

40, 46 & 55-INCH WUXGA NARROW BEZEL TFT-LCD MONITOR



INSTRUCTION MANUAL

Please read this manual thoroughly before use, and keep it handy for future reference.

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This Monitor was
Manufactured by ISO 9001
Certified Factory

SAFETY INSTRUCTION

Important Safety Instruction

1. Read these instructions.
2. Keep these Instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug.
Apolarized plug has two blades with one wider than the other.
Agrounding type plug has two blades and a third grounding prong.
The wide blade or the third prong are provided for your safety.
If the provided plug does not fit into your outlet, consult an electrician for replacement of the bsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
11. Only use attachment/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus the apparatus has been exposed to rain or moisture does not operate normally or has been dropped.

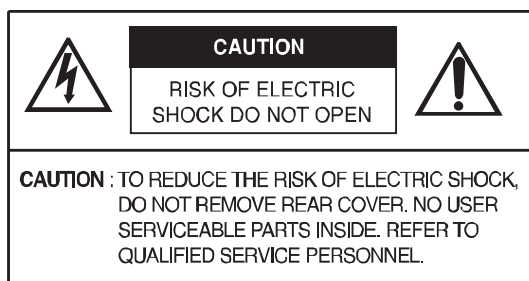


SAFETY INSTRUCTION

- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Minimum distances(e.g. 10cm) around the apparatus for sufficient ventilation.

“WARNING – To reduce the risk of fire or electric shock, do not expose the apparatus to rain or moisture.”

“The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.”



This symbol is intended to alert the user to the presence of uninsulated : dangerous voltage with in the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

CAUTIONS

CAUTION

The power supply cord is used as the main disconnect device, ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

ATTENTION

Le cordon d'alimentation est utilisé comme interrupteur général. La prise de courant doit être située ou installée à proximité du matériel et être facile d'accès

CAUTION TO SERVICE PERSONNEL

POWER SUPPLY CORD IS USED AS MAIN POWER DISCONNECT DEVICE IN THIS PRODUCT. UNPLUG THIS PRODUCT FROM THE WALL OUTLET BEFORE REMOVING THE BACK COVER AND SERVICING

EMISSION CHARACTERISTICS TESTED BY SEMKO

THIS PRODUCT HAS BEEN TESTED AND HAS SHOWN COMPLIANCE WITH THE NATIONAL SPECIFICATIONS SUCH AS SWEDISH MPR 1990.10.(MPR II)

► NEVER REMOVE THE BACK COVER

Removal of the back cover should be carried out only by qualified personnel.

► DO NOT USE IN HOSTILE ENVIRONMENTS

To prevent shock or fire hazard, do not expose the unit to rain or moisture.

This unit is designed to be used in the office or home. Do not subject the unit to vibrations, dust or corrosive gases.

► KEEP IN A WELL VENTILATED PLACE

Ventilation holes are provided on the cabinet to prevent the temperature from rising.

Do not cover the unit or place anything on the top of unit.

► AVOID HEAT

Avoid placing the unit in direct sunshine or near a heating appliance.

► TO ELIMINATE EYE FATIGUE

Do not use the unit against a bright back ground and where sunlight or other light sources will shine directly on the monitor.

► BE CAREFUL OF HEAVY OBJECT

Neither the monitor itself nor any other heavy object should rest on the power cord.

Damage to a power cord can cause fire or electrical shock.

FCC RF INTERFERENCE STATEMENT

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio, TV technician for help.
- Only shielded interface cable should be used.

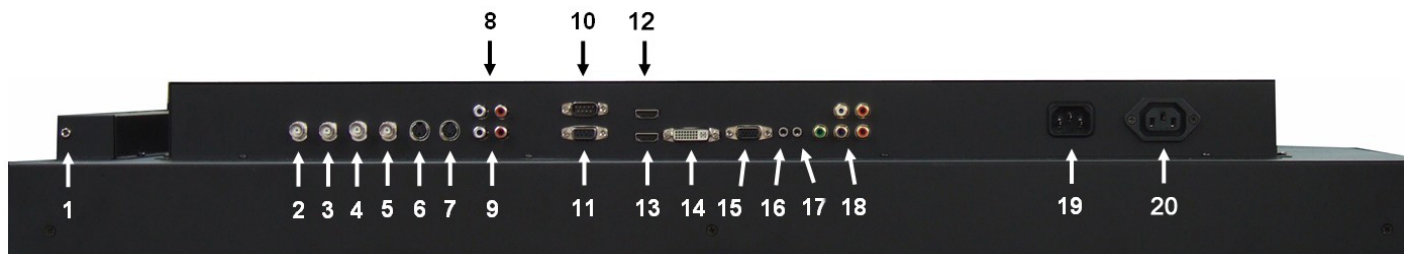
Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

► DOC COMPLIANCE NOTICE

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

CONNECTING WITH EXTERNAL EQUIPMENT

A. BACK PANEL CONTROL



1. Extensional Port for Remote Controller Receiver (See page 16 & 17).
2. AV 1 IN.
3. AV 1 OUT.
4. AV 2 IN.
5. AV 2 OUT.
6. S-VIDEO IN.
7. S-VIDEO OUT.
8. AV 1 & SVIDEO AUDIO L/R IN.
9. AV 2 AUDIO L/R IN.
10. Slave RS-232.
11. Master RS-232.
12. HDMI 2 IN.
13. HDMI 1 IN.
14. DVI IN.
15. PC VGA IN.
16. PC AUDIO IN.
17. AUDIO OUT.
18. COMPONENT Y/Pb/Pr IN & COMPONENT AUDIO L/R IN.
19. AC IN.
20. AC OUT.

