



LCD Monitor User Manual

AG273QG LED backlight



HDMI™

www.aoc.com

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Safety

National Conventions

The following subsections describe notational conventions used in this document.

Notes, Cautions, and Warnings

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, cautions, and warnings, and they are used as follows:



NOTE: A NOTE indicates important information that helps you make better use of your computer system.



CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



WARNING: A WARNING indicates the potential for bodily harm and tells you how to avoid the problem. Some warnings may appear in alternate formats and may be unaccompanied by an icon. In such cases, the specific presentation of the warning is mandated by regulatory authority.

Power



The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.



The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.



Unplug the unit during a lightning storm or when it will not be used for long periods of time. This will protect the monitor from damage due to power surges.



Do not overload power strips and extension cords. Overloading can result in fire or electric shock.





To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC, Min. 5A.





The wall socket shall be installed near the equipment and shall be easily accessible.


Installation

 Do not place the monitor on an unstable cart, stand, tripod, bracket, or table. If the monitor falls, it can injure a person and cause serious damage to this product. Use only a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with this product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer. A product and cart combination should be moved with care.

 Never push any object into the slot on the monitor cabinet. It could damage circuit parts causing a fire or electric shock. Never spill liquids on the monitor.

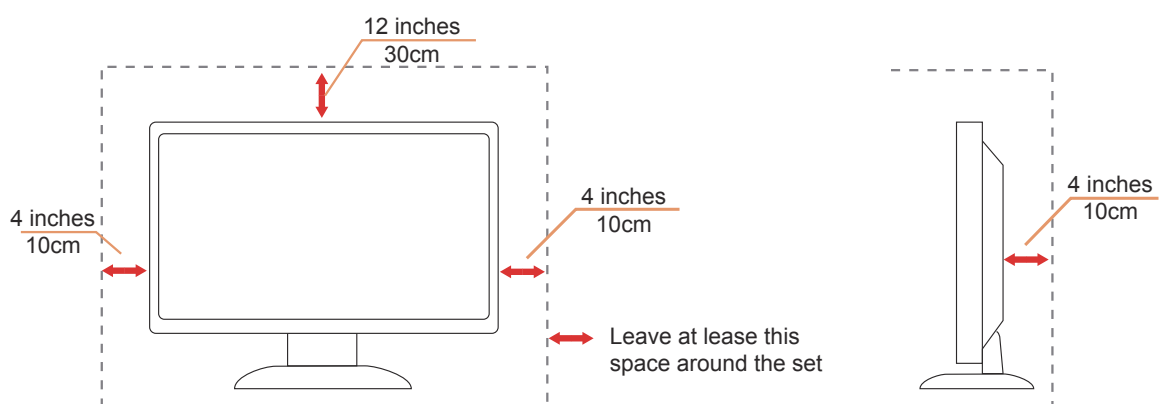
 Do not place the front of the product on the floor.

 If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.


 Leave some space around the monitor as shown below. Otherwise, air-circulation may be inadequate hence overheating may cause a fire or damage to the monitor.


See below the recommended ventilation areas around the monitor when the monitor is installed on the wall or on the stand:


Installed with stand



Cleaning

 Clean the cabinet regularly with cloth. You can use soft-detergent to wipe out the stain, instead of strong-detergent which will cauterize the product cabinet.

 When cleaning, make sure no detergent is leaked into the product. The cleaning cloth should not be too rough as it will scratch the screen surface.

 Please disconnect the power cord before cleaning the product.



Other



If the product is emitting a strange smell, sound or smoke, disconnect the power plug IMMEDIATELY and contact a Service Center.



Make sure that the ventilating openings are not blocked by a table or curtain.



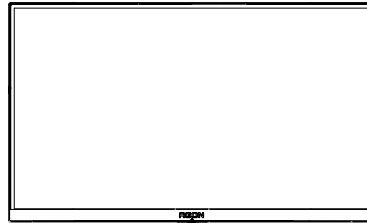
Do not engage the LCD monitor in severe vibration or high impact conditions during operation.



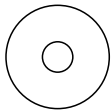
Do not knock or drop the monitor during operation or transportation.

