

MODEL

MHSD-2712, MFSD-2712, MHSD-3212, MFSD-3212,
MHSD-4312, MFSD-4312, MHSD-5512, MFSD-5512

Rev.2.0

MEDICAL & HEALTHCARE MEDICAL GRADE SURGICAL MONITORS

Important :
Please read PRECAUTIONS, this User's
Manual, carefully to familiarize
yourself with safe and effective usage.



For safe and efficient use of the product, read the manual thoroughly.



Warning : Neglecting this sign and misusing the product may result in fatality or severe injury.



Caution : Neglecting this sign and misusing the product may result in Injury/Physical Damage.



Prohibited : This sign indicates the actions that should be prohibited.



Compulsory : This sign indicates the actions that must be followed.



Reference : This sign proposes or suggests the ideal ways to use the product.

Longtime use of the product may cause dizziness. Frequent rest is recommended while in use. When the dizziness is severe, stop the use of the product immediately.

- The dizziness may last varying from a person to another.
- Usage for other purposes may cause physical harm.

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2. Notice for this Monitor

This product has been adjusted specifically for use in the region to which it was originally shipped. If the product is used outside the region, it may not operate as specified in the specifications.

This product may not be covered by warranty for uses other than those described in this manual.

The specifications noted in this manual are only applicable when the following are used :

- Power cords provided with the product.
- Signal cables specified by us.

Only use optional products manufactured or specified by us with this product.

It takes about 30 minutes for the performance of electrical parts to stabilize. Please wait 30 minutes or more after the monitor power has been turned on, and then adjust the monitor.

Monitors should be set to a lower brightness to reduce changes in luminosity caused by long-term use and maintain a stable display.

If the monitor displays continuously on over a long period of time, dark smudges or burn-in may appear. To maximize the life of the monitor, we recommend the monitor be turned off periodically.

Periodic cleaning is recommended to keep the monitor looking new and to prolong its operation lifetime.

The LCD panel is manufactured using high-precision technology. Although, missing pixels or lit pixels may appear on the LCD panel, this is not a malfunction. Percentage of effective dots: 99.9994% or higher.

The backlight of the LCD panel has a fixed lifetime. When the screen becomes dark or begins to flicker, please contact Highness Support Team.

Do not press on the panel or edge of the frame strongly, as this may result in display malfunctions, such as interference patterns, etc. If pressure is continually applied to the panel, it may deteriorate or damage your panel. (If the pressure marks remain on the panel, leave the monitor with a black or white screen. The symptom may disappear.)

Do not scratch or press on the panel with any sharp objects, as this may result in damage to the panel. Do not attempt to brush with tissues as this may scratch the panel.

When the monitor is cold and brought into a room or the room temperature goes up quickly, dew condensation may occur on the interior and exterior surfaces of the monitor. In that case, do not turn the monitor on. Instead wait until the dew condensation disappears, otherwise it may cause some damage to the monitor.

3. Cleaning

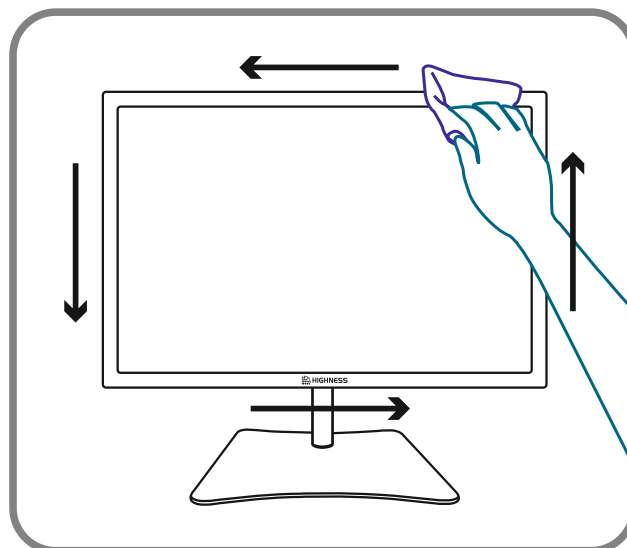
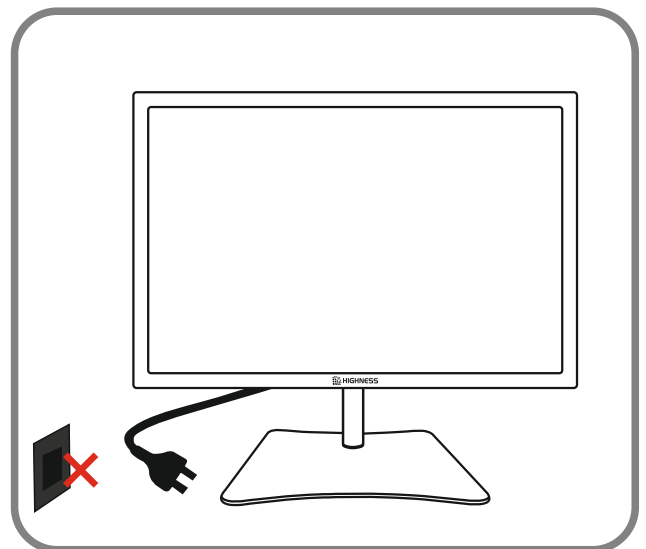
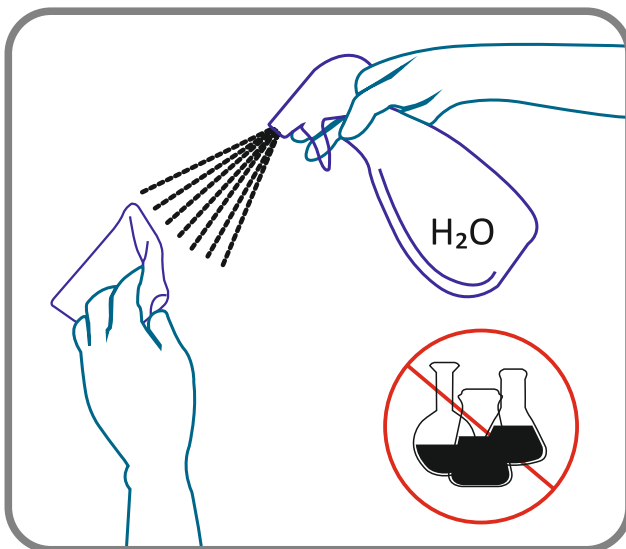
Attention :

- Chemicals such as alcohol and antiseptic solution may cause gloss variation, tarnishing, and fading of the cabinet or panel, and also quality deterioration of the image.
- Never use any thinner, benzene, wax, and abrasive cleaner, which may damage the cabinet or panel.

Note :

- The optional Screen Cleaner is recommended for cleaning the cabinet and panel surface.

If necessary, the stains on the cabinet and panel surface can be removed by moistening part of a soft cloth with water.



4. Precautions

4.1. Power



Warning :



Connect the power plug to an outlet which is GROUNDED. Otherwise electric shock or injury may occur (limited to insulation-type 1 devices).



During thunder and lightning, disconnect the power cable and signal cable from the monitor, otherwise electric shock or fire may occur. Also, disconnect the power plug from the outlet.



DO NOT touch the power plug with wet hands. Moisture may cause electric shock.



While disconnecting the power cable, hold the plug and do not bend the power cord excessively, or put heavy objects on it.



Caution :



Use the power adaptor provided for the monitor. The adaptors of other companies are manufactured by different standards, which may cause damage to the monitor, fire or electric shock.



In cases where the product is intended not to be used for a long time (left over for going outside) from the house, disconnect the power cable from the monitor. Dust may generate heat and cause fire.



Disconnecting the power cord during the use of the monitors may cause electric shock and damage the monitor.

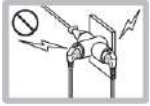


Contact the service centre first for the usage of a power other than 110-220V. The product is set to be used at the power of 110V-220V/60Hz when shipped from the plant.

4.2. Installation



Warning :



DO NOT use multiple products with a single outlet at the same time. Electric shock or fire may occur.



DO NOT install at the locations where excessive heat is produced such as a place with an electric heater. Electric shock, fire, malfunctioning, or deformation may occur.



DO NOT put into the monitor the metallic objects (coins, hairpins, chopsticks, wires, etc.), or flammable objects (paper, matchsticks, etc.). Please do not let your children play with the monitor and always supervise their usage of the monitor. Electric shock, fire, or injury may occur. If foreign objects get into the product, turn off the power immediately and contact the service centre.



DO NOT block the ventilator of the monitor. The product should be installed in a wide place where it is ventilated well, by no less than 10cm off the wall. The monitor's deformation or even the fire can occur due to the increase in the internal temperature.



Install the product at a place free of electromagnetic interference. High-Tension wires, and some specific electric devices emit excessive electromagnetic waves, thereby affecting the performance of the monitor.



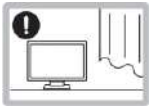
DO NOT place heavy objects on the monitor or climb up on the monitor. Injuries may occur for being dropped down from the monitor : especially for children. Please do not let your children play with the monitor and always supervise their usage of the monitor.



DO NOT leave the power cable or signal cable on the passage way. Falling over the cable may cause electric shock, fire, the damage of product, or injuries.



Caution :



Place the monitor on a flat and stable space lest it fall down and where there is no sunlight.



