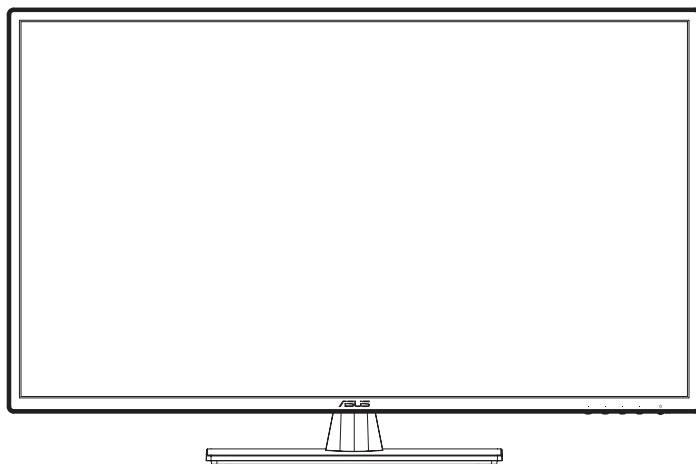




VA329HE

LCD Monitor

User Guide



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Notices

Federal Communications Commission Statement

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

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

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 instructions, 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 following measures:

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



The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

ENERGY STAR complied product



Energy STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

All ASUS products with the ENERGY STAR logo comply with the ENERGY STAR standard, and the power management feature is enabled by default. The monitor and computer are automatically set to sleep after 10 and 30 minutes of user inactivity. To wake your computer, click the mouse or press any key on the keyboard. Please visit <http://www.energystar.gov/powermanagement> for detail information on power management and its benefits to the environment. In addition, please visit <http://www.energystar.gov> for detail information on the ENERGY STAR joint program.



NOTE: Energy Star is NOT supported on FreeDOS and Linux-based operating system.

Canadian Department of Communications Statement

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

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

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

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

Safety information

- Before setting up the monitor, carefully read all the documentation that came with the package.
- To prevent fire or shock hazard, never expose the monitor to rain or moisture.
- Never try to open the monitor cabinet. The dangerous high voltages inside the monitor may result in serious physical injury.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.
- Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- Slots and openings on the back or top of the cabinet are provided for ventilation. Do not block these slots. Never place this product near or over a radiator or heat source unless proper ventilation is provided.
- 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 supply to your home, consult your dealer or local power company.
- Use the appropriate power plug which complies with your local power standard.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Avoid dust, humidity, and temperature extremes. Do not place the monitor in any area where it may become wet. Place the monitor on a stable surface.
- Unplug the unit during a lightning storm or if it will not be used for a long period of time. This will protect the monitor from damage due to power surges.
- Never push objects or spill liquid of any kind into the slots on the monitor cabinet.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC.
- If you encounter technical problems with the monitor, contact a qualified service technician or your retailer.
- Adjustment of the volume control as well as the equalizer to other settings than the center position may increase the ear-/headphones output voltage and therefore the sound pressure level.



This symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment, and mercury-containing button cell battery) should not be placed in municipal waste. Please check local regulations for disposal of electronic products.

AEEE Yönetmeliğine Uygundur

Care & Cleaning

- Before you lift or reposition your monitor, it is better to disconnect the cables and power cord. Follow the correct lifting techniques when positioning the monitor. When lifting or carrying the monitor, grasp the edges of the monitor. Do not lift the display by the stand or the cord.
- Cleaning. Turn your monitor off and unplug the power cord. Clean the monitor surface with a lint-free, non-abrasive cloth. Stubborn stains may be removed with a cloth dampened with mild cleaner.
- Avoid using a cleaner containing alcohol or acetone. Use a cleaner intended for use with the LCD. Never spray cleaner directly on the screen, as it may drip inside the monitor and cause an electric shock.

The following symptoms are normal with the monitor:

- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- When the same image is displayed for hours, an afterimage of the previous screen may remain after switching the image. The screen will recover slowly or you can turn off the Power Switch for hours.
- When the screen becomes black or flashes, or cannot work anymore, contact your dealer or service center to fix it. Do not repair the screen by yourself!

Conventions used in this guide



WARNING: Information to prevent injury to yourself when trying to complete a task.



CAUTION: Information to prevent damage to the components when trying to complete a task.



IMPORTANT: Information that you **MUST** follow to complete a task.



NOTE: Tips and additional information to aid in completing a task.

