



MAG Series

LCD Monitor

MAG 321CUPDF (3DC5)

User Guide

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Revision

V1.0, 2024/12

Getting Started

This chapter provides you with the information on hardware setup procedures. While connecting devices, be careful in holding the devices and use a grounded wrist strap to avoid static electricity.

Package Contents

Monitor	MAG 321CUPDF
Documentation	Quick Start Guide
Accessories	Stand with Screw(s)
	Stand Base with Screw(s)
	Screw(s) for Wall Mount Bracket(s)
	Power Cord
	External Power Supply
Cables	DisplayPort Cable (Optional)

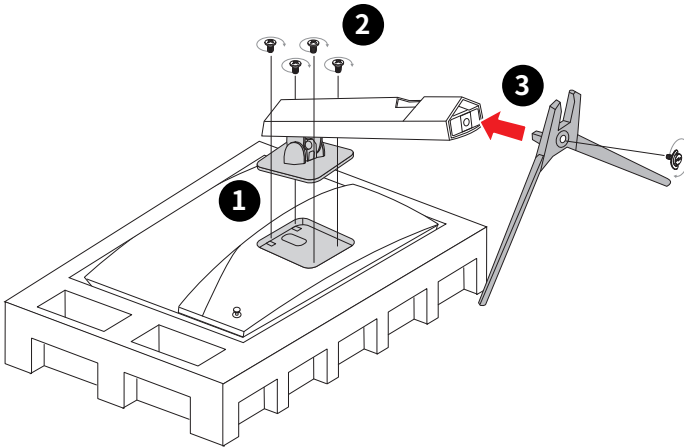


Important

- *Contact your place of purchase or local distributor if any of the items is damaged or missing.*
- *Package contents may vary by country and model.*
- *The included power cord is exclusively for this monitor and should not be used with other products.*

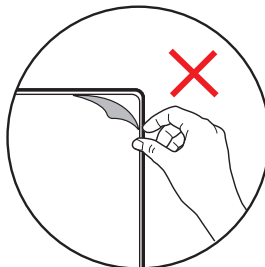
Installing the Monitor Stand

1. Leave the monitor in its protective packaging. Align the stand bracket to the monitor groove.
2. Tighten the stand bracket with screws.
3. Connect the base to the stand and tighten the base screw to secure the base.
4. Make sure the stand assembly is properly installed before setting the monitor upright.



Important

- Place the monitor on a soft, protected surface to avoid scratching the display panel.
- Do not use any sharp objects on the panel.
- The groove for installing the stand bracket can also be used for wall mount. Please contact your dealer for proper wall mount kit.
- This product comes with NO protective film to be removed by the user! Any mechanical damages to the product including removal of the polarizing film may affect the warranty!

