

AOC Q27B2S2 LCD Monitor User Manual

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Product Information

Model: Q27B2S2Manufacturer: AOC

• Website: www.aoc.com.

Product Usage Instructions

Safety

- 1. 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.
- 2. Unplug the unit during a lightning storm or when it will not be used for long periods of time to protect it from power surges.
- 3. Do not overload power strips and extension cords. 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. Use only with the attached power adapter.
- 4. Manufacturers: TPV ELECTRONICS(FUJIAN) CO., LTD
- 5. **Model:** ADPC1938EX(19VDC,2.0A)

Product Installation

- Do not place the monitor on an unstable cart, stand, tripod, bracket, or table. 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.
- Never push any object into the slot on the monitor cabinet and 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 for adequate air circulation to prevent overheating and potential fire or damage.

- Ensure that the monitor does not tilt downward by more than -5 degrees to avoid potential damage. Exceeding the -5 degree downward tilt angle maximum will not be covered under warranty.
- Recommended ventilation areas around the monitor when installed on the wall or stand:
 - 12 inches (30cm)
 - 4 inches (10cm)
 - 4 inches (10cm)
 - Leave at least this much space around the set: 4 inches (10cm)

Safety

National Conventions

The following subsections describe notational conventions used in this document. Notes, Cautions, and WarningsThroughout 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.
- 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. For use only with the attached power adapter.

• Manufacturers: TPV ELECTRONICS(FUJIAN) CO., LTD

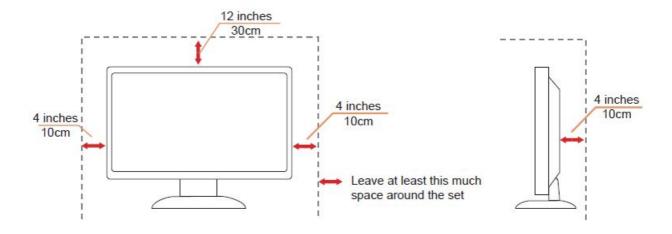
Model: ADPC1938EX(19VDC,2.0A)

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

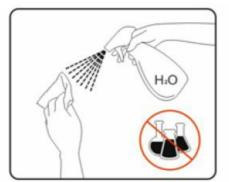
instructions.

- 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.
- To avoid potential damage, for example the panel peeling from the bezel, ensure that the monitor does not tilt downward by more than -5 degrees. If the -5 degree downward tilt angle maximum is exceeded, the monitor damage will not be covered under warranty.
- See below the recommended ventilation areas around the monitor when the monitor is installed on the wall or on the stand:

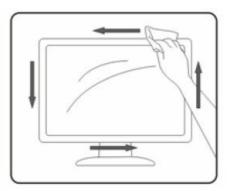


Cleaning

- Clean the cabinet regularly with a water-dampened, soft cloth.
- When cleaning use a soft cotton or microfiber cloth. The cloth should be damp and almost dry, do not allow liquid into the case.







• Please disconnect the power cord before cleaning the product.

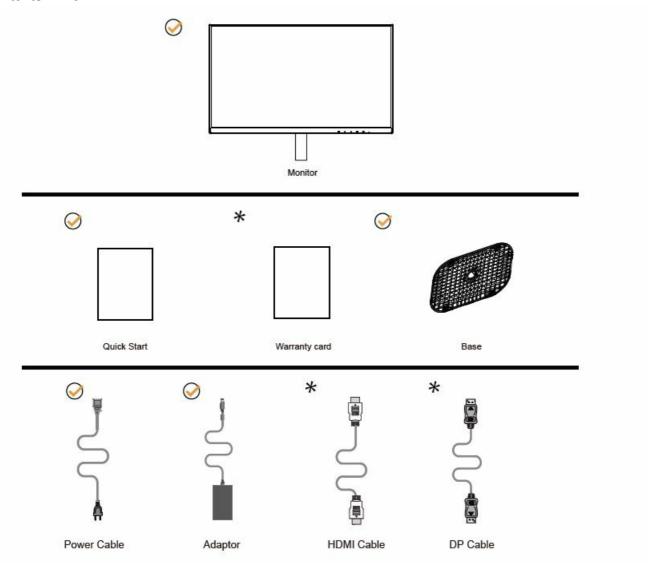
Other

- 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.
- The power cords shall be safety approved. For Germany, it shall be H03VV-F, 3G, 0.75 mm2, or better. For
 other countries, the suitable types shall be used accordingly.
- Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the

equalizer to maximum increases the earphones and headphones output voltage and therefore the sound pressure level.

