

PRO Series

LCD Monitor

PRO MP221 (3BA2)

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Revision

Revision	Date
V1.0	2019/08

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.

Safety Instructions



- ☐ Read the safety instructions carefully and thoroughly.
 - ☐ All cautions and warnings on the device or user's manual should be noted.
 - ☐ Refer servicing to qualified personnel only.
-



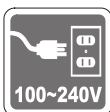
Keep the User's Guide that comes with the package for future reference.



To prevent fire or shock hazard, keep this device away from humidity and high temperature.



Lay this device on a reliable flat surface before setting it up.



- ☐ 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. Do not disable the protective earth pin from the plug. The device must be connected to an earthed mains socket-outlet.
 - ☐ 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.
-



The ventilator on the device is used for air convection and to prevent the device from overheating. Do not cover the ventilator.



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.

NOTE: 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.



Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.



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 work according to user's manual.
- ☑ The device has dropped and damaged.
- ☑ The device has obvious sign of breakage.

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.

★ 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.

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, which takes effect on August 13, 2005, 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://www.msi.com/html/popup/csr/evmtprrt_pcm.html

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://www.msi.com/html/popup/csr/cemm_jp.html

https://tw.msi.com/html/popup/csr_tw/cemm_jp.html

India RoHS

This product complies with the "India E-waste (Management and Handling) Rule 2011" 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 December 3, 2008 № 1057, 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.



1


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.

IMPORTANT

The illustrations are for reference only. Your monitor may vary in appearance.

Package Contents

- 
1. Monitor
 2. Stand with Base
 3. Power Cord
 4. HDMI Cable
 5. D-Sub Cable
 6. Quick Start Guide
 7. Warranty Card

* Contact your place of purchase or local distributor if any of the items is damaged or missing.

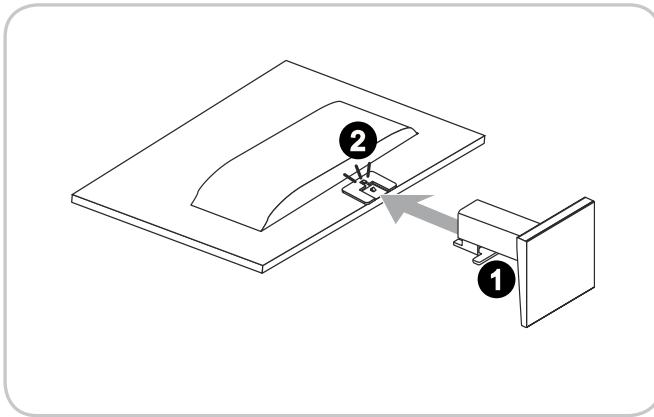
* Package contents may vary by country.

Installing the Monitor Stand

IMPORTANT

Place the monitor on a soft, protected surface to avoid scratching the display panel.

1. Align the latch of the stand with base to the monitor and push it.
2. When the stand with base is secured to the monitor, a click sound will be heard.



IMPORTANT

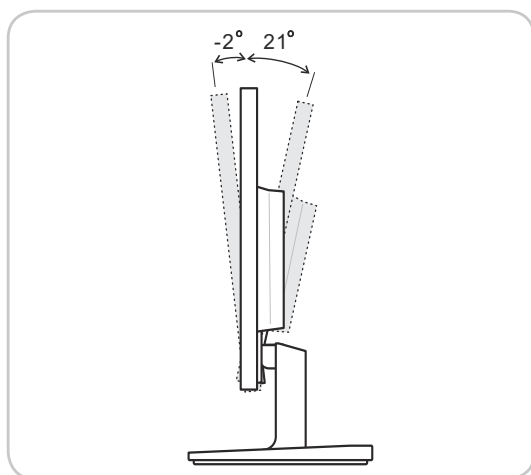
The holes for installing the stand can be also used for wall mount. Please contact your dealer for proper wall mount kit.

