

**AOC**  
GAMING



**LCD Monitor  
User Manual  
U27G3XM**

[www.aoc.com](http://www.aoc.com)

©2024 AOC. All Rights Reserved.

**HDMI**<sup>®</sup>  
HIGH-DEFINITION MULTIMEDIA INTERFACE

Safety .....	1
National Conventions.....	1
Power .....	2
Installation .....	3
Cleaning.....	4
Other .....	5
Setup.....	6
Contents in Box.....	6
Stand & Base Setup .....	7
Adjusting Viewing Angle.....	8
Connecting the Monitor .....	9
Wall Mounting .....	10
AMD FreeSync Premium Pro function .....	12
G-SYNC Compatible function.....	13
HDR.....	14
Adjusting.....	15
Hotkeys.....	15
OSD Setting.....	16
Luminance.....	17
Color Setup.....	19
Picture Boost.....	20
OSD Setup.....	21
PIP Setting.....	22
Game Setting.....	23
Extra .....	24
Exit.....	25
LED Indicator.....	26
Troubleshoot.....	27
Specification .....	28
General Specification.....	28
Preset Display Modes.....	29
Pin Assignments.....	30
Plug and Play.....	31

# Safety

## National Conventions

The following subsections describe national conventions used in this document.

### Notes, Cautions, and Warnings

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, cautions, and warnings, and they are used as follows:



**NOTE:** A NOTE indicates important information that helps you make better use of your computer system.





**CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.




**WARNING:** A WARNING indicates the potential for bodily harm and tells you how to avoid the problem. Some warnings may appear in alternate formats and may be unaccompanied by an icon. In such cases, the specific presentation of the warning is mandated by regulatory authority.


## Power


 The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.

 The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.

 Unplug the unit during a lightning storm or when it will not be used for long periods of time. This will protect the monitor from damage due to power surges.

 Do not overload power strips and extension cords. Overloading can result in fire or electric shock.

 To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC, Min. 5A.

 The wall socket shall be installed near the equipment and shall be easily accessible.

# Installation

**!** Do not place the monitor on an unstable cart, stand, tripod, bracket, or table. If the monitor falls, it can injure a person and cause serious damage to this product. Use only a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with this product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer. A product and cart combination should be moved with care.

**!** Never push any object into the slot on the monitor cabinet. It could damage circuit parts causing a fire or electric shock. Never spill liquids on the monitor.

**!** Do not place the front of the product on the floor.

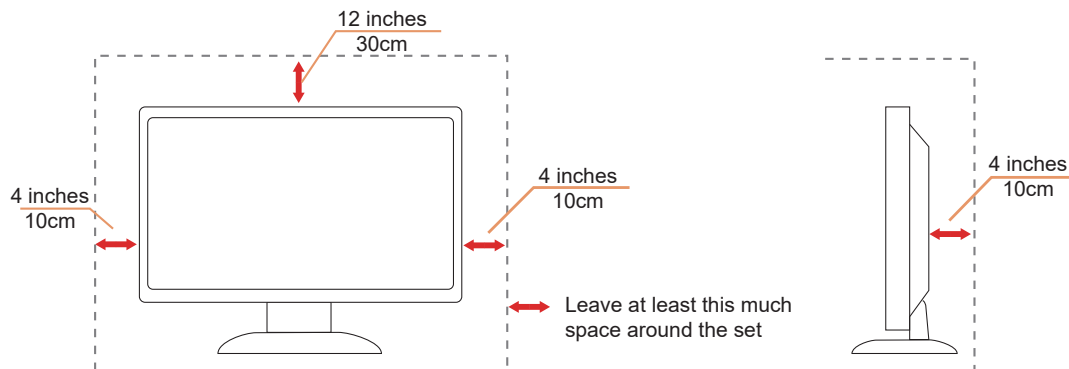
**!** If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.

**!** Leave some space around the monitor as shown below. Otherwise, air-circulation may be inadequate hence overheating may cause a fire or damage to the monitor.

**!** To avoid potential damage, for example the panel peeling from the bezel, ensure that the monitor does not tilt downward by more than -5 degrees. If the -5 degree downward tilt angle maximum is exceeded, the monitor damage will not be covered under warranty.

See below the recommended ventilation areas around the monitor when the monitor is installed on the wall or on the stand:

## Installed with stand



# Cleaning


⚠ Clean the cabinet regularly with a water-dampened, soft cloth.

⚠ When cleaning use a soft cotton or microfiber cloth. The cloth should be damp and almost dry, do not allow liquid into the case.



⚠ Please disconnect the power cord before cleaning the product.

## Other


 If the product is emitting a strange smell, sound or smoke, disconnect the power plug IMMEDIATELY and contact a Service Center.

 Make sure that the ventilating openings are not blocked by a table or curtain.

 Do not engage the LCD monitor in severe vibration or high impact conditions during operation.

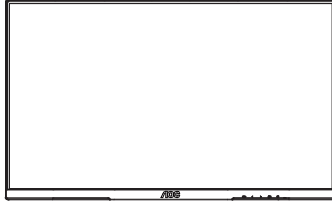
 Do not knock or drop the monitor during operation or transportation.

 The power cords shall be safety approved. For Germany, it shall be H03VV-F, 3G, 0.75 mm<sup>2</sup>, or better. For other countries, the suitable types shall be used accordingly.

 Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphones and headphones output voltage and therefore the sound pressure level.

# Setup

## Contents in Box



\*

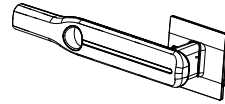


Quick Start guide

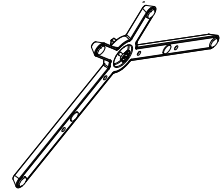
\*



Warranty card



Stand



Base



Power Cable

\*



HDMI Cable

\*



DP Cable

\*



USB Cable

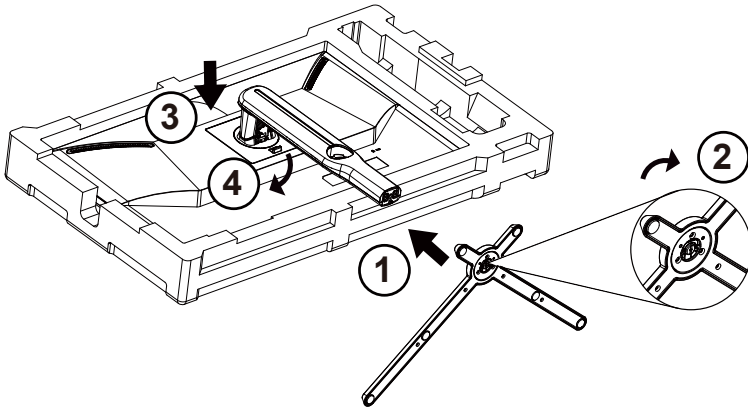
\* Not all signal cables will be provided for all countries and regions. Please check with the local dealer or AOC branch office for confirmation.



