

USER MANUAL

ProLite

LCD Monitor

ProLite L400W
ProLite L320W

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.

ENGLISH

DEUTSCH

FRANCAIS

NEDERLANDS

SVENSKA

ITALIANO

日本語



FCC DECLARATION OF CONFORMITY

Model Number: PLL400W / PLL320W
Trade Name: iiyama
Responsible party: IIYAMA North America, Inc.
Address: 65 West Street Road, Suite 101B, Warminster, PA18974 U.S.A.
Telephone number: 215-682-9050

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for Class B Personal Computers and peripherals, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the device is operated in a residential environment. This device generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If you determine the device does cause harmful interference to radio or television reception (this may be determined by monitoring the interference while turning the device off and on), you are encouraged to try to correct the interference by one of the following measures:

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

To meet the FCC requirements, you should use a signal cable with ferrite core at both ends.

CAUTION

Changes or modifications not expressly approved by iiyama could void the users authority to operate the device under FCC compliance regulations.

CANADIAN DEPARTMENT OF COMMUNICATIONS COMPLIANCE STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulation of the Canadian department of communications.

CE MARKING DECLARATION OF CONFORMITY

This LCD monitor complies with the requirements of the EC Directive 89/336/EEC "EMC Directive" and 73/23/EEC "Low Voltage Directive" as amended by Directive 93/68/EEC.

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.

- We reserve the right to change specifications without notice.
- All trademarks used in this user manual are the property of their respective owners.
- As an ENERGY STAR® Partner, iiyama has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.
- This manual is printed on recycled paper.

TABLE OF CONTENTS

FOR YOUR SAFETY	1
SAFETY PRECAUTIONS	1
SPECIAL NOTES ON LCD MONITORS	3
CUSTOMER SERVICE	3
CLEANING	3
BEFORE YOU OPERATE THE MONITOR	4
FEATURES	4
CHECKING THE CONTENTS OF THE PACKAGE	4
OPTIONAL PARTS	4
INSTALLATION OF STAND	5
CONTROLS AND CONNECTORS	6
PREPARING THE REMOTE CONTROL	7
CONNECTING YOUR MONITOR	8
COMPUTER SETTING	9
BASIC OPERATION	10
OPERATING THE MONITOR	12
ADJUSTMENT MENU CONTENTS	13
SCREEN ADJUSTMENTS	21
POWER MANAGEMENT FEATURE	23
TROUBLE SHOOTING	24
APPENDIX A	25
SPECIFICATIONS	25
DIMENSIONS	26
COMPLIANT TIMING	26
CONNECTOR PIN ASSIGNMENT	27
RS-232C INTERFACE	28
APPENDIX B	28

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 spilled 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. 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. It is recommended that two people are used when moving the monitor.

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.

DO NOT TURN ON AND OFF THE POWER FREQUENCY

Do not alternate between turning the power ON and OFF frequency as it may cause damage.

OTHERS

ERGONOMIC RECOMMENDATIONS

To eliminate eye fatigue, do not operate the monitor against a bright background or in a dark room. 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 its 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. There is the possibility that the previous screen has been fixed. Pay attention sufficient when you use LCD Monitor.
- 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.

CUSTOMER SERVICE

NOTE

- 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

- 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

ProLite L320W-B: **NOTE** The top of the monitor may become hot during use.

FEATURES

- ◆ ProLite L400W-B1X: 39.6" Wide Screen TFT Color LCD Monitor
ProLite L320W-B: 32" Wide Screen TFT Color LCD Monitor
- ◆ Supports Resolutions up to 1280 × 1024 (down scale)
- ◆ Super Wide Viewing Angle and High Contrast
- ◆ Digital Character Smoothing
- ◆ Automatic Set-up
- ◆ Plug & Play VESA DDC2B Compliant, Windows® 95/98/2000/Me/XP Compliant
- ◆ Power Management (ENERGY STAR® and VESA DPMS Compliant)
- ◆ Digital Input for Clear Display

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* | ■ D-SUB Signal Cable MB37 |
| ■ DVI-D Signal Cable DV66 | ■ RS-232C Cable SR51 |
| ■ Stand × 2 | ■ Screw for Stand × 4 |
| ■ Remote Control | ■ AA Dry Battery × 2 |
| ■ User Manual | |

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.

OPTIONAL PARTS

Optional parts as below are available for your LCD monitor. Please contact your local iiyama dealer or regional iiyama office for them. The Video Adapter enables you to connect the video equipment to the monitor.

- Video Adapter OVA1-2

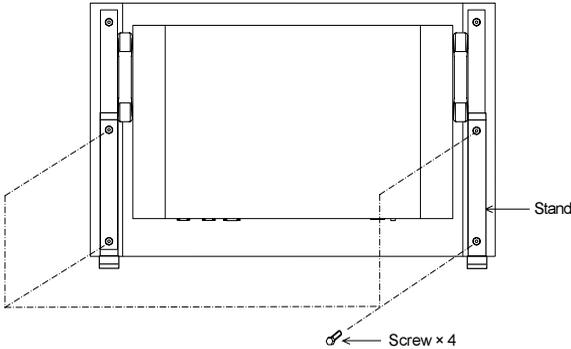
INSTALLATION OF STAND

- CAUTION**
- The monitor is heavy. Two person handling is recommended.
 - Install the stand on a stable surface. The monitor may cause injury or damage if it falls or is dropped.
 - Do not give a strong impact to the monitor. It may cause damage.
 - Unplug the monitor before installation to avoid electric shock or damage.

