



LCD Monitor
User Manual
U27G3X/BK



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# 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**

 $\bigwedge$  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.

 $\Lambda$  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.

 $\Lambda$  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.



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

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



 $\bigwedge$  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.

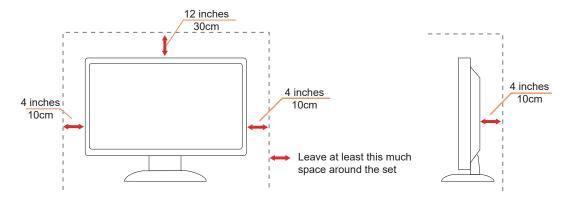
If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.

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.

 $\mathbf{M}$  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:

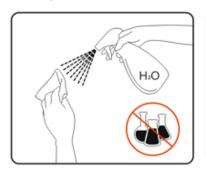
#### Installed with stand



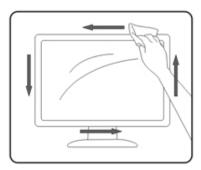
# Cleaning

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.



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



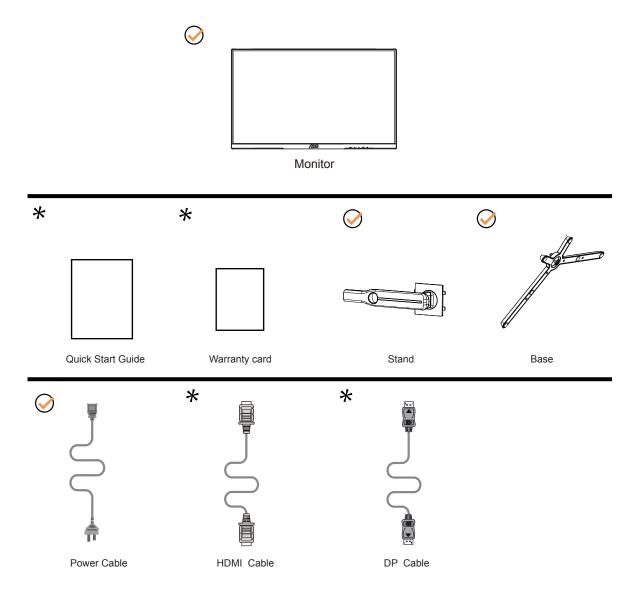
Do not knock or drop the monitor during operation or transportation.

IThe power cords shall be safety approved. For Germany, it shall be H03VV-F, 3G, 0.75 mm2, or better. For other countries, the suitable types shall be used accordingly.

IExcessive 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**

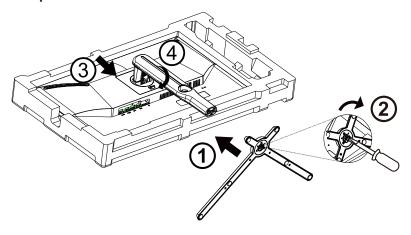


Not all signal cables will be provided for all countries and regions. Please check with the local dealer or AOC branch office for confirmation.

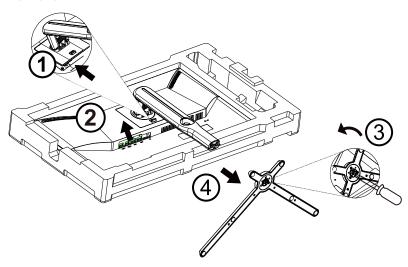
# Stand & Base Setup

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

### Setup:



#### Remove:

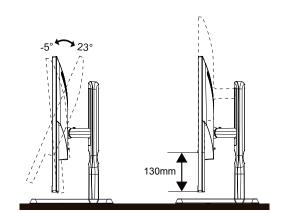


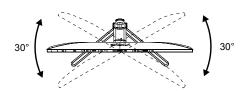
Specification for base screw: M6\*20 mm (effective thread 6mm)

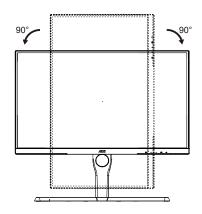


# **Adjusting Viewing Angle**

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:









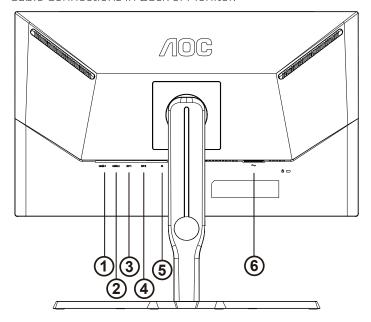
Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.

