

USER MANUAL Prolite

LCD Monitor

ENGLISH

ProLite X1670HC

Thank you very much for choosing the iiyama LCD monitor.

We recommend that you take a few minutes to read carefully through this brief but comprehensive manual before installing and switching on the monitor. Please keep this manual in a safe place for your future reference.

iiyama | Servicecard





Dear user, we congratulate you on the purchase of your iiyama LCD.

For details on warranty and locally used pixel policies that apply directly after installation of your product please check the iiyama website.

To report a fault, please contact your local support centre found at www.iiyama.com/service

Things to check before you call the iiyama information line
if the power cable is connected securely and turned on?
if the display has been turned on?
if the signal cable is connected securely and the correct input selected?
if the computer has been restarted with the display connected?
if the graphics card is correctly installed with the latest drivers possible?
if the correct native resolution has been selected via 'Display Properties'?
If the R/G/B signal configuration is correct?
if the displays On Screen Menu is shown?
if the correct brightness and contrast settings have been set?
if given display tolerances and compatibility have been considered?
if via the On Screen Menu you have performed a Factory Reset/Recall?

Before reporting the screen defect, please prepare the following information/evidence:

model number *

purchase receipt and serial number *

name and address for collection

telephone/fax number, for availability during the day

convenient collection date (date, time)

short description of the defect

Important Note:

If there is no fault found in the collected equipment after inspection, the transferring party shall incur charges for transport and administration.

If you have checked all of the above and there is still no picture, call our information line for assistance in your country.

* see the identification plate on the back of the case.



CE MARKING DECLARATION OF CONFORMITY

This LCD monitor complies with the requirements of the EC/EU Directive 2014/30/EU "EMC Directive", 2014/35/EU "Low Voltage Directive", 2009/125/EC "ErP Directive" and 2011/65/EU "RoHS Directive".

The electro-magnetic susceptibility has been chosen at a level that gives correct operation in residential areas, business and light industrial premises and small-scale enterprises, inside as well as outside of the buildings. All places of operation are characterised by their connection to the public low voltage power supply system.

IIYAMA CORPORATION: Wijkermeerstraat 8, 2131 HA Hoofddorp, The Netherlands

Model No. : PL1670HC



We recommend recycling of used product. Please contact your dealer or iiyama service center. Recycle information is obtained via the Internet, using the address: http://www.iiyama.com

You can access the Web page of different countries from there.

- We reserve the right to change specifications without notice.
- All trademarks used in this user manual are the property of their respective owners.
- Eprel registration number X1670HC-B1 : 397558

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FOR YOUR SAFETY

SAFETY PRECAUTIONS

WARNING

STOP OPERATING THE MONITOR IF YOU ARE AWARE OF ANY PROBLEMS

If you notice any abnormal phenomena such as smoke, strange sounds or fumes, unplug the monitor and contact your dealer or iiyama service center immediately. Further use may be dangerous and can cause fire or electric shock.

NEVER REMOVE THE CABINET

High voltage circuits are inside the monitor. Removing the cabinet may expose you to the danger of fire or electric shock.

DO NOT PUT ANY OBJECT INTO THE MONITOR

Do not put any solid objects or liquids such as water into the monitor. In case of an accident, unplug your monitor immediately and contact your dealer or iiyama service center. Using the monitor with any object inside may cause fire, electric shock or damage.

INSTALL THE MONITOR ON A FLAT, STABLE SURFACE

The monitor may cause an injury if it falls or is dropped.

DO NOT USE THE MONITOR NEAR WATER

Do not use where water may be splashed or spilt onto the monitor as it may cause fire or electric shock.

OPERATE UNDER THE SPECIFIED POWER SUPPLY

Be sure to operate the monitor only with the specified power supply. Use of an incorrect voltage will cause malfunction and may cause fire or electric shock.

PROTECT THE CABLES

Do not pull or bend the cables. Do not place the monitor or any other heavy objects on the cables. If damaged, the cables may cause fire or electric shock.

