LG
Life's Good

OWNER'S MANUAL

MEDICAL MONITOR

Please read this manual carefully before operating your set and retain it for future reference.

27HK510S

www.lg.com

CONTENTS

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In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to *opensource@lge.com.*

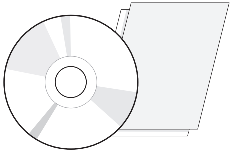
This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

ASSEMBLY AND PREPARING

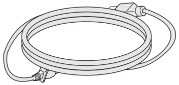
Product Composition

Please check whether all the components are included in the box before using the product. If there are any missing components, contact the retailer where you purchased the product.

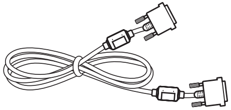
Note that the product and related components may look different from those shown here.



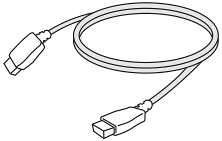
CD (Software/Owner's Manual)/Regulatory Manual/Cards



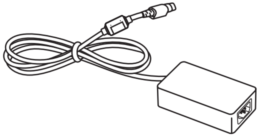
Power Cord



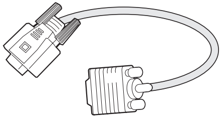
DVI Cable



HDMI Cable



AC/DC Adaptor



DVI-I to D-SUB Gender Cable

CAUTION

- Always use genuine LG components to ensure safety and product performance.
- The product warranty will not cover damage or injury caused by the use of unauthorized components.
- It is recommend that use the supplied components.
- If you use generic cables not certified by LG, the screen may not display or there may be image noises.
- Need to use the authorized components about the below accessories. Unauthorized components may be cause of the damage and malfunction of the product.

Component	Standard
HDMI Cable	UL, Impedance 100 ohm
DVI Cable	UL, Impedance 100 ohm
DVI-I to D-SUB Gender Cable	UL, Impedance 75 ohm
Power Cord	US – Approved Medical grade regulation Others – Approved country safety regulation

- The AC/DC adaptors and etc. except the upper components need to be used only supplied by manufacturer.

NOTE

- The components may look different from those illustrated here.
- Without prior notice, all product information and specifications contained in this manual are subject to change to improve the performance of the product.
- To purchase optional accessories, visit an electronics store or an online shopping site, or contact the retailer from which you purchased the product.
- The power cord provided may differ depending upon the region.

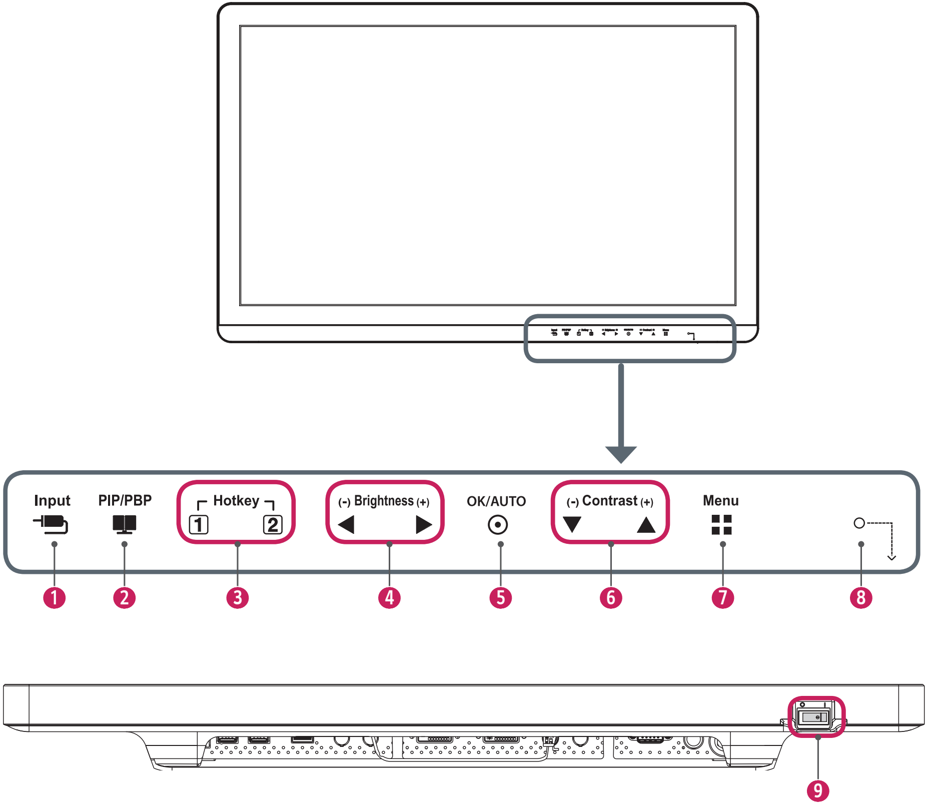
Supported Drivers and Software

Check the drivers and software supported by your product and refer to the manuals on the CD enclosed in the product package.

Drivers and Software	Installation Priority	27HK510S
Monitor Driver	Recommended	0
True Color Pro	Optional	0

- Required and Recommended: You can download and install the latest version from the enclosed CD or from the LGE website (*www.lg.com*).
- Optional: You can download and install the latest version from the LGE website (*www.lg.com*).

Product and LED Control buttons



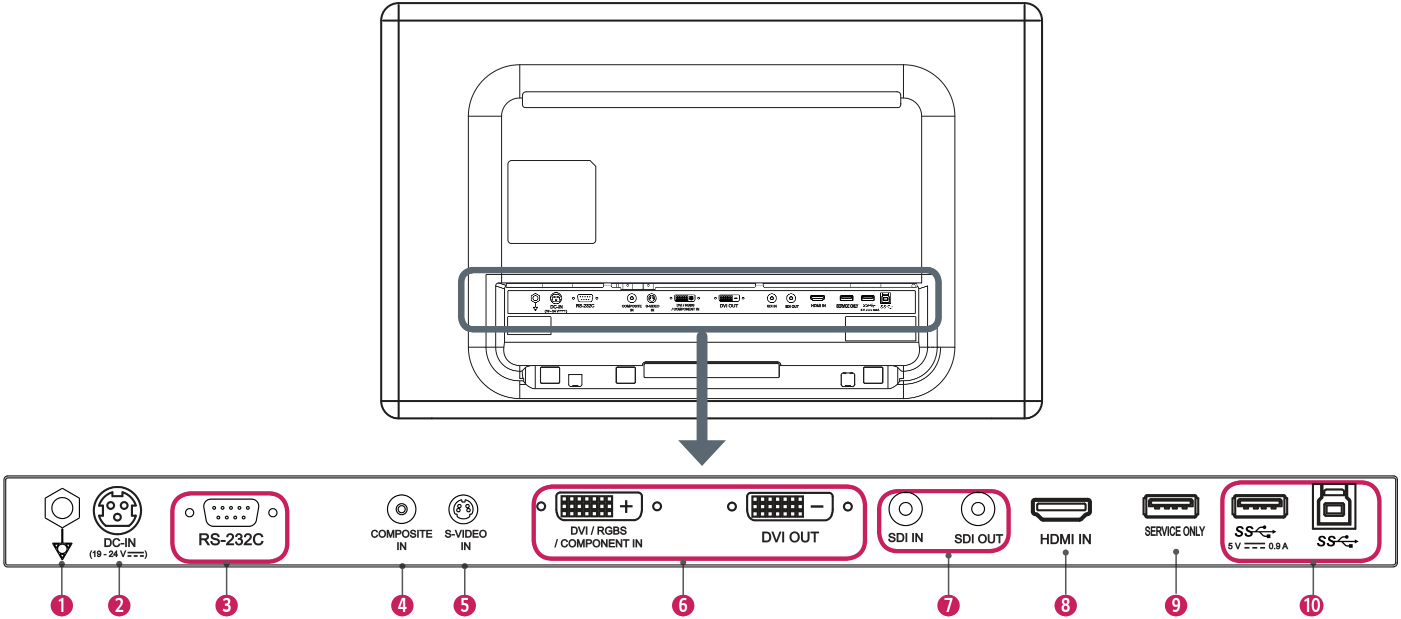
LED Control button Functions

①	Input	Selects the input mode.
②	PIP/PBP	Displays the screens of two input modes on one monitor.
③	Hotkey 1,2	Opens the [Hot key Settings] menu.
④	Brightness	Adjusts the screen brightness.
⑤	OK/AUTO	Selects and confirms menus or options * Automatically sets screen to optimal settings in analog video signal.
⑥	Contrast	Adjusts the screen contrast.
⑦	Menu	Displays LED Control buttons on the front panel and opens the menu mode.
⑧	Power indicator	The green indicator illuminates if the power is on. The arrow indicates the position of the power switch.
⑨	Power switch	Turns the power on/off.