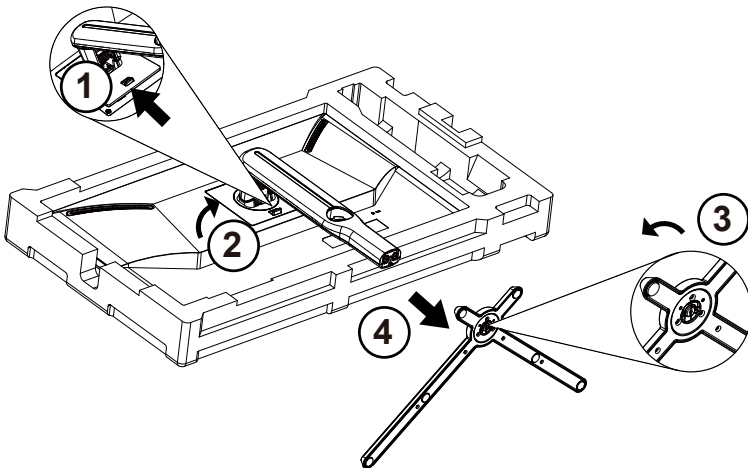
# Stand & Base Setup

Please setup or remove the base following the steps as below.

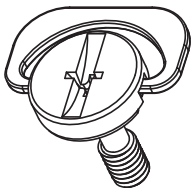
## Setup:



## Remove:

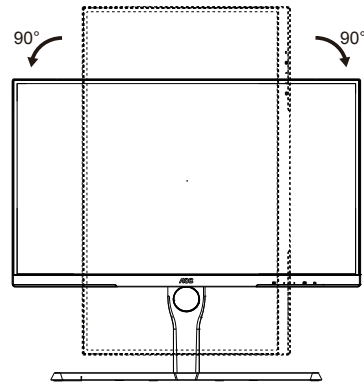
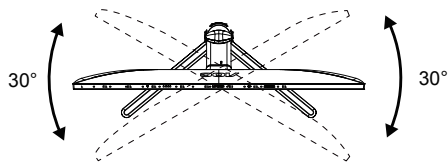
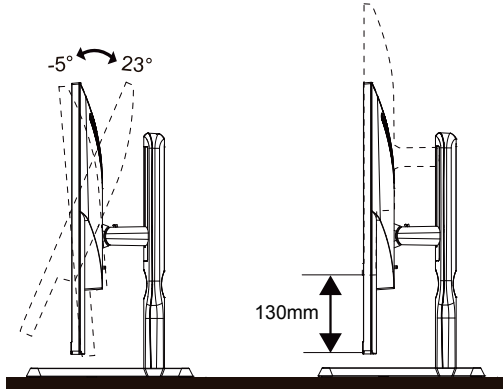


Specification for base screw: M6\*20 mm (effective thread 6mm)



# Adjusting Viewing Angle

To achieve the best viewing experience, it is recommended that the user can make sure they are able to look at their whole face on the screen, then adjust the monitor's angle based on personal preference. Hold the stand so you will not topple the monitor when you change the monitor's angle. You are able to adjust the monitor as below:



 **NOTE:**

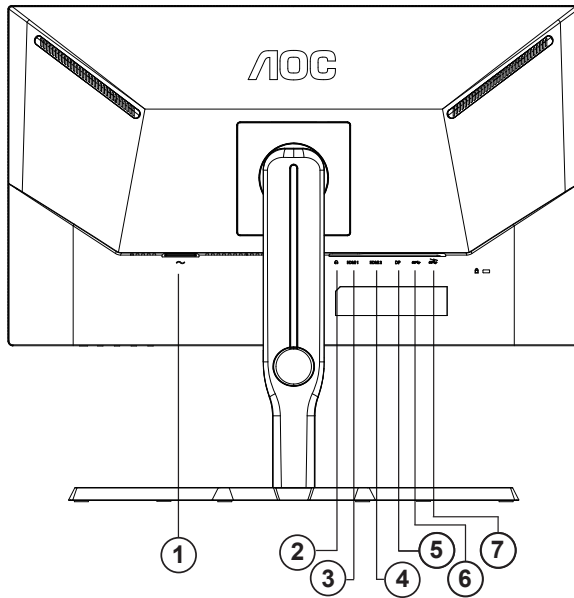
Do not touch the LCD screen when you change the angle. Touching the LCD screen may cause damage.

**WARNING:**

1. To avoid potential screen damage, such as panel peeling, ensure that the monitor does not tilt downward by more than  $-5$  degrees.
2. Do not press the screen while adjusting the angle of the monitor. Grasp only the bezel.

# Connecting the Monitor

Cable Connections In Back of Monitor and Computer:



1. Power
2. Earphone
3. HDMI1
4. HDMI2
5. DP
6. USB-PC upstream
7. USB3.2Gen1+Quick Chargingx1  
USB3.2Gen1x1

## Connect to PC

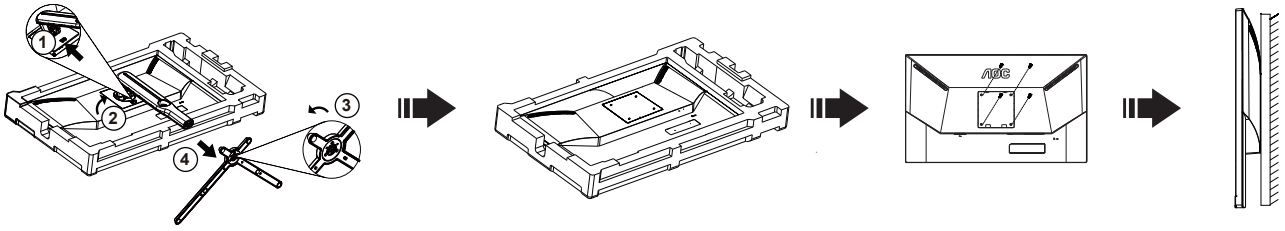
1. Connect the power cord to the back of the display firmly.
2. Turn off your computer and unplug its power cable.
3. Connect the display signal cable to the video connector on the back of your computer.
4. Plug the power cord of your computer and your display into a nearby outlet.
5. Turn on your computer and display.