ADVERSE WEATHER CONDITIONS

It is advisable not to operate the monitor during a heavy thunder storm as the continual breaks in power may cause malfunction. It is also advised not to touch the plug in these circumstances as it may cause electric shock.

CAUTION

INSTALLATION LOCATION

Do not install the monitor where sudden temperature changes may occur, or in humid, dusty or smoky areas as it may cause fire, electric shock or damage. You should also avoid areas where the sun shines directly on the monitor.

DO NOT PLACE THE MONITOR IN A HAZARDOUS POSITION

The monitor may topple and cause injury if not suitably located. Please also ensure that you do not place any heavy objects on the monitor, and that all cables are routed such that children may not pull the cables and possibly cause injury.

MAINTAIN GOOD VENTILATION

Ventilation slots are provided to keep the monitor from overheating. Covering the slots may cause fire. To allow adequate air circulation, place the monitor at least 10cm (or 4 inches) from any walls.

DISCONNECT THE CABLES WHEN YOU MOVE THE MONITOR

When you move the monitor, turn off the power switch, unplug the monitor and be sure the signal cable is disconnected. If you do not disconnect them, it may cause fire or electric shock.

UNPLUG THE MONITOR

If the monitor is not in use for a long period of time it is recommended that it is left unplugged to avoid accidents.

HOLD THE PLUG WHEN DISCONNECTING

To disconnect the cables, always pull it by the plug. Never pull on the cable itself as this may cause fire or electric shock.

DO NOT TOUCH THE PLUG WITH WET HANDS

Pulling or inserting the plug with wet hands may cause electric shock.

WHEN YOU INSTALL THE MONITOR ON YOUR COMPUTER

Be sure the computer is strong enough to hold the weight of the monitor, otherwise, you may damage your computer.

CAREFUL! PROTECT YOUR HANDS AND FINGERS

- Be careful not to hurt your fingers or hands when you change the height or the angle.
- Injury can occur if care is not taken to avoid finger contact with the displays base when adjusting the height. (Just for height adjustable model.)

REMARK FOR 24/7 USAGE

This product is not specifically designed for 24/7 usage in all environments.

OTHERS

ERGONOMIC RECOMMENDATIONS

To eliminate eye fatigue, do not operate the monitor against a bright background or in a dark room. For optimal viewing comfort, the monitor should be just below eye level and 40-60 cm (16-24 inches) away from your eyes. When using the monitor over a prolonged time, a ten minute break every hour is recommended as looking at the screen continuously can cause eye strain.

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SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitors and do not indicate a problem.

- **NOTE** When you first turn on the LCD monitor, the picture may not fit in the display area because of the type of computer that is used. In this case, adjust the picture position to the correct position.
 - You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
 - 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 can be recovered slowly by changing the image or turning off the Power Switch for some hours.

CUSTOMER SERVICE

NOTE If you have to return your unit for service and the original packaging has been discarded, please contact your dealer or iiyama service center for advice or replacement packaging.

CLEANING

WARNING If you drop any materials or liquids such as water into the monitor when cleaning, unplug the power cable immediately and contact your dealer or iiyama service center.

CAUTION For safety reasons, turn off the power switch and unplug the monitor before you clean it.

- NOTE
- To protect the LCD panel, do not scratch or rub the screen with a hard object.
- Never use any of the following strong solvents. These will damage the cabinet and the LCD screen.

Thinner	Spray-type cleaner
Benzine	Wax
Abrasive cleaner	Acid or Alkaline solvent

- Touching the cabinet with any product made from rubber or plastic for a long time may cause degeneration or loss of paint on the cabinet.
- **CABINET** Stains can be removed with a cloth lightly moistened with a mild detergent solvent. Then wipe the cabinet with a soft dry cloth.
- LCD Periodic cleaning with a soft dry cloth is recommended.
- **SCREEN** Don't use tissue paper etc. because these will damage the LCD screen.