Setup

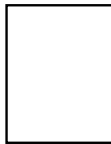
Contents in Box



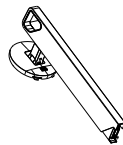
Monitor



CD Manual



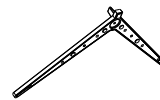
Warranty card



Stand



Screws



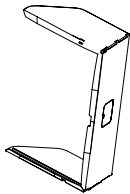
Base



Hand Screw



Wire clip



Shading Hood Packet



Power Cable



DP Cable



HDMI Cable



USB Cable



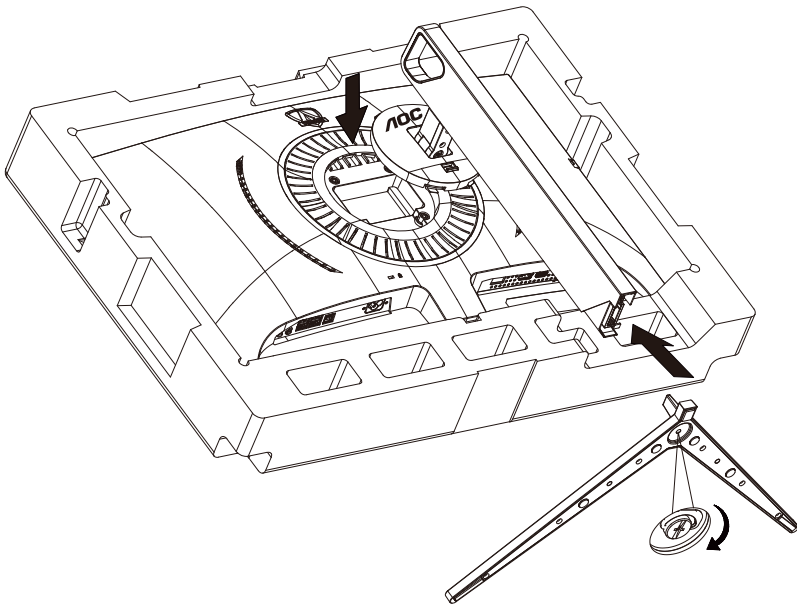
Micphone Cable

*Not all signal cables (DP, HDMI, USB and Micphone cables) will be provided for all countries and regions. Please check with the local dealer or AOC branch office for confirmation.

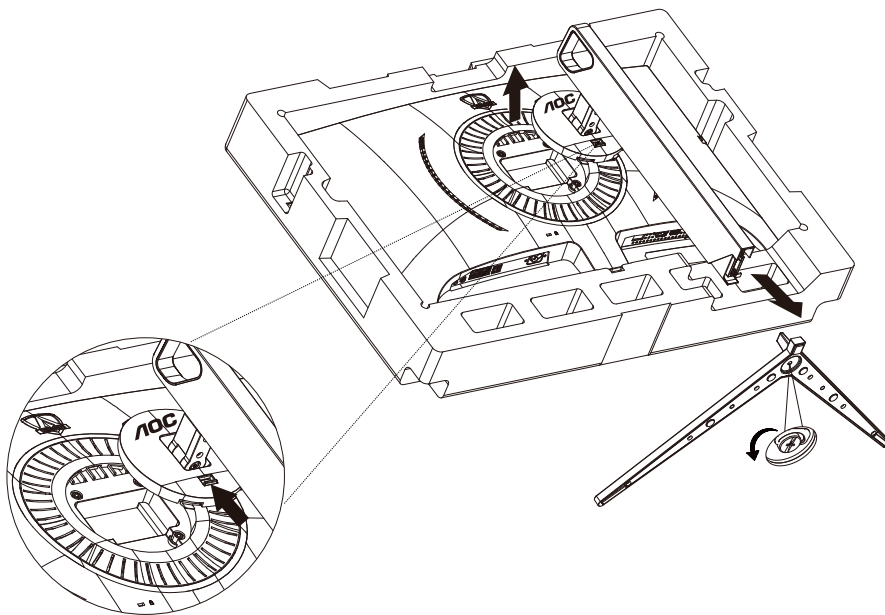
Setup Stand & Base

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

Setup:



Remove:



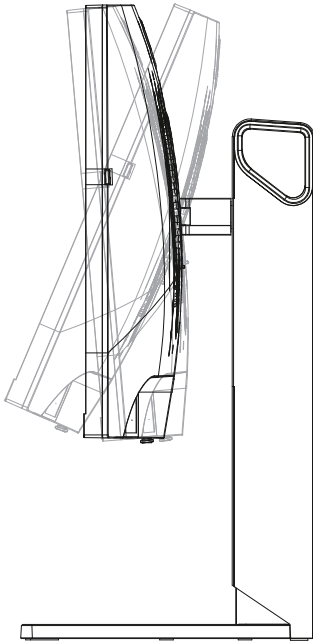
Adjusting Viewing Angle

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

Hold the stand so you will not topple the monitor when you change the monitor's angle.

You are able to adjust the monitor as below:

-5° 23°

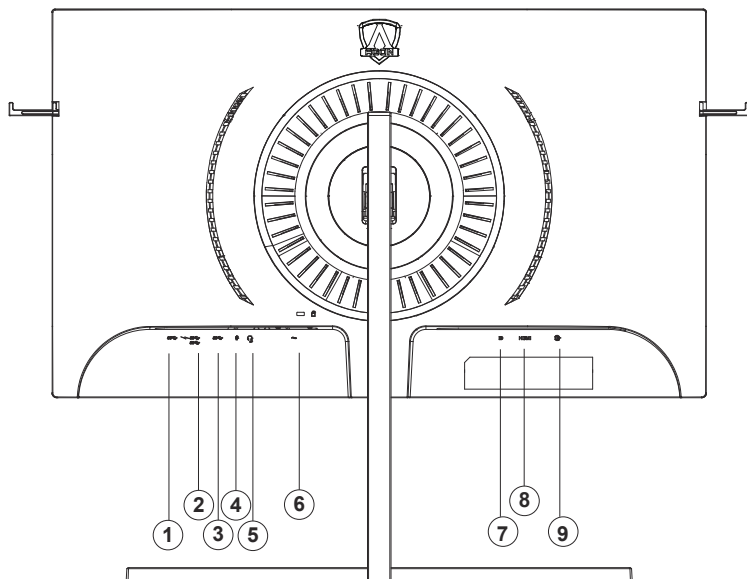


NOTE:

Do not adjust the viewing angle over 23 degrees in order to avoid damage.

Connecting the Monitor

Cable Connections In Back of Monitor and Computer:



1. USB-PC (USB upstream)
2. USB 3.2 Gen 1(fast charging) x 1,USB 3.2 Gen 1 x 1
3. USB 3.2 Gen 1 x 2
4. Microphone in
5. Earphone (Combined with Microphone)
6. AC in
7. DP
8. HDMI
9. Microphone out (Connect to PC)

Connect to PC

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

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

To protect equipment, always turn off the PC and LCD monitor before connecting.