Adjusting the Monitor

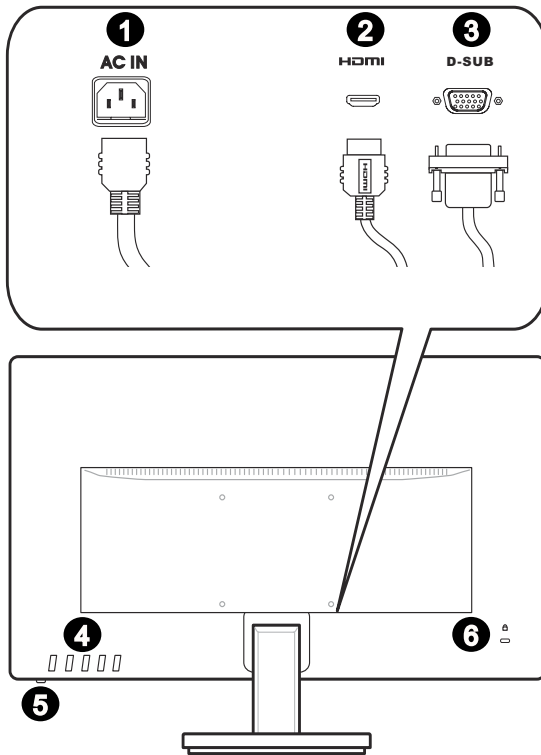
This monitor is designed to maximize your viewing comfort with its adjustment capabilities.

IMPORTANT

Avoid touching the display panel when adjusting the monitor.



Monitor Overview

**1**

Power Jack

2HDMI Port **HDMI**[™]
HIGH-DEFINITION MULTIMEDIA INTERFACE**3**

D-Sub Port

4

OSD Keys

5

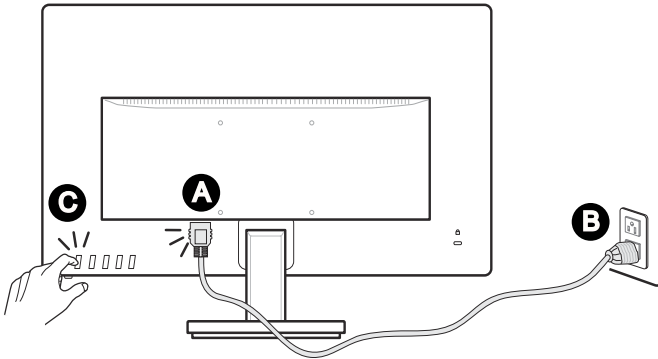
Power LED

6

Kensington Lock

Connecting the Monitor to PC

1. Turn off your computer.
2. Connect the HDMI/DisplayPort cable from the monitor to your computer.
3. Connect the power cord to the monitor power jack. (Figure A)
4. Plug the power cord into the electrical outlet. (Figure B)
5. Turn on the monitor. (Figure C)
6. Power on the computer then monitor will auto detect signal source.



2

OSD Setup

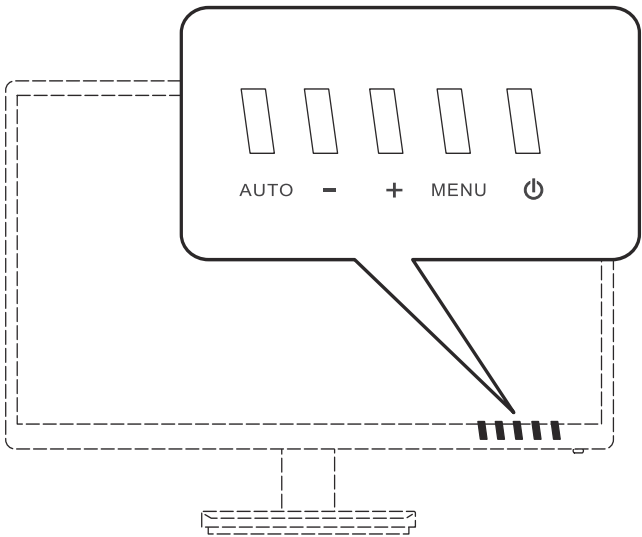
This chapter provides you with essential information on OSD Setup.

IMPORTANT

All information is subject to change without prior notice.

OSD Key

The monitor comes with a set of OSD Key that helps to control the On-Screen Display (OSD) menu.



2-2

Without entering OSD menu, you can use these OSD keys as hot keys for quick settings.

OSD Key	Function	Basic Operations
AUTO	Input selection	<ul style="list-style-type: none">■ Press AUTO button to enter this setting.■ Press AUTO button again to select.■ Press MENU button to confirm and exit.
-	ECO Mode selection	<ul style="list-style-type: none">■ Press - button to enter this setting.■ Press - or + button to select.■ Press AUTO button to confirm and exit.
+	Image Ratio selection	<ul style="list-style-type: none">■ Press + button to enter this setting.■ Press - or + button to select.■ Press AUTO button to confirm and exit.

OSD Setup Menu

Press **MENU** button to launch the On-Screen Display (OSD) main menu. In OSD screen, use **MENU + -** **AUTO** buttons to tune the desired function to suit your personal preferences.

These OSD keys operations are as follows.