NOTE

- The Power button is located at the bottom right on the front of the monitor.
- If the Control Key LED is turned off, press the Control Key (Menu ▪▪) button to turn the Control button LED on. When the Control Key LED is turned on, you can control the Control Key functions.

Connectors


DC-IN
(19 - 24 V ⎓)
RS-232C
COMPOSITE
IN
S-VIDEO
IN
DVI / RGBS
/ COMPONENT IN
DVI OUT
SDI IN
SDI OUT
HDMI IN
SERVICE ONLY
5 V ⎓ 0.9 A
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

①	Equipotential Port - Connect an equipotential plug.
②	**DC-IN (19 - 24 V ⎓)** Port - Connect an AC/DC adapter. - The output of the enclosed adaptor is 19 V. - The product is designed to be used with adaptors of the output ranging between 19-24 V. Please use the adaptors of medical standards.
③	**RS-232C** Port - Connect the RS-232C terminal with an external device to control the monitor.
④	**COMPOSITE IN** Port - Input composite video signals.
⑤	**S-VIDEO IN** Port - Input S-Video signals.
⑥	**DVI IN** / **DVI OUT** Port - Input or output a digital video signal. **RGBS IN** / **COMPONENT IN** Port - Input an analogue signal. - Use the DVI-I to D-SUB gender cable included with the product.
⑦	**SDI IN** / **SDI OUT** Port - Input or output a serial digital component signal.
⑧	**HDMI IN** Port - Input digital video signal. - Using a DVI to HDMI / DP (DisplayPort) to HDMI cable may cause compatibility issues. Use a certified cable that displays the HDMI logo. The screen may not appear or a connection error could occur if a non-certified cable is used. ▶ Recommended HDMI cable types - High-speed HDMI®/™ cable - High-speed HDMI®/™ Ethernet cable

⑨	**SERVICE ONLY** Port - This USB port is used only for services.
⑩	**SS 5 V ⎓ 0.9 A** / **SS** (USB Connector) - This terminal is used for connecting a HW Calibrator (an optional accessory). - A keyboard, mouse, or USB storage device can be connected. ⚠ **CAUTION** Cautions When Using a USB Storage Device • A USB storage device which has a built-in automatic recognition program or uses its own driver might not be recognizable. • Some USB storage devices may not be supported or may not work properly. • It is recommended to use a USB hub or hard disk drive with power supplied. (If the power supplied is not enough, the USB device may not be detected properly.) **SS 5 V ⎓ 0.9 A** / **SS** (USB Connector) - Connect peripheral device to the USB input port. - To use USB 3.0, connect the A-B type USB 3.0 cable to the PC.

NOTE

- All signal out terminals (SDI, DVI, etc.) output a signal when the power switch of the monitor is on. When the power switch is off, no signal is outputted.
- This monitor supports the *Plug and Play feature.

* Plug and Play: A feature that allows you to add a device to your computer without the need for physical device configuration or user intervention.

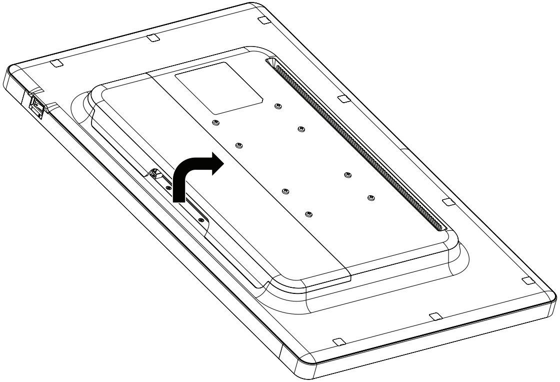
- The standard of the DVI and the SDI output terminals for transmitting a screen
  - DVI OUT: Connect a 5-meter cable to transmit a copied screen to a monitor.
  - SDI OUT: Connect a 100-meter cable (BELDEN 1694) to transmit a copied screen to a monitor.

Installing the Monitor

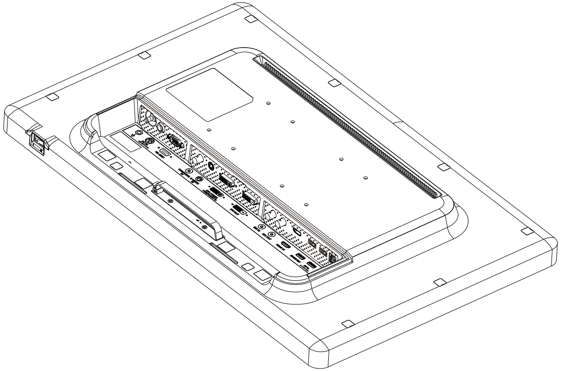
Cable connection and organize

Before connecting the connectors, remove the back door as shown below.

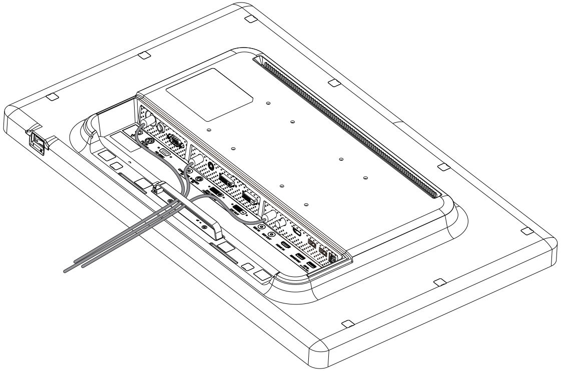
1 Remove the back door by lifting it in the direction of the arrow. The back door is held in place with a magnet.



2 After installing the cables, tidy them up using the cable holders.



3 After tidying the cables, attach the back door and use the product.

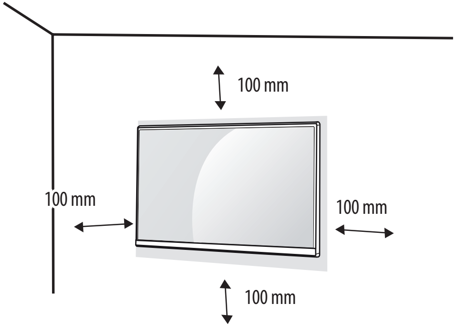


⚠ CAUTION

- When the back door is attached to the monitor, the monitor meets water resistance standards. Do not use the monitor with the back door detached, as the water resistance capability is not guaranteed without the door.

Installing on the Wall

Install the monitor at least 100 mm away from the wall on each side of the monitor to ensure sufficient ventilation. Detailed installation instructions can be obtained from your local dealer. Please refer to the manual to install and set up a tilting wall mounting bracket.

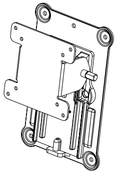


To install the monitor to a wall, attach a wall mount plate (optional) to the back of the monitor.

Make sure that the wall mount plate (optional) is securely fixed to the monitor and to the wall.

1 Using screws longer than the standard length may damage the inside of the product.

2 A non-VESA standard screw may damage the product and cause the monitor to fall. LG Electronics is not liable for any accidents relating to the use of non-standard screws.

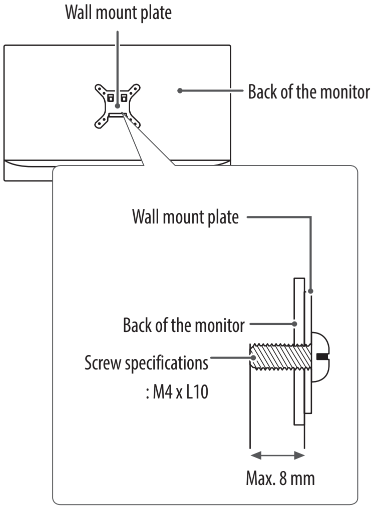
Wall Mount (mm)	100 x 100
Standard screw	M4 x L10
Required screws	4
Wall Mount Plate (optional)	RW120 

NOTE

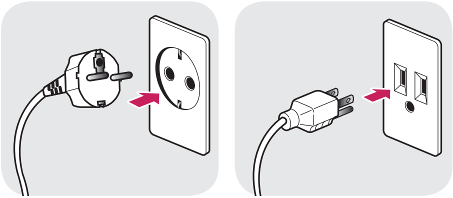
- The screws (M4 x L10) can be found fastened in the wall mount screw holes on the back of the monitor.
- Use the screws specified by VESA standards.
- The wall mount kit includes an installation manual and the necessary parts.
- The wall mount plate is an optional item. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Be sure to use the proper length.
- For more information, please refer to the manual for the wall mounting bracket.

