



# HP Network Sign Manager

User Guide

© 2010, 2014 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

This document contains proprietary information that is protected by copyright. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company.

Windows®, Windows® XP, Windows Vista®, Windows 7®, and Windows 8® are U.S. registered trademarks of the Microsoft group of companies.

Second Edition (January 2014)

Document Part Number: 639186-003

---

# Table of contents

<b>Installing HP Network Sign Manager .....</b>	<b>1</b>
Connecting the Signage Display .....	1
System requirements .....	1
Features .....	2
Environment setup .....	2
Connecting to a display via LAN .....	2
Setting a static IP address for a media player/computer .....	3
Setting an IP address on a network attached display .....	3
Connecting a display via RS-232-C serial port .....	3
HP Network Sign Manager installation .....	4
Installing HP Network Sign Manager .....	4
Removing HP Network Sign Manager .....	4
Quick overview .....	4
Home screen .....	5
Toolbar .....	6
Control Tab .....	6
Log-in .....	7
Connection settings .....	7
Ethernet communication settings .....	7
Serial communication settings .....	7
Display registration .....	8
Registering a networked display .....	8
Registering a display via serial communication .....	8
Display and group management .....	9
Making a group .....	9
Adding a display to group .....	10
Viewing group information .....	11
Deleting a group .....	12
Deleting a group .....	12
Deleting a display from a group .....	12
Deleting a display from the Monitor Register Window Pane .....	12
Adding a tag to a display .....	12
Display configuration .....	13
Viewing information .....	13
Display .....	13
IP Configuration VOE .....	14

IP Configuration Remote Control .....	14
Status .....	14
Diagnosis .....	15
Controlling a display .....	15
Power .....	16
Select Input .....	16
Volume .....	16
Screen Mute .....	16
Volume Mute .....	16
OSD Enable/Disable .....	17
Configuring audio/video settings .....	17
Picture Mode .....	17
Backlight .....	17
Contrast .....	18
Brightness .....	18
Color .....	18
Sharpness .....	18
Color Temperature (White Balance) .....	18
Auto Config .....	18
Sound Mode .....	19
Auto Volume .....	19
Balance .....	19
Speaker .....	19
Treble .....	19
Bass .....	19
Setting screen options .....	20
Aspect Ratio .....	20
ISM Method .....	20
Power indicator LED .....	21
DPM Select .....	21
Remote/Key Lock .....	21
Ambient Light Sensor .....	21
2D Dimming .....	21
Sleep Timer .....	22
Auto Off .....	22
Power On Delay .....	22
Energy Saving .....	22
Factory Reset .....	22
Scheduling .....	23
Clock .....	23
Time Schedule Setting .....	23

On/Off Time Schedule Info .....	24
Saving and loading display configuration .....	24
Saving display configuration .....	24
Loading display configuration .....	25
Tile Mode .....	25
Creating a Tile Mode .....	25
Modifying a Tile Mode .....	27
Tile Mode Settings .....	27
Schedule and Playback contents for HP Media Sign Player (USB) .....	27
Scheduling the playback of files .....	27
USB Schedule .....	27
Saving files in the USB device .....	29
Creating the HP Media Sign Player Schedule and Play List .....	29
Toolbar .....	30
Search .....	30
Setting .....	30
Ethernet Network .....	31
RS-232-C Serial Communication .....	31
Connect .....	31
Refresh .....	32
Message .....	32
Alarm .....	33
Security .....	34
Help .....	35
Log history .....	35
Log data .....	35
Log file name and location .....	35



# Installing HP Network Sign Manager



**NOTE:** To determine if Network Sign Manager is available for your digital signage display, go to [www.hp.com/go/digitalsignage](http://www.hp.com/go/digitalsignage) and consult the data sheet and/or user guide for your product.

HP Network Sign Manager (NSM) is a software utility included with HP digital signage displays that allows remote, centralized management and control of HP digital signage displays. This allows users the ability to monitor and send commands to all the network connected displays in a subnet from a central location such as a data center. NSM may be installed on any media player/computer running Windows XP, Vista, Windows 7, or Windows 8 operating systems. NSM supports either serial (RS232-C) or network connection to the digital signage displays.

HP Network Sign Manager allows you to adjust the settings and controls available through the On-Screen Display (OSD) dialog (e.g. display and power on/off) of the connected displays. It also allows you to group the displays, depending on the purpose such as all the displays in a building or on a campus, and to send commands to all the displays in the group simultaneously. NSM also provides the ability to create schedules and play lists for HP Network Sign Manager.

HP Network Sign Manager supports all the HP network attached digital signage displays. Some commands within HP Network Sign Manager may be unique to some models of digital signage displays. See the Commands and Settings appendix for details on which commands and functions are supported for the different HP digital signage displays.

## Connecting the Signage Display

The signage display has a built-in Ethernet network interface card and an RJ45 port to connect to a network. See the display User Guide for details on how to connect to the network and set the IP address of the display.

## System requirements

The media player/computer used to run HP Network Sign Manager should meet the following minimum requirements:

CPU	P1.8
RAM	256M
HDD	400M
Ethernet	100M
Operating system	Windows® XP (32 bit) Windows Vista (32 bit) Windows 7 (32 bit) Windows 8

## Features

- **Integrated Control of LAN and Serial Communications**—Easily manages the display connected by local network or serial (RS232-C) communications.
- **Local Area Network (LAN) Control**—Efficiently controls the displays at remote sites through LAN connections.
- **Automatic Search for displays on the Same Network**—Automatically searches, adds, and manages displays connected to the same network as HP Network Sign Manager.
- **Self-diagnosis**—Checks and reports status of the connected displays in real time.
- **Support for settings and commands available in display On-Screen Display Dialog**—allows commands such as Power ON/OFF, Scheduling, and Input Source to be sent to the display remotely.

For list of commands and settings available in HP Network Sign Manager, go to [www.hp.com/go/digitalsignage](http://www.hp.com/go/digitalsignage).

- **Easy Tile Mode**—Sets the tile mode with the easy-to-use and intuitive GUI design.
- **Firmware Upgrade via LAN**—Upgrades the LAN firmware easily via network.
- **Instant Messaging**—Allows you to display a message on the screen.
- **Log History**—Logs and manages all events that occur in the HP Network Sign Manager solution.
- **Alarm**—Automatically sends an alert message to a designated email address if any problem occurs on the display.
- **HP Media Sign Player Support**—create schedules and play list for video, image, and music files.

## Environment setup

The HP Network Sign Manager environment setup defines how the HP Network Sign Manager on the player will be connected to the display. There are two methods to make the connection:

- Local Area Network (LAN)
- RS-232 Serial Communication

### Connecting to a display via LAN

You can connect HP Network Sign Manager to the networked display directly (peer to peer) or indirectly via a router, hub, or switch. For direct, peer to peer connection, connect one end of a CAT5 cable to the player and the other end to the display's RJ45 port. For indirect connection, connect the network cable that is connected to the LAN to the Ethernet port on the signage display.






## Setting a static IP address for a media player/computer

 **NOTE:** Use these steps when the media player/computer is connected directly to a display via a peer to peer LAN connection.

1. From the computer **Control Panel**, under **Network and Internet**, click on **View network status and tasks**, then click on **Local Area Connection**.
2. Click **Properties**, highlight **Internet Protocol Version 4(TCP/IPv4)**, click on **Properties**, click on the button for **Use the following IP address:** and then add an **IP address and Subnet mask**. Consult with your network administrator to obtain the correct IP address and Subnet mask

 **NOTE:** When establishing a Peer to Peer connection directly between the media player/computer and digital signage display, the Subnet mask for the display and the media player/computer running HP Network Sign Manager must be the same.

## Setting an IP address on a network attached display

Once the network cable is connected, set an IP address of the signage display to complete the network connection.

Follow these steps to set an IP address of the display:

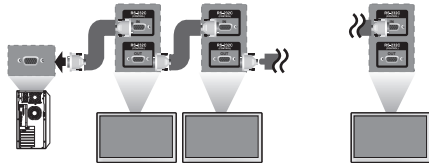
1. Using the On-Screen Display Dialog of the display, go to the **Network** option. See your display User Guide for details.
2. In the **Network** option dialog, you can assign an IP address either manually or using DHCP connection.
  - If you choose to use the DHCP connection:
    - a. Click **Apply** to automatically assign an IP address.
    - b. Click **Close** to complete the IP address configuration.
  - If you choose to assign manually:
    - a. Configure an **IP Address, Subnet Mask, Gateway, and DNS Server** address.