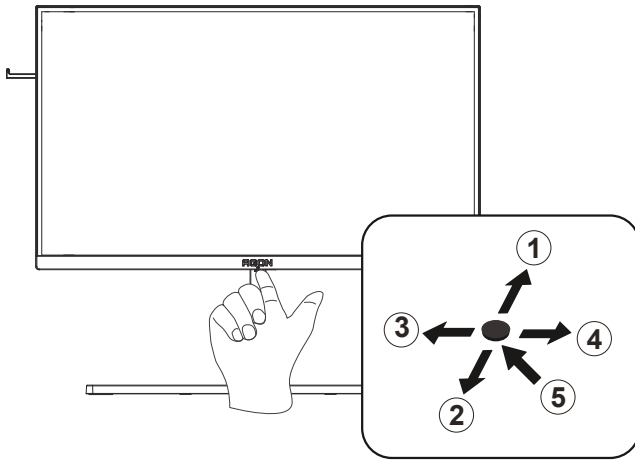
G-SYNC function

Compatible Graphics Card: GeForce GTX 650 Ti Boost or higher (for a list of compatible graphics cards, please visit www.nvidia.com/G-SYNC)

Driver: GeForce 331.58 or higher OS: Windows 7/8/8.1/10

Adjusting

Hotkeys



| | |
|---|-------------------|
| 1 | Source/Up |
| 2 | Dial Point/Down |
| 3 | Game Mode/Left |
| 4 | Light FX /Right |
| 5 | Power/ Menu/Enter |

Power/Menu/Enter

Press the Power button to turn on the monitor.

When there is no OSD, Press to display the OSD or confirm the selection. Press about 2 seconds to turn off the monitor.

Dial Point/Down

When there is no OSD, press Dial Point button to show / hide Dial Point.

Game Mode/Left

When there is no OSD, press "Left" key to open game mode function, then press "Left" or "Right" key to select game mode (FPS, RTS, Racing, Gamer 1, Gamer 2 or Gamer 3) basing on the different game types.

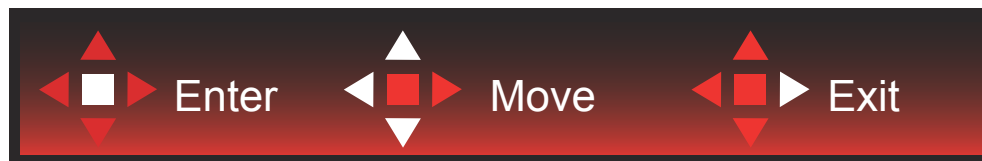
Light FX/Right

When there is no OSD, press "Right" key to active Light FX function.

Source/Up

When the OSD is closed, press Source/Up button will be Source hot key function.

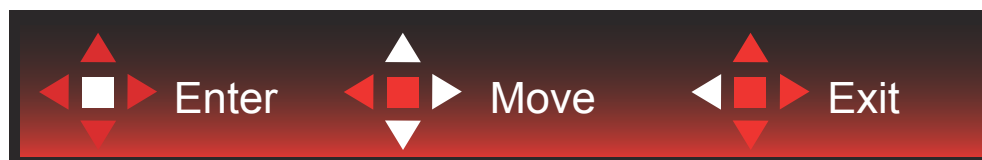
OSD Key Guide (Menu)