If your monitor displays an image, installation is complete. If it does not display an image, please refer to Troubleshoot.

To protect equipment, always turn off the PC and LCD monitor before connecting.

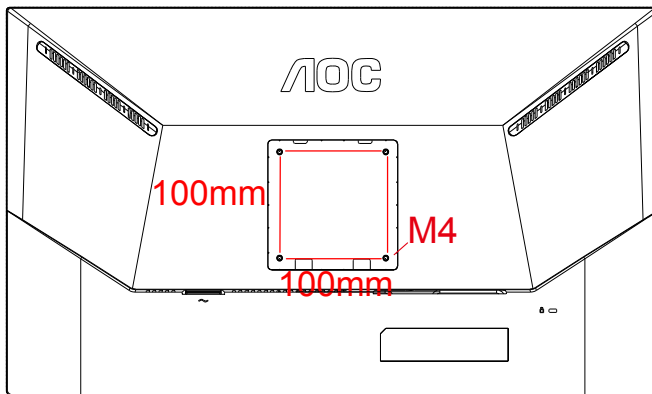
# Wall Mounting

Preparing to Install An Optional Wall Mounting Arm.

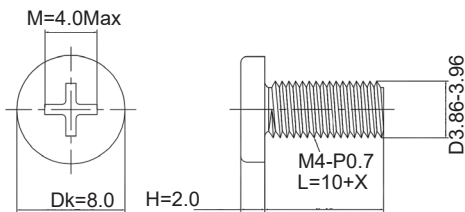



This monitor can be attached to a wall mounting arm you purchase separately. Disconnect power before this procedure. Follow these steps:

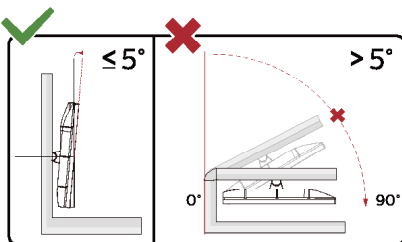
1. Remove the base.
2. Follow the manufacturer's instructions to assemble the wall mounting arm.
3. Place the wall mounting arm onto the back of the monitor. Line up the holes of the arm with the holes in the back of the monitor.
4. Insert the 4 screws into the holes and tighten.
5. Reconnect the cables. Refer to the user's manual that came with the optional wall mounting arm for instructions on attaching it to the wall.

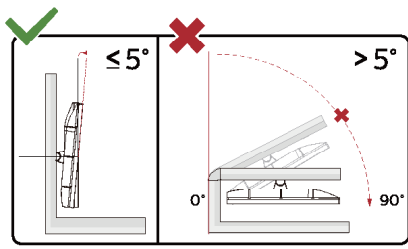


Specification of wall hanger screws M4\*(10+X)mm, ( X=Thickness of Wall mount bracket )



 Note: VESA mounting screw holes are not available for all models, please check with the dealer or official department of AOC. Always contact manufacturer for wall-mount installation.





\* Display design may differ from those illustrated.

**WARNING:**

1. To avoid potential screen damage, such as panel peeling, ensure that the monitor does not tilt downward by more than -5 degrees.
2. Do not press the screen while adjusting the angle of the monitor. Grasp only the bezel.

# AMD FreeSync Premium Pro function

1. AMD FreeSync Premium Pro function is working with DP/HDMI
2. Compatible Graphics Card: Recommend list is as the below, also could be checked by visiting [www.AMD.com](http://www.AMD.com)

## Graphics Cards

- Radeon™ RX Vega series
- Radeon™ RX 500 series
- Radeon™ RX 400 series
- Radeon™ R9/R7 300 series (R9 370/X, R7 370/X, R7 265 except)
- Radeon™ Pro Duo (2016)
- Radeon™ R9 Nano series
- Radeon™ R9 Fury series
- Radeon™ R9/R7 200 series (R9 270/X, R9 280/X except)

## Processors

- AMD Ryzen™ 7 2700U
- AMD Ryzen™ 5 2500U
- AMD Ryzen™ 5 2400G
- AMD Ryzen™ 3 2300U
- AMD Ryzen™ 3 2200G
- AMD PRO A12-9800
- AMD PRO A12-9800E
- AMD PRO A10-9700
- AMD PRO A10-9700E
- AMD PRO A8-9600
- AMD PRO A6-9500
- AMD PRO A6-9500E
- AMD PRO A12-8870
- AMD PRO A12-8870E
- AMD PRO A10-8770
- AMD PRO A10-8770E
- AMD PRO A10-8750B
- AMD PRO A8-8650B
- AMD PRO A6-8570
- AMD PRO A6-8570E
- AMD PRO A4-8350B
- AMD A10-7890K
- AMD A10-7870K
- AMD A10-7850K
- AMD A10-7800
- AMD A10-7700K
- AMD A8-7670K
- AMD A8-7650K
- AMD A8-7600
- AMD A6-7400K

## G-SYNC Compatible function

1. G-SYNC Compatible function is working with DP
2. To enjoy the perfect gaming experience with G-SYNC, you need to purchase a Separate NVIDIA GPU card that supports G-SYNC.

### G-sync system requirements

Desktop computer connected to G-SYNC monitor:

Graphics cards supported: G-SYNC features require NVIDIA GeForce® GTX 650 Ti BOOST or higher graphics cards.

Driver: R340.52 or later

Operating system:

Windows 10

Windows 8.1

Windows 7

System requirements: DisplayPort 1.2 of the GPU must be supported.

Notebook computer connected to G-SYNC monitor:

Supported graphics cards: NVIDIA GeForce® GTX 980M, GTX 970M, GTX 965M GPU or higher graphics cards

Driver: R340.52 or higher

Operating system:

Windows 10

Windows 8.1

Windows 7

System requirements: DisplayPort 1.2 driven directly from the GPU must be supported.