※ PC cable

To use the “Model ID” function using RS-232 cable, the pin 4 in the PC cable must be deleted.

REMOTE FUNCTIONS

B. REMOTE CONTROLLER(Optional)

1. POWER()

Turns the power ON or OFF. There will be a few seconds delay before the display appears.

2. SOURCE

Selects an input source.

3. AUTO

Auto geometry adjustment in the RGB PC source.

4. MUTE

Mutes the sound.

5. MENU

Activates and exits the On Screen Display.

6. EXIT

Exits the On Screen Display.

7. VOL(&)

Increases or decreases the level of audio volume.

8. UP/DOWN

Moves upwards or downwards in the OSD menu.

9. ENTER

Enters an OSD submenu or accepts your selection.

10. INFO

Displays the information about input source.

11. STILL

Pauses the picture.

12. PIP (Picture In Picture)

Activates the PIP mode.

13. P.INPUT

Changes the source of sub-picture in the PIP mode.

14. P.POS

Changes the position of sub-picture in the PIP mode.

15. P.SIZE

Changes the sizes of sub and main pictures in the PIP mode.

16. SWAP

Alternates between sub and main pictures in the PIP mode.

17. ARC (Aspect Ratio Control)

Selects a screen ratio.

18. APC (Auto Picture Control)

Selects a picture mode.

19. ACC (Auto Color Control)

Selects a color mode.

20. S.SET

Selects the source of sound between main and sub pictures in the PIP mode.

21. PC

Selects a PC mode(PC, DVI & HDMI).

22. AV

Selects an AV mode(AV1, AV2 & S-Video).

23. COMP

Selects the Component mode.



CONTROLS AND FUNCTIONS

C. RIGHT SIDE BUTTON CONTROL



1 & 2. VOL(+) & VOL(-)

Adjust the volume and menu settings.

3 & 4. ▲ & ▼

These buttons allow user to enter the sub-menu of the activated function. The up(▲) button is HOLD function and stop the Trigger & Auto switching functions.

5. SOURCE/SELECT

Selects an input source.

Enters a submenu or accepts your selection in the OSD menu.

6. MENU/EXIT

Activates and exits the On Screen Display.

This button can also be used to move previous menu or status.

7. POWER ON/OFF(⏻/⏻)

Turns the power ON or OFF. There will be a few seconds delay before the display appears.

8. POWER LED

The power LED lights with green when the power is turned ON.

The power is turned off by pressing the power button again, and the power LED goes Red.

9. IR Sensor

Remote controller sensor.



CONTROLS AND FUNCTIONS

OSD MENU DESCRIPTION

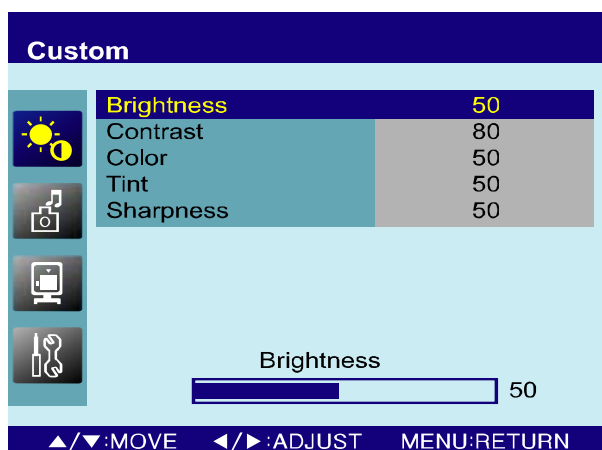
All picture, sound settings and setup for the monitor can be adjusted in the OSD menu.

(On Screen Display)

To adjust the OSD screen:

1. Press the **Menu** button to enter the OSD menu.
2. Press the **▲/▼** buttons to select the desired option. The selected option is highlighted.
3. Press the **►** button to enter the submenu for adjusting items.
4. Change the value you wish to adjust by using the **▲/▼** buttons.
5. Press the **◀** button to exit the submenu for adjusting items.
6. Press the **Menu** button to exit the OSD menu.

A. Custom



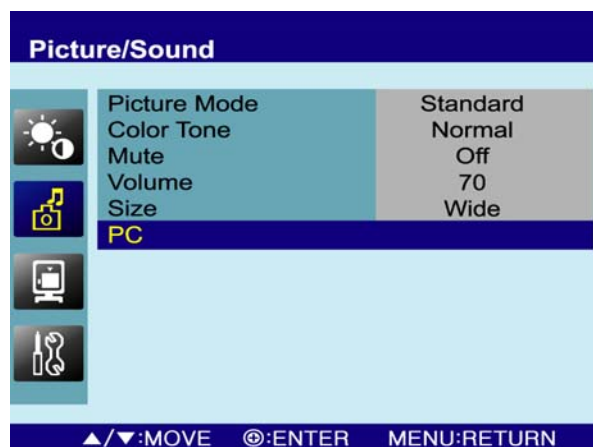
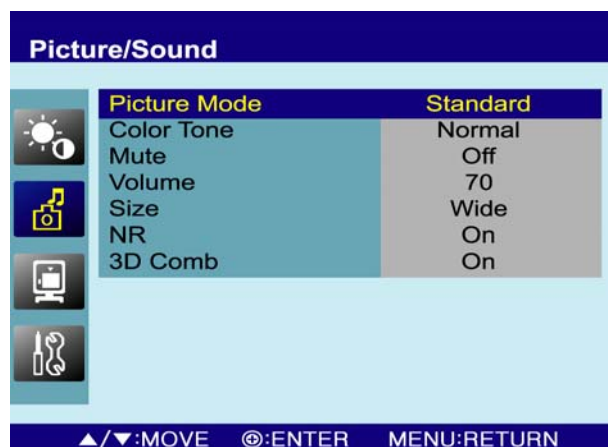
Option	Function	Value
Brightness	Adjusts brightness of the screen.	0 ~ 100
Contrast	Adjusts intensity of the image.	0 ~ 100
Color ¹⁾	Adjusts color of the picture.	0 ~ 100
Tint ^{1) 2)}	Adjusts tint of the picture.	0 ~ 100
Sharpness ¹⁾	Adjusts sharpness of the picture.	0 ~ 100