Place the monitor in a clean and dry space. If you smell smoke, hear a loud noise, or any strange odor is coming from the monitor, turn off the power and contact the service centre.



If the Monitor is dropped, or its cover case is damaged, turn the power off and contact the service centre.

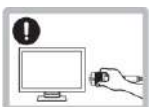
4.3. Move



Warning :



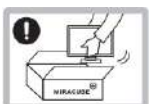
Turn the power off first before moving the product.



Disconnect all the cables before moving the product.



Ensure that the product is not dropped or bumped in any way while being moved.



Keep the box in which the product was delivered. It will be of use for moving the product.



Ensure that the product's panel faces forward, carry by grabbing it with both hands. If the product is dropped, and it is damaged, electric shock or fire may occur. Contact the service centre and have the product repaired.

4.4. Usage



Warning :



DO NOT disassemble, repair, or remodel the product yourself. Only our trained professionals at the service centre can repair the monitor.



When cleaning, DO NOT use flammable sprays directly on the monitor, or wipe it with flammable solutions (paint thinner, benzene, etc.).



DO NOT spray the product with water, or have it wet. Fire, electric shock, or malfunctioning may occur.



Prior to the cleaning of the panel, disconnect the power cord. Wipe the panel lightly with smooth cloth to prevent any scratches. Wet cloth is never to be used.



Caution :

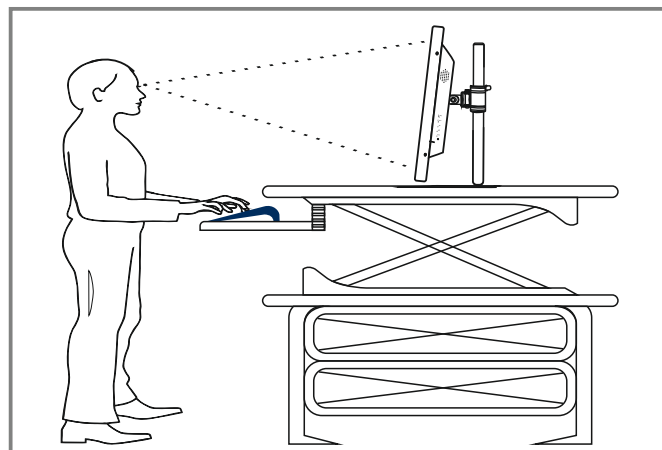


DO NOT stab or scratch the panel with a hand or any sharp objects (nail, pencil, pen etc.). The panel can be scarred, which may cause malfunctioning.



In case where monitor is used for a long time, dizziness or fatigue can be felt. To protect the eyes and reduce the fatigue on muscles, frequent rest is highly recommended.

Proper
postures for
watching the
Monitor :



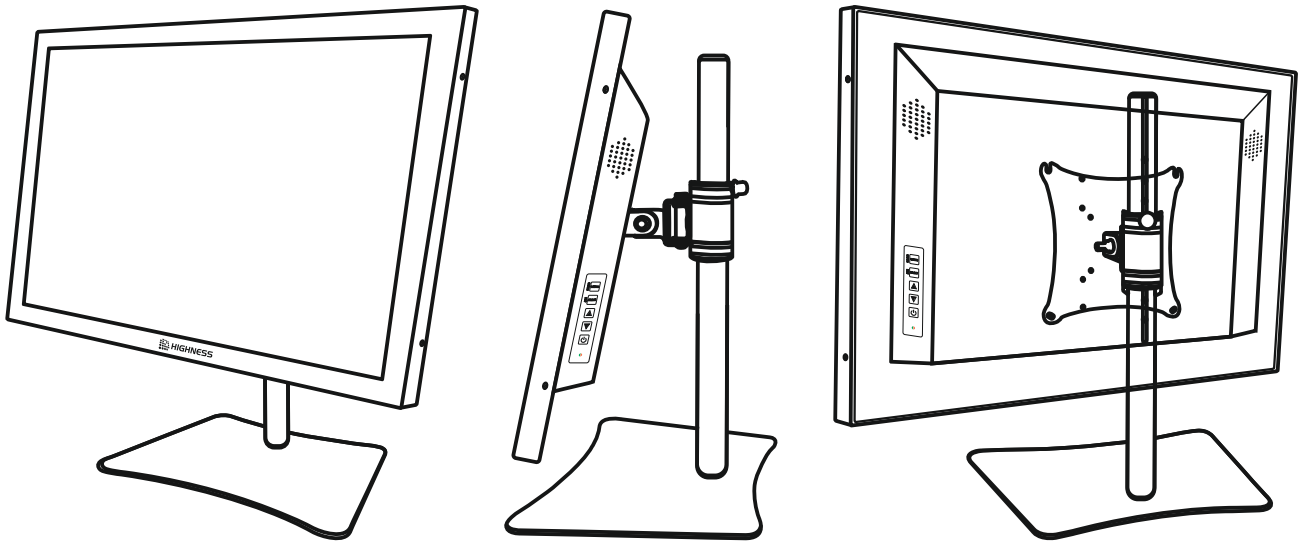
5. Product Description

5.1. Product Components :

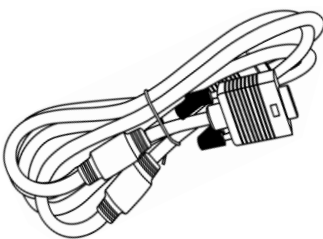


Check if all the parts and accessories are in the box. If any components are missing from what is stated below, please contact the retail store where the product was purchased. For purchasing additional parts or accessories, contact the service centre.

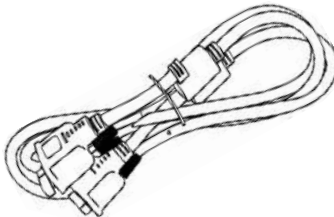
Monitor :



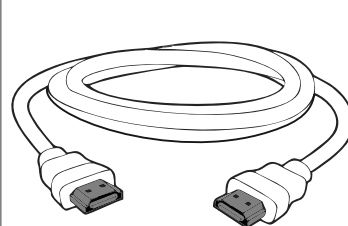
15 Pin D-Sub Cable :



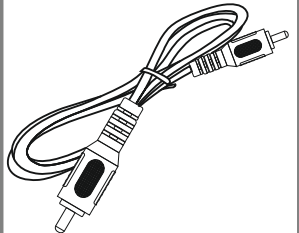
DVI Cable :



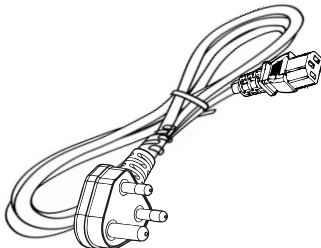
HDMI Cable :



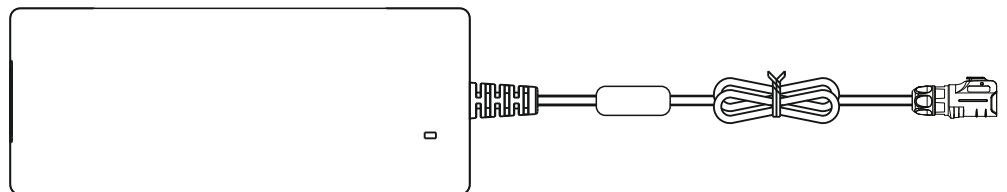
AV Cable :



Power Cord :

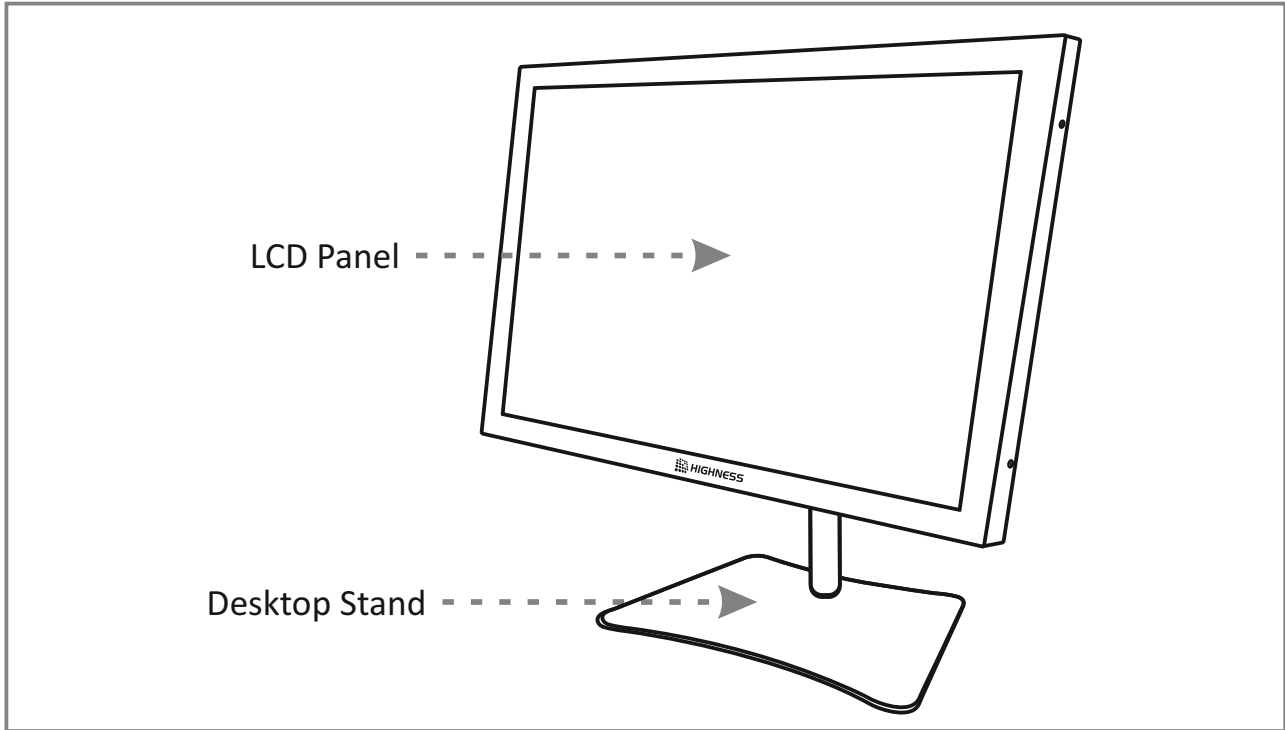


DC 12V/24V :