The Subnet Mask, Gateway, and DNS Server address must be the same as the media player/computer that is running HP Network Sign Manager. See your Network Administrator for these settings.
    - b. Click **Apply** to save the IP address configuration.
    - c. Click **Close** to complete the IP address configuration.
3. Return to the **Option** dialog, select **Information**, and then select **IP Address** to check whether the IP address is properly assigned.

## Connecting a display via RS-232-C serial port

To connect the display directly to the media player/computer that is installed with HP Network Sign Manager using an RS-232-C cable (sold separately):

1. Connect one end of the RS-232-C cable to the serial port of the media player/computer and the other end to the RS-232 IN connector on the display.
2. To connect more than one display to the media player/computer, connect the first display to the media player/computer with an RS-232-C cable, and then connect the next display with an RS-232-C cable, connecting the cable to the RS-232 Out connector of the first display to the RS-232 IN connector of the next display.



**NOTE:** The number of displays that can be connected by daisy chain to one media player/computer might vary depending on the signal status and cable loss. If the signal status is good, and there is no cable loss, it is possible to connect up to twenty-five displays in a daisy chain from one media player/ computer.

## HP Network Sign Manager installation

Install HP Network Sign Manager on the media player/computer to be directly connected with the display or to the network. HP Network Sign Manager installed on your media player/computer allows you to control the display options and playback schedule.

### Installing HP Network Sign Manager

1. Insert the HP Network Sign Manager and VOE Software CD, that comes with the display, into the CD-ROM of the media player/computer. Choose **HP Network Sign Manager**. The HP Network Sign Manager Installation Options screen appears.
2. Follow the instructions and screen prompts to install the software.
3. Click **Next** to continue the installation.
4. Select **Destination Folder** and then click **Install** to start the installation.
5. Click **Show details** to view the installation log after installation is complete.

### Removing HP Network Sign Manager

The following steps describe how to uninstall HP Network Sign Manager from your computer:

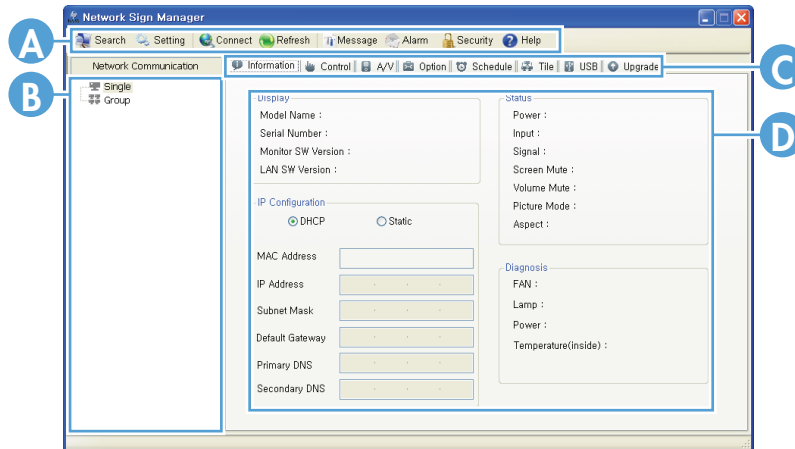
1. Click **Start**, click **All Programs**, click **HP Network Sign Manager**, and then select **Uninstall**. The **HP Network Sign Manager Uninstall: Confirmation** dialog appears.
2. Click **Uninstall**. The **HP Network Sign Manager Uninstall: Completed** window appears when the HP Network Sign Manager program is successfully removed.
3. Click **Close** to close the dialog box.

### Quick overview

HP Network Sign Manager supports monitoring, setting, and changing the HP digital signage display settings in the On-Screen Display dialogs as well as settings and controls for HP Media Sign Player. All HP Network Sign Manager functions are accessed from the home screen.

## Home screen





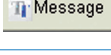


 **NOTE:** Screen image content varies based on model.



<b>A</b>	<b>Toolbar</b>	Provides functions commonly used in HP Network Sign Manager such as networked display search/connection and communication configuration.
<b>B</b>	<b>Monitor Register Window</b>	Displays and manages the list of network connected displays found in Search, manages grouping displays, and selects the individual display in the list to which commands are issued.
<b>C</b>	<b>Control Tab</b>	Controls the settings of the selected display and HP Media Sign Player.
<b>D</b>	<b>Control Panel</b>	Displays information or settings for the selected function in the control tabs.



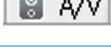
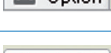



## Toolbar

Provides functions commonly used in HP Network Sign Manager.

 Search	<b>Search</b> is used to find display(s) that are connected to the network and add them in the <b>Monitor Register Window</b> pane. The <b>Search</b> icon is enabled only when the communication configuration of HP Network Sign Manager is set to <b>Network</b> (Ethernet).
 Setting	<b>Setting</b> is used to configure the communication method of HP Network Sign Manager. You can choose either <b>Network</b> (Ethernet) or <b>Serial</b> connection.
 Connect	<b>Connect</b> is used to manually connect the selected display. The <b>Connect</b> icon is enabled only when the communication configuration of HP Network Sign Manager is set to <b>Network</b> (Ethernet).
 Refresh	<b>Refresh</b> is used to refresh the control panel information of HP Network Sign Manager.
 Message	<b>Message</b> is used to display an instant message on the selected display or group of displays.
	<b>Alarm</b> is used to send an alert message to the designated email address if any problem occurs on the display or the network.
 Security	<b>Security</b> is used to change the user ID and password of HP Network Sign Manager.
 Help	<b>Help</b> displays information about the HP Network Sign Manager program.

## Control Tab

The **Control Tab** options control the settings of the selected display.

 Information	<b>Information</b> displays information on the hardware, network, status, and monitored status of the internal functions of the display.
 Control	<b>Control</b> is used to control the power, input, volume, and OSD display settings of the display.
 A/V	<b>A/V</b> is used to change the sound and video settings of the display.
 Option	<b>Option</b> is used to change the settings of additional display functions.
 Schedule	<b>Schedule</b> is used to configure the timer settings to automatically turn the display on and off on selected days.
 Tile	<b>Tile</b> is used to set up multiple displays in a matrix or array.
 USB	<b>USB</b> is used to set the playback schedule and select media files from the USB storage device to be played with HP Media Sign Player.

# Log-in

The **Log-in** dialog appears when HP Network Sign Manager starts. You must log in to use HP Network Sign Manager.

Enter your ID and password in the **Log-in** dialog, and then click **OK**. Then, you are returned to the main window of HP Network Sign Manager.

 **NOTE:** The **ID** and **password** are case-sensitive.

The default **ID** and **password** for HP Network Sign Manager are “**administrator**” and “**0000**” respectively. You can change the password.


## Connection settings

HP Network Sign Manager supports both **Network** (Ethernet) and **Serial** communications to connect to the display. The following sections describe how to configure communication in HP Network Sign Manager.


### Ethernet communication settings

1. Click **Setting**  on the toolbar of HP Network Sign Manager. The **Setting** dialog appears.
2. Select **Network** under **HP NSM Communication Protocol**, and then click **OK** to save the setting.

### Serial communication settings

1. Click **Setting**  on the toolbar of HP Network Sign Manager.
2. Select **Serial** under **HP NSM Communication Protocol**. Then, the **Serial Setting** fields become activated.
3. When all fields are filled, click **OK** and save the setting.

Item	Description
<b>Port</b>	Communication port (COM1 - COM9), Default: COM1
<b>Baudrate</b>	Communication speed (2400 - 115200), Default: 9600
<b>Data</b>	Communication data (Data5 - Data8), Default: Data8
<b>Parity</b>	Parity check (even, odd, none), Default: none
<b>Stop</b>	The number of stop bits (0 - 1), Default: 1
<b>Flow Control</b>	Data flow (Xon/Xoff, hardware, none), Default: none

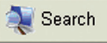
 **NOTE:** When you run HP Network Sign Manager for the first time, the communication is set to **Network** (Ethernet) by default.

# Display registration

HP Network Sign Manager allows you to add and manage multiple displays with both **Network** (Ethernet) and **Serial** communications.


## Registering a networked display

The following describes how to add a display with **Network** (Ethernet) communication.




1. Click **Search**  on the toolbar. The **Signage Monitor Search** dialog appears.
2. Specify a **Search Method** in the **Signage Monitor Search** dialog.

