

## HP Point of Sale (POS) Peripherals Configuration Guide

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7.6	HP RP 7.5.1 7.5.2 7.5.3 7.5.4 7.5.5 7.5.6 7.5.7 7.5.8 7.5.9 Touch 7.6.1 7.6.2 7.6.3 7.6.4 7.6.5 7.6.6 7.6.7 7.6.8 7.6.9 7.6.10 HP aps HP aps	7 15 /17 inch Projective Capacitive AFD (Associate Facing Display)         Connection         Windows Drivers for the Touch Screen         Touch Screen calibration         Touch in Dual Monitor Configuration in POSReady 2009 or XP         Touch in Dual Monitor Setup in POSReady 7 or Windows 7         OPOS Drivers for the Touch Screen         Testing the Touch Screen         JPOS Drivers for the Touch Screen         Disable/Enable On-Screen Display (OSD)         Screen - HP L6015tm / L6017tm Projective Capacitive (PCap)         Connection         Windows Drivers for the Touch Screen         Touch in Dual Monitor Configuration in POSReady 2009 or XP         Connection         Windows Drivers for the Touch Screen         Touch Screen calibration         Touch in Dual Monitor Configuration in POSReady 2009 or XP         Touch in Dual Monitor Configuration in POSReady 2009 or XP         Touch in Dual Monitor Setup in POSReady 7 or Windows 7         OPOS Drivers for the Touch Screen         JPOS Drivers for the Touch Screen	497 497 500 502 503 503 503 503 503 504 505 505 505 505 505 507 510 511 511 512 512 512
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# Version Change History

<b>Document Version</b>	Description of Change(s)
3.89	Added HP Barcode Scanner H-Series section.
3.88	Added HP ElitePOS G1 Retail System and peripherals.
3.87	Updated HP 7" CFD section and Q & A HP 7" CFD section.
	Added HP RP9 Integrated Dual-Head MSR.
3.86	Updated Integrated Cash Drawer Port section.
3.85	<ul> <li>Updated HP Retail Jacket for ElitePad Barcode Scanner section.</li> </ul>
3.84	<ul> <li>Added HP RP9 G1 Retail System reference to sections 7.2 and 7.4.</li> </ul>
3.83	<ul> <li>Added HP RP9 G1 Retail System information and peripherals, including pictures.</li> </ul>
	<ul> <li>Removed most references to HP Point of Sale System Software and</li> </ul>
	Documentation CD since it is no longer being maintained.
	Updated OPOS logical name table.
3.82	<ul> <li>Updated OPOS logical name table.</li> </ul>
	<ul> <li>Added picture of the HP value wireless scanner.</li> </ul>
	<ul> <li>Updated receipt printer section to include Ethernet info.</li> </ul>
	<ul> <li>Added question of driver version in the printer Q&amp;A section.</li> </ul>
	<ul> <li>Added L5105tm info to the document in the L5009tm section.</li> </ul>
	<ul> <li>Updated screen shots in L5006tm / L5009tm / L5015tm to reflect drivers version 5.6.0</li> </ul>
	Removed the Hardware wizard section.
	<ul> <li>Added to the Q &amp; A section a question in regards HP USB Cash Drawer.</li> </ul>
3.81	<ul> <li>Updated MSR section to include single head MSR.</li> </ul>
	<ul> <li>Updated OPOS logical name table.</li> </ul>
	Updated HP 7" CFD Q&A section.
	<ul> <li>Updated screen shoots in the receipt printer OPOS section.</li> </ul>
3.80	Added A798 Info.
	<ul> <li>Corrected numbering of the steps in section 7.4.20.</li> </ul>
	Added HP 7" CFD / DisplayLink section.
	<ul> <li>Updated several screen captures in the document.</li> </ul>
	Removed START MENU screen capture.
	<ul> <li>Added Receipt Printer Windows mini-driver v1.0.5 information.</li> </ul>
	<ul> <li>Added info about HP LCM220 and LCM960 Display.</li> </ul>
	<ul> <li>Added HP R2 Retail System Model 2000/2030 Info</li> </ul>
	<ul> <li>Updated MSR JPOS screen captures.</li> </ul>

#### 1 Introduction

This document contains setup and quick testing information for HP Point of Sale (POS) peripherals and systems.

**Note:** All HP Point of Sale (POS) peripherals are not available worldwide; please check with the HP reseller in your area for the available HP peripherals.

#### 2 General Information

#### 2.1.1 Where to obtain the latest software for the HP POS Peripherals

The latest released versions of software for the HP peripherals are available on the <u>HP.COM</u> web site. Once you have navigated to your HP Point of Sale platform on the <u>HP.COM</u> web site and have selected the operating system you will see the "download by category" section (as shown below). Please go to the appropriate category to obtain the software package.

Quick jump to downloads by category...

- » BIOS
- » Diagnostic
- » Driver Audio
- » Driver Chipset
- » Driver Graphics
- » Driver Keyboard, Mouse and Input Devices
- » Driver Modem
- » Driver Network
- » Driver Storage
- » Operating System Enhancements and QFEs
- » Software Multimedia
- » Software PoS
- » Software PoS Keyboard
- » Software PoS MSR
- » Software PoS Pole Line Display
- » Software PoS Receipt Printer
- » Software PoS Scanner
- » Software Solutions
- » Software System Management
- » Utility Tools

The "Software – POS" section is a generic section that is used for HP POS drivers that do not have their own category section on the web site. For example, the "OPOS Common Control Objects" Softpaq would be found there.

#### 2.1.2 OPOS and CCO Drivers/Application

On the HP Point of Sale System that have HP's Microsoft Windows operating image, the OPOS drivers for the HP branded peripherals have been installed in the image (thermal receipt printers / stand-alone MSR / hand scanner / POS keyboard with integrated MSR / pole display). The Common Control Object (CCO) version 1.9.000 (or later) have also been installed/registered in the HP Windows operating system image.

#### **3** Port Information

To identify the type and number of ports available on the system, refer to the Hardware Reference Guide included in the HP factory image and available from the Product Information support section of <u>HP.COM</u>.

## 4 OPOS Name for HP Point of Sale Peripherals

The following are the Default OPOS logical names for the HP Point of Sale Peripherals:

he following are the Default OPOS logical names for the HP	
Device	Default OPOS Logical Name
HP Barcode Scan	
HP ElitePOS 2D Barcode Scanner	N3680-HP
HP Imaging Barcode Scanner	HPImagerScanner
HP Linear Barcode Scanner	HPLinearScanner
HP Linear Barcode Scanner II	HPLinearScanner
HP Presentation Barcode Scanner	HPPresentationScanner
HP Retail Integrated Barcode Scanner	HPIntegratedImagingBarcodeScanner
HP Retail Jacket for Elitepad Barcode Scanner	HPMobileScanner
HP RP9 Integrated Bar Code Scanner-Bottom	HPIntegratedSLImgScn
HP RP9 Integrated Bar Code Scanner-Side	HPIntegratedSLImgScn
HP Value 2D Wireless Scanner	HPQSWirelessScanner
HP Wireless Barcode Scanner	HPWirelessBTScanner
HP Cash Drawe	rs
HP Flip Top Cash Drawer	Connected to
HP Heavy Duty Cash Drawer	Connected to
HP Standard Duty Cash Drawer	Connected to
Receipt Printer:	
LID Dual Carial LICP Thermal Dessint Drinter	A799-1
HP Dual Serial USB Thermal Receipt Printer	A799-2
HP ElitePOS Column Printer	CashDrawerH300C-1
	CashDrawerH300C-2
HP ElitePOS Serial USB Thermal Printer	CashDrawerH300-1
	CashDrawerH300-2
HP Hybrid POS Printer with MICR II	A776-1 A776-2
	A776-1
HP Hybrid Thermal Printer with MICR	A776-2
	A799-1
HP LAN Thermal Receipt Printer	A799-2
UD DUCD Thermal Descint Drinter	A799-1
HP PUSB Thermal Receipt Printer	A799-2
HP USB Receipt Printer	A794-1
	A794-2
HP Value PUSB Receipt Printer	A798-1
· · · · · · · · · · · · · · · · · · ·	A798-2
HP Value Serial USB Receipt Printer	A798-1 A798-2
	A798-1
HP Value Serial/USB Receipt Printer II	A798-2
Retail Hub:	
	HPCDPORT-1
Cash Drawer Port	HPCDPORT-2
Retail System:	
Cash Drawer Port	HP_CashDrawerPort-1
	HP_CashDrawerPort-2
HP USB Cash Drawer	HPUSBCashDrawer-1
	HPUSBCashDrawer-2

HP Line Displays				
HP ElitePOS Top Mount 2 x 20 CFD	HPTD620Display			
HP Graphical POS Pole Display	HPPOSCCPoleDisplay			
HP POS Pole Display	HP POS Pole Display			
HP Retail Integrated 2x20 Complex	HPLCM960Display			
HP Retail Integrated 2x20 Display	HPLCM220Display			
HP Retail RP7 VFD Customer Display	HPPOSCCPoleDisplay			
HP RP9 2x20 LCD Top Mount without Arm	HPLM940Display			
HP RP9 Integrated 2x20 Display Btm w/Arm	HPLM940Display			
HP RP9 Integrated 2x20 Display Top w/Arm	HPLM940Display			
HP MSRs				
HP ap5000 Magnetic Stripe Reader	Hpap5000MSR			
HP ElitePOS MSR	HPSinglenoSRDMSR			
HP Retail Integrated Dual-Head Magnetic Stripe Reader	HPUSBDualMSR			
	HPUSBDualEncryptMSR			
HP Retail Jacket for Elitepad MSR	HPUSBShecMSR			
HP RP2 Integrated Single Head MSR w/o SRED	HPSinglenoSRDMSR			
HP RP7 Single Head Magnetic Stripe Reader w/o SRED	HPSinglenoSRDMSR			
HP RP9 Integrated Dual-Head MSR	HPUSBDualMSR			
	HPUSBDualEncryptMSR			
HP RP9 Integrated Single-Head MSR	HPSinglenoSRDMSR			
HP USB Mini Magnetic Stripe Reader with Brackets	HPUSBMiniMSR			
HP POS Keyboard				
HP POS Keyboard	HPPOSKeyboard			
HP USB POS Keyboard with Magnetic Stripe Reader	HPKBMSR			
HP Receipt Printer				
HP Dual Serial USB Thermal Receipt Printer	A799			
HP ElitePOS Column Printer	H300			
HP ElitePOS Serial USB Thermal Printer	H300			
HP Hybrid POS Printer with MICR II	A776			
HP Hybrid Thermal Printer with MICR	A776			
HP LAN Thermal Receipt Printer	A799			
HP PUSB Thermal Receipt Printer	A799			
HP USB Receipt Printer	A794			
HP Value PUSB Receipt Printer	A798			
HP Value Serial USB Receipt Printer	A798			
HP Value Serial/USB Receipt Printer II	A798			

#### 5 OPOS Logical Device Name Utility

The "HP OPOS Logical Device Name Utility" can be used to obtain the logical name of the OPOS drivers that are installed on the unit. The utility also provides the ability to change the OPOS logical name of the device. For the HP Point of Sale (POS) peripherals the utility also provides the ability to set the HP POS peripherals back to the factory default logical name.

**Note:** In order to use this utility, the utility must be run from a location that has read/write access and one must have administrator privileges on the unit where the utility is being run on.

Please consult your point of sale application support center or your IT support department before making any changes to the OPOS device name.

#### 5.1 Main GUI

The following is the GUI of the "HP OPOS Logical Device Name Utility" when the utility is launched:

Note: The screen captures are examples, what appears when the utility is run on the unit may differ than the screen capture in this section.

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 36 devices listed	
⊞- CashDrawer	
🗐 CheckScanner	
🔄 LineDisplay	
i i MICR	
i ∰ · MSR	
■ POSKeyboard	
POSPrinter	
i ToneIndicator	
Edit Device Name	
	Refresh
Save	Show Defaults

• The "Device" tab in the utility reflects the OPOS drivers that are installed on the unit:

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	About Exit
Device Setting	
Device Tree - 36 devices listed	
⊞ CashDrawer	
🗄 CheckScanner	
🚊 LineDisplay	
MICR	
🖬 🖬 MSR	
POSKeyboard	
■ POSPrinter	
🗄 Scanner	
i ToneIndicator	
Edit Device Name	
	Refresh
Save	Show Defaults

• The "Refresh" button will refresh the device tree information:

🔡 HP OPOS Logical Device Name 📃 🗖	×
About E	Exit
Device Setting	
Device Tree - 36 devices listed	
🕀 CheckScanner	
🔄 LineDisplay	
i MICR	
i MSR	
i POSKeyboard	
POSPrinter	
- Scanner	
⊞ ToneIndicator	
Edit Device Name	1
Befresh	ก I
Heitesn	ן ע
Save Show Defaults	
	2

• The "Show Default" button will allow one to set the HP peripherals to default factory name (see section <u>5 for more details):</u>

$\mathbf{\times}$
<u>Exit</u>
51
J

• The "Setting" tab in the utility reflects the registry location where the utility obtains the data that is displayed in the "device" tab:

🔡 HP OPOS Logical Device Name		
	<u>About</u>	<u>Exit</u>
Device		
Registry Location	n -	
SOFTWARE\\OLEforRetail\\ServiceOPOS		

• The "About" tab provides version information on the utility:

🔡 HP OPOS Logical Device Name	- 🗆 🔀
	About) Exit
Device Setting	
Registry Location SOFTWARE\\OLEforRetail\\ServiceOPOS	

• Either the "Exit" or "X" can be used to exit the application:

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	About Exit
Device Setting	
Registry Location SOFTWARE\\OLEforRetail\\ServiceOPOS	]

#### 5.2 Obtain OPOS Logical Device Name(s)

The following section describes how to obtain the OPOS logical device names that are installed on the unit.

#### 5.2.1 Overview Steps

The following is an overview of the steps to obtain the OPOS device name:

- 1. Launch the utility.
- 2. Select the "Device" tab.
- 3. Expand the device tree for which you would like to obtain the OPOS device name.

#### 5.2.2 Detailed Steps

The following are detailed steps to obtain the OPOS device name:

- 1. Launch the utility.
- 2. Select the "Device" tab.

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 36 devices listed	
i CheckScanner	
ia LineDisplay	
■ POSKeyboard	
⊡ POSPrinter	
⊡ Scanner ⊞ ToneIndicator	
Edit Device Name	
	Refresh
Save	Show Defaults

- 3. Expand the device tree for which you would like to obtain the OPOS device name.
  - The following shows the "LineDisplay" tree expanded. The OPOS device name that is installed on the unit in this example is "HP POS Pole Display"

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 34 devices listed	
🗐 CashDrawer	~
CheckScanner	
📄 LineDisplay	
HP POS Pole Display	=
	=
MICR	
i Book I I	
POSKeyboard     POSReyboard	
⊞ POSPrinter ⊞ Scanner	~
Edit Device Name	
	Refresh
Save	Show Defaults
ate. This is an example and may	not roflact what is incl

Note: This is an example and may not reflect what is installed on your system. Your system may have more or less items installed.

• The following shows the "MSR" tree expanded. The OPOS device name that is installed on the unit in this example is "HPUSBMINIMSR":

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 34 devices listed	
<ul> <li>CashDrawer</li> <li>CheckScanner</li> <li>LineDisplay</li> <li>MICR</li> </ul>	
HPKBMSR HPUSBDualMSR HPUSBMiniMSR HPUSBShecMSR	
Edit Device Name	
	Refresh
Save	Show Defaults

Note: This is an example and may not reflect what is installed on your system. Your system may have more or less items installed.

• The following shows the "POSPrinter" tree expanded. The OPOS device names that are installed on the unit in this example are "A776 / A794 / A799":

🔡 HP OPOS Logical Device Name	_ 🗆 🔀
	About Exit
Device Setting	
Device Tree - 34 devices listed	
🚊 LineDisplay	^
i MICR	
⊡ MSR	
■ POSKeyboard	
POSPrinter	
A776	
A794	
A798	
E Scanner	~
Edit Device Name	
	Refresh
Save	Show Defaults

Note: This is an example and may not reflect what is installed on your system. Your system may have more or less items installed.

 The following shows the "Scale" tree expanded which is a non-HP branded device. The OPOS device name that is installed on the unit in this example is "Avery Scale":

🔜 HP OPOS Logical Device Name	
	<u>About</u> Exit
Device Setting	
Device Tree - 18 devices listed	
🗄 - CheckScanner	~
i LineDisplay	
i MICR	
i MSR	
POSKeyboard     Pose	=
	_
Avery Scale	
Scanner	
	~
Edit Device Name	
	Refresh
Save	now Defaults

#### 5.3 Change OPOS Logical Device Name(s)

The following section describes how to change the OPOS logical device names that are installed on the unit.

#### 5.3.1 Overview Steps

The following is an overview of the steps to change the OPOS device name:

- 1. Once the utility is launched select the "Device" tab.
- 2. Expand the device tree for which you would like to change the OPOS device name.
- 3. Select the device name; it should also appear in the "Edit Device Name" box.
- 4. Enter the OPOS name that you wish the device to be.
- 5. Once the device name has been entered click on the "SAVE" button.
- 6. You will be asked to confirm that you want to make the change.

#### 5.3.2 Detailed Steps

- The following are detailed steps on how to change the OPOS device name:
- 1. Once the utility is launched select the "Device" tab.

🔜 HP OPOS Logical Device Name	
Device Setting	<u>About Exit</u>
Device Tree - 18 devices listed CashDrawer CheckScanner - LineDisplay - MICR - MSR - POSKeyboard - POSPrinter - Scale - Scanner	
Edit Device Name	Refresh Show Defaults

2. Expand the device tree for which you would like to change the OPOS device name.

😸 HP OPOS Logical Device Nam	ie 📃 🗖 🔀
	<u>About Exit</u>
Device Setting	
Device Tree - 18 devices listed	
	Refresh
Save	Show Defaults

3. Select the device name. The name should also appear in the "Edit Device Name" box once it is selected:

😸 HP OPOS Logical Device Name	
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 18 devices listed	
CashDrawer     A776-1     A776-2     A794-1     A794-2     A799-1     A799-2     CheckScanner     LineDisplay     MICR	
Edit Device Name	
A776-1	Refresh
Save	Show Defaults

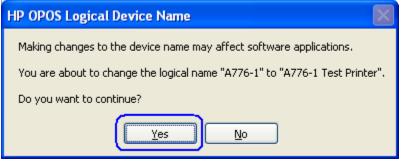
4. Enter/edit the OPOS name that you wish the selected device to be:

🖶 HP OPOS Logical Device Name	
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 18 devices listed	
	^
A776-1	
- A776-2	
- A794-1	
- A794-2	
A799-1	
A799-2	
🗄 CheckScanner	
😟 LineDisplay	
<u>⊞</u> · MICR	<u> </u>
Edit Device Name	
A776-1 Test Printer	Refresh
Save	Show Defaults

5. Once the device name has been entered in the edit box, click on the "SAVE" button:

👪 HP OPOS Logical Device Name	
	About <u>Exit</u>
Device Setting	
Device Tree - 18 devices listed	
□ CashDrawer	~
A776-1	
A776-2	
- A794-1	
A794-2	
- A799-1	
A799-2	
💼 CheckScanner	
i LineDisplay	
Edit Device Name	
A776-1 Test Printer Refr	eeh
Save Show D	efaults

After clicking the "SAVE" button you will be prompted to confirm that you want to make the changes, click on "YES" to make the changes:



Once you have confirmed you want to make the changes the utility will refresh and close all the device trees. When one re-opens the particular tree that was changed, the device name that was changed is now highlighted (if you exit and re-launch the application the device name will not be highlighted):

🔜 HP OPOS Logical Device Name	• 💶 🗖
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 18 devices listed	
CashDrawer     A776-1 Test Printer     A776-2     A794-1     A794-2     A799-1     A799-2     CheckScanner     LineDisplay     MICR Edit Device Name	
	Refresh
Save	Show Defaults

#### 5.4 Set HP branded device to factory default OPOS logical name

The following section describes how to set the HP branded peripherals back to the factory default OPOS logical name.

**Note:** By default this utility will only set the HP branded peripherals to the factory default name if selected. Please refer to section 6 for non-HP branded peripherals being added to INI file.

#### 5.4.1 Overview Steps

The following is an overview of the steps to change the OPOS device name:

- 1. Once the utility is launched select the "Device" tab.
- 2. Select the device you wish to change back to the factory default name.
- 3. Click on the "Show Default" button.
- 4. Select the category of the device that you would like to set back to the factory default OPOS name.
- 5. Select the device of the device that you would like to set back to the factory default OPOS name.
- 6. Click on "Set Default" button and you will be asked to confirm that you want to make the change.

#### 5.4.2 Detailed Steps

The following are detailed steps to change the OPOS device name:

1. Once the utility is launched select the "Device" tab.

🔜 HP OPOS Logical Device Name	
Device Setting	<u>About Exit</u>
Device Tree - 18 devices listed	
Edit Device Name	Refresh Show Defaults

2. Select the device you wish to change back to the factory default name:

🔜 HP OPC	)S Logical D	evice Nar	me 📃 🗖 🔀
			<u>About</u> <u>Exit</u>
Device Se	etting		
- Device T	ree - 18 device	es listed	
- , - , - , - ,	R	inter	
A776-1 T	est Printer		Refresh Show Defaults

3. Click on the "Show Default" button:

😸 HP OPOS Logical Device Nam	e 💶 🛛 🔀
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 18 devices listed	
□ CashDrawer	~
A776-1 Test Printer	
A776-2	
- A794-1	
- A794-2	
A799-1	
A799-2	
庄 CheckScanner	
庄 - LineDisplay	
<u>∎</u> . MICR	
Edit Device Name	
A776-1 Test Printer	Refresh
Save	Show Defaults

The following shows the utility GUI after the "Show Defaults" button has be	en
clicked:	

😸 HP OPOS Logical Device Name	
	<u>About</u> <u>Exit</u>
Device Setting	
Device Tree - 18 devices listed	
CashDrawer	
Edit Device Name	
A776-1 Test Printer	Refresh Show Defaults
Default Names Categories	
Cash Drawer 💌	
Device	
Default Logical Name	Set Default Hide Defaults

4. Select the category of the device that you would like to set back to the factory default OPOS name.

🖶 HP OPOS Logical Device Name	
	<u>About</u> <u>Exit</u>
Device Setting	
C Device Tree - 18 devices listed	
□ CashDrawer	~
<mark>A776-1 Test Printer</mark>	
A776-2	_
A794-1 A794-2	
A799-2	
	<u>×</u>
Edit Device Name	
A776-1 Test Printer	Refresh
Save	Show Defaults
- Default Names	
Categories	
Cash Drawer	·
Cash Drawer	
Line Display	
MICR	Set Default
POS Keyboard	
POS Printer	Hide Defaults
Scanner Check Scanner	

5. Select the device of the device that you would like to set back to the factory default OPOS name.

🖶 HP OPOS Logical Device Name	
	<u>About</u> <u>Exit</u>
Device Setting	
C Device Tree - 18 devices listed	
CashDrawer	<u>^</u>
A776-1 Test Printer A776-2	
A776-2 A794-1	≡
- A794-2	
A799-1	
A799-2 ⊕ CheckScanner	
MICR	<u>×</u>
Edit Device Name	
A776-1 Test Printer	Refresh
Save	Show Defaults
Categories	
Cash Drawer	1
HP Cash Drawer for A794 - Primary	Set Default
HP Cash Drawer for A794 - Seconday HP Cash Drawer for A776 - Primary	Hide Defaults
HP Cash Drawer for A776 - Seconday	
HP Cash Drawer for A799 - Primary HP Cash Drawer for A799 - Seconday	

 Once you have selected the device the factory default name will be entered into the "Default Logical Name" box.

🖶 HP OPOS Logical Device Name	
	<u>About</u> Exit
Device Setting	
Device Tree - 18 devices listed	]
, CashDrawer	~
A776-1 Test Printer	
A776-2 A794-1	=
A794-2	
A799-1	
A799-2 ⊕- CheckScanner	
	~
Edit Device Name	
A776-1 Test Printer	Refresh
Save	Show Defaults
Default Names	
Categories	
Cash Drawer 🗸 🗸	
Device	
HP Cash Drawer for A776 - Primary 🗸 🗸	
Default Logical Name	Set Default
A776-1	Hide Defaults
<u>`</u>	

• To save the default name click on the "Set Default" button:

💀 HP OPOS Logical Device Name 📃 🗖 🔀
About Exit
Device Setting
Device Tree - 18 devices listed
🖃 CashDrawer 🔥
A776-1 Test Printer
- A776-2 - A794-1
A794-2
- A799-1
⊶ A799-2 ⊕- CheckScanner
⊞ - LineDisplay
Edit Device Name
A776-1 Test Printer Refresh
Save Show Defaults
Default Names
Categories
Cash Drawer 🗸
Device
HP Cash Drawer for A776 - Primary
Default Logical Name
A776-1 Hide Defaults

6. You will be asked to confirm that you want to make the change:

HP OPOS Logical Device Name
Making changes to the device name may affect software applications.
You are about to change the logical name "A776-1 Test Printer" to "A776-1".
Do you want to continue?

#### 5.4.3 Default INI File

When the "HP OPOS Logical Device Name" utility is launched a default INI file is created if it does not already exist. The "default.ini" file is used by the utility for the default names of the HP peripherals in the default drop box section of the utility. If the "default.ini" is modified for non-HP peripherals those should appear in the default drop box section of the utility.

#### 5.4.4 Adding non-HP Peripherals to the default drop down

One can add non-HP peripherals to the default INI file in order to have the device appear as a selectable device in the drop down menu in the default name section of the utility.

The following is example of adding a scale to the "default.ini" file so the name appears in the drop down menu.

The following is showing the drop down menu in the default state (no modification to the INI file):

🔡 HP OPOS Logical Device Name	
	<u>About Exit</u>
Device Setting	
C Device Tree - 18 devices listed	
CheckScanner	
ia LineDisplay	
. MSR	
POSKeyboard	
ia POSPrinter ia Scale	
E-B Device Marco	
Edit Device Name	
	Refresh
Save	Show Defaults
Default Names	
Categories	
Cash Drawer 🗸	
Cash Drawer Line Display	
MICR	Set Default
POS Keyboard	
POS Printer Scanner	Hide Defaults
Check Scanner	

The following is showing the default INI file which reflects the above screen capture:

🕞 Default - Notepad
<u>File E</u> dit F <u>o</u> rmat ⊻iew <u>H</u> elp
<pre>[Cash Drawer] HP Cash Drawer for A794 - Primary=A794-1 HP Cash Drawer for A794 - Seconday=A794-2 HP Cash Drawer for A776 - Primary=A776-1 HP Cash Drawer for A799 - Primary=A799-1 HP Cash Drawer for A799 - Seconday=A799-2 [Line Display] HP Pole Display=HP POS Pole Display HP ap5000 Line Display=HPap5000LineDisplay [MICR] HP Receipt Printer A776=A776 [MSR] HP MSR=HPUSBMINIMSR HP POS Keyboard with MSR=HPKBMSR HP ap5000 MSR=HPap5000MSR [POS Keyboard] HP POS Keyboard [POS Printer] HP Receipt Printer A794=A794 HP Receipt Printer A799=A799 [Scanner] HP Bar Code Scanner=HP_USBSCANNER [Check Scanner] HP Check Scanner A776=A776</pre>
S 2.:

If the "default.ini" file is modified to add a device (i.e. scale) the default INI file would look something like the following:

📮 Default - Notepad		×
<u>File E</u> dit Format <u>View H</u> elp		
File Edit Format View Help [Scale] Scale for testing=AveryScale [Cash Drawer] HP Cash Drawer for A794 - Primary=A794-1 HP Cash Drawer for A794 - Seconday=A794-2 HP Cash Drawer for A776 - Primary=A776-1 HP Cash Drawer for A799 - Primary=A776-2 HP Cash Drawer for A799 - Primary=A799-1 HP Cash Drawer for A799 - Seconday=A799-2 [Line Display] HP Pole Display=HP POS Pole Display HP ap5000 Line Display=HPap5000LineDisplay [MICR] HP Receipt Printer A776=A776 [MSR] HP MSR=HPUSBMINIMSR HP POS Keyboard with MSR=HPKBMSR HP ap5000 MSR=HPap5000MSR [PoS Keyboard] HP POS Keyboard=HPPOSKeyboard [PoS Printer] HP Receipt Printer A794=A794 HP Receipt Printer A794=A794 HP Receipt Printer A799=A799 [scanner] HP Bar Code Scanner=HP_USBSCANNER [Check Scanner] HP Check Scanner A776=A776		<
<	>	:

🗏 HP OPOS Logical Device Name 📃 🗖 🔀
About Exit
Device Setting
Device Tree - 18 devices listed
CashDrawer     CashDrawer
I MICR
I III MSR
⊕ POSKeyboard     POSPrinter
🖅 Scanner
Edit Device Name
Refresh
Save Show Defaults
Default Names
Categories
Scale 🗸
Scale
Line Display
MICR MSR
POS Keyboard Hide Defaults
POS Printer Scanner

When the utility is launched with the updated default.INI file it will look like:

**Note:** If the OPOS drivers for the device are re-installed this may change the device name. The "HP OPOS Logical Device Name" utility does not install any OPOS drivers or any registry entries to the OPOS drivers.

#### 6 Peripherals Connection and Software Installation

The USB peripherals should be installed after the Windows operating system has been unbundled. Installing one peripheral at a time, will help determine which peripheral has an issue if a peripheral does not function. By installing one peripheral at a time, Windows may install the native drivers with very little user interaction needed during the native driver installation.

Please note that the drivers for the HP peripherals are included in the HP factory image and are also available from <u>HP.COM</u>.

In the following sections substitute "Compaq" or "SWSetup" for "xxxxx" when references are made to the HP factory image. For example when one sees "C:\xxxxx\Point of Sale\Receipt Printer\Cash Drawer" one would use "C:\Compaq\Point of Sale\Receipt Printer\Cash Drawer" for Windows XP Pro operating system and "C:\SWSetup\Point of Sale\Receipt Printer\Cash Drawer" for Vista / WEPOS / POSReady / Win7 / Win 8.1 / Win 10 operating system.

#### 6.1 Cash Drawer and Flip-Top Cash Drawer



Heavy Duty Cash Drawer



Standard Duty Cash Drawer and USB Cash Drawer



Flip-Top Cash Drawer

In the reminder of this document "cash drawer" will be used to refer to all cash drawers that are shown above.

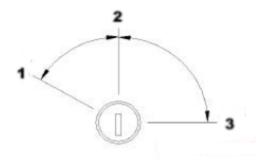
#### 6.1.1

Key lock position The following shows the key lock position for the HP cash drawers:

# Heavy Duty Cash Drawer 2 3

Lock Option	Description
1	Prevents the cash drawer from being opened by
(Locked Closed)	electrical signal from the printer.
2	Operation of the cash drawer is driven
(Online)	electronically by the printer.
3	Allow manual access to the contents of the cash
(Manual Open)	drawer.
4 (Locked Open)	Prevents the cash drawer being latched closed.
	_

#### Flip Top Cash Drawer / Standard Duty / USB Cash Drawer (below)

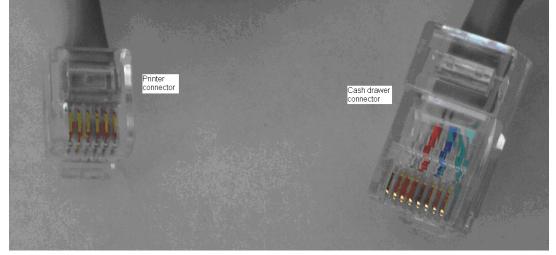


Lock Option	Description
1	Allow manual access to the contents of the cash
(Manual Open)	drawer.
2	Operation of the cash drawer is driven
(Online)	electronically by the printer.
3 (Locked)	Prevents the cash drawer being latched closed.

## 6.1.2 Connection

The cash drawer is attached to the back of the printer or integrated cash drawer port using a RJ12 type connector (the smaller connector).

The smaller connector connects to the back of the printer, the larger connector connects to the bottom of the cash drawer. The following are the cash drawer cable connectors:



The following is the bottom of the cash drawer where the bigger end of the cash drawer cable connects into:



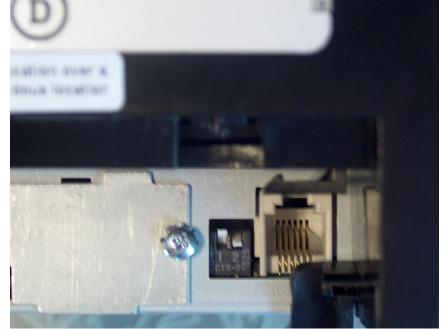
The following is the back of the printer with the cover closed:



The following is the back of the printer with the cover open:



Close-up of cash drawer connector on the back of the printer:



# 6.1.3 Windows Drivers for the Cash Drawer Drivers

There are no Windows drivers for the cash drawer. The cash drawer is controlled by the printer Windows mini-drivers thus the printer drivers need to be installed to electronically open the cash drawer.

Confirm that the cash drawer is connected to the back of the printer via the cash drawer cable.



# 6.1.4 Cash Drawer Decimal Commands

Some POS application that use the Windows mini-drivers request the cash drawer open command so the application can open the cash drawer (i.e. No Sale). The following the decimal commands when attached to the HP receipt printer:

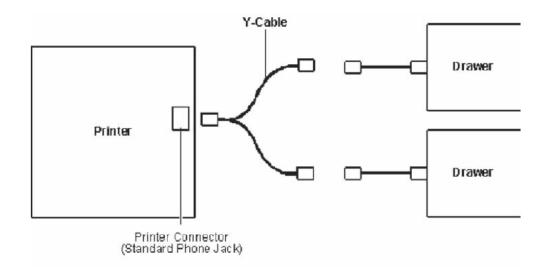
Cash drawer 1	Cash Drawer 2
27 112 0 8 8	27 112 1 8 8

Detailed explanation of the cash drawer command: Generate pulse to open cash drawer

ASCII	ESC p	n p1 p2	
Hexadecimal	1B 70	n p1 p2	
Decimal	27112	n p1 p2	
Value of n:	00, 48 (Decimal) = Drawer 1; 01, 49 (Decimal) = Drawer 2		
Value of p1:	0-255		
Value of p2:	0-255		

# 6.1.5 Dual Cash Drawer Connection

Dual cash drawer is possible with the HP Receipt printer or integrated cash drawer port. In order to have dual cash drawer configuration a Y-Cable is needed, and with this cable both the cash drawers are attached to the printer or integrated cash drawer port.



#### 6.1.5.1 Cash Drawer Cable Info

In order to use dual cash drawer, one will need a Y-Adapter attached to the printer and will need to exchange one of the cash drawer cable with the 2<sup>nd</sup> cash drawer cable.

The following is the cash drawer cable part numbers for single cash drawer configuration:

1st	
Drawer**	
CD-001A	

The following are the cash drawer cable part numbers for a dual cash drawer configuration when the HP cash drawers are attached to HP receipt printer or directly to HP point of sale system that have integrated cash drawer port:

1st Drawer**	2nd Drawer	Y-Adapter
CD-001A	CD-001B	CD-D1D2

\*\* This cable is shipped with the HP Cash drawer.

# 6.1.6 OPOS Drivers for the Cash Drawer

The OPOS drivers for the cash drawer are included in the printer OPOS driver installation. Confirm that the cash drawer is connected to the back of the printer via the cash drawer cable.

# 6.1.7 OPOS Test Applet for the Cash Drawer

The cash drawer may be tested with one of two utilities. The first utility will only test the cash drawer; the second utility will allow you to test both the cash drawer and the printer.

### 6.1.7.1 Cash Drawer and Printer Utility

The following is overview of the steps to test the cash drawer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the Program Files folder.
- 2. Click "CashDrawer"
- 3. Select correct device name for the cash drawer to be tested.
- 4. Click "OPEN"
- 5. Click "ENABLE"
- 6. Click "OPEN Drawer" and the cash drawer should open. The GUI should also show status that the cash drawer is open.
- 7. Close the cash drawer and the GUI should give the status that the cash drawer is closed.
- 8. Exit the test utility.

### **Detailed Steps**

- Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the "C:\xxxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click "CashDrawer". The following is the main GUI of the "Sample\_OPOS\_Application" when it is launched:

Sample Opos Application	n		
<u>File H</u> elp			
h	HP	Receipt Pri	nter
	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets,	Method Return V	Values, and Events	

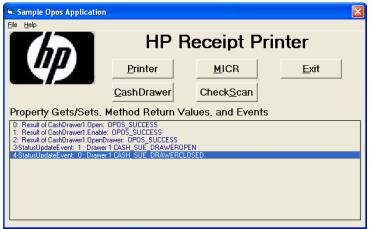
3.	Select cor	rect device na	me for the	cash drawer	to be tested.
----	------------	----------------	------------	-------------	---------------

🛤 Cash Drawer	Examples	
Device To Open A776-1	J	
Open	Open	DeviceDescriptions Control
Enable	Enable	Service
Open Drawer	Open Drawer	
Disable	Disable	
Close	Close	
Drawer 1	Drawer 2	Drawer 1 PowerNotify
Close	Form	I Drawer 2 PowerNotify

- 4. Click "OPEN"
- 5. Click "ENABLE"
- 6. Click "OPEN Drawer" and the cash drawer should open. The GUI should also show status that the cash drawer is open.

Sample Opos Application						×
<u>File H</u> elp						
	HP	Re	eceipt F	Prin	iter	
	<u>P</u> rinter		MICR		<u>E</u> xit	
	<u>C</u> ashDrawer		Check <u>S</u> can			
Property Gets/Sets, M	ethod Return	Valu	ues, and Even	its		
0: Result of CashDrawer1.0pen: 0 1: Result of CashDrawer1.Enable: 2: Result of CashDrawer1.0penDra 3-StatusUpdateEvent: 1: Drawer1	OPOS_SUCCESS wer: OPOS_SUCCES	S				
			·			

7. Close the cash drawer and the GUI should give the status that the cash drawer is closed.



8. Exit the test utility by clicking on DISABLE/CLOSE/CLOSE FORM and then click on EXIT.

🖻 Cash Drawer	Examples	
Device To Open A776-1	•	
Open Enable Open Drawer Disable Close	Open Enable Open Drawer Disable Close	DeviceDescriptions Control OPOS CashDrawer Control 1.11. Service OPOS Service Object for POSPri
Drawer 1	Drawer 2	Drawer 1 PowerNotify
Close	Form	I Drawer 2 PowerNotifu

Sample Opos Application			
	HP	Receipt F	Printer
<i>""</i> "	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets, M	ethod Return	Values, and Even	nts
Result of CashDrawer1.0pen: 0     Result of CashDrawer1.Lenable: 1     Result of CashDrawer1.0penDra     StatusUpdateEvent: 1: Drawer1     4-StatusUpdateEvent: 0: Drawer1     5: Result of CashDrawer1.Disable:	DPOS_SUCCESS wer: OPOS_SUCCESS CASH_SUE_DRAWEF CASH_SUE_DRAWEF OPOS_SUCCESS	ROPEN	
6: Result of CashDrawer1.Close: 0	POS_SUCCESS		

## 6.1.8 JPOS Drivers for the Cash Drawer Drivers

The JPOS drivers are included in the HP factory image and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the cash drawer followed by detailed steps:

- 1. Start the JPOS test utility.
- 2. Click on the "CASH DRAWER" tab.
- 3. Select the "CashDrawer" model in the profile drop down box:
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button.
- 7. To exit the application:
  - a. Click on "DISABLE"
  - b. Click on "RELEASE"
  - c. Click on "CLOSE"
  - d. Click on the "X" in the upper right hand corner of the application.

#### **Detailed Steps**

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:

🛃 HP Receipt Printer JPOS Test Utility	- 🗆 🗙
	<b>_</b>
Usage :: PrinterTestApp <identifyprintertest (true="" false)=""> <commtype (serial<br="">ialrxtx/usb/nativeusb&gt;&gt; <commparameters> -CommParameters : for usb <usbdaemonregistryport(int> UsbDevicePort(int&gt;&gt; for serial/serialrxtx <comport(string> BaudRate(int&gt; DataBits(int&gt; S</comport(string></usbdaemonregistryport(int></commparameters></commtype></identifyprintertest>	
its(int) Parity(int) FlowControl(int)>	
	-

2.	After a few seconds the JPOS test utility GUI will appear as shown below; click on the
	"CASH DRAWER" tab.

🛎 Printer/Cash Drawer	/MICR Unit Test Application	
Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca	AshDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT CheckHealthT
Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Timeout 10000 Open Claim Enable PowerNotify Control/Service In	Illegal CheckHealth Enable Freeze Events ClearOutput

🕌 Printer/Cash Drawer	/MICR Unit Test Application
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool. Props           MICR         MICR Read         CashDrawer         CheckScanner
Clear Printer Sensors Cover Open	Profile CashDrawer   Timeout CashDrawer776   CapPowerRep. CashDrawer794   CapPowerRep. CashDrawer794   CashDrawer799 Internal   PowerState Interactive   PowerState Interactive   PowerState Illegal   State Closed   CheckHealthText   Boolean Properties WaitForDrawerClose   CapStatus Timeout   CapStatusMultiDrawerDe Frequency   PowerNotify Duration   PowerNotify Delay   DeviceEnabled WaitForDrawerClose   DrawerOpened WaitForDrawerClose
NearEnd Empty Receipt Slip Refresh	Open Claim Enable Freeze Events Enable PowerNotify OpenDrawer Control/Service Info

3. Select the "CashDrawer" model in the profile drop down box:

- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.

6. Click on the "ENABLE" button.

📓 Printer/Cash Drawer/MICR Unit Test Application					
Printer Station     Receipt     Slip     Journal     Illegal	POSPrinter Simple Printing Slip Printer B MICR MICR Read CashDrawer Cher	s/BarCodes Bool. Props ckScanner			
Drawer SUE: Drawer Drawer SUE: Drawer	Timeout 0 Internal External External External Interactive PowerState Unknown Illegal				
Clear Printer Sensors	State Idle CheckHeal CheckHealthText WaitForDrawerClose CapStatus CapStatusMultiDrawerDe FreezeEvents PowerNotify Claimed DeviceEnabled MaitForDrawerClose Timeout Frequency Duration Delay WaitForDrawerClose Timeout Frequency Duration Delay				
Cover Open	Close Release Disable Freeze Enable PowerNotify OpenDrawer Control/Service Info	e Events			

- Note: Depending on the JPOS driver version (prior to March 2012 release) when you click on the "OpenDrawer" button the cash drawer should pop open. When the "Timeout" value set to "0", if the cash drawer is not closed within 10 seconds a "JPOSEXCEPTION CAUGHT" error message will appear, this is OK since the cash drawer is open.
  - 7. To exit the application:
    - Click on "DISABLE"
    - Click on "RELEASE"
    - Click on "CLOSE"
    - Click on the "X" in the upper right hand corner of the application.

# 6.2 Integrated Cash Drawer Port

# 6.2.1 Connection

The HP Integrated Cash Drawer port is part of the system board, thus not removable (can be disabled). The cash drawer is attached to the integrated cash drawer port using a RJ12 type connector (the smaller connector).

**Note:** The integrated cash drawer port is to be used in conjunction with a cash drawer that has a 24VDC solenoid.

#### HP RP9 G1 Retail System:

Refer to the Hardware Reference Guide included in the HP factory image and available from <u>HP.COM</u>.

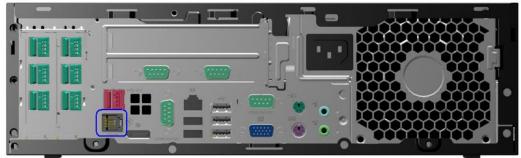




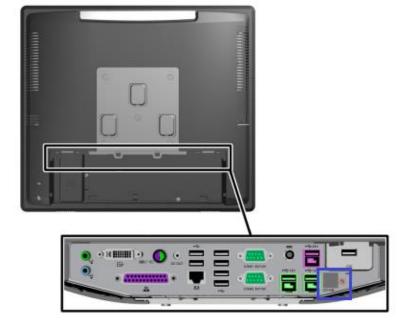
HP rp3100:



HP rp5800 and HP rp5810:



HP RP7 Model 7100/7800:



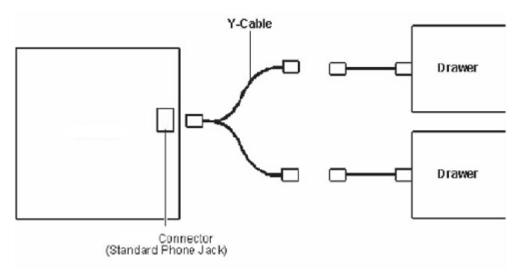
# 6.2.2

Integrated Cash Drawer Pinout (RJ12) The integrated cash drawer port supports a 24VDC solenoid cash drawer (RJ12 connector). The following is the pin out for the integrated cash drawer port.

Pin #	Description
1	Chassis ground
2	Drawer 1 (24V)
3	Drawer status
4	24V
5	Drawer 2 (24V)
6	Ground

# 6.2.3 Dual Cash Drawer Connection

Dual cash drawers is possible with the integrated cash drawer port. In order to have a dual cash drawer configuration a Y-Cable is needed, and with this cable both the cash drawers are attached to the integrated cash drawer port.



#### 6.2.3.1 Cash Drawer Cable Info

In order to use dual cash drawers, one will need a Y-Adapter attached to the integrated cash drawer port and will need to exchange one of the cash drawer cable with the 2<sup>nd</sup> cash drawer cable.

The following is the cash drawer cable part number(s) for single cash drawer configuration:

1st
Drawer**
CD-001A

The following are the cash drawer cable part numbers for a dual cash drawer configuration when the HP cash drawers are attached to integrated cash drawer port or directly to HP point of sale system that have integrated cash drawer port:

1st Drawer**	2nd Drawer	Y-Adapter	
CD-001A	CD-001B	CD-D1D2	

\*\* This cable is shipped with the HP Cash Drawer.

# 6.2.4 Drivers and utilities for the Integrated Cash Drawer Port

The Integrated Cash Drawer may be tested with several utilities which are described in the following sections.

# 6.2.5 OPOS Drivers for the Integrated Cash Drawer Port

The Integrated Cash Drawer Port OPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Cash Drawer Port\Integrated Cash Drawer OPOS) and are also available from <u>HP.COM</u>.

# 6.2.5.1 HP Integrated OPOS Cash Drawer Utility

The following is an overview of the steps to test the cash drawer followed by detailed steps:

1. Open the "HP Integrated OPOS Cash Drawer Utility"

(HPOPOSCDUtility.exe) either using the link in the Start Menu or through the installed location (C:\<Program Files directory>\Hewlett-Packard\HP Integrated Cash Drawer\OPOS).

- 2. Click the "Open" button.
- 3. Click the "Claim" button.
- 4. Click the "Enable" button. The "Drawer Status" will display a status event for the cash drawer current state.
- 5. Click the "Open Drawer" button to open the cash drawer. The "Drawer Status" should reflect the cash drawer open state.
- 6. Close the cash drawer. The "Drawer Status" should reflect the cash drawer closed state.
- 7. To exit the utility:
  - Click the "Disable" button.
  - Click the "Release" button.
  - Click the "Close" button.
  - Click the "X" in the upper right-hand corner of the utility window(s).

#### **Detailed Steps**

- 1. Open the "HP Integrated OPOS Cash Drawer Utility"
  - (HPOPOSCDUtility.exe) either using the link in the Start Menu or through the installed location (C:\<Program Files directory>\Hewlett-Packard\HP Integrated Cash Drawer\OPOS).

- 2. Click the "Open" button.
- 3. Click the "Claim" button.
- 4. Click the "Enable" button. The "Drawer Status" will display a status event for the cash drawer current state.

HP Integrated OPOS Cash Drawer Utility v1.13.3.0				
HP Cash Drawer Devices				
HP_CashDrawerPort-1 HP_CashDrawerPort-2	Cash Drawer 1	Cash Drawer 2		
In-CasibiawerPort-2	Open	Open		
	Claim	Claim		
	Enable	Enable		
	Open Drawer	Open Drawer		
	Drawer Status	Drawer Status		
	Disable	Disable		
	Release	Release		
	Close	Close		
	Display OPOS Result V	alues/Codes		

5. Click the "Open Drawer" button to open the cash drawer. The "Drawer Status" should reflect the cash drawer open state.

🏘 HP Integrated OPOS Cash Drawer Utility v1.13.3.0 🛛 🛛 🔀				
HP Cash Drawer Devices HP_CashDrawerPort-1 HP_CashDrawerPort-2	Cash Drawer 1	Cash Drawer 2 Open Claim		
	Enable	Enable		
	Open Drawer Drawer Status	Open Drawer Drawer Status		
	Disable	Disable		
	Release	Release		
	Close	Close		
	Display OPOS Result Va	lues/Codes		

- 6. Close the cash drawer. The "Drawer Status" should reflect the cash drawer closed state.
- 7. To exit the utility:
  - Click the "Disable" button.
  - Click the "Release" button.
  - Click the "Close" button.
  - Click the "X" in the upper right-hand corner of the utility window(s).

🏘 HP Integrated OPOS Cash Drawer Utility v1.13.3.0				
HP Cash Drawer Devices				
HP_CashDrawerPort-1 HP_CashDrawerPort-2	Cash Drawer 1	Cash Drawer 2		
In Costor awer or the	Open	Open		
	Claim	Claim		
	Enable	Enable		
	Open Drawer	Open Drawer		
	Drawer Status	Drawer Status		
	Disable	Disable		
	Release	Release		
	Close	Close		
	Display OPOS Result Va	alues/Codes		

# 6.2.5.2 OPOS Cash Drawer and Printer Utility

This utility is included in the HP Factory image and can be obtained by downloading and installing the "HP USB Receipt Printer OPOS Test Application" Softpaq. The following is an overview of the steps to test the cash drawer followed by detailed steps:

- 1. Open the "OPOS Test Application" (OPOS\_Test\_Application.exe) either using the link in the Start Menu or through the installed location:
  - **HP Factory image:** C:\xxxxx\Point of Sale\Receipt Printer\OPOS Test Utility
  - Softpaq: C:\Receipt\_OPOS
- 2. Click the "CashDrawer" button.
- 3. Under "Device To Open", select the device name for the cash drawer to be tested.
- 4. Click the "Open" button.
- 5. Click the "Enable" button.
- Click the "Open Drawer" button to open the cash drawer. A StatusUpdateEvent should be displayed reflecting the cash drawer open state.
- 7. Close the cash drawer. A StatusUpdateEvent should be displayed reflecting the cash drawer closed state.
- 8. To exit the utility:
  - Click the "Disable" button.
  - Click the "Close" button.
  - Click the "X" in the upper right-hand corner of the utility window(s).

#### **Detailed Steps**

- 1. Open the "OPOS Test Application" (OPOS\_Test\_Application.exe) either using the link in the Start Menu or through the installed location:
  - HP Factory image: C:\xxxxx\Point of Sale\Receipt
    Printer\OPOS Test Utility
  - Softpag: C:\Receipt OPOS
- 2. Click the "CashDrawer" button.

Sample Opos Application			$\mathbf{X}$
Eile Help			
HP Receipt Printer			
μμ	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets, M	lethod Return	Values, and Event	ts

3. Under "Device To Open", select the device name for the cash drawer to be tested.

🛢 Cash Drawer	Examples		X
Device To Open A776-1 A776-2 A794-1 A794-2 A799-1 A799-2 HP_CashDrawerPo HP_CashDrawerPo Disable Close Close		DeviceDescriptions Control Service	
Drawer 1	Drawer 2	Drawer 1 PowerNotify	
Close	Form	I Drawer 2 PowerNotifu	

- 4. Click the "Open" button.
- 5. Click the "Enable" button.
- 6. Click the "Open Drawer" button to open the cash drawer. A StatusUpdateEvent should be displayed reflecting the cash drawer open state.

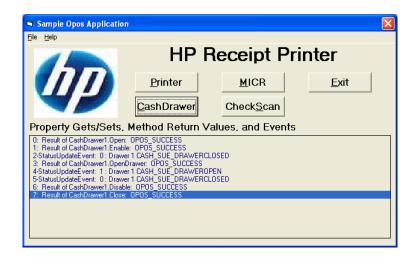
Sample Opos Application						
<u>File H</u> elp						
	HP Receipt Printer					
	<u>P</u> rinter		MICR		<u>E</u> xit	
	<u>C</u> ashDrawer		Check <u>S</u> can			
Property Gets/Sets,	Method Return	Valı	ues, and Event	ts		
0: Result of CashDrawer1.0pen: 0POS_SUCCESS 1: Result of CashDrawer1.Enable: 0POS_SUCCESS 2-StatusUpdateEvent: 0: 0rawer1 CASH_SUE_DRAWERCL0SED 3: Result of CashDrawer1.0penDrawer: 0POS_SUCCESS 4-StatusUpdateEvent: 1: 0rawer1 CASH_SUE_DRAWER0PEN						

7. Close the cash drawer. A StatusUpdateEvent should be displayed reflecting the cash drawer closed state.

Sample Opos Application	n .		
<u>File H</u> elp			
HP Receipt Printer			nter
	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets,	Method Return	Values, and Events	
0: Result of CashDrawer1.0pen: 0P05_SUCCESS 1: Result of CashDrawer1.Enable: 0P05_SUCCESS 2-StatusUpdateEvent: 0: Drawer1 CASH_SUE_DRAWERCLOSED 3: Result of CashDrawer1.0penDrawer: 0P05_SUCCESS 4-StatusUpdateEvent: 1: Drawer1 CASH_SUE_DRAWER0PEN			
5-StatusUpdateEvent: 0: Drawer 1 CASH_SUE_DRAWERCLOSED			

- 8. To exit the utility:
  - Click the "Disable" button.
  - Click the "Close" button.
  - Click the "X" in the upper right-hand corner of the utility window(s).

🛱 Cash Drawer	Examples		
Device To Open HP_CashDrawerPort-1			
Open Enable Open Drawer	Open Enable Open Drawer	DeviceDescriptions Control OPOS CashDrawer Control 1.13. Service HP Integrated OPOS Cash Draw	
Disable Close	Disable Close		
Drawer 1	Drawer 2	🗖 Drawer 1 PowerNotify	
Close Form		I   Drawer 2 PowerNotifu	



### 6.2.6 JPOS Drivers for the Integrated Cash Drawer Port

The Integrated Cash Drawer Port JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Cash Drawer Port\Integrated Cash Drawer JPOS) and are also available from <u>HP.COM</u>.

### 6.2.6.1 JPOS Test Applet for the Integrated Cash Drawer Port

The following is an overview of the steps to test the cash drawer followed by detailed steps:

- Open the "HP Integrated JavaPOS Cash Drawer Utility" (HPJposCDUtility.exe) either using the link in the Start Menu or through the installed location (C:\<Program Files directory>\Hewlett-Packard\HP Integrated Cash Drawer\JavaPOS\service).
- 2. Click the "Open" button.
- 3. Click the "Claim" button.
- 4. Click the "Enable" button. The "Drawer Status" will display a status event for the cash drawer current state.
- 5. Click the "Open Drawer" button to open the cash drawer. The "Drawer Status" should reflect the cash drawer open state.
- 6. Close the cash drawer. The "Drawer Status" should reflect the cash drawer closed state.
- 7. To exit the utility:
  - Click the "Disable" button.
  - Click the "Release" button.
  - Click the "Close" button.
  - Click the "X" in the upper right-hand corner of the utility window(s).

#### **Detailed Steps**

- Open the "HP Integrated JavaPOS Cash Drawer Utility" (HPJposCDUtility.exe) either using the link in the Start Menu or through the installed location (C:\<Program Files directory>\Hewlett-Packard\HP Integrated Cash Drawer\JavaPOS\service).
- 2. Click the "Open" button.
- 3. Click the "Claim" button.

🕌 HP Integrated JavaPOS Cash Dr	awer Test Utility v1.13.0.0 🔳 🗖 🔀
Cash Drawer 1	Cash Drawer 2
Open	Open
Claim	Claim
Enable	Enable
Open Drawer	Open Drawer
Drawer Status	Drawer Status
Disable	Disable
Release	Release
Close	Close

4. Click the "Enable" button. The "Drawer Status" will display a status event for the cash drawer current state.

🛎 HP Integrated JavaPOS Cash Drawer Test Utility v1.13.0.0 🛛 🔲 🔀			
Cash Drawer 1	Cash Drawer 2		
Open	Open		
Claim	Claim		
Enable	Enable		
Open Drawer	Open Drawer		
Drawer Status	Drawer Status		
Status Event: Closed			
Disable	Disable		
Release	Release		
Close	Close		

5. Click the "Open Drawer" button to open the cash drawer. The "Drawer Status" should reflect the cash drawer open state.

HP Integrated JavaPOS Cash	n Drawer Test Utility v1.13.0.0 🔳 🗖 🔀
Cash Drawer 1	Cash Drawer 2
Open	Open
Claim	Claim
Enable	Enable
Open Drawer	Open Drawer
Drawer Status	Drawer Status
Status Event: Open	
Disable	Disable
Release	Release
Close	Close

6. Close the cash drawer. The "Drawer Status" should reflect the cash drawer closed state.

- 7. To exit the utility:Click the "Disable" button.
  - Click the "Release" button.

  - Click the "Close" button.
    Click the "X" in the upper right-hand corner of the utility window(s).

🕌 HP Integrated JavaPOS Cash Dr	awer Test Utility v1.13.0.0 📃 🗖 🔀
Cash Drawer 1	Cash Drawer 2
Open	Open
Claim	Claim
Enable	Enable
Open Drawer	Open Drawer
Drawer Status	Drawer Status
Disable	Disable
Release	Release
Close	Close

# 6.3 USB Cash Drawer



### 6.3.1 Connection

The HP USB Cash Drawer may be plugged into any free USB port. One may plug the USB cash drawer into the powered USB port in the 5v connection; when plugged into a powered USB port the power portion of USB port is not utilized.

### 6.3.2 Drivers and utilities for the HP USB Cash Drawer

The HP USB cash drawer may be tested with several utilities which are described in the following section of the guide.

#### 6.3.3 <u>Windows Test Utility for USB Cash Drawer</u>

The following is overview of the steps to test the USB cash drawer in Windows environment which are followed by detailed steps:

- 1. Ensure the USB cash drawer is attached to the unit.
- 2. Start the "HP USB Cash Drawer" application that can be found in the start menu.
- 3. Click on "Open Cash Drawer" button and the drawer should open and provide status.
- 4. Close the cash drawer.
- 5. To exit the application click on the "X" button in the upper right corner of the utility.

#### **Detailed Steps**

- 1. Ensure the USB cash drawer is attached to the unit.
- 2. Start the "HP USB Cash Drawer" application that can be found in the start menu.
- 3. Click on "Open Cash Drawer" button and the drawer should open and provide status.

🖙 HP USB Cash Drawer - Single Drawer 🛛 🔀			
Open HP USB Cash Drawer			
Poll HP USB Drawer Status			
Drawer is Open			
✓ Enable Status Reporting			
Drawer HID			
1.2.0.0			

4. Close the cash drawer.

🖚 HP USB Cash Drawer - Single Drawer 🛛 🔀			
Open HP USB Cash Drawer			
Poll HP USB Drawer Status			
Drawer is Closed			
Enable Status Reporting			
Drawer HID			
1.2.0.0			

5. To exit the application click on the "X" button in the upper right corner of the utility.

🖙 HP USB Cash Drawer - Single Drawer 🛛 🔀			
	1		
Open HP USB Cash Drawer			
Poll HP USB Drawer Status			
Enable Status Reporting			
Drawer HID			
1.2.0.0			

• If the "Drawer HID" button is clicked, the cash drawer HID information will be obtained:

🖚 HP USB Cash Drawer - Single Drawer 🛛 🛛 🔀			
Open HP USB Cash Drawer			
Poll HP USB Drawer Status			
Drawer is Closed			
Enable Status Reporting			
Drawer HID 4			
1.2.0.0			

# 6.3.4 OPOS Drivers for the HP USB Cash Drawer

The HP USB Cash Drawer Port drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Cash Drawer\USB Cash Drawer) and are also available from <u>HP.COM</u>.

### 6.3.4.1 OPOS Cash Drawer and Printer Utility

The following is overview of the steps to test the cash drawer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the program file folder.
- 2. Click "CashDrawer" button.
- 3. Select correct device name for the cash drawer to be tested. The OPOS name for the HP USB cash drawer is: HPUSBCashDrawer-1
- 4. Click "OPEN"
- 5. Click "ENABLE"
- 6. Click "OPEN Drawer" and the cash drawer should open. The GUI should also show status that the cash drawer is open.
- 7. Close the cash drawer and the GUI should give the status that the cash drawer is closed.
- 8. Exit the test utility.

#### **Detailed Steps**

- Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the "C:\xxxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click "CashDrawer". The following is the main GUI of the "Sample\_OPOS\_Application" when it is launched:

OPOS Test Application			
<u>File H</u> elp			
	HP F	Receipt Pri	nter
	Printer	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets, Method Return Values, and Events			

3. Select correct device name for the cash drawer to be tested. The OPOS name for the HP USB cash drawer is: HPUSBCashDrawer-1

💐 Cash Drawer E	xamples	<u> </u>
Device To Open  A776-1  A776-2  A794-1  A794-2  A799-1  A799-2  HPUSBCashDrawer  HP_CashDrawer  Disable  Close  Close	ort-T 📉	DeviceDescriptions Control Service
Drawer 1	Drawer 2	🔲 Drawer 1 PowerNotify
Close	Form	I Drawer 2 PowerNotify

- 4. Click "OPEN"
- 5. Click "ENABLE"

6. Click "OPEN Drawer" and the cash drawer should open. The GUI should also show status that the cash drawer is open.

OPOS Test Application			$\mathbf{X}$			
Eile Help						
	HP F	Receipt Pri	nter			
	<u>P</u> rinter	MICR	<u>E</u> xit			
	<u>C</u> ashDrawer	Check <u>S</u> can				
Property Gets/Sets,	Method Return Va	alues, and Events				
0: Result of CashDrawer1.0pen: 0P0S_SUCCESS 1: Result of CashDrawer1.Enable: 0P0S_SUCCESS 2-StatusUpdateEvent: 0: Drawer1 CASH_SUE_DRAWERCLOSED 3: Result of CashDrawer1.0penDrawer: 0P0S_SUCCESS						
4-StatusUpdateEvent: 1 : Drawe	r 1 CASH_SUE_DRAWEROF	EN				

7. Close the cash drawer and the GUI should give the status that the cash drawer is closed.

OPOS Test Application			×
<u>File H</u> elp			
	HP F	Receipt Pri	nter
	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets,	Method Return V	alues, and Events	
0: Result of CashDrawer1.0pen: 1: Result of CashDrawer1.Enable 2:StatusUpdateEvent: 0: Drawe 3: Result of CashDrawer1.0pen1 4:StatusUpdateEvent: 1: Drawe 5:StatusUpdateEvent: 0: Drawe	:: OPOS_SUCCESS r1 CASH_SUE_DRAWERCI )rawer: OPOS_SUCCESS r1 CASH_SUE_DRAWEROI	PEN	

8. Exit the test utility by clicking on DISABLE/CLOSE/CLOSE FORM and then click on EXIT.

💐 Cash Drawer E	amples	$\overline{\mathbf{X}}$
Device To Open HPUSBCashDrawer	·1 💌	
Open Enable Disable	Open Enable Open Drawer Disable	DeviceDescriptions Control OPOS CashDrawer Control 1.13. Service HP OPOS USB Cash Drawer Sei
Close Drawer 1	Close Drawer 2	
		<ul> <li>Drawer 1 PowerNotify</li> <li>Drawer 2 PowerNotify</li> </ul>
e Help	HP Printer CashDrawer	Receipt Printer          MICR       Exit         CheckScan
Property Gets/Sets. 0: Result of CashDrawer1.Oper 1: Result of CashDrawer1.Enal 2:StatusUpdateEvent: 0: Draw 3: Result of CashDrawer1.Oper 4:StatusUpdateEvent: 1: Draw 5:StatusUpdateEvent: 0: Draw 6: Result of CashDrawer1.Close	n: OPOS_SUCCESS ble: OPOS_SUCCESS ver 1 CASH_SUE_DRAW nDrawer: OPOS_SUCCE ver 1 CASH_SUE_DRAW ver 1 CASH_SUE_DRAW ble: OPOS_SUCCESS	n Values, and Events

### 6.3.4.2 Dual Cash Drawer Connection

For dual USB cash drawer, attach a second HP USB cash drawer to USB connection.

The following is overview of the steps to add a second USB cash drawer followed by detailed steps in order for OPOS to recognize both cash drawers.

- 1. Launch the "HPCDUtility" that is located in the "C:\Program Files\Hewlett-Packard\USB Cash Drawer".
- 2. Click on the icon that has a plus by the cash drawer or select "Add Device" in the "Edit" menu.
- 3. Click "Next" button.
- 4. Click on "Health Check (Interactive)" button.
- 5. Click on the "OK" button.
- 6. The cash drawer should be open with a GUI indicating the successful drawer.
- 7. Click on the "OK" button.
- 8. Click on the "Cancel" button to quit the health check.
- 9. Click on the "Finish" button.
- 10. Exit the test utility.

#### **Detailed Steps**

1. Launch the "HPCDUtility" that is located in the "C:\Program Files\Hewlett-Packard\USB Cash Drawer". 2. Click on the icon that has a plus by the cash drawer or select "Add Device" in the "Edit" menu.

🏘 HP OPOS USB Cash Drawer U	ility v1.13	🖂
<u> E</u> dit <u>T</u> ools <u>H</u> elp		
🗐 🔜 🗙 🗟 🔋 📔		
€-CashDrawer		
Ready		11.

3. Click "Next" button.

Add New Cash Drawer Device [HP Device Key] 🛛 🔀
Add new HP USB Cash Drawer devce
HP USB Cash Drawer
☑ UPO5 v1.9
Add new LDN
The LDN Logical Device Name(s) is a reference ID pointer to the Device ID only, not required and non destructable.
* LDN's can later be added or removed.
Next > Cancel

4. Click on "Health Check (Interactive)" button.

Add New Cash Drawer Devic	e Settings 🛛 🔀
Device ID [Key] HPUSBCashDrawer-2	USB Port Setting HID#: N/A Port USB1
Heal	th Check (Interactive)
	< <u>B</u> ack <u>F</u> inish <u>C</u> ancel

5. Click on the "OK" button.

HPUSBCashDrawer-2 OPOS CheckHealth (Interactive)	×					
Press OK to open cash drawer, CANCEL to quit						
Cancel						

6. The cash drawer should be open with a GUI indicating the successful drawer.



7. Click on the "OK" button.



8. Click on the "Cancel" button to quit the health check.

HPUSBCashDrawer-2 OPOS CheckHealth (Interactive) 🔀
Press OK to open cash drawer, CANCEL to quit
Cancel

9. Click on the "Finish" button.

Add New Cash Drawer Device	e Settings 🛛 🔀
Device ID [Key] HPUSBCashDrawer-2	USB Port Setting HID#: 6 Port USB1
	th Check (Interactive)
	< Back Einish Cancel

### 10. Exit the test utility.

HP OPOS USB Cash Drawer U	Itility v1.13		_ 🗆 🖂
File Edit Tools Help			
Exit K 🗟 🦹			
■ CashDrawer HPUSBCashDrawer-1 HPUSBCashDrawer-2	Description Device Name Device Description Port HID#	Value HPUSBCashDrawer-2 HP USB Cash Drawer USB1 6	

# 6.3.5 JPOS Drivers for the HP USB Cash Drawer

The HP USB Cash Drawer Port drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Cash Drawer\USB Cash Drawer) and are also available from <u>HP.COM</u>.

### 6.3.5.1 JPOS Test Applet for the USB Cash Drawer Port

- 1. Start the JPOS test utility either using the link in the START MENU:
- 2. Click on the "Cash Drawer" tab.
- 3. Select the proper device from the drop down menu.
- 4. Click on the "OPEN" button. After the imaging scanner is opened a check will appear in the "Data event enabled" box.
- 5. Click on the "CLAIM" button.
- 6. Check the "Device enabled" so there is a check box and the drawer status will appear in the GUI.
- 7. Click on the "Open Cash Drawer" to open the selected cash drawer.
- 8. After drawer has opened successfully, close the drawer and click on the "Release" button.
- 9. Click on "Close" button.
- 10. Click on "Exit" to close the test application.

#### **Detailed Steps**

 Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder for barcode scanner (C:\xxxxx\Point of Sale\Cash Drawer\USB Cash Drawer\USB Cash Drawer JPOS" folder). After a few seconds the JPOS test utility GUI will appear as shown below:

🚳 JavaP	OStester in Progress				. 🗆 🕑
File					
About	Configured Devices	CashDrawer	Exit		
				POSTest	
		٦	The	JavaPOS Device Tester.	
				v1.13.38	
		POStest is a comn		project under the direction of the JavaPOS working group. jinal code donated by 360 Commerce.	
				Contributors:	
				ange - Ultimate Technology Corporation	
				aw - IBM/Raleigh RSS Drivers and Diagnostics White - IBM/Raleigh Retail Store Solutions	
			Bra	cci A. Sistemi - Digitali s.r.l. Pisa (Italy)	
		1		Shisler - PSC Inc. DirectIO Scanner,Scale ry S. Anson - Datalogic Scanning, Inc.	

2. Click on the "Cash Drawer" tab:



3. Select the proper device from the drop down menu.

File          About       Configured Devices       CashDrawer       Exit <ul> <li>upen</li> <li>upusBcashDrawer-1</li> <li>upusBcashDrawer-2</li> <li>open</li> <li>open</li> <li>open</li> <li>det Drawer Opened</li> <li>watt For Drawer Close</li> </ul> Device enabled       Action log:         Freeze events       Image: Close C	🕌 JavaPOStester in	Progress			- 0
Logical name:     HPUSBCashDrawer-1     JPOS_S_CLOSED       Open     HPUSBCashDrawer-2     Tatistics     Firmware     O/C/E     EXIT       Open Cash Drawer     Get Drawer Opened     Wait For Drawer Close       Device enabled     Action log:	File				
Open         HPUSBCashDrawer-1 HPUSBCashDrawer-2         tatistics         Firmware         O/C/E         EXIT           Open Cash Drawer         Get Drawer Openet         Wait For Drawer Close           Device enabled         Action log:	About Configur	ed Devices CashDrawer Exit			
Open         HPUSBCashDrawer-2         Orice         EXIT           Open Cash Drawer         Get Drawer Openet         Wait For Drawer Close           Device enabled         Action log:	Logical nam	e: HPUSBCashDrawer-1	<b>F</b>	JPOS_S_(	CLOSED
Open Cash Drawer 2     Open Cash Drawer Get Drawer Opened Wait For Drawer Close      Device enabled     Action log:	Onon	HPUSBCashDrawer-1	<u> </u>	tietice Eirmwara	
Device enabled Action log:	Open	HPUSBCashDrawer-2		riniware	
		Open Cash Drawer Get Drawer Opened	W.	ait For Drawer Close	
Freeze events	Device enabled	Action	log:		
	Freeze events				

# 4. Click on the "OPEN" button.

ile About (									
About (									
ADOUL	Configure	d Devices	CashDrawer	Exit					
Logi	cal name	HPUSBCa	shDrawer-1			-	JPOS_S_CL	OSED	
0	pen	Claim	Release	Close	JavaPOS Versions	Statistics	Firmware	O/C/E	EXIT
			Open Cash	Drawer	Get Drawer Opened	Wait For Dra	wer Close		
Device e	enabled _				Action	log:			
Freeze e									
	_								

### 5. Click on the "CLAIM" button.

File								
About	Configu	red Devices	CashDrawer	Exit				
L	ogical nam	e: HPUSBCa	shDrawer-1			-	JPOS_S_IDLE	
	Open	Claim	Release	Close	JavaPOS Versions	Statistics	Firmware O/C/E	EXIT
			Open Cash	Drawer	Get Drawer Opened	Wait For Dra	iwer Close	
Devid	e enabled				Action	log:		

6. Check the "Device enabled" so there is a check box and the drawer status will appear in the GUI.

	POStester in	Progress							_ 🗆 🔀
File									
About	Configur	ed Devices	CashDrawer	Exit					
ι	ogical nam.	e: HPUSBCa	shDrawer-1			-	JPOS_S	S_IDLE	
	Open	Claim	Release	Close	JavaPOS Versions	Statistics	Firmware	O/C/E	XIT
			Open Cash	Drawer	Get Drawer Opened	Wait For Dr	awer Close		
🖌 Devi	ce enabled	<u> </u>			Action	log:			
	ze events	Status Updat	e Event: Drawer	Closed					

7. Click on the "Open Cash Drawer" to open the selected cash drawer.

🍝 Java	POStester in	Progress							_ 🗆 🖻 🛃
File									
About	t Configur	ed Devices	CashDrawer	Exit					
	Logical nam	e: HPUSBCa	shDrawer-1			-	JPOS_	S_IDLE	
	Open	Claim	Release	Close	JavaPOS Versions	Statistics	Firmware	O/C/E	EXIT
			Open Cash	Drawer	Get Drawer Opened	Wait For Dra	wer Close		
Done	ice enabled				Action				
		Status Updat	te Event: Drawer	Closed	Action				
- Free	eze events								

Logical name: HPUSBCashDrawer-1	ile									
Open     Claim     Release     Close     JavaPOS Versions     Statistics     Firmware     O/C/E     EXIT       Open Cash Drawer     Get Drawer Opened     Wait For Drawer Close       Z     Device enabled     Status Update Event: Drawer Closed       Freeze events     Open cash drawer.	About	Configu	ed Devices	CashDrawer	Exit					
Open Cash Drawer     Get Drawer Opened     Wait For Drawer Close     Cose     Status Update Event: Drawer Closed     Open cash drawer.	L	ogical nam	e: HPUSBCa	shDrawer-1			-	JPOS_S_I	DLE	
Device enabled     Status Update Event: Drawer Closed     Open cash drawer.		Open	Claim	Release	Close	JavaPOS Versions	Statistics	Firmware	O/C/E	EXIT
Freeze events Open cash drawer.				Open Cash	Drawer	Get Drawer Opened	Wait For Dra	wer Close		
Freeze events Open cash drawer.	∠ Devi	e enabled				Action	log:			
	Free:	ze events	Open cash d	rawer.						

8. After drawer has opened successfully, close the drawer and click on the "Release" button.\_\_\_\_\_

🍰 Java	POStester ir	Progress								_ 0
File										
About	Configu	ed Devices	CashDrawer	Exit						
	Logical nam	e: HPUSBCa	shDrawer-1				JPOS_S_IDLE			
	Open	Claim	Release	Close	JavaPOS Version	IS	Statistics	Firmware	O/C/E	EXIT
			Open Cash	Drawer	Get Drawer Open	ed	Wait For Dra	wer Close		
🖌 Dev	ice enabled				A	ction log	j:			
_	eze events	Status Upda Open cash c	te Event: Drawei	Closed						
			te Event: Drawei	Opened						
			te Event: Drawe							

**Note:** Multiple STATUS UPDATE EVENTs with the same status may appear in the GUI.

# 9. Click on "Close" button

ile									
About C	Configure	d Devices	CashDrawe	Exit					
		: HPUSBCa	1			-	JPOS_S		
Op	pen	Claim	Release	Close	JavaPOS Versions	Statistics	Firmware	O/C/E	EXIT
			Open Cast	Drawer	Get Drawer Opened	Wait For Dra	wer Close		
Device er	holded				Action	1 loa:			
Freeze ev	vents <sub>C</sub>	Open cash d Status Updat	e Event: Drawe rawer. e Event: Drawe e Event: Drawe	r Opened					

10. Click on "Exit" to close the test application.

#### **Receipt Printer** 6.4



# 6.4.1

<u>Connection</u> The HP receipt printer is installed in the 24V powered USB port on the HP POS system. The following show the back of the various HP POS units showing where the 24V power USB port is located.

### HP ElitePOS G1 Retail System:

Refer to the Hardware Reference Guide included in the HP factory image and available from <u>HP.COM</u>.

#### HP RP9 G1 Retail System:

Refer to the Hardware Reference Guide included in the HP factory image and available from HP.COM.

### HP RP2 Model 2000/2030:

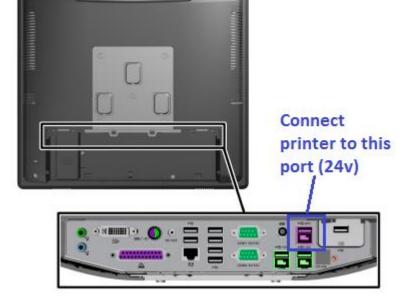




# HP rp3000:



# HP ap5000:



HP RP7 Model 7100 and HP RP7 Model 7800:



HP rp5800 and HP rp5810:





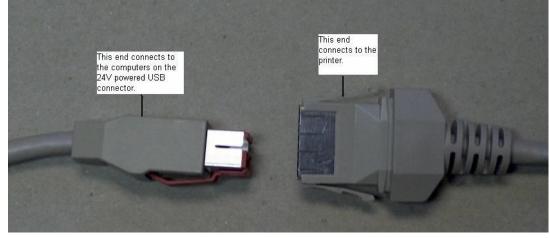


Connect printer to this port (24V USB)

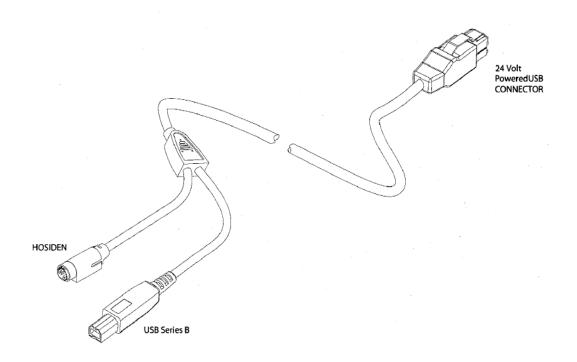
**Note:** The 24V powered USB port and cable are keyed differently than 12V powered USB connector, as well as the color.

# 6.4.2 **Powered USB Cable**

The following is the powered USB cable for single station printer and the hybrid printer (color of the cable maybe different than what is shown):



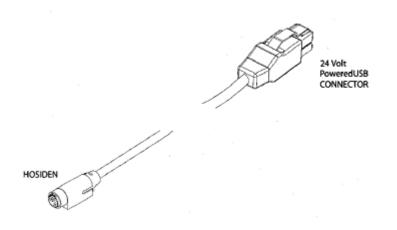
The following is the powered USB cable for the hybrid printer with imager:



The single station printer with serial interface requires two cables: power (hosiden) and serial data cable.



The following is the powered (hosiden) cable for the single station printer with serial interface:



The serial data cable is standard null modem cable and the following is the pin out of the cable:

Pin #	Pin #
1	NC (no
	connect)
2	3
3	2
4	6
5	5
6	4
7	8
8	7
9	NC (no
	connect)
Shield	Frame
	Ground

## 6.4.3 NATIVE mode

Please note that PRINTER CLASS is the default mode of the printer; please see next section for more details on PRINTER CLASS.