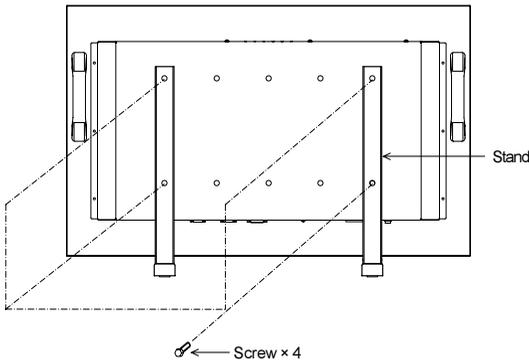
Install the Stand as shown in the illustration.

Tighten the Screw to fasten the Stand.

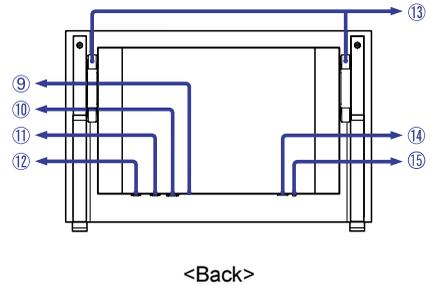
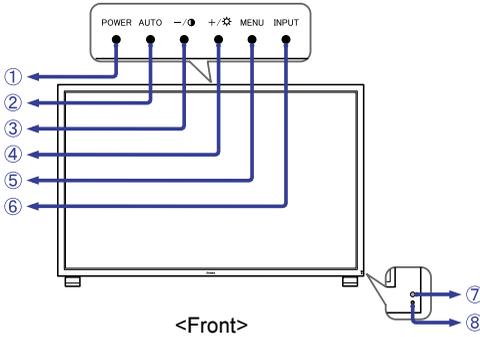
ProLite L400W-B1X



ProLite L320W-B



CONTROLS AND CONNECTORS



- ① Power Switch (POWER)
- ② Auto Button (AUTO)
Adjusts Clock, Phase, H-Position and V-Position automatically.

NOTE

- For best results, use the Auto Set-up in conjunction with the test pattern Test.bmp. (See page 21 for SCREENADJUSTMENTS.)
- The screen becomes dark for approximately five seconds during the adjustment.

- ③ - / Contrast Button (- / ●)
- ④ + / Brightness Button (+ / ☀)
- ⑤ Menu Button (MENU)
- ⑥ Input Button (INPUT)
- ⑦ Remote Sensor
- ⑧ Power Indicator

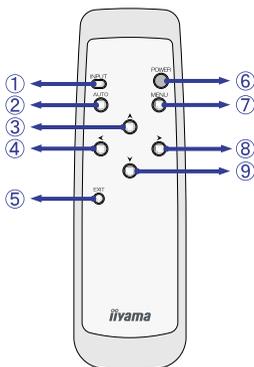
NOTE

- Blue: Normal operation
Orange: Power Management

The monitor enters into power management mode which reduces the power consumption to less than 5W when receiving no horizontal and/or vertical sync signal.

- ⑨ Optional Video Adapter Slot
- ⑩ DVI-D 24pin Connector (DVI)
- ⑪ D-SUB mini 15pin Connector (D-SUB)
- ⑫ RS-232C Connector (RS-232C)
- ⑬ Handles
- ⑭ AC Connector (AC IN)
- ⑮ Main Power Switch (POWER)

<Remote Control>



- ① Input Button (INPUT)
- ② Auto Button (AUTO)
Adjusts Clock, Phase, H-Position and V-Position automatically.

NOTE

■ For best results, use the Auto Set-up in conjunction with the test pattern Test.bmp. (See page 21 for SCREEN ADJUSTMENTS.)

■ The screen becomes dark for approximately five seconds during the adjustment.

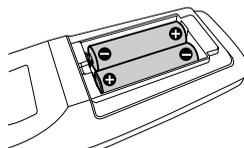
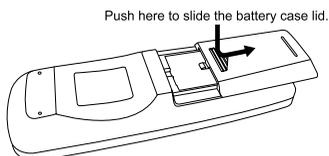
- ③ Zoom + Button (▲)
- ④ – Button / Contrast Button (◀)
- ⑤ Exit Button (EXIT)
- ⑥ Power Switch (POWER)
- ⑦ Menu Button (MENU)
- ⑧ + Button / Brightness Button (▶)
- ⑨ Zoom – Button (▼)

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 open the battery case lid on the reverse of the remote control as shown in the illustration.
- ② Take care not to mix up the “+” and “–” terminals.
- ③ Slide closed the battery case lid.



NOTE ■ Replace with new batteries when the Remote Control does not work close to the monitor. Use AA 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.

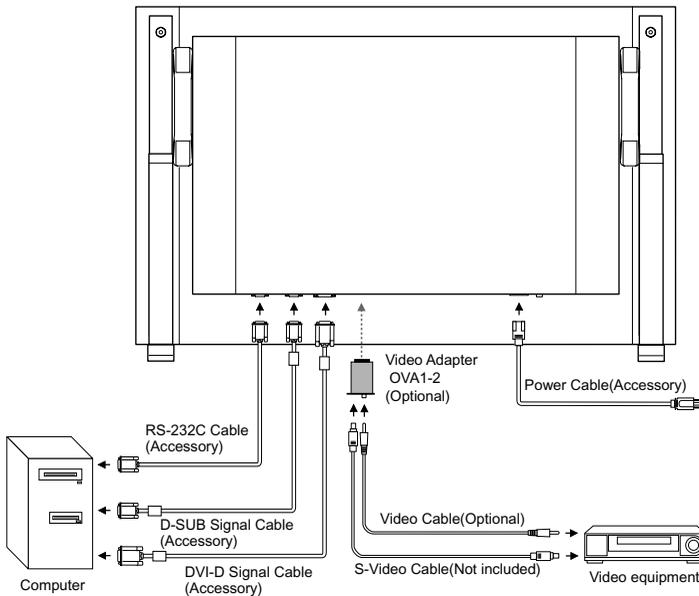
CONNECTING YOUR MONITOR

- ① Ensure that both the computer and the monitor are switched off.
- ② Connect the computer to the monitor with the signal cable. (See page 27 for CONNECTOR PIN ASSIGNMENT.)
- ③ Connect the RS-232C cable to the computer while using the RS-232C control feature. (See page 27 for CONNECTOR PIN ASSIGNMENT.)
- ④ Connect the Power Cable to the monitor first and then to the power supply.

