

Acer LCD Monitor

User Guide

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Acer LCD Monitor User Guide
Original Issue: 10/2016

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Record the model number, serial number, purchase date and place of purchase information in the space provided below. The serial number and model number are recorded on the label affixed to your computer. All correspondence concerning your unit should include the serial number, model number and purchase information.

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Acer LCD Monitor User Guide

Model number: _____

Serial number: _____

Date of purchase: _____

Place of purchase: _____

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Information for your safety and comfort

Safety instructions

Read these instructions carefully. Keep this document for future reference. Follow all warnings and instructions marked on the product.

Special notes on LCD monitors

The following are normal with the LCD monitor and do not indicate a problem.

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the power switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has 99.99% or more effective pixels. It may include blemishes of 0.01% or less such as a missing pixel or pixel lit all the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the power switch for a few hours.

Cleaning your monitor

Please carefully follow these guidelines when cleaning the monitor:

- Always unplug the monitor before cleaning.
- Use a soft cloth to wipe the screen and cabinet front and sides.

Accessibility

Be sure that the power outlet you plug the power cord into is easily accessible and located as close to the equipment operator as possible. When you need to disconnect power from the equipment, be sure to unplug the power cord from the electrical outlet.

Safe listening

To protect your hearing, follow these instructions.

- Gradually increase the volume until you can hear it clearly and comfortably and without distortion.
- After setting the volume level, do not increase it after your ears have adjusted.
- Limit the amount of time listening to music at high volume.
- Avoid turning up the volume to block out noisy surroundings.
- Turn the volume down if you can't hear people speaking near you.

Warnings

- Do not use this product near water.
- Do not place this product on an unstable cart, stand or table. If the product falls, it could be seriously damaged.
- Slots and openings are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind onto or into the product.
- To avoid damage of internal components and to prevent battery leakage, do not place the product on a vibrating surface.
- Never use it under sporting, exercising, or any vibrating environment which will probably cause unexpected short current or damage internal devices.

Using electrical power

- This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.

- If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
- Do not overload a power outlet, strip or receptacle by plugging in too many devices. The overall system load must not exceed 80% of the branch circuit rating. If power strips are used, the load should not exceed 80% of the power strip's input rating.
- This product's power cord is equipped with a three-wire grounded plug. The plug only fits in a grounded power outlet. Make sure the power outlet is properly grounded before inserting the power cord plug. Do not insert the plug into a non-grounded power outlet. Contact your electrician for details.



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Warning! The grounding pin is a safety feature. Using a power outlet that is not properly grounded may result in electric shock and/or injury.



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Note: The grounding pin also provides good protection from unexpected noise produced by other nearby electrical devices that may interfere with the performance of this product.

- Use the product only with the supplied power supply cord set. If you need to replace the power cord set, make sure that the new power cord meets the following requirements: detachable type, UL listed/CSA certified, type SPT-2, rated 7 A 125 V minimum, VDE approved or its equivalent, 4.6 meters (15 feet) maximum length.

Product servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel when:

- the power cord or plug is damaged, cut or frayed
- liquid was spilled into the product
- the product was exposed to rain or water
- the product has been dropped or the case has been damaged
- the product exhibits a distinct change in performance, indicating a need for service
- the product does not operate normally after following the operating instructions



Note: Adjust only those controls that are covered by the operating instructions, since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.

Potentially explosive environments

Switch off your device in any area with a potentially explosive atmosphere and obey all signs and instructions. Potentially explosive atmospheres include areas where you would normally be advised to turn off your vehicle engine. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Switch off the device near depots, storage and distribution areas; chemical plants; or where blasting operations are in progress. Areas with a potentially explosive atmosphere are often, but not always, marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), and areas where the air contains chemicals or particles such as grain, dust or metal powders.

Additional safety information

Your device and its enhancements may contain small parts. Keep them out of the reach of small children.

IT Equipment Recycling Information

Acer is strongly committed to environmental protection and views recycling, in the form of salvaging and disposal of used equipment, as one of the company's top priorities in minimizing the burden placed on the environment.

We at Acer are very conscious of the environmental effects of our business and strive to identify and provide the best working procedures to reduce the environmental impact of our products.

For more information and help when recycling, please go to this website:

<http://www.acer-group.com/public/Sustainability/sustainability01.htm>

Visit www.acer-group.com for further information on the features and benefits of our other products.