There are two search methods:

- **Search Network for all Displays (DHCP)**—Automatically searches display(s) on the same local network to which the media player/computer running HP Network Sign Manager is connected.
- **Search Network with Display IP Address**—An IP address for the display needs to be entered manually to search for it and add it to the HP Network Sign Manager register window list. Displays connected to the external network can also be searched for and added.

 **NOTE:** Sharing the same network means using the same default gateway and subnet host.

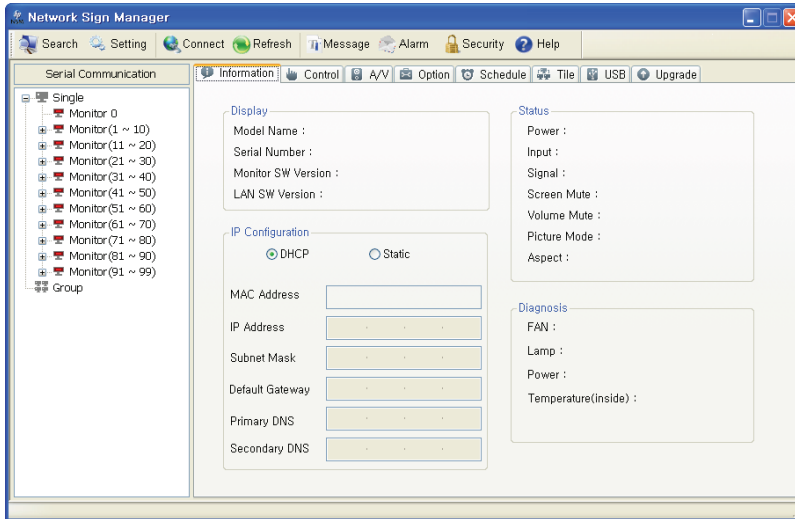
3. Click **Search** to search for a display. When the search is complete, the **Completed** message appears under **Status**.
4. When the search is complete, click **Close** to close the dialog. You can see the searched display(s) added in the **Monitor Register Window** pane of the main window. Under **Network Communication**, the icon for the device changes to blue after a successful connection.

The added display is displayed with three different icons depending on the current status as shown below:	
	Successfully connected to HP Network Sign Manager
	Disconnected from HP Network Sign Manager
	When the panel or temperature is not normal

## Registering a display via serial communication

No extra search for displays is required when they are connected via serial communication using HP Network Sign Manager. All displays connected via serial communication are displayed in the **Monitor Register Window** pane.

 **NOTE:** Screen image content varies based on model.



A display connected via serial communication must have an ID assigned. HP Network Sign Manager uses this ID to communicate with the display connected to the computer using the serial cable. To control a display, select an ID of the display that you wish to control in the **Monitor Register Window** pane.

**NOTE:** If you select **Monitor 0** in the **Monitor Register Window** pane, you can control all displays regardless of the IDs. However, controlling all displays by selecting **Monitor 0** prevents you from receiving acknowledgement (ACK) data from the displays.

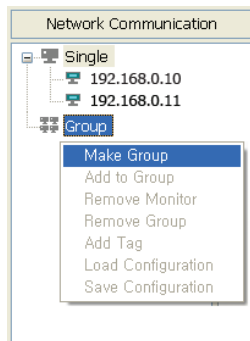
## Display and group management

HP Network Sign Manager supports grouping and managing the displays added in the **Monitor Register Window** pane.

### Making a group

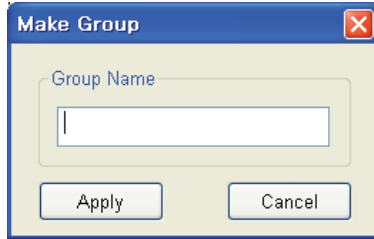
The following describes how to create a display group:

1. Right-click the Group node in the **Monitor Register Window** pane.

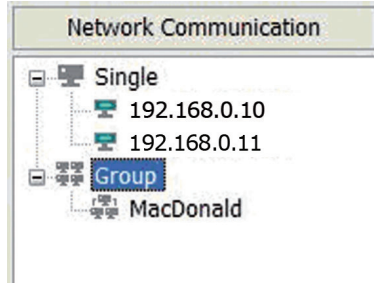


2. Click **Make Group**. The **Make Group** dialog appears.

3. Enter a group name in the **Make Group** dialog, and then click **Apply**.



A new group is created under **Group** in the **Monitor Register Window** pane.

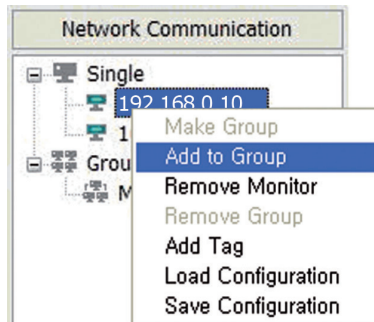


## Adding a display to group

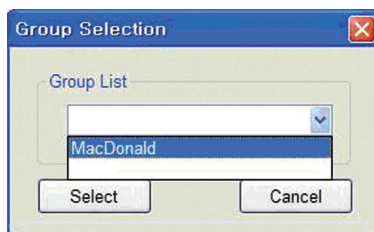
You can add displays to the group you want and manage them by group. A group may have only one type of display within the group. See Commands and Settings Appendix for details of which displays may be grouped together. Commands will be sent to all the displays in a group simultaneously.

The following describes how to add displays to a group:

1. Right-click a display to group in the **Monitor Register Window** pane. The shortcut menu appears.

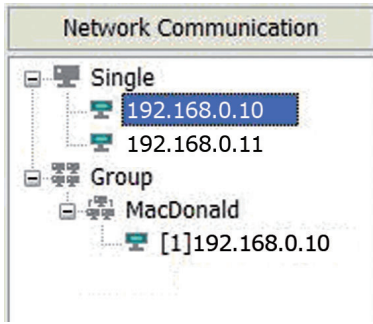


2. Click **Add to Group** from the shortcut menu. The **Group Selection** dialog appears.
3. Select a group to which the display is to be added under **Group List**.



The display is now added to the selected group.





**NOTE:** Alternatively, you can simply drag and drop a display to the group you want in the **Monitor Register Window** pane.

## Viewing group information

If you select a group in the **Monitor Register Window** pane, you can see a summary of all displays included in the group.

**NOTE:** Screen image content varies based on model.

A	B	C	D	E	F	G	H	I
Status	IP Address	Tag	Power	Input	Signal	FAN	LAMP	Temp
On-Line	192.168.0.10	---	On	HDMI_DTV	No Signal	N/A	OK	OK
On-Line	192.168.0.11	---	On	HDMI_DTV	No Signal	N/A	OK	OK

A	<b>Status</b>	Displays the network connection status of the displays included in the selected group.
B	<b>IP Address</b>	Displays the IP address of the displays included in the selected group.
C	<b>Tag</b>	Displays the tag of the displays included in the selected group. This field appears as "----" if the display tag is not specified.
D	<b>Power</b>	Displays the power on/off of the displays included in the selected group.
E	<b>Input</b>	Displays the input settings of the displays included in the selected group.
F	<b>Signal</b>	Displays the signal status of the displays included in the selected group.
G	<b>FAN</b>	Displays status of the display fan if present.
H	<b>LAMP</b>	Displays status of the backlight of the display.
I	<b>Temp</b>	Displays the temperature status of the displays included in the selected group.

## Deleting a group

You can delete a display and group added in the **Monitor Register Window** pane. The following sections describe how to delete a display and group.

### Deleting a group

1. Right-click a group to delete. The **Delete** button appears.
2. Click **Remove Group** from the shortcut menu. The selected group is now deleted.

### Deleting a display from a group

1. Right-click a display to delete from a group. The shortcut menu appears.
2. Click **Delete** from the shortcut menu. The selected display is now deleted from the group. Notice that the display is still listed under the Single list and can still be selected for remote control and management.

### Deleting a display from the Monitor Register Window Pane

You can completely delete a display added in the **Monitor Register Window** pane.

The following describes how to completely delete a display from the **Monitor Register Window** pane:

1. Right-click a display to delete under the **Single** node. The shortcut menu appears.
2. Click **Delete** from the shortcut menu. The selected display is now deleted.



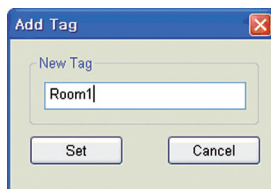
**NOTE:** Deleting a display under **Single** in the **Monitor Register Window** pane will also delete the same display added in the group. The KFC Group no longer includes display 192.168.15.103.