For more information about NVIDIA G-SYNC, please visit: <https://www.nvidia.cn/>

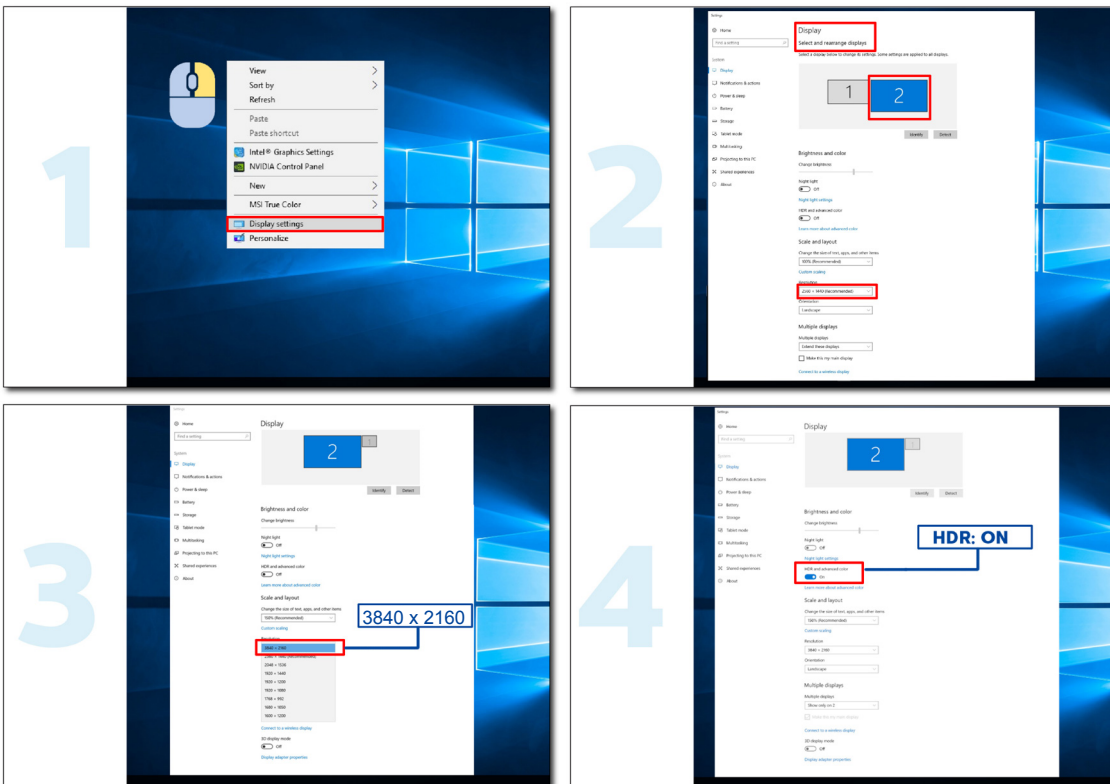
# HDR

It is compatible with input signals in HDR10 format.

The display may automatically activate the HDR function if the player and content are compatible. Please contact the device manufacturer and the content provider for information on the compatibility of your device and content. Please select "OFF" for the HDR function when you have no need for automatical activation function.

## Note:

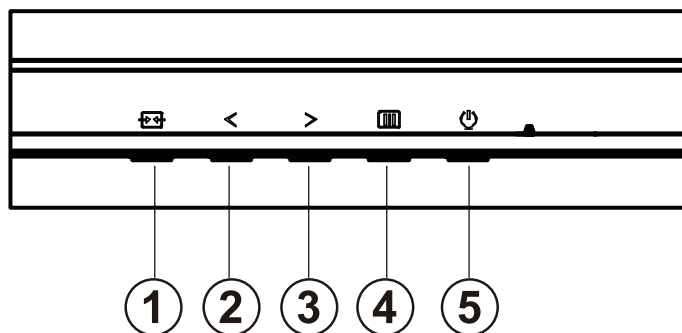
1. No special setting is needed for the DisplayPort/HDMI interface in WIN10 versions lower (older) than V1703.
2. Only the HDMI interface is available and the DisplayPort interface cannot function in WIN10 version V1703.
  - a. The display resolution is set to 3840 x 2160, and HDR is preset to ON. Under these conditions, the screen may slightly dim, indicating HDR has been activated.
  - b. After entering an application, the best HDR effect can be achieved when the resolution is changed to 3840 x 2160 (if available).





# Adjusting

## Hotkeys



1	Source/Exit
2	Game Mode/<
3	Dial Point/>
4	Menu/Enter
5	Power

### Power

Press the Power button to turn on the monitor.

### Menu/Enter

When there is no OSD, Press to display the OSD or confirm the selection.

### Game Mode/<

When there is no OSD, press "<" key to open game mode function, then press "<" or ">" key to select game mode (FPS, RTS, Racing, Gamer 1, Gamer 2 or Gamer 3) basing on the different game types.

### Dial Point/>

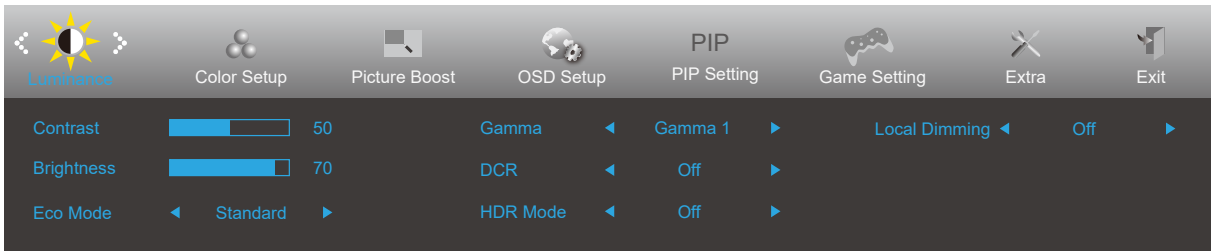
When there is no OSD, press Dial Point button to show / hide Dial Point.









### Source/Exit

When the OSD is closed, press Source/Exit button will be Source hot key function.