CAUTION

- Disconnect the power cord first. Then move or install the monitor. There is risk of electric shock.
- Installing the monitor on the ceiling or on a slanted wall may result in the monitor falling off, which could lead to injury. Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Applying excessive force when tightening screws may damage the monitor. Such damage is not covered by the product warranty.
- Use the wall mounting bracket and screws that confirm to VESA standards. Damage caused by the use or misuse of inappropriate components is not covered by the product warranty.
- When measured from the back of the monitor, the length of each installed screw must be 8 mm or less.



Precautions for Connecting the Power Cord



100-240 V ~

- Make sure to use the power cord that is provided in the product package. Connect the cord to a grounded power outlet.
- If you need another power cord, please contact your local dealer or the nearest retail store.

USER SETTINGS

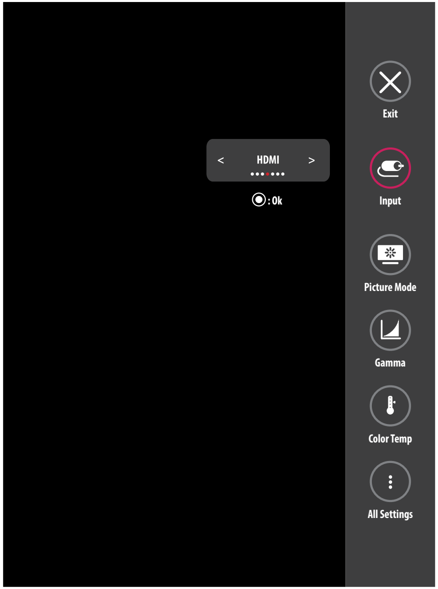
Activating the Quick Menu

1 Press (Menu ⊞) to activate the LED Control Button. When the LED Control button is activated, press (Menu ⊞) to show the OSD Quick Menu.

2 Among the LED Control Button, press (◀ Brightness ▶) to move to the left or right or (▼ Contrast ▲) to move to the bottom or top.

3 Among the LED Control Button, press (◀ Brightness ▶) to move to the left or right or (▼ Contrast ▲) to move to the bottom or top or (◉/OK) to set options.

4 In order to exit from the OSD Menu, press the LED Control Button (Menu ⊞) or select [Exit].



The applicable setting options are as shown below.

Quick Menu Settings	Explanation
[Exit]	Closes the Quick Menu.
[Input]	Selects the applicable input mode.
[Picture Mode]	Selects the [Picture Mode]. **NOTE** • If the [Picture Mode] is not the [Custom] mode, [Gamma] and [Color Temp] will be deactivated.
[Gamma]	Selects the screen's [Gamma].
[Color Temp]	Selects the screen's [Color Temp].
[All Settings]	Enters the All Settings menu.

CAUTION

- The Monitor OSD (On Screen Display) may differ from the description in the User Manual.

Quick Settings

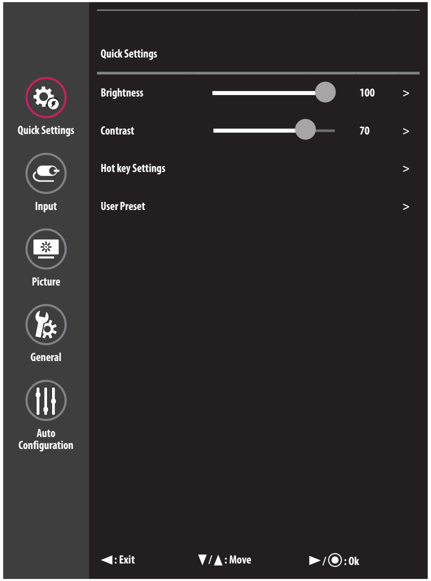
1 Press (Menu ▪▪) to activate the LED Control Button. When the LED Control Button is activated, press (Menu ▪▪) and select [All Settings] to show the complete OSD Menu.

2 Among the LED Control Button, press (◀Brightness▶) to move to the left or right or (▼ Contrast ▲) to move to the bottom or top to go to the [Quick Settings].

3 Configure the options following the instructions that appear in the bottom right corner.

4 To configure an upper menu or another item, press the LED Control Button (◀Brightness) or press (◉/OK) to move to the settings.

5 In order to exit from the OSD Menu, press the LED Control Button (Menu ▪▪) or press (◀Brightness).



Quick Settings

Brightness 100 >

Contrast 70 >

Hot key Settings >

User Preset >

The applicable setting options are as shown below.

[All Settings] > [Quick Settings]	**Explanation**	
[Brightness]	Adjusts screen brightness. **NOTE** • Press the ▼ button to toggle between [Turn on 'Brightness Stabilization']/[Turn off 'Brightness Stabilization']. • When [Brightness Stabilization] is [On] , the [Brightness] adjustment function is deactivated. • When [Brightness Stabilization] is [On], [SMART ENERGY SAVING] and [DFC] functions are deactivated. • When [Picture Mode] is set as [DICOM], or [Gamma] is set as [DICOM Gamma Curve] Setting, the [Brightness] adjustment function is deactivated.	
[Contrast]	Adjusts the colour contrast of the screen.	
[Hot key Settings]	Designate a hotkey for screen image settings. After setting the hotkey, use the hotkey in the LED Control Button to enable the set menu. ([PIP Size], [Mono], [Color Temp], [Gamma], [Black Stabilizer], [Screen Zoom], [Off])	
	[Hotkey 1]	Select a function to use with [Hotkey 1].
	[Hotkey 2]	Select a function to use with [Hotkey 2].

[All Settings] > [Quick Settings]	**Explanation**	
[User Preset]	User Preset allows the user to save or load up to 10 picture quality settings for multiple connected devices in each preset. **NOTE** • You can use User Preset to import or save items in [Picture Adjust] and [Color Adjust] of the [Picture] menu.	
	[User Name]	Allows the user to change and register a user name ([Preset 1] ~ [Preset 3], [User 1] ~ [User 7]) as the user wants. The user can enter a user name to be registered by using the screen keyboard. [Preset 1] ~ [Preset 3] are factory-set user names as samples and the user can change the names.
	[Load User Settings]	Allows the user to change the picture quality settings by loading the User Preset settings.
	[Save User Settings]	Saves the current picture quality settings in the corresponding User Preset. [Preset 1] ~ [Preset 3] are factory-set values as samples and the user can change the values. • [Preset 1]: Use this preset for bluish colour. • [Preset 2]: Use this preset for greenish colour and brighter low-gradation. • [Preset 3]: Use this preset for red tone. • [User 1] ~ [User 7]: Initial values are the same as the factory settings.
	[Default User Settings]	Loads the initial basic picture settings.
	[User Preset Reset]	Initializes User Preset settings. • Initializes the existing user name and user settings to be restored to factory settings ([Preset 1] ~ [Preset 3], [User 1] ~ [User 7]).

Input

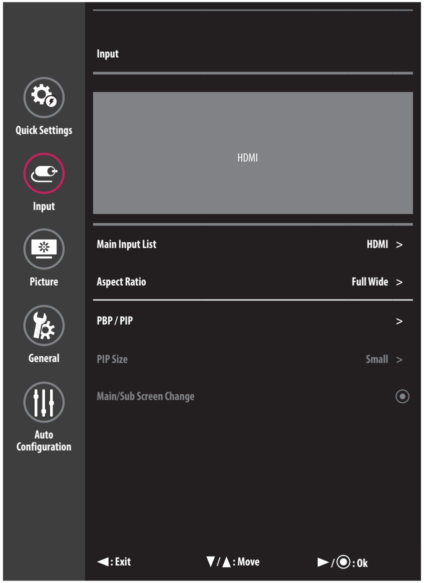
1 Press (Menu ▪▪) to activate the LED Control Button. When the LED Control Button is activated, press (Menu ▪▪) and select [All Settings] to show the complete OSD Menu.

2 Among the LED Control Button, press (◀Brightness▶) to move to the left or right or (▼ Contrast ▲) to move to the bottom or top to go to the [Input].

3 Configure the options following the instructions that appear in the bottom right corner.

4 To configure an upper menu or another item, press the LED Control Button (◀Brightness) or press (◉/OK) to move to the settings.

5 In order to exit from the OSD Menu, press the LED Control Button (Menu ▪▪) or press (◀Brightness).



Main Input List HDMI >

Aspect Ratio Full Wide >

PBP / PIP >

PIP Size Small >

Main/Sub Screen Change ◉

The applicable setting options are as shown below.