Enter : Use Enter key to enter the next OSD level

Move : Use Left / Up / Down key to move OSD selection

Exit : Use Right key to exit OSD



Enter : Use Enter key to enter the next OSD level

Move : Use Right / Up / Down key to move OSD selection

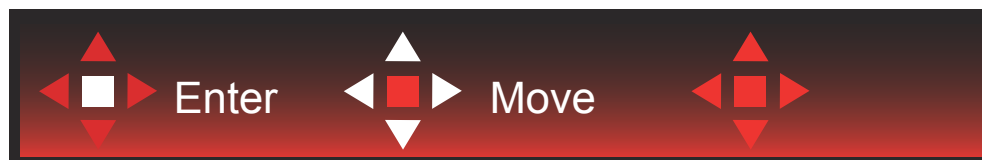
Exit : Use Left key to exit OSD



Enter : Use Enter key to enter the next OSD level

Move : Use Up / Down key to move OSD selection

Exit : Use Left key to exit OSD



Move : Use Left / Right / Up / Down Key to move OSD selection



Exit : Use Left key to exit OSD to previous OSD level

Enter : Use Right key to enter next OSD level

Select : Use Up / Down key to move OSD selection



Enter : Use Enter key to apply the OSD setting and back to previous OSD level

Select : Use Down key to adjust OSD setting



Select : Use Up / Down key to adjust OSD setting

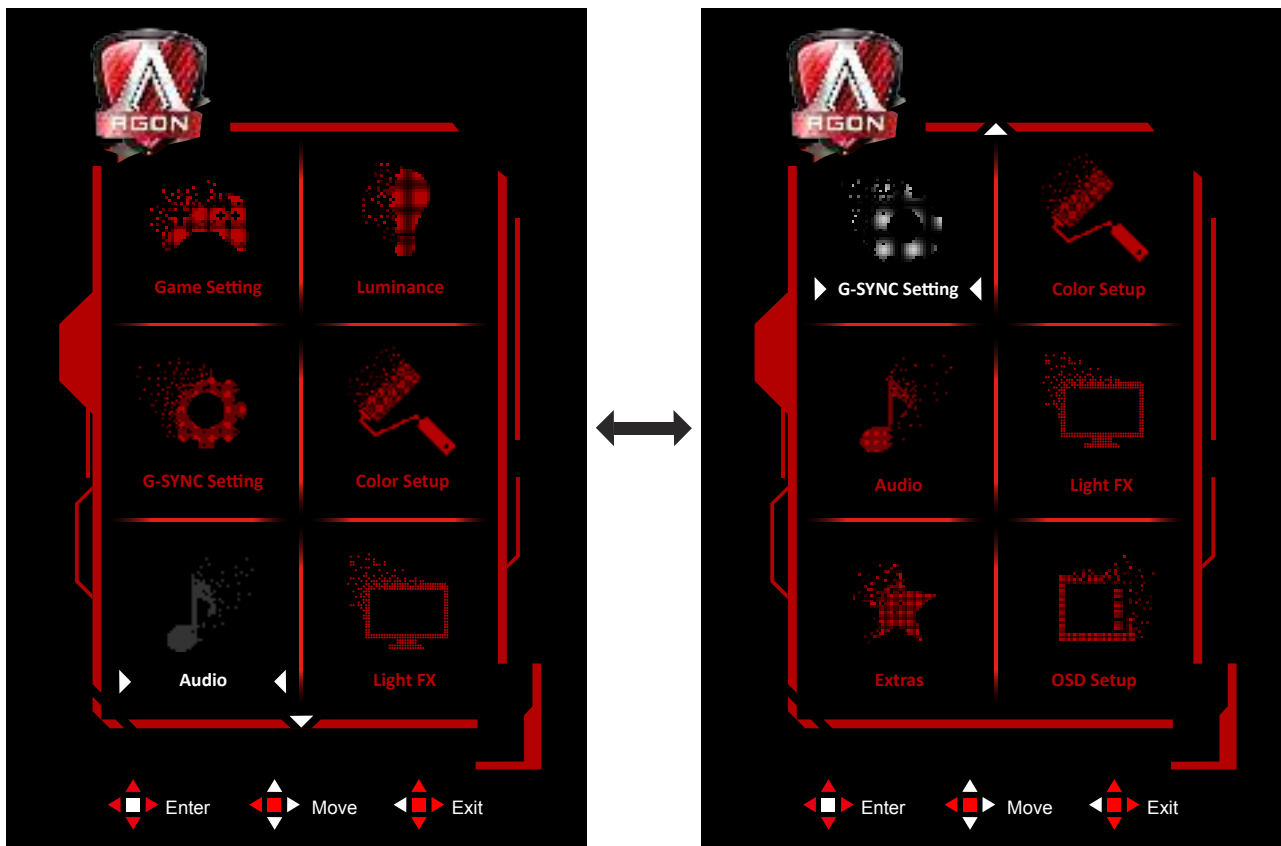


Enter : Use Enter key to exit OSD to previous OSD level

Select : Use Left / Right key to adjust OSD setting

OSD Setting

Basic and simple instruction on the control keys.



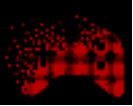
- 1). Press the MENU-button to activate the OSD window.
- 2). Follow Key Guide to move or select (adjust) OSD settings
- 3). OSD Lock/Unlock Function: To lock or unlock the OSD, press and hold the Down-button for 10s while OSD function is not active.

Notes:

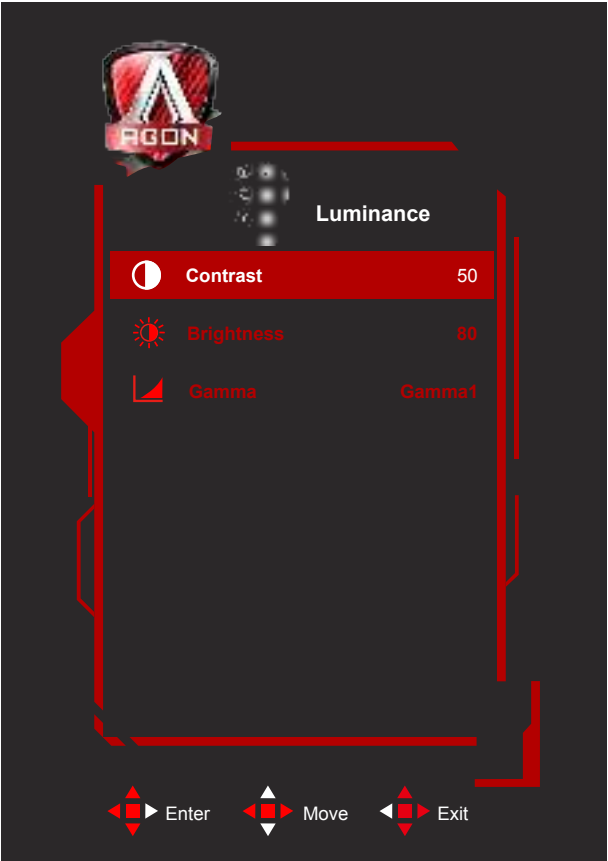
If the product has only one signal input, the item of "Input Select" is disable to adjust.

