



HP Linear Scanner

Quick Reference Guide

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First Edition (October 2011)

Document Part Number: 678520-001

About This Guide

This guide provides information on setting up and using the HP Linear Scanner.

 **WARNING!** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

 **CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

 **NOTE:** Text set off in this manner provides important supplemental information.

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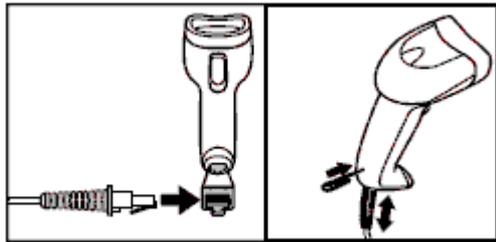
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1 Setting Up the Scanner

Follow the steps below to set up the scanner.

1. Connect the interface cable to the bottom of the scanner.

Figure 1-1 Connecting/Disconnecting the Cable



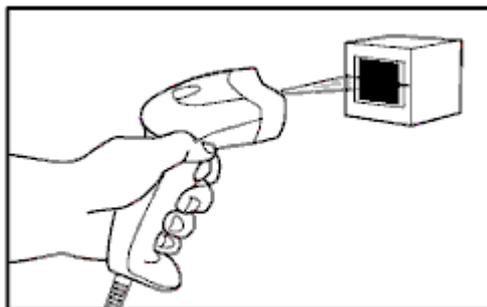
2. Connect the other end of the interface cable to a USB connector on the host device.

Figure 1-2 USB Interface Connection



3. Aim the scanner at the barcode and press the trigger.

Figure 1-3 Aiming and Scanning

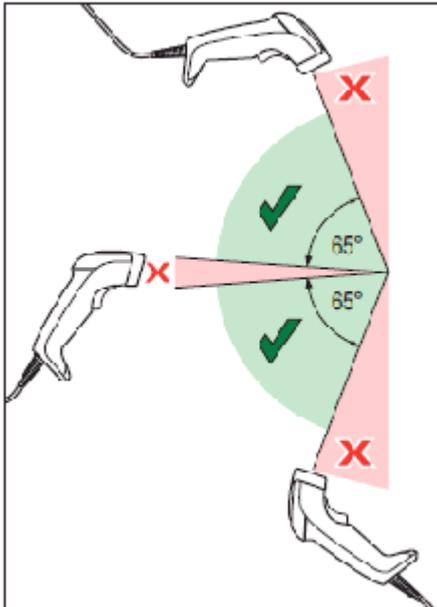


4. Ensure that the scan line crosses every bar and space of the barcode.

Figure 1-4 Correct and Incorrect Scans



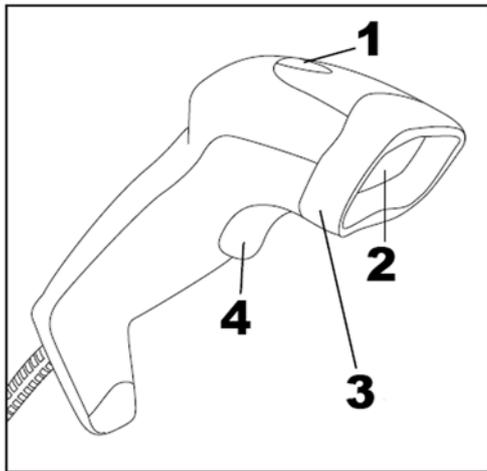
5. Do not hold the scanner directly over the barcode. Laser light reflecting directly back into the scanner from the barcode is known as specular reflection. This specular reflection can make decoding difficult. You can tilt the scanner up to 65° forward or back and achieve a successful decode.



2 Using the Scanner

Parts of the Scanner

Figure 2-1 Scanner Parts



- (1) LED
- (2) Scan Window
- (3) Nose Boot
- (4) Trigger

Scanning Modes

The scanner can operate in one of several scanning modes as described below.

Trigger Single Mode

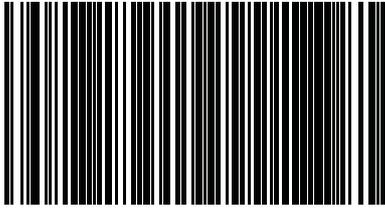
When the trigger is pulled, scanning is activated until one of the following occurs:

- a programmable duration has elapsed
- a label has been read
- the trigger is released

This mode is associated with typical handheld reader operation: when the trigger is pulled, scanning starts and the product scans until the trigger is released, or a label is read, or the maximum programmable duration has elapsed.

