



LG

Life's Good

English

OWNER'S MANUAL

NETWORK MONITOR

Please read the safety information carefully before using the product.

Network Monitor Model
N2210WZ

www.lg.com

TABLE OF CONTENTS

3 ASSEMBLING AND PREPARING

- 3 Unpacking
- 4 Parts and buttons
- 6 Setting Up the Monitor set
 - 6 - Attaching the Stand Base
 - 6 - Detaching the stand base
 - 7 - Adjusting the stand height
 - 7 - Adjusting the angle
 - 8 - Mounting on a table
 - 8 - Using the Kensington locking device
 - 9 - Detaching the stand body
 - 9 - Swivel stand
 - 9 - Installing the wall mount plate
 - 10 - Mounting on a wall

11 USING THE MONITOR SET

- 11 Connecting Input Signal Cable
 - 11 - D-SUB IN connection - PC
 - 11 - D-SUB OUT connection - PCoIP
 - 12 - DVI connection - PCoIP
- 13 Connecting LAN/Peripherals
 - 13 - LAN connection - PCoIP
 - 14 - Peripheral device connection
 - 15 - Self Image Adjustment

16 CUSTOMIZING SETTINGS

- 16 Accessing The Main Menus
- 17 MENU Settings
 - 17 - Picture
 - 18 - Color
 - 19 - Display
 - 19 - Volume (Only supported in PCoIP)
 - 20 - Others
- 21 AUTO Settings : D-SUB Input
- 21 **↔** Settings : PCoIP Input

22 TROUBLESHOOTING

24 PRODUCT SPECIFICATION

- 25 Preset Mode
- 25 Power Indicator

26 PROPER POSTURE

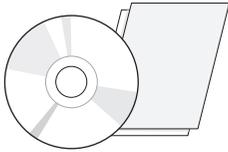
- 26 Proper posture for using the monitor

27 USING PCOIP SOLUTION

ASSEMBLING AND PREPARING

Unpacking

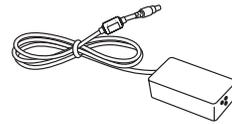
Please check whether all the components are included in the box before using the product. If there are missing components, contact the retail store where you purchased the product. Note that the product and components may look different from those shown here.



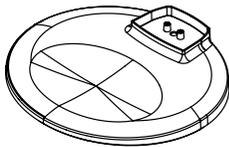
User Manual/Card



Power Cord



Adaptor



Stand Base



15-pin D-SUB Signal Cable



CAUTION

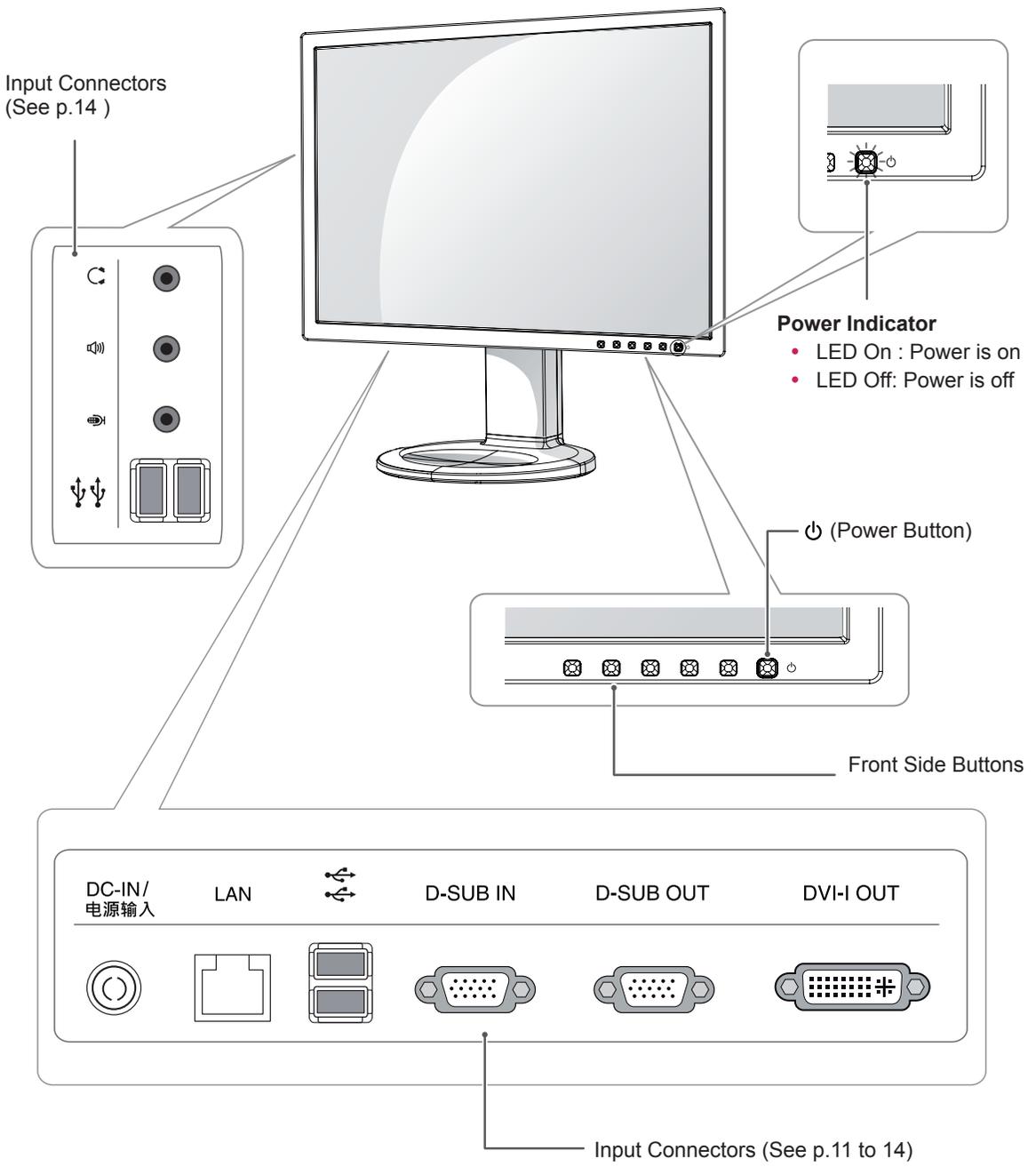
- Only use an approved LG power adapter.
- Damage caused by other power adapters is not covered by warranty.



NOTE

- Note that the components may look different from those shown here.
- Without prior notice, all information and specifications in this manual are subject to change to improve the performance of the product.
- To purchase optional accessories, visit an electronics store or online shopping site or contact the retail store where you purchased the product.

Parts and buttons



| Button | Description | |
|--------------------------|--|--|
| MENU | Activates the main menu. | |
| | OSD Lock/Unlock Functions | Locks/unlocks the OSD screen. <ul style="list-style-type: none"> To lock the OSD screen, press and hold the MENU button for several seconds. The "OSD LOCKED" message will be displayed and the screen will be locked. To unlock the OSD screen, press and hold the MENU button again for several seconds. The "OSD UNLOCKED" message will be displayed and the screen will be unlocked. |
| VOLUME (Only PCoIP mode) | Adjust the volume of the Monitor set. (See p.19) | |
| AUTO | To adjust the monitor settings, press the AUTO button on the MONITOR SETUP OSD menu (only supported for analog signal). For optimal screen display, use the following resolution. | |
| | Optimal Resolution | 1680 x 1050 |
| INPUT | Allows selection of the input signal. <ul style="list-style-type: none"> If you connect the monitor to a computer using a D-SUB cable, select either the PCoIP or D-SUB input signal. If only one computer is connected to the monitor, the input signal is detected automatically. The initial input signal is PCoIP. | |
| EXIT | Exits the OSD menu. | |
| ⏻ (Power Button) | <ul style="list-style-type: none"> D-SUB Input: Power On/Off PCoIP Input Monitor Off: Press the power button and wait for 5 seconds. PCoIP Off: Press the power button twice. PCoIP On: Press the power button. Remote PC Power Control: Press the power button for at least five seconds to turn the PC on/off. * To use the Remote PC Power Control function, separate settings are required for the PC. | |
| | Power Indicator | When the monitor is in operating mode, the power indicator will turn white (on mode). When the monitor is in power saving mode, the power indicator will blink white. |

Setting Up the Monitor set

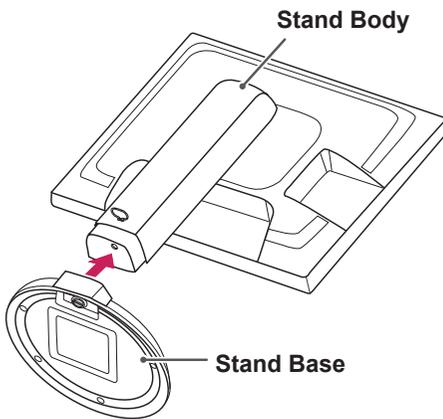
Attaching the Stand Base

- 1 Place the monitor's screen face down.

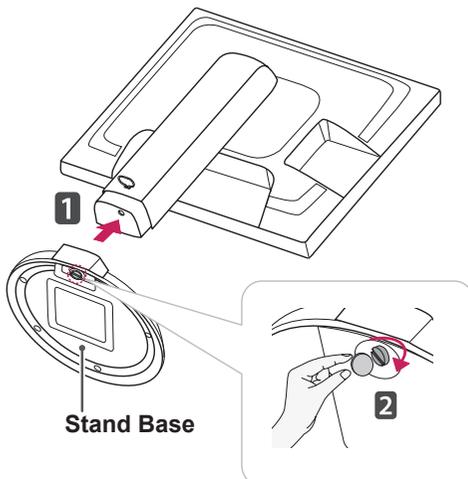
CAUTION

- To protect the screen from scratches, cover the surface with a soft cloth.

- 2 Check the **position (at the front and rear)** of the stand body, then mount the **stand base** on the **stand body** as shown in the figure.

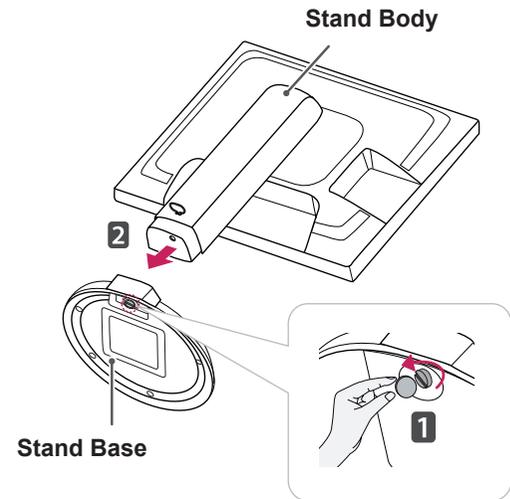


- 3 Using a coin, turn the screw clockwise to secure the **stand base**.