1) Unavailable in RGB PC, DVI, HDMI1 and HDMI2.

2) Unavailable in Component mode and PAL system.

CONTROLS AND FUNCTIONS

B. Picture/Sound



Option	Function	Value
Picture Mode	Sets picture mode.	See table below
Color Tone	Sets color tone.	See table below
Mute	Mutes speaker sound.	Off or On
Volume	Adjust the level of audio volume.	0 ~ 100
Size	Display picture size.	See table below
NR ¹⁾	Reduces noise of the picture.	On or Off
3D Comb ²⁾	Activates the 3D comb filter.	On or Off
PC ³⁾	See table below.	

1) Unavailable in RGB PC, DVI, HDMI1 and HDMI2.

2) Unavailable in S-Video, RGB PC, DVI, HDMI1, HDMI2 and Component.

3) Only available in RGB PC.

Picture Mode

Custom	Applies user selected values.(Brightness, Contrast, Color, Tint and Sharpness)
Dynamic	Provides enhanced contrast and sharpness.
Standard	Provides standard contrast and sharpness.
Movie	Is recommended for viewing film-based content.
Mild	Reduces contrast and sharpness.

CONTROLS AND FUNCTIONS

Color Tone

Cool	Gives the white color a bluish tint.
Normal	Gives the white color a neutral tint.
Warm	Gives the white color a reddish tint.
User	To manually adjust the color tones(Red, Green, and Blue).

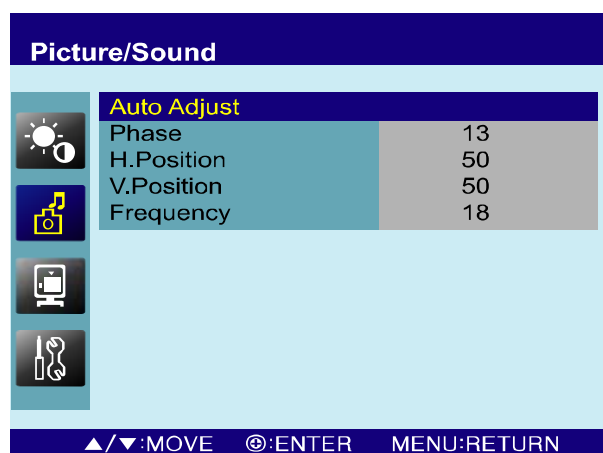
Size

4:3	Sets the image size to 4:3
Panorama ¹⁾	Sets the image to panorama
Zoom1 ¹⁾	Expands the image size about two times to upward and downward
Zoom2 ¹⁾	Expands the image size about one and half times to upward and downward
Wide	Sets the image size to wide
Under ²⁾	Adjusts the image size to display resolution without overscan
1:1 ¹⁾	Adjusts the image size to input resolution with overscan

1) Unavailable in RGB PC, DVI, HDMI1, HDMI2 and Component.

2) Unavailable in RGB PC.

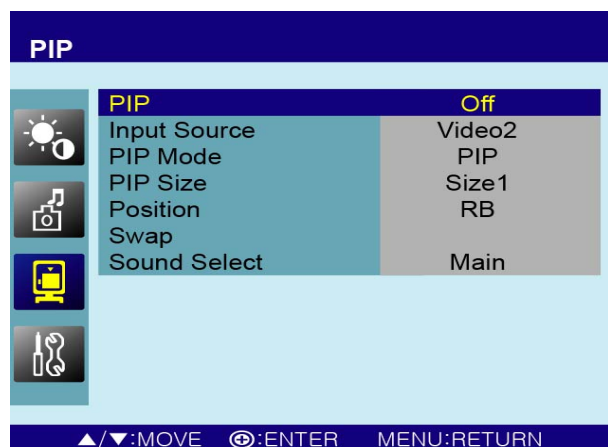
PC



Option	Function	Value
Auto Adjust	Auto geometry adjustment.	
Phase	Adjusts the number of horizontal picture elements.	0 ~ 100
H-Position	Adjusts the horizontally picture position.	0 ~ 100
V-Position	Adjusts the vertically picture position.	0 ~ 100
Frequency	Adjusts the vertical noise of screen image.	0 ~ 100

