ENGLISH

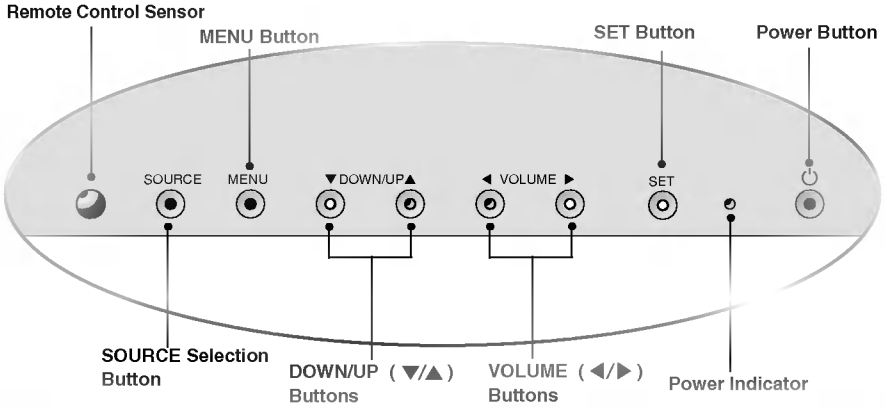
The FLATRON LCD 295LM Flat Panel Monitor has an active matrix TFT (Thin-Film Transistor) LCD (Liquid Crystal Display).

Features

- The FLATRON LCD 295LM is a 22-inch (55.8cm viewable) intelligent micro-processor based monitor.
- This monitor can be connected to a VCR or DVD. The monitor has two signal connectors (D-sub and DVI-D) so that it can support both an existing analog input (D-sub) and an advanced standard digital input (DVI-D). Two computers can be simultaneously used while connected to this monitor.
- This monitor has a picture-in-picture function so that you can watch from VCR/DVD while using a computer.
- The aspect ratio of the monitor is 16:10 so that you can feel as if you are watching a film in a theater. You can also simultaneously display two pages of a document set to an A4 size on the monitor, so that working efficiency can be improved.
- This monitor provides an audio function. Speakers that are included are easily detachable and attachable. They can also be placed in desired positions.
- Digitally controlled auto-scanning is done with the micro-processor for horizontal scan frequencies between 30 and 94kHz, and vertical scan frequencies between 56 - 85Hz.
- USB (Universal Serial Bus) ports at the back of the monitor are prepared for the USB cable and hub. You can easily and flexibly connect USB-designed devices- such as a mouse, keyboard or printer- to the monitor for true Plug and Play function.
- We accomplished to adapt the advanced design and technology to the monitor. Soft touch buttons on the front panel are simple and allow you to conveniently adjust a variety of image controls.
- This monitor has DDC 2B function.*
- Compliant with the following regulated specifications :*
  - EPA ENERGY STAR
  - Swedish TCO' 95

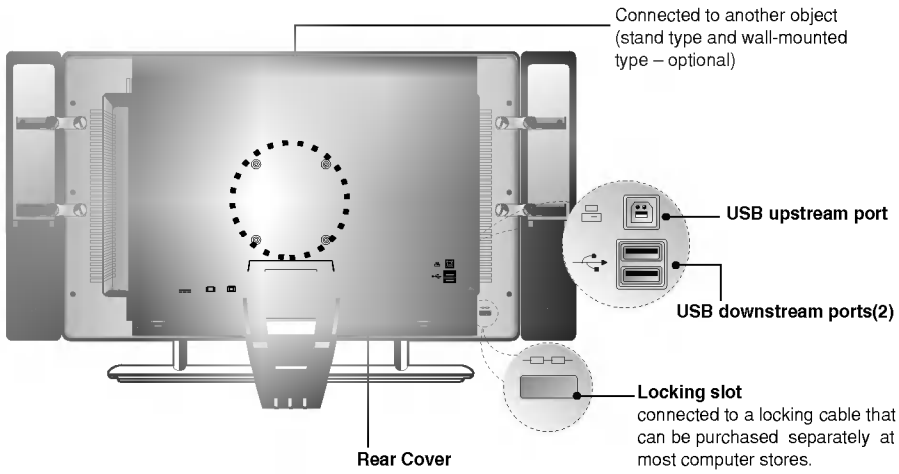
For detailed information, please refer to the **Reference Guide provided .*