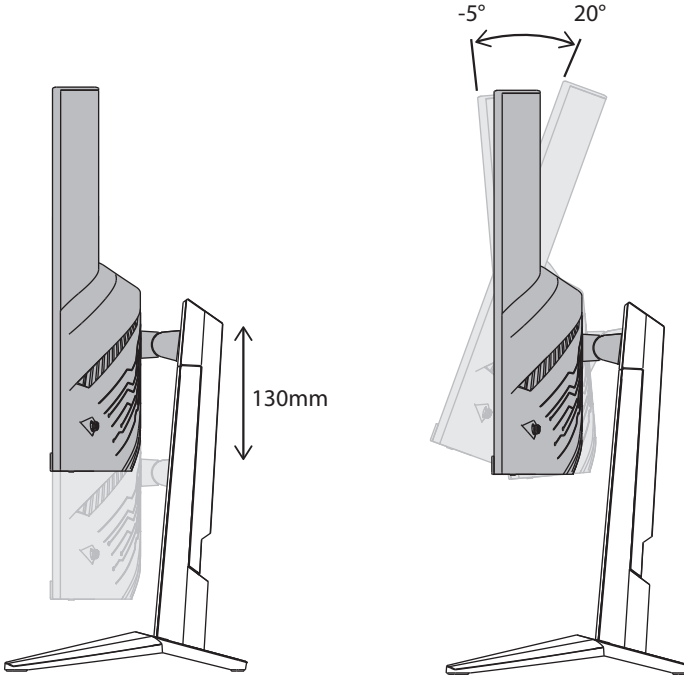


Adjusting the Monitor

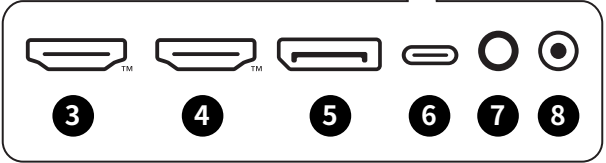
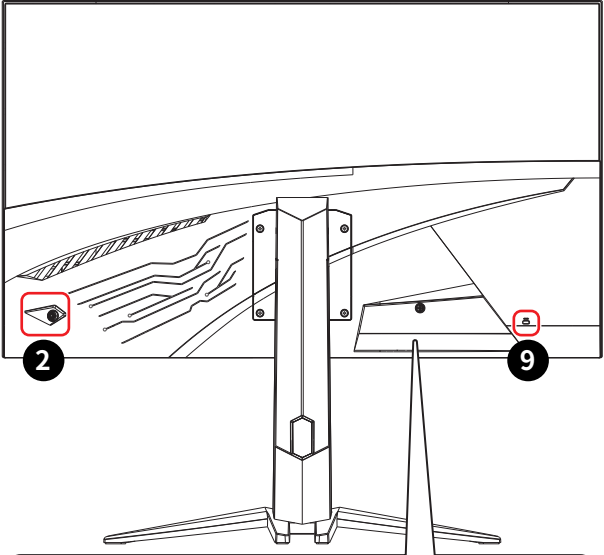
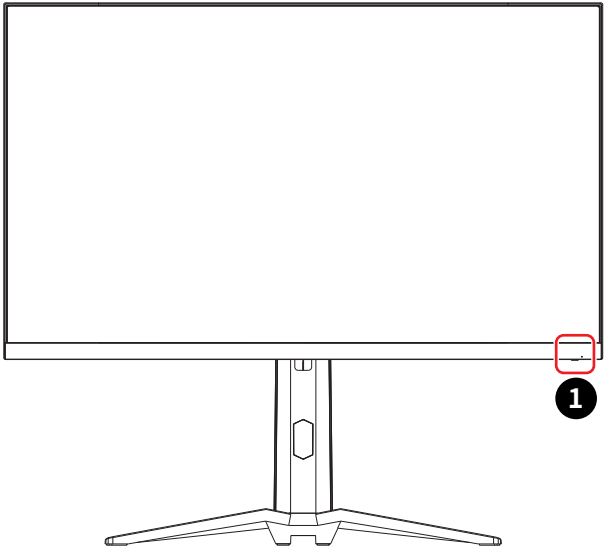
This monitor is designed to maximize your viewing comfort with its adjustment capabilities.






 **Important**

Avoid touching the display panel when adjusting the monitor.



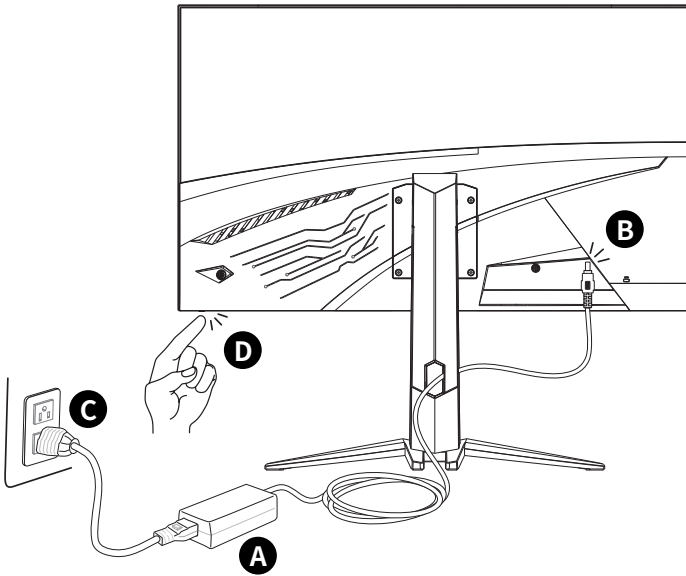
Monitor Overview



<p>1</p>	<p>Power Button & Power LED</p> <p>Lit in white after the monitor is turned on. If no signal input, the LED will turn into orange. Lit in orange when the monitor is in Stand-by mode.</p>
<p>2</p>	<p>Navi Key</p>
<p>3</p>	<p>HDMI™ Connector  <small>HIGH-DEFINITION MULTIMEDIA INTERFACE</small></p> <p>Supports HDMI™ CEC, 3840x2160@160Hz as specified in HDMI™ 2.1.</p> <p> Important</p> <p><i>To ensure optimal performance and compatibility, please use only HDMI™ cables certified with the official HDMI™ logo when connecting this monitor. For more information, please visit https://www.hdmi.org/resource/cables.</i></p>
<p>4</p>	<p>HDMI™ Connector  <small>HIGH-DEFINITION MULTIMEDIA INTERFACE</small></p> <p>Supports 3840x2160@160Hz as specified in HDMI™ 2.1.</p> <p> Important</p> <p><i>To ensure optimal performance and compatibility, please use only HDMI™ cables certified with the official HDMI™ logo when connecting this monitor. For more information, please visit https://www.hdmi.org/resource/cables.</i></p>
<p>5</p>	<p>DisplayPort</p> <p>Supports 3840x2160@160Hz as specified in DisplayPort 1.4a.</p>
<p>6</p>	<p>USB Type-C Port</p> <p>This port supports DisplayPort Alternate (DP Alt) Mode up to 5V/3A(15W). It only carries video signals and does not support data transmission function. Power delivery is unavailable in HDR mode.</p> <p> Important</p> <p><i>Your USB-C signal source and cable must support DisplayPort Alternate Mode to enable video output to the monitor.</i></p>
<p>7</p>	<p>Headphone Jack</p>
<p>8</p>	<p>Power Jack</p>
<p>9</p>	<p>Kensington Lock</p>

Connecting the Monitor to PC

1. Turn off your computer.
2. Connect the video cable from the monitor to your computer.
3. Assemble the external power supply & power cord. (Figure A)
4. Connect the external power supply to the monitor power jack. (Figure B)
5. Plug the power cord into the electrical outlet. (Figure C)
6. Turn on the monitor. (Figure D)
7. Power on the computer and the monitor will auto detect the signal source.



