



Thank you very much for choosing the iiyama LCD monitor.

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

## 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

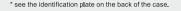
telephone/fax number, for availability during the day

- 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.





## **CE MARKING DECLARATION OF CONFORMITY**

This LCD monitor complies with the requirements of the EC/EU Directive 2004/108/EC "EMC Directive", 2006/95/EC "Low Voltage Directive" and 2011/65/EU "RoHS Directive".

#### Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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



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.

## TABLE OF CONTENTS

FOR YOUR SAFETY	1
SAFETY PRECAUTIONS	1
SPECIAL NOTES ON LCD MONITORS	3
CUSTOMER SERVICE	4
CLEANING	4
BEFORE YOU OPERATE THE MONITOR	5
FEATURES	5
CHECKING THE CONTENTS OF THE PACKAGE	5
UNPACKING	6
SPECIAL NOTES ON	6
CONTROLS AND CONNECTORS : MONITOR	7
INSTALLATION	9
CONTROLS AND CONNECTORS : REMOTE CONTROL	11
PREPARING THE REMOTE CONTROL	12
BASIC OPERATION	13
CONNECTING YOUR MONITOR	16
COMPUTER SETTING	18
OPERATING THE MONITOR	19
ADJUSTMENT MENU CONTENTS	21
SCREEN ADJUSTMENTS	29
POWER MANAGEMENT FEATURE	32
TROUBLE SHOOTING	33
RECYCLING INFORMATION	
APPENDIX	35
SPECIFICATIONS	35
DIMENSIONS	36
COMPLIANT TIMING	37
PAP SUPPORT SCREEN TABLE	

# ENGLISH

## FOR YOUR SAFETY

## SAFETY PRECAUTIONS

#### WARNING

#### STOP OPERATING THE MONITOR WHEN YOU SENSE TROUBLE

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 power cable and signal cable. 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 10 cm (or 4 inches) from any walls. Do not remove the tilt stand when operating the monitor. Ventilation slots on the back of the cabinet will be blocked and the monitor may overheat if the stand is removed. This may cause fire or damage. Operating the monitor on its back, side, upside down or on a carpet or any other soft material may also cause damage.

#### 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 power cable or signal cable, 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.

#### DO NOT USE THE MONITOR FOR 24-HOURS CONTINUOUSLY

The monitor is not designed to work for 24-hours continuously, do not use the monitor for 24-hours continuously.

#### **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.

## 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.
- Due to the nature of the backlight, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.
- Contact your dealer or iiyama service center for the backlight replacement when the screen is dark, flickering or not lighting up. Never attempt to replace it by yourself.
- Max. non-stop operating time and conditions
  - If a static image is displayed continuously, it is recommended to disrupt it with a motion picture.
  - (2) It is recommended to periodically change the background colour and background image.
  - (3) Maximum operating time of the display is 18 hours per day, if the IRFM function is set on. If the IRFM function is off, do not exceed a 12 hour non-stop operating time limit.
  - (4) If the screen is active for a longer period of time, it is recommended to
    - I. Run the screensaver (motion picture or black pattern)
    - II. Power off the system for a while
  - (5) Make sure that the screen is suitably ventilated, or is used in conjunction with climate control system if installed into any bespoke cabinets.
  - (6) We strongly recommend an active cooling system with fans for long operating times, especially for high luminance LCD models.
- This LCD cannot be used outdoors.
- This LCD cannot be used with the screen facing upwards.
- If you use a cable longer than the supplied one, the picture quality is not guaranteed.
   Touch function can be disrupted if the USB cable length exceeds 3m.

#### **CUSTOMER SERVICE**

The fluorescent light used in the LCD monitor may have to be periodically replaced. For the warranty coverage on this component, please check with local iiyama service center.

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

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	Benzine	Abrasive cleaner
Spray-type cleaner	Wax	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 4000:1 (Typical: without Touch panel) / Brightness 500cd/m<sup>2</sup> (Typical: without Touch panel)
- Digital Character Smoothing
- Automatic Set-up
- Stereo Speakers 2 × 12W Stereo Speakers
- Plug & Play VESA DDC2B Compliant Windows<sup>®</sup> 95/98/2000/Me/XP/Vista/7/8 Compliant
- Power Management (VESA DPMS Compliant)
- VESA Mounting Standard (400mm×400mm) Compliant
- Glass with AG coating

### CHECKING THE CONTENTS OF THE PACKAGE

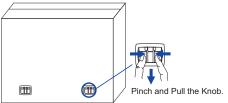
The following accessories are included in your package. Check to see if they are enclosed with the monitor. If anything is missing or damaged, please contact your local iiyama dealer or regional iiyama office.

- Power Cable\*
- USB Cable
- iiyama Logo Sticker
- VGA(D-sub) Signal Cable DVI-D Signal Cable
- Remote Control
- Safety Guide
- Touch Pen
- Quick Start Guide

- CAUTION
  - \* The rating of the Power Cable enclosed in 120V area is 10A/125V. If you are using a power supply higher than this rating, then a power cable with a rating of 10A/ 250V must be used. However, all guarantees and warranties are void for any problems or damage caused by a power cable not supplied by iiyama.

## UNPACKING

- Before unpacking your monitor, prepare a stable, level, and clean surface near a wall outlet.
   Set the LCD Monitor box in an upright position and open from the top of the box before removing the top cushions.
- 2 Remove the carton holders.
- ③ Remove the top cushion and take the accessories box and the Monitor out.



## CAUTION

Moving the monitor requires at least two people. If not, it may drop and could result in a serious injury.

When moving/shipping the monitor, please hold by the carton holders.



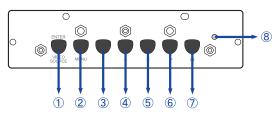
## SPECIAL NOTES ON

#### CAUTION

Permanent damage can occur if Sharp Edged, Pointed or Metal items are used to activate Touch. This could invalidate any remaining warranty.

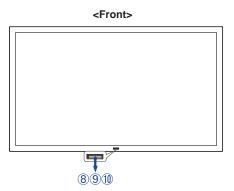
We recommend you use a plastic stylus (tip R0.8 or over) or finger.