#### 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:



- 1. HDMI1
- 2. HDMI2
- 3. DP1
- 4. DP2
- 5. Earphone
- 6. Power

#### **Connect to PC**

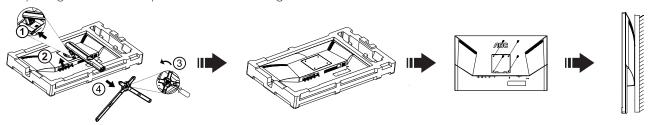
- 1. Connect the power cord to the back of the display firmly.
- 2. Turn off your computer and unplug its power cable.
- 3. Connect the display signal cable to the video connector on the back of your computer.
- 4. Plug the power cord of your computer and your display into a nearby outlet.
- 5. Turn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

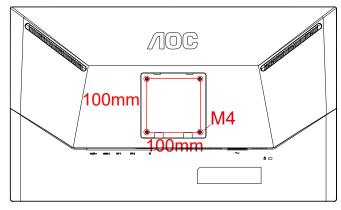
# **Wall Mounting**

Preparing to Install An Optional Wall Mounting Arm.

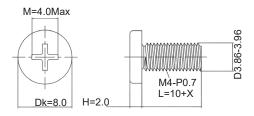


This monitor can be attached to a wall mounting arm you purchase separately. Disconnect power before this procedure. Follow these steps:

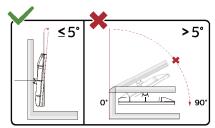
- 1. Remove the base.
- 2. Follow the manufacturer's instructions to assemble the wall mounting arm.
- 3. Place the wall mounting arm onto the back of the monitor. Line up the holes of the arm with the holes in the back of the monitor.
- 4. Insert the 4 screws into the holes and tighten.
- 5. Reconnect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

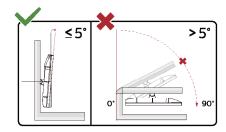


Specification of wall hanger screws M4\*(10+X)mm, (X=Thickness of Wall mount bracket)



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.

# **Adaptive-Sync function**

- 1. Adaptive-Sync function works with DP/HDMI
- 2. Compatible Graphics Card: Recommended list is as below, also could be checked by visiting <u>www.AMD.</u> <u>com</u>

#### **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: <a href="https://www.nvidia.cn/">https://www.nvidia.cn/</a>

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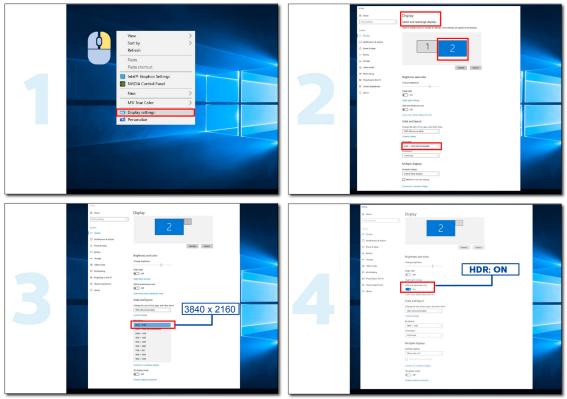
### **HDR**

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.

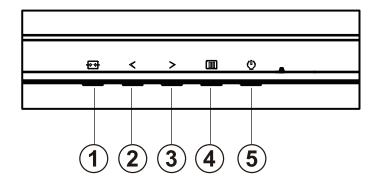
#### Note:

- 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.
- 3. 3840 x 2160 @50Hz /60Hz not suggestion used in PC device only for UHD player or Xbox-ones / PS4-Pro.
- 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.

When the OSD is closed, press Source/Auto/Exit button continuously about 2 second to do auto configure (Only for the models with D-Sub).