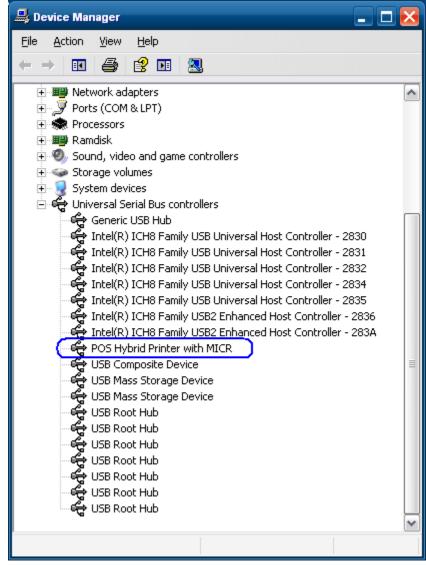
On the HP Point of Sale units with Windows operating system, the drivers for Windows device manager are installed on the image from the HP factory. When the printer is attached to the unit via the powered USB connection, Windows will load the drivers for the HP POS printer.

If the Windows USB drivers are needed for Device Manager when the printer is in native mode, they can be found on <u>HP.COM</u>.

The following is showing what appears in Windows Device Manager after the driver has been loaded for the printer in NATIVE mode (native mode is only supported in XP based operating system – WePOS / POSReady 2009 / Windows XP Professional):

🚇 Device Manager	
<u>File Action View Help</u>	
<ul> <li>HP17077299691</li> <li>Computer</li> <li>Display adapters</li> <li>Maintors</li> <li>Network adapters</li> <li>Ports (COM &amp; LPT)</li> <li>Processors</li> <li>Sound, video and game controllers</li> <li>System devices</li> <li>Universal Serial Bus controllers</li> <li>System devices</li> <li>Universal Serial Bus controllers</li> <li>System devices</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2830</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2831</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2832</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2834</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2835</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB2 Enhanced Host Controller - 2836</li> </ul>	

Single Station Printer in Native Mode



HP Hybrid Printer in Native mode

# 6.4.4 PRINTER CLASS Mode

When the printer is in PRINTER CLASS mode, the Microsoft Windows native drivers are loaded by operating system for device manager. PRINTER CLASS mode must be used when the POS application does not use OPOS driver to communicate the receipt printer.

The following is showing what appears in Windows Device Manager after the driver has been loaded for the printer in PRINTER CLASS mode:

B Device Manager	
<u>Eile Action View H</u> elp	
<ul> <li>Computer</li> <li>Display adapters</li> <li>Display adapters</li> <li>Display adapters</li> <li>DE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>Monitors</li> <li>Network adapters</li> <li>Ports (COM &amp; LPT)</li> <li>Processors</li> <li>Sound, video and game controllers</li> <li>System devices</li> <li>Universal Serial Bus controllers</li> <li>System devices</li> <li>Universal Serial Bus controllers</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2831</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2831</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2832</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2834</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2835</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB Universal Host Controller - 2836</li> <li>Intel(R) ICH8 Family USB Enhanced Host Controller - 2836</li> <li>USB Root Hub</li> </ul>	

# 6.4.5 COMM CLASS Mode

If the correct boot and flash firmware level are present on the printer (see table below) the printer can be put into COMM CLASS. When the printer is in COMM CLASS mode a virtual COM port is assigned to the printer USB interface for application that only communicate to the printer via serial port. One can look in Windows Device Manager  $\rightarrow$  PORTS to determine the virtual com port that Windows assigned to the virtual printer COM port. Steps to change COMM class are covered in <u>USB MODE</u> <u>SELECTOR</u> section of the document).

**Note:** The COMM CLASS option is available only on the A799 powered USB model and A776 printer. The following are minimum version of the firmware that supports the COMM CLASS option:

Firmware Version	A776	A799
Boot Firmware Version	1.25	1.06
Flash Firmware Version	2.00	1.08

**Note:** If the printer has later versions then what is listed in the above table, the printer firmware does not need to be downgraded to the version in the table.

In order to obtain the firmware that is installed on the printer, perform the following steps when you are in front of the printer:

- 1. Open the printer cover that holds the thermal receipt paper.
- 2. Hold down the printer form feed button and close the printer cover.
- 3. Release the form feed button on the printer and a diagnostics printout will be printed.

The following are examples of the diagnostics printout:

#### HP Single Station Printer (A799)

*** A799 - Diagnostics ReceiptWare E	inabled
	A799-C40D-HN00 K102100925
Boot Firmware	
Revision :	V3.02
CRC :	7E22
P/N :	189-7940489B
Flash Firmware	
Revision :	V3.01
CRC :	4448
P/N :	189-7940490A
H/W parameters	
Flash Memory Size :	
Flash Logos/Fonts :	
Flash User Storage :	64 kbytes
Flash Perm'nt Fonts:	2240 kbytes
Flash Journal Size :	64 kbytes
CDAM Cize .	510 khutaa

## HP Hybrid Thermal Printer (A776)

***	A776	1	B780	-	Diagnostics	Form	***
		R	eceipt	tW.	are Énabled		

Model number Serial number		A776-C21W-H000 K084905284
Boot Firmware		
Revision		V1.25
CRC	2	FC97
D /N		189-7760899A
Flash Firmware		
Revision	:	V2.00
CRC	÷	B910
P/N	:	189-7760897A
H/W parameters		
Flash Memory Size		2 Mbytes
Flash Logos/Fonts		
Flash User Storage		64 kbytes
Fidsi use stoldye		UT KUYLOS

The following is showing what appears in Windows Device Manager after the driver has been loaded for the printer in COMM CLASS mode:

🚚 Device Manager	
<u> Eile A</u> ction <u>V</u> iew <u>H</u> elp	
<ul> <li>HP17077299691</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Human Interface Devices</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>Mice and other pointing devices</li> <li>Monitors</li> <li>Monitors</li> <li>Ports (COM &amp; LPT)</li> <li>Communications Port (COM1)</li> <li>Communications Port (COM2)</li> <li>Communications Port (COM3)</li> <li>Communications Port (COM4)</li> <li>Printer Port (LPT1)</li> <li>USB Serial Port A799 (COM5)</li> <li>Processors</li> <li>Sound, video and game controllers</li> <li>System devices</li> <li>Universal Serial Bus controllers</li> </ul>	

# 6.4.6 USB Mode Selector Utility

If the proper level of firmware is present on the receipt printer the USB MODE SELECTOR utility can be used to switch the printer between NATIVE / PRINTER / COMM Class mode. The HP USB receipt printer must be attached to the desktop computer and all Microsoft Windows device drivers must be loaded (no yellow exclamation marks in Device Manager) in order for the utility to work correctly.

The following is an overview of the steps to use the USB Mode Selector Utility:

- Launch the UsbModeSelector.exe program from the START MENU or from "C:\xxxxx\Point of Sale\Receipt Printer\HP Receipt USB Mode Selector Utility" folder.
- 2. A dialog appears which reflects the mode the printer is currently set to.
  - a. Select the desired mode of the printer. If the printer is in COMM CLASS mode, the GUI will display the virtual com port that is assigned to the printer on the unit that utility is run on.
  - b. Click on the change button.
  - c. Exit the utility.

**Note:** The first time the printer is changed to a different mode, Windows may take a few minutes to completely load and enable the driver for the selected mode.

The following example shows the printer in PRINTER CLASS mode (item is circled in blue):

USB Mode Selector v1.0.0.9	
USB Mode	Close
<ul> <li>Printer Class</li> <li>Comm Class</li> </ul>	Printer Class USB
	Change

# 6.4.6.1

<u>Set printer to NATIVE mode</u> The following are the steps to switch the printer to NATIVE MODE (native mode is only supported in XP based operating system - WePOS / POSReady 2009 / Windows XP Professional):

Note: Native Mode option is no longer available starting with version 1.0.0.9 of the utility.

1. Select NATIVE MODE in the GUI.

USB Mode Selector v1.0.0.8	
USB Mode Native Mode Printer Class Comm Class	Close Printer Class USB Change

2. Click on the CHANGE button.

USB Mode Selector v1.0.0.8	
USB Mode Native Mode Printer Class C Comm Class	Close Printer Class USB Change

3. Once the printer has loaded the drivers and changed modes, the GUI will change the printer mode status to NATIVE USB.

USB Mode Selector v1.0.0.8	
USB Mode Native Mode Printer Class C Comm Class	Close Native USB Change

## 6.4.6.2

<u>Set printer to PRINTER CLASS mode (default)</u> The following are the steps to switch the printer to PRINTER CLASS MODE (printer default):

1. Select PRINTER CLASS in the GUI.

USB Mode Selector v1.0.0.9	
USB Mode	Close
Printer Class     C Comm Class	Comm Class USB = COM10
	Change

2. Click on the CHANGE button.

USB Mode Selector v1.0.0.9	
USB Mode Printer Class     Comm Class	Close Comm Class USB = COM10 Change

3. Once the printer has loaded the drivers and changed modes, the GUI will change the printer mode status to PRINTER CLASS USB.

USB Mode Printer Class  Close  Printer Class USB  Comm Class
Change

# Set printer to COMM CLASS mode (virtual serial port) The following are the steps to switch the printer to COMM CLASS MODE: 6.4.6.3

1. Select COMM CLASS in the GUI.

USB Mode Selector v1.0.0.9	
USB Mode	Close
Printer Class	Printer Class USB
Comm Class	Change

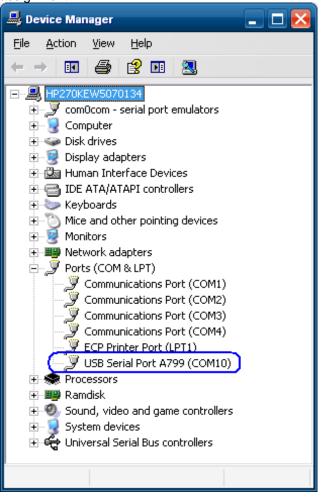
2. Click on the CHANGE button.

USB Mode Selector v1.0.0.9	
USB Mode	Close
C Printer Class	Printer Class USB
Comm Class	Change

3. Once the printer has loaded the drivers, close and re-launch the utility in order to have the utility display the virtual COMM PORT that was assigned by Windows.

USB Mode Selector v1.0.0.9	
USB Mode C Printer Class C Comm Class	Close Comm Class USB = COM10 Change

One may also look in Windows Device Manager  $\rightarrow$  PORTS to see the virtual COMM PORT assignment.



# 6.4.7 Serial Printer

The serial version of the printer will not show as a unique device in Windows device manager. Ensure that the serial port in device manager is present and does not have yellow bang.

# 6.4.8 <u>Windows Drivers for the Receipt Printer Drivers</u>

The printer has two modes: NATIVE and PRINTER CLASS. PRINTER CLASS is the default mode of the printer.

The PRINTER CLASS mode is used with POS application that use Windows printer driver to print, they do not use OPOS to communicate to the printer.

Note: The Windows mini-drivers and the OPOS drivers cannot be set to the same COM port.

#### 6.4.8.1 Windows Printer Driver (USB) for v1.0.5 for POSReady 2009

- The following is an overview of the steps to test the receipt printer followed by detailed steps:
- 1. Start the setup program for the Windows mini-drivers by double clicking on "HP\_Mini\_Drivers.BAT" file and click "OK".
- 2. Select your printer model that appear on the screen.
- 3. Select the USBxxx (Virtual Printer Port of USB) printer port from the drop menu (towards the bottom of the drop down menu).
  - In order to make the printer the default printer select the option "Set as default printer".
  - If one wishes to print a test page, select the option "Print test page" in the GUI.
- 4. Click "OK" to install the printer driver and a test print out will occur if the option was selected.

#### **Detailed Steps**

1. Start the setup program for the Windows mini-drivers by double clicking on "HP\_Mini\_Drivers.BAT" file and click "OK".

One can launch the "HP\_Mini\_Drivers.BAT" file from the start menu or go to the "C:\xxxxx\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers" folder and double click on the "HP\_Mini\_Drivers.BAT" file.

The following is the GUI that one will see when the "HPSETUP.EXE" is launched:

HPSetup Version 1.0.5	X
Cancel	

2. Select your printer model that appear on the screen.

Install/Unir	ıstali		$\mathbf{\Sigma}$	
Welcome to the HP printer setup program. Choose the appropriate option to Install or UnInstall a printer driver.				
	<ul> <li>32-Bit</li> </ul>	○ 64-Bit		
	Install HP A794/98	Install HP A799		
	Install HP A776Rcpt	Install HP A776Slip		
Uninstall				
Exit				

3. Select the USBxxx (Virtual Printer Port of USB) printer port from the drop menu (towards the bottom of the drop down menu).

HP Printer Installation	$\mathbf{x}$
HP A794/98 Minidriver	
Choose a Printer Model	
Available Printers: HP A794/98 CD #1 Partial	
Choose a Printer Port	
Available Ports: COM1:	
LPT2: LPT3: PDFC	
Set as de USB001	
OK Cancel	

When the selections are made, the selection should be similar to the following screen:

HP Printer Installation	$\mathbf{X}$
HP A794/98 Minidriver	
Choose a Printer Model	
Available Printers: HP A794/98 CD #1 Partial	
Choose a Printer Port	
Available Ports: USB001	
Set as default printer Print test page	
OK Cancel	

In order to make the printer the default printer select the option "Set as default printer".

HP Printer Installation	×
HP A794/98 Minidriver	
Choose a Printer Model	
Available Printers: HP A794/98 CD #1 Partial	
Choose a Printer Port	
Available Ports: USB001	
Set as default printer	
OK Cancel	

If one wishes to print a test page, select the option "Print test page" in the GUI.

HP Printer Installation	×
HP A794/98 Minidriver	
Choose a Printer Model	
Available Printers: HP A794/98 CD #1 Partial	
Choose a Printer Port	
Available Ports: USB001	
Set as default printer	
OK Cancel	

4. Click "OK" to install the printer driver and a test print out will occur if the option was selected.

#### 6.4.8.2 <u>Windows Printer Driver (Serial) for v1.0.5 for POSReady 2009</u>

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2.Go into the communication port properties to change the Windows baud rate to the printer is set to on the diagnostics form (previous step) and flow control to "Hardware" for port that the printer is attached.
- 3. Start the setup program for the Windows mini-drivers by double clicking on "HP\_Mini\_Drivers.BAT" file and click "OK".
- 4. Select your printer model that appear on the screen.
- 5. Select the COM (serial) port the printer is attached to.
  - In order to make the printer the default printer select the option "Set as default printer".
  - If one wishes to print a very small test page, select the option "Print test page" in the GUI.
- 6.Click "OK" to install the printer driver and a test print out will occur if the option was selected.

#### **Detailed Steps**

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Go into the communication port properties to change the Windows baud rate to the printer is set to on the diagnostics form (previous step) and flow control to "Hardware" for port that the printer is attached.

Communi	cations Port (CC	)M2) Propertie	28	? 🔀
General	Port Settings D	river Details	Resources	
Į	Communications	Port (COM2)		
	Device type:	Ports (COM	& LPT)	
	Manufacturer:	(Standard p	ort types)	
	Location:	on Intel(R) H	IM65 Express Chi	ipset Family LPC
This If you	e status device is working u are having proble the troubleshooter	ems with this dev	vice, click Trouble	<u> </u>
<u>D</u> evice Use thi	usage: is device (enable)			~
			ОК	Cancel

Communication	ns Port (COM2	!) Propertie	8		? 🔀
General Port 9	Settings Drive	r Details	Resources		
	<u>B</u> its	per second:	115200		
		<u>D</u> ata bits:	8		~
		<u>P</u> arity:	None		•
		<u>S</u> top bits:	1		•
	C	low control:	Hardware		
		Adv	anced	<u>R</u> estore De	faults
					ancel

Note: The baud rate may be different than the screen shot shown above.

3. Start the setup program for the Windows mini-drivers by double clicking on "HP\_Mini\_Drivers.BAT" file and click "OK"

One can launch the "HP\_Mini\_Drivers.BAT" file from the start menu or go to the "C:\xxxxx\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers" folder and double click on the "HP\_Mini\_Drivers.BAT" file.

The following is the GUI that one will see when the "HPSETUP.EXE" is launched:



4. Select your printer model that appears on the screen.

Install/Unl	nstall		×	
		setup program. Choose the For UnInstall a printer driver.		
	<ul> <li>32-Bit</li> </ul>	C 64-Bit		
ſ	Install HP A794/98	Install HP A799		
	Install HP A776Rcpt	Install HP A776Slip		
	Unl	nstall		
Exit				

5. Select the COM (serial) port that the printer is attached to.

HP Printer Installation	×
HP A794/98 Minidriver	
Choose a Printer Model	
Available Printers: HP A794/98 CD #1 Partial	
Choose a Printer Port	]
Available Ports: COM1:	
COM2: COM3: COM4: COM4: COM6:	
OK Cancel	

When the selections are made, the selection should be similar to the following screen:

HP Printer Installation	
HP Receipt	
Choose a Printer Model	1
Available Printers: HP Receipt	
Choose a Printer Port	
Available Ports: COM2:	
Set as default printer Print test page	-
OK Cancel	

In order to make the printer the default printer, select the option "Set as default printer":

HP Printer Installation	
HP Receipt	
Choose a Printer Model	
Available Printers: HP Receipt	
Choose a Printer Port	
Available Ports: COM2:	
Set as default printer	
OK Cancel	

To print a small test page, select the option "Print test page":

HP Printer Installation	
HP Receipt	
Choose a Printer Model	
Available Printers: HP Receipt	
Choose a Printer Port	
Available Ports: COM2:	
Set as default printer	
OK Cancel	

6. Click "OK" to install the printer driver and a test printout will occur if the option was selected.

#### 6.4.8.3 Windows Printer Driver (Ethernet) for v1.0.5 for POSReady 2009

The following is an overview of the steps to test the receipt printer followed by detailed steps:

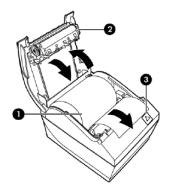
- 1. Print out the diagnostic form on the printer in order to obtain the IP Address and the RAW TCPIP Port information.
- 2. Go to Control Panel Devices and Printers and select "Add a printer".
- 3. Select "Add a local printer". **Do not select the network option.**
- 4. Select "Create a new port" option.
- 5. Select "Standard TCP / IP Port" option and click on the next button.
- 6. Enter the IP Address that is printed on the diagnostics form and click on the "Next" button.
- 7. On the "Additional port information required" GUI select "Standard Generic Network Card" and click on "Next" and click the "Finish" button.
- 8. When the "Install the printer driver" GUI appears select "Have Disk" option.
- 9. When the "Install From Disk" option appears browse to the location where the drivers are located and select the "OEMPRINT.INF" file and click "Open"
- 10. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.
- 11. On the "Print Sharing" GUI select the option "Do not share this printer" and click on the "Next" button.
- 12. On the "Print Test Page" GUI select the "No" option and click on the "Next" button. The configuration is not complete is the reason for selecting no.
- 13. Click on the "Finish" button.
- 14. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Properties".
- 15. Select the "Ports" tab.
- 16. Highlight the port for the printer that was installed and select "Configure Port".
- 17. Go to the "Raw Settings" section on the "Configure Standard TCP/IP Port monitor" GUI. In the "Port Number" section enter 9001 (double check the diagnostics form to confirm 9001 is on the "Raw TCPIP Port" and click OK.
- 18. Close the printer properties GUI screen.
- 19. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Properties".
- 20. Click on "Print Test Page" and printout should occur.

#### **Detailed Steps**

1. Print out the diagnostic form on the printer in order to obtain the IP Address and the RAW TCPIP Port information.

#### Steps to obtain a diagnostics printout

- A. Plug the printer into the network and have power to the printer.
- B. Run a diagnostic printout and obtain the printer IP address from the printout.
- C. Be sure paper is in the printer (1).
- D. Open the receipt cover (2).
- E. Press and hold the paper feed button (3).
- F. Close the receipt cover (2).

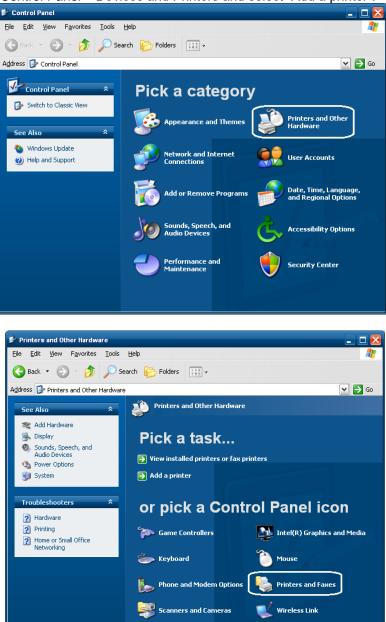


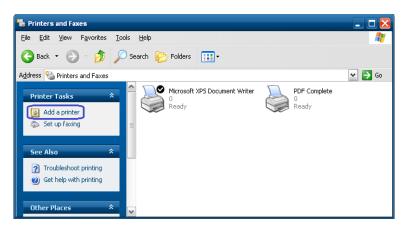
The following is partial A799II – Diagnostics Form printout showing the IP address and Port info:

Comm. Interfaces Port Idle Timeout Interface - USB	:	disabled
RX Buffer Size	:	4096
USB Driver Type		
USB Packet w/Error		
Interface - RS232		
RX Buffer Size	:	4096
Parameters		
Baud Rate	:	115200
Data Bits	:	8
Stop Bit	:	1
Parity	:	NONE
	:	DTR/DSR
Reception Errors	:	Ignore
Interface - Bluetoot		
		not available
Interface - Ethernet	t	
Ethernet Type	: 1	lired
Parameters		
MAC Address	:	00:E0:70:F0:21:7C
IP Address	4	10.1.3.18
Net Mask	:	255.255.252.0
Gateway	:	10.1.0.1
Raw TCPIP Port	:	9001
Loop Back Port		
Http Server Port		
DHCP		Enabled
		00E070F0217C
		Disabled
Keep Alive Pings	:	Disabled

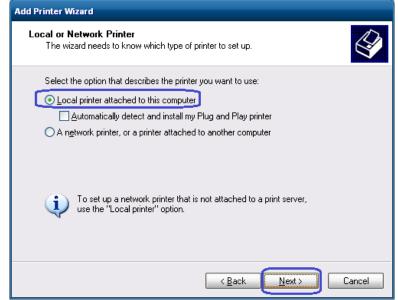
**Note:** The default IP address is 192.0.0.192. If this address appears on the printout, the printer has not obtained an IP address

2. Go to Control Panel - Devices and Printers and select "Add a printer".





3. Select "Add a local printer". Do not select the network option.



4. Select "Create a new port" option.

5. Select "Standard TCP / IP Port" option and click on the next button.

Add Printer Wizard		
Select a Printer Port Computers communicate with printers through ports.		
Select the port you want yo new port.	ur printer to use. If the port is not listed, you can create a	
$\bigcirc$ <u>U</u> se the following port:	LPT1: (Recommended Printer Port)	
	ise the LPT1: port to communicate with a local printer. Fort should look something like this:	
© <u>C</u> reate a new port: Type of port:	Standard TCP/IP Port	
	< <u>B</u> ack <u>N</u> ext ≻ Cancel	

6. Enter the IP Address that is printed on the diagnostics form and click on the "Next" button.

Add Standard TCP/IP Printer Port W	Vizard	X
Add Port For which device do you want t	to add a port?	
Enter the Printer Name or IP ad	dress, and a port name for th	ne desired device.
Printer Name or IP <u>A</u> ddress:	10.1.3.225	
Port Name:	IP_10.1.3.225	
	< <u>B</u> ack	Next > Cancel

Note: The IP Address is an example, yours will differ.

7. On the "Additional port information required" GUI select "Standard Generic Network Card" and click on "Next" and click the "Finish" button.

Add Standard TCP/IP Prin	ter Port Wizard 🛛 🔀
Additional Port Information Required The device could not be identified.	
<ol> <li>The device is properly</li> <li>The address on the pr</li> <li>Either correct the address</li> </ol>	
- Device Type	
⊙ <u>S</u> tandard Gener	ic Network Card
	ings
	< <u>B</u> ack <u>N</u> ext> Cancel
Add Standard TCP/IP Prin	ter Port Wizard 🔀
	Completing the Add Standard TCP/IP Printer Port Wizard
	You have selected a port with the following characteristics.
	CNMP N-
	SNMP: No Protocol: BAW, Port 9100
	Device: 10.1.3.225
	Port Name: IP_10.1.3.225
	Adapter Type: Generic Network Card
	To complete this wizard, click Finish.
	< <u>B</u> ack Finish Cancel

8. When the "Install the printer driver" GUI appears select "Have Disk" option.

Add Printer Wizard
Install Printer Software The manufacturer and model determine which printer software to use.
Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for compatible printer software.
Manufacturer       Printers         Agfa       AGFA-AccuSet v52.3         Alps       AGFA-AccuSet v52.3         Apollo       AGFA-AccuSet 800         Apple       AGFA-AccuSet 800SF v52.3         ASF-PS       AGFA-AccuSet 800SF v52.3         This driver is digitally signed.       Windows Update         Tell me why driver signing is important       Windows Update
< <u>B</u> ack <u>N</u> ext > Cancel

9. When the "Install From Disk" option appears browse to the location where the drivers are located and select the "OEMPRINT.INF" file and click "Open"

For the HP factory image the location are:

#### 32Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\32Bit\ <go to the folder that matches your printer model>

For the A798 printer use the A794 folder.

10. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.

Name Your Printer You must assign a name to this printer.	<u>(</u>
	ome programs do not support printer and server aracters, it is best to keep the name as short as
possible. <u>P</u> rinter name:	
HP A794 CD #1 Partial	lefault printer?
⊙ Yes ○ No	енам ракон

Note: You model may differ than what is show in the above screen GUI.

11. On the "Print Sharing" GUI select the option "Do not share this printer" and click on the "Next" button.

Add Printer Wizard
Printer Sharing You can share this printer with other network users.
If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.
O Share name:
< <u>Back</u> <u>N</u> ext> Cancel

12. On the "Print Test Page" GUI select the "No" option and click on the "Next" button. The configuration is not complete is the reason for selecting no.

Add Printer Wizard
Print Test Page To confirm that the printer is installed properly, you can print a test page.
Do you want to print a test page?
O⊻es
< <u>Back</u> Cancel

#### 13. Click on the "Finish" button.

Add Printer Wizard		
	Comple Wizard	ting the Add Printer
		ccessfully completed the Add Printer Wizard. I the following printer settings:
		HP A794 CD #1 Partial <not shared=""> IP_10.1.3.225</not>
	Model:	– HP A794 CD #1 Partial
	Default:	Yes
	Test page:	No
	To close this	wizard, click Finish.
		< Back Finish Cancel

14. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Properties".



- Select the "Ports" tab.
   Highlight the port for the printer that was installed and select "Configure Port".

👹 HP A794 CD	#1 Partial Properties		? 🔀
General Sha	ring Ports Advance	d Security Device Settings	
ы 🦉	P A794 CD #1 Partial		_
Print to the for checked por		ts will print to the first free	
Port	Description	Printer	~
СОМ2:	Serial Port		_
🗌 🗆 сом1:	Serial Port		
🗌 🗆 сом5:	Serial Port		
Сом7:	Serial Port		≡
FILE:			
IP_1			
D PDFC	PDF Complete Doc	PDF Complete	×
Add P	or <u>t</u> <u>D</u> elete	e Port Configure Port.	
	directional support inter pooling		
	OK	Cancel Ap	ply

17. Go to the "Raw Settings" section on the "Configure Standard TCP/IP Port monitor" GUI. In the "Port Number" section enter 9001 (double check the diagnostics form to confirm 9001 is on the "Raw TCPIP Port" and click OK.

Configure Standard TCP/IP Port Monitor 🛛 🤶 🔀		
Port Settings		
Port Name:	IP_10.1.3.225	
Printer Name or IP <u>A</u> ddress:	10.1.3.225	
Protocol	OLPR	
Port Number: 9001		
LPR Settings		
LPR Byte Counting Enabled	d I	
SNMP Status Enabled		
Community Name: public	D	
SNMP <u>D</u> evice Index: 1		
	OK Cancel	

- 18. Close the printer properties GUI screen.
- 19. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Properties".
- 20. Click on "Print Test Page" and printout should occur.

💕 HP A794 CD #1 Partial Properti	ies 🔹 🤶 🔀
General Sharing Ports Advar	nced Security Device Settings
HP A794 CD #1 Part	ial
Location:	
<u>C</u> omment:	
Model: HP A794 CD #1 Parti	al
Features	
Color: No	Paper available:
Double-sided: No	Receipt 8 in.
Staple: No	
Speed: Unknown	
Maximum resolution: 204 dpi	~
Printing	Preferences Print <u>Iest Page</u>
	OK Cancel Apply

## 6.4.8.4 <u>Windows Printer Driver (USB) for v1.0.0 – 1.0.3</u>

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the setup program for the Windows mini-drivers by launching the "HPSETUP.EXE" program and click "OK" on the main GUI (graphical user interface).
- 2. Select if running 32-Bit or 64-Bit operating system.
- 3. Select the printer model that you wish to install.
- 4. Select the printer driver option that you wish to install from the drop down menu.
- 5. Select the USBxxx (Virtual Printer Port of USB) printer port from the drop menu (towards the bottom of the menu).
- 6. Click "OK" to install the printer driver and a small test print out will occur if the option was selected.

## **Detailed Steps**

1. Start the setup program for the Windows mini-drivers by double clicking on "HPSETUP.EXE" file and click "OK".

One can launch the "HPSETUP.EXE" file from the start menu or go to the "C:\xxxxx\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers" folder and double click on the "HPSETUP.EXE" file.

The following is the GUI that one will see when the "HPSETUP.EXE" is launched:



2. Select if running 32-Bit or 64-Bit operating system.

Install	Uninstall		×	
	Welcome to the HP printer setup program. Choose the appropriate option to Install or UnInstall a printer driver.			
	<ul> <li>32-Bit</li> </ul>	C 64-Bit		
	Install HP A794	Install HP A799		
	Install HP A776Rcpt	Install HP A776Slip		
	Uninstall			
		Exit		

3. Select the printer model that you wish to install.

Instal	l/Uninstall		×
	Welcome to the HP printer appropriate option to Install	setup program. Choose the or UnInstall a printer driver.	
	<ul> <li>32-Bit</li> </ul>	C 64-Bit	
ſ	Install HP A794	Install HP A799	
	Install HP A776Rcpt	Install HP A776Slip	
	Uninstall		
Exit			

4. Select the printer driver option that you wish to install from the drop down menu.

HP Printer Installation	
HP A799 Minidriver	
Choose a Printer Model	
Available Printers: HP A799 CD1 Nocut	•
HP A799 CD1 Nocut         HP A799 CD1 Partial         HP A799 CD2 Nocut         HP A799 CD2 Nocut         HP A799 CD2 Partial         HP A799 COMP Nocut         Available Ports:	
Set as default printer Print test par	ge
OK Cancel	

• The HP A7xx CD#1 and HP A7x CD#2 versions generate a pulse to open cash drawer 1 or 2, respectively after each document. The HP A7xx COMP version does not send the reset command at the start of every document.

**Note:** "xx" is the complete model number of the printer, (i.e. A794 / A799 / A776).

5. Select the USBxxx (Virtual Printer Port of USB) printer port from the drop menu (towards the bottom of the drop down menu).

HP Printer Installation	×
HP A799 Minidriver	
Choose a Printer Model	
Available Printers: HP A799 CD1 Nocut	
Choose a Printer Port	
Available Ports: COM1:	
Set as de PDFC	
OK Cancel	

When the selections are made, the selection should be similar to the following screen:

HP Printer Installation	×
HP A799 Minidriver	
Choose a Printer Model	
Available Printers: HP A799 CD1 Nocut	
Choose a Printer Port	
Available Ports: USB001	
🔲 Set as default printer 🛛 🗖 Print test page	
OK Cancel	

In order to make the printer the default printer select the option "Set as default printer".

HP Printer Installation	
HP A799 Minidriver	
Choose a Printer Model	
Available Printers: HP A799 CD1 Nocut	
Choose a Printer Port	
Available Ports: USB001	
Set as default printer Print test page	
OK Cancel	

If one wishes to print a very small test page, select the option "Print test page" in the GUI.

HP Printer Installation	
HP A799 Minidriver	
Choose a Printer Model	1
Available Printers: HP A799 CD1 Nocut	
Choose a Printer Port	]
Available Ports: USB001	
Set as default printer	_
OK Cancel	

- 6. Click "OK" to install the printer driver and a small test print out will occur if the option was selected.
  - **Note**: If the option was selected to install the printer driver with "NoCut" when "Print Test Page" is selected during the driver install process, the test print out will print and it will cut the receipt paper.

## 6.4.8.5 <u>Windows Printer Driver (Serial) for v1.0.0 – 1.0.3</u>

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Go into the communication port properties to change the Windows baud rate to the printer is set to on the diagnostics form (previous step) and flow control to "Hardware" for port that the printer is attached.
- 3. Start the setup program for the Windows mini-drivers by launching the "HPSETUP.EXE" program and click "OK" on the main GUI (graphical user interface).
- 4. Select the printer model that you wish to install.
- 5. Select the printer driver option that you wish to install from the drop down menu.
- 6. Select the COM (serial) port the printer is attached to.
- 7. Click "OK" to install the printer driver and a small test print out will occur if the option was selected.

## **Detailed Steps**

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Go into the communication port properties to change the Windows baud rate to the printer is set to on the diagnostics form (previous step) and flow control to "Hardware" for port that the printer is attached.

Communi	cations Port (C	OM1) Properties	? 🗙
General	Port Settings Driv	er Details Resources	
Į	Communications P	ort (COM1)	
	Device type:	Ports (COM & LPT)	
	Manufacturer:	(Standard port types)	
	Location:	on Intel(R) ICH8/ICH8R Family LPC Interf	ace
lf you	evice is working pro	operly. s with this device, click Troubleshoot to	
<u>D</u> evice u	Isage:		
Use this	device (enable)		~
		ОК Са	ancel

Communications Port (COM1) Properties		
General Port Settings Driver Details Resources		
Bits per second:       115200         Data bits:       8         Parity:       None         Stop bits:       1         Elow control:       Hardware		
Advanced <u>R</u> estore Defaults		
OK Cancel		

Note: The baud rate may be different than the screen shot shown above.

3. Start the setup program for the Windows mini-drivers by double clicking on "HPSETUP.EXE" file and click "OK".

One can launch the "HPSETUP.EXE" file from the start menu or go to the "C:\xxxxx\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers" folder.

The following is the GUI that one will see when the "HPSETUP.EXE" is launched:

HPSetup Version 1.0.2	
()	Cancel

Page 118 of 550

4. Select the printer model that you wish to install.

💑 Install/Uninstall				
Welcome to the HP printer setup program. Choose the appropriate option to Install or UnInstall a printer driver.				
	Install HP A794 Install HP A799			
	Install HP A776Rcpt Install HP A776Slip			
UnInstall				
]				
Exit				

5. Select the printer driver option that you wish to install from the drop down menu.

HP Printer Installation	×			
HP A799 Minidriver				
Choose a Printer Model				
Available Printers: HP A799 CD1 Nocut				
HP A799 CD1 Nocut				
Available Ports: COM1:				
🦳 Set as default printer 👘 Print test page				
OK Cancel				

- The HP A7xx CD#1 and HP A7x CD#2 versions generate a pulse to open cash drawer 1 or 2, respectively after each document. The HP A7xx COMP version does not send the reset command at the start of every document.
- Note: "xx" is the complete model number of the printer, (i.e. A794 / A799 / A776).

6. Select the COM (serial) port the printer is attached to.

HP Printer Installation				
HP A799 Minidriver				
Choose a Printer Model				
Available Printers: HP A799 CD1 Nocut				
Choose a Printer Port				
Available Ports: COM1:				
COM3: Set as de COM4: COM5:				
OK Cancel				

When the selections are made, the selection should be similar to the following screen:

HP Printer Installation				
HP A799 Minidriver				
Choose a Printer Model	7			
Available Printers: HP A799 CD1 Nocut				
Choose a Printer Port				
Available Ports: COM2:				
🔲 Set as default printer 👘 Print test page				
OK Cancel				

In order to make the printer the default printer select the option "Set as default printer".

HP Printer Installation				
HP A799 Minidriver				
Choose a Printer Model				
Available Printers: HP A799 CD1 Nocut				
Choose a Printer Port	1			
Available Ports: COM2:				
	J			
🔽 Set as default printer 📃 🗖 Print test page				
OK Cancel				

If one wishes to print a very small test page, select the option "Print test page" in the GUI.

HP Printer Installation	×			
HP A799 Minidriver				
Choose a Printer Model				
Available Printers: HP A799 CD1 Nocut				
Choose a Printer Port				
Available Ports: COM2:				
Set as default printer				
OK Cancel				

- 7. Click "OK" to install the printer driver and a small test print out will occur if the option was selected.
  - **Note**: If the option was selected to install the printer driver with "NoCut" when "Print Test Page" is selected during the driver install process, the test print out will print and it will cut the receipt paper.

## 6.4.8.6 <u>Test Receipt Printer in Windows Environment (non-OPOS)</u>

In addition to the test option during the Windows mini-drivers installation, once the printer driver is loaded one may use notepad (or WordPad) to confirm the drivers are loaded and communicating to the printer. Type in a sentence or two in Notepad/WordPad and select the option to print; what was type should appear on the print out. If the Windows mini-driver with "CD#1" was selected, the cash drawer should also open.

Included with the mini drivers is a file that can be used for testing using WordPad; this test file will have barcodes on the printout. The file can be found in the in the following location "C:\ xxxxx\Point of Sale\Receipt Printer\Windows Receipt Printer Driver". Ensure all the margins to the minimum setting in the page setup

Page Setup		? 🛛	
Paper			
Size:	leceipt 8 in.	~	
<u>S</u> ource: A	utomatically Select	~	
Orientation	Margins (inches)-		
⊙ P <u>o</u> rtrait	<u>L</u> eft: 1.25	<u>R</u> ight: 1.25	
O L <u>a</u> ndscape	<u>Т</u> ор: 1	<u>B</u> ottom: 1	
OK Cancel <u>Printer</u>			

Page Setup	? 🛛		
Paper	1       Control of the con		
Size:	Receipt 8 in.		
<u>S</u> ource:	Automatically Select		
Orientation	Margins (inches)		
Optrait	Left: 0.158 <u>R</u> ight: 0.156		
O L <u>a</u> ndscape	<u>I</u> op: 0 <u>B</u> ottom: 0		
OK Cancel <u>Printer</u>			

or one can set all the margins to zero "0". By setting the margins to zero "0", WordPad to automatically sets the margins to the minimum setting.

The following is a partial example of appears on the print out using the file that is included with mini-drivers:

HP A79			
Fonts	& Bá	irco	des
123456789		tab	tab
23456789			tab
3456789	12345		
456789		font c	
56789	12545	hei	ght
change	3		
6789	12045	width	cheq.
789	12345	pitch	change
68	12345	52	
9	12345		



E0D57+9\$32:A



Code 39 Plain & HRI:



ITF Plain & HRI:

Jan8 Plain & HRI:



Jan13 Plain & HRI:



## 6.4.8.7 Windows Printer Driver (USB) for v1.0.3 and later for Windows 7 / 8.1 / 10

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Go to Control Panel Devices and Printers and select "Add a printer".
- 2. Select "Add a local printer".
- 3. Select "Use an existing port" option and "USB00x (Virtual printer port for USB)"
- 4.When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".
- 5.When the "Install From Disk" option appears browse to the location where the drivers are located and select the "HP\_Receipt\_OEM" or "HP\_Receipt\_OEM64" file and click "Open".
- 6. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.
- 7.Enter a printer name or use the default of "HP Receipt" and click on the "Next" button.
- 8.Once the printer drivers is installed click on the "Finish" button. Prior to clicking on the "Finish" button one can click "Print a test page".

## **Detailed Steps**

1. Go to Control Panel – Devices and Printers and select "Add a printer".

	Hardware and Sound      Devices and Printers	<ul> <li>+ +</li> <li>Search Devices and Printers</li> </ul>
Add a device	Add a printer	L • 0
Devices (3)	Start the Add Printer Wizard, which helps you install a printer	
Elo Touchmonite Serial Interfac		
Printers and	Faxes (3)	
Fax	Microsoft XPS Document Writer	
-	6 items	

2. Select "Add a local printer".

6	Add Printer
	What type of printer do you want to install?
	Add a local printer Use this option only if you don't have a USB printer. (Windows automatically installs USB printers when you plug them in.)
	Add a network, wireless or Bluetooth printer Make sure that your computer is connected to the network, or that your Bluetooth or wireless printer is turned on.
	Next Cancel

3. Select "Use an existing port" option and "USB00x (Virtual printer port for USB)"

🚱 🖶 Add Printer	
Choose a printer port	
A printer port is a type of con	nection that allows your computer to exchange information with a printer.
Output: Out	USB001 (Virtual printer port for USB)
Create a new port:	
Type of port:	Local Port 👻
	Next Cancel

4. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".

0	Add Printer	
	Install the printer driver Choose your printer from the list. Click Windows Update to see more models. To install the driver from an installation CD, click Have Disk.	
	Manufacturer     Printers       Brother     Brother DCP-116C       Canon     Brother DCP-117C       Epson     Brother DCP-128C       Fuji Xerox     Brother DCP-129C       Constin     Brother DCP-130C	
	This driver is digitally signed. <u>Tell me why driver signing is important</u> <u>Windows Update</u> <u>Have Disk</u>	J
	<u>N</u> ext Cancel	

5.When the "Install From Disk" option appears browse to the location where the drivers are located and select the "HP\_Receipt\_OEM" or "HP\_Receipt\_OEM64" file and click "Open"

For the HP factory image the location are:

# 32Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\32Bit\_MiniDrivers\Receipt

## 64Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\64Bit\_MiniDrivers\Receipt 6.When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.

🚱 🖶 Add Printer	×
Install the printer driver Choose your printer from the list. Click Win To install the driver from an installation CD,	
Printers	
This driver is digitally signed. <u>Tell me why driver signing is important</u>	<u>W</u> indows Update <u>H</u> ave Disk
	Next Cancel

7.Enter a printer name or use the default of "HP Receipt" and click on the "Next" button.

Type a printer	r name			
Printer name:	HP Receipt	]		
This printer will be	e installed with the Hl	P Receipt driver.		

8.Once the printer drivers is installed click on the "Finish" button. Prior to clicking on the "Finish" button one can click "Print a test page".

×
🧼 🖶 Add Printer
You've successfully added HP Receipt
To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page. Print a test page
<u>Einish</u> Cancel

## 6.4.8.8 <u>Windows Printer Driver (Serial) for v1.0.3 and later for Windows 7 / 8.1 / 10</u>

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Go into the communication port properties to change the Windows baud rate to the printer is set to on the diagnostics form (previous step) and flow control to "Hardware" for port that the printer is attached.
- 3. Go to Control Panel Devices and Printers and select "Add a printer".
- 4. Select "Add a local printer".
- 5. Select "Use an existing port" option and select the COM port the printer is attached to.
- 6. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".
- 7. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".
- When the "Install From Disk" option appears browse to the location where the drivers are located and select the "HP\_Receipt\_OEM" or "HP Receipt OEM64" file and click "Open".
- 9. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.
- 10. Enter a printer name or use the default of "HP Receipt" and click on the "Next" button.
- 11. Once the printer drivers is installed click on the "Finish" button. Prior to clicking on the "Finish" button one can click "Print a test page".

## **Detailed Steps**

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Go into the communication port properties to change the Windows baud rate to the printer is set to on the diagnostics form (previous step) and flow control to "Hardware" for port that the printer is attached.

Communications Port (COM2) Properties				
General Port Settings Driver Details Resources				
<u>B</u> its per second: 115200 ▼				
<u>D</u> ata bits:				
Parity: None				
Stop bits: 1				
Elow control: None				
<u>A</u> dvanced <u>R</u> estore Default	s			
OK Cano	el			

Note: The baud rate may be different than the screen shot shown above.

	Iware and Sound   Devices and Printers	- Search Devices and Printers	-
Add a device Add	J a printer		•
Devices (3)	Start the Add Printer Wizard, which helps you install a printer		
Elo G Touchmonitor Serial Interface	eneric Non-PnP UNIT3-HP		
Printers and Faxe	s (3)		
	Microsoft XPS ocument Writer		
🦳 6 item	-		

3. Go to Control Panel - Devices and Printers and select "Add a printer".

4. Select "Add a local printer".

6	Add Printer
	What type of printer do you want to install?
	Add a local printer Use this option only if you don't have a USB printer. (Windows automatically installs USB printers when you plug them in.)
	Add a network, wireless or Bluetooth printer Make sure that your computer is connected to the network, or that your Bluetooth or wireless printer is turned on.
	Next Cancel

5. Select "Use an existing port" option and select the COM port the printer is attached to.

6. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".

G	🖶 Add Printer	
	Choose a printer port A printer port is a type of connecti	on that allows your computer to exchange information with a printer.
		COM2: (Serial Port)
	Type of port:	Local Port 👻
		<u>N</u> ext Cancel

Note: The above COM port maybe differ than your setting.

7. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".

0	🖶 Add Printer	x
	Install the printer driver Choose your printer from the list. Click Windows Update to see more models. To install the driver from an installation CD, click Have Disk.	
	Manufacturer       Printers         Brother       Brother DCP-116C         Canon       Brother DCP-117C         Epson       Brother DCP-128C         Fuji Xerox       Brother DCP-129C         Canadia       Brother DCP.130C         This driver is digitally signed.       Windows Update         Tell me why driver signing is important	
	<u>N</u> ext Cance	el l

 When the "Install From Disk" option appears browse to the location where the drivers are located and select the "HP\_Receipt\_OEM" or "HP\_Receipt\_OEM64" file and click "Open".

For the HP factory image the location are:

#### 32Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\32Bit\_MiniDrivers\Receipt

## 64Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\64Bit\_MiniDrivers\Receipt

9. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.

🚱 🖶 Add Printer	
Install the printer driver Choose your printer from the list. Click Wi To install the driver from an installation Cl	
Printers	
This driver is digitally signed. <u>Tell me why driver signing is important</u>	<u>W</u> indows Update <u>H</u> ave Disk
	Next Cancel

10. Enter a printer name or use the default of "HP Receipt" and click on the "Next" button.

0	heave	- Bank		X
G 🖶 Add Printer		Cardo Santa San	and the second	
Type a printer name				
Printer name:	Receipt			
This printer will be installed	with the HP Receipt drive	r.		
			Next	Cancel

11. Once the printer drivers is installed click on the "Finish" button. Prior to clicking on the "Finish" button one can click "Print a test page".

🥪 🖶 Add Printer
You've successfully added HP Receipt
To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page. Print a test page
Einish

## 6.4.8.9 Windows Printer Driver (Ethernet) for v1.0.3 & later for Windows 7 / 8.1 / 10

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Print out the diagnostic form on the printer in order to obtain the IP Address and the RAW TCPIP Port information.
- 2. Go to Control Panel Devices and Printers and select "Add a printer".
- 3. Select "Add a local printer". Do not select the network option.
- 4. Select "Create a new port" option.
- 5. Select "Standard TCP / IP Port" option and click on the next button.
- 6. Uncheck "Query the printer and automatically select the driver to use."
- 7. Enter the IP Address that is printed on the diagnostics form and click on "Next".
- 8. On the "Additional port information required" GUI, select "Standard Generic Network Card" and click on "Next".
- 9. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".
- When the "Install From Disk" option appears browse to the location where the drivers are located and select the "HP\_Receipt\_OEM" or "HP\_Receipt\_OEM64" file and click "Open".
- 11. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.
- 12. Enter a printer name or use the default of "HP Receipt" and click on the "Next" button.
- 13. Once the printer drivers is installed click on the "Finish" button. **Do not** click on the "Print a test page" button since the configuration is not complete.
- 14. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Printer Properties".
- 15. Select the "Ports" tab.
- 16. Highlight the port for the printer that was installed and select "Configure Port".
- 17. Go to the "Raw Settings" section on the "Configure Standard TCP/IP Port monitor" GUI. In the "Port Number" section enter 9001 (double check the diagnostics form to confirm 9001 is on the "Raw TCPIP Port" and click OK.
- 18. Close the printer properties GUI screen.
- 19. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Printer Properties".
- 20. Click on "Print Test Page" and printout should occur.

## **Detailed Steps**

1. Print out the diagnostic form on the printer in order to obtain the IP Address and the RAW TCPIP Port information.

## Steps to obtain a diagnostics printout

- A. Plug the printer into the network and have power to the printer.
- B. Run a diagnostic printout and obtain the printer IP address from the printout.
- C. Be sure paper is in the printer (1).
- D. Open the receipt cover (2).
- E. Press and hold the paper feed button (3).
- F. Close the receipt cover (2).



The following is partial A799II – Diagnostics Form printout showing the IP address and Port info:

Comm. Interfaces	dia shi ta d
Port Idle Timeout Interface - USB	: disabled
RX Buffer Size	: 4096
	: Printer Class
USB Packet w/Error	
Interface - RS232	
RX Buffer Size	: 4096
Parameters	
Baud Rate	: 115200
Data Bits	: 8
Stop Bit	: 1
Parity	: NONE
Flow Control	: DTR/DSR
Reception Errors	: Ignore
Interface - Bluetoot	
Status	: not available
Interface - Ethernet	
Ethernet Type	: Wired
Parameters	
MAC Address	: 00:E0:70:F0:21:70
IP Address	: 10.1.3.18
Net Mask	: 255.255.252.0
Gateway	: 10.1.0.1
Raw TCPIP Port	: 9001
Loop Back Port	
Http Server Port	
DHCP	: Enabled
Client ID	: 00E070F0217C
Idle Timeout	: Disabled
Keep Alive Pings	: Disabled

**Note:** The default IP address is 192.0.0.192. If this address appears on the printout, the printer has not obtained an IP address

	ardware and Sound > Devices and Printers	Search Devices and Printers	_
Add a device	Add a printer	E •	(
Devices (3)	Start the Add Printer Wizard, which helps you install a printer	J	
Elo Touchmonitor Serial Interface	Generic Non-PnP Monitor		
Printers and Fa	xes (3)		
Fax	Microsoft XPS Document Writer		
6 it	ems		

2. Go to Control Panel - Devices and Printers and select "Add a printer".

3. Select "Add a local printer". Do not select the network option.

0	Add Printer	
	What type of printer do you want to install?	
	Add a local printer Use this option only if you don't have a USB printer. (Windows automatically installs USB printers when you plug them in.)	
	Add a network, wireless or Bluetooth printer Make sure that your computer is connected to the network, or that your Bluetooth or wireless printer is turned on.	
	Next Cancel	)

4. Select "Create a new port" option.

5. Select "Standard TCP / IP Port" option and click on the next button.

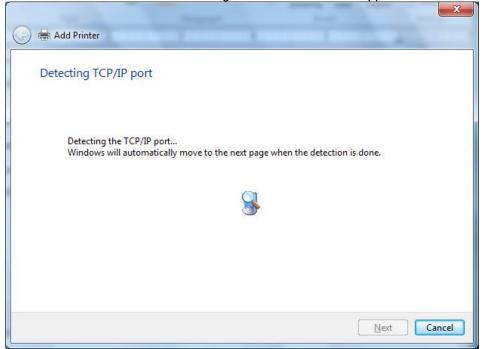
🚱 🖶 Add Printer		-2.		
Choose a printer port A printer port is a type of connect	ion that allows your com	puter to exchange	information with	a printer.
Use an existing port:	LPT1: (Printer Port)			-
	Standard TCP/IP Port			•
			<u>N</u> ext	Cancel

- 6. Uncheck "Query the printer and automatically select the driver to use"7. Enter the IP Address that is printed on the diagnostics form and click on the "Next" button.

0	🖶 Add Printer			X
	Type a printer hostname o	or IP address		
	Device <u>t</u> ype:	TCP/IP Device		-
	Hostname or IP <u>a</u> ddress:	10.1.3.225		
	Port name:	10.1.3.225		
	Ouery the printer and automat	ically select the driver to use		
			Next	ancel

Note: The IP Address above is an example.

After click the "Next" button "Detecting TCP/IP Port" box will appear.



8. On the "Additional port information required" GUI select "Standard Generic Network Card" and click on "Next".

🚱 🖶 Add Printer	
Additional por	t information required
The device is not	found on the network. Be sure that:
<ol> <li>The address of the addr</li></ol>	s connected. properly configured. in the previous page is correct. ddress is not correct, click Back to return to the previous page. Then correct the form another search on the network. If you are sure the address is correct, select the
Device Type	
Standard	Generic Network Card
© <u>C</u> ustom	S <u>e</u> ttings
	<u>N</u> ext Cancel

9. When the "Install the printer driver" GUI appears select "Have Disk" option and click on "Next".

3	🖶 Add Printer		ĉ		x
		e your printer fron		e list. Click Windows Update to see more models. installation CD, click Have Disk.	
	Manufacturer Brother Canon Epson Fuji Xerox	s digitally signed.	•	Printers  Printers  Brother DCP-116C  Brother DCP-117C  Brother DCP-128C  Brother DCP-129C  Undows Update Have Disk	
		y driver signing is			<b>ר</b>

 When the "Install From Disk" option appears browse to the location where the drivers are located and select the "HP\_Receipt\_OEM" or "HP\_Receipt\_OEM64" file and click "Open"

For the HP factory image the location are:

# 32Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\32Bit\_MiniDrivers\Receipt

## 64Bit Image

C:\SWSetup\Point of Sale\Receipt Printer\Windows Receipt Printer Drivers\64Bit\_MiniDrivers\Receipt 11. When you are back to the "Install the printer Driver" GUI "HP Receipt" printer will appear, click on the "Next" button.

			×
😋 🖶 Add Printer			
		k Windows Update to see more mo n CD, click Have Disk.	dels.
Printers R HP Receipt	)		
	s digitally signed. / driver signing is important	<u>W</u> indows Update	<u>H</u> ave Disk
			Next Cancel

12. Enter a printer name or use the default of "HP Receipt" and click on the "Next" button.

			_	-		×
🙆 🖨 Ad	d Printer					
	u i ilitei				and the second	
Type	a printer na	200				
Type	a printer na	ne				
<u>P</u> rinter	name:	HP Receipt				
This pr	rinter will be inst	alled with the HP Re	ceipt driver.			
				) I	Next	Cancel
						concer

13. Once the printer drivers is installed click on the "Finish" button. **Do not** click on the "Print a test page" button since the configuration is not complete.

🕞 🖶 Add Printer
You've successfully added HP Receipt
To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page.
<u>Einish</u> Cancel

- 14. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Printer Properties".
- 15. Select the "Ports" tab.
- 16. Highlight the port for the printer that was installed and select "Configure Port"

🖶 HP Receipt P	roperties		×
General Sharir	ng Ports Advanced	Color Management	Security Device Settings
🦂 н	P Receipt		
Print to the fict checked port	ollowing port(s). Docur t.	nents will print to	the first free
Port	Description	Printer	
COM1:	Serial Port		
COM2:	Serial Port		
COM5:	Serial Port		
COM6:	Serial Port		=
COM7:	Serial Port		
FILE:	Print to File		
☑ 10.1.3	Standard TCP/IP Port	HP Receipt	
Add P	Por <u>t</u>	elete Port	<u>C</u> onfigure Port
V Enable bio	directional support		
	nter pooling		
<u> </u>	inc. pooling		
		ОК	Cancel Apply

17. Go to the "Raw Settings" section on the "Configure Standard TCP/IP Port monitor" GUI. In the "Port Number" section enter 9001 (double check the diagnostics form to confirm 9001 is on the "Raw TCPIP Port" and click OK.

Configure Standard TCP/IP Port	Monitor	×		
Port Settings				
Port Name:	10.1.3.225			
Printer Name or IP <u>A</u> ddress:	10.1.3.225	10.1.3.225		
Protocol				
<u> </u>		© <u>L</u> PR		
Raw Settings Port <u>N</u> umber:	9001			
LPR Settings Queue Name:				
LPR <u>B</u> yte Counting Ena	led			
SNMP Status Enabled				
<u>C</u> ommunity Name:	public			
SNMP <u>D</u> evice Index:	1			
		OK Cancel		

- 18. Close the printer properties GUI screen.
- 19. Go to the "Devices and Printers" and right click on the printer that was just installed and select "Printer Properties".
- 20. Click on "Print Test Page" and printout should occur.

HP Receipt Pro	perties						×
General Sharing	Ports	Advanced	Colo	r Management	Security	Device	Settings
	HP Rece	eipt					
Location:							
<u>C</u> omment:							
M <u>o</u> del:	HP Rece	ipt					
Features							
Color: No				Paper availabl	e:		
Double-side	d: No			Receipt 8 in.			*
Staple: No							
Speed: Unkn	nown						
Maximum re	esolution	: 204 dpi					Ŧ
		Pr	<u>e</u> fere	nces	Print	<u>T</u> est Pag	Je
				ОК	Cancel		Apply

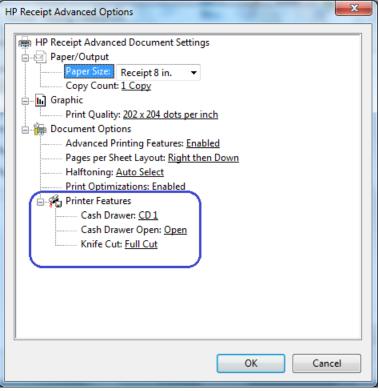
#### 6.4.8.10 Windows Printer Driver Options for v1.0.3 and later for Windows 7 / 8.1 / 10

The options for full cut / partial cut / cash drawer / cash drawer selection are not located in the receipt printer advanced options.

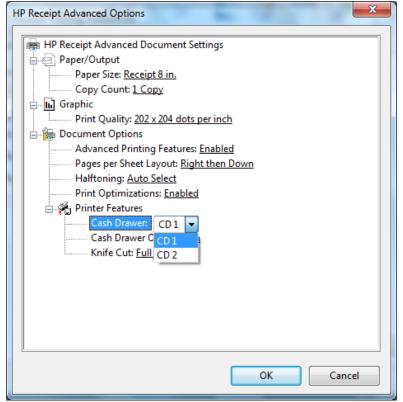
- 1. Go the Printer and Faxes section in Windows.
- 2. Select the HP Receipt Printer and right click to go to the Printing Preferences.
- Click on the Printing Preferences button.
   Click on the Advance button.

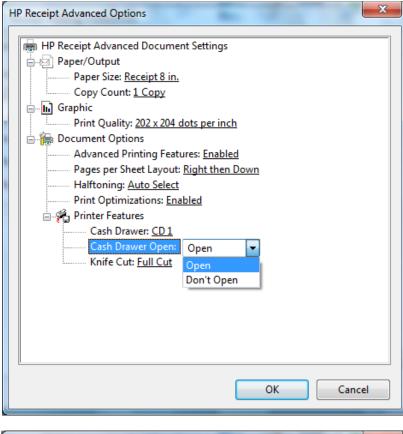
▲ Portrait       ▼         Page Order:       Front to Back       ▼         Page Format       ▼         Pages per Sheet       1       ▼         □ Draw Borders       ■       ■	
	Advanced

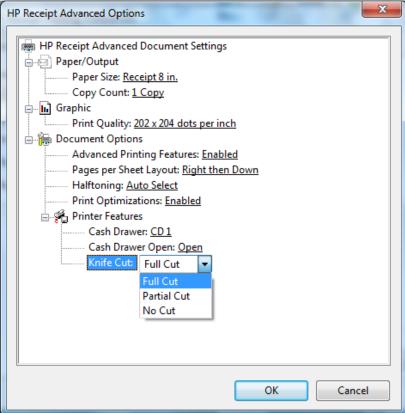
5. Selection the desired option in the Printer Features section.



The following screens show the selections that are available in the each of the three areas:







# 6.4.9 Knife Cut Commands

Some POS application that use the Windows mini-drivers request the knife cut command so the application can perform a cut after something is printed (i.e. No Sale). The following the decimal commands:

# Perform full knife cut

ASCII	EM	ESC i
Hexadecimal	19	1B 69
Decimal	25	27 105

# Perform partial knife cut

ASCII	SUB	ESC m
Hexadecimal	1A	1B 6D
Decimal	26	27 109

The partial knife cut leaves 5mm (0.20 inch) of paper on the left edge.

# 6.4.10 OPOS Drivers for the Receipt Printer

The receipt printer OPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Receipt Printer\Receipt Printer OPOS) and are also available from <u>HP.COM</u>.

**Note:** If you are using the serial printer, one will need to uninstall the OPOS drivers and then re-install the OPOS driver (see details below of installation). HP OPOS driver version 1.0.1.34 (or later) supports the serial receipt printer.

OPOS driver 1.0.1.21 (or later) for the receipt printer will work with the printer in either NATIVE or PRINTER CLASS mode. During the installation process of the OPOS driver one will be prompted for which mode the printer is in (PRINTER CLASS is selected by default).

The Windows mini-drivers and the OPOS drivers cannot be set to the same COM port.

#### 6.4.10.1 OPOS Installation - USB

The following is an overview of the steps to install the receipt printer followed by detailed steps:

- 1. Start the HP Receipt Printer OPOS executable.
- 2. Select only the printer(s) that need to be installed.
- 3. Select the Emulation Mode of the printer being installed (HP H300 Printer is Generation II).
- 4. Select YES or NO to install OPOS Control Objects.
- 5. Select USB Communications as the Connection Method.
- 6. Select the USB connection method (printer class is the default).
- 7. For the remaining options, defaults can be selected until the installation is complete.

### **Detailed Steps**

- 1. Start the HP Receipt Printer OPOS executable.
- 2. Select only the printer(s) that need to be installed.

OPOS Support For HP Printers - Printer choices	InstallShield Wizard X
Select the printers to install	
HP A776/A77611 Printer HP A798/A79811 Printer HP H300 Printer HP A794 Printer HP A794 Printer	
InstallShield —	Select All Glear All

3. Select the Emulation Mode of the printer being installed (HP H300 Printer is Generation II).

OPOS Support For HP Printers - InstallShield V	/izard	×
Emulation Mode		Z
Choose Printer Emulation to be used		
Generation II Printer		
Generation I Printer		
InstallShield		
	< <u>B</u> ack <u>N</u> ext >	Cancel

If HP A776/A776II Printer was selected, choose the appropriate Imager option.

OPOS Support For HP Printers - InstallShield W	/izard		×
Setup Type Select the setup type that best suits your nee	ds.		Z
Is the A776 also an Imager?			
() YES			
NO			
InstallShield			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

4. Select YES or NO to install OPOS Control Objects.

OPOS Support For HP Printers - InstallShield Wize	ard		×
Setup Type Select the setup type that best suits your needs		V	Z
Are OPOS Control Objects to be installed?			
OVES			
ONO			
InstallShield			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

If "NO" is selected, ensure that the standalone CCO package is installed prior to using the OPOS test program or a Point Of Sale application. The CCO installation package can be found in the HP factory image or <u>HP.COM</u>.

5. Select USB Communications as the Connection Method.

OPOS Support For HP Printers - InstallShield V	Vizard		×
Connection Methods			Z
Choose the Datacomm method used			
USB Communications			
Serial Communications			
Ethernet Communications (A799 II)			
InstallShield	< <u>B</u> ack	<u>N</u> ext >	Cancel

6. Select the USB connection method (printer class is the default).

OPOS Support For HP Printers - InstallShield Wizard	×
USB connection method	Z
Choose either Printer Class or Native USB	
Printer Class USB	
Native USB	
InstallShield	
< <u>B</u> ack <u>N</u> ext >	Cancel

7. For the remaining options, defaults can be selected until the installation is complete.

OPOS Support For HP Printers - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed OPOS Support For HP Printers. Click Finish to exit the wizard.	
	< Back Finish Cancel	

# 6.4.10.2 OPOS Installation – Serial Port

The following is an overview of the steps to install the receipt printer followed by detailed steps:

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Start the HP Receipt Printer OPOS executable.
- 3. Select only the printer(s) that need to be installed.
- 4. Select the Emulation Mode of the printer being installed (HP H300 Printer is Generation II).
- 5. Select YES or NO to install OPOS Control Objects.
- 6. Select Serial Communications as the Connection Method.
- 7. Select the COM (serial) port that the printer is attached.
- 8. Refer to the diagnostics form that was printed in step 1 for the baud rate of the printer and select the Baudrate for Serial Communications.
- 9. Select the Parity for Serial Communications.
- 10. Select the Flow Control for Serial Communications.
- 11. For the remaining options, defaults can be selected until the installation is complete.

### **Detailed Steps**

- 1. Print out the diagnostic form on the printer in order to obtain the baud rate the printer is set to.
- 2. Start the HP Receipt Printer OPOS executable.
- 3. Select only the printer(s) that need to be installed.

OPOS Support For HP Printers - InstallShield V	Vizard X
Printer choices	
Select the printers to install	
HP A776/A776II Printer	
HP A798/A798II Printer	
HP H300 Printer	
HP A794 Printer	
HP A799/A799II Printer	
,	Select All Qlear All
T	Select All Clear All
InstallShield	
	< Back Next > Cancel

4. Select the Emulation Mode of the printer being installed (HP H300 Printer is Generation II).

OPOS Support For HP Printers - InstallShield V	Vizard		×
Emulation Mode			Z
Choose Printer Emulation to be used			
Generation II Printer			
Generation I Printer			
L			
InstallShield			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

If HP A776/A776II Printer was selected, choose the appropriate Imager option.

OPOS Support For HP Printers - InstallShield Wi	zard		×
Setup Type Select the setup type that best suits your need	s.	V	Z
Is the A776 also an Imager?			
() YES			
• NO			
InstallShield	< Back	Next >	Cancel
l	< <u>p</u> ack	ivext >	Cancel

5. Select YES or NO to install OPOS Control Objects.

OPOS Support For HP Printers - InstallShield W	izard	×
Setup Type Select the setup type that best suits your need	ds.	Z
Are OPOS Control Objects to be installed?		
© MO		
InstallShield	< <u>B</u> ack <u>N</u> ext >	Cancel

If "NO" is selected, ensure that the standalone CCO package is installed prior to using the OPOS test program or a Point Of Sale application. The CCO installation package can be found in the HP factory image or <u>HP.COM</u>.

6. Select Serial Communications as the Connection Method.

POS Support For HP Printers - InstallShield W	/izard		×
Connection Methods			Z
Choose the Datacomm method used			
USB Communications			
Serial Communications			
Ethernet Communications (A799 II)			
stallShield	< <u>B</u> ack	<u>N</u> ext >	Cancel

7. Select the COM (serial) port that the printer is attached.

OPOS Support For HP Printers - InstallShield Wizard	×
Serial Communications	Z
Serial port	
COM1 COM2 COM3 COM4 COM5 COM6 COM6 COM7 COM8 COM8 COM9	
InstallShield < <u>B</u> ack Next >	Cancel

8. Refer to the diagnostics form that was printed in step 1 for the baud rate of the printer and select the Baudrate for Serial Communications.

OPOS Support For HP Printers - InstallShield Wizard	×
Serial Communications	Z
Baudrate	
✓ 115200 57600 38400 19200 9600 4800 2400 1200	
InstallShield	ack Next > Cancel

Note: The baud rate may be different than that shown above.

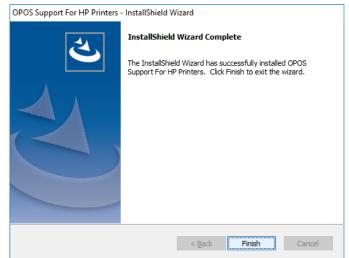
9. Select the Parity for Serial Communications.

OPOS Support For HP Printers - InstallShield Wizard	×
Serial Communications	
Parity	
No Parity Odd Parity Even Parity	
InstallShield	Next > Cancel

#### 10. Select the Flow Control for Serial Communications.

OPOS Support For HP Printers - InstallShield V	Vizard		×
Serial Communications		V	×
Flow Control			
✓ DTR/DSR			
□ Xon/Xoff			
T-st-lightald			
InstallShield	< <u>B</u> ack	<u>N</u> ext >	Cancel

11. For the remaining options, defaults can be selected until the installation is complete.



### 6.4.10.3 OPOS Installation - Ethernet

In the HP factory image the OPOS driver is installed in USB mode. Later in this section are the steps to change the OPOS driver from USB mode to Ethernet mode; see "OPOS – Ethernet IPS Address (Registry)" section. These steps will need to be used even if the printer driver Ethernet option is selected during installation in order to get the correct IP address into the registry.

The following is an overview of the steps to install the receipt printer followed by detailed steps:

- 1. Start the HP Receipt Printer OPOS executable.
- 2. Select HP A799/A799II Printer for Printer choices. Currently this is the only model offered by HP that supports Ethernet.
- 3. Select Generation II Printer for Emulation Mode.
- 4. Select YES or NO to install OPOS Control Objects.
- 5. Select "Ethernet Communications (A799 II) as the Connection Method.
- 6. For the remaining options, defaults can be selected until the installation is complete.

#### **Detailed Steps**

- 1. Start the HP Receipt Printer OPOS executable.
- 2. Select HP A799/A799II Printer for Printer choices. Currently this is the only model offered by HP that supports Ethernet

OPOS Support For HP Printers - In	stallShield Wizard X
Printer choices	
Select the printers to install	
HP A776/A776II Printer	
HP A798/A798II Printer HP H300 Printer	
HP A794 Printer	
HP A799/A799II Printer	
InstallShield	Select All
	< <u>B</u> ack <u>N</u> ext > Cancel

3. Select Generation II Printer for Emulation Mode.

OPOS Support For HP Printers - InstallShield V	Wizard X
Emulation Mode	
Choose Printer Emulation to be used	
Generation II Printer	
Generation I Printer	
InstallShield	
al la sumo inclu	< Back Next > Cancel

#### 4. Select YES or NO to install OPOS Control Objects.

OPOS Support For HP Printers - InstallShield W	/izard		×
Setup Type Select the setup type that best suits your nee	ds.		Z
Are OPOS Control Objects to be installed?			
• YES			
ОNО			
InstallShield			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

If "NO" is selected, ensure that the standalone CCO package is installed prior to using the OPOS test program or a Point Of Sale application. The CCO installation package can be found in the HP factory image or <u>HP.COM</u>.

5. Select Ethernet Communications (A799 II) as the Connection Method.

OPOS Support For HP Printers - InstallShield	Wizard X
Connection Methods	
Choose the Datacomm method used	
USB Communications	
Serial Communications	
Ethernet Communications (A799 II)	
InstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel

6. For the remaining options, defaults can be selected until the installation is complete.

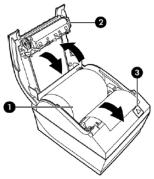
OPOS Support For HP Printers - InstallShield Wizard	
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed OPOS Support For HP Printers. Click Finish to exit the wizard.
	< Back Finish Cancel

# 6.4.10.4 OPOS – Ethernet IP Address (Registry)

- 1. Plug the printer into the network and have power to the printer.
- 2. Run a diagnostic printout and obtain the printer IP address from the printout.

Steps to obtain a diagnostics printout.

- a) Be sure paper is in the printer (1).
- b) Open the receipt cover (2).
- c) Press and hold the paper feed button (3).
- d) Close the receipt cover (2).

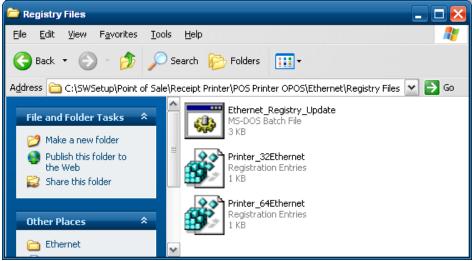


The following is partial A799II – Diagnostics Form printout showing the IP address and Port info:

FOIL IIIO.	
Comm. Interfaces	
Port Idle Timeout	: disabled
Interface - USB	
RX Buffer Size	: 4096
	: Printer Class
USB Packet w/Error	: Reject
Interface - RS232	-
RX Buffer Size	: 4096
Parameters	
Baud Rate	: 115200
	: 8
	: 1
Parity	: NONE
Flow Control	: DTR/DSR
Reception Errors	
Interface - Bluetoot	h
Status	: not available
Interface - Ethernet	
Ethernet Type :	Wired
Parameters	
MAC Address	: 00:E0:70:F0:21:7C
IP Address	: 10.1.3.18
Net Mask	: 255.255.252.0
Gateway	: 10.1.0.1
Raw TCPIP Port	: 9001
Loop Back Port	: Disabled
Http Server Port	
DHCP	: Enabled
Client ID	: 00E070F0217C
	: Disabled
Keep Alive Pings	
heep hiller ingo	

**Note:** The default IP address is 192.0.0.192. If this address appears on the printout, the printer has not obtained an IP address.

3. Go to the "Ethernet" folder that is found in the OPOS package folder. Then go to the "Registry Files" folder within the package.



4. In 32Bit operating system using Notepad (or text editor) modify the "Printer\_32Ethernet.REG" file with the Port / Address (IP Address) that is on the diagnostics printout that was obtained earlier.

In 64Bit operating system using Notepad (or text editor) modify the "Printer\_64Ethernet.REG" file with the Port / Address (IP Address) that is on the diagnostics printout that was obtained earlier.

Below is modified 32Bit registry file:

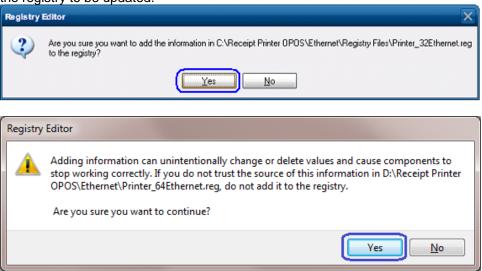


Below is modified 64Bit registry file:

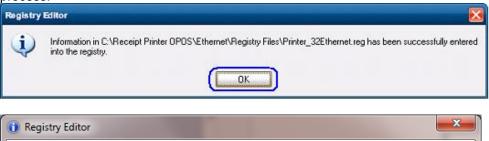


5. After the file has been changed and saved, close Notepad (or text editor).

6. Double click on the registry file to update the registry. One of the following messages will appear asking for confirmation. Click the YES button to allow the registry to be updated.



After clicking the YES button, one of the following confirmation screens will appear indicating that the update was successful. Click OK to complete the process.



Regis	stry Editor
1	The keys and values contained in D:\Receipt Printer OPOS\Ethernet\Printer_64Ethernet.reg have been successfully added to the registry.
	ОК

If you are not sure if you are on 32Bit or 64Bit operating system:

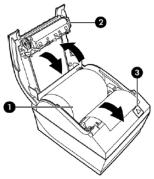
- Modify the "Printer\_32Ethernet.REG" file with the Port / Address (IP Address) that is on the diagnostics printout that was obtained earlier.
- Modify the "Printer\_64Ethernet.REG" file with the Port / Address (IP Address) that is on the diagnostics printout that was obtained earlier.
- Run the "Ethernet\_Registry\_Update.BAT" file with administrator rights.
- Confirm it is OK to update the registry by clicking on the YES button on the screen that ask for confirmation to update the registry.
- Click OK on the confirmation screen to complete the registry update process.

## 6.4.10.5 OPOS – Ethernet IP Address (GUI)

- 1. Plug the printer into the network and have power to the printer.
- 2. Run a diagnostic printout and obtain the printer IP address from the printout.

Steps to obtain a diagnostics printout.

- e) Be sure paper is in the printer (1).
- f) Open the receipt cover (2).
- g) Press and hold the paper feed button (3).
- h) Close the receipt cover (2).

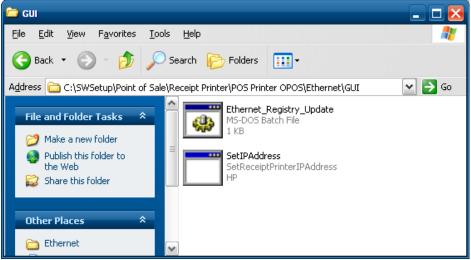


The following is partial A799II – Diagnostics Form printout showing the IP address and Port info:

FOIL IIIO.	
Comm. Interfaces	
Port Idle Timeout	: disabled
Interface - USB	
RX Buffer Size	: 4096
	: Printer Class
USB Packet w/Error	: Reject
Interface - RS232	-
RX Buffer Size	: 4096
Parameters	
Baud Rate	: 115200
	: 8
	: 1
Parity	: NONE
Flow Control	: DTR/DSR
Reception Errors	
Interface - Bluetoot	h
Status	: not available
Interface - Ethernet	
Ethernet Type :	Wired
Parameters	
MAC Address	: 00:E0:70:F0:21:7C
IP Address	: 10.1.3.18
Net Mask	: 255.255.252.0
Gateway	: 10.1.0.1
Raw TCPIP Port	: 9001
Loop Back Port	: Disabled
Http Server Port	
DHCP	: Enabled
Client ID	: 00E070F0217C
	: Disabled
Keep Alive Pings	
heep hiller ingo	

**Note:** The default IP address is 192.0.0.192. If this address appears on the printout, the printer has not obtained an IP address.

3. Go to the "Ethernet" folder that is found in the OPOS package folder. Then go to the "GUI" folder within the package.



4. Launch the Receipt Printer IP Address utility via the batch file (if one wants to launch the GUI directly ensure it is done with administrate privileges). Enter the IP Address for the receipt printer in the GUI.

Set Receipt Printer IP Address	
Enter IP Address below and click	Version 1.0.0.2 OK or Clear IP Address
10.1.3.18 (Format: x x x x)	OK Clear IP Address
Valid IP Address range 0 to 255	Exit

5. Press OK on the dialog box that appears that shows the IP address that was entered.

Set Receipt Printer IP Address	
Enter IP Address below and c	Version 1.0.0.2 lick OK or Clear IP Address
10.1.3.18	ОК
(Format: x x x x)	Clear IP Address
Valid IP Address range 0 to 2	55 Exit

6. Close the Receipt Printer IP Address utility.

Set Receipt Printer IP Address	
Enter IP Address below and click OK or Clea	Version 1.0.0.2 ar IP Address
10.1.3.18 OK	
(Format: x x x x) Clear IP A	ddress
Valid IP Address range 0 to 255	Exit

Description
Where the IP Address for the receipt printer is entered.
Will update the Windows registry with the information entered in the box. <b>Note:</b> If you are not sure of the address of the printer or what this is, contact your IT administrator.
Will clear the entry in the box.
Will close and exit the utility.

#### 6.4.10.6 <u>OPOS Test Applet for the Receipt Printer - Receipt Printer and Cash Drawer</u> <u>Utility</u>

The following is overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the program file folder.
- 2. Click "Printer"
- 3. Select printer from the drop down menu.
- 4. Click "Open Printer"
- 5. Click "Claim Printer"
- 6. Click "Enable Printer"
- 7. What is type in the sample text to print box will be sent and printed on the receipt printer when one clicks "PRINT".
- 8. Click "Feed" to advance the paper in the receipt printer.
- 9. Click "Cut" to cut the receipt.
- 10. Exit the test application.