 **NOTE:** See the Programming Guide (PG) for additional programmable features. In this case: Scanning Active Time.

Figure 2-2 Trigger Single Mode



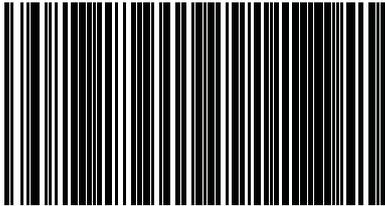
Trigger Hold Multiple Mode

When the trigger is pulled, scanning starts and the product scans until the trigger is released or a programmable duration has elapsed. Reading a label does not disable scanning. Double Read Timeout prevents undesired multiple reads while in this mode.

 **NOTE:** See the Programming Guide (PG) for additional programmable features. In this case: Scanning Active Time.

Double Read Timeout is also programmed using the PG.

Figure 2-3 Trigger Hold Multiple Mode



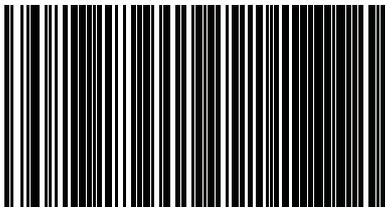
Trigger Pulse Multiple Mode

When the trigger is pulled and released, scanning is activated until programmable duration has elapsed or the trigger has been pulled again to transition to another state. Double Read Timeout prevents undesired multiple reads while in this mode.

 **NOTE:** See the Programming Guide (PG) for additional programmable features. In this case: Scanning Active Time.

Double Read Timeout is also programmed using the PG.

Figure 2-4 Trigger Pulse Multiple Mode

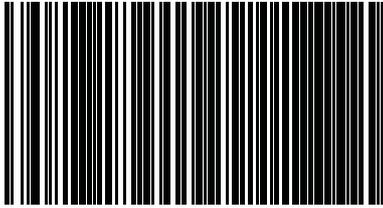


Flashing Mode

The reader flashes on and off regardless of the trigger status.

 **NOTE:** This is controlled by Flash On Time and Flash Off Time. Use the PG to program these options.

Figure 2-5 Flashing Mode



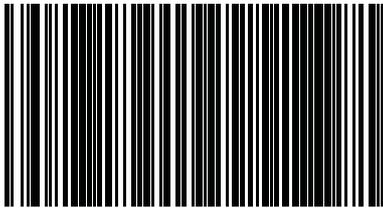
Always On

No trigger pull is required to read a barcode. Scanning is continually on. If the trigger is pulled, the reader acts as if it is in Trigger Single Mode. Double Read Timeout prevents undesired multiple reads while in this mode.



NOTE: Double Read Timeout is programmed using the PG.

Figure 2-6 Always On



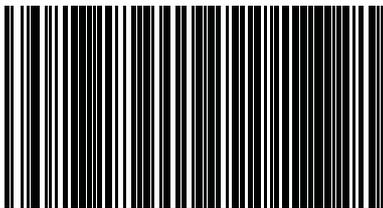
Stand Mode

No trigger pull is required to read a barcode. Scanning is turned on automatically when an item is placed in reader's field of view. If the trigger is pulled, the reader acts as if it in Trigger Single mode. Double Read Timeout prevents undesired multiple reads while in this mode.



NOTE: Double Read Timeout is programmed using the PG.

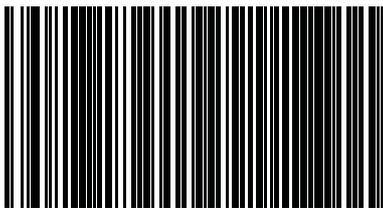
Figure 2-7 Stand Mode



Trigger Object Sense

This mode is similar to Stand Mode, except that a trigger pull is required to activate the decoder.