# OSD Setting

## Basic and simple instruction on the control keys.

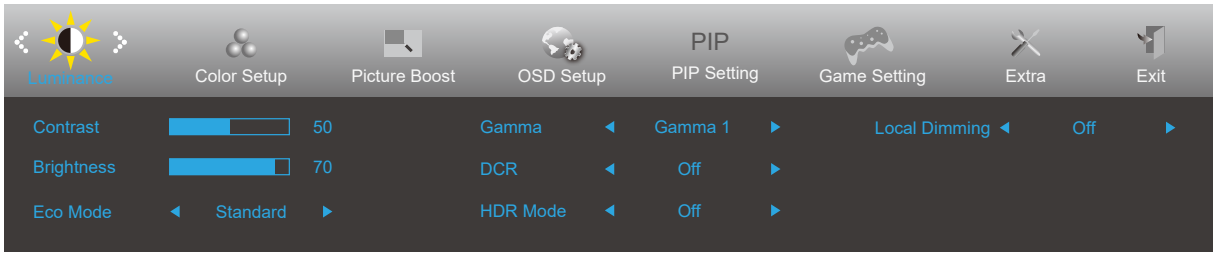











- 1). Press the  **Menu-button** to activate the OSD window.
- 2). Press **< Left** or **> Right** to navigate through the functions. Once the desired function is highlighted, press the  **Menu-button** to activate it, press **< Left** or **> Right** to navigate through the sub-menu functions. Once the desired function is highlighted, press  **Menu-button** to activate it.
- 3). Press **< Left** or **>** to change the settings of the selected function. Press  to exit. If you want to adjust any other function, repeat steps 2-3.
- 4). OSD Lock Function: To lock the OSD, press and hold the  Menu-button while the monitor is off and then press  power button to turn the monitor on. To unlock the OSD - press and hold the  Menu-button while the monitor is off and then press  power button to turn the monitor on.

### Notes:

- 1). If the product has only one signal input, the item of "Input Select" is unable to be adjusted.
- 2). DCR, Color Boost and Picture Boost, for these states that only one state can exist

# Luminance



	Contrast	0-100		Contrast from Digital-register.	
	Brightness	0-100		Backlight Adjustment	
	Eco mode	Standard	<input checked="" type="checkbox"/>		Standard Mode
		Text			Text Mode
		Internet			Internet Mode
		Game			Game Mode
		Movie			Movie Mode
		Sports			Sports Mode
		Reading			Reading Mode
		Uniformity			Uniformity Mode
	Gamma	Gamma1			Adjust to Gamma 1
		Gamma2			Adjust to Gamma 2
		Gamma3			Adjust to Gamma 3
	DCR	Off			Disable dynamic contrast ratio
		On			Enable dynamic contrast ratio
	HDR	Off			Set the HDR profile according to your usage requirements. Note: When HDR is detected, the HDR option is displayed for adjustment.
		DisplayHDR			
HDR Picture					
HDR Game					
HDR Mode	OFF			Adjust HDR Mode.	
	HDR Picture				
	HDR Movie				
	HDR Game				
Local Dimming	Off/ Low/ Medium/ Strong			Disable or Choose Local Dimming	

Note:

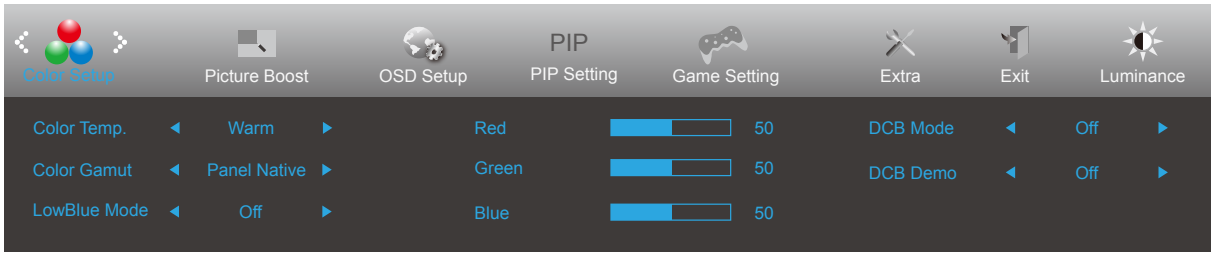
When HDR Mode is set to non-off, the Contrast, Brightness Scene Mode, and Gamma items cannot be adjusted.


When HDR is set to non-off, the Contrast, Brightness, Brightness Scene Mode, Gamma, DCR items are not adjustable.

When the Color Space under Color Settings is set to sRGB or DCI-P3, the Contrast, Brightness Scene Mode, Gamma, HDR Mode, and HDR items are not adjustable.

Because of the light diffusion effect of the LCD panel and the principle of dimming in the backlight area, there will be a slight halo or instantaneous brightness opening phenomenon at the edge of some specific picture windows or moving objects, which is the physical characteristics of the Mini LED backlight LCD panel, non-fault phenomenon, please feel free to use. You can choose to turn off Local Dimming from the OSD menu to mitigate or eliminate this phenomenon.

## Color Setup



	Color Temp.	Warm	Recall Warm Color Temperature from EEPROM.
		Normal	Recall Normal Color Temperature from EEPROM.
		Cool	Recall Cool Color Temperature from EEPROM.
		User	Red Gain from Digital-register Green Gain Digital-register. Blue Gain from Digital-register
	Color Gamut	Panel Native	Standard color space panel.
		sRGB	sRGB color space.
		DCI-P3	DCI-P3 color space.
	LowBlue Mode	Reading / Office / Internet / Multimedia / Off	Decrease blue light wave by controlling color temperature.
	Red	0-100	Red gain from Digital-register.
	Green	0-100	Green gain from Digital-register.
	Blue	0-100	Blue gain from Digital-register.
	DCB Mode	Full Enhance	Disable or Enable Full Enhance Mode
		Nature Skin	Disable or Enable Nature Skin Mode
		Green Field	Disable or Enable Green Field Mode
		Sky-blue	Disable or Enable Sky-blue Mode
Auto Detect		Disable or Enable AutoDetect Mode	
DCB Demo	On or Off	Disable or Enable OFF Mode	


Note:

When HDR Mode or HDR under Luminance is set to non-off, all items under Color Settings cannot be adjusted.

When the Color Space is set to sRGB or DCI-P3, all other items under Color Settings are not adjustable.