## Detailed Steps

- Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the "C:\xxxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click "Printer". The following is the main GUI of the "Sample\_OPOS\_Application" when it is launched:

OPOS Test Application				×
<u>File H</u> elp				
	HP Re	ceipt Printer	V1.0. 630	
	<u>P</u> rinter	MICR	<u>E</u> xit	
	<u>C</u> ashDrawer	Check <u>S</u> can		
Property Gets/Sets,	Method Return V	alues, and Events		_
				_

3. Select printer from the drop down menu.

🖣 Printer Examp	les	$\mathbf{X}$			
Device:       A776         A794       Insertion         A798       Insertion         A799       End Insertion         Claim Printer       End Insertion         Enable Printer       Begin Removal         Disable Printer       End Removal         Disable Printer       Rotate Left         Release Printer       Rotate Left         Statistics       AsyncMode         Available Char Sets       Image: Set Character Set         Print Character Set       Print Character Set					
Current Character Se Set Sample Charac					
Print Feed Not all printer models support code pages 950, 932, 936, 949, 874 and 1256. Refer to the HP printer documentation.					
🗖 Scanner 🔲 🛙	nable Power Notify	Close Form			

4. Click "Open Printer", in the main GUI one will receive status. If successful the status will say SUCCESS.

If failure occurs at this point make sure the printer is plugged in and the LED is on solid and the OPOS drivers are installed on the computer.

5. Click "Claim Printer", in the main GUI one will receive status. If successful the status will say SUCCESS.

If failure occurs at this point confirm that the CCO 1.9 (or later) files are installed on this unit. If the CCO files need to be installed, they can be found in the HP factory image (C:\xxxxx\Point of Sale\Common Control Object (CCO)) and are also available from <u>HP.COM</u>.

6. Click "Enable Printer", in the main GUI one will receive status.

If successful the status will say SUCCESS as shown below for "Open Printer" / "Claim Printer" / Enable Printer".

OPOS Test Application				×
<u>File H</u> elp				
	HP Re	ceipt Printer	V1.0. 630	
	<u>P</u> rinter	MICR	<u>E</u> xit	
	<u>C</u> ashDrawer	Check <u>S</u> can		
Property Gets/Sets,	Method Return \	/alues, and Events		
0: Result of Printer.0pen: 0P0 1: Service Version: 1.13.4 0P0	IS SUCCESS			]
2: Result of Printer.Claim: 0P0 3: Result of Printer.Enable: 0P1				
				]

7. What is typed in the sample text to print box will be sent to the printer to be printed on the receipt printer when one clicks on "PRINT" button.

🖻 Printer Exampl	es			
Device: A799	•			
Open Printer	Begin Insertion	Select Station Receipt Slip		
Claim Printer	End Insertion	C Journal		
Enable Printer	Begin Removal	10000		
Disable Printer	End Removal	OPOS Properties Bitmaps & BarCodes		
Release Printer	Rotate Left	Statistics		
Close Printer	Rotate Normal	AsyncMode		
Available Char Sets	999-ANSI	•		
437, 850, 852, 857, 8 865, 866, 737, 1048, 101, 1252, 1256, 950	1251, 1255, 998, 999,	Set Character Set		
101, 1202, 1200, 000	, 330, 332, 343, 614	Print Character Set		
Current Character Se	et: 999-ANSI			
Set Sample Charac	ter Set Data			
Print Feed	Not all printer models 950, 932, 936, 949, 8 the HP printer docum	374 and 1256. Refer to		
Type something here\0a				
🔲 Scanner 🕅 E	nable Power Notify	Close Form		

8. Click "Feed" to advance the paper 10 line feed that is in the receipt printer. In the GUI success status should appear after the "Feed" button is successful:

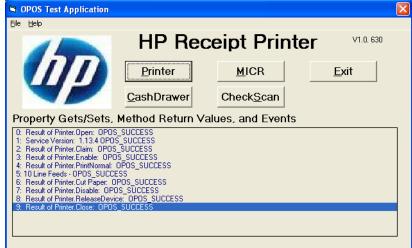
9. Click "Cut" to cut the receipt. In the GUI success status should appear after the "Cut" button is successful:

OPOS Test Application				×
<u>File H</u> elp				
HP Receipt Prin			V1.0. 630	
	Printer	MICR	<u>E</u> xit	
	<u>C</u> ashDra <del>w</del> er	Check <u>S</u> can		
Property Gets/Sets, Method Return Values, and Events				
0: Result of Printer.Open: OPOS_SUCCESS 1: Service Version: 1.13.4 OPOS_SUCCESS 2: Result of Printer.Emister: OPOS_SUCCESS 3: Result of Printer.Emister: OPOS_SUCCESS 4: Result of Printer.PrintNormat: OPOS_SUCCESS 5: 10 Line Feeds - OPOS_SUCCESS 5: 10 Line Feeds - OPOS_SUCCESS				
6: Result of Printer.Cut Paper: 0P05_SUCCESS				
L				_

10. To exit the application clicking on "DISABLE PRINTER" / "Release Printer" / "Close Printer" and "Close Form".

🖻 Printer Example	:S	×		
Device: A799	•			
Open Printer	Begin Insertion	Select Station Receipt Slip		
Claim Printer	End Insertion	C Journal		
Enable Printer	Begin Removal	10000		
Disable Printer	End Removal	OPOS Properties		
Release Printer	Rotate Left	Bitmaps & BarCodes Statistics		
Close Printer	Rotate Normal	AsyncMode		
Available Char Sets	999-ANSI	•		
437, 850, 852, 857, 85 865, 866, 737, 1048, 1	251, 1255, 998, 999,	Set Character Set		
101, 1252, 1256, 950,	936, 932, 949, 874	Print Character Set		
Current Character Set	Current Character Set: 999-ANSI			
Set Sample Characte	er Set Data			
Print         Feed         Not all printer models support code pages           950, 932, 936, 949, 874 and 1256. Refer to           Clear         the HP printer documentation.				
Type something here\Oa				
		~		
🔲 Scanner 🕅 En	able Power Notify	Close Form		

11. To close the main application GUI, click on EXIT.



### 6.4.10.7 Rotate Left Testing

The following is overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the program file folder.
- 2. Click "Printer"
- 3. Select printer from the drop down menu.
- 4. Click "Open Printer"
- 5. Click "Claim Printer"
- 6. Click "Enable Printer"
- 7. Click on "Print" button to confirm that the printer is printing.
- 8. Click on "Rotate Left" button.
- 9. Click on "PRINT" button.
- 10. Click on "Rotate Normal" button.
- 11. Exit the test application.

#### Detailed Steps

- 1. Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the "C:\xxxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click "Printer". The following is the main GUI of the "Sample OPOS Application" when it is launched:

OPOS Test Application			×
<u>File H</u> elp			
	HP Receipt Printer	∨1.0.630	
	Printer MICR	<u>E</u> xit	
	<u>CashDrawer</u> Check <u>S</u> can		
Property Gets/Sets, Method Return Values, and Events			
			_

3. Select printer from the drop down menu.

🖣 Printer Examp	les	X	
Device: A776 A776 A794 A798 A799 Claim Printer Enable Printer Disable Printer Release Printer Close Printer Available Char Sets	Insertion     End Insertion     Begin Removal     End Removal     Rotate Left     Rotate Normal	Select Station © Receipt © Slip © Journal 10000 OPOS Properties Bitmaps & BarCodes Statistics © AsyncMode Set Character Set Print Character Set	
Current Character Set: 999 Set Sample Character Set Data Print Feed Not all printer models support code pages 950, 932, 936, 949, 874 and 1256. Refer to the HP printer documentation. Type something here\0a			
, I Scanner I E	inable Power Notify	Close Form	

4. Click "Open Printer", in the main GUI one will receive status. If successful the status will say SUCCESS.

If failure occurs at this point make sure the printer is plugged in and the LED is on solid and the OPOS drivers are installed on the computer.

5. Click "Claim Printer", in the main GUI one will receive status. If successful the status will say SUCCESS.

If failure occurs at this point confirm that the CCO 1.9 (or later) files are installed on this unit. If the CCO files need to be installed, they can be found in the HP factory image (C:\xxxxx\Point of Sale\Common Control Object (CCO)) and are also available from <u>HP.COM</u>

6. Click "Enable Printer", in the main GUI one will receive status.

If successful the status will say SUCCESS as shown below for "Open Printer" / "Claim Printer" / Enable Printer".

OPOS Test Application			X	
<u>File H</u> elp				
	HP Re	ceipt Printer	V1.0. 630	
	Printer	MICR	<u>E</u> xit	
	<u>C</u> ashDrawer	Check <u>S</u> can		
Property Gets/Sets,	Method Return V	alues, and Events		
0: Result of Printer.Open: OPOS_SUCCESS 1: Service Version: 1.13.4 OPOS_SUCCESS				
2: Result of Printer.Claim: OPOS_SUCCESS 3: Result of Printer.Enable: OPOS_SUCCESS				

7. Click on "Print" button to confirm that the printer is printing.

🛱 Printer Example	S	×	
Device: A799	•		
Open Printer Claim Printer	Begin Insertion End Insertion	Select Station © Receipt © Slip © Journal	
Enable Printer	Begin Removal	10000	
Disable Printer	End Removal	OPOS Properties Bitmaps & BarCodes	
Release Printer	Rotate Left	Statistics	
Close Printer	Rotate Normal	AsyncMode	
Available Char Sets	999-ANSI	•	
437, 850, 852, 857, 858, 860, 862, 863, 865, 866, 737, 1048, 1251, 1255, 998, 999,		Set Character Set	
101, 1252, 1256, 950, 9	330, 332, 343, 074	Print Character Set	
Current Character Set: 999-ANSI Set Sample Character Set Data			
Print Feed Not all printer models support code pages 950, 932, 936, 949, 874 and 1256. Refer to the HP printer documentation.			
Type something here\0	a	~	
🔲 Scanner 🕅 En	able Power Notify	Close Form	

Below is example of what is printed on the receipt:

Type something here

8. Click on "Rotate Left" button.

Printer Exampl	es		
Device: A799	•		
Open Printer	Begin Insertion	Select Station Receipt Slip Journal	
Enable Printer	Begin Removal	10000	
Disable Printer	End Removal	OPOS Properties	
Release Printer	Rotate Left	Bitmaps & BarCodes Statistics	
Close Printer	Rotate Normal	AsyncMode	
Available Char Sets	999-ANSI	•	
	1251, 1255, 998, 999,	Set Character Set	
101, 1252, 1256, 950, 936, 932, 949, 874		Print Character Set	
Current Character Set: 999-ANSI Set Sample Character Set Data			
Print Feed Not all printer models support code pages 950, 932, 936, 949, 874 and 1256. Refer to Cut Clear the HP printer documentation.			
Type something here	.Oa		
🗖 Scanner 🔲 🗉	nable Power Notify	Close Form	

9. Click on "PRINT" button.

RINT DUILON.				
Printer Example	es	X		
Device: A799	•			
Open Printer	Begin Insertion	Select Station     Receipt     Slip		
Claim Printer	End Insertion	C Journal		
Enable Printer	Begin Removal	10000		
Divelle Distan	End Removal	OPOS Properties		
Disable Printer		Bitmaps & BarCodes		
Release Printer	Rotate Left	Statistics		
Close Printer	Rotate Normal	AsyncMode		
Available Char Sets	999-ANSI	•		
437, 850, 852, 857, 858, 860, 862, 863, 865, 866, 737, 1048, 1251, 1255, 998, 999, 101, 1252, 1256, 950, 936, 932, 949, 874		Set Character Set		
		Print Character Set		
Current Character Se	Current Character Set: 999-ANSI			
Set Sample Charac	ter Set Data			
Feed       Not all printer models support code pages         950, 932, 936, 949, 874 and 1256. Refer to         Cut       Clear         the HP printer documentation.				
Type something here	.0a			
🔲 Scanner 🕅 E	nable Power Notify	Close Form		

10. Click on "Rotate Normal" button.

🖻 Printer Examp	les			
Device: A799	•			
Open Printer Claim Printer	Begin Insertion	Select Station C Receipt C Slip C Journal		
Enable Printer	Begin Removal	10000		
Disable Printer	End Removal	OPOS Properties		
Release Printer	Rotate Left	Bitmaps & BarCodes Statistics		
Close Printer	Rotate Normal	AsyncMode		
Available Char Sets	999-ANSI	•		
437, 850, 852, 857, 858, 860, 862, 863, 865, 866, 737, 1048, 1251, 1255, 998, 999, 101, 1252, 1256, 950, 936, 932, 949, 874		Set Character Set		
		Print Character Set		
	Current Character Set: 999-ANSI Set Sample Character Set Data			
Print Feed Not all printer models support code pages 950, 932, 936, 949, 874 and 1256. Refer to Cut Clear the HP printer documentation.				
Type something here	\0a			
🗖 Scanner 🕅 E	nable Power Notify	Close Form		

Below is example of what is printed on the receipt:

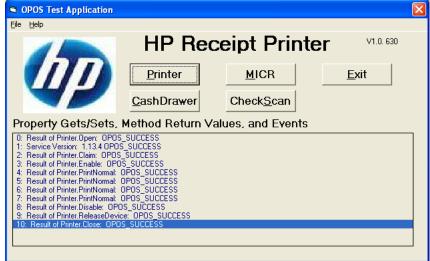
Type something here

Type something here

11. To exit the application clicking on "DISABLE PRINTER" / "Release Printer" / "Close Printer" and "Close Form".

🖻 Printer Example	es	×	
Device: A799	•		
Open Printer Claim Printer	Begin Insertion	Select Station © Receipt © Slip © Journal	
Enable Printer	Begin Removal	10000	
Disable Printer	End Removal	OPOS Properties	
Release Printer	Rotate Left	Bitmaps & BarCodes Statistics	
Close Printer	Rotate Normal	AsyncMode	
Available Char Sets	999-ANSI	•	
437, 850, 852, 857, 85 865, 866, 737, 1048, 1	1251, 1255, 998, 999,	Set Character Set	
101, 1252, 1256, 950, 936, 932, 949, 874		Print Character Set	
Current Character Set: 999-ANSI Set Sample Character Set Data			
Print         Feed         Not all printer models support code pages 950, 932, 936, 949, 874 and 1256. Refer to Cut           Cut         Clear         the HP printer documentation.			
Type something here\	Oa		
🗂 Scanner 🗂 Er	nable Power Notify	Close Form	

12. To close the main application GUI, click on EXIT.



### 6.4.10.8 Bitmap / Barcode Testing

- The following are the steps to test bitmap or barcode on the receipt printer:
   a. If you have not enabled the printer, please complete steps in the
  - previous section. b. Click on "Bitmaps & Barcodes" button

aps a Darco	ucs bullon		
🖻 Printer Exampl	es		
Device: A799	•		
Open Printer	Begin Insertion	Select Station Receipt Slip	
Claim Printer	End Insertion	C Journal	
Enable Printer	Begin Removal	10000	
Disable Printer	End Removal	OPOS Properties	
Release Printer	Rotate Left	Bitmaps & BarCodes	
		Statistics	
Close Printer	Rotate Normal	AsyncMode	
Available Char Sets	999-ANSI	-	
437, 850, 852, 857, 858, 860, 862, 863, 865, 866, 737, 1048, 1251, 1255, 998, 999, 101, 1252, 1256, 950, 936, 932, 949, 874			
	Print Character Set		
Current Character Set: 999-ANSI			
Set Sample Charac	ter Set Data		
Print Feed	Not all printer models 950, 932, 936, 949, t the HP printer docum	874 and 1256. Refer to	
Type something here <sup>4</sup>	.0a	×	
🗖 Scanner 🗖 E	nable Power Notify	Close Form	

#### <u>Bitmap</u>

- There are three test bitmaps (GRID.BMP / HP.BMP / TEST.BMP) that can be used. These bitmaps are located in the "C:\xxxxx\Point of Sale\Receipt Printer\OPOS Test Utility.
- ii. Select the bitmap alignment (left / center / right).
- iii. Select "I'll set it" option. Set it to 500 in the Bitmap Width.

🖻 Bitmap & BarCode Tests	
Bitmap Path       OS Test Utility\test.bmp         Bitmap Alignment       C         C Left       Center       Right         Illegal       Bitmap Width       C         As Is       I'll set it 500       Bitmap Number         Bitmap       PrintBitmap       PrintBitmap	Bar Code Alignment C Left Center C Right Illegal Human Readable Characters C Above C Below C None C Illegal Bar Code Width C Small C Medium C Large C Manual Sample
Reset All Choices Close Form	Down for Symbologies       Enter Bar Code Data Here       Height     162       Multiple Barcodes       Multiple On a Line       Start Multiple       Stop Multiple

iv. Click on "PrintBitmap" button. The printer should have printed the selected bitmap.

Bitmap Path OS Test Utility\test.bmp Bitmap Alignment C Left I Center C Right	Bar Code Alignment C Left C Center C Right C Illegal
Cillegal Bitmap Width CiAs Is Cilliset it 500	Human Readable Characters C Above C Below C None C Illegal
Bitmap Number 1 SetBitmap	Bar Code Width C Small C Medium C Large C Manual Sample
	Down for Symbologies
Reset All Choices	Enter Bar Code Data Here
Close Form	Height 162 PrintBarCode Multiple Barcodes Multiple On a Line Start Multiple Stop Multiple

v. Click on "CLOSE FORM" button.

vi. Click on DISABLE PRINTER / RELEASE PRINTER / CLOSE PRINTER and CLOSE FORM button.

🛱 Printer Example	es	X		
Device: A799	•	0. L. 1. O. 1.		
Open Printer	Begin Insertion	Select Station Receipt C Slip		
Claim Printer	End Insertion	C Journal		
Enable Printer	Begin Removal	10000		
Disable Printer	End Removal	OPOS Properties		
Release Printer	Rotate Left	Bitmaps & BarCodes		
		Statistics		
Close Printer	Rotate Normal	AsyncMode		
Available Char Sets	999-ANSI	-		
437, 850, 852, 857, 8 865, 866, 737, 1048, 1	1251, 1255, 998, 999,	Set Character Set		
101, 1252, 1256, 950, 936, 932, 949, 874		Print Character Set		
Current Character Se	Current Character Set: 999-ANSI			
Set Sample Charact	ter Set Data			
Print         Feed         Not all printer models support code pages           950, 932, 936, 949, 874 and 1256. Refer to           Cut         Clear         the HP printer documentation.				
Type something here\Oa				
🗖 Scanner 🔲 Er	nable Power Notify	Close Form		

### **Barcode**

- i. Select the bar code alignment (left / center / right).
- ii. Select "Human Readable Characters" (Above / Below / None).
- iii. Select Bar Code Width (Small / Medium / Large)
- iv. Select Interleaved 2 of 5 in the drop down box.
- v. Type in numerical value for the barcode.
- vi. Click on "PrintBarCode". The printer should have printed the barcode.

Bitmap Path POS Test Utility\test.bmp       Bar Code Alignment         Bitmap Alignment       Left         C Left       Center         Bitmap Width       Illegal         As Is       I'll set it         Bitmap Number       Bar Code Alignment         C Left       Center         Bitmap Width       As Is         C As Is       I'll set it         Bitmap Number       Bar Code Width         SetBitmap       PrintBitmap         Interleaved 2 of 5       Ital         Interleaved 2 of 5       Ital         Height       162         PrintBarCode       Multiple Barcodes         Multiple Dro a Line       Start Multiple	🖣 Bitmap & BarCode Tests	X
	Bitmap Alignment C Left C Center C Right Illegal Bitmap Width C As Is C I'll set it Bitmap Number 1 SetBitmap PrintBitmap Reset All Choices	C Left Center C Right C Illegal Human Readable Characters C Above © Below C None C Illegal Bar Code Width C Small ⓒ Medium C Large C Manual Sample Interleaved 2 of 5 1038316 Height 162 PrintBarCode Multiple Barcodes Multiple Barcodes Multiple Darcodes

### vii. Click on "Close Form" button.

🖻 Bitmap & BarCode Tests	
Bitmap Path       OS Test Utility\test.bmp         Bitmap Alignment       Center         C Left       C Center         Bitmap Width       Bitmap Width         C As Is       I'll set it         Bitmap Number       1         SetBitmap       PrintBitmap	Bar Code Alignment C Left Center C Right Illegal Human Readable Characters Above C Below C None Illegal Bar Code Width C Small C Medium C Large Manual Sample
Reset All Choices	Interleaved 2 of 5 I038316 Height 162 Multiple Barcodes Multiple Barcodes Start Multiple Stop Multiple Stop Multiple

- viii. Click on "Disable Printer" button.
- ix. Click on "Release Printer" button.
- x. Click on "Close Printer" button.

xi. Click on "Close Form" button.

🖻 Printer Example	5	×		
Device: A799	•	- Select Station		
Open Printer	Begin Insertion	<ul> <li>Receipt</li> <li>Slip</li> </ul>		
Claim Printer	End Insertion	C Journal		
Enable Printer	Begin Removal	10000		
Disable Printer	End Removal	OPOS Properties		
Belease Printer	Datata Lati	Bitmaps & BarCodes		
	Rotate Left	Statistics		
Close Printer	Rotate Normal	AsyncMode		
Available Char Sets	999-ANSI	•		
437, 850, 852, 857, 858, 860, 862, 863, 865, 866, 737, 1048, 1251, 1255, 998, 999, Set Character Set				
101, 1252, 1256, 950, 936, 932, 949, 874 Print Character Set				
Current Character Set: 999-ANSI				
Set Sample Characte	r Set Data			
Print Feed Cut Clear	950, 932, 936, 949, 874 and 1256. Refer to			
Type something here\Oa				
🗍 Scanner 🗍 Ena	able Power Notify	Close Form		

### 6.4.10.9 Receipt Printer and Cash Drawer Utility – Cash Drawer Testing

The following is an overview of the steps to test the cash drawer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the program file folder.
- 2. Click "CashDrawer"
- 3. Select correct device name for the cash drawer to be tested.
- 4. Click "OPEN"
- 5. Click "ENABLE"
- 6. Click "OPEN Drawer" and the cash drawer should open. The GUI should also show status that the cash drawer is open.
- 7. Close the cash drawer and the GUI should give the status that the cash drawer is closed.
- 8. Exit the test application.

### **Detailed Steps**

#### Starting the OPOS printer sample application

- Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the "C:\xxxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click "CashDrawer". The following is the main GUI of the "Sample\_OPOS\_Application" when it is launched:

OPOS Test Application				×
<u>File H</u> elp				
	HP Re	ceipt Printer	V1.0. 630	
	Printer	MICR	<u>E</u> xit	
	CashDrawer	Check <u>S</u> can		
Property Gets/Sets, N	lethod Return V	Values, and Events		
				7

3. Select correct device name for the cash drawer to be tested.

🛱 Cash Drawer I	Examples		×
Device To Open A776-1 A776-1 A776-2 A794-1 A794-2 A798-1 A798-2 A799-1 A799-2 Open Drawer Disable Close Close	Close	DeviceDescriptions Control Service	
Drawer 1	Drawer 2	🗖 Drawer 1 PowerNotify	
Close I	Form	I Drawer 2 PowerNotifu	

- 4. Click "OPEN"
- 5. Click "ENABLE"
- 6. Click "OPEN Drawer" and the cash drawer should open. The GUI should also show status that the cash drawer is open.

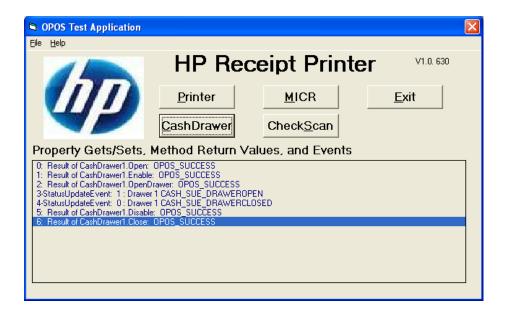
OPOS Test Application			
<u>File H</u> elp			
	HP Re	ceipt Printer	V1.0. 630
	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets,	Method Return V	alues, and Events	
0: Result of CashDrawer1.0per 1: Result of CashDrawer1.Enab 2: Result of CashDrawer1.0per 3-StatusUpdateEvent: 1: Draw	le: OPOS_SUCCESS Drawer: OPOS_SUCCESS	PEN	

7. Close the cash drawer and the GUI should give the status that the cash drawer is closed.

OPOS Test Application			
<u>File H</u> elp			
	HP Rec	ceipt Printer	- V1.0. 630
	<u>P</u> rinter	MICR	<u>E</u> xit
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Sets, N	lethod Return V	alues, and Events	
0: Result of CashDrawer1.0pen: 1: Result of CashDrawer1.Enable: 2: Result of CashDrawer1.0penDU 3-StatusUpdateEvent: 1: Drawer 4-StatusUpdateEvent: 0: Drawer	OPOS_SUCCESS awer: OPOS_SUCCESS	2EN .OSED	

8. Exit the test utility the clicking on DISABLE/CLOSE/CLOSE FORM and then click on EXIT.

🛢 Cash Drawer	Examples	×
Device To Open A799-1	¥	
Open	Open	DeviceDescriptions Control OPOS CashDrawer Control 1.13.
Enable	Enable	Service
Open Drawer	Open Drawer	OPOS Service Object for POSPri
Disable	Disable	
Close	Close	
Drawer 1	Drawer 2	🔲 Drawer 1 PowerNotify
Close		I Drawer 2 PowerNotify



### 6.4.11 OPOS Test Applet for the MICR

The following is overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE".
- 2. Click the "MICR" button.
- 3. Click the "Open MICR" button.
- 4. Click the "Claim MICR" button.
- 5. Click the "Enable MICR" button.
- 6. Insert the check in the front of the printer until the front LED comes on.
- 7. Click the "Begin Insertion" button.
- 8. Click the "End Insertion" button. At this point the printer will perform the MICR operation; the document should come out the front and then will be returned back to the bottom portion of the printer.
- 9. Click the "Enable Data Event". The data from the check scan should appear in the bottom of the GUI.
- 10. Click on "Begin Removal" and remove the check from the printer when it has been ejected.
- 11. Click on "End Removal" button.
- 12. Close the MICR.
- 13. Close the form.

#### **Detailed Steps**

- Start the "OPOS\_Test\_Application.EXE" that can be found in the start menu or in the "C:\xxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click the "MICR" button and another GUI will open as shown below:

MICR Examples			
Device To Open A776	TimeOut • 10000	Sample Opos Application	×
Open MICR Claim MICR Enable MICR Disable MICR Release MICR Close MICR Transit Number Bank Number Raw MICR Data	Begin Insertion End Insertion Begin Removal End Removal Enable Data Event Close Form Check Type Serial Number Account Number	Pie Heb Finter CashDrawer Property Gets/Sets, Method Return Values, and Events	

3. Click the "Open MICR" button and should have success in the main GUI:

MICR Examples		
Device To Open A776	TimeOut	
Inito	• 10000	Sample Opos Application
Open MICR	Begin Insertion	HP Receipt Printer
Enable MICR	Begin Removal	Printer MICR Exit
Disable MICR	End Removal	<u>C</u> ashDrawer Check <u>S</u> can
Release MICR	Enable Data Event	Property Gets/Sets, Method Return Values, and Events
Close MICR	Close Form	0: Result of MICR.Open: OPOS_SUCCESS
	Check Type	
Transit Number	Serial Number	
Bank Number	Account Number	
, Raw MICR Data		
1		

4. Click the "Claim MICR" button and should have success in the main GUI:

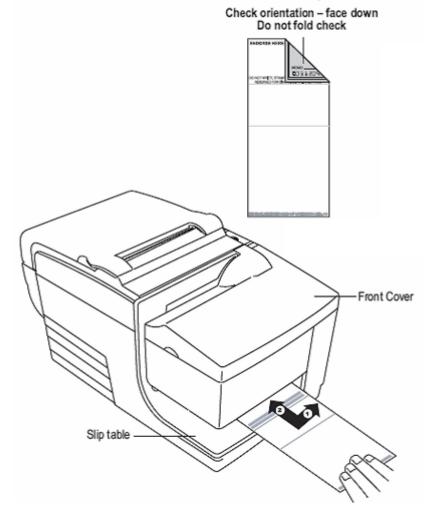
MICR Examples		
Device To Open A776	TimeOut	
prio		Sample Opos Application
Open MICR	Begin Insertion	HP Receipt Printer
Claim MICR	End Insertion	hn Hecciper Hinde
Enable MICR	Begin Removal	Printer MICR Exit
Disable MICR	End Removal	<u>C</u> ashDrawer Check <u>S</u> can
Release MICR	Enable Data Event	Property Gets/Sets, Method Return Values, and Events
Close MICR	Close Form	0: Result of MICR.Open: OPOS_SUCCESS 1: Result of MICR.Claim: OPOS_SUCCESS
	Check Type	
Transit Number	Serial Number	
Bank Number	Account Number	
J Baw MICB Data	I	

5. Click the "Enable MICR" button and should have success in the main GUI.

MICR Examples		
Device To Open A776	TimeOut 10000	Sample Opos Application
Open MICR Claim MICR Enable MICR Disable MICR Release MICR Close MICR	Begin Insertion End Insertion Begin Removal End Removal Enable Data Event Close Form Check Type	File Help     HP Receipt Printer     Printer     Printer     MICR     Exit     CashDrawer     CheckScan  Property Gets/Sets. Method Return Values, and Events      Read of MICR Dam. DPOS_SUCCESS      Read of MICR Dam. DPOS_SUCCESS      Read of MICR Dam. DPOS_SUCCESS
Transit Number	Serial Number	
Bank Number	Account Number	
Raw MICR Data		
,	1	

If one receives a message stating "NO Hardware" and the LED is blinking on the printer, please ensure that there is not a paper jam.

6. Insert the check in the front of the printer until the front LED comes on.



7. Click the "Begin Insertion" button.

MICR Examples		
Device To Open A776	TimeOut 10000	Sample Opos Application
Open MICR Claim MICR Enable MICR Disable MICR Release MICR Close MICR	Begin Insertion           End Insertion           Begin Removal           End Removal           End Removal           Enable Data Event           Close Form           Check Type	File       Help       HP Receipt Printer         Printer       Printer       MICR       Exit         CashDrawer       CheckScan         Property Gets/Sets, Method Return Values, and Events       In Result of MICR Oper: OPOS_SUCCESS         1: Result of MICR Endue: OPOS_SUCCESS         2: Result of MICR Endue: OPOS_SUCCESS         3: Result of MICR Endue: OPOS_SUCCESS
Transit Number Bank Number	Serial Number	
 Raw MICR Data 		

- 8. Click the "End Insertion" button. At this point the printer will perform the MICR operation; the document should come out the front and then will be returned back to the bottom portion of the printer.
- 9. Click the "Enable Data Event". The data from the MICR should appear in the bottom of the GUI.

MICR Examples			
Device To Open A776	TimeOut 10000	Sample Opos Application	
Open MICR Claim MICR	Begin Insertion End Insertion	HP Receipt Printer	
Enable MICR Disable MICR Release MICR	Begin Removal End Removal	<u>CashDrawer</u> CheckScan	
Close MICR	Close Form Check Type X	Property Gets/Sets, Method Return Values, and Events    Result of MICR Denr. OPOS SUCCESS   Result of MICR Enable: OPOS SUCCESS  Result of MICR Enable: OPOS SU	
Transit Number	Serial Number	5: DeadSvent 6: Result of MICR.DataEventEnabled: OPOS_SUCCESS	
Bank Number xxxxx	Account Number		
Raw MICR Data	×		

MICR Examples		
Device To Open	TimeOut	
A776	▼ 10000	
Open MICR	Begin Insertion	
Claim MICR	End Insertion	
Enable MICR	Begin Removal	
Disable MICR	End Removal	
Release MICR	Enable Data Event	
Close MICR	Close Form	
	Check Type	
	х	
Transit Number	Serial Number	
****	xxxx	
Bank Number	Account Number	
xxxxx	XXXXXXXXXX	
Raw MICR Data		
******	(	

Note in the above example the actual number have been replaced the "x".

- 10. Click on "Begin Removal" and remove the check from the printer when it has been ejected.
- 11. Click on "End Removal" button.

MICR Examples		
Device To Open A776	TimeOut 10000	Sample Opos Application
Open MICR Claim MICR Enable MICR Disable MICR Release MICR Close MICR	Begin Insertion End Insertion Begin Removal End Removal Enable Data Event Close Form Check Type X	File Help     File     Fi
Transit Number	Serial Number	5: DataEvent 6: Result of MICR.DataEventEnabled: DPOS_SUCCESS 7: Result of MICR.BeginRemoval: DPOS_SUCCESS
Bank Number	Account Number	8: Result of MICR.EndRemoval: OPOS_SUCCESS
xxxxx Raw MICR Data	****	
XXXXXXXXXXXX XXXXXXXXX XXX	x	

12. To exit the application "Disable the MICR" / "Release the MICR" / "Close the MICR".

MICR Examples		
Device To Open	TimeOut	
A776	▼ 10000	Sample Opos Application
Open MICR	Begin Insertion	File Help
Claim MICR	End Insertion	HP Receipt Printer
Enable MICR	Begin Removal	Printer MICR Exit
Disable MICR	End Removal	CashDrawer CheckScan
Release MICR	Enable Data Event	Property Gets/Sets, Method Return Values, and Events
Close MICR	Close Form	0: Result of MICR.Open: OPDS_SUCCESS
	Check Type	1: Result of MICR Linia: DPDS_SUCCESS 2: Result of MICR Enable: OPDS_SUCCESS 3: Result of MICR Regimention: OPDS_SUCCESS 4: Result of MICR Endmention: OPDS_SUCCESS
Transit Number	Serial Number	5. DataEvent 6. Result of MICR.DataEventEnabled: OPOS_SUCCESS
XXXXXXXXXX	XXXX	7: Result of MICR.BeginRemoval: OPOS_SUCCESS
Bank Number	Account Number	8: Result of MICR.EndRemoval: OPOS_SUCCESS
XXXXX	XXXXXXXXXX	
Raw MICR Data		
xxxxxxxxxxx xxxxxxxxxx xxx	×	

13. Click on "Close Form" button.

MICR Examples		
Device To Open A776	TimeOut 10000	
Open MICR	Begin Insertion	
Claim MICR	End Insertion	
Enable MICR	Begin Removal	
Disable MICR	End Removal	
Release MICR	Enable Data Event	
Close MICR	Close Form	
	Check Type	
Transit Number	x Serial Number	
xxxxxxxxx	XXXX	
Bank Number	Account Number	
xxxxx	****	
Raw MICR Data		
xxxxxxxxxx xxxxxxxxx xxx		

#### 6.4.12 OPOS Test Applet for the CheckScan

**Note:** The check scanner feature is only available on the HP Hybrid printer that has imaging capabilities. The following is an image of the the HP Hybrid printer model with imaging capabilities:

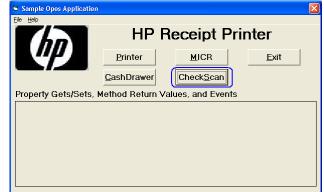


The following is overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the "OPOS\_Test\_Application.EXE".
- 2. Click the "CheckScan" button.
- 3. Click the "Open" button.
- 4. Click the "Claim" button.
- 5. Click the "Enable" button.
- 6. Click the "Begin Insertion" button. You should hear a click noise from the printer.
- 7. Insert the check face up in the front of the printer until the front LED comes on.
- 8. Click the "End Insertion" button. At this point the printer will perform the "CheckScan" operation; the document should come out the front and then will be returned back to the bottom portion of the printer.
- 9. Click the "Enable Data Event" button.
- 10. Click the "Retrieve Image" button.
- 11. Click on "SAVE AS" under "FILE" to save the image that was captured. Save the file with "TIF" extension. After the file is save in the message box will state "File Written".
- 12. Click on "BEGINREMOVAL" button.
- 13. Click on "EndREMOVAL" button.
- 14. Close the "CheckScan".
- 15. Close the form.

### **Detailed Steps**

- Start the "OPOS\_Test\_Application.EXE" that can be found in the Start Menu or in the "C:\xxxxxx\ Point of Sale\Receipt Printer\OPOS Test Utility" subfolder.
- 2. Click the "CheckScan" button.



## 3. Click the "Open" button.

CheckScanner			X		
File					
Device: A776	BeginInsertion     20       EndInsertion     20       BeginRemoval     20       EndRemoval     20	Direct IO Tag tests Common Specific Boolean Capabilities CapAutoGenerateFileID CapAutoGenerateImageTagData CapAutoSize CapConcurrentMICR CapDefineCropArea CapDefineCropArea CapImageTagData	Other Tests Writeable		
	Retrievelmage	CapMICRDevice CapStoreImageFiles			
Claimed V Server	Enable Data Event	CapValidationDevice			
		Integer Capabilities CapColor Grays CapImageFormat TIFF Integer Read-Only Properties - CropAreaCount			
/ Image Data	Data Length	ImageMemoryStatus <inval< th=""><th></th></inval<>			
Clear		MaxCropAreas RemainingImagesEstimate			
Messages		String Read-Only Property			
		QualityList 200			
Scanner Probe					
OPOS CheckScanner Control 1.8.00"	[Public, by CRM/RCS-Dayton]	<u> </u>	1.8.1		
OPOS Service Object for POSPrinter	/MICR/CashDrawer/CheckScanner, v 1.8,	, © 2009 TPG, Inc.	1.8.51		
Sample Opos Applic	Sample Opos Application				
File Help		ceipt Printer			
	Printer	MICR Exit	:		
	<u>C</u> ashDrawer Check <u>S</u> can				
Property Gets/Sets, Method Return Values, and Events					
	r1.0pen: OPOS_SUCCESS niversion: None OPOS_SUCCESS				

4. Click the "Claim" button.

CheckScanner		🔺 🕹 🕹 🕹 🕹 🕹 🕹 🕹		
File				
Device: A776		Direct IO Tag tests Other Tests Common <b>Specific</b> Writeable		
□pen         □laim         □laim         □laible         □laib	EndInsertion	20       Boolean Capabilities         CapAutoGenerateFileID       CapAutoGenerateFileID         CapAutoGenerateFileID       CapAutoSize         20       CapAutoGenerateFileID         20       CapAutoSize       ImageTagData         20       CapConcurrentMICR       ImageTagData         20       CapDefineCropArea       ImageTagData         CapMICRDevice       ImageTagData       ImageTagData         CapMICRDevice       ImageTagData       ImageTagData         CapMicRDevice       ImageTagData       ImageTagData         CapValidationDevice       ImageTagData       ImageTagData         CapColor       Grayscale       CapColor         CapRead-Only Properties       CropAreaCount       ImageMemoryStatus         MaxCropAreas       0       ImageMemoryStatus       0         MaxCropAreas       0       0       String Read-Only Property       0         QualityList       200       200       0       0		
OPOS CheckScanner Control 1.8.00	1 [Public, by CRM/RCS-Dayton]	1.8.		
OPOS Service Object for POSPrinter.	r, v 1.8, © 2009 TPG, Inc. 1.8.5			
Sample Opos Application  File Help  HP Receipt Printer				
	Printer	MICR Exit		
<u>CashDrawer</u> <u>CheckScan</u>				
Property Gets/Sets, Method Return Values, and Events 0: Result of CheckScanner1.0pen: 0P0S_SUCCESS				
1: CheckScanner,BinayConversion: None OPOS_SUCCESS 2: Result of CheckScanner,Diraction, Device: OPOS_SUCCESS 3: Result of CheckScanner,DiractiO.Server: OPOS_SUCCESS				

5. <u>Click the "Enable" button.</u>

CheckScanner			X
File			
Device: A776		Direct IO Tag tests	Other Tests Writeable
<u>O</u> pen	BeginInsertion 20	Boolean Capabilities	
<u> </u>	EndInsertion	CapAutoGenerateFileID CapAutoGenerateImageTagData	
	BeginRemoval 20	CapAutoSize	
Disable	EndRemoval	CapConcurrentMICR CapDefineCropArea	
Release		CapImageTagData	÷ [] [
Close	Retrievelmage	CapMICRDevice CapStoreImageFiles	
Claimed 🔽 Server	Enable Data Event	CapValidationDevice	
		Integer Capabilities	
		CapColor Gray CapImageFormat TIFF	scale
		Integer Read-Only Properties	
	Data Length	CropAreaCount	0
Image Data		ImageMemoryStatus    MaxCropAreas	alid>
Clear		RemainingImagesEstimate	0
Messages		String Read-Only Property QualityList 200	
		QualityList 200	
Scanner Probe			
OPOS CheckScanner Control 1.8.00	1 [Public, by CRM/RCS-Dayton]		1.8.1
OPOS Service Object for POSPrinter.	/MICR/CashDrawer/CheckScanner, v 1.8	}, © 2009 TPG, Inc.	1.8.51
🛱 Sample Opos Applic	ation		X
File Help			
	HP Re	ceipt Printer	
	Printer	MICR Exi	t
	<u>C</u> ashDrawer	Check <u>S</u> can	
Property Gets/Se	ets, Method Return Value	es, and Events	
1: CheckScanner.BinaryC 2: Result of CheckScanne 3: Result of CheckScanne	r1.Open: OPOS_SUCCESS onversion: None OPOS_SUCCESS rt.ClaimDevice: OPOS_SUCCESS rt.DirectIO.Server: OPOS_SUCCESS rt.Enable: OPOS_SUCCESS		

6. Click the "Begin Insertion" button. You should hear a click noise from the printer.

CheckScanner			×
File			
Device: A776		Direct IO Tag tests	Other Tests Writeable
□pen         □laim       5         Enable         □isable         Belease         Close         ✓ Claimed       ✓ Server         Image Data         Clear	BeginInsertion       20         EndInsertion       20         BeginRemoval       20         EndRemoval       20         EndRemoval       20         EndRemoval       20         EndRemoval       20         Data Length	Boolean Capabilities         CapAutoGenerateFileID         CapAutoGenerateImageTagData         CapAutoGize         CapConcurrentMICR         CapDefineCropArea         CapMutoRevice         CapMicRDevice         CapStoreImageFiles         CapColor         Gargys         CapDefineCropArea         CapMicRDevice         CapStoreImageFiles         CapColor         Grays         CapImageFormat         TIFF         Integer Read-Only Properties         CropAreaCount         ImageMemoryStatus         RemainingImagesEstimate         String Read-Only Property	
		QualityList 200	
Scanner Probe			
OPOS CheckScanner Control 1.8.00	11 [Public, by CRM/RCS-Dayton]		1.8.1
OPOS Service Object for POSPrinter	:/MICR/CashDrawer/CheckScanner, v 1.8,	© 2009 TPG. Inc.	1.8.51
Sample Opos Applic	_	ceipt Printer	×
	<u>P</u> rinter	MICR <u>E</u> xit	:
	<u>C</u> ashDrawer C	Check <u>S</u> can	
Property Gets/S	ets, Method Return Value	s, and Events	
0: Result of CheckScann 1: CheckScanner.Binary 2: Result of CheckScann 3: Result of CheckScann 4: Result of CheckScann	er1.Open: OPOS_SUCCESS conversion: None OPOS_SUCCESS er1.ClaimDevice: OPOS_SUCCESS er.DirectIO.Server: OPOS_SUCCESS er.Enable: OPOS_SUCCESS er.BeginInsertion: OPOS_E_TIMEOUT		_

- 7. Insert the check face up in the front of the printer until the front LED comes on.
- 8. Click the "End Insertion" button. At this point the printer will perform the "CheckScan" operation; the document should come out the front and then will be returned back to the bottom portion of the printer.

CheckScanner							X
File							
Device: A776		1	Direct IO Common	Tag tes		Other Tests Writeable	Ĵ
Open       Claim       Enable       Disable       Release       Close       V Claimed	BeginInsertion       \[         EndInsertion       \[         BeginRemoval       \[         EndRemoval       \[         Retrievelmage       \[         Enable Data Event       \[	20	CapAutoGer	apabilities nerateFileID nerateFileID nerateImageTag e entMICR ropArea agData agData ayoice ageFiles nnDevice	μ	สาวรุยาร	
End Insertion returned			CapColor CapImageFo	rmat ad-Only Prop	Graysc TIFF erties	ale	
	Length		CropAreaCou ImageMemor MaxCropArea RemainingIm	ryStatus	<invali< td=""><td>0 d&gt; 0 0</td><td></td></invali<>	0 d> 0 0	
Messages			_	d-Only Prope			
			QualityList		200		
Scanner Probe							
OPOS CheckScanner Control 1.8.001 [Pul	blic, by CRM/RCS-Dayton]						1.8.1
OPOS Service Object for POSPrinter/MICF	R/CashDrawer/CheckScann	ier, v 1.8, <sup>.</sup>	© 2009 TPG, In	IC.			1.8.51
Sample Opos Application						X	
File Help							
Thomas and	HP R	lece	eipt P	Printe	r		
	<u>P</u> rinter	1	MICR	ļ	<u>E</u> xit		
	CashDrawer	Che	eck <u>S</u> can				
Property Gets/Sets, M		ilues,	and Even	ts			
D: Result of CheckScanner1.0pen     TcheckScanner.BinatyConversio     Result of CheckScanner.Llaim     Result of CheckScanner.Directl     Result of CheckScanner.Enable     Result of CheckScanner.Enable     Result of CheckScanner.Beginl     Result of CheckScanner.Beginl     Result of CheckScanner.StatusUpdateEv	n: None OPOS_SUCCESS Device: OPOS_SUCCESS 0.Server: OPOS_SUCCESS 2: OPOS_SUCCESS nsertion: OPOS_SUCCESS isertion: OPOS_SUCCESS	i			_		

9. <u>Click the "Enable Data Event" button.</u>

Direct IO Tag tests Other Tests Common <b>Specific</b> Writeable
Common     Specific     Writeable       Boolean Capabilities     CapAutoGenerateFileID     Image CapAutoGenerateFileID       CapAutoGenerateFileID     Image CapAutoGize     Image CapAutoGize       CapAutoSize     Image CapAutoGize     Image CapAutoGize       CapConcurrentMICR     Image CapDefineCropArea     Image CapDefineCropArea       CapMicRDevice     Image CapAutoGize     Image CapAutoGize       CapMicRDevice     Image CapAutoGize     Image CapAutoGize       CapValidationDevice     Image CapAutoGize     Image CapAutoGize       Integer Capabilities     CapColor     Grayscale       CapImageFormat     TIFF     Image CapAutoGize
Integer Read-Only Properties           CropAreaCount         0           ImageMemoryStatus <invalid>           MaxCropAreas         0           RemainingImagesEstimate         0</invalid>
String Read-Only Property QualityList 200
1.
8, © 2009 TPG, Inc. 1.8
Ceipt Printer
heck <u>S</u> can
s, and Events

### 10. Click the "Retrieve Image" button.

CheckScanner			X
File			
Device: A776		Direct IO Tag tests Other Tests Common <b>Specific</b> Writeable	]
□pen         □laim       5         Enable       0         □isable       0         Belease       0         Close       0         Claimed       0         Server       0         End Insertion returned       0         Image Data       0         Clear       0	BeginInsertion       20         EndInsertion       20         BeginRemoval       20         EndRemoval       20         EndRemoval       20         Enable Data Event       20	Boolean Capabilities         CapAutoGenerateFileID         CapAutoGenerateFileID         CapAutoGenerateFileID         CapAutoGenerateFileID         CapAutoGenerateFileID         CapConcurrentMICR         V         CapDefineCropArea         CapMICRDevice         V         CapValidationDevice         V         CapColor         CapImageFormat         TIFF         Integer Read-Only Properties         CropAreaSount         O         ImageMemoryStatus         MaxCropAreas         QualityList         200	
Scanner Probe	[Public, by CRM/RCS-Davton]		1.8.1
	MICR/CashDrawer/CheckScanner, v 1.	8 @ 2009 TPG Inc	1.8.51
Sample Opos Applicati	on	≍ eipt Printer	
	<u>P</u> rinter	MICR Exit	
	<u>C</u> ashDrawer C	neck <u>S</u> can	
Property Gets/Sets	, Method Return Values	, and Events	
C. Result of CheckScanner1.     CheckScanner, BinaryConve Result of CheckScanner1.     Result of CheckScanner.     S. Result of CheckScanner.     F. Result of CheckScanner.     Result of CheckScanner1.     CheckScanner1.     CheckScanner.     Result of CheckScanner.     S. Result of CheckScanner.     S. Result of CheckScanner.     S. CheckScanner.     DataEvent:	Ipen: OPOS_SUCCESS ersion: None OPOS_SUCCESS laimDevice: OPOS_SUCCESS extl0.Server: OPOS_SUCCESS able: OPOS_SUCCESS ginInsertion: OPOS_SUCCESS ndInsertion: OPOS_SUCCESS teEvent: OPOS_SUCCESS teEvent: DPOS_SUCCESS		
1: CheckScanner,BinaryConvi 2: Result of CheckScanner,Di 3: Result of CheckScanner,Di 4: Result of CheckScanner,Be 5: Result of CheckScanner,Be 7: CheckScanner,StatusUpda 8: Result of CheckScanner,Da 9: CheckScanner,DataEvent:     9: CheckScanner,DataEvent:	sision: None DPDS_SUCCESS laimDevice: DPDS_SUCCESS exett0.Server: 0PDS_SUCCESS iginInsertion: 0PDS_SUCCESS indInsertion: 0PDS_SUCCESS teEvent: 0PDS_SUCCESS ataEventEnabled: 0POS_SUCCESS 0PDS_SUCCESS		

11. Click on "SAVE AS" under "FILE" to save the image that was captured. Save the file with "TIF" extension. After the file is save in the message box will state "File Written".

CheckScanner	
File	
Open Ctrl+O Save Ctrl+S	Direct IO Tag tests Other Tests
Save As	Common Specific Writeable
Exit <u>BeginInsertion</u>	20 Boolean Capabilities CapAutoGenerateFileID
<u>Claim</u> 5 E <u>n</u> dInsertion	CapAutoGenerateImageTagData
<u>Enable</u> BeginRemoval	20 CapAutoSize V CapConcurrentMICR V
<u>D</u> isable EndRemoval	CapDefineCropArea
<u>R</u> elease	CapImageTagData
<u>Close</u>	CapStoreImageFiles
Claimed Server Enable Data Even	
	Integer Capabilities     CapColor     Grayscale
End Insertion returned	CapImageFormat TIFF
	Integer Read-Only Properties
Image Data Data Length	CropAreaCount 0 ImageMemoryStatus <invalid></invalid>
	MaxCropAreas 0
	RemainingImagesEstimate 0 String Read-Only Property
	QualityList 200
Scanner Probe	
OPOS CheckScanner Control 1.8.001 [Public, by CRM/RCS-D	
OPOS Service Object for POSPrinter/MICR/CashDrawer/Cher	ckScanner, v 1.8, © 2009 TPG, Inc. 1.8.51
🖻 Sample Opos Application	
File Help	
HF HF	P Receipt Printer
Printer	<u>M</u> ICR <u>Exit</u>
<u>C</u> ashDrawe	er Check <u>S</u> can
Property Gets/Sets, Method Retu	rn Values, and Events
0: Result of CheckScanner1.0pen: 0P0S_SUCCESS	
1: CheckScanner.BinaryConversion: None 0P0S_SUC 2: Result of CheckScanner1.ClaimDevice: 0P0S_SUC	CCESS
3: Result of CheckScanner.DirectIO.Server: OPOS_SI 4: Result of CheckScanner.Enable: OPOS_SUCCESS	
5: Result of CheckScanner.BeginInsertion: 0P0S_SU 6: Result of CheckScanner1.EndInsertion: 0P0S_SU	CCESS
7: CheckScanner StatusUpdateEvent: OPOS_SUCCE 8: Result of CheckScanner.DataEventEnabled: OPOS	.SS _SUCCESS
9: CheckScanner DataEvent: 0P0S_SUCCESS 10: Result of CheckScanner.RetrieveImage: 0P0S_S	UCCESS

CheckScanner			X
File			
Device: A776		Direct IO Tag tests	Other Tests Writeable
<u>I</u> mage Data Clear	BeginInsertion       20         EndInsertion       20         BeginRemoval       20         EndRemoval       20         EndRemoval       20         EndRemoval       20         Data Length       20	Boolean Capabilities         CapAutoGenerateFileID         CapAutoGenerateImageTagData         CapAutoSize         CapConcurrentMICR         CapDefineCropArea         CapMICRDevice         CapConcurrentMICR         CapMicRDevice         CapConcurrentMicR         CapMicRDevice         CapMageTagData         CapMicRDevice         CapColor         CapMageFormat         TIFF         Integer Read-Only Properties         CropAreaCount         ImageMemoryStatus         RemainingImagesEstimate	
Messages		String Read-Only Property	
File Written		QualityList 200	
Scanner Probe			Ч
OPOS CheckScanner Control 1.8.00	1 (Public, by CPM/PCS Disutes)		1.8.1
	/MICR/CashDrawer/CheckScanner, v 1.8,	@ 2009 TPC	1.8.51
Sample Opos Applicat	ion	eipt Printer	
	Printer	MICR Exit	
	<u>C</u> ashDrawer Ch	eck <u>S</u> can	
Property Gets/Sets	s, Method Return Values,	and Events	
2: Result of CheckScanner1.     3: Result of CheckScanner.D     4: Result of CheckScanner.E     5: Result of CheckScanner.B     6: Result of CheckScanner1.     7: CheckScanner StatusUpd     8: Result of CheckScanner.D	version: None OPOS_SUCCESS ClaimDevice: OPOS_SUCCESS lirectIO.Server: OPOS_SUCCESS		

12. Click on "BEGINREMOVAL" button.

## 13. Click on "EndREMOVAL" button.

CheckScanner	Σ
File	
Device: A776	Direct IO Tag tests Other Tests Common Specific Writeable
□pen       □         □ laim       5         □ laimed       □ laimed         □ laimed       □ Server         □ laimed       □ Server         □ laimed       □ Data Length         □ laimage       □ Data Length         □ limage       □ Data         □ limage       □ laimed         □ limage       □ laimed         □ limage       □ laimed         □ limage       □ laimed         □ limage       □ limage         □ limage	Common     Specific     Writeable       Boolean Capabilities     CapAutoGenerateFileID     CapAutoSize       CapAutoSize     Image CapAutoSize     Image CapAutoSize       CapAutoSize     Image CapAutoSize     Image CapAutoSize       CapDefineCropArea     Image CapAutoSize     Image CapAutoSize       CapDefineCropArea     Image CapAutoSize     Image CapAutoSize       CapMitCRDevice     Image CapAutoSize     Image CapAutoSize       CapStoreImageFiles     Image CapAutoDevice     Image CapAutoSize       CapColor     Grayscale     Image CapAutoSize       CapCaparae     Image CapAutoSize     Image CapAutoSize       CapColor     Grayscale     Image CapAutoSize       CapAutoSize     Image CapAutoSize     Image CapAutoSize       CapAutoSize     Image CapAutoSize     Image CapAutoSize       CapAutoSize     Image CapAutoSize     Image CapAutoSize
Scanner Probe	
OPOS CheckScanner Control 1.8.001 [Public, by CRM/RCS-Dayton]	1.8.
OPOS Service Object for POSPrinter/MICR/CashDrawer/CheckScanner, v 1.8	s, © 2009 TPG, Inc. 1.8.5
Sample Opos Application	eipt Printer
hn HF Nec	
Printer	MICR Exit
<u>C</u> ashDrawer Ch	eck <u>S</u> can
Property Gets/Sets, Method Return Values,	, and Events
O: Result of CheckScanner1.0pen: 0P0S_SUCCESS     1: CheckScanner.BinaryConversion: None 0P0S_SUCCESS     2: Result of CheckScanner.LaimDevice: 0P0S_SUCCESS     3: Result of CheckScanner.Daile: 0P0S_SUCCESS     4: Result of CheckScanner.Enable: 0P0S_SUCCESS     5: Result of CheckScanner.Enable: 0P0S_SUCCESS     6: Result of CheckScanner.Endbe: 0P0S_SUCCESS     7: CheckScanner.BerginInsettion: 0P0S_SUCCESS     7: CheckScanner.Betwent: 0P0S_SUCCESS     8: Result of CheckScanner.DataEvent: 0P0S_SUCCESS     9: Result of CheckScanner.Betwent: 0P0S_SUCCESS     9: CheckScanner.DataEvent: 0P0S_SUCCESS     9: CheckScanner.DataEvent: 0P0S_SUCCESS     10: Result of CheckScanner.RetrieveImage: 0P0S_SUCCESS	

14. Close the "CheckScan" by clicking on DISABLE / RELEASE / CLOSE button in this order.

CheckScanner			
File			
Device: A776 🗸		Direct IO Tag tests	Other Tests
, _			Writeable
Open	BeginInsertion 20	Boolean Capabilities	
		CapAutoGenerateFileID	
<u>C</u> laim 5	EndInsertion	CapAutoGenerateImageTagData	
<u> </u>	BeginRemoval 20	CapAutoSize CapConcurrentMICR	
<u>D</u> isable	EndRe <u>m</u> oval	CapDefineCropArea	Ê
<u>R</u> elease		CapImageTagData	
Close	Retrievelmage	CapMICRDevice CapStoreImageFiles	
Claimed 🔽 Server	Enable Data Event	CapValidationDevice	
		Integer Capabilities	
End Insertion returned		CapColor Grays	cale
		CapImageFormat TIFF	
		Integer Read-Only Properties	
	Data Length	CropAreaCount ImageMemoryStatus (Inva	0
<u>I</u> mage Data		ImageMemoryStatus <inva MaxCropAreas</inva 	
Clear		RemainingImagesEstimate	<u>0</u>
Messages		String Read-Only Property	
File Written		QualityList 200	
Scanner Probe			—L
OPOS CheckScanner Control 1.8.00	1 [Public, by CRM/RCS-Dayton]		1.8.1
OPOS Service Object for POSPrinter	r/MICR/CashDrawer/CheckScanner, v 1.8,	, © 2009 TPG, Inc.	1.8.51
Sample Opos Applic	ation		
File Help			
	I HP Red	ceipt Printer	
<i>"""</i>	Printer	MICR Exit	
	<u>C</u> ashDrawer C	heck <u>S</u> can	
<u> </u>	ets, Method Return Value	s, and Events	
	r:DirectIO.Server: OPOS_SUCCESS r:Enable: OPOS_SUCCESS		
5: Result of CheckScanne	r.BeginInsertion: OPOS_SUCCESS r1.EndInsertion: OPOS_SUCCESS		
7: CheckScanner StatusU	pdateEvent: OPOS_SUCCESS		
8: Result of CheckScanne 9: CheckScanner DataEve	r.DataEventEnabled: 0P0S_SUCCESS = ent: 0P0S_SUCCESS		
10: Result of CheckScann	er.Retrievelmage: OPOS_SUCCESS		=
	er1.BeginRemoval: OPOS_SUCCESS		
12: Result of CheckScann			
13: Result of CheckScann	er1.EndRemoval: OPOS_SUCCESS er.Disable: OPOS_SUCCESS		
13: Result of CheckScann 14: Result of CheckScann	er1.EndRemoval: OPOS_SUCCESS		

15. Close the form.

# 6.4.13 Receipt Printer Cash Drawer Signal

### 6.4.13.1 Cash Drawer Signal

The cash drawer is attached to the back of the printer using an RJ12 or similar connector (the smaller connector). On HP cash drawers, this connector sends a HIGH signal from the printer to open the cash drawer. The HIGH signal is the default setting for the HP OPOS receipt printer drivers installation.

However, there are other cash drawers that may be using an opposite LOW signal to open the cash drawer. In this case, a user may need to configure the driver to also send a low signal in order for the cash drawer to open correctly (steps provided later). If the user has tried both settings and the cash drawer is still not opening, a different cash drawer cable may be needed. Check with the cash drawer vendor or the cash drawer vendor's documentation in regards to the LOW and HIGH signal setting.

## 6.4.13.2 Cash Drawer Signal Change

The registry files needed to change the cash drawer signal option are included in the HP factory image in C:\SWSetup\Point of Sale\Receipt Printer\Cash Drawer Signal:

### • "HP Default Cash Drawer Signal.REG"

Changes the cash drawer registry value to HIGH which is the default value when the OPOS drivers are installed and the value that is need when the HP cash drawer is attached to the HP Receipt printer.

### "HP Non-Default Cash Drawer Signal.REG"

Changes the cash drawer registry value to LOW which may be tried for a non-HP cash drawer if default HIGH option does not open the cash drawer.

You must have administrator right in order to make the change. When you double click on the file you will receive a prompt for confirmation that you want to make the changes.

Registry	Editor 🛛
?	Are you sure you want to add the information in C:\Cash Drawer Signal\HP Default Cash Drawer Signal.REG to the registry?

If you click YES then you will receive a confirmation that the change was made.



In order to test the signal cash, please refer to the cash drawer test section (<u>OPOS</u> <u>Test Applet for the Cash Drawer</u>) of this guide.

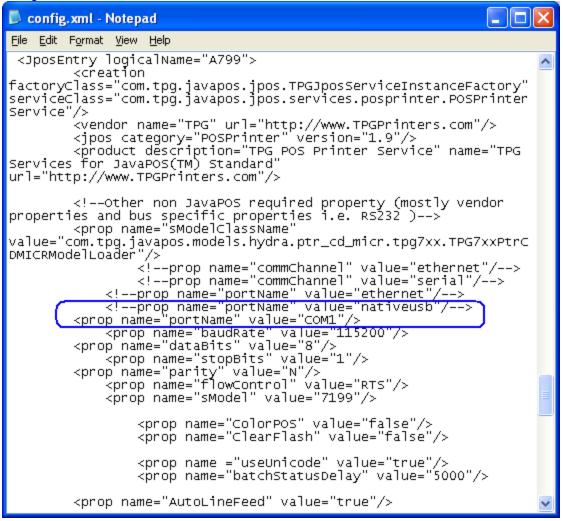
# 6.4.14 JPOS Drivers for the Receipt Printer Drivers – Serial Port Setting

If you are using the serial version of the receipt printer, the entry in the CONFIG.XML must be edited to reflect the COM (serial) port to which the printer is attached. The CONFIG.XML from HP is located in the "...Receipt Printer JPOS\JPOS\jpos\res" folder, the location will most likely be in a different location for your point of sale application. Please contact your administrator or POS application provider to assist on making changes to the configuration setting.

The following is the default CONFIG.XML file that comes from HP:

```
📕 config.xml - Notepad
                                                                                          File Edit Format View Help
 <JposEntry logicalName="A799">
                                                                                                 ~
            <creation
factoryClass="com.tpg.javapos.jpos.TPGJposServiceInstanceFactory"
serviceClass="com.tpg.javapos.jpos.services.posprinter.POSPrinter
Service"/>
url="http://www.TPGPrinters.com"/>
value="com.tpg.javapos.models.hydra.ptr_cd_micr.tpg7xx.TPG7xxPtrC
DMICRModelLoader"/>
                       <!--prop name="commChannel" value="ethernet"/-->
<!--prop name="commChannel" value="serial"/-->
           <prop name="portName" value="ethernet"/-->
<prop name="portName" value="nativeusb"/>
<!--prop name="portName" value="COM1"/-->
<prop name="baudRate" value="COM1"/-->
<prop name="baudRate" value="115200"/>
<prop name="dataBits" value="8"/>
"starpeite" value="1"/
                 control = "stopBits" value="1"/>
            <prop name="stopBits" value="1//
<prop name="parity" value="N"/>
<prop name="flowControl" value="RTS"/>
<prop name="sModel" value="7199"/>
                       <prop name="ColorPOS" value="false"/>
<prop name="ClearFlash" value="false"/>
                       <prop name ="useUnicode" value="true"/>
<prop name="batchStatusDelay" value="5000"/>
            <prop name="AutoLineFeed" value="true"/>
```

If the printer is attached to COM1, one needs to comment out the USB entry / enable the COM port entry and enter the correct COM port. The following is an example of what the changes would look like:



**Note:** Make sure the other communication parameters (Baudrate / DataBits, etc) all match your Windows setting and printer.

#### 6.4.15 JPOS Drivers for the Receipt Printer Drivers – Ethernet

If you are using the Ethernet version of the receipt printer, the entry in the CONFIG.XML must be edited to reflect the Ethernet port and IP Address to which the printer is attached. The CONFIG.XML from HP is located in the "...Receipt Printer JPOS\JPOS\jpos\res" folder; the location will most likely be different location for you point of sale application. Please contact your administrator or POS application provider to assist on making changes to the configuration setting.

- 1. Plug the printer into the network and have power to the printer.
- 2. Run a diagnostic printout and obtain the printer IP address from the printout.

Steps to obtain a diagnostics printout.

- a) Be sure paper is in the printer (1).
- b) Open the receipt cover (2).
- c) Press and hold the paper feed button (3).
- d) Close the receipt cover (2).



**Note:** The default IP address is 192.0.0.192. If this address appears on the printout, the printer has not obtained an IP address.

- 3. Go the "Receipt Printer JPOS\JPOs\jpos\res" folder.
- 4. Using Notepad (or text editor) modify the <u>A799</u> section in the "CONFIG.XML" file. The following items will need to be modified:
  - PortName for Ether will need to be uncommented out.
    - Remove"!--" (two dashes) from the beginning of the line and "--" (two dashes) towards the end of the line.
  - IPAddress that is on the diagnostics printout will need to entered in the CONFIG.XML file.
    - Will also need to uncomment the line by removing"!--" (two dashes) from the beginning of the line and "--" (two dashes) towards the end of the line.
  - PortNumber that is on the diagnostics printout will need to be entered in the CONFIG.XML file.
    - Will also need to uncomment the line by removing"!--" (two dashes) from the beginning of the line and "--" (two dashes) towards the end of the line.
  - PortName for NativeUSB will need to be commented out.
    - Add"!--" (two dashes) towards the beginning of the line after the "<" and "--" (two dashes) to the end of the line before ">" to comment this line out in the CONFIG.XML file.

Below is modified CONFIG.XML file showing the Ethernet option enabled:

<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	🚺 configxml - Notepad
<pre></pre> //postntry> <pre>(Jpostntry&gt; </pre> <pre>(Jpostntry </pre> <pre></pre>	Eile Edit Format View Help
<pre>' creation'factoryClass='com.tpg.javapos.jpos.rPGJposServiceInstanceFactory' eviceClass'com.tpg.javapos.jpos.services.posprinter.POSPrinterService'/&gt; cvendor name='TEG' uil='http://www.TPGPrinterS.com'/&gt; cjosCategory-'posprinter' version='lls'/&gt; product description='TEG POS Printer Service' name='TPG Services for JavaPOS(TM) Standard'' rl="http://www.TPGPrinterS.com'/&gt; cl-other non JavaPOS required property (mostly vendor properties and bus specific properties i.e. R5232 )&gt; cprop name='sodelClassAmer 'value=''cont tpg.javapos.modelS.hydra.ptr_cd_micr.tpg/xx.TPG7xxPtrCDMICRModelLoader'/&gt; cl-otroo name=''comchanne!'' value=''enternet''/-&gt; cl-orpo name=''nortwame'' value=''nort tpg.javapos.modelS.hydra.ptr_cd_micr.tpg/xx.TPG7xxPtrCDMICRModelLoader'/&gt; cl-orpo name=''portwame'' value=''nort'/&gt; cl-orpo name=''nortwame'' value=''nort'/&gt; cl-orpo name=''sodel'' value='''/&gt; cprop name=''sodel'' value='''/&gt; cprop name=''sodel'' value='''/&gt; cprop name=''sodel'' value=''false''/&gt; cprop name=''sodel'' value=''false''/&gt; cprop name=''InferedesKett'' value='''/&gt; cl-orpo name=''InferedesKett'' value='''/&gt; cl-orpo name=''InferedesKett'' value='''/&gt; cl-orpo name=''InferedesKett'' value='''/&gt; cl-orpo name=''InferedesKett'' value='''/&gt; cl-orpo name=''InferedesKett'' value=''''/&gt; cl-orpo name=''InferedesKett'' value='''/&gt; cl-orpo name=''InferedesKett'' value</pre>	
<pre>cprop name="style="com.tpg_javapos.models:hydra.ptr_cd_micir.tpg7xx:tPic7xxPtrCDMICRModelLoader"/&gt;                        </pre>	<pre>' <creation'factoryclass="com.tpg.javapos.jpos.tpgjposserviceinstancefactory" serviceclass="com.tpg.javapos.jpos.services.posprinter.POSprintersservice"></creation'factoryclass="com.tpg.javapos.jpos.tpgjposserviceinstancefactory"> <vendor name="TPG" url="http://www.TPGPrinters.com"></vendor> <ipos cateogrv="POSPrinter" version="1.13"></ipos></pre>
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	<prop name="useUnicode" value="false"></prop> <prop name="batchStatusDelay" value="5000"></prop>
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	<prop name="AutoLineFeed" value="true"></prop> <prop name="asciiBarCode" value="true"></prop> ==
<prop name="Code93ssSuppress" value="0"></prop>	<prop name="LineFeedsB4Cut" value="0"></prop>
<prop name="vendor10" value="1497"></prop> <prop name="productI0" value="42901"></prop> Following lists the 2-byte Asian characters resident in the printer prop name="tbcodePages" value="950"/ prop name="tbcodePages" value="939, 950"/ prop name="tbcodePages" value="32,949,950"/ <prop -="" name="tbcodePages" value="32,949,950"> <prop name="tbcodePages" value="32,949,950"></prop> <prop name="tbcodePages" value="874,932,936,949,950"></prop> <prop name="tbcodePages" value="874,932,936,949,950"></prop> <prop name="tbcodePages" value="874,932,936,949,950"></prop> <prop name="tbcodePages" value="874,932,936,949,950"></prop> <prop name="tbcodePages" value="874,932,936,949,950"></prop> <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre></prop>	
prop name="tbcodePages" value="950"/ prop name="tbcodePages" value="949, 950"/ prop name="tbcodePages" value="922,949,950"/ <prop name="tbcodePages" value="874,932,936,949,950"></prop> <prop name="tbcodePages" value="true"></prop> 	<prop name="vendorID" value="1497"></prop>
<pre><jposentry logicalname="CashDrawer799-1"></jposentry></pre>	prop name="tbcodePages" value="950"/ prop name="tbcodePages" value="949, 950"/ prop name="tbcodePages" value="949, 950"/ <prop name="tbcodePages" value="874,932,936,949,950"></prop> <prop name="tbLarge5ize" value="true"></prop>
	<jposentry logicalname="CashDrawer799-1"></jposentry>

🗍 config.xml - Notepad	x
Eile Edit Format View Help	
<pre></pre>	*
<pre><!--Other non JavaPOS required property (mostly vendor properties and bus specific properties i.e. R5232 )--> value="com.tpg.javapos.modelS.hydra.ptr_cd_micr.tpg7xx.TPG7xxPtrCDMICRModelLoader"/&gt; <!--prop name="commchannel" value="tehrenet"/--> <!--prop name="commchannel" value="serial"/--> </pre> <pre></pre>	
<prop name="ColorPos" value="false"></prop> <prop name="ClearFlash" value="false"></prop>	
<prop name="useUnicode" value="false"></prop> <prop name="batchStatusDelay" value="5000"></prop>	
<prop name="AutoLineFeed" value="true"></prop> <prop name="asciiBarCode" value="true"></prop>	
prop name="LineFeedsB4cut" value="[int desired number of lines] If value = 0 then normal operation."/ <prop name="lineFeedsB4cut" value="0"></prop> <prop name="TAftercut" value="false"></prop>	
prop name ="Code93Supress" value=" If value = 0 [Default value] will turn off this option."/ <prop name="Code93ssSuppress" value="0"></prop>	+

## 6.4.16 JPOS Drivers for the Receipt Printer Drivers

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Receipt Printer\JPOS POS Printer) and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the receipt printer followed by detailed steps:

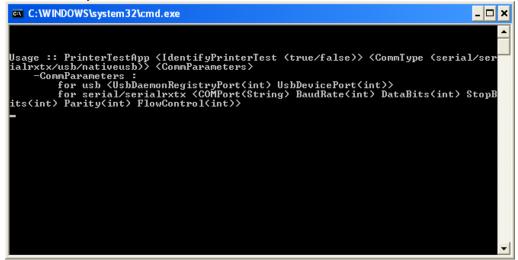
- 1. Start the JPOS test utility.
- 2. After a few seconds the JPOS test utility GUI will appear.
- 3. Select the printer model in the profile drop down box.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button.
- 7. Click on the "SIMPLE PRINTING" tab.
- 8. Type some text in the "PRINT DATA" area; this is the text that should print on the receipt printer:
- 9. After you have entered the text that you wish to print, click on the "PRINTNORMAL" button and the receipt printer will print the text.

**Note:** In order to see the text you will need to press the line feed button on the printer unless you added several carriage returns to your text.

#### Detailed Steps

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

In the location the files were found execute the POSTEST.BAT file. Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:



2. After a few seconds the JPOS test utility	y GUI will appear as shown below:
----------------------------------------------	-----------------------------------

📓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer M POSPrinter Simple Printing Boolean Properties	ashDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props
	<ul> <li>PowerNotify</li> <li>Claimed</li> <li>DeviceEnabled</li> <li>FreezeEvents</li> </ul>	CapPowerRe PowerState State Closed CheckHealthT
	Parameters Profile A776 V Timeout 10000	CheckHealth Internal External Interactive
Clear Printer Sensors Cover Open		CheckHealth
NearEnd Empty Receipt   Slip  Refresh	Open Claim Enable PowerNotify Control/Service In	Enable Freeze Events ClearOutput fo DirectIO

3. Select the printer model in the profile drop down box:

🛎 Printer/Cash Drawer/MICR Unit Test Application		
Printer Station     Receipt Slip     Journal Illegal	MICR       MICR Read       CashDrawer       CheckScanner         Printer Line Props       Printer More Props       Bitmaps/BarCodes         POSPrinter       Simple Printing       Slip       Printer Bool. Props         Boolean Properties       Other Properties       CapPowerRe          Claimed       PowerState        State       Closed         PreezeEvents       CheckHealthT	
Clear Printer Sensors	Parameters Profile Timeout A776 A794 A799 CheckHealth CheckHealth CheckHealth CheckHealth	
Cover Open	Open Claim Enable Freeze Events Enable PowerNotify ClearOutput Control/Service Info DirectIO	

- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.

6. Click on the "ENABLE" button. After all three buttons are clicked the screen will look similar to the following screen capture:

📓 Printer/Cash Drawer/MICR Unit Test Application					
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props			
Printer SUE: Statu: Printer SUE: Statu:	PowerNotify	CapPowerRe Standard PowerState Unknown State Idle CheckHealthT			
Clear Printer Sensors Cover Open	Parameters Profile A799 V Timeout 10000	CheckHealth O Internal External Interactive Illegal CheckHealth			
NearEnd Empty Receipt Slip Refresh	Close Release Enable PowerNotify Control/Service In	Disable Freeze Events ClearOutput fo DirectIO			

### 7. Click on the "SIMPLE PRINTING" tab:

📓 Printer/Cash Drawer/MICR Unit Test Application					
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read Ca Printer Line Props Printer M POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props			
Printer SUE: Statu: Printer SUE: Statu:	Powerwoony	CapPowerRe Standard PowerState Unknown State Idle CheckHealthT			
Clear Printer Sensors Cover Open	Parameters Profile A799 V Timeout 10000	CheckHealth  Internal  External  Interactive Illegal  CheckHealth			
NearEnd Empty Receipt Slip Refresh	Close Release Enable PowerNotify				

8. Type some text in the "PRINT DATA" area; this is the text that should print on the receipt printer:

🕌 Printer/Cash Drawer/	MICR Unit Test Application
Printer Station     Receipt     Slip     Journal     Illegal	MICR         MICR Read         CashDrawer         CheckScanner           Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool. Props           String Data         String Data         Slip         String Data
Printer SUE: Statu: Printer SUE: Statu:	A-Z Add Data
Clear Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Clear     Add CR     Add LF     CR LF       AsyncMode     PrintNormal     PrintImmediate       FlagWhenIdle     SetLogo (Top)     SetLogo (Btm)

9. After you have entered the text that you wish to print, click on the "PRINTNORMAL" button and the receipt printer will print the text.

**Note:** In order to see the text you will need to press the line feed button on the printer unless you added several carriage returns to your text.

🕌 Printer/Cash Drawer	/MICR Unit Test Application 📃 🗖 🔀
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read CashDrawer CheckScanner Printer Line Props Printer More Props Bitmaps/BarCodes POSPrinter Simple Printing Slip Printer Bool. Props
Printer SUE: Statu: Printer SUE: Statu:	Add Data
	Print Data Type in the text that you would like to have printed in this box.
Clear  Printer Sensors  Cover Open	Clear Add CR Add LF CR LF
NearEnd Empty Receipt Slip	AsyncMode PrintNormal PrintImmediate
Refresh	Validate Data SetLogo (Top) SetLogo (Btm)

## 6.4.17 JPOS Drivers for the Receipt Printer Drivers - CheckScanner

**Note:** The check scanner feature is only available on the HP Hybrid printer that has imaging capabilities. The following is image of the model of the HP Hybrid printer with imaging capabilities:



The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Receipt Printer\JPOS POS Printer) and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the JPOS test utility
- 2. After a few seconds the JPOS test utility GUI will appear.
- 3. Select the "CheckScanner" tab.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button.
- 7. Insert a piece of paper face up that you wish to capture an image of during this test in the front of the printer until the LED comes on. The paper should be inserted face up in the slip portion of the printer. Click on "Begin" button in the left "TransactionPrint" box.
- 8. Click on "END" button, the printer will make some noise and move the paper through the imager.
- 9. Enable the "Data Events Enabled" by click on the option in the GUI.
- 10. Click on the "Retievealmage" button. After the button is pressed the status will be updated and some information will be filled about the image.
- 11. To view the image that was scanned click on "DisplayImage" button.
- 12. To Exit the application one needs to "Disable/Release/Close" the printer and then click on the "X" to close the application.
- 13. The piece of paper that was inserted in step 7 can be removed from the imager portion of the printer by pulling on the paper; there will be slight force needed when the paper is pulled.