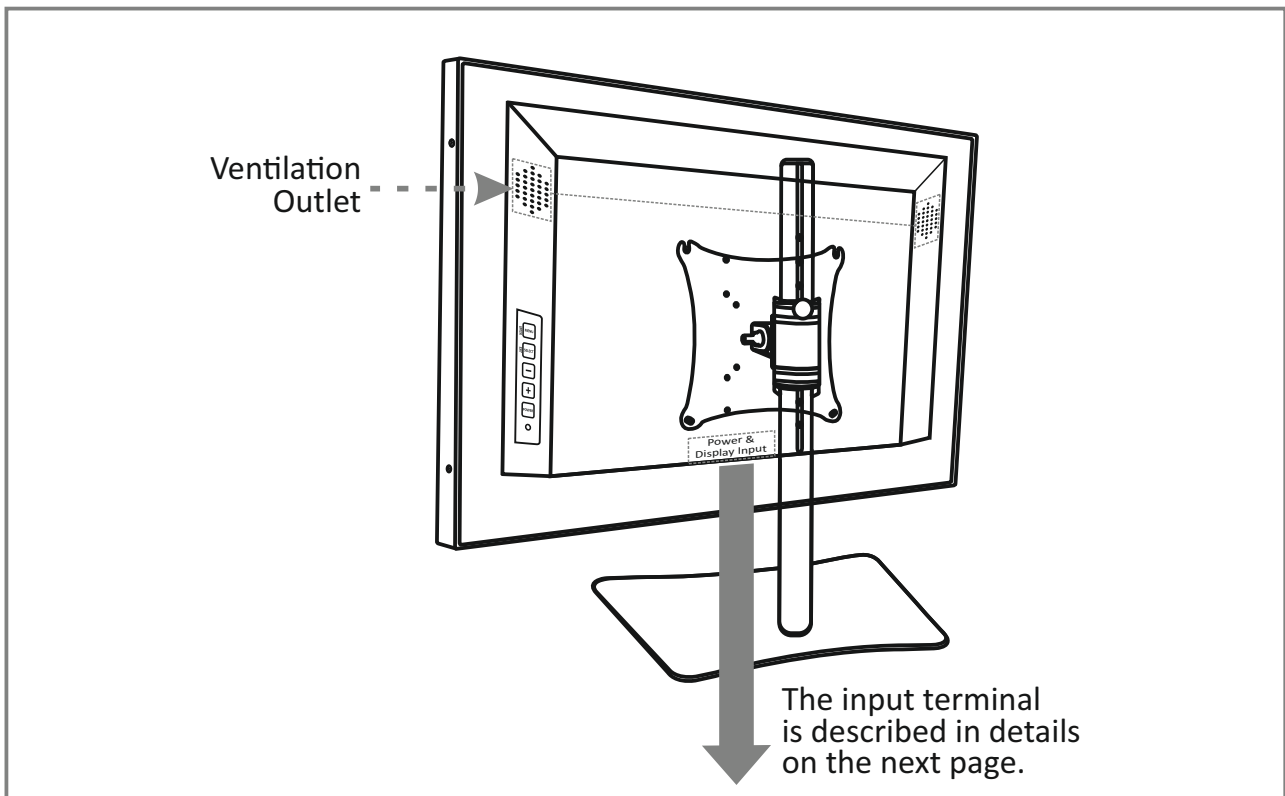


5.2. Name of Components :

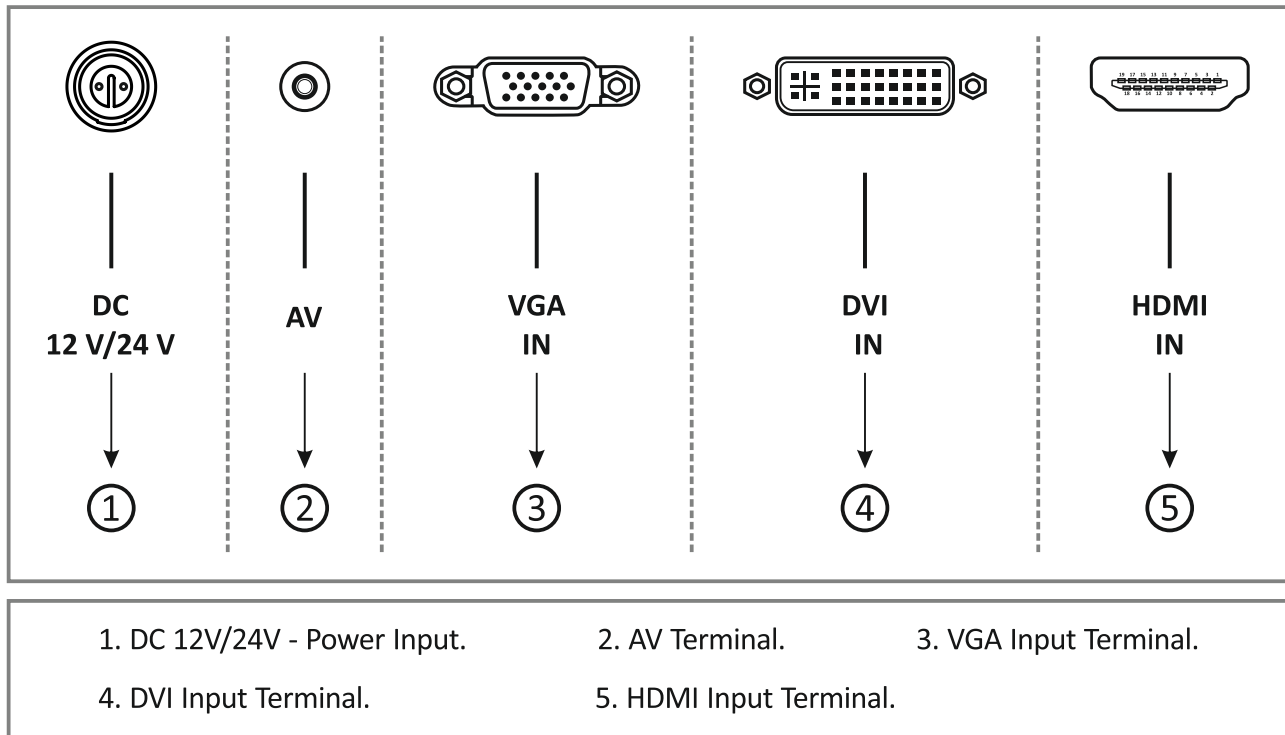
A. Front Side :