BEFORE YOU OPERATE THE MONITOR

FEATURES

- Supports Resolutions up to 1920 × 1080
- High Contrast 800:1 (Typical), Adv. Contrast Function Available / Brightness 220cd/m² (Typical)
- Blue Light Reducer
- Digital Character Smoothing
- Standby Feature (VESA DPMS Compliant)

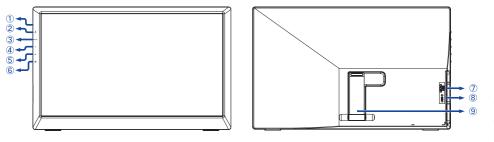
CHECKING THE CONTENTS OF THE PACKAGE

The following accessories are included in your package. Check to see if they are enclosed with the monitor. If anything is missing or damaged, please contact your local iiyama dealer or regional iiyama office.

- USB-C Cable *
- Safety Guide
- Quick Start Guide

- Carrying bag
- **CAUTION** * All guarantees and warranties are void for any problems or damage caused by a USB-C cable not supplied by iiyama.

CONTROLS AND CONNECTORS



<Front>



- ① Power Indicator
 NOTE Blue: Normal operation Orange: Standby mode
- (2) Power Switch (\bigcirc)
- ③ Menu Button (MENU)
- ④ Scroll up / ECO Mode Button (+)
- (5) Scroll down / i-Style Color Button ()
- 6 Exit Button (EXIT)
- ⑦ USB Connector (MICRO USB, DC-IN)
- ⑧ USB Connector (USB-C, INPUT/DC-IN)
- (9) Stand

---- : Direct current

CONNECTING YOUR MONITOR

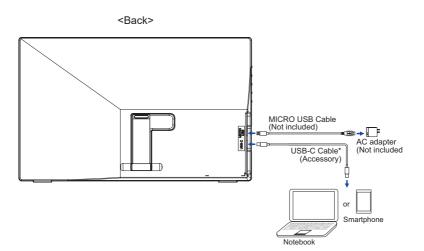
- 1 Ensure that both the notebook and the monitor are switched off.
- ② Connect the notebook to the monitor with the USB-C Cable.
- ③ Connect the Micro USB Cable and AC adapter to the monitor first and then to the power source when supplying power from an outlet. (When using AC adapter and Micro USB cable)
- ④ Turn on your monitor and notebook.

NOTE

Depending on the type of USB-C connector, your monitor may not have enough power supply from your computer, even with a USB-C cable attached. In that case, purchase a commercially available Micro USB cable and AC adapter which complies with the limited power source before use.

Specification Input: 100-240V~, 50/60Hz, 0.3A Output: 5Vdc, 2A

[Example of Connection]



* Check the user manual of your device if it supports video over USB-C.

COMPUTER SETTING

Signal Timing

Change to the desired signal timing listed on page 18: COMPLIANT TIMING.

ADJUSTING THE VIEWING ANGLE

- For optimal viewing it is recommended to look at the full face of the monitor.
- You are able to adjust the monitor's angle up to 15 - 35 degrees upward.
- ①Put a piece of soft cloth on the table beforehand to prevent the monitor from being scratched. Lay the monitor flat on a table with front face down.
- (2)Hold the monitor and pull the stand up until you hear a click.
- ③Stand the monitor in the upright position. Adjust the screen tilt to your preference.
- NOTE Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.
 - Careful attention is required not to pinch your fingers or hands into the moving part of the stand when you change the angle.
 - When packaged, the stand is folded. Do not use in this state otherwise injury may occur if it falls or is dropped.



OPERATING THE MONITOR

To create the best picture, your iiyama LCD monitor has been preset at the factory with the COMPLIANT TIMING shown on page 18. You are also able to adjust the picture by following the button operation shown below.

① Press the MENU Button to start the On Screen Display (OSD) feature. There are additional Menu items which can be switched by using the +/- Buttons.

🔅 Picture	Contrast	11111	50
Color	Brightness	11111111	90
Eanguage	Sharpness	11111	50
OSD Settings ال	Over Drive		
💮 Setup Menu	Adv. Contrast		
	ECO Mode		

- ② Select the Menu item which contains the adjustment icon relating to the adjustment you want to make. Press the MENU Button. Then, use the + / - Buttons to highlight the desired adjustment icon.
- ③ Press the MENU Button again. Use the + / Buttons to make the appropriate adjustment or setting.
- ④ Press the EXIT Button to leave the menu, and the settings you just made would be automatically saved.