## **CONTROLS AND CONNECTORS : MONITOR**

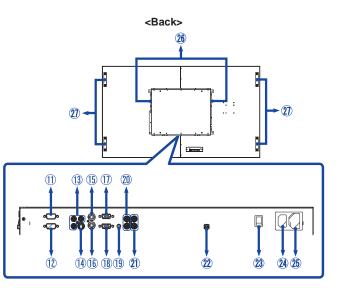


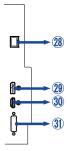
<back< th=""><th>Controller&gt;</th></back<>	Controller>
--	-------------

1	ENTER/SOURCE	Enter/Input Select Button
2	MENU	Menu Button
3	▼	Down Button
4		Up Button
5	◀/-	Left / - Button
6	► / +	Right / + Button
$\bigcirc$	Φ	Power Button



	Green	Normal Operation		
		Flash : Power Management (Power Save : Low)		
Dower Indicator	Ded	Lighting : If turn off the Power Button on the Remote		
Fower mulcator	Red	Control and the Back Controller. Power		
		Management (Power Save : High)		
Off		Power Off		
9 Remote Sensor		Remote Sensor		
Ambient Light Sensor		Detects ambient lighting conditions around the Monitor and adjusts screen brightness automatically when the Ambient Light Sensor function is activated.		
		Power Indicator Red Off Remote Sensor		





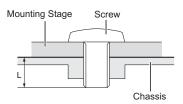
<Right Side>

1	RS232C OUT	D-SUB 9pin	RS232C Connector
12	RS232C IN	D-SUB 9pin	RS232C Connecto
13	COMPONENT VIDEO (VIDEO IN)	RCA G/B/R	Component Video Connector
14	S-Video	Mini Din 4pin	S-Video Connector
15	AV OUT	BNC	Video Connector
16	AV IN	BNC	Video Connector
1	VGA OUT	D-SUB mini 15pin	D-SUB mini 15pin Connector
18	VGA IN	D-SUB mini 15pin	D-SUB mini 15pin Connector
19	AUDIO IN1 (PC Audio In)	Mini Jack	Audio Connector
20	AUDIO IN2	RCA L/R	Audio Connector
21)	AUDIO OUT	RCA L/R	Audio output Connector
22	USB	USB	Touch USB Connector
23	AC SWITCH $-$ (ON) / $\bigcirc$ (OFF)	MAIN POWER	Main Power Switch
24	AC IN	AC-INLET	AC Connector (AC-IN)
25	AC OUT	AC-OUTLET	AC Connector (AC-OUT)
26	SPEAKERS		Speakers
Ø	Handles		Handles
28	RJ45	RJ45	RJ45 Connector
29	DisplayPort (DP)	DisplayPort	DisplayPort Connector
30	HDMI	HDMI	HDMI Connector
31	DVI	DVI-D 24pin	DVI-D 24pin Connector

## CAUTION

- Follow the manual instructions for the type of mount you have selected. Refer all servicing to qualified service personnel.
- Moving the monitor requires at least two people.
- Before installing, please make sure the wall is strong enough to hold the necessary weight of the display and the mount.

#### [WALL MOUNTING]



#### CAUTION

When using the wall mounting, consideration of thickness of the mounting stage needs to be taken. Tighten the M8 Screw with washer which "L" length is 10mm to fasten the monitor. Using a screw longer than this may cause electric shock or damage because it may contact with the electrical parts inside the monitor.

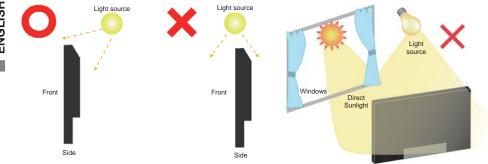
#### [INSTALLATION NOTE]

The touch kit of this monitor is an optical device that utilizes infrared light source and sensitive sensors for touch detection.

Notice the incident light that contains large quantities of infrared light may affect touch screen operation and performance.

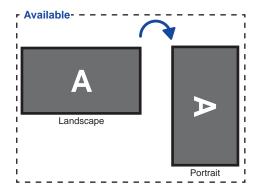
Please install it with care as follows to ensure reliable touch performance.

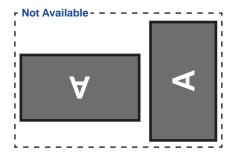
Intense light / Specular light / Focus spotlight / Wide spread light / Direct sunlight / Indirect sunlight from the window and/or the glass door. / Not install the touch monitor right under the light source.



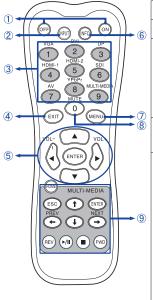
#### [ROTATING THE DISPLAY]

It is designed to be compatible in both landscape and portrait modes, however, it is optimized for landscape mode.





## **CONTROLS AND CONNECTORS : REMOTE CONTROL**



1	ON/OFF	Turns the monitor ON and OFF.
2	INPUT	Selects the source.
3	Number (1-9) / Input source	Serve as input source buttons when the Menu is not displayed. The HDMI-2, SDI and MULTI-MEDIA functions are not available with this monitor.
4	EXIT	Returns to a previous menu or closes the OSD Menu.
6	A <b>T A</b> Þ	<ul> <li>Navigates through submenus and settings.</li> <li>▲: Up Button</li> <li>♥: Down Button</li> <li>◄: Left Button</li> <li>♦: Right Button</li> <li>◀ (VOLUME-): Decreases the sound volume.</li> <li>▶ (VOLUME+): Increases the sound volume.</li> </ul>
	ENTER	Confirms your selection or save changes.
6	INFO	Provides source and resolution information.
0	MENU	Opens the monitor's on-screen menu systems. When the menu system is already open, pressing this button will select the previous submenu.
8	Number (0)/ MUTE	Turns on or off the mute function when the Menu is not displayed.
9	MULTI-MEDIA	Not available on this model.

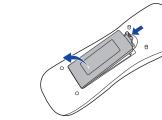
#### PREPARING THE REMOTE CONTROL

To use the remote control, insert the two dry batteries.

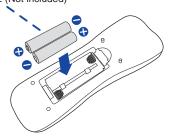
#### CAUTION

Do not use any other batteries other than those specified in this manual for the Remote Control. Do not insert old and new batteries together in the Remote Control. Make sure that the terminals match the "+" and "-" indications in the battery compartment. Burst batteries or the electrolyte from these batteries may cause stains, fire or injury.

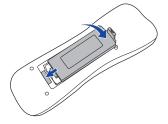
1 Slide back and remove the battery cover in the direction of the arrow.