Detaching the stand base

- 1 Place the monitor's screen face down.
To protect the screen from scratches, cover the surface with a soft cloth.
- 2 Using a coin, turn the screw in the stand base counterclockwise. Detach the **stand base** from the **stand body**.



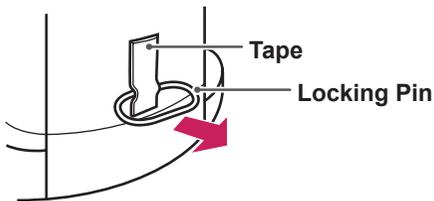
CAUTION

- The components appearing in the illustrations may look different from the actual product.
- Do not carry the monitor upside-down as this may cause it to fall off its stand, resulting in damage or injury.
- To avoid damaging the screen when lifting or moving the monitor, only hold the stand or the plastic cover. This avoids putting unnecessary pressure on the screen.
- Only remove the tape and the locking pin when the monitor is mounted on the stand base and is in an upright position. Otherwise, the stand body may protrude, which may lead to injury.

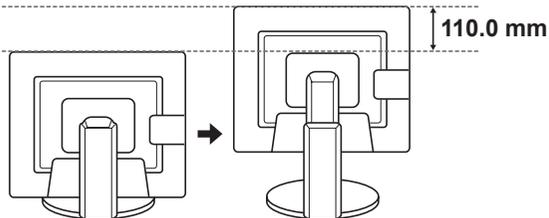
Adjusting the stand height

- 1 Place the monitor mounted on the stand base in an upright position.
- 2 Remove the **tape** attached at the bottom rear of the **stand body**, then pull out the **locking pin**.

Stand Body



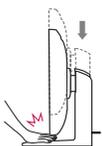
- 3 The height can be adjusted up to **110 mm**.



CAUTION

- Once the pin is removed, it is not necessary to re-insert it to adjust the height.

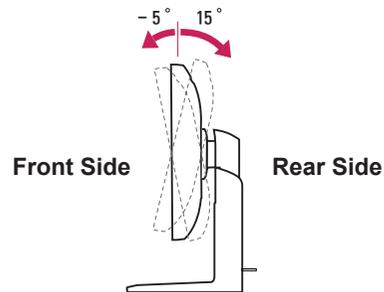
WARNING



- Do not put your finger between the screen and the base (chassis) when adjusting the screen's height.

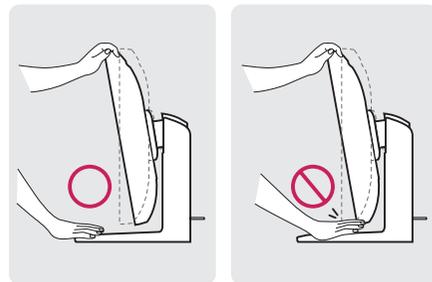
Adjusting the angle

- 1 Place the monitor mounted on the stand base in an upright position.
- 2 Adjust the angle of the screen. The angle of the screen can be adjusted up to 15° forwards and 5° backwards for a comfortable viewing experience.

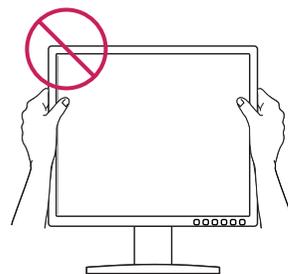


WARNING

- To avoid injury to the fingers when adjusting the screen, do not hold the lower part of the monitor's frame as illustrated below.



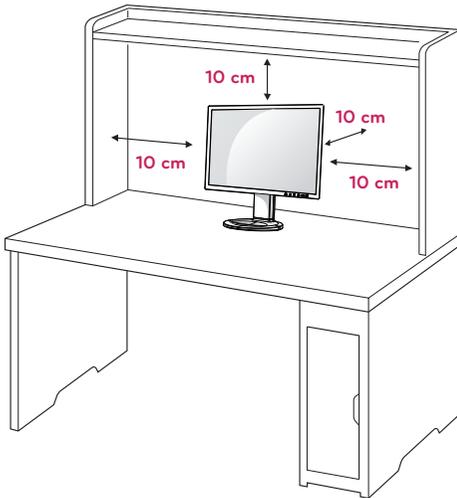
- Be careful not to touch or press the screen area when adjusting the angle of the monitor.



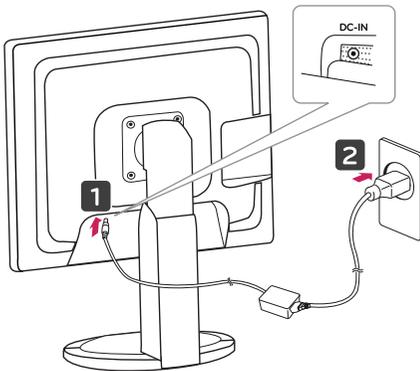
Mounting on a table

- 1 Lift the monitor and place it on the table in an upright position.

Install at least **10 cm** away from the wall to ensure sufficient ventilation.



- 2 Connect the adaptor to the monitor, then plug the power cord into the wall outlet.



- 3 Press the ⏻ (Power) button on the front of the monitor to turn on the monitor.



CAUTION

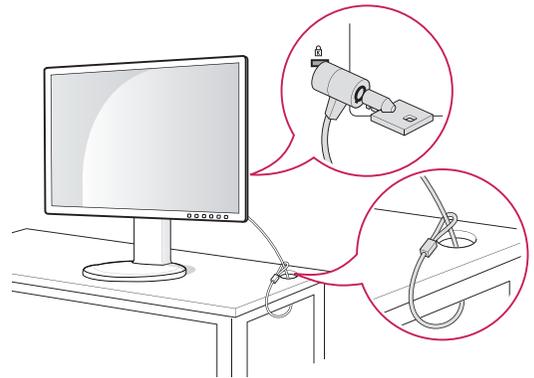
- Unplug the power cord prior to moving or installing the monitor. There is risk of electric shock.

Using the Kensington locking device

The connector for the Kensington lock is located on the rear of the monitor.

For more information on installation and usage, refer to the Kensington lock user manual or visit the website at <http://www.kensington.com>.

Connect the monitor to the table with the Kensington lock cable.

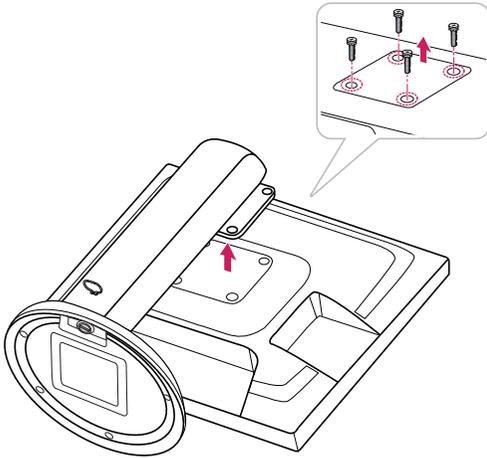


NOTE

- Using the Kensington lock is optional. The accessories can be purchased at your local electronics store.

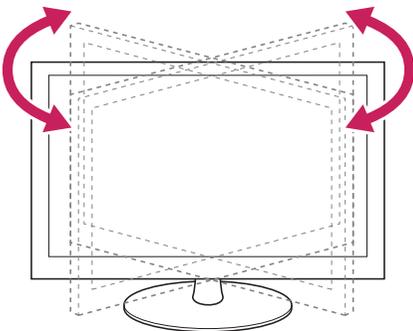
Detaching the stand body

- 1 Place the monitor's screen face down. To protect the screen from scratches, cover the surface with a soft cloth.
- 2 Using a screwdriver, remove the four screws and detach the stand from the monitor.



Swivel stand

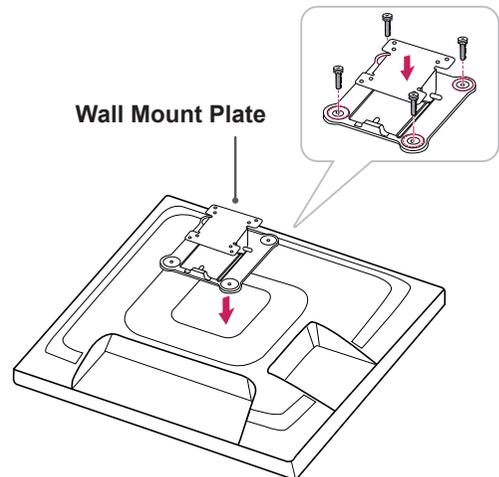
- Image shown may differ from your Monitor set.
- 1 Swivel 356 degrees and adjust the angle of the Monitor set to suit your view.



Installing the wall mount plate

This monitor has a VESA compatible mount on the back. Most mounts will require an LG mounting plate.

- 1 Place the monitor's screen face down. To protect the screen from scratches, cover the surface with a soft cloth.
- 2 Place the wall mount plate on the monitor and align it with the screw holes on the monitor.
- 3 Using a screwdriver, tighten the four screws to fix the plate onto the monitor.

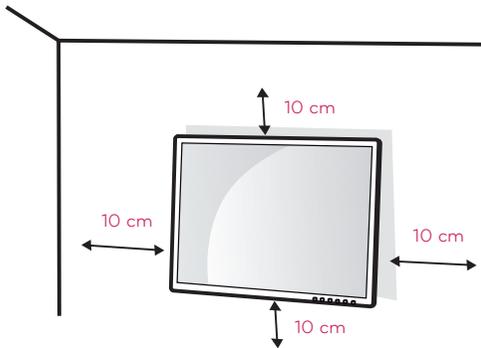


! NOTE

- The wall mount plate is sold separately.
- For more information on the installation, refer to the wall mount plate's installation guide.

Mounting on a wall

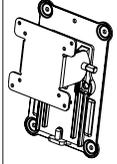
Install the monitor at least 10 cm away from the wall and leave about 10 cm of space at each side of the monitor to ensure sufficient ventilation. Detailed installation instructions can be obtained from your local retail store. Please refer to the manual to install and set up a tilting wall mounting bracket.



If you intend to mount the Monitor set to a wall, attach Wall mounting interface (optional parts) to the back of the set.

When you install the Monitor set using a wall mounting interface (optional parts), attach it carefully so it will not drop.