CONTROLS AND FUNCTIONS

C. PIP



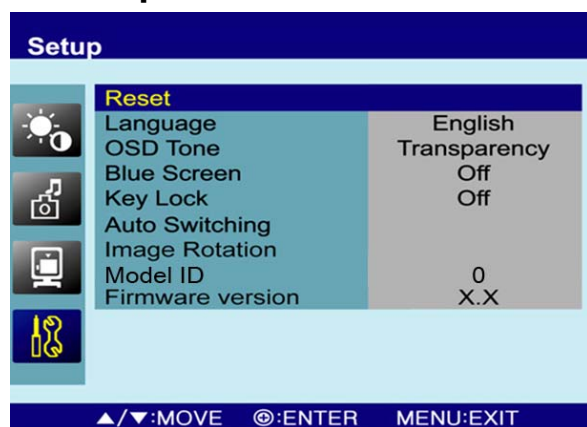
Option	Function	Value
PIP	Activates the PIP feature.	Off or On
Input Source	Selects the input source for the PIP area.	See table below
PIP Mode	Enables 3 screen size. 4:3 side by corner, 4:3 side by 4: 3, and full screen side by side.	PIP, PBP1 or PBP2
PIP Size	Selects the size of PIP screen.	Size1, Size2 or Size3
Position	Selects the position of PIP screen. Right of Bottom , Left of Bottom , Left of Top and Right of Top .	RB, LB, LT or RT
Swap	Alternates between the main and sub picture	
Sound Select	Selects the sound source from either the Main or PIP	Main or Sub

Input Source

	Main	Sub
Available combination	AV1, AV2 or S-Video	AV1, AV2 or S-Video
	AV1, AV2 or S-Video	RGB PC, DVI, HDMI1, HDMI2 or Component
	RGB PC, DVI, HDMI1, HDMI2 or Component	AV1, AV2 or S-Video
Unavailable combination	RGB PC, DVI, HDMI1, HDMI2 or Component	RGB PC, DVI, HDMI1, HDMI2 or Component

CONTROLS AND FUNCTIONS

D. Setup



Option	Function	Value
Reset	Resets the monitor settings to their factory default.	
Language	Sets the language of the OSD menu.	English, French, Deutsch, Italian, Spanish, Portuguese or Nederland
OSD Tone	Changes background of monitor menus. (e.g. input source & information)	Transparency or On
Blue Screen	Displays a blue screen if the monitor receives no signal.	Off or On
Key Lock ¹⁾	Locks all buttons of the monitor. Note: Use remote controller to unlock.	Off or On
Auto Switching	See table below	
Image Rotation ²⁾	Activates the Image Rotation function.	Off or On
Model ID	See below.	0 ~ 100, ALL

1) How to unlock

- ① On the front key: Press the SOURCE/SELECT and MENU button at the same time over 3 seconds.
- ② On the Remote Controller: The Remote Controller operates well because the Key Lock function is only allowed for the front key of this product.

2) The displayed image is slightly moved to prevent image persistence when the Image Rotation function is On. The user is able to adjust the image rotation time from 0~10Min. in the sub-menu of image rotation.

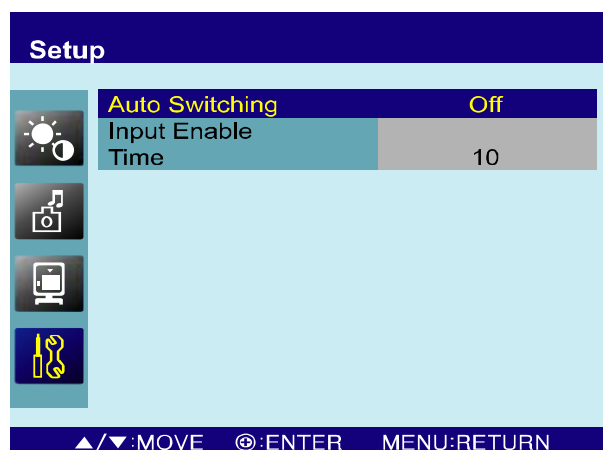
※ Image persistence

When an LCD panel is continuously displaying the same image(graphic) for a long period of time, a trace of the image can remain visibly. Image persistence is not a product defect, and all LCD products are subject to image persistence.

CONTROLS AND FUNCTIONS

※ **NOTICE:** When watching moving images on a computer or a DVR through this monitor using a PC- RGB, DVI or HDMI input, you can see blurred images on the edge of icons and pop-up windows but, this is not a defect. The blur may appear on the fixed images such as another icon and pop-up window because the 120Hz feature is focused on fast moving images to enhance the quality of moving image.

Auto Switching



Option	Function	Value
Auto Switching	Activates the Auto Switching feature.	Off or On
Input Enable	Opens another menu and you can select the input sources to include in the Auto Switching cycle.	AV1, AV2, S-Video, RGB PC, DVI, HDM1, HDMI2 and Component
Time	Selects the amount of time, in seconds, that the monitor displays each selected input source.	3 ~ 100