#### **Detailed Steps**

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

In the location the files were found execute the POSTEST.BAT file. Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:

C:\WINDOWS\system32\cmd.exe	- 🗆	×
<pre>Usage :: PrinterTestApp <identifyprintertest <true="" false="">&gt; <commtype (serial,<br="">ialrxtx/usb/nativeusb&gt;&gt; <commparameters> -CommParameters : for usb <usbdaemonregistryport(int) usbdeviceport(int)=""> for serial/serialrxtx <comport(string) baudrate(int)="" databits(int)="" st<br="">its(int) Parity(int) FlowControl(int&gt;&gt;</comport(string)></usbdaemonregistryport(int)></commparameters></commtype></identifyprintertest></pre>		
		Ŧ

2. After a few seconds the JPOS test utility GUI will appear as shown below:

📓 HP Printer/Cash Drawer/MICR Unit Test Application 🛛 📃 🗖 🔀				
Printer Station Receipt Slip Journal Illegal	MICR       MICR Read       CashDrawer       CheckScanner         Printer Line Props       Printer More Props       Bitmaps/BarCodes         POSPrinter       Simple Printing       Slip       Printer Bool. Props         Boolean Properties       Other Properties       CapPowerRe          PowerNotify       CapPowerRet        PowerState          DeviceEnabled       State       Closed       CheckHealthT			
Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Parameters Profile A794 Timeout 10000 External External External Interactive Illegal CheckHealth Open Claim Enable Freeze Events Enable PowerNotify ClearOutput Control/Service Info DirectIO			

3. Select the "CheckScanner" tab.

enconcountier tab.					
📓 HP Printer/Cash Drawer/MICR Unit Test Application					
Printer Station Receipti Slip Journal Illegal		ashDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT			
	Profile A794 V Timeout 10000	CheckHealth  Internal  External  Interactive			
Clear Printer Sensors Cover Open		CheckHealth			
NearEnd Empty Receipt Slip Refresh	Open Claim Enable PowerNotify Control/Service In				

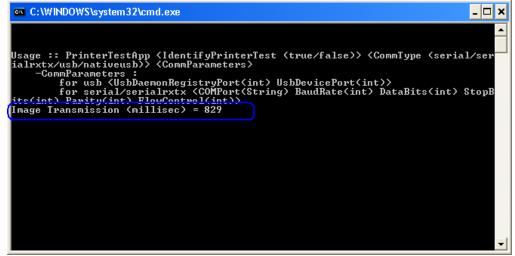
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button. After all three buttons on clicked the screen will look similar to the following screen capture:

📓 HP Printer/Cash Drawer/MICR Unit Test Application				
Printer Station     Receipt Slip     Journal Illegal	Printer Line Pro POSPrinter MICR MICI TransactionPrint Timeout Begin	Simple Printing	Slip Prin	maps/BarCodes ter Bool. Props CheckScanner 10000 End
	DirectIO	CheckH	Retrievel	Display I
	DocumentHeight		DocumentWidth	
	FileID		FileIndex	
Clear	ImageTagData		ImageData Size	
Printer Sensors	⊙ Dots ○ Twips ○ English ○ Metric			
Cover Open 📃	Auto Disable OwerNotify			
NearEnd Empty	Data Events Enabled     Freeze Events			
Receipt 📃 📃	More Boolean Props. Other Props.			
Slip 🗌 🗌	Slip Profile CheckScapper 776 V Timeout 0			
Refresh	Close	Rele	ease	Disable

- 7. Insert a piece of paper face up that you wish to capture an image of during this test in the front of the printer until the LED comes on. The paper should be inserted face up in the slip portion of the printer. Click on "Begin" button in the left "TransactionPrint" box.
- 8. Click on "END" button, the printer will make some noise and move the paper through the imager. After a few seconds a status will appear in the status box.

🕌 HP Printer/Cash Drawer/MICR Unit Test Application				
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Pro POSPrinter MICR MICI TransactionPrint	Simple Printing	Slip Prin	maps/BarCodes ter Bool, Props CheckScanner t
StatusEvent Status	Timeout Begin	10000 End	Timeout Begin	10000 End
	DirectIO	CheckH	Retrievel	Display I
	DocumentHeight		DocumentWidth	
	FileID		FileIndex	
Clear	ImageTagData		ImageData Size	
Printer Sensors	💽 Do	ots 🔘 Twips	🔵 English 🛛 🔿 M	1etric
Cover Open 📃	Auto Disable		PowerNotify	
NearEnd Empty	Data Events E	nabled	Freeze Event	s
Receipt 📃 📃	More Boolean Props. Other			Props.
	Profile Che	ckScanner776 Ň	Timeout 0	
Refresh	Close	Rel	ease	Disable

In the open CMD box, it will note the amount of time it took to for the image transfer. The following is an example of the box (the time will vary):



9. Enable the <u>"Data Events Enabled" by click on the option in the GUI:</u>

📓 HP Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool, Props           MICR         MICR Read         CashDrawer         CheckScanner           TransactionPrint         TransactionPrint         Printer			
StatusEvent Status	Timeout Begin	10000 End	Timeout Begin	10000 End
	DirectIO	CheckH	Retrievel	Display I
	DocumentHeight		DocumentWidth	
	FileID		FileIndex	
Clear	ImageTagData		ImageData Size	
Printer Sensors	⊙ Dots ◯ Twips ◯ English ◯ Metric			
Cover Open 🗌 NearEnd Empty	Auto Disable	nabled	PowerNotify	s
Receipt 🗌 🗌	More Boolean Props. Other Props.			Props.
Slip	Profile CheckScanner776 V Timeout 0			
Kerresh	Close	Rel	ease	Disable

10. Click on the "Retievealmage" button. After the button is pressed the status will be updated and some information will be filled about the image.

📓 HP Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
-Printer Station  Receipt Slip Journal Illegal	Printer Line Prop POSPrinter MICR MICf	Simple Printing	Slip Prin	maps/BarCodes ter Bool, Props CheckScanner t
StatusEvent Status CheckScanner Image	Timeout Begin	10000 End	Timeout Begin	10000 End
	DirectIO	CheckH	Retrievel	Display I
	DocumentHeight	535	DocumentWidth	1344
	FileID		FileIndex	2
Clear	ImageTagData		ImageData Size	26538
Printer Sensors	⊙ Dots ○ Twips ○ English ○ Metric			
Cover Open 📃	Auto Disable		PowerNotify	
NearEnd Empty	Receipt More Boolean Props. Other Props.			
Receipt				Props.
	Profile Che	ckScanner776 🛓	Timeout 0	
Refresh	Close	Rel	ease	Disable

11. To view the image that was scanned of	click on "DisplayImage" button.
-------------------------------------------	---------------------------------

🕌 HP Printer/Cash Drawer/MICR Unit Test Application							
Printer Station Receipt Slip Journal Illegal	Printer Line Pro POSPrinter MICR MIC	Simple Printing	Slip Prin	maps/BarCodes ter Bool. Props CheckScanner t			
StatusEvent Status CheckScanner Image:	Timeout Begin	10000 End	Timeout Begin	10000 End			
	DirectIO	CheckH	Retrievel	Display I			
	DocumentHeight 535 DocumentWidth 1344						
	FileID		FileIndex	2			
Clear	ImageTagData		ImageData Size	26538			
Printer Sensors	💿 Do	ots 🔘 Twips	🔵 English 🛛 🔿	1etric			
Cover Open 📃	Auto Disable		PowerNotify				
NearEnd Empty	Data Events E	inabled	Freeze Event	s			
Receipt	More Boole	an Props.	Other	Props.			
Slip	Profile Che	eckScanner776 💊	Timeout 0				
Refresh	Close	Rele	ease	Disable			

When the "DisplayImage" button is pressed another box will appear with the image, which will allow one to save the image if they wish.

🕌 TPG A776 Imager 📃 🗖 🔀
tTestTestTestTestTestTestTestTestTestTes
$\label{eq:listic} ITestTestTestTestTestTestTestTestTestTest$
stTestTestTestTestTestTestTestTestTestTe
stTestTestTestTestTestTestTestTestTestTe
st Test Test Test Test Test Test Test Te
st Test Test Test Test Test Test Test Te
est Test Test Test Test Test Test Test T
estTestTestTestTestTestTestTestTestTestT
est Test Test Test Test Test Test Test T
estTestTestTestTestTestTestTestTestTestT
TestTestTestTestTestTestTestTestTestTest
< · · · · · · · · · · · · · · · · · · ·
Flip + - Save

12. To Exit the application one needs to "Disable/Release/Close" the printer and then click on the "X" to close the application.

🛎 HP Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀						
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool, Props           MICR         MICR Read         CashDrawer         CheckScanner           TransactionPrint         TransactionPrint         TransactionPrint					
StatusEvent Status CheckScanner Image	Timeout Begin	10000 End	Timeout Begin	10000 End		
	DirectIO	CheckH	Retrievel	Display I		
	DocumentHeight	DocumentHeight 535 DocumentWidth 1344				
	FileID		FileIndex	2		
Clear	ImageTagData		ImageData Size	26538		
Printer Sensors	💿 Do	⊙ Dots 🔿 Twips 🔿 English 🔿 Metric				
Cover Open 📃	Auto Disable DowerNotify					
NearEnd Empty	Data Events Enabled Freeze Events					
Receipt More Boolean Props Other Props.						
Slip	Profile Che	eckScanner776 🔻	Timeout 0			
Refresh	Open		aim	Enable		

13. The piece of paper that was inserted in step 7 can be removed from the imager portion of the printer by pulling on the paper; there will be slight force needed when the paper is pulled.

# 6.4.18 JPOS Drivers for the Receipt Printer Drivers - MICR

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Receipt Printer\JPOS POS Printer) and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the JPOS test utility.
- 2. After a few seconds the JPOS test utility GUI will appear.
- 3. Click on the MICR tab.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button.
- 7. Click on the "MICR READ" tab.
- 8. Slide the check facing down into the MICR until the LED on comes on.
- 9. Click on "Enable Data Events".
- 10. Click on "Begin" in the "Insertion" section of the GUI.
- 11. Click on "End" in the "Insertion" section of the GUI.
- 12. Exit the application (ensure the device is closed and released).
- 13. The piece of paper that was inserted in step 8 can be removed from the imager portion of the printer by pulling on the paper; there will be slight force needed when the paper is pulled.

#### Detailed Steps

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

In the location the files were found execute the POSTEST.BAT file. Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:

🔤 C:\WINDOWS\system32\cmd.exe	×
C:WINDOWS\system32\cmd.exe Usage :: PrinterTestApp (IdentifyPrinterTest (true/false)) (CommType (serial/sialrxtx/usb/nativeusb)) (CommParameters) -CommParameters : for usb (UsbDaemonRegistryPort(int) UsbDevicePort(int)) for serial/serialrxtx (COMPort(String) BaudRate(int) DataBits(int) Strits(int) Parity(int) FlowControl(int))	
	-

2. After a few seconds the JPOS test utility GUI will appear as shown below:

🕌 HP Printer/Cash Drav	sh Drawer/MICR Unit Test Application 📃 🗖 🔀					
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read Ca Printer Line Props Printer Mc POSPrinter Simple Printing Boolean Properties PowerNotify Claimed DeviceEnabled FreezeEvents	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT				
Clear	Parameters Profile A794  Fineout 10000 CheckHealth Timeout Internal Timeout Interactive Interactive Illegal					
Printer Sensors Cover Open   NearEnd Empty Receipt   Slip   Refresh	Open Claim Claim Enable PowerNotify Control/Service Inf	CheckHealth Enable Freeze Events ClearOutput io DirectIO				

3. Click on the MICR tab:

📓 HP Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀							
Printer Station Receipt Slip Journal Illegal		ashDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT					
Clear  Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Open Claim Enable PowerNotify Control/Service In						

- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.

6. Click on the "ENABLE" button. After all three buttons on clicked the screen will look similar to the following screen capture:

🕌 HP Printer/Cash Drav	📓 HP Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀						
Printer Station	Printer Line Props Printer M POSPrinter Simple Printing	ore Props Bitmaps/BarCodes Slip Printer Bool. Props ashDrawer CheckScanner Other Properties PowerReporting Standard PowerState Unknown State Idle CheckHealthT					
Clear -Printer Sensors Cover Open  NearEnd Empty Receipt  Slip  Refresh	Enable PowerNotify	Disable Freeze Events AutoDisable On ervice Info					

7. Click on the "MICR READ" tab:

🕌 HP Printer/Cash Drav	🕌 HP Printer/Cash Drawer/MICR Unit Test Application						
Printer Station     Receipt Slip     Journal Illegal	Printer Line Props Printer More Props Bitmaps/BarCodes POSPrinter Simple Printing Slip Printer Bool. Props MICR (MICR Read) CashDrawer CheckScanner Boolean Properties Other Properties						
	AutoDisable     PowerReporting     Standard       PowerNotify     PowerState     Unknown       Claimed     State     Idle       DeviceEnabled     CheckHealthT     CheckHealthT						
Clear Printer Sensors	Profile MICR776 V Timeout 0 External O Illegal CheckHealth						
Cover Open	Close Release Disable Freeze Events Enable PowerNotify AutoDisable On Control/Service Info						

8. Slide the check facing up into the MICR until the LED on comes on.

9. Click on "Enable Data Events":

	ver/MICR Unit Test Application 📃 🗖 🔀
-Printer Station Receipt Slip Journal Illegal	Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool. Props           MICR         MICR Read         CashDrawer         CheckScanner           Data Handling         Capabilities         Capabilities
	ClearInput
	Timeout 10000 Timeout 10000
	Begin End Begin End
Clear Printer Sensors	RawData AccountNumber Amount
Cover Open 📃	BankNumber EPC
NearEnd Empty Receipt	SerialNumber TransitNumber
Slip	CheckType 99 CountryCode 99

10. Click on "Begin" in the "Insertion" section of the GUI:

🕌 HP Printer/Cash Dra	wer/MICR Unit Test Application
Printer Station Receipt Slip Journal Illegal	Printer Line Props       Printer More Props       Bitmaps/BarCodes         POSPrinter       Simple Printing       Slip       Printer Bool. Props         MICR       MICR Read       CashDrawer       CheckScanner         Data       Handling       Image: Capabilities       Image: Capabilities         DataCount       0       Image: Capabilities       Image: Capabilities         ClearInput       ClearInput       Image: Capabilities       Image: Capabilities         Insertion       Removal       Image: Capabilities       Image: Capabilities         Begin       End       Begin       End
Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	MICR Data         RawData         AccountNumber         Amount         BankNumber         EPC         SerialNumber         TransitNumber         CheckType       99         CountryCode       99

	Insertion	SECTION		501.			
🕌 HP Prin	ter/Cash Dra	wer/MICR	Unit Test	Appl	ication		
<ul> <li>Printer Static</li> <li>Receipt</li> <li>Journal</li> </ul>	Slip	Printer L POSPrint MICR	ine Props ter Sim MICR Rea	ole Pri		e Props Slip Drawer	Bit Prin
- Joannar	U nogai	-Data Han				Capabilitie	s

11.	Click on	"End"	in the	"Insertion"	section	of the	GUI:
-----	----------	-------	--------	-------------	---------	--------	------

Printer Station	Printer Line Pro	ps 🕴 Printer Mo	re Props	Bitmaps/BarCodes
💿 Receipt  🔿 Slip	POSPrinter	Simple Printing	Slip	Printer Bool. Props
🔿 Journal 🕥 Illegal	MICR MIC	R Read Cas	shDrawer	CheckScanner
	-Data Handling-		-Capabilities	
	DataCount Enable Da Clear		🔽 Cap	WalidationDevice
	-Insertion		-Removal	
	Timeout	10000	Timeout	10000
	Begin	End	Begin	End
	MICR Data			
Clear	RawData			
Printer Sensors	AccountNumber			
	Amount			
Cover Open 📃	BankNumber			
NearEnd Empty	EPC			
Receipt	SerialNumber			
Slip 🗌 🗌	TransitNumber			
	CheckType	99		
Refresh	CountryCode	99		

When "End" is clicked, the printer will engage and read the MICR information on the check.

The data that was read will appear in the "MICR Data" section of the GUI ("x" represent where data would appear that is read):

🕌 HP Printer/Cash Dray	ver/MICR Unit	Test Applicati	on	
-Printer Station  Receipt Slip Journal Illegal	Printer Line Pro POSPrinter MICR MIC	Simple Printing	Slip Prin	maps/BarCodes ter Bool. Props CheckScanner
	-Data Handling-		Capabilities	
MICR Data Event oc	Enable Da	0 ata Events Input	🔽 CapValio	lationDevice
	-Insertion		Removal	
	Timeout	10000	Timeout	10000
	Begin	End	Begin	End
< >	MICR Data			
Clear	RawData	xxxxxxxxx xx	****	
Printer Sensors	AccountNumber	XXXXXXXXXX		
_	Amount			
Cover Open 📃	BankNumber	XXXXX		
NearEnd Empty	EPC			
Receipt 📃 📃	SerialNumber	XXXX		
Slip 📃 📃	TransitNumber	*****		
Refresh	CheckType CouptryCode	1		
Refresh	CountryCode	1		

12. To exit the application, need to disable/release and close the MICR from the MICR tab. The following screen shows the MICR still being claimed by the test utility:

🕌 HP Printer/Cash Drav	ver/MICR Unit Test Applicati	ion 📃 🗆 🔀
-Printer Station  Receipt Slip Journal Illegal	POSPrinter Simple Printing	ore Props Bitmaps/BarCodes Slip Printer Bool. Props ashDrawer CheckScanner Other Properties
MICR Data Event oc	<ul> <li>AutoDisable</li> <li>PowerNotify</li> <li>Claimed</li> <li>DeviceEnabled</li> <li>DataEventsEnabled</li> <li>FreezeEvents</li> </ul>	PowerReporting Standard PowerState Unknown State Idle CheckHealthT
Clear Printer Sensors Cover Open	Parameters Profile MICR776 V Timeout 0	CheckHealth <ul> <li>Internal</li> <li>External</li> <li>Interactive</li> <li>Illegal</li> </ul> CheckHealth
NearEnd Empty Receipt Slip Refresh	Close Release Enable PowerNotify	Disable Freeze Events AutoDisable On ervice Info

The following shows the device has been released and is available for other application after "Disable / Release / Close" button have been clicked:

🕌 HP Printer/Cash Drav	wer/MICR Unit Test Applicati	ion 📃 🗖 🔀
-Printer Station  Receipt Slip Journal Illegal	POSPrinter Simple Printing	ore Props Bitmaps/BarCodes Slip Printer Bool. Props ashDrawer CheckScanner Other Properties
MICR Data Event oc:		PowerReporting PowerState State Closed CheckHealthT
Clear	Parameters Profile MICR776 V Timeout 0	CheckHealth   Internal  External  Interactive  Illegal  CheckHealth
Cover Open	Open Claim Claim Enable PowerNotify Control/S	Enable Freeze Events AutoDisable On ervice Info

13. The piece of paper that was inserted in step 7 can be removed from the imager portion of the printer by pulling on the paper; there will be slight force needed when the paper is pulled.

## 6.4.19 JPOS Drivers for the Receipt Printer Drivers – Slip Printing

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Receipt Printer\JPOS POS Printer) and are also available from <u>HP.COM</u>.

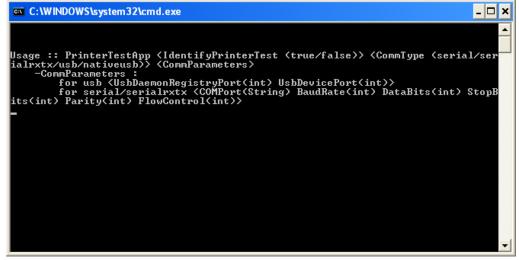
The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the JPOS test utility either using the link in the START MENU.
- 2. Select the A776 printer from the drop down menu in "POSPrinter" tab.
- 3. Click on the "OPEN" button.
- 4. Click on the "CLAIM" button.
- 5. Click on the "ENABLE" button.
- 6. Select the "SLIP" option in the "Printer Station" section.
- 7. Click on the SLIP tab:
- 8. Click on the "Begin" button on the "Insertion" of the menu (middle section).
- 9. Slide the paper in the front of the printer until it comes out from the top.
- 10. Click on the "End" button on the "Insertion" of the menu (middle section). The paper may move down and the LED light should stay on indicating paper is in the slip.
- 11. Click on the "Simple Printing" tab.
- 12. Type some text in the "PRINT DATA" area; this is the text that should print on the receipt printer and click on the "PRINTNORMAL" button.
- 13. Click on the "SLIP" tab.
- 14. Click on "Begin" in the "Removal" of the GUI. Once the paper comes out from the top remove the paper from the printer.
- 15. Click on "End" in the "Removal" of the GUI.
- 16. To exit the application, need to disable/release and close the printer from the "POSPrinter" tab. The following screen shows the printer still being claimed by the test utility:

### Detailed Steps

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

In the location the files were found execute the POSTEST.BAT file. Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:



2. Select the A776 printer from the drop down menu in "POSPrinter" tab.

🕌 Printer/Cash Drawer	/MICR Unit Test Application	
Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer Me POSPrinter Simple Printing Boolean Properties PowerNotify Claimed DeviceEnabled FreezeEvents Parameters	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT
Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Profile   A776   V  Timeout   A776   V  A776   V  A794 A799   V  Copen   Claim   V  Enable PowerNotify Control/Service Inl	Internal External Interactive Illegal CheckHealth Enable Freeze Events ClearOutput fo DirectIO

- 3. Click on the "OPEN" button.
- 4. Click on the "CLAIM" button.
- 5. Click on the "ENABLE" button. After all three buttons are clicked the screen will look similar to the following screen capture:

🕌 Printer/Cash Drawer/	MICR Unit Test Application	
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read Ca Printer Line Props Printer M POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props
Printer SUE: Statu. Printer SUE: Statu. Printer SUE: Statu.		CapPowerRe Standard PowerState Unknown State Idle CheckHealthT
Clear	Profile A776 V Timeout 10000	CheckHealth   Internal  External  Interactive  Illegal  CheckHealth
Cover Open  NearEnd Empty Receipt  Slip  Refresh	Close Release Enable PowerNotify Control/Service In	Disable Freeze Events ClearOutput fo DirectIO

6. Select the "SLIP" option in the "Printer Station" section.

🕌 Printer/Cash Drawer	/MICR Unit Test Application	
Printer Station Receipt Journal Illegal		ashDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT
Clear  Printer Sensors Cover Open NearEnd Empty Receipt Slip	Open Claim Claim Enable PowerNotify	CheckHealth Enable Freeze Events ClearOutput
Refresh	Control/Service In	fo DirectIO

7. Click on the SLIP tab:

🕌 Printer/Cash Drawer	/MICR Unit Test Application	
-Printer Station  Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:		CapPowerRe Standard PowerState Unknown State Idle CheckHealthT
Clear	Parameters Profile A776 V Timeout 10000	CheckHealth
Cover Open	Close Release Enable PowerNotify Control/Service Inf	Disable Freeze Events ClearOutput fo DirectIO

- Click on the "Begin" button on the "Insertion" of the menu (middle section).
   Slide the paper in the front of the printer until it comes out from the top.

🛓 Printer/Cash Drawer/	/MICR Unit Test Application
Printer Station	MICR MICR Read CashDrawer CheckScanner
🔿 Receipt 💿 Slip	Printer Line Props Printer More Props Bitmaps/BarCodes
🔿 Journal 🔿 Illegal	POSPrinter Simple Printing Slip Printer Bool. Props
	-Insertion
Printer SUE: Statu:	Timeodc 10000 Timeodc 10000
Printer SUE: Statu:	
Printer SUE: Statu: Printer SUE: Statu:	
Printer SUE: Statu	
	CSlip Flip
	Side 1
	Side 2
	Opposite
< · · · >	Slip Flip
Clear	
-Printer Sensors	
Cover Open 🗌	
NearEnd Empty	
Receipt 📃 📃	
Slip 🔲 🔲	
Refresh	

10. Click on the "End" button on the "Insertion" of the menu (middle section). The paper may move down and the LED light should stay on indicating paper is in the slip.

🕌 Printer/Cash Drawer/	/MICR Unit Test Application 📃 🗖 🔀
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read CashDrawer CheckScanner Printer Line Props Printer More Props Bitmaps/BarCodes POSPrinter Simple Printing Slip Printer Bool. Props
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:	
Printer SUE: Statu: Printer SUE: Statu:	egin chu pegin chu
Printer SUE: Statu:	Slip Flip Side 1 Side 2 Opposite
< <u>&gt;</u>	Slip Flip
Clear Printer Sensors	
Cover Open _ NearEnd Empty Receipt Slip Refresh	

11. Click on the "Simple Printing" tab.

🕌 Printer/Cash Drawer/	MICR Unit Test Application	
Printer Station     Receipt     O Slip     Journal     Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:		CapPowerRe Standard PowerState Unknown State Idle CheckHealthT
Clear Printer Sensors Cover Open	Parameters Profile A776 V Timeout 10000	CheckHealth  CheckHealth  External  Interactive  Illegal  CheckHealth
NearEnd Empty Receipt Slip V V Refresh	Close Release Enable PowerNotify	Disable Freeze Events ClearOutput fo DirectIO

12. Type some text in the "PRINT DATA" area; this is the text that should print on the receipt printer and click on the "PRINTNORMAL" button.

🕌 Printer/Cash Drawer/	/MICR Unit Test Application
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read CashDrawer CheckScanner Printer Line Props Printer More Props Bitmaps/BarCodes POSPrinter Simple Printing Slip Printer Bool. Props
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:	A-2 Add Data
<	Print Data Type in the text that you would like to have printed in this box.
Clear -Printer Sensors	
Cover Open 🔄 NearEnd Empty	Clear Add CR Add LF CR LF
Receipt	AsyncMode PrintNormal PrintImmediate
Refresh	Validate Data SetLogo (Top) SetLogo (Btm)

13. Click on the "SLIP" tab.

📓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
-Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner pre Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:		CapPowerRe Standard PowerState Unknown State Idle CheckHealthT
Clear Printer Sensors Cover Open	Parameters Profile A776 V Timeout 10000	CheckHealth   Internal  External  Interactive  Illegal  CheckHealth
NearEnd Empty Receipt Slip V V Refresh	Close Release Enable PowerNotify Control/Service Inf	Disable Freeze Events ClearOutput fo DirectIO

- 14. Click on "Begin" in the "Removal" of the GUI. Once the paper comes out from the top remove the paper from the printer.
- 15. Click on "End" in the "Removal" of the GUI.

🛎 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Printer Station     Receipt      Slip     Journal     Illegal	MICR         MICR Read         CashDrawer         CheckScanner           Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool. Props           Insertion         Removal         Removal	
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:		
Printer SUE: Statu: Printer SUE: Statu:		
Printer SUE: Statu:		
Clear		
Printer Sensors		
Cover Open _ NearEnd Empty Receipt Slip		

16. To exit the application, need to disable/release and close the printer from the "POSPrinter" tab. The following screen shows the printer still being claimed by the test utility:

🚳 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
-Printer Station Receipt ③ Slip Journal ① Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:		CapPowerRe Standard PowerState Unknown State Idle CheckHealthT
Clear Printer Sensors Cover Open	Parameters Profile A776 V Timeout 10000	CheckHealth    Internal  External  Interactive  Illegal  CheckHealth
NearEnd Empty Receipt Slip V V Refresh	Close Release Enable PowerNotify Control/Service In	Disable Freeze Events ClearOutput fo DirectIO

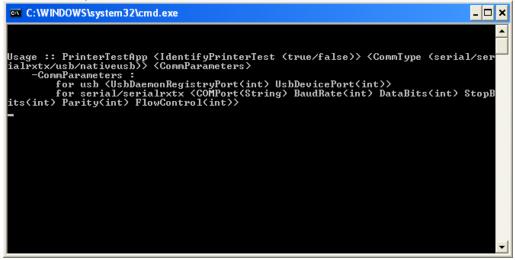
The following shows the printer has been released and is available for other application after "Disable / Release / Close" button have been clicked:

📓 Printer/Cash Drawer/MICR Unit Test Application		
Printer Station Receipt  Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer M POSPrinter Simple Printing Boolean Properties PowerNotify Claimed DeviceEnabled FreezeEvents	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT
Clear Printer Sensors Cover Open	Parameters Profile A776 V Timeout 10000	CheckHealth   Thernal  External  Interactive  Illegal  CheckHealth
NearEnd Empty Receipt Slip Refresh	Open Claim Enable PowerNotify Control/Service In	

### 6.4.20 JPOS Drivers for the Receipt Printer Drivers – Barcode Testing Detailed Steps

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

In the location the files were found execute the POSTEST.BAT file. Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:



2. After a few seconds the JPOS test utility GUI will appear as shown below:

🕌 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer Ma POSPrinter Simple Printing Boolean Properties PowerNotify Claimed DeviceEnabled FreezeEvents Parameters Profile A776 ¥ Timeout 10000	AbDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT
Clear  Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Open Claim Claim Enable PowerNotify	Illegal CheckHealth Enable Freeze Events ClearOutput

3. Select the printer from the dropdown menu in "POSPrinter" tab.

📓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties PowerNotify Claimed DeviceEnabled FreezeEvents Parameters Profile A776 Timeout A776	shDrawer CheckScanner pre Props Bitmaps/BarCodes Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT CheckHealth Internal External Interactive
Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	A799	Illegal CheckHealth Enable Freeze Events ClearOutput fo DirectIO

- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button. After all three buttons are clicked the screen will look similar to the following screen capture:

📓 Printer/Cash Drawer/MICR Unit Test Application		
Printer Station     Receipt     Slip     Journal     Illegal	MICR MICR Read Ca Printer Line Props Printer M POSPrinter Simple Printing Boolean Properties	shDrawer CheckScanner ore Props Bitmaps/BarCodes Slip Printer Bool. Props
Printer SUE: Statu: Printer SUE: Statu: Printer SUE: Statu:		CapPowerRe Standard PowerState Unknown State Idle CheckHealthT
Clear Printer Sensors Cover Open	Parameters Profile A776 V Timeout 10000	CheckHealth
NearEnd Empty Receipt Slip V V Refresh	Close Release Enable PowerNotify Control/Service In	Disable Freeze Events ClearOutput fo DirectIO

7. Click on the "Bitmaps/Barcode" tab. In the "Print BarCode" section, fill in the appropriate values for the barcode. Below are examples of the various barcode with the appropriate values for the various symbologies:

🕌 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read
Printer SUE: Statu: Printer SUE: Statu:		SetBitmap #
	File	Test.jpg
	Align (select or mmu)	PTR_BM_LEFT
	Width (select or mmu)	PTR_BM_ASIS
	Print BarCode	
Printer Sensors	Data	123456789012
Princer bensors	Symbology	PTR BCS UPCA
Cover Open 📃	Height (mmu)	100
	Width	100
NearEnd Empty	Alignment (Select or mmu)	PTR_BC_LEFT
Receipt	TextPosition	PTR BC TEXT ABOVE
Slip	RotateSpecial	PTR RP NORMAL
Refresh	Multiple BarCode	s PrintBarCode

#### UPCA



UPCE		
🕌 Printer/Cash Drawer/MIC	CR Unit Test Application	_ 🗆 🔀
Receipt Slip     Journal Illegal	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read
Printer SUE: Statu: Printer SUE: Statu:	Print Bitmap	SetBitmap #
	File	Test.jpg
	Align (select or mmu)	PTR_BM_LEFT
	Width (select or mmu)	PTR_BM_ASIS
Clear	Print BarCode	012200000345
Printer Sensors	Symbology	PTR BCS UPCE
Cover Open 📃	Height (mmu) Width	100 100
NearEnd Empty	Alignment (Select or mmu)	PTR_BC_LEFT 💽
Receipt	TextPosition RotateSpecial	PTR BC TEXT ABOVE
Refresh	Multiple BarCode:	s PrintBarCode



JAN 8		
🕌 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Receipt Slip     Journal Illegal	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read
Printer SUE: Statu: Printer SUE: Statu:	Print Bitmap PrintBitmap	SetBitmap #
	File	Test.jpg
	Align (select or mmu)	PTR_BM_LEFT
	Width (select or mmu)	PTR_BM_ASIS
Clear	Print BarCode	
Printer Sensors	Data Symbology	12345678 PTR BCS JAN8
Cover Open 📃	Height (mmu) Width	100
NearEnd Empty	Alignment (Select or mmu)	PTR_BC_LEFT
Receipt	TextPosition RotateSpecial	PTR BC TEXT ABOVE
Slip	Multiple BarCode	s PrintBarCode



JAN13			
🕌 Printer/Cash Drawer/MI	🖆 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Printer Station Receipt Slip Journal Illegal Printer SUE: Statu: Printer SUE: Statu:	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes Print Bitmap PrintBitmap	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read SetBitmap #	
	File Align (select or mmu) Width (select or mmu)	Test.jpg PTR_BM_LEFT V PTR_BM_ASIS V	
Clear Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip		123456789012 PTR BCS JAN13 100 100 PTR_BC_LEFT PTR BC TEXT ABOVE PTR RP NORMAL PrintBarCode	
Keiresii			



ITF		
🛓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀		
Receipt Slip     Journal Illegal	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read
Printer SUE: Statu: Printer SUE: Statu:	Print Bitmap PrintBitmap	SetBitmap #
	File	Test.jpg
	Align (select or mmu)	
	Width (select or mmu)	PTR_BM_ASIS
Clear	Print BarCode	
Printer Sensors	Data Symbology	1234 PTR BCS ITF
Cover Open 📃	Height (mmu)	100
NearEnd Empty	Width Alignment (Select or mmu)	100 PTR BC LEFT
Receipt	TextPosition	PTR BC TEXT ABOVE
Slip Refresh	RotateSpecial	PTR RP NORMAL



Codabar				
🛓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Printer Station <ul> <li>Receipt</li> <li>Slip</li> <li>Journal</li> <li>Illegal</li> </ul>	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read		
Printer SUE: Statu: Printer SUE: Statu:				
	File Align (select or mmu)	Test.jpg PTR_BM_LEFT V		
	Width (select or mmu)	PTR_BM_ASIS		
Clear		A123456789B PTR BCS Codabar		
Cover Open	Symbology Height (mmu) Width	100 100		
NearEnd Empty Receipt  Slip Refresh	Alignment (Select or mmu) TextPosition RotateSpecial Multiple BarCodes	PTR_BC_LEFT  PTR BC TEXT ABOVE  PTR RP NORMAL  s PrintBarCode		



Code 39				
🛓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Receipt Slip     Journal Illegal	Printer Line Props         Printer More Props           POSPrinter         Simple Printing         Slip         Printer Bool. Props           CashDrawer         CheckScanner           Bitmaps/BarCodes         MICR         MICR Read			
Printer SUE: Statu: Printer SUE: Statu:				
	File Align (select or mmu)	Test.jpg PTR_BM_LEFT V		
	Width (select or mmu)	PTR_BM_ASIS		
Clear Printer Sensors Cover Open	Print BarCode Data Symbology Height (mmu) Width	1234567890 PTR BCS Code39 💌 100 100		
NearEnd Empty Receipt  Slip Refresh	Alignment (Select or mmu) TextPosition RotateSpecial	PTR_BC_LEFT  PTR BC TEXT ABOVE  PTR RP NORMAL  PTINtBarCode		



Code 93				
🛓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Receipt Slip     Journal Illegal	Printer Line Props         Printer More Props           POSPrinter         Simple Printing         Slip         Printer Bool. Props           CashDrawer         CheckScanner           Bitmaps/BarCodes         MICR         MICR Read			
Printer SUE: Statu: Printer SUE: Statu:				
	File Align (select or mmu)	Test.jpg PTR_BM_LEFT 🗸		
	Width (select or mmu)	PTR_BM_ASIS		
Clear Printer Sensors Cover Open	Print BarCode Data Symbology Height (mmu)	1234567890 PTR BCS Code93 💌 100		
NearEnd Empty Receipt	Width Alignment (Select or mmu) TextPosition RotateSpecial Multiple BarCode:	100 PTR_BC_LEFT PTR BC TEXT ABOVE PTR RP NORMAL PTR RP NORMAL		
Refresh				



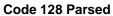
Code 128				
🕌 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Printer Station © Receipt O Slip O Journal O Illegal	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read		
Printer SUE: Statu: Printer SUE: Statu:	Print Bitmap PrintBitmap	SetBitmap #		
	File	Test.jpg		
	Align (select or mmu)	PTR_BM_LEFT		
	Width (select or mmu)	PTR_BM_ASIS		
Clear Printer Sensors	Symbology	i1234567890/01 PTR BCS Code128		
Cover Open 📃	Height (mmu) Width	100 100		
NearEnd Empty Receipt Slip	Alignment (Select or mmu) TextPosition RotateSpecial	PTR_BC_LEFT  PTR BC TEXT ABOVE PTR RP NORMAL		
Refresh	Multiple BarCode:	s PrintBarCode		

49505152	25354555	6574847	484900
INTERVIEW.	HAND & U.K.		
I B I BI III II B		II ONDI MUUDI	

Code 128				
🛓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Props POSPrinter Simple Printin CashDrawer Bitmaps/BarCodes	Printer More Props g Slip Printer Bool. Props CheckScanner MICR MICR Read		
Printer SUE: Statu: Printer SUE: Statu:	Print Bitmap PrintBitmap	SetBitmap #		
	File	Test.jpg		
	Align (select or mmu)	PTR_BM_LEFT		
	Width (select or mmu)	PTR_BM_ASIS		
Clear	Print BarCode			
	Data	i1234567890		
Printer Sensors	Symbology	PTR BCS Code128		
Cover Open	Height (mmu)	100		
	Width	100		
NearEnd Empty	Alignment (Select or mmu)	PTR_BC_LEFT 🛛 💽		
Receipt	TextPosition	PTR BC TEXT ABOVE		
Slip	RotateSpecial	PTR RP NORMAL 🛛 💌		
Refresh	Multiple BarCode	s PrintBarCode		



🕌 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀			
Receipt Slip     Journal Illegal	POSPrinter         Simple Printing         Slip         Printer Bool. Props           MICR         MICR Read         CashDrawer         CheckScanner           Printer Line Props         Printer More Props         Bitmaps/BarCodes		
Printer SUE: Statu: Printer SUE: Statu:	PrintBitmap SetBitmap # 1		
	File	Test.jpg	
	Align (select or mmu)	PTR_BM_LEFT	
	Width (select or mmu)	PTR_BM_ASIS	
	Print BarCode		
Clear	Data	{A123456789	
Printer Sensors	Symbology	PTR_BCS_Code128_Parsed 🛛 💌	
	Height (mmu)	100	
Cover Open 📃	Width	100	
NearEnd Empty	Alignment (Select or mmu)	PTR_BC_LEFT	
Receipt	TextPosition	PTR_BC_TEXT_ABOVE	
	RotateSpecial	PTR_RP_NORMAL	
Slip	Multiple BarCoo	des PrintBarCode	





PDF 417				
🕌 Printer/Cash Drawer/MI	📓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀			
Receipt Slip     Journal Illegal	POSPrinter         Simple Printing         Slip         Printer Bool. Props           MICR         MICR Read         CashDrawer         CheckScanner           Printer Line Props         Printer More Props         Bitmaps/BarCodes			
Printer SUE: Statu: Printer SUE: Statu:	PrintBitmap SetBitmap # 1			
	File	Test.jpg		
	Align (select or mmu)	PTR_BM_LEFT		
	Width (select or mmu)	PTR_BM_ASIS		
<	Print BarCode			
Clear	Data	1234567890		
Printer Sensors	Symbology	PTR_BCS_PDF417		
	Height (mmu)	100		
Cover Open	Width	100		
NearEnd Empty	Alignment (Select or mmu)	PTR_BC_LEFT 💽		
Receipt	TextPosition	PTR_BC_TEXT_ABOVE		
	RotateSpecial	PTR_RP_NORMAL		
Slip Refresh	Multiple BarCoo	des PrintBarCode		



QR Code				
🕌 Printer/Cash Drawer/MI	CR Unit Test Application	_ 🗆 🔀		
Printer Station Receipt Slip Journal Illegal Printer SUE: Statu: Printer SUE: Statu:	Printer Line Props Printer Print Bitmap PrintBitmap	ng Slip Printer Bool. Props CashDrawer CheckScanner More Props Bitmaps/BarCodes SetBitmap # 1		
	File Align (select or mmu)	Test.jpg PTR_BM_LEFT V		
Clear Clear Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Symbology F Height (mmu) 2 Width 2 Alignment (Select or mmu) F TextPosition F	PTR_BM_ASIS		



### 6.4.21 JPOS Drivers for the Cash Drawer Drivers

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Cash Drawer\USB Cash Drawer\USB Cash Drawer JPOS) and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the JPOS test utility.
- 2. Click on the "CASH DRAWER" tab.
- 3. Select the "CashDrawer" model in the profile drop down box:
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Click on the "ENABLE" button.
- 7. To exit the application:
  - a. Click on "DISABLE"
  - b. Click on "RELEASE"
  - c. Click on "CLOSE"
  - d. Click on the "X" in the upper right hand corner of the application.

#### **Detailed Steps**

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the receipt printer folder.

Depending on your screen resolution the following screen will be in the background before the GUI appears for the test utility:

HP Receipt Printer JPOS Test Utility	
	<b>_</b>
Usage :: PrinterTestApp <identifyprintertest (true="" false)=""> <commtype (serial="" s<br="">ialrxtx/usb/nativeusb)&gt; <commparameters> -CommParameters : for usb <usbdaemonregistryport(int) usbdeviceport(int)=""> for serial/serialrxtx <comport(string) baudrate(int)="" databits(int)="" sta<br="">its(int) Parity(int) FlowControl(int)&gt;</comport(string)></usbdaemonregistryport(int)></commparameters></commtype></identifyprintertest>	

2. After a few seconds the JPOS test utility GUI will appear as shown below; click on the "CASH DRAWER" tab.

📓 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀					
Printer Station Receipt Slip Journal Illegal	MICR MICR Read Ca Printer Line Props Printer Mo POSPrinter Simple Printing Boolean Properties PowerNotify Claimed DeviceEnabled FreezeEvents Parameters Profile A776 ¥ Timeout 10000	Slip Printer Bool. Props Other Properties CapPowerRe PowerState State Closed CheckHealthT CheckHealth Internal External			
Clear  Printer Sensors Cover Open NearEnd Empty Receipt Slip Refresh	Open Claim Claim Enable PowerNotify	Interactive     Illegal     CheckHealth Enable Freeze Events ClearOutput io DirectIO			

3. Select the "CashDrawer" model in the profile drop down box:

📓 Printer/Cash Drawer/MICR Unit Test Application				
Printer Station     Receipt     Slip     Journal     Illegal	Printer Line Props         Printer More Props         Bitmaps/BarCodes           POSPrinter         Simple Printing         Slip         Printer Bool. Props           MICR         MICR Read         CashDrawer         CheckScanner           Profile         CashDrawer         CheckHealth			
	Timeout CashDrawer776 CashDrawer776 CashDrawer794 CashDrawer799 PowerState State Closed CheckHealthText			
Clear Printer Sensors Cover Open	Boolean Properties       WaitForDrawerClose         CapStatus       Timeout         CapStatusMultiDrawerDe       Frequency         PrezeEvents       Duration         Claimed       DeviceEnabled         DrawerOpened       WaitForDrawerClose			
NearEnd Empty Receipt Slip Refresh	Open Claim Enable Freeze Events Enable PowerNotify OpenDrawer Control/Service Info			

- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.

6. Click on the <u>"ENABLE" button.</u>

🛎 Printer/Cash Drawer/MICR Unit Test Application 📃 🗖 🔀				
Printer Station     Receipt     Slip     Slip	Printer Line Pro POSPrinter MICR MIC	Simple Printing	lore Props Bitmaps/BarCodes Slip Printer Bool. Props ashDrawer CheckScanner	
O Journal O Illegal Drawer SUE: Drawer Drawer SUE: Drawer	Profile Timeout CapPowerRep	nDrawer799 👻 0 Standard	CheckHealth  Internal  External  Interactive	
	PowerState State CheckHealthText	Unknown Idle	CheckHealth	
Clear Printer Sensors Cover Open	Boolean Propert CapStatus CapStatus PreezeEven PowerNotify Claimed DeviceEnabl DrawerOper	ultiDrawerDe ts ed	WaitForDrawerClose       Timeout       Frequency       Duration       Delay       WaitForDrawerClose	
NearEnd Empty Receipt Slip Refresh	Close	Release	Disable Freeze Events OpenDrawer ervice Info	

- Note: Depending on the JPOS driver version (prior to March 2012 release) when you click on the "OpenDrawer" button the cash drawer should pop open. When the "Timeout" value set to "0", if the cash drawer is not closed within 10 seconds a "JPOSEXCEPTION CAUGHT" error message will appear, this is OK since the cash drawer is open.
  - 7. To exit the application:
    - Click on "DISABLE"
    - o Click on "RELEASE"
    - Click on "CLOSE"
    - Click on the "X" in the upper right hand corner of the application.

# 6.4.22 <u>HP Font Utility (ASIAN Font Download) – Single Station (A799 with 4MG)</u> <u>Printer</u>

The single station printer can have an additional font downloaded to the printer via the HP Font Download utility. The English font will always be present in the printer even when an additional font is downloaded to the printer. The following fonts can be downloaded to the printer: Chinese / Kanji / Korean.

# Note: This is only needs to be performed on the single station printer that has 4MB of memory. The printers that have 8MB of memory have the font already resident on the printer and do not need this utility.

# 6.4.22.1 HP Font Utility (Asian Font Download Utility)

The following is overview of the steps to test the receipt printer followed by detailed steps:

- Install the HP Asian Font Downloader utility, the SETUP.EXE can be found on "HP POS Drivers and Documentation CD" or from the <u>HP.COM</u> web site. After the installation is complete, launch the "HP FONT LOADER" from the Windows START menu.
- 2. Click on the "Allocate Memory for Fonts" button. The status box will indicate that the allocation process has been completed.
- 3. Click on the language that you would like to download to the printer. This process can take 10 minutes to complete; during the download process the LED on the printer will blink. When the process has completed downloading, the font the status box will indicate that is it complete.
- 4. Click on "Print Sample/Diagnostics" to confirm you are able to get a print out after the font download. Note the print out will be in English.
- 5. Click on "Exit" to leave and close the application.

#### Detailed Steps

 Install the HP Asian Font Downloader utility, the SETUP.EXE can be found on "HP POS Drivers and Documentation CD" or from the <u>HP.COM</u> web site. After the installation is complete, launch the "HP FONT LOADER" from the Windows START menu. 2. Click on the "Allocate Memory for Fonts" button. The status box will indicate that the allocation process has been completed.

🖻 Font Control			
	HP Langua	ige Font Downloader	Version 2.0.14
Allocate Mer	nory for Fonts	Clearing flash OD Getting number of user sectors available 30 00	
Download Traditional Chinese Code Page 950	Download Simplified Chinese Code Page 936	Allocating sectors OG Erasing font area OD	
Download Kanji (Japan) Code Page 932	Download Hangul (Korea) Code Page 949	Allocate sectors script complete	
Download Thai Code Page 874	User Defined		
Print Diagnostics Form	Print Font Information		
Set Printer USB Mode	Set Program USB Mode		
Set Native Mode	Set Native Mode		
Set Printer Class	Set Printer Class	Clear Status	Exit

3. Click on the language that you would like to download to the printer. This process can take up to 10 minutes to complete; during the download process the LED on the printer will blink. When the process has completed downloading, the font the status box will indicate that is it complete.

🛱 Font Control					
	HP Langu	iage F	<sup>-</sup> ont Downloa	ader	Version 2.0.14
Allocate Memory	for Fonts	E	Reseting the printer JSB open Frasing font area ID		
Download Traditional Chinese Code Page 950	Download Simplified Chinese Code Page 936		) ownloading the map	ap.CHR file size is: 1176	
Download Kanji (Japan) Code Page 932	Download Hangul (Korea) Code Page 949	T	) ownloading 16 wide [raditionalChinese_1] Port 1 download is co	6.CHR file size is: 454424	
Download Thai Code Page 874	User Defined	1	) ownloading 24 wide [raditionalChinese_2 Port 1 download is co	4.CHR file size is: 102226	4
Print Diagnostics Form	Print Font Information		Download script com	plete	
Set Printer USB Mode	Set Program USB Mode				
Set Native Mode	Set Native Mode	I			
Set Printer Class	Set Printer Class	_	Clear Status		Exit

63. F	ont Control			
		HP Langua	ige Font Downloader	Version 2.0.14
	Allocate Memor Download Traditional Chinese Code Page 950 Download Kanji (Japan) Code Page 932 Download Thai Code Page 874	y for Fonts Download Simplified Chinese Code Page 936 Download Hangul (Korea) Code Page 949 User Defined	Reseting the printer USB open Erasing font area OD Downloading the map file SimplifiedChinese_Map.CHR file size is: 1644 Port 1 download is complete Downloading 16 wide font (~ 3 minutes) SimplifiedChinese_16.CHR file size is: 704952 Port 1 download is complete Download Chinese_24 wide font (~ 6 minutes) SimplifiedChinese_24.CHR file size is: 1585952 Port 1 download is complete Download script complete	
	Print Diagnostics Form	Print Font Information		
	Set Printer USB Mode	Set Program USB Mode		
	Set Native Mode	Set Native Mode		
	Set Printer Class	Set Printer Class	Clear Status	Exit

🖣 Font Control			
	HP Langu	uage Font Downloader	Version 2.0.14
Allocate Memory	for Fonts	Reseting the printer USB open Downloading the map file	
Download Traditional Chinese Code Page 950	Download Simplified Chinese Code Page 936	Kanii_Map.CHR file size is: 570 Port 1 download is complete Downloading 16 wide font (~ 1 minute) Kanii 16.CHR file size is: 238904	
Download Kanji (Japan) Code Page 932	Download Hangul (Korea) Code Page 949	Port download is complete Downloading 24 wide font (~ 2 minutes) Kanji 24.CHR file size is: 537344	
Download Thai Code Page 874	User Defined	Port I download is complete Download script complete	
Print Diagnostics Form	Print Font Information		
Set Printer USB Mode	Set Program USB Mode		
Set Native Mode	Set Native Mode		
Set Printer Class	Set Printer Class	Clear Status	Exit

S Font Control			
	HP Langu	age Font Downloader	Version 2.0.14
Allocate Memory Download Traditional Chinese Code Page 950 Download Kanji (Japan) Code Page 932 Download Thai Code Page 874 Print Diagnostics Form	for Fonts Download Simplified Chinese Code Page 936 (Corea) Code Page 949 User Defined Print Font Information	Reseting the printer USB open Downloading the map file Korean, Map.CHR file size is: 666 Port 1 download is complete Downloading 16 wide font (~1 minute) Korean, 16.CHR file size is: 293128 Port 1 download is complete Downloading 24 wide font (~3 minutes) Korean, 24.CHR file size is: 672848 Port 1 download is complete Download script complete	
Set Printer USB Mode	Set Program USB Mode		
Set Native Mode	Set Native Mode		
Set Printer Class	Set Printer Class	Clear Status	Exit

🖣 Font Control			
	HP Langu	uage Font Downloader	Version 2.0.14
Allocate Memo	ry for Fonts	Reseting the printer USB open Erasing font area	
Download Traditional Chinese Code Page 950	Download Simplified Chinese Code Page 936	0D Downloading Thai Font T4002_mod.FNT file size is: 22592 Port 1 download is complete	
Download Kanji (Japan) Code Page 932	Download Hangul (Korea) Code Page 949	Download script complete	
Download Thai Code Page 874	User Defined		
Print Diagnostics Form	Print Font Information		
Set Printer USB Mode	Set Program USB Mode		
Set Native Mode	Set Native Mode		
Set Printer Class	Set Printer Class	Clear Status	Exit

4. Click on "Print Sample/Diagnostics" to confirm you are able to get a print out after the font download. Note that the print out will be in English.

🛱 Font Control			
(III)	HP Langua	age Font Downloader	Version 2.0.14
Allocate	Memory for Fonts	Diagnostic printout script complete	
Download Traditional Chinese Code Page 950	Download Simplified Chinese Code Page 936		
Download Kanji (Japan) Code Page 932	Download Hangul (Korea) Code Page 949		
Download Thai Code Page 874	User Defined		
Print Diagnostics Form	Print Font Information		
Set Printer USB Mode	Set Program USB Mode		
Set Native Mode	Set Native Mode		
Set Printer Class	Set Printer Class	Clear Status	Exit

5. Click on "Exit" to leave and close the application.

# 6.5 HP ap5000 MSR (Magnetic Stripe Reader)



# 6.5.1 Connection

The MSR on the HP ap5000 system is integrated into the system which is connected internally via serial interface; default is COM4. There is no user connection required for this device.

	ap5000 MSR
Port	COM4
Baud Rate	19200
Data Bit	8
Parity	None
Stop Bit	1
Flow Control	None

# 6.5.2 Windows Drivers for the HP ap5000 MSR

Windows operating system supports serial port COM4, so no extra drivers are needed to be installed.

#### 6.5.3 OPOS Drivers for the HP ap5000 MSR

The HP ap5000 OPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\MSR HP ap5000\ap5000 MSR OPOS) and are also available from <u>HP.COM</u>.

#### 6.5.4 Testing HP ap5000 MSR

#### 6.5.4.1 Testing HP ap5000 MSR in non-OPOS mode

The following is overview of the steps to test the ap5000 MSR followed by detailed steps:

- 1. Start the non-OPOS test utility from Windows start menu.
- Select the COM port from the drop down box or keep the default option of "Auto" which will search for the ap5000 MSR device. Click on the "Test Mode" button to start the test.

- 3. When the "Test Mode" has been selected the COM port will appear and in the GUI title bar "(Test Mode)" will appear. At this point when one swipes a card in the ap5000 MSR, the data will appear in the test utility.
- 4. To exit the application:
  - a. Click "Test Mode" so "(Test Mode)" does not appear in the title of the GUI.
  - b. Click on "Exit" to close test applet.

#### **Detailed Steps**

- 1. Start the non-OPOS test utility from Windows start menu.
- 2. Select the COM port from the drop down box or keep the default option of "Auto" which will search for the ap5000 MSR device. Click on the "Test Mode" button to start the test.

별 ap5000 MSR Test V1.3R12		_ 🗆 🔀
L	/	
Clear Message	Test Mode	Exit
Auto 🔻		

3. When the "Test Mode" has been selected the COM port will appear and in the GUI title bar "(Test Mode)" will appear. At this point when one swipes a card in the ap5000 MSR, the data will appear in the test utility.

n the ap5000 MSR, ap5000 MSR Test V1.3R				y. 💶 🗆 🔀
Clear Message COM4		Test	Mode	Exit
<pre>     ap5000 MSR Test V1.3R     </pre> <pre>         <pre></pre></pre>	981477^VISA CARDH 00000?;4917901008			

- 4. To exit the application:
  a. Click "Test Mode" so "(Test Mode)" does not appear in the title of the GUI.

储 ap5000 MSR Test V1.3R'	Test Mode)	_ 🗆 🔀
	477 VISA CARDHOLDER/^ 00?;4917901008981477= ? <cr></cr>	
Clear Message	Test I	Mode Exit

b. Click on "Exit" to close test applet.

#### 6.5.4.2 Testing HP ap5000 MSR in OPOS mode

The following is overview of the steps to test the ap5000 MSR followed by detailed steps:

- 1. Start the OPOS test utility from Windows start menu.
- 2. Click on the "OPEN" button to start the test, should receive "Open Success" status message.
- 3. When one swipes a valid card in the ap5000 MSR data should appear in the test utility. The "x" represent will be replaced by the data that is read from the card that is swiped.
- 4. To exit the application:
  - a. Click "CLOSE" button.
  - b. Click on "X" in the upper right hand corner to close the test applet.

#### **Detailed Steps**

1. Start the OPOS test utility from Windows start menu.

When the utility is	launched the following is the GUI th	at will appear:
🔛 hp ap5000 MSR	OPOS Test Utility V1.0.4	
Please swipe a card.		
Account number:		
Expiration date:		
First Name:		
Surname:		
Middle initials:		
Track1:		
Track2:		
Track3:		
Track4:		
Clear	0	Church
	Open	Close
		_
		~

١

2. Click on the "OPEN" button to start the test, should receive "Open Success" status message.

🛤 hp ap5000 MSR OPO	S Test Utility V1.0.4	
Please swipe a card.		
Account number:		_
Expiration date:		
First Name:		
Surname:		
Middle initials:		
Track1:		
Track2:		
Track3:		
Track4:		
Clear	Open	Close
13:24:08: Open: Success 13:24:08: Claim: Success		<u> </u>
· · · · · ·	)	
		$\checkmark$

3. When one swipes a valid card in the ap5000 MSR data should appear in the test utility. The "x" represent will be replaced by the data that is read from the card that is swiped.

🔛 hp ap5000 MSR C	POS T	est Utility V1.0.4		×
Please swipe a card.				
Account number:	*****	****		
Expiration date:	1301			
First Name:	YOU			
Surname:	A			
Middle initials:	GIFT F	FOR		
Track1:	Вхххх	xxxxxxxxxxxA GIFT FOR Y	OU/ ^13xxxxxxxxxx	
Track2:	xxxxxx	*****	<	
Track3:				
Track4:				
Clear		Open	Close	
13:24:08: Open: Succes 13:24:08: Claim: Succes 13:24:33: DataEvent Cor	s			

- 4. To exit the application:a. Click "CLOSE" button.b. Click on "X" in the upper right hand corner to close the test applet.

😁 пр арэооо мэк	OPOS Test Utility V1.0.4	
Please swipe a card.		
Account number:		
Expiration date:		
First Name:		
Surname:		
Middle initials:		
Track1:		_
Track2:		_
Track3:		
Track4:		_
Clear	Open Close	
13:24:08: Open: Succe 13:24:08: Claim: Succe		<

# 6.5.5 JPOS Drivers for the HP ap5000 MSR

The HP ap5000 JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\MSR HP ap5000\ap5000 MSR JPOS) and are also available from <u>HP.COM</u>.

The following is overview of the steps to test the ap5000 MSR followed by detailed steps:

- 1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file locate in the JPOS folder in the ap5000 MSR folder.
- 2. Click on the "MSR" tab.
- 3. After clicking on the "MSR" tab.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Check the "DATA EVENT ENABLED" so there is a check box.
- 7. Check the "DEVICE ENABLED" so there is a check box.
- 8. Swipe a credit card and text should appear in the field.
- 9. Click on "RELEASE" / "CLOSE" and then click "EXIT" to exit the JPOS test utility.

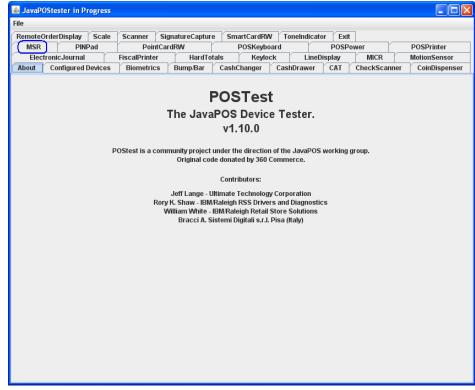
#### **Detailed Steps**

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the ap5000 MSR folder.

After a few seconds the JPOS test utility GUI will appear as shown below:

🕌 JavaPOStester in Progress			
File			
RemoteOrderDisplay Scale Scann	nner SignatureCapture SmartCardRW	ToneIndicator Exit	
MSR PINPad	PointCardRW POSKeyboa	rd POSPower	POSPrinter
	alPrinter HardTotals Keylock		MotionSensor
About Configured Devices Biom	ometrics Bump/Bar CashChanger	CashDrawer CAT CheckScanner	CoinDispenser
POStest	POSTest And And And And And And And And And And	e <b>Tester.</b> of the JavaPOS working group. ommerce. Corporation s and Diagnostics tore Solutions	

2. Click on the "MSR" tab:



3. After clicking on the "MSR" tab the screen should look like:

🛓 JavaPOStester in Progres	ss 💶 🗆 🛃
File	
RemoteOrderDisplay S MSR PINPad	cale Scanner SignatureCapture SmartCardRW ToneIndicator Exit PoIntCardRW POSKeyboard POSPower POSPrinter
ElectronicJournal	FiscalPrinter HardTotals Keylock LineDisplay MICR MotionSensor
About Configured Dev	ices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
Logical name	: HPap5000MSR JPOS_S_CLOSED
Open	Claim Release Close Info Statistics Firmware O/C/E EXIT
Auto disable	MSR Reading
Data event enabled	
Device enabled	Track 1 Data:
_	Track 2 Data:
Freeze events	Track 3 Data:
Decode data	Account number:
Parse decode data	Expiration date:
Transmit sentinels	Title:
Per-track error reporting	First name:
Track 1 enabled	Middle initial:
Track 2 enabled	Surname:
Track 3 enabled	Suffix:
Track 4 enabled	Service Code: Track 1 discretionary data:
Clear Input	Track 2 discretionary data:
	Data Count:
	Clear Fields Refresh Fields

The logical name of the device is "HPap5000MSR" which should appear in the logical name field. If another name is present, change the logical name to "HPap5000MSR". If one clicks on the "Configured Device" tab, the names for the device will appear that will be used in the test utility.

- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.

🛓 JavaPOStester in Progre	s 🔹 🗖 🔽
File	
	cale Scanner SignatureCapture SmartCardRW ToneIndicator Exit
MSR PINPa	PointCardRW POSKeyboard POSPower POSPrinter
ElectronicJournal About Configured Dev	FiscalPrinter HardTotals Keylock LineDisplay MICR MotionSensor ces Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
	HPap5000MSR JPOS_S_IDLE
Open	Claim         Release         Close         Info         Statistics         Firmware         O/C/E         EXIT
🔜 Auto disable	MSR Reading
📃 Data event enabled	Track 1 Data:
Device enabled	Track 2 Data: 0
Freeze events	Track 3 Data:
🗹 Decode data	Track 4 Data:
Parse decode data	Account number:
Transmit sentinels	Expiration date:
Per-track error reporting	Title:
Track 1 enabled	Middle initial:
Track 2 enabled	Surname:
Track 3 enabled	Suffix:
Track 4 enabled	Service Code:
	Track 1 discretionary data:
Clear Input	Track 2 discretionary data:
	Data Count: 0
	Clear Fields Refresh Fields

- 6. Check the "DATA EVENT ENABLED" so there is a check box.
- 7. Check the "DEVICE ENABLED" so there is a check box.

🕌 JavaPOStester in Progre	\$5 💶 🗖 🔀
File	
	Scale Scanner SignatureCapture SmartCardRW ToneIndicator Exit
MSR PINPad	
ElectronicJournal About Configured Dev	FiscalPrinter HardTotals Keylock LineDisplay MICR MotionSensor rices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
	e: HPap5000MSR JPOS_S_IDLE
Open	Claim Release Close Info Statistics Firmware O/C/E EXIT
🔜 Auto disable	MSR Reading
🖌 Data event enabled	Track 1 Data:
Device enabled	Track 1 Data:         0           Track 2 Data:         0
Freeze events	Track 3 Data: 0
Decode data	Track 4 Data: 0
Parse decode data	Account number:
Transmit sentinels	Expiration date:
Per-track error reporting	Title:
	First name: Middle initial:
Track 1 enabled	Surname:
Track 2 enabled	Suffix:
Track 3 enabled	Service Code:
Track 4 enabled	Track 1 discretionary data:
Clear Input	Track 2 discretionary data:
	Data Count: 0
	Clear Fields Refresh Fields

8. Swipe a credit card and text should appear in the field. Depending on the type of card there may or may not be information displayed in all of the track field.

🛓 JavaPOStester in	Progress							
File								
RemoteOrderDisp	-		ynatureCaptu	re Smart(	CardRW Ton	eIndicator Exit		
MSR	PINPad	PointCar			SKeyboard	POSP		POSPrinter
ElectronicJou		FiscalPrinter	Hard		Keylock	LineDisplay	MICR	MotionSensor
About Configu	ured Device	es Biometrics	Bump/Bar	CashCha	nger CashD	rawer CAT	CheckScanner	CoinDispense
Logic	cal name:	IPap5000MSR				JPOS_	S_IDLE	
O	pen (	Claim Release	Close	Info	Statistics	Firmware	O/C/E	EXIT
🗌 Auto disable	N	ASR Reading						
🗾 Data event enab	led _	rack 1 Data:	0		ATEOTO	<u>.</u>		
🖌 Device enabled		rack 2 Data:	0	200000000000000000000000000000000000000	0001EST/P	A)000000000000000		
Freeze events		rack 3 Data:	0					
Decode data	Т	rack 4 Data:	0					
Parse decode da	A etc	Account number:		200000000000000000000000000000000000000	x			
Transmit sentine	E	xpiration date:		X000X				
Per-track error re		itle:						
		ïrst name: Aiddle initial:		TEST				
Track 1 enabled		Surname:		P				
Track 2 enabled		Suffix:		<u>г</u>				
Track 3 enabled	5	Service Code:						
Track 4 enabled	Т	rack 1 discretionary	/ data:					
Clear Input		rack 2 discretionary	/ data:					
	D	ata Count: 0						
					Cle	ear Fields Re	fresh Fields	

9. Click on "RELEASE" / "CLOSE" and then click "EXIT" to exit the JPOS test utility.

🛃 JavaPOStester in Progres	ss						_ 🗆 🗵
File							
RemoteOrderDisplay S	cale Scanner	SignatureCapt	ure Sma	rtCardRW To	oneIndicator E	xit	
MSR PINPad		CardRW		OSKeyboard		SPower	POSPrinter
ElectronicJournal	FiscalPrinter		fotals	Keylock	LineDisplay	MICR	MotionSensor
About Configured Dev		Bump/Bar	CashCl	nanger Casi	hDrawer CAT	CheckSca	nner CoinDispenser
Logical name	: HPap5000MSR			<u> </u>	JPOS_S	_CLOSED	
Open	Claim Relea	ise Close	e Info	Statistics	s Firmware	e O/C/E	EXIT
🗌 Auto disable	MSR Reading		_				
🗾 Data event enabled	Track 1 Data:		1				1
Device enabled	Track 1 Data: Track 2 Data:	0		0000(ATEST/P	^>0000000000	XX	
Freeze events	Track 3 Data:	0		0000(=)00000000000	~~		
✓ Decode data	Track 4 Data:	0					
Parse decode data	Account number:		200000000000000000000000000000000000000	000X			
Transmit sentinels	Expiration date:		XXXXX				
	Title:						
Per-track error reporting	First name:		TEST				
Track 1 enabled	Middle initial: Surname:		P				
Track 2 enabled	Suffix:						
Track 3 enabled	Service Code:						
Track 4 enabled	Track 1 discretion	ary data:					
Clear Input	Track 2 discretion	ary data:					
	Data Count: 0						
				(	Clear Fields	Refresh Fields	

# 6.6 HP Magnetic Stripe Readers (MSR)

This section covers the following MSRs:

- HP ElitePOS MSR
- HP Retail Integrated Dual Head Magnetic Stripe Reader
- HP Retail Jacket for Elitepad MSR
- HP RP2 Integrated Single Head MSR w/o SRED
- HP RP7 Single Head Magnetic Stripe Reader w/o SRED
- HP RP9 Integrated Dual-Head MSR
- HP RP9 Integrated Single-Head MSR
- HP USB Mini Magnetic Stripe Reader with Brackets





HP RP9 Integrated Dual-Head MSR



HP RP9 Integrated Single-Head MSR



**HP ElitePOS** 

MSR



HP USB Mini Magnetic Stripe Reader with Brackets



HP Retail Integrated Dual-Head Magnetic Stripe Reader



HP Retail Jacket for Elitepad MSR (two views)



HP RP2 Integrated Single Head MSR w/o SRED



HP RP7 Single Head Magnetic Stripe Reader w/o SRED

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# 6.6.1 Connection

The MSR may be plugged into any free USB port, including powered USB ports. If a powered USB port is used, the powered portion is just not utilized. For All-in-One systems, the MSR may be plugged into any designated free USB port on the display.

#### 6.6.2 Interfaces

The MSR supports the following interfaces:

- USB HID
- USB HID Keyboard (default)

Both interfaces are supported under OPOS.

# 6.6.3 **Configuration**

To change the MSR configuration settings such as interface, the HP MagSwipe Configuration Utility must be used, and is only available through a Softpaq download from <u>HP.COM</u>.

#### **Changing Interface:**

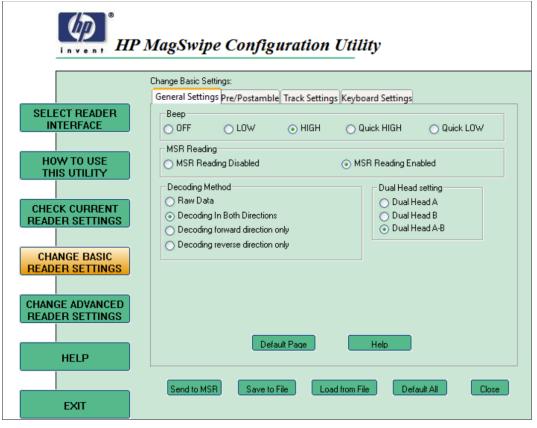
Click the Change Advanced Reader Settings button, make a selection, and click the Send to MSR button.

HP	MagSwipe Configuration Utility
	Change Advanced Settings:
	Output Format Data Editing Quick Clone Manual Command
SELECT READER INTERFACE	USB HID Format: Modifying this setting reset the reader. USB HID Data Format <ul> <li>USB HID Keyboard Data Format</li> </ul>
HOW TO USE THIS UTILITY	
CHECK CURRENT READER SETTINGS	
CHANGE BASIC READER SETTINGS	
CHANGE ADVANCED READER SETTINGS	Help
HELP	
	Send to MSR Save to File Load from File Default All Close
EXIT	

#### **Changing Dual Head setting:**



Click the Change Basic Reader Settings button, make a selection, and click the Send to MSR button.



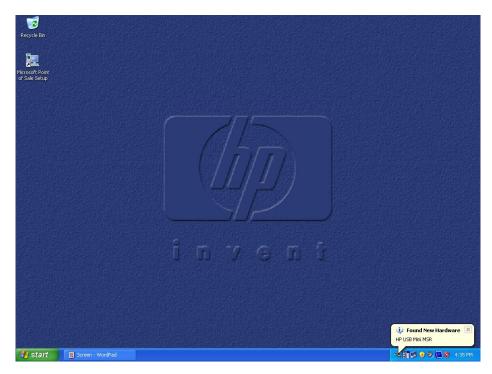
### Changing Track Separator and Terminator:

Click the Change Basic Reader Settings button, click on the Track Settings tab, either make a selection from Non-Printable Char dropdown menu or type in the separator character to be used, and click the Send to MSR button.

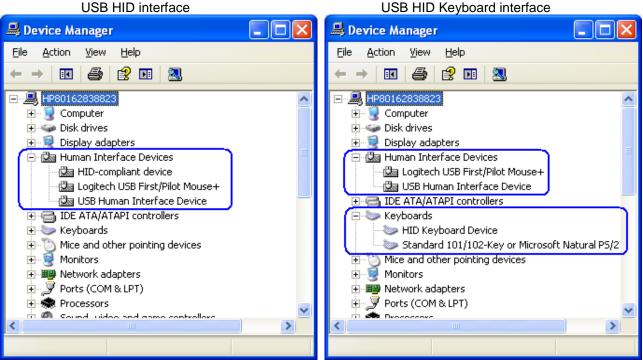
invent HP	MagSwipe Configuration Utility Asta Vetx Vetx
	Change Basic Settings: \enq
	General Settings Pre/Postamble Track Settings Keyboard Setting
SELECT READER	Track Select
INTERFACE	Any Track     Track1 Only     Tr(
	O Track1 And Track2 O Track3 Only O Tr
HOW TO USE	Track2 And Track3 All Three Tracks Tracks
THIS UTILITY	O Track2 Or Track3
CHECK CURRENT	Send Start/End Sentinel Send LRC in Card D
READER SETTINGS	Ex Track 2 Only Sand Associat Number Vdc3
CHANGE BASIC	Send Error Indication \syn
READER SETTINGS	Track Separator: Vcr Non-Printable Char:
CHANGE ADVANCED	Terminator: \cr Non-Printable Char:
READER SETTINGS	
	Default Page Help
HELP	

#### **Windows Drivers** 6.6.4

The MSR is natively supported by the Windows operating system as a Human Interface Device (HID). If during the driver installation Windows displays the new hardware wizard, the user needs to accept the defaults that appear during the hardware wizard GUI (for the first screen you may select the no option) and the native drivers will be loaded. Please refer to "If prompted for native driver location (New Hardware Wizard)" section.



The following is the Windows Device Manager after all drivers are loaded for the MSR in:



USB HID Keyboard interface

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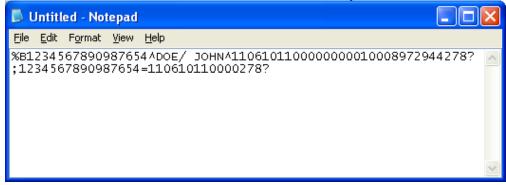
# 6.6.5 OPOS Drivers for the MSR

The MSR OPOS drivers included in the HP factory image (C:\xxxxx\Point of Sale\MSR (USB)\MSR OPOS) and are also available from <u>HP.COM</u>.

# 6.6.6 <u>Testing MSR</u>

#### 6.6.6.1 Testing MSR in USB HID Keyboard interface

Open Microsoft Notepad and swipe a card. If data appears as in the example below, this confirms that the MSR interface is USB HID Keyboard.



If nothing appears in Notepad, the MSR interface is likely set to USB HID. Use HP MagSwipe Configuration Utility to confirm the MSR interface and reconfigure as USB HID Keyboard if necessary.

#### 6.6.6.2 Testing MSR in USB HID or USB HID Keyboard interface with OPOS

The OPOS drivers for the MSR will work with the MSR in either USB HID or USB HID Keyboard interface. In order to test the MSR, the OPOS for HP Mini MSR package must be installed. In order to test the MSR when it is in USB HID interface an OPOS aware application that interfaces with the MSR OPOS drivers is needed in order to confirm that MSR is able to read the data from a card.

The following is overview of the steps to test the MSR followed by detailed steps:

- 1. Launch the MSR OPOS Test utility from Windows start menu.
- 2. Select the MSR OPOS logical name from the drop down menu that you wish to test.
- 3. Click "OPEN" button, if successful will receive and OPOS\_SUCCESS message.
- 4. Click on "CLAIM" button, if successful will receive and OPOS\_SUCCESS message.
- 5. Click on "Device Enabled" so there is a check in the box, if successful will receive and OPOS\_SUCCESS message.
- 6. Swipe a credit card.
- 7. To close the MSR OPOS test application click on RELEASE / CLOSE / EXIT buttons in the order stated.

#### **Detailed Steps**

1. Launch the MSR OPOS Test utility from Windows start menu.

If there is no option for the MSR OPOS Test Utility, the utility is located in C:\xxxxx\Point of Sale\MSR (USB)\MSR OPOS Test Program in the HP factory image and is also available from <u>HP.COM</u>.

	bor of the Mort Test Application.
💯 MSR OPOS Test Program v6.13	
MSR Method:	MSR Properties:
Open	Description Control   Track Control   Track Data   Parsed Data   Card Data   Encryption   Au
Claim	Claimed CapPowerReporting:     AutoDisable
CheckHealth	DeviceEnabled     PowerNotify:
ClearInputProperties	FreezeEvents     PowerState:     DataEventEnabled
ClearInput	EncodingMaxLength: State: CLOSED
	TracksTowrite: DataCount
WriteTracks	CheckHealthText
Release	,
Close	
Test Report:	
	2
1	<u>s</u>
Clear Report Save	e Report

The following is the GUI of the MSR Test Application:

2. Select the MSR OPOS logical name from the drop down menu that you wish to test.

MSR Method:	MSR Properties:	
Open	Description Control Track Control Track PUSBShecMSR - USB USBHID/USBKB HPUSBDualMSR - USB USBHID/USBKB	
Claim	Claimed CapPowerReporting: AutoDisable	
CheckHealth	DeviceEnabled     PowerNotify:     FreezeEvents	
ClearInputProperties	PowerState:	
ClearInput	EncodingMaxLength: CLOSED TracksTowrite: DataCount	
WriteTracks	CheckHealthText:	
Release	,	
Close		
Test Report.		

3. Click "OPEN" button, if successful will receive and OPOS\_SUCCESS message.

MSR OPOS Test Program v6.11				
MSR Method:	MSR Properties:	HPUSB	DualMSR - USB USBHID/USBKB	•
Open	Description Control Tra	ack Control   Track Data	Parsed Data   Card Data   Encryption	Au 🔹 🕨
Claim	☐ Claimed	CapPowerReporting:	NONE	
CheckHealth	DeviceEnabled	PowerNotify:	DISABLED	
ClearInputProperties	☐ FreezeEvents ☐ DataEventEnabled	PowerState:	UNKNOWN	
ClearInput	EncodingMaxLength:	0 State:	IDLE	
	TracksTowrite: 0	DataCount:	0	
WriteTracks	CheckHealthText:			
Release				
Close				
Test Report:				
05:50:23 SetTracksToRead: Succ 05:50:23 Open: Succeeded!	eededl			
				~
Clear Report Save	Report		Exit	

4. Click on "CLAIM" button, if successful will receive and OPOS\_SUCCESS message.

MSR OPOS Test Program v6.11				
MSR Method:	MSR Properties:	HPUSE	DualMSR - USB USBHID/USBKB	•
Open	Description Control Track C	Control   Track Data	Parsed Data Card Data Encryption	Au • •
Claim	I Claimed Cap Cap	PowerReporting:	NONE	
CheckHealth	DeviceEnabled	PowerNotify:	DISABLED	
ClearInputProperties	FreezeEvents DataEventEnabled	PowerState:	UNKNOWN	
ClearInput	EncodingMaxLength: 0	State:	IDLE	
	TracksTowrite: 0	DataCount	0	
WriteTracks	CheckHealthText:			
Release	,			
Close				
Test Report:				
05:50:23 SetTracksToRead: Succ 05:50:23 Open: Succeeded 05:50:35 Claim: Succeeded	eeded!			
Clear Report Save	Report		Exit	<u>~</u>

5. Click on "Device Enabled" so there is a check in the box, if successful will receive and OPOS\_SUCCESS message.

MSR OPOS Test Program v6.11				
MSR Method:	MSR Properties:	HPUSB	DualMSR - USB USBHID/USBKB	•
Open	Description Control Tr	ack Control   Track Data	Parsed Data Card Data Encryption	Au 🔸 🕨
Claim	☑ Claimed □ AutoDisable	CapPowerReporting:	NONE	
CheckHealth	✓ DeviceEnabled	PowerNotify:	DISABLED	
ClearInputProperties	☐ FreezeEvents ✓ DataEventEnable	PowerState: d	UNKNOWN	
ClearInput	EncodingMaxLength:	0 State:	IDLE	
WriteTracks	TracksTowrite: 0 CheckHealthText;	DataCount:	0	
Release		J		
Close				
Test Report:				
05:50:23 SetTracksToRead: Suc 05:50:23 Open: Succeeded 05:50:35 Claim: Succeeded 05:51:20 SetDeviceEnabled: Suc				<ul> <li></li> </ul>
Clear Report Save	e Report		Exit	

#### 6. Swipe a credit card.

MSR OPOS Test Program v6.11				
MSR Method:	MSR Properties:	HPUSB	MiniMSR - USB USBHID/USBKB	-
Open	Description Control Track	Control   Track Data	Parsed Data Card Data Encryption	Au◀►
Claim	I Claimed Ca □ AutoDisable	pPowerReporting:	NONE	
CheckHealth	✓ DeviceEnabled	PowerNotify:	DISABLED	
ClearInputProperties	☐ FreezeEvents ☑ DataEventEnabled	PowerState:	UNKNOWN	
	EncodingMaxLength: 0	State:	IDLE	
ClearInput	TracksTowrite: 0	 DataCount:	0	
WriteTracks	CheckHealthText:		J-	
Release	,			
Close				
Test Report:				
	-have data. Event is received. 002037			^
05:54:49 Track1Data Le 05:54:49 Track2Data Le 05:54:49 Track2Data Le 05:54:49 Track3Data Le	ngth: 0x37 ngth: 0x20 ngth: 0x00			
Clear Report Save	Report		Exit	

MSR OPOS Test Program v6.11			
MSR Method:	MSR Properties:	HPUSBMiniMSR - USB USBHID/USBKB	•
Open	Description Contro	rol   Track Control Track Data   Parsed Data   Card Data   Encryption   Au	• •
Claim	Track1Data:	B4019811934345704^SHARMA/SHASHI^10111011000000536000000	
CheckHealth	Track1Discretio	onaryData: 1000000536000000	
ClearInputProperties	Track2Data:	4019811934345704=101110110000536	
ClearInput	Track2Discretio	onaryData: 10000536	
Cicampa	Track3Data:		
WriteTracks	Track4Data:		
Release			
Close			
Test Report:			
	ength: 0x20 ength: 0x00		<
Clear Report Save	Report	Exit	

Click on "TRACK DATA" tab to see the data that was read.
----------------------------------------------------------

MSR OPOS Test Program v6.11		
MSR Method:	MSR Properties:	HPUSBMiniMSR - USB USBHID/USBKB
Open	Description   Control   Tre	ack Control   Track Data (Parsed Data) Card Data   Encryption   Au 💶 🕨
Claim	AccountNumber:	4019811934345704
	ExpirationDate:	1011
CheckHealth	FirstName:	SHASHI
ClearInputProperties	MiddleInitial:	
	Surname:	SHARMA
ClearInput	Title:	
WriteTracks	Suffix:	
	ServiceCode:	101
Release		,
Close		
Test Report:		
		<u> </u>
	00002037	
05:54:49 Track2Data L 05:54:49 Track3Data L	ength: 0x20	
05:54:49 Track4Data L		
Clear Report Sav	/e Report	Exit

🕼 MSR O	POS Test Program v6.11			X
MSF	R Method:	MSR Properties:	HPUSBMiniMSR - USB USBHID/USBKB	•
	Open	Description Control T	Track Control   Track Data   Parsed Data Card Data Encryption   Au	
	Claim	CardType:	ЗАЛК	
	CheckHealth	CardTypeList:	BANKAAMVA	
C	2) DearInputProperties	CardPropertyList:		
		ExpirationDate,FirstN	Name,ServiceCode,AccountNumber,Sumame	
	ClearInput	Choose CardProper	erty: ExpirationDate	
	WriteTracks		retrieveCardProperty	
	Release	PropertyValu	ue: 1011	
	Close			
Test	Report:			
05:54:44 05:55:5- 05:55:5- 05:55:55 05:55:05 05:56:01 05:56:01	9 Track4Date 4 retrieveCardProperty: 9 retrieveCardProperty: 2 retrieveCardProperty: 6 retrieveCardProperty:			<
	Clear Report Si	ave Report	Exit	

In order to test another card swipe it is recommended to click on the "ClearInputProperties" and "ClearInput" button to remove all the data that appears in the test application.