② Align and insert two AAA batteries according to their plus and minus ports (as indicated in the remote control). Battery x 2 (Not included)



③ Replace the battery cover in the direction of the arrow and snap it back into place.



- **NOTE** Replace with new batteries when the Remote Control does not work close to the monitor. Use AAA dry batteries.
  - Operate the Remote Control by pointing it toward the Remote Sensor on the monitor.
  - Other manufacturers remote control will not work with this monitor. Use the provided Remote Control ONLY.
  - Used batteries needed to follow the local rules to be discarded. (Suggestion: to dispose of used batteries please follow correct policy as per your local regulations.)

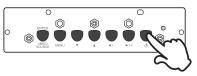
#### Turning the monitor ON

The monitor is turned On and the Power Indicator turns to Green when you press the POWER Button on the monitor or the Remote Control. The monitor is turned Off and the Power Indicator turns to Red when you press the POWER Button on the monitor or the Remote Control. Press again to turn On the monitor.

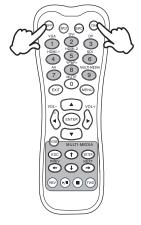
#### NOTE

Even when using the power management mode or turning OFF the Power Switch, the monitor will consume a small amount of electricity. Disconnect the Power Cable from the power supply whenever the monitor is not in use or during the night, to avoid unnecessary power consumption.

#### [Monitor]



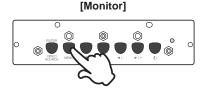
#### [Remote Control]



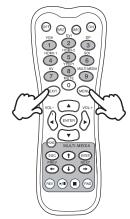
#### Display the adjustment menu page

The menu page appears on the screen when you press the MENU Button on the monitor or the Remote Control.

The menu page disappears when you press the EXIT Button on the Remote Control again.



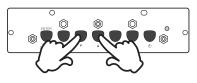
#### [Remote Control]



#### Move the cursor vertically

Select adjustment by pressing the  $\blacktriangle$  /  $\blacktriangledown$  Button while the menu page is displayed on the screen.

#### [Monitor]

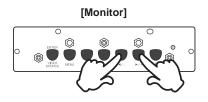


## [Remote Control]



#### Move the cursor horizontally

Select menu or setting, or perform the adjustment by pressing the  $\blacktriangleleft$  /  $\blacktriangleright$  Button while the menu page is displayed on the screen.



#### [Remote Control]



#### Adjust the volume of sound

Press the  $\blacktriangleleft$  /  $\triangleright$  Button to adjust the volume of sound when the menu page is not displayed on the screen.

#### [Monitor]



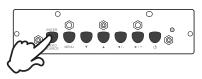
# 

[Remote Control]

#### Switch the input signal

This is activated when you successively press the VIDEO SOURCE Button on the monitor or INPUT Button on the Remote Control as follows:

#### [Monitor]





#### **CONNECTING YOUR MONITOR**

Tensure that both the computer and the monitor are switched off.

②Connect the computer to the monitor with the signal cable.

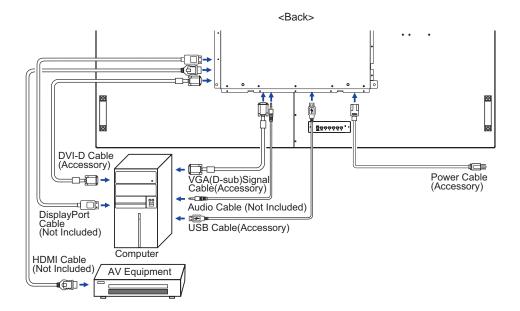
③Connect the computer to the monitor with the USB Cable.

(4) Connect the Power Cable to the monitor first and then to the power supply.

⑤Turn on your monitor (Main Power Switch and Power Switch) and computer.

- **NOTE** The signal cables used for connecting the computer and monitor may vary with the type of computer used. An incorrect connection may cause serious damage to both the monitor and the computer. The cable supplied with the monitor is for a standard connector. If a special cable is required please contact your local iiyama dealer or regional iiyama office.
  - For connection to Macintosh computers, contact your local iiyama dealer or regional iiyama office for a suitable adaptor.
  - Make sure you tighten the finger screws at each end of the Signal Cable.
  - Don't connect the RS-232C cable and the USB cable to the computer at the same time. And cannot use those at the same time.
  - When USB cable connected than wait for 5 seconds and the touch function is ready to go. It can be activated by pen, finger or any other pointer.

[Example of Connection]



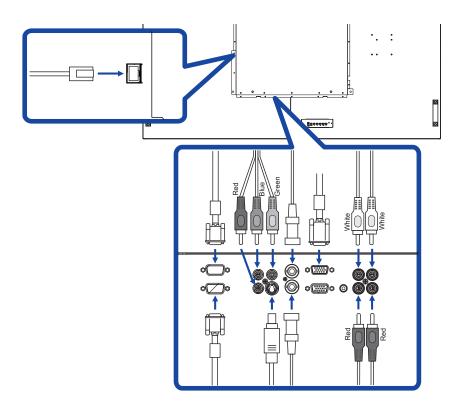
#### [ Connection example with the peripheral device ]

### CAUTION

Turn off the power switch and unplug the monitor and peripherals before connection to avoid electric shock or damage.

#### NOTE

- Refer to the user manual of peripherals at the same time.
- Ensure you have the necessary cables as required.



#### **COMPUTER SETTING**

Signal Timing

Change to the desired signal timing listed on page 37: COMPLIANT TIMING.

Windows 95/98/2000/Me/XP/Vista/7/8 Plug & Play

The iiyama LCD monitor complies with DDC2B of VESA standard. The Plug & Play function runs on Windows 95/98/2000/Me/XP/Vista/7/8 by connecting the monitor to DDC2B compliant computer with the Signal Cable supplied.

For installation on Windows 95/98/2000/Me/XP: The monitor Information File for iiyama monitors may be necessary for your computer and obtained via the Internet, using the address:

#### http://www.iiyama.com

- - NOTE For additional information on how to download the driver for your touch screen monitor, please access the internet site noted above.
    - Monitor Drivers are not required in most cases for Macintosh or Unix operating systems. For further information, please contact your computer dealer first for advice.
  - Procedure for turning ON the Power Switch Turn ON the monitor first, and then the computer.
  - MULTI-TOUCH

This monitor complies with DDC2B of VESA standard. (Plug&play compliant) The MULTI-TOUCH function runs on Windows7/8 by connecting the monitor to DDC2B compliant computer with the USB cable supplied.