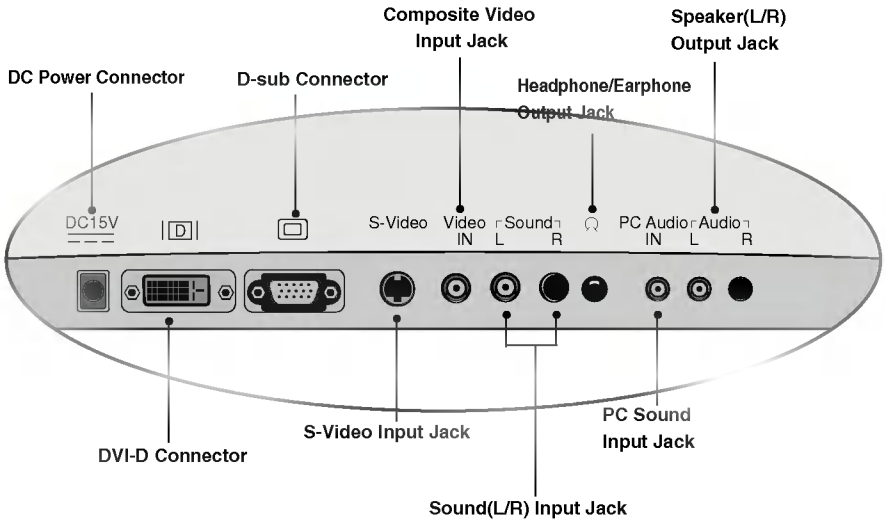
Front Panel Controls



Control	Function
SOURCE **SOURCE Selection Button**	Use this button to select an input signal. SOURCE ▼DOWN/UP▲ SET • DVI DIGITAL : DVI digital signal • D-SUB ANALOG : 15-pin D-sub analog signal • V1(AV): Composite video • V2(S): S video
MENU **MENU Button**	Use this button to enter or exit the on screen display.
▼DOWN/UP▲ **DOWN/UP (▼/▲) Buttons**	Use these buttons to choose or adjust items in the on screen display.
◄ VOLUME ► **VOLUME (◄/►) Buttons**	• Use these buttons to choose or adjust items in the on screen display. • Use these buttons to decrease or increase volume level.
SET **SET Button**	Use this button to enter a selection in the on screen display.
Power Indicator	The power indicator light is shown in the power button. This indicator lights up green when the monitor operates normally. If the monitor is in DPM (Energy Saving) mode (stand-by/ suspend/power off), this indicator color changes to amber.
Power Button	Use this button to turn the monitor on or off.

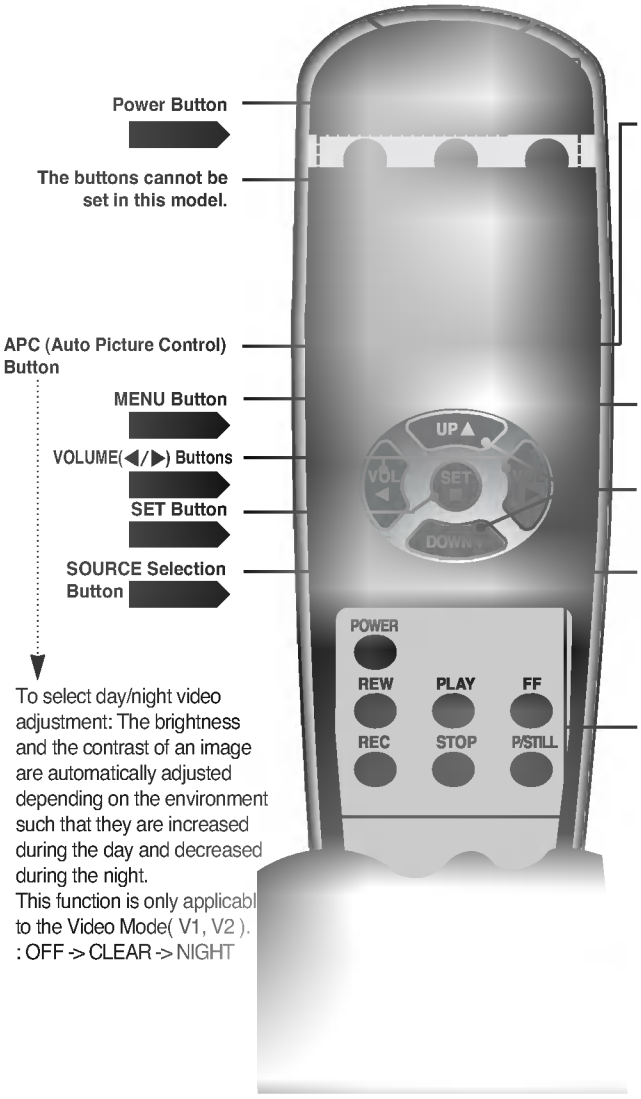
Rear Panel Controls





For the detailed instruction for each button of the remote control, refer to the appropriate pages in this manual.