Setup

Contents in Box

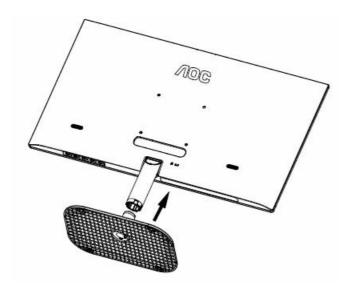


Not all signal cables will be provided for all countries and regions. Please check with the local dealer or AOC branch office for confirmation.

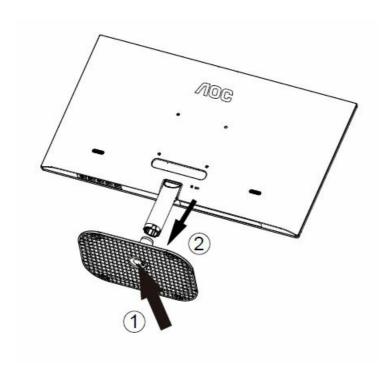
Setup Stand & Base

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:

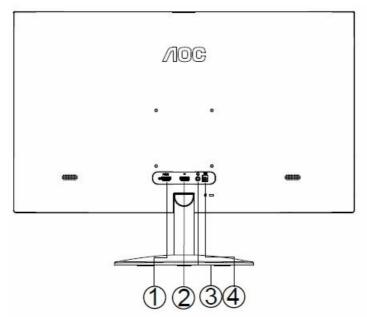


NOTE: Do not touch the LCD screen when you change the angle. Touching the LCD screen may cause damage. **WARNING:**

- 1. To avoid potential screen damage, such as panel peeling, ensure that the monitor does not tilt downward by more than -5 degrees.
- 2. Do not press the screen while adjusting the angle of the monitor. Grasp only the bezel.

Connecting the Monitor

Cable Connections In Back of Monitor:



- 1. HDMI
- 2. DP
- 3. Earphone
- 4. Power

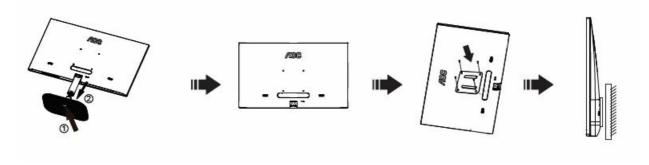
Connect to PC

- 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 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.

Wall Mounting

Preparing to Install An Optional Wall Mounting Arm.

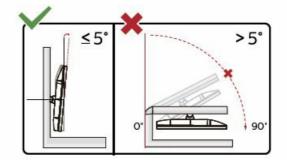


This monitor can be attached to a wall mounting arm you purchase separately. Disconnect power before this procedure.

Follow these steps:

- 1. Remove the base.
- 2. Follow the manufacturer's instructions to assemble the wall mounting arm.
- 3. Place the wall mounting arm onto the back of the monitor. Line up the holes of the arm with the holes in the back of the monitor.
- 4. Insert the 4 screws into the holes and tighten.
- 5. Reconnect the cables. Refer to the user's manual that came with the optional wall mounting arm for instructions on attaching it to the wall

Noted: VESA mounting screw holes are not available for all models, please check with the dealer or official department of AOC.



Display design may differ from those illustrated.

WARNING:

1. To avoid potential screen damage, such as panel peeling, ensure that the monitor does not tilt downward by

more than -5 degrees.

2. Do not press the screen while adjusting the angle of the monitor. Grasp only the bezel.

Adaptive-Sync function

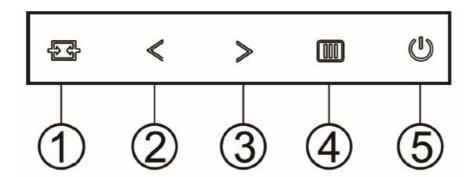
- 1. Adaptive-Sync function is working with DP/HDMI
- 2. Compatible Graphics Card: Recommend list is as the below, also could be checked by visiting

www.AMD.com

- Radeon™ RX Vega series
- Radeon™ RX 500 series
- Radeon™ RX 400 series
- Radeon™ R9/R7 300 series R9 370/X, R7 370/X, R7 265 except
- Radeon™ Pro Duo (2016)
- Radeon™ R9 Nano series
- Radeon™ R9 Fury series
- Radeon™ R9/R7 200 series (R9 270/X, R9 280/X except)

Adjusting

Hotkeys



1	Source/Exit
2	Clear Vision/<
3	Volume/>
4	Menu/Enter
5	Power

Menu/Enter

When there is no OSD, Press to display the OSD or confirm the selection.