<table>
<tr><th>[All Settings] > [Input]</th><th>Explanation</th></tr>
<tr><td>[Main Input List]
[Sub Input List]</td><td>Selects the input mode.
<table>
<tr><th colspan="2" rowspan="2">PBP / PIP Connection</th><th colspan="7">[Sub]</th></tr>
<tr><th>D-SUB</th><th>DVI</th><th>HDMI</th><th>SDI</th><th>Composite</th><th>Component</th><th>S-Video</th></tr>
<tr><th rowspan="7">[Main]</th><th>D-SUB</th><td>-</td><td>-</td><td>0</td><td>0</td><td>-</td><td>-</td><td>-</td></tr>
<tr><th>DVI</th><td>-</td><td>-</td><td>0</td><td>0</td><td>-</td><td>-</td><td>-</td></tr>
<tr><th>HDMI</th><td>0</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><th>SDI</th><td>0</td><td>0</td><td>0</td><td>-</td><td>0</td><td>0</td><td>0</td></tr>
<tr><th>Composite</th><td>-</td><td>-</td><td>0</td><td>0</td><td>-</td><td>-</td><td>-</td></tr>
<tr><th>Component</th><td>-</td><td>-</td><td>0</td><td>0</td><td>-</td><td>-</td><td>-</td></tr>
<tr><th>S-Video</th><td>-</td><td>-</td><td>0</td><td>0</td><td>-</td><td>-</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>[Aspect Ratio]</td><td>Adjusts the aspect ratio of the screen. ([Full Wide], [Original], [Just Scan])
<b>NOTE</b>
• The display may look the same for [Full Wide], [Original] and [Just Scan] options at the recommended resolution (1920 x 1080).
<table>
<tr><td rowspan="2">[Main Aspect Ratio]</td><td>[Full Wide]</td><td>Displays the image to fit the PBP / PIP screen, regardless of the video signal input.</td></tr>
<tr><td>[Original]</td><td>Displays on the PBP / PIP screen in the aspect ratio of the video signal input.</td></tr>
<tr><td rowspan="2">[Sub Aspect Ratio]</td><td>[Full Wide]</td><td>Displays the image to fit the PBP / PIP screen, regardless of the video signal input.</td></tr>
<tr><td>[Original]</td><td>Displays on the PBP / PIP screen in the aspect ratio of the video signal input.</td></tr>
</table>
</td></tr>
</table>

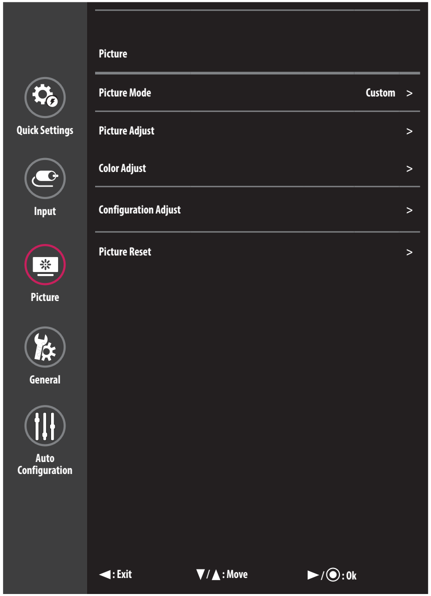
[All Settings] > [Input]	Explanation
[PBP / PIP]	Displays screens of two input modes on a single monitor at the same time.
[PIP Size]	Adjusts the size of PIP. ([Small], [Medium], [Large])
[Main/Sub Screen Change]	Converts between the Main and the Sub in the [PBP / PIP] mode.

NOTE

- If not using the [PBP / PIP] feature, [PIP Size], [Main/Sub Screen Change] are deactivated.
- You can connect a PC analogue (D-SUB) input source to the DVI-I input connector by using the DVI-I to D-SUB gender cable. In order to use a D-SUB input, use the DVI-I to D-SUB gender cable included in the box.

Picture

1. Press (Menu ▪▪) to activate the LED Control Button. When the LED Control Button is activated, press (Menu ▪▪) and select [All Settings] to show the complete OSD Menu.
2. Among the LED Control Button, press (◀Brightness▶) to move to the left or right or (▼ Contrast▲) to move to the bottom or top to go to the [Picture].
3. Configure the options following the instructions that appear in the bottom right corner.
4. To configure an upper menu or another item, press the LED Control Button (◀Brightness) or press (◉/OK) to move to the settings.
5. In order to exit from the OSD Menu, press the LED Control Button (Menu ▪▪) or press (◀Brightness).



The applicable setting options are as shown below.

[All Settings] > [Picture]	Explanation	
[Picture Mode]	[Custom]	Allows the user to adjust each element. The colour mode of the main menu can be adjusted.
	[Mono]	Mono (black and white) colour mode.
	[sRGB]	The standard RGB colour mode for monitors and printers.
	[EBU]	The standard TV PAL colour mode for broadcasting.
	[REC709]	The standard HDTV colour mode for broadcasting.
	[SMPTE-C]	The standard TV NTSC colour mode for broadcasting.
	[DICOM]	A mode that optimizes the screen settings so you can view images for medical use.
	[Calibration 1]	Configures to the last calibrated (corrected) screen.
	[Calibration 2]	Configures to a previously calibrated (corrected) screen.
	NOTE • The [Brightness Stabilization] function is operated in [Custom]. • [Calibration 2]: If you use Calibration after installing the TRUE COLOR PRO program, the applicable menu will be activated.	

[All Settings] > [Picture]	Explanation		
[Picture Adjust]	[Brightness]	Adjusts screen brightness. **NOTE** - Press the ▼ button to toggle between [Turn on 'Brightness Stabilization']/[Turn off 'Brightness Stabilization']. - When [Brightness Stabilization] is [On] , the [Brightness] adjustment function is deactivated. - When [Brightness Stabilization] is [On], [SMART ENERGY SAVING] and [DFC] functions are deactivated. - When [Picture Mode] is set as [DICOM], or [Gamma] is set as [DICOM Gamma Curve] Setting, the [Brightness] adjustment function is deactivated.	
	[Contrast]	Adjusts the colour contrast of the screen.	
	[Sharpness]	Adjusts the sharpness of the screen.	
	[Brightness Stabilization]	A function for maintaining a set brightness appropriate for treatment environments.	
		[On]	Automatically adjusts brightness.
		[Off]	Deactivates the applicable function and the user can adjust the brightness.
	[SUPER RESOLUTION+]	[High]	Select this option for crystal clear images.
		[Middle]	The optimized picture quality is displayed when a user wants images between low and high modes for comfortable viewing.
		[Low]	The optimized picture quality is displayed when a user wants smooth and natural images.
		[Off]	Select this option for the normal user experience. Deactivates the [SUPER RESOLUTION+] function.
	[Black Level]	Sets up the offset level. (HDMI only) - Offset: as a reference for a video signal, this is the darkest colour the monitor can display.	
		[High]	Maintains the current screen contrast range.
		[Low]	Reduces the black levels and increases the white levels of the current screen contrast range.

[All Settings] > [Picture]	Explanation		
[Picture Adjust]	[DFC]	[On]	Automatically adjusts brightness depending on the screen.
		[Off]	Deactivates the [DFC] function.
	[Response Time]	Sets a response time for displayed pictures based on the movement of the picture on the screen. In a normal environment, it is recommended that you set [Fast]. For images with a lot of motion, it is recommended that you set [Faster]. But, when [Faster] is set, it may cause an afterimage.	
		[Faster]	Sets the response time to Faster.
		[Fast]	Sets the response time to Fast.
		[Normal]	Sets the response time to Normal.
		[Off]	Does not use the response time improvement feature.
	[Black Stabilizer]	Adjusts the black level to clearly see objects on a dark screen. Increasing the [Black Stabilizer] value brightens the low grey levels on the screen. (You can easily distinguish objects on a dark game screen.) Reducing the [Black Stabilizer] value darkens the low grey levels and increases the dynamic contrast on the screen.	
	[Uniformity]	Automatically adjusts the brightness uniformity of the screen. **NOTE** • If [Uniformity] is activated, the screen may become darker.	
		[On]	Activates the [Uniformity] function.
		[Off]	Deactivates the [Uniformity] function.