For example, to correct for OSD vertical position, select Menu item of $\frac{1}{2}$ (OSD Settings) and then press the MENU Button. Then, select OSD V. Position by using the + / – Buttons and press then the MENU Button.

🔆 Picture	OSD H. Position	11111	50
③ Color	OSD V. Position		50
😓 Language	OSD Background	Off	
OSD Settings ا	OSD Time Out		
🛞 Setup Menu			

And use the + / - Buttons to change the OSD vertical position settings. The OSD vertical position should be changing accordingly while you are doing this.

Press the EXIT Button lastly, it ends, all changes are saved in the memory.

- **NOTE** When button operations are aborted during adjustment, On-Screen Display disappears when the time set for the OSD Time Out has passed. Also, the EXIT Button can be used to return previous menu and turn off the On-Screen Display.
 - Any changes are automatically saved in the memory when the On Screen Display disappears. Turning off the power should be avoided while using the Menu.
 - All adjustments have only one setting which applies to all signal timings.

ADJUSTMENT MENU CONTENTS

Adjustment Item	Probl	em / Option	Button to Press			
Contrast *2		Too dull Too intense				
Brightness * ^{1,2}		Too dark Too bright				
Sharpness * ²	(soft to Press t numeri picture Adjust	You can change the picture quality from 0 to 100 (soft to sharp). Press the + Button to change the picture quality in numerical order. Press the – Button to change the picture quality in reverse numerical order. Adjust the picture quality at resolutions of less 1920 x 1080. You can change the picture quality.				
Over Drive *2	It will in	Off / -2 / -1 / 0 / +1 / +2 It will improve the gray level response time of the LCD panel. A higher level results in a faster response time.				
Adv. Contrast *2	On Increased Contrast Ratio Off Typical Contrast Ratio					
	Off	Off Normal				
ECO Mode *2 Direct	1	1 Brightness of back-light is reduced.				
	2 Brightness of back-light is reduced more than 1.					
	3	3 Brightness of back-light is reduced more than 2.				

*1 Adjust the Brightness when you are using the monitor in a dark room and feel the screen is too bright.

*² Adjustable / settable items depend on which item is activated. See page 13 Function Correlation Matrix for more details.

Direct

You can skip the Menu items and directly display an option setting screen by using the following button operations.

• ECO Mode: Press the + Button when the Menu is not displayed.

Color *1,2

RG

Adjustment Item	Problem / Op	otion Button to Press		
Cool (9300k)	Cool color			
Normal (6500k)	Normal color			
Warm (5500K)	Warm color			
User Color	Red Green Blue	Too weak ← ♀ Too strong ← ♀		
	Off	Return to a state set by color adjustment except i-Style Color.		
	Standard	For general windows environment and monitor default setting.		
i-Style Color * ³ Direct	Game	For PC game environment.		
	Cinema	For movie and video environment.		
	Scenery	For displaying outdoor scenery images		
	Text	For text editing and viewing in a word processing environment.		
	Off	Typical		
Blue Light Reducer *3	1	Blue light is reduced.		
	2	Blue light is reduced more than Mode1.		
	3	Blue light is reduced more than Mode2.		

*1 Functions other than i-Style Color is disabled when i-Style Color is activated.

*² Functions other than Blue Light Reducer is disabled when Blue Light Reducer is activated.

*³ Adjustable / settable items depend on which item is activated. See page 18 Function Correlation Matrix for more details.

Direct

You can skip the Menu items and directly display an option setting screen by using the following button operations.

• i-Style Color: Press the - Button when the Menu is not displayed.