Remote Controller

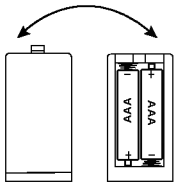


Insert the batteries into the remote control to operate the monitor.

Preparing the Remote Control

1. Open the battery cover.
2. Insert batteries (AAA size).

   Make sure to match the + and - on the batteries to the marks inside the battery compartment.
3. Close the cover.

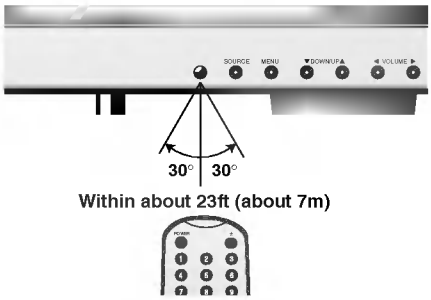


Note
- Do not insert the batteries into the remote control in the wrong direction.
- Do not charge, heat, open, or short-circuit the batteries. Also do not throw the batteries into the fire.
- Do not use different types of batteries together, nor mix old and new batteries.

This section shows you how to use the remote control.

Operating with the Remote Control

Point the remote control at the remote sensor and press the buttons.



Distance : About 23 ft (7 m) from the front of the remote sensor.
Angle : About 30° in each direction of the front of the remote sensor.

Do not expose the sensor of remote control in the monitor to a strong light source such as direct sunlight or illumination. If so, may not be able to operate the monitor with the remote control.

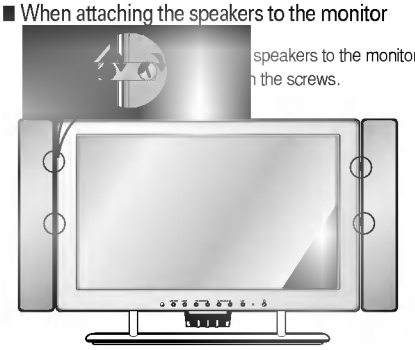
Note
- Do not drop the remote control or handle it roughly.
- Do not leave the remote control in extremely hot or humid conditions.
- Do not expose the remote control to water or anything wet.

To set up the monitor, ensure that the power is turned off to the monitor, computer system, and other attached devices. Remove the rear cover of the monitor to connect the cables and connect the cables to the monitor with it lying on a cushion or a cloth.
Follow these steps:

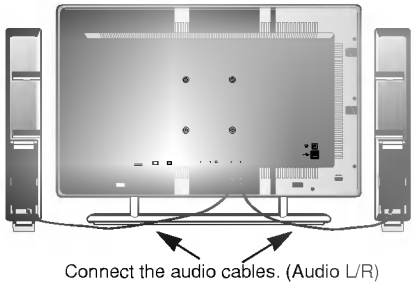
Connecting the Speakers

Attach the speakers to the monitor as shown in the picture or install them at desired positions.

■ When attaching the speakers to the monitor



■ When installing the speakers beside the monitor



Using the Computer

1. Connect the signal cable.

■ When connecting the DVI-D signal cable .....Figure 1

Connect one end of the monitor signal cable to the input connector on the rear panel of the monitor. ● Connect the other end to the DVI-D connector on the rear panel of the computer and tighten the screws.● Be sure the signal cable aligns with the DVI-D connector.

■ When connecting the D-Sub signal cable .....Figure 2

Connect one end of the monitor signal cable to the input connector on the rear panel of the monitor. ● Connect the other end to the D-Sub connector on the rear panel of the computer and tighten the screws.● Be sure the signal cable aligns with the D-Sub connector.

MAC Connect one end of the monitor signal cable to the input connector on the rear panel of the monitor. ● Connect the other end of the monitor signal cable to the rear panel of Macintosh computer through a Macintosh adapter and then tighten screws. ●

2. Connect the plug from the AC adapter into the back of the monitor. ●

3. Connect one end of the AC power cord to the AC adapter● and the other end to a properly grounded AC outlet that is easily accessible and close to the monitor ●.