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.
- 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.

[Example of Connection]



COMPUTER SETTING

■ Signal Timing

Change to the desired signal timings listed on page 26 in COMPLIANT TIMING, after you confirm that the picture appears normally.

■ Windows 95/98/2000/Me/XP Plug & Play

The iiyama LCD monitor complies with DDC2B of VESA standard. The Plug & Play function runs on Windows 95/98/2000/Me/XP by connecting the monitor to DDC2B compliant computer with the Signal Cable supplied. Windows 95/98/2000/Me/XP Monitor Information File for iiyama monitors may be necessary for your computer and obtained via the Internet, using the address:

<http://www.iiyama.com> (U.S.A.)

<http://www.iiyama.co.uk> (U.K.)

NOTE

- For additional information on how to download the driver for your monitor, please access one of the internet sites 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.

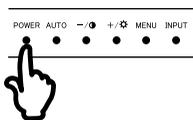
BASIC OPERATION

■ Turn on the monitor

Press the Main Power Switch on the monitor. The monitor is turned ON when you press the Power Switch on the monitor or the Remote Control. Press again to turn OFF the monitor.

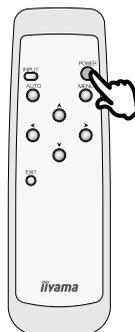
[Monitor]

Press the Power Switch.



[Remote Control]

Press the Power Switch.



NOTE

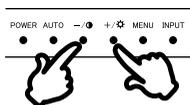
Even when using the power management mode, the monitor consumes electricity. Turn off the Power Switch whenever the monitor is not in use, during the night and weekends, to avoid unnecessary power consumption.

■ Move the cursor horizontally

Select menu or setting, or perform the adjustment by pressing the + / - on the monitor or the < / > Button on the Remote Control when the menu page is displayed on the screen.

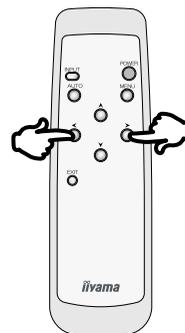
[Monitor]

Press the + / - Button.



[Remote Control]

Press the < / > Button.



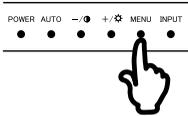
■ Display the adjustment menu page

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.

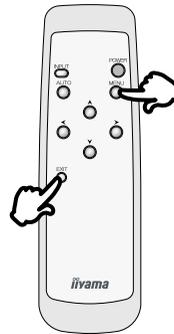
[Monitor]

Press the Menu Button.



[Remote Control]

Press the Menu Button.

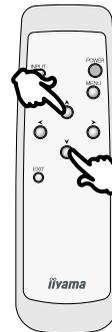


■ Display the adjustment Zoom

The Zoom item appears on the screen when you press the Zoom ▲ / ▼ Button on the Remote Control.

[Remote Control]

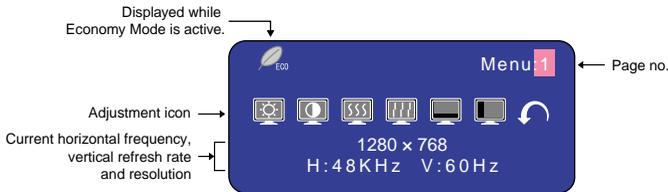
Press the Zoom ▲ / ▼ Button.



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 26. You are also able to adjust the picture by following the button operation shown below. For more detailed adjustments, see page 21 for SCREEN ADJUSTMENTS.

- ① **Press the Menu Button on the monitor or the Remote Control to start the On Screen Display feature. There are additional Menu pages which can be switched by using the + / - Buttons on the monitor or the < / > Buttons on the Remote Control.**



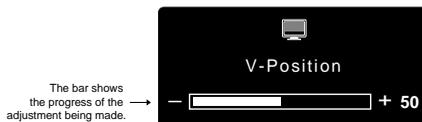
- ② **Select the Menu page which contains the adjustment icon relating to the adjustment you want to make. Press the Menu Button again. Then, use the + / - Buttons or the < / > Buttons to highlight the desired adjustment icon.**

- ③ **Press the Menu Button again. Use the + / - Buttons or the < / > Buttons to make the appropriate adjustment or setting.**

For example, to correct for vertical position, select Menu page number 1 and then press the Menu Button. Then, select  (V-Position) by using the + / - Buttons or the < / > Buttons.



An adjustment scale appears after you press the Menu Button. Use the + / - Buttons or the < / > Buttons to change the vertical position settings. The vertical position of the overall display should be changing accordingly while you are doing this.



NOTE

- The On Screen Display disappears several seconds after you stop pressing the buttons while performing an adjustment.
- 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 Clock, Phase and Position are saved for each signal timing. Except for these adjustments, all other adjustments have only one setting which applies to all signal timings.

ADJUSTMENT MENU CONTENTS

Direct

You can skip the Menu pages and display an adjustment scale directly by using the following button operations.

- **Brightness:** Press the Brightness Button on the monitor or the Remote Control when the Menu is not displayed.
- **Contrast:** Press the Contrast Button on the monitor or the Remote Control when the Menu is not displayed.
- **Signal Select:** Press the Input Button on the monitor or the Remote Control.
- **Auto Set-up:** Press the Auto Button on the monitor or the Remote Control.
- **Zoom:** Press the Zoom Button on the Remote Control when the menu is not displayed.

NOTE

SWITCHING BRIGHTNESS / CONTRAST ADJUSTMENT

To switch between Brightness and Contrast adjustments, press the Menu Button within 5 seconds after pressing the Brightness Button or the Contrast Button during the direct adjustments above.