OSD Setup

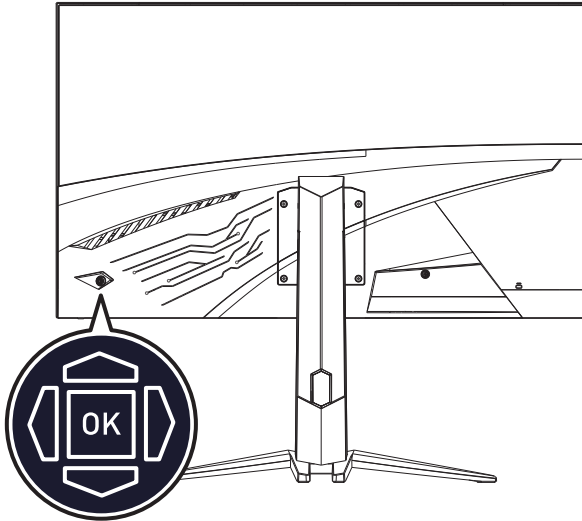
This chapter provides you with essential information on OSD Setup.



All information is subject to change without prior notice.

Navi Key

The monitor comes with a Navi Key, a multi-directional control that helps navigate the On-Screen Display (OSD) menu.



Up/Down/Left/Right:

- selecting function menus and items
- adjusting function values
- entering into/exiting from function menus

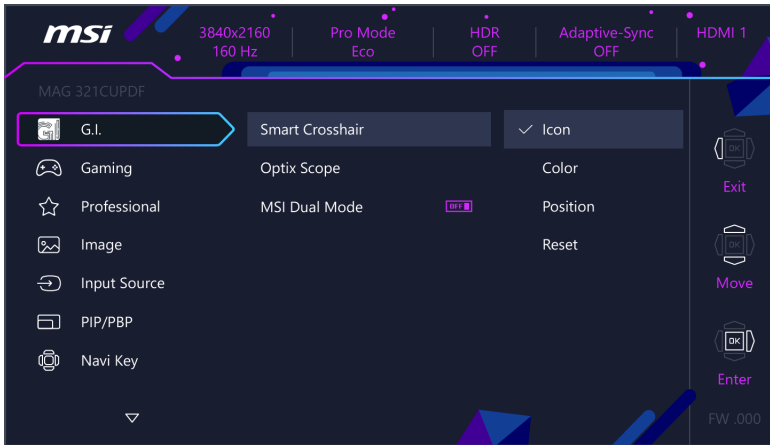
Press (OK):

- launching the On-Screen Display (OSD)
- entering submenus
- confirming a selection or setting

Hot Key

- Users may enter into preset function menus by moving the Navi Key up, down, left or right when the OSD menu is inactive.
- Users may customize their own Hot Keys to enter into different function menus.

OSD Menu




Important

The following settings will be grayed out when HDR signals are received:

- Night Vision
- MPRT Sync
- Low Blue Light
- HDCR
- Brightness
- Contrast
- Color Temperature
- Optix Scope
- PIP/PBP
- AI Vision

G.I.

1st Level Menu	2nd/3rd Level Menu		Description								
Smart Crosshair	Icon	None	<ul style="list-style-type: none"> Through AI algorithm, this function enhances the visibility of in-game crosshair. Users can select the color and position of the crosshair. 								
											
	Color	White									
		Red									
		Auto									
	Position										
Reset											
Optix Scope	Scope Size	Small	<ul style="list-style-type: none"> The center point will zoom in when Optix Scope is enabled, user can adjust the details through the "Scope Size" and "Scope Ratio" settings. Smart Crosshair and Optix Scope can be enabled at the same time. Activating Optix Scope will affect: <table border="1" data-bbox="602 991 934 1145"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» MPRT Sync</td> <td rowspan="3">Set to OFF</td> </tr> <tr> <td>» Adaptive-Sync</td> </tr> <tr> <td>» PIP/PBP</td> </tr> <tr> <td>» Screen Size 1:1</td> <td>Set to Auto</td> </tr> </tbody> </table> 	Affected Function	Function Status	» MPRT Sync	Set to OFF	» Adaptive-Sync	» PIP/PBP	» Screen Size 1:1	Set to Auto
		Affected Function		Function Status							
		» MPRT Sync		Set to OFF							
	» Adaptive-Sync										
	» PIP/PBP										
	» Screen Size 1:1	Set to Auto									
	Medium										
Large											
Scope Ratio	x1.5										
	x2										
	x4										
OFF											
ON											
MSI Dual Mode	OFF										
	ON										