 MULTI-TOUCH support operation system Microsoft Windows XP (64 bit and 32 bit) Microsoft Windows Vista (64 bit and 32 bit) Microsoft Windows 7 (64 bit and 32 bit) Mac OS X V10.4 & above Linux (2.6x) & above Not support Windows 2000 and earlier versions.

	Windows8	Windows7*5	Windows7*4	Vista	XP	Mac OSX	Linux
Default mouse*1	0	0	0	0	0	0	0
Touch digitizer*2	0	0	0	0	×	×	×
Windows7 gestures*3	0	Ó	×	×	×	×	×

- \*1 Default mouse (click, drag, double-click and right-click)
- \*<sup>2</sup> Touch digitizer (click, drag /selection, double-click, right-click, flick and visual feedback)
- \*3 Digitizer with Windows7 multi-touch gestures
- \*4 Windows 7 Starter and Home Basic version
- \*5 Windows 7 Home Premium, Professional, Enterprise and Ultimate versions

## **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 37. You are also able to adjust the picture by following the button operation shown below. For more detailed adjustments, see page 29 for SCREEN ADJUSTMENTS.

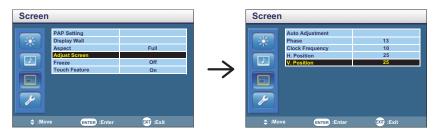
Press the MENU Button to start the On Screen Display feature. There are additional Menu items which can be switched by using the  $\blacktriangle$  /  $\blacktriangledown$  Buttons.

Picture						
	Picture Mode	Standard				
	Backlight	5				
200	Contrast	88				
	Brightness	43				
	Chroma	50				
	Phase	25				
	Sharpness	5				
	Color Temp.	Neutral				
	Noise Reduction	Mid				
P	Film Mode	Auto				
	Reset					

- ② Select the Menu item of the adjustment you want to make. Press the ▶ or ENTER Buttons and enter the menu page. Then, use the ▲ / ▼ Buttons to highlight the desired adjustment item.
- ③ Press the ▶ or ENTER Buttons 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 vertical position, select Menu item of Screen. Select "Adjust Screen" by using the  $\blacktriangle$  /  $\blacktriangledown$  Buttons. Press the  $\blacktriangleright$  Button. Then, select "V. Position" by using the  $\blacktriangle$  /  $\blacktriangledown$  Buttons.

Use the  $\triangleleft$  /  $\triangleright$  Buttons to change the vertical position settings. The vertical position of the overall display should be changing accordingly while you are doing this.



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

#### NOTE

- The MENU / EXIT Button can be used to return previous menu item.
- 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.
- Adjustments for Image Position, Clock Frequency and Phase are saved for each signal timing. Except for these adjustments, all other adjustments have only one setting which applies to all signal timings.

#### [LOCK MODE]

Back Controller Button: \* Available for Back Controller only.

Pressing and holding the  $\blacktriangleleft$  and  $\blacktriangleright$  buttons for about 5 seconds when Menu is not displayed, will lock/unlock the Back Controller Button Lock function.

- Remote Control Button: \* Available for Back Controller only.
   Pressing and holding the MENU and buttons for about 5 seconds when Menu is not displayed, will lock/unlock the Remote Control Button Lock function.
- Back Controller Button & Remote Control Button: \* Available for Remote Control only.
   Press and hold the ▼ button for about 5 seconds, then press ENTER button when Menu is not displayed to activate/deactivate the Back Controller and Remote Control Lock function.

Direct \* Available for Remote Control only.

#### Reset Control Setting:

Pressing and holding the INFO button for about 5 seconds when Menu is not displayed.

#### • Freeze Function:

Press the  $\mathbf{\nabla}$  button and then press 0 button when Menu is not displayed. Repeat successively to activate/deactivate the function.

## ADJUSTMENT MENU CONTENTS

icture	Picture		
	Pie	cture Mode	Standard
	Ba	acklight	5
	Co	ontrast	88
	Br	ightness	43
	Ch	nroma	50
	Ph	lase	25
	Sh	arpness	5
	Co	olor Temp.	Neutral
	No	bise Reduction	Mid
	Fil Fil	Im Mode	Auto
	Re	eset	
	⇒ :Move	ENTER :Enter	EXIT :Exit

Adjustment Item	Problem / Option				Button to Press		
	Vivid	For displayin	างุ	g outdoor sc	enery images.		
Picture Mode	Standard	U U	For general windows environment and monitor default setting.				
	Custom		Displays a picture on a screen set by Image Settings adjustments.				
	Cinema	For movie ar	n	d video envi	ronment.		
Backlight*3	Brightness	of back light is	s	reduced.	<b>◆</b> ↓		
Contrast	Too dull Too intense	e					
Brightness*1	Too dark Too bright				\$ \$		
Chroma* <sup>2</sup>	Too week Too strong	Too week $\leftarrow$ Too strong $\leftarrow$					
Phase*5	Purplish Greenish	Purplish Greenish Greenish					
Sharpness	Too soft Too sharp				<b>\$</b> }		
	Cool (Bluis	h white)		Red			
Color Temp.	Neutral (G	reenish white)	1	Green	Too weak		
Color temp.	Warm (Red	ddish white)		Blue			
	Custom			Reset			
	Off	Noise Reduc	ct	tion is turned	d off.		
	Low	Electronic image noise caused by different media players is reduced.			aused by different media		
Noise Reduction* <sup>2</sup>	Mid	Electronic image noise caused by different media players is reduced.			aused by different media		
	High	Electronic image noise caused by different media players is reduced.					
Film Mode* <sup>2,4</sup>	Auto	Automatically optimized format settings based or the content type.					
	Off	Film Mode is	S	turned off.			

OPERATING THE MONITOR 21

Picture	Pict	ture				
		Contrast Brightness Chroma Phase Sharpness Color Temp. Noise Reductio Film Mode Reset	on ER :Enter	Standard 5 88 43 50 25 5 Neutral Mid Auto		
Adjustment Item		Problem	/ Optic	on	Button to Press	
Reset		Cancel	Retur	n to Menu.		
RESEL	ſ	ОК	Resets all settings in the Picture menu.			