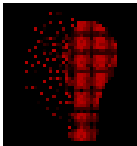
Game Setting



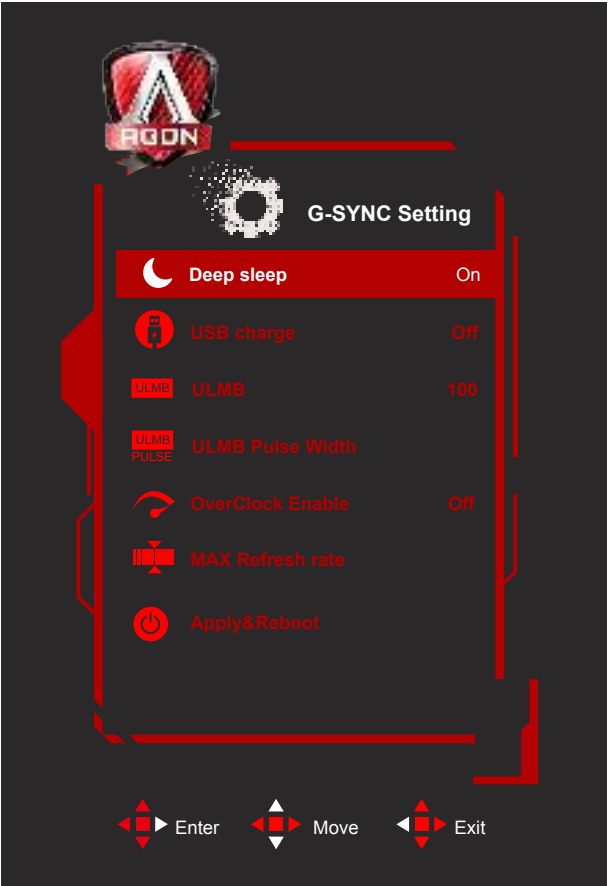
| | | | |
|---|----------------|---|---|
|  | Game Mode | FPS | For playing FPS (first Person Shooters) games. Improves dark theme black level details. |
| | | RTS | For playing RTS (Real Time Strategy). Improves the image quality. |
| | | Racing | For playing Racing games, Provides fastest response time and high color saturation. |
| | | Gamer 1 | User's preference settings saved as Gamer 1. |
| | | Gamer 2 | User's preference settings saved as Gamer 2. |
| | | Gamer 3 | User's preference settings saved as Gamer 3. |
| | | off | No optimization by Smart image game |
| | Shadow Control | 0-3 | Shadow Control Default is 0, then end-user can adjust from 0 to 3 or 0 to increase contrast for clear picture. 1. If picture is too dark to be saw the detail clearly, adjusting from 0 to 3 for clear picture.. 2. If picture is too white to be saw the detail clearly, adjusting from 3 to 0 for clear picture |
| | Game Color | 0-200 | Game Color will provide 0-200 level for adjusting saturation to get better picture. |
| | Dial Point | On/off | The "Dial Point" function places an aiming indicator in the center of screen for helping gamers to play First Person Shooter (FPS) games with an accurate and precise aiming. |
| | Overdrive | Weak/Medium/Strong/Off | Adjust the response time. |
| | Frame Counter | Off/Right-Up/Right-Down/Left-Down/Left-Up | Display V frequency on the corner selected (Frame counter feature only works with NVidia graphic card.) |


Luminance



| | | | |
|---|------------|-------------------|---------------------------------|
|  | Contrast | 0-100 | Contrast from Digital-register. |
| | Brightness | 0-100 | Backlight Adjustment |
| | Gamma | Gamma1 | Adjust to Gamma 1 |
| | | Gamma2 | Adjust to Gamma 2 |
| | Gamma3 | Adjust to Gamma 3 | |

G-SYNC Setting



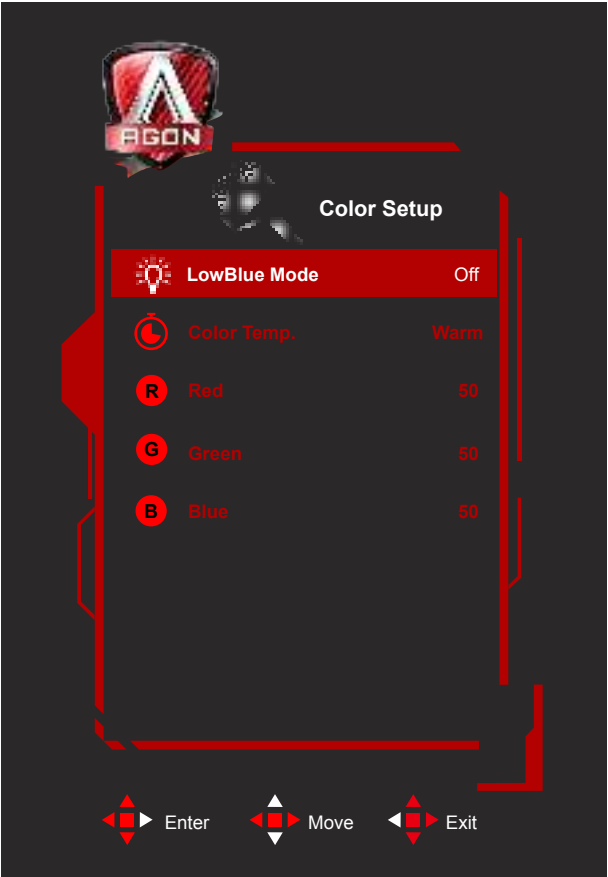
| | | | |
|---|------------------|--------|--|
|  | Deep sleep | on/off | Set the “allow deep sleep mode” to ON or OFF. The deep sleep mode will turn the FPGA completely off after a certain amount of time when either the user presses the monitor DC power off button or the PC puts the monitor to sleep. |
| | USB Charge | on/off | USB charge On/Off |
| | ULMB | on/off | Return ULMB capability for the timing associated with the timing index. |
| | ULMB Pulse Width | 10-100 | ULMB PWM setting |
| | OverClock Enable | | panel supports overclocking. |


Note:

With Nvidia® Ultra Low Motion Blur(ULMB) technology, objects in motion look sharper than they do during standard operation -even at high refresh rates such as 85hz, 100hz, 120hz.