Figure

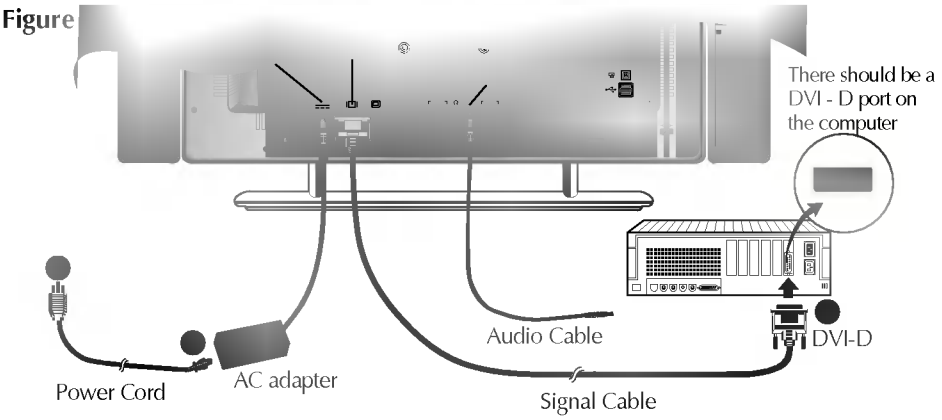
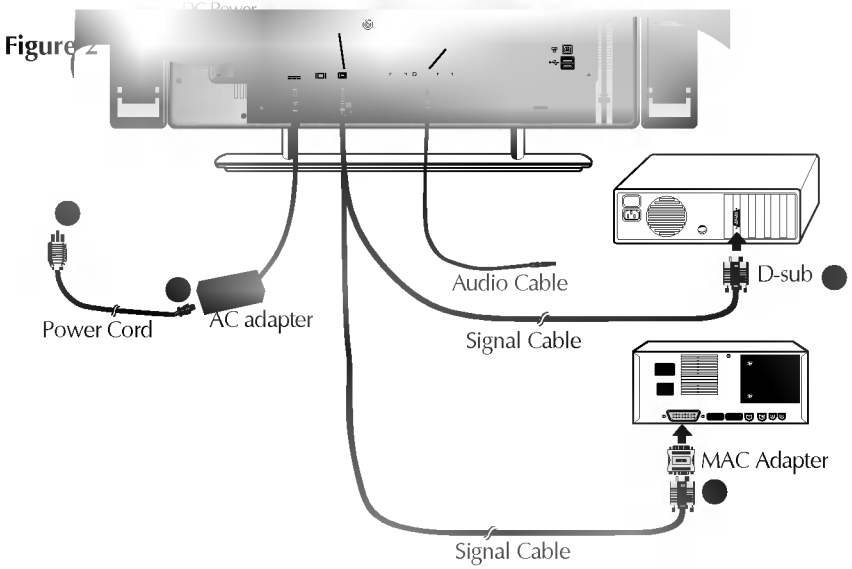


Figure 2



4. Connect the audio cable from the PC AUDIO IN port to the audio output port on your computer's sound card.

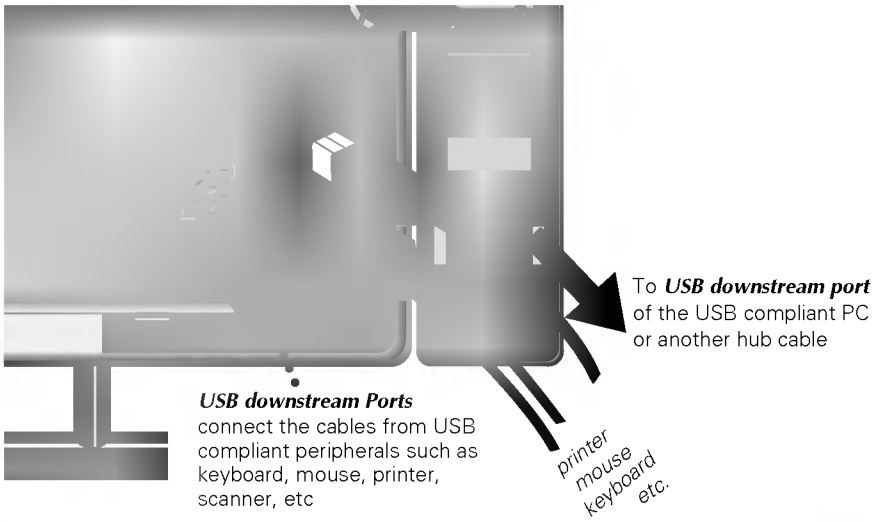
5. After connecting cables, put the rear cover correctly into the holes.