Gaming


1st Level Menu	2nd/3rd Level Menu	Description														
Game Mode	User	<ul style="list-style-type: none"> Use Up or Down Button to select and preview mode effects. Press the OK Button to confirm and apply your mode type. Game Mode defaults to User in both SDR and HDR modes. 														
	FPS															
	Racing															
	RTS															
	RPG															
Night Vision	OFF	<ul style="list-style-type: none"> This function optimizes background brightness and is recommended for FPS games. 														
	Normal															
	Strong															
	Strongest															
	A.I.															
AI Vision	OFF	<ul style="list-style-type: none"> AI Vision enhances image quality by optimizing the contrast of images and background brightness. Activating AI Vision will affect: <table border="1" data-bbox="561 719 916 887"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» MPRT Sync</td> <td>Set to OFF</td> </tr> <tr> <td>» HDCR</td> <td rowspan="3">Unable to select</td> </tr> <tr> <td>» Brightness</td> </tr> <tr> <td>» Night Vision</td> </tr> </tbody> </table> 	Affected Function	Function Status	» MPRT Sync	Set to OFF	» HDCR	Unable to select	» Brightness	» Night Vision						
	Affected Function		Function Status													
» MPRT Sync	Set to OFF															
» HDCR	Unable to select															
» Brightness																
» Night Vision																
ON																
Response Time	Normal	<ul style="list-style-type: none"> Setting to Fastest will reach the shortest response time and help improve blurred images when playing very fast games. 														
	Fast															
	Fastest															
MPRT Sync	OFF	<ul style="list-style-type: none"> MPRT Sync is available when the refresh rate is over 85Hz. Activating MPRT Sync will affect: <table border="1" data-bbox="561 1115 928 1417"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» Response Time</td> <td rowspan="2">Unable to select</td> </tr> <tr> <td>» Brightness</td> </tr> <tr> <td>» HDCR</td> <td rowspan="3">Set to OFF</td> </tr> <tr> <td>» PIP/PBP</td> </tr> <tr> <td>» Optix Scope</td> </tr> <tr> <td>» AI Vision</td> <td rowspan="2">Set to Auto</td> </tr> <tr> <td>» Screen Size 1:1</td> </tr> <tr> <td>» Type C PD Charge</td> <td>Set to OFF & Unable to select</td> </tr> </tbody> </table> 	Affected Function	Function Status	» Response Time	Unable to select	» Brightness	» HDCR	Set to OFF	» PIP/PBP	» Optix Scope	» AI Vision	Set to Auto	» Screen Size 1:1	» Type C PD Charge	Set to OFF & Unable to select
	Affected Function		Function Status													
» Response Time	Unable to select															
» Brightness																
» HDCR	Set to OFF															
» PIP/PBP																
» Optix Scope																
» AI Vision	Set to Auto															
» Screen Size 1:1																
» Type C PD Charge	Set to OFF & Unable to select															
ON																

1st Level Menu	2nd/3rd Level Menu		Description								
Refresh Rate	Location	Left Top	<ul style="list-style-type: none"> Location is adjustable in OSD Menu. Press the OK Button to confirm and apply your Refresh Rate Location. This monitor follows and works at the Operating System's preset Screen Refresh Rate. 								
		Right Top									
		Left Bottom									
		Right Bottom									
		Customize									
	OFF										
ON											
Alarm Clock	Location	Left Top	<ul style="list-style-type: none"> After setting the time, press the OK Button to activate the timer. Users have to manually restore their preset Alarm Clock after any AC power loss and reconnection. 								
		Right Top									
		Left Bottom									
		Right Bottom									
		Customize									
	OFF										
	15:00	00:01 ~ 99:59									
	30:00										
45:00											
60:00											
Adaptive-Sync	OFF		<ul style="list-style-type: none"> Adaptive-Sync prevents screen tearing. HDMI™ VRR (Variable Refresh Rate) synchronizes with Adaptive-Sync (ON/ OFF) and is disabled when Screen Size 16:10 is set to ON. Activating Adaptive-Sync will affect: <table border="1" data-bbox="561 978 927 1104"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» PIP/PBP</td> <td>Set to OFF</td> </tr> <tr> <td>» Optix Scope</td> <td></td> </tr> <tr> <td>» Screen Size 1:1</td> <td>Set to Auto</td> </tr> </tbody> </table> 	Affected Function	Function Status	» PIP/PBP	Set to OFF	» Optix Scope		» Screen Size 1:1	Set to Auto
	Affected Function	Function Status									
» PIP/PBP	Set to OFF										
» Optix Scope											
» Screen Size 1:1	Set to Auto										
ON											
DSC	OFF		<ul style="list-style-type: none"> Users can toggle DSC (Display Stream Compression) on/off. For more DSC timing information, please check Preset Display Modes for DSC On/Off timing tables. Activating DSC will affect: <table border="1" data-bbox="561 1289 919 1380"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» Screen Size 16:10</td> <td rowspan="2">Unable to select</td> </tr> <tr> <td>» PIP/PBP</td> </tr> </tbody> </table> 	Affected Function	Function Status	» Screen Size 16:10	Unable to select	» PIP/PBP			
	Affected Function	Function Status									
» Screen Size 16:10	Unable to select										
» PIP/PBP											
ON											