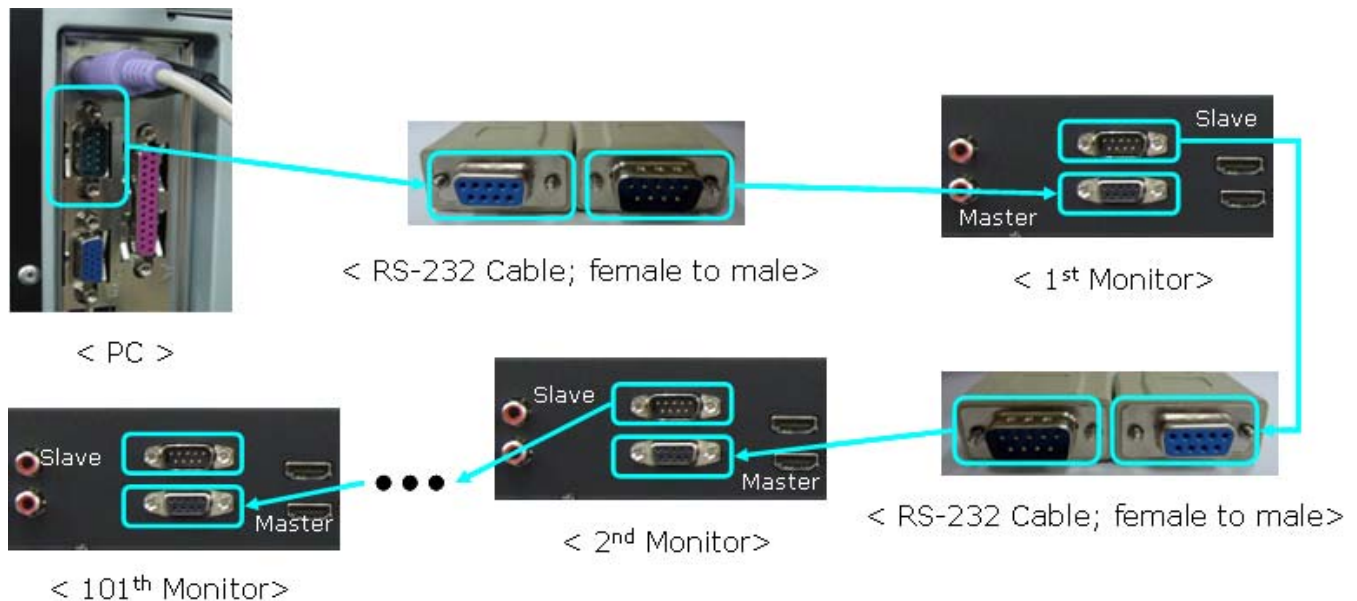
CONTROLS AND FUNCTIONS

Model ID

You can control this monitor with “Monitor control” software and “Model ID” functions.

Available controls are Turn on, Turn off or change the input source of this monitor.

1. Connect the PC and Monitor(s) with RS-232 Cable. The PC and Monitor(s) have to be turned on.

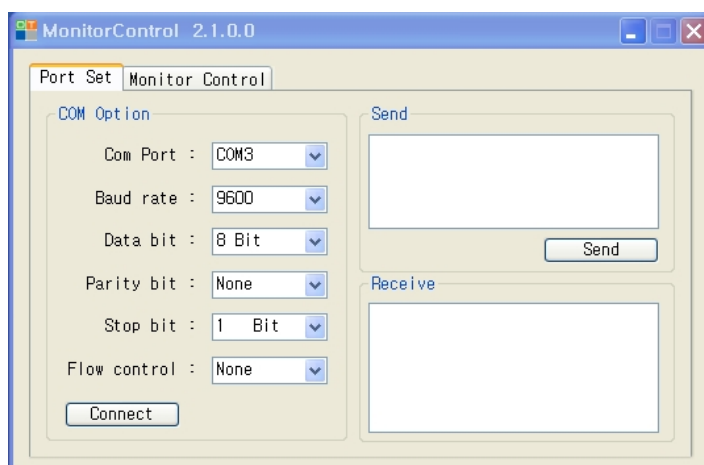


2. Install the “Monitor Control” software using an enclosed CD.

- 1) Insert the CD into the PC and open the CD-ROM drive folder.
- 2) Copy the “Monitor Control” icon and paste it on the screen of the PC.
- 3) Double click the icon.

3. Monitor Control

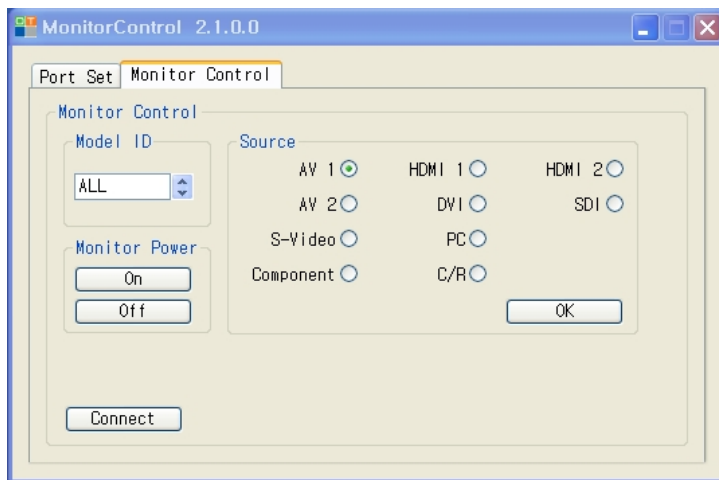
1) Port Set: Click the “Connect”.



- Com Port: Can be set up from Com1 to Com6.
- Baud rate: Can be set up form 600 to 25600.
- Data bit: Can be set up from 5 to 8 bit.
- Parity bit: Can be set up as None, Odd, Even, Mark or Space.
- Stop bit: Can be set up as 1, 1.5 or 2bit.
- Flow control: Can be set up as None, DTR/DSR, RTS/CTS or Space.