SIGNAL SELECT (IN1 / IN2)

Select either IN1 or IN2 for the signal input when both of the signal inputs are connected to a signal source. Switch IN1 and IN2 whenever pressing the Input Button.

Analog Input

Adjustment Item		Problem / Option	Button to Press
Brightness *1	Direct	Too dark Too bright	or
Contrast	Direct	Too dull Too intense	or
Clock *2		To correct flickering text or lines	or
Phase *2		To correct flickering text or lines	or
V-Position		Too low Too high	or
H-Position		Too far to the left Too far to the right	or
Return to Menu		Highlight "Menu : 1" again.	

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

*2 See page 21 for SCREENADJUSTMENTS.

Direct See page 13 for Direct.

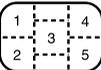
**Menu : 2
(Analog)**



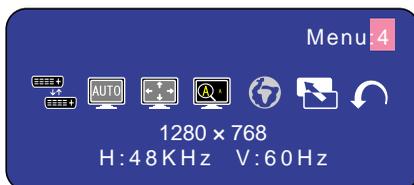
Adjustment Item	Problem / Option		Button to Press		
 Color Temp.	9300K	Bluish white (Approx. 9300K)			
	6500K	Reddish white (Approx. 6500K)			
	User	   <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>Red</td></tr> <tr><td>Green</td></tr> <tr><td>Blue</td></tr> </table>	Red	Green	Blue
Red					
Green					
Blue					
 Gamma	Normal	Normal			
	Hi Cont.	High contrast			
	Dark	Dark			
 Sharpness	1 2 3 4 5		  or   		
	You can change the picture quality from 1 to 5 (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.				
 Economy Mode	OFF	Normal			
	Mode 1	Brightness of back-light is reduced by Approx.10%.			
	Mode 2	Brightness of back-light is reduced by Approx.50%.			
 Return to Menu	Highlight "Menu : 2" again.				

**Menu : 3
(Analog)**



Adjustment Item	Problem / Option		Button to Press
 OSD Position	1 2 3 4 5 You can move the OSD display area to any one of the following 5 positions within the overall display: 		  or   or 
 OSD Off Timer	You can set the OSD display time 3 to 60		  or   or 
 Key Lock Mode	OFF	Return to Menu.	
	ON	All adjustment items are locked out.	
<p>NOTE It can not be released when the Key Lock Mode is on. In the case that release is necessary, please contact your dealer.</p>			
 H-Flipping	OFF	Return to Normal.	
	ON	The screen that reversed the right and left is displayed.	
 V-Flipping	OFF	Return to Normal.	
	ON	The screen that rotated 180 degrees is displayed.	
 Return to Menu	Highlight "Menu : 3" again.		

**Menu : 4
(Analog)**



Adjustment Item	Problem / Option		Button to Press	
 Signal Select 	IN 1	Select the D-SUB input.		
	IN 2	Select the DVI input.		
	S Video *1	Select the S Video input.		
	Video *1	Select the Video input.		
 Auto Set-up *2 	NO	Return to Menu.		
	YES	Adjust Clock, Phase, V-Position and H-Position automatically.		
<p>NOTE The screen becomes dark for approximately five seconds during the adjustment.</p>				
 Full Screen	1 to 1	The normal screen display of 4:3.		
	Aspect	Expansion display of Aspect.		
	Full	Expansion display.		
 Zoom  Only the Remote Control has direct adjustment.	Zoom In	The screen is expanded.   or 		
	Zoom Out	The screen is returned.   or 		
	H-Position  	To move the zoom point to the right.   or 		
	V-Position  	To move the zoom point downward.   or 		
 Language	English	English	Italiano	Italian
	Deutsch	German	Español	Spanish
	Français	French	Русский	Russian
	Nederlands	Dutch	中文	Chinese
	Svenska	Swedish	日本語	Japanese
 Reset	NO	Return to Menu.		
	YES	Factory-preset data is restored.		
 Return to Menu	Highlight "Menu : 4" again.			

*1 Optional input only, see APPENDIX B.

*2 For best results, use the Auto Set-up in conjunction with the adjustment pattern.
(See page 21 for SCREEN ADJUSTMENTS.)

 See page 13 for Direct.

Digital Input

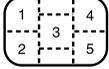
Adjustment Item		Problem / Option		Button to Press		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> Menu : 1 (Digital) </div> <div style="border: 1px solid black; background-color: #1a3d54; color: white; padding: 10px; border-radius: 10px; width: 300px;"> <div style="text-align: right; font-weight: bold; color: #e91e63;">Menu 1</div> <div style="display: flex; justify-content: space-around; margin-bottom: 5px;"> </div> <div style="text-align: center; font-size: 0.9em;"> 1280 x 768 H: 48 KHz V: 60 Hz </div> </div> </div>						
Brightness * Direct	Too dark		+ or - or			
	Too bright					
Contrast Direct	Too dull		+ or - or			
	Too intense					
Color Temp.	9300K	Bluish white (Approx. 9300K)		+ or - or		
	6500K	Reddish white (Approx. 6500K)				
	User	<small>MENU</small> <table border="1" style="font-size: 0.8em; border-collapse: collapse;"> <tr><td>Red</td></tr> <tr><td>Green</td></tr> <tr><td>Blue</td></tr> </table>	Red			Green
Red						
Green						
Blue						
		Too strong				
Gamma	Normal	Normal				
	Hi Cont.	High contrast				
	Dark	Dark				
Sharpness	1 2 3 4 5		+ or - or			
	You can change the picture quality from 1 to 5 (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.					
Economy Mode	OFF	Normal				
	Mode 1	Brightness of back-light is reduced by Approx.10%.				
	Mode 2	Brightness of back-light is reduced by Approx.50%.				
Return to Menu	Highlight "Menu : 1" again.					