[All Settings] > [Picture]	**Explanation**		
[Color Adjust]	[Gamma]	Set your own gamma value. ([Gamma 1.8], [Gamma 2.0], [Gamma 2.2], [Gamma 2.4], [Gamma 2.6], [DICOM Gamma Curve]) Higher gamma settings mean a darker image is displayed or vice versa.	
	[Color Temp]	Set your own colour temperature. ([Custom], [6500K], [7500K], [9300K], [Manual])	
		[Custom]	Users can customize the red, green and blue colours.
		[6500K]	Indicates the screen colour with a 6500K red colour temperature.
		[7500K]	Sets the screen colour between red and blue with a 7500K colour temperature.
		[9300K]	Indicates the screen colour with 9300K blue colour temperature.
		[Manual]	Adjusts the colour temperature in 500K increments. (However, supports 9300K instead of 9500K)
	[Red]	You can customize the picture colour using Red, Green and Blue colours.	
	[Green]		
	[Blue]		
	[Six Color]	Meets the user requirements for colours by adjusting the hue and saturation of the six colours (red, green, blue, cyan, magenta and yellow) and then saving the settings.	
		[Hue]	Adjusts the tint of the screen colours.
		[Saturation]	The lower the screen's colour sharpness value, the less sharper and brighter the colours become. The higher the value, the sharper and darker the colours become.
[Configuration Adjust]	[Horizontal] [Vertical]	Adjusts the position of the screen.	
	[Clock] [Phase]	Improves the sharpness and stability of the screen.	

[All Settings] > [Picture]	Explanation
[Resolution]	A user can set the desired resolution. This option is available only when the screen resolution of the computer is set as below (only for the D-SUB). **NOTE** • When the resolution selected by a user is different from the resolution outputted by the PC per computer, the function will be deactivated.
	[1024 x 768], [1280 x 768], [1360 x 768], [1366 x 768], [Off]
	[1280 x 960], [1600 x 900], [Off]
	[1440 x 900], [1600 x 900], [Off]
[Picture Reset]	Returns colour to the default settings.

General

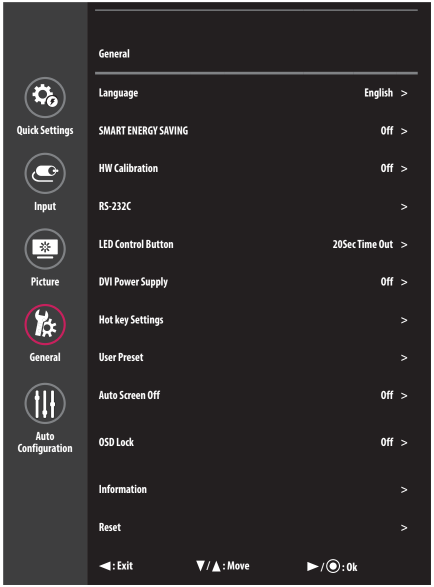
1 Press (Menu ▪▪) to activate the LED Control Button. When the LED Control Button is activated, press (Menu ▪▪) and select [All Settings] to show the complete OSD Menu.

2 Among the LED Control Button, press (◀ Brightness ▶) to move to the left or right or (▼ Contrast ▲) to move to the bottom or top to go to the [General].

3 Configure the options following the instructions that appear in the bottom right corner.

4 To configure an upper menu or another item, press the LED Control Button (◀ Brightness) or press (◉/OK) to move to the settings.

5 In order to exit from the OSD Menu, press the LED Control Button (Menu ▪▪) or press (◀ Brightness).



General

Language English >
SMART ENERGY SAVING Off >
HW Calibration Off >
RS-232C >
LED Control Button 20Sec Time Out >
DVI Power Supply Off >
Hot key Settings >
User Preset >
Auto Screen Off Off >
OSD Lock Off >
Information >
Reset >

◀ : Exit ▼/▲ : Move ▶/◉ : Ok

The applicable setting options are as shown below.

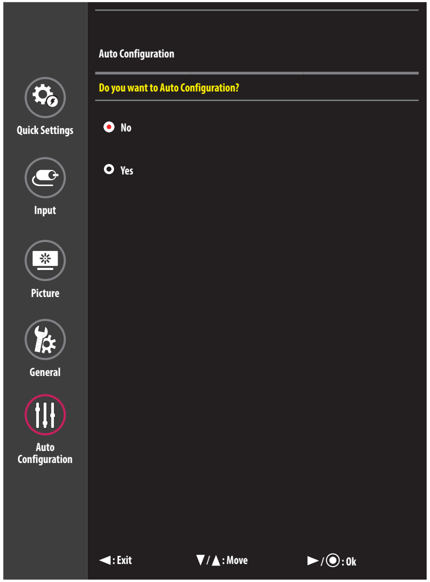
[All Settings] > [General]	**Explanation**	
[Language]	Sets the menu screen to the desired language.	
[SMART ENERGY SAVING]	Conserve energy by using luminance compensation algorithm.	
	[High]	Saves energy using the high-efficiency [SMART ENERGY SAVING] feature.
	[Low]	Saves energy using the low-efficiency [SMART ENERGY SAVING] feature.
	[Off]	Disables the [SMART ENERGY SAVING] function.
[HW Calibration]	[RS-232C] and the [HW Calibration] cannot be used at the same time.	
	[On]	The HW Calibration function will operate.
	[Off]	The HW Calibration function will be turned off.
[RS-232C]	[RS-232C] and the [HW Calibration] cannot be used at the same time.	
	[Serial Port]	The [RS-232C] function will be operated or turned off.
	[Set ID]	Adjusts [Set ID]. (The scope of adjustment: 1-10)
[LED Control Button]	Adjusts the ON time of the Control Button. ([Always On], [20Sec Time Out], [10Sec Time Out], [5Sec Time Out])	
[DVI Power Supply]	Supplies power to a device used by connecting to a DVI input terminal in the form of dongle without power.	
	[On]	Activates the [DVI Power Supply] function.
	[Off]	Deactivates the [DVI Power Supply] function.
[Hot key Settings]	Designate a hotkey for screen image settings. After setting the hotkey, use the hotkey in the LED Control Button to enable the set menu. ([PIP Size], [Mono], [Color Temp], [Gamma], [Black Stabilizer], [Screen Zoom], [Off])	
	[Hotkey 1]	Select a function to use with [Hotkey 1].
	[Hotkey 2]	Select a function to use with [Hotkey 2].

[All Settings] > [General]	Explanation	
[User Preset]	User Preset allows the user to save or load up to 10 picture quality settings for multiple connected devices in each preset. **NOTE** • You can use User Preset to import or save items in [Picture Adjust] and [Color Adjust] of the [Picture] menu.	
	[User Name]	Allows the user to change and register a user name ([Preset 1] ~ [Preset 3], [User 1] ~ [User 7]) as the user wants. The user can enter a user name to be registered by using the screen keyboard. [Preset 1] ~ [Preset 3] are factory-set user names as samples and the user can change the names.
	[Load User Settings]	Allows the user to change the picture quality settings by loading the User Preset settings.
	[Save User Settings]	Saves the current picture quality settings in the corresponding User Preset. [Preset 1] ~ [Preset 3] are factory-set values as samples and the user can change the values. • [Preset 1]: Use this preset for bluish colour. • [Preset 2]: Use this preset for greenish colour and brighter low-gradation. • [Preset 3]: Use this preset for red tone. • [User 1] ~ [User 7]: Initial values are the same as the factory settings.
	[Default User Settings]	Loads the initial basic picture settings.
	[User Preset Reset]	Initializes User Preset settings. • Initializes the existing user name and user settings to be restored to factory settings ([Preset 1] ~ [Preset 3], [User 1] ~ [User 7]).
[Auto Screen Off]	Automatically turns off the screen when there is no monitor signal for a set time period.	
	[On]	Activates [Auto Screen Off] function.
	[Off]	Deactivates [Auto Screen Off] function.

[All Settings] > [General]	Explanation	
[OSD Lock]	A function for restricting menu configuration and adjustment.	
	[On]	Turns on [OSD Lock].
	[Off]	Turns off [OSD Lock].
	NOTE • Deactivates all functions except the [Quick Settings] menu and [Input] menu's [Input List] and [Aspect Ratio] functions, and the [General] menu's [OSD Lock] and [Information] functions.	
[Information]	Displays the total power on time, serial number and resolution information.	
[Reset]	[Do you want to reset your settings?]	
	[No]	Cancels the selection.
	[Yes]	Restores the screen settings to the default settings when your monitor was first purchased.

Auto Configuration

1 Press (Menu ⁘) to activate the LED Control Button. When the LED Control Button is activated, press (Menu ⁘) and select [All Settings] to show the complete OSD Menu.
2 Among the LED Control Button, press (◀Brightness▶) to move to the left or right or (▼ Contrast ▲) to move to the bottom or top to go to the [Auto Configuration].
3 Configure the options following the instructions that appear in the bottom right corner.
4 To configure an upper menu or another item, press the LED Control Button (◀Brightness) or press (◉/OK) to move to the settings.
5 In order to exit from the OSD Menu, press the LED Control Button (Menu ⁘) or press (◀Brightness).