\*1 Adjust the Brightness when you are using the monitor in a dark room and feel the screen is too bright.
\*2 Only AV,S-Video, YPbPr, HDMI(Video) and DisplayPort(Video) inputs.

- \*<sup>3</sup> Backlight is disabled when the Ambient Light Sensor is active.
   \*<sup>4</sup> Film Mode is disabled when the PAP is active.
- \*<sup>5</sup> Only AV(NTSC) input.

ENGLISH

Sound	ound						
	Sound Mode Treble Bass Balance Surround Speaker Audio Source Reset ************************************	Enter					
Adjustment Item	Problem / 0	Option	Button to Press				
	Dynamic	Enhances treble and	d bass.				
Sound Mode*1	Standard	Flat settings.					
	Custom	Recalls customized settings.					
Treble*2	Too weak Too strong		\$ \$				
Bass* <sup>2</sup>	Too weak Too strong		+ + + + + + + + + +				
Balance*1	Left side spea Right side spe		<b>* </b>				
0	On	Surround is turned on.					
Surround*1	Off	Surround is turned off.					
Creaker	Line-out	Select the Line-out.					
Speaker	Internal	Select the Internal S	Speaker.				
	Audio1	Select the Audio1 in	iput.				
Audio Source	Audio2	Select the Audio2 in	iput.				
	HDMI	Select the HDMI input.					
	DisplayPort	Select the DisplayPe	ort input.				
Reset	Cancel	Return to Menu.					
INESEL	ОК	Resets all settings in the Sound menu.					

\*<sup>1</sup> Sound Mode, Balance and Surround are disabled when the Line-out (Speaker) is active.
 \*<sup>2</sup> Treble and Bass are disabled when the Line-out (Speaker) or Custom (Sound Mode) is active.

#### Screen

Screen		
	PAP Setting Display Wali Aspect Adjust Screen Freeze Touch Feature	Full Off On
🗢 :Move	ENTER :Enter	EXIT :Exit

Adjustment Item	Problem	/ Optio	n	Button to Press		
		Off	PA	P is turned off.		
	PAP	PIP	Dis	splay the sub screen in the main screen.		
		PBP	Dis	play images from two sources side by side.		
		Main	Se	lect the Main screen.		
	A	Sub	Se	lect the Sub screen.		
	Active Picture	Left	Se	lect the Left screen.		
PAP Setting*1	liotare	Right	Se	lect the Right screen.		
		Swap	Sw	aps the Main/Sub or Left/Right screens.		
	Picture	Large	Inc	rease the size of the Sub screen.		
	Size	Small	Re	duce the size of the Sub screen.		
		Upper	Left	Move the sub screen to the upper left corner.		
	Picture Position *PIP only	Upper	Right	Move the sub screen to the upper right corner.		
		Lower	Left	Move the sub screen to the lower left corner.		
		Lower	Right	Move the sub screen to the lower right corner.		
	H Monitors	Sets th positior		number of displays used in the horizontal		
	V Monitors	Sets th positior		nber of displays used in the vertical		
	H Position	Sets th	e hori	zontal position of the display wall matrix.		
	V Position	Sets th	e vert	tical position of the display wall matrix.		
Display Wall* <sup>2</sup>	Frame			ts images near the display edges for al demonstration across the display wall.		
	comp.	Off	Retur	n to Menu.		
	LED	On	The p	ower indicator is turned on.		
		Off	The p	ower indicator is turned off.		
	Power On			splay wall monitors will power on mly within 10 seconds.		
	Delay	Off	Powe	r On Delay is turned off.		

 \*<sup>1</sup> PAP = Picture and Picture With this function, you can display two different picture.
 PAP support details, See page 38 "PAP Support Screen Table".

\*<sup>2</sup> The best performance would be 2x2.
 If the Display - wall is more than 3x3, we suggest use video splitter.
 And, VGA, RS232C and AV input can do daisy chain.

Screen	Screen PAP Set Display Aspect Adjust S Freeze Touch Fe * :Move	Vall Full Creen Off				
Adjustment Item	Problem / Optio	n Button to Press				
	Wide zoom* <sup>3</sup>	Enlarge to fill screen with minimum distortion.				
	Zoom* <sup>3</sup>	Enlarge the picture, keeping its original aspect ratio.				
	Full* <sup>3</sup>	Enlarge the picture horizontally to fill the screen if the picture source is 4:3 (standard definition). When the picture source is 16:9 (high definition), it is not scaled.				
Aspect	4:3* <sup>3</sup>	Displays all picture in 4:3 aspect ratio.				
	Full1* <sup>4</sup>	Enlarge the picture to fill the screen in vertical direction, keeping its original aspect ratio. A black frame may appear around the picture.				
	Full2*4	Enlarge the picture to fill the screen.				
	Real*4	Display the picture dot by dot.				
	Auto Adjustment*6	Cancel         Return to Menu.           OK         Adjust Position, Clock Frequency and Phase automatically.				
	Phase	To correct flickering text or lines				
Adjust Screen*⁵	Clock	Too narrow				
	Frequency	Too wide				
	H. Position	To correct flickering text or lines				
	V. Position	Too low				
<b>F</b>	On	Freeze the picture.				
Freeze	Off	Freeze is turned Off.				
Touch Feature	On	To streamline the OSD, then grayout the following functions: Aspect, PIP, Overscan and Display Wall				
	Off	Return to Menu.				

\*<sup>3</sup> Only AV, S-Video, YPbPr, HDMI(Video) and DisplayPort(Video) inputs. \*<sup>4</sup> Only VGA, DVI, HDMI(PC) and DisplayPort(PC) inputs.

\*<sup>5</sup> Only VGA input.

\*<sup>6</sup> For best results, use the Auto Adjust in conjunction with the adjustment pattern. See page 29 for SCREEN ADJUSTMENTS.