Figure 2-8 Trigger Object Sense



Programming Barcodes

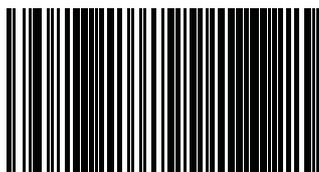
For your convenience, this guide includes the programming barcodes required to configure the scanner for use with different interface (terminal/host) types.

Refer to the Programming Guide (PG) at <http://www.hp.com/support> for more complete information about programming and configurable features.

Resetting the Product Configuration to Defaults

If you aren't sure what programming options are in your scanner, or you've changed some options and want to restore the Custom Default Configuration that may have been saved in the scanner, scan the Restore Custom Default Configuration barcode below. This will restore the custom configuration for the currently active interface.

Figure 2-9 Restore Custom Default Configuration



USB Interface

The scanner attaches directly to a USB host, or a powered USB hub, and is powered by it. No additional power supply is required. When using a USB interface, the scanner auto-detects the USB and defaults to the HID keyboard interface.

Figure 2-10 Select USB-COM-STD

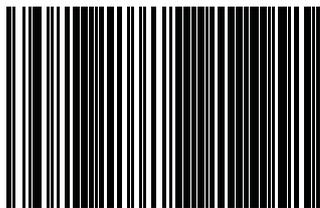


Figure 2-11 Select USB Keyboard (with standard key encoding)

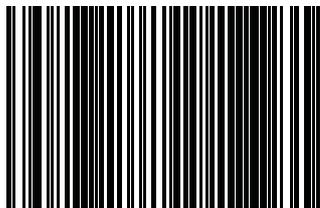
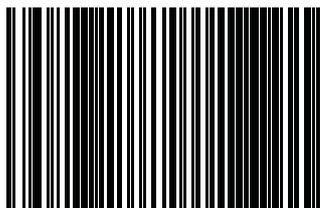


Figure 2-12 Select USB Alternate Keyboard (with alternate key encoding)



LED and Beeper Indications

The scanner's beeper sounds and its LED illuminates to indicate various functions or errors on the reader. A "Green Spot" also lights to indicate a good read. The tables below list these indications. One exception to the behaviors listed in the tables is that the reader's functions are programmable, and may or may not be turned on. For example, certain indications, such as the power-up beep can be disabled using programming barcode labels. Refer to the PG for a more detailed list.

Indication	LED	Beeper
Power-up	LED flashes/blinks on power-up, however, this may be too rapid to view. With a USB interface, the LED blinks until enumeration with the host is completed.	Scanner beeps four times at highest frequency and volume upon power-up.
Good Read	LED behavior for this indication is configurable using the PG.	One beep at current frequency, volume, mono/bi-tonal setting and duration upon a successful label scan.
ROM Failure	200ms on / 200ms off	Scanner sounds one error beep at highest volume for 200 mS.
Limited Scanning Label Read	Not Applicable	Scanner 'chirps' six times at the highest frequency and current volume.
Scanner Disabled	The LED blinks continuously 100mS on / 900mS off.	Not Applicable

A Troubleshooting

Solving Common Problems

The following table lists possible problems, causes, and recommended solutions.

Problem	Possible Cause	Possible Solution
Nothing happens when the scan button is pulled.	No power to the scanner.	Check system power. Ensure power supply is connected.
	Interface or power cables are loose.	Ensure all cable connections are secure.
LED comes on, but barcode does not decode.	Scanner not programmed for correct barcode type.	Ensure scanner is programmed to read the type of barcode scanned. Refer to the Programming Guide (PG) for more information.
	Barcode label is unreadable.	Check the label to ensure it is not defaced. Try scanning another barcode type.
	Distance between scanner and barcode is incorrect.	Move scanner closer to or further from the barcode.
Barcode reading ability has degraded.	Scan Window has become scratched or contaminated with dust.	Replace window as instructed in this guide.
Barcode is decoded but not transmitted to the host.	Scanner not programmed for the correct host type.	Scan the appropriate host type barcode. Refer to the Programming Guide (PG) for more information.



NOTE: For detailed troubleshooting, refer to the Programming Guide (PG).

Online Technical Support

For the online access to technical support information, self-solve tools, online assistance, community forums or IT experts, broad multivendor knowledge base, monitoring and diagnostic tools, go to <http://www.hp.com/support>.