B. Back Side :

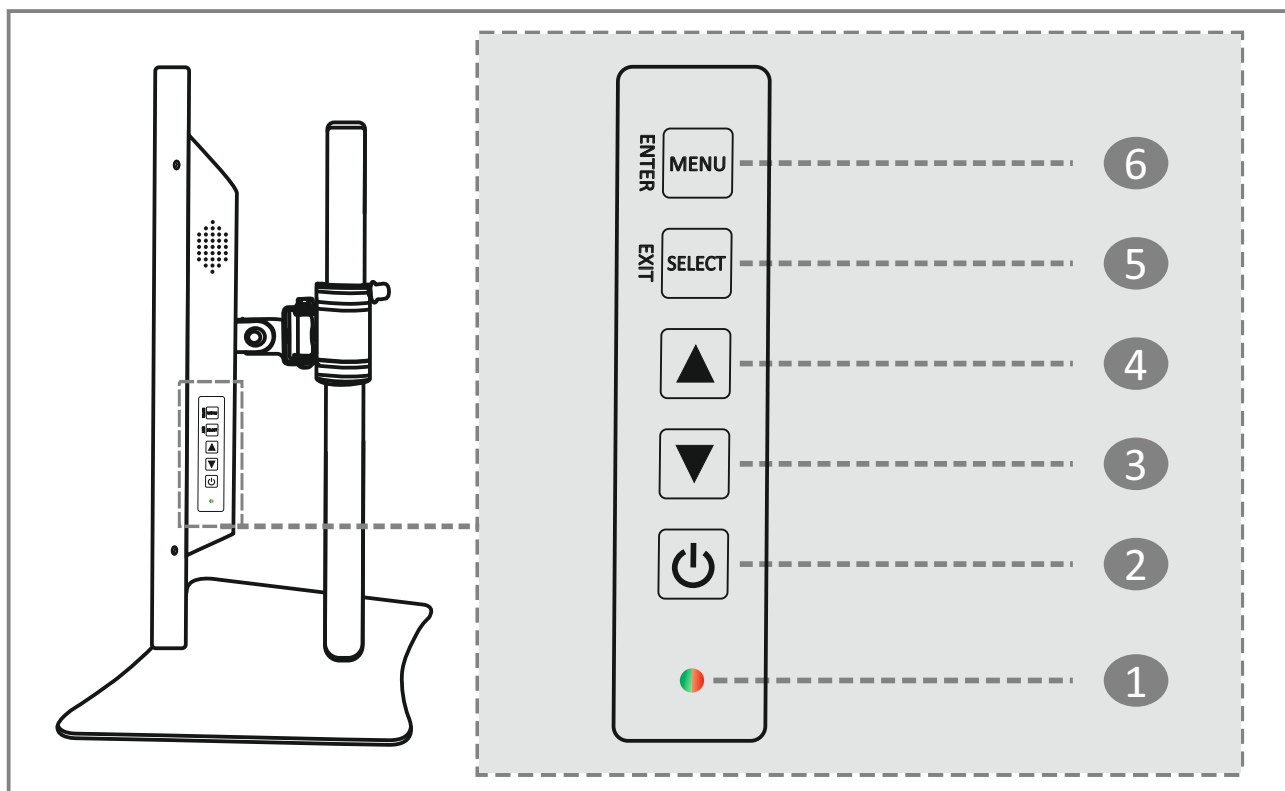


● Detailed Description on Terminal :



C. Side View :

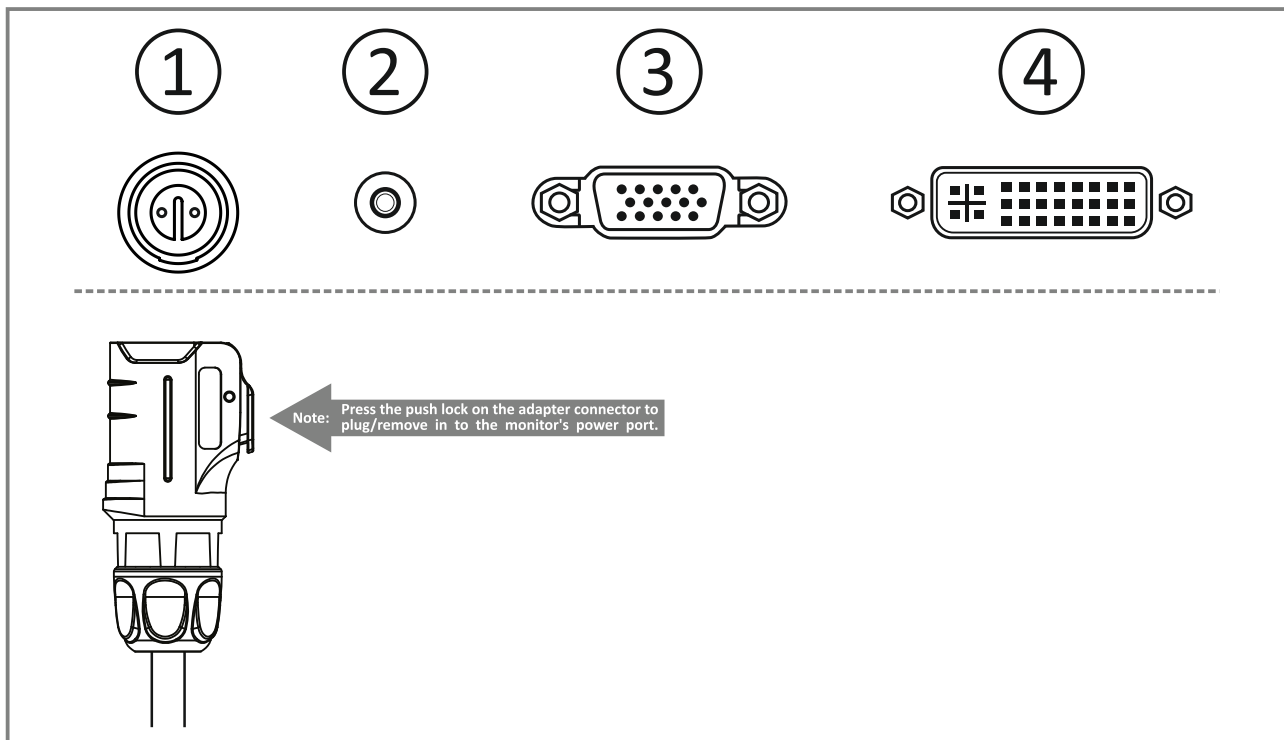
● Detail Description on Button :



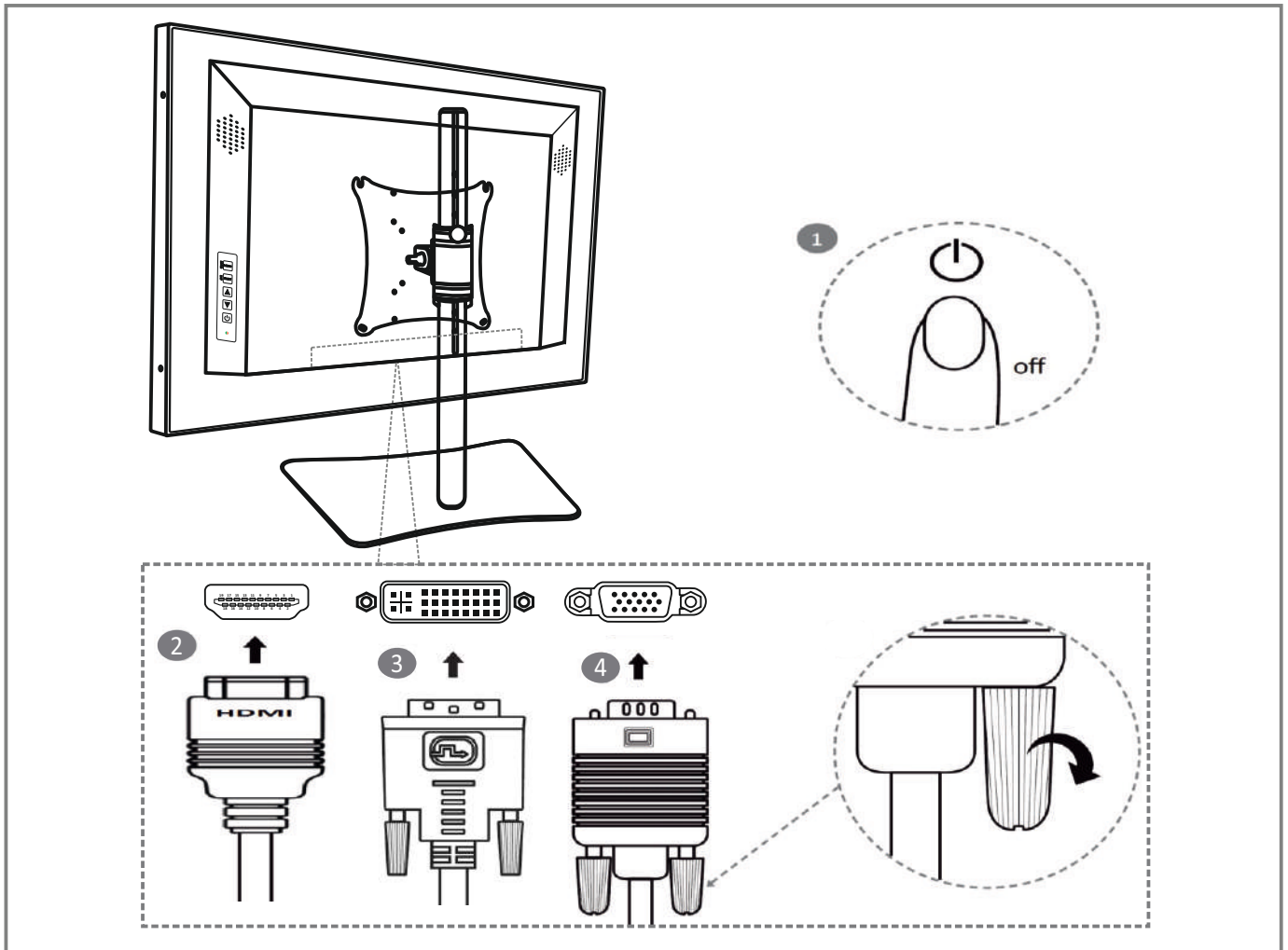
- 1. Power LED :** Indicates the monitor's operation status.
Green : Operating
Red : Power saving mode/Power off
- 2. Power :** Turns the power On or Off.
- 3. Down :** To move the cursor downwards or to switch over the setting items or to increase / decrease the figure of the setting selected.
- 4. Up :** To move the cursor upwards or to switch over the setting items or to increase / decrease the figure of the setting selected.
- 5. Exit/Select :** To Enter the Option.
- 6. Enter/Menu :** To Enter the OSD Menu or confirm the setting to go back to the previous option

Only use the adaptor provided together with the Monitor, or compatible adaptors. The use of incompatible adaptors may damage the computer. (Selected Model Only)

D. Power Connection :



E. Display Signal :



1. First turn off the power of the computer and peripheral devices.

2. **Connection on with the HDMI cable :** Connect the HDMI input terminal at the bottom of the monitor.