Warning: If any display error or crash occurs during overclocking, remove and connect the DP cable or power cord to restart the display.


Color Setup



| | | | | |
|---|--------------|--|-------|--|
|  | LowBlue Mode | Off/Multimedia/ Internet/Office/ Reading | | Decrease blue light wave by controlling color temperature. |
| | Color Temp. | Warm | | Recall Warm Color Temperature from EEPROM. |
| | | Normal | | Recall Normal Color Temperature from EEPROM. |
| | | Cool | | Recall Cool Color Temperature from EEPROM. |
| | | sRGB | | Recall SRGB Color Temperature from EEPROM. |
| | | User | Red | Red Gain from Digital-register |
| | | | Green | Green Gain Digital-register. |
| | | | Blue | Blue Gain from Digital-register |


Audio



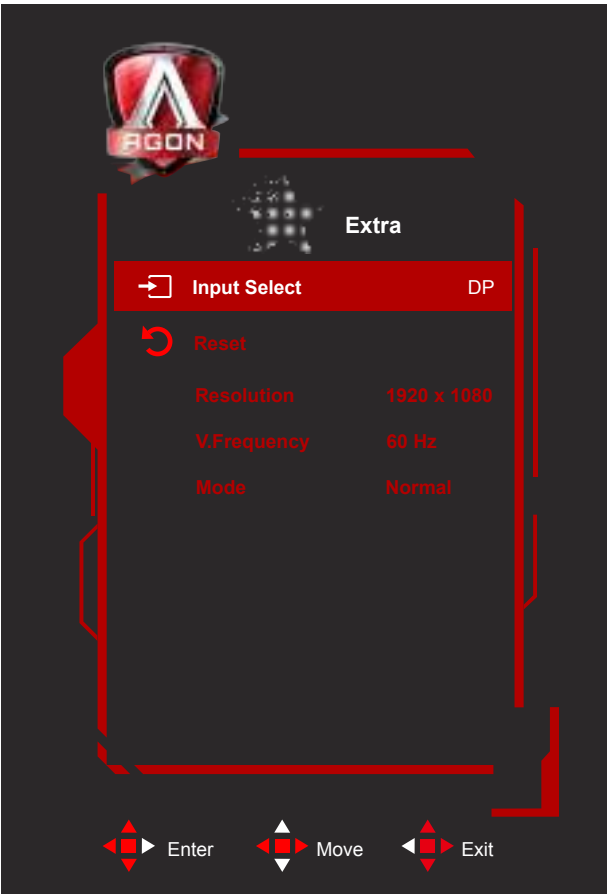
| | | | |
|---|-----------|---------|-----------------------|
|  | Volume | 0-100 | Adjust volume setting |
| | DTS Sound | on /off | DTS On/Off |

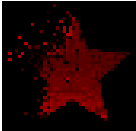
Light FX



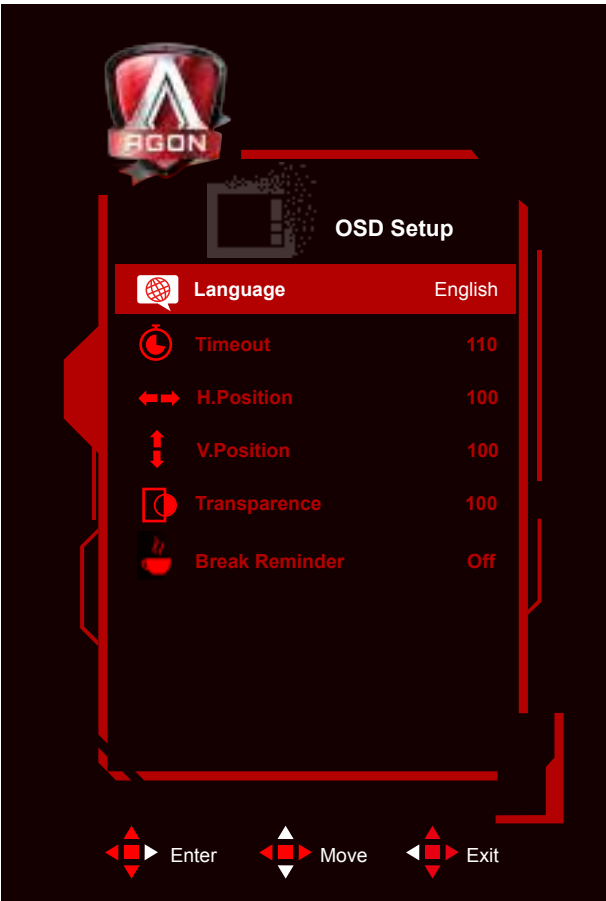
| | | | |
|---|---------------|---|--|
|  | Light FX | Off/Low/Medium/Strong | Light FX On/Off |
| | Light FX Mode | Static/Simple Shift/Gradient Shift/Simple Filling/1 Way Filling/2 Way Filling/Breathing/Motion Point/Zoom/Discolor/Water Wave/Flashing/Demo | Select Light FX Mode |
| | Pattern | Red/Green/Blue/Rainbow/User Define | Select Light FX Pattern |
| | Foreground R | 0-100 | User can adjust Light FX foreground color, when Pattern setting to user define |
| | Foreground G | | |
| | Foreground B | | |
| | Background R | 0-100 | User can adjust Light FX background color, when Pattern setting to user define |
| | Background G | | |
| | Background B | | |