## Setting

Setting

\*

Language Schedule Power Save

English

Low

	Power Save Control Setting Network Settings Set Monitor ID HDMI Control Advanced Information All Reset		Low RS-232C 1 Off			
	Simove (Enter) :En	nter	Exit			
Adjustment Item	Problem / O	ption		В	utton to Press	
	English	English		Nederlands	Dutch	
Language	Français	French		Polski	Polish	
Language	Español	Spanish	ı	Русский	Russian	
	Deutsch	Germar				
	Date and Time	Year/Mc			ne. ylight Saving Time	
	Clock Display	On I	Display t	ime.		
Schedule		Off	Clock Di	splay is turned	off.	
Schedule	Input	display	s autom AV/S-Vic	but source to use when the atically turned on next time. eo/YPbPr/VGA/DVI/HDMI/		
	On/Off Timer	1	Sets when to turn on or off the display. On/Off/Everyday/Mon/Tue/Wed/Thu/Fri/Sat/Sun			
	Low		All input sources can activate/deactivate entering the power saving mode.			
Power Save	High	All input sources can activate entering the power saving mode, but only the VGA signal can deactivate it. If an another input source is connected you have to press the POWER button.				
	Off	Power Save is turned off.				
	RS-232C	Select the RS-232C to control the display.				
	LAN	Select this option to control the display via LAN.				
Control Setting	IR Passthrough	connec		n if multiple displays are RS-232C cables. łary		
		Cancel	Retur	n to Menu.		
Network Settings	DHCP	Execute	Execute If you are in a DHCP environment, once established, the IP Address, Subnet mask, Default gateway, Primary and Secondary DNS settir are displayed.			
	Manual	If you are not in a DHCP environment, your ITS administrator for information of IP Address, Subnet mask, Default gate Primary and Secondary DNS settings a them accordingly.			mation on the ault gateway,	

Setting	Setting						
	Sel Por Internet Inte	nguage nedule wer Save nitrol Setting work Settings Monitor ID MI Control vanced ormation Reset	English Low RS-232C 1 Off ter CV :Exit				
Adjustment Item	Problem / O	otion		Button to Press			
Set Monitor ID	Set ID to the Mo 1-98	onitor.					
HDMI Control	On	one remo	te control.	device and the display with			
	Off	HDMI Co	ntrol is turned off.				
	Auto Search	On	Automatically detects available input sources.				
	Auto Search	Off	Return to Menu.				
	Auto	On	When a new signal is input, adjust Position, Clock Frequency and Phase automatically.				
	Adjustment*1	Off	Return to Menu.				
	Overscan*2	On	Activate Overscan to reduce picture noise while using Video input.				
		Off	Overscan is turned off.				
	RGB Signal	PC	Signal from a PC that is connected to the display via the HDMI input.				
Advanced	ROD Signal	Video	Signal from a video device connected to the display via the HDMI input.				
	Image Retention	On	Automatically displays swift moving patterns ever 1 second to prevent image retention on the scree				
		Off	Image Retention is to	urned off.			
		Landscape	Landscape display				
	OSD Rotation	Portrait	Portrait display				
	OSD Info Box	On	Switching signal inputs, or changing timing, t current input source and resolution information will be displayed on the screen.				
		Off	OSD Info Box is turn	ed off.			
	Adaptive	On	Enhances image cor	ntrast for dark scenes.			
	Contrast	Off	Adaptive Contrast is	turned off.			

\*1 Only VGA input.

For best results, use the Auto Adjust in conjunction with the adjustment pattern. See page 29 for SCREEN ADJUSTMENTS.

\*<sup>2</sup> Only YPbPr, HDMI(Video) and DisplayPort(Video) inputs.

Setting	Setting					
	Sch Pow Com Ent HDJ Info	guage edule ver Save trol Setting work Settings Monitor ID MI Control anced arnation Reset	English Low RS-232C 1 Off off			
Adjustment Item	Problem / Op	otion		Button to Press		
	Ambient Light Sensor	On	Automatically adjust image brightness to changing ambient lighting conditions.			
Advanced	Sensor	Off	Ambient Light Sensor is turned off.			
Auvanceu		On	iiyama Logo displayed when the monitor is turned o			
	Opening Logo	Off	iiyama Logo does monitor is turned	not display when the on.		
Information	Date/Model Name/Serial Number/Operation Time/Software Version/         LAN Version/IP Address*         NOTE       See your graphic card user guide for more information about					
	changing the resolution and refresh.					
All Reset	Cancel	Return to	o Menu.			
	ОК	Factory-preset data is restored.				

\* IP address is displayed only when LAN is connected.

## SCREEN ADJUSTMENTS

Adjust the image by following the procedure below to get the desired picture when selecting Analog input.

- The screen adjustments described in this manual are designed to set image position and minimize flicker or blur for the particular computer in use.
- The monitor is designed to provide the best performance at resolution of 1920 × 1080, but can not provide the best at resolutions of less than 1920 × 1080 because the picture is automatically stretched to fit the full screen. It is recommended to operate at resolution of 1920 × 1080 in normal use.
- Displayed text or lines will be blurred or irregular in thickness when the picture is stretched due to the screen enlargement process.
- It is preferable to adjust the image position and frequency with the monitor controls, rather than the computer software or utilities.
- Perform adjustments after a warm-up period of at least thirty minutes.
- Additional adjustments may be required after the Auto Adjust depending on the resolution or signal timing.
- The Auto Adjust may not work correctly when displaying the picture other than the screen adjustment pattern. In this case, manual adjustments are required.

There are two ways to adjust the screen. One way is automatic adjustment for Position, Clock Frequency and Phase. The other way is performing each adjustment manually.

Perform the Auto Adjust first when the monitor is connected to a new computer, or resolution is changed. If the screen has a flicker or blur, or the picture does not fit in the display area after performing the Auto Adjust, manual adjustments are required. Both adjustments should be made by using the screen adjustment pattern (Test.bmp) obtained via the IIYAMA web site (http://www.iiyama.com).

Adjust the image by following the procedure below to get the desired picture. This manual explains adjustment under Windows 95/98/2000/Me/XP/Vista/7/8.

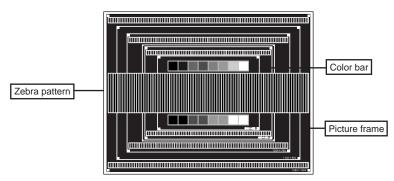
① Display the picture at the optimum resolution.

#### ② Enter the Test.bmp (screen adjustment pattern) to wallpaper.

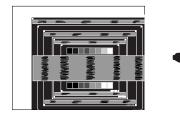
**NOTE** Consult the appropriate documentation for doing this.

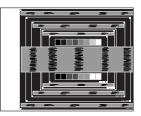
Test.bmp is made at resolution of 1280 x 1024. Set the display position to center in the wallpaper setting dialogue box. If you use Microsoft<sup>®</sup> PLUS! 95/98 cancel the setting of "Stretch desktop wallpaper to fit the screen".