Power

Press the Power button to turn on the monitor.

Volume/>

When there is no OSD, Press > Volume button to active volume adjustment bar, Press < or > to adjust volume.

Source/Exit

When the OSD is closed, press Source/Exit button will be Source hot key function. When the OSD is closed, press Source/Exit button continuously about 2 second to do auto configure (Only for the models with D-Sub).

Clear Vision

- 1. When there is no OSD, Press the " <" button to activate Clear Vision.
- 2. Use the ">" or ">" buttons to select between weak, medium, strong, or off settings. Default setting is always "off".



3. Press and hold "<" button for 5 seconds to activate the Clear Vision Demo, and a message of "Clear Vision Demo: on" will be display on the screen for a duration of 5 seconds. Press Menu or Exit button, the message will disappear. Press and hold "<" button for 5 seconds again, Clear Vision Demo will be off.



 Clear Vision function provides the best image viewing experience by converting low resolution and blurry images into clear and vivid images.

OSD Setting

Basic and simple instruction on the control keys.



- 1. Press the MENU-button to activate the OSD window.
- Press Left or Right to navigate through the functions. Once the desired function is highlighted, press the MENU-button to activate it, press Left or Right to navigate through the sub-menu functions. Once the desired function is highlighted, press MENU-button to activate it.
- 3. Press Left or to change the settings of the selected function. Press to exit. If you want to adjust any other function, repeat steps 2-3.
- 4. OSD Lock Function: To lock the OSD, press and hold the MENU-button while the monitor is off and then

press power button to turn the monitor on. To un-lock the OSD – press and hold the MENU-button while the monitor is off and then press power button to turn the monitor on.

Notes:

- 1. If the product has only one signal input, the item of "Input Select" is disable to adjust.
- 2. ECO modes (except Standard mode), DCR, DCB mode and Picture Boost, for these four states that only one state can exist.

Luminance



	Contrast	0-100		Contrast from Digital-register.
	Brightness	0-100		Backlight Adjustment.
		Standard	4	Standard Mode.
		Text	T	Text Mode.
		Internet	6	Internet Mode.
	Eco mode	Game	منتفي	Game Mode.
		Movie	6	Movie Mode.
		Sports	3.	Sports Mode.
10-		Reading	R	Reading Mode.
		Gamma1		Adjust to Gamma 1.
	Gamma	Gamma2		Adjust to Gamma 2.
		Gamma3		Adjust to Gamma 3.
	DCR	On	DCR	Enable dynamic contrast ratio.
	DCR	Off		Disable dynamic contrast ratio.
		Off		
	HDR Mode	HDR Picture		Select HDR Mode.
	TIDIX WOOL	HDR Movie		COLOR FIENT WOOD.
		HDR Game		

Note: When "HDR Mode" is set to "non-off", the items "Contrast", "ECO", "Gamma" cannot be adjusted.

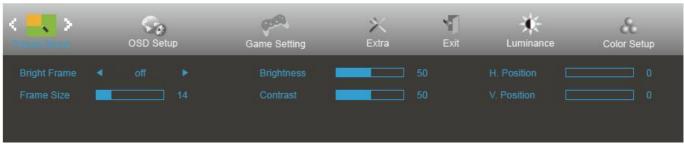
Color Setup



		Warm	Recall Warm Color Temperature from EEPROM.
		Normal	Recall Normal Color Temperature from EEPROM.
	Color Temp.	Cool	Recall Cool Color Temperature from EEPROM.
	·	User	Restore Color Temperature from EEPROM.
		Panel Native	Standard color space panel.
	Color Gamut	sRGB	Recall SRGB Color Temperature from EEPROM.
		Reading / Office /	
	LowBlue Mode	Internet / Multimedia /	Decrease blue light wave by controlling color temp erature.
		Off	o.a.a.s.
	Red	0-100	Red gain from Digital-register.
	Green	0-100	Green gain from Digital-register.
	Blue	0-100	Blue gain from Digital-register.
		Full Enhance	Disable or Enable Full Enhance Mode
		Nature Skin	Disable or Enable Nature Skin Mode
		Green Field	Disable or Enable Green Field Mode
		Sky-blue	Disable or Enable Sky-blue Mode
	DCB Mode	AutoDetect	Disable or Enable AutoDetect Mode
		Off	Disable or Enable DCB Mode
	DCB Demo	On or Off	Disable or Enable Demo