Note : The figure ● shows the connection to an Apple Macintosh, using a separately purchased adapter. For more information on adapter requirements, contact your authorized dealer, reseller, or service provider.

USB (Universal Serial Bus) is an innovation in connecting your different desktop peripherals conveniently to your computer. By using the USB, you will be able to connect your mouse, keyboard, printer, and other peripherals to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. USB allows you to connect chain up to 120 devices on a single USB port, and you can "hot" plug (attach them while the computer is running) or unplug them while maintaining Plug and Plug auto detection and configuration.

USB connection

1. Connect the upstream port of the monitor to the downstream port of the USB compliant PC or another hub using the USB cable (Computer must have a USB port).
2. Connect the USB compliant peripherals to the downstream ports of the monitor.



NOTE

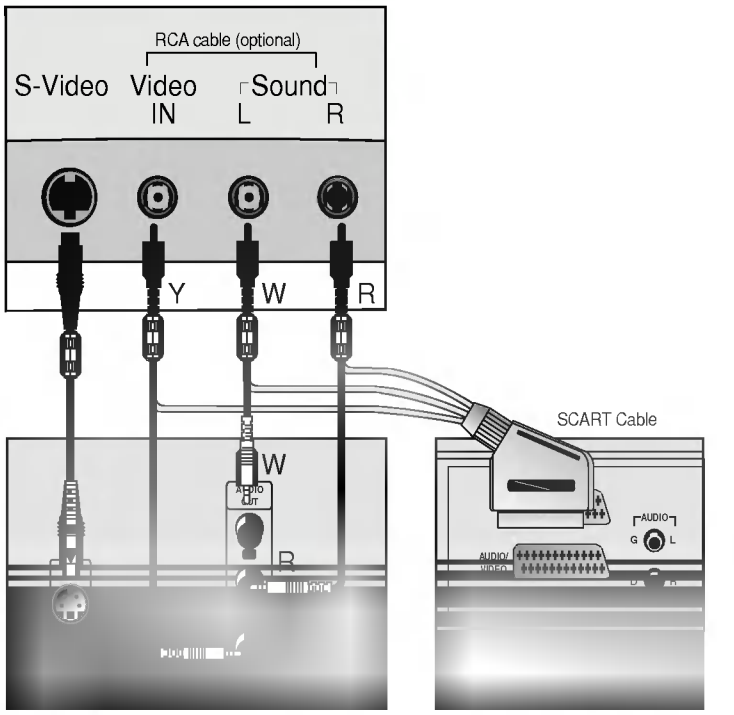
- To activate the USB hub function, the monitor must be connected to a USB compliant PC(OS) or another hub with the USB cable(enclosed).
- When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.
- When the monitor is not plugged into an electric socket, the peripherals connected to the downstream ports will not operate.
- Even if the monitor is in a power saving mode, USB compliant devices will function when they are connected the USB ports(both the upstream and downstream) of the monitor.

Connecting the VCR/DVD

1. Connect the audio/video output jacks of the VCR/DVD to the corresponding input ports of the set.
If you connect the S-Video input port to external equipment, you can enjoy high definition display.

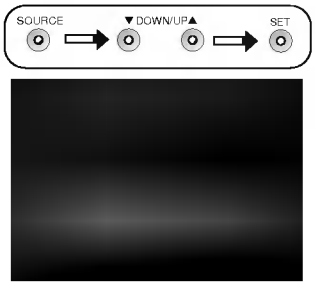
• **Monitor**

• **VCR/DVD**



<When connecting the RCA cable> <When connecting the SCART cable>

2. Select an input signal.



Press the SOURCE button on the front panel of the monitor to select an input.

V1(AV): Composite video,
V2(S): S-video

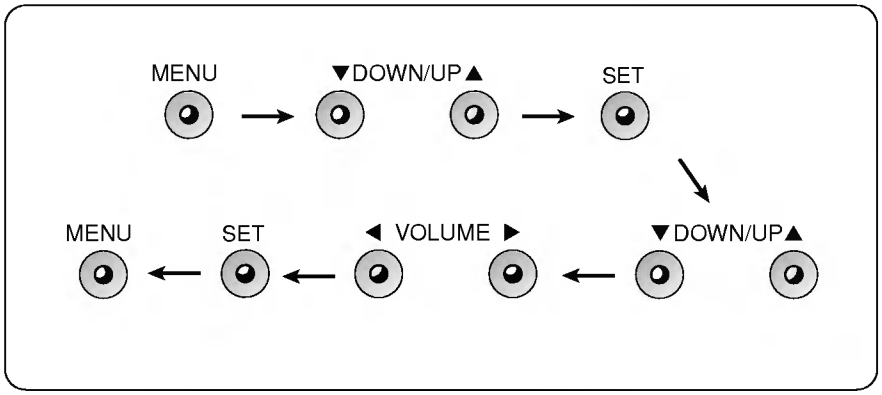
On Screen Display (OSD) Control Adjustment

