# **AOC** Gaming



# USER MANUAL



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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:

### V

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.

# Δ

**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.

A 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.

 $\bigwedge$  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.

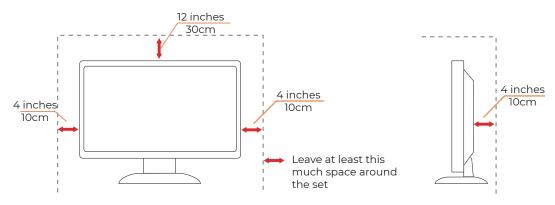
🕂 Do not place the front of the product on the floor.

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.

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:

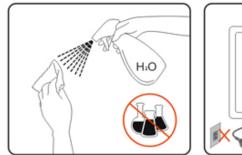


### Installed with stand

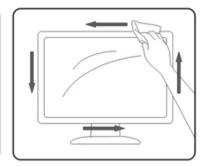
# Cleaning

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.

A 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.

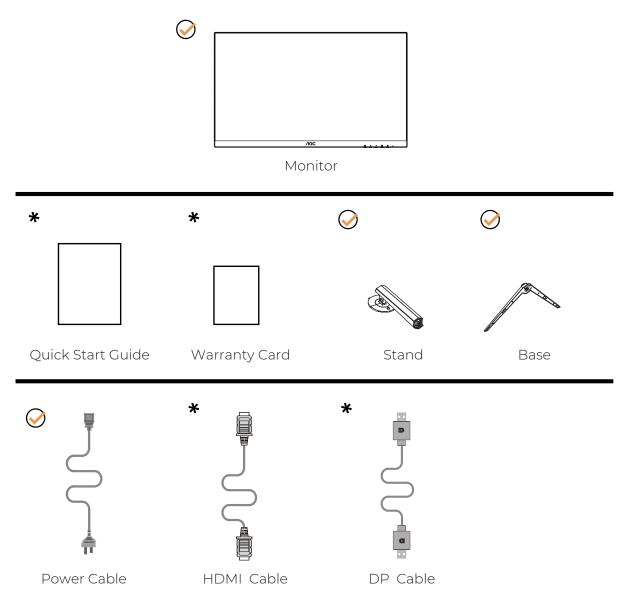
🕂 Do not knock or drop the monitor during operation or transportation.

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**

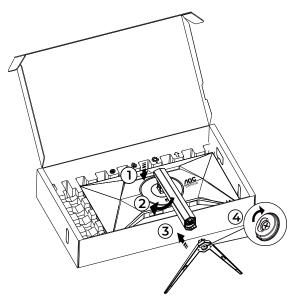


Not all signal cables will be provided for all countries and regions. Please check with the local dealer or AOC branch office for confirmation.

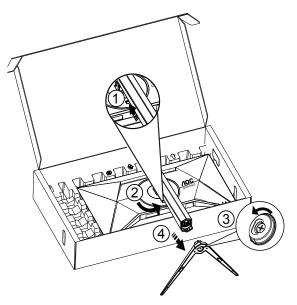
# Set-up Stand & Base

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

### Setup:



#### Remove:

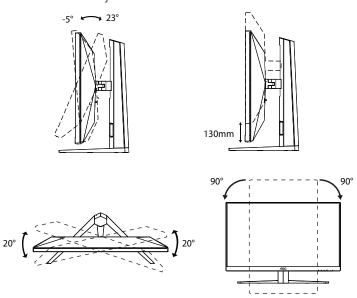


Specification for base screw: M6\*23 mm (effective thread 5.5mm)



# **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:



### 

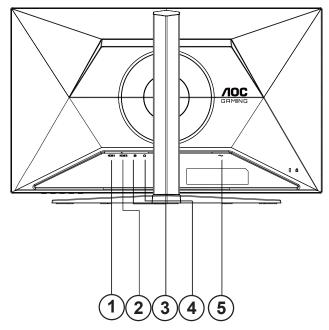
Do not touch the LCD screen when you change the angle. Touching the LCD screen may cause damage.