MSR OPOS Test Program v6.11			
MSR Method:	MSR Properties:	HPUSBMiniMSR - USB USBHID/USBKB	Ţ
Open		ack Control   Track Data   Parsed Data   Card Data   Encryption   Au 4	
Claim	AccountNumber:	4019811934345704	
CheckHealth	ExpirationDate: FirstName:	1011 SHASHI	
ClearInputProperties	MiddleInitial:		
ClearInput	Sumame:	SHARMA	
WriteTracks	Title: Suffix:		
Belease	ServiceCode:	101	
Close			
Test Report:	·		
	—have data. aEvent is received. 0002037		^
05:54:49 Track1Data Le 05:54:49 Track2Data Le 05:54:49 Track2Data Le 05:54:49 Track3Data Le	ength: 0x37 ength: 0x20 ength: 0x00		
	, .		*
Clear Report Save	e Report	Exit	

7. To close the MSR OPOS test application click on RELEASE / CLOSE / EXIT buttons in the order stated.

MSR OPOS Test Program v6.11		
MSR Method:	MSR Properties: HPUSBMiniMSR - USB USBHID/USBKB	•
Open	Control   Track Control   Track Data   Parsed Data   Card Data   Encryption   Authentication	
Claim	CardType:	
CheckHealth	CardTypeList BANKAAMVA	
ClearInputProperties	CardPropertyList	
ClearInput	, Choose CardProperty:	
WriteTracks	retrieveCardProperty	
Release	Property-Value:	
Close		
Test Report: 06:01:44 retrieveCardProperty:	Succeeded!	~
06:01:48 OnBtnMsrRelease:To 06:01:49 Release: Succeeded! 06:01:50 Close:	release.	
06:01:50 Close: Set DeviceEnal 06:01:50 Close: Release 06:01:51 Close: Succeeded!	Jied to FALSE;	
Clear Report Save	Report	

# 6.6.7 JPOS Drivers for the MSR

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\MSR (USB)\MSR JPOS) and are also available from <u>HP.COM</u>.

The "MSR Keyboard Base Driver" must also be installed on the unit either via the standalone package (which is part of the JPOS softpaq / folder) or via the OPOS drivers installed on the unit.

The following is overview of the steps to test the receipt printer followed by detailed steps:

- 1. Start the JPOS test utility.
- 2. Click on the "MSR" tab.
- 3. Click on the "OPEN" button.
- 4. Click on the "CLAIM" button and there will be four beeps from the MSR.
- 5. Check the "DATA EVENT ENABLED" so there is a check box.
- 6. Check the "DEVICE ENABLED" so there is a check box.
- 7. Swipe a credit card and text should appear in the field.
- 8. Click on "RELEASE" and then click "EXIT" to exit the JPOS test utility.

#### **Detailed Steps**

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the MSR (standalone) folder.

After a few seconds the JPOS test utility GUI will appear as shown below:

· · · · · ·
📓 JavaPOStester in Progress
File
RemoteOrderDisplay Scale Scanner SignatureCapture SmartCardRW ToneIndicator Exit
MotionSensor MSR PINPad PointCardRW POSKeyboard POSPower POSPrinter
CoinDispenser Electronic Journal FiscalPrinter HardTotals Keylock LineDisplay MICR
About Configured Devices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner
POSTest
The JavaPOS Device Tester.
v1.13.3
POStest is a community project under the direction of the JavaPOS working group.
Original code donated by 360 Commerce.
Contributors:
Jeff Lange - Ultimate Technology Corporation
Rory K. Shaw - IBM/Raleigh RSS Drivers and Diagnostics
William White - IBM/Raleigh Retail Store Solutions Bracci A. Sistemi Digitali s.r.l. Pisa (Italy)

2. Click on the "Configured Device" tab to obtain the device names.

RemoteOrderDispl		Scanner	Signatu	· ·			ToneInd		Exit		
MotionSensor	MSR	PINPad	PointCa		POSKeybo		POSP			Printer	
CoinDispenser		icJournal	FiscalP		HardTotals			LineDi	·	olay MICR CheckScanner	
About Configure	ed Devices	Biometrics	Bump	Bar	CashChanger	Cash	Drawer	CAT	Спеск	scanner	
Below is a list of	the devices	found in your i	noe vml	filo							
Category	the devices	Logical Name		ile.	Vendor		F	Product N	lame		
ISR	HPUSBE	ualMSR		HP		HP US	B Dual H	leaded M	ISR		
ISR	HPUSBN	1iniMSR		HP		HP US	B Mini MS	3R			
SR	HPUSBS	hecMSR		HP		HP US	B Single	Headed	MSR		

# 3. Click on the "MSR" tab:

File							
RemoteOrderDispla		SignatureCaptu				Exit	
MotionSensor							Printer
CoinDispenser	ElectronicJournal	FiscalPrinter	HardTotals	Keylock	ylock LineDi		MICR
About Configure	d Devices Biometric	s Bump/Bar	CashChanger	CashDrawer	CAT	Checks	Scanner
Below is a list of f	the devices found in you	r jpos.xml file.					
Category	Logical Nan	ne	Vendor	F	Product N	lame	
MSR	HPUSBDualMSR	HP		HP USB Dual H		ISR	
WSR WSR	HPUSBMiniMSR	HP		HP USB Mini M			
		IHP		IHP USB Single	Headed	MSR	
	HPUSBShecMSR	HP		HP USB Single	Headed	MSR	

Ū		
🕌 JavaPOStester in Progr	ress	
File		
RemoteOrderDisplay Se	cale Scanner SignatureCaptu	ure SmartCardRW ToneIndicator Exit
MSR PINPa		POSKeyboard POSPower POSPrinter
ElectronicJournal		ardTotals Keylock LineDisplay MICR MotionSensor
About Configured Dev	vices Biometrics Bump/B	Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
Logical Name:	defaultMSR	State: JPOS_S_CLOSED PowerState: JPOS_PS_UNKNOWN
Open	Claim Release Cl	lose Info Statistics Firmware O/C/E EXIT
Auto disable	MSR Reading Authentication	MSR Writing
Data event enabled	Track 1 Data:	
Device enabled	Track 2 Data:	
Freeze events	Track 3 Data:	
Decode data	Track 4 Data:	
Parse decode data	Track 1 Encrypted Data:	
Transmit sentinels	Track 2 Encrypted Data:	
Per-track error reporting	Track 3 Encrypted Data:	
Track 1 enabled	Track 4 Encrypted Data: Additional Security Information:	
	Account number:	
Track 2 enabled	Expiration date:	
Track 3 enabled	Title:	
Track 4 enabled	First name:	
DeviceAuthenticated	Middle initial:	
Power notify	Surname:	
Clear Input	Suffix:	
Clear Input Properties	Service Code:	
cical inpactioperates	Track 1 discretionary data:	
	Track 2 discretionary data:	
	Data Count:	Clear Fields

# After clicking on the "MSR" tab the screen should look like:

#### 4. Enter the device name:

File														
RemoteOrderDisplay	Scale	Scanner	Signatu	reCaptu	re Sm	artCardRV	N	ToneIndicat	or	Exit				
MSR PIN	Pad	1	PointCardR	w		POSK	eyboa	ard	r	POSP	ower			POSPrinter
Electronic Journal		FiscalPr			dTotals		eyloc			isplay	MI			MotionSensor
About Configured	Devices	Biome	trics E	Bump/Ba	r Ca	ashChange	भ	CashDraw	ver	CAT	Check	Scanne	er	CoinDispense
Logical Nam	e HPUSE	MiniMSR			State:	JPOS_S_0	CLOSI	ED I	Powe	erState: JF	OS_PS	UNKNO	NWN	
Ope	n C	laim	Release	Clo	se	Info	Stat	tistics	Firn	nware	O/C/E		exit	
Auto disable	en a devic	e	Authenti		MSRW	he life in an								
—	WSR	rreading	Aumenue	cation	MSRW	riung								
Data event enabled	Trac	k 1 Data:												
Device enabled	Trac	k 2 Data:												
Freeze events	Trac	k 3 Data:												
🗌 Decode data	Trac	k 4 Data:												
🗖 Parse decode data		k 1 Encryp												
Transmit sentinels		k 2 Encryp												
Per-track error reportir		k 3 Encryp												
	- nao	k 4 Encryp												
Track 1 enabled		tional Secu ount numbe	-	auon:										
Track 2 enabled		ration date			-									
Track 3 enabled	Title				_									
Track 4 enabled		name:			_									
DeviceAuthenticated		lle initial:			_									
Power notify	Surn	ame:												
Clear Input	Suffi	ix:												
•	Serv	ice Code:												
Clear Input Properties	Trac	k 1 discret	ionary data	a:										
	Trac	k 2 discret	ionary data	a:										
	Data	Count:								Clear Fie	de			

If one clicks on the "Configured Device" tab, the names for the device will appear that will be used in the test utility.

**Note:** In JPOS utility, the name is case sensitive.

5. Click on the "OPEN" button; the MSR will beep several times.

📓 JavaPOStester in Prog	ress						
File							
RemoteOrderDisplay 9	Scale Scanner	SignatureCapture	SmartCardR	W ToneIndic	ator Exit		
MSR PINP	ad Poi	intCardRW	POSI	Keyboard	POSP	ower	POSPrinter
ElectronicJournal	FiscalPrint			Keylock	LineDisplay	MICR	MotionSensor
About Configured De	evices Biometri	cs Bump/Bar	CashChang	ger CashDr	awer CAT	CheckScan	ner CoinDispenser
Logi <u>cal Nam</u>	e: HPUSBMiniMSR		State: JPOS_	S_IDLE	PowerState: JP0	S_PS_UNKNO	NMN .
Open	Claim R	elease Close	Info	Statistics	Firmware	O/C/E	EXIT
🔄 Auto disable	MSR Reading	Authentication M	SR Writing				
🔲 Data event enabled	Track 1 Data:	0					
🔲 Device enabled	Track 2 Data:	0	_				
🔲 Freeze events	Track 3 Data:	0					
🖌 Decode data	Track 4 Data:	0					
🖌 Parse decode data	Track 1 Encrypted	<u></u>					
Transmit sentinels	Track 2 Encrypted Track 3 Encrypted						
🔲 Per-track error reporting	Track 4 Encrypted						
🗹 Track 1 enabled	Additional Securit						
🖌 Track 2 enabled	Account number:						
🖌 Track 3 enabled	Expiration date:						
Track 4 enabled	Title: First name:						
DeviceAuthenticated	First name: Middle initial:						
Power notify	Surname:						
Clear Input	Suffix:						
· · · · · · · · · · · · · · · · · · ·	Service Code:						
Clear Input Properties	Track 1 discretion	nary data:					
	Track 2 discretion	nary data:					
	Data Count: 0				Clear Fie	lds	

6. Click on the "CLAIM" button; the MSR will beep several times.

🕌 JavaPOStester in Progr	ess					
File						
RemoteOrderDisplay So	cale Scanner SignatureCap	oture SmartC	ardRW ToneInd	icator Exit		
MSR PINPad			POSKeyboard	POSPO		POSPrinter
Electronic Journal		lardTotals	Keylock	LineDisplay	MICR	MotionSensor
About Configured Dev	vices Biometrics Bump	Bar CashC	hanger CashE	Drawer CAT	CheckScan	ner CoinDispenser
Logical Name:	HPUSBMiniMSR	State: JP	OS_S_IDLE	PowerState: JPO	S_PS_UNKNO	WN
Open	Claim Release	Close Info	5 Statistics	Firmware	O/C/E	EXIT
🔲 Auto disable	MSR Reading Authentication	MSR Writin	9			
🔲 Data event enabled	Track 1 Data:	0				
🔲 Device enabled	Track 2 Data:	0				
Freeze events	Track 3 Data:	0				
🖌 Decode data	Track 4 Data:	0				
🖌 Parse decode data	Track 1 Encrypted Data:	0				
Transmit sentinels	Track 2 Encrypted Data: Track 3 Encrypted Data:	0				
Per-track error reporting	Track 4 Encrypted Data:	0				
Track 1 enabled	Additional Security Information:					
✓ Track 2 enabled	Account number:					
✓ Track 3 enabled	Expiration date:					
 Track 4 enabled	Title:					
DeviceAuthenticated	First name: Middle initial:					
Power notify	Surname:					
Clear Input	Suffix:					
	Service Code:					
Clear Input Properties	Track 1 discretionary data:					
	Track 2 discretionary data:					
	Data Count: 0			Clear Fie	lds	

- 7. Check the "DATA EVENT ENABLED" so there is a check box.
- 8. Check the "DEVICE ENABLED" so there is a check box.

🙆 JavaPOStester in Prog	ress 🔲 🗖 🗙
File	
RemoteOrderDisplay Se	cale Scanner SignatureCapture SmartCardRW ToneIndicator Exit
MSR PINPa	d PointCardRW POSKeyboard POSPower POSPrinter
ElectronicJournal	FiscalPrinter HardTotals Keylock LineDisplay MICR MotionSensor
About Configured Dev	vices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
Logical Name	: HPUSBMiniMSR State: JPOS_S_IDLE PowerState: JPOS_PS_UNKNOWN
Open	Claim         Release         Close         Info         Statistics         Firmware         O/C/E         EXIT
🔲 Auto disable	MSR Reading Authentication MSR Writing
🖌 Data event enabled	Track 1 Data:
✓ Device enabled	Track 2 Data:
Freeze events	Track 3 Data: 0
🖌 Decode data	Track 4 Data: 0
🖌 Parse decode data	Track 1 Encrypted Data:
Transmit sentinels	Track 2 Encrypted Data: 0
Per-track error reporting	Track 3 Encrypted Data:         0           Track 4 Encrypted Data:         0
<ul> <li>Track 1 enabled</li> </ul>	Track 4 Encrypted Data: 0 Additional Security Information:
Track 2 enabled	Account number:
	Expiration date:
✓ Track 3 enabled	Title:
Track 4 enabled	First name:
DeviceAuthenticated	Middle initial:
Power notify	Surname:
Clear Input	Suffix:
Clear Input Properties	Service Code:
	Track 1 discretionary data:
	Det Grunt G
	Data Count: 0 Clear Fields

9. Swipe a credit card and text should appear in the field. Depending on the type of card there may or may not be information displayed in all of the tracks field.

📓 JavaPOStester in Progr	ress					
File						
RemoteOrderDisplay Se	cale Scanner SignatureCap	oture Sm	artCardRW Tonel	ndicator Exit		
MSR PINPa			POSKeyboard		Power	POSPrinter
ElectronicJournal		lardTotals	Keylock	LineDisplay	MICR	MotionSensor
About Configured Dev	vices Biometrics Bump	/Bar Ca	shChanger Cas	shDrawer CAT	CheckScanne	er CoinDispenser
Logical Name	: HPUSBMiniMSR	State	: JPOS_S_IDLE	PowerState: JP	OS_PS_UNKNOW	/N
Open	Claim Release	Close	Info Statistic:	s Firmware	O/C/E	EXIT
Auto disable	MSR Reading Authentication	MSRW	iting		· ·	
Data event enabled			- 1			
Device enabled	Track 1 Data:		11000991000500^F		1210110000	
	Track 2 Data:		1000991000500=07	1210110000		
Freeze events	Track 3 Data:	0				
🗹 Decode data	Track 4 Data:	0				
🖌 Parse decode data	Track 1 Encrypted Data: Track 2 Encrypted Data:	0				
Transmit sentinels	Track 3 Encrypted Data:	0				
Per-track error reporting	Track 4 Encrypted Data:	0				
Track 1 enabled	Additional Security Information					
Track 2 enabled	Account number:	601	1000991000500			
_	Expiration date:	071				
✓ Track 3 enabled	Title:					
Track 4 enabled	First name:	FDN	15			
DeviceAuthenticated	Middle initial:					
Power notify	Surname:					
Clear Input	Suffix:					
Clear Input Properties	Service Code:	101				
cital inpact roperties	Track 1 discretionary data:	100				
	Track 2 discretionary data:	100	00			
	Data Count: 0			Clear Fi	elds	

### 10. Click on "RELEASE" button.

🛃 JavaPOStester in Pr	ogress										
File											
RemoteOrderDisplay	Scale	Scale Scanner SignatureCapture			SmartCardRW ToneIndicator Exit						
MSR PIN	Pad	7	PointCard	RW	PC	SKeyboard		POSP	ower	POSPI	inter
Electronic Journal	r	FiscalP	rinter	HardT	otals	Keylock	LineD	isplay	MICR	Motion	Sensor
About Configured	Devices	Biom	etrics	Bump/Bar	CashCha	nger Cash	Drawer	CAT	CheckScar	nner Coin	Dispenser
Logical Na	me: HPU	SBMiniMS	R		State: JPOS	S_S_IDLE	Powers	State: JPC	DS_PS_UNKNO	D <b>WN</b>	
Оре	n C	laim	Release	Close	Info	Statistics	Firm	nware	O/C/E	EXIT	
🔲 Auto disable	MSF	Reading	Authenti	ication N	ISR Writing						
🔲 Data event enabled	Trac	k 1 Data:		57	B6011000	991000500^FD	MS	^071	210110000		
🖌 Device enabled	Trac	k 2 Data:		29	60110009	91000500=071	21011000	0			
🔲 Freeze events	Trac	k 3 Data:		0							
Decode data	Trac	k 4 Data:		0							
Parse decode data	Trac	k 1 Encry	oted Data:	0							
Transmit sentinels			oted Data:	0							
			oted Data:	0							
Per-track error reportir	- 1140		oted Data:	0							
🗹 Track 1 enabled			urity Inforn	nation:							
🗹 Track 2 enabled		ount numb ration dat			60110009	91000500					
🖌 Track 3 enabled	Title		<i>.</i>		0712						
🔲 Track 4 enabled		name:			FDMS						
DeviceAuthenticated		lle initial:			P DWO						
Power notify	Surr	ame:									
Clear Input	Suff	ix:									
i	Serv	ice Code:			101						
Clear Input Properties	Trac	k 1 discre	tionary dat	a:	10000						
	Trac	k 2 discre	tionary dat	a:	10000						
	Data	Count: 0						Clear Fie	elds		

11. Click on "CLOSE" button and the click on "EXIT" to exit the JPOS test utility.

🕌 JavaPOSte	ester in Progre	ess											
File													
RemoteOrde			Signat		pture	SmartCar		ToneIndia	cator	Exit			
MSR	PINPad		PointCard				SKeybo		ľ	POSP		Ľ, —	POSPrinter
	nicJournal	FiscalPr			HardTo		Keyloo			isplay	MICR	ſ	MotionSensor
About	Configured Devi	ces Biome	etrics	Bump	)/Bar	CashCha	nger	CashDi	rawer	CAT	CheckSc	anner	CoinDispenser
	Logical Name:	HPUSBMiniMSF	२			State: JPOS	_S_IDLI	E	Powers	State: JPC	S_PS_UNK	NOWN	
	Open	Claim	Release	- 1 (	Close	Info	Sta	tistics	Firm	nware	O/C/E	EXIT	
🔲 Auto disabl	le (	MSR Reading	Authen	ticatio	n MS	SR Writing							
Data event	· ·	5											
		Track 1 Data:			57	B6011000	9910006	500AFDM8	3	^071	210110000		
Device ena		Track 2 Data:			29	60110009	9100050	00=07121	011000	0			
Freeze eve	ints	Track 3 Data:			0								
🖌 Decode da	ita	Track 4 Data:			0	ļ							
🖌 Parse deco	ode data	Track 1 Encryp			0	<u> </u>							
🔲 Transmit s	entinels	Track 2 Encryp Track 3 Encryp			0	<u> </u>							
Per-track e	rror reporting	Track 3 Encryp			0								
Track 1 ena		Additional Sec			1								
Track 2 ena		Account numb	-			60110009	9100050	10					
		Expiration date	:			0712							
✓ Track 3 ena		Title:											
Track 4 ena	abled	First name:				FDMS							
DeviceAuth	nenticated	Middle initial:											
Power notif	fy	Surname:											
Clear Input		Suffix:											
Clear Input		Service Code:				101							
cical input	riopendes	Track 1 discre	-			10000							
		Track 2 discre	tionary da	ita:		10000							
		Data Count: 0								Clear Fie	elds		
				_									

### 6.7 <u>HP Barcode Scanner (Laser 1D)</u>

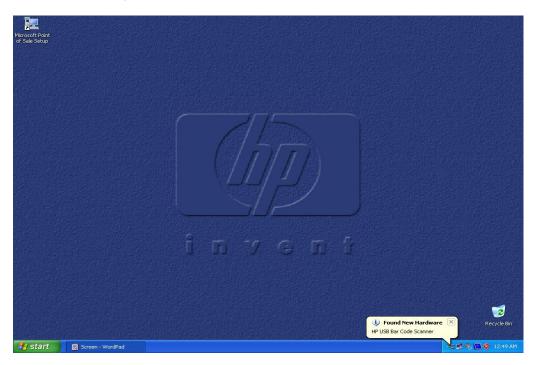


# 6.7.1 <u>Connection</u>

The barcode scanner may be plugged into any free USB port. One may plug the barcode scanner into the power USB port in the 5V part of USB port, when plugged in this configuration the power portion of USB port is not utilized.

### 6.7.2 Windows Drivers for the Barcode Scanner

The HP POS scanner uses native drivers for Windows operating system. If during the driver installation Windows displays the new hardware wizard, the user needs to accept the defaults that appear during the hardware wizard GUI (for the first screen you may select the no option) and the native drivers will be loaded. Please refer to "<u>If prompted for native driver location</u> (<u>New Hardware Wizard</u>)" section.



The following is the Device Manager window after all the drivers are loaded for the HP USB Barcode Scanner (default mode):

🖳 Device Manager
Eile Action View Help
HP-B9TNM9S5SPPM     Gomputer     Josh drives     Josh dri
⊕ ■ Ramdisk ⊕ •

The following is the Device Manager window after all the drivers are loaded for the HP USB Barcode Scanner when it is in the OPOS mode:

🚇 Device Manager	
<u>File Action View H</u> elp	
Image: HP-B9TMM9555PPM         Image: Computer         Image: Display adapters         Image: Display adapters	

### 6.7.3 OPOS Drivers for the Barcode Scanner

There are no OPOS drivers needed for this device if the device is used in the human interface device (HID) keyboard emulation mode (default mode as shipped from the factory).

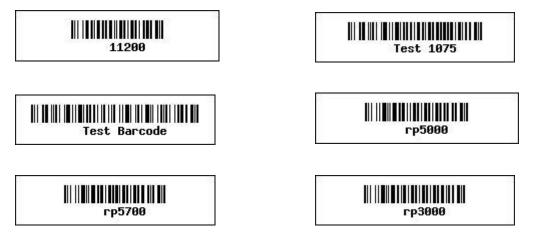
If the POS application needs the OPOS drivers, the barcode OPOS drivers can be found on <u>HP.COM</u>. The drivers are already installed in the HP factory image; for reference the drivers are located in the "C:\xxxxx\Point of Sale\Barcode Scanner\Barcode Scanner OPOS" subdirectory.

### 6.7.4 <u>Testing the Barcode Scanner</u>

#### 6.7.4.1 Testing Barcode Scanner in non-OPOS

The default mode of the scanner is non-OPOS mode when shipped from HP. In order to test the scanner in non-OPOS mode one can open an application like Microsoft Notepad and scan a barcode when the scanner is in default scanner mode.

You may use one of the barcodes below for testing if you do not have an item with a barcode handy.



#### 6.7.4.2 Testing the Barcode Scanner in OPOS

The Barcode Scanner must be in OPOS mode (IBM Hand-Held USB mode). If one is not sure what mode the scanner is in, open an application like notepad and scan a barcode. If the scanner is in OPOS mode, when you scan a barcode in Notepad nothing will appear in Notepad. If something appears in Notepad the scanner is HID Keyboard emulation mode.

To put the scanner in OPOS mode one needs to scan the barcode below:



BM Hand-Held USE

There is a PDF file included in the HP factory image (C:\xxxxx\Point of Sale\Barcode Scanner\Barcode Scanner OPOS) and available from <u>HP.COM</u> with the barcode to put the scanner into OPOS mode as well as in the HID keyboard emulation mode and other modes.

The following is an overview of the steps to test the Barcode Scanner followed by detailed steps:

- 1. Launch the barcode scanner OPOS Test utility from Windows start menu
- 2. Click "Open Service Object"
- 3. Click on OK after confirming "HP\_USBSCANNER" is shown for the service object name.

- 4. Click on "Enable Scan"
- 5. Scan a barcode.
- 6. Click on "Disable Scan" to stop scanning with the OPOS test utility.
- 7. Click on "Close" to close the test application.

#### **Detailed Steps**

- 1. Launch the barcode scanner OPOS Test utility from Windows start menu from the "HP USB Barcode Scanner" or from the "HP Point of Sale Information" menu.
- 2. Click "Open Service Object"

💑 TestScan	
Scan data:	Open Service Object
Enable Scan Disable Scan	Close

3. Click on OK after confirming "HP\_USBSCANNER" is shown for the service object name.

Open Service Object	<b></b>
Service Object Name:	OK ]
HP_USBSCANNER	Cancel

4. Click on "Enable Scan"

💑 TestScan	X
Scan data:	Open Service Object
Enable Scan Disable Scan	Close

- 5. Scan a barcode.
- 6. Click on "Disable Scan" to stop scanning with the OPOS test utility.
- 7. Click on "Close" to close the test application.

### 6.7.5 JPOS Drivers for the Barcode Scanner

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Barcode Scanner\Barcode Scanner JPOS) and are also available from <u>HP.COM</u>.

In order for the scanner to work with JPOS driver, the scanner must be programmed into the "IBM HAND-HELD USB" / OPOS mode. In order to put the scanner into this mode, scan the bard code below:



#### IBM Hand-Held USB

**Note:** The HIDScanWin32.DLL is copied to working JAVA directory "C:\Program Files\Java\xxxx\bin" when the test utility is launched. An example of JAVA directory is "C:\Program Files\Java\jre1.6.0\_01\bin", "jre1.6.0\_01" reflects the version that is installed on the unit.

The following is overview of the steps to test the barcode scanner followed by detailed steps: Start the JPOS test utility.

- 1. Start the JPOS test utility using the link in the START MENU:
- 2. Click on the "Scanner" tab.
- 3. Click on the "OPEN" button.
- 4. Click on the "CLAIM" button. After clicking on the "CLAIM" button a check should appear next to the "CLAIMED" box.
- 5. Check the "DEVICE ENABLED" so there is a check box.
- 6. Check the "AUTO DATA EVENT ENABLE" so there is a check box.
- 7. Check the "DATA EVENT ENABLED" so there is a check box.
- 8. Check the "DECODE DATA" so there is a check box.
- 9. Scan a bar code.
- 10. Click on "RELEASE" or "CLOSE" to exit the JPOS test utility.

#### **Detailed Steps**

 Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder for barcode scanner (C:\xxxxx\Point of Sale\Barcode Scanner\Barcode Scanner JPOS" folder). After a few seconds the JPOS test utility GUI will appear as shown below:



2. Click on the "Scanner" tab:

💰 JavaPOStester in Progress	_ 🗆 ×
File	
POSPower POSPrinter RemoteOrderDisplay Scale Scanner SignatureCapture ToneIndicator Exit	
HardTotals Keylock LineDisplay MICR MotionSensor MSR PINPad PointCardRW POSKe	
About Configured Devices Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser Fisca	alPrinter
POSTest	
The JavaPOS Device Tester.	
v1.9.1	
POStest is a community project under the direction of the JavaPOS working group.	
Original code donated by 360 Commerce.	
Contributors:	
Jeff Lange - Ultimate Technology Corp.	
Rory K. Shaw - IBM/Raleigh RSS Drivers and Diagnostics	

🕹 JavaPOStester in Progress ile									_ □
	V Devente Or dev Die	days V Carala		-1 0 1	V	ter K Fed	•		
POSPower POSPrinter HardTotals Keylock	RemoteOrderDis LineDisplay	play Scale MICR	Scanner Sig MotionSensor	natureCapture MSR		ator ∣⊂Exi PointCardF		POSKeyt	hrea
About Configured Devic		CashChange			heckScanner		spenser	Fiscal	
		custicitunge	casibilatio			combi	-		Tinto
.ogical name: HP_USBSCA	NNER	nknown Ope	en Claim	Release	Close	Info	Fast mo	ode	EXI
Claimed Sc	an Data:								
Auto disable	an Data Type:								
Sci	an Data Label:								
Auto data event enable Sc	an Data Count:								
Data event enabled	anner Health:			_					
			Clear Data						
Freeze events									
Decode data									
Check Health									

After clicking on the "Scanner" tab the screen should look like:

The logical name of the device is "HP\_USBSCANNER". If one clicks on the "Configured Device" tab, the names for the device will appear that will be used in the test utility.

- 3. Click on the "OPEN" button.
- 4. Click on the "CLAIM" button. A check should appear next to the "CLAIMED" box.

avaPOStester in Progress
SPower POSPrinter RemoteOrderDisplay Scale Scanner SignatureCapture ToneIndicator Exit
lardTotals Keylock LineDisplay MICR MotionSensor MSR PINPad PointCardRW POSKeyboard
oout   Configured Devices   Bump/Bar   CashChanger   CashDrawer   CAT   CheckScanner   CoinDispenser   FiscalPrinter
ical name: HP_USBSCANNER unknown Open Claim Release Close Info Fast mode EXIT
Claimed Scan Data:
Auto disable D (Unknown)
Device enabled Scan Data Count:
Auto data event enable Scanner Health:
Data event enabled Clear Data
Freeze events
Decode data
Check Health

- 5. Check the "DEVICE ENABLED" so there is a check box.
- 6. Check the "AUTO DATA EVENT ENABLE" so there is a check box.
- 7. Check the "DATA EVENT ENABLED" so there is a check box.
- 8. Check the "DECODE DATA" so there is a check box.

🕌 JavaPOSte	ster in Progre	55						
File								
POSPower	POSPrinter	RemoteOrder	Display Sc	ale Scanner	SignatureCa	oture ToneIndica	tor Exit	
HardTotals							PointCardRW	POSKeyboard
About Co	onfigured Devi	ices Bump/Ba	ar CashCh	anger ( CashE	rawer CAT	CheckScanner	CoinDispenser	FiscalPrinter
Logical name	: HP_USBSC	ANNER	unknown	Open Cla	im Relea	se Close	Info Fast n	node EXIT
Claimed	s	can Data:						
Auto disab	6	can Data Type:		0 (Unkn	own)			
		can Data Label:						
Device ena	S	can Data Count:		0				
		canner Health:						
🖌 Data event	enabled			Cle	ar Data			
🔲 Freeze eve	nts							
🖌 Decode da	ita							
📃 Check Hea	aith							

#### 9. Scan a bar code:

🕹 JavaPOStester in Progress							
ile							
POSPower POSPrinter RemoteOrderDisplay			atureCapture	ToneIndi			
		ionSensor		INPad	PointCard		eyboard
About Configured Devices Bump/Bar Cas	hChanger	CashDrawer	CATCh	eckScanne	r í CoinDi	spenser Fis	calPrinter
.ogical name: HP_USBSCANNER unknow	n Open	Claim	Release	Close	Info	Fast mode	EXIT
Claimed Scan Data:	7	20555 SH 249					
Auto disable Scan Data Type:		10 (Code 128)					
Scan Data Label:     Device enabled     Scan Data Count:		20555 SH 249					
Auto data event enable Scanner Health:	0						
🖌 Data event enabled	I	Clear Data					
Freeze events							
🖌 Decode data							
Check Health							

Depending on the fonts installed you may see some block character at the end of the "SCAN DATA" line, this is OK. An example

File			
POSPower POSPrinter RemoteOrderDis HardTotals Keylock LineDisplay About Configured Devices Bump/Bar	splay Scale Scanner Sig MICR MotionSensor CashChanger CashDrawe	- Ly in the second seco	r Exit intCardRW POSKeyboard CoinDispenser FiscalPrinter
	Inknown Open Claim (720555 SH 2 110 (Code 12 720555 SH 2 0 Clear Dat	9000 8) 9	Info Fast mode EXIT

10. Click on "RELEASE" or "CLOSE" to exit the JPOS test utility.

#### 6.8 **HP Barcode Scanner H-Series**

This section covers the following Barcode Scanner(s): • HP ElitePOS 2D Barcode Scanner



HP ElitePOS 2D Barcode Scanner

## 6.8.1 Connection

The Barcode Scanner may be plugged into any free USB port, including powered USB ports. If a powered USB port is used, the powered portion is just not utilized.

### 6.8.2 Interfaces

The Barcode Scanner supports the following interfaces:

- USB COM
- USB Composite (default)
- USB HID POS

### 6.8.3 Configuration

To change the Barcode Scanner configuration settings such as interface, there are three methods available:

- Common configuration barcodes in this document.
- Programming Reference Guide available from <u>HP.COM</u>
- HP EZConfig (only available through a Softpaq download from HP.COM)

#### **Common Configuration Barcodes:**



Default



USB COM



USB Composite



Presentation Mode



Show Software Revision



Manual Trigger Mode

### HP EZConfig:



Click the **CONNECTED DEVICE** button to begin configuring the device.

### 6.8.4 <u>Windows Drivers</u>

For USB Composite and USB HID POS interfaces, native Windows Operating System drivers are used. For USB COM interface, HP Barcode Scanner H-Series USB COM Driver is needed. It is included in the HP Factory image and can be found on <u>HP.COM</u>.

Device	Interface	Device Manager
	USB COM	Ports (COM & LPT) HP ElitePOS 2D Barcode Scanner (COMx)
HP ElitePOS 2D Barcode Scanner	USB Composite (default)	Keyboards HID Keyboard Device POS Barcode Scanner POS HID Barcode scanner
	USB HID POS	POS Barcode Scanner POS HID Barcode scanner

#### 6.8.5 OPOS Drivers

HP Barcode Scanner H-Series OPOS is included in the HP factory image and can be found on <u>HP.COM</u>. OPOS can only be used with USB COM or USB HID POS interfaces.

#### 6.8.6 JPOS Drivers

HP Barcode Scanner H-Series JPOS is included in the HP factory image and can be found on <u>HP.COM</u>. JPOS can only be used with USB COM or USB HID POS interfaces.

#### 6.8.7 Testing the Barcode Scanner

#### 6.8.7.1 Testing in non-OPOS/JPOS

Open Microsoft Notepad and scan a barcode. The data should appear in the Notepad window. If nothing appears, confirm that the interface is set to USB Composite.

#### 6.8.7.2 Testing in OPOS

<u>Steps</u>

- 1. Launch the **OPOS Validation Utility** from the Start Menu.
- 2. Click the Advanced View button.
- 3. Select the Device Name (N3680-HP).
- 4. Click the **Open** button.
- 5. Click the **Claim** button.
- 6. Click the **Enable Device** button.
- 7. Check the Always Enable Data Event checkbox.
- 8. Check the **Decode Data** checkbox.
- 9. Scan a barcode. The Scan Data will be displayed.
- 10. After testing is complete, click the **Disable Device** button.
- 11. Click the **Release** button.
- 12. Click the **Close** button.
- 13. Exit the OPOS Validation Utility.

#### **Detailed Steps**

1. Launch the **OPOS Validation Utility** from the Start Menu.

### 2. Click the **Advanced View** button.

Q OPOS Validation Utility	
File View Help Basic View Advanced	View /
	Scanner
	Status
	Device Name N3690-HP  Begin Test
	This window shows the barcode when the device connected. To connect to device click on Begin Test and read a barcode. Device Output
	Configuration Utity

#### 3. Select the **Device Name**.

Q OPOS Validation Utility	- D X
File DirectIO View Help	
Basic View 🧳	Advanced View 🥂
Scanner 🔗	Scanner Specific Properties
Device Settings	Device Name N3560+P  Qpen Claim 10000 ms Claim Enable Device
Device Health	Close
Device State	Close Belease Brighte Perice
Device Capabilities	□ Data Event Enable □ Always Enable Data Event □ Auto Disable None ▼ Binary Conversion
Device Information	Freeze Events Power Notify
	Clear Input Properties
	Select method 💌 Apply Claimed
	T Decode Data
	Scan Data Scan Data Label Scan Data Type
	Clear Input
Device Configuration	
Auto Detect = True	Get Al Properties
	This screen changes according to:
	Save To File 1. Device output 2. Property results
	Clear Output Log
	DataCount : 0
L	

#### 4. Click the **Open** button.

Q OPOS Validation Utility		×
File DirectIO View Help		
Basic View 🧳	Advanced View	7
Scanner 🔗	Scanner Specific Properties	
Device Settings	Device Name N35690.+P  Qpen Claim 10000 ms Claim Enable Device	
Device Health	Close	
Device State		-
Device Capabilities	□ Data Event Enable □ Always Enable Data Event □ Auto Disable None   Binary Conversion	
Device Information	Freeze Events Fower Notify	
	Clear Input Properties	
	Select method 💌 Apply Claimed	1
	Decode Data	' 0
	Scan Data Scan Data Label Scan Data Type	
	Clear Input	1
Device Configuration	on Output	ł
Auto Detect = True	Get All Properties	
	Save To File This screen changes according to: 1. Device output	
	Clear Output Log	
	DataCount : 0	

#### 5. Click the **Claim** button.

OPOS Validation Utility File DirectIO View Help		x
Basic View	Advanced View	Ø
Scanner 🔗	Scanner Specific Properties	
Device Settings Device Health Device State		Laim  Enable Device Disable Device
Device Capabilities Device Information	Data Event Enable     Aways Enable Data Event     Auto Disable     Freeze Events     Power Nobly	None Binary Conversion
	Select method   Decode Data	Acoly Claimed
		Scan Data Type Clear Input
Device Configuratio	on Output Get Al Properties Save To File Clear Output Log Clear Output Log	
		DataCount : 0

#### 6. Click the **Enable Device** button.

Q OPOS Validation Utility	- 🗆 X
File DirectIO View Help	
Basic View 🧳	Advanced View 🎢
Scanner 😞	Scanner Specific Properties
Device Settings	Device Name N0560-+P  Qpen Claim 10000 ms Claim Enable Device
Device Health	Close  Cl
Device State	
Device Capabilities	Data Event Enable     Always Enable Data Event     Auto Disable     None     Binary Conversion
Device Information	Freeze Events Power Notify Clear Input Properties
	Select method      Apply     Claimed     Claimed
	Scan Data Scan Data Label Scan Data Type
	Clear Input
Device Configuration	
Auto Detect = True	Get All Properties Save To File Clear Output Log
	DataCount : 0

### 7. Check the Always Enable Data Event checkbox.

OPOS Validation Utility	- 🗆 X
File DirectIO View Help	P
Basic View 🧳	Advanced View
Scanner 🔶	Scanner Specific Properties
Device Settings	Device Name N3680+#P  Qpen Claim 10000 ms Claim Enable Device  Enable Device
Device Health	Close
Device State	enos
Device Capabilities	🔽 Data Event Enable 🖉 Always Enable Data Event 🔽 Auto Disable None 💌 Binary Conversion
Device Information	Freeze Events     Power Notify     Clear Input Properties
	Select method      Apply     Claimed     Decode Data
	Scan Data Scan Data Label Scan Data Type
	Clear Input
Device Configurati	ion Output
Auto Detect = True	Get Al Properties Scanner : Set DecodeData : True , ResultCode : OPOS_SUCCESS
	Save To File Scanner : AlwayEnableDataEvent : True , ResultCode : OPOS_SUCCESS
	Glear Output Log Scanner : Set DataEventEnabled : True , ResultCode : OPOS_SUCCESS
	Ceer Output Log Scanner : Set DeviceEnabled : True , ResultCode : OPOS_SUCCESS
	Scanner : Set Device Enable and Data Event Enable to true for reading data
	👃 🖽 🚖 🚔 🚖 🧭 🥘 📖 base 🔺 👘

### 8. Check the **Decode Data** checkbox.

Q OPOS Validation Utility File DirectIO View Help	- D X
Basic View 🧳	Advanced View 🎢
Scanner 🔗	Scanner Specific Properties
Device Settings	Device Name N3680+#P
Device Health	Close
Device State	
Device Capabilities	🔽 Data Event Enable 🛛 Always Enable Data Event 🦷 Auto Disable None 💌 Binary Conversion
Device Information	Freeze Events     Power Notify     Gear Input Properties
	Select method      Apply Claimed      Decode Data
	Scan Data Scan Data Label Scan Data Type
	Clear Input
Device Configuration	on Output
Auto Detect = True	Get All Properties Scanner : Set DecodeData : True , ResultCode : OPOS_SUCCESS
	Save To File Scanner : AlwayEnableDataEvent : True , ResultCode : OPOS_SUCCESS
	Clear Output Log Scanner : Set DataEventEnabled : True , ResultCode : OPOS_SUCCESS
	Scanner : Set DeviceEnabled : True , ResultCode : OPOS_SUCCESS
	Scanner : Set Device Enable and Data Event Enable to true for reading data
ng	- U 🖸 🔁 🚍 🛍 😒 🛷 🧕 🕘 🛛 🗛 þaucas 🕅 40 B

### 9. Scan a barcode. The Scan Data will be displayed.

Q OPOS Validation Utility	- 🗆 X
File DirectIO View Help	
Basic View 🧳	Advanced View 🧳
Scanner 🔶	Scanner Specific Properties
Device Settings	Device Name N3650+4P  Qpen Claim 10000 ms Claim Enable Device  Enable Device
Device Health	Close   Release  Disable Device
Device State	
Device Capabilities	🔽 Data Event Enable 🛛 🗸 Always Enable Data Event 🦷 Auto Disable None 💌 Binary Conversion
Device Information	Freeze Events Power Notify
	Clear Input Properties
	Select method
	V Decode Data
	0C045612348973 SCAN_SOT_Code128
	Scan Data Scan Data Label Scan Data Type
	Clear Input
Device Configuration	
Auto Detect = True	Get All Properties Scanner : Set DataEventEnabled : True , ResultCode : OPOS_SUCCESS
	Save To File Scanner : ScanDataType : SCAN_SDT_Code 128
	Gear Output Log Scanner : ScanDataLabel : 45612348973
	Scanner : ScanData : j]C045612348973
	Scanner : Set DecodeData : True , ResultCode : OPOS_SUCCESS
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#### 10. After testing is complete, click the **Disable Device** button.

Q OPOS Validation Utility	- 🗆 X
File DirectIO View Help Basic View	Advanced View
Scanner 🔗	Scanner Specific Properties
Device Settings Device Health Device State Device Capabilities Device Information	Device Name N3560+PP  Qpen  Quem 10000 ms Claim Enable Device  Disable Device  Close  Auto Disable Device  Belease  Disable Device  Beary Conversion Friezze Events Power Notify Clear Input Properties
	Scarbala Scarbala Laber Scarbala rype Gear Input
Device Configuration	
Auto Detect = True	Get AI Properties         Scienner : Set DataElventEnabled : True , ResultCode : OPOS_SUCCESS         A           Sarve To File         Scienner : ScanDataType : SCALL, SDT_Code:128         Scienner : ScanDataLabel : 456:12349973           Clear Output Log         Scienner : ScanData : j[0:0456:12349973         Scienner : ScanData : j[0:0456:12349973           Scienner : SetDetodelata : Ture , ResultCode : OPOS_SUCCESS         Scienner : SetDetodelata : Ture , ResultCode : OPOS_SUCCESS
ng	👃 💷 🤮 🚍 🍓 🐋 🍥 🛛 🔤 👘

### 11. Click the Release button.

OPOS Validation Utility	- 🗆 X
File DirectIO View Help	
Basic View 🧳	Advanced View 🎢
Scanner 🔗	Scanner Specific Properties
Device Settings	Device Name N3680+P  Qpen Claim 10000 ms Clgim Enable Device
Device Health	Close
Device State	
Device Capabilities	🔽 Dista Event Enable 🕅 Always Enable Data Event 🔽 Auto Disable None 💌 Binary Conversion
Device Information	Freeze Events F Power Notify
	Otear Input Properties       - Select method - ▼       ✓ Decode Data       ØC045612346973       45612346973       Scan Data       Scan Data       Scan Data       Scan Data       Oear Input
Device Configuratio	
Auto Detect = True	Get All Properties Scanner : Set DataEventEnabled : True , ResultCode : OPOS_SUCCESS
	Save To File Scanner : ScanDataType : SCAN_SDT_Code128
	Clear Output Log Scanner : ScanDataLabel : 45612348973
	Scanner : ScanData : []C045612348973
	Scanner : Set DecodeData : True , ResultCode : OPOS_SUCCESS
ng	🛛 🕹 🖨 🖆 😒 🧕 🔤 🕹 Datačan 🕅 40 .

### 12. Click the **Close** button.

-	
Q OPOS Validation Utility File DirectIO View Help	×
Basic View 🧳	Advanced View 1
Scanner 🔗	Scanner Specific Properties
Device Settings	Device Name N3680+P
Device Health	Close   Release   Disable Device
Device State	
Device Capabilities	🕅 Dista Event Enable 🕅 Always Enable Data Event 🗌 Auto Disable None 🔹 Binary Conversion
Device Information	Freeze Events     Power Notify     Clear Input Properties
	Select method •         Apply         Claimed           IV Decode Data         SCAN_SOT_Code128         SCAN_SOT_Code128           Scan Data         Scan Data Type         Scan Data Type
	Scar bala scar bala tabe Scar bala tipe Oear Input
Device Configurati	on Output
Auto Detect = True	Get All Properties Scanner : Set DataEventEnabled : True , ResultCode : OPOS_SUCCESS
	Save To File Scanner : ScanDataType : SCAN_SDT_Code128
	Clear Output Log Scanner : ScanDataLabel : 45612340973
	Scanner : ScanData : []C045612348973
	Scanner : Set DecodeData : True , ResultCode : OPOS_SUCCESS
ng	- 👃 🖽 😑 📄 💼 😒 🧕 👘 paucies 🕅 40 (

13. Exit the OPOS Validation Utility.

### 6.8.7.3 Testing in JPOS

<u>Steps</u>

- 1. Launch the **JPOS Validation Utility** from the Start Menu.
- 2. Click the Advanced View button.
- 3. Select the Device Name (N3680-HP).
- 4. Click the **Open** button.
- 5. Click the **Claim** button.
- 6. Click the **Enable Device** button.
- 7. Check the Always Enable Data Event checkbox.
- 8. Check the **Decode Data** checkbox.
- 9. Scan a barcode. The Scan Data will be displayed.
- 10. After testing is complete, click the **Disable Device** button.
- 11. Click the **Release** button.
- 12. Click the **Close** button.
- 13. Exit the JPOS Validation Utility.

#### **Detailed Steps**

1. Launch the **JPOS Validation Utility** from the Start Menu.

#### 2. Click the **Advanced View** button.

Q JPOS Validatio	on Utility		-	-		×
Sie Djrectio View Hel	lo .					
Basic View	11 Avanced W	<i>i</i> i				
1	Scanner					
	Status					
	Device Name	N3600-HP 🕑 Begin Test 🕨				
	Device Ouput	This window shows the barcode when the device connected. To connect to device click on Begin Test and read a barcode.				
			Configuration Utility			
L					_	

#### 3. Select the Device Name.

Q JPOS Validation U	Utility —	×
gile Djrect10 ⊻iew <u>H</u> elp		
Basic View 🧳	Advanced View	
Scanner 🔗	Scanner Device Settings	
Device Settings	Device Name N3680-HP V Open Timeout 10000 ms Claim Enable Dev	rice 🕨
Device Health	Clos <u>e</u> Clos <u>e</u> Disable De	vice ┥
Device State	Data Event Enab Always Enable Data Ev Auto Disable	
Device Capabilities	Freeze Events Power Notify	
Device Information	Clear Input Properties	
	Select Method V Apply	Claimed
	Decode Data	
	Scan Data Scan Data Label Scan Data Type	
	Scan Data Laber Scan Data Type	Clear Input
Device Configuration	Output	
Auto Detect = True	Get All Properties	
	Save To File	
	Clear Output Log	

### 4. Click the **Open** button.

Q JPOS Validation U	Jtility				-		×
file DjrectID View Help							
Basic View 🅢	Advanced View						
Stanner 🔗		Scanne	r Device Settings				
Device Settings 🕨	Device Name N3680-HP	~ <u>0</u>	pen 🕨 meaut 10000	ms Cl <u>a</u> im 🕨	Enel	ble Device 🕽	
Device Health		ci	los <u>e</u>	Belease 📢	Dise	ble Device 🕯	
Device State	Data Event Enab	Always En	able Data Ev Auto D	isable			
Device Capabilities	Freeze Events	Power Not	ity				
Device Information				Clear Input Properties			
	Select Method $\sim$			Sele V Ap	ply	Claim	ed
	Decode Data						
	Scan Data		Scan Data Label	Scan Data Ty	pe	Clear I	nput
Device Configuration	Output						
Auto Detect = True	Get All Properties						
	Save To File						
	Clear Output Log						

### 5. Click the **Claim** button.

1				
IPOS Validation Ut	tility	-		×
file DjrectID View Help				
Basic View 🧳	Advanced Veen			
Scenner 🔗	Scanner Device Settings			
Device Settings 🕨 D	levice Name N3680-HP 🔽 Qpen 🕨 Timeout 10000 m Clgim 🕨	Enable	e Device 🏓	
Device Health	Clos <u>u</u> ┥ Belease ┥	Disab	le Device ┥	
Device State	Data Event Enab Always Enable Data Ev Auto Disable			
Device Capabilities	Freeze Events Power Notify			
Device Information	Clear Input Properties			
	Select Method V Appl	v	Claim	d
	Decode Data			
	Scan Data Scan Data Label Scan Data Type			
		_	Clear In	put
Device Configuration	Output			
Auto Detect = True	Get All Properties			
	Save To File			
	Clear Output Log			

#### 6. Click the Enable Device button.

Q JPOS Validation U	Jtility		- 🗆	×
file DjrectID View Help				
Basic View 🧳	Advanced View			
Scenner 🔗		Scanner Device Settings		
Device Settings 🕨	Device Name N3680-HP	Open Timeout 10000 ms Claim	Enable Device	
Device Health		Clos <u>e</u> 📢 Belease ┥	Disable Device	•
Device State	Data Event Enab	Always Enable Data Ev Auto Disable		
Device Capabilities	Freeze Events	Power Notify		
Device Information		Clear Input Properties		
	Select Method $\sim$	Sele V Ap	aly <b>Cl</b>	imed
	Decode Data			
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	Clear Output Log			
	Clear Output Log			

<ol><li>Check the Always Enable Data Event checkbox.</li></ol>	7.	Check the	Always	Enable	Data	Event	checkbox.
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			*

#### 8. Check the **Decode Data** checkbox.

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Basic View 🎁	Advanced View 🎢				
Scenner 🔗		Scanner Device Settings			
Device Settings	Device Name N3680-HP	Qpen Timeout 10000 ms Clgim	Enable	Device 🕨	
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	Clear Output Log	Scanner, Scan Data Label: 45612345973			
	Cherr Odtput Log	Scanner_Scan Data Type: SCAN_SDT_Code125			~
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### 9. Scan a barcode. The Scan Data will be displayed.

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### 10. After testing is complete, click the **Disable Device** button.

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Device Capabilities	Freeze Events	Power Notify		
Device Information		Clear Input Properties		
	Select Method $\sim$	Sele V Ap	ply Claimed	
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	)]C045612348973	45612348973 SCAN_SOT_Code1	128	
	Scan Data	Scan Data Label Scan Data Typ	Clear Input	
Device Configuration	Output			
Auto Detect = True	Get All Properties			^
		Scenner : Set DataEventEnabled : true, Result Code: JPDS_SUCCESS		
	Save To File	Scanner_Scan Data : j]C045512348973		
	Clear Output Log	Scanner_Scan Data Label: 45612345973		
		Scanner_Scan Data Type: SCAN_SDT_Code125	>	×
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#### 11. Click the Release button.

Auto Detect = True           Get Al Properties         Scanner : Set DataEventEnabled : true, Result Code: 3PDS_SUCCESS           Save To File         Scanner_Scan Data : j]C045812348973           Clear Output Log         Scanner_Scan Data Label: 45012348973           Scanner_Scan Data Type: SCAN_SOT_Code128         Y	Q JPOS Validation	Utility			×
Stremer       Scanner Device Settings         Device Settings       Device Nome       Ogen       Timeout       Dollowing       Elected       Disable Device       Disable Device         Device Name       Ogen       Timeout       Dollowing       Elected       Disable Device       Disable Device         Device Stata <ul> <li>Device Capabilities</li> <li>Device Events</li> <li>Power Notify</li> <li>Clear Input Properties</li> <li>Select Mathod</li> <li>Gecode Data</li> <li>Difo15612348973</li> <li>Scan Data</li> <li>Label</li> <li>Scan Data</li> <li>Scan Data</li> <li>Device Configuration</li> <li>Output</li> <li>Searcer: Set DataEventEnabled : true, Result Code: 3POS_SUCCESS</li> <li>Save To File</li> <li>Scarner: Set DataEventEnabled : true, Result Code: 3POS_SUCCESS</li> <li>Scarner: Set DataEventEnabled : 45612348973</li> <li>Scarner: Set DataEventEnabled : true, Result Code: 3POS_SUCCESS</li> <li>Scarner: Set DataEventEnabled : 45612348973</li> <li>Scarner: Set Da</li></ul>	jie DjrectID View Belp	-			
Device Settings       Device Name       Device Name       Device Time out 1000 ms       Claim       Enable Device         Device Health       Class       Belease       Disable Device       Disable Device         Device State       Device Time out 1000 ms       Claim       Belease       Disable Device         Device Capabilities       Precese Events       Power Notify       Claim out Properties         Salest Mathod       Image: Precese Events       Power Notify       Claim out Properties         Salest Mathod       Image: Precese Events       Power Notify       Claim out Properties         Salest Mathod       Image: Precese Events       Power Notify       Claim out Properties         Salest Mathod       Image: Precese Events       Power Notify       Claim out Properties         Salest Mathod       Image: Precese Events       Power Notify       Claim out Properties         Salest Mathod       Image: Precese Events       Scon Data       Scon Data       Scon Data         J)CO45612346973       Scon Data       Scon Data       Scon Data       Scon Data       Clear Input         Device Configuration       Output       Scon Data       <	Bosic View 🧳	Advanced View 🎢			
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Device Configuration       Output         Device Configuration       Output         Auto Detect = True       Get All Properties         Source Configuration       Output         Auto Detect = True       Get All Properties         Source Configuration       Output         Searce True       Get All Properties         Source Configuration       Output         Searce True       Get All Properties         Source To File       Scenner: Set DataEventEnabled : true, Result Code: JPOS_SUDCESS         Source:	Device Health		Clos <u>u</u>	Disable Device 📢	
Device Information       If Prover Noory       Clear Input Properties         Select Mathed       Image: Select Mathed       Image: Select Mathed         Scen Data       Scan Data Label       Scen Data Type         Device Configuration       Output       Clear Input         Auto Detect = True       Get All Properties       Scenner: Set DataEvertEnabled : Inue, Result Code: IPDS_SUDCESS       Image: Scenner_Scen Data : ijC043512348973         Searner_Scen Data Label:       45612348973       Scenner_Scen Data : ijC043512348973         Scenrer_Scen Data Label:       45612348973       Scenrer_Scen Data : ijC043512348973	Device State	Data Event Enab	Always Enable Data Ev Auto Disable		
Device Information       Salest Method       Image: Selection of the selecti	Device Cepabilities	Freeze Events			
Device Configuration         Output           Auto Detect = True         Get All Properties           Scenner_Scen Data         jjC045512348973           Scenner_Scenn Data         Label           Scenner_Scenn Data         true, Result Code: JPDS_SUCCESS           Saver To File         Scenner_Scenn Data           Scenner_Scenn Data         Scenner_Scenn Data           Scenner_Scenn Data         Scenner_Scenn Data	Device Information		Clear Input Properties		
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J)C045612346973       45612348973       SCAN_SOT_Code128         Scen Data       Scen Data       Scen Data         Scen Data       Scen Data       Scen Data         Auto Detect = True       Get All Properties       Scenner_Sen Data         Save To File       Scenrer_Scen Data       J)C043612348973         Searner_Scen Data       J)C043612348973       Scenrer_Scen Data         Scenrer_Scen Data       J)C043612348973       Scenrer_Scen Data		Select Method $\sim$	Sele 🗸 🗛	pply Claime	d
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Scanner_Scan Data Type: SCAN_SDT_Code128					
		Clear Output Log	-		
			Scanner_Scan Data Type: SCAN_SDT_Code128		>

#### 12. Click the **Close** button.

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Device Capabilities	Freeze Events	Power Notify			
Device Information		Clear Input Properties			
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	J)C045612348973	45612348973 SCAN_SOT_Code1	28		
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Auto Detect = True	Get All Properties	Scanner : Set DataEventEnabled : true, Result Code: JPOS_SUCCESS			^
	Save To File	Scanner_Scan Data : j[C045612348973			
		Scanner_Scan Data : 312045612546975			
	Clear Output Log	Scanner_Scan Deta Type: SCAN_SDT_Code128			
		Contraction Contractive: SCAR_SUT_Code125			>
			_		

13. Exit the JPOS Validation Utility.

# 6.9 HP USB Barcode Scanners

The barcode scanners are covered in following section





HP RP9 Integrated Bar Code Scanner-Side

HP RP9 Integrated Bar Code Scanner-Bottom



HP Retail Integrated Barcode Scanner





HP Laser Barcode Scanner

HP Wireless Barcode Scanner



HP Value 2D Wireless Scanner



HP Linear Barcode Scanner



HP Presentation Barcode Scanner



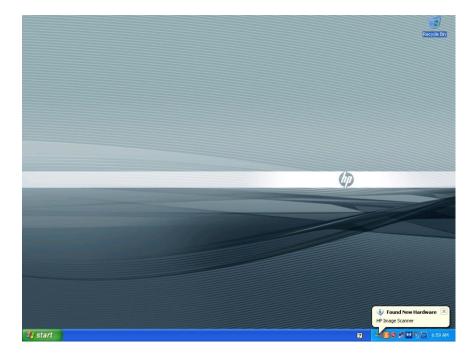
HP KIOSK Scanner

### 6.9.1 Connection

The barcode scanner may be plugged into any free USB port. One may plug the barcode scanner into the power USB port in the 5V part of USB port, when plugged in this configuration the power portion of USB port is not utilized.

#### 6.9.2 Windows Drivers for Scanners

The HP Imaging / Linear / Presentation scanner uses native drivers for Windows operating system in USB HID-KBD mode. If during the driver installation Windows displays the new hardware wizard, the user needs to accept the defaults that appear during the hardware wizard GUI (for the first screen you may select the no option) and the native drivers will be loaded. Please refer to "If prompted for native driver location (New Hardware Wizard)" section.



The following is the Device Manager window after all the drivers are loaded for the HP Imaging / Linear / Presentation Scanners in USB HID-KBD (default) mode:

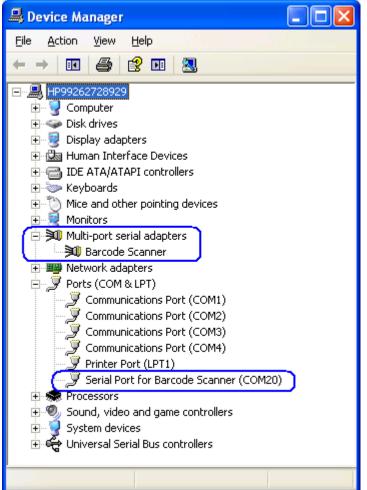


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The following is the Device Manager window after all the drivers are loaded for the HP RP9 Integrated Barcode Scanners in USB HID-KBD mode:

File Action View Help
<ul> <li>HP-engb</li> <li>Audio inputs and outputs</li> <li>Bluetooth</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Firmware</li> <li>Firmware</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
<ul> <li>Audio inputs and outputs</li> <li>Bluetooth</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Firmware</li> <li>Firmware</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
<ul> <li>Bluetooth</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Firmware</li> <li>Human Interface Devices</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
<ul> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Firmware</li> <li>Human Interface Devices</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
<ul> <li>Disk drives</li> <li>Display adapters</li> <li>Firmware</li> <li>Human Interface Devices</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
<ul> <li>Display adapters</li> <li>Firmware</li> <li>Human Interface Devices</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
<ul> <li>Human Interface Devices</li> <li>IDE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
Gai IDE ATA/ATAPI controllers     A
<ul> <li>Keyboards</li> <li>HID Keyboard Device</li> </ul>
HID Keyboard Device
— HID Keyboard Device
HID Keyboard Device
Mice and other pointing devices
Monitors
Network adapters
▷ IP Ports (COM & LPT)
Print queues
Processors
Security devices
Sound, video and game controllers
System devices
P P System devices
Universal Serial Bus controllers

The following is the Device Manager window after all the drivers are loaded for the HP Imaging / Linear / Presentation Scanners when it is in the USB-COM mode (OPOS):



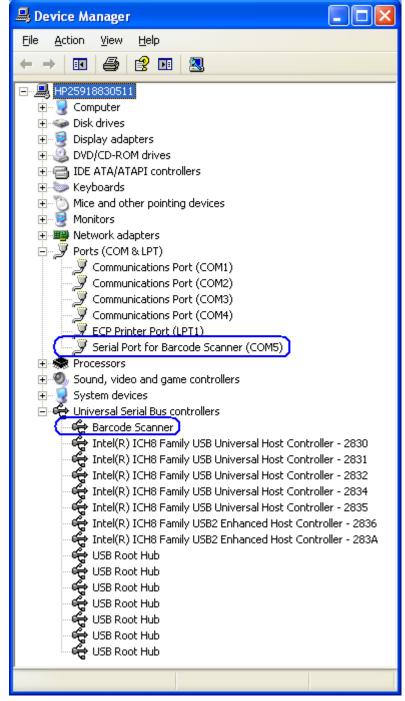
The following is the Device Manager window after all the drivers are loaded for the HP RP9 Integrated Barcode Scanners in USB-COM mode (OPOS):

Device Manager – 🗆 🗙
<u>F</u> ile <u>A</u> ction <u>V</u> iew <u>H</u> elp
🗢 🔿   🔃   👔 🖬   👰
🔺 🚔 HP-engb
Audio inputs and outputs
Bluetooth
Image:
Disk drives
Display adapters
Firmware
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Ports (COM & LPT)
Communications Port (COM1)
Communications Port (COM2)
P Modular SL Imaging Barcode Scanner (COM7) T Intel(R) Active Management Technology - SOL (COM3)
Print queues
Processors
Security devices
Software devices
Sound, video and game controllers
Storage controllers
Isstem devices
> 🏺 Universal Serial Bus controllers

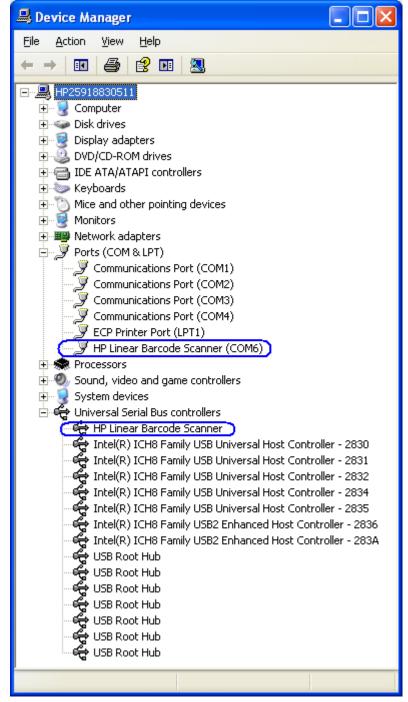
The following is the Device Manager window after all the drivers are loaded for the HP RP9 Integrated Barcode Scanners in USB-OEM mode:

A Device Manager -	
<u>File Action View H</u> elp	٦
<ul> <li>Audio inputs and outputs</li> <li>Audio inputs and outputs</li> <li>Bluetooth</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Firmware</li> <li>Human Interface Devices</li> <li>HID-compliant device</li> <li>HID-compliant vendor-defined device</li> <li></li></ul>	
<ul> <li>Keyboards</li> <li>Mice and other pointing devices</li> <li>Monitors</li> <li>Monitors</li> <li>Ports (COM &amp; LPT)</li> <li>Print queues</li> <li>Print queues</li> <li>Processors</li> <li>Security devices</li> <li>Software devices</li> <li>Sond, video and game controllers</li> <li>Storage controllers</li> <li>System devices</li> </ul>	
Universal Serial Bus controllers	

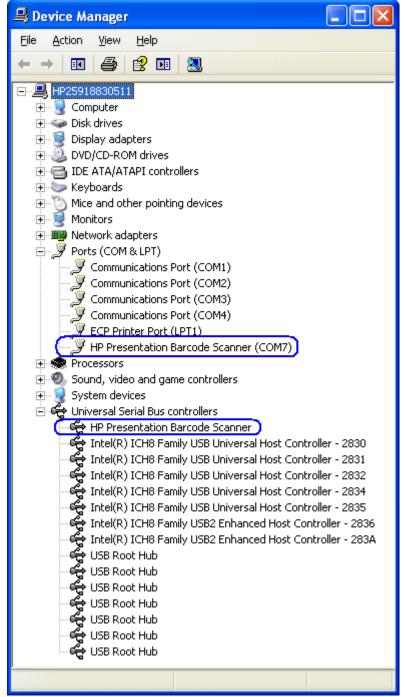
The following is the Device Manager window after all the drivers are loaded for the HP RP9 Integrated Barcode Scanners in USB-Composite (default) mode:



2D Imaging Barcode Scanner with driver 3.13.xx.xx



HP Linear Barcode Scanner with driver 3.13.xx.xx



HP Presentation Scanner with driver 3.13.xx.xx

**Note:** For Windows XP Professional / WePOS / POSReady operating systems the virtual COM port for the scanner is assigned COM20 with version 3.0.1.32. Starting with version 3.12.0.32 the virtual COM port is not fixed at COM20 but assigned the next available COM port on the system. For Vista / Windows 7 the virtual COM port is assigned the next available COM port on the system. The virtual COM port assignment for the Imaging Barcode Scanner can be changed by going to the properties page of the scanner COM port.

With USB-COM driver version 3.13.xx.xx or later the "Multi-port serial adapters" will not appear for the scanner in device manager, it has moved to the USB section of device manager.

# 6.9.3 **OPOS Drivers for the Scanners**

There are no OPOS drivers needed for this device if the device is used in the human interface device (HID) keyboard emulation mode.

When the device is in USB-COM mode (OPOS) a Windows device driver is required. The required device drivers that support the scanner are included in the HP factory image (C:\xxxxx\Point of Sale\Scanner (LED\_Imager)) and can be found on <u>HP.COM</u>.

## 6.9.4 **Testing the Scanners**

#### 6.9.4.1 Testing scanners in non-OPOS

The default mode of the scanner is non-OPOS mode when shipped from HP. In order to test the scanner in non-OPOS mode one can open an application like Microsoft Notepad and scan a barcode when the scanner is in default scanner mode.

You may use one of the barcodes below for testing if you do not have an item with a barcode handy.



#### 6.9.4.2 Testing the scanners in OPOS

The scanners must be in USB-COM mode (OPOS). If one is not sure what mode the scanner is in, open an application like notepad and scan a barcode. If the scanner is in OPOS mode, when you scan a barcode nothing will appear in Notepad. If something appears in Notepad, the scanner is in USB HID Keyboard emulation or USB-Composite mode.

In order for the scanner to work with OPOS driver, the scanner must be programmed into the USB-COM mode (OPOS).

Barcodes that can be used to change the scanner mode are included in the HP factory image (C:\xxxxx\Point of Sale\Scanner (LED\_Imager)) and can be found on <u>HP.COM</u>.

The following is an overview of the steps to test the scanners followed by more detailed steps:

- 14. Launch the scanner OPOS Test utility from Windows start menu.
- 15. Select the scanner device box.
- 16. Click "Open Scanner" button.
- 17. Click "Claim" button.
- 18. Click "Enable" button.
- 19. Click "Data Event Enable" button or select "Auto Data Event Enable" so the status states "Ready to scan a label".
- 20. Scan a barcode.
- 21. After scan is complete click on "Disable" button.
  - Note: When the imaging scanner is disabled the LED on the scanner will blink to indicate that it has been disabled. When an OPOS application has been setup to use the imaging scanner in OPOS (USB COM) mode when the application is started the scanner will be enabled. When the application is exited then the imaging scanner will be disabled (LED on the scanner will blink).
- 22. Click "Release" button.
- 23. Click "Close Scanner" button.
- 24. Exit the application.

#### **Detailed Steps**

- 14. Launch the scanner OPOS Test utility from Windows start menu or from the "C:\Program Files\Hewlett-Packard\HPScannerOPOS" folder.
- 15. Select appropriate scanner device box.
- 16. Click "Open Scanner" button.

Description: OPOS Scanner Control 1.13.001 [ Version: 1.13.1 File Version: 1, 13, 001, 0 Copyright: Copyright (c) RCS-Dayton.		
Scanners: HPImagerScanner HPIntegratedImagingBarcodeScanner HPKioskBarcodeScanner HPLinearScanner HPPresentationScanner HPWirelessBTScanner	Open Scanner     Claim     Enable     Data Event Enable      Matto Data Event Enable     Compare Firmware Version     Update Firmware	Close Scanner Release Disable Oper File
Status: Raw Data: Data: Type: Scanner Service Object Version Filename: C:\Program Files\Hewlett-Packard\ Description: HP Service Object Version: 1.13.49 File Version: 1.13.0043.000 Copyright: All rights reserved.	HPScannerDPDS\Driver\Service0PDS.dll	

Click "Claim" button.

Version: 1.13.1 File Version: 1, 13, 001, 0 Copyright: Copyright (c) RCS-Dayton.		
HPImagerScanner HPIntegratedImagingBarcodeScanner HPKitisekBarcodeScanner HPRitinesKScanner HPPresentationScanner HPVirelessBTScanner	Open Scanner Claim Enable Data Event Enable ☑ Auto Data Event Enable ☑ Compare Firmware Version Update Firmware	Close Scanner Release Disable Oper File
Raw Data: Data: Type: Scanner Service Object Version	kard\HPScanner0P0S\Driver\Service0P0S.dll	

# 17. Click "Enable" button.

	1.13.1 1, 13, 001, 0 Copyright (c) RCS-Dayton.		
HPKioskB HPLinear HPPreser	Scanner tedImagingBarcodeScanner arcodeScanner	Dpen Scanner     Claim     Enable     Data Event Enable     ✓ Auto Data Event Enable     Compare Firmware Version     Update Firmware	Close Scanne Release Disable Cipe File
Raw Data: Data: Type: Scanner Se Filename: Description: Version: File Version:	HP Service Object	Scanner0P0S\Driver\Service0P0S.dll	

18. Click "Data Event Enable" button or select "Auto Data Event Enable" so the status states "Ready to scan a label".

nner Test	1.13.0.27	
Description: Version: File Version:	C:\Program Files\Hewlett-Packard\HPScannerOPOS\Controls\OPOSScanner.ocx OPOS Scanner Control 1.13.001 [Public, by CRM/RCS-Dayton]	
HPKioske HPLinear HPPreser HPWirele	Scanner tedlmagingBarcodeScanner larcodeScanner Claim	
Raw Data: Data: Type:	Scanner enabled. ervice Object Version	
Filename: Description: Version: File Version:	C:\Program Files\Hewlett-Packard\HPScanner0P0S\Driver\Service0P0S.dll HP Service 0bject	
	Exit	

19. Scan a barcode and the data will appear in the dialog box.

inner Test 1.13.0.27			
Control Object Version Filename: C:VProgram Files/H Description: OPOS Scanner Co Version: 1.13.1 File Version: 1.13,001,0 Copyright: Copyright (c) RCS-1	ntrol 1.13.001 (Public,	anner0P0S\Controls\0P0SSc by CRM/RCS-Dayton]	canner.ocx
Scanners: HPImagerScanner		Open Scanner	Close Scanner
HPIntegratedImagingBarcode HPKioskBarcodeScanner	icanner	Claim	Release
HPLinearScanner HPPresentationScanner		Enable	Disable
HPWirelessBTScanner		Data Event Enable	
		Auto Data Event Enab	le
		Compare Firmware Ver	nion I
		compare Filmware ver	Open File
		Update Firmware	File
Status: Ready to scan a lab	el		
Raw Data: C123456789012			
Data: 123456789012 [1] Type: UPC-A			
	J		
Scanner Service Object Version			
Filename: C:\Program Files\He Description: HP Service Object	wlett-Packard\HPSca	nner0P0S\Driver\Service0P0	)S.dll
Version: 1.13.49			
File Version: 1.13.0049.000			
Copyright: All rights reserved.			
			Exit

- 20. After scan is complete click on "Disable" button.
  - Note: When the imaging scanner is disabled the LED on the scanner will blink to indicate that it has been disabled. When an OPOS application has been setup to use the imaging scanner in OPOS (USB COM) mode when the application is started the scanner will be enabled. When the application is exited then the imaging scanner will be disabled (LED on the scanner will blink).

nner Test	1.13.0.27	
Filename: Description: Version: File Version:	ject Version : C:\Program Files\Hewlett-Packard\HPScanner0P0S\Controls\0P0SScanner.ocx 0P0S Scanner Control 1.13.001 [Public, by CRM/RCS-Dayton] 1.13.1 : 1, 13, 001, 0 : Copyright (c) RCS-Dayton.	
Scanner: HPImage	rScanner Open Scanner Close Sc	anner
HPKiosk!	atedImagingBarcodeScanner Claim Relea	ise
	Scanner IntationScanner IntationScanner	ole
I I I WIER	Data Event Enable	
	🔽 Auto Data Event Enable	
	Compare Firmware Version	Open
	Update Firmware	File
Status: Raw Data: Data: Type:	C123456789012	
Scanner S	ervice Object Version	
Description:	C:\Program Files\Hewlett-Packard\HPScanner0P0S\Driver\Service0P0S.dll HP Service Object 1.13.49	
	1.13.0049.000	
Copyright:	All rights reserved.	
		Exit

21. Click "Release" button.

nner Test - SCANNER	1.13.0.27		
Control O Filenam Description Version File Version	bject Version	IPScanner0P0S\Controls\0P0SScanner.oc; Iblic, by CRM/RCS-Dayton]	4
HPInteg	ers: jerScanner gratedImagingBarcodeScanner KBarcodeScanner	Open Scanner Claim	Close Scanner Release
HPLine HPPres	ab actores can ren at Scanner entationScanner lessBTScanner	Enable Data Event Enable Compare Firmware Version Update Firmware	Disable Open File
Status: Raw Data: Data: Type:			
Scanner Filename Descriptior Versior File Versior	Service Object Version	PScannerOPOS\Driver\ServiceOPOS.dll	
			Exit

22. Click "Close Scanner" button.

Filename: C:\Program Files\Hewlett-Packard\F Description: OPDS Scanner Control 1.13.001 [Pu Version: 1.13.1 File Version: 1.13, 001,0 Copyright: Copyright (c) RCS-Dayton.		
Scanners: HPImagerScanner HPIntegratedImagingBarcodeScanner HPKinselScanner HPPresentationScanner HPVirelessBTScanner Status: Released	Claim	Scanner ase able Oper File
Raw Data: Data: Type: Scanner Service Object Version Filename: C:\Program Files\Hewlett-Packard\Hf Description: HP Service Object Version: 1.13.49 File Version: 1.13.0049.000 Copyright: All rights reserved.	<sup>2</sup> Scanner0P0S\Driver\Service0P0S.dll	

23. Exit the application.

Description: OPOS Scanner Control 1.13 Version: 1.13.1 File Version: 1, 13, 001, 0	ackard\HPScannerOPOS\Controls\OPOSScanner. .001 [Public, by CRM/RCS-Dayton]	UCA
Copyright Copyright (c) RCS-Dayton. Scanners: HPImagerScanner HPIntegratedImagingBarcodeScanner HPKioskBarcodeScanner HPIchealScanner HPPresentationScanner HPWirelessBTScanner	Open Scanner Claim Enable Data Event Enable Matto Data Event Enable Compare Firmware Version	Close Scanner Release Disable
J Status: Released Raw Data: Data: Туре:	Update Firmware	File
Scanner Service Object Version Filename: C:\Program Files\Hewlett-Pac Description: HP Service Object Version: 1.13.49 File Version: 1.13.0049.000 Copyright: All rights reserved.	skard\HPScanner0P0S\Driver\Service0P0S.dll	

# 6.9.5 JPOS Drivers for the Scanners

The JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Scanner (LED\_Imager)\Img\_LED JPOS) and are also available from <u>HP.COM</u>.