- 1 Please, Use the screw and wall mount interface in accordance with VESA Standards.
- 2 If you use screw longer than standard, the monitor might be damaged internally.
- 3 If you use improper screw, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for it.
- 4 VESA compatible.
- 5 Please use VESA standard as below.
 - 784.8 mm (30.9 inch) and under
 - * Wall Mount Pad Thickness : 2.6 mm
 - * Screw : Φ 4.0 mm x Pitch 0.7 mm x Length 10 mm
 - 787.4 mm (31.0 inch) and above
 - * Please use VESA standard wall mount pad and screws.

| | |
|------------------------------------|---|
| Model | N2210WZ |
| VESA (A x B) | 75 x 75 |
| Stand Screw | M4 |
| Required Screw | 4 |
| Wall Mount Plate (Optional) | RW120  |

CAUTION

- Unplug the power cord before moving or installing the monitor to avoid electric shocks.
- Installing the monitor on the ceiling or on a slanted wall may result in the monitor falling off, which could lead to injury. Please use a LG wall mounting bracket when using a VESA mount. For more information, contact your local retail store or a qualified installer.
- Applying excessive force when fastening screws may cause damage to the monitor. Damage caused in this way will not be covered by the product warranty.
- Use the wall mounting bracket and screws that conform to the VESA standard. Damage caused by the use or misuse of inappropriate components will not be covered by the product warranty.

NOTE

- Use the screws specified in the VESA standard.
- The wall mount kit includes the installation guide and necessary parts.
- The wall mounting bracket is optional. The accessories can be purchased at your local retail store.
- The length of the screw may differ for each wall mounting bracket. Ensure the correct length of the screw is used.
- For more information, please refer to the user manual for the wall mounting bracket.

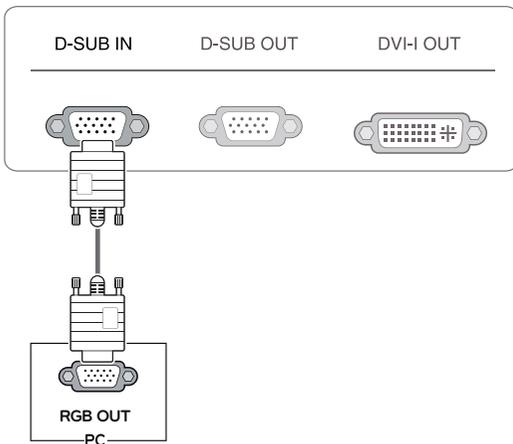
USING THE MONITOR SET

Connecting Input Signal Cable

- This monitor supports the *Plug and Play feature.
*Plug and Play: A feature that allows you to add a device to your computer, without having to reconfigure anything or install any manual drivers.

D-SUB IN connection - PC

D-SUB IN transfers analog video signals from the PC to the monitor.
Connect the monitor to the PC using the provided 15-pin D-SUB signal cable as illustrated below.



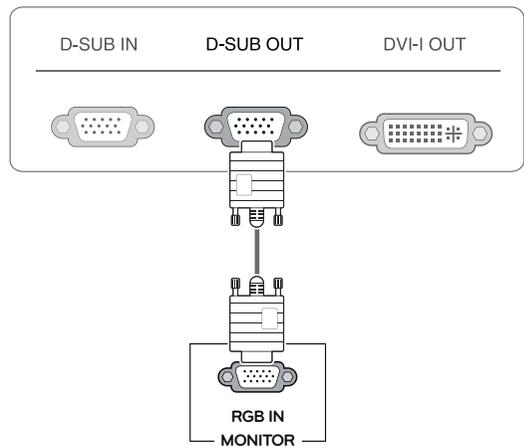
NOTE

- When using this device simply as a regular monitor through the RGB IN port, set "PCoIP" to OFF in MENU > OTHERS to reduce energy consumption.

D-SUB OUT connection - PCoIP

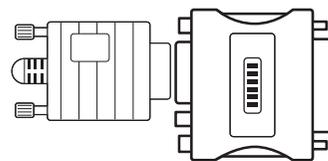
D-SUB OUT can only mirror the image displayed on the monitor. (it does not support an extended desktop).

Connect the monitor to the PC using the provided 15-pin D-SUB signal cable as illustrated below.



NOTE

- When using a Macintosh D-SUB input cable

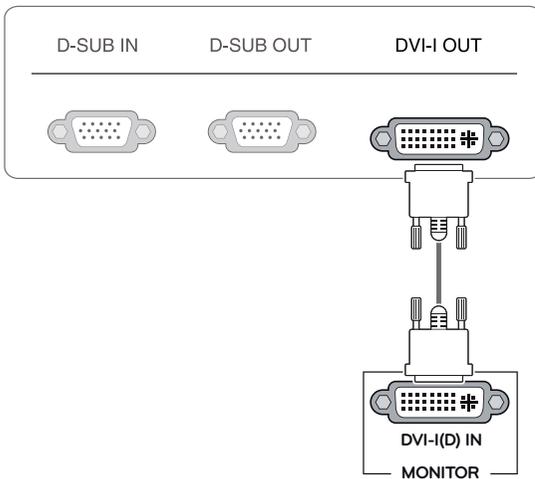


- Macintosh Adaptor: Use the standard Macintosh adaptor. Other commercial adaptors may not be compatible (due to the signaling difference).

DVI connection - PCoIP

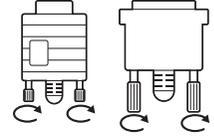
Transfers digital video signals to another monitor. Connect the monitor using the DVI cable as illustrated below.

This connection is used to support an extended monitor or replicate the image displayed on the monitor.



CAUTION

- Connect the input signal cable and tighten in the direction of the arrow. To prevent disconnection secure the cable tightly.
- Do not press on the screen for a prolonged time. This may cause image distortion.
- Do not display a still image on the screen for a prolonged time. This may cause image retention. If possible, use the screen saver.



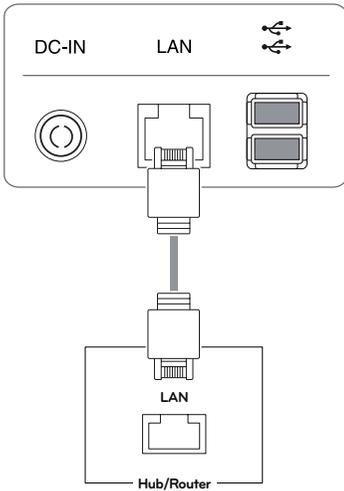
NOTE

- To connect the monitor to a computer, use the appropriate signal cable (LAN and D-SUB).
- A converter can be used to convert the DVI-I input signal to D-SUB input signal.
- When connecting the power cord to the outlet, use a grounded (3-hole) multi-socket or a grounded wall outlet.
- The monitor may flicker when turned on in an area of low temperature. This is normal.
- Sometimes red, green or blue spots may appear on the screen. This is normal.

Connecting LAN/Peripherals

LAN connection - PCoIP

The LAN connection transmits PCoIP signals to the monitor. Connect the router or switch to the monitor using a LAN cable as illustrated below.



! NOTE

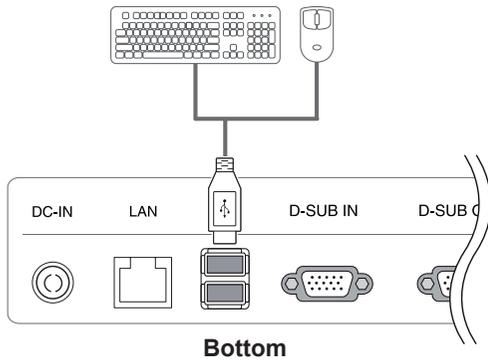
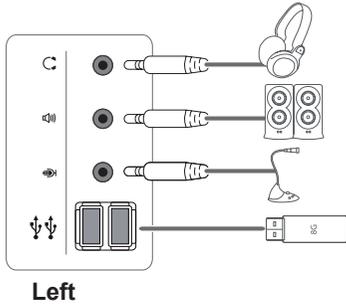
- The LAN cable is sold separately.
- The following LAN cable type can be used:
Standard: IEEE 802.3 ETHERNET
- When connecting the Earphone Out or Line Out through the LAN, use the volume icon on the taskbar of your PC to adjust the volume.

! NOTE

- Connect the LAN cable and the peripheral devices prior to booting up the PC.

Peripheral device connection

Connect peripheral devices to the monitor using USB, headphone, speaker, and microphone ports.



! NOTE

- Peripheral devices are sold separately.
- The USB ports on the left and bottom of the monitor can be used to connect the keyboard, mouse, and other USB devices.
- Cables with angled plugs may have clearance issues, use straight plugs when possible.



Angle Type



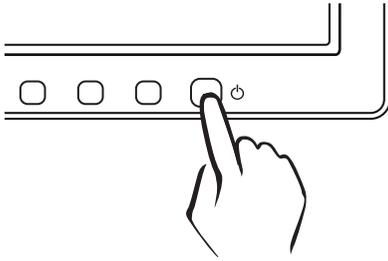
Straight Type

! NOTE

- Headphones, speakers or microphone may not work normally, depending on the server PC settings.
- Virtual solutions may affect the functions or speed of the specific USB storage device.

Self Image Adjustment

Press the power button on the front to turn on the monitor. When powered on, the **"Self Image Adjustment"** function will run automatically (only available for analog [D-SUB input] signals).



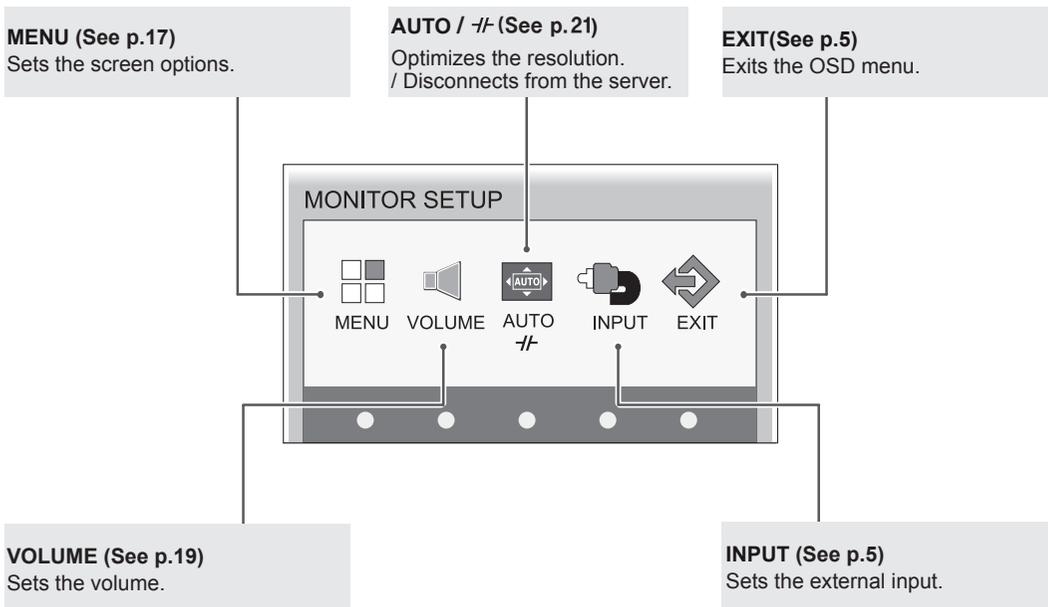
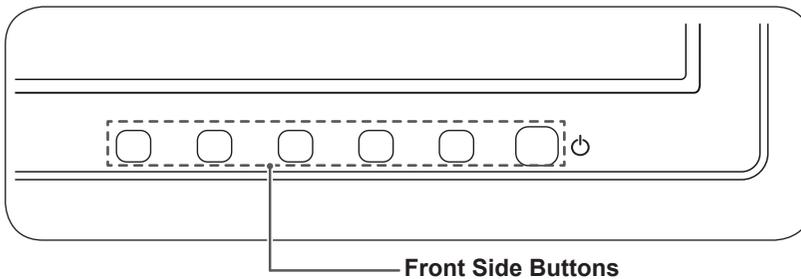
! NOTE

- What is "Self Image Adjustment"? This function runs when the monitor is connected for the first time and performs automatic image adjustment for each signal (only available for analog [D-SUB input] signals) to provide an optimal screen display.