### Warning

- To avoid potential screen damage, such as panel peeling, ensure that the monitor does not tilt downward by more than -5 degrees.
- 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. HDMI1
- 2. HDMI 2
- 3. DisplayPort
- 4. Earphone
- 5. Power

### Connect to PC

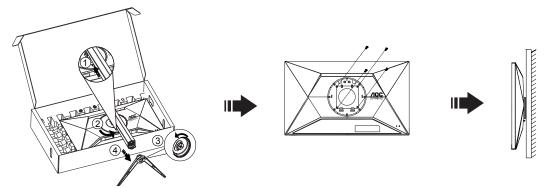
- 1. Connect the power cord to the back of the display firmly.
- 2. Turn off your computer and unplug its power cable.
- 3. Connect the display signal cable to the video connector on the back of your computer.
- 4. Plug the power cord of your computer and your display into a nearby outlet.
- 5. Turn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

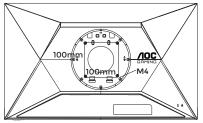
# Wall Mounting

Preparing to Install An Optional Wall Mounting Arm.

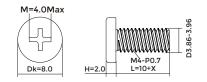


This monitor can be attached to a wall mounting arm you purchase separately. Disconnect power before this procedure. Follow these steps:

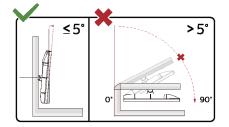
- 1. Remove the base.
- 2. Follow the manufacturer's instructions to assemble the wall mounting arm.
- 3. Place the wall mounting arm onto the back of the monitor. Line up the holes of the arm with the holes in the back of the monitor.
- 4. Insert the 4 screws into the holes and tighten.
- 5. Reconnect 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 DisplayPort/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<sup>™</sup> 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<sup>™</sup> 7 2700U
- AMD Ryzen<sup>™</sup> 5 2500U
- AMD Ryzen<sup>™</sup> 5 2400G
- AMD Ryzen<sup>™</sup> 3 2300U
- AMD Ryzen<sup>™</sup> 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

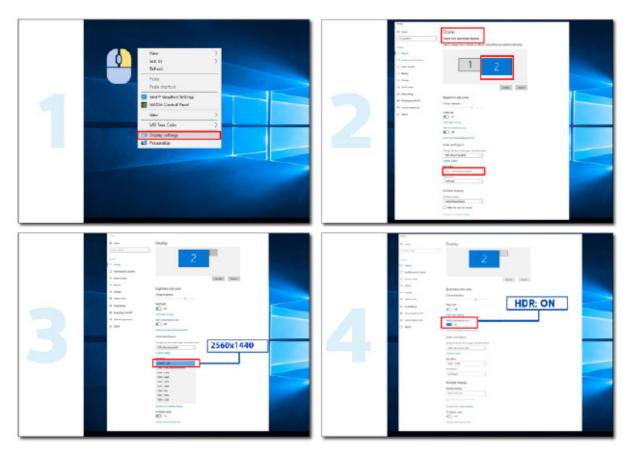
# HDR

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.

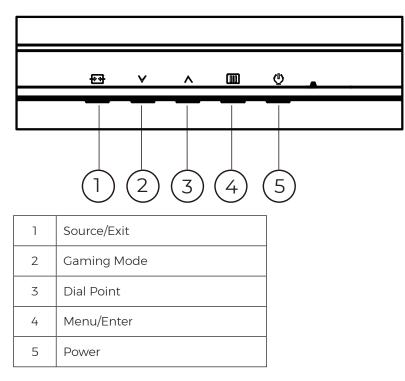
### Note:

- 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. 3840x2160 only suggest for Blu-ray Player, Xbox and PlayStation.
- a. The display resolution is set to 2560\*1440, and HDR is preset to ON.
- b. After entering an application, the best HDR effect can be achieved when the resolution is changed to 2560\*1440 (if available).



# Adjusting

### Hotkeys



### Menu/Enter

Press to display the OSD or confirm the selection.

### Power

Press the Power button to turn on the monitor.