Disposal instructions



Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle. For more information on the Waste from Electrical and Electronics Equipment (WEEE) regulations, visit <http://www.acer-group.com/public/Sustainability/sustainability01.htm>

LCD pixel statement

The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as black or red dots. This has no effect on the recorded image and does not constitute a malfunction.

This product has been shipped enabled for power management:

- Activate display's Sleep mode within 5 minutes of user inactivity.
- Wake the monitor when it is in Active Off mode, move the mouse or press any keyboard key.

Tips and information for comfortable use

Computer users may complain of eyestrain and headaches after prolonged use. Users are also at risk of physical injury after long hours of working in front of a computer. Long work periods, bad posture, poor work habits, stress, inadequate working conditions, personal health and other factors greatly increase the risk of physical injury.

Incorrect computer usage may lead to carpal tunnel syndrome, tendonitis, tenosynovitis or other musculoskeletal disorders. The following symptoms may appear in the hands, wrists, arms, shoulders, neck or back:

- numbness, or a burning or tingling sensation
- aching, soreness or tenderness
- pain, swelling or throbbing
- stiffness or tightness
- coldness or weakness

If you have these symptoms, or any other recurring or persistent discomfort and/or pain related to computer use, consult a physician immediately and inform your company's health and safety department.

The following section provides tips for more comfortable computer use.

Finding your comfort zone

Find your comfort zone by adjusting the viewing angle of the monitor, using a footrest, or raising your sitting height to achieve maximum comfort. Observe the following tips:

- refrain from staying too long in one fixed posture
- avoid slouching forward and/or leaning backward
- stand up and walk around regularly to remove the strain on your leg muscles

Taking care of your vision

Long viewing hours, wearing incorrect glasses or contact lenses, glare, excessive room lighting, poorly focused screens, very small typefaces and low-contrast displays could stress your eyes. The following sections provide suggestions on how to reduce eyestrain.

Eyes

- Rest your eyes frequently.
- Give your eyes regular breaks by looking away from the monitor and focusing on a distant point.
- Blink frequently to keep your eyes from drying out.

Display

- Keep your display clean.
- Keep your head at a higher level than the top edge of the display so your eyes point downward when looking at the middle of the display.
- Adjust the display brightness and/or contrast to a comfortable level for enhanced text readability and graphics clarity.
- Eliminate glare and reflections by:
 - placing your display in such a way that the side faces the window or any light source
 - minimizing room light by using drapes, shades or blinds
 - using a task light
 - changing the display's viewing angle
 - using a glare-reduction filter
 - using a display visor, such as a piece of cardboard extended from the display's top front edge
- Avoid adjusting your display to an awkward viewing angle.
- Avoid looking at bright light sources, such as open windows, for extended periods of time.

Developing good work habits

Develop the following work habits to make your computer use more relaxing and productive:

- Take short breaks regularly and often.
- Perform some stretching exercises.
- Breathe fresh air as often as possible.
- Exercise regularly and maintain a healthy body.



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New Taipei City 221, Taiwan

Declaration of Conformity

We,

Acer Incorporated

8F, 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 221, Taiwan

And,

Acer Italy s.r.l.

Viale De Gasperi 88/A, 20017 Mazzo di Rho (MI), Italy

Tel: +39-02-939-921 ,Fax: +39-02 9399-2913

www.acer.it

Product:	LCD Monitor
Trade Name:	Acer
Model Number:	KG221Q
SKU Number:	KG221Q XXXXXX;
	("x" = 0-9, a ~ z, A ~ Z, or blank)

We, Acer Incorporated, hereby declare under our sole responsibility that the product described above is in conformity with the relevant Union harmonization legislations as below Directive and following harmonized standards and/or other relevant standards have been applied:

EMC Directive: 2014/30/EU

<input checked="" type="checkbox"/> EN 55022:2010+AC:2011 Class B	<input checked="" type="checkbox"/> EN 55024:2010
<input checked="" type="checkbox"/> EN 61000-3-2:2006+A2:2009 Class D	<input checked="" type="checkbox"/> EN 61000-3-3:2013

LVD Directive: 2014/35/EU

<input checked="" type="checkbox"/> EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013

RoHS Directive: 2011/65/EU

<input checked="" type="checkbox"/> EN 50581:2012

ErP Directive: 2009/125/EC

<input checked="" type="checkbox"/> Regulation (EC) No. 1275/ 2008; EN 50564:2011

Year to begin affixing CE marking: 2016.