Where to find more information

Refer to the following sources for additional information and for product and software updates.

1. **ASUS websites**

The ASUS websites worldwide provide updated information on ASUS hardware and software products. Refer to **<http://www.asus.com>**

2. **Optional documentation**

Your product package may include optional documentation that may have been added by your dealer. These documents are not part of the standard package.

Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for our customers to be able to responsibly recycle our products, batteries and other components as well as the packaging materials.

Please go to <http://csr.asus.com/english/Takeback.htm> for detail recycling information in different region.

1.1 Welcome!

Thank you for purchasing the ASUS® LCD monitor!

The latest widescreen LCD monitor from ASUS provides a broader, brighter and crystal-clear display, plus a host of features that enhance your viewing experience.

With these features, you can enjoy the convenience and delightful visual experience that the monitor brings to you!

1.2 Package contents

Check your package for the following items:

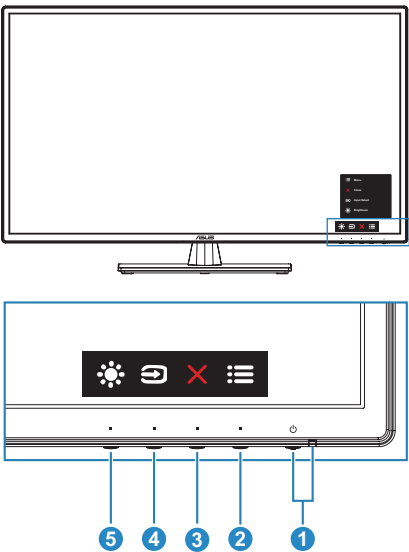
- ✓ LCD Monitor
- ✓ Monitor Base
- ✓ Quick Start Guide
- ✓ Warranty Card
- ✓ 1x Power Cord
- ✓ 1x VGA Cable (option)
- ✓ 1x HDMI Cable (option)



-
- If any of the above items is damaged or missing, contact your retailer immediately.
-

1.3 Monitor introduction

1.3.1 Front view



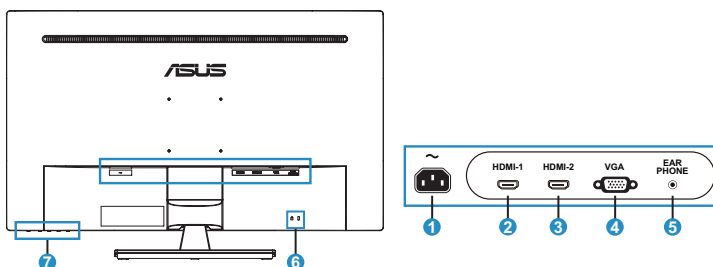
- 1. Power button/power indicator
 - Turns the monitor on/off.
 - The color definition of the power indicator is as the below table.

Status	Description
White	On
Amber	Standby mode
Off	Off

- 2. Menu button:
 - Press this button to display the OSD menu when the OSD is off.
 - Enters the OSD menu.
 - Toggles the Key Lock function between on and off with a long press for 5 seconds.
- 3. Exit button:
 - Press this button to display the OSD menu when the OSD is off.
 - Exits the OSD menu.
- 4. Shortcut 1
 - Press this button to display the OSD menu when the OSD is off.
 - Default: Input Select hotkey.

- To change the hotkey function, go to the Shortcut > Shortcut 1 menu.
5.  **Shortcut 2**
- Press this button to display the OSD menu when the OSD is off.
 - Default: Brightness hotkey.
 - To change the hotkey function, go to the Shortcut > Shortcut 2 menu.

1.3.2 Back view

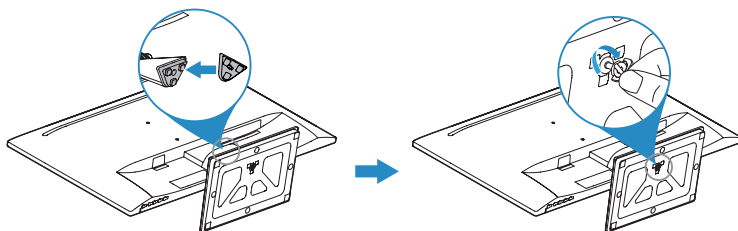


1. **AC-IN port.** This port connects the power cord.
2. **HDMI-1 port.** This port is for connection with an HDMI-1 compatible device.
3. **HDMI-2 port.** This port is for connection with an HDMI-2 compatible device.
4. **VGA port.** This 15-pin port is for PC VGA connection.
5. **Earphone jack.** This port is only available when an HDMI/DP cable is connected.
6. **Kensington lock slot.**
7. **Control buttons.**

2.1 Assembling the monitor base

To assemble the monitor base:

1. Have the front of the monitor face down on a table.
2. Attach the base into the arm, making sure the tab on the arm fits into the groove on the base.
3. Fix the base to the arm by rotating the screw until it fits into place.