OSD Key	Basic Operations
MENU	<ul style="list-style-type: none">■ Entering the submenus■ Confirming a selection or setting
+	<ul style="list-style-type: none">■ Selecting function menus and items■ Allowing upward adjustment in function values
-	<ul style="list-style-type: none">■ Selecting function menus and items■ Allowing downward adjustment in function values
AUTO	<ul style="list-style-type: none">■ Exiting the current menu



► Luminance

1st Level Menu	2nd/3rd Level Menu	Description
Contrast	0-100	Adjust contrast. This function is available in Standard modes.
Brightness	0-100	Adjust brightness. This function is available in Standard modes.
Eco Mode	Standard	
	Text	
	Internet	
	Game	
	Movie	
	Sports	
DCR	On	DCR enhances image quality by increasing the contrast of images.
	Off	

► Image Setup

1st Level Menu	2nd/3rd Level Menu	Description
Clock	0-100	Adjust the clock to reduce Vertical-Line noise.
Phase	0-100	Adjust the phase to reduce Horizontal-Line noise.
H. Position	0-100	Adjust the horizontal position of the image.
V. Position	0-100	Adjust the vertical position of the image.
Image Ratio	Wide	Select the format for display.
	4:3	

► Color Temp.

1st Level Menu	2nd/3rd Level Menu	Description
Warm (6500K)		Select and preview mode effects.
Normal (7300K)		
Cool (9300K)		
User	R(0-100)	
	G(0-100)	
	B(0-100)	
sRGB		

► OSD Setup

1st Level Menu	2nd/3rd Level Menu	Description
H. Position	0-100	Adjust the horizontal position of the OSD.
V. Position	0-100	Adjust the vertical position of the OSD.
Timeout	5-100	Adjust the OSD timeout.
Language	English Español Français Português Русский 简体中文 繁體中文 한국어 (More languages coming soon)	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.

► Extra

1st Level Menu	2nd/3rd Level Menu	Description
Input Select	D-Sub HDMI Auto	Users can adjust Input Source in any Mode.
DDC/CI	On Off	Enable or disable the DDC/CI function.
Reset	YES NO	Users can reset and restore settings to original OSD default.
Information Resolution: H. Frequency: V. Frequency:		Show the resolution and frequency. Read only.



Appendix

IMPORTANT

All information is subject to change without prior notice.

Specifications

Model		PRO MP221(3BA2)
Size		21.5 inch
Panel Type		TN
Resolution		1920 x 1080 @60Hz
Aspect Ratio		16:9
Brightness (nits)		250 cd/m2 (TYP)
Contrast Ratio		1000:1
Refresh Rate		60Hz
Response Time		5ms
Input Interface		■ HDMI Port x1 ■ D-Sub Port x1
View Angles		170°(H) , 160°(V)
sRGB / DCI-P3 *		97.3% / 76.6%
Surface Treatment		Anti-glare, Haze 25%
Display Colors		16.7 Million
Power Type		Internal Power Adapter
Power Input		100-240VAC, 50/60Hz
Power Consumption (Typical)		Power On < 40W Standby < 0.5W Power Off < 0.5W
Adjustment (Tilt)		-2° ~ 21°
Kensington Lock		Yes
VESA Mounting		■ Plate Type: 100 x 100mm ■ Screw Type: M4 x 10mm ■ Thread Diameter: 4mm ■ Thread Pitch: 0.7mm ■ Thread Length: 10mm
Dimension (W x H x D)		504.8 x 374.5 x 181.9mm
Weight		2.6kg
Environment	Operating	Temperature: 0°C to 40°C Humidity: 10% to 85%, non-condensing Altitude: 0 ~ 5000m
	Storage	Temperature: -20°C to 60°C Humidity: 10% to 90%, non-condensing

* Based on CIE1976 test standards.

Preset Display Modes

Standard	Resolution	PRO MP221(3BA2)	
		HDMI	D-Sub
VGA	640x480 @60Hz		V
	640x480 @67Hz		V
	640x480 @72Hz		V
	640x480 @75Hz		V
Dos-Mode	720x400@70Hz		V
SVGA	800x600 @56Hz		V
	800x600 @60Hz		V
	800x600 @72Hz		V
	800x600 @75Hz		V
XGA	1024x768 @60Hz		V
	1024x768 @70Hz		V
	1024x768 @75Hz		V
	1152x864 @75Hz		V
SXGA	1280x1024 @60Hz		V
	1280x1024 @75Hz		V
WXGA+	1440x900 @60Hz		V
WSXGA+	1680x1050 @60Hz		V
Full HD	1920x1080 @60Hz		V
Video Timing Resolution	480P	V	
	576P	V	
	720P	V	
	1080i	V	
	1080P	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).