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

Direct See page 13 for Direct.

**Menu : 2
(Digital)**



Adjustment Item	Problem / Option		Button to Press
 OSD Position	1 2 3 4 5 You can move the OSD display area to any one of the following 5 positions within the overall display: 		  or   or 
 OSD Off Timer	You can set the OSD display time 3 to 60 seconds.		  or   or 
 Key Lock Mode	OFF	Return to Menu.	
	ON	All adjustment items are locked out.	
NOTE It can not be released when the Key Lock Mode is on. In the case that release is necessary, please contact your dealer.			
 H-Flipping	OFF	Return to Normal.	
	ON	The screen that reversed the right and left is displayed.	
 V-Flipping	OFF	Return to Normal.	
	ON	The screen that rotated 180 degrees is displayed.	
 Return to Menu	Highlight "Menu : 2" again.		

Adjustment Item		Problem / Option		Button to Press
 Signal Select 	IN 1	Select the D-SUB input.		
	IN 2	Select the DVI input.		
	S Video *	Select the S Video input.		
	Video *	Select the Video input.		
 Full Screen	1 to 1	The normal screen display of 4:3.		
	Aspect	Expansion display of Aspect.		
	Full	Expansion display.		
 Zoom  Only the Remote Control has direct adjustment.	Zoom In	The screen is expanded.		 or 
	Zoom Out	The screen is returned.		 or 
	H-Position  MENU	To move the zoom point to the right.		 or 
	V-Position  MENU	To move the zoom point to the left.		 or 
 Language	English	English	Italiano	Italian
	Deutsch	German	Español	Spanish
	Français	French	Русский	Russian
	Nederlands	Dutch	中文	Chinese
	Svenska	Swedish	日本語	Japanese
 Reset	NO	Return to Menu.		
	YES	Factory-preset data is restored.		
 Return to Menu	Highlight "Menu : 3" again.			

* Optional input only, see APPENDIX B.

 See page 13 for Direct.

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 1280 × 768, but can not provide the best at resolutions of less than 1280 × 768 because the picture is automatically stretched to fit the full screen. It is recommended to operate at a resolution of 1280 × 768 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 with computer software or utilities.
- Perform adjustments after a warm-up period of at least thirty minutes.
- Additional adjustments may be required after the Auto Set-up depending on the resolution or signal timing.
- The Auto Set-up 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 Clock, Phase and Position. The other way is performing each adjustment manually.

Perform the Auto Set-up 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 Set-up, 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> or <http://www.iiyama.co.uk>).

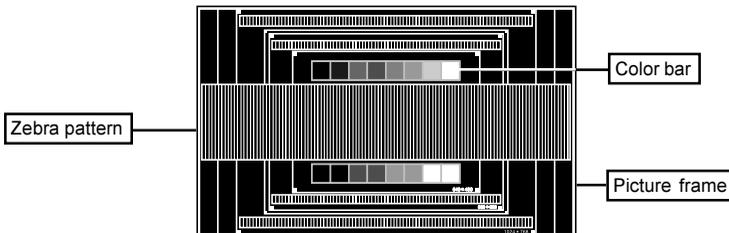
This manual explains adjustment under Windows 95/98/2000/Me/XP.

- ① **Set the Full Screen feature to Off and display the picture at the optimum resolution.**
- ② **Enter the Test.bmp (screen adjustment pattern) to wallpaper.**

NOTE

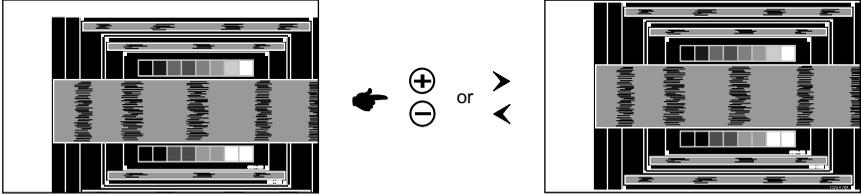
- Consult the appropriate documentation for doing this.
- Test.bmp is made at resolution of 1280 × 1024. Set the display position to center in the wallpaper setting dialogue box. If you use Microsoft® PLUS! 95/98 cancel the setting of "Stretch desktop wallpaper to fit the screen".

[Adjustment pattern]

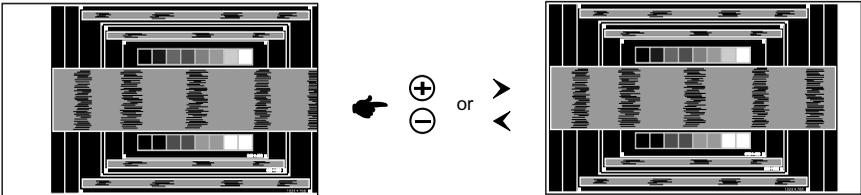


This is the image displayed at 1280 × 768.

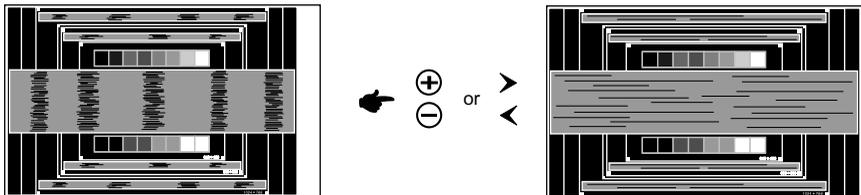
- ③ Press the Auto Button. (Auto Set-up)
- ④ Adjust the image manually by following procedure below when the screen has a flicker or blur, or the picture does not fit in the display area after performing the Auto Set-up.
- ⑤ Adjust the V-Position so that the top and bottom of the picture frame will fit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



- 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.