CUSTOMIZING SETTINGS

Accessing The Main Menu

- 1 Press any button on the front of the monitor to display the MONITOR SETUP OSD menu.
- 2 Press to select the desired menu item.
- 3 To change the settings of the selected item press the buttons on the front of the monitor.
To return to the upper menu or set other menu items, use the up arrow (↑) button.
- 4 Select EXIT to leave the OSD menu.



! NOTE

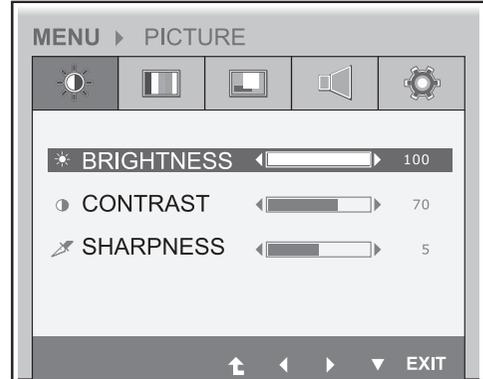
Different menu items are enabled depending on the type of input signal.

- **D-SUB Input:** MENU, AUTO, INPUT, EXIT
- **PCoIP Input:** MENU, VOLUME, +/-, INPUT, EXIT
- The language of the monitor's OSD menu and that of the OSD menu illustrated in the CD-ROM manual may be different.

MENU Settings

Picture

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 Press the **MENU** button to display the options in the OSD menu.
- 3 Set the options by pressing the buttons on the front of the monitor.
- 4 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.



Each option is explained below.

| Menu | Analog (D-SUB) | PCoIP | Description |
|-------------------|----------------|-------|------------------------------------|
| BRIGHTNESS | • | • | Sets the brightness of the screen. |
| CONTRAST | • | • | Sets the contrast of the screen. |
| SHARPNESS | • | • | Sets the sharpness of the screen. |

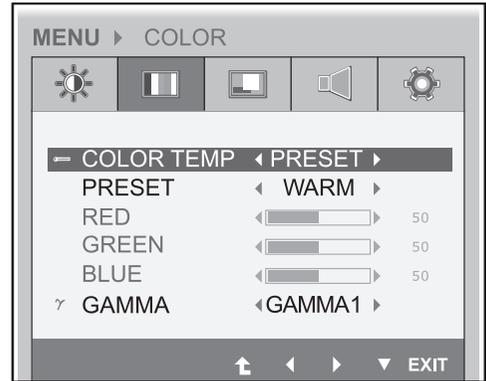
- Analog: D-SUB (analog signal) input. PCoIP: Internal signal through the LAN.

! NOTE

- If the screen is not displayed properly after adjusting the settings, use the "FACTORY RESET" option to revert back to the factory default settings. If necessary, enable the "WHITE BALANCE" option again. This option is enabled only for analog (D-SUB) signals.

Color

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 Press the **MENU** button to display the options in the OSD menu.
- 3 Set the options by pressing the buttons on the front of the monitor.
- 4 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.



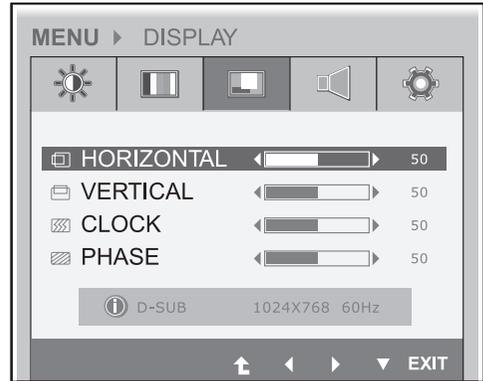
Each option is explained below.

| Menu | Analog (D-SUB) | PCoIP | Description | |
|-------------------|----------------|-------|---|---|
| COLOR TEMP | • | • | Allows PRESET or USER to be selected. | |
| PRESET | • | • | sRGB | Sets the screen color according to the sRGB color standard. |
| | | | WARM | Sets the screen color to a reddish tone. |
| | | | MEDIUM | Sets the screen color between the reddish and bluish tone. |
| | | | COOL | Sets the screen color to a bluish tone. |
| USER | • | • | You can customize the picture color using Red, Green, and Blue colors. | |
| GAMMA | • | • | Sets the clarity of the screen. The gamma value can be set to 0, 1 or 2, from darker to brighter screen colors respectively. | |

- **Analog: D-SUB (analog signal) input. PCoIP: Internal signal through the LAN.**

Display

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 Press the **MENU** button to display the options in the OSD menu.
- 3 Set the options by pressing the buttons on the front of the monitor.
- 4 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.



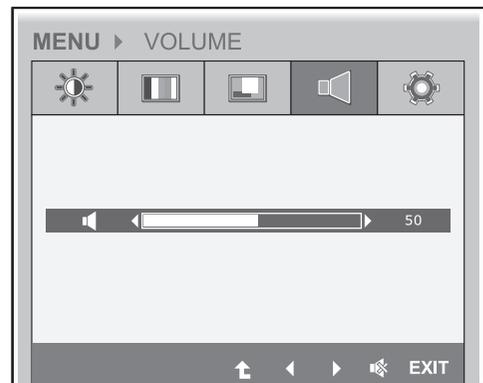
Each option is explained below.

| Menu | Analog (D-SUB) | PCoIP | Description |
|-------------------|----------------|-------|---|
| HORIZONTAL | • | x | Moves the display area left or right. |
| VERTICAL | • | x | Moves the display area up or down. |
| CLOCK | • | x | If vertical lines are shown on the screen, adjust the frequency to minimize the lines and adjust the screen's horizontal width. |
| PHASE | • | x | Adjusts the focus of the screen's image. Use when frequencies are shown on the screen or when the text appears overlapped. For optimal results, use this option after adjusting the "CLOCK" option. |

- **Analog: D-SUB (analog signal) input. PCoIP: Internal signal through the LAN.**

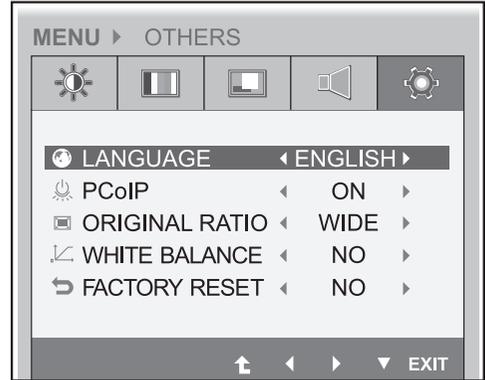
Volume (Only supported in PCoIP)

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 Press the **MENU** button to display the options in the OSD menu.
- 3 Set the options by pressing the buttons on the front of the monitor.
- 4 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.



Others

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 Press the **MENU** button to display the options in the OSD menu.
- 3 Set the options by pressing the buttons on the front of the monitor.
- 4 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.



Each option is explained below.

| Menu | Analog (D-SUB) | PCoIP | Description |
|--|----------------|-------|---|
| LANGUAGE | • | • | Sets the menu screen to the desired language. |
| PCoIP | • | • | Allows the PCoIP to be turned ON or OFF. |
| | | | If PCoIP is ON If you switch to D-SUB input, PCoIP continues to be turned on. If PCoIP is OFF If you switch to D-SUB input, PCoIP will be turned off. |
| <div style="border: 1px solid black; padding: 5px;"> <p>NOTE</p> <ul style="list-style-type: none"> The factory default is set to OFF. If you use it for the normal PC usage only, turn off the PCoIP mode to save energy consumption. </div> | | | |
| ORIGINAL RATIO | • | x | WIDE |
| | | | Switch to full screen mode according to input image signal. |
| WHITE BALANCE | • | x | ORIGINAL |
| | | | Change the input image signal ratio to original. * This function works only if input resolution is lower than Monitor set ratio (16:9). |
| FACTORY RESET | • | • | If the video card output is different from the specified level, the color may appear to have altered due to the video signal distortion. The white balance adjusts the output signal level to correspond to that of the standard signal, thus providing optimal display. Run this option when the screen displays an image with both white and black. |
| FACTORY RESET | • | • | Resets the screen to the factory default settings. Note that the language option will not be reset. |

- **Analog: D-SUB (analog signal) input. PCoIP: Internal signal through the LAN.**

AUTO Settings : D-SUB Input

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 Press the **AUTO** button to automatically adjust the screen.
- 3 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.

PROCESSING AUTO IMAGE ADJUSTMENT
FOR OPTIMAL DISPLAY
CHANGE RESOLUTION TO 1680 x 1050

Pressing the AUTO button allows the monitor to automatically optimize the screen to the current display mode.

If you are not satisfied with the optimized screen, you can manually adjust the position of the display area, frequency, phase and sharpness in the OSD menu.

(Only available for D-SUB [analog] signals. Note that the sharpness setting is only available for digital signals.)

! NOTE

- What is "Auto Image Adjustment"? The Auto Image Adjustment option allows you to improve the picture quality if the screen is dimmed, if the text appears blurred or spread, if the screen flickers or if the display area is not centered after adjusting the resolution. (Only available for D-SUB [analog] signals.)

⚡ Settings : PColP Input

- 1 Press any button on the front of the monitor to display the **MONITOR SETUP** OSD menu.
- 2 ⚡ Press the button for at least three seconds to disconnect from the server.
- 3 Select **EXIT** to leave the OSD menu.
To return to the upper menu or set other menu items, use the up arrow (↑) button.

In PColP mode, press the button for at least three seconds to disconnect from the server.