Making adjustments to the image size, position and operating parameters of the monitor are quick and easy with the On Screen Display Control system. A quick example is given below to familiarize you with the use of the controls. Following section is an outline of the available adjustments and selections you can make using the OSD.

NOTE

- Allow the monitor to stabilize for at least 30 minutes before making image adjustment.

To make adjustments in the On Screen Display, follow these steps:



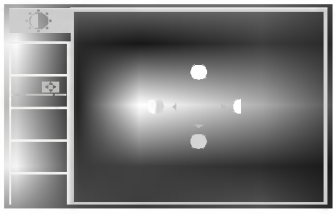
1. Press the **MENU Button**, the main menu of the OSD will appear.
2. To access a control, use the **DOWN/UP (▼/▲) Buttons**. When the desired control icon is highlighted, press the **SET Button**.
3. Press the **DOWN/UP (▼/▲) Buttons** to select the desired item.
4. Use the **VOLUME (◀/▶) Buttons** to adjust the item to the desired level.
5. Accept the changes by pressing the **SET Button.**
6. Exit the OSD by Pressing the **MENU Button.**

You were introduced to the procedure of selection and adjusting an item using the OSD system.

Listed below are the icons, icon names, and icon descriptions of the items that are shown on the Menu.

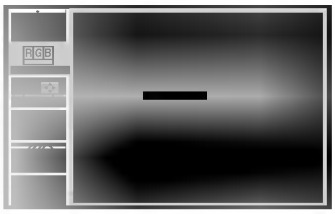
Adjusting the Screen when Using a Computer

Note : When input is set as a digital signal, only the BRIGHTNESS, SETUP, and PIP items can be adjusted. You do not need to adjust the other items.



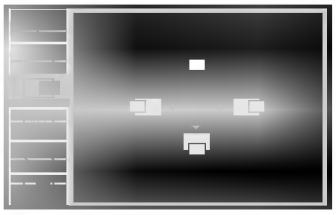
Brightness
Used to adjust the brightness of the screen.

Contrast
Adjust the display to the contrast desired.



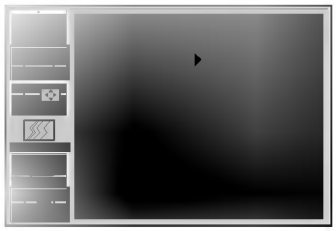
USER — **RED / GREEN / BLUE**
To set your own color levels.

9300K
6500K
To appear the displays color temperature.
- 9300K:Slightly bluish white.
- 6500K:Slightly reddish white.



Horizontal Position
To move picture image left and right.

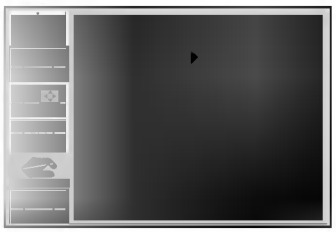
Vertical Position
To move image up and down.



AUTO This function is suitable for analog signal input only. This button is for the automatic adjustment of the screen position, clock and phase.

CLOCK To minimize any vertical bars or stripes visible on the screen background.The horizontal screen size will also change.

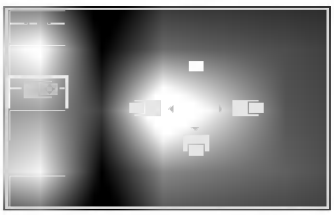
PHASE To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.
Phase adjustment should be done after adjusting the **Clock**.



LANGUAGE To choose the language in which the control names are displayed.

IMAGE SIZE This function displays the image in its original size or enlarged size so as to fit in the full screen of the LCD panel.

OSD POSITION To adjust position of the OSD window on the screen. Press the SET button to display the submenu for OSD POSITION.

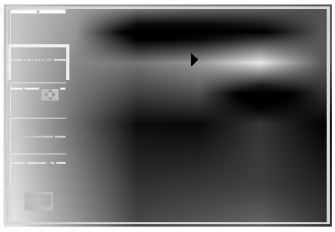


TRANSPARENCY To adjust the transparency of the OSD menu screen.