## Picture Boost

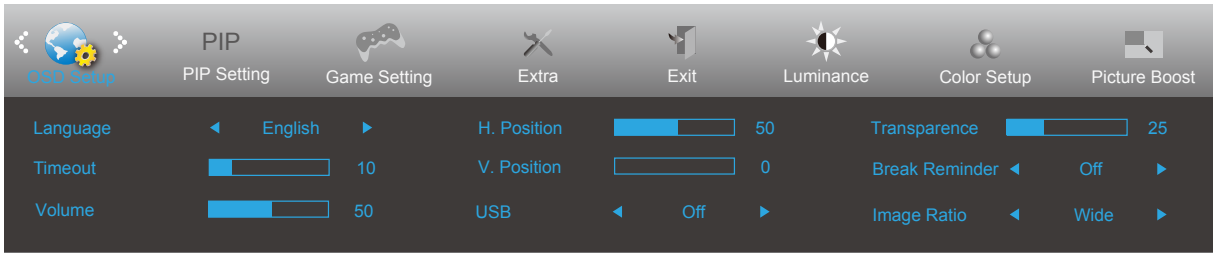



	Bright Frame	On or Off	Disable or Enable Bright Frame
	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V. position	0-100	Adjust Frame vertical Position

### Note:

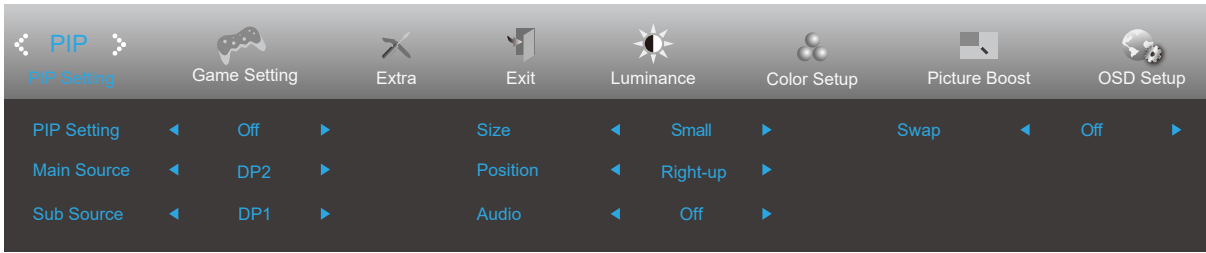
When HDR Mode or HDR under Luminance is set to non-off, all items under Window Brighten are not adjustable.

# OSD Setup



	Language		Select the OSD language
	Timeout	5-120	Adjust the OSD Timeout
	Volume	0-100	Volume Adjustment.
	H. Position	0-100	Adjust the horizontal position of OSD
	V. Position	0-100	Adjust the vertical position of OSD
	USB	On or Off	Turn off USB function or set USB interface version.
	Transparence	0-100	Adjust the transparence of OSD
	Break Reminder	On or Off	Break reminder if the user continuously works for more than 1hrs
	Image Ratio	Wide/4:3/1:1/ 17"(4:3)/19"(4:3) 19"(5:4)/19"W(16:10) 21.5"W(16:9)/ 22"W(16:10)/ 23"W(16:9)/ 23.6"W(16:9)/ 24"W(16:9)	Select image ratio for display.

## PIP Setting



PIP	PIP Setting	OFF / PIP / PBP	Disable or Enable PIP or PBP.	
	Main Source		Select main screen source.	
	Sub Source		Select sub screen source.	
	Size	Small / Middle / Large	Select screen size.	
	Position	Right-up		Set the screen location.
		Right-down		
		Left-up		
Left-down				
Audio	On: PIP Audio		Disable or Enable Audio Setup.	
	Off: Main Audio			
Swap	On: Swap		Swap the screen source.	
	Off: non action			

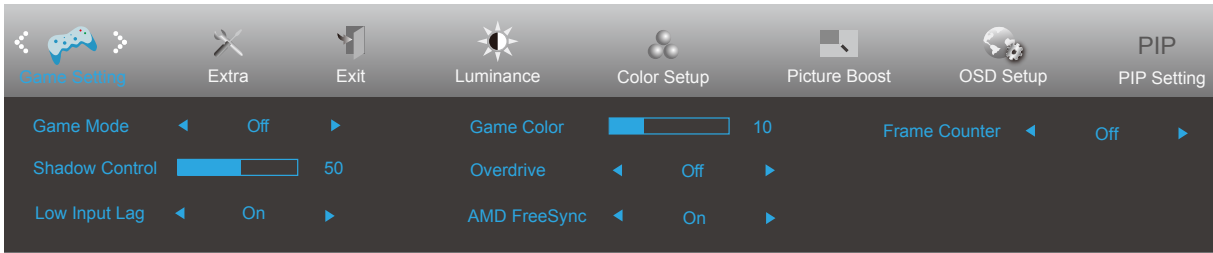
Note:


- 1) When "HDR" under "Brightness" is set to non-off, all items under "PIP Settings" cannot be adjusted.
- 2) When "Local Dimming" is set to non-off, all items under "PIP Settings" cannot be adjusted.
- 3) When PIP/PBP is enabled, some color-related adjustments in the OSD menu are only valid for the main screen, but not for the sprite. As a result, the main and sprite may have different colors.

PBP/PIP		Main source		
		HDMI1	HDMI2	DP
Sub source	HDMI1	√	√	√
	HDMI2	√	√	√
	DP	√	√	√