TROUBLESHOOTING

| Nothing is displayed on the screen | |
|---|---|
| Is the monitor's power cord plugged in? | <ul style="list-style-type: none"> • Check if the power cord is correctly plugged in to the outlet. |
| Is the power indicator on? | <ul style="list-style-type: none"> • Check the power indicator. |
| Is the power indicator displaying as white? | <ul style="list-style-type: none"> • Adjust the brightness and the contrast. |
| Is the power indicator blinking? | <ul style="list-style-type: none"> • If the monitor is in power saving mode, move the mouse or press any key on the keyboard to switch the display on. • Check if the computer is turned on. |
| Is the "OUT OF RANGE" message displayed? | <ul style="list-style-type: none"> • This occurs when signals transferred from the PC (video card) are out of the horizontal or vertical frequency range of the monitor. Please see the "Product Specification" section of this manual to set the appropriate frequency. |
| Is the "CHECK SIGNAL CABLE" message is displayed? | <ul style="list-style-type: none"> • This is displayed when the signal cable between the PC and the monitor is missing or disconnected. Check the cable and reconnect. |

| The "OSD LOCKED" message is displayed. | |
|--|--|
| Is the "OSD LOCKED" message displayed when the MENU button is pressed? | <ul style="list-style-type: none"> • The OSD lock feature is enabled to prevent undesired modification of the OSD settings. Press and hold the MENU button for a couple of seconds to unlock the OSD. (The "OSD UNLOCKED" message will be displayed.) |

| The screen retains an image. | |
|--|---|
| Does image sticking occur even when the monitor is turned off? | <ul style="list-style-type: none"> • Displaying a still image for a prolonged time may cause damage to the screen, resulting in the retention of the image. • Use a screen saver to protect the screen when using the monitor for a prolonged period of time. |



NOTE

- **Vertical Frequency:** In order to display an image, the screen must be refreshed dozens of times per second like a fluorescent lamp. The number of times the screen is refreshed per second is called vertical frequency or refresh rate and is represented by Hz.
- **Horizontal Frequency:** The time it takes to display one horizontal line is called the horizontal cycle. The number of horizontal lines displayed in one second can be calculated by dividing one by the horizontal cycle. This is called horizontal frequency and is represented by kHz.

| The image is displayed abnormally. | |
|--|--|
| Does the display area appear un-centered? | Pressing the AUTO button will automatically optimize the screen to the current display mode. |
| Does the screen exhibit vertical lines? | Pressing the AUTO button will automatically optimize the screen to the current display mode. |
| Does the screen display horizontal frequencies, or does the text appear blurred? | Pressing the AUTO button will automatically optimize the screen to the current display mode. |

 **NOTE**

- Check if the video card's resolution or frequency is within the range allowed by the monitor and set to the recommended (optimal) resolution in **Control Panel > Display > Settings**.
- Failing to set the video card to the recommended (optimal) resolution may result in blurred text, a dimmed screen, a truncated display area or misalignment of the display.
- The configuration procedure may differ depending on your computer and/or operating system. Also, some video cards may not support certain resolutions. If this is the case, contact the computer or video card manufacturer for assistance.
- The AUTO option is only available for D-SUB (analog) signals.

| The display color is abnormal. | |
|--|--|
| Does the display color appear dis-colored (16 color)? | <ul style="list-style-type: none"> • Set the color to 24 bit (true color) or higher. In Windows, go to Control Panel > Display > Settings > Color Quality. |
| Does the display color appear unstable or in monochrome? | <ul style="list-style-type: none"> • Check if the signal cable is connected properly. Re-connect the cable or re-insert the PC's video card. |
| Are there spots on the screen? | <ul style="list-style-type: none"> • When using the monitor, pixilated spots (red, green, blue, white or black) may appear on the screen. This is normal for the LCD screen. It is not an error nor is it related to the monitor's performance. |

PRODUCT SPECIFICATION

| | | |
|----------------------------|---|--|
| LCD Screen | Type | 558 mm (22 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Screen Diagonal length of the screen: 558 mm |
| | Pixel Pitch | 0.282 mm x 0.282 mm |
| Resolution | Maximum Resolution | 1680 x 1050 @ 60 Hz |
| | Recommended Resolution | 1680 x 1050 @ 60 Hz |
| Video Signal | Horizontal Frequency | 30 kHz to 66 kHz |
| | Vertical Frequency | 57 Hz to 63 Hz |
| | Synchronization | Separate Sync/PCoIP |
| Input Connector | 15-pin D-SUB (Analog), 10/100/1000Mbps RJ45 (PCoIP) | |
| Power | 19 V --- 3.2 A | |
| | Power Consumption: PCoIP/D-SUB | On Mode: 42 W/28 W (Typical) Power Saving Mode ≤ 16 W/1 W Off Mode ≤ 1 W |
| AC/DC Adapter | Type PA-1650-68, manufactured by LITE-ON TECHNOLOGY CORPORATION. OUTPUT: 19 V --- 3.42 A | |
| Dimension/ Weight | Monitor Size (Width x Height x Depth) | |
| | With Stand | 506.4 mm x 368.9 mm x 224.4 mm |
| | Without Stand | 506.4 mm x 333.2 mm x 59.1 mm |
| Weight (Without Packaging) | 4.2 kg | |
| Stand Angle Adjustment | Forwards/Backwards: -5° to 15° (Monitor) | |
| Environment Condition | Operating Condition | Temperature: 10°C to 35°C; Humidity: 10% to 80% |
| | Storing Condition | Temperature: -20°C to 60°C; Humidity: 5% to 90% |

The specifications are subject to change without notice.

Preset Mode

| Display Modes (Resolution) | Horizontal Frequency (kHz) | Vertical Frequency (Hz) | Polarity (H/V) | Remark |
|----------------------------|----------------------------|-------------------------|----------------|------------------|
| 720 x 400 | 31.468 | 70 | -/+ | |
| 640 x 480 | 31.469 | 60 | -/- | |
| 800 x 600 | 37.879 | 60 | +/+ | |
| 1024 x 768 | 48.363 | 60 | -/- | |
| 1280 x 1024 | 63.981 | 60 | +/+ | |
| 1680 x 1050 | 65.290 | 60 | -/+ | Recommended Mode |

Power Indicator

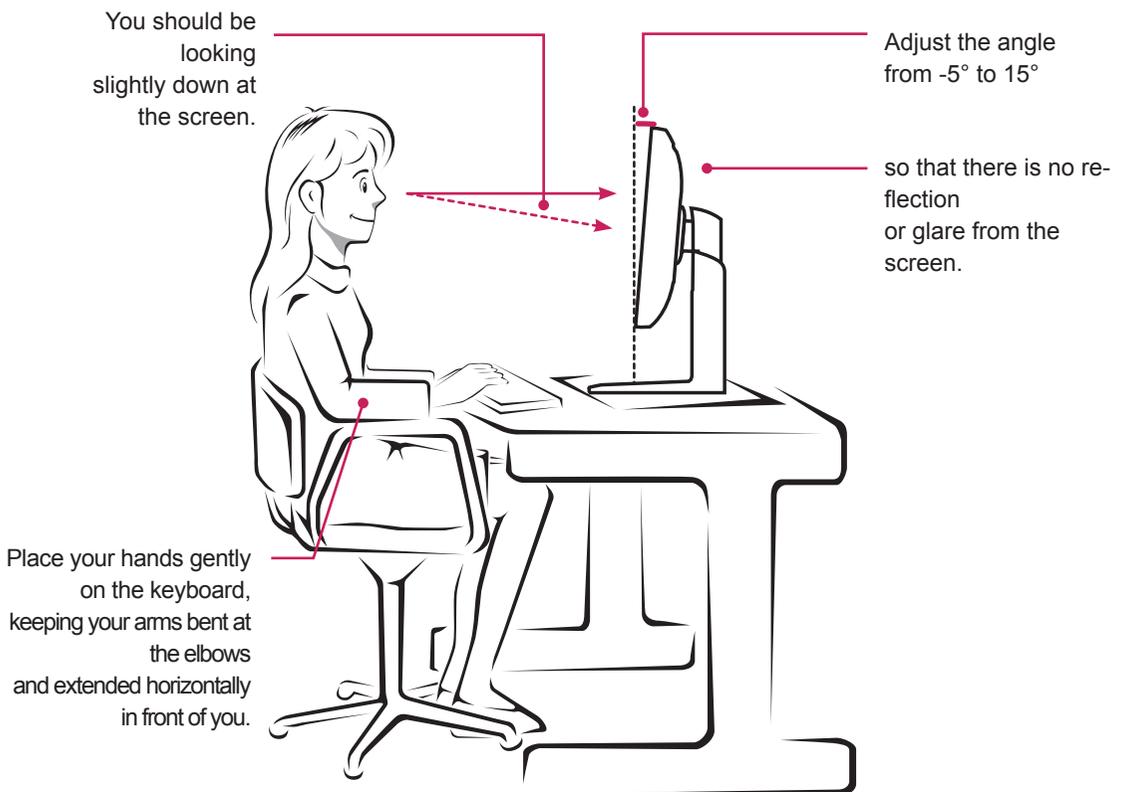
| Mode | LED Color |
|--------------|----------------|
| On Mode | White |
| Power Saving | Flashing White |
| Off Mode | Off |

PROPER POSTURE

Proper posture for using the monitor

Adjust the angle so that the screen is slightly lower than your eyes.

- Using the monitor for a prolonged period of time can cause eye fatigue. Take a 10-minute break every hour.
- The stand is designed to best support the monitor when the optimal conditions are selected. Adjust the angle of the monitor from -5° to 15° to obtain the best view of the screen.



USING PCOIP SOLUTION

Connect Screen

The Connect screen is shown during start-up, except when the portal has been configured for a managed start-up or auto-reconnect. The logo displayed above the Connect button can be changed by uploading a replacement image via the admin interface. The network icon on the bottom right of the Connect screen shows the status of the network connection. You must wait until the network icon is displayed as shown in Figure 2-3.

Selecting one of the options will produce a settings window.

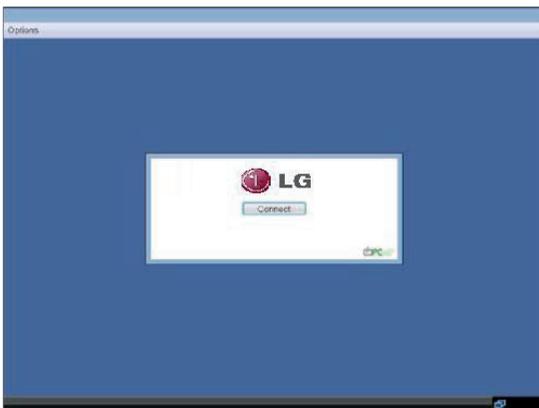


Figure 2-1. OSD Connect Screen

A red "X" over the network icon indicates that either the network is not properly connected or that the connection is still being initialized (i.e. during portal boot up). Figure 2-2 shows the red "X" over the network icon indicating that the network is not ready.