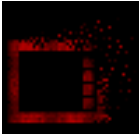
Extra



| | | | |
|---|--------------|---------|----------------------------|
|  | Input Select | HDMI/DP | Select Input Signal Source |
| | Reset | | Reset the menu to default |

OSD Setup



| | | | |
|---|----------------|---------|---|
|  | Language | | Select the OSD language |
| | Timeout | 10-120 | Adjust the OSD Timeout |
| | H. Position | 0-100 | Adjust the horizontal position of OSD |
| | V. Position | 0-100 | Adjust the vertical position of OSD |
| | Transparence | 0-100 | Adjust the transparence of OSD |
| | Break Reminder | on /off | Break reminder if the user continuously work for more than 1hrs |

LED Indicator

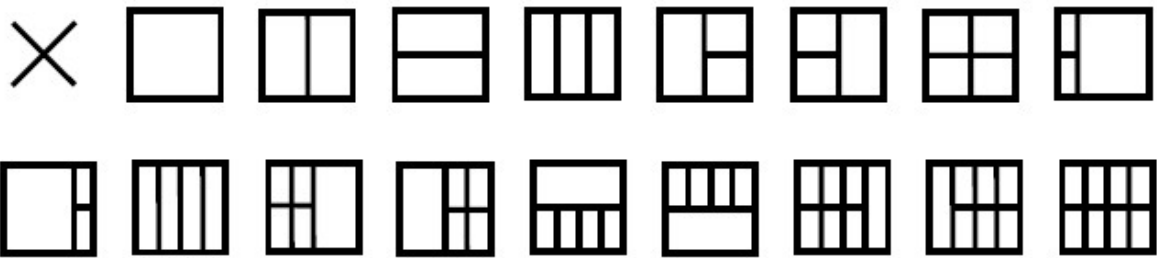
| Status | LED Color |
|-----------------|-----------|
| Full Power Mode | Red |
| Active-off Mode | Orange |

Driver

Screen+



Welcome to "Screen+" software by AOC. Screen+ software is a desktop screen splitting tool, it splits the desktop into different panels, and each panel displays a different window. You only need to drag the window to a corresponding panel when you want to access it. It supports multiple monitor display to make your task easier. Please follow the installation software to install it. The software Supported operating systems: Windows 10, Windows 8, Windows 7.



Troubleshoot

| Problem & Question | Possible Solutions |
|---|--|
| Power LED Is Not ON | Make sure the power button is ON and the Power Cord is properly connected to a grounded power outlet and to the monitor. |
| No images on the screen | <ul style="list-style-type: none"> Is the power cord connected properly? Check the power cord connection and power supply. Is the cable connected correctly? (Connected using the HDMI cable) Check the HDMI cable connection. (Connected using the DP cable) Check the DP cable connection. *HDMI/DP input is not available on every model. If the power is on, reboot the computer to see the initial screen (the login screen), which can be seen. If the initial screen (the login screen) appears, boot the computer in the applicable mode (the safe mode for Windows 7/8/10) and then change the frequency of the video card. (Refer to the Setting the Optimal Resolution) If the initial screen (the login screen) does not appear, contact the Service Center or your dealer. Can you see "Input Not Supported" on the screen? You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can handle properly. Adjust the maximum resolution and frequency that the monitor can handle properly. Make sure the AOC Monitor Drivers are installed. |
| Picture Is Fuzzy & Has Ghosting Shadowing Problem | Adjust the Contrast and Brightness Controls. Press to auto adjust. Make sure you are not using an extension cable or switch box. We recommend plugging the monitor directly to the video card output connector on the back. |
| Picture Bounces, Flickers Or Wave Pattern Appears In The Picture | Move electrical devices that may cause electrical interference as far away from the monitor as possible. Use the maximum refresh rate your monitor is capable of at the resolution you are using. |
| Monitor Is Stuck In Active Off-Mode" | The Computer Power Switch should be in the ON position. The Computer Video Card should be snugly fitted in its slot. Make sure the monitor's video cable is properly connected to the computer. Inspect the monitor's video cable and make sure no pin is bent. Make sure your computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn ON or OFF after hitting the CAPS LOCK key. |
| Missing one of the primary colors (RED, GREEN, or BLUE) | Inspect the monitor's video cable and make sure that no pin is damaged. Make sure the monitor's video cable is properly connected to the computer. |
| Picture has color defects (white does not look white) | Adjust RGB color or select desired color temperature. |
| Horizontal or vertical disturbances on the screen | Use Windows 7/8/10 shut-down mode to adjust CLOCK and FOCUS. Press to auto-adjust. |
| Regulation & Service | Please refer to Regulation & Service Information which is in the CD manual or www.aoc.com (to find the model you purchase in your country and to find Regulation & Service Information in Support page. |