### **Dial Point**

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

### **Gaming Mode**

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

### Source/Exit

When the OSD is closed, press Source/Exit button will be Source hot key function. When the OSD menu is active, this button acts as an exit key (to exit the OSD menu).

# **OSD Setting**

Basic and simple instruction on the control keys.

RESOLUTION	REFRESH RATE	GAMING MODE	BRIGHTNESS	INPUT SOURCE
2560x1440	60 HZ	Standard	70	DP
Game Setting		Gaming Mode		
Picture		Shadow Control		
Settings				
Audio		Game Color		
OSD Setup		Adaptive-Sync		
Information		Dial Point		
		Overdrive		
		Frame Counter		
		~		
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- 1). Press the **IIII MENU-button** to activate the OSD window.
- Press vor to navigate through the functions. Once the desired function is highlighted, press the IIII MENU-button / OK to activate it, press vor to navigate through the sub-menu functions. Once the desired sub-menu function is highlighted, press IIII MENU-button / OK to activate it.
- 3). Press vor 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 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). If the input signal resolution is the native resolution or Adaptive-Sync, then the item "Image Ratio" is invalid.

### **Game Setting**

RESOLUTION REFRESH RATE CAMING MODE BRICHTNESS INPUT SOURCE   2560x1440 60 HZ Standard 70 DP     Came Setting   Picture   Standow Control   Settings   Audio   OSD Setup   Information   Dial Point   Overdrive   Frame Counter					
Came Setting       Caming Mode         Picture       Shadow Control         Settings       Low Input Lag         Audio       Game Color         OSD Setup       Adaptive-Sync         Information       Dial Point         Overdrive       Frame Counter         Frame Counter       V	RESOLUTION	REFRESH RATE	GAMING MODE	BRIGHTNESS	INPUT SOURCE
Picture       Shadow Control         Settings       Low Input Lag         Audio       Game Color         OSD Setup       Adaptive-Sync         Information       Dial Point         Overdrive       Frame Counter	2560x1440	60 HZ	Standard	70	DP
Settings       Low Input Lag         Audio       Game Color         OSD Setup       Adaptive-Sync         Information       Dial Point         Overdrive       Frame Counter         V       V	Game Setting		Gaming Mode		
Audio     Came Color       OSD Setup     Adaptive-Sync       Information     Dial Point       Overdrive     Frame Counter	Picture		Shadow Control		
OSD Setup Information Dial Point Overdrive Frame Counter V	Settings				
Information Dial Point Overdrive Frame Counter	Audio		Game Color		
Overdrive Frame Counter	OSD Setup		Adaptive-Sync		
Frame Counter	Information		Dial Point		
			Overdrive		
			Frame Counter		
			~		
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	Standard	Enhance readability for suitable web and mobile games.
	FPS	For playing FPS (first Person Shooters) games. Improves black level in dark theme.
	RTS	For playing RTS (Real Time Strategy) games. Improves the image quality.
Gaming Mode	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.
Shadow Control	0-20	Shadow Control Default is 0, then end-user can adjust from 0 to 20 increase for a clearer picture. If picture is too dark to be saw the detail clearly, adjusting from 0 to 20 for a clear picture.
Low Input Lag	Off / On	Turn off frame buffer to decrease input lag.
Game Color	0~20	Game Color will provide 0-20 level for adjusting saturation to get a better picture.
		Disable or Enable Adaptive-Sync.
Adaptive-Sync	Off / On	Adaptive-Sync Run Reminder: When the Adaptive-Sync feature is enabled, there may be flashing in some game environments.
Dial Point	Off / On / Dynamic	The"Dial Point"function places an aiming indicator in the center of screen for helping gamers to play First Person Shooter (FPS) games with accurate and precise aiming.
	Normal	Adjust the response time.
	Fast	Note:
Overdrive	Faster	If the user adjusts OverDrive to "Fastest" the displayed image may be blurred. Users can adjust the OverDrive level or turn it off
	Fastest	according to their preferences.