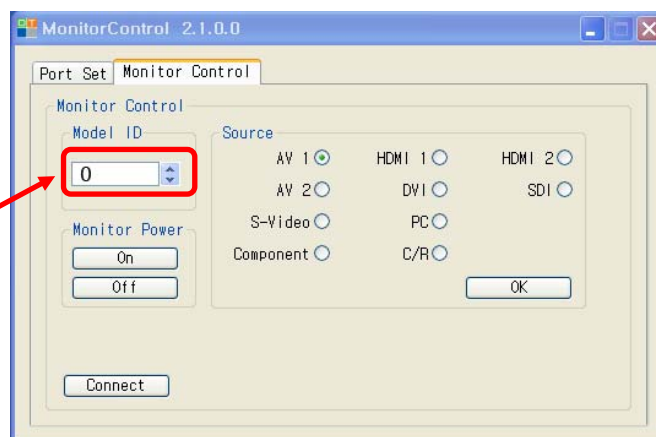
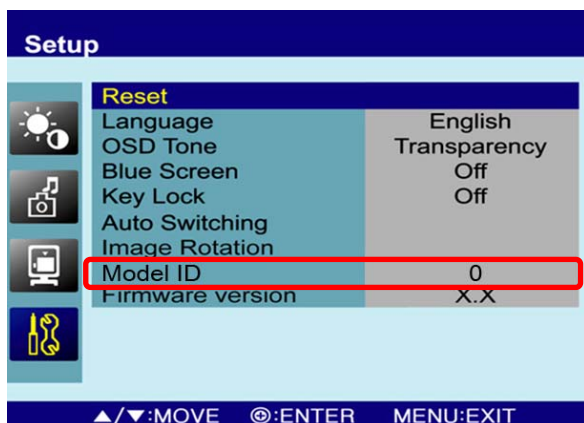
CONTROLS AND FUNCTIONS

2) Monitor Control: Click the “Connect”.



- Model ID: Match with the monitor which you want to control.
- Monitor Power: Can be “turned on” or “turned off” the monitor.
- Source: Can be changed the source of the Monitor

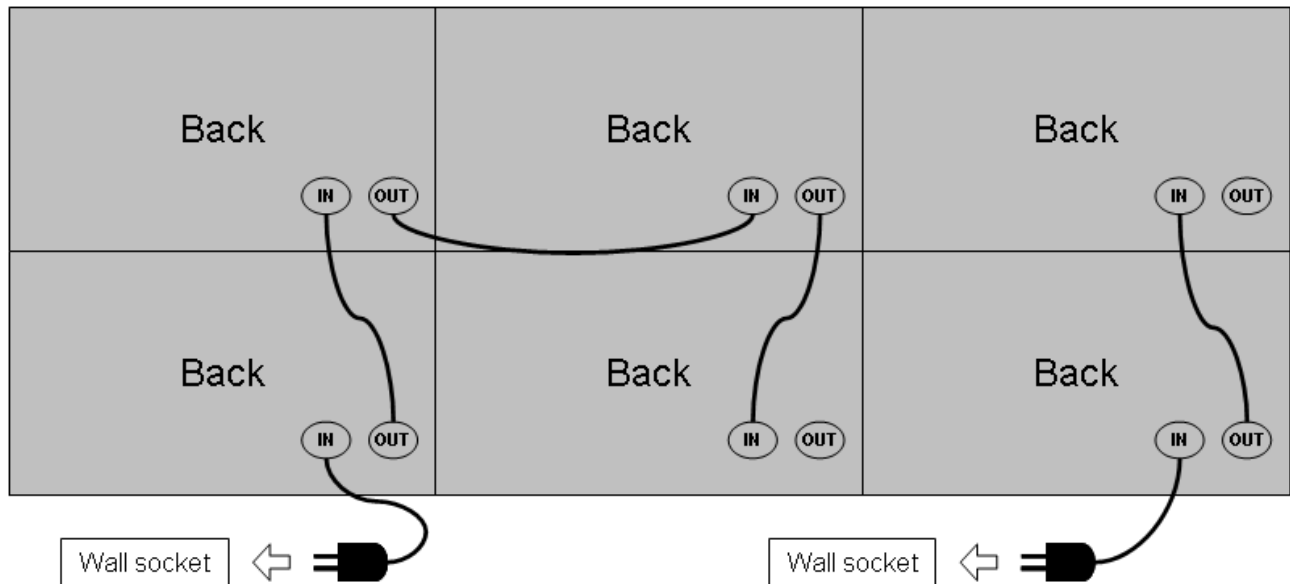
e.g.) In this case, you can control the “Model ID No. 0” monitor.



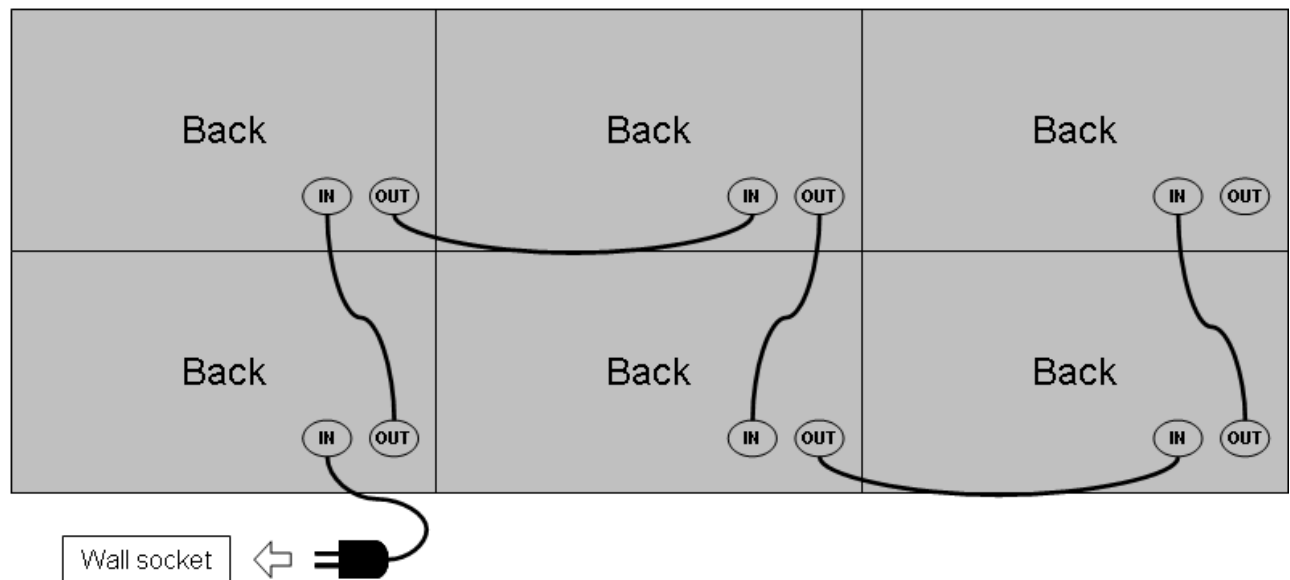
※ For the detail explanation, refer to the enclosed “Monitor Control” CD.