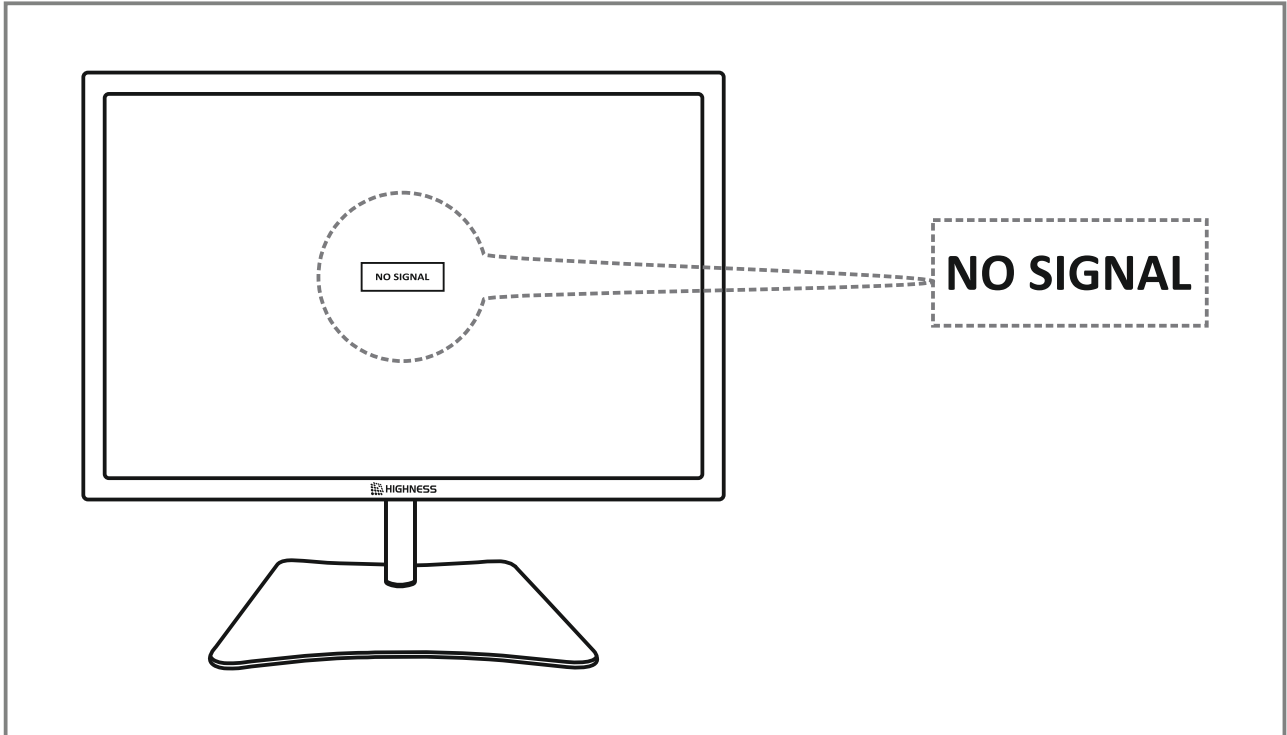
3. **Connection on with the VGA cable :** In order to use the monitor by receiving the signal from the VGA terminal.

4. **Connection on with the DVI cable :** In order to use the monitor by receiving the signal from the DVI terminal.

5. After connecting, tighten both the screws at each end of cable to be fixed.

F. Connection Status checkup :

If the LED lamp frequently blinks, and a “No Signal (as shown below)” appears on the screen, check out the connection status of the HDMI, VGA or other Video cable.



6. How to Use OSD

6.1. INFO :

Press the “ENTER/MENU” key to the call out OSD menu. Press “EXIT/SELECT” Key to select the “INFO”. Select the “INFO” key for the all information about the panel.
Press “ENTER/MENU” or “RETURN” option to display main OSD window.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

MODEL	VENUS6 PRO
INPUT	HDMI
FORMAT	[1920X1080@60]
GAMMA	BYPASS
RANGE	[FULL]
FW08-M-0002-FFFZS01	

6.2. INPUT :

Press the “ENTER/MENU” Button using “▼” Key to move “INPUT” It will be highlighted to “Gray Color”.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
INPUT	HDMI
SETUP LEVEL	0
ANALOG CALIBRATE	

A) INPUT :

Press “EXIT/SELECT” Button to select the “INPUT”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. In the input mode the display shows, which input source we give to panel. (SDI 1, SDI 2, HDMI, DVI, VGA, CVBS, AUTO) Press “ENTER/MENU” button after selecting the desired option. Press “EXIT/SELECT” to save the setting.

Press “ENTER/MENU” or “RETURN” option to display main OSD window.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
INPUT	HDMI
SETUP LEVEL	0
ANALOG CALIBRATE	

SDI 1	
SDI 2	
HDMI	
DVI	
VGA	
CVBS	
AUTO	[OFF]

B) SETUP LEVEL :

“SETUP LEVEL” options will be Disable.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
INPUT	HDMI
SETUP LEVEL	0
ANALOG CALIBRATE	

C) ANALOG CALIBRATE :

“ANALOG CALIBRATE” options will be Disable.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
INPUT	HDMI
SETUP LEVEL	0
ANALOG CALIBRATE	

6.3. PICTURE :

Press the “ENTER/MENU” Button using “▼” Key to move “PICTURE” It will be highlighted to “Gray Color”.
Press “EXIT/SELECT” key to enter.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
BRIGHT	50
CONTRAST	88
CHROMA	47
SHARPNESS	49
RESET TO DEFAULT	

A) BRIGHT :

Press “▼” Button to select the “Bright”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the “Bright”. Adjusting brightness to enhance the level of dark area in the video picture such as night scenes and shadow scenes. Increasing brightness will make dark areas more visible. Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
BRIGHT	50
CONTRAST	88
CHROMA	47
SHARPNESS	49
RESET TO DEFAULT	

B) CONTRAST :

Press “▼” Button to select the “Contrast”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the “Contrast”. Increasing contrast will make white area of the video picture brighter. Contrast works in conjunction with “Brightness”. Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
BRIGHT	50
CONTRAST	88
CHROMA	47
SHARPNESS	49
RESET TO DEFAULT	

C) CHROMA :

Press the “▼” button to the select “Chroma”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase / decrease the adjusting the chroma. Chroma refers to the purity of color. it’s similar to saturation but not quite the same. Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
BRIGHT	50
CONTRAST	88
CHROMA	47
SHARPNESS	49
RESET TO DEFAULT	

D) SHARPNESS :

Press “▼” Button to select the “Sharpness”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the “Sharpness”. It adds to the detail enhancement of the video picture. Increasing the figure will enhance the edges of objects in the video picture. Decreasing the figure will reduce enhancement. Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	BRIGHT	50
PICTURE		CONTRAST	88
GAMMA	BYPASS	CHROMA	47
COLOR		SHARPNESS	49
SCREEN	AUTO	RESET TO DEFAULT	
AUDIO	[50]		
SETUP			

E) RESET TO DEFAULT :

Press the “▼” button to the select “Reset to Default”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press the select button to reset to default setting. Panel take default setting of picture mode of all options. Press the “ENTER/MENU” key after adjusting. Press “EXIT/SELECT” to save the setting. Press “ENTER/MENU” or “RETURN” option to display main OSD window.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	BRIGHT	50
PICTURE		CONTRAST	88
GAMMA	BYPASS	CHROMA	47
COLOR		SHARPNESS	49
SCREEN	AUTO	RESET TO DEFAULT	
AUDIO	[50]		
SETUP			

6.4. GAMMA :

Press the “ENTER/MENU” Button using “▼” Key to move “GAMMA” It will be highlighted to “Gray Color”. Press “EXIT/SELECT” key to into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (BYPASS, 2.2-D65, DICOM). Press the “ENTER/MENU” key after adjusting. Press “EXIT/SELECT” to save the setting. Press “ENTER/MENU” or “RETURN” option to display main OSD window.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	BYPASS	
PICTURE		2.2-D65	Calibrated
GAMMA	BYPASS	DICOM	Calibrated
COLOR			
SCREEN	AUTO		
AUDIO	[50]		
SETUP			

6.5. COLOR :

Press the “ENTER/MENU” Button using “▼” Key to move “COLOR” It will be highlighted to “Gray Color”. Press “EXIT/SELECT” key to enter.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

A) RED BIAS :

Press “▼” Button to select the “Red Bias”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the redness of picture. (Range of Red Bias -128 to 127) Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

B) GREEN BIAS :

Press “▼” Button to select the “Green Bias”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the Greenest of picture. (Range of Green Bias 0 to 128) Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” or Return option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

C) BLUE BIAS :

Press “▼” Button to select the “Blue Bias”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the blueness of picture. (Range of Blue Bias 0 to 128) Press “EXIT/SELECT” to save the setting.
Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

D) RED GAIN :

Press “▼” Button to select the “Red Gain”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the redness of picture. (Range of Red Gain 0 to +255) (Standard range of Red Gain 128) Press “EXIT/SELECT” to save the setting.
Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

E) GREEN GAIN :

Press “▼” Button to select the “Green Gain”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the greenest of picture. (Range of Green Gain 0 to 256) (Standard range of Green Gain 128) Press “EXIT/SELECT” to save the setting.
Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

F) BLUE GAIN :

Press “▼” Button to select the “Blue Gain”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the blueness of picture. (Range of Blue Gain 0 to 256) (Standard range of blue Gain 128)

Press the “ENTER/MENU” key after adjusting. Press “EXIT/SELECT” to save the setting.