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Language

Adjustment Item	Problem / Option			Button to Press
Language	English	English	Русский	Russian
	Français	French	日本語	Japanese
	Deutsch	German	简体中文	Simplified Chinese
	Nederlands	Dutch	繁體中文	Traditional Chinese
	Polski	Polish		

بريًُوم. OSD Settings			
Adjustment Item	Problem	/ Option	Button to Press
OSD H. Position	OSD is too OSD is too		↓ ↓ ↓ ○
OSD V. Position	OSD is too OSD is too		↓ ♀ ↓ ♀
	On	The background of OSD is made	de transparent.
OSD Background	Off Return the background of OSD.		
OSD Time Out	You can se 5s / 15s / 3	t the OSD display duration time. 0s / 60s	

诊: Setup Menu

Adjustment Item	Problem /	Option Button to Press		
Video Mada Adjust	Full Screen	Full screen display		
Video Mode Adjust	Aspect Ratio *	Expansion display of Aspect		
	On	iiyama Logo displayed when the monitor is turned on.		
Opening Logo	Off	iiyama Logo does not display when the monitor is turned on.		
LED	On	The Power Indicator is turned On.		
	Off	The Power Indicator is turned Off.		
NOTE Turn Off the P	ower Indicator v	when you are bothered by the light.		
Information Inform				
Memory Recall	Yes	Factory-preset data is restored.		
Wernory Recall	No	Return to Menu.		

* It can display in the center of the screen with a 4:3, 5:4 or 16:10 aspect ratio when input video resolution is 4:3, 5:4 or 16:10.

Function Correlation Matrix

\square		Item to be selected							
		Adv. Contrast	ECO Mode	i-Style Color	Blue Light Reducer	Brightness	Contrast	Sharpness	Over Drive
	Adv. Contrast		_	~	~	-	\checkmark	~	✓
Item	ECO Mode	—	\geq	~	~	-	~	~	✓
activated	i-Style Color	_	-		-	-	_	-	-
	Blue Light Reducer	_	_	_		-	~	~	~

✓ : Available

Not available

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Lock Mode

<OSD Menu>

- 1. The OSD lock will be activated by pressing the front buttons MENU and + for about 5 seconds. If you try to access the OSD by pressing any of the buttons MENU, +, and EXIT, message "OSD Locked" will appear on the screen.
- 2. The OSD lock will be deactivated by pressing the front buttons MENU and + again for 5 seconds.

<Power Switch>

- The power switch lock will be activated by pressing the front buttons EXIT and for 10 seconds. Locking the power switch means that won't be able to turn off the Monitor while the power switch is locked. If presses the power switch message "Power Button Locked" will appear on the screen.
- The power switch lock will be deactivated by pressing the front buttons EXIT and again for about 10 seconds.

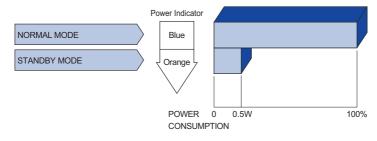
STANDBY FEATURE

The standby feature of this product complies with power saving requirement of VESA DPMS. When activated, it automatically reduces unnecessary power consumption of the monitor when your computer is not in use.

To use the feature, the monitor needs to be connected to a VESA DPMS compliant computer. There is a standby step the monitor takes as described below. The standby function, including any timer settings is configured by the operating system. Check your operating system manual for information on how this can be configured.

Standby Mode

When the video signal from the computer is off, the monitor enters into Standby Mode which reduces the power consumption to less than 0.5W. The screen becomes dark, and the power indicator turns to orange. From Standby Mode, the image reappears in several seconds when either the keyboard or the mouse are touched again.



NOTE Even when using the standby mode, the monitor consumes electricity. Turn off the Power Switch whenever the monitor is not in use, during the night and weekends, to avoid unnecessary power consumption.

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TROUBLE SHOOTING

If the monitor fails to operate correctly, please follow the steps below for a possible solution.

- 1. Perform the adjustments described in OPERATING THE MONITOR, depending on the problem you have. If the monitor does not get a picture, skip to 2.
- 2. Consult the following items if you cannot find an appropriate adjustment item in OPERATING THE MONITOR or if the problem persists.
- 3. If you are experiencing a problem which is not described below or you cannot correct the problem, discontinue using the monitor and contact your dealer or iiyama service center for further assistance.