[Adjustment pattern]

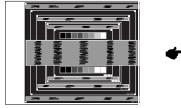


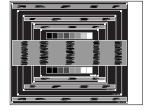
- **③ Adjust the Auto Adjustment.**
- ④ Adjust the image manually by following procedure below when the screen has a flicker or blur, or the picture does not fit in the display area after performing the Auto Adjust.
- (5) Adjust the V-Position so that the top and bottom of the picture frame will fit to the display area.



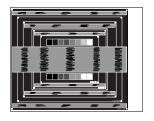


- ENGLISH
  - ⑥ 1) Adjust the H-Position so that the left side of the picture frame will move to the left edge of the display area.

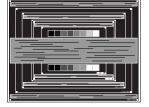




2) Stretch the right side of the picture frame to the right edge of the display area by adjusting the Clock Frequency.

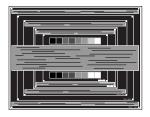




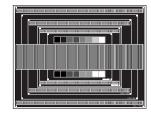


- NOTE
- When the left side of the picture frame moves apart from the left edge of the display area during the Clock Frequency adjustment, adjust steps 1) and 2).
- Another way to make the Clock Frequency adjustment is to correct the vertical wavy lines in the zebra pattern.
- The picture may flicker during the Clock Frequency, H/V-Position adjustment.
- In case the picture frame is bigger or smaller than the data display area after the Clock Frequency adjustment, repeat steps from ③.

#### ⑦ Adjust the Phase to correct horizontal wavy noise, flicker or blur in the zebra pattern.







- NOTE In case the strong flicker or blurs remain on a part of the screen, repeat steps ⑥ and ⑦ because the Clock Frequency may not be adjusted correctly. If the flicker or blurs still remain, set the refresh rate of computer to low (60Hz) and repeat steps from ③ again.
  - Adjust the H-Position after the Phase adjustment if the horizontal position moves during the adjustment.
- ⑧ Adjust the Brightness and Color to get the desired picture after you complete the Clock Frequency and Phase adjustments.

Put back your favorite wallpaper.

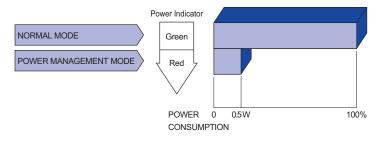
#### **POWER MANAGEMENT FEATURE**

The power management 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 power management step the monitor takes as described below. The power management function, including any timer settings is configured by the operating system. Check your operating system manual for information on how this can be configured.

#### Power Management Mode

When the H-sync signal / V-sync signal / H and V sync signals from the computer are off, the monitor enters into Power Management Mode which reduces the power consumption to less than 0.5W. The screen becomes dark. From Power Management Mode, the image reappears in several seconds when either the keyboard or the mouse are touched again.



- **NOTE** Even when using the power management 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.
  - It is possible that the video signal from the computer may be on while the H or V sync signal is missing. In this instance, the POWER MANAGEMENT feature may not work properly.

# ENGLISH

## **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.
- 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

does not deviate.

#### Check

<ol> <li>The picture does not appear.</li> </ol>	<ul> <li>The Power Cable is firmly seated in the socket.</li> <li>The Power Switch is turned ON.</li> <li>The AC socket is live. Please check with another piece of equipment.</li> <li>If the blank screen saver is in active mode, touch the keyboard or the mouse.</li> <li>Increase the Contrast and/or Brightness.</li> <li>The computer is ON.</li> <li>The Signal Cable is properly connected.</li> <li>The signal timing of the computer is within the specification of the monitor.</li> <li>If the monitor is in power management mode, touch the keyboard or the mouse.</li> </ul>
② The screen is not synchronized.	<ul> <li>The Signal Cable is properly connected.</li> <li>The signal timing of the computer is within the specification of the monitor.</li> <li>The video output level of the computer is within the specification of the monitor.</li> </ul>
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.	<ul><li>The power voltage is within the specification of the monitor.</li><li>The signal timing of the computer is within the specification of the monitor.</li></ul>
6 No sound.	<ul> <li>The audio equipment (computer etc.) is ON.</li> <li>The Audio Cable is properly connected.</li> <li>The Volume is turned up.</li> <li>The Mute is OFF.</li> <li>The audio output level of the audio equipment is within the specification of the monitor.</li> </ul>
⑦ The sound is too loud or too quiet.	□ The audio output level of the audio equipment is within the specification of the monitor.
(8) A strange noise is heard.	□ The Audio Cable is properly connected.
③ The touch screen shows no response.	<ul> <li>□ The USB Cable is firmly seated in the socket.</li> <li>□ Touch screen driver software is installed.</li> </ul>
1 The touch position	The calibration function set up correctly.

TROUBLE SHOOTING 33

## **RECYCLING INFORMATION**

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

## **APPENDIX**

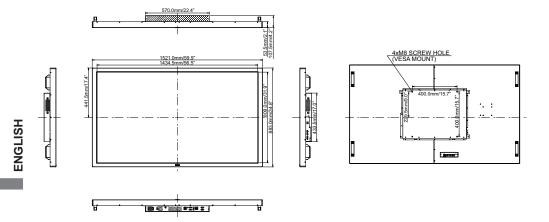
Design and specifications are subject to change without prior notice.