Press “ENTER/MENU” or “RETURN” to display main OSD window.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	RED BIAS	[0]
PICTURE		GREEN BIAS	[0]
GAMMA	BYPASS	BLUE BIAS	[0]
COLOR		RED GAIN	[128]
SCREEN	AUTO	GREEN BIAS	[128]
AUDIO	[50]	BLUE GAIN	[128]
SETUP			

6.6. SCREEN :

Press the “ENTER/MENU” Button using “▼” Key to move “SCREEN” It will be highlighted to “Gray Color”.

Press “EXIT/SELECT” key to enter.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	SCAN	NORMAL
PICTURE		ASPECT	AUTO
GAMMA	BYPASS	MONO/COLOR	RGB
COLOR		FLIP H	[OFF]
SCREEN	AUTO	FLIP V	[OFF]
AUDIO	[50]		
SETUP			

A) SCAN :

Press “▼” Button to select the “Scan”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (Normal, Overscan, zoom). Press “EXIT/SELECT” to save the setting.

Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN		NORMAL
INPUT	HDMI	SCAN	NORMAL	OVERSCAN
PICTURE		ASPECT	AUTO	ZOOM
GAMMA	BYPASS	MONO/COLOR	RGB	
COLOR		FLIP H	[OFF]	
SCREEN	AUTO	FLIP V	[OFF]	
AUDIO	[50]			
SETUP				

B) ASPECT :

Press “▼” Button to select the “Aspect”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (Auto, 4:3, 16:9, Fill). Press “EXIT/SELECT” to save the setting.

Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN		AUTO
INPUT	HDMI	SCAN	NORMAL	4:3
PICTURE		ASPECT	AUTO	16:9
GAMMA	BYPASS	MONO/COLOR	RGB	FILL
COLOR		FLIP H	[OFF]	
SCREEN	AUTO	FLIP V	[OFF]	
AUDIO	[50]			
SETUP				

C) MONO/COLOR :

Press “▼” Button to select the “Mono/Color”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (RGB, Mono, Red, Green, Blue). Press “EXIT/SELECT” to save the setting.

Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN		RGB
INPUT	HDMI	SCAN	NORMAL	MONO
PICTURE		ASPECT	AUTO	RED
GAMMA	BYPASS	MONO/COLOR	RGB	GREEN
COLOR		FLIP H	[OFF]	BLUE
SCREEN	AUTO	FLIP V	[OFF]	
AUDIO	[50]			
SETUP				

D) FLIP H :

Press “▼” Button to select the “FLIP H”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (ON/OFF). Flip H option use for the mirror image in Horizontal way of image. Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN		
INPUT	HDMI	SCAN	NORMAL	
PICTURE		ASPECT	AUTO	
GAMMA	BYPASS	MONO/COLOR	RGB	
COLOR		FLIP H	[OFF]	
SCREEN	AUTO	FLIP V	[OFF]	
AUDIO	[50]			
SETUP				

E) FLIP V :

Press “▼” Button to select the “FLIP V”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (ON/OFF). Flip V option use for the mirror image in Vertical way of image.

Press “ENTER/MENU” button after selecting the desired option. Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	SCAN	NORMAL
PICTURE		ASPECT	AUTO
GAMMA	BYPASS	MONO/COLOR	RGB
COLOR		FLIP H	[OFF]
SCREEN	AUTO	FLIP V	[OFF]
AUDIO	[50]		
SETUP			

6.7. AUDIO : (Unusable)

Press the “MENU/ENTER” Button using “▼” Key to move “AUDIO” It will be highlighted to “Gray Color”. Press “SELECT/EXIT” key to enter.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	FRONT VOLUME	[50]
PICTURE			
GAMMA	BYPASS		
COLOR			
SCREEN	AUTO		
AUDIO	[50]		
SETUP			

A) FRONT VOLUME :

Press “▼” Button to select the “Front Volume”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the “Front Volume”. (Range of Front Volume 50 to 100) Press the “ENTER/MENU” key after adjusting. Press “EXIT/SELECT” to save the setting. Press “ENTER/MENU” or “RETURN” option to display main OSD window.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	FRONT VOLUME	
PICTURE			
GAMMA	BYPASS		
COLOR			
SCREEN	AUTO		
AUDIO	[50]		
SETUP			

6.8. SETUP :

Press the “ENTER/MENU” Button using “▼” Key to move “SETUP” It will be highlighted to “Gray Color”. Press “EXIT/SELECT” key to enter.

INFO	[1920x1080@60]	RETURN	
INPUT	HDMI	FORMAT DISPLAY	AUTO
PICTURE		POWER SAVE	ALWAYS ..
GAMMA	BYPASS	KEY LOCK	UNLOCK
COLOR		BACKLIGHT CONTROL	LINEAR
SCREEN	AUTO	BACKLIGHT	100
AUDIO	[50]	OSD ALPHA	[0]
SETUP		RESET TO DEFAULT	

A) FORMAT DISPLAY :

Press “▼” Button to select the “Format Display”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and Choose option to “EXIT/SELECT” Button. (Auto, On, Off) Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.
Auto : If choose “Auto” format display then display shows input source name at the one time only whenever give power ON/OFF to panel.

ON : If choose ON format display then display continuously shows input source name.

OFF : If choose OFF format display then display never shows input source name.

INFO	[1920x1080@60]	RETURN		AUTO
INPUT	HDMI	FORMAT DISPLAY	AUTO	ON
PICTURE		POWER SAVE	ALWAYS ..	OFF
GAMMA	BYPASS	KEY LOCK	UNLOCK	
COLOR		BACKLIGHT CONTROL	LINEAR	
SCREEN	AUTO	BACKLIGHT	100	
AUDIO	[50]	OSD ALPHA	[0]	
SETUP		RESET TO DEFAULT		

B) POWER SAVE :

Press “▼” Button to select the “Format Display”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Press “▲” or “▼” key to select and to choose option press “EXIT/SELECT” Button (Always, On, 2 MIN, 5 MIN, 10 MIN, 30 MIN, 1 HOUR, 2 HOUR). Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO [1920x1080@60]	RETURN	ALWAYS ON
INPUT HDMI	FORMAT DISPLAY AUTO	2 MIN
PICTURE	POWER SAVE ALWAYS ..	5 MIN
GAMMA BYPASS	KEY LOCK UNLOCK	10 MIN
COLOR	BACKLIGHT CONTROL LINEAR	30 MIN
SCREEN AUTO	BACKLIGHT 100	1 HOUR
AUDIO [50]	OSD ALPHA [0]	2 HOUR
SETUP	RESET TO DEFAULT	

C) KEY LOCK :

Press “▼” Button to select the “Key Lock”. It will be highlighted to “Gray Color”. To choose option press “EXIT/SELECT” Button (Lock & Unlock) (By default setting Unlock). Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO [1920x1080@60]	RETURN	LOCK
INPUT HDMI	FORMAT DISPLAY AUTO	UNLOCK
PICTURE	POWER SAVE ALWAYS ..	
GAMMA BYPASS	KEY LOCK UNLOCK	
COLOR	BACKLIGHT CONTROL LINEAR	
SCREEN AUTO	BACKLIGHT 100	
AUDIO [50]	OSD ALPHA [0]	
SETUP	RESET TO DEFAULT	

D) BACKLIGHT CONTROL :

Press “▼” Button to select the “Backlight Control”. It will be highlighted to “Gray Color”. To select and to choose option press “EXIT/SELECT” Button (Linear & Curve). Press “EXIT/SELECT” to save the setting. Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO [1920x1080@60]	RETURN	LINEAR
INPUT HDMI	FORMAT DISPLAY AUTO	CURVE
PICTURE	POWER SAVE ALWAYS ..	
GAMMA BYPASS	KEY LOCK UNLOCK	
COLOR	BACKLIGHT CONTROL LINEAR	
SCREEN AUTO	BACKLIGHT 100	
AUDIO [50]	OSD ALPHA [0]	
SETUP	RESET TO DEFAULT	

E) BACKLIGHT :

Press “▼” Button to select the “Backlight”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the Backlight (0 to 100). Press “EXIT/SELECT” to save the setting.

Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
FORMAT DISPLAY	AUTO
POWER SAVE	ALWAYS ..
KEY LOCK	UNLOCK
BACKLIGHT CONTROL	LINEAR
BACKLIGHT	100
OSD ALPHA	[0]
RESET TO DEFAULT	

F) OSD ALPHA :

Press “▼” Button to select the “OSD Alpha”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. Use the “▲” or “▼” key to increase/decrease the OSD Alpha. (0 to 6)

Press “EXIT/SELECT” to save the setting.

Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
FORMAT DISPLAY	AUTO
POWER SAVE	ALWAYS ..
KEY LOCK	UNLOCK
BACKLIGHT CONTROL	LINEAR
BACKLIGHT	100
OSD ALPHA	[0]
RESET TO DEFAULT	

G) RESET TO DEFAULT :

Press “▼” Button to select the “Reset to Default”. It will be highlighted to “Gray Color”. Press the “EXIT/SELECT” button to enter into option. An option window displaying (Cancel/Reset now) will appear on screen.

Press the “ENTER/MENU” or “RETURN” option after adjusting.

INFO	[1920x1080@60]
INPUT	HDMI
PICTURE	
GAMMA	BYPASS
COLOR	
SCREEN	AUTO
AUDIO	[50]
SETUP	

RETURN	
FORMAT DISPLAY	AUTO
POWER SAVE	ALWAYS ..
KEY LOCK	UNLOCK
BACKLIGHT CONTROL	LINEAR
BACKLIGHT	100
OSD ALPHA	[0]
RESET TO DEFAULT	

7. Screen Adjustment |

7.1. Digital Signal Input :

When digital signals are input, images are displayed correctly based on the preset data of the monitor.

7.2. Analog Signal Input :

Attention

- It takes about 30 minutes for the performance of electrical parts to stabilize. Please wait 30 minutes or more after the monitor power has been turned on, and then adjust the monitor.

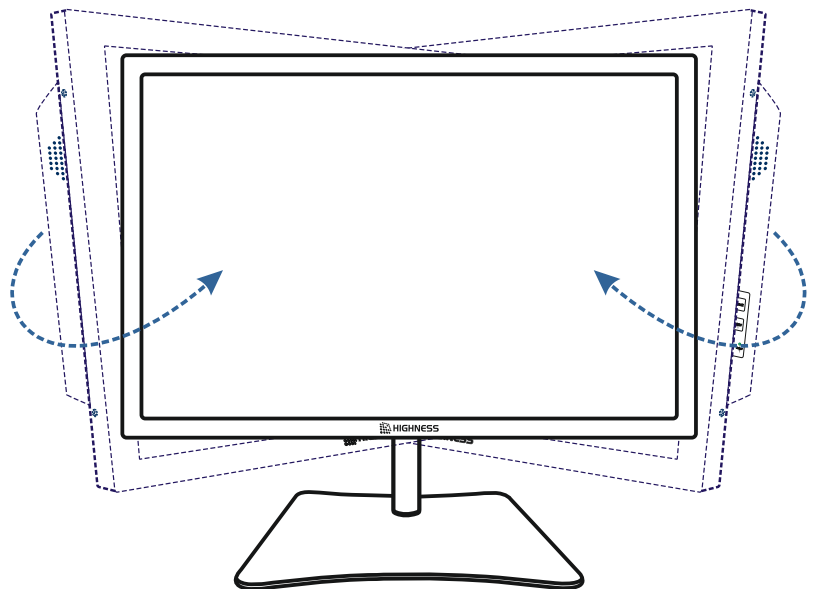
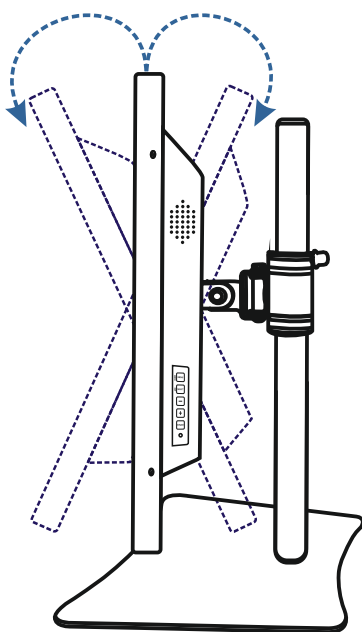
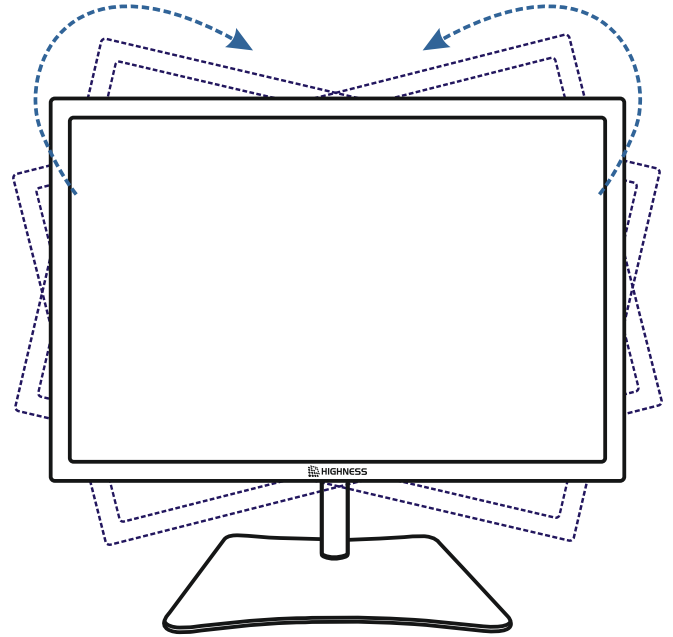
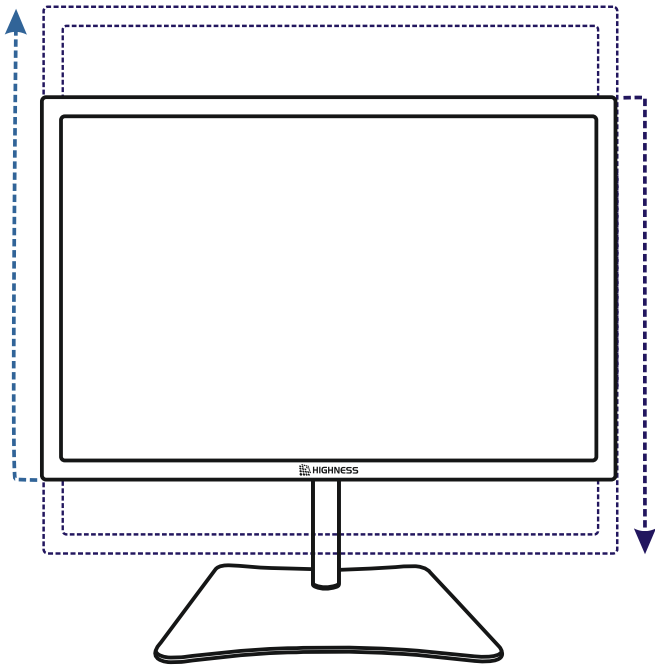
The monitor screen adjustment is used to suppress flickering of the screen or adjust screen position and screen size correctly according to the Module to be used.

Note

- The Self Adjust function works when all of the following conditions are satisfied :
 - When a signal is input into the monitor for the first time or when a resolution or vertical/ horizontal scan frequency not used before is set.











8. Compensating viewing angle deficiency

When the screen is to be viewed from below, the viewing angle can be compensated for so the screen looks as if it is being seen from directly ahead.











9. How to Use REMOTE

Distance at 1.5 meters max and 20 degree (Left/Right) max at right side corner of the monitor.

-  Turns the power ON/OFF
-  Volume Mute
-  Auto Adjust setting
-  To move the cursor upwards or to switch over the setting items or to Increase / Decrease the figure of the setting selected.
-  To move the cursor downwards or to switch over the setting items or to Increase / Decrease the figure of the setting selected.
-  Increase / Decrease the figure of the setting selected.
-  Increase / Decrease the figure of the setting selected.
-  To Enter the Option and select the option.
-  To Enter the OSD Menu or confirm the setting to go back to the previous option.
-  Select RGB, DVI, HDMI source.



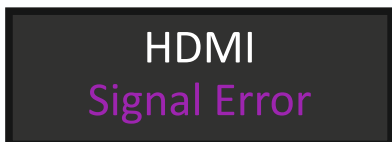
-  Select RGB / VGA source.
-  Select DVI source.
-  Select HDMI source.
-  Not Applicable.
-  Full Screen.
-  Not Applicable.
-  Not Applicable.
-  Not Applicable.

10. Troubleshooting

If a problem still remains after applying the suggested remedies, contact your Highness Support Team.

10.1. No picture :

Problem	Possible cause and remedy
1. No picture <ul style="list-style-type: none"> Power indicator does not light. 	<ul style="list-style-type: none"> Check whether the power cord is connected properly. Turn the main power switch on. Press Power Turn off the main power, and then turn it on again a few minutes later.
<ul style="list-style-type: none"> Power indicator is lighting green. 	<ul style="list-style-type: none"> Increase “Brightness”, “Contrast” in the Setting menu.
2. The message below appears. <ul style="list-style-type: none"> The message shows that the input signal is out of the specified frequency range. Example : 	<p>This message appears when the signal is not input correctly even when the monitor functions properly.</p> <ul style="list-style-type: none"> Check whether the Module is configured to meet the resolution and vertical scan frequency requirements of the monitor Reboot the Module. Select an appropriate setting.