Auto Configuration

Do you want to Auto Configuration?

● No

○ Yes

The applicable setting options are as shown below.

[All Settings]> [Auto Configuration]	Explanation	
[Do you want to Auto Configuration?]	[No]	Cancels the selection.
	[Yes]	Automatically sets screen to optimal settings.

TROUBLESHOOTING

Nothing is displayed on the screen.	
Is the monitor's power cord plugged in?	• Check if the power cord is correctly plugged into the power outlet.
Is the power indicator on?	• Check the power cable connection and turn on the power switch.
Is the power indicator displaying as green?	• Check if the input setting is correct. ((Menu ⊞) > [All Settings] > [Input])
Is the [Out of Range] message being displayed?	• This occurs when signals transferred from the PC (graphics 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 [No Signal] message displayed?	• This is displayed when the signal cable between the PC and the monitor is missing or disconnected. Check the cable and reconnect it.

The screen retains an image.	
Does image sticking occur even when the monitor is turned off?	• Displaying a still image for a prolonged time may cause damage to the screen, resulting in the retention of the image. • To extend the lifetime of the monitor, use a screensaver.

The screen is unstable and shakes. / There are shadowy traces left on the screen.	
Did you select the appropriate resolution?	• If the selected resolution is HDMI 1080i 60/50 Hz (interlaced), the screen may be flickering. Change the resolution to 1080p or the recommended resolution.

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. If 1 is divided by the horizontal interval, the result is the number of horizontal lines displayed per second. This is called horizontal frequency and is represented by kHz.
- Check if the graphics card's resolution or frequency is within the range allowed by the monitor and in Windows set it to the recommended (optimal) resolution in Control Panel > Display > Settings. (May differ depending on your operating system (OS).)
- Not setting 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 setting methods may be different depending on the computer or operating system, and some resolutions may not be available depending on the performance of the graphics card. If this is the case, contact the manufacturer of the computer or graphics card for assistance.
- Normal graphics cards do not support 1920 x 1080 resolution. If the resolution cannot be displayed, contact the manufacturer of your graphics card.

The display colour is abnormal.	
Does the display appear discoloured (16 colours)?	• Set the number of colours to 24 bits (true colours) or higher: In Windows Control Panel > Display > Settings > Colour Quality (May differ depending on your operating system.)
Does the display colour appear unstable or monochrome?	• Check if the signal cable is connected properly. Reconnect the cable or reinsert the PC's graphics card.
Are there spots on the screen?	• When using the monitor, pixilated spots (red, green, blue, white or black) may appear on the screen. This is normal for an LCD screen. It is not an error, nor is it related to the monitor's performance.

The 'Unknown Monitor' message appears when the monitor is connected.	
Did you install the monitor driver?	• Install the enclosed monitor driver which is provided with the monitor or go to LG Electronics homepage (*www.lg.com*) to download and install the monitor driver. • Check whether the plug & play function is supported by referring to the graphics card user manual.

The image is displayed abnormally.	
Does the screen area appear abnormal?	• If you want to automatically configure display images to optimal settings, enter the [Auto Configuration] function and select [Yes].
Do you see vertical lines on the screen?	
Does the screen display horizontal noise, or does the text appear blurred?	

PRODUCT SPECIFICATIONS

In order to improve the product, specifications may change without notice.

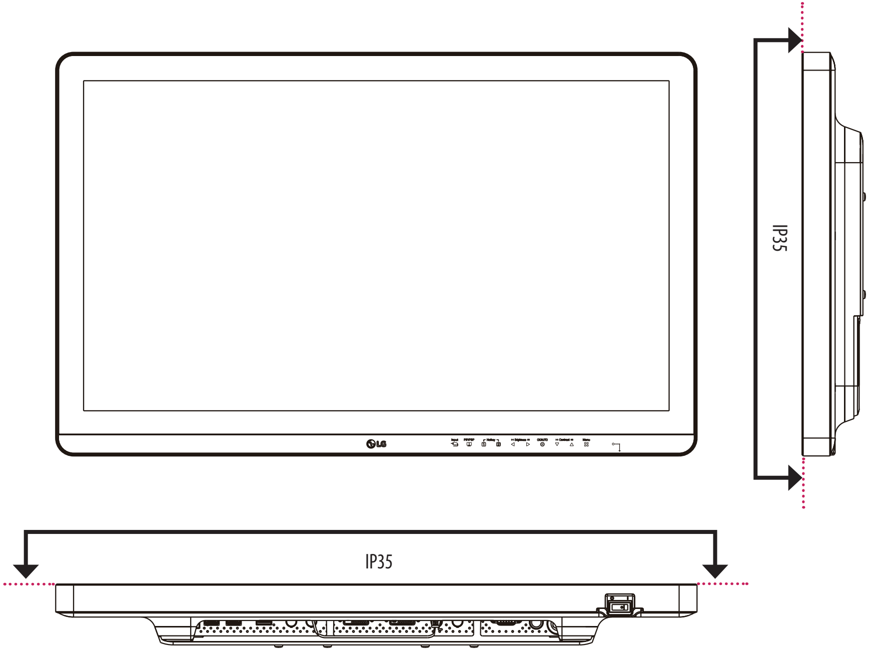
The ~ symbol means alternating current, and the symbol ⎓ means direct current.

LCD Screen	Type	TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Screen
	Pixel Pitch	0.3114 mm x 0.3114 mm
Resolution	Max Resolution	1920 x 1080 @ 60 Hz
	Recommended Resolution	
Video Signal	Horizontal Frequency	30 kHz - 83 kHz
	Vertical Frequency	56 Hz - 75 Hz
Input Connector	Equipotential Port, DC-IN (19 - 24 V ⎓), RS-232C, COMPOSITE IN, S-VIDEO IN, DVI IN, RGBS IN, COMPONENT IN, SDI IN, HDMI IN, SERVICE ONLY, USB (SS 5 V ⎓ 0.9 A), USB (SS)	
Output Connector	DVI OUT, SDI OUT	
Power Sources	Power Rating	19 - 24 V ⎓ 6.32 - 5 A
	Power Consumption	Max. 120 W Off Mode: ≤ 0.3 W
AC-DC Adaptor	DA-120D19 type, manufactured by Asian Power Devices Inc. (APD) Input: 100-240 V~ 50-60 Hz, 1.8-0.7 A Output: 19 V ⎓ 6.32 A Classification by protection type against Electric Shock: Class I equipment	
	NOTE - Connect an AC/DC adapter. - The output of the enclosed adaptor is 19 V. - The product is designed to be used with adaptors of the output ranging between 19-24 V. Please use the adaptors of medical standards.	

Environmental Conditions	Operating Conditions	Temperature	0°C to 40°C
		Humidity	0% to 80%
		Pressure	700 hPa to 1060 hPa
	Storing Conditions	Temperature	-20°C to 60°C
		Humidity	0% to 85%
		Pressure	500 hPa to 1060 hPa

Dimensions (mm)	Monitor Size (Width x Height x Depth)
	656.4 x 412.9 x 62.2
Weight (Without Packaging) (kg)	7.7

Medical Specifications	Classification by protection type against Electric Shock	Class Ⅰ equipment
	Classification according to the degree of protection against ingress of water or particulate matter	Front: IP35 Except for Front: IP32
	Mode of operation	Continuous Operation
	Environment of Use	This equipment is not suitable for use in the presence of flammable anesthetic or oxygen.