	Off / Right-up / Right-	
Frame Counter	Down / Left-Up / Left-	Display V frequency on the corner selected.
	Down	

#### Note:

- 1). When "HDR Mode" under "Picture" is enable, the items "Gaming Mode", "Shadow Control", "Game Color" cannot be adjusted.
- 2). When the "Color Space" under "Picture" is set to sRGB, the items "Gaming Mode", "Shadow Control", "Shadow Boost" and "Game Color" cannot be adjusted.

### Picture

		GR	OC MING		
RESOLUTIO	ON REFRESH RA	TE GAM	ING MODE	BRIGHTNESS	INPUT SOURCE
2560x1440	о 60 HZ	SI	tandard	70	DP
Game S	Setting	Brigł	ntness		
Pict	ure	Cor	utrast		
Setti	ngs	Gar	nma		
Aud	dio	Eco Adj	ustment		
OSD S	Setup	Color	Temp.		
Inform	nation	R	ed		
			een		
			ue		
		÷	<ul> <li></li> </ul>	ЛОК	ڻ ل
Brightness	0-100		Backligh	nt Adjustment	
Contrast	0-100		Contrast	t from Digital-	register.
Gamma	1.8 / 2.0 / 2.2 /	2.4 / 2.6	Adjust C	Samma.	
	Standard		Standar	d Mode.	
	Text		Text Mo	de.	
	Internet		Internet	Mode.	
Eco	Game		Game M	1ode.	
Adjustment	Movie		Movie M	lode	

	Standard	Standard Mode.
	Text	Text Mode.
	Internet	Internet Mode.
Eco	Game	Game Mode.
Adjustment	Movie	Movie Mode.
	Sports	Sports Mode.
	Reading	Reading Mode.
	Uniformity	Uniformity Mode.
	Warm	Recall Warm Color Temperature from EEPROM.
Color Tomp	Normal	Recall Normal Color Temperature from EEPROM.
Color Temp.	Cool	Recall Cool Color Temperature from EEPROM.
	User	Restore Color Temperature from EEPROM.
Red	0-100	Red gain from Digital-register.
Green	0-100	Green gain from Digital-register.
Blue	0-100	Blue gain from Digital-register.

	Off	
	DisplayHDR	Set the HDR profile according to your usage requirements.
HDR	HDR Picture	Note: When HDR is detected, the HDR option is displayed for
	HDR Movie	adjustment.
	HDR Game	
	Off	
	HDR Picture	Optimized for the color and contrast of the picture, which will simulate showing the HDR effect.
HDR Mode	HDR Movie	Note: When HDR is not detected, the HDR Mode option is displayed for
	HDR Game	- adjustment.
	Off	Disable dynamic contrast ratio.
DCR	On	Enable dynamic contrast ratio.
Local Dimming	Off / Strong / Medium / Low	Disable or enable zone dimming.
	Panel Native	Standard color space panel.
Color Space	sRGB	sRGB Color space.
	DCI-P3	DCI-P3 color space.
	Off	
	Multimedia	
LowBlue Mode	Internet	Decrease blue light wave by controlling color temperature.
	Office	
	Reading	
Image Ratio	Full / Aspect	Select image ratio for display.

#### Note:

- 1). When HDR Mode is set to non-off, the "Contrast", "Gamma", "Eco", "Color Temp"., "Color Space", "Low Blue Light" Mode items are not adjustable.
- 2). When HDR is set to non-off, the "Brightness", "Contrast", "Gamma", "Eco Adjustment", "Color Temp", "DCR", "Color Space", "Low Blue Light" Mode items are not adjustable.
- 3). When the "Color Space" is set to "sRGB" or "DCI-P3", the "Contrast", "Gamma", "Eco Adjustment", "Color Temperature", "HDR Mode", "Low Blue Light Mode" items are not adjustable.
- 4). When "Eco Adjustment" is set to "Reading", the "Contrast", "Color Temp", "DCR", "Color Space", "Low Blue Light Mode" items are not adjustable.
- 5). For liquid crystal panel light diffusing and backlight local dimming effect, some special window picture edge or moving picture may have halo or brightness varies quickly during pattern change, those phenomena are related to mini-LED backlight, Please use it carefreely. You can active OSD menu and set local dimming off to reduce the diffusing or halo effect.