- We recommend that you cover the table surface with soft cloth to prevent damage to the monitor.
- When assembling the base, be sure to tighten the screw to prevent the monitor from shaking.

2.2 Detaching the arm/base (for VESA wall mount)

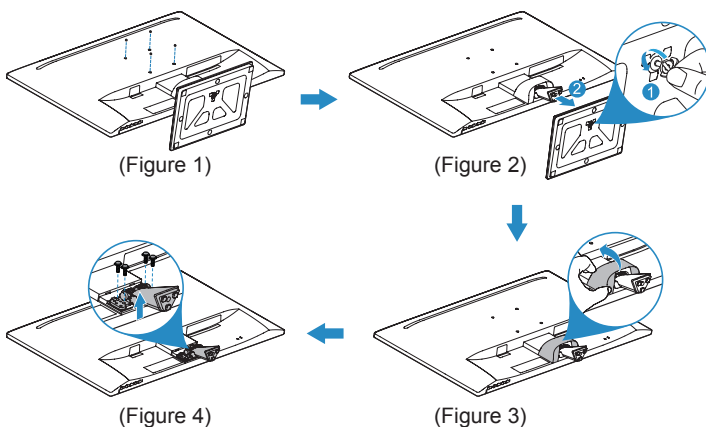
The detachable arm/base of this monitor is specially designed for VESA wall mount.

To detach the arm/base:

1. Have the front of the monitor face down on a table.
2. Remove the rubbers in the four screw holes. (Figure 1)
3. Remove the base (Figure 2).
4. Remove the hinge cover (Figure 3).
5. Use a screwdriver to remove the screw(s) on the hinge (Figure 4), then remove the hinge.



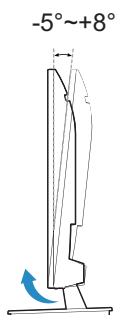
- We recommend that you cover the table surface with soft cloth to prevent damage to the monitor.



- The VESA wall mount kit (100 x 100 mm) is purchased separately.
- Use only the UL Listed Wall Mount Bracket with minimum weight/load 22.7 kg (Screw size: M4 x 10 mm).

2.3 Adjusting the monitor

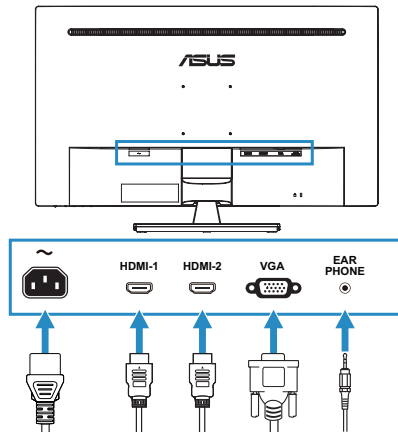
- For optimal viewing, we recommend that you look at the full face of the monitor, then adjust the monitor to the angle that is most comfortable for you.
- Hold the stand to prevent the monitor from falling when you change its angle.
- You can adjust the monitor's angle from $+8^{\circ}$ to -5° .



It is normal that the monitor slightly shakes while you adjust the viewing angle.

2.4 Connecting the cables

Connect the cables as the following instructions:



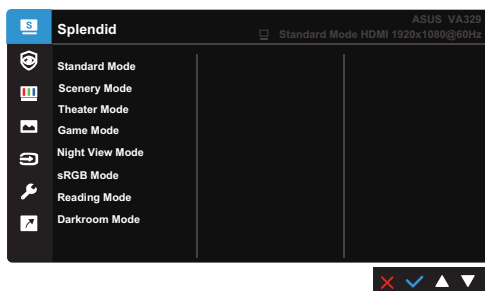
- **To connect the power cord:** Connect one end of the power cord securely to the monitor's AC input port, the other end to a power outlet.
- **To connect the VGA/HDMI cable:**
 1. Press this button to display the OSD menu when the OSD is off.
 2. Enters the OSD menu.
 3. Toggles the Key Lock function between on and off with a long press for 5 seconds.
- **To use the earphone:** connect the end with plug type to the monitor's earphone jack when an HDMI signal is fed.