AC POWER CONNECTION GUIDE

※ **CAUTION:** Do not connect five or more monitors into one wall socket.



< Good >



< Bad >

EXTENSIONAL IR RECEIVER FOR REMOTE CONTROLLER

1. Extensional Remote Controller Receiver is on the top of the monitor.



EXTENSIONAL IR RECEIVER FOR REMOTE CONTROLLER

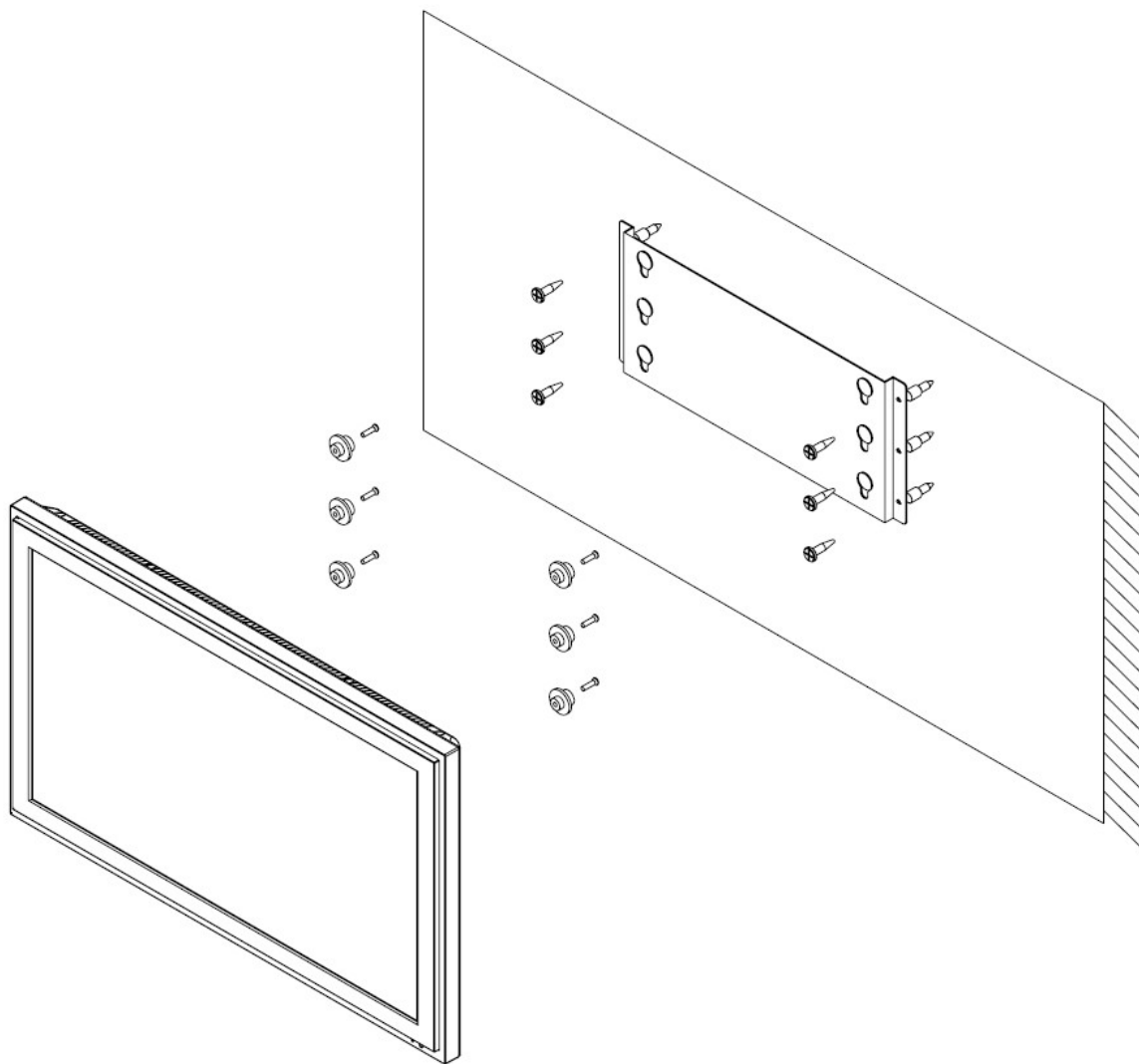
2. Extensional Remote Controller Receiver is on the bottom of the monitor.



MOUNTING GUIDE

Wall mounting (Optional)

The LCD monitors are suitable for VESA standard wall mount (not included in the delivery).