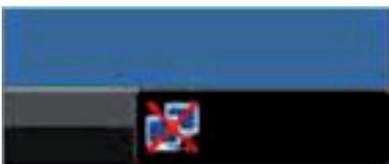


Figure 2-2. Network Not Ready (Detail)

Figure 2-3 shows the network icon when ready.



Figure 2-3. Network Ready (Detail)

Selecting the Connect button initiates a PCoIP or RDP session depending on the session settings. While the PCoIP connection is pending, the OSD local GUI will display a "Connection Pending" message. When the connection is established, the OSD local GUI will disappear and be replaced by the session image.



Figure 2-4. OSD Connect Screen (Connecting)

OSD Options Menu

Selecting the Options menu will produce a list of selections. The OSD Options menu contains:

- **Configuration**
- **Diagnostics**
- **Information**
- **User Settings**

Selecting one of the options will produce a settings window.

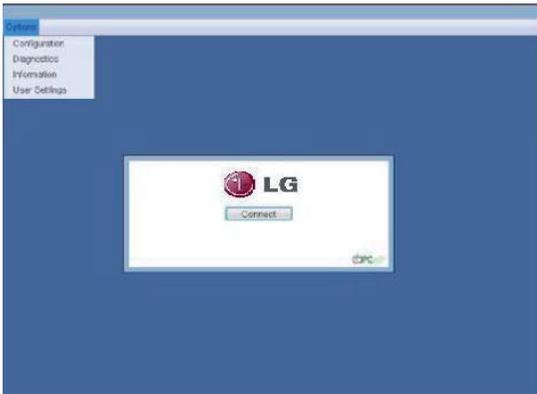


Figure 2-5. OSD Options Menu

Configuration Window

In the Configuration window, the administrator can access the window tabs that contain the settings to configure and manage the portal environment. The Configuration window has the following tabs:

- **Network**
- **Label**
- **Connection Management**
- **Discovery**
- **Session**
- **RDP**
- **Language**
- **OSD**
- **Reset**
- **Display**
- **VMware View**

Each tab contains OK, Cancel and Apply buttons to allow the administrator to apply or cancel the modified settings.

NOTE

- Some PCoIP devices have their password protection disabled and can be logged into the management web page or access the OSD parameters without a password. The login page and the OSD's password protection can be enabled in the PCoIP management console.

Network Tab

The Network tab allows the administrator to configure the portal network parameters.

NOTE

- The network parameters can also be configured using the Webpage Administration Interface.

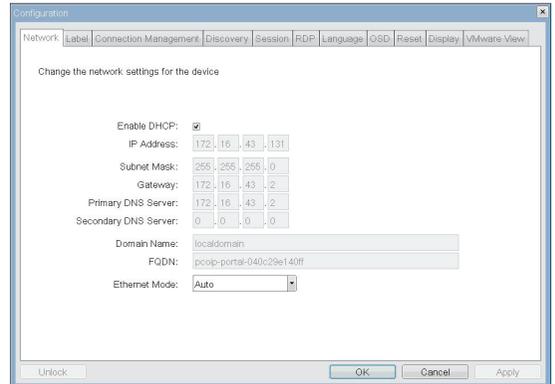


Figure 2-6. Network Configuration

• Enable DHCP

If the Enable DHCP option is selected, a device will be connected to the DHCP server that allocates the IP address, subnet mask, gateway IP address, and DNS server. If this option is disabled, the above parameters must be configured manually.

• IP Address

The IP Address field contains the IP address of the device. If DHCP is disabled, this field is required. If DHCP is enabled, this field cannot be edited. This field must contain the correct IP address. If an incorrect IP address is provided, an OSD message is displayed prompting the administrator to provide the correct IP address.

• Subnet Mask

The Subnet Mask field contains the subnet mask of the device. If DHCP is disabled, this field is required. If DHCP is enabled, this field cannot be edited. This field must have the correct subnet mask. If an incorrect subnet mask is provided, an OSD message is displayed prompting the administrator to provide the correct subnet mask.

- **Gateway**

The Gateway field contains the gateway IP address of the device. If DHCP is disabled, this field is required. If DHCP is enabled, this field cannot be edited.

- **Primary DNS Server**

The Primary DNS Server field contains the primary DNS IP address of the device. This field is optional. If DHCP is enabled, this field cannot be edited.

- **Secondary DNS Server**

The Secondary DNS Server field contains the secondary DNS IP address of the device. This field is optional. If the DHCP is enabled, this field cannot be edited.

- **Domain Name**

The Domain Name field contains the domain name used, e.g. "domain local". This field is optional. It specifies on which domain the host or portal operates.

- **FQDN**

The FQDN field represents the Fully Qualified Domain Name of the host or portal. The default value is PCoIP-host-MAC or PCoIP-portal-MAC, where MAC is the MAC address of the host or portal. If there is a domain name, it will be added to the FQDN in the format of PCoIP-host-MAC.domain.local

NOTE

- In order to utilize the FQDN feature, a DNS server, configured properly with DHCP option 81, must be used.

- **Ethernet Mode**

The Ethernet Mode field specifies the portal's Ethernet mode.

The available options are as follows.

- Auto
- 100 Mbps Full-Duplex
- 10 Mbps Full-Duplex

If another network device is configured to operate under 10 Mbps Full-Duplex or 100Mbps Full-Duplex, the administrator should always set the Ethernet Mode field to Auto and only use 10 Mbps Full-Duplex or 100 Mbps Full-Duplex.

Label Tab

The Label tab allows the administrator or host to add customized information to the portal.

NOTE

- The portal label parameters can also be configured using the Webpage Administration Interface.

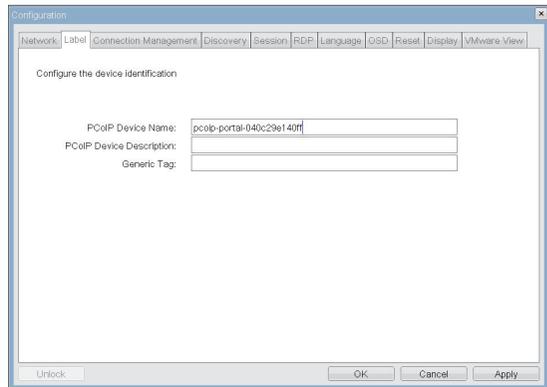


Figure 2-7. Label Configuration

- **PCoIP Device Name**

In the PCoIP Device Name field, the administrator can specify a logical name to the host or portal. The default value is PCoIP-host-MAC or PCoIP-portal-MAC, where MAC is the MAC address of the host or portal.

- **PCoIP Device Description**

In the PCoIP Device Description field, the administrator can add specific information, such as the endpoint location, or add a description to the host or portal. This field cannot be used in the PCoIP firmware and accessibility is strictly limited to the administrator.

- **Generic Tag**

In the Generic Tag field, the administrator can add a generic tag to the host or portal. This field cannot be used in the PCoIP firmware and accessibility is strictly limited to the administrator.

Connection Management Tab

The Connection Management tab allows the user to enable or disable the connection management and specify the connection manager's IP address.

In a managed connection, an external Connection Management Server can communicate with a device to remotely control and configure the device. The connection manager can also search for an appropriate peer to connect to the device. Connection Management significantly reduces the tasks of the administrator in a large and complicated system.

NOTE

- The Connection Management parameters can also be configured using the Webpage Administration Interface.

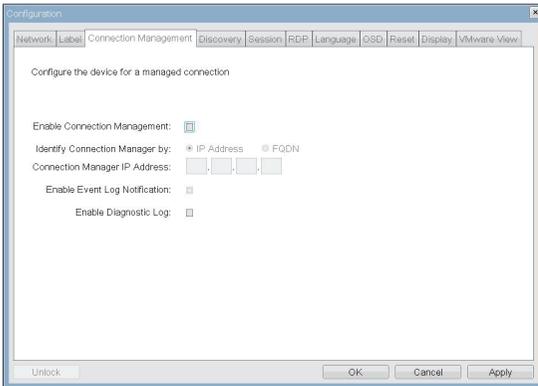


Figure 2-8. Connection Management Configuration

• Enable Connection Management

If the Enable Connection Management option is enabled, the device can be controlled and configured from an external connection manager.

• Identify Connection Manager By

The Identify Connection Manager By selector allows the administrator to decide whether to identify the connection manager by IP Address or by FQDN. If Connection Management is disabled, this field is not required and can therefore not be edited.

Table 2-1 shows the configuration parameters that can be used with one of the two methods. If an incorrect IP address or DNS name is provided, an OSD message is displayed prompting the administrator to correct the error.

| 방법 | 데이터 필드S |
|--------------|---------------|
| <IP address> | 연결 관리자 IP 주소 |
| <FQDN> | 연결 관리자 DNS 이름 |

Table 2-1 Connection Manager Method

• Enable Event Log Notification

The Enable Event Log Notification field controls whether the PCoIP host and the portal devices will send their event log to the connection management server.

• Enable Diagnostic Log

The Enable Diagnostic Log field specifies whether to log the connection management specific debug message to the PCoIP host and to the portal devices' event logs.

Discovery Tab

The Discovery tab allows the administrator to easily find a portal in the PCoIP system.

NOTE

- The Discovery parameters can also be configured using the Webpage Administration Interface.

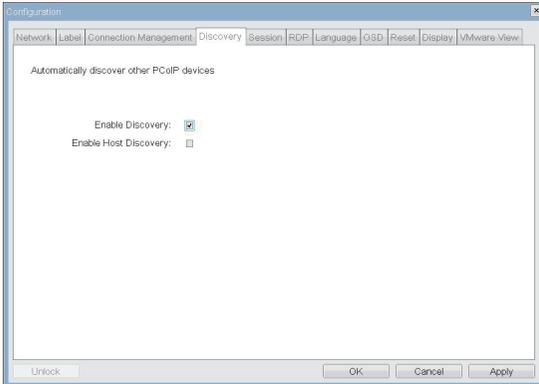


Figure 2-9. Discovery Configuration

• Enable Discovery

If the Enable Discovery option is selected, a device will use SLP Discovery to dynamically locate the peer device without requiring any information about the location of the device in the network. This means that the configuration and maintenance work in a complicated system can be significantly reduced.

As SLP Discovery requires a multicast-enabled router, the recommended search structure is DNS-SRV Discovery.

• Enable Host Discovery

The Enable Host Discovery option allows the user to find the host not listed in the PCoIP session from the portal. When this option is enabled, up to 10 available hosts can be listed, in the order of their detection from the portal. Use the Enable Host Discovery option when there are a relatively small number of hosts.

Session Tab

The Session tab allows the administrator to set the method to connect the device to a peer device.

NOTE

- The Session parameters can also be configured using the Webpage Administration Interface.