### Settings

RESOLUTION	REFRESH RATE	GAMING MOI	DE B	RIGHTNESS	INPUT SOURCE
2560x1440	60 HZ	Standard		70	DP
Game Setti	ng	Language			
Picture		Input Select			
Settings		Break Reminder			
Audio		Off Timer			
OSD Setu	q	DDC/CI			
Informatio	n	Reset			
				^	ĸŮ
Language		Se	lect the C	SD languag	e.
Input Select	Auto / HDMI1 / HE	DMI2 / DP Se	lect Input	: Signal Sour	rce.
Break Reminder	Off / On		eak remir ore than 1	nder if the us hrs.	ser continuously works f
Off Timer	0-24 hrs	Se	lect DC of	ff time.	
DDC/CI	No / Yes	Tu	rn On/Off	DDC/CI Sup	pport.
Reset	No / Yes	Re	set the m	ienu to defa	ult.

### Audio

		<b>AOC</b> Grming		
RESOLUTION	REFRESH RATE	GAMING MODE	BRIGHTNESS	INPUT SOURCE
2560x1440	60 HZ	Standard	70	DP
Game Setting		Volume		
Picture		Mute		
Settings				
Audio				
OSD Setup				
Information				
			∧ OK	U

Volume	0-100	Volume Adjustment.
Mute	Off / On	Mute the volume.

### **OSD Setup**

		<b>AOC</b> GRMING		
RESOLUTION	REFRESH RATE	GAMING MODE	BRIGHTNESS	INPUT SOURCE
2560x1440	60 HZ	Standard	70	DP
Game Setting		Transparence		
Picture		H. Position		
Settings		V. Position		
Audio		Time out		
OSD Setup				
Information				
			∧ OK	Ċ

Transparence	0-100	Adjust the transparence of OSD.	
H. Position	0-100	Adjust the horizontal position of OSD.	
V. Position	0-100	Adjust the vertical position of OSD.	
Timeout	5-120	Adjust the OSD Timeout.	

### Information

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RESOLUTION	REFRESH RA	TE GAMING M	DDE BR	IGHTNESS	INPUT SOUF	RCE
2560x1440	60 HZ	Standard	1	70	DP	
Game Setting		Model Name			Q27G4XM	
Picture		Resolution			2560(H)x1440(V)	
Settings		Refresh Rate			60HZ	
Audio		HDR			SDR	
OSD Setup		Sync			Adaptive-Sync	
Information		Serial Number			****	
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# **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 HDMI cable) Check the HDMI cable connection. (Connected using the DP cable) Check the DP cable connection.</li> <li>* 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>
Picture Is Fuzzy & Has Ghosting Shadowing Problem	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.
Picture Bounces, Flickers Or Wave Pattern Appears In The Picture	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.
Monitor Is Stuck In Active Off-Mode"	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.
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 7/8/10/11 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	Q27G4XM			
	Driving system	TFT Color LCD			
Panel	Viewable Image Size	68.5 cm diagonal			
	Pixel pitch	0.2331mm(H) x 0.2331mm(V)			
	Display Color	1.07B (8bit+FRC) <sup>[1]</sup>			
	Horizontal scan range	30k-230kHz (HDMI)			
	_	30k-280kHz (DisplayPo	rt)		
	Horizontal scan Size(Maximum)	596.736 mm			
	Vertical scan range	48-144Hz (HDMI)			
		48-180Hz (DisplayPort)			
	Vertical Scan Size(Maximum)	335.664 mm			
	Optimal preset resolution	2560x1440@60Hz			
Others	Max resolution	2560x1440@144Hz (HDMI)			
		2560x1440@180Hz (DisplayPort)			
	Plug & Play	VESA DDC2B/CI			
	Power Source	100-240V~ 50/60Hz 1.5A			
	Power Consumption	Typical(default brightness and contrast)		30W	
		Max. (brightness = 100, contrast =100)		≤95W	
		Standby Mode		≤0.3W	
Physical	Connector Type	HDMIx2/DisplayPort/Earphone out			
Characteristics	Signal Cable Type	Detachable			
	Taura a susta una	Operating	0°C~40°C		
	Temperature	Non-Operating	on-Operating -25°C~55°C		
_ ·		Operating 10%~85% (Non-Condensing)		ondensing)	
Environmental	Humialty	Non-Operating 5%~93% (Non-Condensing)		ndensing)	
		Operating Om~5000m (0ft~16404ft)		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 Version	HDMI2.1		DP1.4	
Color Format Color Bit	YCbCr422 YCbCr420	YCbCr444 RGB	YCbCr422 YCbCr420	YCbCr444 RGB
2560x1440@180Hz 10bpc	\	\	ОК	ОК
2560x1440@180Hz 8bpc	\	\	ОК	ОК
2560x1440@165Hz 10bpc	\	\	ОК	ОК
2560x1440@165Hz 8bpc	\	\	ОК	ОК
2560x1440@144Hz 10bpc	ОК	\	ОК	ОК