## Adding a tag to a display

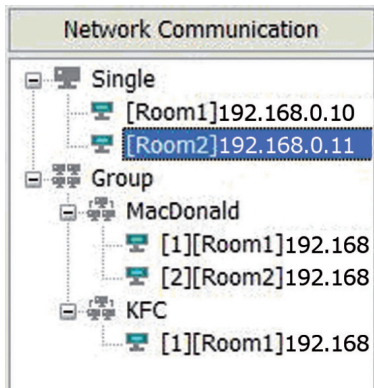
By default, displays added in the **Monitor Register Window** pane have only the IP address displayed. You can also add a tag for each display to identify it easily.

The following describes how to add a tag to a display:

1. Right-click a display to add a tag. The shortcut menu appears.
2. Click **Add Tag**. The **Add Tag** dialog appears.
3. Enter a tag name in the **New Tag** field, and then click **Set**.



You can see the tag is added before the IP address of the display in the **Monitor Register Window** pane. Also notice that the tag is carried along with the display IP address where it has been added to a group.



## Display configuration

HP Network Sign Manager can remotely control the connected displays and change their settings.

### Viewing information

You can see details of the display configuration in the **Information** tab.

### Display

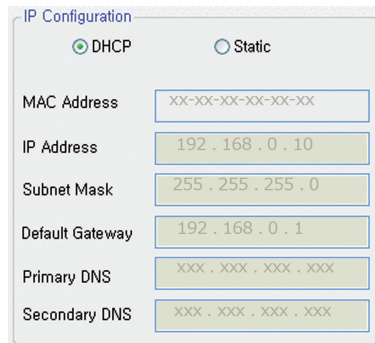
The **Display** section shows the basic information on the selected display.

Display	
Model Name :	LD4710
Serial Number :	
Monitor SW Version :	1.60
LAN SW Version :	3.20

Item	Description
<b>Model Name</b>	Model of display.
<b>Serial Number</b>	Serial number
<b>Display Name</b>	Display Name of VOE (only available on select models)
<b>Display Location</b>	Display Location of VOE (only available on select models)
<b>Player Name</b>	Player name of VOE (only available on select models)
<b>VOE Association</b>	Attached to a media player by VOE (only available on select models)

## IP Configuration VOE

The **IP Configuration VOE** section shows the network information of VOE for the selected display.



Item	Description
<b>IP Configuration Method</b>	IP configuration (DHCP/Static)
<b>Network properties</b>	Network properties



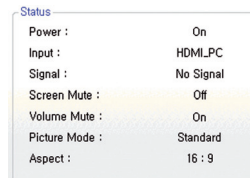
**NOTE:** IP Configuration VOE is only available on select models.

## IP Configuration Remote Control

The **IP Configuration Remote Control** section shows the network information for the selected display.

### Status

The **Status** section shows the current configuration of the selected display.



Item	Description
<b>Power</b>	Power on/off status
<b>Input</b>	Input source setting
<b>Signal</b>	Signal status
<b>Screen Mute</b>	Screen on/off status (only available on select models)
<b>Volume Mute</b>	Sound on/off setting status (only available on select models)
<b>Picture Mode</b>	Screen mode setting
<b>Aspect</b>	Screen aspect ratio setting
<b>2D Dimming</b>	Local dimming status (only available on select models)
<b>Ambient Light Sensor</b>	The frequency of adjustment to ambient light (only available on select models)

## Diagnosis

The **Diagnosis** section shows display activities and failures.

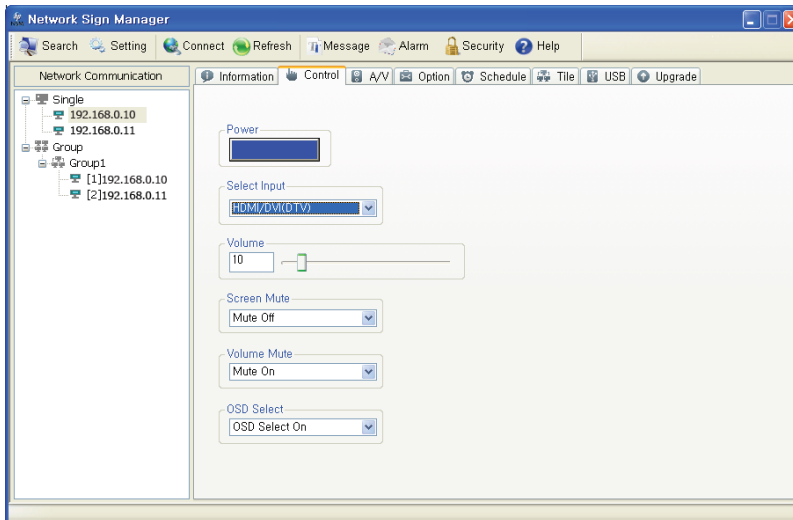
Diagnosis	
FAN :	N/A
Lamp :	OK
Power :	OK
Temperature(inside):	27 degrees [C] 81 degrees [F]

Item	Description
<b>Backlight</b>	Lamp Status (only available on select models)
<b>Power</b>	Power status
<b>Ambient Light Sensor</b>	Adjust the frequency of the ambient light (only available on select models)
<b>Elapsed Operating Time</b>	Total elapsed power on time of display (hours)
<b>Temperature (inside)</b>	Temperature inside the display

## Controlling a display

The **Control** tab allows you to control the selected display.


 **NOTE:** Screen image content varies based on model.



## Power

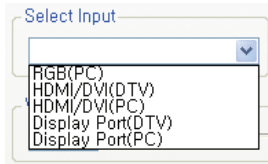
You can turn the display on or off with a mouse-click under **Power**. The color of the button changes depending on the display status.


Item	Description
Blue	When the display is turned on, or the display is in energy-saving mode.
Red	When the display is turned off

 **NOTE:** When the display is turned off or in energy-saving mode, you can use **Power on**, **Volume control**, **Signal check**, and **Lamp check** functions only.

## Select Input

Use **Select Input** to select an input type supported in the display.



 **NOTE:** The input type supported in the display might vary depending on the model.

## Volume

**Volume** is used to adjust the position of the slider to set the volume between 0 and 100.



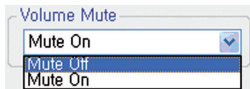
## Screen Mute

**Screen Mute** is used to turn on or off the screen. Set to **Mute On** to play the sound only (no image/video on the screen).



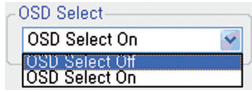
## Volume Mute

**Volume Mute** is used to turn on or off the sound. Set to **Mute On** to play the image/video only on the screen without sound.



## OSD Enable/Disable

**OSD Enable/Disable** is used to turn on or off the OSD (on-screen display) of the display. Set to **OSD Disable** to remove the appearance of the OSD from the screen.

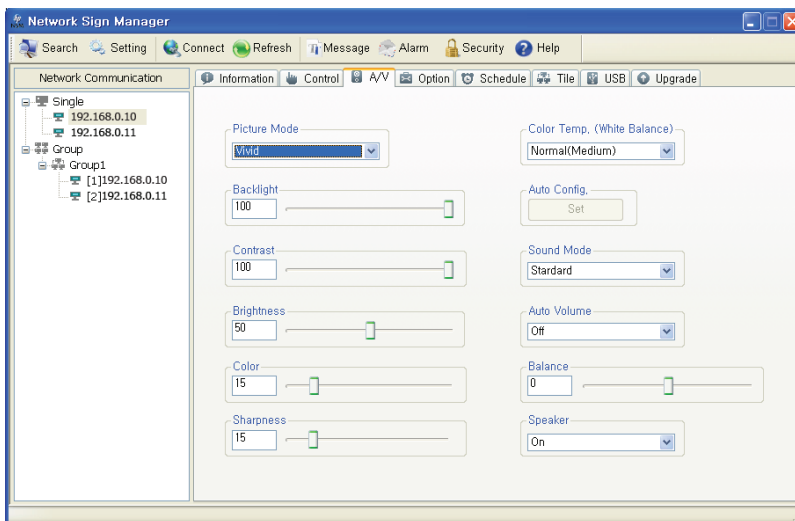


**NOTE:** You cannot configure the screen settings with a remote control or key operations of the display when **OSD Disable** is set to **Off**.

## Configuring audio/video settings

You can change the audio and video settings of the selected display in the **A/V** tab.