In order for the scanner to work with JPOS driver, the scanner must be programmed into the USB-COM mode.

The following is overview of the steps to test the imaging barcode scanner followed by detailed steps:

- 1. Start the JPOS test utility using the link in the START MENU.
- 2. Click on the "Scanner" tab.
- 3. Select the proper device from the drop down menu.
- 4. Click on the "OPEN" button. After the imaging scanner is opened a check will appear in the "Data event enabled" box.
- 5. Click on the "CLAIM" button.
- 6. Check the "Device enabled" so there is check box.
- 7. Check the "Decode Data" so there is a check box.
- 8. Scan a barcode and the data will appear in the "Scan Data" and "Scan Data Label" boxes.
- 9. After scan is complete click on "Release" button.
- 10. Click on "Close" button.
- 11. Click on "Exit" to close the test application.

#### **Detailed Steps**

 Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder for barcode scanner (C:\xxxxx\Point of Sale\Scanner (LED\_imager)\Img\_LED JPOS\HPJPOSScanner" folder). After a few seconds the JPOS test utility GUI will appear as shown below:



2. Click on the "Scanner" tab:



3. Select the proper device from the drop down menu.

File
About Configured Devices Scanner Exit
Logical name: HP Imaging Barcode Scanner  JPOS_S_CLOSED
Open HP Imaging Barcode Scanner ta istics Firmware O/C/E EXIT
Auto disable HP Kiosk Barcode Scanner
Data event enabled HP Linear Barcode Scanner
HP Presentation Barcode Scanner Device er abled HP Wireless Bluetooth Barcode Scanner
Decode data Scan Data Label:
Clear Input
Data Count:         Label Count:         Clear Fields         Refresh Fields
DirectlO
Direct IO data
Direct IO Command Reset   Execute Direct IO  RS232
Status Messages Clear Status

4. Click on the "OPEN" button. After the imaging scanner is opened a check will appear in the "Data event enabled" box.

📓 JavaPOStester in Progr	ess 📃 🗆 🔀
File	
About Configured Device	es Scanner Exit
Logical name:	HP Linear Barcode Scanner
Open	Claim Release Close Info Statistics Firmware O/C/E EXIT
Auto disable	Scan Data:
Device enabled	Scan Data Type:
Freeze events Decode data	Scan Data Label:
Clear Input Clear Input Properties DirectIO	Data Count: Label Count: Clear Fields Refresh Fields
Direct IO data	
Direct IO Command Reset	Execute Direct IO
Status Messages Clear	r Status
L	

5. Click on the "CLAIM" button.

🕌 JavaPOSte	ster in Prog	ress								
File										
About Cor	figured Devi	ces Scan	ner Exit							
	Logical name	e: HP Linear	Barcode Scann	er		-	JPOS_S	_IDLE		
	Open	Claim	Release	Close	Info	Statistics	Firmware	O/C/E	EXIT	
🗌 Auto disabl	e <b>– – – – –</b>		(					•]		
Data event		Scan	Data:							
🗌 Device ena	bled	Scan	Data Type:					-		
🗌 Freeze ever	nts		bala ijpoi					]		
🗌 Decode dat	a	Scan	Data Label:				▲ ■			
Clear Input					7					
Clear Input I	Droportion	Data	Count:		Label Coun	t:	Clea	r Fields	Refresh	ields
Direct IO Con Status Mess		et ▼ ar Status	Execute Dire		RS232	<b>•</b>				

6. Check the "Device enabled" so there is check box.

7.	Check the	"Decode Data"	so there is a	a check box.

📓 JavaPOStester in Progress
File
About Configured Devices Scanner Exit
Logical name: HP Linear Barcode Scanner 🔹 JPOS_S_IDLE
Open Claim Release Close Info Statistics Firmware O/C/E EXIT
□ Auto disable Scan Data:
Device enabled Scan Data Type:
Freeze events     Scan Data Label:
Clear Input     Data Count:     Label Count:     Clear Fields       Clear Input Properties     Clear Fields     Refresh Fields
DirectlO
Direct IO data
Direct IO Command Reset 💌 Execute Direct IO RS232 💌
Status Messages Clear Status

8. Scan a barcode and the data will appear in the "Scan Data" and "Scan Data Label" boxes.

🕌 JavaPOStester in Progress					
File					
About Configured Devices	Scanner Exit				
Logical name: HP	Linear Barcode Scanne	r 🗸	JPOS_S_IDLE		
Open Cla	aim Release	Close Info Statistics	Firmware O/C/E	EXIT	
<ul> <li>□ Auto disable</li> <li>✓ Data event enabled</li> </ul>	Scan Data:	C123456789012			
🗹 Device enabled	Scan Data Type:	101 (UPC-A)			
Freeze events	Scan Data Label:	123456789012			
Clear Input	Data Count: 0	Label Count: 1	Clear Fields	Refresh Fields	
Clear Input Properties	Data Count.	Laber Count.	ciedi fielus	Refreatifienda	
DirectIO					
Direct IO data					
Direct IO Command Reset	<ul> <li>Execute Direct</li> </ul>	t IO RS232 🔻			
Status Messages Clear Sta	atus				
l					

9. After scan is complete click on "Release" button.

📓 JavaPOStester in Progress							
File							
About Configured Devices Scanner Exit	About Configured Devices Scanner Exit						
Logical name: HP Linear Barcode Sc	anner JPOS_S_IDLE						
Open Claim Release	Close Info Statistics Firmware O/C/E EXIT						
☐ Auto disable Scan Data:	C123456789012						
Device enabled     Scan Data Type:	101 (UPC-A)						
Freeze events Clean Data Label:	123456789012						
Clear Input Data Count: 0	Label Count: 1 Clear Fields Refresh Fields						
DirectIO							
Direct IO data							
Direct IO Command Reset   Execute I	Direct IO RS232 💌						
Status Messages Clear Status							
I							

10. Click on "Close" button.

File										
About Co	nfigured Devic	es Scar	nner Exit							
	Logical name	: HP Linear	Barcode Scar	nner		-	JPOS_S	JDLE		
	Open	Claim	Release	Close	Info	Statistics	Firmware	O/C/E	EXIT	
🗌 Auto disab 🗹 Data event		Scar	ı Data:	C123456	789012					
Device ena		Scar	n Data Type:	101 (UPC	)-A)		•			
🗌 Freeze eve 🗹 Decode da			n Data Label:	1234567			<b>A</b>			
Clear Input Clear Input		Data	Count: 0		Label Cou	int: 1		Fields	Refresh F	ields
DirectIO Direct IO da Direct IO Co	nta ommand Rese	t 💌	Execute Di	irect IO	R\$232	•				
Direct IO da	ommand Rese	t ▼ ar Status	Execute Di	irect IO	R\$232	•				
Direct IO da Direct IO Co	ommand Rese		Execute Di	irect IO	RS232	<b>•</b>				
Direct IO da Direct IO Co	ommand Rese		Execute Di	irect IO	RS232	•				
Direct IO da Direct IO Co	ommand Rese		Execute Di	irect IO	RS232	T				
Direct IO da Direct IO Co	ommand Rese		Execute Di	irect IO	RS232	V				
Direct IO da Direct IO Co	ommand Rese		Execute Di	rect IO	RS232	T				

11. Click on "Exit" to close the test application.

# 6.9.6 Imaging Testing

In order for the scanner to capture an image, the scanner must be programmed into the USB-COM mode (OPOS). In order to put the scanner into this mode, scan the USB-COM barcode from the appropriate scanner folder (i.e. Imaging Scanner / Linear Scanner / Wireless BT scanner, etc.).

The following is overview of the steps to test the imaging barcode scanner followed by detailed steps:

- 1. Install the "HP Imaging Scanner Configuration" on the system. This may be found on HP.COM.
- 2. After installation is complete launch the "HP Imaging Scanner Configuration".
- 3. Detect the scanner attached to the unit by selecting "Device Autodetection" option
- 4. Select on "Search On Connection" option.
- 5. Select the COM port that the scanner is attached to. If the scanner is not in USB-COM mode scan the barcode on the previous page or scan the barcode that appears on the screen and then select your COM port that the scanner is assigned to when in USB-COM mode:
- 6. Click on the scanner picture until the menu appears (will see a message that it is retrieving data from the scanner).
- 7. Click on the eyeglass icon (view image) in the menu bar to put the scanner into capture mode. When this option is selected the scanner will beep.
- 8. Select "Capture on Trigger" option located at the bottom of the screen.
- 9. Point the scanner to the item that one wishes to scan and pull the trigger to capture the image.
- 10. Exit the application.

#### **Detailed Steps**

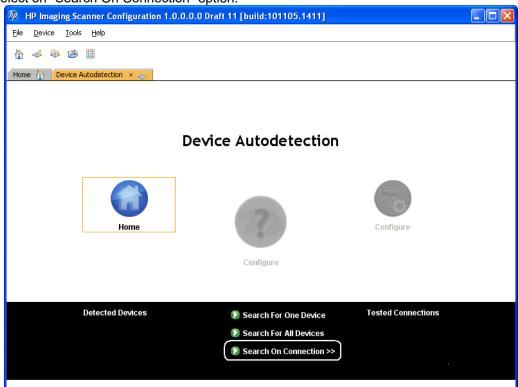
- 1. Install the "HP Imaging Scanner Configuration" on the system. This may be found on HP.COM.
- 2. After installation is complete launch the "HP Imaging Scanner Configuration".
- 3. Detect the scanner attached to the unit by selecting "Device Autodetection" option

   Imaging Scanner Configuration 1.0.0.0.0.0 Draft 11 [build:101105.1411]

   Imaging Scanner Configuration v1.0.0

   Imaging Scanner Configuration v1.0.0

4. Select on "Search On Connection" option.



5. Select the COM port that the scanner is attached to. If the scanner is not in USB-COM mode scan the USB-COM barcode or scan the barcode that appears on the screen and then select your COM port that the scanner is assigned to when in USB-COM mode:

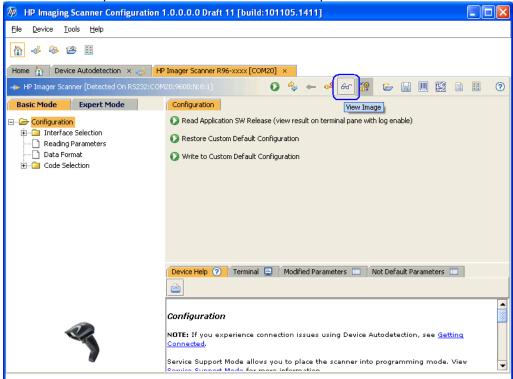
🕼 Select Co	nnection to Search Device	X				
Select the USB-COM port connection or read the barcode below if						
Connection:						
baud rate:	9600 👻					
parity:	N 🕶					
data bits:	8 💌					
stop bits:	1 💌					
	OK Cancel					

6. Click on the scanner picture until the menu appears (will see a message that it is retrieving data from the scanner).

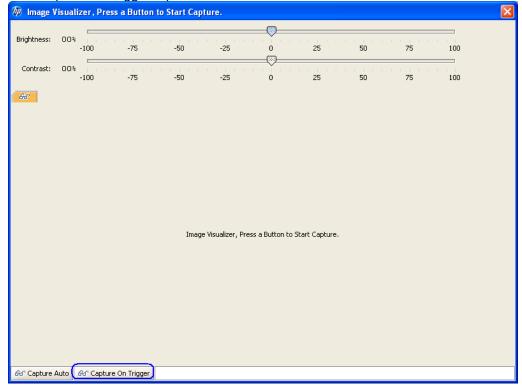




7. Click on the eyeglass icon (view image) in the menu bar to put the scanner into capture mode. When this option is selected the scanner will beep.



8. Select "Capture on Trigger" option located at the bottom of the screen.



9. Point the scanner to the item that one wishes to scan and pull the trigger to capture the image.



10. Exit the application.

# 6.10 HP Retail Jacket for ElitePad Barcode Scanner



## 6.10.1 Connection

The barcode scanner is connected by installing a supported tablet into the HP Retail Jacket for ElitePad:

- HP ElitePad 900 Tablet
- HP ElitePad 1000 Tablet

### 6.10.2 Operating Modes

The operating modes supported by the HP Retail Jacket for Elitepad barcode scanner are listed below along with their Windows Device Manager entries. The scanner by default is shipped in USB HID Keyboard mode; however, with scanner Firmware version 3.06.068 or newer this mode has been redefined as USB Composite (combines USB HID Keyboard and HID-POS) in order to support Firmware updates. If necessary, change the scanner mode for your environment by using the "HP Retail Jacket Scanner OPOS\_NonOPOS Barcodes.pdf" file included in the HP factory image or the HP Retail Jacket for Elitepad Barcode Scanner Programming Reference Guide available on <u>HP.COM</u>.

#### HID-POS (available only with scanner Firmware version 3.06.068 or newer):

POS Barcode Scanner\POS HID Barcode scanner

• Hardware Id: HID\VID\_03F0&PID\_5539

### USB COM:

Universal Serial Bus controllers\HP USB Mobile Barcode Scanner - COM

Hardware Id: USB\VID\_03F0&PID\_2C39

#### USB HID Keyboard (default):

Scanner Firmware version 3.06.068 or newer: Keyboards\HID Keyboard Device

Hardware Id: HID\VID\_03F0&PID\_5739
POS Barcode Scanner\POS HID Barcode scanner

Hardware Id: HID\VID\_03F0&PID\_5739

- Universal Serial Bus controllers\USB Composite Device
  - Hardware Id: USB\VID\_03F0&PID\_5739

Scanner Firmware version older than 3.06.068: Keyboards\HID Keyboard Device

• Hardware Id: HID\VID\_03F0&PID\_2A39

## 6.10.3 Drivers

The drivers needed for each scanner operating mode are listed in the table below. All drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Scanner (Mobile Retail Jacket)) and are also available from <u>HP.COM</u>.

Operating mode	Windows driver	OPOS or JPOS driver
HID-POS	None (native)	Optional
USB COM	Required	Required
USB HID Keyboard (default)	None (native)	Not applicable

The OPOS and JPOS drivers are configured for USB COM mode by default. When switching the scanner operating mode between USB COM and HID-POS, the OPOS and JPOS drivers must be reconfigured to match:

Reconfiguring for OPOS is accomplished either by running the HP Scanner OPOS Setting utility (included and installed as part of the OPOS driver) in C:\<Program Files folder>\HP\HP Mobile Scanner OPOS\Scanner OPOS Configuration Utility or by uninstalling and reinstalling the OPOS driver itself. When opening the HP Scanner OPOS Setting utility and selecting the Device Type (ex: HPMobileScanner), the current scanner operating mode will be shown/selected under Communication Type.

Reconfiguring for JPOS is accomplished by editing jpos.xml in C:\SWSetup\Point of Sale\Scanner (Mobile Retail Jacket)\Mobile Retail Jacket Scanner JPOS\JposScanner. The Port value should be set to "COM" for USB COM mode or "HID" for HID-POS mode.

**6.10.4 Testing the scanner** Sample barcodes that can be used for testing purposes are listed below.







#### 6.10.4.1 <u>Testing the scanner in HID-POS mode</u>

There is currently no HID-POS test app available from HP.

#### 6.10.4.2 <u>Testing the scanner in USB HID Keyboard mode</u> To test the scanner in this mode open a text editor such as Microsoft Notepad, scan a barcode, and verify that a text entry is made.

#### 6.10.4.3 <u>Testing the scanner in USB COM mode with OPOS</u>

The following is an overview of the steps to test the scanner followed by detailed steps:

- Launch the scanner OPOS Test utility from "C:\SWSetup\Point of Sale\Scanner (Mobile Retail Jacket)\Mobile OPOS Test Utility" folder.
- 2. Select appropriate scanner device from the drop down box.
- 3. Click "Open" button.
- 4. Click "Claim" button.
- 5. Click "Enable" button.
- 6. Scan a barcode and the data will appear in the dialog box.
- 7. After scan is complete click on "Disable" button.
- 8. Click "Release" button.
- 9. Click "Close Scanner" button.
- 10. Exit the application.

<u>Detailed Steps</u>
1. Launch the scanner OPOS Test utility from "C:\SWSetup\Point of Sale\Scanner (Mobile Retail Jacket)\Mobile OPOS Test Utility" folder

🍈 HP Mobile OPOS Scanner Tes	t V1.4					X
Device Name	•	0	pen	Claim	Enable	
Exit		Cli	ose	Release	Disable	
Always Enable Data Event				Clear Bar (	Code Data	
Raw Data (ScanData)						
Data (ScanDataLable)						< >
Type:						
OutPut Clear Output Log						
			Clear	DataCount	DataCount: (	)

2. Select appropriate scanner device from the drop down box.

🏟 HP Mobile OPOS Scanner Test V1.4			$\mathbf{X}$
Device Name HPMobileScanner	Open	Claim	Enable
Exit	Close	Release	Disable
🔲 Always Enable Data Event		Clear Bar C	ode Data
Bar Code Data			
Raw Data (ScanData)			~
Data (ScanDataLable)			<u>^</u>
Type:			
OutPut Clear Output Log			
	Cle	ear DataCount	DataCount: 0

3. Click "Open" button. In the OUTPUT section should see OPEN SUCCESS.

🍈 HP Mobile OPO	S Scanner Test V1.4			
Device Name	HPMobileScanner 🖵	Open	Claim	Enable
Exit		Close	Release	Disable
🔲 Always Enat	ole Data Event		Clear Bar Co	de Data
Bar Code Data	·			
Raw Data (Scar	iData)			~
Data (ScanData	Lable)			~
Type:				
OutPut Clear Output	Open Success			
		Clear	DataCount [	)ataCount: 0

4. Click "Claim" button. In the OUTPUT section should see CLAIM SUCCESS.

🍈 HP Mobile OPO	S Scanner Test V1.4			$\sim$
Device Name	HPMobileScanner 🚽	Open	Claim	Enable
Exit		Close	Release	Disable
🗖 Always Enak	ole Data Event		Clear Bar Co	de Data
Bar Code Data	i			
Raw Data (Scar	nData)			<u>^</u>
Data (ScanData	Lable)			<
Туре:				
OutPut Clear Output	Claim Success Open Success			2
		Cle	ar DataCount	DataCount: 0

# 5. Click "Enable" button.

Make sure "Alwa	ys Enable Data I	Event" has is checked.
-----------------	------------------	------------------------

🍈 HP Mobile OPOS Scann	ner Test V1.4					×
Device Name HPMol	bileScanner 🖵	Open		Claim	Enal	ble
Exit		Close		Release	Disa	ble
🔽 Always Enable Data	Event			Clear Bar /	Code Data	1
Bar Code Data						
Raw Data (ScanData)						~
Data (ScanDataLable)						~
Type:						
OutPut						
Clear Output Log	Ready to Scan La Enable Device Claim Success Open Success	abel				~
	,		Clear Da	ataCount	DataCoun	ıt: O

# 6. Scan a barcode and the data will appear in the dialog box.

🖤 HP Mobile OPOS Scanner Test	V1.4			X
Device Name HPMobileScal	nner 💌	Open	Claim	Enable
Exit		Close	Release	Disable
🔽 Always Enable Data Event			Clear Bar Co	de Data
Bar Code Data	81014973			~
Raw Data (ScanData)				 ▼
Data (ScanDataLable)	1014973			<
Type: UPC-A	0			
Clear Output Log	vata: c4885810 488581014973 UPC-A to Scan Label	3	****	
	e Device			~
		Clea	ar DataCount	DataCount: 1

7. After scan is complete click on "Disable" button.

🍈 HP Mobile OPOS Sca	inner Test V1.4
Device Name HP1	NobileScanner 🚽 Open Claim Enable
Exit	Close Release Disable
🔽 Always Enable Da	ata Event Clear Bar Code Data
Bar Code Data	
Raw Data (ScanData	c488581014973
Data (ScanDataLable	e) 488581014973
Туре:	UPC-A
OutPut	
Clear Output Log	Device Disable     Image: Comparison of the comparison of
	Clear DataCount DataCount: 1

# 8. Click "Release" button

🍈 HP Mobile OPOS Scann	er Test V1.4			×
Device Name HPMot	oileScanner 🔽	Open	Claim	Enable
Exit		Close	Release	Disable
🔽 Always Enable Data	Event		Clear Bar Co	de Data
Bar Code Data				
Raw Data (ScanData)	c488581014973			<u>~</u>
Data (ScanDataLable)	488581014973			<
Туре:	UPC-A			
OutPut Clear Output Log	Release Success Device Disable Raw Data: c488581 Data: 48858101497 Type: UPC-A		****	
		Cle	ar DataCount	)ataCount: 1

9. Click "Close Scanner" button.

🍈 HP Mobile OPOS Scann	er Test V1.4			$\mathbf{X}$
Device Name HPMol	bileScanner 💌 Open	CI	aim	Enable
Exit	Close	Rel	ease	Disable
🔽 Always Enable Data	Event	Cle	ar Bar Code	Data
Bar Code Data	c488581014973			
Data (ScanDataLable)	488581014973			~
Type:	UPC-A			
OutPut {	Close Success Release Success Device Disable Raw Data: c488581014973 Data: 488581014973 Type: UPC-A			
		Clear DataC	ount Dat	taCount: 1

### 10. Exit the application.

🍈 HP Mobile OPOS Scann	ner Test V1.4		X
Device Name HPMo	bileScanner 💌 Open	Claim	Enable
Exit	Close	Release	Disable
🔽 Always Enable Data	Event	Clear Bar	Code Data
Bar Code Data			
Raw Data (ScanData)	c488581014973		<u>∧</u> ⊻
Data (ScanDataLable)	488581014973		<ul> <li></li> </ul>
Type:	UPC-A		
OutPut			
Clear Output Log	Close Success Release Success Device Disable Raw Data: c488581014973 Data: 488581014973 Type: UPC-A		
		Clear DataCount	DataCount: 1

#### 6.10.4.4 Testing the scanner in USB COM mode with JPOS

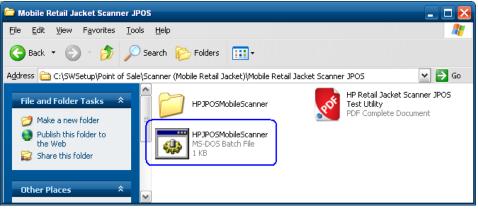
The JPOS drivers are located in ""C:\SWSetup\Point of Sale\Scanner (Mobile Retail Jacket)\ Mobile Retail Jacket Scanner JPOS" folder.

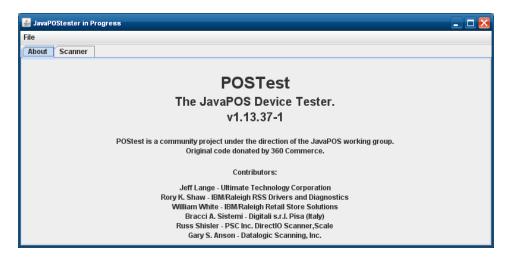
The following is an overview of the steps to test the scanner followed by detailed steps:

- Launch the scanner JPOS Test utility (HPJPOSMobileScanner.bat) from "C:\SWSetup\Point of Sale\Scanner (Mobile Retail Jacket)\ Mobile Retail Jacket Scanner JPOS" folder.
- 2. Click on the "Scanner" tab.
- 3. Select the proper device from the drop down menu.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Scan a barcode and the data will appear in the "Scan Data" and "Scan Data Label" boxes.

#### **Detailed Steps**

1. Launch the scanner JPOS Test utility (HPJPOSMobileScanner.bat) from "C:\SWSetup\Point of Sale\Scanner (Mobile Retail Jacket)\ Mobile Retail Jacket Scanner JPOS" folder.





2. Click on the "Scanner" tab.

🛃 JavaPOStester in Progress	_ 🗆 🔀
File	
About Scanner	
POSTest	
The JavaPOS Device Tester.	
v1.13.37-1	
POStest is a community project under the direction of the JavaPOS working group. Original code donated by 360 Commerce.	
Contributors:	
Jeff Lange - Ultimate Technology Corporation Rory K. Shaw - IBMRaleigh RSS Drivers and Diagnostics William White - IBMRaleigh Retail Store Solutions Biracci A. Sistemi - Digitali s.r.I. Pisa (Italy)	
Russ Shisler - PSC Inc. DirectlO Scanner,Scale Gary S. Anson - Datalogic Scanning, Inc.	

#### 3. Select the proper device from the drop down menu.

🕌 JavaPOStester in Prog	jress	🗕 🗖 🚽
File		
About Scanner		
	Logical name: HPMobileSca	Inner V JPOS_S_CLOSED
	Open	Inner Close Info O/C/E EXIT
🗌 Auto disable	0 D (	
🗌 Data event enabled	Scan Data:	
Device enabled	Scan Data Type:	
🗌 Freeze events		
🗌 Decode data	Scan Data Label:	
Clear Input		<u> </u>
Clear Input Properties	Label Count:	Data Count: Clear Fields Refresh Fields

# 4. Click on the "OPEN" button.

🛓 JavaPOStester in Prog	ress	- C 🔀
File		
About Scanner		
	Logical name: HPMobileSca	nner V JPOS_S_CLOSED
	Open Claim	Release Close Info O/C/E EXIT
🗌 Auto disable		
🗌 Data event enabled	Scan Data:	
Device enabled	Scan Data Type:	
🗌 Freeze events		
🗌 Decode data	Scan Data Label:	
Clear Input		
Clear Input Properties	Label Count: 0	Data Count: 0 Clear Fields Refresh Fields

5. Click on the "CLAIM" button.

🕌 JavaPOStester in Progre	:55	
File		
About Scanner		
	Logical name: HPMobileS	canner  JPOS_S_IDLE
	Open Claim	Release Close Info O/C/E EXIT
🗌 Auto disable		
🗌 Data event enabled	Scan Data:	
Device enabled	Scan Data Type:	
Freeze events		
🗌 Decode data	Scan Data Label:	
Clear Input		
Clear Input Properties	Label Count: 0	Data Count: 0 Clear Fields Refresh Fields
	_	

After clicking on the "CLAIM" button a few seconds later a check should appear next to the "Data event enabled / Device enabled / Decode data" boxes

🕌 JavaPOStester in Progre	88	
File		
About Scanner		
	Logical name: HPMobileSc	anner V JPOS_S_IDLE
	Open Claim	Release Close Info O/C/E EXIT
☐ Auto disable ✔ Data event enabled	Scan Data:	
Device enabled Freeze events	Scan Data Type:	
Decode data	Scan Data Label:	
Clear Input Clear Input Properties	Label Count: 0	Data Count: 0 Clear Fields Refresh Fields

6. Scan a barcode and the data will appear in the "Scan Data" and "Scan Data Label" boxes.

🕌 JavaPOStester in Progre	85	- D 🔀
File		
About Scanner		
I	ogical name: HPMobileS	canner V JPOS_S_IDLE
	Open Claim	Release Close Info O/C/E EXIT
🗌 Auto disable		c488581014973
🗹 Data event enabled	Scan Data:	
🖌 Device enabled	Scan Data Type:	UPC-A
Freeze events		488581014973
🖌 Decode data	Scan Data Label:	
Clear Input		<u> </u>
Clear Input Properties	Label Count: 2	Data Count: 0 Clear Fields Refresh Fields

7. After scan is complete click on "Release" button.

🕌 JavaPOStester in Progr	ess	- D D
File		
About Scanner		
	Logical name: HPMobile	Scanner JPOS_S_IDLE
	Open Claim	Release Close Info O/C/E EXIT
🔲 Auto disable		c488581014973
🗹 Data event enabled	Scan Data:	
🗹 Device enabled	Scan Data Type:	UPC-A
🔲 Freeze events		488581014973
🗹 Decode data	Scan Data Label:	
Clear Input		
Clear Input Properties	Label Count: 4	Data Count: 0 Clear Fields Refresh Fields

# 8. Click on "Close" button.

🛓 JavaPOStester in Progr	ess	N 🗆 🗖 -
File		
About Scanner		
	Logical name: HPMobile	Scanner JPOS_S_IDLE
	Open Claim	Release Close Info O/C/E EXIT
🗌 Auto disable	Contra Dottor	c488581014973
🗌 Data event enabled	Scan Data:	
Device enabled	Scan Data Type:	UPC-A
Freeze events		488581014973
Decode data	Scan Data Label:	
Clear Input		
Clear Input Properties	Label Count: 4	Data Count: 0 Clear Fields Refresh Fields
	_	

9. Click on "Exit" to close the test application.

- 🗆 🔼
esh Fields
esirrielus

# 6.11 HP POS Keyboard



# 6.11.1 Connection

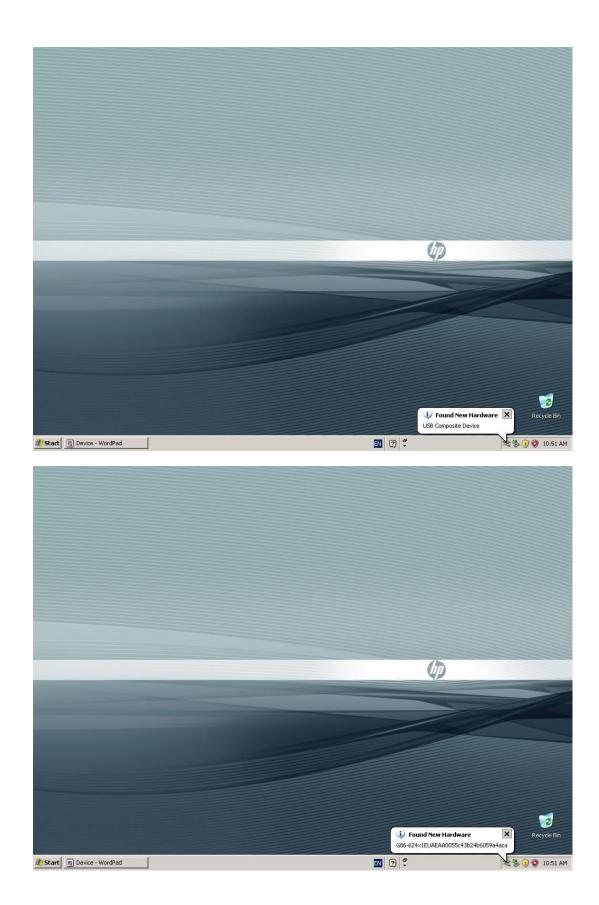
The HP POS Keyboard may be plugged into any free USB port, including powered USB ports. If a powered USB port is used, the powered portion is just not utilized.

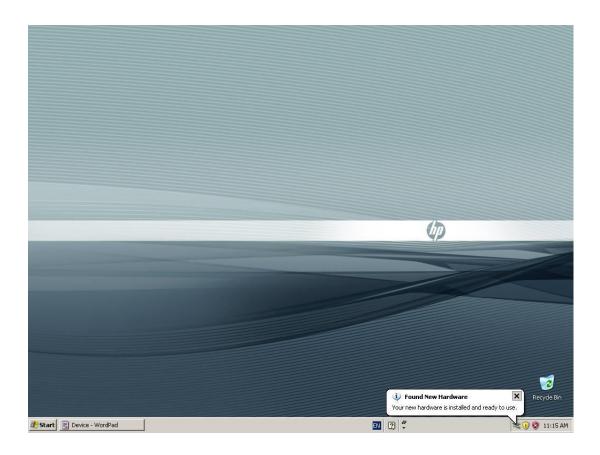
# 6.11.2 Windows Drivers for the HP POS Keyboard

The HP POS Keyboard uses native drivers for Windows operating system. Windows will load several drivers for the keyboard and touch pad. If during the driver installation, Windows displays the new hardware wizard, the user needs to accept the defaults that appear during the hardware wizard GUI (for the first screen you may select the no option) and the native drivers will be loaded. Please refer to "<u>If prompted for native driver location (New Hardware Wizard)</u>" section. If prompted for the driver installation you may need to go through the new hardware wizard 5 or 6 times to load the Windows HID drivers.

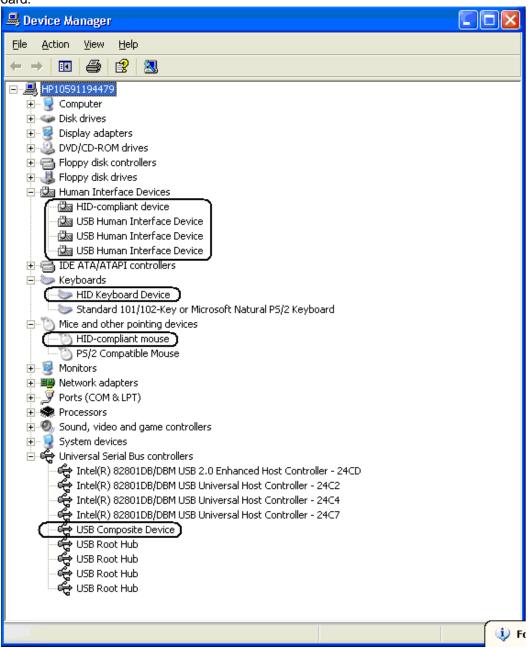
The following shows some of the dialog boxes that will appear while Windows is installing the drivers for this device:







The following is the Device Manager window after all the drivers are loaded for the HP POS Keyboard:



# 6.11.3 OPOS Drivers for the HP POS Keyboard

No OPOS drivers are needed for the keyboard.

## 6.11.4 Testing the HP POS Keyboard

Open Notepad, what is typed on the keyboard should appear in Notepad.

## 6.11.5 JPOS Drivers for the HP POS Keyboard

No JPOS drivers are needed for the keyboard.

# 6.12 HP USB POS Keyboard with Magnetic Stripe Reader



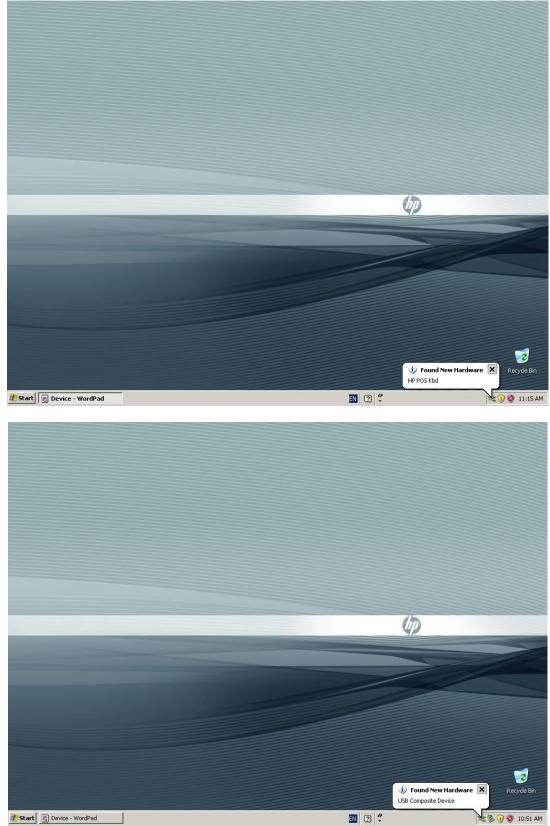
## 6.12.1 Connection

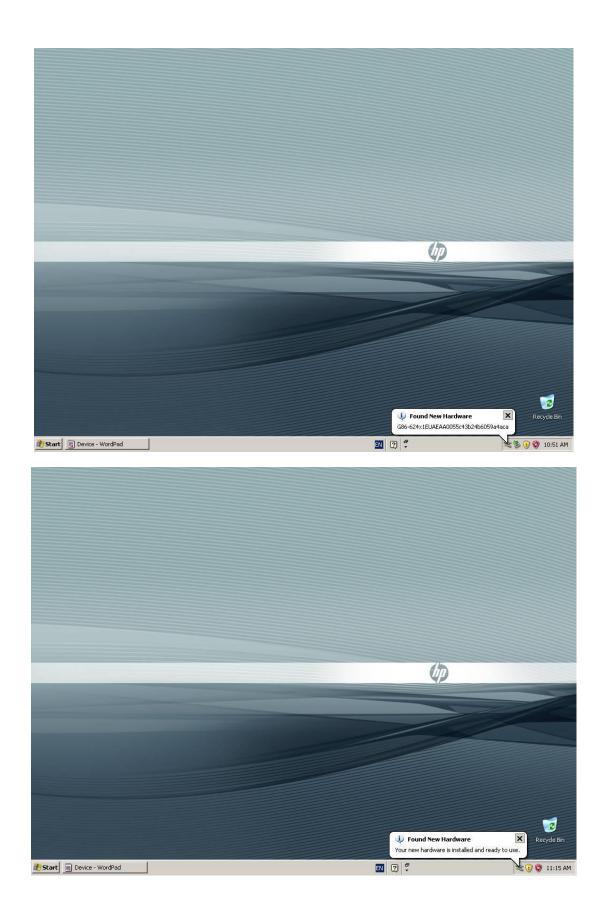
The HP USB POS Keyboard with Magnetic Stripe Reader may be plugged into any free USB port, including powered USB ports. If a powered USB port is used, the powered portion is just not utilized.

## 6.12.2 Windows Drivers for the HP USB POS Keyboard with Magnetic Stripe Reader

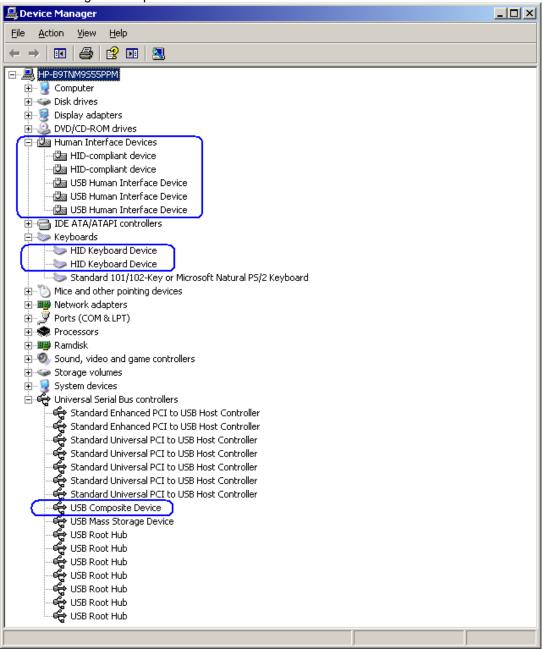
The HP USB POS Keyboard with Magnetic Stripe Reader uses native drivers for Windows operating system. Windows will load several drivers for the keyboard and touch pad. If during the driver installation, Windows displays the new hardware wizard, the user needs to accept the defaults that appear during the hardware wizard GUI (for the first screen you may select the no option) and the native drivers will be loaded. Please refer to "<u>If prompted for native driver location</u> (<u>New Hardware Wizard</u>)" section. If prompted for the driver installation you may need to go through the new hardware wizard 5 or 6 times to load the Windows HID drivers.

The following shows some of the dialog boxes that will appear while Windows is installing the drivers for this device:

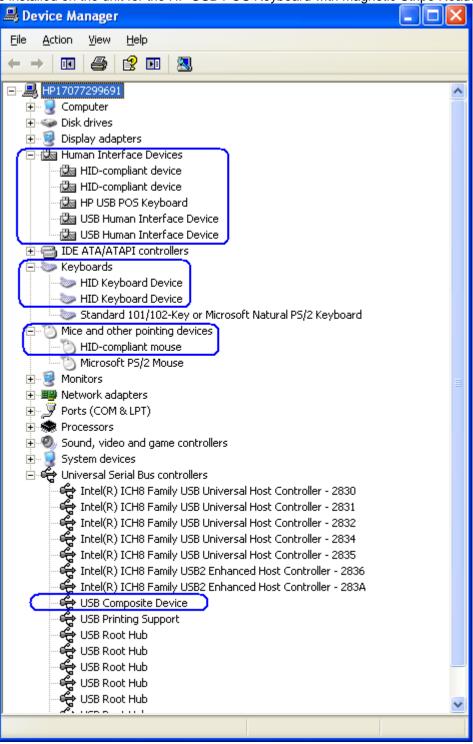




The following is the Device Manager window after all the drivers are loaded for the HP USB POS Keyboard with Magnetic Stripe Reader:



The following is the Device Manager window after all the drivers **and** the keyboard configuration software is installed on the unit for the HP USB POS Keyboard with Magnetic Stripe Reader:



## 6.12.3 Enable OPOS/JPOS for the MSR

In order to use OPOS/JPOS drivers for the MSR on the HP USB POS Keyboard with Magnetic Stripe Reader one will need to enable this option.

#### Enable MSR OPOS/JPOS

The following is an overview of the steps to test the MSR followed by detailed steps:

- 1. Must have the HP POS Keyboard configuration utility package, run the EXE and the unit will need to be restarted after the utility has completed installation.
  - **Note:** In the HP factory image the HP POS Keyboard configuration utility is already installed so step 1 can be skipped, proceed to step 2. If the configuration utility is already installed on the unit and setup is launched one will be prompted to modify / repair / remove the version that is installed, cancel the installation process and proceed to step 2.
- 2. After the unit has completed the restart and is back at the Windows desktop, launch "Designer" program which is located in the "HP POS Keyboard" folder.
- 3. Accept the default once "Designer" is launched.
- 4. Once the application has read the configuration you will see keyboard layout in the GUI and click on the MSR icon.
- 5. Click on the "Enable OPOS/JavaPOS settings:
- 6. Close the application and you will be prompted to save the setting to keyboard, click "YES".

#### Enable MSR OPOS/JPOS Detailed Steps

- Must have the HP POS Keyboard configuration utility package, run the EXE and the unit will need to be restarted after the utility has completed installation. This utility is already installed in the HP factory image (C:\xxxxx\Point of Sale\Keyboard with MSR\Configuration Utility) and is also available from <u>HP.COM</u>.
- **Note:** In the HP factory image the HP POS Keyboard configuration utility is already installed so step 1 can be skipped, proceed to step 2. If the configuration utility is already installed on the unit and setup is launched one will be prompted to modify / repair / remove the version that is installed, cancel the installation process and proceed to step 2.
- 2. After the unit has completed the restart and is back at the Windows desktop, launch "Designer" program which is located in the "HP POS Keyboard" folder.
- 3. Accept the default once "Designer" is launched. The following are some screens that you will see:

Designer File Configuration Options View Window	Urb.			. ð X
New Open Save Activate	Edit Wizard Help	_		_
	Designer Wizard - Select operation			
	Welcome to the Designer Wizard!			
	This wizard helps you to create and customize configuration files.			
	Open configuration of a connected keyboard for writing or saving to a file.			
	Which of the following operations would you like to perform?			
	Modify active configuration of a keyboard     Generate gew configuration			
	Ordeligue gen europainater file     Omodify configuration from a file			
	Do not show wizard at startup			
	< <u>R</u> ack <u>N</u> ext> <u>C</u> ancel <u>H</u> elp			
Ready				
start Designer		2	<mark>8</mark> 09, 🖻	3:20 AM
Designer				. <b>ð</b> X
File Configuration Options View Window	Help			
📄 📂 🔳 💒	💒 🛐 🕜			
New Open Save Activate	Edit Wizard Help			
	Status 🛛 🔀			
	Reading the configuration from the keyboard may last 2 minutes.			
	Please do not turn off the computer during this operation, and do not touch or unplug keyboard or			
	mouse from your computer.			
	Job status Estimated time left: seconds, Elapsed Time: seconds,			
	Estimated time left:seconds. Elapsed Time:seconds.			
	Do not confirm read or write of configuration			
	(Back Next> Cancel Help			
Ready			809.0	

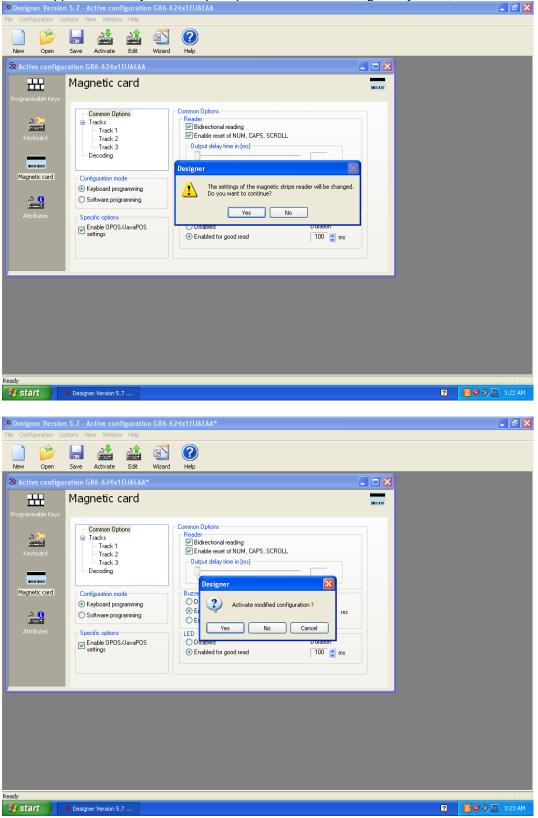
4. Once the application has read the configuration you will see keyboard layout in the GUI and click on the MSR icon:

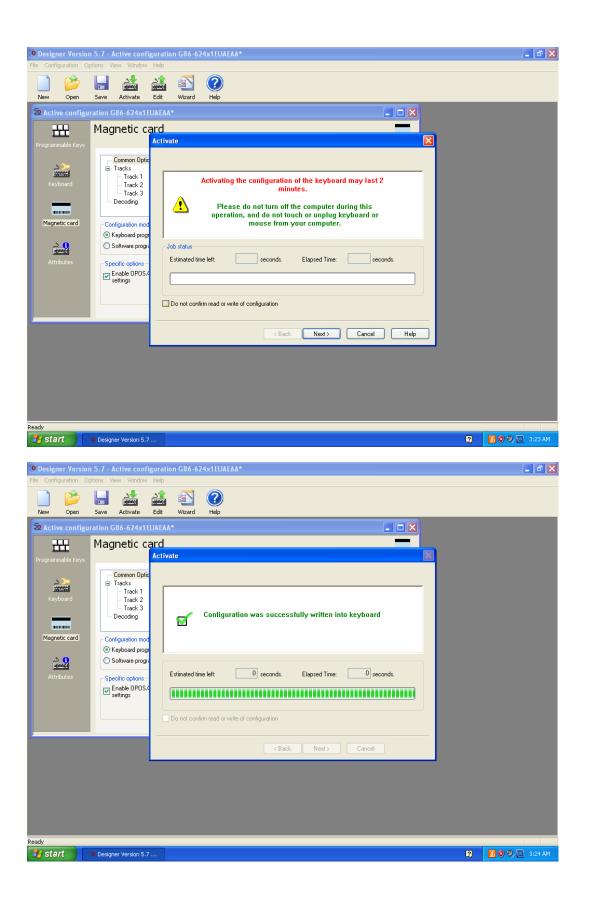
Designer Version 5.7 - Act	ive configuration G86-624x1EUAEAA		
File Configuration Options View	Window Help		
📄 😂 📙	💒 🏄 🛐 🕜		
	Activate Edit Wizard Help		
Active configuration G86	-624x1EUAEAA		$\overline{\mathbf{X}}$
	ammable Keys		
	anninable Reys	田	
Programmable Keys		Clayout	
	Prn Scr Pa Del Ins F11 F12 Hom Pgt Num 7	8 9 - Change	
Keyboard	F2 F3 F4 F5 F6 F7 F8 F9 F10 End P94 / 4	5 6 +	
	2 3 4 5 6 7 8 9 0 - = + 1	2 3 Ent Programming	
→I Q Intrimute Caps A	W E R T Y U I O P [ ] \ *	Enable all     Keys	
	z x с v в N м , . / û ↑	— Keys	
	Alt Space Alt 🛐 🗲 🕹 🔶		
	Keyboard programming	✓ Software programming	
Attributes	andard-Layer	Enable software settings Key label	
OCtr		Software macro	
⊖ Sh	ift-Layer	Software function     Apply	
	Remove Next >>	Remove Next >>	
	)( )		
Ready			
Start Designer	Version 5.7		😰 🛛 💆 🍳 💽 3:21 AM

5. Click on the "Enable OPOS/JavaPOS settings:

Designer Version 5.7 - Active configuration G86-624x1EUAEAA	- 7 🛛
File Configuration Options View Window Help	
📄 📂 님 🚢 🏩 🛐 🕢	
New Open Save Activate Edit Wizard Help	
Active configuration GB6-624x1EUAEAA	
H Magnetic card	
Programable Keys	
Common Options	
Tracks	
Track 3 Decoding	
Becimpi	
Magnetic card Configuration mode Buzzer	
Keyboard programming     Oisabled     Duration     Enabled for good read     100      ms	
Software programming Enabled for bad read	
Attributes Specific options LED Duration	
settings OF US /JavaPUS	
Ready	
y start Designer Version 5.7	🗾 😵 🧐, 🔃 3:22 AM

6. Close the application and you will be prompted to save the setting to keyboard, click "YES".





## 6.12.4 OPOS Drivers for the HP USB POS Keyboard with Magnetic Stripe Reader -Keyboard

No OPOS drivers are needed for the keyboard.

## 6.12.5 <u>OPOS Drivers for the HP USB POS Keyboard with Magnetic Stripe Reader -</u> MSR

The OPOS drivers are already installed in the HP factory image (C:\xxxxx\Point of Sale\Keyboard with MSR\OPOS) and is also available from <u>HP.COM</u>.

# 6.12.6 Testing the HP USB POS Keyboard with Magnetic Stripe Reader

#### 6.12.6.1 <u>Keyboard</u>

Open Notepad, what is typed on the keyboard should appear in Notepad.

### 6.12.6.2 <u>MSR OPOS</u>

The following is overview of the steps to test the MSR followed by detailed steps:

- 1. Launch the OPOS test utility.
- 2. Select the device name, need to select "HPKBMSR" for the MSR that is located on the HP POS Keyboard with integrated MSR.
- 3. Click on "BEGIN" and swipe a card. After the card is swiped data should appear in the test applet.
- 4. Click on "END" button to exit the test application.

#### OR

- 1. Launch the OPOS test utility from the start menu.
- 2. Select the device name, need to select "HPKBMSR" for the MSR that is located on the HP POS Keyboard with integrated MSR.
- 3. Click on "OPEN"
- 4. Click on "CLAIM"
- 5. Select "DataEventEnabled (R/W)" and "DeviceEnabled (R/W)"
- 6. Swipe a credit card and the data should appear in the test applet.
- 7. To exit the application:
  - a. Click on the RELEASE button.
    - b. Click on the CLOSE button.
    - c. Click on the EXIT button.

#### **Detailed Steps**

1. Launch the OPOS test utility.

2. Select the device name, need to select "HPKBMSR" for the MSR that is located on the HP USB POS Keyboard with Magnetic Stripe Reader.

3. Click on "BEGIN" and swipe a card. After the card is swiped data should appear in the test applet.

OPOS 1.11 MagneticStripeReader Demo		
Device Specific	Device Name: DeviceDescription:	HPKBMSR 🔽
Track2Data: Track3Data: Track4Data: TracksToRead: Card Level Card Level Card Level	ServiceObjectVersion: ServiceObjectDescription: ControlObjectVersion: ControlObjectDescription: Device Properties	0 Methods
CapTransmitSentinals. (R)  TransmitSentinals (R/W)  CapISO (R) AccountNumber:  CapJISTwo (R) ExpirationDate:  DecodeData (R/W)  Title:	Claimed (R) DeviceEnabled (R/W) AutoDisable (R/W) DataEventEnabled (R/W) Auto Reset FreezeEvents (R/W)	Open         CheckHealth           Close         ClearInput           Claim         DirectIO           Release         Statistics           Firmware
ParseDecodeData (R/W) FirstName:     Write Tracks     MiddleInitiat:     CapWritableTracks     Surname:     Suffix:     TracksToWrite     VriteTracks     WriteTracks     ViriteTracks	DataCount: 0 CheckHealthText: Power CapPwrRep. PwrState	Result     0     Closed       Result     0     Closed       Result     0     Closed       OpenResult     0     Closed       Debug Messages:     0     Closed
Exit Exit End	BinaryConversion:	× ×

OPOS 1.11 MagneticStripeReader Der	no				
Device Specific		Device	Name:	HPKBMSR	<b>v</b>
Track1Data: B3724 496353 11003/10./A	^05	DeviceDescr	iption:	HP OPOS MSR	
Track2Data: 372449635311003=051294	1116203	ServiceObjectVe	ersion:	1008000	
Track3Data:		ServiceObjectDescr	iption:	HP OPOS MSR Serv	rice Object
Track4Data:		ControlObjectVe	ersion:	1011000	
	ReportingType: — ard Level	ControlObjectDescr	iption:	OPOS MSR Control 1.1	1.000 [Public, by
WSR_IR_I_2_3 ▼	ard Level ack Level	Device Properties		Methods	
CapTransmitSentinals. (R)		Claimed (R) Claimed (R) Claimed (R/W)		Open	CheckHealth
TransmitSentinals (R/W)		AutoDisable (R/W)		Close	ClearInput
CapISO (R) AccountNumber:	372449635311	DataEventEnabled (R/W		Claim	DirectIO
CapJISTwo (R)	0512	Auto Reset		Release	Statistics
✓ DecodeData (RAV)		FreezeEvents (R/W)	_	Firmware	
ParseDecodeData (R/W) FirstName:	A	DataCount: 0		ResultCodes	State
Write Tracks MiddleInitial:		CheckHealthText:		Result: 0	C Closed
CapWritableTracks Surname:	10.	Power		Result Ex.: 0	<ul> <li>Idle</li> </ul>
J – – Suffix:		CapPwrRep. PR_NONE	•	OpenResult 0	C Error
MSR_TR_NON - ServiceCode:		PwrState PS_UNKNO	-	Debug Messages:	
WriteTracks		PwrNotify PN_DISABLI	ΞI	DataEventEnabled to T	RUE, 🔼
Track2Discretionary:	116203			otherwise the next DATA EVENT will be q	ueued !
Automatic		BinaryConversion:			-
Exit Begin	End	NONE	•	<	>

## 4. Click on "END" button to exit the test application.

OPOS 1.11 MagneticStripeReader Demo 📃 🗖 🔀							
Device Specific			1	Device Name:	HPKBMSR	Y	
Track1Dete:	B3724 496353 11003*10./A 105		De	viceDescription	HP OPOS MSR		
Track2Data:	372449635311003=0512941	116203	Servic	eObjectVersion:	1008000		
Track3Detx	Track3Data:		ServiceOt	bjectDescription	HP OPOS MSR Ser	vice Object	
Track4Dete:			Contro	olObjectVersion	1011000	-	
TracksToRead		ReportingType:	ControlOt	bjectDescription	OPOS MSR Control 1	11.000 [Public, by	
MSR_TR_1_2_3	•	ack Level	Device Properties		Methodis		
CapTransmits		ck Level	Claimed (R)		Open	CheckHealth	
TransmitSenti	nals (RAV)		DeviceEnable     AutoDisable (I		Close	Clearinput	
CapiSO (R)	1 01240000011		DataEventEna		Claim	DirectiO	
CapJISOne (F CapJISTwo (F	<ul> <li>EXDITATION LINER.</li> </ul>	0512	Auto Rese	et	Release	Statistics	
DecodeData (	Titler		FreezeEvents	: (RAV)	Firmware		
ParseDecode		A	DataCount:	0	ResultCodes	State	
Write Tracks	Middelnitiet		CheckHealthText		Result: 0	C Closed	
CapiVritableTra	Surriging.	10.	Power		Result Ex.: 0	- C Busy G Idle	
MSR_TR_NON	Suffic			NONE -	OpenResult 0	C Error	
TracksToWrite MSR_TR_NON	ServiceCode:	941			Debug Messages:		
	Track1Discretionary:	116203			DataEventEnabled to	TRUE,	
WriteTracks	Track2Discretionary:	116203	PwrNotify PN		otherwise the next		
Automatic			BinaryConversion	×	DATA EVENT will be	queued i	
Ext	Begin	End	NONE			×	
EX	Dogi	end	Inone	<u> </u>	<	<u>≥</u>	

If one does not want to use the "AUTOMATIC" method, the following are the steps to use when manually test using the OPOS test applet.

1. Launch the OPOS test utility.

2. Select the device name, need to select "HPKBMSR" for the MSR that is located on the HP USB POS Keyboard with Magnetic Stripe Reader.

DPOS 1.11 MagneticStripeReader Demo						
OPOS 1.11 MagneticStripeReader Demo         Device Specific         Track1Data:         Track2Data:         Track3Data:         Track4Data:         CapIransmitSentinals.(R)         CapISO (R)         AccountNumber:         CapJISOne (R)         ExpirationDate:         DecodeData (R/W)         FirstName:         ParseDecodeData (R/W)         VitidIn FirstName:	Device Name: DeviceObjectVersion: ServiceObjectVersion: ControlObjectVersion: ControlObjectVersion: ControlObjectVersion: ControlObjectDescription: DeviceProperties Claimed (R) DeviceEnabled (R/W) AutoDisable (R/W) DataEventEnabled (R/W) FreezeEvents (R/W) DataCount: 0	0 0 Methods Copen CheckHealth Close ClearInput Claim DirectIO Release Firmware ResultCodes State Claim				
Write Tracks       MiddleInitial:         CapVvritableTracks       Surname:         TracksToWrite       Surfix:         Track1Discretionary:       Track1Discretionary:         WriteTracks       Track2Discretionary:         Automatic       Begin         Exit       Begin	CheckHeatthText	Result 0 Closed Result Ex.: 0 Closed OpenResult 0 Closed Clusy Clale C Error Debug Messages:				

- 3. Click on "OPEN"
- 4. Click on "CLAIM"

OPOS 1.11 MagneticStripeReader Demo		
OPOS 1.11 MagneticStripeReader Demo         Device Specific         Track1Data:         Track2Data:         Track3Data:         Track4Data:         Track4Data:         Track4Data:         CapUS O (R)         CapUS O (R)         CapUS O (R)         CapUS Two (R)         DecodeData (R/W)         ParseDecodeData (R/W)         Write Tracks         Surname:         Suffix:         TrackToWrite         Surname:         WriteTracks         Track1Discretionary:	Device Name: DeviceObjectVersion: ServiceObjectDescription: ControlObjectDescription: ControlObjectDescription: ControlObjectDescription: Calaimed (R) DeviceEnabled (R/V) AutoDisable (R/V) DataEventEnabled (R/V) Auto Reset FreezeEvents (R/V) DataCount: CheckHealthText: Power CapPwrRep. PwrState PwrNotify	
Automatic Exit Begin End	BinaryConversion:	<

5. Select "DataEventEnabled (R/W)" and "DeviceEnabled (R/W)"

OPOS 1.11 MagneticStripeReader Demo	
Device Specific Track1Data: B3566005530230860°FDMS TEST JCB ACC' Track2Data: 3566005530230860°FDMS TEST JCB ACC' Track3Data: Track3Data: Track4Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data: Track1Data:	Device Name: HPKEMSR  DeviceObject/Version: HP OPOS MSR DeviceObject/Version: 1013000 ServiceObjectDescription: OPOS MSR Service Object Copyright(c ControlObjectDescription: OPOS MSR Control 1.13.001 [Public, by ControlObjectDescription: OPOS MSR Control
WriteTracks         Track1Discretionary:         10000000000           WriteTracks         Track2Discretionary:         100000000000           Automatic         Begin         End	PwrNotify PN_DISABLE DataEventEnabled to TRUE, otherwise the next DATA EVENT will be queued !

6. Swipe a credit card and the data should appear in the test applet.

(	OPOS 1.11 MagneticSt	ripeReader Demo						
OPOS 1.11 MagneticStripeReader Demo  Device Specific  Track1Data: B3566005530230860*FDMS TEST JCB ACC'  Track2Data: 3566005530230860=071210110000000000( Track3Data: Track3Data: Track4Data:  TracksToRead: ErrorReportingType: C Card Level				Servic Co Contr	Device Name: DeviceDescription: erviceObjectVersion: ceObjectDescription: ontrolObjectVersion: rolObjectDescription:	1013000 OPOS MSR Service Ot 1013001 OPOS MSR Control 1.1		
	MSR_TR_1_2_3	(R) V) AccountNumber: 3 ExpirationDate: 0 Title:	s6600553023		AutoDisak DataEvent Auto f FreezeEve	R) abled (R/W) ble (R/W) tEnabled (R/W) Reset ents (R/W)	Methods Open Close Claim Release Firmware	CheckHealth ClearInput DirectIO Statistics
	V8##oTrooko	MiddleInitial: J Surname: Fi Suffix: S ServiceCode: 11 ack1Discretionary: 11	EST CB DMS 01 0000000000 0000000000 0000000000	Ci P C F P	ataCount: heckHealthTe CapPwrRep. PwrState PwrNotify BinaryConver NONE	PR_STAND/ V PS_UNKNOV V PN_DISABLI V	ResultCodes Result: 0 Result Ex.: 0 OpenResult 0 Debug Messages: DataEventEnabled to TI otherwise the next DATA EVENT will be qu	

- 7. To exit the application:a. Click on the RELEASE button.b. Click on the CLOSE button.

# 6.12.7 JPOS Drivers for the HP USB POS Keyboard with Magnetic Stripe Reader

## 6.12.7.1 Keyboard

No JPOS drivers are needed for the keyboard.

#### 6.12.7.2 <u>MSR JPOS</u>

The following is overview of the steps to test the MSR followed by detailed steps:

- 1. Launch the JPOS test utility.
- 2. Select MSR from "TEST" drop down box.
- 3. Click "OPEN"
- 4. Click "CLAIM"
- 5. Click on "DataEventEnabled (R/W)
- 6. Click on "DeviceEnabled (R/W)
- 7. Swipe a card.
- 8. Select the Release / Close / Exit buttons to exit application.

#### **Detailed Steps**

- 1. Launch the JPOS test utility.
- 2. Select MSR from "TEST" drop down box.

🛓 Ji	🕌 JPOS-Testsuite V1.1.8			
File	Test			
riie	Keyboard Keylock MSR			

# Click "OPEN" Click "CLAIM"

CLAIM		
🕌 POS MSR Test		
open <u>claim</u> close release	clearinput checkHealth clearOutput directIO	TracksToRead (R/W) MSR_TR_1_2_3_4
☐ AutoDisable (RM) I⊄ Claimed (R)	DeviceControlDescription: JavaPOS MSR Device Control	Track2Data           Track3Data           Track4Data
DataEventEnabled (R/W)     DeviceEnabled (R/W)     FreezeEvents (R/W)	DeviceControlLabel: 1010000 DeviceServiceDescription:	✓ DecodeData (RM)     ✓ CardLevel (Error RM)     ✓ ParseDecodeData (RM)     ✓ TrackLevel (Error RM)
PowerNotify (R/W)     CapPowerReporting: STANDARD	HP POS JPOS MSR Device Serv DeviceServiceLabel:	AccountNumber ExpirationDate
DataCount: 0 PowerState: PS_UNKNOWN	11010001 PhysicalDeviceDescription: IHP POS MSR-Device (HP-Keybo	Title
CheckHealthText:	PhysicalDeviceName:	MiddleInitial
State:	🔽 CapISO (R)	Sumame Suffix
Idle C Busy	I⊄ CapJISOne (R) I∏ CapJISTwo (R)	ServiceCode
C Error	✓ CapTransmitSentinels (R)	Track1Discr.data Track2Discr.data

- Click on "DataEventEnabled (R/W)
   Click on "DeviceEnabled (R/W)

🕌 POS MSR Test		X
open claim	clearinput checkHealth	TracksToRead (R/W) MSR_TR_1_2_3_4
close release	clearOutput directIO	Track1Data
🗌 TransmitSentinels (RM)		Track2Data
T AutoDisable (R/W)	DeviceControlDescription:	Track3Data
Claimed (R)	JavaPOS MSR Device Control	Track4Data
DataEventEnabled (R/W)     DeviceEnabled (R/W)     FreezeEvents (R/W)	DeviceControlLabel: 1010000 DeviceServiceDescription:	I I I I CardLevel (Error RM) I ParseDecodeData (RM) I TrackLevel (Error RM)
PowerNotify (R/W)	HP POS JPOS MSR Device Sen	AccountNumber
CapPowerReporting: STANDARD DataCount: 0	DeviceServiceLabel:	ExpirationDate
PowerState:	PhysicalDeviceDescription:	Title
PS_UNKNOWN	HP POS MSR-Device (HP-Keybo	FirstName
CheckHealthText:	PhysicalDeviceName:	MiddleInitial
	ļ	Sumame
State:	🔽 CapISO (R)	Suffix
Idle C Busy	✓ CapJISOne (R) ✓ CapJISTwo (R)	ServiceCode
C Error	🔽 CapTransmitSentinels (R)	Track1Discr.data
End		Track2Discr.data

7.	Swipe a card.	The data from the card should appear in the test applet.
	POS MSR Te	t

🕌 POS MSR Test							
open	claim	clearInput checkHealth		TracksToRead (R/W	) M	SR_TR_1_2_3_4	-
close re	elease	clearOutput directIO	(	Track1Data	B3724 496	353 11003^10./A	^0512
🗌 TransmitSentinels (R/	MM)			Track2Data 372449635311003=0512941116203			
🗌 AutoDisable (R/W)		DeviceControlDescription:		Track3Data			
🔽 Claimed (R)		JavaPOS MSR Device Control		Track4Data	<u> </u>		
DataEventEnabled (R.	AN)	DeviceControlLabel:	<u>ر</u>	E Deverte Data (BA	0	G Cord ovel /Error B	A80
DeviceEnabled (RMV)		1010000		DecodeData (RM)     CardLevel (Error RM     ParseDecodeData (RM)     TrackLevel (Error RA			
FreezeEvents (RM)		DeviceServiceDescription:		FaiseDecodeData (RVV)   HackLevel (Elloi RVV)			
E PowerNotify (R/W)		HP POS JPOS MSR Device Sen		AccountNumber	372449635311003		
CapPowerReporting:	STANDARD	DeviceServiceLabel:		ExpirationDate	0512		
DataCount: 0		11010001		Title			
PowerState:		PhysicalDeviceDescription:		1100			
PS_UNKNOWN		HP POS MSR-Device (HP-Keybo		FirstName	A		
CheckHealthText:		PhysicalDeviceName:		MiddleInitial			
		MSR		Sumame	10.		
State:				Sumame	110.		
Closed		🔽 CapISO (R)		Suffix			
Idle		🔽 CapJISOne (R)		ServiceCode	941		
C Busy		🗖 CapJISTwo (R)			1		
C Error		✓ CapTransmitSentinels (R)		Track1Discr.data	116203		
End				Track2Discr.data	116203		

To test another card, click on "DataEventEnabled (R/W)" so it is checked and then swipe the card that one wishes to test.

- 8. To exit the application:
  - a. Click on the RELEASE button.
  - b. Click on the CLOSE button.
  - c. Click on the EXIT button.

# 6.13 HP ap5000 VFD (Vacuum Fluorescent Display)



## 6.13.1 Connection

The VFD on the HP ap5000 system is connected via serial interface. When attached at the HP factory the VFD is installed on COM2 as the default location. The HP ap5000 VFD can be connected either on COM2 or COM1 on the ap5000 unit; it **cannot** be used on COM3.

If the VFD is moved to factory default location, please go to into the BIOS and enable 5V on the COM2 and disable 5V on COM1.

	ap5000 VFD	
Port	COM2 (default) or COM1	
Baud Rate	38400	
Data Bit	8	
Parity	None	
Stop Bit	1	
Flow Control	None	

## 6.13.2 Windows Drivers for the HP ap5000 VFD

Windows operating system supports serial port COM1/COM2, so no extra drivers are needed to be installed.

## 6.13.3 OPOS Drivers for the HP ap5000 VFD

The OPOS drivers are already installed in the HP factory image (C:\xxxxx\Point of Sale\VFD HP ap5000\ap5000 VFD OPOS) and are also available from <u>HP.COM</u>.

#### 6.13.4 Testing HP ap5000 VFD

#### 6.13.4.1 Testing HP ap5000 VFD in non-OPOS mode

The following is an overview of the steps to test the ap5000 VFD followed by detailed steps:

- 1. Start the Windows test utility from Windows start menu.
- 2. Select the COM port from the drop down box or keep the default option. The ap5000 VFD is shipped by default on COM2 from the HP factory.
- 3. Click on the "Test" button once "READY" appears in the status box.

- 4. To exit the application:a. Click on "Exit" to close test applet.

#### **Detailed Steps**

- 1. Start the Windows test utility from Windows start menu.
- 2. Select the COM port from the drop down box or keep the default option. The ap5000 VFD is shipped by default on COM2 from the HP factory.

🕅 HP ap5000 LineDisplay Test	_ 🗆 🔀
COM Port	Version 1.0.0.3
COM2	
COM3 COM4	Exit
Ready	
B HP an5000 LineDisplay Test	

HP ap5000 LineDisplay Test	_ 🗆 🔀
COM Port	Version 1.0.0.3
Test Clear	Exit
Ready	

3. Click on the "Test" button once "READY" appears in the status box.

HP ap5000 LineDisplay Test	_ 🗆 🐱
COM Port	Version 1.0.0.3
COM2	ш.
Clear Ready	Exit

Once the test is complete and passes, the VFD will display "Test OK" and the test utility will provide some status information and the test results.

HP ap5000 LineDisplay Test	_ 🗆 🔀		
COM Port	Version 1.0.0.3		
COM2	L.		
Test [Clear]	Exit		
User set up mode start returned 4 bytes: 28 65 01 00 (OK) Read Status information (Product type) returned 18 bytes: 28 65 40 43 55 32 30 30 32 39 54 33 30 37 41 30 31 20 (OK) Test result: PASS.			

- 4. To exit the application:a. Click on "Exit" to close test applet.

HP ap5000 LineDisplay Test	_ 🗆 🔀		
COM Port	Version 1.0.0.3		
COM2	Щ		
Test Clear	Exit		
User set up mode start returned 4 bytes: 28 65 01 00 (OK) Read Status information (Product type) returned 18 bytes: 28 65 40 43 55 32 30 30 32 39 54 33 30 37 41 30 31 20 (OK) Test result: PASS.			

#### 6.13.4.2 Testing HP ap5000 VFD in OPOS mode

The following is overview of the steps to test the ap5000 VFD followed by detailed steps:

- 1. Start the OPOS test utility.
- 2. Click on "Clear Text" to clear the text on the pole display. To display a test message on the pole, enter a message in the text box or use the default message that appear "Display this text" and click on "Display Text"
- 3. To blink a test message:
  - a. Enter the test message.
  - b. Check the "Blink" box
  - c. Click "Display Text" button.
- 4. To "Reverse" a test message:
  - a. Enter the test message.
  - b. Check the "Reverse" box
  - c. Click "Display Text" button.
- 5. To display a test message on different ROW or Column:
  - a. Enter the test message.
  - b. From the drop down menu select the column and row where you would like the message to be displayed.
  - c. Click "Display Text At" button.
- 6. To cause message to scroll (test #1):
  - a. Click on "Scrolling Text Test #1" button. The pole will scroll a message and the following message "Scrolling" appears on the VFD bottom line.
- 7. To cause message to scroll (test #2):
  - a. Click on "Scrolling Text Test #2" button. The pole will scroll a message and the following message "Longer scroll message (37 characters)" appears on the VFD bottom line.
- 8. To display a test message with delayed character appearing:
  - a. Enter different value (if so desired) for the delay time.
  - b. Click "Set CharacterDelayTime" button.
  - c. Enter a text message and click "Display Text" button.
- 9. To exit the OPOS test applet, click on the "EXIT" button or click on the "x" in the upper right corner of the test applet.

#### **Detailed Steps**

1. Start the OPOS test utility from the start menu or from "C:\xxxxx\Point of Sale\VFD HP ap5000\ap5000 VFD OPOS Test Program" folder.

When the HP Pole Display OPOS test applet has successfully established communication with the pole display, the following message will appear on the pole: HPap5000LineDisplay OPOS Test OK!

2. Click on "Clear Text" to clear the text on the pole display. To display a test message on the pole, enter a message in the text box or use the default message that appear "Display this text" and click on "Display Text".

HP ap5000 LineDisplay OPOS Test	_ 🗆 🔀		
OPOS Device Name HPap5000LineDisplay	Version 1.0.0.7		
Clear Text			
Display Text	Enter text to display (Unicode only), or drag-and-drop a text		
Display this text	file onto this window.		
Blink Reverse			
Display Text At			
CharacterSet			
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet		
Scrolling Text Test #1	(Less than 20 characters)		
Scrolling Text Test #2	(More than 20 characters)		
set CharacterDelayTime	0 × 100ms		
Exit			
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Public, by CRM/RCS- Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Object			

- To blink a test message:
   a. Enter the test message.
   b. Check the "Blink" box

  - c. Click "Display Text" button.

HP ap5000 LineDisplay OPOS Test	_ 🗆 🔀
OPOS Device Name HPap5000LineDisplay	Version 1.0.0.7
Clear Text	æ
Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text	file onto this window.
Blink Reverse	-Column - Row
Display Text At	
CharacterSet	<b>)</b>
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet
Scrolling Text Test #1 (	(Less than 20 characters)
Scrolling Text Test #2 (	(More than 20 characters)
set CharacterDelayTime	0 × 100ms
Exit	
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Public, Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Object	

- 4. To "Reverse" a test message:
  a. Enter the test message.
  b. Check the "Reverse" box
  c. Click "Display Text" button.

HP ap5000 LineDisplay OPOS Test	_ 🗆 🔀
OPOS Device Name	Version 1.0.0.7
HPap5000LineDisplay	<u> </u>
Clear Text	
Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text	file onto this window.
🗆 Blink 🔽 Reverse	Column Row
Display Text At	
CharacterSet	-
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	0 × 100ms
Exit	
Control Object (Version: 1011000); OPOS LineDisplay Control 1.11.000 [Publi Dayton] Service Object (Version: 1013004); HP ap5000 LineDisplay OPOS Service Obj	

- 5. To display a test message on different ROW or Column:

  - a. Enter the test message.b. From the drop down menu select the column and row where you would like the message to be displayed.c. Click "Display Text At" button.

HP ap5000 LineDisplay OPOS Test	2
OPOS Device Name	Version 1.0.0.7
HPap5000LineDisplay	I
Clear Text	
Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text	file onto this window.
Blink Reverse	Column Row
Display Text At	
CharacterSet	1
437 PC437 (USA: Standard Europe)	
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	0 × 100ms
Exit	
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Pu Dayton] Service Object (Version: 1013004):	
HP ap5000 LineDisplay OPOS Service O	bject 🗸 🗸

Note: In the column drop down box, the option shown are from 0 - 20 which is per the OPOS specification.

- To cause message to scroll (test #1):
   a. Click on "Scrolling Text Test #1" button. The pole will scroll a message and the following message "Scrolling" appears on the VFD bottom line.

HP ap5000 LineDisplay OPOS Test	_ 🗆 🔀
OPOS Device Name HPap5000LineDisplay	Version 1.0.0.7
Clear Text	
Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text	file onto this window.
🗖 Blink 🗖 Reverse	Column Row
Display Text At	
CharacterSet	
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	0 × 100ms
Exit	
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Publ Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Obj	

To stop the scrolling message click on the "OK" button on the following box:

Scrolling 🔀
Scrolling 9-character message string:
"Scrolling"
Press OK to stop.
OK

- To cause message to scroll (test #2):
   a. Click on "Scrolling Text Test #2" button. The pole will scroll a message and the following message "Longer scroll message (37 characters)" appears on the VFD bottom line.

HP ap5000 LineDisplay OPOS Test	_ 🗆 🗷
OPOS Device Name HPap5000LineDisplay	Version 1.0.0.7
Clear Text Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text       Blink     Reverse	file onto this window.
Display Text At CharacterSet 437 PC437 (USA: Standard Europe)	MapCharacterSet
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	0 × 100ms
Exit	]
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Publ Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Obj	

To stop the scrolling message click on the "OK" button on the following box:

Scrolling 🔀
Scrolling 37-character message string:
"Longer scroll message (37 characters)"
Press OK to stop.
(OK)

- To display a test message with delayed character appearing:
   a. Enter different value (if so desired) for the delay time.

HP ap5000 LineDisplay OPOS Test	🗆 🔀
OPOS Device Name HPap5000LineDisplay	Version 1.0.0.7
Clear Text	
Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text	file onto this window.
Blink Reverse	Column
Display Text At	2 • 1 •
CharacterSet	
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	100ms
Exit	
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Publ Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Obj	

b. Click <u>"Set CharacterDelayTime" button.</u>

HP ap5000 LineDisplay OPOS Test	_ 🗆 🗷
OPOS Device Name HPap5000LineDisplay	Version 1.0.0.7
Clear Text	
Display Text	Enter text to display (Unicode only), or drag-and-drop a text
Display this text	file onto this window.
🗖 Blink 🔲 Reverse	Column Row
Display Text At	
CharacterSet	
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	100ms
Exit	
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Publ Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Obj	

c. Enter the test message and click "Display Text" butto	n.
----------------------------------------------------------	----

HP ap5000 LineDisplay OPOS Test	_ 🗆 🔀
OPOS Device Name	Version 1.0.0.7
HPap5000LineDisplay	<b>▼FD</b>
Clear Text	
Display Text Display this text	Enter text to display (Unicode only), or drag-and-drop a text file onto this window.
🗌 Blink 🔲 Reverse	Column
Display Text At	2 • 1 •
CharacterSet	
437 PC437 (USA: Standard Europe) 💌	MapCharacterSet
Scrolling Text Test #1	(Less than 20 characters)
Scrolling Text Test #2	(More than 20 characters)
set CharacterDelayTime	0 × 100ms
Exit	]
Control Object (Version: 1011000): OPOS LineDisplay Control 1.11.000 [Pub Dayton] Service Object (Version: 1013004): HP ap5000 LineDisplay OPOS Service Ob	

9. To exit the OPOS test applet, click on the "EXIT" button or click on the "x" in the upper right corner of the test applet.

## 6.13.5 JPOS Drivers for the HP ap5000 VFD

The JPOS drivers are already installed in the HP factory image (C:\xxxxx\Point of Sale\VFD HP ap5000\ap5000 VFD JPOS) and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the ap5000 VFD followed by detailed steps:

- 1. Start the JPOS test utility either using the link in the START MENU.
- 2. Click on the "LineDisplay" tab.
- 3. Replace the "defaultLineDisplay" that appears in the logical name box with "HPap5000LineDisplay".
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Check the "DEVICE ENABLED" so there is a check box.
- 7. Press the "CLEAR TEXT" button.
- 8. Type in the test message in the "Send to line display" box and click on "Display Text"
- 9. Click on "RELEASE" / "CLOSE" / "EXIT" to exit the JPOS test utility.