Specification

General Specification

| | | | |
|--------------------------|-------------------------------|---|----------------------------|
| Panel | Model name | AG273QG | |
| | Driving system | TFT Color LCD | |
| | Viewable Image Size | 68.5 cm diagonal | |
| | Pixel pitch | 0.2331mm(H) x 0.2331mm(V) | |
| | Display Color | 16.7M Colors | |
| Others | Horizontal scan range | 30k~140kHz(HDMI) 1k~240kHz(DP) | |
| | Horizontal scan Size(Maximum) | 596.74mm | |
| | Vertical scan range | 24~60Hz(HDMI) 1~165Hz(DP) | |
| | Vertical Scan Size(Maximum) | 335.66mm | |
| | Optimal preset resolution | 2560x1440@60Hz | |
| | Max resolution | 2560x1440@60Hz(HDMI) 2560x1440@165Hz(DP) | |
| | Plug & Play | VESA DDC2B/CI | |
| | Power Source | 100~240V, 1.5A, 50/60Hz | |
| | Power Consumption | Typical(Brightness = 90, Contrast = 50) | 60W |
| | | Max. (brightness = 100, contrast = 100) | ≤110W |
| | | Power saving | ≤0.5W |
| Physical Characteristics | Connector Type | HDMI/DP/USB/Earphone out | |
| | Signal Cable Type | Detachable | |
| Environmental | Temperature | Operating | 0° ~ 40° |
| | | Non-Operating | -25° ~ 55° |
| | Humidity | Operating | 10% ~ 85% (non-condensing) |
| | | Non-Operating | 5% ~ 93% (non-condensing) |
| | Altitude | Operating | 0~ 5000 m (0~ 16404ft) |
| | | Non-Operating | 0~ 12192m (0~ 40000ft) |

Preset Display Modes

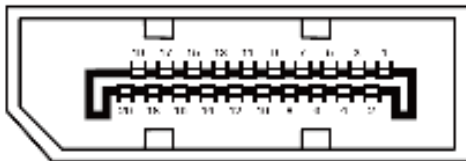
| STANDARD | RESOLUTION | HORIZONTAL FREQUENCY(kHz) | VERTICAL FREQUENCY(Hz) | |
|----------|--|------------------------------|---------------------------|---------|
| VGA | 640×480 @60Hz | 31.469 | 59.940 | HDMI/DP |
| EDTV | 576P @50Hz | 31.250 | 50.000 | HDMI |
| EDTV | 720x480 @60Hz | 31.469 | 59.940 | HDMI |
| SVGA | 800×600 @60Hz DMT | 37.879 | 60.317 | HDMI/DP |
| XGA | 1024×768 @60Hz DMT | 48.363 | 60.004 | HDMI/DP |
| HDTV | 720P @50Hz (1280x720) VIC 19,68 | 37.500 | 50.000 | HDMI |
| HDTV | 720P @60Hz (1280x720) VIC4,69 | 44.955 | 59.940 | HDMI |
| FHD | 1080P @50Hz for Digital only VIC 31,75 | 56.250 | 50.000 | HDMI |
| FHD | 1920×1080@60Hz CVT16:9 R VIC 16,76 | 67.500 | 60.000 | HDMI |
| QHD | 2560×1440 @60Hz CVT16:9 R | 88.787 | 59.951 | HDMI/DP |
| QHD | 2560x1440 @85Hz NVIDIA G-Sync | 127.390 | 84.983 | DP |
| QHD | 2560x1440 @100Hz NVIDIA G-Sync | 150.919 | 99.946 | DP |
| QHD | 2560x1440 @120Hz NVIDIA G-Sync | 182.996 | 119.998 | DP |
| QHD | 2560x1440 @144Hz NVIDIA G-Sync | 222.189 | 143.998 | DP |
| QHD | 2560x1440 @165Hz NVIDIA G-Sync | 240.735 | 165.000 | DP |

Pin Assignments



19-Pin Color Display Signal Cable

| Pin No. | Signal Name | Pin No. | Signal Name | Pin No. | Signal Name |
|---------|--------------------|---------|---------------------------|---------|-----------------|
| 1. | TMDS Data 2+ | 9. | TMDS Data 0- | 17. | DDC/CEC Ground |
| 2. | TMDS Data 2 Shield | 10. | TMDS Clock + | 18. | +5V Power |
| 3. | TMDS Data 2- | 11. | TMDS Clock Shield | 19. | Hot Plug Detect |
| 4. | TMDS Data 1+ | 12. | TMDS Clock- | | |
| 5. | TMDS Data 1Shield | 13. | CEC | | |
| 6. | TMDS Data 1- | 14. | Reserved (N.C. on device) | | |
| 7. | TMDS Data 0+ | 15. | SCL | | |
| 8. | TMDS Data 0 Shield | 16. | SDA | | |



20-Pin Color Display Signal Cable

| Pin No. | Signal Name | Pin No. | Signal Name |
|---------|---------------|---------|-----------------|
| 1 | ML_Lane 3 (n) | 11 | GND |
| 2 | GND | 12 | ML_Lane 0 (p) |
| 3 | ML_Lane 3 (p) | 13 | CONFIG1 |
| 4 | ML_Lane 2 (n) | 14 | CONFIG2 |
| 5 | GND | 15 | AUX_CH(p) |
| 6 | ML_Lane 2 (p) | 16 | GND |
| 7 | ML_Lane 1 (n) | 17 | AUX_CH(n) |
| 8 | GND | 18 | Hot Plug Detect |
| 9 | ML_Lane 1 (p) | 19 | Return DP_PWR |
| 10 | ML_Lane 0 (n) | 20 | DP_PWR |

Plug and Play

Plug & Play DDC2B Feature

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities.

The DDC2B is a bi-directional data channel based on the I2C protocol. The host can request EDID information over the DDC2B channel.



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