Professional

1st Level Menu	2nd Level Menu	Description														
Pro Mode	Eco	<ul style="list-style-type: none"> Use Up or Down Button to select and preview mode effects. Press the OK Button to confirm and apply your mode type. Pro Mode defaults to Eco for SDR mode and User for HDR mode. 														
	User															
	Anti-Blue															
	Movie															
	Office															
	sRGB															
Low Blue Light	OFF	<ul style="list-style-type: none"> Low Blue Light protects your eyes against blue light. When enabled, Low Blue Light adjusts the screen color temperature to a more yellow glow. When Pro Mode is set to Anti-Blue, it is mandatory to enable Low Blue Light. 														
	ON															
HDCR	OFF	<ul style="list-style-type: none"> HDCR enhances image quality by increasing the contrast of images. Activating HDCR will affect: <table border="1" data-bbox="519 715 884 815"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» MPRT Sync</td> <td>Set to OFF</td> </tr> <tr> <td>» Brightness</td> <td>Unable to select</td> </tr> </tbody> </table> 	Affected Function	Function Status	» MPRT Sync	Set to OFF	» Brightness	Unable to select								
	Affected Function		Function Status													
» MPRT Sync	Set to OFF															
» Brightness	Unable to select															
ON																
MPRT Sync	OFF	<ul style="list-style-type: none"> MPRT Sync is available when the refresh rate is over 85Hz. Activating MPRT Sync will affect: <table border="1" data-bbox="519 922 884 1225"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» Response Time</td> <td rowspan="2">Unable to select</td> </tr> <tr> <td>» Brightness</td> </tr> <tr> <td>» HDCR</td> <td rowspan="3">Set to OFF</td> </tr> <tr> <td>» PIP/PBP</td> </tr> <tr> <td>» Optix Scope</td> </tr> <tr> <td>» AI Vision</td> <td rowspan="2">Set to Auto</td> </tr> <tr> <td>» Screen Size 1:1</td> </tr> <tr> <td>» Type C PD Charge</td> <td>Set to OFF & Unable to select</td> </tr> </tbody> </table> 	Affected Function	Function Status	» Response Time	Unable to select	» Brightness	» HDCR	Set to OFF	» PIP/PBP	» Optix Scope	» AI Vision	Set to Auto	» Screen Size 1:1	» Type C PD Charge	Set to OFF & Unable to select
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» Response Time	Unable to select															
» Brightness																
» HDCR	Set to OFF															
» PIP/PBP																
» Optix Scope																
» AI Vision	Set to Auto															
» Screen Size 1:1																
» Type C PD Charge	Set to OFF & Unable to select															
ON																
Image Enhancement	OFF	Image Enhancement enhances image edges to improve their acutance.														
	Weak															
	Medium															
	Strong															
	Strongest															

Image

1st Level Menu	2nd/3rd Level Menu	Description							
Brightness	0-100	<ul style="list-style-type: none"> Properly adjust Brightness according to the surrounding lighting. 							
Contrast	0-100	<ul style="list-style-type: none"> Properly adjust Contrast to relax your eyes. 							
Sharpness	0-5	<ul style="list-style-type: none"> Sharpness improves clarity and details of images. 							
Color Temperature	Cool	<ul style="list-style-type: none"> Use Up or Down Button to select and preview mode effects. Press the OK Button to confirm and apply your mode type. Users can adjust Color Temperature in Customization mode. 							
	Normal								
	Warm								
	Customization		R (0-100)						
		G (0-100)							
		B (0-100)							
Screen Size	Auto	<ul style="list-style-type: none"> Users can adjust Screen Size in any mode, any resolution and any screen refresh rate. Activating Screen Size 1:1/24.5"/27" will affect: <table border="1" data-bbox="575 715 926 876"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» MPRT Sync</td> <td rowspan="4">Set to OFF</td> </tr> <tr> <td>» Adaptive-Sync</td> </tr> <tr> <td>» PIP/PBP</td> </tr> <tr> <td>» Optix Scope</td> </tr> </tbody> </table> 	Affected Function	Function Status	» MPRT Sync	Set to OFF	» Adaptive-Sync	» PIP/PBP	» Optix Scope
	Affected Function		Function Status						
	» MPRT Sync		Set to OFF						
	» Adaptive-Sync								
	» PIP/PBP								
	» Optix Scope								
	4:3								
16:9									
16:10									
1:1									
24.5"									
27"									
		 Important Screen Size 1:1 refers to displaying content at its original resolution. This option is disabled when the monitor is set to its native resolution.							

Input Source

1st Level Menu	2nd Level Menu	Description
HDMI™ 1		<ul style="list-style-type: none"> Users can adjust Input Source in any mode.
HDMI™ 2		
DP		
Type C		
Auto Scan	OFF	<ul style="list-style-type: none"> Users can use the Navi Key to select Input Source at below status: <ul style="list-style-type: none"> While "Auto Scan" is set to "OFF" with the monitor at power saving mode; While "No Signal" message box is shown on the monitor.
	ON	