## **SPECIFICATIONS**

Touch	Technology	IR Touch 2points					
Screen	Light transmission	88%					
	Communication system	USB serial transfer					
Size Ca	tegory	65"					
LCD	Panel technology	VA					
Panel	Size	Diagonal: 65" (164cm)					
	Pixel pitch	0.744mm H × 0.744mm V					
	Brightness	450cd/m <sup>2</sup> (Typical: without Touch panel)					
	Contrast ratio	4000 : 1 (Typical: without Touch panel)					
	Viewable angle	Horizontal : 178 degrees, Vertical: 178 degrees (Typical)					
	Response time	8ms (Typical, Gray to Gray)					
Display	Colors	Approx.1.073G					
Sync Fr	equency	Analog: Horizontal: 30.0-83.0kHz, Vertical: 50-76Hz Digital: Horizontal: 30.0-83.0kHz, Vertical: 50-76Hz					
Maximu	m Resolution	1920 × 1080, 2.1 MegaPixels					
Input Co	nnector	D-Sub mini 15 pin, DVI-D 24 pin, HDMI, DisplayPort					
Input Vie	deo Connector	BNC jack, S-Video					
Input Au	dio Connector	mini jack, RCA (L/R)					
Input Co	mponent Connector	RCA (Video/L/R)					
LAN		RJ45					
Serial P	ort	RS-232C In/Out					
Plug & F	Play	VESA DDC2B <sup>™</sup>					
Input Sy	nc Signal	Separate sync: TTL, Positive or Negative					
Input Vi	deo Signal	Analog: 0.7Vp-p (Standard), 75Ω, Positive Digital: DVI (Digital Visual Interface Standard Rev.1.0) compliance Digital: HDMI, DisplayPort					
Input Au	dio Signal	0.5Vrms maximum					
Output 0	Connector	D-Sub mini 15 pin					
Output \	/ideo Connector	BNC jack					
Output A	udio Connector	RCA(L/R)					
Speaker	S	Internal: 12W×2 (Stereo speakers)					
Maximu	m Screen Size	1428.48mm W × 803.52mm H / 56.2" W × 31.6" H					
Power S	ource	100-240VAC, 50/60Hz, 6.4A					
Power C	consumption*	265W typical, Power management mode: 0.5W maximum					
Dimensi	ons / Net Weight	1521.0 × 833.0 × 107.5mm / 59.9 × 34.8 × 4.2" (W×H×D) 63.5kg / 140.0lbs					
Environi Conside		Operating: Temperature Humidity0 to 40°C / 32 to 104°F 85% (No condensation)Storage: Temperature Humidity-20 to 60°C / 4 to 140°F 85% (No condensation)					
Approva	ls	CB, CE, CU, TÜV-Bauart					

**NOTE** \* USB peripherals / Audio equipment are not connected.

## DIMENSIONS



Timing		fH(kHz)	fV(Hz)	Dot clock (MHz)	VGA	DVI	DisplayPort	IMDH	YPbPr	AV	S-Video	
	VGA 640x	480	31.469 37.861	59.940 72.809	25.175 31.500	0	0					
	VGA 640X480		37.500	75.000	31.500	0	0	0	$\circ$			
	SVGA 800x600		37.879	60.317	40.000	$\circ$	0	$\bigcirc$	$\circ$			
			46.875	75.000	49.500	0	0	0	0			
	XGA 1024	x768	48.363	60.004	65.000	0	0	0	$\bigcirc$			
			60.023	75.029	78.750	0	0	$\bigcirc$	Q			
	1280x768		47.776	59.870	79.500	$\bigcirc$	0		$\bigcirc$			
		80x800 RB	49.306	59.910	71.000	$\bigcirc$	$\square$					
VESA	WXGA 12	80x800	49.702	59810	83.500	$\Box$	$\square$		$\square$			
	1280x960		60.000	60.000	108.000	$\Box$	$\underline{Q}$		$\square$			
	SXGA 128		63.981	60.020	108.000	$\bigcirc$	$\square$					
	1360x768		47.712	60.020	85.500	$-\Theta$	$\square$	$\square$				
	1366x768	0	47.712	59.700	85.500	-		$\mathbb{H}^{-}$				
	1400x120	-	65.317	59.980	121.750	- 2						
	UXGA 160 1680x105		75.000	60.000 59.880	162.000			$\square$	$\square$			
	WSXGA 1		65.290	59.880	146.250		$\square$	$\square$				
	FHD 1920		67.500	60.000	148.500	$\mathbb{R}$			$\left  \right\rangle$			
IBM	720x400	1000	31.467	70.080	28.320	-		$\square$	$\square$			
CEA-861	1280x720		45.000	60.000	74.250	-		$\square$				
CLA-001	640x480		35.000	66.670	30.240	$\square$						
	832x624		49.722	74.550	57.280	$\overline{}$	$\overline{}$	$\vdash$	$\square$			
MAC	1024x768		60.241	74.930	80.000	$\overline{}$	$\overline{}$	$\vdash$	$\mathbb{R}$			
	1152x870		68.681	75.060	100.000	$\overline{}$	$\overline{}$	$\vdash$	- X			
	NTSC-M		15.734	59.940	13.500					$\overline{\mathbf{O}}$	$\cap$	$\cap$
	NTSC-J		15.734	59.940	13.500					ŏ	ŏ	
	PAL-BDG	HI	15.734	59.940	13.500					ŏ	ŏ	ŏ
SD	480i	60Hz	15.734	59.940	13.500				$\cap$	ŏ		
	576i	50Hz	15.625	50.000	13.500				ŏ	ŏ		
	480p	60Hz	31.469	59.940	27.000		0	0	Ŏ	Ŏ		
	576p	50Hz	31.250	50.000	27.000		Õ	Õ	Õ	Õ		
	·	25Hz	18.750	25.000	74.250		0	Ó	0	0		
	720p	30Hz	22.500	30.000	74.250		0	0	$\circ$	$\circ$		
	/20p	50Hz	37.500	50.000	74.250		0	0	$\circ$	$\circ$		
		60Hz	45.000	60.000	74.250		0	$\circ$	$\circ$			
	1080i	50Hz	28.125	50.000	74.250		0	0	0	0		
	10001	60Hz	33.750	60.000	74.250		0	$0^{-}$	$0^{-}$	$\circ$		
HD		24Hz	27.000	24.000	74.250		0	0	0	Q		
		25Hz	28.125	25.000	74.250		Q		Q	$\left  \right $		
		30Hz	33.750	30.000	74.250		$\bigcirc$	LQ_				
	1080p	50Hz	56.250	50.000	148.500		Q		Q	$\bigcirc$		
		60Hz	67.500	60.000	148.500		$\cup$		$\bigcirc$			
		24Psf	27.000	24.000	74.250					$\left  \begin{array}{c} 0 \end{array} \right $		
		25Psf	28.125	25.000	74.250					$\square$		

 $^{*}$   $\bigcirc$  means supported the timing.

## PAP SUPPORT SCREEN TABLE

Sub Main	AV	S-Video	YPbPr	VGA	DVI	HDMI	DisplayPort
AV	—	—	—	0	0	0	0
S-Video	_	—	—	0	0	0	0
YPbPr	_	_	—	_	0	0	0
VGA	0	0	—	_	0	0	0
DVI	0	0	0	0	_	—	0
HDMI	0	0	0	0	_	_	Ó
DisplayPort	0	0	0	0	0	0	—