Problem		Check			
1	The picture does not appear.				
	(Power indicator does not light up.)	 The Power Cable is firmly seated in the socket. The Power Switch is turned ON. The AC socket is live. Please check with another piece of equipment. 			
	(Power indicator is blue.)	 If the blank screen saver is in active mode, touch the keyboard or the mouse. Increase the Contrast and/or Brightness. The computer is ON. The Signal Cable is properly connected. The signal timing of the computer is within the specification of the monitor. 			
	(Power indicator is orange.)	 If the monitor is in standby mode, touch the keyboard or the mouse. The computer is ON. The Signal Cable is properly connected. The signal timing of the computer is within the specification of the monitor. 			
2	The screen is not synchronized.	The Signal Cable is properly connected.The signal timing of the computer is within the specification of the monitor.			
3	The screen position is not in the center.	□ The signal timing of the computer is within the specification of the monitor.			
4	The screen is too bright or too dark.	□ The video output level of the computer is within the specification of the monitor.			
5	The screen is shaking.	☐ The power voltage is within the specification of the monitor.☐ The signal timing of the computer is within the specification of the monitor.			

RECYCLING INFORMATION

For better environment protection please don't dispose your monitor. Please visit our web site: www.iiyama.com for monitor recycling.

APPENDIX

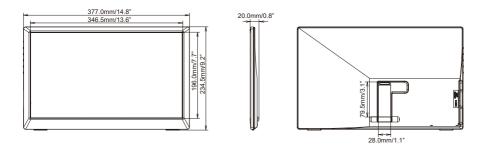
Design and specifications are subject to change without prior notice.

SPECIFICATIONS

Size Category		16"				
	Panel technology	IPS (In-Plane-Switching)				
	Size	Diagonal: 15	Diagonal: 15.6" (39.5cm)			
	Pixel pitch	0.179mm H × 0.179mm V				
LCD Panel	Brightness	220cd/m ² (Typical)				
	Contrast ratio	800 : 1 (Typical), Adv. Contrast Function Available				
	Viewable angle	Right / Left : 85° each, Up / Down: 85° each (Typical)				
	Response time	6ms (Gray to Gray)				
Display Colors		Approx. 16.7M				
Sync Fre	Sync Frequency		Horizontal: 30.0 - 68.0kHz, Vertical: 60Hz			
Native Resolution		1920 × 1080, 2.1 MegaPixels				
Supported max. resolution		1920 × 1080 60Hz				
Input Connector		USB-C (DP alt-mode), Micro USB				
Plug & Play		VESA DDC2B [™]				
Input Vid	eo Signal	USB-C (DP alt-mode)				
Maximun	n Screen Size	344.2mm W × 193.6mm H / 13.6" W × 7.6" H				
Power Se	ource	5VDC, 2A				
Power Consumption		8W typical, Standby mode: 0.5W maximum				
Dimensio	ons / Net Weight	377.0 × 234.5 × 20.0mm / 14.8 × 9.2 × 0.8" (W×H×D) 0.96kg / 2.1lbs				
Tilt Angle		Upward: 15 - 35°				
Environmental Considerations		Operating: Storage:	Temperature Humidity Temperature Humidity	5 to 35°C / 41 to 95°F 10 to 80% (No condensation) -20 to 60°C / -4 to 140°F 5 to 85% (No condensation)		
Approvals		CE, TÜV-Bauart, EAC				



* When the stand is closed.



COMPLIANT TIMING

Video Mode	Horizontal Frequency	Vertical Frequency	Dot Clock
640 × 480	31.469kHz	59.940Hz	25.175MHz
800 × 600	37.879kHz	60.317Hz	40.000MHz
1024 × 768	48.363kHz	60.004Hz	65.000MHz
1280 × 1024	63.981kHz	60.020Hz	108.000MHz
1680 × 1050	65.290kHz	60.000Hz	146.250MHz
1920 × 1080	66.590kHz	59.930Hz	138.500MHz