RU Jan / Sr. Manager
Acer Incorporated (Taipei, Taiwan)

Nov.4,2016
Date

acer

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 Suite 1500
 CA 95110, U. S. A.
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Federal Communications Commission Declaration of Conformity

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.

The following local Manufacturer /Importer is responsible for this declaration:

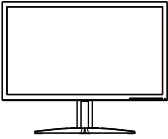

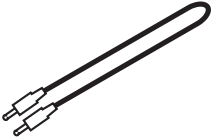
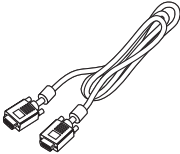
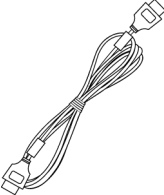
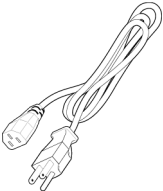
Product:	LCD Monitor
Model Number:	KG221Q
SKU Number:	KG221Q xxxxxx ("x" = 0~9, a ~ z, or A ~ Z)
Name of Responsible Party:	Acer America Corporation
Address of Responsible Party:	333 West San Carlos St. Suite 1500 San Jose, CA 95110 U. S. A.
Contact Person:	Acer Representative
Phone No.:	254-298-4000
Fax No.:	254-298-4147

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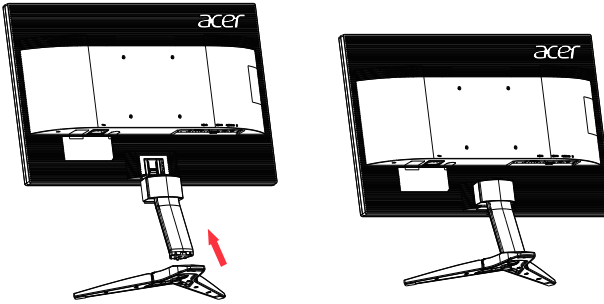
Unpacking

Please check that the following items are present when you unpack the box, and save the packing materials in case you need to ship or transport the monitor in the future.

LCD monitor	Quick start guide	Audio Cable (Optional)
		
VGA Cable (Optional)	HDMI cable (Optional)	AC Power cord
		

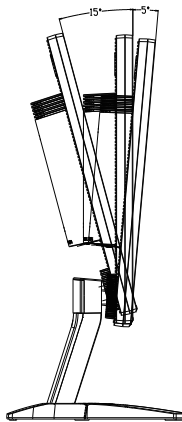
- **Attaching the Base**

Note: Remove the monitor and monitor base from its packaging. Carefully place the monitor face-down on a stable surface -- use a cloth to avoid scratching the screen.



- **Screen position adjustment**

To optimize the viewing position, you can adjust the monitor tilt by using both of your hands to hold the edges of the monitor as shown below. The monitor can be adjusted to 15 degrees up or 5 degrees down.



Connecting the adapter and AC Power cord

- Check first to make sure that the power cord you use is the correct type required for your area.
- The monitor has a universal power supply that allows operation in either 100/120 V AC or 220/240 V AC voltage area. No user-adjustment is required.
- Plug one end of the AC power cord to the Adapter, and plug the other end into an AC outlet.
- For units using 120 V AC:
Use a UL-listed cord set, type SVT wire and plug rated 10 A/125 V.
- For units using 220/240 V AC:
Use a cord set consisting of H05VV-F cord and plug rated 10 A/250 V. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

Power saving

The monitor will be driven into "Power Saving" mode by the control signal from the display controller, as indicated by the amber-color power LED.

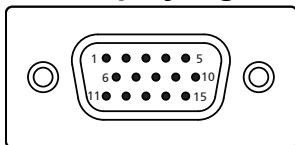
State	LED Light
ON	Blue
Power Saving Mode	Amber

The power saving states will be kept until a control signal has been detected or the keyboard or mouse is activated. The recovery time from Active OFF state back to ON state is around 3 seconds.

Display Data Channel (DDC)

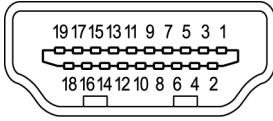
To make installation easier, so long as your system supports the DDC protocol, the monitor is able to plug-and-play. The DDC is a communication protocol through which the monitor automatically informs the host system about its capabilities; for example, supported resolutions and corresponding timing. The monitor supports the DDC2B standard.