BEEP To select beep on or off.

ZOOM To adjust horizontal and vertical image size simultaneously.
If you want to move the zooming point, use the H/V POSITION function in the sub-menu. However, if the monitor turns off when zooming in and out the screen, the monitor will be returned to original screen.

ELAPSED TIME It show how long the monitor has been used.



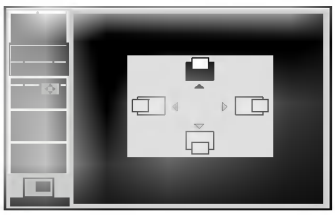
This PIP (Picture-in-Picture) function allows the image from the VCR or DVD to be displayed on a sub-screen while you are using a computer.

PIP ON/OFF To select the sub-screen on/off.

PIP SOURCE To select an input signal for PIP. :V1 (AV) / V2 (S)

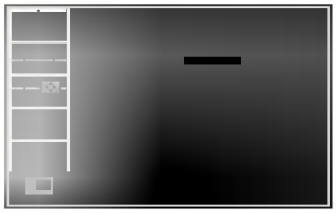
PIP SIZE To adjust the size of the PIP screen. :SMALL/MEDIUM/LARGE

PIP POSITION To adjust the position of PIP screen. Press the SET button to display the submenu for PIP POSITION.



PIP SOUND To turn the PIP sound on/off.

PIP IMAGE To adjust the image of the PIP screen; Press the SET button to display the submenu for PIP IMAGE.
Use the VOLUME (◀/▶) buttons to adjust the item to the desired level.



PIP CONTRAST
Adjust the display to the contrast desired.

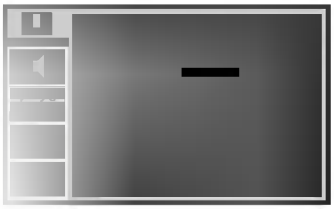
PIP BRIGHTNESS
Used to adjust the brightness of the screen.

PIP SHARPNESS
To adjust the clearness of the screen.

PIP COLOR
To adjust the color to desired level.

PIP TINT
To adjust the tint to desired level. This function is available only in NTSC broadcasting mode.

Adjusting the Screen when Using VCR/DVD (V1 / V2)



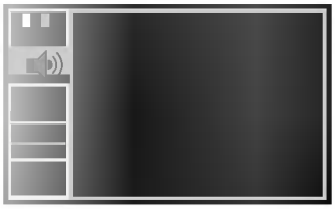
CONTRAST Adjust the display to the contrast desired.

BRIGHTNESS Used to adjust the brightness of the screen.

SHARPNESS To adjust the clearness of the screen.

COLOR To adjust the color to desired level.

TINT To adjust the tint to desired level. This function is available only in NTSC broadcasting mode.



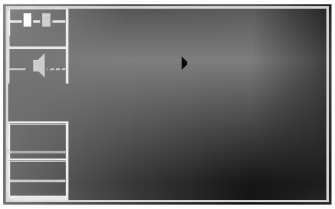
VOLUME Raises or lowers audio level.

BASS Raises or lowers Bass level.

TREBLE Raises or lowers treble level.

MUTE Used to select mute on (means sound off) and mute off (means sound on).

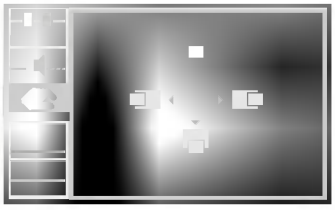
SOUND To select the audio mode.
: MONO/STEREO



LANGUAGE To choose the language in which the control names are displayed.

IMAGE SIZE This function displays the image in its original size or enlarged size so as to fit in the full screen of the LCD panel.

OSD POSITION To adjust position of the OSD window on the screen. Press the SET button to display the submenu for OSD POSITION.



TRANSPARENCY To adjust the transparency of the OSD menu screen.

BEEP To select beep on or off.

The display modes listed below are the most commonly used modes and are set as factory defaults. The monitor automatically recognizes most input data modes, and displays centered images with the proper sizing.

If the screen size is inappropriately set or the display is not centered, you need to readjust the parameters of the monitor using the OSD (on-screen display).