IP35
IP35

Preset Mode

D-SUB / DVI / HDMI

Preset Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Polarity (H/V)	Remarks
720 x 400	31.468	70.08	-/+	
640 x 480	31.469	59.94	-/-	
640 x 480	37.5	75	-/-	
720 x 480	31.47	59.94	-/-	HDMI only
800 x 600	37.879	60.317	+/+	
800 x 600	46.875	75.0	+/+	
1024 x 768	48.363	60.0	-/-	
1024 x 768	60.023	75.029	+/+	
1152 x 864	67.500	75.000	+/+	
1280 x 720	45	60	+/+	
1280 x 800	49.306	59.910	+/-	
1280 x 1024	63.981	60.02	+/+	
1280 x 1024	79.976	75.025	+/+	
1400 x 1050	64.744	59.948	+/-	
1440 x 900	55.469	59.901	+/-	
1600 x 900	60.00	60.00	+/+	
1680 x 1050	65.290	59.954	-/+	
1920 x 1080	67.50	60	+/+	

Input Timing (Video)

Vertical dimensions	Vertical Frequency (Hz)	HDMI	SDI	Remarks
480i	59.94/60	-	0	
480p	59.94/60	0	-	
576p	50	0	-	
576i	50	-	0	
720p	59.94/60	0	0	
720p	50	0	0	
1080i	59.94/60	-	0	
1080p	59.94/60	0	0	
1080i	50	-	0	
1080p	50	0	0	
1080p	29.97/30	0	0	

Input Timing (Component)

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720 x 480	15.730	59.940
720 x 480	15.750	60.000
720 x 480	31.470	59.940
720 x 480	31.500	60.000
720 x 576	15.625	50.000
720 x 576	31.250	50.000
1280 x 720	44.960	59.940
1280 x 720	45.000	60.000
1280 x 720	37.500	50.000
1920 x 1080	33.720	59.940
1920 x 1080	33.750	60.000
1920 x 1080	28.125	50.000
1920 x 1080	56.250	50.000
1920 x 1080	67.432	59.940
1920 x 1080	67.500	60.000

Input Timing (S-Video, Composite)

- This monitor supports the NTSC, PAL.

Power indicator

Mode	LED Colour
On Mode	Green

EXTERNAL CONTROLLER SETUP

The actual product may differ from the picture shown.
Connect the RS-232C (serial connector) of the PC to the RS-232C IN connector at the back of the projector.
Purchase a cable to connect the RS-232C connectors, as the cable is not provided as an accessory.

Use an RS-232C cable to remotely control the monitor (see Figure 1).

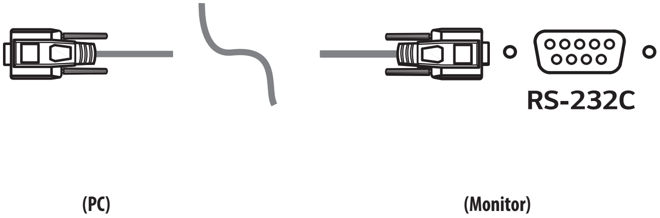
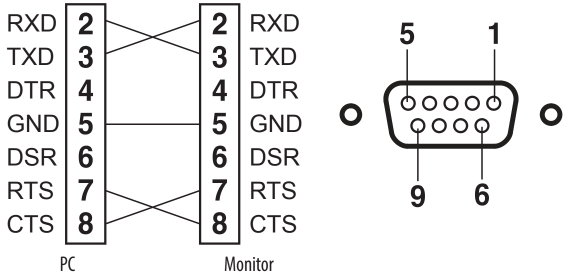


Figure 1: RS-232C Connection Diagram



* There are no connections to Pin 1 and Pin 9.

Set ID Function

This function allows you to assign a unique ID to the monitor to control it remotely from your PC.

Please refer to the "Transmission/Reception Protocol".

1. Press the (Menu ∷) button.
2. Use the ◄, ►, ▼, ▲ buttons to select [General]. Then press the OK button.
3. Use the ◄, ►, ▼, ▲ buttons to select [Set ID]. Then press the OK button.
4. Select a [Set ID] to assign. Then press the [OK] button. The [Set ID] can be a value from 1 to 10.
5. In order to exit from the OSD Menu, press the LED Control Button (Menu ∷) or press (◄Brightness).

Communication Parameters

- Baud rate: 9600 bps (UART)
- Data length: 8 bits
- Parity bit: None
- Stop bit: 1 bit
- Communication code: ASCII code
- Crossed (reverse) cable used.

Command Reference List

Command	Command1	Command2	Data (Hexadecimal)
01. Power	k	a	00 ~ 01
02. Screen Mute	k	d	00 ~ 01
03. Input select ([Main])	k	b	00 ~ 06
04. Input select ([Sub])	k	y	00 ~ 06
05. [Aspect Ratio] ([Main])	k	c	00 ~ 02
06. [Aspect Ratio] ([Sub])	k	o	00 ~ 01
07. [PBP / PIP]	k	n	00 ~ 05
08. [PIP Size]	k	p	00 ~ 02
09. [Main/Sub Screen Change]	m	a	01
10. [Picture Mode]	d	x	00 ~ 08
11. [Brightness]	k	h	00 ~ 64
12. [Contrast]	k	g	00 ~ 64
13. [Sharpness]	k	k	00 ~ 64
14. [Brightness Stabilization]	m	b	00 ~ 01
15. [SUPER RESOLUTION+]	m	c	00 ~ 03
16. [Black Level]	m	d	00 ~ 01
17. [DFC]	m	f	00 ~ 01
18. [Response Time]	m	g	00 ~ 03
19. [Black Stabilizer]	m	h	00 ~ 64
20. [Uniformity]	m	i	00 ~ 01
21. [Gamma]	m	j	00 ~ 05
22. [Color Temp]	k	u	00 ~ 04
23. Red Gain	j	w	00 ~ 64
24. Green Gain	j	y	00 ~ 64
25. Blue Gain	j	z	00 ~ 64
26. [Language]	f	i	00 ~ 10
27. [SMART ENERGY SAVING]	m	k	00 ~ 02
28. [LED Control Button]	m	l	00 ~ 03
29. [DVI Power Supply]	m	m	00 ~ 01
30. [Auto Screen Off]	m	n	00 ~ 01
31. [OSD Lock]	k	m	00 ~ 01
32. [Reset]	f	k	00 ~ 02
33. [Auto Configuration]	j	u	01

Transmission/Reception Protocol

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

[Command 1]: j, k, m, x

[Command 2]: This command is used to control the monitor.

[Set ID]: Used to identify the monitor being controlled. [Set ID] can be assigned to each monitor under [General] in the Settings Menu.

A value from 1 to 10 can be assigned. By selecting '0' for the [Set ID] value in the protocol format, you can control all connected monitors.

* The value is displayed as base 10 on the OSD menu and used as base 16 (0x00 - 0x63) in the transmission/reception protocol for remote control.

[Data]: Transmits a setting value (Data) required for the command described previously. (base 16)

When the Data 'FF' is sent, the setting value corresponding to the specific command is read (Data read mode).

[Cr]: Carriage return, which is '0x0D' in ASCII code.

[ ]: Space, which is '0x20' in ASCII code.

OK Acknowledgment

[Command2][ ][Set ID][ ][OK][Data][x]

When the Data has been successfully received, the monitor sends an ACK response signal in the above format. The Data showing the current state is received in the Data read mode. The Data from the PC is simply returned in the Data write mode.

Error Acknowledgment

[Command2][ ][Set ID][ ][NG][Data][x]

When the set receives an abnormal piece of Data for an unsupported function or there is a communication error, it returns ACK in the format above.

Data 00 : Illegal code

Actual Data Structure (Base 16 → Base 10)

- See the table below when inserting a base-16 value in [Data].
- The channel setup command (ma) uses a 2-byte base-16 value ([Data]) for channel number input.

00: Step 0
01: Step 1 (Set ID 1)
...
0A: Step 10 (Set ID 10)
...
0F: Step 15 (Set ID 15)
10: Step 16 (Set ID 16)
...

32: Step 50 (Set ID 50)
33: Step 51 (Set ID 51)
...
63: Step 99 (Set ID 99)
...
C7: Step 199
C8: Step 200
...

FE: Step 254
FF: Step 255
...
01 00: Step 256
...
27 0E: Step 9998
27 0F: Step 9999
...

* Commands may work differently depending on the model and signal.

01. Power (Command: k a)

- ▶ Controls the On/Off of the power supply to the monitor.

Transmission [k][a][ ][Set ID][ ][Data][Cr]

Data 00: Power Off
01: Power On

Ack [a][ ][Set ID][ ][OK/NG][Data][x]

02. Screen Mute (Command: k d)

- ▶ Controls the On/Off of the screen of the monitor.

Transmission [k][d][ ][Set ID][ ][Data][Cr]

Data 00: Screen Mute Off
01: Screen Mute On

Ack [d][ ][Set ID][ ][OK/NG][Data][x]

03. Input select ([Main]) (Command: k b)

- ▶ Controls the input mode of the Main.

Transmission [k][b][ ][Set ID][ ][Data][Cr]

Data
00 : D-SUB
01 : SDI
02 : DVI
03 : HDMI
04 : Component
05 : Composite
06 : S-Video

Ack [b][ ][Set ID][ ][OK/NG][Data][x]

04. Input select ([Sub]) (Command: k y)

- ▶ Controls the input mode of the Sub.