Note: When "HDR Mode" under "Luminance" is set to "non-off", all items under "Color Setup" cannot be adjusted.

Picture Boost



	Bright Frame	on or off	Disable or Enable Bright Frame
	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V. position	0-100	Adjust Frame vertical Position

Note:

- Adjust the brightness, contrast, and position of the Bright Frame for better viewing experience.
- When "HDR Mode" under "Luminance" is set to "non-off", all items under "Picture Boost" cannot be adjusted.

OSD Setup



Language		Select the OSD language
Timeout	5-120	Adjust the OSD Timeout
DP Capability	1.1/1.2	If the DP video content supports DP1.2, please select DP1.2 for DP Capability; otherwise, please select DP1.1
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 or off	Break reminder if the user continuously work for more than 1hrs

Game Setting



		Off	No optimization by 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.
			mage quality.
	Game Mode	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.
			Shadow Control Default is 50, then end-user can
			adjust from 50 to 100 or 0 to increase contrast for clear picture.
	Shadow Control	0-100	If picture is too dark to be saw the detail cl early, adjusting from 50 to 100 for clear picture.
			2. If picture is too white to be saw the detail
			clearly, adjusting from 50 to0 for clear picture
			Disable or Enable Adaptive-Sync.c
	Adaptive-Sync	On or Off	Adaptive-Sync Run Reminder: When the Adaptiv e-Sync feature is enabled, there may be flashing in some game environments.
بنعون	Game Color	0-20	Game Color will provide 0-20 level for adjusting saturation to get better picture.
		Weak	
		Medium	
	Overdrive	Strong	Adjust the response time.
		Off	
		Off / Right-up / Right-	
	Frame Counter	Down / Left-Down / Le ft-Up	Display V frequency on the corner selected
		<u> </u>	

		The "Dial Point" function places an aiming indicator in
		the
	On or Off	center of screen for helping gamers to play First P erson
Dial Point		Shooter (FPS) games with an accurate and precise
		aiming.

Note: When "HDR Mode" under "Luminance" is set to "non-off", the items "Game Mode", "Shadow Control", "Game Color" cannot be adjusted.

Extra



	Input Select		Select Input Signal Source
	Off timer	0-24hrs	Select DC off time
2		Wide	
	Image Ratio	4:3	Select image ratio for display.
	DDC/CI	Yes or No	Turn ON/OFF DDC/CI Support
		Yes or No	Reset the menu to default
			Reset the menu to default
	Reset	ENERGY STAR® or No	(ENERGY STAR® available for selective models)

Exit





LED Indicator

Status	LED Color
Full Power Mode	White
Active-off Mode	Orange

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.
	Is the power cord connected properly?
	Check the power cord connection and power supply. Is the video cable connected correctly??
	(Connected using the VGA cable) Check the VGA cable connection. (Connected using the HDMI cable) Check the HDMI cable connection. (Connected using the DP cable) Check the DP cable connection.
	* VGA/HDMI/DP input is not available on every model.
	If the power is on, reboot the computer to see the initial screen (the login scree n.) 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 freq uency 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?
No images on the screen	You can see this message when the signal from the video card exceeds the m aximum resolution and frequency that the monitor can handle properly.
g.s.s.s.s.s.s.s.	Adjust the maximum resolution and frequency that the monitor can handle properly.
	Make sure the AOC Monitor Drivers are installed.