2.5 Turning on the monitor

Press the power button . See page 1-2 for the location of the power button. The power indicator  lights up in white to show that the monitor is ON.

3.1 OSD (On-Screen Display) menu

3.1.1 How to reconfigure

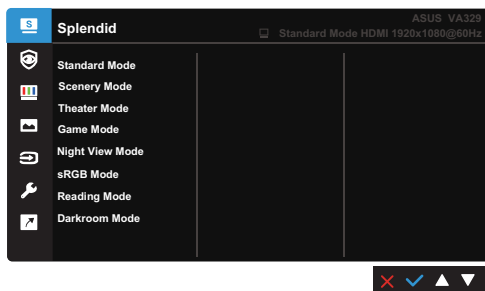


1. Press any button (except the Power button) to display the OSD menu.
2. Press the  Menu button to activate the OSD menu.
3. Press the buttons as indicated on the screen to navigate through the functions. Highlight the desired function and press  to activate it. If the function selected has a sub-menu, press  and  again to navigate through the sub-menu functions. Highlight the desired sub-menu function and press  to activate it.
4. Press  and  to change the settings of the selected function.
5. To exit and save the OSD menu, press  or  repeatedly until the OSD menu disappears. To adjust other functions, repeat steps 1-4.

3.1.2 OSD Function Introduction

1. Splendid

This function contains 8 sub-functions you can select for your preference. Each mode has the Reset selection, allowing you to maintain your setting or return to the preset mode.



- **Standard Mode:** Best choice for document editing with Splendid Video Enhancement.



Standard Mode meets Energy Star® requirements.

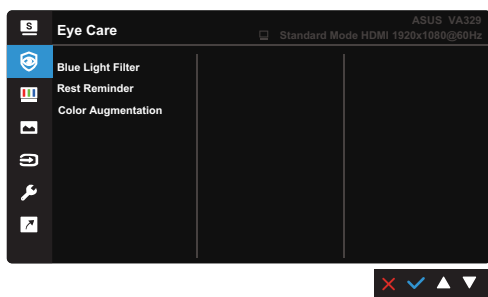
- **Scenery Mode:** Best choice for scenery photo display with Splendid Video Enhancement.
- **Theater Mode:** Best choice for movies with Splendid Video Enhancement.
- **Game Mode:** Best choice for game playing with Splendid Video Enhancement.
- **Night View Mode:** Best choice for dark-scene games or movies with Splendid Video Enhancement.
- **sRGB Mode:** Best choice for viewing photos and graphics from PCs.
- **Reading Mode:** This is the best choice for book reading.
- **Darkroom Mode:** This is the best choice for a weak ambient light environment.



-
- In the Standard mode, the following function(s) are not user-configurable: Saturation, Skin Tone, Sharpness, ASCR.
 - In the sRGB mode, the following function(s) are not user-configurable: Brightness, Contrast, Saturation, Color Temp., Skin Tone, Sharpness, ASCR.
 - In the Reading mode, the following function(s) are not user-configurable: Contrast, Saturation, Color Temp., Skin Tone, Sharpness, ASCR.
-

2. Eye Care

In this function, you can adjust settings to better protect your eyes.



- **Blue Light Filter:** In this function, you can adjust the blue light filter from 0 to Max.
- * 0: No change.

- * Max: The higher the level, the less blue light is scattered. When blue light filter is activated, the default settings of Standard Mode will be automatically imported. Besides maximum level, the brightness is user-configurable. Maximum is the optimized setting. It is compliance with TUV low blue light certification*. The brightness function is not user configurable.



*When color augmentation is in default value (50).