## Game Setting

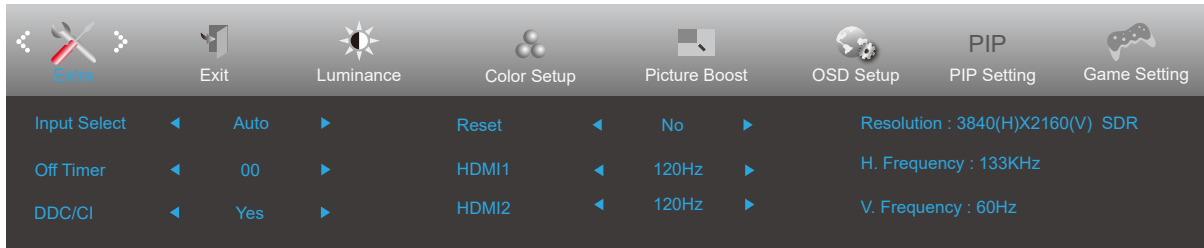



	Game Mode	FPS	For playing FPS (First Person Shooters) games. Improves black level in dark theme.
		RTS	For playing RTS (Real Time Strategy). Improves the image quality.
		Racing	For playing Racing games, Provides fastest response time and high color saturation.
		Gamer 1	User's preference settings saved as Gamer 1.
		Gamer 2	User's preference settings saved as Gamer 2.
		Gamer 3	User's preference settings saved as Gamer 3.
		off	No optimization by Smart image game
	Shadow Control	0-100	Shadow Control Default is 50, then end-user can adjust from 50 to 100 or 0 to increase/decrease contrast for clear picture. 1. If picture is too dark to be saw the detail clearly, adjusting from 50 to 100 for clear picture. 2. If picture is too white to be saw the detail clearly, adjusting from 50 to 0 for clear picture
	Low Input Lag	On/Off	Turning off the frame buffer reduces input lag. Note: The low input lag feature works when UHD 120Hz~160Hz, and is enabled by default when AMD FreeSync Premium Pro or G-SYNC Pro (or G-SYNC) is turned on, and cannot be adjusted.
	Game Color	0-20	Game Color will provide 0-20 level for adjusting saturation to get better picture.
Overdrive	Off	Adjust the response time. Note: 1. If the user sets OverDrive to the "Strong" level, a blurry image may be displayed. Users can adjust the OverDrive rating or turn it off to their liking. 2. Enhancements are only available when AMD FreeSync Premium Pro (or G-SYNC) is turned off and the field frequency $\geq 75\text{Hz}$ . 3. Turn on the enhancement function, and the screen brightness will be reduced.	
	Weak		
	Medium		
	Strong		
AMD FreeSync	On/Off	Adjust the AMD FreeSync Premium Pro (or G-SYNC)	
Frame Counter	Off / Right-up / Right-Down / Left-Down / Left-Up	Display V frequency on the corner selected	

Note:

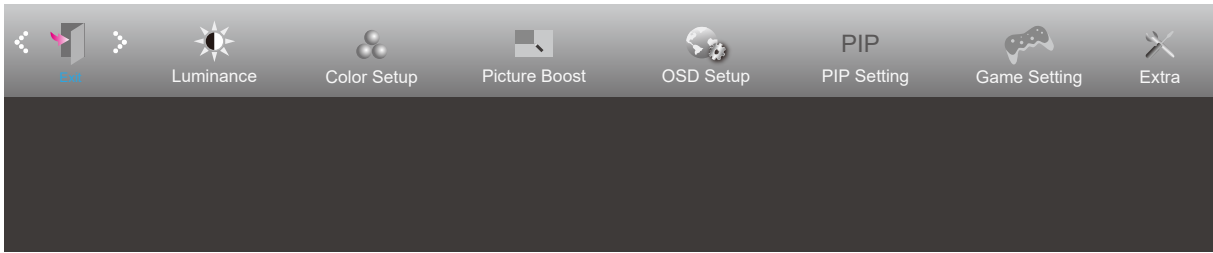
When the "HDR Mode" under "Brightness" is set to a non-off state, the "Game Mode", "Dark Field Control", and "Game Tone" items under "Game Settings" cannot be adjusted.

## Extra



	Input Select	Auto/HDMI1/HDMI2/DP	Select Input Signal Source
	Off timer	0-24hrs	Select DC off time
	DDC/CI	yes or no	Turn ON/OFF DDC/CI Support
	Reset	yes or no	Reset the menu to default.
	HDMI1	120Hz / 144Hz	When connecting a game console or DVD player, set the HDMI 1 to 120Hz.
	HDMI2	120Hz / 144Hz	When connecting a game console or DVD player, set the HDMI 2 to 120Hz.

# Exit



	Exit		Exit the main OSD
---	------	--	-------------------

## LED Indicator

<b>Status</b>	<b>LED Color</b>
Full Power Mode	White
Active-off Mode	Orange

# Troubleshoot

Problem & Question	Possible Solutions
<b>Power LED Is Not ON</b>	Make sure the power button is ON and the Power Cord is properly connected to a grounded power outlet and to the monitor.
<b>No image on the screen</b>	<ul style="list-style-type: none"> <li>● Is the power cord connected properly? Check the power cord connection and power supply.</li> <li>● Is the video cable connected correctly? (Connected using the VGA cable) Check the VGA cable connection. (Connected using the HDMI cable) Check the HDMI cable connection. (Connected using the DP cable) Check the DP cable connection. * VGA/HDMI/DP input is not available on every model.</li> <li>● If the power is on, reboot the computer to see the initial screen (the login screen.) If the initial screen (the login screen) appears, boot the computer in the applicable mode (the safe mode for Windows 7/8/10) and then change the frequency of the video card. (Refer to the Setting the Optimal Resolution) If the initial screen (the login screen) does not appear, contact the Service Center or your dealer.</li> <li>● Can you see "Input Not Supported" on the screen? You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can handle properly. Adjust the maximum resolution and frequency that the monitor can handle properly.</li> <li>● Make sure the AOC Monitor Drivers are installed.</li> </ul>
<b>Picture Is Fuzzy &amp; Has Ghosting Shadowing Problem</b>	Adjust the Contrast and Brightness Controls. Press hot-key (AUTO) to auto-adjust. Make sure you are not using an extension cable or switch box. We recommend plugging the monitor directly to the video card output connector on the back.
<b>Picture Bounces, Flickers Or Wave Pattern Appears In The Picture</b>	Move electrical devices that may cause electrical interference as far away from the monitor as possible. Use the maximum refresh rate your monitor is capable of at the resolution you are using.
<b>Monitor Is Stuck In Active Off-Mode"</b>	The Computer Power Switch should be in the ON position. The Computer Video Card should be snugly fitted in its slot. Make sure the monitor's video cable is properly connected to the computer. Inspect the monitor's video cable and make sure no pin is bent. Make sure your computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn On or Off after hitting the CAPS LOCK key.
<b>Missing one of the primary colors (RED, GREEN, or BLUE)</b>	Inspect the monitor's video cable and make sure that no pin is damaged. Make sure the monitor's video cable is properly connected to the computer.
<b>Screen image is not centered or sized properly</b>	Adjust H-Position and V-Position or press hot-key (AUTO).
<b>Picture has color defects (white does not look white)</b>	Adjust RGB color or select desired color temperature.
<b>Horizontal or vertical disturbances on the screen</b>	Use Windows 7/8/10 shut-down mode to adjust CLOCK and FOCUS. Press hot-key (AUTO) to auto-adjust.
<b>Regulation &amp; Service</b>	Please refer to Regulation & Service Information which is in the CD manual or <a href="http://www.aoc.com">www.aoc.com</a> (to find the model you purchase in your country and to find Regulation & Service Information in Support page.