# **OSD Setting**

#### Basic and simple instruction on the control keys.



- 1). Press the **IIII 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 III 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 III Menubutton 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 disable to adjust.
- 2). DCR, Color Boost and Picture Boost, for these states that only one state can exist

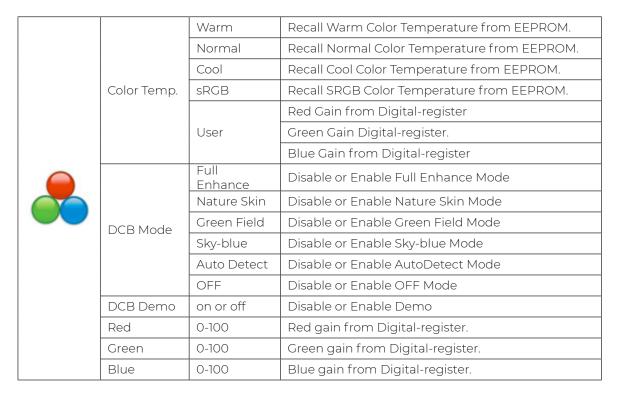
## Luminance



Contrast from Digital-register.		
Adjust to Gamma 1		
djust to Gamma 2		
st ratio		
st ratio		
Set the HDR profile according to your usage requirements.		
the LIDD ention is		
the HDR option is nt.		

### **Color Setup**



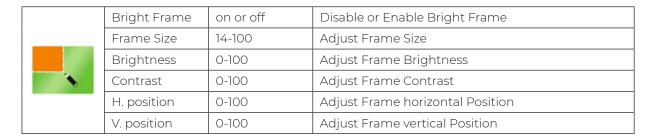


#### Note:

When "HDR Mode" under "Brightness" is set to a non-off state, all items under "Color Settings" cannot be adjusted.

#### **Picture Boost**





#### Note:

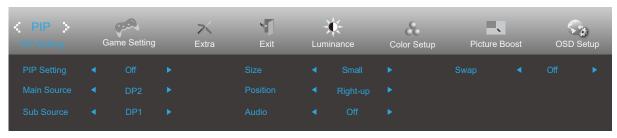
- 1). For a better viewing experience, adjust the brightness, contrast, and position of the brightening.
- 2). When the "HDR Mode" under "Brightness" is set to a non-off state, all items under "Window Brightening" cannot be adjusted.

# **OSD Setup**



	Language		Select the OSD language
	Timeout	5-120	Adjust the OSD Timeout
	DP Capability	1.1/1.2/1.4	Please be noted that only DP1.2 support G-SYNC/ Adaptive-Sync function
	H. Position	0-100	Adjust the horizontal position of OSD
	V. Position	0-100	Adjust the vertical position of OSD
	Volume	0-100	Volume Adjustment.
	Transparence	0-100	Adjust the transparence of OSD
	Break	on or off	Break reminder if the user continuously works for
	Reminder		more than 1hrs

## **PIP Setting**



	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.
PIP	Position	Right-up Right-down Left-up Left-down	Set the screen location.
	Audio	On: PIP Audio Off: Main Audio	Disable or Enable Audio Setup.
Swap		On: Swap Off: non action	Swap the screen source.

#### Note

- 1) When "HDR" under "Brightness" is set to non-off state, all items under "PIP Settings" cannot be adjusted.
- 2) When PBP/PIP is enabled, the main screen/secondary screen input source compatibility is as follows:

PBP		Main source			
PDP		HDMII	HDMI2	DP1	DP2
	HDMII	V	V	V	V
Sub source	HDMI2	V	V	V	V
	DP1	V	V	V	V
	DP2	V	V	V	V

PIP		Main source			
PIP		HDMII	HDMI2	DP1	DP2
HDMII		V	V	V	V
Sub source	HDMI2	V	V	V	V
	DP1	V	V	V	V*
	DP2	V	V	V*	V

<sup>\*:</sup> When PIP is enabled, if DP1 and DP2 are input as the primary screen source and secondary screen source at the same time, and one of the DP interfaces is UHD 144Hz/160Hz, The other DP port supports a maximum of UHD 120Hz 8bit(RGB or YCbCr 444 format) or UHD 144Hz 8bit(YCbCr 422 or 420 format).