Transmission [k][y][ ][Set ID][ ][Data][Cr]

Data
00 : D-SUB
01 : SDI
02 : DVI
03 : HDMI
04 : Component
05 : Composite
06 : S-Video

Ack [y][ ][Set ID][ ][OK/NG][Data][x]

05. [Aspect Ratio] ([Main]) (Command: k c)

- ▶ Adjusts the Aspect Ratio of the Main.

Transmission [k][c][ ][Set ID][ ][Data][Cr]

Data
00 : [Full Wide]
01 : [Original]
02 : [Just Scan]

Ack [c][ ][Set ID][ ][OK/NG][Data][x]

06. [Aspect Ratio] ([Sub]) (Command: k o)

▶ Adjusts the Aspect Ratio of the Sub.

Transmission [k][o][ ][Set ID][ ][Data][Cr]

00 : [Full Wide]
01 : [Original]

Ack [o][ ][Set ID][ ][OK/NG][Data][x]

07. [PBP / PIP] (Command: k n)

▶ Controls the PBP/PIP mode.

Transmission [k][n][ ][Set ID][ ][Data][Cr]

Data
00 : Off
01: PBP
02: PIP_LT
03: PIP_RT
04: PIP_LB
05: PIP_RB

Ack [n][ ][Set ID][ ][OK/NG][Data][x]

08. [PIP Size] (Command: k p)

▶ Adjusts the size of PIP.

Transmission [k][p][ ][Set ID][ ][Data][Cr]

Data
00 : [Small]
01 : [Medium]
02 : [Large]

Ack [p][ ][Set ID][ ][OK/NG][Data][x]

09. [Main/Sub Screen Change] (Command: m a)

▶ Controls the Swap in the PBP mode.

Transmission [m][a][ ][Set ID][ ][Data][Cr]

Data 01 : Main/Sub Screen exchange

Ack [a][ ][Set ID][ ][OK/NG][Data][x]

10. [Picture Mode] (Command: d x)

▶ Controls the Picture Mode.

Transmission [d][x][ ][Set ID][ ][Data][Cr]

Data
00 : [Custom]
01 : [Mono]
02 : [sRGB]
03 : [EBU]
04 : [REC709]
05 : [SMPTE-C]
06 : [DICOM]
07 : [Calibration 1]
08 : [Calibration 2]

Ack [x][ ][Set ID][ ][OK/NG][Data][x]

11. [Brightness] (Command: k h)

▶ Adjusts screen brightness.

Transmission [k][h][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [h][ ][Set ID][ ][OK/NG][Data][x]

12. [Contrast] (Command: k g)

▶ Adjusts the colour contrast of the screen.

Transmission [k][g][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [g][ ][Set ID][ ][OK/NG][Data][x]

13. [Sharpness] (Command: k k)

▶ Adjusts the sharpness of the screen.

Transmission [k][k][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [k][ ][Set ID][ ][OK/NG][Data][x]

14. [Brightness Stabilization] (Command: m b)

▶ Controls the Brightness Stabilization function.

Transmission [m][b][ ][Set ID][ ][Data][Cr]

Data 00 : [Off]
01 : [On]

Ack [b][ ][Set ID][ ][OK/NG][Data][x]

15. [SUPER RESOLUTION+] (Command: m c)

▶ Controls the SUPER RESOLUTION+ function.

Transmission [m][c][ ][Set ID][ ][Data][Cr]

Data 00 : [High]
01 : [Middle]
02 : [Low]
03 : [Off]

Ack [c][ ][Set ID][ ][OK/NG][Data][x]

16. [Black Level] (Command: m d)

▶ Controls the Offset level. (HDMI only)

Transmission [m][d][ ][Set ID][ ][Data][Cr]

Data 00 : [High]
01 : [Low]

Ack [d][ ][Set ID][ ][OK/NG][Data][x]

17. [DFC] (Command: m f)

▶ Controls the DFC function.

Transmission [m][f][ ][Set ID][ ][Data][Cr]

Data 00 : [On]
01 : [Off]

Ack [f][ ][Set ID][ ][OK/NG][Data][x]

18. [Response Time] (Command: m g)

▶ Controls the Response Time.

Transmission [m][g][ ][Set ID][ ][Data][Cr]

Data 00 : [Faster]
01 : [Fast]
02 : [Normal]
03 : [Off]

Ack [g][ ][Set ID][ ][OK/NG][Data][x]

19. [Black Stabilizer] (Command: m h)

▶ Controls the Black Sharpness Optimization function.

Transmission [m][h][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [h][ ][Set ID][ ][OK/NG][Data][x]

20. [Uniformity] (Command: m i)

▶ Controls the Uniformity function.

Transmission [m][i][ ][Set ID][ ][Data][Cr]

Data 00 : [On]
01 : [Off]

Ack [i][ ][Set ID][ ][OK/NG][Data][x]

21. [Gamma] (Command: m j)

▶ Adjusts the Gamma settings.

Transmission [m][j][ ][Set ID][ ][Data][Cr]

Data 00 : [Gamma 1.8]
01 : [Gamma 2.0]
02 : [Gamma 2.2]
03 : [Gamma 2.4]
04 : [Gamma 2.6]
05 : [DICOM Gamma Curve]

Ack [j][ ][Set ID][ ][OK/NG][Data][x]

22. [Color Temp] (Command: k u)

▶ Adjusts the colour Temp.

Transmission [k][u][ ][Set ID][ ][Data][Cr]

Data
00 : [Custom]
01 : [6500K]
02 : [7500K]
03 : [9300K]
04 : [Manual]

Ack [u][ ][Set ID][ ][OK/NG][Data][x]

23. Red Gain (Command: j w)

▶ Adjusts the red.

Transmission [j][w][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [w][ ][Set ID][ ][OK/NG][Data][x]

24. Green Gain (Command: j y)

▶ Adjusts the green.

Transmission [j][y][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [y][ ][Set ID][ ][OK/NG][Data][x]

25. Blue Gain (Command: j z)

▶ Adjusts the blue.

Transmission [j][z][ ][Set ID][ ][Data][Cr]

Data Min : 00 - Max : 64

Ack [z][ ][Set ID][ ][OK/NG][Data][x]

26. [Language] (Command: f i)

▶ Adjusts the language of the Menu screen.

Transmission [f][i][ ][Set ID][ ][Data][Cr]

English - Korean (17 languages)

Ack [i][ ][Set ID][ ][OK/NG][Data][x]

27. [SMART ENERGY SAVING] (Command: m k)

▶ Adjusts the SMART ENERGY SAVING.

Transmission [m][k][ ][Set ID][ ][Data][Cr]

Data 00 : [High] 01 : [Low]
02 : [Off]

Ack [k][ ][Set ID][ ][OK/NG][Data][x]

28. [LED Control Button] (Command: m l)

▶ Adjusts the LED ON time of the Control Button.

Transmission [m][l][ ][Set ID][ ][Data][Cr]

Data 00 : [Always On] 01 : [20Sec Time Out]
02 : [10Sec Time Out] 03 : [5Sec Time Out]

Ack [l][ ][Set ID][ ][OK/NG][Data][x]

29. [DVI Power Supply] (Command: m m)

▶ Controls the DVI Power Supply function.

Transmission [m][m][ ][Set ID][ ][Data][Cr]

Data 00 : [On] 01 : [Off]

Ack [m][ ][Set ID][ ][OK/NG][Data][x]

30. [Auto Screen Off] (Command: m n)

- ▶ Adjusts the time to automatically turn the screen off when there is no monitor signal for a set period of time.

Transmission [m][n][ ][Set ID][ ][Data][Cr]

Data 00 : [On] 01 : [Off]

Ack [n][ ][Set ID][ ][OK/NG][Data][x]

31. [OSD Lock] (Command: k m)

- ▶ Controls the OSD Lock function.

Transmission [k][m][ ][Set ID][ ][Data][Cr]

Data 00 : [Off] 01 : [On]

Ack [m][ ][Set ID][ ][OK/NG][Data][x]

32. [Reset] (Command: f k)

- ▶ Controls the Reset operation.

Transmission [f][k][ ][Set ID][ ][Data][Cr]

Data
00: [Picture Reset] 01: Factory Reset
02: [User Preset Reset]

Ack [k][ ][Set ID][ ][OK/NG][Data][x]

33. [Auto Configuration] (Command: j u)

- ▶ Performs the Auto Configuration.

Transmission [j][u][ ][Set ID][ ][Data][Cr]

Data 01 : [Auto Configuration]

Ack [u][ ][Set ID][ ][OK/NG][Data][x]

LG

Life's Good

WARNING: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

Read the user manual (CD) carefully and keep it at hand. The product label contains necessary information for after-service.

Model

Serial No.