# Specification

## General Specification

Panel	Model name	U27G3XM	
	Driving system	TFT Color LCD	
	Viewable Image Size	68.4 cm diagonal	
	Pixel pitch	0.15525mm(H) x 0.15525mm(V)	
	Display Color	1.07B <sup>[1]</sup>	
Others	Horizontal scan range	30k-255kHz	
	Horizontal scan Size(Maximum)	596.16 mm	
	Vertical scan range	48-144Hz(HDMI) 48-160Hz(DP)	
	Vertical Scan Size(Maximum)	335.34 mm	
	Max resolution	3840x2160@144Hz(HDMI) 3840x2160@160Hz <sup>[2]</sup> (DP)	
	Plug & Play	VESA DDC2B/CI	
	Power Source	100-240V~ 50/60Hz 2A	
	Power Consumption	Typical (default brightness and contrast)	63W
Max. (brightness = 100, contrast =100)		≤192W	
Standby mode		≤0.5W	
Physical Characteristics	Connector Type	HDMIx2/DP/USB UP/USBx2/Earphone out	
	Signal Cable Type	Detachable	
Environmental	Temperature	Operating	0°C~ 40°C
		Non-Operating	-25°C~ 55°C
	Humidity	Operating	10% ~ 85% (non-condensing)
		Non-Operating	5% ~ 93% (non-condensing)
	Altitude	Operating	0m~5000m(0ft~16404ft)
		Non-Operating	0m~12192m (0ft~40000ft)

### Note

[1] : The maximum number of colors supported by this product is 1.07 billion. The setting conditions are listed in the following table (due to output limitations of some graphics cards, there may be differences) :

Signal Version Color Format Color Bit State	HDMI2.1		DP1.4+DSC	
	YCbCr422 YCbCr420	YCbCr444 RGB	YCbCr422 YCbCr420	YCbCr444 RGB
3840x2160 160Hz 10 bit	\	\	OK	OK
3840x2160 144Hz 10 bit	OK	OK	OK	OK
2560x1440 144Hz 10 bit	OK	OK	OK	OK
2560x1440 120Hz 10 bit	OK	OK	OK	OK
1920x1080 144Hz 10 bit	OK	OK	OK	OK

[2] : DP signal input, in order to reach UHD 144Hz/160Hz, a video card supporting DSC must be used. Please visit the graphics card manufacturer's website for DSC support

## Preset Display Modes

STANDARD	RESOLUTION(+/-1Hz)	HORIZONTAL FREQUENCY(kHz)	VERTICAL FREQUENCY(Hz)
VGA	640x480@60Hz	31.469	59.940
	640x480@72Hz	37.861	72.809
	640x480@75Hz	37.500	75.000
	640x480@100Hz	51.080	99.769
	640x480@120Hz	60.938	119.720
SVGA	800x600@56Hz	35.156	56.250
	800x600@60Hz	37.879	60.317
	800x600@72Hz	48.077	72.188
	800x600@75Hz	46.875	75.000
	800x600@100Hz	62.760	99.778
	800x600@120Hz	76.302	119.972
XGA	1024x768@60Hz	48.363	60.004
	1024x768@70Hz	56.476	70.069
	1024x768@75Hz	60.023	75.029
	1024x768@100Hz	80.450	99.811
	1024x768@120Hz	97.550	119.989
SXGA	1280x1024@60Hz	63.981	60.02
	1280x1024@75Hz	79.976	75.025
FHD	1920x1080@60Hz	67.5	60
	1920x1080@120Hz	135	120
QHD	2560x1440@120Hz	192.360	120.000
	2560x1440@144Hz	222.056	143.912
UHD	3840x2160 @ 60Hz	133.320	60.000
	3840x2160 @75Hz (Only DP connect)	166.653	75.000
	3840x2160 @100Hz	222.203	100.001
	3840x2160 @120Hz	268.811	120.700
	3840x2160 @144Hz	222.056	143.912
	3840x2160 @160Hz (Only DP connect)	350.382	159.992
PBP	1920x2160@60Hz	133.293	59.988
	1920x2160@75Hz	166.644	74.997
	1920x2160@100Hz	222.202	100.001
	1920x2160@120Hz	266.639	120.000
	1920x2160@144Hz	315.072	144.000
IBM MODES			
DOS	720x400@70Hz	31.469	70.087
MAC MODES			
VGA	640x480@67Hz	35	66.667
SVGA	832x624@75Hz	49.725	74.551

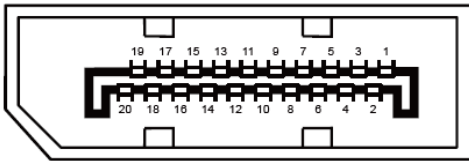
Note: According to the VESA standard, there may be a certain error (+/-1Hz) when calculating the refresh rate (field frequency) of different operating systems and graphics cards. In order to improve compatibility, the nominal refresh rate of this product has been rounded off. Please refer to the actual product.

# Pin Assignments



## 19-Pin Color Display Signal Cable

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1.	TMDS Data 2+	9.	TMDS Data 0-	17.	DDC/CEC Ground
2.	TMDS Data 2 Shield	10.	TMDS Clock +	18.	+5V Power
3.	TMDS Data 2-	11.	TMDS Clock Shield	19.	Hot Plug Detect
4.	TMDS Data 1+	12.	TMDS Clock-		
5.	TMDS Data 1Shield	13.	CEC		
6.	TMDS Data 1-	14.	Reserved (N.C. on device)		
7.	TMDS Data 0+	15.	SCL		
8.	TMDS Data 0 Shield	16.	SDA		



## 20-Pin Color Display Signal Cable

Pin No.	Signal Name	Pin No.	Signal Name
1	ML_Lane 3 (n)	11	GND
2	GND	12	ML_Lane 0 (p)
3	ML_Lane 3 (p)	13	CONFIG1
4	ML_Lane 2 (n)	14	CONFIG2
5	GND	15	AUX_CH(p)
6	ML_Lane 2 (p)	16	GND
7	ML_Lane 1 (n)	17	AUX_CH(n)
8	GND	18	Hot Plug Detect
9	ML_Lane 1 (p)	19	Return DP_PWR
10	ML_Lane 0 (n)	20	DP_PWR



# Plug and Play

## **Plug & Play DDC2B Feature**

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities.

The DDC2B is a bi-directional data channel based on the I2C protocol. The host can request EDID information over the DDC2B channel.