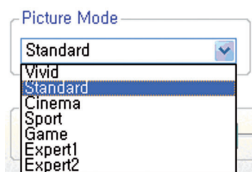
**NOTE:** Screen image content varies based on model.



**NOTE:** Audio/video setting options might vary depending on the display model.

## Picture Mode

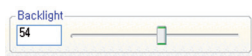
**Picture Mode** is used to set the screen mode.



**NOTE:** Changing this setting will invalidate the color calibration on select models.

## Backlight

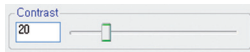
**Backlight** is used to adjust the position of the slider between 0 and 100 to set the brightness of the screen backlight.




**NOTE:** Changing this setting will invalidate the color calibration on select models.

## Contrast

**Contrast** is used to adjust the position of the slider between 0 and 100 to set the contrast of the screen.

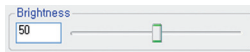



 **NOTE:** Changing this setting will invalidate the color calibration of select models.

---

## Brightness

**Brightness** is used to adjust the position of the slider between 0 and 100 to set the brightness of the screen.

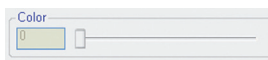


 **NOTE:** Changing this setting will invalidate the color calibration of select models.

---

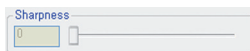
## Color


**Color** is used to adjust the position of the slider between 0 and 100 to set the color density of the screen.



## Sharpness

**Sharpness** is used to adjust the position of the slider between 0 and 100 to set the sharpness of the screen.

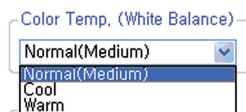


 **NOTE:** Changing this setting will invalidate the color calibration of select models.

---

## Color Temperature (White Balance)

**Color Temperature (White Balance)** is used to change the color temperature of the screen. You can choose from Normal, Cool, and Warm.



 **NOTE:** Changing this setting will invalidate the color calibration of select models.

---

## Auto Config

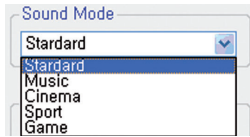
**Auto Configuration** is used to automatically configure the screen settings. When the display is connected to the media player/computer with an RGB cable, click the **Set** button to automatically adjust the screen position and minimize the screen flicker.





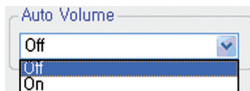
## Sound Mode

**Sound Mode** is used to set the sound mode of the display.



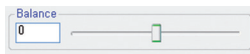
## Auto Volume

**Auto Volume** is used to turn on/off the auto volume adjustment function. Setting **Auto Volume** to **On** will automatically adjust and optimize the display volume.



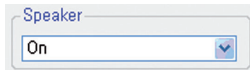
## Balance

**Balance** is used to control the left and right speaker balance by adjusting the position of the slider between -50 (left) and 50 (right).




## Speaker

**Speaker** is used to turn on or off the display speaker. You can turn off the speaker when connecting an external speaker to the display or when not in use.




## Treble

**Treble** is used to expand the strength of the voice.

 **NOTE:** Treble is only available for select models.

## Bass

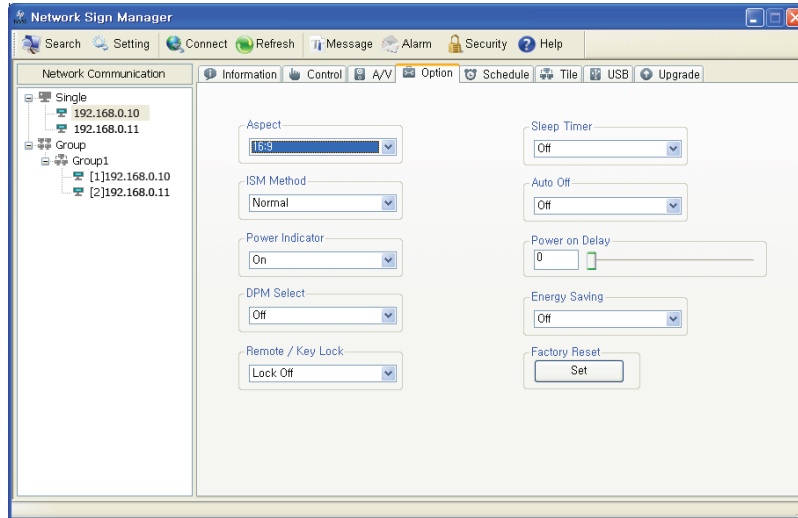
**Bass** is used to adjust the bass sound effect.


 **NOTE:** Bass is only available on select models.

## Setting screen options

The **Option** tab allows you to change the screen settings of the selected display.

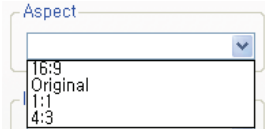
 **NOTE:** Screen image content varies based on model.



 **NOTE:** Screen setting options might vary depending on the display model.

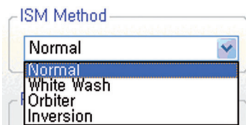
## Aspect Ratio

**Aspect Ratio** is used to set the aspect ratio of the screen.



## ISM Method

**ISM Method** is used to change the Image Sticking Minimization (ISM) method for the display. ISM prevents an image-sticking phenomenon where a frozen still picture displayed on the screen for prolonged periods can result in a ghost image.



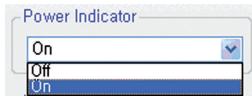
There are four ISM methods available in the display:

Image Sticking Method	Description
Off	Does not use the ISM method.
White Wash	Refreshes the screen into white to remove the ghost image.
Orbiter	Moves the screen up/down/left/right every 2 minutes to remove the ghost image.

Image Sticking Method	Description
Inversion	Inverts the current screen color to remove the ghost image.
Dot Wash	Imposes black dots on the image, moving them every 5 seconds (only available on select models).

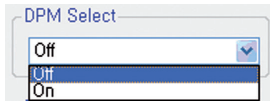
## Power indicator LED

Power Indicator LED is used to enable or disable the power indicator of the display.



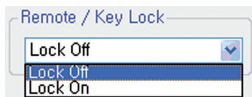
## DPM Select

**DPM Select** is used to change the display DPM (Dynamic Power Management) setting. Setting **DPM Select** to **On** will automatically switch the display into the energy-saving mode when no image signal is entered to the display.




## Remote/Key Lock

**Remote/Key Lock** is used to lock or unlock the remote control and the keys on the display. Setting **Remote/Key Lock** to **Lock On** will disable the remote control and keys on the display, preventing you from controlling the display locally with either the IR remote control or using the display control buttons.




## Ambient Light Sensor

**Ambient Light Sensor** will turn the ambient light sensor on HIGH, LOW, or OFF. HIGH will frequently adjust the backlight brightness based on input from the sensor. LOW will periodically adjust the backlight brightness based on input from the sensor. OFF will not adjust the backlight brightness.

 **NOTE:** Ambient light sensor is only available for select models.

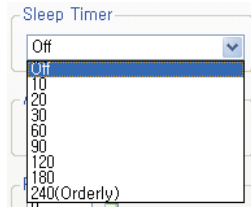
## 2D Dimming

**2D Dimming**, when turned ON, will allow the display to dynamically adjust sections of the backlight to enhance details and make blacks more black. 2D Dimming may result in lowering the overall energy utilization of the display.

 **NOTE:** 2D dimming is only available for select models.

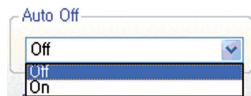
## Sleep Timer

**Sleep Timer** is used to set the timer to go to the sleep mode. Once the specified time passes, the display turns off automatically.



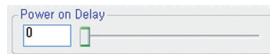
## Auto Off

**Auto Off** is used to enable or disable the auto power off function. Setting **Auto Off** to **On** will turn off the display if no image signal is detected for 10 minutes.



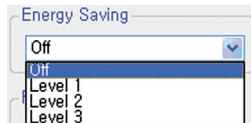
## Power On Delay

**Power On Delay** is used to adjust the slider between 0 and 100 to set the delay time before turning the display on. When turning more than one display at the same time, set Power On Delay of each display to be different from each other to protect from overload.