Picture Is Fuzzy & Has Ghos ting Shadowing Problem	Adjust the Contrast and Brightness Controls. Press hot-key (AUTO) to auto-adjust (D-SUB). Make sure you are not using an extension cable or switch box. We recommen d plugging the monitor directly to the video card output connector on the back.
Picture Bounces, Flickers O r Wave Pattern Appears In T he 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 O ff- 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. In spect 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 O N or OFF after hitting the CAPS LOCK key.
Missing one of the primary c olors (RED, GREEN, or BLU E)	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.
Screen image is not centere d or sized properly	Adjust H-Position and V-Position or press hot-key (AUTO) (D-SUB).
Picture has color defects (w hite does not look white)	Adjust RGB color or select desired color temperature.
Horizontal or vertical disturb ances on the screen	Use Windows 7/8/10/11 shut-down mode to adjust CLOCK and FOCUS. Press hot-key (AUTO) to auto-adjust (D-SUB).
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

	Model name	Q27B2S2
	Driving system	TFT Color LCD
	Viewable Image Size	68.5cm diagonal
Panel		

	Pixel pitch	0.2331(H)mm x 0.2331(V) mm				
	Display Color	16.7M Colors				
	Horizontal scan range	30k-150kHz				
	Horizontal scan Size(Maximum)	596.736mm				
	Vertical scan range	48-100Hz				
	Vertical Scan Size(M aximum)	335.664mm				
	Optimal preset resolu tion	2560×1440@60Hz				
	Max resolution	2560×1440@100Hz				
Others	Plug & Play	VESA DDC2B/CI				
	Power Source	19Vdc, 2.0A				
		Typical(default brightness and contrast) 30W				
	Power Consumption	Max. (brightness = 100, contrast =100) ≤ 45W				
		Standby mode ≤0.3W				
Physical	Connector Type	HDMI/DP/Earphone		-		
Characteri stics	Signal Cable Type	Detachable				
	_	Operating	0°C~ 40°C			
Environm	Temperature	Non-Operating -25°C~ 55°C				
		Operating	ng 10% ~ 85% (non-condensing)			
	Humidity	Non-Operating	ng 5% ~ 93% (non-condensing)			
ental		Operating	0 ~ 5000 m (0~ 16404ft)			
	Altitude		1			

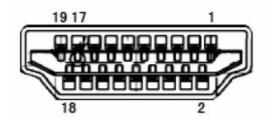
			Non-Operating	0 ~ 12192m (0~ 40000ft)
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Preset Display Modes

STANDARD	RESOLUTION	HORIZONTAL FREQUENCY(kHz)	VERTICAL FREQUENCY (Hz)
	640×480@60Hz	31.469	59.94
VGA	640×480@72Hz	37.861	72.809
	640×480@75Hz	37.5	75
	800×600@56Hz	35.156	56.25
	800×600@60Hz	37.879	60.317
SVGA	800×600@72Hz	48.077	72.188
	800×600@75Hz	46.875	75
	1024×768@60Hz	48.363	60.004
XGA	1024×768@70Hz	56.476	70.069
	1024×768@75Hz	60.023	75.029
	1280×1024@60Hz	63.981	60.02
SXGA	1280×1024@75Hz	79.976	75.025
	1440×900@60Hz	55.935	59.887
WXGA+	1440×900@60Hz	55.469	59.901
	1680×1050@60Hz	65.29	59.954
WSXGA	1680×1050@60Hz	64.674	59.883
FHD	1920×1080@60Hz	67.5	60
FHD	1920×1080@75Hz	83.895	74.97
QHD	2560×1440@60Hz	88.787	59.951

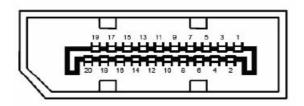
QHD	2560×1440@75Hz	111.028	74.968				
QHD	2560×1440@100Hz	148.5	100				
IBM MODES	IBM MODES						
DOS	720×400@70Hz	31.469	70.087				
MAC MODES							
VGA	640×480@67Hz	35	66.667				
SVGA	832×624@75Hz	49.725	74.551				
XGA	1024×768@75Hz	60.241	74.927				

Pin Assignments



19-Pin Color Display Signal Cable

Pin N o.	Signal Name	Pin N o.	Signal Name	Pin N o.	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. www.aoc.com@2023. AOC. All Rights Reserved.

Documents / Resources



AOC Q27B2S2 LCD Monitor [pdf] User Manual Q27B2S2, Q27B2S2 LCD Monitor, LCD Monitor, Monitor

References

- AMD I together we advance Al
- 1 Homepage | AOC Monitors

Manuals+,