PIP/PBP

1st Level Menu	2nd/3rd Level Menu		Description														
OFF																	
PIP	Source	HDMI™1	<ul style="list-style-type: none"> PIP (Picture in Picture) allows users to simultaneously display multiple video sources on one screen. One program is displayed on the full screen at the same time as one or more other programs are displayed in inset windows. PBP (Picture by Picture) is a similar feature that displays two input sources side-by-side on the screen. 														
		HDMI™2															
		DP															
		Type C															
	PIP Size	Small	<ul style="list-style-type: none"> Display Switch allows users to switch between primary and secondary input sources. If there is only one signal input, the Display Switch and Audio Switch will be grayed out. 														
		Medium															
		Large															
	Location	Left Top	<ul style="list-style-type: none"> Users can adjust the ratio of window division by switching Mode 1/ 2. Activating PIP/PBP will affect: <table border="1" data-bbox="572 608 928 911"> <thead> <tr> <th>Affected Function</th> <th>Function Status</th> </tr> </thead> <tbody> <tr> <td>» Response Time</td> <td rowspan="2">Unable to select</td> </tr> <tr> <td>» DSC</td> </tr> <tr> <td>» MPRT Sync</td> <td rowspan="3">Set to OFF</td> </tr> <tr> <td>» Adaptive-Sync</td> </tr> <tr> <td>» Optix Scope</td> </tr> <tr> <td>» HDMI™ CEC</td> <td>Set to OFF & unable to select</td> </tr> <tr> <td>» PIP: Screen Size 1:1</td> <td rowspan="2">Set to Auto & unable to select</td> </tr> <tr> <td>» PBP: Screen Size</td> </tr> </tbody> </table> 	Affected Function	Function Status	» Response Time	Unable to select	» DSC	» MPRT Sync	Set to OFF	» Adaptive-Sync	» Optix Scope	» HDMI™ CEC	Set to OFF & unable to select	» PIP: Screen Size 1:1	Set to Auto & unable to select	» PBP: Screen Size
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		» DSC															
		» MPRT Sync		Set to OFF													
	» Adaptive-Sync																
	» Optix Scope																
» HDMI™ CEC	Set to OFF & unable to select																
» PIP: Screen Size 1:1	Set to Auto & unable to select																
» PBP: Screen Size																	
Right Top																	
Left Bottom																	
Right Bottom																	
Customize																	
Display Switch																	
Audio Switch																	
PBP	Mode 1																
	Mode 2																
	Customize																
	Source 1	HDMI™1															
		HDMI™2															
		DP															
		Type C															
	Source 2	HDMI™1															
		HDMI™2															
		DP															
		Type C															
	Display Switch																
	Audio Switch																

Navi Key



1st Level Menu	2nd Level Menu	Description
Up Down Left Right	OFF	<ul style="list-style-type: none"> All Navi Key items can be adjusted via OSD Menus.
	Brightness	
	Game Mode	
	Smart Crosshair	
	Alarm Clock	
	Input Source	
	PIP/PBP Mode	
	Refresh Rate	
	Info. On Screen	
	Night Vision	
	Optix Scope	
	MSI Dual Mode	

Settings

1st Level Menu	2nd Level Menu	Description
Language	繁體中文	<ul style="list-style-type: none"> Users have to press the OK Button to confirm and apply the Language setting. Language is an independent setting. Users' own language setting will override the factory default. When users set Reset to Yes, Language will not be changed.
	English	
	Français	
	Deutsch	
	Italiano	
	Español	
	한국어	
	日本語	
	Русский	
	Português	
	简体中文	
	Bahasa Indonesia	
	Türkçe	
(More languages coming soon)		
Transparency	0-5	<ul style="list-style-type: none"> Users can adjust Transparency in any mode.
OSD Time Out	5-30s	<ul style="list-style-type: none"> Users can adjust OSD Time Out in any mode.

1st Level Menu	2nd Level Menu	Description
Power Button	OFF	<ul style="list-style-type: none"> When set to OFF, users can press the power button to turn off the monitor.
	Standby	<ul style="list-style-type: none"> When set to Standby, users can press the power button to turn off the panel and backlight.
Info. On Screen	OFF	<ul style="list-style-type: none"> The information of the monitor status will be shown on the right side of the screen.
	ON	
HDMI™ CEC	OFF	<ul style="list-style-type: none"> HDMI™ CEC (Consumer Electronics Control) supports Sony PlayStation®, Nintendo® Switch™, Xbox Series X S consoles and various audio-visual devices that are CEC-capable. If HDMI™ CEC is set to ON: <ul style="list-style-type: none"> The monitor will automatically power on when the CEC device is turned on. The CEC device will enter power saving mode when the monitor is turned off. When Sony PlayStation®, Nintendo® Switch™, or Xbox Series X S console is connected, Game Mode and Pro Mode will be automatically set to default mode and can be adjusted to users' preferred modes later.
	ON	
Type C PD Charge	OFF	<ul style="list-style-type: none"> This function enables users to charge their devices through a USB Type-C connector. Type C PD Charge enables users to charge their devices through a USB Type-C connector, which can deliver up to 15W (5V/3A).
	ON	
Reset	YES	<ul style="list-style-type: none"> Users can Reset and restore settings to original OSD Default in any mode.
	NO	