## Energy Saving

**Energy Saving** is used to change the energy-saving mode.



## Factory Reset

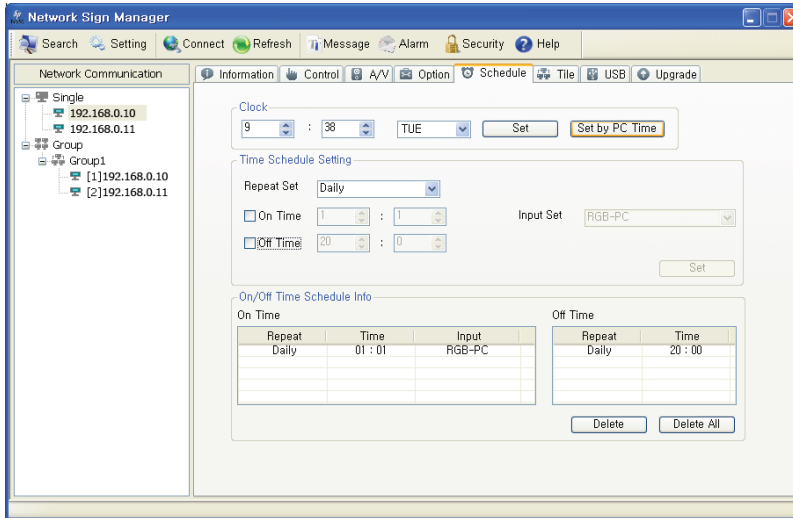
**Factory Reset** is used to reset the display to the factory default settings. Be careful with this option because all settings will be reset.



## Scheduling

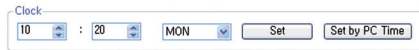
The **Schedule** tab allows you to schedule the power on and off of the display.

 **NOTE:** Screen image content varies based on model.



## Clock

**Clock** is used to set the current time of the display.



- Select hour/minute/day, and then click **Set** to complete the time setting.
- Click **Set by PC Time** to synchronize the clock of the display to the clock of the media player/computer that is installed with HP Network Sign Manager.

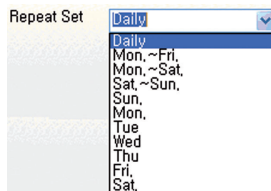
## Time Schedule Setting

**Time Schedule Setting** is used to schedule the power on/off of the display.



The following describes how to schedule the power on/off of the display:

1. Select an option in the **Repeat Set** drop-down list to set the power on/off schedule. You can set it to Daily, Monday to Friday, Monday to Saturday, Saturday to Sunday, or day of week.



- Set both **On Time** (time to turn the display on) and **Off Time** (time to turn the display off). You can specify **On Time** and **Off Time** separately by selecting each check box as shown below.

On Time 12 : 0  
 Off Time 14 : 30

- Set an input setting to use when the display is turned on – **VOE** (only available on select models), **RGB (PC)**, **DisplayPort**, or **HDMI/DVI** (only available on select models).



**NOTE:** Selecting **No change** will keep the last input setting.

- Check whether the display On/Off Time settings are correct, and then click **Set** to save the changes. You can see your display on/off schedule added under **On/ Off Time Schedule Info**.

On/Off Time Schedule Info

On Time			Off Time	
Repeat	Time	Input	Repeat	Time
Daily	12:00	No Change	Daily	14:30

## On/Off Time Schedule Info

**On/Off Time Schedule Info** is used to check and manage the power on/off schedule of the display.

- To delete the on/off schedule of the selected display, select a schedule (time) to delete, and then click **Delete**. The on/off schedules of all selected displays are deleted.

On/Off Time Schedule Info

On Time			Off Time	
Repeat	Time	Input	Repeat	Time
Daily	12:00	No Change	Daily	14:30

- To delete all schedules, select a list to delete, and then click **Delete All**. All the selected display on/off times are deleted.

On/Off Time Schedule Info

On Time			Off Time	
Repeat	Time	Input	Repeat	Time
			Daily	14:30

## Saving and loading display configuration

All display settings set in HP Network Sign Manager can be saved as a file. You can import the saved settings later when necessary.

### Saving display configuration

The following describes how to save the current display settings:

- Right-click a display for which the settings are to be saved.
- Click **Save Configuration** from the shortcut menu. The **Save As...** dialog appears.
- Enter a file name, and then click **Save**. The **Finish Save Configuration** message appears when it is successfully saved.

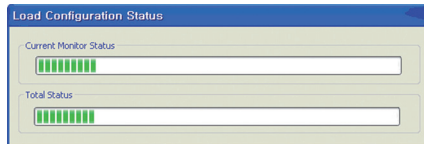
All of the settings in the **Control**, **A/V**, **Option**, and **Schedule** tabs are saved.

## Loading display configuration

You can import (load) the saved settings to restore the display settings easily.

The following describes how to import the saved display settings.

1. Right-click a display for which the settings are to be imported and restored.
2. Click **Load Configuration** from the shortcut menu. The **Open** dialog appears.
3. Select the display settings file to import, and then click **Open**. The selected settings are imported for the display, and the **Load Configuration Status** dialog shows the progress. The **Configuration load complete** message appears when they are successfully imported.




## Tile Mode

**Tile Mode** is used to set up displays in a matrix or array (video wall) so that an image can be sent to the first display in the matrix or array and extend that image across all the multiple displays in the video wall automatically by using the display's internal scalar capabilities. HP Network Sign Manager provides the capability to set up each of the displays and define the size of the matrix. Before setting up **Tile Mode**, all the displays within the matrix must be connected via a daisy chain and must be added to a **Group** in the Registration Window. The **Tile** tab can also be used to adjust the settings for select digital signage display models **Tile Mode** matrix.

### Creating a Tile Mode

1. Select the group that contains all of the displays to be used in Tile Mode (Video Wall) from the Registration Window.
2. Select the **Tile** tab. The **Tile Mode Wizard** appears as shown below.
3. To create a new **Tile Mode**, select **Create Tile Mode**. To modify a previous **Tile Mode**, select **Adjust Tile Mode**.
4. On the next screen, select the number of columns and rows in the matrix and click on the Set button. Then click **Next**.


---

 **NOTE:** The tile size cannot exceed the maximum number of displays in the selected group. The maximum size of **Tile Mode** supported is 5 x 5 video wall and the displays can be in either landscape or portrait orientation.

---

5. A graphic will appear illustrating the matrix configuration selected. Assign the display from the **Registration Window** to its position in the matrix by setting the corresponding number in the icon as shown below. After setting the number in each icon to the display number, click **Next**.

---

 **NOTE:** Use the **Add Tag** feature in the **Registration Window** to add a description to the IP address of the display to help identify the position of the display in the wall or matrix.

---

6. Select the input source to use for all of the displays within the video wall or matrix from the pull down menu. All the displays must be daisy chained using the video source selected. (See the display User Guide for details on daisy chain for **Tile Mode**.) The Group matrix should automatically show the size of the matrix.

7. After you have selected the input source and verified that the **Group** matrix values are correct, click **Next** to verify that the **Tile ID** is assigned correctly.
8. Assign **Tile ID** to each display in the matrix by setting the numbers in the display icon to the correct **Tile ID** in the matrix. This screen will change the **Tile ID** setting in each display to correspond to the ID set in each icon. Tables 1–1 through 1–4 below illustrate what the **Tile ID** will be, depending on the definition of the video wall or matrix. The **Tile ID** defines which portion of the image will be shown on each display within the wall or matrix. Display **Tile IDs** are numbered from the upper-left corner of the matrix from left to right and top to bottom. After setting the **Tile ID** for each display, click **Next**.

Tile ID in a 3x3 matrix with select Digital Signage Displays

1	2	3
4	5	6
7	8	9

Tile ID in a 5x5 matrix with select Digital Signage Displays

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

Tile ID in a 3x3 matrix with select Digital Signage Displays

1,1	1,2	1,3
2,1	2,2	2,3
3,1	3,2	3,3

Tile ID in a 5x5 matrix with select Digital Signage Displays

1,1	1,2	1,3	1,4	1,5
2,1	2,2	2,3	2,4	2,5
3,1	3,2	3,3	3,4	3,5
4,1	4,2	4,3	4,4	4,5
5,1	5,2	5,3	5,4	5,5



## Modifying a Tile Mode

The following describes how to modify the previous **Tile Mode**.

1. Select the **Tile** tab. The **Tile Mode Wizard** appears. To modify a previous **Tile Mode**, select **Adjust Tile Mode**.
2. The **Tile Mode Summary** dialog appears. Modify the **Tile Mode** as necessary.