Please refer to the following to alleviate eye strains:

- Users should take some time away from the display if working for long hours. It is advised to take short breaks (at least 5 mins) after around 1 hour of continuous working at the computer. Taking short and frequent breaks is more effective than a single longer break.
 - To minimize eye strain and dryness in your eyes, users should rest the eye periodically by focusing on objects that are far away.
 - Eye exercises can help to reduce eye strain. Repeat these exercises often. If eye strain continues please consult a physician. Eye exercises: (1) Repeating look up and down (2) Slowly roll your eyes (3) Move your eyes diagonal.
 - High energy blue light may lead to eye strain and AMD (Age-Related Macular Degeneration). Blue light filter to reduce 70% (max.) harmful blue light to avoid CVS (Computer Vision Syndrome) when the user adjusts blue light filter bar to maximum level.
-
- **Rest Reminder:** This function provides you a rest reminder according to how long you set for your working time. For example, if you set a 30-minute working time and there will be a pop up reminder appeared on the upper left corner of the monitor for 5 seconds when time is up. Press any key to make this reminder OSD disappear.



When this function is enabled, the following functions are not available: Splendid Demo Mode, GamePlus, QuickFit.

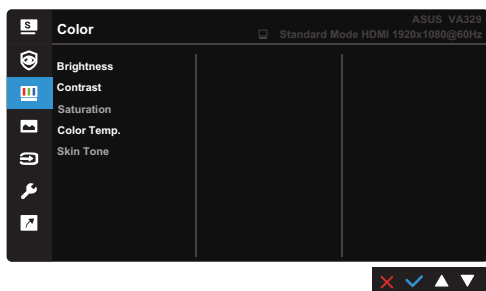
- **Color Augmentation:** The adjusting range of color enhancement is from 0 to 100.



-
- This function is not available when sRGB Mode is selected in the Splendid menu.
 - This function is not available when Reddish or Yellowish is selected in the Skin Tone menu.
-

3. Color

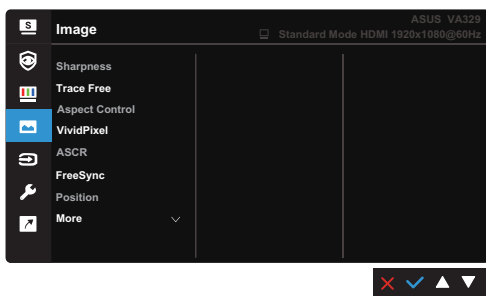
Set a desired color setting from this menu.



- **Brightness:** The adjusting range is from 0 to 100.
- **Contrast:** The adjusting range is from 0 to 100.
- **Saturation:** The adjusting range is from 0 to 100.
- **Color Temp.:** Contains 4 modes including Cool, Normal, Warm and User Mode.
- **Skin Tone:** Contains three color modes including Reddish, Natural, and Yellowish.

4. Image

Set the image related setting from this menu.



- **Sharpness:** The adjusting range is from 0 to 100.
- **Trace Free:** Adjusts the response time of the monitor.
- **Aspect Control:** Adjusts the aspect ratio to full, 4:3, or OverScan



4:3 is only available when input source is in 4:3 format. OverScan is only available for the HDMI input source.

- **VividPixel:** Enhances the outline of the displayed picture and generates high-quality images on screen.

- **ASCR:** Turns on/off the ASCR (ASUS Smart Contrast Ratio) function.
- **FreeSync:** Allows an AMD 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 (Only available for HDMI input).



- FreeSync (HDMI only) can only be activated within 48Hz ~ 75Hz.
- For supported GPUs, minimum PC system and driver requirements, please contact the GPU manufactures.

- **Position:** Adjusts the horizontal position (H-Position) and the vertical position (V-Position) of the image. The adjusting range is from 0 to 100 (Only available for VGA input).
- **Focus:** Reduces Horizontal-line noise and Vertical-line noise of the image by adjusting (Phase) and (Clock) separately. The adjusting range is from 0 to 100 (Only available for VGA input).

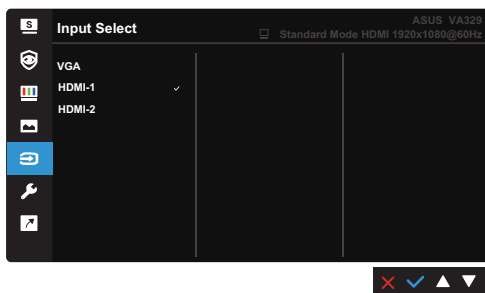


- Phase adjusts the phase of the pixel clock signal. With a wrong phase adjustment, the screen shows horizontal disturbances.
- Clock (pixel frequency) controls the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the image is not proportional.

- **Auto Adjust.:** Automatically adjusts the image to its optimized position, clock, and phase. (Only available for VGA input.)