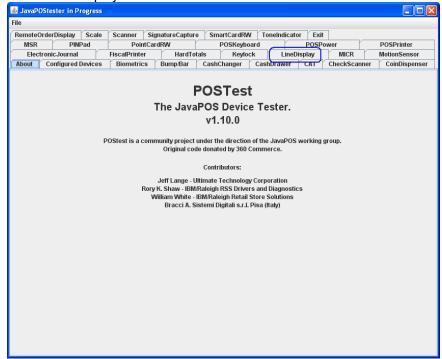
#### **Detailed Steps**

1. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the ap5000 VFD JPOS folder.

After a few seconds the JPOS test utility GUI will appear as shown below:

📓 JavaPOStester in Progress 🗧 🗖 🔀
File
RemoteOrderDisplay         Scale         Scanner         SignatureCapture         SmartCardRW         ToneIndicator         Exit
MSR PINPad PointCardRW POSKeyboard POSPower POSPrinter
Electronic Journal Fiscal Printer Hard Totals Keylock LineDisplay MICR Motion Sensor
About Configured Devices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser

2. Click on the "LineDisplay" tab:



After clicking on the "LineDisplay" tab the screen should look like:

	rDisplay Scale	Scanner SignatureCapture SmartCardRW ToneIndicator Exit	
MSR	PINPad	PointCardRW POSKeyboard POSPower POSPrin	nter
ElectronicJournal		FiscalPrinter HardTotals Keylock LineDisplay MICR MotionS	ensor
lbout C	onfigured Devices	s Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinD	ispens
	Logical name: defa	efaultLineDisplay JPOS_S_CLOSED	
		laim Release Close Info Statistics Firmware O/C/E EXIT	
Device ena			
Freeze eve	nts Display Text	ext Window Control Misc Controls	
	_		
	Row:	<ul> <li>Dispay Text At Dispay Text Clear Text</li> </ul>	
	Column:	n: V Mara Curaar	
		Move Cursor	
	Attribute:	Send to line display:	

- The logical name of the device is "HPap5000LineDisplay". Replace the "defaultLineDisplay" that appears in the logical name box with "HPap5000LineDisplay". If one clicks on the "Configured Device" tab, the names for the device will appear that will be used in the test utility.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button. After clicking the "CLAIM" button, the "Device Enabled" is available.

🛓 JavaPOStester in Pr	ogress					_ 🗆 🔀				
File										
RemoteOrderDisplay	/ Scale Scanner	SignatureCapture	SmartCardRW To	neIndicator Exit						
		tCardRW	POSKeyboard	POSPo		POSPrinter				
ElectronicJourna				LineDisplay		IotionSensor				
About Configure	d Devices Biometric	s Bump/Bar	CashChanger Casl	hDrawer CAT	CheckScanner	CoinDispenser				
Logical name: HPap5000LineDisplay JPOS_S_IDLE										
Open	n Claim Rele	ase Close	Info Statistics	s Firmware	O/C/E EXI	т				
Device enabled	claim a de	vice								
Freeze events Display Text Window Control Misc Controls										
	Row: 0	Dispay Text At	Dispay Text C	lear Text						
	Column: 0 💌		Move Cursor							
	Attribute: Normal									
,	autibute. Normai		Send to line dis	piay:						

6. Check the "DEVICE ENABLED" so there is a check box.

🛃 JavaPOS	Stester in	ı Progr	ess													_ 0	X
File																	
RemoteO	rderDisp	lay	Scale	Scan	ner Sig	jnatureCap	ture	SmartC	ardRW	/ Tone	elndicato	r Exit	7				
MSR PINPad			PointCa			POS	-	Keyboard		POSPower		POSPrinter					
	ronicJou				Printer		HardTotals		-			LineDisplay				MotionSensor	
About	Configu	Ired D	evices	Bior	netrics	Bump/Ba	r Ca	ashChar	nger CashDrawer CAT		CAT	CheckScanner		CoinDispenser			
	Logic	al nar	ne: HPa	p5000LineDisplay					JPOS_9	S_IDLE							
	0	pen	Clair	n	Release	Clos	e	Info	Sta	ntistics	Firi	nware	O/C/E	E)	XIT		
Device	enabled																
Freeze		Disp	olay Text	Wi	ndow Con	trol Mise	: Contro	Is									
			_									-					
			Row: 0	-		Dispay Tex	t At	Dispay	y lext	Cle	ar Text						
		0	Column:	0	-			/love Cu	reor	1							
			ibute: No														
		AUT	Dute: NO	nmai				Se	nd to li	ne displa	ay:	ī					
												]					

- 7. Press the "CLEAR TEXT" button.
- 8. Type in the test message in the "Send to line display" box and click on "Display Text"

🛓 JavaPOStester in Progres	s		· ·				
File							
RemoteOrderDisplay S	cale Scanner Sign	atureCapture Smart	CardRW Tone	Indicator Exit	]		
MSR PINPad	PointCard	RW PC	SKeyboard	POSPor	wer	POSPrinter	
ElectronicJournal	FiscalPrinter	HardTotals	Keylock	LineDisplay	MICR	MotionSensor	
About Configured Devices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser						ner CoinDispenser	
Logical name	Logical name: HPap5000LineDisplay JPOS_S_IDLE						
Open	Claim Release	Close Info	Statistics	Firmware	O/C/E	EXIT	
✓ Device enabled							
Freeze events Displa	y Text Window Contr	ol Misc Controls					
Col	umn: 0 💌	Move C	ursor end <sub>to</sub> line displa	ar Text			

**Note:** On the JPOS tester utility when "INFO" button is pressed one will receive an exception. The exception error can be safely ignored; all the functions of the pole display under JPOS are working correctly.

9. Click on "RELEASE" / "CLOSE" / "EXIT" to exit the JPOS test utility.

## 6.13.6 Utility to change power-on message

When the HP ap5000 is powered on the following message is scrolled on the display until an application takes control the pole display. There are two lines that are scrolled, the default message that is scrolled on the display is:

HP ap5000 All-in-One Point of Sale System .... Thank You and Have a Nice Day ....

If one wishes to change the power on message one may do so by running "HP ap5000 LineDisplay Startup Message" program. This program can be found on the "HP Point of Sale System Software and Documentation CD". This utility is not included on the HP factory image.

Please note this only changes the scrolling message on the pole display; once the POS application has started, the POS application will control what is being displayed on the pole display.

#### 6.13.6.1 Utility to Change Default Power-On Message

The following is an overview of the steps to test the power-on message utility followed by detailed steps:

- 1. Start the "HP ap5000 LineDisplay Startup Message" application which is available on "HP Point of Sale System Software and Documentation CD". This utility is not included on the HP factory image.
- 2. Select the correct COM port where the ap5000 VFD is attached if the utility does not find the correct COM port. (COM2 is the factory default).
- 3. Enter the message(s) that one wishes to display on the VFD.
- 4. From the drop down box, select the scroll speed of the message.
- 5. Click on the "Write to VFD" to save the message to the pole.
- 6. Click on "Exit" to leave the application.

#### **Detailed Steps**

- Start the "HP ap5000 LineDisplay Startup Message" application which is available on "HP Point of Sale System Software and Documentation CD". This utility is not included on the HP factory image.
- 2. Select the correct COM port where the ap5000 VFD is attached if the utility does not find the correct COM port. (COM2 is the factory default).

HP ap5000 Line Display Startup Message	_ 🗆 🔀
COM Port	Version 1.0.0.3
COM2	Set to factory default
Row 0 (Top)	
HP ap5000 All-in-One Point of Sale System	
Row 1 (Bottom)	
Thank You and Have a Nice Day	
Scroll speed	
300ms / character  Write to VFD	Exit

3. Enter the message(s) that one wishes to display on the VFD.

🕅 HP ap5000 Line Display Startup Message	_ 🗆 🔀
COM Port	Version 1.0.0.3
COM2	Set to factory default
Row 0 (Top)	]
HP ap5000 All-in-One Point of Sale System	
Row 1 (Bottom)	
Thank You and Have a Nice Day	
Scroll speed	
300ms / character  Write to VFD	Exit

4. From the drop down box, select the scroll speed of the message.

HP ap5000 Line Display Star	tup Message	_ 🗆 🔀
COM Port		Version 1.0.0.3
COM2		Set to factory default
Row 0 (Top)	- Cushan	
HP ap5000 All-in-One Point of Sal	e System	
Row 1 (Bottom)		
Thank You and Have a Nice D	)ay	
Scroll speed		
300ms / character 🛛 💌	Write to VFD	Exit
<10ms / character		
100ms / character 200ms / character		
300ms / character		
400ms / character		
500ms / character		4

5. Click on the "Write to VFD" to save the message to the pole.

🕅 HP ap5000 Line Display Startup Message	_ 🗆 🔀
COM Port	Version 1.0.0.3
	Set to factory default
Row 0 (Top)	
HP ap5000 All-in-One Point of Sale System	
Row 1 (Bottom)	
Thank You and Have a Nice Day	
Scroll speed 300ms / character Write to VFD	Exit

6. Click on "Exit" to leave the application.

HP ap5000 Line Display Startup Message	_ 🗆 🔀					
COM Port	Version 1.0.0.3					
COM2	Set to factory default					
Row 0 (Top)						
HP ap5000 All-in-One Point of Sale System						
Row 1 (Bottom)						
Thank You and Have a Nice Day						
Scroll speed 300ms / character  Write to VFD	Exit					

#### 6.13.6.2 Enable the VFD Default Power-On Message

The following is an overview of the steps to test the power-on message utility followed by detailed steps:

- 1. Start the "HP ap5000 LineDisplay Startup Message" application which is available on "HP Point of Sale System Software and Documentation CD". This utility is not included on the HP factory image.
- 2. When the utility is launched the default HP factory message appears in the GUI. One can either click on "Write to VFD" or click on "Set to factory default" button.
- 3. Click on "Exit" to leave the application.

### **Detailed Steps**

 Start the "HP ap5000 LineDisplay Startup Message" application which is available on "HP Point of Sale System Software and Documentation CD". This utility is not included on the HP factory image. 2. When the utility is launched the default HP factory message appears in the GUI. One can either click on "Write to VFD" or click on "Set to factory default" button.

HP ap5000 Line Display Startup Message	_ 🗆 🔀				
COM Port	Version 1.0.0.3				
	Set to factory default				
Row 0 (Top)					
HP ap5000 All-in-One Point of Sale System					
Row 1 (Bottom)					
Thank You and Have a Nice Day					
Scroll speed 300ms / character	'FD Exit				

3. Click on "Exit" to leave the application.

🕅 HP ap5000 Line Display Startup Message	_ 🗆 🔀					
COM Port	Version 1.0.0.3					
	Set to factory default					
Row O (Top)						
HP ap5000 All-in-One Point of Sale System						
Row 1 (Bottom)						
Thank You and Have a Nice Day						
Scroll speed						
300ms / character  Write to VFD	Exit					

# 6.13.7 HP ap5000 VFD BIOS Power Setting

The 5 volt power that is needed for the HP ap5000 VFD is supplied via the serial port (pin 9). When the ap5000 VFD is attached to the unit on COM2 from the HP factory and a Windows operating system is installed, the 5 volt for COM2 will be enabled natively. If the user has the need to move the VFD from COM2 to COM1 then the 5 volt for COM1 will need to be enabled by the steps outlined below. In addition, it is recommended that the 5 volt for COM2 should be disabled. This will prevent any possible damage to future serial devices inserted into COM2 but not rated for 5 volt.

There are two ways one can enable the voltage on COM1 on the HP ap5000 unit. One method is to go into F10 BIOS and enable the voltage on the serial port. The second method under Windows is by using the graphical utility to change the setting.

## 6.13.7.1 F10 BIOS Method

- Press F10 to enter BIOS setup at the post screen. If power-on or password option is enabled, enter the password in order to continue.
- Press the right arrow key to highlight "Advanced" option.
- Press the down arrow key to highlight "SuperIO Configuration" option and press the "ENTER" key.
- Press the down arrow key to go the serial port that you wish to change the power setting and press the "ENTER" key.
- Once the menu appears select the setting the power option for the port to be set to. "Standard Mode" means no power on the serial port.

Note: The ap5000 VFD cannot be installed on COM3, it only be used on COM1 or COM2.

## 6.13.7.2 Windows Graphical Method

In order to use the Windows graphical utility no BIOS password (power-on or Setup) must be enabled and one must have administrator privilege.

Note: The ap5000 VFD cannot be installed on COM3, it only be used on COM1 or COM2

The following is an overview of the Windows graphical utility for the COM port setting:

- 1. Close any open application or document.
- 2. Launch the "HP Com Port Utility.EXE" which is located on the "HP POS Software and Documentation CD" that is included in the peripherals after-market option kit.
- 3. Select the COM port that you which to change.
- 4. Select the option that you wish for the COM port (Enable Power or Disable Power).
- 5. After the COM port setting is changed, restart Windows operating system for the BIOS changes to take effect.

## **Detailed Steps**

1. Close any open application or document.

2. Launch the "HP Com Port Utility.EXE" which is located on the "HP POS Software and Documentation CD" that is included in the peripherals after-market option kit. The following is the GUI that will appears when the utility is launched:

🔜 COM Port Utility		IX
HP ap5000	<u>About</u>	<u>Exit</u>
		_
🔘 СОМ 1 🔘 СОМ 2 🔘 СОМ	3	
Voltage: Please select a COM port.		
Enable Power	able Pov	ver

3. Select the COM port that you would like to change..

🖶 COM Port Utility		X
[HP ap5000]	<u>About</u>	<u>Exit</u>
	3	
Voltage: Please select a COM port.		
Enable Power Dis	able Pov	ver

4. Select from the two options for the COM port (Enable Power or Disable Power).

🖶 COM Port Utility		
HP ap5000	<u>About</u>	<u>Exit</u>
	3	
Voltage: Please select a COM port.		
Enable Power Dis	able Pow	ver

When power is enabled for COM1 or COM2, 5V will be enabled. When power is enabled for COM3, 12V will be enabled.

When "Enable Power" is selected, a prompt window to confirm the action will be shown.

The following is an example of the prompt screens that will appear when COM1 is enabled.

	🖶 COM Port Utility				
	HP ap5000		<u>About</u>	<u>Exit</u>	
		12 🔿 СОМ	3		
	Voltage: 5 volts will b	e enabled or d	lisabled.		
	Enable Power	🛑 Disa	able Pow	er	
OM Por	t Utility				
You are	about to enable COM1 t	o 5 volts. Do	o you w	ant to	continu
	<u>Y</u> es	No			

The following prompt appears when the "Disable Power" option is clicked:

	🔜 COM Port Utility 📃 🗖 🔀
	HP ap5000
	Voltage: 5 volts will be enabled or disabled.
	Enable Power     Disable Power
COM Port U	tility 🛛 🕅
You are abou	It to set COM1 to standards settings. Do you want to continue?
	Yes No

5. After the COM port setting is changed, restart Windows operating system for the BIOS changes to take effect.

Note: The ap5000 VFD cannot be installed on COM3, it only be used on COM1 or COM2.

# 6.14 Pole Display



## 6.14.1 Connection

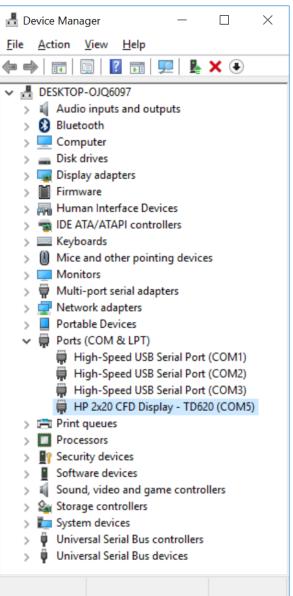
The HP Pole Display may be plugged into any free USB port. One may plug the HP Pole Display into the power USB port in the 5V part of USB port, when plugged in this configuration the power portion of USB port is not utilized.

The standalone HP VFD display may be plugged into any free 12v powered USB port on the computer. The HP 7800 VFD display can be mounted on the back of the unit and is plugged in one of the 12v powered USB port on the HP 7800 unit.

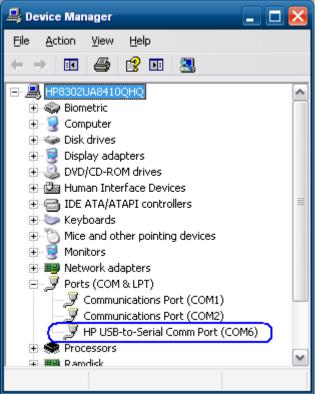
## 6.14.2 Windows Drivers for the Pole Display

The HP Pole Display device drivers for Windows device manager may be installed using the Windows driver's package or by using the OPOS package for this device. The OPOS package will install both the Windows drivers for the device and the OPOS drivers for the device.

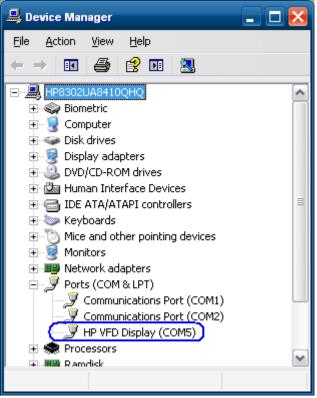
The following is the Windows Device Manager after all the drivers are loaded for the HP ElitePOS Top Mount 2 x 20 CFD:



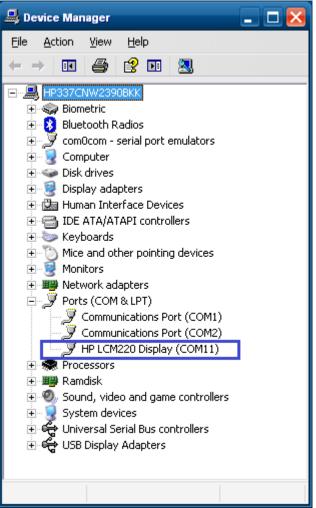
The following is the Windows Device Manager after all the drivers are loaded for the HP USB Pole Display:



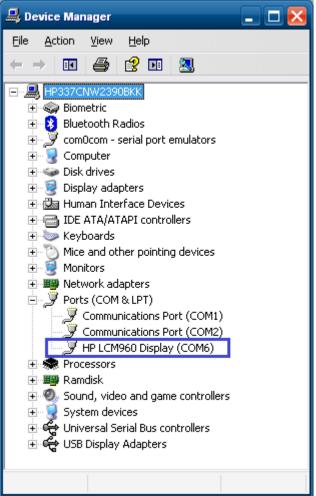
The following is the Windows Device Manager after all the drivers are loaded for HP VFD Display:



The following is the Windows Device Manager after all the drivers are loaded for HP Integrated 2x20 Display (LCM220):



The following is the Windows Device Manager after all the drivers are loaded for HP Integrated 2x20 Display Complex (LCM960):



The following is the Windows Device Manager after all the drivers are loaded for HP RP9 Integrated 2x20 Display (LM940):



## 6.14.3 Utility to change power-on message

## 6.14.3.1 HP USB Pole Display

When the pole display has power the following message is scrolled on the display until an application takes control of the pole display. The HP USB Pole Display there are two lines that are scrolled at different speed, the default message that is scrolled on the display is:

### \*\* VFD DISPLAY LD220P\*\* \*\* HAVE A NICE DAY AND THANK YOU\*\*

If one wishes to change the power on message one may do so by running "HP Display Setup Utility" program. This program can be found on <u>HP.COM</u>. This utility is not included in the HP factory image.

Please note this only changes the power-on message on the pole display; once the POS application has started, the POS application will control what is being displayed on the pole display.

### Utility to Change Default Power-On Message for HP USB Pole Display

The following is an overview of the steps to test the power-on message utility followed by detailed steps:

- 1. Exit any open application.
- 2. Start the "HP Display Setup Utility" application which is available from HP.COM.
- 3. Confirm the correct virtual COM port was automatically detected by the utility.
- 4. Click on "Obtain Setting from Display".
- 5. Click on "Welcome Message" tab.
- 6. Enter you message that you wish to be displayed. Information that is entered on line1 and/or line 2 will automatically be converted to hex by the utility.
- 7. Click on the "Download Setting to Display" to save the message to the pole.
- 8. After receiving the message that it has successfully written the message to the pole display need to power on/off the pole for the changes to take effect. Either unplug and re-plug the pole into the USB port or restart the computer to active the new message or power off the pole via the power switch.

#### Detailed Steps

- 1. Exit any open application.
- 2. Start the "HP Display Setup Utility" application which is available from <u>HP.COM</u>. This utility is not included in the HP factory image.

3. Confirm the correct virtual COM port was automatically detected by the utility. The COM port that has been assigned to the pole display can be obtained from Windows device manager.

		HP Display Setup	Utility 🕠	Version 6.0.0.2	×
Line Display					
	ng ( Line Display ) —		· · · · · · · · · · · · · · · · · · ·		
COM6 9600,n,8,1 🔽	Obtain Setting from Display	Download Setting to Display	Load Setting	Save Setting	Default Setting
	Welcome Message				
	Character Type :			✓ Reload	
	Command Mode :	EPSON (Default)		~	
	BaudRate :	9600,N,8,1 (Default)		¥	

4. Click on "Obtain Setting from Display". The pole will go blank and message will appear indicating the information was successfully retrieved.

		HP Display Setup	o Utility 🚽	Version 6.0.0.2	
Line Display					
Connection Setting	(Line Display)				
	Obtain Setting from Display	Download Setting to Display	Load Setting	Save Setting	Default Setting
Command We Setting Me	lcome ssage				
	Character Type 🛛 :			✓ Reload	
	Command Mode :	EPSON (Default)		~	
	BaudRate :	9600,N,8,1 (Default)		~	

		HP Display Setu	oUtility 🕠	Version 6.0.0.2	×
Line Display					
9600,n,8,1 🔽	Obtain Setting from Display	Download Setting to Display	Load Setting	Save Setting	Default Setting
Command Setting	Welcome Message				
	Character Type :	US ENG Device Inform	ation Successfully R	etrieved Reload	
	Command Mode :	EPSON	OK		
	BaudRate :	9600,N,8,1 (Default)		~	

5. Click on "Welcome Message" tab.

		HP Display Setup	o Utility	Version 6.0.0.2	
Line Display					
	ing ( Line Display ) —				
COM6 9600,n,8,1 🔽	Obtain Setting from Display	Download Setting to Display	Load Setting	Save Setting	Default Setting
	Welcome Message				
	linobougo				
	Character Type :			✓ Reload	
	Command Mode :	EPSON (Default)		~	
	BaudRate :	9600,N,8,1 (Default)		~	
•					

6. Enter you message that you wish to be displayed. Information that is entered on line1 and/or line 2 will automatically be converted to hex by the utility.

HP Display Setup Utility Version 6.0.0.2         Line Display         COM6       Obtain Setting from Display       Download Setting Load Save Setting       Default Setting         Gonnection Setting (Line Display)       Download Setting to Display       Load Setting       Save Setting       Default Setting         Gommand       Welcome Message       Load Setting       Load Setting       Save Setting       Default Setting         Line 1:       *VFD DISPLAY LD220 *       Hex : 2A 56 46 44 20 44 49 53 50 4C 41 59 20 4C 44 32 32 30 20 2A       Line 2:       **HAVE A NICE DAY AND THANK YOU**         Hex :       2A 2A 48 41 56 45 20 41 20 4E 49 43 45 20 44 41 59 20 41 4E       44 20 54 48 41 4E 48 20 59 4F 55 2A 2A 00 00 00 00 00 00       00	×												
Line Display													
	ng ( Line D	isplay) —											
					ng								
Command Setting	Nelcome Nessage												
Line	e1: *VFD	DISPLAY LD	220 *									]	
Hex	( : 2A 5	6 46 44 2	20 44 49	53 50	4C 41	59 20	) 4C 4	14 32	32	30 20	2A		
_											_		
Line	e 2 : **HAV	E A NICE D	AY AND TH	ANK YOU*	*								
Hex	( : 2A 2	A 48 41 5	56 45 20	41 20	4E 49	43 45	20 4	4 41	59	20 41	4E		
	44 2	0 54 48 4	41 4E 4B	20 59	4F 55	2A 2A	00 0	00 00	00	00 00	00		

7. Click on the "Download Setting to Display" to save the message to the pole.

					n.	P Dis	pia	уз	ett	ıp	υti	Πť	y	Ve	rsior	n 6.0	0.0.2	2		
Line Displa	y																			
nnection S																				
COM6			Settin			ownlo			ng			.oac ettir				ave ttin				Defau
00,n,8,1 👻	П	omi	Display	/		10 L	Displ	ay			30	eun	ıy		36	um	y			Settin
Command Setting	Welc	ome	e																	
oetting	meaa	age																		
	Line 1 :	*VF	D DISPI	AY	L D 2 2	0 *														]
	Hex :	2A	56 46	44	20	44 49	53	50	4C	41	59	20	4C	44	32	32	30	20	2A	
	Line 2 :	**H	AVE A I	IICE	DAY	AND TH	IANK	YOU	**											1
										10	45	ar.	20			50	0.0		45	]
	Hex :	2A	2A 48	-	-	45 20	-	20		49	43	45	20		41	59	20	_	4E	
		44	20 54	48	41	4E 4B	20	59	4F	55	2A	2 A	00	00	00	00	00	00	00	

8. After receiving the message that it has successfully written the message to the pole display need to power on/off the pole for the changes to take effect. Either unplug and re-plug the pole into the USB port or restart the computer to active the new message or power off the pole via the power switch.

			HP Display Setu	pUtility 🕠	Load Save Default Setting Setting Setting	
Line Display						
9600,n,8,1 🗸		atain Setting om Display	Download Setting to Display	Load Setting		
Command Setting	Welco Mess	ome age				
He	ne 2 :	**HAVE A NICE E 2A 2A 48 41 1	20 4 Device inform Please restart the pole	OK OK 9 43 45 20 4	winloaded. es to take effect.	4E

### 6.14.3.2 HP VFD Display

When the pole display has power the following message is scrolled on the display until an application takes control of the pole display. For the HP VFD Display there are two lines; the top line is centered and the bottom line will display a scrolling message. The default message that is displayed on the HP VFD Display is:

## HP VFD Display ..... Thank You and Have a Nice Day ....

If one wishes to change the power on message one may do so by running "HP Display Setup Utility" program. This program can be found on <u>HP.COM</u>. This utility is not included in the HP factory image.

Please note this only changes the power-on message on the pole display; once the POS application has started, the POS application will control what is being displayed on the pole display.

#### Utility to Change Default Power-On Message for HP VFD Display

The following is an overview of the steps to test the power-on message utility followed by detailed steps:

- 1. Exit any open application.
- 2. Start the "HP Display Setup Utility" application which is available from HP.COM.
- 3. Confirm the correct virtual COM port was automatically detected by the utility.
- 4. Click on "Obtain Setting from Display".
- 5. Enter you message that you wish to be displayed. Information that is entered on line1 and/or line 2 will automatically be converted to hex by the utility.
- 6. Click on the "Download Setting to Display" to save the message to the pole.
- 7. After receiving the message that it has successfully written the message to the pole display need to power on/off the pole for the changes to take effect. Either unplug and re-plug the pole into the USB port or restart the computer to active the new message or power off the pole via the power switch.

#### **Detailed Steps**

- 1. Exit any open application.
- 2. Start the "HP Display Setup Utility" application which is available from <u>HP.COM</u>. This utility is not included in the HP factory image.

3. Confirm the correct virtual COM port was automatically detected by the utility. The COM port that has been assigned to the pole display can be obtained from Windows device manager.

		HP Di	1 1	- K		• · ·	ersion 6	no.u.z		
VFD Display		- )								
	otain Settin rom Display	g Downl	oad Sett Display	ting	Loa Sett		Sav Setti			nce / Bas ult Settin
Basic Grap Setting Sett										Advance Setting
anguage Setting:		¥	Reload	Cor	npound \	Vord: Di	isable		~	
Screensaver Mode:										
2*20 (Default) 🖌 🖌	Line 1 :	HP VFD Di	splay					Disp	lay the so	croll option
Graphic Start at No: 1	Hex :	0020 0020	0020	0048	0050	0020	0056	0046	0044	0020
End at No: 1 💌		0044 0069	0073	0070	006C	0061	0079	0020	0020	0020
	Line 2 :	Thank Y	ou and Ha	ave a ll	ice Day			🗹 Disp	lay the so	croll option
Welcome Messsage.	Hex :	002E 002E	002E	002E	0020	0054	0068	0061	006E	006B
Scrolling Speed:	l	0020 0059	006F	0075	0020	0061	006E	0064	0020	0048
Scrolling Speed:	[	0020 0059 0061 0076	006F 0065	0075 0020	0020 0061	0061 0020	006E 004E	0064 0069	0020 0063	0048 0065

4. Click on "Obtain Setting from Display". The pole will go blank and message will appear indicating the information was successfully retrieved.

	tain Settin om Display			oad Set Display		Loa Sett		Sav Setti			ice / Bas ilt Settin
Basic Grap Setting Sett											Advanc Setting
.anguage Setting:			<b>√</b> F	Reload	Co	mpound \	Vord: D	isable		~	
Screensaver Mode: 2*20 (Default)	Line 1 :	HP	VFD Dis	play					🔲 Disp	play the so	roll option
Graphic	Hex :	0020	0020	0020	0048	0050	0020	0056	0046	0044	0020
Start at No: 1 🗸		0044	0069	0073	0070	006C	0061	0079	0020	0020	0020
		т	hank Vo	u and H	ave a li	ica Dav			🔽 Disc	lov the cr	roll option
						0020	0054	0068	0061	006E	006B
	Line 2 : Hex	002E	002E	002E	002E						
Scrolling Speed:	Line 2 : Hex :	002E 0020	002E 0059	002E 006F	002E	0020	0061	006E	0064	0020	0048
Welcome Messsage. Scrolling Speed: Fast (Default)								006E 004E	0064	0020 0063	

5. Enter you message that you wish to be displayed; check the "Display the scroll option" if one wishes to have this line scrolling. Information that is entered on line1 and/or line 2 will automatically be converted to hex by the utility.

VFD Display	FD Display										
	FD Display										
		/)—									
	tain Settin om Display		Downic to [	oad Set Display		Loa Sett		Sav Setti	-		ice / Bas ilt Settin
Basic Grap Setting Setti											Advanc Settin
anguage Setting:			<b>v</b> F	Reload	Co	mpound \	Nord: D	sable		~	
creensaver Mode:	(										
2*20 (Default) 🗸 🗸	Line 1 :	HP	VFD Dis	play					🔄 Disp	lay the so	roll option
Start at No: 1	Hex :	0020	0020	0020	0048	0050	0020	0056	0046	0044	0020
End at No: 1		0044	0069	0073	0070	006C	0061	0079	0020	0020	0020
	Line 2 :	1	Thank Yo	u and H	ave a li	ice Day			🔽 Disp	lay the so	roll option
Velcome Messsage. crolling Speed:	Hex :	002E	002E	002E	002E	0020	0054	0068	0061	006E	006B
ast (Default) 🖌 🖌		0020	0059	006F	0075	0020	0061	006E	0064	0020	0048
		0061	0076	0065	0020	0061	0020	004E	0069	0063	0065
		0020	0044	0061	0079	0020	002E	002E	002E	002E	0020

6. Click on the "Download Setting to Display" to save the message to the pole.

				pray	setup		~ <b>5</b> V	ersion 6	0.0.0.2		
VFD Display											
Connection Setting										ſ	
	Obtain Settir from Displa			ad Set	<b>U</b>	Lo: Sett		Sav Sett			nce / Bas ult Settin
600,n,8,1 🖌	from Displa	y	toL	Display		Sell	ing	Sell	ing	Defau	lit Settin
	aphic etting										Advanc Setting
Language Setting:			<b>v</b> F	Reload	Co	mpound \	/Vord: D	isable		~	
Screensaver Mode: 2*20 (Default)	Line 1 :	HP V	FD Dis	play					🔲 Disp	lay the so	roll option
Graphic	Hex :	0020	0020	0020	0048	0050	0020	0056	0046	0044	0020
Start at No: 1 💌 End at No: 1 💌		0044	0069	0073	0070	006C	0061	0079	0020	0020	0020
Welcome Messsage.	Line 2 :	Th	ank Yo	u and H	lave a N	ice Day			🗹 Disp	lay the so	roll option
Scrolling Speed:	Hex :	002E	002E	002E	002E	0020	0054	0068	0061	006E	006B
	1	0020	0059	006F	0075	0020	0061	006E	0064	0020	0048
Fast (Default) 🛛 🗸	u								0050	0007	0005
Fast (Default) 🛛 🛩		0061	0076	0065	0020	0061	0020	004E	0069	0063	0065

7. After receiving the message that it has successfully written the message to the pole display need to power on/off the pole for the changes to take effect. Either unplug and re-plug the pole into the USB port or restart the computer to active the new message or power off the pole via the power switch.

		HP Disp	olay Setup	o Utility	Version (	5.0.0.2		×
VFD Display								
9600,n,8,1 🗸	Obtain Setting from Display		id Setting isplay	Load Setting	g Sat	-		nce / Basic ult Setting
Basic Setting	Graphic Setting						,	Advanced Setting
Language Setting:	IS English [CP437]	Re	load Co	mpound Wo	rd: Disable		~	
Screensaver Mode:					ſ			
2*20 (Default)	Line 1 :	HP VFD Disp	· ·				play the so	roll option
Graphic Start at No: 1	Hex : 00		0020 0073	Information Suc	ccessfully Retriev	046	0044	0020
End at No: 1 Welcome Messsage. Scrolling Speed:	Line 2 :		and Have a I			✓ Disp 0061	olay the so	roll option
Fast (Default)	<ul> <li>✓</li> <li>✓</li> <li>ØØ</li> </ul>		006F 0075		0061 006E	0064	002.0	0048
	000		0065 0020		0020 004E	0069	0063	0065
	00	20 0044	0061 0079	0020 0	002E 002E	002E	002E	0020

## 6.14.4 OPOS Drivers for the Pole Display

The HP Pole Display OPOS drivers are already installed in the HP factory image (C:\xxxxx\Point of Sale\Pole Display\Pole Display OPOS) and are also available from HP.COM.

#### 6.14.5 <u>Testing Pole Display</u>

#### 6.14.5.1 Testing pole display in non-OPOS environment

There are two utilities available to test the display in non-OPOS environment: "HP USB Pole non-OPOS Test Utility" and "HP VFD Utility"

## 6.14.5.1.1 HP USB Pole non-OPOS Test Utility

The following is overview of the steps to test the pole display followed by detailed steps:

- 1. Start the HP USB Pole non-OPOS Test Utility test utility.
- 2. After clicking on "Display Point Test" this message will appear on the pole display.
- 3. One can display other text for testing purpose by entering the text in the box. After entering the text in the box, click on "Display Text" and what is entered in the text box will be displayed on the pole display.
- 4. Click "Exit" to close the non-OPOS test applet.

### Detailed Steps

- 1. Start the HP USB Pole non-OPOS Test Utility from Windows start menu or from "C:\Program Files\Hewlett-Packard\Pole Display Test" folder.
- 2. Several seconds will pass before the test GUI appears on the screen. After clicking on "Display Point Test" button this message will appear on the pole display with other block characters. When the test is complete the word "Finish..." will appear on the pole display.

HP Pole Display Test v2.0.0.7				
Display Point Test	Display text			
Exit	t			

3. One can display other text for testing purpose by entering the text in the box. After entering the text in the box, click on "Display Text" and what is entered in the text box will be displayed on the pole display.

HP Pole Display Test v2.0.0	.7				
Display Point Test	Display text				
This is a test.					
Exi	t				
HP Pole Display Test v2.0.0	.7				
Display Point Test	.7 Display text				
Display Point					

4. Click "Exit" to close the non-OPOS test applet.

## 6.14.5.1.2 HP VFD Utility for HP USB Pole Display

The following is overview of the steps to test the pole display followed by detailed steps:

- 1. Start the HP VFD Utility from Windows start menu.
- 2. Several seconds will pass before the test GUI appears on the screen. Confirm the device was detected on the proper COM port.
- 3. Click on the available buttons on the utility.
- 4. Click "x" in the upper right corner of the utility to close/exit the HP VFD utility.

#### **Detailed Steps**

- 1. Start the HP VFD Utility from Windows start menu or from "C:\Program Files\Hewlett-Packard\Pole Display Test" folder.
- 2. Several seconds will pass before the test GUI appears on the screen. Confirm the device was detected on the proper COM port.

HP VFD Utility v1.0.1.7	×
Detect Device	- Compound Word
Line Display	Korean
Device Port : COM10	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US ENGLISH [CP437 🔽
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

**Note:** Features that are not supported by this device will be grayed out.

- 3. Click on the available buttons on the utility. The following describe the function of the buttons in the utility.
  - Blink → Will cause the device to blink ABCDEFGHIJ on the display until another button is pressed or the utility is exited.

HP VFD Utility v1.0.1.7	×
Detect Device	Compound Word
Line Display 🗸 🗸	Korean
Device Port : COM10	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US ENGLISH [CP437 🔽
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

• Reverse Characters → Will cause the device to display lower case **abcdefghij** on the display in reverse characters until another button is pressed or the utility is exited.

Detect Device	Compound Word
Line Display 🛛 🗸	Korean
Device Port : COM10	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US ENGLISH [CP437 🐱
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

If you close the pole it appears that as garbage characters; from a distance they are little more clear than close up.

- Code page drop down → Allows one to select the code page/language to display on the pole.
  - The four code page button will let one display the down page that was selected in the drop down menu.

HP VFD Utility v1.0.1.7	Đ
Detect Device	Compound Word
Line Display	Korean
Device Port : COM10	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US ENGLISH [CP437 🐱
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

• Play → Will cause all the available option for the pole to be displayed automatically and continuously until the utility is stopped or exited. Only the selected cod page in the drop down box will be displayed in this mode.

HP VFD Utility v1.0.1.7	×
Detect Device	- Compound Word
Line Display	Korean
Device Port : COM10	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US ENGLISH [CP437 🗸
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

4. Click "x" in the upper right corner of the utility to close/exit the HP VFD utility.

HP VFD Utility v1.0.1.7	
Detect Device	Compound Word
Line Display	Korean
Device Port : COM10	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US ENGLISH [CP437 🗸
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

## 6.14.5.1.3 HP VFD Utility for HP VFD Display

The following is overview of the steps to test the pole display followed by detailed steps:

- 1. Start the HP VFD Utility from Windows start menu.
- 2. Several seconds will pass before the test GUI appears on the screen.
- 3. Click on the available buttons on the utility.
- 4. Click "x" in the upper right corner of the utility to close/exit the HP VFD utility.

#### **Detailed Steps**

- 1. Start the HP VFD Utility from Windows start menu or from "C:\Program Files\Hewlett-Packard\Pole Display Test" folder.
- 2. Several seconds will pass before the test GUI appears on the screen. Confirm the device was detected on the proper COM port.

HP VFD Utility v1.0.1.7	
Detect Device	Compound Word
VFD Display	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 🛛 👻
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF
C	

- 3. Click on the available buttons on the utility. The following describe the function of the buttons in the utility.
  - Fixed Image  $\rightarrow$  An image with geometric shapes (similar to what is shown below) • will appear on the display.

<b>++</b>	
HP VFD Utility v1.0.1.7	×
Detect Device VFD Display	Compound Word Korean
Device Port : COM6	Japanese
Show Image Fixed Image	Simplified Chinese Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 🛛 👻
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF
C	

• Scrolling Image 1 → Geometric shapes (similar to what is shown below) will scroll across the display. The same image that is in the fixed image except that it will be scrolling on the display.

HP VFD Utility v1.0.1.7	
Detect Device VFD Display Device Port : COM6 Show Image Fixed Image Scrolling Image 1 Scrolling Image 2 Text	Compound Word Korean Japanese Simplified Chinese Traditional Chinese Codepage US English [CP437]
Scroll Blink Reverse Character	Codepage 0xA0~0xBF Codepage 0xC0~0xDF Codepage 0xD0~0xFF

Scrolling Image 2  $\rightarrow$  Will cause two different images (similar to what is shown below) to scroll on the display; one after the other. •

Enjory your Shopping Here!			
HP VFD Utility v1.0.1.7	×		
Detect Device	Compound Word		
VFD Display	Korean		
Device Port : COM6	Japanese		
Show Image	Simplified Chinese		
Fixed Image	Traditional Chinese		
Scrolling Image 1	Codepage		
Scrolling Image 2	US English [CP437] 🛛 🗸		
Text	Codepage 0x80~0x9F		
Scroll	Codepage 0xA0~0xBF		
Blink	Codepage 0xC0~0xDF		
Reverse Character	Codepage 0xD0~0xFF		

• Scroll → Will cause the device to scroll **1234567890** on the display until another button is pressed or the utility is exited.

HP VFD Utility v1.0.1.7	×
Detect Device	Compound Word
VFD Display	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 🛛 🔽
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF
<u> </u>	

• Blink → Will cause the device to blink **ABCDEFGHIJ** on the display until another button is pressed or the utility is exited.

HP VFD Utility v1.0.1.7	×
Detect Device	Compound Word
VFD Display	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 💌
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

• Reverse Characters → Will cause the device to display lower case **abcdefghij** on the display in reverse characters until another button is pressed or the utility is exited.

HP VFD Utility v1.0.1.7	
Detect Device	Compound Word
VFD Display	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 💌
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

- Code page drop down → Allows one to select the code page/language to display on the pole.
  - The four code page button will let one display the down page that was selected in the drop down menu.

HP VFD Utility v1.0.1.7	×
Detect Device	Compound Word
VFD Display	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 🔽
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF
	>

• Compound Word → When one clicks on the one of the four languages buttons (Korean / Japanese / Simplified Chinese / Traditional Chinese) two lines will be displayed on the HP VFD Display. The first line will display the welcome in the language button that was pressed and the second line will be "Welcome" in English. Sometimes "compound word" is referred to as complex characters.

HP VFD Utility v1.0.1.7	×
Detect Device	Compound Word
VFD Display 🗸	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 🛛 🗸
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF

• Play → Will cause all the available option for the pole to be displayed automatically and continuously until the utility is stopped or exited. Only the selected cod page in the drop down box will be displayed in this mode.

HP VFD Utility v1.0.1.7	×	
Detect Device	Compound Word	
VFD Display	Korean	
Device Port : COM6	Japanese	
Show Image	Simplified Chinese	
Fixed Image	Traditional Chinese	
Scrolling Image 1	Codepage	
Scrolling Image 2	US English [CP437] 🛛 🗸	
Text	Codepage 0x80~0x9F	
Scroll	Codepage 0xA0~0xBF	
Blink	Codepage 0xC0~0xDF	
Reverse Character	Codepage 0xD0~0xFF	

4. Click "x" in the upper right corner of the utility to close/exit the HP VFD utility.

HP VFD Utility v1.0.1.7	( 🛛
Detect Device	Compound Word
VFD Display	Korean
Device Port : COM6	Japanese
Show Image	Simplified Chinese
Fixed Image	Traditional Chinese
Scrolling Image 1	Codepage
Scrolling Image 2	US English [CP437] 🛛 👻
Text	Codepage 0x80~0x9F
Scroll	Codepage 0xA0~0xBF
Blink	Codepage 0xC0~0xDF
Reverse Character	Codepage 0xD0~0xFF
	>

## 6.14.5.2 Testing pole display in OPOS environment – HP USB Pole Display

The following is overview of the steps to test the pole display followed by detailed steps:

- 1. Start the OPOS test utility from the START MENU
- 2. Select the device from the drop down menu.
- 3. Click on "Clear Text" button to clear if there is any text on the pole display. To display a test message on the pole, enter a message in the text box and click on "Display Text".
- 4. To display a test message on different ROW or Column:
  - a. Enter the test message.
  - b. Enter column and row supported by the display.
  - c. Click "Display Text At" button.
- 5. To cause a message to blink on the pole:
  - a. Click on the "Blink Characters" button which will cause "!!! Blinking !!!" to appear on the pole display.
- 6. To cause message to scroll (test #1):
  - a. Click on "Scrolling Text Line 1" button. The pole will scroll a message and the following message "Scrolling Text Line 1" appears on the pole until exiting the test applet or performing a different test function.
- 7. To cause message to scroll (test #2):
  - a. Click on "Scrolling Text Line 2" button. The pole will scroll a message and the following message "<<<Scrolling Text Line 2 >>> ..." appears on the pole until exiting the test applet or performing a different test function.
- 8. To display a message using different code page.
  - a. Click on "Clear Text" button.
  - b. Select Character Set from the drop down box.
  - c. Enable the character set by enabling the "MapCharacterSet" option on the utility.
  - d. Enter the appropriate text.
  - e. Click on the "Display Text" button.
  - f. The test message will display on the pole display using the code page specified.
- 9. To display a graphics on the HP VFD Display (this option will only be shown on the device that supports this feature):
  - a. Click on "Clear Text" button.
  - b. Click on "OPEN FILE" button and browse to the location of the BMP file.
    - In the OPOS folder there is "Sample BMP" folder with few BMP file that may be used with this utility.
    - Select the BITMAP file, now the file name and location should appear in the box to the left of the "OPEN FILE" button.
  - c. Click on "DISPLAYBITMAP" button to have the BMP appear on the VFD.
- 10. To exit the OPOS test applet, click on the "OK" button or click on the "x" in the upper right corner of the test applet.

<u>Detailed Steps</u>
1. Start the OPOS test utility from the START MENU or from C:\Program Files (x86)\HP\Line Display\OPOS.

Note: For 32-bit OS, use Program Files without the "(x86)" in the path above.

2. Select the device from the drop down menu:

HP LineDisplay OPOS Demo Utility Character Set Select Character Set MapCharacterSet		Select Device Name HP LCM220 Display HP LCM960 Display HP POS Pole Display HPPOSCCPoleDisplay
DisplayText		
- Display Text At	Column Row	
DisplayTextAt	0~19 0~1	
Blink Characters		
Marquee		
Scrolling Text Line 1		
Scrolling Text Line 2		
Clear Text		
	Exit	Verson 4.1.3.8

3. Click on "Clear Text" button to clear if there is any text on the pole display. To display a test message on the pole, enter a message in the text box and click on "Display Text".

HP LineDisplay OPOS Demo Utility		
Character Set Select Character Set		ot Device Name
US English (CP-437)	SO V	ersion 5.0.3.03
This is a test.		
DisplayText		
DisplayTextAt 0	olumn Row 0 ~19 0~1	
Blink Characters		
Marquee Scrolling Text Line 1 Scrolling Text Line 2		
Clear Text		
	Open File DisplayBitn	nap
	Exit	Verson 4.1.3.8

- 4. To display a test message on different ROW or Column:

  - a. Enter the test message.b. Enter column and row supported by the display.
  - c. Click "Display Text At" button.

THP LineDisplay OPOS Demo Utility	
Character Set Select Character Set US English [CP-437]	Select Device Name HPPOSCCPoleDisplay
MapCharacterSet	
This is a test.	
DisplayText ⊂Display Text At	<u>_</u>
Column     Row       DisplayTextAt     0     0       0~19     0~1	
Blink Characters	
Marquee Scrolling Text Line 1 Scrolling Text Line 2	
Clear Text	
Open File Dis	splayBitmap
Exit	Verson 4.1.3.8

Note: If a numerical value is entered that is outside of the valid range, the value will default back to zero ("0").

- To cause a message to blink on the pole:
   a. Click on the "Blink Characters" button which will cause "!!! Blinking !!!" to appear on the pole display.

T HP LineDisplay OPOS Demo Utility		X
Character Set Select Character Set		Select Device Name
US English [CP-437]	~	SO version 5.0.3.03
MapCharacterSet		
This is a test.		
DisplayText		
Display Text At		
DisplayTextAt	Column Row 0 0 0~19 0~1	
Blink Characters	]	
Marquee		
Scrolling Text Line 1		
Scrolling Text Line 2		
Clear Text		
	Open File Disp	layBitmap
	Exit	Verson 4.1.3.8

- To cause message to scroll (test #1):

   Click on "Scrolling Text Line 1" button. The pole will scroll a message and the following message "Scrolling Text Line 1" appears on the pole until exiting the test applet or performing a different test function.

T HP LineDisplay OPOS Demo Utility	×
Character Set Select Character Set	Select Device Name
US English [CP-437]	SO version 5.0.3.03
This is a test.	
DisplayText	
Column     Row       DisplayTextAt     0       0~19     0~1	
Blink Characters	
Scrolling Text Line 1 Scrolling Text Line 2	
Clear Text	
Open File	DisplayBitmap
Exit	Verson 4.1.3.8

- 7. To cause message to scroll (test #2):
  a. Click on "Scrolling Text Line 2" button. The pole will scroll a message and the following message "<<<Scrolling Text Line 2 >>> ..." appears on the pole until exiting the test applet or performing a different test function.

Character Set		Select Device Name
Select Character Set		HPPOSCCPoleDisplay 🗸
US English [CP-437]	~	SO version 5.0.3.03
MapCharacterSet		
This is a test.		
DisplayText		
Display Text At		
	Column Row	
DisplayTextAt	0 0	
	0~19 0~1	
Blink Characters		
Marquee		
Scrolling Text Line 1		
Scrolling Text Line 2		
Clear Text		
	Open File Di	splayBitmap
		Verson 4.1.3.8

- 8. To display a message using different code page:

  - a. Click on "Clear Text" button.b. Select Character Set from the drop down box.
  - c. Enable the character set by enabling the "MapCharacterSet" option on the utility.

  - d. Enter the appropriate text.e. Click on the "Display Text" button.
  - The test message will display on the pole display using the code page specified. f.

HP LineDisplay OPOS Demo Utility	<u> </u>
Character Set Select Character Set US English [CP-437]	Select Device Name HPPOSCCPoleDisplay
This is a test.	
DisplayText Display Text At DisplayTextAt 0 0~19 0~1	
Blink Characters Marquee Scrolling Text Line 1 Scrolling Text Line 2 Clear Text	
Open File Displ	layBitmap Verson 4.1.3.8

- 9. To display a graphics on the HP VFD Display (this option will only be shown on the device that supports this feature):
  - a. Click on "Clear Text" button.
  - b. Click on "OPEN FILE" button and browse to the location of the BMP file.
    - In the OPOS folder there is "Sample BMP" folder with few BMP file that may be used with this utility.
    - Select the BITMAP file, now the file name and location should appear in the box to the left of the "OPEN FILE" button.
  - c. Click on "DISPLAYBITMAP" button to have the BMP appear on the VFD.

THP LineDisplay OPOS Demo Utility	
Character Set Select Character Set	Select Device Name
US English [CP-437]	SO version 5.0.3.03
This is a test.	
DisplayText Display Text At	
Column     Row       DisplayTextAt     0     0       0~19     0~1	
Blink Characters	
Marquee Scrolling Text Line 1 Scrolling Text Line 2	
Clear Text	
of Sale\Pole Display\square.bmp Open File Display.	splayBitmap
Exit	Verson 4.1.3.8

10. To exit the OPOS test applet, click on the "OK" button or click on the "x" in the upper right corner of the test applet.

HP LineDisplay OPOS Demo Utility		$\mathbf{X}$
Character Set Select Character Set		Select Device Name
US English [CP-437]	~	SO version 5.0.3.03
MapCharacterSet		
This is a test.		
DisplayText		
Display Text At	Column Row	
DisplayTextAt		
	0413 041	
Blink Characters		
Marquee		
Scrolling Text Line 1		
Scrolling Text Line 2		
Clear Text		
of Sale\Pole Display\square.bmp	Open File Dis	playBitmap
	Exit	Verson 4.1.3.8

## 6.14.6 JPOS Drivers for the pole display

The HP Pole Display JPOS drivers are included in the HP factory image (C:\xxxxx\Point of Sale\Pole Display\Pole Display JPOS) and are also available from <u>HP.COM</u>.

The following is an overview of the steps to test the pole display followed by detailed steps: Start the JPOS test utility.

- 1. Confirm/edit the JPOS.XML file that it has the correct COM port information for the pole that you are testing.
- 2. Start the JPOS test utility either using the link in the START MENU:
- 3. Click on the "LineDisplay" tab.
- 4. Click on the "OPEN" button.
- 5. Click on the "CLAIM" button.
- 6. Check the "DEVICE ENABLED" so there is a check box.
- 7. Press the "CLEAR TEXT" button.
- 8. Type in the test message in the "Send to line display" box and click on "Display Text"
- 9. Click on "RELEASE" / "CLOSE" / "EXIT" to exit the JPOS test utility.

## **Detailed Steps**

1. Confirm/edit the JPOS.XML file that it has the correct COM port information for the pole that you are testing.

📕 jpos - Notepad 📃 🗖	×
<u>File E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp	
<pre><!--Please change the serial port (i.e. COM5) to the correct virtual serial port for the pole on computer--></pre>	~
<pre>    <!--Other non JavaPOS required property (mostly vendor properties and bus specific properties i.e. RS232 )-->     </pre>	!
<pre></pre>	III
<pre><!--Please change the serial port (i.e. COM5) to the correct virtual serial port for the pole on computer--> <prop name="portName" type="String" value="COM5"></prop> <prop name="baudRate" type="String" value="9600"></prop></pre>	>

2. Start the JPOS test utility either using the link in the START MENU or by launching the POSTEST.BAT file that is located in the JPOS folder within the POLE DISPLAY folder.

After a few seconds the JPOS test utility GUI will appear as shown below:

JavaPOStester in Progress				_ 🗆 🔁 🚩
le				
RemoteOrderDisplay Scale	Scanner SignatureCapt	ture SmartCardRW Toneli	ndicator Exit	
MSR PINPad	PointCardRW	POSKeyboard	POSPower	POSPrinter
ElectronicJournal	FiscalPrinter Hard	ITotals Keylock	LineDisplay MICR	MotionSensor
About Configured Devices	Biometrics Bump/Bar	r CashChanger CashDra	awer CAT CheckSca	anner CoinDispenser
	POStest is a community proje Original Jeff Lange Rory K. Shaw - II William Whit	POSTest vaPos Device Test v1.10.1 ect under the direction of the Jac code donated by 360 Commerce Contributors: - Ultimate Technology Corporat MiRaleigh Retail Store Solu Sistemi Digitali s.r.J. Pisa (Italy	vaPOS working group. e. ion gnostics titons	

3. Click on the "Configured Devices" tab to obtain the device names.

최 JavaPOStester in I File	Progress			_ 🗆 🔀
RemoteOrderDispla MotionSensor	ay Scale Scanner MSR PINPad		artCardRW ToneInd SKeyboard POSF	licator Exit Power POSPrinter
CoinDispenser	ElectronicJournal	FiscalPrinter Hard	Totals Keylock	LineDisplay MICR
About Configure	ed Devices   Biometrics	Bump/Bar CashCha	nger CashDrawer	CAT CheckScanner
Category	<b>the devices found in your jp</b> Logical Name	Vendor		uct Name
LineDisplay	HPPOSCCPoleDisplay	Hewlett-Packard	LineDisplay Service for	· · ·
LineDisplay LineDisplay	HPLCM220Display HP_POLE_DISPLAY	Hewlett-Packard Hewlett-Packard	LineDisplay Service for	JavaPOS(TM) Standard JavaPOS(TM) Standard
LineDisplay	HPLCM960Display	Hewlett-Packard	LineDisplay Service for	JavaPOS(TM) Standard

4. Click on the "LineDisplay" tab to obtain the device logical name to use:

🛓 JavaP0Stester in	Progress		_ 0 🛛
File			
RemoteOrderDispl	ay Scale Scanner	SignatureCapture Sm	nartCardRW ToneIndicator Exit
MotionSensor	MSR PINPad	PointCardRW PO	SKeyboard POSPower POSPrinter
CoinDispenser	ElectronicJournal	FiscalPrinter Hard	Totals Keylock LineDisplay MICR
About Configure	ed Devices   Biometrics	Bump/Bar CashCha	anger CashDrawer CAT CheckScanner
Below is a list of	the devices found in you	jpos.xml file.	
Category	Logical Name	Vendor	Product Name
LineDisplay	HPPOSCCPoleDisplay	Hewlett-Packard	LineDisplay Service for JavaPOS(TM) Standard
LineDisplay	HPLCM220Display	Hewlett-Packard	LineDisplay Service for JavaPOS(TM) Standard
LineDisplay	HP_POLE_DISPLAY	Hewlett-Packard	LineDisplay Service for JavaPOS(TM) Standard
LineDisplay	HPLCM960Display	Hewlett-Packard	LineDisplay Service for JavaPOS(TM) Standard

🛓 JavaPOStester	in Progress				
File					
Scale Scanner	r SignatureCapture Sma	artCardRW ToneIn	dicator Exit	]	
PointCardRW	POSKeyboard	POSPower	POSPrinter	Remo	oteOrderDisplay
FiscalPrinter	HardTotals Keylock			lotionSensor	MSR PINPad
About Configu	red Devices Bump/Bar	CashChanger 🛛 Cas	hDrawer CA1	CheckScann	er CoinDispenser
Logical name: c	defaultLineDisplay			JPOS_S_CLOSE	ED
Open (	Claim Release Cl	ose Info	Statistics	Firmware	O/C/E EXIT
Device enabled					
Freeze events	Display Text Window Co	ontrol Misc Contro	s		
		D'	D:	01T1	
	Row:	Dispay Text At	Dispay Text	Clear Text	
	Column:		love Cursor		
		IN IN			
	Attribute:		Send to line	display:	

After clicking on the "LineDisplay" tab the screen should look like:

5. Enter the device logical name in the field.

le						
Scale Scanner	·	1/	elndicator Exit	L		
PointCardRW	POSKeyboard	POSPower	POSPrinter		noteOrde	
FiscalPrinter	HardTotals Keylo			NotionSensor	MSR	PINPad
About Configu	red Devices Bump/Bar	CashChanger Ca	ashDrawer CA	CheckScar	iner C	oinDispense
Logical name: c	lefaultLineDisplay			JPOS_S_CLO	SED	
Open (	Claim Release	Close Info	Statistics	Firmware	O/C/E	EXIT
Device enabled						
Freeze events	Display Text Window	Control Misc Cont	rols			
110020 070110						
					_	
	Row:	Dispay Text At	Dispay Text	Clear Text		
			Dispay Text	Clean Leve		
			Dispay Text	Cledi Text		
	Column: 🤍 🤟		Move Cursor	Clear Text		
	Column:		Move Cursor			
			Move Cursor		]	
			Move Cursor		]	
			Move Cursor		]	
			Move Cursor			
			Move Cursor		]	
			Move Cursor		]	

**Note:** If one clicks on the "Configured Device" tab, the names for the device will appear that will be used in the test utility.

6. Click on the "OPEN" button. If the test applet has successfully established communication with the pole display, the pole display will be blank.

📓 JavaPOStester in Progress
File
Scale Scanner SignatureCapture SmartCardRW ToneIndicator Exit
PointCardRW POSKeyboard POSPower POSPrinter RemoteOrderDisplay
FiscalPrinter HardTotals Keylock LineDisplay MICR MotionSensor MSR PINPad
About Configured Devices Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
Logical name: HP_POLE_DISPLAY JPOS_S_IDLE
Open Claim Release Close Info Statistics Firmware O/C/E EXIT
Freeze events Display Text Window Control Misc Controls
Row: 0 💌 Dispay Text At Dispay Text Clear Text
Column: 0  Move Cursor
Attribute: Normal Send to line display:

7. Click on the "CLAIM" button. After clicking the "CLAIM" button, the "Device Enabled" is available.

🛓 JavaPOStester	in Progress
File	
Scale Scanner	SignatureCapture SmartCardRW ToneIndicator Exit
PointCardRW	POSKeyboard POSPower POSPrinter RemoteOrderDisplay
FiscalPrinter	HardTotals Keylock LineDisplay MICR MotionSensor MSR PINPad
About Configur	ed Devices Bump/Bar CashChanger CashDrawer CAT CheckScanner CoinDispenser
Logical name: H	P_POLE_DISPLAY JPOS_S_IDLE
Open C	laim Release Close Info Statistics Firmware O/C/E EXIT
Device enabled	
Freeze events	Display Text Window Control Misc Controls
	Row: 0 V Dispay Text At Dispay Text Clear Text
	Column: 0  Move Cursor
	Attribute: Normal Send to line display:

8. Check the "DEVICE ENABLED" so there is a check box.

▲ JavaPOStester	in Progress				
File					
Scale Scanner	SignatureCapture	SmartCardRW Ton	elndicator Exit		
PointCardRW	POSKeyboard	POSPower	POSPrinte	r Rem	oteOrderDisplay
FiscalPrinter		lock LineDisplay		NotionSensor	MSR PINPad
About Configur	ed Devices Bump/Ba	r CashChanger (	CashDrawer CA	T CheckScann	er CoinDispenser
Logical name:	IP_POLE_DISPLAY			JPOS_S_ID	LE
Open (	Claim Release	Close Info	Statistics	Firmware	O/C/E EXIT
Device enabled					
Freeze events	Display Text Windo	w Control Misc Con	trols		
	Row: 0 🔻	Dispay Text At	Dispay Text	Clear Text	
	Column: 0 🔻	_	Move Cursor		
	Attribute: Normal		Send to line	e display:	

9. Press the "CLEAR TEXT" button.

🛓 JavaPOStester in Progr	ess				
File					
Scale Scanner Signa	ntureCapture Sm	nartCardRW Tonel	ndicator Exit		
PointCardRW	POSKeyboard	POSPower	POSPrinte	r RemoteOr	derDisplay
	Fotals Keyloci			MotionSensor MS	
About Configured Device	es Bump/Bar	CashChanger Cas	shDrawer CA	T CheckScanner	CoinDispenser
Logical name: HP_POLE	_DISPLAY			JPOS_S_IDLE	
Open Claim	Release C	lose Info	Statistics	Firmware O/C/E	EXIT
✓ Device enabled					
Freeze events Display	y Text Window C	Control Misc Contro	ols		
R	ow: 0 🔻	Dispay Text At	Dispay Text	Clear Text	
Coli	umn: 0 🔻		Move Cursor		
Attribu	te: Normal		Send to lin	e display:	

10. Type in the test message in the "Send to line display" box and click on "Display Text"

🕌 JavaPOStester in Progress					
File					
Scale Scanner SignatureCapture	SmartCardRW T	oneIndicator	Exit		
PointCardRW POSKeyboar	d POSPower	POSE	Printer	Remo	oteOrderDisplay
	eylock LineDispl			nSensor	MSR PINPad
About Configured Devices Bump/E	ar CashChanger	CashDrawer	CAT	CheckScann	er CoinDispenser
Logical name: HP_POLE_DISPLAY				JPOS_S_IDL	.E
Open Claim Release	Close Info	Statistics	Firm	ware	O/C/E EXIT
Device enabled	dow Control Misc C				
Freeze events Display Text Win	dow Control Misc C	ontrois			
			_		
Row: 0 🔻	Dispay Text A	t 🛛 Dispay T	ext C	lear Text	
	1				
Column: 0 🔻		Move Curs	or		
Attribute: Normal		Send	to line disp	olav:	
	This is a test				
	<u></u>				

11. Click on "RELEASE" / "CLOSE" / "EXIT" to exit the JPOS test utility.

🕌 JavaPOStester in Progress		
File		
Scale Scanner SignatureCapture S	imartCardRW ToneIndicator Exit	
PointCardRW POSKeyboard	POSPower POSPrinter RemoteOrderDisc	olay
FiscalPrinter HardTotals Keylo		PINPad
About Configured Devices Bump/Bar	CashChanger CashDrawer CAT CheckScanner CoinDi	spenser
Logical name: HP_POLE_DISPLAY	JPOS_S_CLOSED	
Open Claim Release	Close Info Statistics Firmware O/C/E	EXIT
Device enabled		_
Freeze events Display Text Window	Control Misc Controls	
Freeze events	Control Misc controls	
	[]	
Row: 0 🗸	Dispay Text At Dispay Text Clear Text	
Column: 0		
	Move Cursor	
Attribute: Normal	Send to line display:	
	This is a test	

# 6.15 HP Biometric Fingerprint Readers



# 6.15.1 Connection

The fingerprint reader may be plugged into any designated free USB port for the specific device.

## 6.15.2 Windows Drivers for the HP Biometric Fingerprint Readers

The Biometric Fingerprint drivers are included in the HP factory image (C:\xxxxx\Drivers\Biometric Reader) and are also available from <u>HP.COM</u>.

The following is an example of Windows Device Manager after all the drivers are loaded for the HP Biometric Fingerprint Reader:

🚇 Device Man	ager		_ 🗆 🔀
<u>File A</u> ction	⊻iew <u>H</u> elp		
$\leftrightarrow$ $\rightarrow$ <b>I</b>	8	1 🔝	
Biom Biom Bluet Com Com Com Com Com Com Com Com Com Com	HP Retail Finge tooth Radios Doom - serial p puter drives an adapters an Interface E ATA/ATAPI co boards and other poi tors vork adapters s (COM & LPT) essors disk ad, video and a	ort emulato Devices ntrollers nting device	es ollers

# 6.15.3 OPOS Drivers / JPOS Drivers / SDK Kit

Please contact your HP rep who will contact HP R&D to have arrangements made for the SDK kit for the HP Biometric device.

Recommended cleaning:

Apply the sticky side of a piece of adhesive cellophane tape on the window and peel it away. If necessary, gently wipe the window with a cloth (not paper) dampened with a mild ammonia-based glass cleaner to remove any milky haze.

## Never do the following:

- Clean the reader window with paper
- Pour glass cleaner directly on the reader window
- Use alcohol-based cleaners
- Submerge the reader in liquid

### **Touch Screen** 7

### 7.1 HP L5006tm

### 7.1.1 Connection

The HP L5006tm touch screen monitor has three (3) connections that need to be made on the back of the unit. One connector will plug into the VGA connector on the back of the unit, the second connection which is for the touch screen can be connected either via USB connector or serial connector and the third connection is for power to the monitor. The USB connection will plug into one of the free USB ports on the back of the unit. If the serial connection is chosen, please note which serial port on the back of the unit that you connect the monitor touch screen port; this information will be needed later.

ouch screen erial connection.

View underneath the HP L5006tm monitor showing monitor connections:

### Windows Drivers for the Touch Screen 7.1.2

The drivers for HP touch screen may be obtained from HP.COM.

Note: The touch screen install process must be run with ADMINISTRATOR privileges.

The following is an overview of the steps to install the touch screen drivers and applets:

- 1. Start the touch screen installer.
- 2. Select your language.
- 3. Select the interface that you will use for the touch screen.
- 4. After the drivers are installed, please select the option to calibrate the touch screen monitor and follow the instructions on the screen.

For the L5006tm / L5009tm / L5015tm touch screen, after the drivers are installed please restart the operating system.

<u>Detailed installation instructions</u>1. Start the touch screen installer and select your language:

HP Touchscreen Setup (5.6.0)	×
Pick the default language for the HP Touchscreen Driver package.	
All HP Touchscreen applications will be displayed in the language selected below.	
English	
Next > Cancel	

Selecting default will use the language that the operating system is running.

2. Make the appropriate selection for your model and interface:

HP Touchscreen Setup (5.6.0 )
Welcome to HP Touchscreen Setup.
Install Serial Touchscreen Drivers (HP L5006tm)
Install APR Touchscreen Driver (HP L5009tm, HP L5015tm)
< Back Next > Cancel

USB Connection If USB drivers are selected the installation package will search the USB ports for the monitor.

HP Touchscreen Setup (5.6.0)	×
Welcome to HP Touchscreen Setup.	
<ul> <li>Install Serial Touchscreen Drivers (HP L5006tm)</li> <li>✓ Install USB Touchscreen Drivers (HP L5006tm)</li> <li>☐ Install APR Touchscreen Driver (HP L5009tm, HP L5015tm)</li> </ul>	
< Back Next > Cance	

HP Touchscreen Setup (5.6.0)
Installing HP Touchscreen drivers and components
Copying files

3. After the drivers are installed, please select the option to calibrate the touch screen monitor and follow the instructions on the screen.

HP Touchscreen Setup (5.6.0)	×
Setup Complete Setup has finished installing the HP Touchscreen drivers and components. You can choose to calibrate your HP Touchscreen monitors after setup finishes.	
Calibrate HP Touchscreen monitors.	
Finish	

Serial Connection If Serial Touchscreen drivers are selected you may have the installation package try to auto-detect which COM port the monitor is attached to.

HP Touchscreen Setup (5.6.0)	×
Welcome to HP Touchscreen Setup.	
Install Serial Touchscreen Drivers (HP L5006tm)	
Install APR Touchscreen Driver (HP L5009tm, HP L5015tm) Sector Applied APR Touchscreen Driver (HP L5009tm, HP L5015tm)           <         Cancel	_

HP Touchscreen Setup (5.6.0)
Examining serial ports on your computer.
Please wait
Ficase Wait

When the following box appears make sure that there is a check in the "Auto-detect HP Touchscreens" box.

HP Touchscreen Setup (5.6.0)				
Select the COM ports to use with HP serial Touchscreens. Check the Auto-detection box if you want Setup to auto-detect COM ports currently connected to HP devices.				
During Auto-detection, Setup will send data to each port which may temporarily interfere with some types of serial devices.				
Click Next to continue.				
Auto-detect HP Touchscreens.				
< Back Next > Cancel				

HP Touchscreen	Setup (	5.6.	0)
----------------	---------	------	----

Searching for connected HP Touchscreens.

Please wait...

The following screen appears that shows the com ports that were found in unit. The COM port that is selected where were the utility found the touch screen monitor.

HP Touchscreen Setup (5.6.0)	×
Choose the COM ports from the list below to use with your Touchscreens. All COM ports reported by your system are listed.	
□ COM3 □ COM4 ✓ COM1 □ COM2 □ COM5	
Once you have selected a COM port, dick Next to continue the installation.	
< Back Next > Cancel	

**Note:** The COM port listing on your unit may vary from the screen capture above.

You will be asked to confirm the COM port before the drivers are installed.

HP Touchscreen Setup (5.6.0)	×
You have selected the COM ports listed below to use with your Touchscreen.	
COM1	
Click Next to complete the installation or click Back to change your selections.	
< Back Next > Cancel	

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HP Touchscreen Setup (5.6.0)		
Installing HP Touchscreen drivers and components		
Copying files		
HP Touchscreen Setup (5.6.0)		
Setup Complete		
Setup has finished installing the HP Touchscreen drivers and components.		
You can choose to calibrate your HP Touchscreen monitors after setup finishes.		
Calibrate HP Touchscreen monitors.		
View Readme.		
Finish		

Would highly recommend after the drivers are installed please restart the operating system.

The following screen is showing Windows Device Manager when the touch screen is connected to the unit via the USB cable. After the Windows has loaded the device drivers for the touch screen there will be an entry in "Human Interface Devices" and "Mice and other pointing device" section in Device Manager as shown below:

🚔 Device Manager 🗕 🗖 🗙
<u>F</u> ile <u>A</u> ction <u>V</u> iew <u>H</u> elp
HPPankaj     Audia issute and autoute
<ul> <li>Audio inputs and outputs</li> <li>Image: Computer</li> </ul>
Disk drives
Display adapters
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
🖉 Elo Touch Solutions 2700 IntelliTouch USB Touchmonitor Interface
Microsoft PS/2 Mouse
Monitors
Network adapters
Portable Devices
▷ 🚏 Ports (COM & LPT)
Print queues
Processors
<ul> <li>Security devices</li> <li>Software devices</li> </ul>
Solution of the second seco
Storage controllers
Storage controllers System devices
Universal Serial Bus controllers
· · · · · · · · · · · · · · · · · · ·

The following screen is showing Windows Device Manager when the touch screen is connected to the unit via the COM port. After the Windows has loaded the device drivers for the touch screen there will be an entry in "Mice and other pointing device" section in Device Manager as shown below:

📇 Device Manager 🗕 🗖 🗙
<u>File Action View H</u> elp
🔺 🚔 HPPankaj
Audio inputs and outputs
⊳ jЩ Computer
Disk drives
Display adapters
DE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
👸 Elo Touchmonitor Serial Interface
Microsoft PS/2 Mouse
Monitors
Network adapters
Portable Devices
▷ Ports (COM & LPT)
Print queues
Processors
Security devices
Software devices
Sound, video and game controllers
Storage controllers
Image: System devices
Universal Serial Bus controllers

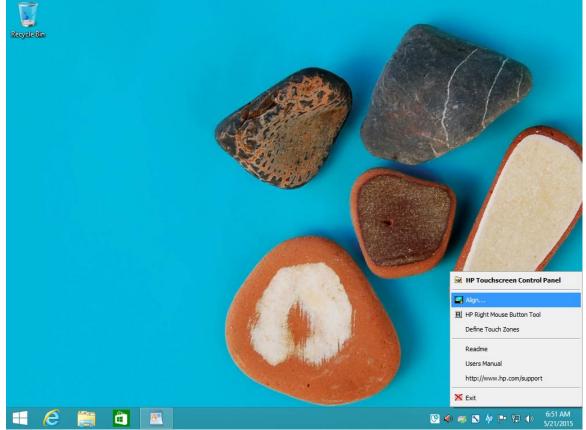
After Windows has loaded the device drivers for the touch screen there will be an Elo icon in the system tray:



#### 7.1.3 <u>Touch Screen Alignment</u>

You will need to run the touch screen alignment program the first time you use the touch screen.

There are couple methods to get to the alignment program for the touch screen. You can access this program either via the Elo ICON in the system tray or control panel.



Method1: On the Elo icon in the system tray, click on the icon and select "Align ...." Option:

Note: The screen capture is example, what appears in the menu may vary by driver version.

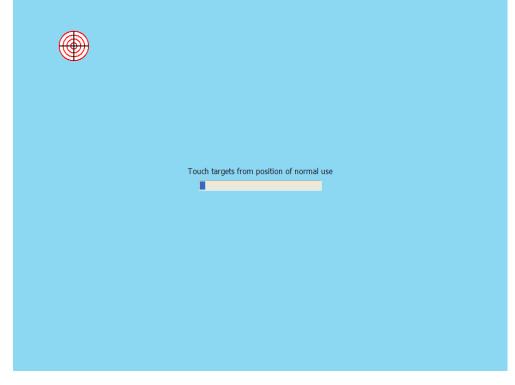
X All Control Panel Items -🛞 🍥 👻 🕆 📴 🕨 Control Panel 🕨 All Control Panel Items 🕨 V C Search Control Panel p Adjust your computer's settings View by: Large icons \* Action Center Administrative Tools AutoPlay **BitLocker Drive Encryption** Color Management Credential Manager Date and Time **Default Programs** Device Manager Ease of Access Center **Devices and Printers** Display 201 Energy Star (32-bit) Family Safety File History Flash Player (32-bit) Folder Options Fonts hp HomeGroup **HP** Touchscreen Indexing Options 94 Intel® Rapid Storage Internet Options Keyboard Technology Language 1 Location Settings Mouse All Control Panel Items -🛞 💮 👻 🕇 📴 🕨 Control Panel 🕨 All Control Panel Items Search Control Panel p V C Adjust your computer's settings View by: Small icons -Action Center Administrative Tools AutoPlay BitLocker Drive Encryption Color Management Credential Manager Date and Time Default Programs Device Manager Devices and Printers Display Ease of Access Center Energy Star (32-bit) S Family Safety File History Flash Player (32-bit) Folder Options A Fonts () HP Touchscreen HomeGroup 🔒 Indexing Options Rapid Storage Technology C Keyboard Internet Options 😒 Language E Location Settings @ Mouse Network and Sharing Center Notification Area Icons NVIDIA Control Panel S NVIDIA nView Desktop Manager Personalization Phone and Modern Power Options Programs and Features Realtek HD Audio Manager P Recovery A Region 15 RemoteApp and Desktop Connections Sound Speech Recognition Storage Spaces Taskbar and Navigation Sync Center System Troubleshooting & User Accounts Int Windows Defender Windows Firewall Windows Update Mork Folders

Method 2: Need to switch to classic view or Large ICON / Small ICON view in control panel in order to see the HP Touch screen option.

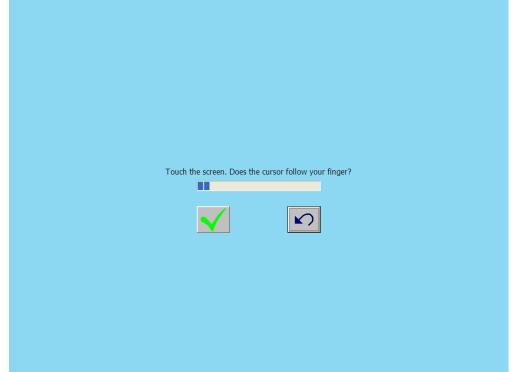
(hp	HP Touchscreen Control Panel ?	×							
General	Mode         Sound         Properties 1         About           Video alignment enables the computer to convert Touchscreen coordinates into image coordinates.           Align the Touchscreen whenever you:								
	* Initially install the Touchscreen drivers. * Change the Touchscreen or Touchscreen hardware. * Notice the cursor isn't lined up with your finger.								
	Calibration mode Normal Align								
	Ok Cancel Apply	Help							

Select the align option; follow the on screen direction to align the touch screen:

During the alignment of the touch screen you will be presented with three targets to press:



The fourth screen presented will accept the calibration that was performed:



# 7.1.4 OPOS Drivers for the Touch Screen

No OPOS drivers are needed for the touch screen.

# 7.1.5 <u>Testing the Touch Screen</u>

Touch several places on the monitor screen and the mouse cursor should be present where the monitor was touched.

# 7.1.6 JPOS Drivers for the Touch Screen

No JPOS drivers are needed for the touch screen.

# 7.2 HP L5009tm / HP L5015tm

#### 7.2.1 Connection

The HP L5009tm / HP L5015tm touch screen monitor has three (3) connections that need to be made on the back of the unit. One connector will plug into the VGA connector on the back of the unit, the second connection which is for the touch screen via USB connector and the third connection is for power to the monitor. The USB connection will plug into one of the free USB ports on the back of the unit.

View underneath the HP L5009tm monitor showing monitor connections:



View underneath the HP L5015tm monitor showing monitor connections:



**Note:** For the HP L5009tm / HP L5015tm, there is **no** serial connection for the touch screen, it is only USB.

#### 7.2.2 Windows Drivers for the Touch Screen

The drivers for HP touch screen may be obtained from the <u>HP.COM</u> web or the HP factory image.

**Note:** When one attaches the USB cable for the touch screen on the HP L5009tm / HP L5015tm monitor, one may receive a Windows Hardware Wizard screen; select the CANCEL option on this screen. During the next few steps the drivers will be installed on the unit.

The touch screen install process must be run with ADMINISTRATOR privileges.

The following is overview of the steps to install the touch screen drivers and applets:

- 1. Start the touch screen installer.
- 2. Select your language.
- 3. Select the interface that you will use for the touch screen.
- 4. Agree to the license agreement.
- 5. Depending on whether the touch screen part of the monitor is attached to the unit or not, two different behaviors will be seen.

#### **Detailed Steps**

1. Start the touch screen installer and select your language:

HP Touchscreen Setup (5.6.0)							
Pick the default language for the HP Touchscreen Driver package.							
All HP Touchscreen applications will be displayed in the language selected below.							
English V							
Next > Cancel							

Selecting default will use the language that the operating system is running.