15-pin color display signal cable



PIN No.	Description	PIN No.	Description
1	Red	9	+5V
2	Green	10	Logic ground
3	Blue	11	Monitor ground
4	Monitor ground	12	DDC-serial data
5	DDC-return	13	H-sync
6	R-ground	14	V-sync
7	G-ground	15	DDC-serial clock
8	B-ground		

19-pin color display signal cable



PIN No.	Description	PIN No.	Description
1	TMDS Data2+	2	TMDS Data2 Shield
3	TMDS Data2-	4	TMDS Data1+
5	TMDS Data1 Shield	6	TMDS Data1-
7	TMDS Data0+	8	TMDS Data0 Shield
9	TMDS Data0-	10	TMDS Clock+
11	TMDS Clock Shield	12	TMDS Clock-
13	CEC	14	Reserved (N.C. on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		

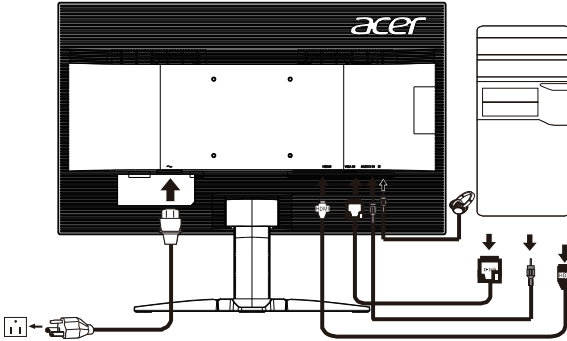
Standard timing table

VESA MODE			
MODE	Resolution		
1	VGA	640x480	60Hz
2	MAC	640x480	66.662Hz
3	VESA	720x400	70Hz
4	SVGA	800x600	56Hz
5	SVGA	800x600	60Hz
6	XGA	1024x768	60Hz
7	XGA	1024x768	70Hz
8	VESA	1152x864	75Hz
9	SXGA	1280x1024	60Hz
10	VESA	1280x720	60Hz
11	WXGA	1280x800	60Hz
12	WXGA+	1440x900	60Hz
13	WSXGA+	1680x1050	60Hz
14	UXGA	1920x1080	60Hz
15	UXGA	1920x1080	75Hz ^{*1}

^{*1} For HDMI input only

Installation

1. Turn off your computer and unplug your computer's power cord.
2. Connect the signal cable to the HDMI (optional) and /or VGA (optional) input socket of the monitor, and the HDMI (optional) and /or VGA (optional) output socket of the graphics card on the computer. Then tighten the thumbscrews on the signal cable connector.
3. (Optional): Connect the audio input socket (AUDIO IN) of the LCD monitor and the line-out port on the computer with the audio cable.
4. Insert the monitor power cable into the power port at the back of the monitor.
5. Connect the power adapter and power cord to the monitor, then to a properly grounded AC outlet.

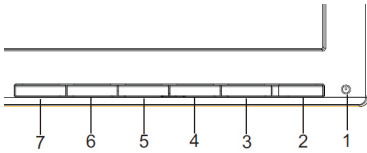


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Note: Audio output is only for audio output model. Please check user manual for more instruction.






FreeSync (HDMI only):

It can allow a FreeSync supported graphics source to dynamically adjust display refresh rate based on typical content frame rates for power efficient, virtually stutter free and low-latency display update.

User Controls



External controls

1&2	Power button	Turns the monitor on/off. Blue indicates power on. Amber indicates standby/ power saving mode.
3	Function key 	<ol style="list-style-type: none">Press to view Main page. Press again to enter next function in the Function Menu.When the Function Menu is active, press this key selected or move to the next function.
4	Function key 	<ol style="list-style-type: none">Press to view Main page. Press again to enter Input select function.When the Function Menu is active, press this button selected or move to the previous function.
5	Function key 	<ol style="list-style-type: none">Press to view Main page. Press again to enter Volume adjustment function.When the Function Menu is active, this button will enter a selection in the OSD.
6	Function key 	<ol style="list-style-type: none">Press to view Main page. Press again to enter brightness adjustment function.When the Function Menu is active. Press to return previous Menu or exit current Menu.
7	Function key 	<ol style="list-style-type: none">When the Main page is active, Press to trigger the Game mode controlWhen the Function Menu is active, press to exit current Menu.

For displays with glossy bezels the user should consider the placement of the display as the bezel cause disturbing reflections from surrounding light and bright surfaces.