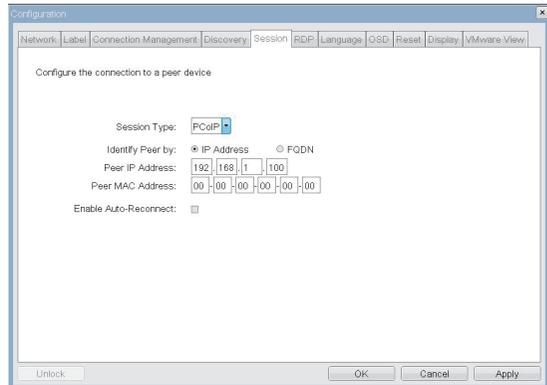


Figure 2-10. Session Configuration

• Session Type

In Session Type, the administrator can configure a portal for the PCoIP session or the RDP session.

• Identify Peer By

The Identify Peer By selector allows the administrator to decide whether to identify the peer device by IP, by MAC address or by FQDN.

Table 2-2 shows the peer ID parameters that can be used with one of the two methods. If an incorrect IP address or DNS name is provided, an OSD message is displayed prompting the administrator to correct the error.

| 피어 ID 방법 | 데이터 필드 | 설명 |
|-------------|-------------------------------------|--------------------------------|
| Peer IP/MAC | Peer IP Address Peer MAC Address | PCoIP 또는 포털 RDP 클라이언트 PCoIP |
| Peer FQDN | Peer FQDN | PCoIP 또는 포털 RDP 클라이언트 |

Table 2-2. Peer ID Method

• Enable Auto-Reconnect

The Enable Auto-Reconnect option allows the portal to automatically reconnect to the last connected host when the session is closed.

RDP Tab

The RDP tab allows the administrator to configure the remote desktop protocol (RDP) specific settings.



NOTE

- The RDP Label parameters can also be configured using the Webpage Administration Interface.

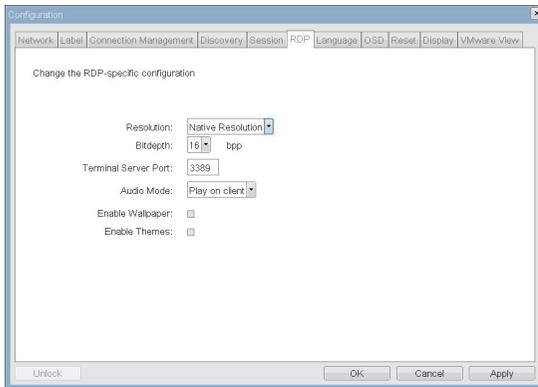


Figure 2-11. RDP Configuration

• Resolution

The Resolution field is used to set the RDP screen resolution. The available values are as follows.

- Native Resolution
- 800x600
- 1024x768
- 1280x768
- 1280x1024
- 1440x900
- 1600x1200
- 1680x1050
- 1920x1080
- 1920x1200

• Bit Depth

The Bit Depth field is used to set the color bit depth for the RDP session. The available values are as follows.

- 8 bpp (bits per pixel)
- 16 bpp
- 24 bpp

• Terminal Server Port

The Terminal Server Port field is used to set the port number to connect the RDP client.

• Audio Mode

The Audio Mode field is used to set the audio playback location of the RDP session. The available options are as follows.

- None
- Play on client
- Play on host

• Enable Wallpaper

The Enable Wallpaper field is used to allow the user to use the wallpaper in the RDP session.

• Enable Themes

The Enable Themes field is used to enable the user to use the wallpaper theme in the RDP session.

Language Tab

The Language tab allows the administrator to set the OSD language.



NOTE

- The Language parameters can also be configured using the Webpage Administration Interface.

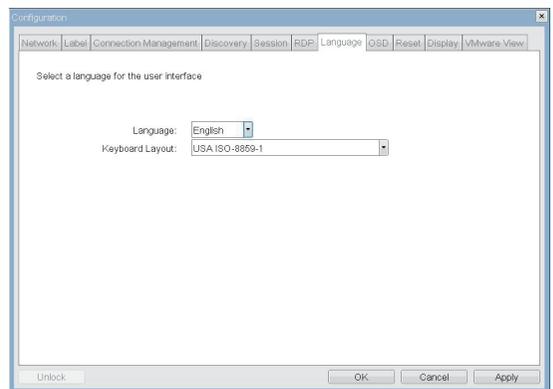


Figure 2-12. Language Configuration

• Language

The Language field is used to set the display language of the OSD and the user level event log messages.

• Keyboard Layout

The Keyboard Layout field allows the administrator to modify the keyboard layout.

OSD Tab

The OSD tab allows the administrator to modify the On Screen Display (OSD) parameters.

NOTE

- The OSD parameters can also be configured using the Webpage Administration Interface.

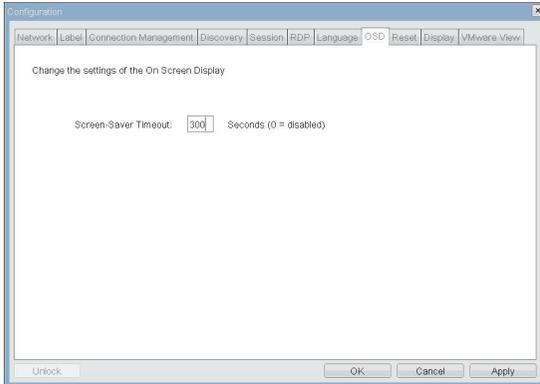


Figure 2-13. OSD Configuration

• Screen-Saver Timeout

The Screen-Saver Timeout field allows the administrator to set a time limit for the screen saver. The time limit is defined in seconds. The maximum time is 9999 seconds. If it is set to 0 seconds, the screen saver will be turned off.

Reset Tab

The Reset tab allows the administrator to reset all configurable parameters stored in Flash.

NOTE

- The Reset function can also be accessed through the Webpage Administration Interface.

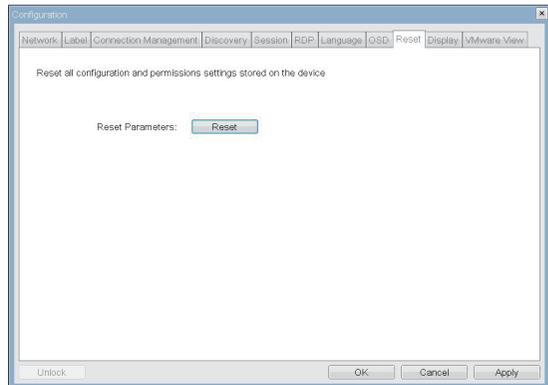


Figure 2-14 Reset

• Reset Parameters

Pressing the Reset Parameters button will reset all settings and options to the factory default settings. When this button is pressed, an OSD message is displayed. This is to prompt the administrator and prevent accidental reset.

Display Tab

The Display tab allows the user to configure the EDID function of the monitor.

NOTE

- The Enable display override function can be used when the EDID function of the monitor is not running.

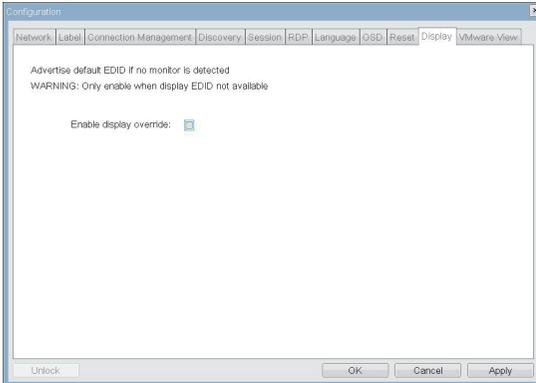


Figure 2-15. Display Configuration

VMware View Tab

The VMware View tab allows the user to select the device to use the VMware View Connection Server.

NOTE

- The VMware View parameters can also be configured using the Webpage Administration Interface.

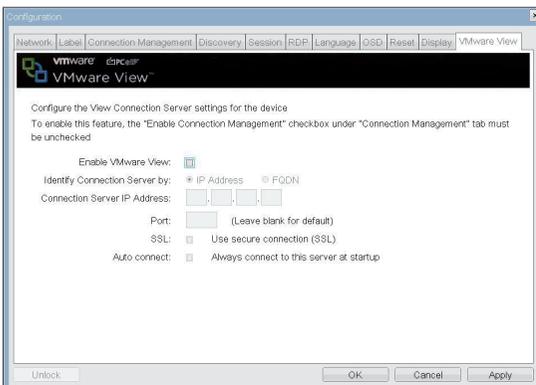


Figure 2-16. VMware View Configuration

• Enable VMware View

The Enable VMware View option allows the user to configure the portal to use the VMware View Connection Server.

NOTE

- To enable the VMware View function, the Enable Connection Management check box in the Enable Connection Management Tab must be deselected.

• Identify Connection Server by

The Identify Connection Server by selector allows the administrator to decide whether to identify the connection manager by IP address or by FQDN. If VMware View is disabled, this field is not required cannot be edited.

• Port

The Port parameter allows the administrator to specify the port to communicate with the VMware View Connection Server.

• SSL

The SSL parameter allows the administrator to specify the SSL to communicate with the VMware View Connection Server.

• Auto Connect

The Auto Connect parameter allows the administrator to ensure that the device always automatically connects to the VMware View Connection Server when starting the portal.

Diagnostics Window

In the Diagnostics window, the administrator can access the window tab to diagnose the portal. The Diagnostics window has the following tabs:

- Event Log
- Session Statistics
- PCoIP Processor
- Ping

Each tab has the Close button to close the window.

Event Log Tab

The Event Log tab allows the administrator to view and delete the event log messages from the portal.

NOTE

- The event log (regardless of the quantity) can also be reset using the Webpage Administration Interface.

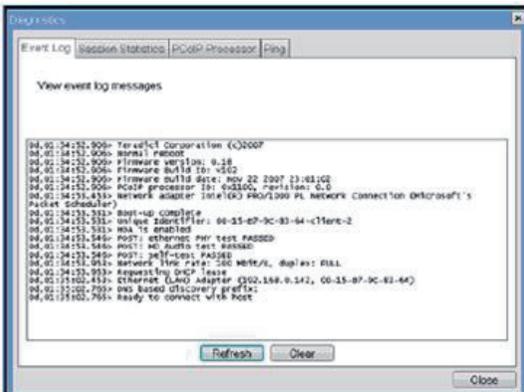


Figure 2-17. Event Log Configuration

• View Event Log Message

The View Event Log Message field displays the log messages accompanied by the timestamp information. The following two buttons are available:

• Refresh

The Refresh button refreshes the displayed event log messages.

• Clear

The Clear button clears all event log messages.

Session Statistics Tab

The Session Statistics tab allows the administrator to view the PCoIP specific statistics of the last active PCoIP session from the portal.