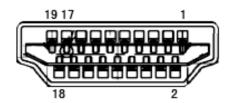
2560x1440@144Hz 8bpc	ОК	ОК	ОК	ОК
2560x1440@120Hz 10bpc	ОК	\	ОК	ОК
2560x1440@120Hz 8bpc	ОК	ОК	ОК	ОК
2560x1440@100Hz 10bpc	ОК	ОК	ОК	ОК
2560x1440@100Hz 8bpc	ОК	ОК	ОК	ОК
2560x1440@60Hz 10bpc	ОК	ОК	ОК	ОК
2560x1440@60Hz 8bpc	ОК	ОК	ОК	ОК
Low resolution 10 bpc	ОК	ОК	ОК	ОК
Low resolution 8 bpc	ОК	ОК	ОК	ОК

# **Preset Display Modes**

STANDARD	RESOLUTION(±1Hz)	HORIZONTAL FREQUENCY(KHz)	VERTICAL FREQUENCY(Hz)	
	640x480@60Hz	31.469	59.94	
	640x480@72Hz	37.861	72.809	
VGA	640x480@75Hz	37.5	75	
	640x480@100Hz	50.900	99.993	
	640x480@120Hz	61.910	119.52	
	800x600@56Hz	35.156	56.25	
	800x600@60Hz	37.879	60.317	
	800x600@72Hz	48.077	72.188	
SVGA	800x600@75Hz	46.875	75	
	800x600@100Hz	63.60	100.001	
	800x600@120Hz	76.302	119.972	
	1024x768@60Hz	48.363	60.004	
	1024x768@70Hz	56.476	70.069	
XGA	1024x768@75Hz	60.023	75.029	
	1024x768@100Hz	81.577	99.972	
	1024x768@120Hz	97.551	119.989	
	1280x1024@60Hz	63.981	60.02	
SXGA	1280x1024@75Hz	79.976	75.025	
FUD	1920x1080@60Hz	67.5	60	
FHD	1920x1080@120Hz	135.0	120.000	
	2560x1440@60Hz	88.787	59.951	
	2560x1440@120Hz	182.996	119.998	
QHD	2560x1440@144Hz	222.194	144.001	
	2560x1440@165Hz	244.36	165	
	2560x1440@180Hz	266.580	180	
	IBM MC	DES		
DOS	720x400@70Hz	31.469	70.087	
	MAC MO	DDES		
VGA	640x480@67Hz	35	66.667	
SVGA	832x624@75Hz	49.725	74.551	
XGA	1024x768@75Hz	60.241	74.927	

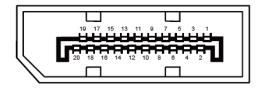
Note: According to the VESA standard, there may be a certain error (+/-1Hz) when calculating the refresh rate (field frequency) of different operating systems and graphics cards. In order to improve compatibility, the nominal refresh rate of this product has been rounded off. Please refer to the actual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



HIGH-DEFINITION MULTIMEDIA INTERFACE