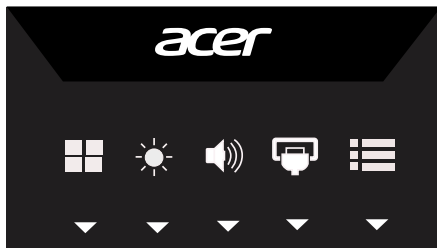
Using the Shortcut Menu




Note: The following content is for general reference only. Actual product specifications may vary.

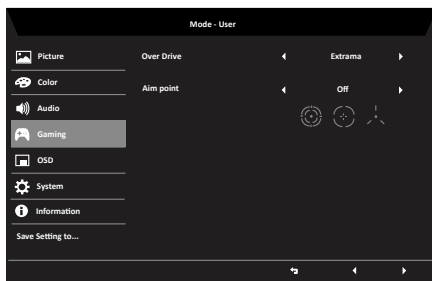
The OSD (onscreen display) can be used to adjust the settings of your LCD monitor. Press the MENU key to open the OSD. You can use the OSD to adjust the picture quality, OSD position and general settings. For advanced settings, please refer to following page:

Main page




Adjusting the OD setting

Open the OD control and select your preferred OD setting using the arrows. When you are done, use  to go back one level.



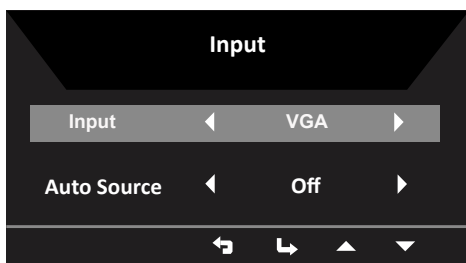
Adjusting the volume

Open the Volume control and set the Volume using the arrows. When you are done, use  to go back one level.




Selecting the input

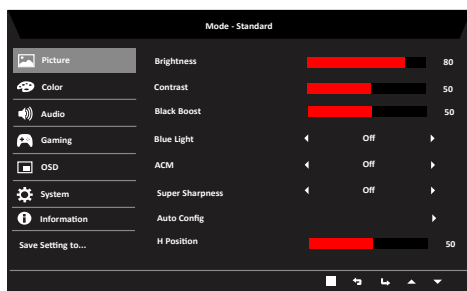
Open the Input control and select HDMI or VGA. When you are done, use  to go back one level.



The Function page

Open the Function page to adjust the Picture, Color, OSD and Setting functions, settings which you want using the arrows. You can also view your monitor's system information from this page. When you are done, use  to go back one level.

Picture



1. Press the MENU key to open the OSD.
2. Using the ▲/▼ keys, select Picture from the OSD. Then navigate to the picture element you wish to adjust.
3. Use the ◀/▶ keys to adjust the sliding scales.
4. The Picture menu can be used to adjust the Brightness, Contrast, Blue Light, Dark boost and Adaptive contrast.
5. Brightness: Adjust the brightness from 0 to 100.



Note: Adjusts the balance between light and dark shades.

6. Contrast: Adjust the contrast from 0 to 100.



Note: Sets the degree of difference between light and dark areas.

- Black Boost: Adjust the black level from 0 to 10. Enhances shadows by increasing the brightness without changing lighter shades.



Note: If the image is very bright or has few shadow areas, adjusting this setting may not result in any noticeable changes to the image.

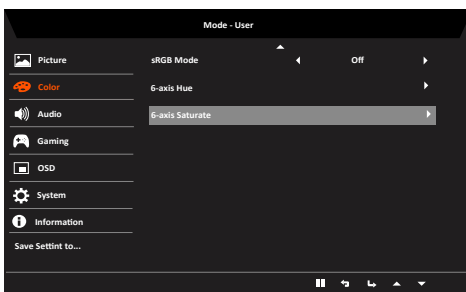
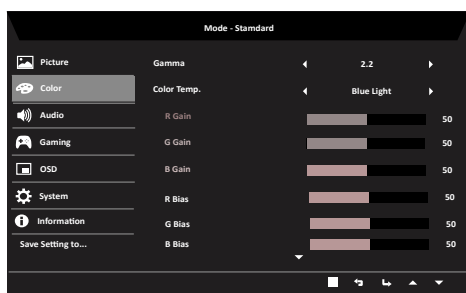
- Blue Light: Filters out blue light to protect your eyes by adjusting how much blue light is shown -- 80%, 70%, 60%, or 50%.