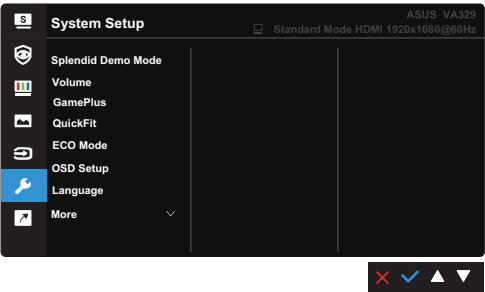
5. Input Select

In this function, you can select your desired input source.



6. System Setup

Allows you to adjust the system.



- **Splendid Demo Mode:** Splits the screen into two for Splendid modes comparison. (Scenery mode only)
- **Volume:** The adjusting range is from 0 to 100.
- **GamePlus:** The GamePlus function provides a toolkit and creates a better gaming environment for users when playing different types of games. The crosshair overlay with different crosshair options lets you choose the one that best suits the game you're playing. There's also an onscreen timer you can position on the left of the display so you can keep track of the elapsed gaming time; while the FPS (frames per second) counter lets you know how smooth the game is running. Display Alignment displays alignment lines on 4 sides of the screen, serving as an easy and handy tool for you to line up multiple monitors perfectly.

GamePlus Main menu	GamePlus — Crosshair
GamePlus — Timer	GamePlus — Timer — Position
GamePlus — FPS Counter — Position	

- **QuickFit:** You can have a preview of the document or photo layout directly on screen without printing test copies.
 1. **Alignment:** This facilitates designers and users to organize content and layout on one page and achieve a consistent look and feel.

Alignment Grid 1	Alignment Grid 2
	

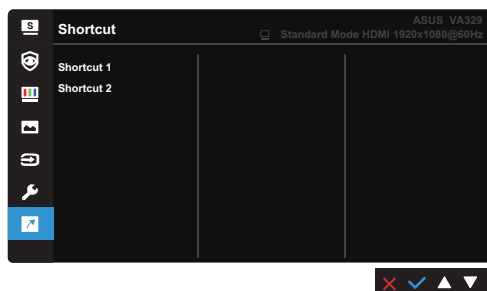
2. **Photo:** The various real photo sizes displayed provides photographers and other users to accurately view and edit their photos in real size on the screen.



- **ECO Mode:** Reduces power consumption.
- **OSD Setup:**
 - Adjusts the OSD timeout from 10 to 120 seconds.
 - Enables or disables the DDC/CI function.
 - Adjusts the OSD background from opaque to transparent.
- **Language:** There are 21 languages for your selection, including English, French, German, Italian, Spanish, Dutch, Portuguese, Russian, Czech, Croatian, Polish, Romanian, Hungarian, Turkish, Simplified Chinese, Traditional Chinese, Japanese, Korean, Thai, Indonesian, Persian.
- **Key Lock:** To disable all function keys. Press the second button from the right over five seconds to cancel the key lock function.
- **Information:** Shows the monitor information.
- **Power Indicator:** Turns the power LED indicator on/off.
- **Power Key Lock:** Enables or disables the power key.
- **All Reset:** "Yes" allows you to restore the default settings.

7. Shortcut

Defines the functions for Shortcut 1 and 2 buttons.



- **Shortcut 1/Shortcut 2:** Selects a function for Shortcut 1 and 2 buttons.



When a certain function is selected or activated, your shortcut key may not support. Available function choices for shortcut: Blue Light Filter, Splendid, Brightness, Auto Adjust, Contrast, Color Temp., QuickFit, Input Select, GamePlus, Rest Reminder, Color Augmentation.