NOTE

- The session statistics (regardless of the quantity) can also be viewed using the Webpage Administration Interface.

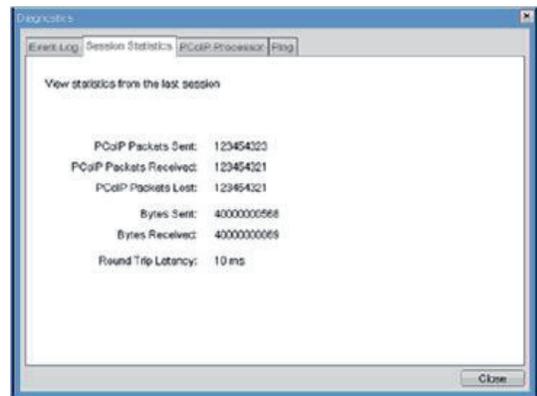


Figure 2-18. Session Statistics Configuration

• PCoIP Packets Statistics

• PCoIP Packets Sent

The PCoIP Packets Sent field shows the total number of PCoIP packets sent from the portal to the host in the last active session.

• PCoIP Packets Received

The PCoIP Packets Received field shows the total number of PCoIP packets received from the host to the portal in the last active session.

• PCoIP Packets Lost

The PCoIP Packets Lost field shows the total number of PCoIP packets lost in the last active session.

• Bytes Statistics

- Bytes Sent
The Bytes Sent field shows the total number of bytes sent in the last active session.
- Bytes Received
The Bytes Received field shows the total number of bytes received in the last active session.

• Round Trip Latency

The Round Trip Latency field shows the total round-trip PCoIP system (e.g. from the portal to the host, then back to the portal) and the network latency in milliseconds (+/- 1 ms).

PCoIP Processor Tab

The PCoIP Processor tab allows the administrator to view the portal PCoIP processor's uptime since its last booting.



NOTE

- The PCoIP Processor Uptime can also be viewed using the Webpage Administration Interface.

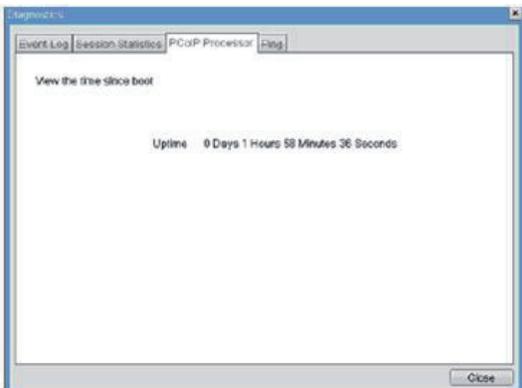


Figure 2-19. PCoIP Processor Configuration

Ping Tab

The Ping tab allows the administrator to perform a ping test to the device and check if it can reach the overall IP network. This is useful to check whether the device can reach the host.



NOTE

- The Ping tab has no corresponding menu in to the Webpage Administration Interface of Section 1.

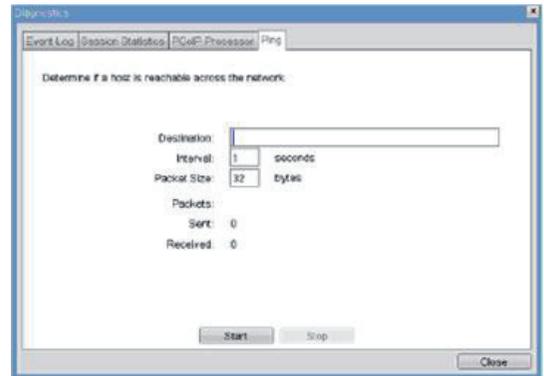


Figure 2-20. Ping Configuration

• Ping Settings

- Destination
The IP address or FQDN to perform the ping test.
- Interval
The interval between the ping packets.
- Packet Size
The size of the ping packet.
- Packets
 - Sent
The number of ping packets sent.
 - Received
The number of ping packets received.

Information Window

In the Information window, the administrator can access the Version tab that contains the device related information.

NOTE

- The version information can also be viewed using the Webpage Administration Interface.

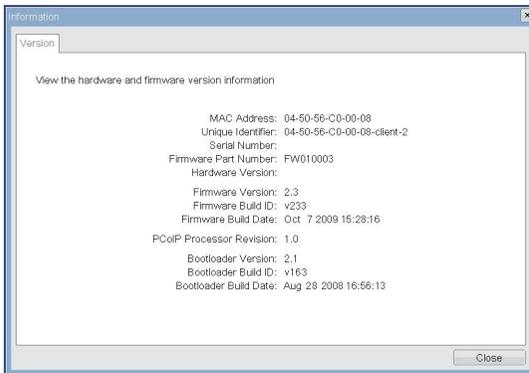


Figure 2-21. Version Configuration

• VPD Information

The Vital Product Data (VPD) is information that uniquely identifies each portal or host.

- MAC Address
The portal MAC address
- Unique Identifier
The portal ID
- Serial Number
The portal serial number
- Firmware Part Number
The part number of the PCoIP firmware
- Hardware Version
The portal hardware version

• Firmware Information

The Firmware Information shows the details of the current PCoIP firmware.

- Firmware Version
The current PCoIP firmware version
- Firmware Build ID
The current PCoIP firmware revision code
- Firmware Build Date
The current PCoIP firmware build date

PCoIP Processor Revision

This shows the PCoIP processor's revision code. TERA1x00 Revision A silicone is denoted by 0.0 and TERA1x00 Revision B silicone is denoted by 1.0.

• Boot Loader Information

The Boot Loader Information shows the details of the current PCoIP boot loader.

- Boot Loader Version
The current PCoIP boot loader version
- Boot Loader Build ID
The current PCoIP boot loader revision code
- Boot Loader Build Date
The current PCoIP boot loader build date

User Settings Window

In the User Settings window, the administrator can access the tab to select the mouse and keyboard and define the PCoIP image quality.

The User Settings window has the following tabs:

• Boot Loader Information

The Boot Loader Information shows the details of the current PCoIP boot loader.

- Mouse
- Keyboard
- Image
- Display Topology

Mouse Tab

The Mouse tab allows the user to modify the OSD and RDP session's mouse cursor speed setting.

NOTE

- The OSD mouse cursor speed setting does not affect the mouse cursor settings when a PCoIP session is active unless the Local Keyboard Host Driver function is being used (see PCoIP Host Software User Guide for more information).
- The Mouse tab has no corresponding menu in the Webpage Administration Interface of Section 1.

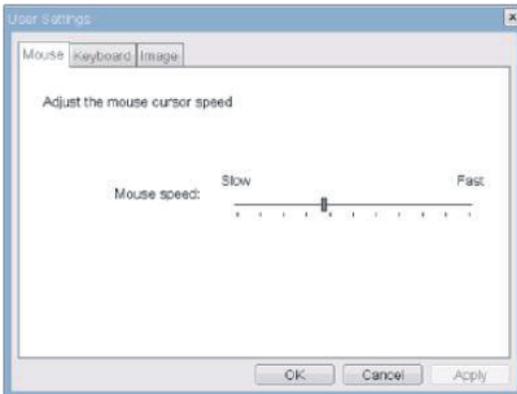


Figure 2-22. Mouse

• Mouse Speed

The Mouse Speed field allows the user to set the portal's mouse cursor speed.

NOTE

- The Mouse Speed can also be configured via the PCoIP Host Software. For more information on using the PCoIP Host Software, refer to the PCoIP Host Software User Guide.

Keyboard Tab

The Keyboard tab allows the user to modify the OSD and RDP session's keyboard repeat setting.

NOTE

- The OSD keyboard setting does not affect the keyboard settings when a PCoIP session is active unless the Local Keyboard Host Driver function is being used (see PCoIP Host Software User Guide for more information).
- The Keyboard tab has no corresponding menu in the Webpage Administration Interface of Section 1.

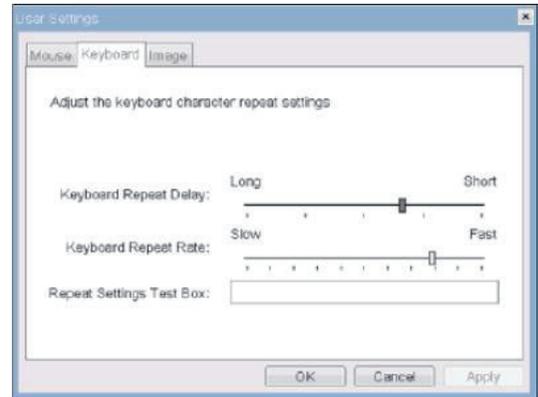


Figure 2-23. Keyboard

• Keyboard Repeat Delay

The Keyboard Repeat Delay field allows the user to set the portal's keyboard repeat delay.

• Keyboard Repeat Rate

The Keyboard Repeat Rate field allows the user to set the portal's keyboard repeat rate.

• Repeat Settings Test Box

The Repeat Settings Test Box allows the user to test the selected keyboard settings.

Image

The Image tab allows a user to change the image settings on the PCoIP system.

NOTE

- The Image parameters can also be configured using the Webpage Administration Interface.

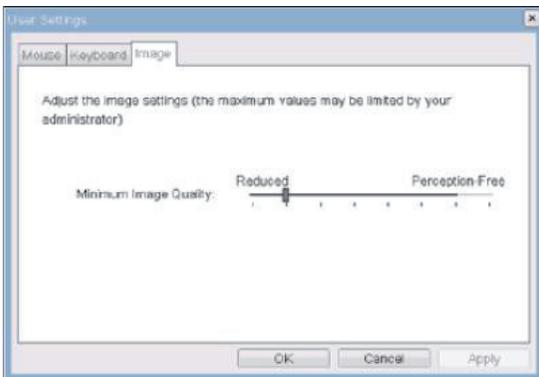


Figure 2-24. Image

• Minimum Image Quality

The Minimum Image Quality slider allows the administrator to make compromises between image quality and frame rate when network bandwidth is limited. Sometimes, lower-quality images at a higher frame rate may be required, while at other times, higher-quality images at a lower frame rate may be preferred.

In environments where the network bandwidth is limited, moving the slider towards Reduced ensures higher frame rates; moving the slider towards Perception-Free ensures higher image quality. When network bandwidth is not limited, the PCoIP system will maintain perception-free quality regardless of the Minimum Image Quality setting.



Make sure to read the Safety Precautions before using the product.

Keep the Owner's Manual (CD) in an accessible place for future reference.

The model and serial number of the SET is located on the back and one side of the SET.

Record it below should you ever need service.

MODEL _____

SERIAL _____

ENERGY STAR is a set of power-saving guidelines issued by the U.S.Environmental Protection Agency(EPA).



As an ENERGY STAR Partner LGE U. S. A.,Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.