## Tile Mode Settings

	16.9mm to 20.3mm Bezel Models	Micro Bezel Models
Identify Size of Matrix	Tile Mode: Choose the matrix dimension (HxW); OFF, 1x2, 1x3, 1x4, 1x5, 2x1, 2x2, 2x3, 2x4, 2x5, 3x1, 3x2, 3x3, 3x4, 3x5, etc. up to 5x5	H monitors: Enter Number of rows (1, 2, 3, 4, 5) V Monitors: Enter Number of columns (1, 2, 3, 4, 5)
Identify the display position within the matrix	Tile ID: Enter the number of the display within the matrix, start numbering from the top left, across and then down (1, 2, 3, 4, 5...25)	H Position: Enter column position from left to right (1, 2, 3, 4, 5) V Position: Enter row position from top to bottom (1, 2, 3, 4, 5)
Mullion Compensation	Natural Mode: OFF/ON	Natural Mode: OFF/ON
Adjust horizontal size of image	H Size: 0 to 100 pixels	N/A
Adjust vertical size of image	V Size: 0 to 100 pixels	N/A
Move screen position horizontally	H Position: +/- 10 pixels	N/A
Move screen position vertically	V Position: +/- 10 pixels	N/A
Return settings to default	Reset: Turns Tile Mode Off	Reset: Return all settings to default (1)

## Schedule and Playback contents for HP Media Sign Player (USB)

This function allows you to set the playback schedule of HP Media Sign Player. All files to play should be saved in a USB storage device and then inserted into the USB port on the display. HP Network Sign Manager allows you to schedule the start and stop time, define the play list, and define the days of the week the play list should be played. You can have only one schedule and play list defined for the display. See the HP Media Sign Player User Guide for more details. This function is only active for displays which support HP Media Sign Player. See Appendix A for a list of these displays.

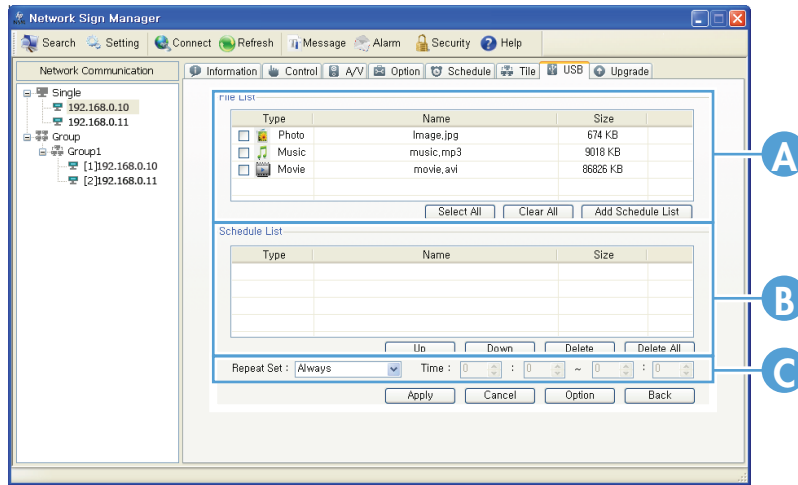
### Scheduling the playback of files

Set the playback schedule for HP Media Sign Player.

#### USB Schedule

**USB Schedule** allows you to schedule the playback of media files saved in the USB storage device connected to the display. **USB Schedule** has three sections: **File List**, **Play List**, and **Set Play List Schedule**.

 **NOTE:** Screen image content varies based on model.



**A**                      **File List**                      Lists the media files in the USB device connected to the display.

- **Select All**—Selects all media files in **File List**.
- **Clear All**—Deselects all media files in **File List**.
- **Add**—Adds the selected file to **Play List**.

**B**                      **Play List**                      Lists the media files to play on the display.

- **Up**—Moves up the selected file in **Play List**.
- **Down**—Moves down the selected file in **Play List**.
- **Delete**—Removes the selected file from **Play List**.
- **Delete All**—Removes all files from **Play List**.

**C**                      **Repeat Set**                      Schedules the playback time (duration) of the media file(s).

- **Repeat Set**—Schedules when the **Play List** should be repeated.

There are 12 options of repetition playback.

Repetition option	Description
<b>Always</b>	Repeats the <b>Play List</b> continuously. You do not need to set a specific playback schedule with this option.
<b>Daily</b>	Plays the <b>Play List</b> everyday for the specified time period.
<b>Mon–Fri</b>	Plays the <b>Play List</b> for the specified time period from Monday to Friday.
<b>Mon–Sat</b>	Plays the <b>Play List</b> for the specified time period from Monday to Saturday.
<b>Sat–Sun</b>	Plays the <b>Play List</b> for the specified time period from Saturday to Sunday.
<b>Sun</b>	Plays the <b>Play List</b> for the specified time period on Sunday.
<b>Mon</b>	Plays the <b>Play List</b> for the specified time period on Monday.
<b>Tue</b>	Plays the <b>Play List</b> for the specified time period on Tuesday.
<b>Wed</b>	Plays the <b>Play List</b> for the specified time period on Wednesday.
<b>Thu</b>	Plays the <b>Play List</b> for the specified time period on Thursday.

Repetition option	Description
<b>Fri</b>	Plays the <b>Play List</b> for the specified time period on Friday.
<b>Sat</b>	Plays the <b>Play List</b> for the specified time period on Saturday.


- **Apply**—Saves the playback schedule and the **Play List**.
- **Cancel**—Deletes the current playback schedule set for the display.
- **Option**—Sets the playback schedule option
- **Back**—Moves back to the USB function selection view.


## Saving files in the USB device


Before you schedule the playback of files, all media files to play on the display should be saved in the USB device separately. Use the Windows Explorer to save the media files to your USB device.

The following describes how to save media files directly to the USB device:

1. Connect the USB device to the media player/computer. When the USB device appears in the **My Computer** window, double-click the USB device.
2. Copy the media file(s) to play to the USB root directory.

 **NOTE:** The media files should be saved to the USB root directory; otherwise, HP Network Sign Manager will not be able to load them.


 **NOTE:** HP Network Sign Manager supports the following media file formats—Image: jpg / Video: avi / Music: mp3. When playing media files on the USB device, you can use power on, power off, volume mute, volume control, and self diagnosis (LAMP, Power).

 **NOTE:** When HP Media Sign Player is active on the display, only certain control functions are active with HP Network Manager. The active controls are power on, power off, volume mute, volume control, and self diagnosis (LAMP, Power).

## Creating the HP Media Sign Player Schedule and Play List

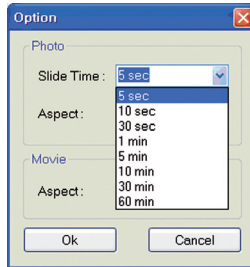
The following describes how to create the schedule and the **Play List** using the **USB Schedule** function:

1. The USB device with all the files to be played must be inserted into the display and the display must be powered on.
2. Select the display to which the USB device is connected in the **Monitor Register Window** pane, and then select the **USB** tab. The USB function selection view appears in the **Control Panel**.
3. Click the **Create Play List and Schedule Online** button. The **USB Schedule** view appears, and the files saved in the USB device are displayed in **File List**.

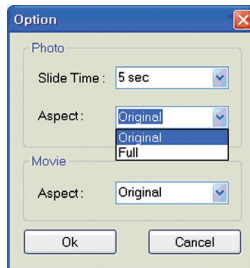
 **NOTE:** **File List** does not display the files with invalid formats which are not supported by HP Network Sign Manager, or the files not located in the USB root directory. Up to 31 characters are allowed for the file name. Up to 80 files are added to the file list.

4. Select the file(s) to schedule the playback, and then click **Add**. The files are now added to **Play List**. Use **Select All** and **Clear All** to easily select and deselect the files.
5. Change the playback order of the files in **Play List** using **Up** and **Down**.
6. Set the **Play List** schedule option.

7. Set the start and end times between 00:00 and 23:59.
8. Click **Option** to adjust the slide time interval and the aspect ratio.
9. Select one of the options in the **Slide Time** drop-down list. You can set the slide time to 5, 10, or 30 seconds, and 1, 5, 10, 30, or 60 minutes.



10. Use the **Aspect** drop-down list to adjust the aspect ratio of photos and movies. Select **Original** to keep the original aspect ratio; select **Full** to view in full screen mode. If you select **Full**, files will be scaled to fit the screen. If the files are a different aspect ratio than 16:9, the image may be distorted when the files are played in the slide show.




11. Click **OK** to complete the **Play List** schedule. The media files will be played on the display according to the **Play List** schedule.