3.2 Specifications summary

Model	VA329HE
Panel Type	IPS
Panel Size	31.5"W (80.01 cm)
Max. Resolution	1920 x 1080
Brightness (Typ.)	300cd/m ²
Contrast Ratio (Typ.)	1200:1
Contrast Ratio (Max.)	100,000,000:1 (with ASCR on)
Viewing Angle (CR>10)	178°(H) / 178°(V)
Display Colors	16.7 M
Response Time	5 ms GTG
Splendid Video Enhancement	Yes
Splendid selection	8 video preset modes
Auto adjustment	Yes
Color temperature selection	4 color temperatures
Analog input	D-Sub
Digital input	HDMI v1.4 x 2
Earphone jack	Yes
Speaker (Built-in)	No
Audio Line-in	No
Power LED	White (On)/Amber (Standby)
Colors	Black
Tilt	-5° ~ +8°
AC input voltage	AC: 100~240V
Power consumption	Power On: < 19.88W (Measuring a screen brightness of 200 nits Without audio / USB / Card reader connection)
	Standby: < 0.5 W, Power Off: < 0.3 W
VESA Wall Mounting	Yes (100mm x 100mm)
Temperature (Operating)	0°C~40°C
Temperature (Non-operating)	-20°C~+60°C
Dimension (WxHxD)	727 x 479.7 x 202mm (with stand)
	727 x 424.6 x 69.8mm (without stand)
	860 x 537 x 145 mm (package)
Net Weight (Esti.)	7.1 kg
Gross Weight (Esti.)	9.6 kg

Specifications are subject to change without notice.

3.3 Troubleshooting (FAQ)

Problem	Possible Solution
Power LED is not ON	• Press the  button to check if the monitor is in the ON mode. • Check if the power cord is properly connected to the monitor and the power outlet. • Check Power Indicator function in main menu OSD. Select "ON" to turn on power LED.
The power LED lights amber and there is no screen image	• Check if the monitor and the computer are in the ON mode. • Make sure the signal cable is properly connected the monitor and the computer. • Inspect the signal cable and make sure none of the pins are bent. • Connect the computer with another available monitor to check if the computer is properly working.
Screen image is too light or dark	• Adjust the Contrast and Brightness settings via OSD.
Screen image is not centered or sized properly	• Adjust the H-Position or V-Position settings via OSD.
Screen image bounces or a wave pattern is present in the image	• Make sure the signal cable is properly connected to the monitor and the computer. • Move electrical devices that may cause electrical interference.
Screen image has color defects (white does not look white)	• Inspect the signal cable and make sure that none of the pins are bent. • Perform Reset via OSD. • Adjust the R/G/B color settings or select the Color Temperature via OSD.
Screen image is blurry or fuzzy	• Adjust the Phase and Clock settings via OSD.

3.4 Supported operating modes

Resolution Frequency	Vertical Frequency (Hz)	Horizontal Frequency (KHz)	Pixel (MHz)
640x480	31.47(N)	59.94(N)	25.18
640x480	35.00(N)	66.66(N)	30.24
640x480	37.87(N)	72.82(N)	31.5
640x480	37.5(N)	75.00(N)	31.5
720x400	31.47(N)	70.08(P)	28.32
800x600	35.16(P)	56.25(P)	36
800x600	37.88(P)	60.32(P)	40
800x600	48.08(P)	72.12(P)	50
800x600	46.86(P)	75.00(P)	49.5
832x624	49.72(P/N)	74.55(P/N)	57.28
1024x768	48.36(N)	60.00(N)	65
1024x768	56.476(N)	70.069(N)	75
1024x768	60.02(N)	75.00(N)	78.75
1152x864	67.5(P/N)	75.00(P/N)	108
1280x720	45.00(P)	60.00(N)	75.25
1280x768	47.78(P)	60.00(N)	79.5
1280x800	49.7(P)	60.00(N)	83.5
1280x960	60.00(P)	60.00(N)	108
1280x1024	63.98(P)	60.02(P)	108
1280x1024	79.98(P)	75.02(P)	135
1366x768	47.712(P)	59.79(P)	85.5
1440x900	55.94(N)	59.89(P)	106.5
1600x1200	75.00(P)	60.00(P)	162
1680x1050	65.29(N)	60.00(P)	146.25
1920x1080	67.5(P)	60.00(P)	148.5
1920x1080	74.97(N)	83.89(P)	174.5

* "P", "N" stands for "Positive", "Negative" polarity of incoming H-sync/V-sync (input timing).

Timing mode :

When the monitor is operating in the video mode (ie, not displaying data) using the HDMI connector, the following high definition modes shall be supported in addition to standard definition video.

Timing Name	Pixel Format	Horizational Frequency (kHz)	Vertical Frequency (Hz)	Pixel Rate (MHz)
480p	720 x 480	31.469	60	27
720p60	1280 x 720	45	60	74.25
576p	720 x 576	31.25	50	27
720p50	1280 x 720	37.5	50	74.25
1080p60	1920 x 1080	67.5	60	148.5
1080p50	1920 x 1080	56.25	50	148.5