





LCD Monitor User Manual Q27G3Z



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National Conventions 1 Power 2 Installation 3 Cleaning 4 Other 5 Setup 6 Contents in Box 6 Setup Stand & Base 7 Adjusting Viewing Angle 8 Concerting the Monitor 9 Wall Mounting 10 Adaptive-Sync function 11 G-SYNC Compatible function 12 HDR 13 Adjusting 14 OSD Setting 15 Luminance 16 Color Setup 17 Picture Boost 18 OSD Setting 20 Game Setting 21 Extra 22 Exit 22 LeD Indicator 24 Troubleshoot 25 Specification 26 General Specification 26 Piezel Display Modes 27 Pin Assignments 28 Plug and Play 29	Safety	1
Installation 3 Cleaning 4 Other 5 Setup 6 Contents in Box 6 Setup Stand & Base 7 Adjusting Viewing Angle 8 Connecting the Monitor 9 Wall Mounting 10 Adaptive-Sync function 11 G-SYNC Compatible function 12 HDR 13 Adjusting 14 Hotkeys 14 OSD Setting 15 Luminance 16 Color Setup 17 Picture Boost 18 OSD Setting 20 Game Setting 21 Extra 22 Exit 23 LED Indicator 24 Troubleshoot 25 Specification 26 Preset Display Modes 27 Pin Assignments 28	National Conventions	1
Cleaning4Other5Setup6Contents in Box6Setup Stand & Base7Adjusting Viewing Angle8Connecting the Monitor9Wall Mounting10Adaptive-Sync function11G-SYNC Compatible function12HDR13Adjusting14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot26General Specification26Pin Assignments27Pin Assignments28	Power	2
Other	Installation	3
Setup6Contents in Box6Setup Stand & Base7Adjusting Viewing Angle8Connecting the Monitor9Wall Mounting10Adaptive-Sync function11G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setting20Game Setting21Exit22Exit22Exit22Exit22Specification26General Specification26Pin Assignments28	Cleaning	4
Contents in Box6Setup Stand & Base7Adjusting Viewing Angle8Connecting the Monitor9Wall Mounting10Adaptive-Sync function11G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26Preset Display Modes27Pin Assignments28	Other	5
Setup Stand & Base7Adjusting Viewing Angle8Connecting the Monitor9Wall Mounting10Adaptive-Sync function11G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Extra23LED Indicator25Specification26General Specification26Preset Display Modes27Pin Assignments28	Setup	6
Adjusting Viewing Angle8Connecting the Monitor9Wall Mounting10Adaptive-Sync function11G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26Preset Display Modes27Pin Assignments28	Contents in Box	6
Connecting the Monitor9Wall Mounting10Adaptive-Sync function11G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26Preset Display Modes27Pin Assignments28	Setup Stand & Base	7
Wall Mounting 10 Adaptive-Sync function 11 G-SYNC Compatible function 12 HDR 13 Adjusting 14 Hotkeys 14 OSD Setting 15 Luminance 16 Color Setup 17 Picture Boost 18 OSD Setting 19 PIP Setting 20 Game Setting 21 Extra 22 Exit 23 LED Indicator 24 Troubleshoot 25 Specification 26 General Specification 26 Preset Display Modes 27 Pin Assignments 28	Adjusting Viewing Angle	8
Adaptive-Syn function11G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setting19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28	Connecting the Monitor	9
G-SYNC Compatible function12HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setting19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28	Wall Mounting	
HDR13Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28	Adaptive-Sync function	11
Adjusting14Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup.19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot.25Specification26General Specification26Preset Display Modes27Pin Assignments.28	G-SYNC Compatible function	
Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26Preset Display Modes27Pin Assignments28	HDR	13
Hotkeys14OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26Preset Display Modes27Pin Assignments28	Adjusting	14
OSD Setting15Luminance16Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28		
Luminance		
Color Setup17Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28	5	
Picture Boost18OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28		
OSD Setup19PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28		
PIP Setting20Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28		
Game Setting21Extra22Exit23LED Indicator24Troubleshoot25Specification26General Specification26Preset Display Modes27Pin Assignments28		
Extra 22 Exit 23 LED Indicator 24 Troubleshoot 25 Specification 26 General Specification 26 Preset Display Modes 27 Pin Assignments 28		
LED Indicator		
Troubleshoot	Exit	
Specification	LED Indicator	24
General Specification	Troubleshoot	
General Specification	Specification	
Preset Display Modes	•	
Pin Assignments	•	
5		
	5	

Safety

National Conventions

The following subsections describe notational 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.

A 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.

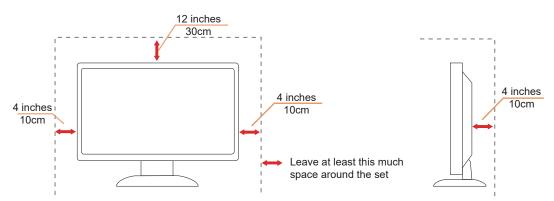
1 Do not place the front of the product on the floor.

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:

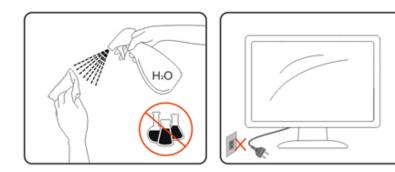


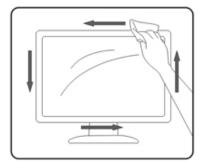
Installed with stand

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.

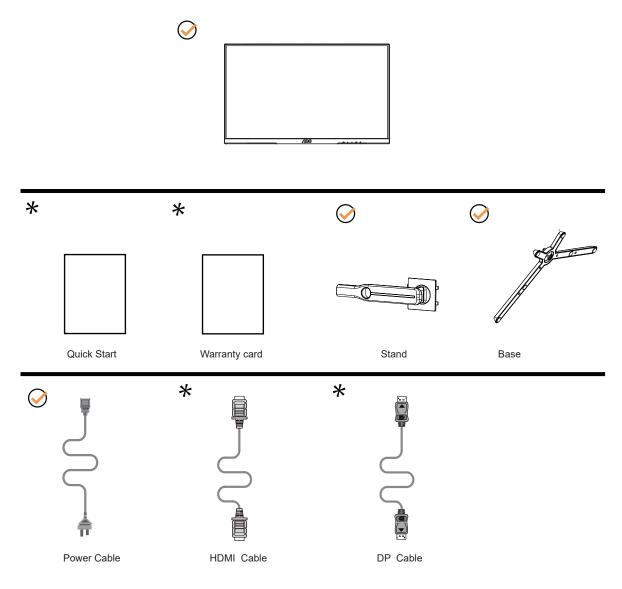
Do not knock or drop the monitor during operation or transportation.

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

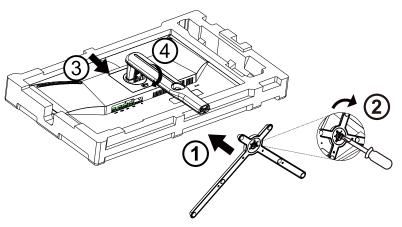


Not all signal cables will be provided for all countries and regions. Please check with the local dealer or AOC branch office for confirmation.

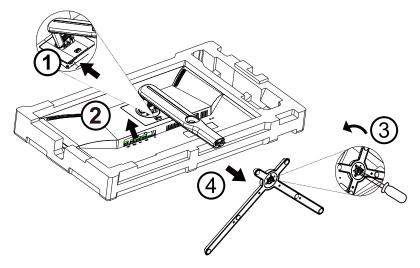
Setup Stand & Base

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

Setup:



Remove:

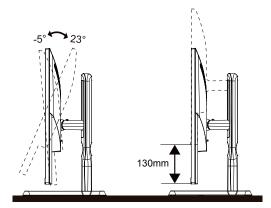


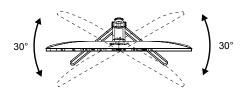
Adjusting Viewing Angle

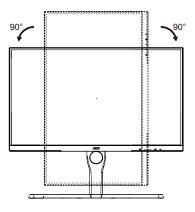
For optimal viewing it is recommended to look at the full face of the monitor, then adjust the monitor's angle to your own preference.

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:







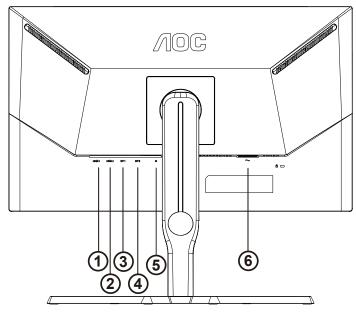
Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.

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 and Computer:



- 1. HDMI1 1
- 2. HDMI1 2
- 3. DP 1
- 4. DP 2
- 5. Earphone
- 6. Power

Connect to PC

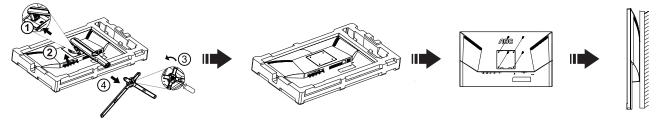
- 1. Connect the power cord to the back of the display firmly.
- 2. Turn off your computer and unplug its power cable.
- 3. Connect the display signal cable to the video connector on the back of your computer.
- 4. Plug the power cord of your computer and your display into a nearby outlet.
- 5. Turn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

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

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.

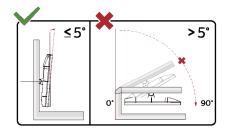
2. Follow the manufacturer's instructions to assemble the wall mounting arm.

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.

Note: VESA mounting screw holes are not available for all models, please check with the dealer or official department of AOC.



* 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 is working with DP/HDMI
- 2. Compatible Graphics Card: Recommend list is as the below, also could be checked by visiting 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/

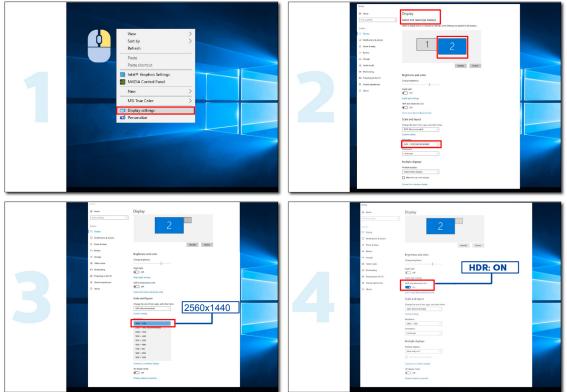
HDR

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.

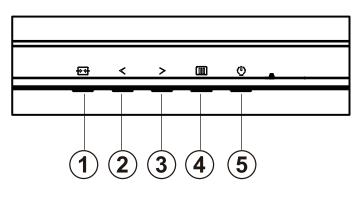
Note:

- 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.
- 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 2560 x 1440, 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 2560 x 1440 (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.

<	Color Setup	Picture Boost	OSD Setup	PIP PIP Setting	Game Setting	Extra E	xit
Contrast			Gamma				
Brightness			DCR	Off			
Eco Mode	 Standard 	•	HDR Mode	Off	•		

- 1). Press the III MENU-button to activate the OSD window.
- Press < Left or > Right to navigate through the functions. Once the desired function is highlighted, press the III MENU-button to activate it, press < Left or > Right to navigate through the sub-menu functions. Once the desired function is highlighted, press III 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 IIII MENU-button while the monitor is off and then press U power button to turn the monitor on. To un-lock the OSD press and hold the IIII MENU-button while the monitor is off and then press U power button to turn the monitor on.

Note:

- 1). If the product has only one signal input, the Input Selection option is invalidated.
- 2). If the product input signal resolution is the native resolution or G-SYNC/Adaptive-Sync function, the "image scale" item is invalid.
- 3). ECO mode (except standard mode), DCR mode, DCB mode, and window brighting can display only one status at a time.

Luminance

K	Color Setup	Picture Boost	Sign OSD Setup	PIP PIP Setting	Game Setting	X Extra	Exit		
Contrast Brightness	50	Gam DCR		Gamma 1 ► Off ►					
Eco Mode		HDR		Off 🕨					
	Contrast	0-100		Contrast fr	om Digital-registe	er.			
	Brightness	0-100		Backlight A	Adjustment				
		Standard	\checkmark	Standard N	Node				
		Text	т	Text Mode					
		Internet	e	Internet M	ode				
	Eco mode	Game	·	Game Mod	le				
		Movie	Ø	Movie Moo	le				
		Sports	32	Sports Mode					
		Reading	R	Reading M	Reading Mode				
		Gamma1		Adjust to G	Adjust to Gamma 1				
-0-	Gamma	Gamma2		Adjust to G	Adjust to Gamma 2				
~~~		Gamma3		Adjust to G	Adjust to Gamma 3				
	DOD	Off		Disable dynamic contrast ratio					
	DCR	On		Enable dynamic contrast ratio					
		Off							
		DisplayHDR		Set the HD	R profile accordi	ng to your us	age		
	HDR	HDR Picture		Note:		UDD option	io		
		HDR Movie			R is detected, the for adjustment.		15		
		HDR Game							
		OFF	,						
		HDR Picture			P Modo				
	HDR Mode	HDR Movie		Adjust HDI					
		HDR Game							

#### 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 cannot be adjusted.

### **Color Setup**

Color Setup	Picture Boos	OSD Setup	PIP PIP Setting	Game Setting	) Extra	Exit	Luminance
Color Temp.			i 🗖	50			
DCB Mode	Off		en 📃	50			
DCB Demo	Off		e 📃	50			

	1					
		Warm	Recall Warm Color Temperature from EEPROM.			
		Normal	Recall Normal Color Temperature from EEPROM.			
		Cool	Recall Cool Color Temperature from EEPROM.			
	Color Temp.	sRGB	Recall SRGB Color Temperature from EEPROM.			
			Red Gain from Digital-register			
		User	Green Gain Digital-register.			
			Blue Gain from Digital-register			
		Full Enhance	Disable or Enable Full Enhance Mode			
	DOD Mada	Nature Skin	Disable or Enable Nature Skin Mode			
		Green Field	Disable or Enable Green Field Mode			
	DCB Mode	Sky-blue	Disable or Enable Sky-blue Mode			
		Auto Detect	Disable or Enable AutoDetect Mode			
		OFF	Disable or Enable OFF Mode			
	DCB Demo	on or off	Disable or Enable Demo			
	Red	0-100	Red gain from Digital-register.			
	Green	0-100	Green gain from Digital-register.			
	Blue	0-100	Blue gain from Digital-register.			

Note:

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

### **Picture Boost**

Picture Boost	OSD Setup	PIP PIP Setting	Game Setting	) Extra	Exit	 Color Setup
Bright Frame	◄ Off		Brightness	50		0
Frame Size			Contrast	50		0

	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:

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

< 😪 > OSD Setup	PIP PIP Setting	çېنې Game Setting	X Extra	Exit	Luminance	Color Setup	Picture Boost
Language						ansparence	
Timeout							Off 🕨
DP Capability							

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 Reminder	on or off	Break reminder if the user continuously work for more than 1hrs

### **PIP Setting**

✓ PIP > PIP Setting	Gi	ame Setting	≫ Extra	Exit	Lumi	<b>k</b> inance	Color Setup	Picture	e Boost		Setup
PIP Setting		Off								Off	
Main Source		DP2									
Sub Source		DP1				Off					

	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:

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

PBP		Main source					
		HDMI1	HDMI2	DP1	DP2		
	HDMI1	V	V	V	V		
Sub source	HDMI2	V	V	V	V		
Sub source	DP1	V	V	V	V		
	DP2	V	V	V	V		

PIP		Main source					
		HDMI1	HDMI2	DP1	DP2		
	HDMI1	V	V	V	V		
Sub source	HDMI2	V	V	V	V		
Sub source	DP1	V	V	V	V		
	DP2	V	V	V	V		

### **Game Setting**

< çç⊶ > Game Setting	K (tra	Exit	Luminance	Colc	or Setup	Pic	ture Boost	S OSD S	<b>b</b> Setup		PIP Setting
Game Mode	Off		Game Color							On	•
Shadow Control					Off					Off	•
Low Input Lag	On		Overdrive		Off						0

	1		
	FPS	For playing FPS (First Person Shooters) games. Improves dark theme black level details.	
	RTS	For playing RTS (Real Time Strategy). Improves the image quality.	
Game Mode	RTS	For playing RTS (Real Time Strategy). Improves the image quality.	
	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		<ul> <li>Shadow Control Default is 50, then end-user can adjust from 50 to 100 or 0 to increase contrast for clear picture.</li> <li>1. If picture is too dark to be saw the detail clearly, adjusting from 50 to100 for clear picture.</li> <li>2. If picture is too white to be saw the detail clearly, adjusting from 50 to0 for clear picture</li> </ul>	
Low Input Lag	On/Off	Turn off frame buffer to decrease input lag	
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.	
	Low Input Lag Game Color Low Blue Mode Overdrive G-SYNC Frame Counter	Game ModeRTSGame 1Gamer 1Gamer 2Gamer 3offoffShadow Control0-100Low Input LagOn/OffGame Color0-20Low Blue ModeReading / Office / Internet / Multimedia / OffLow Blue ModeReading / Office / Internet / Multimedia / OffCoverdriveStrongBoostOffGarse CourreOffOverdriveStrongBoostOffGarse CourreOffDoterdriveStrongBoostOffOffOn/OffG-SYNCOn/OffStrongDoverdriveFrame CounterOff / Right-up / Right-Down / Left-Down / Left-Up	

Note:

1) When "HDR Mode" under "Brightness" is set to non-off state, "Game Mode", "Dark Field Control", "Game Tone" and "Low Blue Light Mode" under "Game Settings" cannot be adjusted.

2) When "HDR" under "Brightness" is set to non-off, "Game Mode", "Dark Field Control", "Game tone", "Low Blue Light mode", "MBR", "Overdrive" and other items cannot be adjusted or selected under "Game Settings".

### Extra

< 🔀 >	Exit	Luminance	Color Setup	Picture Boos	OSD Setup	PIP PIP Setting	Game Setting
Input Select			DDC/CI			tion : 3840(H)X216	
Off Timer						quency : 144KHz	
Image Ratio							

	Input Select	Auto/HDMI1/HDMI2/DP1/ DP2	Select Input Signal Source
	Off timer	0-24hrs	Select DC off time
×	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.
	DDC/CI	yes or no	Turn ON/OFF DDC/CI Support
	Reset	yes or no	Reset the menu to default.

### Exit

<	xit	- XX- Luminance	Color Setup	Picture Boost	OSD Setup	PIP PIP Setting	Game Setting	X Extra

Exit	Exit the main OSD	
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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 images 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.</li> <li>* 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.</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	Q27G3Z				
	Driving system	TFT Color LCD				
Panel	Viewable Image Size	68.5 cm diagonal				
	Pixel pitch	0.2331mm(H) x 0.2331mi	m(V)			
	Display Color	1.07B Colors ^[1]				
	Horizontal scan range	30k-255kHz				
	Horizontal scan Size(Maximum)	596.736 mm				
	Vertical scan range	48-144Hz(HDMI)				
		48-240Hz(DP)				
	Vertical Scan Size(Maximum)	335.664 mm				
	Optimal Preset Resolution	2560X1440@60Hz				
Others	Max resolution	2560X1440@144Hz(HDMI)				
		2560X1440@240Hz ^[2] (DP)				
	Plug & Play	VESA DDC2B/CI	VESA DDC2B/CI			
	Power Source	100-240V~ 50/60Hz 1.5A				
		Typical (default brightness and contrast) 21W				
	Power Consumption	Max. (brightness = 100, c	ontrast =100)	≤ 52W		
		Standby mode		≤ 0.5W		
Physical	Connector Type	HDMIx2/DPx2/Earphone	out			
Characteristics	Signal Cable Type	Detachable				
	T	Operating	0°C~ 40°C			
	Temperature	Non-Operating	-25°C~ 55°C			
		Operating	10% ~ 85% (	non-condensing)		
Environmental	Humidity	Non-Operating				
		Operating	0~ 5000 m (0	~ 16404ft )		
	Altitude	Non-Operating	0~ 12192m ((	0~ 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	HDI	MI2.0	DP1.4	+DSC
Color Format Color Bit	YCbCr422 YCbCr420	YCbCr444 RGB	YCbCr422 YCbCr420	YCbCr444 RGB
QHD 240Hz 10bits	1	\	ОК	OK
QHD 240Hz 8bits	1	1	ОК	OK
QHD 200Hz 10bits	/	1	ОК	OK
QHD 200Hz 8bits	1	/	ОК	OK
QHD 144Hz 10bits	OK	1	ОК	OK
QHD 144Hz 8bits	OK	OK	ОК	OK
QHD 120Hz 10bits	OK	1	ОК	OK
QHD 120Hz 8bits	OK	OK	ОК	OK
Low resolution 120Hz 10bits	OK	ОК	ОК	OK
Low resolution 120Hz 8bits	OK	ОК	ОК	OK

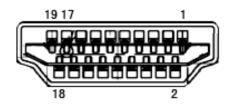
[2]: DP1.4(HBR3) signal input, in order to achieve QHD 240Hz 1.07 billion color number (RGB/YCbCr 4:4:4 format), a video card supporting DSC must be used.Consult your graphics card manufacturer for DSC support.

## **Preset Display Modes**

STANDARD	RESOLUTION(+/-1Hz)	FREQUENCY(kHz)	VERTICAL FREQUENCY(Hz)
	640x480@60Hz	31.469	59.94
	640x480@72Hz	FREQUENCY(kHz)           31.469           37.861           37.861           37.5           51.08           60.94           35.156           37.879           48.077           46.875           62.76           76.3           48.363           56.476           60.023           80.45           97.55           63.981           79.976           111.972           149.295           179.151           214.989           358.314           67.5           135           274.52           88.787           182.997           222.056           240.9           294           352.803	72.809
VGA	640x480@75Hz	37.5	75
	640x480@100Hz	51.08	99.769
	640x480@120Hz	60.94	119.72
	800x600@56Hz	35.156	56.25
	800x600@60Hz	FREQUENCY(kHz)         I           31.469         3           37.861         3           37.5         1           60.94         3           35.156         1           37.879         1           48.077         1           46.875         1           62.76         1           60.023         1           48.363         1           60.023         1           80.45         1           97.55         1           63.981         1           97.976         1           111.972         1           149.295         1           179.151         1           214.989         1           358.314         1           67.5         1           135         1           222.056         1           240.9         1           294         3           352.803         1           354.469         1	60.317
SVGA	800x600@72Hz		72.188
SVGA	800x600@75Hz		75
	800x600@100Hz	62.76	99.778
	800x600@120Hz	76.3	119.972
	1024x768@60Hz	48.363	60.004
	1024x768@70Hz	56.476	70.069
XGA	1024x768@75Hz	FREQUENCY(kHz)           31.469           37.861           37.861           37.5           51.08           60.94           35.156           37.879           48.077           46.875           62.76           76.3           48.363           56.476           60.023           80.45           97.55           63.981           79.976           111.972           149.295           179.151           214.989           358.314           67.5           135           274.52           88.787           222.056           240.9           294           352.803           DDES           31.469           ODES	75.029
	1024x768@100Hz	80.45	99.811
	1024x768@120Hz	97.55	119.989
0200	1280x1024@60Hz	63.981	60.02
SXGA —	1280x1024@75Hz	79.976	75.025
	1280x1440 @75Hz	111.972	74.998
	1280x1440 @100Hz	149.295	99.996
	1280x1440 @120Hz	179.151	119.994
	1280x1440 @144Hz	214.989	143.998
	1280x1440 @ 240Hz	358.314	239.996
	1920x1080@60Hz	67.5	60
FHD	1920x1080@120Hz	31.469         37.861         37.5         51.08         60.94         35.156         37.879         48.077         46.875         62.76         76.3         48.363         56.476         60.023         80.45         97.55         63.981         97.55         63.981         97.55         111.972         149.295         179.151         214.989         358.314         67.5         137.26         135         274.52         88.787         182.997         222.056         240.9         294         352.803         DDES         31.469         ODES	199.982
	1920x1080@120Hz	135	120
	1920x1080 @ 240Hz	274.52	239.964
	2560x1440@60Hz	88.787	59.951
	2560x1440@120Hz	182.997	119.998
	2560x1440@144Hz	222.056	143.912
QHD	2560x1440@165Hz (Dp-only interface)	76.3         48.363         56.476         60.023         80.45         97.55         63.981         79.976         111.972         149.295         179.151         214.989         358.314         67.5         137.26         135         274.52         88.787         182.997         222.056         240.9         294         352.803         ODES         31.469	165
	2560x1440@200Hz (Dp-only interface)	294	200
	2560x1440@240Hz (Dp-only interface) 35		240.002
		1	
DOS	720x400@70Hz		70.087
		Ì	
VGA	640x480@67Hz	35	66.667
SVGA	832x624@75Hz	49.725	74.551
XGA	1024x768@75Hz	60.241	74.927

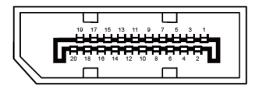
Note: According to the VESA standard, there may be a certain error (+/-1Hz) when calculating the refresh rate (field frequency) of different operating systems and graphics cards. In order to improve compatibility, the nominal refresh rate of this product has been rounded off. Please refer to the actual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