## Toolbar

The toolbar has a collection of useful functions.




## Search

**Search**  searches the display(s) connected to the network and adds them to the **Monitor Register Window**.

 **NOTE:** Displays connected to serial communication will not be detected.

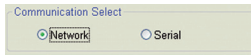
## Setting

**Setting**  allows you to set a communication method to connect to the signage display. You can select either **Network** (Ethernet) or RS-232 serial communication depending on your environment.

## Ethernet Network

To use **Network** (Ethernet) communication:

1. Under **Communication Select**, select **Network**.

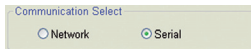


2. Click **OK** to complete.

## RS-232-C Serial Communication

To use RS-232-C serial communication:

1. Under **Communication Select**, select **Serial**.



Adjust the serial communication settings to fit your environment.

Item	Description
<b>Port</b>	Communication port (COM1 - COM9), Default: COM1
<b>Baudrate</b>	Communication speed (2400 - 115200), Default: 9600
<b>Data</b>	Communication data (Data5 - Data8), Default: Data8
<b>Parity</b>	Parity check (even, odd, none), Default: none
<b>Stop</b>	The number of stop bits (0 - 1), Default: 1 bit
<b>Flow Control</b>	Data flow (Xon/Xoff, hardware, none), Default: none

2. Click **OK** to complete.

## Connect

**Connect**  is used to reconnect HP Network Sign Manager to the network manually when the display is disconnected.


The following describes how to reconnect a specified display to the network.

1. Select a display or display group to reconnect.
2. Click **Connect**.

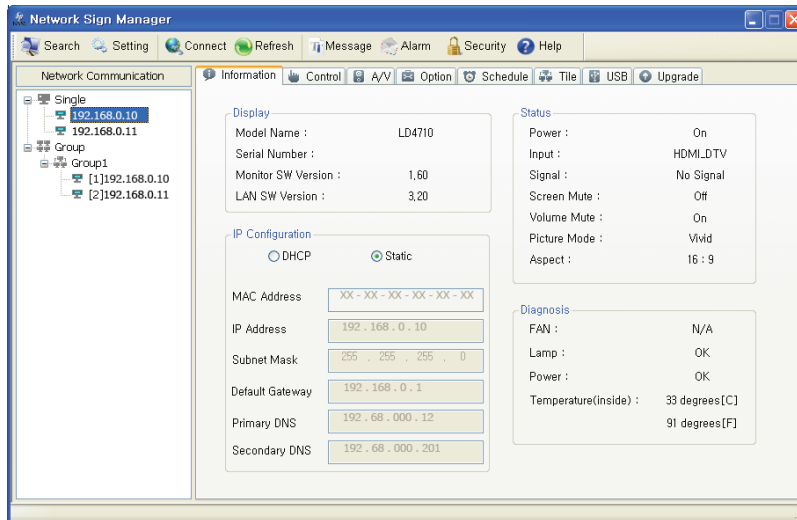


**NOTE:** This function does not support a display connected with serial communication.

## Refresh


**Refresh**  is used to refresh the information in the selected **Control Tab**. For example, select the **Information** tab, and then click **Refresh**. The information for the selected display or display group is updated.


 **NOTE:** Screen image content varies based on model.



Similarly, to view the current display settings, select a display, select the **A/V** tab, and then click **Refresh**

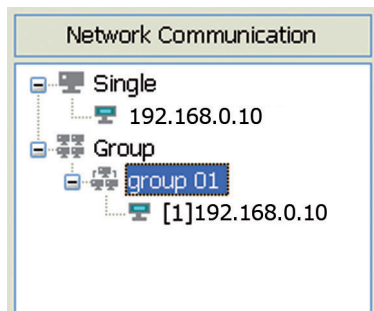
## Message

**Message**  is used to display a message you want on the selected display. You specify a message to be displayed constantly in a specific position of the screen.

 **NOTE:** Up to 60 characters are allowed in the message field.

The following describes how to use the **Message** function:

1. From **Network Communication**, select a display or display group on which you want to display a message.



- On the toolbar, click **Message**. The **Message Setting** dialog appears.



**NOTE:** If a display or display group has not been selected, the **Message Setting** dialog does not appear. The message will remain on the display until one of the following actions happens locally at the display.

Any action button on the IR Remote Control is pressed (Example: BACK, TILE, EXIT, INPUT, ARC/ MARK, PSM, BRIGHTNESS, MENU, AUTO, USB, MUTE.)

A play list created with HP Network Sign Manager is playing and the next image is displayed.

A button on the display control panel is pressed.


- Set the position, color, and content of the message displayed on the display. Each time the Message Setting dialog box is launched, the text field will be blank. The message may include any alphanumeric character and the following special characters – ! ( ) - + : , . / ?.

Item	Description
<b>Message Align</b>	Sets the position where the message is displayed by clicking on the appropriate button.
<b>Message Color</b>	Selects a color of the message displayed. Selecting a different color will also automatically change the color of the test message being displayed on the selected display or display group in real time without having to press the SEND button
<b>Message Send</b>	Enters the content of the message displayed. The counter indicates how many characters you have used of the 60 characters allowed.

- Click **Send** to send the created message.

Item	Description
<b>Send</b>	Displays the created message on the selected display or display group.
<b>Clear</b>	Clears the text message on the selected display or display group.
<b>Close</b>	Closes the <b>Message Send</b> dialog.

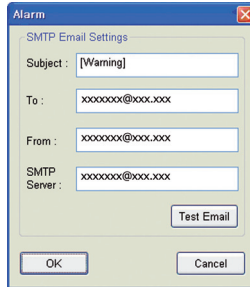
## Alarm

**Alarm**  is used to automatically send an alert email to the designated email address if an error is detected during self-diagnosis. This function is activated when:

- The network connection is not normal (except for serial communication).
- An error in the lamp or temperature is detected during self-diagnosis.
- The ID or password is changed.

Before using this function, you need to configure the SMTP email settings. The following describes how to configure the SMTP email:

1. On the toolbar, select **Alarm**. The **Alarm** dialog appears.




2. To send an alert email automatically to the administrator, set the following fields:

Item	Description
<b>Subject</b>	Enter the subject.
<b>To</b>	Enter the email address of the administrator.
<b>From</b>	Enter the email address of the sender.
<b>SMTP Server</b>	Enter the host name or IP address of the SMTP server to use.  <b>NOTE:</b> HP Network Sign Manager cannot use the <b>Alert Mail</b> function if the specified SMTP server requests the ID and password of the email sender.

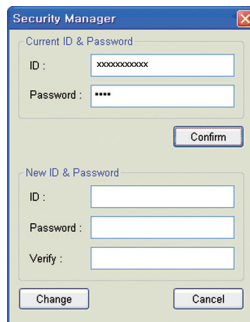
3. Once all fields are filled, click **Test Email**.
4. Check that the alert email was successfully sent to the email address that you specified.
5. Click **OK** to save the SMTP mailing settings. The **Alert Mail** function is now activated.

## Security

**Security**  **Security** is used to change the ID and password of the administrator to be used when logging in to HP Network Sign Manager.

The following describes how to change the administrator ID and password:

1. On the toolbar, select **Security**. The **Security Manager** dialog appears.




2. Under **Current ID & Password**, enter the current administrator **ID** and **Password**, and then click **Confirm**.



**NOTE:** You cannot create a new account if an invalid **ID** or **Password** is entered. The **ID** and **Password** are case sensitive.




3. The fields under **New ID & Password** are enabled. Enter a new administrator **ID** and **Password** that you want to use. Enter the same password again in the **Verify** field.

 **NOTE:** The default **ID** and **Password** of HP Network Sign Manager are “**administrator**” and “**0000**” respectively.

4. Click **Change** to apply changes. You should use the changed ID and password the next time that you log into HP Network Sign Manager.

## Help

**Help**  displays information about the HP Network Sign Manager program.

## Log history

All events that occurs in HP Network Sign Manager, including button operations, network connection history, and display failures, are automatically saved in a log file.

### Log data

Item	Description
Date	The date when the event is generated.
Time	The time when the event is generated.
IP Address	The IP address of the display from which the event is generated.
Operation	The operation when the event is generated.

### Log file name and location

The log file is saved in the directory where HP Network Sign Manager is installed. The file name will vary depending on the communication settings of HP Network Sign Manager.

Communication method	File name
For network communication	Network_HistoryReport.txt
For serial communication	Serial_HistoryReport.txt