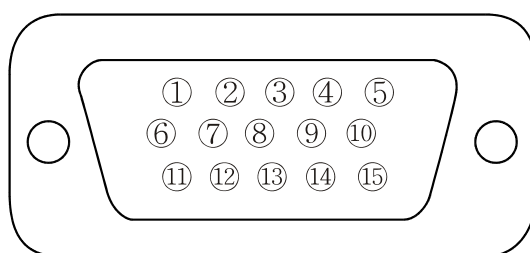
1. 40-inch: VESA 400mm x 130mm x 130mm.
2. 46-inch: VESA 600mm x 100mm x 100mm.
3. 55-inch: VESA 600mm x 200mm x 200mm.

D-SUB CONNECTOR PIN ASSIGNMENTS

► PIN ASSIGNMENTS

Pin 1	RED VIDEO	9	
2	GREEN VIDEO	10	SIGNAL CABLE DETECT
3	BLUE VIDEO	11	GROUND
4		12	SDA(for DDC)
5	GROUND	13	H-SYNC.(or H+V SYNC.)
6	RED GROUND	14	V-SYNC.
7	GREEN GROUND	15	SCL(for DDC)
8	BLUE GROUND		

D-SUB



► ACCESSORIES

1. Power cord; In & Out.
2. User's manual.
3. PC cable.
4. RS-232 cable (9pin male to female: direct connection).
5. Monitor Control Software CD.
6. Extensional Remote Controller Receiver cable; Stereo cable.
7. Stereo cable.
8. Remote controller & Batteries.
9. Wall mount bracket (Optional).

※ PC cable

To use the "Model ID" function using RS-232 cable, the pin 4 in the PC cable must be deleted.

POWER MANAGEMENT

This monitor features a power management system to “power down” upon receipt of the VESA DPMS(The display power management signaling) from a VESA DPMS video card.

The VESA DPMS-compliant video card performs this signaling system through not sending horizontal, vertical, or sync signal.

This monitor enters an appropriate mode through identifying each of the three modes of the signaling system.

POWER CONSUMPTION

40”	46”	55”
180W	240W	300W

LED INDICATOR

The power management feature of the monitor is comprised of four stages: On(Green), Standby, Suspend, Active off(Red on/off 1 sec) and Unsupported mode(Green).

MODE	LED COLOR	MONITOR OPERATION
ON	GREEN	Normal Operation
STANDBY	RED ON/OFF 1 SEC	Screen blanks after preset idle time And some electronic circuits or all Circuitry in the monitor shut down.
SUSPEND		
ACTIV OFF		
UNSUPPORTES MODE	GREEN	Normal operation but the on screen Display will show error message
POWER OFF	RED	Not Operation

SPECIFICATIONS

		40" WUXGA	46" WUXGA	55" WUXGA
LCD-Type	TYPE	40" Diagonal AM-TFT (Active-Matrix)	46" Diagonal AM-TFT (Active-Matrix)	55" Diagonal AM-TFT (Active-Matrix)
	PIXEL PITCH(mm)	0.46125(H) x 0.46125(V)	0.53025(H) x 0.53025(V)	0.63(H) x 0.63(V)
	BRIGHTNESS	700cd/m ² (Typical)		
	CONTRAST RATIO	3000:1 (Typical)		4000:1(Typical)
	VIEWING ANGLE	178°/178°(H/V)		
	RESPONSE TIME	8msec (G-to-G)		
RESOLUTION (H x V)		1920X1080 @60Hz		
FREQUENCY		HORIZONTAL: 31~80KHz / VERTICAL: 56~75Hz		
INPUT SIGNAL		VIDEO (2ch input 1.0Vp-p, 75Ω terminated, loop-through out)		
		S-VIDEO (1ch input (Y/C), loop-through out)		
		COMPONENT(Y,Pb,Pr, Sound L/R)		
		DVI (Digital Video Interface)		
		HDMI1, HDMI2 (High Definition Multimedia Interface)		
		PC RGB		
		AV (composite) Sound in/Out		
		PC Stereo Sound		
		Audio Out		
ACTIVE DISPLAY AREA (H x V)		885.6mm X 498.15mm	1018.08mm X 572.67mm	1209.6mm X 680.4mm
PACKING DIMENSIONS (W x H x D)		1080mm X 670mm X 260mm (42.52" X 26.38" X 10.24")	1340mm X 920mm X 430mm (52.76" X 36.22" X 16.93")	1340mm X 920mm X 430mm (52.76" X 36.22" X 16.93")
WEIGHT	Net Weight	25kg (55 lbs)	33 kg (73 lbs)	45kg (99 lbs)
	Gross Weight	29kg (64 lbs)	43kg (95 lbs)	60.0kg (133 lbs)
ELECTRICAL RATINGS		100-240V~, 50/60Hz (Auto Switching)		

►► **NOTE:** Technical specifications are subject to change without notice.

TROUBLESHOOTING GUIDE

TROUBLE	TROUBLESHOOTING TIP
No image on display screen	<ol style="list-style-type: none"> 1. Check that power cord of the Monitor have been connected securely into wall outlet or grounded extension cable or strip. 2. Power switch should be in the ON position and LED is lit. 3. Check that the Brightness and/or the Contrast adjustments of the Display have not been turned down to minimum levels.
"Going to Sleep" message on screen	<ol style="list-style-type: none"> 1. The signal cable should be completely connected to the video card/computer. 2. The video card should be completely seated in its slot and the computer is switched ON.
Display image is not centered, too small or too large in PC mode	Push the down key in front side or Auto key in remote controller.
Vertical or Horizontal noise is present in the picture	Adjust Clock and Phase in the OSD.

WEEE Symbols

**Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)**
(Applicable in the European Union and other
European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