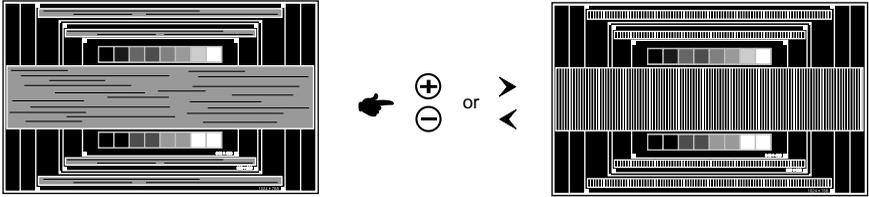


- 2) Stretch the right side of the picture frame to the right edge of the display area by adjusting the Clock.



- NOTE**
- When the left side of the picture frame moves apart from the left edge of the display area during the Clock adjustment, adjust steps 1) and 2).
 - Another way to make the Clock adjustment is to correct the vertical wavy lines in the zebra pattern.
 - The picture may flicker during the Clock, H-Position and V-Position adjustment.
 - In case the picture frame is bigger or smaller than the data display area after the Clock 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 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 Temp. to get the desired picture after you complete the Clock and Phase adjustments.
Put back your favorite wallpaper.

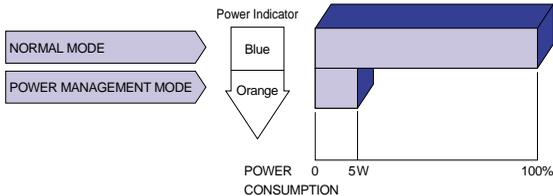
POWER MANAGEMENT FEATURE

The power management feature of this product complies with every power saving requirement of ENERGY STAR® and 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 5W. The screen becomes dark, and the power indicator turns to orange. 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.

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.) (Power indicator is blue.) (Power indicator is orange.)	<input type="checkbox"/> The Power Cable is firmly seated in the socket. <input type="checkbox"/> The Power Switch is turned ON. <input type="checkbox"/> The AC socket is live. Please check with another piece of equipment. <input type="checkbox"/> If the blank screen saver is in active mode, touch the keyboard or the mouse. <input type="checkbox"/> Increase the Contrast and/or Brightness. <input type="checkbox"/> The computer is ON. <input type="checkbox"/> The Signal Cable is properly connected. <input type="checkbox"/> The signal timing of the computer is within the specification of the monitor. <input type="checkbox"/> If the monitor is in power management mode, touch the keyboard or the mouse. <input type="checkbox"/> If the input video signal selection is different, switch the Signal Select. <input type="checkbox"/> The computer is ON. <input type="checkbox"/> The Signal Cable is properly connected. <input type="checkbox"/> The signal timing of the computer is within the specification of the monitor.
② The screen is not synchronized.	<input type="checkbox"/> The Signal Cable is properly connected. <input type="checkbox"/> The signal timing of the computer is within the specification of the monitor. <input type="checkbox"/> The video output level of the computer is within the specification of the monitor.
③ The screen position is not in the center.	<input type="checkbox"/> The signal timing of the computer is within the specification of the monitor.
④ The screen is too bright or too dark.	<input type="checkbox"/> The video output level of the computer is within the specification of the monitor.
⑤ The screen is shaking.	<input type="checkbox"/> The power voltage is within the specification of the monitor. <input type="checkbox"/> The signal timing of the computer is within the specification of the monitor.
⑥ Remote Control does not work.	<input type="checkbox"/> Replace with new batteries. <input type="checkbox"/> The battery terminals match the "+" and "-" indications in the battery compartment. <input type="checkbox"/> The Remote Sensor is bathed in an intense light such as a fluorescent light. <input type="checkbox"/> There is an obstacle between the Remote Control and the Remote Sensor.