Specifications

Monitor	MAG 321CUPDF
Size	31.5 inch
Curvature	Curve 1500R
Panel Type	Rapid VA
Resolution	3840x2160 (UHD)
Aspect Ratio	16:9
Brightness	<ul style="list-style-type: none"> • Typical SDR: 350 nits • Peak HDR: 400 nits
Contrast Ratio	3000:1
Refresh Rate	<ul style="list-style-type: none"> • Normal (UHD): 160Hz • Dual (FHD): 320 Hz
Response Time	<ul style="list-style-type: none"> • 1ms (MPRT) • 0.5ms (GtG)
I/O	<ul style="list-style-type: none"> • HDMI™ Connector x 2 • DisplayPort x1 • USB Type-C Port x1 • Headphone Jack x1
View Angles	178°(H) , 178°(V)
DCI-P3*/ sRGB	97%/136%
Surface Treatment	Anti-glare
Display Colors	1.07B, 10bits (8bits + FRC)
Monitor Power Options	19V  4.74A
External Power Supply**	Model: DA-90J19-BEAA
Power Input	100~240Vac, 50~60HZ, 1.5A
Power Output	19V  4.74A
Adjustment (Tilt)	-5° ~ 20°
Adjustment (Height)	0 ~ 130mm
Kensington Lock	Yes

Monitor		MAG 321CUPDF
VESA Mounting		<ul style="list-style-type: none"> • Plate Type: 100 x 100 mm • Screw Type: M4 x 10 mm <ul style="list-style-type: none"> • Thread Diameter: 4 mm • Thread Pitch: 0.7 mm • Thread Length: 10 mm
Dimension (W x D x H)		711 x 267 x 534 mm
Weight	Net	6.6 kg
	Gross	9.6 kg
Environment	Operating	<ul style="list-style-type: none"> • Temperature: 0°C to 40°C • Humidity: 20% to 90%, non-condensing • Altitude: 0 ~ 5000m
	Storage	<ul style="list-style-type: none"> • Temperature: -20°C to 60°C • Humidity: 10% to 90%, non-condensing

* Based on CIE1976 test standards.

** External Power Supply may vary by country.

Preset Display Modes

Important

- All information is subject to change without prior notice.
- HDMI™ VRR (Variable Refresh Rate) synchronizes with Adaptive-Sync (ON/ OFF). For VRR ON/OFF status, please check Adaptive-Sync.
- To display the preferred timing and frequency, make sure to use the graphics card that supports DSC (Display Stream Compression).

Standard Default Mode (DSC On)

Standard	Resolution		HDMI™	DP	USB-C
Full HD	1920x1080	@60Hz		V	V
QHD	2560x1440	@60Hz	V	V	V
		@120Hz	V	V	V
UHD	3840x2160	@60Hz	V	V	V
		@144Hz	V	V	V
		@160Hz	V	V	V
Video Timing Resolution	720P		V	V	V
	720P@120Hz		V	V	V
	1080P	@60Hz	V	V	V
		@120Hz	V	V	V
	2160P	@60Hz	V	V	V
		@120Hz	V	V	V
HDMI™ VRR			V		

Standard Default Mode (DSC Off)

Standard	Resolution		HDMI™	DP	USB-C
Full HD	1920x1080	@60Hz	V	V	V
QHD	2560x1440	@60Hz	V	V	V
		@120Hz	V	V	V
UHD	3840x2160	@60Hz	V	V	V
		@144Hz	V		
		@160Hz	V		
Video Timing Resolution	720P		V	V	V
	720P@120Hz		V	V	V
	1080P	@60Hz	V	V	V
		@120Hz	V	V	V
	2160P	@60Hz	V	V	V
		@120Hz	V	V	V

Standard	Resolution	HDMI™	DP	USB-C
HDMI™ VRR		V		

Dual Mode (Enabled at Resolutions Other Than 4K)

Standard	Resolution	HDMI™	DP	USB-C
Full HD	1920x1080	@60Hz		V
		@85Hz	V	V
		@120Hz		V
		@165Hz	V	V
		@240Hz	V	V
		@320Hz	V	V
Video Timing Resolution	720P	V	V	V
	1080P	@60Hz	V	
		@120Hz	V	
HDMI™ VRR		V		

Dual Mode (Enabled at 4K@60Hz)

Standard	Resolution	HDMI™	DP	USB-C
Full HD	1920x1080	@120Hz	V	V
Video Timing Resolution	1080P	@120Hz	V	V
HDMI™ VRR		V		

Dual Mode (Enabled at 4K@120Hz)

Standard	Resolution	HDMI™	DP	USB-C
Full HD	1920x1080	@240Hz	V	V
HDMI™ VRR		V		

Dual Mode (Enabled at 4K@160Hz)

Standard	Resolution	HDMI™	DP	USB-C
Full HD	1920x1080	@320Hz	V	V
HDMI™ VRR		V		

PIP Mode (Not Support HDR)

Standard	Resolution	HDMI™	DP	USB-C
Full HD	1920x1080	@60Hz	V	V
QHD	2560x1440	@60Hz	V	V
		@120Hz	V	V

Standard	Resolution		HDMI™	DP	USB-C
UHD	3840x2160	@60Hz	V	V	V
Video Timing Resolution	720P		V	V	V
	1080P	@60Hz	V	V	V
	2160P	@60Hz	V	V	V

PBP Mode 1 (Not Support HDR)

Standard	Resolution		HDMI™	DP	USB-C
Video Timing Resolution	720P		V	V	V
Used for PBP Full Screen	960x2160	@60Hz	V	V	V
	2880x2160	@60Hz	V	V	V

PBP Mode 2 (Not Support HDR)

Standard	Resolution		HDMI™	DP	USB-C
Video Timing Resolution	720P		V	V	V
Used for PBP Full Screen	1920x2160	@60Hz	V	V	V

Screen Size 16:10 (Not Support HDR)

Standard	Resolution		HDMI™	DP	USB-C
QHD+	2560x1600	@60Hz	V	V	V
		@120Hz	V	V	V
		@144Hz	V	V	V

Troubleshooting

The power LED is off.