Preparing to Call Technical Support

If you can not solve a problem using the troubleshooting tips in this section, you may need to call technical support. Have the following information available when you call:

- If the product is connected to an HP POS computer, provide the serial number of the POS computer
- Purchase date on invoice
- The spares part number located on the product
- Condition under which the problem occurred

- Error messages received
- Hardware configuration
- Hardware and software you are using

B Agency Regulatory Notices

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hewlett Packard Company may void the user's authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Declaration of Conformity for Products Marked with the FCC Logo (United States Only)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

For questions regarding the product, contact:

Hewlett Packard Company

P. O. Box 692000, Mail Stop 530113

Houston, Texas 77269-2000

Or, call 1-800-HP-INVENT (1-800 474-6836)

For questions regarding this FCC declaration, contact:

Hewlett Packard Company

P. O. Box 692000, Mail Stop 510101

Houston, Texas 77269-2000

Or, call (281) 514-3333

To identify this product, refer to the Part, Series, or Model number found on the product.

Canadian Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Regulatory Notice

Products bearing the CE marking comply with the following EU Directives:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC
- Ecodesign Directive 2009/125/EC, where applicable

CE compliance of this product is valid if powered with the correct CE-marked AC adapter provided by HP.

Compliance with these directives implies conformity to applicable harmonized European standards (European Norms) that are listed in the EU Declaration of Conformity issued by HP for this product or product family and available (in English only) either within the product documentation or at the following web site: <http://www.hp.eu/certificates> (type the product number in the search field).

The compliance is indicated by one of the following conformity markings placed on the product:

	For non-telecommunications products and for EU harmonized telecommunications products, such as Bluetooth® within power class below 10mW.
	For EU non-harmonized telecommunications products (If applicable, a 4-digit notified body number is inserted between CE and !).

Please refer to the regulatory label provided on the product.

The point of contact for regulatory matters is: Hewlett-Packard GmbH, Dept./MS: HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, GERMANY.

Japanese Notice

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VCCI-B

Korean Notice

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Product Environmental Notices

Materials Disposal

Some HP LCD monitors contain mercury in the fluorescent lamps that might require special handling at end-of-life.

Disposal of this material can be regulated because of environmental considerations. For disposal or recycling information, contact the local authorities or the Electronic Industries Alliance (EIA) <http://www.eiae.org>.

Disposal of Waste Equipment by Users in Private Household in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling or waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact the local city office, the household waste disposal service or the shop where you purchased the product.

HP Recycling Program

HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, go to <http://www.hp.com/recycle>.

Chemical Substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and Council). A chemical information report for this product can be found at <http://www.hp.com/go/reach>.

Restriction of Hazardous Substances (RoHS)

A Japanese regulatory requirement, defined by specification JIS C 0950, 2005, mandates that manufacturers provide Material Content Declarations for certain categories of electronic products offered for sale after July 1, 2006. To view the JIS C 0950 material declaration for this product, visit <http://www.hp.com/go/jisc0950>.

2008年、日本における製品含有表示方法、JISC0950が公示されました。製造事業者は、2006年7月1日以降に販売される電気・電子機器の特定化学物質の含有につきまして情報提供を義務付けられました。製品の部材表示につきましては、www.hp.com/go/jisc0950を参照してください。

有毒有害物质和元素及其含量表

根据中国的《电子信息产品污染控制管理办法》

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
主板 处理器和散热器	X	○	○	○	○	○
内存条	X	○	○	○	○	○
I/O PCAs	X	○	○	○	○	○
电源	X	○	○	○	○	○
键盘	X	○	○	○	○	○
鼠标	X	○	○	○	○	○
机箱/其他	X	○	○	○	○	○
风扇	X	○	○	○	○	○
内部/外部媒体阅读设备	X	○	○	○	○	○
外部控制设备	X	○	○	○	○	○
电缆	X	○	○	○	○	○
硬盘驱动器	X	○	○	○	○	○
显示屏	X	X	○	○	○	○

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。

表中标有“X”的所有部件都符合欧盟RoHS法规,“欧洲议会和欧盟理事会2003年1月27日关于电子电器设备中限制使用某些有害物质的2002/95/EC号指令”。

注: 环保使用期限的参考标识取决于产品正常工作的温度和湿度等条件。