2. Select the "Install APR Touchscreen Driver" option and click on the NEXT button:

HP Touchscreen Setup (5.6.0)						
Welcome to HP Touchscreen Setup.						
Install Serial Touchscreen Drivers (HP L5006tm)						
☐ Install USB Touchscreen Drivers (HP L5006tm) ✓ Install APR Touchscreen Driver (HP L5009tm, HP L5015tm)						
< Back Next > Cancel						

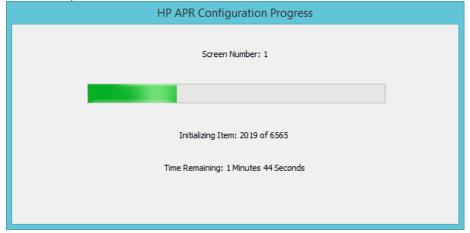
Note: The Serial Touchscreen Drivers option is not available for HP L5009tm / HP L5015tm.

HP Touchscreen Setup (5.6.0)
Installing HP Touchscreen drivers and components
Copying files

- 4. Depending if the touch screen USB cable is attached to the unit or not, one of the following behaviors will be seen:
  - a. After the drivers are installed and the HP L5009tm / HP L5015tm monitor touch screen USB cable is **not** attached to the unit, the installation process is complete as indicated below and the readme file may be viewed.

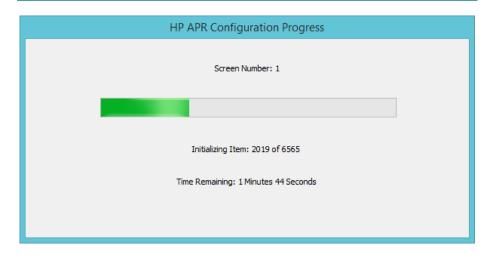
HP Touchscreen Setup
Setup Complete
Setup has finished pre-installing the HP Touchscreen drivers. Your monitor can be plugged in at anytime.
Click Finish to exit Setup.
View Readme.
Finish

When one attaches the HP L5009tm / HP L5015tm monitor touch screen the APR configuration process will start, it will copy files to the hard drive (this process will take several minutes).



b. With the HP L5009tm / HP L5015tm monitor touch screen (USB cable) attached to the unit and one has agreed to the license agreement the installation process for the driver will start and one will see some of the following screens:

HP Touchscreen Setup (5.6.0)					
Installing HP Touchscreen drivers and components					
Copying files					



Select the option to "Calibrate HP Touchscreen monitors" and click on the "Finish" button:

HP Touchscreen Setup (5.6.0)	×
Setup Complete	
Setup has finished installing the HP Touchscreen drivers and components.	
You can choose to calibrate your HP Touchscreen monitors after setup finishes.	
✓ Calibrate HP Touchscreen monitors.	
View Readme.	
Finish	

The calibrate option for HP L5009tm / HP L5015tm is a one point calibration, the screen during the calibration process looks like:

Touch targets from position of normal use	

The following screen is showing Windows Device Manager after the HP L5009tm and HP L5015tm drivers are installed and when the touch screen is connected to the unit via the USB cable. After Windows has loaded the device drivers for the touch screen there will be an entry in "Human Interface Devices" and "Mice and other pointing devices" sections in Device Manager as shown below:

HP 5009tm attached to the unit.	HP 5015tm attached to the unit
🚔 Device Manager 🗕 🗖 🔀	🛃 Device Manager 😑 🗖
<u>File Action View H</u> elp	<u>File Action View H</u> elp
<ul> <li>HPPankaj</li> <li>Audio inputs and outputs</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Display adapters</li> <li>Dis LTA/ATAPI controllers</li> <li>Keyboards</li> <li>Mice and other pointing devices</li> <li>Elo Touch Solutions PulseTouch-7000/7002</li> <li>Microsoft PS/2 Mouse</li> <li>Monitors</li> <li>Monitors</li> <li>Network adapters</li> <li>Ports (COM &amp; LPT)</li> <li>Print queues</li> <li>Software devices</li> <li>Software devices</li> <li>Software devices</li> <li>Software devices</li> <li>Software devices</li> <li>Sortage controllers</li> <li>Versal Serial Bus controllers</li> </ul>	<ul> <li>HPPankaj</li> <li>Audio inputs and outputs</li> <li>Computer</li> <li>Disk drives</li> <li>Display adapters</li> <li>Dipplay adapters</li> <li>DE ATA/ATAPI controllers</li> <li>Keyboards</li> <li>Mice and other pointing devices</li> <li>HP L5015tm APR Touch Monitor</li> <li>Microsoft PS/2 Mouse</li> <li>Monitors</li> <li>Metwork adapters</li> <li>Ports (COM &amp; LPT)</li> <li>Processors</li> <li>Software devices</li> <li>Software devices</li> <li>Sound, video and game controllers</li> <li>System devices</li> <li>Wirersal Serial Bus controllers</li> </ul>

After Windows has loaded the device drivers for the touch screen there will be an HP icon in the system tray:

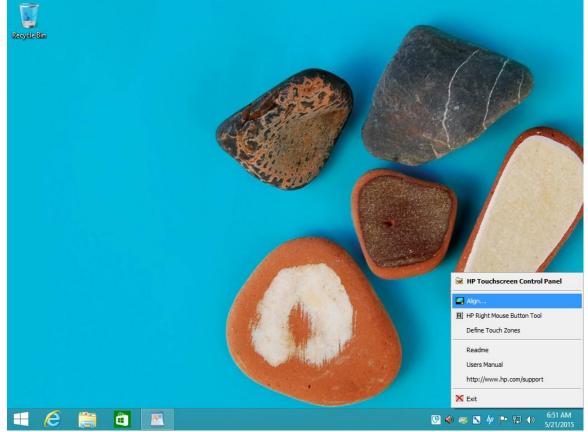
()	 8	hp	₽	P	<b>(</b> ))	12:53 PM 5/18/2015
<b>()</b>	 8	hp.	HP T	ouch	scree N	n 2:56 PM 5/18/2015

#### d to the unit.

#### 7.2.3 <u>Touch Screen Alignment</u>

You will need to run the touch screen alignment program the first time you use the touch screen.

There are couple of methods to get to the alignment program for the touch screen. You can access this program either via the HP ICON in the system tray or control panel.



Method1: On the HP icon in the system tray, click on the icon and select "Align ...." Option:

Note: The screen capture is example, what appears in the menu may vary by driver version.

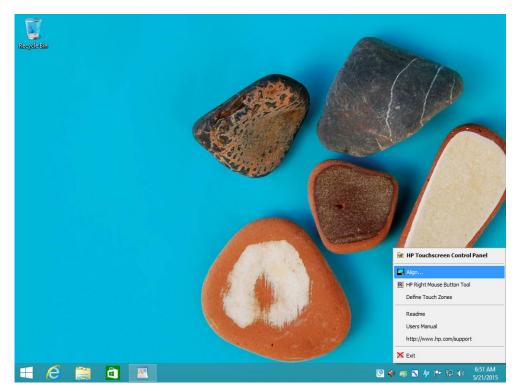
X All Control Panel Items -🛞 🍥 👻 🕆 📴 🕨 Control Panel 🕨 All Control Panel Items 🕨 V C Search Control Panel p Adjust your computer's settings View by: Large icons \* Action Center Administrative Tools AutoPlay **BitLocker Drive Encryption** Color Management Credential Manager Date and Time **Default Programs** Device Manager Ease of Access Center **Devices and Printers** Display 201 Energy Star (32-bit) Family Safety File History Flash Player (32-bit) Folder Options Fonts hp HomeGroup **HP** Touchscreen Indexing Options 94 Intel® Rapid Storage Internet Options Keyboard Technology Language 1 Location Settings Mouse All Control Panel Items -🛞 💮 👻 🕇 📴 🕨 Control Panel 🕨 All Control Panel Items Search Control Panel p V C Adjust your computer's settings View by: Small icons \* Action Center Administrative Tools AutoPlay BitLocker Drive Encryption Color Management Credential Manager Date and Time Default Programs Device Manager Devices and Printers Display Ease of Access Center Energy Star (32-bit) S Family Safety File History Flash Player (32-bit) Folder Options A Fonts () HP Touchscreen HomeGroup 🔒 Indexing Options Rapid Storage Technology C Keyboard Internet Options 😒 Language E Location Settings @ Mouse Network and Sharing Center Notification Area Icons NVIDIA Control Panel S NVIDIA nView Desktop Manager Personalization Phone and Modern Power Options Programs and Features D Realtek HD Audio Manager P Recovery A Region 15 RemoteApp and Desktop Connections Sound Speech Recognition Storage Spaces Taskbar and Navigation Sync Center System Troubleshooting & User Accounts Int Windows Defender Windows Firewall Windows Update Mork Folders

Method 2: Need to switch to classic view or Large ICON / Small ICON view in control panel in order to see the HP Touch screen option.

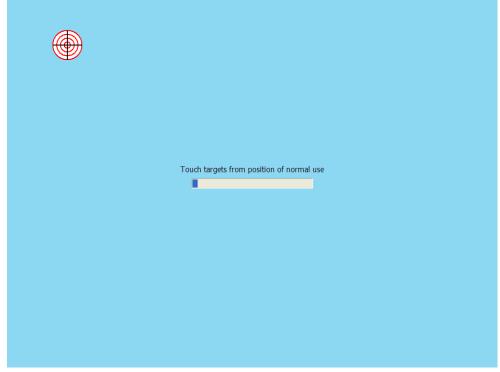
(p)	,		HP Touchs			Panel	?	x
General	Mode	Sound	Properties 1	About				
			Touch	nscreen	coordinates	he computer to into image coo nenever you:		
			* Cha hardv	ange the vare.	Touchscree	nscreen drivers en or Touchscre ned up with you	en	
	Alig	<mark>n</mark>		oration n Norma ) Enhand				
			Ok		Cancel	Apply	Н	elp

Select the align option; follow the on screen direction to align the touch screen:





During the alignment of the touch screen you will be presented with one target to press:



# 7.2.4 OPOS Drivers for the Touch Screen

No OPOS drivers are needed for the touch screen.

#### **Testing the Touch Screen** 7.2.5

Touch several places on the monitor screen and the mouse cursor should be present where the monitor was touched.

#### JPOS Drivers for the Touch Screen No JPOS drivers are needed for the touch screen. 7.2.6

# 7.3 <u>HP ap5000 Touch Screen</u>



#### 7.3.1 Connection

The touch screen on the HP ap5000 system is integrated into the system which is connected internally via PS/2 interface. There is no user connection required for this device.

#### 7.3.2 Windows Drivers for the Touch Screen

The HP ap5000 touch screen drivers are already installed in the HP factory image (C:\xxxxx\ap5000 Touch Drivers) and are also available from <u>HP.COM</u>.

**Note:** Under Microsoft Vista, the touch screen install process must be run with ADMINISTRATOR privileges.

The following is an overview of the steps to install the touch screen drivers and applets:

1. Start the touch screen installer from the location that was mentioned in the beginning of this section.

**Note:** On the ap5000 unit with a Microsoft Windows image, the drivers for the ap5000 touch screen are pre-installed in the image.

- 2. Follow the prompts that appear on the screen.
- 3. After the drivers are installed, please select the option to calibrate the touch screen monitor and follow the instructions on the screen.

#### **Detailed installation instructions**

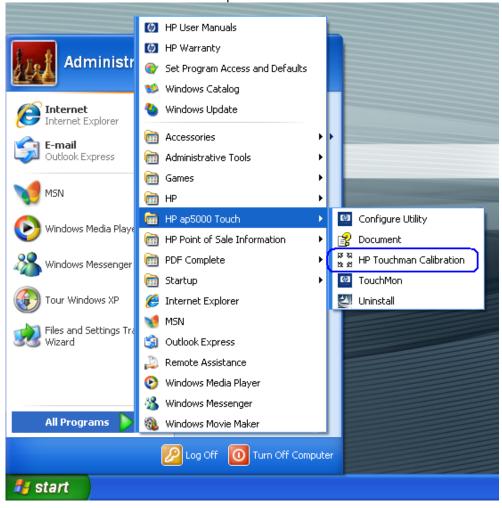
1. Start the touch screen installer from the location that was mentioned in the beginning of this section.

**Note:** On the ap5000 unit with a Microsoft Windows image, the drivers for the ap5000 touch screen are pre-installed in the image.

One must have ADMINISTRATOR privileges in order to install the drivers.

2. Follow the prompts that appear on the screen.

3. After the drivers are installed, please select the option to calibrate the touch screen monitor and follow the instructions on the screen by launching the calibration option in the start menu or from the system tray.

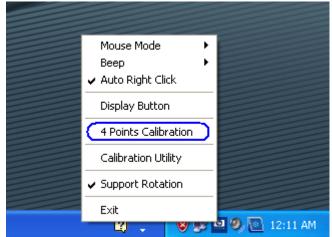


Calibration option from start menu

Calibration option from system tray menu



Right click on the touch screen option and select "4 Points Calibration"



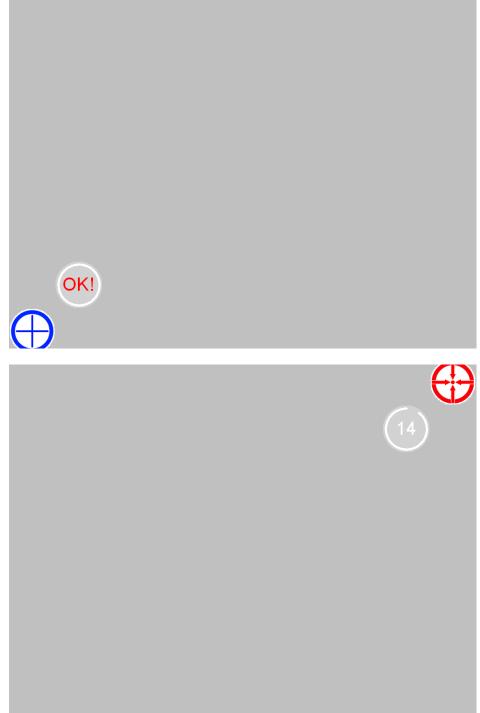
The calibrate option for HP ap5000 is four button calibration; one button appearing in each corner of the screen.

**Note:** When the red circle appear on the display, touch <u>and</u> hold the center of the red circle until it says OK.

The following screens appear during the calibration process:



After the calibration point has been successfully accepted an "OK" appears:

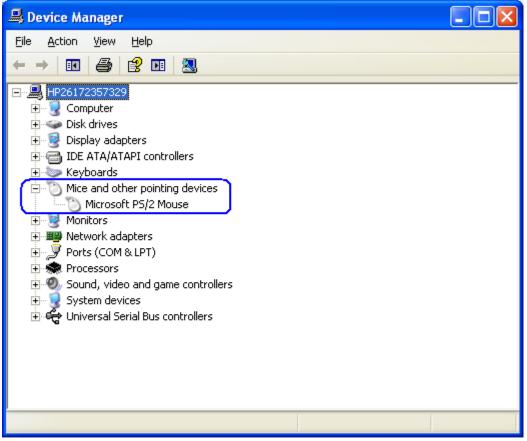




After all four points have been successfully calibrated, several screens will appear that read and write the calibration parameters. The following is a screen capture of the read screen that will appear:

Reading parameters

The following screen is showing Windows Device Manager after the HP ap5000 drivers are installed:



After Windows has loaded the device drivers for the touch screen there will be an HP icon in the system tray:



# 7.3.3 OPOS Drivers for the ap5000 Touch Screen

No OPOS drivers are needed for the touch screen.

# 7.3.4 Testing the Touch Screen

Touch several places on the monitor screen and the mouse cursor should be present where the monitor was touched.

# 7.3.5 JPOS Drivers for the ap5000 Touch Screen

No JPOS drivers are needed for the touch screen.

# 7.4 HP RP7 15inch Resistive (AFD)



Unit is shown down position with MSR / Biometric option.

#### 7.4.1 Connection

The 15inch resistive AFD (Associate Facing Display) is part of the base unit thus require no external cables to be connected by the user.

#### 7.4.2 Windows Drivers for the Touch Screen

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system, the touch is recognized by the operating system automatically.

For Microsoft POSReady 2009 operating system, the drivers for HP touch screen are already installed in the HP factory image and are also available from <u>HP.COM</u>.

After obtaining drivers, the following is overview of the steps to install the touch screen drivers and applets:

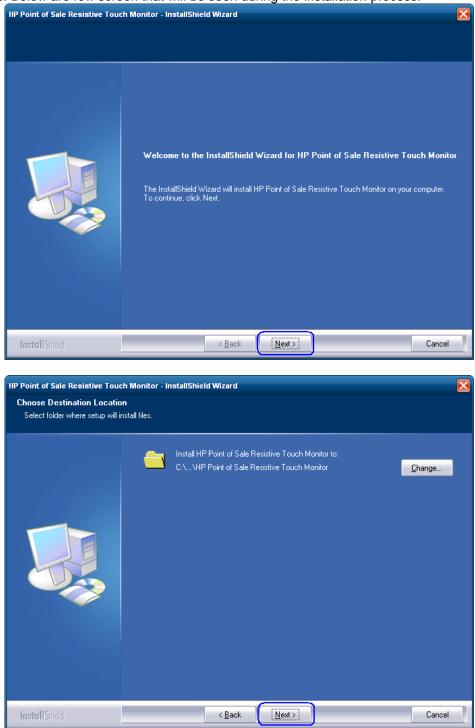
- Start the touch screen installer by clicking on the SETUP.EXE file. Note: The touch driver is installed in the HP factory for HP RP7 15inch resistive model.
- 2. Accept the default prompt prompts until the installation process is complete to install the drivers.
- 3. Once the installation is complete restart the operating system by selecting YES to the restart question or manually restart after other items installation are complete.
- 4. Run the calibration utility.

#### **Detailed Steps**

1. Start the touch screen installer by clicking on the "HP Resistive TouchScreen Driver.exe" file.

Note: The touch driver is installed in the HP factory for HP RP7 15inch resistive model.

2. Accept the default prompt prompts until the installation process is complete to install the drivers. Below are few screen that will be seen during the installation process:



HP Point of Sale Resistive Touch Monitor - InstallShield Wizard				
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed HP Point of Sale Resistive Touch Monitor. Click Finish to exit the wizard.			
InstallShield	< <u>B</u> ack [Finish] Cancel			

3. Once the installation is complete restart the operating system by selecting YES to the restart question or manually restart after other items installation are complete.

HP Point of Sale Resistive Touch	Monitor - InstallShield Wizard
	InstallShield Wizard Complete
	Please reboot your computer to work your touch properly.
	Yes, I want to restart my computer now.
	No, I will restart my computer later.
	Click Finish to complete setup
InstallShield	< Back Finish Cancel

4. Run the calibration utility as mentioned in the touch screen calibration section.

## 7.4.3 <u>Touch Screen calibration</u>

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system:

- 1. Click on the START button.
- 2. Click on CONTROL PANEL.
- 3. In the search box type in "Tablet PC Setting" (without the quote) and in the list of results select "Table PC Settings".
- 4. On the DISPLAY tab under DISPLAY OPTION select CALIBRATE.
  - **Note:** When one calibrates for the screen for the first time, the screen uses 16 different reference points. If one selects the calibration option again only 4 points are used. To perform a 16-point calibration again, in the Tablet PC Properties window, tap the Reset button.
- 5. Follow the instructions on the screen and click YES to save your calibration settings.

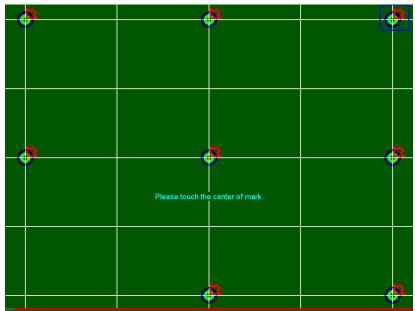
For POSReady 2009 operating system:

- 1. Click on the START button.
- 2. Open "HP Point of Sale Resistive Touch Monitor" folder.
- 3. Select the TOUCH TOOL icon.

	🍻 HP Warranty			
Internet	accessories	•		
	m HP Help and Support	•		
🕞 Windows Media Play	m HP Point of Sale Information	•		
	💼 HP Point of Sale Resistive Touch Monitor	•	1	Touch tool
	intel	•	8	Touch tool Help
	m Productivity and Tools	•		
	🛅 Startup	•		
	🏉 Internet Explorer			
	🐼 Microsoft Office Excel Viewer			
	🕞 Microsoft Office PowerPoint Viewer 2007			
	Wicrosoft Office Word Viewer 2003			
	💫 Remote Assistance			
	SetRefresh			
All Programs	🕑 Windows Media Player			

4. Select the 9 point calibration option and follow the prompts on the screen to calibrate the touch monitor. Press the target button that appears until the next target appears. The screen shot below represent the calibration screen that will appear during the process (the "x" represent the other 8 touch point that will appear during the calibration process.

HP Point of Sale Resisti	ve Touch Monitor			
General Settings Advance About				
Controller list				
Device name	Firmware Ve	r. Display		
HIDTOUCH0	V2.1E	1	Refresh	
			device	
9 pts calib	ration	Free	draw	
5 pt5 camb			diaw	
		Ok	Cancel	
	Diseas touch the	contar of mark		
	Please touch the	center of mark.		



Note: The targets appear one at a time. The screen shot above represent the location where the 9 point calibration targets will appear.

5. Save the calibration setting.

		Skip	
		Save	)

# 7.4.4 OPOS Drivers for the Touch Screen

No OPOS drivers are needed for the touch screen.

#### 7.4.5 <u>Testing the Touch Screen</u>

Touch several places on the monitor screen and the mouse cursor should be present where the monitor was touched.

# 7.4.6 JPOS Drivers for the Touch Screen

No JPOS drivers are needed for the touch screen.

# 7.5 HP RP7 15 /17 inch Projective Capacitive AFD (Associate Facing Display)



Unit is shown down position with MSR option.

#### 7.5.1 Connection

The 15 / 17 inch Projective Capacitive (PCap) AFD (Associate Facing Display) is part of the base unit thus require no external cables to be connected by the user.

#### 7.5.2 Windows Drivers for the Touch Screen

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system, the touch is recognized by the operating system automatically.

For Microsoft POSReady 2009 operating system the drivers for HP touch screen are already installed in the HP factory image and are also available from <u>HP.COM</u>.

After obtaining drivers, the following is overview of the steps to install the touch screen drivers and applets:

- 1. Start the touch screen installer by clicking on the SETUP.EXE file.
  - **Note:** The touch driver is installed in the HP factory for HP RP7 15/17 inch projective capacitive model.
- 2. Click on the "OK" to start the installation process.
- 3. Once the installation is complete restart the operating system by selecting YES to the restart question. If one selects "NO" one will see a screen that indicates the driver was successfully installed; manually restart after other items installation are complete.

#### Detailed installation instructions for Windows XP/POSReady 2009

Start the touch screen installer by clicking on the SETUP.EXE file.
 Note: The touch driver is installed in the HP factory for HP RP7 15/17 inch projective capacitive model.

2. Click on the "OK" to start the installation process.

IP Projective Capacitive Touch Controller Installer		
hp	Do you want to install HP Touch Controller driver?	
	Driver Version	
	7.2.52.00	
	ОК	
	Exit	
HP Projective Capacitive	Touch Controller Installer	
hp	Do you want to install HP Touch Controller driver?	
	Driver Version	
	7.2.52.00	
Installing	ОК	
	<b>-</b>	
	Exit	

3. Once the installation is complete restart the operating system by selecting YES to the restart question. If one selects "NO" one will see a screen that indicates the driver was successfully installed; manually restart after other items installation are complete.

	Driver ins	stallation	×
	1	You must reboot this system to complete Restart now?	e the installion.
HP Projective Capac	itive Touch Co	ontroller Installer	
hp	Do y	ou want to install HP Touch (	Controller driver?
	Drive	er Version	
	7.2.5	52.00	
			OK
Install	ation suc	ccess!	Exit

## 7.5.3 <u>Touch Screen calibration</u>

For Microsoft POSReady 2009 and Windows XP Professional operating system there is no calibration needed due to the projective capacitive technology therefore there is no calibration utility for the HP RP7 15/17 inch projective capacitive touch.

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system the following are the steps to launch the calibration utility **BUT** it is not necessary for the HP RP7 15/17 inch projective capacitive touch:

- 1. Click on the START button.
- 2. Click on CONTROL PANEL.
- 3. In the search box type in "Tablet PC Setting" (without the quote) and in the list of results select "Table PC Settings".
- 4. On the DISPLAY tab under DISPLAY OPTION select CALIBRATE.
  - **Note:** When one calibrates for the screen for the first time, the screen uses 16 different reference points. If one selects the calibration option again only 4 points are used. To perform a 16-point calibration again, in the Tablet PC Properties window, tap the Reset button.
- 5. Follow the instructions on the screen and click YES to save your calibration settings.

#### 7.5.4 Touch in Dual Monitor Configuration in POSReady 2009 or XP

This section and the touch drivers are for Microsoft POSReady 2009 and Microsoft Windows XP operating system.

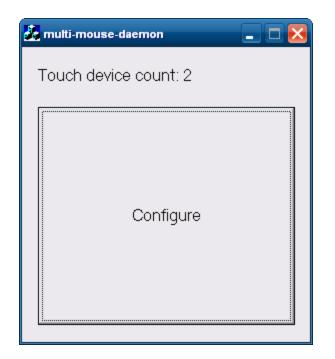
In a dual touch PCAP monitor configuration, in order to have touch on both monitors one must have driver's version 7.5.52.00 or later which can be obtained on the <u>HP.COM</u> website. After the drivers are obtained the following is the process to install the drivers in dual touch PCAP configuration.

- 1. Go to the folder where the PCAP touch drivers have been downloaded and extracted.
- 2. Launch the SETUP.EXE utility with "/dual" parameter (i.e. SETUP.EXE /dual) and follow the prompts on the screen.
- 3. After the drivers are installed and the unit is rebooted, need to identify the touch monitors to the touch drivers. In the system tray double click on the "Multi-mouse-daemon" icon to launch the configuration of the touch monitors. This utility was installed in the system tray because of the "/dual" parameter.

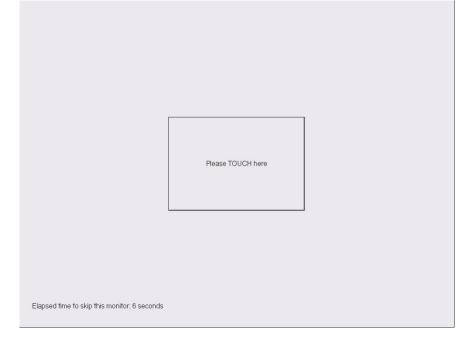
	🔸 😗 🗉 🛃 👷 🕬 🌒 🧠 🤿 🥵 6:46 AM
Multi-mouse-d	daemon icon
in system tray.	

4. Follow the prompts that appear when "Multi-mouse-daemon" utility is launched. The following are the screens that will appear.

Initial screen that appears when the utility is launched:



Once the "CONFIGURE" button is pressed on the primary monitor a screen appears that ask one to touch a box. After the box on primary monitor is touched then the similar screen appears on the secondary monitor. The boxes that will be similar to the box below:



After the second monitor has been touched or timeout has occurred a message indicating that the process is complete appears:

🛃 multi-mouse-daemon	_ <b>_</b> X
Touch device count: 2	
Configure X Done	

Click or press on the OK button to complete the process.

**Note:** The "Multi-mouse-daemon" information will be kept upon reboot of the operating system. If the driver is re-installed or different monitor PCAP monitor is installed on the unit the utility must be re-run in order to obtain the proper monitor information.

#### 7.5.5 Touch in Dual Monitor Setup in POSReady 7 or Windows 7

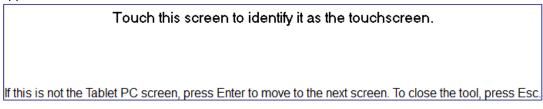
For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system the following are the steps to correctly identify the touch monitors:

- 1. Click on the START button.
- 2. Click on CONTROL PANEL.
- 3. In the search box type in "Tablet PC Setting" (without the quote) and in the list of results select "Table PC Settings".

4. On the DISPLAY tab under CONFGIURE click on the SETUP button.

Tablet PC Settings	×
Display Other Configure Configure your pen and touch displays.	
Display options Display: 1, HP AFD15C	
Details: Touch Input Available	
<u>C</u> alibrate <u>R</u> eset	
Choose the order in which your screen rotates. <u>Go to Orientation</u>	
OK Cancel Ap	ply

5. Follow the prompt that appears on the screen. The following is example of the prompt that appears on the screen:



## 7.5.6 OPOS Drivers for the Touch Screen

No OPOS drivers are needed for the touch screen.

## 7.5.7 <u>Testing the Touch Screen</u>

Touch several places on the monitor screen and the mouse cursor should be present where the monitor was touched.

#### 7.5.8 JPOS Drivers for the Touch Screen

No JPOS drivers are needed for the touch screen.

# 7.5.9 Disable/Enable On-Screen Display (OSD)

The OSD feature can be locked and unlocked. The monitor is shipped with the OSD menu in the unlocked position.

To lock the OSD menu and disable the OSD controls:

- Tap on the area where the OSD icons are located so that the icon become illuminated and active.
- Press the "MENU" icon for approximately 10 seconds until message appears indicating the OSD is locked.

To unlock the OSD menu and enable the OSD controls:

- Tap on the area where the OSD icons are located so that the icon become illuminated and active.
- Press the "MENU" icon for approximately 10 seconds until message appears indicating the OSD is unlocked.

## 7.6 Touch Screen – HP L6015tm / L6017tm Projective Capacitive (PCap)





### 7.6.1 Connection

Please see the documentation that comes with the monitor for connection information.

## 7.6.2 Windows Drivers for the Touch Screen

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system, the touch is recognized by the operating system automatically.

For Microsoft POSReady 2009 operating system the drivers for HP touch screen are already installed in the HP factory image and are also available from <u>HP.COM</u>.

The following is overview of the steps to install the touch screen drivers and applets:

- 1. Start the touch screen installer by clicking on the SETUP.EXE file from the "Touchscreen" folder in the start menu.
- 2. Click on the "OK" to start the installation process.
- 3. Once the installation is complete restart the operating system by selecting YES to the restart question. If one selects "NO" one will see a screen that indicates the driver was successfully installed; manually restart after other items installation are complete.

### **Detailed Steps**

1. Start the touch screen installer by clicking on the SETUP.EXE file from the "Touchscreen" folder in the start menu.



OR

The installation package can also be found at the following location on the HP image "C:\SWSetup\Point of Sale\HP Projective-Capacitive Touchscreen"

2. Click on the "OK" to start the installation process.

HP Projective Capacitiv	re Touch Controller Installer
hp	Do you want to install HP Touch Controller driver?
	Driver Version 7.2.52.00
	ОК
	Exit
HP Projective Capaciti	ve Touch Controller Installer
hp	Do you want to install HP Touch Controller driver?
	Driver Version
	7.2.52.00
Installin	g OK
	Exit

3. Once the installation is complete restart the operating system by selecting YES to the restart question. If one selects "NO" one will see a screen that indicates the driver was successfully installed; manually restart after other items installation are complete.

	Driver ins	stallation	×	
	1	You must reboot this system to con Restart now?	nplete the installion.	
HP Projective Capac	itive Touch Co	ntroller Installer		
hp	Do y	ou want to install HP Tou	ch Controller driver?	
	Drive	er Version		
	7.2.5	52.00		
			ОК	
Install	ation suc	ccess!	Exit	

### 7.6.3 Touch Screen calibration

For Microsoft POSReady 2009 and Windows XP Professional operating system there is no calibration is needed due to the projective capacitive technology therefore there is no calibration utility for the HP RP7 15/17 inch projective capacitive touch.

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system the following are the steps to launch the calibration utility **BUT** it is not necessary for the HP RP7 15/17 inch projective capacitive touch:

- 1. Click on the START button.
- 2. Click on CONTROL PANEL.
- 3. In the search box type in "Tablet PC Setting" (without the quote) and in the list of results select "Table PC Settings".
- 4. On the DISPLAY tab under DISPLAY OPTION select CALIBRATE.
  - **Note:** When one calibrates for the screen for the first time, the screen uses 16 different reference points. If one selects the calibration option again only 4 points are used. To perform a 16-point calibration again, in the Tablet PC Properties window, tap the Reset button.
- 5. Follow the instructions on the screen and click YES to save your calibration settings.

## 7.6.4 Touch in Dual Monitor Configuration in POSReady 2009 or XP

This section and the touch drivers are for Microsoft POSReady 2009 and Microsoft Windows XP operating system.

In a dual touch PCAP monitor configuration, in order to have touch on both monitors one must have driver's version 7.5.52.00 or later which can be obtained on the <u>HP.COM</u> website. After the drivers are obtained the following is the process to install the drivers in dual touch PCAP configuration.

- 1. Go to the folder where the PCAP touch drivers have been downloaded and extracted.
- 2. Launch the SETUP.EXE utility with "/dual" parameter (i.e. SETUP.EXE /dual) and follow the prompts on the screen.
- After the drivers are installed and the unit is rebooted, need to identify the touch monitors to the touch drivers. In the system tray double click on the "Multi-mouse-daemon" icon to launch the configuration of the touch monitors. This utility was installed in the system tray because of the "/dual" parameter.

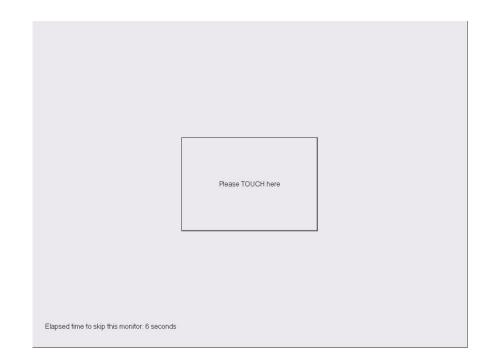
	🍾 😲 🛯 🔀 🍢 🖓 🧐 🌒 🥪 🥪 6:46 AM
Multi-mouse-d	daemon icon
in system tray.	

4. Follow the prompts that appear when "Multi-mouse-daemon" utility is launched. The following are the screens that will appear.

Initial screen that appears when the utility is launched:
-----------------------------------------------------------

Touch device count: 2	nulti-mous	se-daemon	🗆 🔀
Configure	Touch de	vice count: 2	
		-	

Once the "CONFIGURE" button is pressed on the primary monitor a screen appears that ask one to touch a box. After the box on primary monitor is touched then the similar screen appears on the secondary monitor. The boxes that will be similar to the box below:



After the second monitor has been touched or timeout has occurred a message indicating that the process is complete appears:

🚣 multi-mouse	-daemon	_ 🗆 🗙
Touch devi	ce count: 2	1
	Configure 🔀 Done	

Click or press on the OK button to complete the process.

**Note:** The "Multi-mouse-daemon" information will be kept upon reboot of the operating system. If the driver is re-installed or different monitor PCAP monitor is installed on the unit the utility must be re-run in order to obtain the proper monitor information.

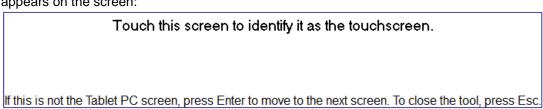
## 7.6.5 Touch in Dual Monitor Setup in POSReady 7 or Windows 7

For Windows 7 (32 and 64 bit) and POSReady 7 (32 and 64 bit) operating system the following are the steps to correctly identify the touch monitors:

- 1. Click on the START button.
- 2. Click on CONTROL PANEL.
- 3. In the search box type in "Tablet PC Setting" (without the quote) and in the list of results select "Table PC Settings".
- 4. On the DISPLAY tab under CONFGIURE click on the SETUP button.

Tablet PC Setting	gs	×
Display Other		
Configure Configure your displays.	pen and touch	Setup
Display options		
Display:	1. HP AFD15C	•
Details:	Touch Input Availab	le
	<u>C</u> alibrate	🚱 <u>R</u> eset
Choose the orde <u>Go to Orientatio</u>	r in which your scree <u>n</u>	n rotates.
	ОК	Cancel Apply

5. Follow the prompt that appears on the screen. The following is example of the prompt that appears on the screen:



## 7.6.6 OPOS Drivers for the Touch Screen

No OPOS drivers are needed for the touch screen.

## 7.6.7 Testing the Touch Screen

Touch several places on the monitor screen and the mouse cursor should be present where the monitor was touched.

## 7.6.8 JPOS Drivers for the Touch Screen

No JPOS drivers are needed for the touch screen.

## 7.6.9 Disable/Enable On-Screen Display (OSD)

The OSD feature can be locked and unlocked. The monitor is shipped with the OSD menu in the unlocked position.

To lock the OSD menu and disable the OSD controls:

- Tap on the area where the OSD icons are located so that the icon become illuminated and active.
- Press the "MENU" icon for approximately 10 seconds until message appears indicating the OSD is locked.

To unlock the OSD menu and enable the OSD controls:

- Tap on the area where the OSD icons are located so that the icon become illuminated and active.
- Press the "MENU" icon for approximately 10 seconds until message appears indicating the OSD is unlocked.

### 7.6.10 Disable/Enable Power Button

The power button can be locked and unlocked. The monitor is shipped with the power button in the unlocked position.

To lock the power button menu:

• Press the power button for approximately 10 seconds until message appears indicating the power button is locked.

To unlock the power button menu:

 Press the power button for approximately 10 seconds until message appears indicating the power button is unlocked.

## 8 HP ap5000 Point of Sale System

# 8.1 <u>HP ap5000 10" Display</u>



## 8.1.1 Connection

The HP ap5000 10" display can be attached to the back of the ap5000 unit by replacing VFD. The ap5000 10" display is connected via VGA connector on the I/O panel of the unit.

## 8.1.2 Windows Drivers for the HP ap5000 10" display

No additional drivers are necessary. The Intel video drivers that are used for the ap5000 integrated (touch screen) video are drivers that are needed to drive the 10" display.

## 8.1.3 OPOS Drivers for the HP ap5000 10" Display

No OPOS drivers are needed for the touch screen.

## 8.1.4 <u>Testing the HP ap5000 10" Display</u>

Once the second monitor is enabled in the Windows operating system, video should appear on the 10" display.

## 8.1.5 JPOS Drivers for the HP ap5000 10" Display

No JPOS drivers are needed for the touch screen.



### 9.1.1 Connection

The HP 7" CFD can be connected to any USB port. The HP Integrated 7" CFD is designed to be attached on units and monitors that have the appropriate mounting receptacle (i.e. RP2, RP7, RP9, HP 6015tm, HP 6017tm).

The HP 7" CFD supports a single resolution of 1024x600. All other display options for the HP 7" CFD can be set either through the Control Panel or the DisplayLink System Tray icon depending on the OS and DisplayLink driver version being used. This device is not controlled by a video driver (i.e. Intel Video applet) even though it appears to applications as a monitor.

### 9.1.2 Windows Drivers for the HP 7" CFD display

The HP DisplayLink drivers may be included in the HP factory image (C:\xxxxx\Point of Sale\HP CFD Display with DisplayLink) and are also available from <u>HP.COM</u>.

If the HP DisplayLink drivers have been installed, the following will be present in Programs and Features:

### Windows 10 and newer:

Programs and Features						-	- 🗆	$\times$
← → ✓ ↑ ፬ → Control Pa	anel > Programs > Programs and Features			~	Ö Se	arch Programs	and Features	Ą
Control Panel Home	Uninstall or change a program							
View installed updates	To uninstall a program, select it from the list and th	en click Uninstall, Change, or Repair.						
🗣 Turn Windows features on or								
off	Organize 🔻 Uninstall						== -	?
	Name	Publisher	Installed On	Size	Version			^
ſ	🗹 📰 DisplayLink Graphics Driver	DisplayLink Corp.	9/27/2016	8.54 MB	8.0.778.0			
_	🗇 HP Software Setup	HP	8/2/2016	2.32 MB	9.2.2			~
	DisplayLink Corp. Product version: 8.0 Help link: htt	.778.0 Support lir p://www.displaylin Update informatic	nk: <u>http://www</u> n: http://www			8.54 MB Installs Display	Link Core sof	tware.

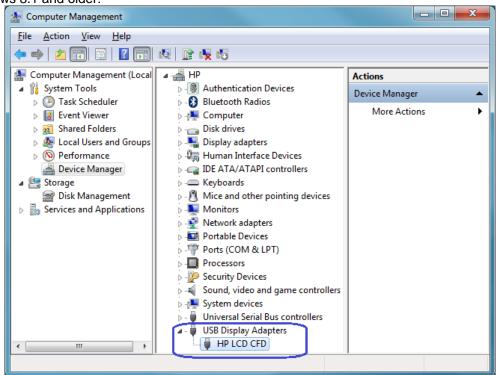
Win	dows 8.1 and older:						
						- 0	x
G	🗸 🗢 💽 🕨 Control Panel	All Control Panel Items      Programs a	ind Features 👻 🗸		grams and Fea	tures	٩
	Control Panel Home View installed updates Turn Windows features on or	Uninstall or change a prog To uninstall a program, select it fr	<u> </u>	Uninstall, Chan <u>o</u>	ge, or Repair.		
	off	Organize 🔻 Uninstall				•== •	0
		Name	Publisher	Installed On	Size	Version	
		🗹 📳 DisplayLink Core Software	DisplayLink Corp.	9/27/2016	30.2 MB	8.0.778.0	
		🔄 🖽 HP USB Monitors	Hewlett-Packard	9/27/2016		8.0.833.0	-
		DisplayLink Corp. Prod	uct version: 8.0.778.0 Help link: <u>http://www.d</u>	isplaylink.com/			

If the HP DisplayLink drivers have been installed and the HP 7" CFD is attached to the system, the following will be present in Device Manager:

Windows 10 and newer:







# 9.1.3 OPOS Drivers for the HP 7" CFD Display

No OPOS drivers are needed.

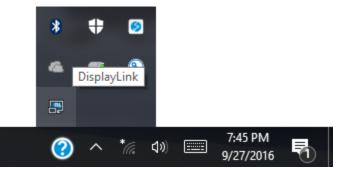
9.1.4 JPOS Drivers for the HP 7" CFD Display No JPOS drivers are needed.

## 9.1.5 <u>Testing the HP 7" CFD Display</u>

Once the second monitor is enabled in the Windows operating system, video should appear on the HP 7" CFD display.

### 9.1.6 HP 7 CFD Options

If the HP DisplayLink drivers have been installed, a DisplayLink icon will be present in the System Tray:



Clicking this icon will bring up the available configuration options. Depending on the OS installed, the icon may open the OS display properties directly instead of displaying menus as shown below:

		Hewlett Packard DisplayLink Manager				1		
	Screen Resolution	2. HP LCD CFD	•	4	8			
۲	Screen Rotation Extend To Extend	Audio Setup Video Setup		8	æ			
	Set as Main Monitor Notebook Monitor Off Mirror		Cust	omize				
	Off		EN	-	18 🤞	•	2:51 PM 9/27/2016	

**Note:** The above screen is an example only. The HP LCD CFD may appear as different number depending on how many video monitors are attached and active.

Q & A

# 9.2 <u>General</u>

**Question:** What are the OPOS names for the HP Peripherals?

Answer: Please refer to section <u>OPOS Names for HP Point of Sale Peripherals</u> for the OPOS names.

Question: Where can I obtain the latest drivers?

**Answer:** The latest drivers are posted on the <u>HP.COM</u> web site.

## 9.3 HP Cash Drawer

- Question: When I run the sample application I receive a message stating dependencies not correctly registered. How do I correct this?
- Answer: If you run the cash drawer sample application and receive the following screen, it indicates that either the CCO or the OPOS drivers are not installed and registered. Install the CCO drivers and install the printer OPOS package. After the installation is complete, please restart Windows.

Cash Drawer Sample Application Error message:

A794_0	POS_SampleApp 🛛 🔀						
8	Component 'OPOSCA~2.OCX' or one of its dependencies not correctly registered: a file is missing or invalid						
	()						
Printer 9	Sample Application Error message when you click on cash drawer option						

Printer Sample Application Error message when you click on cash drawer option

Sample_	Application
1	Run-time error '339': Component 'OPOSCA~2.0CX' or one of its dependencies not correctly registered: a file is missing or invalid
	()

- Question: In a dual cash drawer configuration both of my cash drawers are opening at the same time, why?
- Answer: This is occurring because both the cash drawer have the same cash drawer cable. In a dual cash drawer configuration a different cash drawer cable is required for the second cash drawer.

Question: What are the ASCII codes to open the cash drawer?

Answer: The ASCII codes to open the cash drawer are:

Cash drawer 1	Cash Drawer 2
27 112 0 8 8	27 112 1 8 8

### 9.4 HP USB Cash Drawer

Question: With JPOS driver version 1.13.3 in dual cash drawer situation what used to be cash drawer 1 appears as USB0 before it was USB1, why?

Answer: JPOS driver prior to 1.13.3 used cashed drawer USB1 to define the first cash drawer mistakenly. With JPOS driver version 1.13.3 this was corrected to use USB0 for the first cash drawer. One can go into "C:\HP" folder and edit the JPOS XML file manually to define which cash drawer is the first cash drawer (will need the HID number on the bottom of the cash drawer).

## 9.5 <u>HP Receipt Printer</u>

- **Question:** When I run the sample application I receive a message stating dependencies not correctly registered. How do I correct this?
- Answer: If you run the cash drawer sample application and receive the following screen, it indicates that either the CCO or the OPOS drivers are not installed and registered. Install the CCO drivers and install the printer OPOS package. After the installation is complete, please restart Windows.

Printer Sample Application Error message when you click on printer option



- **Question:** What firmware version is required to be able to switch between native and printer class mode on the A794 printer?
- Answer: The A794 printer must have firmware 3.48 or later. If the printer has firmware prior to 3.48, there is softpaq available on the <u>HP.COM</u> web site that will allow one to update the firmware.

Question: Can one switch the printer between native and printer class mode?

**Answer:** Yes, one may switch the printer between native and printer class mode. On the <u>HP.COM</u> web site there is firmware softpaq that may be obtained that has the option to switch the printer between printer class and native mode.

Question: How do I tell if the printer is in NATIVE or PRINTER CLASS mode?

Answer: One can obtain this information in one of two ways:

- 1 ... Print out the diagnostic form on the printer by holding down the form feed button when you close the printer cover. In the COMM. INTERFACE section of the print out see if the USB DRIVER TYPE states NATIVE or PRINTER CLASS.
- 2 ... Look in Windows device manager USB section. If it states HP USB Receipt printer, the printer is in NATIVE mode. If you it has USB PRINTING SUPPORT, the printer is in PRINTER CLASS mode.
- **Question:** Downloaded an updated JAVA from the web site, now the JPOS test utility does not launch?
- Answer: The batch file sets the location where the runtime of JAVA folder is located. Need to change the location in the batch file to reflect the update JAVA folder.
- **Question:** Why do I not see an option for "USB001 (Virtual USB Port) in the Windows mini-drivers setup?

Answer: In order for the port to appear, the printer must be attached to the unit AND the printer must be in printer class mode.

Question: What are the ASCII codes to open the cash drawer?

Answer: The ASCII codes to open the cash drawer are:

Cash drawer 1	Cash Drawer 2
27 112 0 8 8	27 112 1 8 8

### Detailed explanation of the cash drawer command: Generate pulse to open cash drawer

ASCII	ESC p	n p1 p2
Hexadecimal	1B 70	n p1 p2
Decimal	27 1 1 2	n p1 p2
Value of n:		Decimal) = Drawer 1; Decimal) = Drawer 2
Value of p1:	0-255	
Value of p2:	0-255	

Question: What are the ASCII codes to cut the paper (knife cut)?

Answer: The ASCII codes to cut the paper (knife cut) are:

## Perform full knife cut

ASCII	EM	ESC i
Hexadecimal	19	1B 69
Decimal	25	27 105

## Perform partial knife cut

ASCII	SUB	ESC m
Hexadecimal	1A	1B 6D
Decimal	26	27 109

The partial knife cut leaves 5mm (0.20 inch) of paper on the left edge.

Question: How do I obtain the baud rate that the serial printer is set to?

**Answer:** Perform the following steps to obtain a diagnostics printout which has the baud rate information:

- Open the printer cover.
- Pull the paper out slightly.
- Press and hold the form feed button on the printer.

- Close the printer cover.
- When the diagnostics form prints, let go of the form feed button. Close to the middle of the diagnostics print out is the baud rate of the printer. Below is an example of the diagnostics print out:

Serial number	: K083100426
Boot Firmware	
	•••••
Comm. Interface RX Buffer Size Interface type Parameters	: 4096 : RS232/USB
Baud Rate	: 115200
Data Bits	: 8
Stop Bit	: 1
Parity	: NONE
Flow Control	: DTR/DSR
Reception Errors	
	: Printer Class
USB Packet w/Error	: Reject

Question: For the HP Hybrid printer, what is the ribbon number if I want to purchase them locally?

Answer: The following are the numbers for the ribbon for the HP Hybrid printer:

- A152-0041 Purple
- A152-0042 Black
- **Question:** After installing the Windows mini-drivers in Windows 8.1 the print out on the receipt is small. This did not occur in previous operating system.
- Answer: To resolve this issue, ensure you have Microsoft KB2911106 installed in your Windows 8.1 image.
- Question: With the A799II printer when connected via serial connection, seeing garbage characters appear on the print out.
- Answer: Make sure the baud rate setting in Windows for the COM port / the baud rate for the Windows mini-drivers make that baud rate on the printer.
- Question: With the A799II printer receiving yellow bang in Windows device manager saying Cognitive TPGA795 but everything seems to work in OPOS/JPOS. How do I get rid of this yellow bang.

Answer: Point to the i386 folder that is located in the Windows mini-drivers. Will need to point to the 32bit or 64bit folder depending on your operating system in order to get the correct i386 folder.

Question: What version of OPOS driver do I need to support the Ethernet connection?

Answer: On the A799II Ethernet printer model need OPOS driver version 1.13.3.8 or later.

Question: What version of JPOS driver do I need to support the Ethernet connection?

Answer: On the A799II Ethernet printer model need OPOS driver version 1.13.0.3 or later.

- Question: The A799II Ethernet printer will lockup with the OPOS test utility when I hot dock and undock the unit, I get an error message when I try to print or claim the printer.
- Answer: Hot docking / undocking is not supported on the Ethernet printer since A799II Ethernet printer is not directly hooked up to the computer, Windows is not aware if the device is present or not. When using the Ethernet printer it is recommend to OPEN / CLAIM the network printer prior to printing a receipt and CLOSE the printer after the receipt is printed.

## 9.6 HP USB Barcode Scanner

**Question:** I am not sure the setting of the Barcode Scanner, how can I put the scanner back to the factory default setting?

Answer: You can put the scanner back to factory default setting by scanning the following bar code:



Set All Defaults

- **Question:** After scanning an item, I have to press the "Enter" to accept what was scanned in my application.
- Answer: You can change the behavior of the scan so that a carriage return is also transmitted after an item is scanned. In order to change the behavior of the scanner, scan the following bar codes in order that they appear below:



Scan Options



<Data><Suffix>

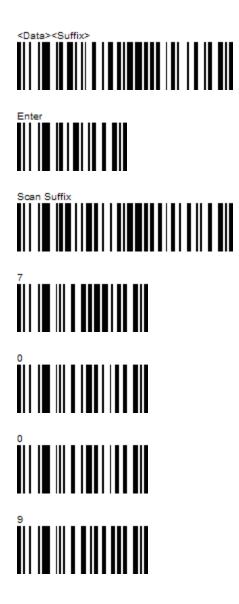


Question: After scanning an item my application needs a tab.

Answer: You can change the behavior of the scan so that a tab is also transmitted after an item is scanned. In order to change the behavior of the scanner, scan the following bar codes in order that they appear below:



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- **Question:** I need to use OPOS drivers with my application for the scanner, where can I obtain them from?
- Answer: The OPOS drivers for the scanner may be obtained from the HP web site under the software/driver section for the product. You will also need to change the scanner from HID device (default) to IBM hand-held USB device by scanning the appropriate bar code below:



HID Keyboard Emulation



IBM Hand-Held USB

- **Question:** The volume of the scanner is loud for my environment, how can I lower the volume on the scanner?
- Answer: There are three volume setting for the scanner low / medium (default) / high. Scan one of the bar code below to set the volume on the scanner:



Question: When I scan something in notepad it appears to garbage in non-English language?

Answer: The barcode scanner USB country keyboard type needs to change. Please use one of the following barcode to change to the country.



North American Standard USB Keyboard



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French Windows



French Canadian Windows 2000/XP



Spanish Windows



Italian Windows



Swedish Windows



**UK English Windows** 



Japanese Windows (ASCII)



Portuguese-Brazilian Windows

## 9.7 HP Touch Screen (HP L5006tm / HP L5009tm / HP L5015tm)

- **Question:** Someone else installed the HP touch screen, how do I know which port the touch screen is attached to?
- Answer: In the touch screen properties it will inform you what if you are on the USB or serial interface. If you are using COM port it will tell you which com port the monitor is attached to.

4 HP Touc	chscreen Control Panel ?	×
General Mode Sound Properties	es 1 About	
Screen Information		
Windows monitor nun	imber: 0	
Touchscreen t	type: Acoustic Pulse Recognition	
Connection	n Port: USB	
Controller m	nodel: Elo TouchSystems Inc. APR Controller	
Controller Sta	itatus: Working properly	
Sensor Serial Nu	umber J09L025552	
Controller Serial Nun	mber: T42G8814	
Diag Si	Status 0x20	
Cal File in	in Use J09L025552	
Identif Align		e
OF	Ok Cancel Apply Help	

Showing touch screen attached to USB port:

Showing touch screen attached to serial port on COM1:

General Mode		pout	
Wir	ndows monitor number:	0	
	Touchscreen type:	IntelliTouch	
	Connection Port:	COM1	
	Controller model:	2700U [1.7 - 0.0]	
	Controller Status:	Working properly	
Co	ntroller Serial Number:	UN006705	
	Ok	Cancel Apply	Help

Question: In Microsoft Vista when I click on Elo ICON on control panel (classical view) I receive stating "No Elo touchscreen found" but the touch screen is attached to the unit.



**Answer:** Re-run the install program from the start menu with administrator rights. Right click on the option to install and select "Run as administrator".

📑 Windows Mail	-	
🚺 Windows Media Pla	yer 🛛	
🔋 Windows Meeting S	pace ast	as
📱 Windows Movie Ma	ker	
🛅 Windows Photo	Open	
Windows Upda	-	
Accessories	Edit	
퉬 Extras and Upgr	Open file location	
퉬 Games 📃 🔔	Print	
📗 HP Backup & R 🛞	Run as administrator	
🐌 HP Manageabil 🐂	<b>D</b>	s i
🐌 HP Point of Sale	Restore previous versions	
🖬 HP POS Acc	Send To	•
HP POS Cor		
🐌 Hand Scanr	Cut	
📕 MSR	Сору	
🌗 Pole Display	Delete	
🌗 POS Keyboa		el
🌗 Receipt Prin	Rename	
TouchScree	Properties	Irams
HP L500	rouchocreen oetup	
🖬 HP Touch Sc		elp and Support
1 Back		
Start Search	0	() <u> </u>
Start Search	~	

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**Question:** I keep turning off the monitor or bringing up the on-screen display (OSD) when I put my hands on the side of the monitor. Is there a way to prevent this?

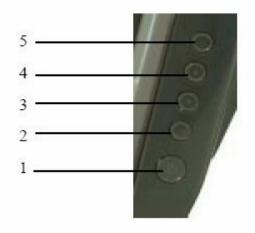
**Answer:** Yes, you can lock buttons on the monitor using the following procedure:

#### HP L5006tm and HP L5006tm: OSD Lock/Unlock

- Press the Menu button and down arrow button simultaneously until a window displays "OSD Unlock." Continue to hold the buttons down until "OSD Lock" displays.
- 2. To unlock the power button, repeat the above step until "OSD Unlock" is displayed.

#### Power Lock/Unlock

- Press the Menu button and down arrow button simultaneously until a window displays "Power Unlock." Continue to hold the buttons down until "Power Lock" displays.
- 2. To unlock the power button, repeat the above step until "Power Unlock" is displayed.



#### **Monitor Front Panel Controls**

- 1 Power Turns the monitor on or off.
- 2 Select Selects the adjustment items from the OSD menus.
- 3 Decrease value of the adjustment item.
- 4 Increase value of the adjustment item.
- 5 Menu/Exit Displays or exits the OSD menus.

#### HP L5015tm:

#### OSD Lock/Unlock

- 1. To lock the OSD Press and hold the "Menu" and "Up" buttons for two seconds.
- 2. To unlock the OSD Press and hold the "Menu" and "Up" buttons for two seconds.
- 3. When the OSD Locking is enabled, pressing any of the Menu, Up, Down, or Select keys will have no effect on the system.

#### Power Lock/Unlock

- Press the Menu button and down arrow button simultaneously until a window displays "Power Unlock." Continue to hold the buttons down until "Power Lock" displays.
- 2. To unlock the power button, repeat the above step until "Power Unlock" is displayed.

## 9.8 <u>HP MSR</u>

Question: How can I tell what mode the MSR is currently set to?

- Answer: There are two ways to determine the mode the MSR is currently set to:
  - 1. You can use the configuration utility and follow the steps that were outlined in <u>"Utility to</u> <u>switch MSR mode"</u> section of the document.
  - 2. In Windows device manager see what drivers Microsoft Windows has loaded for the device.

When the MSR is in the USB HID-KB mode (default shipping mode) there will be one driver loaded for the MSR.\*

🚇 Device Manager 💽 🗖 🔀
Eile <u>A</u> ction <u>V</u> iew <u>H</u> elp
Computer     Disk drives     Disk drives

When the MSR is in the USB HID mode there will be two drivers loaded for the MSR.\*

😫 Device Manager	
<u>File Action View H</u> elp	
🔁 🚽 Computer	
DVD/CD-ROM drives	
🖻 🖾 Human Interface Devices	
HID-compliant device	
🖾 USB Human Interface Device	
TOT ATA/ATAFI CONTONIERS	
🕀 🧓 Imaging devices	
🕀 🦢 Keyboards	
🗉 🐚 Mice and other pointing devices	
🗄 😼 Monitors	
🗈 🦉 Network adapters	
🗄 🖉 Ports (COM & LPT)	
Recessors	
Sound, video and game controllers	
🖭 😼 System devices	
🔃 😋 Universal Serial Bus controllers	

\* If you have other USB device installed you may have more than two HID device loaded showing in the device manager.

Question: Can I switch the MSR between USB HID and USB HID-KB mode?

Answer: Yes, the MSR can be switched between the two modes. This can be accomplished either by using the MSR configuration utility which can be obtained on <u>HP.COM</u> web site or using the standalone MSR HID Utility to switch between the modes. The standalone utility is included in the HP Factory image and can also be obtained from <u>HP.COM</u>.

**Question:** I am trying to disable one of the read head on the dual head MSR but receive an error message, why can I not disable the read head?

MSR Read Head Configuration v1.00 for: HP USB Dual Head MSR
Cannot disable MSR read head         HP MSR was not found OR the HP MSR does         not support the ability to disable read head.

Answer: The MSR that is attached to the unit does not support the ability to disable the read head. The "-002" or later dual headed MSR has the ability to disable the read head; the "-001" does not have this ability.

Question: Can I disable the read head on the single headed MSR?

Answer: No, disabling the read head on the single headed MSR is not supported.

# 9.9 HP Font Loader

**Question:** When I launch the font downloader utility, I receive an error message. How do I correct this?

🖻 Asian Font Control			
invent.	HP Asian F	ont Downloader	Version 2.0.13
Allocate Men	nory for Fonts	Unable to open the COMM port for USB. To resolve the issue, please use a printout of the Diagnostics Form to determine if the printer is set for Native or Printer Class USB.	
Download Traditional Chinese Code Page 950	Download Simplified Chinese Code Page 936	Then use the Set USB Program Mode buttons on this form to set the program to the USB type that matches the type on the Diagnostics Form. Then, please restart the utility.	
Download Kaniji (Japan) Code Page 932	Download Hangul (Korea) Code Page 949		
Print Diagnostics Form	Print Font Information		
Set Printer USB Mode	Set Program USB Mode		
Set Native Mode	Set Native Mode		
Set Printer Class	Set Printer Class	_	Clear Status
		_	Exit

Answer: The printer is setup in a different mode then what utility is currently set to. In the "SET PROGRAM USB MODE" select the mode the printer is currently set and then restart the utility.

🛱 Asian Font Control			
invent.	HP Asian	Font Downloader	Version 2.0.13
Allocate Mer Download Traditional Chinese Code Page 950 Download Kanii (Japan) Code Page 932 Print Diagnostics Form Set Printer USB Mode Set Native Mode	Download Simplified Chinese Code Page 936 Download Hangul (Korea) Code Page 949 Print Font Information Set Program USB Mode Set Native Mode	Unable to open the COMM port for USB. To resolve the issue, please use a printout of the Diagnostics Form to determine if the printer is set for Native or Printer Class USB. Then use the Set USB Program Mode buttons on this form to set the program to the USB type that matches the type on the Diagnostics Form. Then, please restart the utility.	
Set Printer Class	Set Printer Class		Clear Status Exit

Question: After the font to the printer is complete, the LED on the printer is blinking?

Answer: Select the "PRINT Sample/Diagnostics" button on the utility or reset the printer in order to have the LED go back to solid state.

## 9.10 HP rp3000 Optical Door

Question: How does one start and stop the optical door utility service?

- Answer: One must have administrator privileges in order to stop and start the service once it has been installed in the image. The following are the syntax:
  - Syntax to enable "ODDDoorCoverMonitor.exe -install"
  - Syntax to disable service "sc stop HPODDDoorCoverMonitor.exe"
    - Both enable and disable of the HPODDCoverMonitor service requires a reboot for the service to perform the action.

# 9.11 HP Pole Display

Question: When I run the non-OPOS test utility, I receive a run-time error message.



- Answer: This error occurs when the utility is not able to talk to the pole display. Ensure the following on the pole display
  - The pole display is attached to the unit
  - The Windows device manager drivers for the pole display are installed.
  - Confirm the pole display switch is turned on.

# 9.12 HP OPOS Logical Device Name Utility

**Question:** When the utility is launched it states "no OPOS drives have been detected", what needs to be done to correct this?

歸 HP OPOS Logical Device Name		
	About	<u>Exit</u>
Device Setting		
Device Tree - 0 devices listed		
No installed OPOS driver has been detected of unit. Please consult with your support staff.	on this	
Edit Device Name		
Ref	iresh	וכ
Save Show [	Defaults	

**Answer:** Check with your POS application to see if application uses OPOS drivers. If the application does use OPOS drivers, for the HP branded peripherals the OPOS drivers can be obtained from <u>HP.COM</u> web site.

## 9.13 <u>HP ap5000 VFD</u>

Question: What is the default port that the VFD is attached to?

Answer: The ap5000 VFD as shipped from the HP factory is shipped on serial port 2 (COM2).

Question: Can the VFD be used on different COM port besides COM2?

**Answer:** Yes, the VFD may be used either on COM1 or COM2. The VFD cannot be attached to COM3 because of the power requirements.

Question: Does the VFD support emulation modes?

**Answer:** No emulation modes are supported BUT many of the same ESC commands are used that are used in Epson emulation mode.

### 9.14 HP ap5000 VFD (non-OPOS)

**Question:** When the "Test" button is selected I receive an error indicating a "WriteFile" error. How to fix this error?

HP ap5000 Line	Display test	🔀
COM port name	•	
Test ERROR: WriteFile()	Clear returned error.	Exit
	Error.	X) Dr.

- **Answer:** This error indicates that the utility is not able to find the ap5000 VFD attached to the unit. Checking the following items:
  - 1. An ap5000 VFD is attached to the unit.
  - 2. The ap5000 VFD is attached on either COM1 or COM2.

 In BIOS the port (COM1 or COM2) that the VFD is attached is set for "5V" for power instead of "Standard Mode". Please refer to the <u>HP</u> <u>ap5000 VFD BIOS Power setting</u> section for details on how to enable the power on the serial ports.

# 9.15 HP ap5000 VFD (JPOS)

Question: In the JPOS test utility, after I click on the "OPEN" button I receive a failed message when the default name is used that appears in the JPOS test utility. How to fix this error?

error?	
📓 JavaPOStester in Progress	_ 🗆 🔀
File	
RemoteOrderDisplay Scale Scanner SignatureCapture SmartCardRW ToneIndicator Exit	
MSR PINPad PointCardRW POSKeyboard POSPower POSPri	nter
ElectronicJournal FiscalPrinter HardTotals Keylock LineDisplay MICR Motions	
About Configured Devices Biometrics Bump/Bar CashChanger CashDrawer CAT CheckScanner Coint	)ispenser
Logical name: defaultLineDisplay JPOS_S_CLOSED	
Open Claim Release Close Info Statistics Firmware O/C/E EXIT	
Device enabled	
Freeze events Display Text Window Control Misc Controls	
Row: v Dispay Text At Dispay Text Clear Text	
Column:  Move Cursor	
Attribute: Send to line display:	

**Answer:** The logical name of the device is "HPap5000LineDisplay". Replace the "defaultLineDisplay" that appears in the logical name box with "HPap5000LineDisplay". If one clicks on the "Configured Device" tab, the names for the device will appear that will be used in the test utility.

## 9.16 <u>HP ap5000 VFD (OPOS)</u>

**Question:** When launching the OPOS test utility, I receive an error indicating a "FAILED". How to fix this error?

	HP ap5000 LineDisplay OPOS test (error)	_ 🗆 🔀	
	OPOS Device Name HPap5000LineDisplay	version 1.0.0.6	
	OPOS Test Clear	Exit	
	Service Object (Version: 1013003): HP ap5000 LineDisplay OPOS Service Object ClaimDevice() failure Enable device success DisplayText() failure DisplayText() failure Close() success  OPOS test FAILED!		
Error			$\mathbf{\times}$
	e HP ap5000 VFD Display OPOS driver is unable to		
	ase ensure the device is plugged into the unit and the abled for the serial port that the HP ap5000 VFD disp		:

- **Answer:** This error indicates that the utility is not able to find the ap5000 VFD attached to the unit. Checking the following items:
  - 1. An ap5000 VFD is attached to the unit.
  - 2. The ap5000 VFD is attached on either COM1 or COM2.
  - In BIOS the port (COM1 or COM2) that the VFD is attached is set for "5V" for power instead of "Standard Mode". Please refer to the <u>HP</u> <u>ap5000 VFD BIOS Power setting</u> section for details on how to enable the power on the serial ports.
- **Question:** When I exit my point of sale application that uses OPOS to control the VFD there is nothing displayed on the VFD. I would like to have my customized power-on message appear on the VFD, can this be accomplished?
- Answer: The default behavior of the OPOS driver when exiting is to clear the screen. In order to have the power-on message appear when exiting a point of sale application a registry key value needs to be changed for the pole display. The registry key value that needs to be changed is "HKI MS of two of Control of Section 2005, Line Display, HBap 5000, in Display,"

"HKLM\Software\OLEforRetail\ServiceOPOS\LineDisplay\HPap5000LineDisplay".

## 9.17 HP ap5000 MSR

Question: What port is the MSR attached to?

Answer: The ap5000 MSR as shipped from the HP factory is shipped on COM4.

Question: When I open Notepad and swipe a card nothing appears in Notepad, why?

- **Answer:** The ap5000 MSR is attached to a serial port; it is not a USB HID keyboard (wedge) device. In order to have data appear in Notepad one may run a third party utility that takes data from the serial port and sends via keyboard. For XP / WePOS / POSReady there is serial key option that can be enabled, for Vista / Win7 a third party utility must be used. Please check with point of sale application if they support serial MSR which would be preferred over serial key option or third party application.
- **Question:** My application needs a carriage return after track 2, how can I add carriage return after track 2?
- Answer: One can use the ap5000 MSR configuration to enable a carriage return on track 2. The ap5000 MSR configuration utility may be obtained from <u>HP.COM</u> or from the HP Point of Sale Driver and Documentation CD.

## 9.18 HP ap5000 MSR (JPOS/OPOS)

Question: Why do I not need to configure any setting besides the device name when using OPOS / JPOS for the MSR like I need to for Windows?

#### Answer:

- For OPOS the drivers understand the settings for the MSR and communicate with it with the proper protocols.
- For JPOS the configuration file that is provided by HP already has proper protocol setting in the file.

# 9.19 Imaging Scanner - JPOS

**Question:** When I do a claim of the HP Imaging scanner in the JPOS utility I receive message stating the claim failed, what could be the cause?

🛓 JavaPOStester in Progress					- 🗆 X	
File						
About Configured Devices Sca	nner Exit					
Logical name: HPImage	Scanner	-	JPOS_S_IDI	LE		
Open Claim	Release Close	Info Statistics	Firmware	O/C/E EXIT		
<ul> <li>Auto disable</li> <li>✓ Data event enabled</li> <li>✓ Device enabled</li> </ul>	Scan Data: Scan Data Type:	5Z7668359 20Z0.00 100	00 28Z K801-0810 26	<b>•</b>		
<ul> <li>Freeze events</li> <li>✓ Decode data</li> <li>Clear Input</li> </ul>	Scan Data Label:	8359 20Z0.00 1000 28		719		
Clear Input Properties	Data Count: 0 Failed	Clear Fiel	ds Refresh Fie	elds		
DirectIO Lizer IO Command Reset   Exception: 0x80000004, Port open error  Direct IO Command Reset   Exception: 0x80000004, Port open error  Status Messages Clear Status						

Answer: The above message will occur if the device has been released and then one tries to CLAIM the device again. Need to CLOSE the device and then reopen OPEN / CLAIM the device (see the <u>JPOS section of the Imaging Scanner</u> for details).

**Question:** In the JPOS test utility for the HP Imaging Barcode Scanner, the "Data Count" is always zero (0) regardless of how many barcodes I scan?

🛃 JavaPOStester in Progress				_ 🗆 🔀				
File								
About Configured Devices Scanner	About Configured Devices Scanner Exit							
Logical name: HPImageScanner V JPOS_S_IDLE								
Open Claim R	elease Close	Info Statistics	Firmware O/C/E	EXIT				
Auto disable		T720555 SH 249	<b>^</b>					
🖌 Data event enabled	Scan Data:		<b>—</b>					
Device enabled	Scan Data Type:	110 (Code 128)						
Freeze events		720555 SH 249	<b>^</b>					
Decode data	Scan Data Label:							
Clear Input	Data Count: 0	Clear Field	s Refresh Fields					
Clear Input Properties								
DirectIO								
Direct IO data								
Direct IO Command Reset 💌 E	xecute Direct IO	R\$232 <b>•</b>						
Status Messages Clear Status								

**Answer:** In the JPOS utility the "Data Count" field is not used to keep track of the number of barcode that have been scanned during the session of the JPOS utility like it is in the OPOS utility for the imaging scanner.

## 9.20 HP Imaging Barcode Scanner

Question: When I scan something in notepad it appears to garbage in non-English language?

**Answer:** The "country mode" needs to be changed on the imaging barcode scanner. The country mode barcode are available in the programming guide for the scanner or one can change this via the configuration utility for the scanner in the "USB Keyboard parameter" which is found in the "Interface selection" of the utility.

## 9.21 Multiple HP Barcode Scanner

- Question: When I have multiple HP scanners installed on the unit (HP Imaging scanner / HP Linear Scanner / HP Presentation) the OPOS test utility will only test of one of the scanner. How can I have multiple scanners work on the unit in ((HP Imaging scanner / HP Linear Scanner / HP Presentation) OPOS?
- Answer: One will need to disable the OPOS driver so it does not use the virtual port to find the scanner. When this feature is disabled the OPOS driver will use the COM port that is assigned to the scanner; the COM port setting can be obtained from Windows device manager. Change these settings for the other scanner (HP Imaging scanner / HP Linear Scanner / HP Presentation). The following shows the changes in the registry (scanner is on COM6):



Registry Editor Edit View Favorites <u>H</u> elp				
🗊 🚞 Nico Mak Computing	~	Name	Туре	Data
🕀 🧰 Novadigm		ab (Default)	REG SZ	DLOPOS.DLScanner
🗊 🧰 ODBC		ab AbstractDevice	REG SZ	817614FD C918 4060
😑 🧰 OLEforRetail		ab]BaudRate	REG SZ	9600
		a)CheckIHSOnClaim	REG_SZ	1
			REG SZ	1
		ab DataBits	REG_SZ	*
			REG SZ	HP 1D Imaging Barcode
HPPresentationScanner		FirmwareUpdate	REG_SZ	FC2D854E 06C6 46fd
PC Magazine			REG_SZ	0
			REG_SZ	0
Program Groups     Realtek			REG_SZ	0
RegisteredApplications		ab Parity	REG_52 REG_5Z	None
		Port	REG SZ	COM6
			REG_52	1
		ScanDataEgualsScanDataLabel	REG_52 REG_SZ	1
🕀 🦲 Seagull Scientific	_	StopBits	REG_52 REG_5Z	1
			-	1
🗊 🧰 Sonic			REG_SZ REG_SZ	1
🗉 🧰 Sun Microsystems				
🗄 🦲 Symantec		UseVirtualPort	REG_SZ	
🛓 🦲 W3i		(a) WarholParsing	REG_SZ	1
🗊 🦲 Windows		• WMIOnClaim	REG_SZ	1
🗊 🦲 Windows 3.1 Migration Status				
WinRAR				
🖻 🧰 System				
🖶 🧰 HKEY_USERS				
🖮 🧰 HKEY_CURRENT_CONFIG	~	<		

## 9.22 HP Biometric Fingerprint Reader

Question: Do I need to clean my reader to keep it working well?

### **Answer:** Recommended cleaning:

Apply the sticky side of a piece of adhesive cellophane tape on the window and peel it away. If necessary, gently wipe the window with a cloth (not paper) dampened with a mild ammonia-based glass cleaner to remove any milky haze.

### Never do the following:

- Clean the reader window with paper
- Pour glass cleaner directly on the reader window
- Use alcohol-based cleaners
- Submerge the reader in liquid

## 9.23 HP RP7 / RP3 Monitor

Question: How can I tell if I have Projective Capacitive or Resistive monitor on the RP7 or RP3 unit?

**Answer:** The Projective Capacitive display has flush glass on the front of the unit, the resistive display has a border around the touch.



**Projective Capacitive** 



Resistive

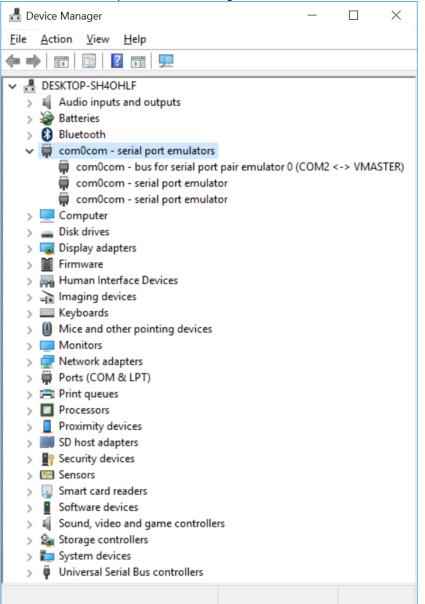
- **Question:** In Windows XP or POSReady 2009 environment I have dual Projective Capacitive display setup but the touch on the second monitor is registered on the primary monitor when I touch the screen.
- **Answer:** The "Multi-mouse-daemon" utility needs to be run to provide the touch driver the monitor information. The "Multi-mouse-daemon" is found in driver's version 7.5.52.00 or later and must be installed with the "/dual" parameter.
- **Question:** In Windows 7 or POSReady 7 environment I have dual Projective Capacitive display setup but the touch one of the screens the mouse cursor is on the other screen.

**Answer:** The Windows 7 or POSReady 7 environment needs to be configured for the primary and secondary touch. Please refer to the "Touch in Dual Monitor Setup in POSReady 7 or Windows 7" section.

## 9.24 HP Retail Jacket for ElitePad Barcode Scanner

**Question:** How can I tell which COM port the scanner is assigned when it is USB-COM mode for OPOS/JPOS?

**Answer:** Open Windows Device Manager and open the "com0com – serial port emulators" device to see which COM port has been assigned.



- **Note:** The above screen capture show the scanner assigned as COM2, your system setup could vary.
- Question: In JPOS when I click on the OPEN button, nothing seems to happen, what should I check?
- Answer: Depending on the operating mode of the scanner:
  - 1) If HID-POS mode is being used:

- i. Make sure the Port value is set to "HID" in JPOS.XML.
- 2) If USB COM mode is being used:
  - i. Make sure the COM port drivers are installed.
  - ii. Make sure the Port value is set to "COM" in JPOS.XML.
  - iii. Make sure the Portno value is set to the COM# from Windows Device Manager in JPOS.XML.

🧾 jpos - Notepad	- 🗆 X
<u>Eile E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp	
xml version="1.0" encoding="UTF-8"?	/
JposEntries PUBLIC "-//JavaPOS//DTD//EN"</td <td></td>	
"jpos/res/jcl.dtd">	
<jposentries></jposentries>	
<jposentry logicalname="HPMobileScanner"></jposentry>	
<pre><creation factoryclass="com.jpos.scanner.ScannerSvcInstanceFac&lt;br&gt;&lt;vendor name=" hpscanner"="" url=""></creation></pre>	cory" serviceClass="com.jpos.scanner.ScannerSvc"/>
<pre><jpos category="Scanner" version="1.13"></jpos></pre>	
<product )<="" description="Serial/USB Scanner" name="HPMobileScanner" td=""><td>" url=""/&gt;</td></product>	" url=""/>
</td <td></td>	
<prop name="port" value="HID"></prop>	
>	
The interface of Scanner, "HID" is HID POS Mode	
<prop name="port" value="COM"></prop>	
<prop name="portno" value="2"></prop>	
See Scanner type define on the top	
<prop name="ScannerType" value="3"></prop>	
Enable/disable the suffix code default=0, close the suffix</td <td>code&gt;</td>	code>
<prop name="Suffix" value="0"></prop> (ZasasEntrum)	
<	>

## 9.25 HP 7" CFD

Question: What is the video resolution for this monitor?

**Answer:** The HP 7" CFD has one fixed video resolution which is 1024 x 600.

**Question:** I have dual touch screens on my system. When I attach the HP 7" CFD the touch on the second monitor does not seem to respond.

**Answer:** Multiple touch monitors need to be registered prior to attaching the HP 7" CFD to the unit. Below are the steps to register multiple touch monitors under Windows:

- 1. Click on the Start button.
- 2. In the search box, type "Tablet PC Settings" and select this option in the list of results.
  - i. You may be required to perform this search from the Control Panel on older OSs.

3. On the Display tab, click the Setup button under Configure.

💐 Tablet PC Se	ttings		×
Display Other			
Configure Configure yo displays.	ur pen and touch	<u>∳</u> setu	p
Display optio	ns		
Display:	1. HP AFD18		$\sim$
Details:	Full Windows	fouch Support	
	€ <u>C</u> alibrate	<u> </u>	:t
Choose the o <u>Go to Orienta</u>	rder in which your : <u>tion</u>	screen rotates.	
	ОК	Cancel	<u>A</u> pply

4. Follow the prompt that appears on the screen:

