



TC027QXA
TC027USA

User Manual

Contents

Chapter 1 Introduction	1
1.1 Package Contents	1
Chapter 2 Setting up the Monitor	2
2.1 Attaching the Stand Arm and Base	2
2.2 Detaching the Stand Arm and Base	5
2.3 Making Connections	6
2.4 Adjusting the Viewing Angle	13
2.5 Using the Security Slot	16
Chapter 3 Monitor Overview	17
3.1 Front View	17
3.2 Rear View	18
3.3 Bottom View	20
Chapter 4 Specifications	22
4.1 Monitor Specifications	22
4.2 Supported Timing List	26
Chapter 5 Operating the Monitor	30
5.1 Powering On/Off the Monitor	30
5.2 Control Buttons	32
5.3 Using the Joystick Control	33
Chapter 6 OSD Setup	35
6.1 Accessing the OSD Menu	35
6.2 OSD Menus	36

Chapter 7 Troubleshooting	50
Chapter 8 Safety Instructions	51

Chapter 1 Introduction

Thank you for purchasing the ASRock TCO27QXA / TCO27USA monitor. This monitor is manufactured under ASRock's stringent quality control standards to deliver reliable performance and durability.

1.1 Package Contents

Your monitor ships with the components shown below. Please make sure that you have received all the components and contact your place of purchase or local distributor if any item is damaged or missing.

- ASRock TCO27QXA / TCO27USA Monitor
- ASRock TCO27QXA / TCO27USA Stand Arm
- ASRock TCO27QXA / TCO27USA Stand Base
- ASRock TCO27QXA / TCO27USA Quick Start Guide
- HDMI Cable
- DisplayPort Cable
- Power Cord
- Power Adapter
- USB Type-A to Type-B Cable
- USB Type-C Cable



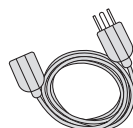
Monitor



HDMI Cable



DisplayPort Cable



Power Cord



Stand Arm



USB Type-A to Type-B Cable



USB Type-C Cable



Stand Base



Power Adapter



Quick Start Guide



Important

- Package contents may vary by country.
- The included power cord/power adapter is exclusively for this monitor and should not be used with other products.
- The illustrations, images, and screen captures in this manual are for reference only. The actual product shall prevail.

Chapter 2 Setting up the Monitor

2.1 Attaching the Stand Arm and Base

Step 1. Installing the Stand Base

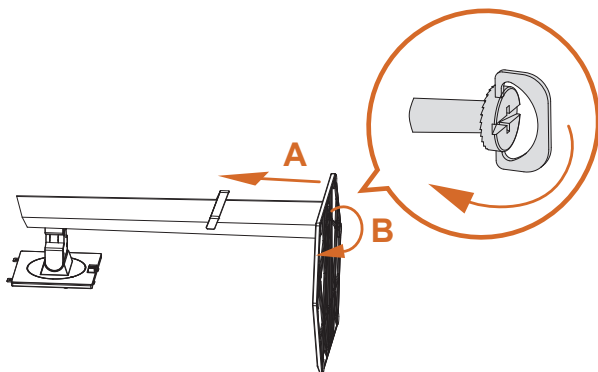
- Leave the monitor in its protective packaging.



Important

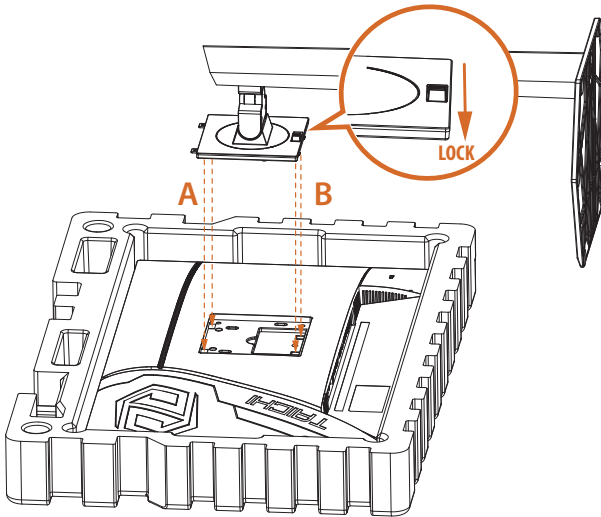
Place the monitor in its protective packaging, or on a soft, protected surface to avoid scratching the display screen.

- Insert the stand base into the stand arm and tighten the screw at the bottom of the stand base.



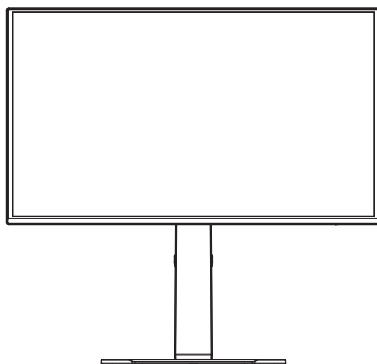
Step 2. Installing the Monitor Stand

- Align the two tabs on the stand arm with the grooves on the back of the monitor, then slide the stand arm into place until it clicks.
- Push the stand lock to the locked position to ensure stability.



Step 3. Placing the Monitor Upright

Lift the monitor carefully out of the packaging and into its upright position on a flat, stable surface.



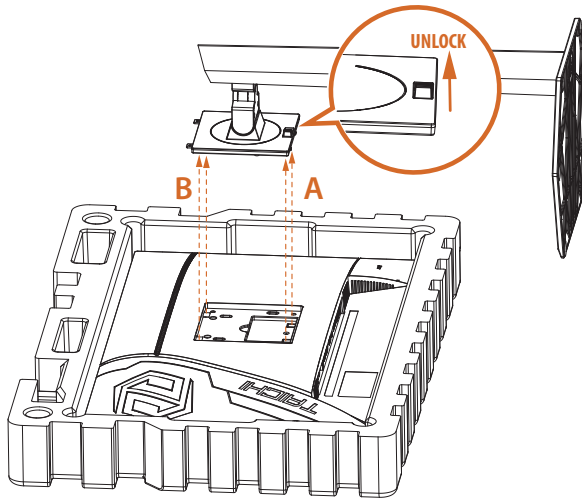
Important

Be careful not to touch or press the display screen area when lifting or moving the monitor to avoid any scratches or damage.

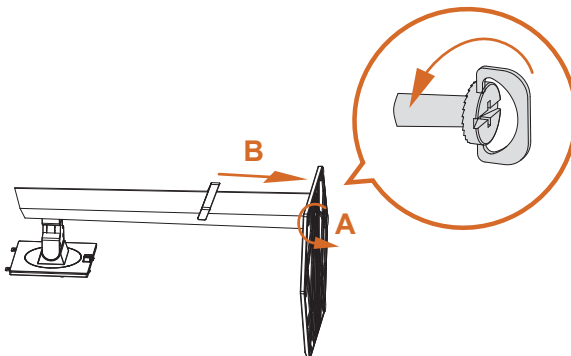
2.2 Detaching the Stand Arm and Base

Before removing the stand, be sure to turn off the monitor and disconnect all cables.

1. Push the stand lock to the unlocked position. Lift upward to disengage the tabs on the stand arm from the monitor. Remove the stand (arm and base).



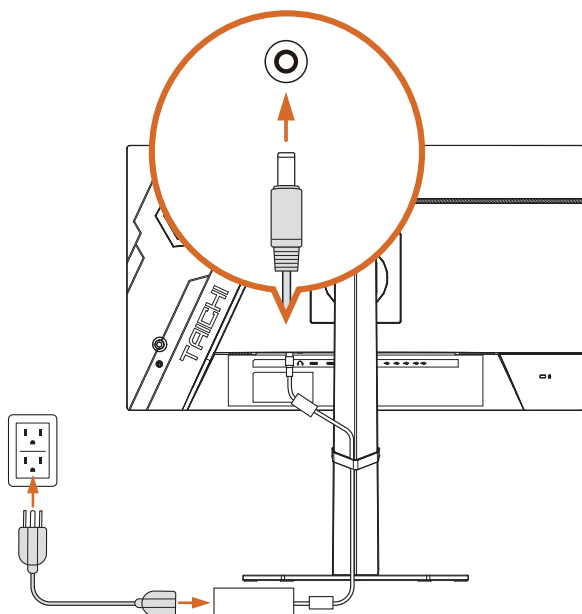
2. Remove the screw at the bottom of the stand base. Pull the stand base away from the stand arm to remove it.



2.3 Making Connections

Connecting the Power Cord/Power Adapter

Pass the cable of the power adapter through the cable management hole on the stand arm. Connect the power adapter to the monitor. Then connect the power cord to the power adapter and plug the power cord into a wall outlet.



Important

Please make sure to make a grounding connection before connecting the power plug to the power source.

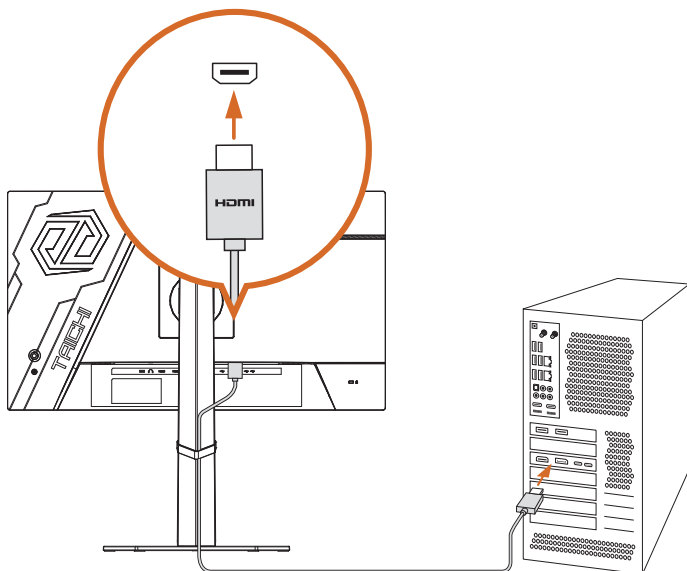
Additionally, when disconnecting the grounding connection, be sure to disconnect the power plug from the power source before proceeding.

If you need to reconnect the power cord/power adapter, unplug it, wait approximately 10 seconds, and then plug it back in.

Connecting the Monitor to a PC or Laptop

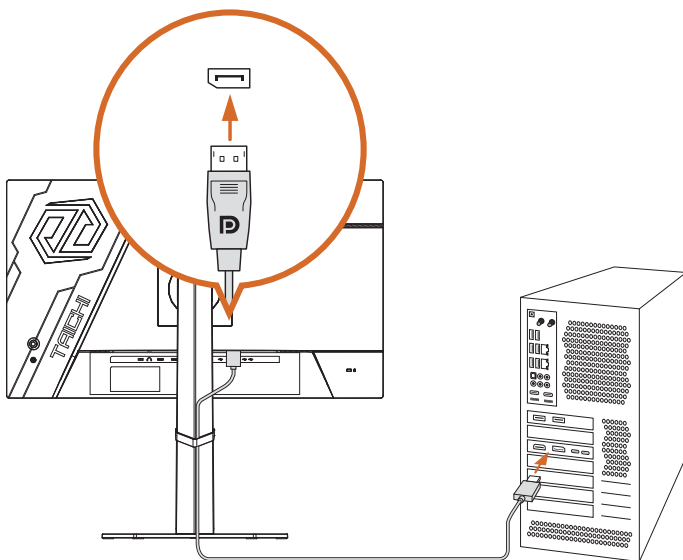
HDMI Connection

Connect one end of the HDMI cable to the HDMI connector on the back of the monitor. Then connect the other end to the HDMI connector on the PC or laptop. Pass the cable through the cable management hole on the stand arm.



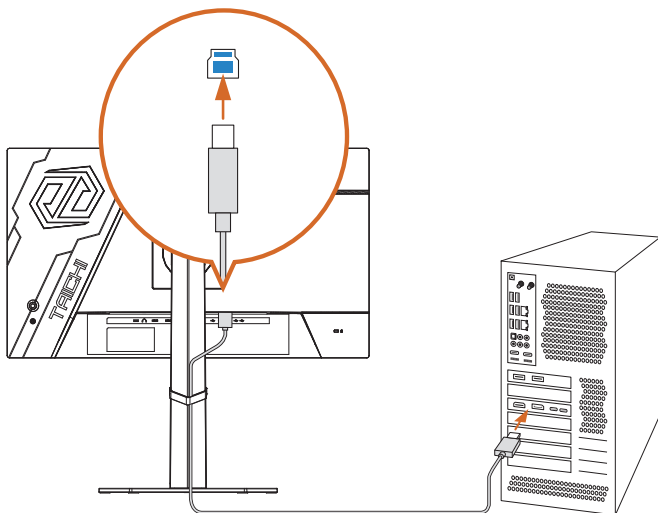
DisplayPort Connection

Connect one end of the DisplayPort cable to the DisplayPort input connector on the back of the monitor. Then connect the other end to the DisplayPort output connector on the PC or laptop. Pass the cable through the cable management hole on the stand arm.



USB Type-B Connection (to Host)

Connect the USB Type-B end of the USB cable to the USB Type-B upstream port on the back of the monitor. Then connect the other end of the cable to a USB port on your PC or laptop.

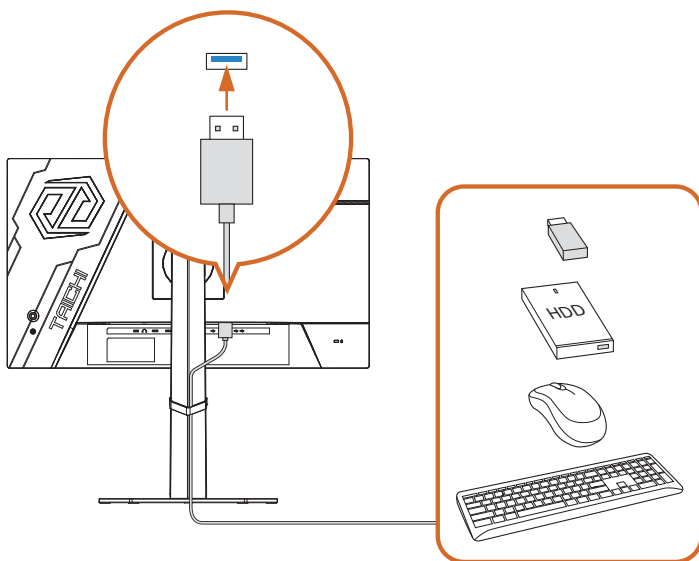


Important

It is required to connect the USB Type-B upstream port to your computer or laptop before using the downstream Type-A ports for connections.

USB Type-A Connection (to Device)

Use the USB Type-A downstream ports on the monitor to connect USB devices such as a keyboard, mouse, external drive, or USB flash drive.

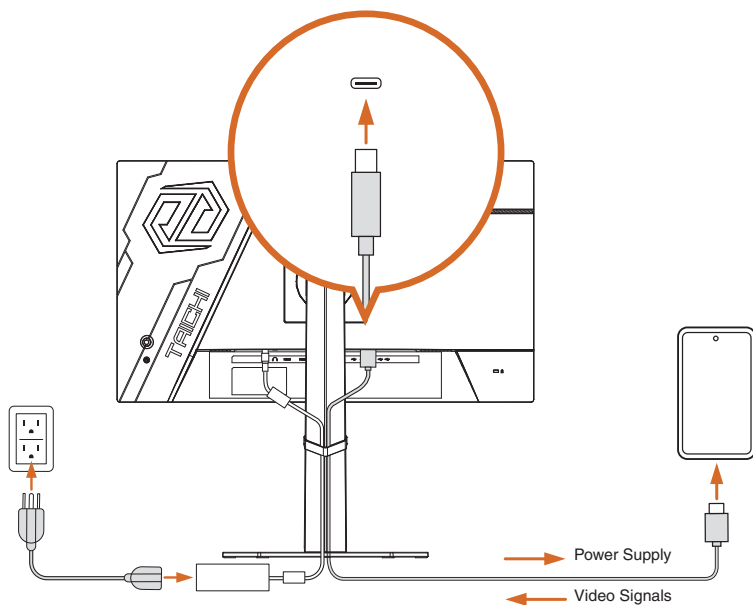


USB Type-C Connection (for Display and Power Delivery)

The USB Type-C port on the back of the monitor supports DisplayPort Alt Mode and USB Power Delivery.

Use a USB Type-C cable to connect a compatible laptop to the monitor for video output and power delivery. You can also connect a compatible smartphone or tablet that supports DisplayPort Alt Mode to mirror the device's screen on the monitor.

The USB Type-C port can also charge compatible devices via USB Power Delivery.

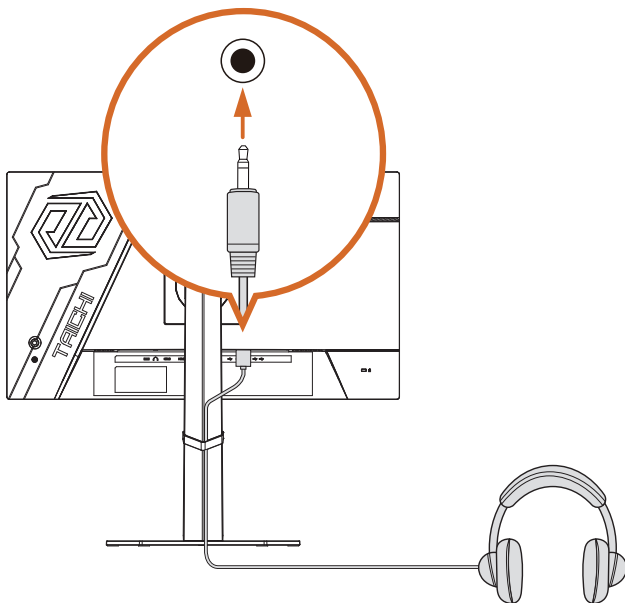


Important

Devices connected must be equipped with a USB-C connector, and support the charging function based on USB-C or USB Power Delivery.

Audio Cable Connection

You can connect headphones to the headphone jack on the bottom of the monitor. Pass the cable through the cable management hole on the stand arm.



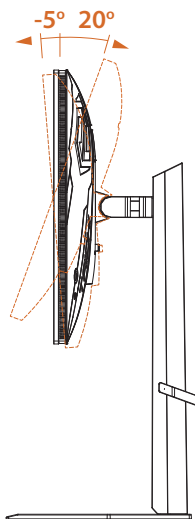
2.4 Adjusting the Viewing Angle

Tilt Angle Adjustment

For optimal viewing, position yourself directly in front of the monitor and adjust the viewing angle to your preference.

Hold the stand firmly with one hand while tilting the monitor forward or backward with the other hand to prevent the monitor from tipping over.

You can adjust the tilt angle from -5° to 20° .

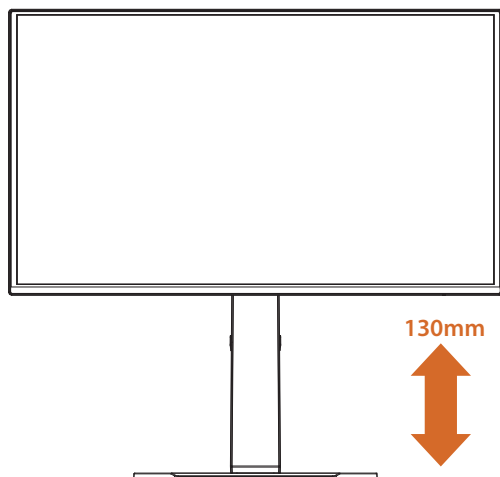


Important

Be careful not to touch or press the display screen area when adjusting the monitor.

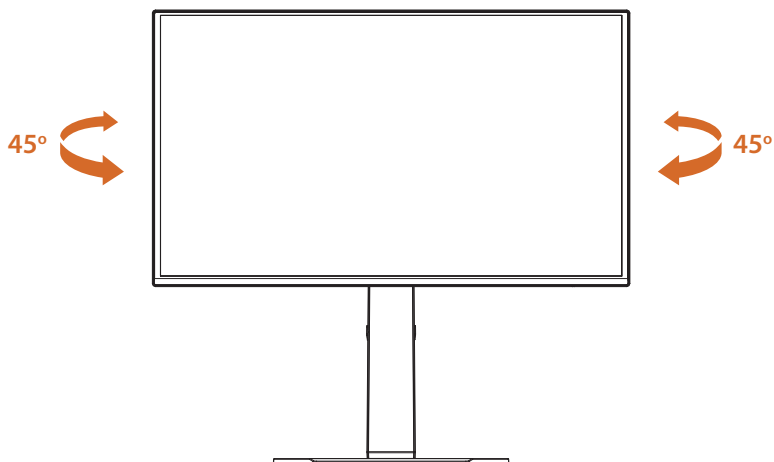
Height Adjustment

You can lower or raise the monitor to the desired height.



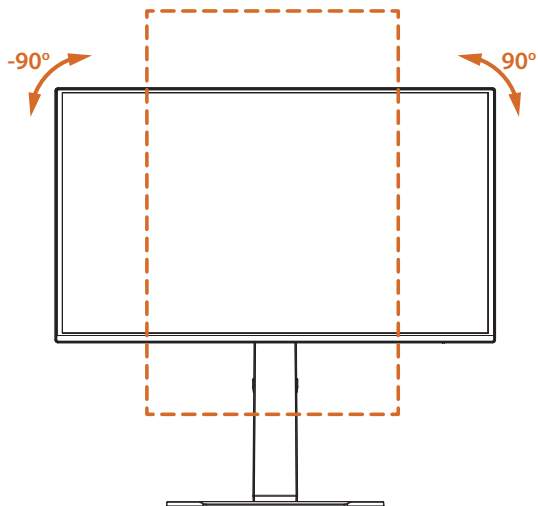
Swivel Adjustment

Swivel the monitor to the left or right for the desired viewing angle.



Monitor Pivot (Screen Orientation Adjustment)

Before rotating the monitor screen, adjust the monitor height to the highest position. Then rotate the monitor 90° clockwise or counterclockwise.

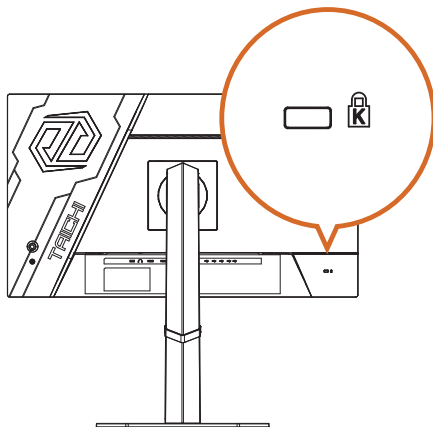


Important

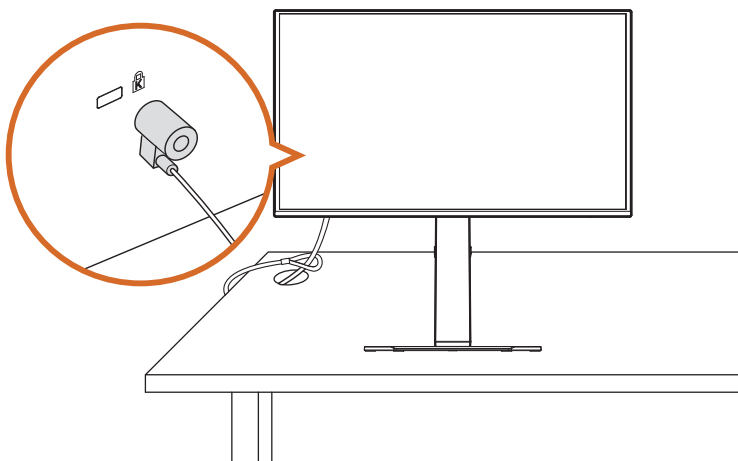
Be careful not to touch or press the display screen area when adjusting the monitor.

2.5 Using the Security Slot

This monitor supports a Kensington-type security slot. A Kensington-compatible lock can be used to secure the monitor and help prevent theft.

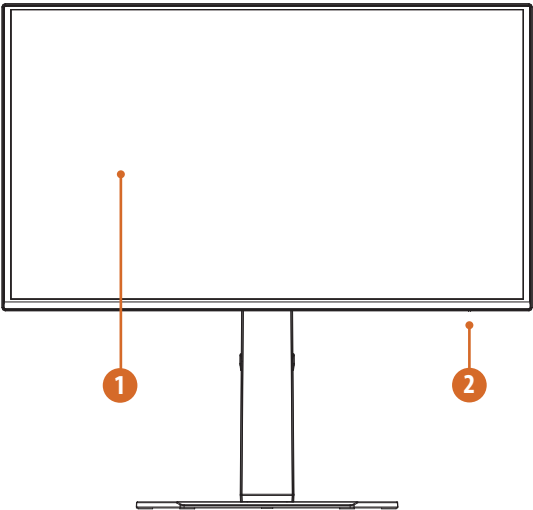


NOTE: A Kensington lock is not included. A compatible security lock must be purchased separately.



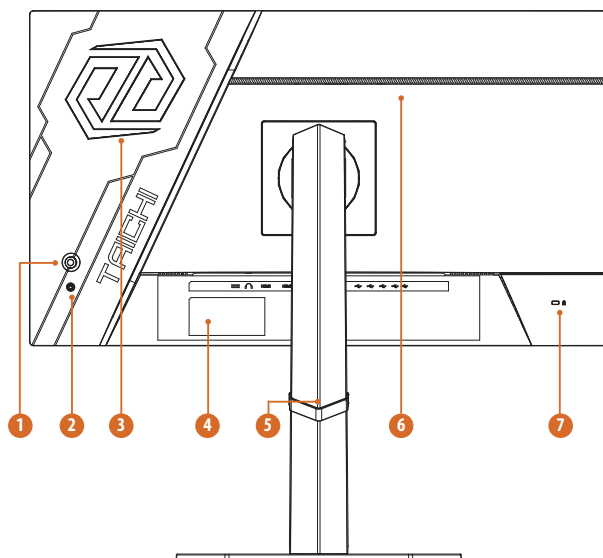
Chapter 3 Monitor Overview

3.1 Front View



No.	Item	Description
1	Display screen	Displays visual content.
2	Power Indicator	The color definition of the power indicator: • Solid White - Power-on mode • Solid Amber - Standby mode • LED Off - Off mode

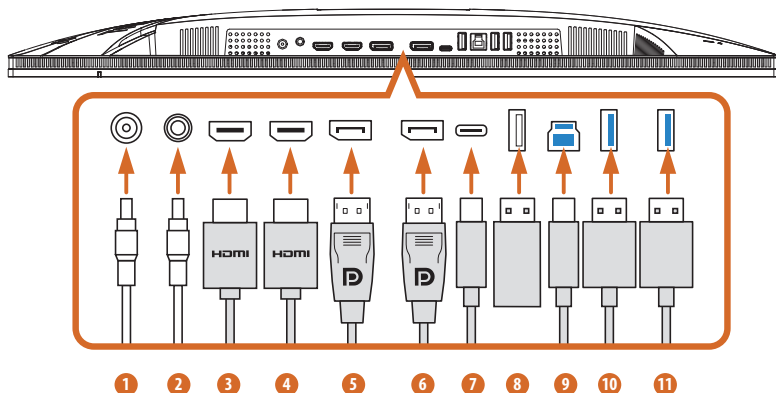
3.2 Rear View



No.	Item	Description
1	Control Buttons / Hotkeys / Joystick	Press to open the OSD menu. Please refer to "Control Buttons" and "Using the Joystick Control" sections for more details.
2	Power On/Off Button	Press to turn the monitor on. Press and hold for 3 seconds to turn the monitor off.
3	LED Backlights	The RGB LED backlights enhance gaming and movie watching experiences. You can adjust the lighting in the OSD menu: Select "System" > "Lighting".
4	Serial Label	Lists the monitor model name and power rating information.
5	Cable Management Hole	Organize cables by passing them through the hole.

6	Air vent	Allows airflow for heat dissipation and ventilation.
7	Kensington Lock slot	Secure the monitor with a compatible security lock (security lock not included).

3.3 Bottom View



No.	Item	Description
1	DC-IN Port	Connect the power adapter.
2	Audio Output	Connect your headphones to the audio output jack. (Sold separately)
3	HDMI1 Input	Connect your computer using an HDMI cable.
4	HDMI2 Input	Connect your computer using an HDMI cable.
5	DisplayPort1 Input	Connect your computer using a DisplayPort cable.
6	DisplayPort2 Input	Connect your computer using a DisplayPort cable.
7	USB 3.2 Gen1 Type-C Port (DP Alt Mode/PD 65W)	Connect a compatible device via USB Type-C for video input and USB Power Delivery.
8	USB Type-A Port for Firmware Update	Insert a USB flash drive containing the firmware update into this port.
9	USB 3.2 Gen1 Type-B Port (upstream)	Connect the USB cable from the host (your computer) to the monitor when using the USB hub function.

10	USB 3.2 Gen1 Type-A Port (downstream)	Connect USB devices such as a keyboard or mouse when using the monitor's USB hub function.
11	USB 3.2 Gen1 Type-A Port (downstream)	Connect USB devices such as a keyboard or mouse when using the monitor's USB hub function.

Chapter 4 Specifications

4.1 Monitor Specifications

Model			TC027QXA
Display	Panel Size	27"	
	Viewing Area	590.42 (H) x 333.72 (V)	
	Aspect Ratio	16:9	
	Panel Type	QD-OLED	
	Viewing Angle	178°(H) / 178°(V)	
	Resolution	QHD (2560 x 1440)	
	Pixel Pitch	0.2992 x 0.2992 mm	
	Curvature	Flat	
	Refresh Rate	500Hz	
	Response Time	0.03 ms (GTG)	
	Brightness	300nits (SDR Typ.) 515 nits (HDR TB500 APL10%) 1000 nits (HDR Peak APL3%)	
	Color Space	DCI-P3: 99%typ, 97%min	
	Display Colors	1.07B (10 bit)	
	Contrast Ratio	1,500,000:1	
	Display Surface	Glossy with Anti-Reflection Treatment	
	HDR	VESA DisplayHDR™ True Black 500	
	Flicker-free	N/A	
	Low Blue Light	YES (SOFT)	
	Light Effect	YES	
	Adaptive Sync	AMD FreeSync™ Premium Pro	
I/O Ports	HDMI	2 x HDMI™ 2.1 (48G)	
	DisplayPort	2 x DisplayPort™ 2.1	
	USB Type-A	2 x USB3.2 Gen1 Type-A	
		1 x Type-A (for firmware upgrade only)	
	USB Type-B	1 x USB3.2 Gen1 Type-B	
	USB Type-C	1 x USB3.2 Gen1 Type-C (DP Alt / PD 65W)	
	Audio Out	1 x Headphone Out	
	Speaker	3Wx2	

Digital Signal Frequency	HDMI	30~835KHz (H) 47~500Hz (V)
	DP	30~835KHz (H) 47~500Hz (V)
Power Consumption	Power Consumption (Max)	≤ 223W
	Power Consumption(TYP.)	≤ 83W
	Power Saving Mode	≤ 0.5W
	Power Off Mode	≤ 0.3W
	Voltage	100~240Vac, 50/60Hz, (Adapter 240W)
Mechanical Design	Tilt Adjustment	-5°~+20°
	Swivel Adjustment	-45° ~ +45°
	Height Adjustment	0~130 mm
	Pivot Adjustment	-90° ~ +90°
	VESA Mount	100 x 100 mm Screw type: M4 x 12 mm
Dimensions (W x H x D)	Dimensions with Stand	611.11 x 582.23 x 239.47 mm
	Dimensions without stand	611.11 x 354.1 x 53.88 mm
Weight	Net Weight with Stand	5.3kg
	Net Weight without Stand	3.4kg
	Gross Weight	8.7kg
Environment	Operating	• Temperature: 0°C to 40°C • Humidity: 20% to 80%, non-condensing • Altitude: 0~3048m
	Storage	• Temperature: -20°C to 60°C • Humidity: 20% to 80%, non-condensing • Altitude : 0~12192m

Model TCO27USA		
Display	Panel Size	27"
	Viewing Area	589.97 (H) x 332.93 (V)
	Aspect Ratio	16:9
	Panel Type	QD-OLED
	Viewing Angle	178°(H) / 178°(V)
	Resolution	UHD (3840 x 2160)
	Pixel Pitch	0.153 x 0.153mm
	Curvature	Flat
	Refresh Rate	240Hz
	Response Time	0.03 ms (GTG)
	Brightness (typ.)	250nits (SDR Typ.) 450 nits (HDR TB400 APL10%) 1000 nits (HDR Peak APL3%)
	Color Space	DCI-P3: 99%typ, 97%min
	Display Colors	1.07B (10 bit)
	Contrast Ratio	1,500,000:1
	Display Surface	Glossy with Anti-Reflection Treatment
	HDR	VESA DisplayHDR™ True Black 400
	Flicker-free	N/A
	Low Blue Light	YES (SOFT)
	Light Effect	YES
	Adaptive Sync	AMD FreeSync™ Premium Pro
I/O Ports	HDMI	2 x HDMI™ 2.1 (48G)
	DisplayPort	2 x DisplayPort™ 2.1
	USB Type-A	2 x USB3.2 Gen1 Type-A
		1 x Type-A (for firmware upgrade only)
	USB Type-B	1 x USB3.2 Gen1 Type-B
	USB Type-C	1 x USB3.2 Gen1 Type-C (DP Alt / PD 65W)
	Audio Out 3.5"	1 x Headphone Out
	Speaker	3 W x 2

Digital Signal Frequency	HDMI	30~565.44KHz (H) 48~240Hz (V)
	DP	30~565.44KHz (H) 48~240Hz (V)
Power Consumption	Power Consumption (Max)	≤ 223W
	Power Consumption(TYP.)	≤ 87W
	Power Saving Mode	≤ 0.5W
	Power Off Mode	≤ 0.3W
	Voltage	100~240Vac, 50/60Hz, (Adapter 240W)
Mechanical Design	Tilt Adjustment	-5°~+20°
	Swivel Adjustment	-45° ~ +45°
	Height Adjustment	0~130 mm
	Pivot Adjustment	-90° ~ +90°
	VESA Mount	100 x 100 mm Screw type: M4 x 12 mm
Dimensions (W x H x D)	Dimensions with Stand	611.11 x 582.23 x 239.47 mm
	Dimensions without stand	611.11 x 354.1 x 53.88 mm
Weight	Net Weight with Stand	5.4 kg
	Net Weight without Stand	3.4 kg
	Gross Weight	8.8 kg
Environment	Operating	• Temperature: 0°C to 40°C • Humidity: 20% to 80%, non-condensing • Altitude: 0~3048 m
	Storage	• Temperature: -20°C to 60°C • Humidity: 20% to 80%, non-condensing • Altitude: 0~12192 m

4.2 Supported Timing List

Standard	Resolution	TC027QXA	
		HDMI	DP
IBM MODE DOS	720x400 @70Hz	V	V
VGA	640x480 @60Hz	V	V
	640x480 @67Hz	V	V
	640x480 @72Hz	V	V
	640x480 @75Hz	V	V
SVGA	800x600 @56Hz	V	V
	800x600 @60Hz	V	V
	800x600 @72Hz	V	V
	800x600 @75Hz	V	V
XGA	1024x768 @60Hz	V	V
	1024x768 @70Hz	V	V
	1024x768 @75Hz	V	V
SXGA	1280x1024 @60Hz	V	V
	1280x1024 @75Hz	V	V
WXGA+	1440x900 @60Hz	V	V
WSXGA+	1680x1050 @60Hz	V	V
----	832x624@75Hz	V	V
	1280x720 @60Hz	V	V
	1280x960@60Hz	V	V
	1600x900@60Hz	V	V
Full HD	1920x1080 @60Hz	V	V
	1920x1080 @100Hz	V	V
	1920x1080 @120Hz	V	V
QHD	2560x1440 @60Hz	V	V
	2560x1440 @120Hz	V	V
	2560x1440 @144Hz	V	V
	2560x1440 @240Hz	V	V
	2560x1440 @360Hz	V	V
	2560x1440 @500Hz	V	V

Video Timing Resolution	640x480P 59.94/60Hz 4:3	V	V
	720x480P 59.94/60Hz 16:9	V	V
	720x576P 50Hz 16:9	V	V
	1280x720P 50Hz 16:9	V	V
	1280x720P 59.94/60Hz 16:9	V	V
	1920x1080p 50Hz 16:9	V	V
	1920x1080P 59.94/60Hz 16:9	V	V
	1920x1080P 119.88/120Hz 16:9	V	V

Standard	Resolution	TCO27USA	
		HDMI	DP
IBM MODE DOS	720x400 @70Hz	V	V
VGA	640x480 @60Hz	V	V
	640x480 @67Hz	V	V
	640x480 @72Hz	V	V
	640x480 @75Hz	V	V
SVGA	800x600 @56Hz	V	V
	800x600 @60Hz	V	V
	800x600 @72Hz	V	V
	800x600 @75Hz	V	V
XGA	1024x768 @60Hz	V	V
	1024x768 @70Hz	V	V
	1024x768 @75Hz	V	V
SXGA	1280x1024 @60Hz	V	V
	1280x1024 @75Hz	V	V
WXGA+	1440x900 @60Hz	V	V
WSXGA+	1680x1050 @60Hz	V	V
----	832x624 @75Hz	V	V
	1280x720 @60Hz	V	V
	1280x960 @60Hz	V	V
	1600x900 @60Hz	V	V
Full HD	1920x1080 @60Hz	V	V
	1920x1080 @100Hz	V	V
	1920x1080 @120Hz	V	V
QHD	2560x1440 @60Hz	V	V
	2560x1440 @120Hz	V	V
UHD	3840x2160 @60Hz	V	V
	3840x2160 @120Hz	V	V
	3840x2160 @144Hz	V	V
	3840x2160 @240Hz	V	V

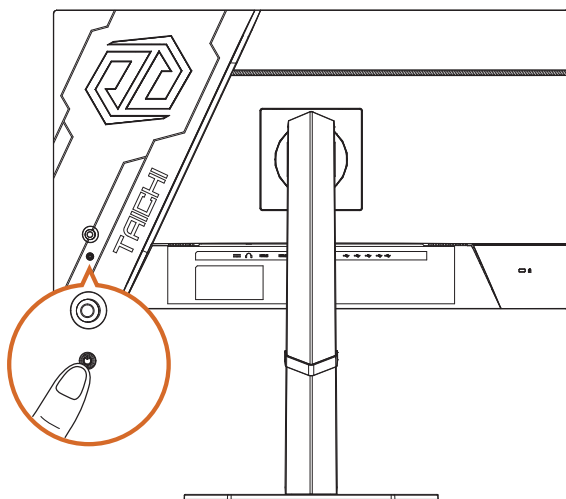
Video Timing Resolution	640x480P 59.94/60Hz 4:3	V	V
	720x480P 59.94/60Hz 16:9	V	V
	720x576P 50Hz 16:9	V	V
	1280x720P 50Hz 16:9	V	V
	1280x720P 59.94/60Hz 16:9	V	V
	1920x1080P 50Hz 16:9	V	V
	1920x1080P 59.94/60Hz 16:9	V	V
	1920x1080P 119.88/120Hz 16:9	V	V

Chapter 5 Operating the Monitor

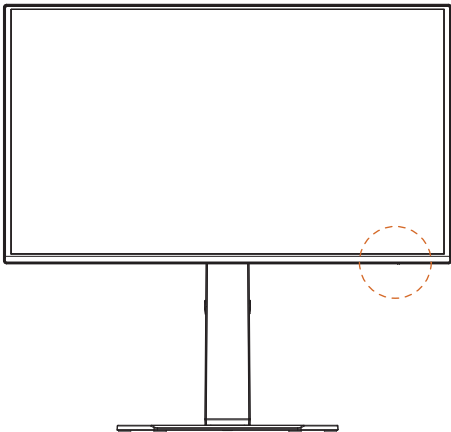
5.1 Powering On/Off the Monitor

Press the power button as shown below to turn on the monitor. The power indicator on the front of the monitor lights up solid white to show that the monitor is on.

To turn the monitor off, press and hold the power button for about 3 seconds until the power LED turns off.



The power LED indicator is located as shown below.

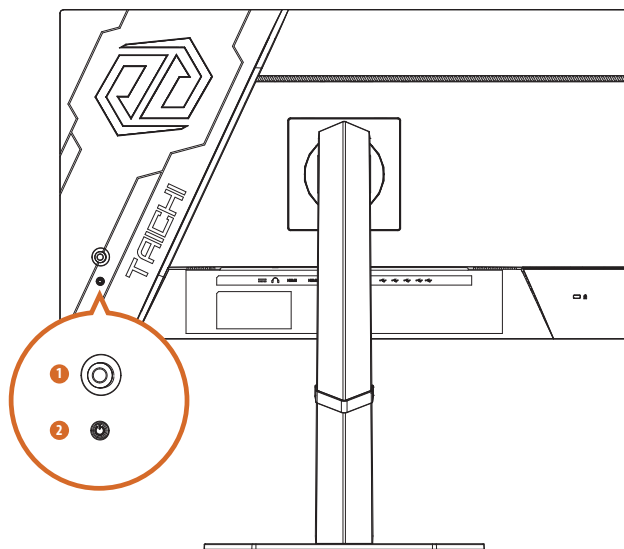


The color definition of the power indicator:

LED Indicator	Status	Description
Solid White	On	A solid white light indicates the monitor is turned on.
Solid Amber	Standby	Solid amber light indicates the monitor is in standby mode.
LED Off	Off	No light indicates the monitor is turned off.

5.2 Control Buttons

Use the control buttons on the monitor to adjust the monitor settings.

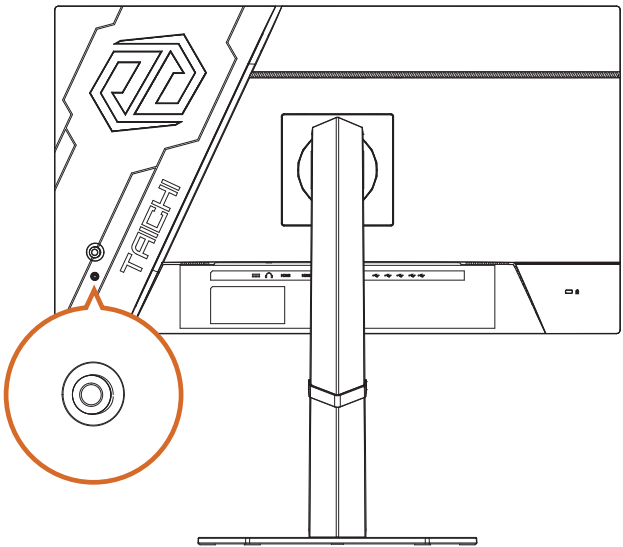


No.	Button	Function
1		MENU Press to activate the OSD main menu.
2		POWER Press the power button to turn the monitor on or off.

5.3 Using the Joystick Control

When the OSD menu is open, use the joystick on the back of the monitor to navigate the OSD menu and adjust the settings.

1. To access the OSD menu, press the joystick button to launch the OSD main menu.
2. Move the joystick up, down, left, or right to navigate through the menu options.
3. Press the joystick button again to confirm the selection.
4. Move the joystick to the left to exit the OSD menu.



No.	Action		Joystick Control
1	Press		When the OSD menu is open, press to confirm the selection (Enter) or save the settings (OK).
2	Move Left		Move the joystick to the left to select menu items (Move), go back to the previous menu (Back) or exit the OSD menu (Exit). Decreases the value of the selected setting (Adjust).

3	Move Right		Move the joystick to the right to select menu items or go to the next menu (Move). Increases the value of the selected setting (Adjust).
4	Move Up		Move the joystick up to select menu items (Move).
5	Move Down		Move the joystick down to select menu items (Move).

Chapter 6 OSD Setup

This chapter describes how to configure the monitor using the OSD menu.

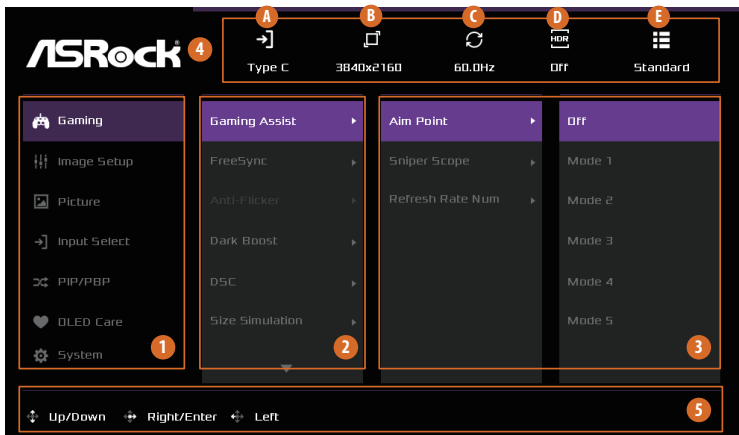


Important

- All information is subject to change without prior notice.
- The illustrations, images, and screen captures in this manual are for reference only. The actual product shall prevail.

6.1 Accessing the OSD Menu

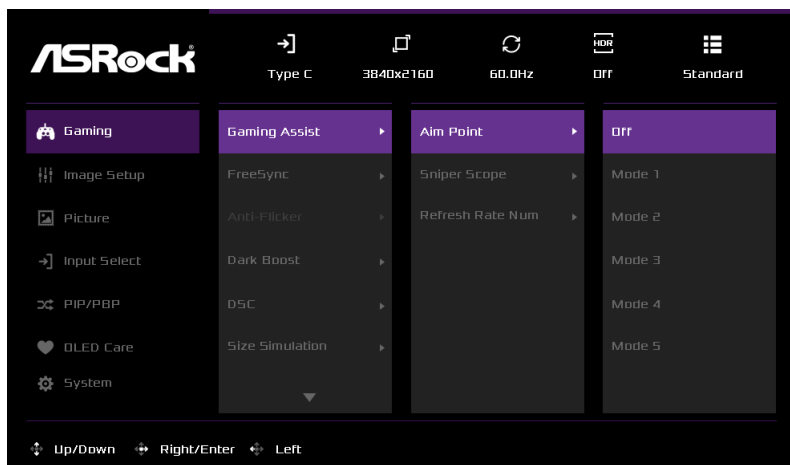
After you press the Menu button, the OSD menu appears in the lower-right corner of the screen.



No.	Item	Description		
1	Main Menu	Displays the main menu.		
2	Submenu	Displays the submenu.		
3	Submenu Items and Options	Displays the submenu items and options.		
4	Current Status	Displays the current settings.	A	Current input source
			B	Current resolution
			C	Current refresh rate
			D	Current HDR status
			E	Current scene mode
5	Key Guide	Follow the key guide displayed at the bottom of the OSD screen to move or select (adjust) OSD settings.		

6.2 OSD Menus

Function: Gaming

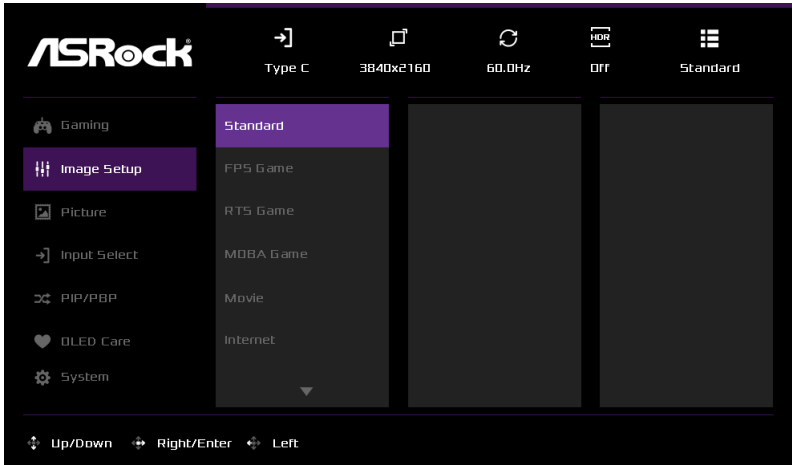


Main Menu	Submenu	Submenu Item	Submenu Option	Description
Gaming	Game Assist	Aim Point	Off	Turn off the Aim Point function, or select an Aim Point mode.
			Mode 1	
			Mode 2	
			Mode 3	
			Mode 4	
			Mode 5	
		Sniper Scope	Off	This feature enables a local, central zoom to improve targeting in FPS games.
			1.5X Zoom	
			2X Zoom	
			4X Zoom	
		Refresh Rate Num	Off	Displays the current Refresh rate in the corner you prefer.
			Left Top	
			Right Top	
			Left Bottom	
			Right Bottom	
	FreeSync	Off	Enables users to set the FreeSync On or Off.	
		On		

Gaming	Anti-Flicker	Off	Disables the Anti-Flicker function. (Available when FreeSync is enabled.)		
		Middle	Applies a moderate level of flicker reduction. (Available when FreeSync is enabled.)		
		High	Applies a high level of flicker reduction. (Available when FreeSync is enabled.)		
	BFI (Black Frame Insertion)	Off	This feature reduces motion blur by inserting black frames between displayed frames for clearer motion in fast-paced games.		
		On			
	Dark Boost	0-100	Enhances details in dark areas of the image.		
	DSC (Display Stream Compression)	On	This feature enables high resolutions and refresh rates.		
		Off			
	Size Simulation	Full	Simulates the viewing area of a smaller display size. *Based on the original signal source, black borders or bars may appear around the image.		
		24.5"			
	Aspect Ratio	4:3	Select the aspect ratio of the monitor. *Only supports full size (27")		
		5:4			
		16:9			
		16:10			
	Lighting Control	All Lighting	Off	Turn off all lighting.	
			On	Mode	Select the preferred lighting mode.
				Taichi Pulse	
				Scroll	
				Breathe	
				Static	
			Color	Taichi	Select the preferred lighting color.
				Mixed	
				Red	
				Green	
				Blue	

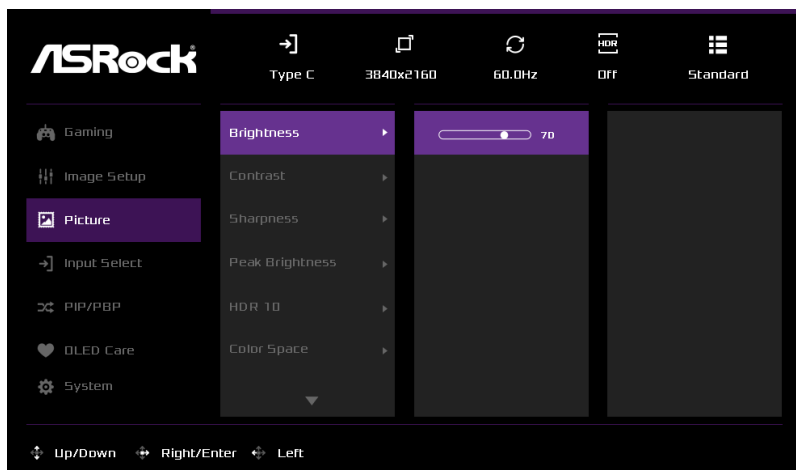
Gaming	Lighting Control	Logo Lighting	Off	Turn on or off the logo lighting.
			On	
		Stripe Lighting	Off	Turn on or off the stripe lighting.
			On	
	Reset Gaming	Restore all Gaming settings to factory defaults.		

Function: Image Setup



Main Menu	Submenu	Description
Image Setup	Standard	This scene mode is for document editing.
	FPS Game	Select this mode for First-Person Shooter (FPS) games.
	RTS Game	Select this mode for Real-Time Strategy (RTS) playing.
	MOBA Game	Select this mode for Multiplayer Online Battle Arena game playing.
	Movie	Select this mode for watching movies.
	Internet	Select this mode for browsing websites.
	sRGB	Select this mode for viewing photos and graphics from PCs.
	ECO	Select this mode to balance display brightness and power consumption.
	User	Create a user-defined mode and customize monitor settings based on the user's preferences.
	HDR400 True Black (TCO27USA) / HDR500 True Black (TCO27QXA)	Select this mode for viewing HDR content.
	HDR Movie	Select this mode for viewing HDR movies.
	HDR Game	Select this mode for viewing HDR games.

Function: Picture

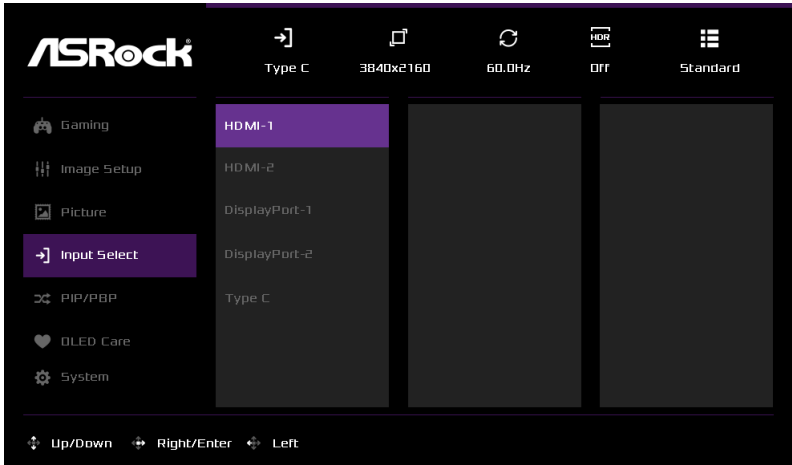


Main Menu	Submenu	Submenu Item	Description
Picture	Brightness	0-100	Adjusts the luminance of the backlight.
	Contrast	0-100	Adjusts the difference between the darkest and brightest areas of the image.
	Sharpness	0-100	Adjusts edge sharpness to enhance image clarity.
	Peak Brightness	Low	Adjusts the peak brightness of the panel.
		High	
	HDR10	Auto	Select Auto to automatically enable HDR when compatible HDR content is detected.
		Off	
	Color Space	sRGB	The standard RGB color space commonly used for web content.
		Adobe RGB	This mode is ideal for high-end photography and color-critical work.
		DCI-P3	This mode is recommended for cinema-quality footage.
		Native	Uses the panel's native color gamut.

Picture	Color Temperature	Cooler	Increases the color temperature. Select Cooler to enhance blue color of an image.			
		Cool	Increases the color temperature. The screen appears cooler with a blue tint.			
		Native	Loads the monitor's default color settings.			
		Warm	Decreases the color temperature. The screen appears warmer with a red/ yellow tint.			
		User Color	Red	0-100	Customize the color temperature by adjusting the red (R), green (G), and blue (B) levels according to your preference.	
			Green	0-100		
			Blue	0-100		
		6-axis Color	Hue	Red	0-100	Adjust the tint of each color (red, green, blue, cyan, magenta, and yellow).
				Green	0-100	
	Blue			0-100		
	Cyan			0-100		
	Magenta			0-100		
	Yellow			0-100		
	Saturation		Red	0-100	Adjusts the saturation of each color (red, green, blue, cyan, magenta, and yellow).	
			Green	0-100		
			Blue	0-100		
			Cyan	0-100		
			Magenta	0-100		
			Yellow	0-100		
	Gamma	1.8	Adjust the gamma level. Lower numbers make the image lighter, while higher numbers increase contrast/ darkness.			
		2.0				
		2.2				
		2.4				
		2.6				
	Low Blue Light	0-100	Adjust the Low Blue Light value of the display according to your preference.			

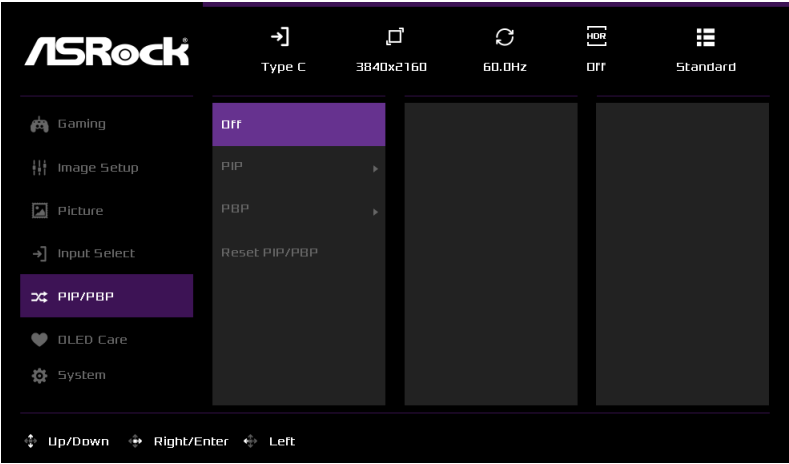
Picture	RGB Range	Auto	The monitor can automatically detect the color range of the input signal. If colors are not displayed correctly, you can manually select the appropriate RGB range.
		Full	
		Limited	
	Reset Picture	Restore all Picture settings to factory defaults.	

Function: Input Select



Main Menu	Submenu	Description
Input Select	HDMI-1	Select the HDMI-1 input.
	HDMI-2	Select the HDMI-2 input.
	DisplayPort-1	Select the DisplayPort-1 input.
	DisplayPort-2	Select the DisplayPort-2 input.
	Type C	Select the Type C input.

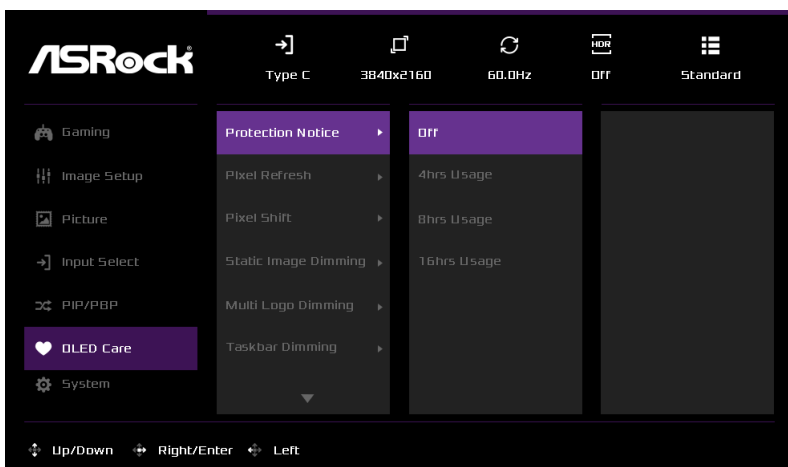
Function: PIP/PBP



Main Menu	Submenu	Submenu Item	Submenu Option	Description
PIP/PBP	Off			Disables the PIP/PBP feature.
	PIP	Source	HDMI-1	Select the secondary video source to display in the PIP window.
			HDMI-2	
			DisplayPort-1	
			DisplayPort-2	
			Type C	
		PIP Size	Small	Select the size of the PIP window.
			Medium	
			Large	
		Location	Left Top	Select the position of the PIP window on the screen..
			Right Top	
			Left Bottom	
			Right Bottom	

PIP/PBP	PIP	Display Switch		Use this item to switch the primary and secondary sources. The secondary source is displayed in the PIP window by default.
		Audio Switch	HDMI-1	Select the audio source for PIP mode.
			HDMI-2	
			DisplayPort-1	
			DisplayPort-2	
			Type C	
	PBP	Source	HDMI-1	Select the secondary video source for PBP mode.
			HDMI-2	
			DisplayPort-1	
			DisplayPort-2	
			Type C	
		PBP Size	Full	Select whether the PBP windows maintain their aspect ratio or fill the available screen area.
			Aspect	
		Display Switch		Use this item to switch the primary and secondary sources. The secondary source is displayed in the PBP window by default.
		Audio Switch	HDMI-1	Select the audio source for PBP mode.
			HDMI-2	
			DisplayPort-1	
			DisplayPort-2	
			Type C	
	Reset PIP/PBP			Restore all PIP/PBP settings to factory defaults.

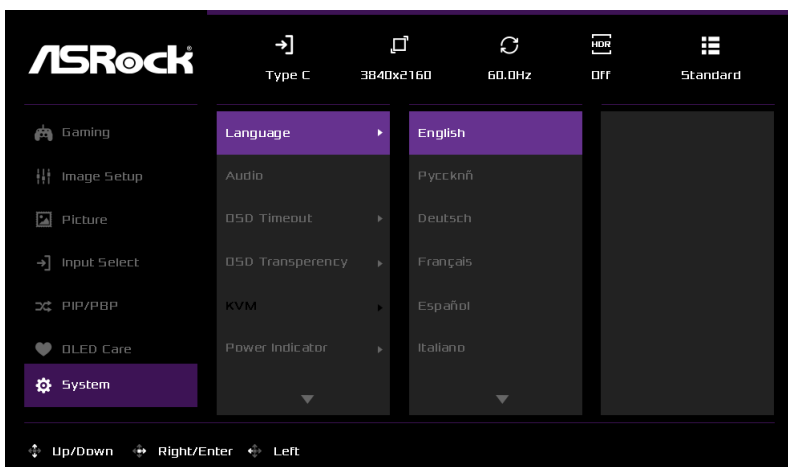
Function: OLED Care



Main Menu	Submenu	Submenu Item	Description
OLED Care	Protection Notice	Off	An OSD alert that reminds users to run panel maintenance to prevent screen burn-in, triggered typically after long usage periods (4, 8 or 16 hours) or if automatic maintenance was previously interrupted.
		4hrs Usage	
		8hrs Usage	
		16hrs Usage	
	Pixel Refresh	Standby	Pixel Refresh is an OLED panel maintenance feature that helps prevent image retention and burn-in. When set to Standby, Pixel Refresh runs automatically after use or at scheduled intervals.
		Execute	
			Select Execute to start Pixel Refresh immediately.

OLED Care	Pixel Shift	Slow	Pixel Shift subtly shifts the displayed image at regular intervals to help prevent burn-in caused by static content.		
		Normal			
		Fast			
	Static Image Dimming	Off	Static Image Dimming reduces screen brightness when static elements remain on screen, which can prevent localized screen burn-in and extend the lifespan of your panel.		
		On	Starting in	50 sec	Starts the Static Image Dimming process in 50 or 100 sec.
				100 sec	
			Time Required	120 sec	Set the time required for the Static Image Dimming process.
				240 sec	
			Reducing Level	1~7	Level 1 applies a milder dimming effect, while Level 7 dims the screen more quickly and aggressively.
	Multi Logo Dimming	0~4	Reduces the brightness of multiple static logo areas to help prevent burn-in.		
	Taskbar Dimming	0~4	Reduces the brightness of the taskbar area to help prevent burn-in.		
	Boundary Dimming	0~4	Reduces brightness near the screen boundaries to help prevent burn-in.		
	OLED Usage Info	Displays the OLED usage Information.			
Reset OLED Care	Restore all OLED Care settings to their factory defaults.				

Function: System



Main Menu	Submenu	Submenu Item		Description
System	Language	—		Select the OSD language.*
	Audio	Volume	0 - 100	Adjust the volume level.
		Mute	On	Enables or disables the mute function.
			Off	
	OSD Timeout	5- 15 -30 -60		Select how long the OSD menu remains visible before it automatically closes.
	OSD Transparency	On		Enables or disables OSD transparency.
		Off		
	KVM	Auto		Allows you to control two computers using one keyboard and mouse connected to the monitor's USB Type-A downstream ports. Select Auto to detect which computer is active and switch automatically.

System	KVM	Manual	KVM (USB-B)	Manually switch the KVM connection to the computer connected to the selected USB upstream port.
			KVM (USB-C)	
	Power Indicator	Off		Enables or disables the power indicator LED.
		On		
	Shutdown Timer	30 Minutes		Sets the monitor to automatically turn off after 30, 45, 60, or 120 minutes.
		45 Minutes		
		60 Minutes		
		120 Minutes		
		Off		
	DisplayPort 1.2	Off		Enables or disables DisplayPort 1.2 support.
		On		
	Type-C Bandwidth	USB 3.2		Select the USB Type-C bandwidth mode.
		USB 2.0		
	DDC/CI	Off		Enables or disables DDC/CI support.
		On		
	USB-Update	On		Select On to start the firmware update from a connected USB flash drive. After the update is complete, restart the monitor for the changes to take effect.
	Information	Resolution:		Displays information about the primary input source.
		H. Frequency:		
		V. Frequency:		
		Pixel Clock:		
		Model Number:		
	Factory Reset	—		Restore all OSD settings to factory defaults.

*English, Русский, Deutsch, Français, Español, Italiano, Nederlands, Suomi, Polski, Português, Português (Brasil), 繁體中文, 日本語, Čeština, Hrvatski, Magyar, Română, ไทย, Bahasa Indonesia, Български

Chapter 7 Troubleshooting

Problem and Question	Possible Solution
The power LED does not light up.	• Check if the Power button is pressed and make sure the monitor is turned on. • Make sure the power cord/power adapter is properly connected.
No signal	• Check that the video cable is properly connected. • Check the video cable and connectors for damage.
Picture is fuzzy.	• Adjust the contrast and brightness settings.
The image flickers or shows interference.	• Move nearby electrical devices that may cause interference away from the monitor.
The power LED is on, but there is no image.	• Make sure the computer is turned on. • Make sure the graphics card is properly installed. • Make sure the video cable is securely connected to both the monitor and the computer. • Check the video cable and connectors for damage.
One of the primary colors (red, green, or blue) is missing.	• Check the video cable connection and make sure the cable and connectors are not damaged.
Picture has color defects (white does not look white).	• Adjust the RGB color settings or select a different color temperature.
Poor brightness or contrast	• If screen brightness decreases significantly over time and display performance is affected, contact an authorized ASRock service center for assistance.
Unable to open OSD menu.	• Turn off the monitor, unplug the power cord/power adapter, wait a few seconds, reconnect it, and then turn the monitor on again.

Chapter 8 Safety Instructions

- Read the safety instructions carefully and thoroughly.
- All cautions and warnings on the device or User Guide should be noted.
- Refer servicing to qualified personnel only.

Safety Information

- Make sure that the power voltage is within its safety range and has been adjusted properly to the value of 100~240V before connecting the device to the power outlet.
- To avoid electric shock, always use the power cord and plug with a properly grounded power outlet.
- If the power cord comes with a 3-pin plug, do not disable the protective earth pin from the plug.
- Always disconnect the power cord or switch the wall socket off if the device would be left unused for a certain time to achieve zero energy consumption.
- Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.
- If this device comes with an adapter, use only the ASRock provided AC adapter approved for use with this device.
- To prevent fire or shock hazard, never expose the monitor to rain or moisture.
- Never try to open the monitor cabinet. The dangerous high voltages inside the monitor may result in serious physical injury.
- Never place this product near or over a radiator or heat source unless proper ventilation is provided.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push objects or spill liquid of any kind into the slots on the monitor cabinet.

European Union:

Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.

California, USA:

The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California. For further information please visit: <https://dtsc.ca.gov/perchlorate/>

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.

This Class B digital apparatus meets all requirements of the Canadian Interference - Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouiller du Canada.

Environment

- To reduce the possibility of heat-related injuries or of overheating the device, do not place the device on a soft, unsteady surface or obstruct its air ventilators.
- Use this device only on a hard, flat and steady surface.
- To prevent the device from tipping over, secure the device to a desk, wall or fixed object with an anti-tip fastener that helps to properly support the device and keep it safe in place.
- To prevent fire or shock hazard, keep this device away from humidity and high temperature.
- Do not leave the device in an unconditioned environment with a storage temperature above 60°C or below -20°C , which may damage the device.
- The maximum operating temperature is around 40°C .
- When cleaning the device, be sure to remove the power plug. Use a piece of soft cloth rather than industrial chemical to clean the device. Never pour any liquid into the opening; that could damage the device or cause electric shock.
- Always keep strong magnetic or electrical objects away from the device.
- If any of the following situations arises, get the device checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the device.
 - The device has been exposed to moisture.
 - The device does not work well or you can not get it working according to the User Guide.
 - The device has dropped and damaged.
 - The device has obvious sign of breakage.

Warning!

Overuse of screens is likely to affect eyesight.

Recommendations:

Take a 10-minute break for every 30 minutes of screen time.

Children under 2 years of age should have no screen time. For children aged 2 years and over, screen time should be limited to less than one hour per day.

CE Conformity



This device complies with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (2014/30/EU), Low-voltage Directive (2014/35/EU), ErP Directive (2009/125/EC) and RoHS directive (2011/65/EU). This product has been tested and found to comply with the harmonized standards for Information Technology Equipment published under Directives of Official Journal of the European Union.

ASRock Contact Information

ASRock EUROPE B.V.

Address : Bijsterhuizen 11-11, 6546 AR Nijmegen, The Netherlands

Phone: +31-24-345-44-33

Technical Support

Phone: +31-24-345-44-33

Online Support <https://event.asrock.com/tsd.asp>

FCC-B Radio Frequency Interference Statement



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

ASRock Contact Information

ASRock America, Inc.

Address : 13848 Magnolia Ave, Chino, CA91710, U.S.A.

Phone: +1-909-590-8308

Technical Support

Phone: +1-909-590-8308

Online Support <https://event.asrock.com/tsd.asp>

WEEE Statement

Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2012/19/EU, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.



Chemical Substances Information

In compliance with chemical substances regulations, such as the EU REACH Regulation (Regulation EC No. 1907/2006 of the European Parliament and the Council), ASRock provides the relevant information at:
<https://asrock.com/general/about.asp?cat=Responsibility>

RoHS Statement

Japan JIS C 0950 Material Declaration

A Japanese regulatory requirement, defined by specification JIS C 0950, mandates that manufacturers provide material declarations for certain categories of electronic products offered for sale after July 1, 2006.



The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



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Technical Support

If a problem arises with your product and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Alternatively, please visit <https://www.asrock.com> for further guidance.

Product information for EU energy label

TCO27QXA:

<https://eprel.ec.europa.eu/screen/product/electronicdisplays/2728249>

TCO27USA:

<https://eprel.ec.europa.eu/screen/product/electronicdisplays/2728261>

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Disclaimer

Because the monitor specifications and the firmware might be updated, the content of this documentation will be subject to change without notice. In case any modifications of this documentation occur, the updated version will be available on ASRock's website without further notice. If you require technical support related to this monitor, please visit our website for specific information about the model you are using. You may find the latest monitor support list on ASRock's website as well.

ASRock Website: <http://www.asrock.com>