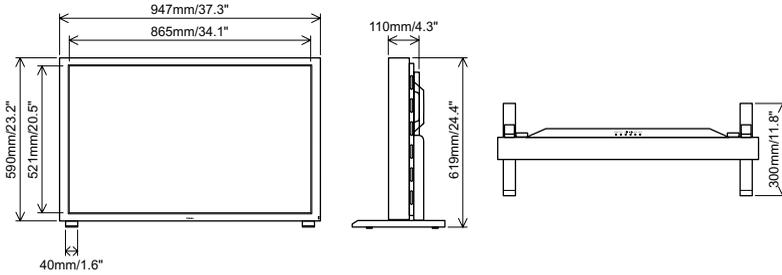
APPENDIX A

SPECIFICATIONS

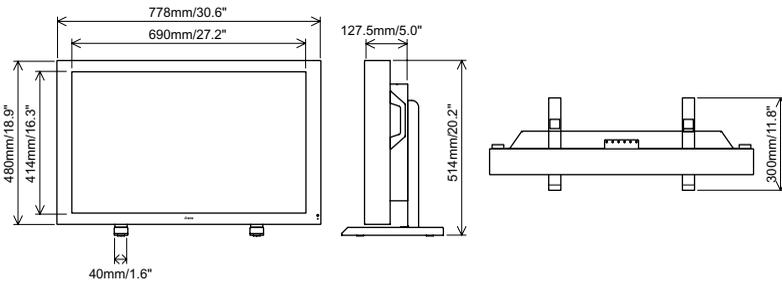
		ProLite L400W-B1X	ProLite L320W-B
LCD Panel	Driving system	a-Si TFT Active Matrix	
	Size	Diagonal: 101cm / 39.6"	Diagonal: 80.2cm / 32"
	Pixel pitch	0.6735mm H × 0.6735mm V	0.537mm H × 0.537mm V
	Brightness	500cd/m ² (Typical)	
	Contrast ratio	600 : 1 (Typical)	500 : 1 (Typical)
	Viewable angle	Right / Left / Up / Down: 85 degrees each	
	Response time	22ms (Black, white, black)	33ms (Black, white, black)
Display Colors		16,777,216 maximum	
Sync Frequency		Horizontal: 31.47-60.24kHz, Vertical: 56-75Hz	
Dot Clock		102.98MHz maximum	
Maximum Resolution		1280 × 768, 1 Mega Pixels	
Input Video Connector		D-SUB mini 15pin (ANALOG) DVI-D 24pin (DIGITAL)	
Control Input Connector		RS-232C	
Plug & Play		VESA DDC2B™	
Input Sync Signal		Separate sync: TTL, Positive or Negative Composite sync: TTL, Positive or Negative Sync on green: 0.3Vp-p, Negative	
Input Video Signal		Analog: 0.7Vp-p (Standard), 75Ω, Positive Digital: DVI (Digital Visual Interface standard Rev.1.0) compliance	
Maximum Screen Size		862.080mm W × 517.248mm H / 33.9" W × 20.4" H	687.36mm W × 412.42mm H / 27.1" W × 16.2" H
Power Source		100-230VAC, 50/60Hz, 2.3-1.0A	100-230VAC, 50/60Hz, 1.94-0.84A
Power Consumption		220W maximum	180W maximum
		Power management mode: 5W maximum	
Dimensions		947 × 619 × 300mm /	778 × 514 × 300mm /
Net Weight		37.3 × 24.4 × 11.8" (W×H×D) 31kg / 68.3lbs (With Stand)	30.6 × 20.2 × 11.8" (W×H×D) 21kg / 46.3lbs (With Stand)
Environmental Considerations		Operative temperature: 0 to 40°C / 32 to 104°F Storage temperature: -20 to 60°C / -4 to 140°F Humidity: 85% maximum (No condensation)	
Approvals		CE, FCC-B, UL / C-UL, VCCI-B, CCC	CE, FCC-B, UL / C-UL, VCCI-B

DIMENSIONS

ProLite L400W-B1X



ProLite L320W-B



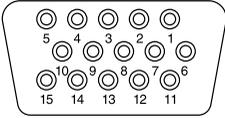
COMPLIANT TIMING

Video Mode		Horizontal Frequency	Vertical Frequency	Dot Clock
VESA	VGA 640 × 480	31.469kHz	59.940Hz	25.175MHz
		37.861kHz	72.809Hz	31.500MHz
		37.500kHz	75.000Hz	31.500MHz
	SVGA 800 × 600	37.879kHz	60.317Hz	40.000MHz
		48.077kHz	72.188Hz	50.000MHz
		46.875kHz	75.000Hz	49.500MHz
	XGA 1024 × 768	48.363kHz	60.004Hz	65.000MHz
		56.476kHz	70.069Hz	75.000MHz
		60.023kHz	75.029Hz	78.750MHz
	WXGA 1280 × 768	44.409kHz	56.000Hz	73.895MHz
		47.701kHz	60.000Hz	80.136MHz
		60.150kHz	75.000Hz	102.977MHz
VGA TEXT	720 × 400	31.469kHz	70.087Hz	28.322MHz *
Macintosh	640 × 480	35.000kHz	66.667Hz	30.240MHz *
	832 × 624	49.725kHz	74.500Hz	57.283MHz *
	1024 × 768	60.150kHz	74.720Hz	80.000MHz *

NOTE * DVI input is not compliant.

CONNECTOR PIN ASSIGNMENT

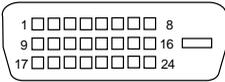
■ D-SUB mini 15pin Connector



D-SUB

Pin	Input Signal	Pin	Input Signal
1	Red video	9	5V in
2	Green video	10	Ground
3	Blue video	11	Ground
4		12	Data line (SDA)*
5		13	H-Sync
6	Red video ground	14	V-Sync
7	Green video ground	15	Clock line (SCL)*
8	Blue video ground		* Compliant to VESA DDC.

■ DVI-D 24pin Connector

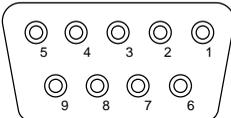


DVI-D

Pin	Input Signal	Pin	Input Signal
1	T.M.D.S Data 2-	13	
2	T.M.D.S Data 2+	14	+5V Power
3	T.M.D.S Data 2 Ground	15	Ground
4		16	Hot Plug Detect
5		17	T.M.D.S Data 0-
6	Clock line (SCL) *	18	T.M.D.S Data 0+
7	Data line (SDA) *	19	T.M.D.S Data 0 Ground
8	Analog V-Sync	20	
9	T.M.D.S Data 1-	21	
10	T.M.D.S Data 1+	22	T.M.D.S Clock Ground
11	T.M.D.S Data 1 Ground	23	T.M.D.S Clock +
12		24	T.M.D.S Clock -

* Compliant to VESA DDC.

■ RS-232C (D-SUB 9pin) Connector



D-SUB

Pin	Input Signal	Pin	Input Signal
1	NC	6	NC
2	TxD (Transmit Data)	7	NC
3	RxD (Receive Data)	8	RTS (Request To Sent)
4	NC	9	NC
5	Ground		

RS-232C INTERFACE

- Baud Rate 9600bps
- Data Format Start: 1-bit
Data: 8-bit
Parity: 0 (no Parity)
Stop: 1-bit

Command Name	Function
POF	Turn off power
PON	Turn on power

NOTE Transmit POF and PON commands one by one. Allow an interval of 20 or more seconds between commands.

- Protocol

STX(02hex)	ID(2Byte)	COMMAND(3Byte)	ETX(03hex)
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COMMAND 3Byte(ASCII)

APPENDIX B

Optional Video Input

This OSD Menu is available only when the optional video adapter is installed in the monitor.

Video input is not selected automatically from Analog or Digital input. Switch to video input by "Signal Select" on OSD Menu or the Input Button. Under the power management mode, "Signal Select" page is displayed directly by pressing the Menu Button when the Menu is not displayed.