Display Modes (Resolution)

Display Modes (Resolution)			Horizontal Freq.(kHz)	Vertical Freq.(Hz)
1	VESA, IBM	640 x 350	31.469	70
2	VESA	640 x 480	31.469	60
3	VESA	640 x 480	37.500	75
4	VESA	640 x 480	43.269	85
5	VESA	720 x 400	31.468	70
6	VESA	800 x 600	37.879	60
7	VESA	800 x 600	46.875	75
8	VESA	800 x 600	53.674	85
9	MAC	832 x 624	49.725	75
10	VESA	1024 x 768	48.363	60
11	VESA	1024 x 768	60.020	75
12	VESA	1024 x 768	68.677	85
13	MAC	1152 x 870	68.681	75
14	SUN	1152 x 900	61.805	65
15	VESA	1280 x 1024	63.981	60
*16	VESA	1280 x 1024	79.976	75
*17		1600 x 1024	62.110	60
*18	VESA	1600 x 1200	75.000	60
*19	VESA	1600 x 1200	93.750	75

* Analog only

Check the following before calling for service.

Display Position is incorrect.
- Select **AUTO** in the OSD menu.
- If the results are unsatisfactory, adjust the image position using the position icon in the on screen display.

On the screen background, vertical bars or stripes are visible.
- Select **AUTO** in the OSD menu.
- If the results are unsatisfactory, decrease the vertical bars or stripes using the **CLOCK** icon in the on screen display.

Any horizontal noise appearing in any image or characters are not clearly portraid.
- Select **AUTO** in the OSD menu.
- If the results are unsatisfactory, decrease the horizontal bars using the **PHASE** icon in the on screen display.

Check signal Cable message.
- The signal cable is not connected, or is loose. Check and secure the connection.

OUT OF RANGE message appears.
Picture is blank.
- The frequency of the signal from the video card is outside the operating range of the monitor.

  Horizontal Frequency: 30kHz-94kHz
  Vertical Frequency: 56Hz-85Hz

  *Use the graphics board's utility software to change the frequency setting (Refer to the manual for graphics board).

  *You can change the setup to the supported resolution using the **Safe Mode** (Press the F8 key during booting the system).

The power LED is illuminated amber.
- The monitor is in its display power management mode.
- There is no active signal coming from the PC.
- The signal cable is not fastened securely.
- Check the computer power and graphics adapter configuration.

The monitor doesn't enter the power saving off mode (Amber).
- Computer video signal is not VESA DPMS standard. Either the PC or the video controller card is not using the VESA DPMS power management function.

NOTE
- If the power indicator(LED) light is blinking amber, may result in abnomal condition of the monitor.
- Then press a power ON/OFF button on the front panel control and call your service technician for more information.

Display	Type	22inch (55.8cm) Wide SXGA TFT LCD Anti-Glare coating
	Viewable Size	22inch (55.8cm)
	Viewing Angle(max.)	70˚ (Left/Right/Up/Down)
	Pixel pitch	0.294 x 0.294mm
	True color	16.7 million color
Sync Input	Horizontal Freq.	30kHz - 94kHz (Automatic)
	Vertical Freq.	56Hz - 85Hz (Automatic)
	Input form	Separate, TTL, Positive/Negative
		Digital
Video Input	Signal input	15 pin D-Sub connector/DVI-D connector
	Input Form	Separate, RGB Analog, 0.7Vp-p/75ohm, Positive
		Digital
	Resolution (max.)	Analog : 1600 x 900, 1600 x 1024, 1600 x 1200 @ 75Hz
		Digital : 1280x 1024 @ 60Hz
Audio Signal	Input	PC : 700mVrms, Video : 400mVrms
	Audio output and its ratio	PC : 1.5W + 1.5W (left+right)/3% VCR : 2W + 2W (left+right)/3%
	Speaker Impedance	8Ω
Power Consumption	Normal	≤ 80W
	Stand-by/Suspend	≤ 8W
	Power Off	≤ 8W
Dimensions	Width	58.2 cm / 22.9 inches
	Height	46.75 cm / 18.4 inches
	Depth	7.3 cm / 2.87 inches
Power Input	DC 15V 5.0A	
AC Adapter	Input	AC 100-240V, 50 /60Hz, ~1.5A
	Output	DC 15V ⎓ 5.33A ⊖—●—⊕
	Net	14.8 kg / 32.6 lbs
	10˚~30˚	
Environment	Operating condition	
	Temperature	10˚C to 35˚C
	Humidity	10% to 80% non-condensing
	Storage condition	
	Temperature	-20˚C to 60˚C
	Humidity	5% to 95% non-condensing

NOTE

■ Information in this document is subject to change without notice.