## **Game Setting**



			For playing FPS (First Person Shooters) games.
	Game Mode	FPS	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 to100 for clear picture.  2. If picture is too white to be saw the detail clearly, adjusting from 50 to0 for clear picture
	Low Input Lag	On/Off	Turn off frame buffer to decrease input lag
A.	Game Color	0-20	Game Color will provide 0-20 level for adjusting saturation to get better picture.
	Low Blue Mode	Reading / Office / Internet / Multimedia / Off	Decrease blue light wave by controlling color temperature.
		Weak	
		Medium	
	Overdrive	Strong	Adjust the response time.
		Boost	
		Off	
	G-SYNC	On/Off	Adjust the G-SYNC/Adaptive-Sync.
	Frame Counter	Off / Right-up / Right-Down / Left-Down / Left- Up	Display V frequency on the corner selected
	MBR	0 ~ 20	Adjust the Motion Blur Reduction.

#### 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.

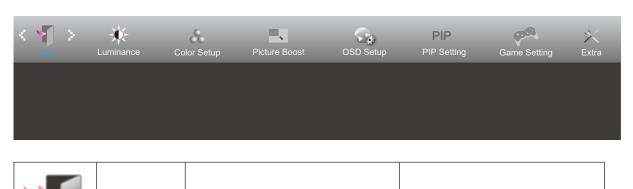
### **Extra**



	Input Select	Auto/HDMI]/HDMI2/DP]/ DP2	Select Input Signal Source
	Off timer	0-24hrs	Select DC off time
21	DDC/CI	yes or no	Turn ON/OFF DDC/CI Support
	Reset	yes or no	Reset the menu to default.
HDMI1 120Hz / 144Hz	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**

Status	LED Color
Full Power Mode	White
Active-off Mode	Orange

# **Troubleshoot**

Problem & Question	Possible Solutions		
Power LED Is Not ON	Make sure the power button is ON and the Power Cord is properly connected to a grounded power outlet and to the monitor.		
No image on the screen	<ul> <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>		
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 recommend plugging the monitor directly to the video card connector on the back.			
Picture Bounces, Flickers Or Wave Pattern Appears In The Picture  Move electrical devices that may cause electrical interference a away from the monitor as possible. Use the maximum refresh rate your monitor is capable of at the			
resolution you are using.  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 computer.  Inspect the monitor's video cable and make sure no pin is be Make sure your computer is operational by hitting the CAPS Lock LED. The should either turn ON or OFF after hitting the CAPS LOCK key			
Missing one of the primary colors (RED, GREEN, or BLUE)	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.		
Screen image is not centered or sized properly	Adjust H-Position and V-Position or press hot-key (AUTO).		
Picture has color defects (white does not look white)	Adjust RGB color or select desired color temperature.		
Horizontal or vertical disturbances on the screen	Use Windows 7/8/10 shut-down mode to adjust CLOCK and FOCUS. Press hot-key (AUTO) to auto-adjust.		
Regulation & Service	Please refer to Regulation & Service Information which is in the CD manual or www.aoc.com (to find the model you purchase in your country and to find Regulation & Service Information in Support page.		