Note: Higher values allow more blue light through. For the best protection select a lower value.

- ACM: Turn ACM on or off. The default is off.
- Super Sharpness: Turn the sharpness On or Off. Sharpness technology can simulate high-resolution images by boosting the pixel density of the original source to make images sharper and clearer.

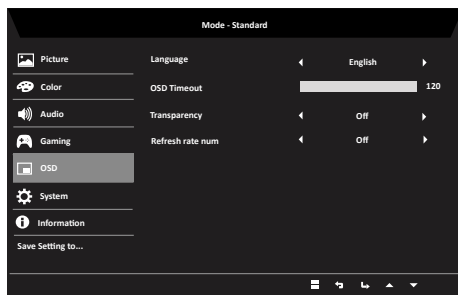
Color



- Press the MENU key to open the OSD.
- Using the ▲/▼ keys, select Color from the OSD. Then navigate to the picture element you wish to adjust.
- Use the ◀/▶ keys to select the setting.
- Gamma mode allows you to adjust the luminance tone. The default value is 2.2 (standard value for Windows).
- Color temperature: Default is warm. You can choose Cool, Normal, Warm, Bluelight or User.

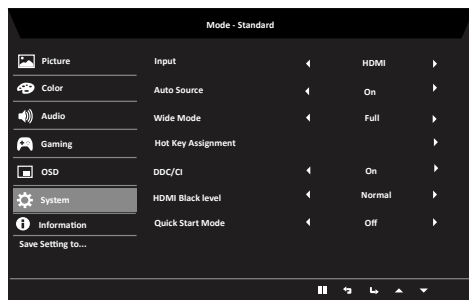
- sRGB: Default is off. You can turn sRGB on or off to better color match with peripheral devices, such as printers and digital cameras.
- 6-axis Saturate: Adjust the red, green, blue, yellow, magenta and cyan saturation.
- 6-axis Hue: Adjust the red, green, blue, yellow, magenta and cyan hue.

OSD



- Press the MENU key to open the OSD.
- Using the ▲/▼ keys, select OSD from the OSD. Then navigate to the setting you wish to change.
- Use the ◀/▶ keys to adjust any sliding scales.
- Language: Set the OSD menu language.
- OSD timeout: Adjust the delay before turning off the OSD menu.
- Refresh rate num: Display the panel's current refresh rate on the screen.
- Transparency: Select the transparency when using gaming mode. The transparency can be 0% (OFF), 20%, 40%, 60%, or 80%.

System Setting



- The Setting menu can be used to select the input and other important settings.
- Press the MENU key to open the OSD.
- Using the ▲/▼ keys, select Setting from the OSD. Then navigate to the setting you

wish to adjust.

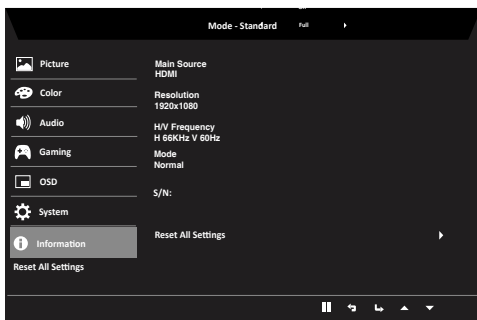
4. Use the ◀/▶ keys to select the setting.
5. Input: Select the source from VGA In, HDMI.
6. Auto Source: Default is "on", support auto source.
7. HDMI Black level setting.
8. **Wide mode:** You can select which screen aspect you are using. The options are Aspect and Full.
9. DDC/CI: Allows the monitor settings to be set through the software on the PC.



Note: DDC/CI, short for Display Data Channel/Command Interface, which allows monitor controls to be sent via software.

10. Quick start mode setting.

Product information



1. Press the MENU key to open the OSD.
2. Using the ▲/▼ keys, select Information to view the basic information for your monitor and current input.
3. Reset all settings: Reset the custom color settings to factory defaults.

Troubleshooting

Before sending your LCD monitor for servicing, please check the troubleshooting list below to see if you can self-diagnose the problem.

HDMI/VGA Mode (Optional)

Problem	LED status	Remedy
No picture visible	Blue	Using the OSD menu, adjust brightness and contrast to maximum or reset to their default setting.
	Off	Check the power switch.
		Check if the AC power cord is properly connected to the monitor.
Amber		Check if the video signal cable is properly connected at the back of monitor.
		Check if the computer system is switched on and in power saving/standby mode.