- Press the monitor power button again.
- Check if the monitor power cable is properly connected.

No image.

- Check if the computer graphics card is properly installed.
- Check if the computer and monitor are connected to electrical outlets and are turned on.
- Check if the monitor signal cable is properly connected.
- The computer may be in Standby mode. Press any key to activate the monitor.

The screen image is not properly sized or centered.

- Refer to Preset Display Modes to set the computer to a setting suitable for the monitor to display.

No Plug & Play.

- Check if the monitor power cable is properly connected.
- Check if the monitor signal cable is properly connected.
- Check if the computer and graphics card are Plug & Play compatible.

The icons, font or screen are fuzzy, blurry or have color problems.

- Avoid using any video extension cables.
- Adjust brightness and contrast.
- Adjust RGB color or tune color temperature.
- Check if the monitor signal cable is properly connected.
- Check for bent pins on the signal cable connector.

The monitor starts flickering or shows waves.

- Change the refresh rate to match the capabilities of your monitor.
- Update your graphics card drivers.
- Keep the monitor away from electrical devices that may cause electromagnetic interference (EMI).

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.

Power

- 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.
- If the power cord comes with a 3-pin plug, do not disable the protective earth pin from the plug. The device must be connected to an earthed mains socket-outlet.
- Please confirm the power distribution system in the installation site shall provide the circuit breaker rated 120/240V, 20A (maximum).
- 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 MSI provided AC adapter approved for use with this device.

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.

TÜV Rheinland Certification

TÜV Rheinland Low Blue Light Certification

Blue light has been shown to cause eye fatigue and discomfort. MSI now offers monitors with TÜV Rheinland Low Blue Light certification to ensure users' eye comfort and well-being. Please follow the instructions below to reduce the symptoms from extended exposure to the screen and blue light.



Low Blue Light
(Software
Solution)
Flicker Free

www.tuv.com

- Place the screen 20 – 28 inches (50 – 70 cm) away from your eyes and a little below eye level.
- Consciously blinking the eyes every now and then will help to reduce eye strain after extended screen time.
- Take breaks for 20 minutes every 2 hours.
- Look away from the screen and gaze at a distant object for at least 20 seconds during breaks.
- Make stretches to relieve body fatigue or pain during breaks.
- Turn on the optional Low Blue Light function.

TÜV Rheinland Flicker Free Certification

- TÜV Rheinland has tested this product to ascertain whether the display produces visible and invisible flicker for the human eye and therefore strains the eyes of users.
- TÜV Rheinland has defined a catalogue of tests, which sets out minimum standards at various frequency ranges. The test catalogue is based on internationally applicable standards or standards common within the industry and exceeds these requirements.
- The product has been tested in the laboratory according to these criteria.
- The keyword “Flicker Free” confirms that the device has no visible and invisible flicker defined in this standard within the range of 0 - 3000 Hz under various brightness settings.
- The display will not support Flicker Free when Anti Motion Blur/MPRT is enabled. (The availability of Anti Motion Blur/MPRT varies by products.)

Regulatory Notices

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.



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:

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

MSI Computer Corp.

901 Canada Court, City of Industry, CA 91748, USA
(626) 913-0828
www.msi.com

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), MSI provides the information of chemical substances in products at:

<https://csr.msi.com/global/index>

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.

<https://csr.msi.com/global/Japan-JIS-C-0950-Material-Declarations>

India RoHS

This product complies with the “India E-waste (Management and Handling) Rule 2016” and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

Turkey EEE Regulation

Conforms to the EEE Regulations of the Republic Of Turkey

Ukraine Restriction of Hazardous Substances

The equipment complies with requirements of the Technical Regulation, approved by the Resolution of Cabinet of Ministry of Ukraine as of 10 March 2017, № 139, in terms of restrictions for the use of certain dangerous substances in electrical and electronic equipment.

Vietnam RoHS

As from December 1, 2012, all products manufactured by MSI comply with Circular 30/2011/TT-BCT temporarily regulating the permitted limits for a number of hazardous substances in electronic and electric products.

Green Product Features

- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy

Environmental Policy

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.
- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
- Visit the MSI website and locate a nearby distributor for further recycling information.
- Users may also reach us at gpcontdev@msi.com for information regarding proper disposal, take-back, recycling, and disassembly of MSI products.
- Please visit <https://us.msi.com/page/recycling> for information regarding the recycling of your product in the US.



Warning!

Overuse of screens is likely to affect eyesight.

Recommendations:

1. Take a 10-minute break for every 30 minutes of screen time.
2. 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.

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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.msi.com/support/> for further guidance.