# **Specification**

# **General Specification**

	Model name	U27G3X/BK				
	Driving system	TFT Color LCD				
Panel	Viewable Image Size	68.4cm diagonal				
	Pixel pitch	0.15525mm(H) x 0.15525mm(V)				
	Display Color	1.07B Colors <sup>[1]</sup>	1.07B Colors <sup>[1]</sup>			
	Horizontal scan range	30k-255kHz				
	Horizontal scan Size(Maximum)	596.16 mm				
	Vertical scan range	48-144Hz(HDMI)				
	vertical scall range	48-160Hz(DP)				
	Vertical Scan Size(Maximum)	335.34 mm				
	Max resolution	3840x2160@144Hz(HDI				
Others	IVIAX TESOTUCION	3840x2160@160Hz <sup>[2]</sup> (DP)				
011013	Plug & Play	VESA DDC2B/CI				
	Power Source	100-240V~, 50/60Hz, 1.5A				
		Typical (default brightness and		32W		
		contrast)				
	Power Consumption	Max. (brightness = 100, contrast = 100)		≤73W		
		Standby mode		≤ 0.5W		
Physical	Connector Type	HDMIx2/DPx2/Earphon	ie out			
Characteristics	Signal Cable Type	Detachable				
	Taranaratura	Operating	0°C~ 40°C			
	Temperature	Non-Operating	-25°C~ 55°C			
En viva p pa a patal	I luma initu	Operating 10% ~ 85% (non-conder		non-condensing)		
Environmental	Humaity	Non-Operating	5% ~ 93% (non-condensing)			
	Altitude	Operating		(Oft~16404ft)		
	Altitude	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	Н	DP1.4+DSC		
$\frac{Signal\ Version}{Color\ Format}$ Color Bit	YCbCr422 YCbCr420	YCbCr444 RGB	YCbCr422 YCbCr420	YCbCr444 RGB
UHD 160Hz 10 bpc	\	\	OK	OK
UHD 160Hz 8 bpc	\	\	OK	OK
UHD 144Hz 10 bpc	\	Support (some NVIDIA chipset graphics cards)	OK	OK
UHD 144Hz 8 bpc	\	OK	OK	OK
UHD 120Hz 10 bpc	OK	OK	OK	OK
UHD 120Hz 8 bpc	OK	OK	OK	OK

UHD 100Hz 10 bpc	OK	OK	OK	OK
UHD 100Hz 8 bpc	OK	OK	OK	OK
Low resolution 8	Support (some AMD	OK	OK	OK
bpc/10 bpc	chipset graphics cards)	OK .	OK	

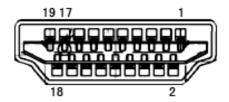
<sup>[2]:</sup> DP signal input, in order to reach UHD 144Hz/160Hz, a video card supporting DSC must be used. Please visit the graphics card manufacturer's website for DSC support

# **Preset Display Modes**

STANDARD	resolution(+/-1Hz)	HORIZONTAL FREQUENCY(kHz)	VERTICAL FREQUENCY(Hz)		
	640x480@60Hz	31.469	59.94		
VGA	640x480@72Hz	37.861	72.809		
	640x480@75Hz	37.5	75		
	800x600@56Hz	35.156	56.25		
SVGA	800x600@60Hz	37.879	60.317		
SVUA	800x600@72Hz	48.077	72.188		
	800x600@75Hz	46.875	75		
	1024x768@60Hz	48.363	60.004		
XGA	1024x768@70Hz	56.476	70.069		
	1024x768@75Hz	60.023	75.029		
SXGA -	1280x1024@60Hz	63.981	60.02		
SXUA	1280x1024@75Hz	79.976	75.025		
WXGA+	1440x900@60Hz	55.935	59.887		
WSXGA	1680x1050@60Hz	1680x1050@60Hz 64.674			
ELLE.	1920x1080@60Hz	67.5	60		
FHD -	1920x1080@120Hz	135	120		
QHD	2560x1440@120Hz	182.996	119.998		
***	*** 1920x2160@60Hz 133.293		59.988		
UHD(HDMI Only)	3840x2160 @30Hz	67.5 30			
	3840x2160 @60Hz	133.3	60		
	3840x2160 @75Hz	166.652	75		
	3840x2160 @100Hz	222.2	100.001		
UHD	3840x2160 @120Hz	266.653	120.006		
	3840x2160 @144Hz	319.994	143.989		
	3840x2160 @160Hz (Dp-only interface)	355.52	159.992		
IBM MODES					
DOS 720x400@70Hz		31.469	70.087		
MAC MODES					
VGA	640x480@67Hz	35	66.667		
SVGA	832x624@75Hz	49.725	74.551		
XGA	XGA 1024x768@75Hz		74.927		

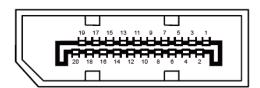
Note: According to the VESA standard, there may be a certain error (+/-1Hz) when calculating the refresh rate (field frequency) of different operating systems and graphics cards. In order to improve compatibility, the nominal refresh rate of this product has been rounded off. Please refer to the actual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