Direct

You can skip the Menu pages and display an adjustment scale directly by using the following button operations.

- Brightness: Press the Brightness Button on the monitor or the Remote Control when the Menu is not displayed.
- Contrast: Press the Contrast Button on the monitor or the Remote Control when the Menu is not displayed.
- Signal Select: Press the Input Button on the monitor or the Remote Control.
- Zoom: Press the Zoom Button on the Remote Control when the menu is not displayed.
- Picture Lock: Press the Auto Button on the monitor or the Remote Control when the Menu is not displayed.

NOTE

SWITCHING BRIGHTNESS / CONTRAST ADJUSTMENT

To switch between Brightness and Contrast adjustments, press the Menu Button within 5 seconds after pressing the Brightness Button or the Contrast Button during the direct adjustments above.

PICTURE LOCK

"Now, Frame was Locked." is displayed and picture on the screen can be locked when pressing the Auto Button while the Menu is not displayed.

Press the Auto Button again to release it.

**Menu : 1
(Video)**

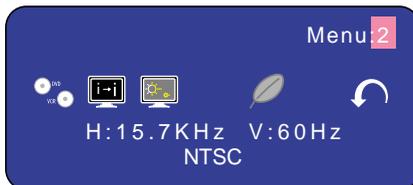


Adjustment Item	Problem / Option		Button to Press		
 Brightness * Direct	Too dark Too bright		  or    or 		
 Contrast Direct	Too dull Too intense		  or    or 		
 Color	Too weak Too strong		  or    or 		
 Hue	Purplish Greenish		  or    or 		
 Color Temp.	9300K	Bluish white (Approx. 9300K)			
	6500K	Reddish white (Approx. 6500K)			
	User	   <table border="1" data-bbox="600 761 678 852"> <tr><td>Red</td></tr> <tr><td>Green</td></tr> <tr><td>Blue</td></tr> </table>	Red	Green	Blue
Red					
Green					
Blue					
 Gamma	Normal	Normal			
	Hi Cont.	High contrast			
	Dark	Dark			
 Return to Menu	Highlight "Menu : 1" again.				

* Adjust the Brightness and Contrast so that the picture is displayed naturally in Video Input mode.

Direct See page 28 for Direct.

**Menu : 2
(Video)**



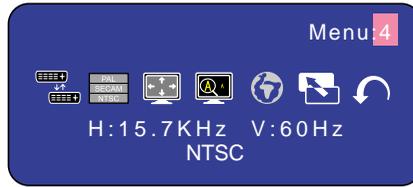
Adjustment Item	Problem / Option		Button to Press
 Input Source	DVD	Select this in normal use.	
	VCR	Correct the picture distortion and shaking.	
<p>NOTE The picture may be shaking or distorted because of the type of video equipment. In this case, select VTR. The picture may not display normally when inputting the signal of television or damaged videotape.</p>			
 Picture Quality	1 2 3 4 5 You can change the picture quality from 1 to 5 (soft to clear). Press the + Button to change the picture quality in numerical order. Press the – Button to change the picture quality in reverse numerical order.		
 Sharpness	Too soft Too sharp		
 Economy Mode	OFF	Normal	
	Mode 1	Brightness of back-light is reduced by Approx.10%.	
	Mode 2	Brightness of back-light is reduced by Approx.50%.	
 Return to Menu	Highlight "Menu : 2" again.		

**Menu : 3
(Video)**



Adjustment Item	Problem / Option		Button to Press
 OSD Position	1 2 3 4 5 You can move the OSD display area to any one of the following 5 positions within the overall display: Press the + Button to move the OSD in numerical order. Press the – Button to move the OSD in reverse numerical order.		  or   or 
 OSD Off Timer	You can set the OSD display time 3 to 60 seconds.		  or   or 
 Key Lock Mode	OFF	Return to Menu.	
	ON	All adjustment items are locked out.	
NOTE It can not be released when the Key Lock Mode is on. In the case that release is necessary, please contact your dealer.			
 H-Flipping	OFF	Return to Normal.	
	ON	The screen that reversed the right and left is displayed.	
 V-Flipping	OFF	Return to Normal.	
	ON	The screen that rotated 180 degrees is displayed.	
 Return to Menu	Highlight "Menu : 3" again.		

Menu : 4
(Video)



Adjustment Item	Problem / Option		Button to Press	
 Signal Select 	IN 1	Select the D-SUB input.		
	IN 2	Select the DVI input.		
	S Video	Select the S Video input.		
	Video	Select the Video input.		
 Color System	Auto	Switch the broadcast system automatically. Select this in normal use.		
	NTSC	Switch the broadcast system to NTSC by force.		
	PAL	Switch the broadcast system to PAL by force.		
	SECAM	Switch the broadcast system to SECAM by force.		
 Full Screen	1 to 1	The normal screen display of 4:3.		
	Aspect	Expansion display of Aspect.		
	Full	Expansion display.		
 Zoom  Only the Remote Control has direct adjustment.	Zoom In	The screen is expanded.	  or 	
	Zoom Out	The screen is returned.	  or 	
	  	To move the zoom point to the right.	  or 	
	H-Position	To move the zoom point to the left.	  or 	
  	V-Position	To move the zoom point downward.	  or 	
		To move the zoom point upward.	  or 	
 Language	English	English	Italiano	Italian
	Deutsch	German	Español	Spanish
	Français	French	Русский	Russian
	Nederlands	Dutch	中文	Chinese
	Svenska	Swedish	日本語	Japanese
 Reset	NO	Return to Menu.		
	YES	Factory-preset data is restored.		
 Return to Menu	Highlight "Menu : 4" again.			

 See page 28 for Direct.

Specifications for Optional Video Input

Input Connector	RCA pin jack S-Video terminal
Input Video Signal	Video*: NTSC, PAL, SECAM

NOTE * Not all broadcast systems are supported.