10.2. Imaging problems (for both digital and analog) :

Problem	Possible cause and remedy
1. The screen is too bright or too dark.	<ul style="list-style-type: none"> • Use “Brightness” or “Contrast” in the Setting menu to adjust it. (The LCD monitor backlight has a limited life span. When the screen becomes dark or begins to flicker, contact your Highness Support Team.)
2. After images appear.	<ul style="list-style-type: none"> • Afterimages are particular to LCD monitors. Avoid displaying the same image for a long time. • Use the screen saver or power save function to avoid displaying the same image for extended periods of time.
3. Green / Red / Blue / White dots or defective dots remain on the screen.	<ul style="list-style-type: none"> • This is due to LCD panel characteristics and is not a failure.
4. Interference patterns or pressure marks remain on the screen.	<ul style="list-style-type: none"> • Leave the monitor with a white or black screen. The symptom may disappear.

10.3. Other Problems :

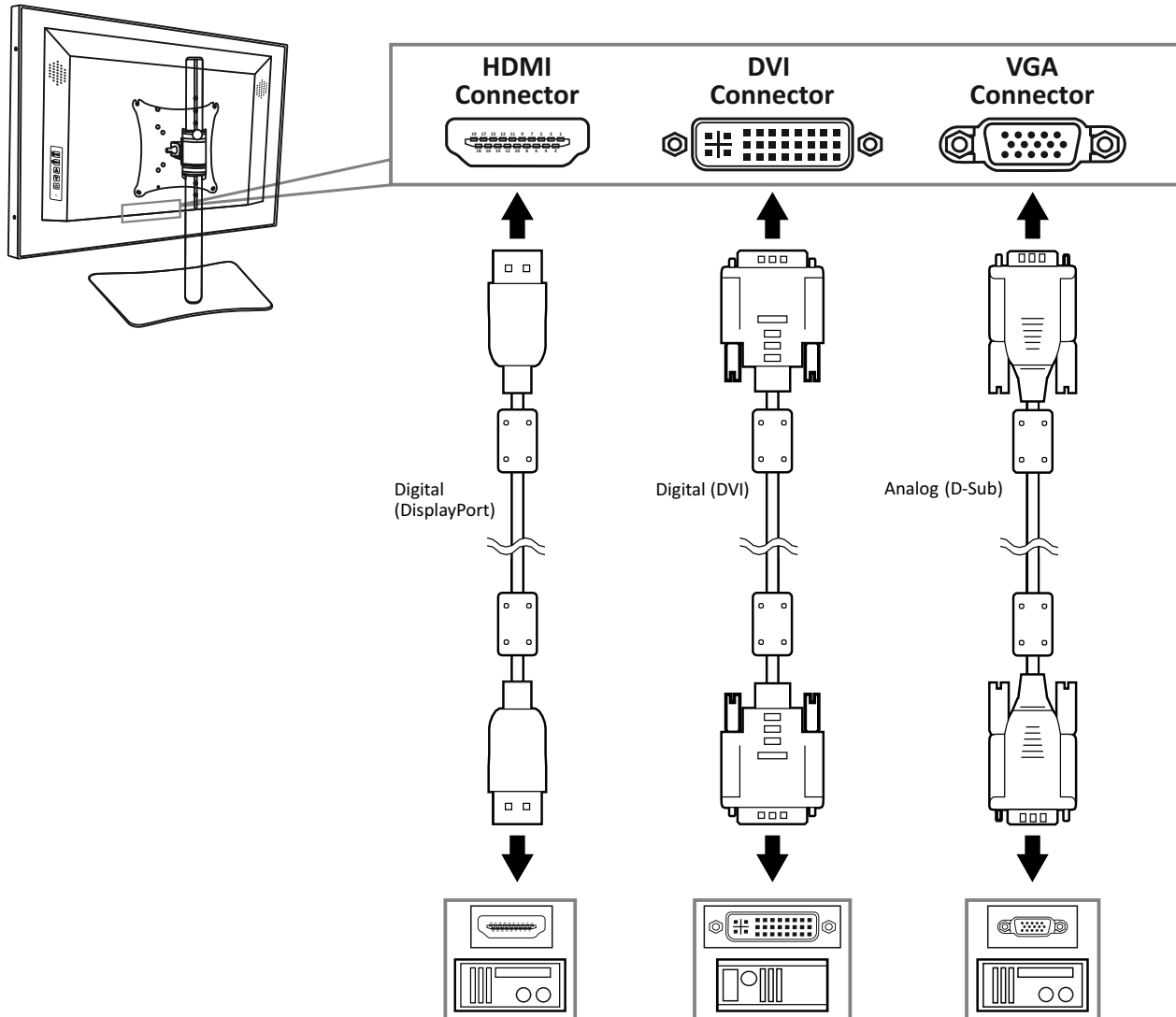
Problem	Possible cause and remedy
1. The Setting menu does not appear.	<ul style="list-style-type: none"> • Check whether the signal cable is connected.

10.4. Hot Key :

Button	Function
1. ▲ and ▼ Button	<ul style="list-style-type: none"> • If pressed once can be used to toggle Input Source.
2. Select Button	<ul style="list-style-type: none"> • If pressed it will show quick setting of Backlight, Bright, Contrast, Chroma, Sharpness, Gamma.

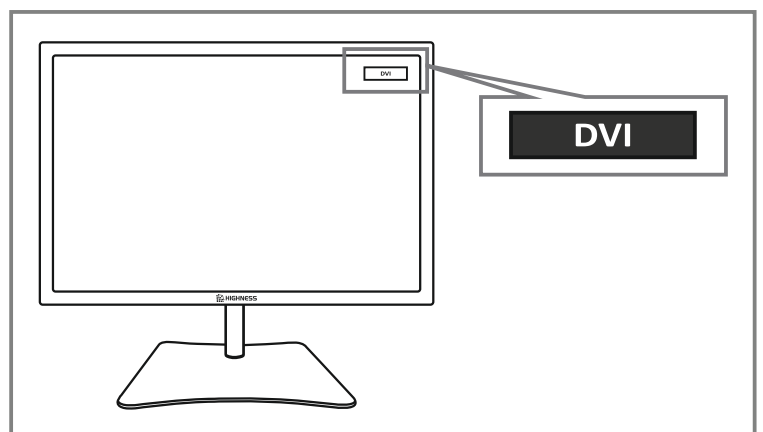
11. Connecting Camera Module

11.1. Connection examples :



11.2. To switch among input signals :

- The input signal switches each time is pressed.
- When the signal is switched, the active input port name appears at the top right corner of the screen.



12. Warranty Information

12.1. Warranty Coverage :

Keep the Original packaging box for further services :

The medical monitor is covered by a 2 years & the Industrial monitors covered by 1 year limited warranty from the date of purchase, provided the product is used under normal operating conditions. This warranty covers defects in materials and workmanship, and includes:

- **Parts Replacement** : Replacement of defective parts necessary to restore the monitor to proper working condition.
- **Labor Costs** : Labor costs associated with the repair or replacement of covered parts, as long as the service is performed by an authorized service provider.

12.2. Warranty Exclusions :

This warranty does not cover :

- **Physical Damage** : Damage resulting from accidents, misuse, or unauthorized modifications.
- **Electrical Damage** : Damage resulting from high voltage of electricity, harm caused by issues such as power surges, incorrect voltage, or electrostatic discharge
- **Unauthorized Repairs** : Any damage or malfunction resulting from repairs or modifications performed by unauthorized personnel.
- **Normal Wear and Tear** : Parts that are subject to normal wear and tear or degradation over time.
- **Environmental Factors** : Damage caused by exposure to environmental conditions such as extreme temperatures, humidity, or corrosive substances.

12.3. Warranty Claims :

To make a warranty claim, please follow these steps :

1. Contact Us : Reach out to our customer service department by filling up the query form on <https://highnessmicro.com/support/>

The following information :

- Product serial number
- Proof of purchase (e.g., receipt or invoice)
- Description of the issue

2. Authorization : Obtain a Return Merchandise Authorization (RMA) number from our customer service team. This number must be clearly marked on the shipping label and any accompanying documentation.

3. Return Instructions : Send the defective monitor, along with the RMA number with the original shipping packaging and proof of purchase, to the designated address provided by our customer service team. Ensure that the product is securely packaged to prevent damage during transit.

4. Evaluation : Upon receipt, the product will be evaluated by our authorized service center. If the warranty claim is validated, we will repair or replace the monitor and return it to you at no additional cost.

12.4. Contact Information :

For any questions or further assistance regarding the warranty, please contact :

- **Customer Service Department :** +91 77100 65140
- **Email :** support@highnessmicro.com
- **Address : HIGHNESS MICROELECTRONICS LTD.**
R-364, TTC Industrial Area, Rabale, Navi Mumbai - 400 701.

Please retain your proof of purchase and this warranty information for your records. The warranty is only valid with a valid proof of purchase and may be subject to local laws and regulations.

13. Inquiry & A/S Request

If the manual does not prove the information you wanted, or any other help is needed about this product, Please contact Highness Microelectronics Ltd., Technical Support Team.

URL : www.highnessmicro.com/support

E. : support@highnessmicro.com

Manufacturer : Highness Microelectronics Ltd.

Collect the information from the Internet

From the internet, download the manual from our website.

www.highnessmicro.com



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All images are for representation purpose only. All images and content are copyrighted & copy, reprint or reproduction without written permission prohibited.
(Manufacturer reserves the sole right to change the specifications without prior notice.) (Touch screen will reduce the original luminance of the LCD display.)