

Important Precautions

This unit has been engineered and manufactured to ensure your personal safety, however improper use may result in potential e shock or fire hazards. In order to allow the proper operation of all safeguards incorporated in this display, observe the following basic rules for its installation, use, and servicing.

On Safety

Use only the power cord supplied with the unit. In case you use another power cord, make sure that it is certified by the applicable national standards if not being provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

The power supply cord is used as the main disconnection device. Ensure that the socket-outlet is easily accessible after installation.

Operate the display only from a power source indicated in the specifications of this manual or listed on the display. If you are not sure what type of power supply you have in your home, consult with your dealer.

Overloaded AC outlets and extension cords are dangerous. So are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

Do not Open the Display.

- There are no user serviceable components inside.
- There are Dangerous High Voltages inside, even when the power is OFF.
- Contact your dealer if the display is not operating properly.

To Avoid Personal Injury :

- Do not place the display on a sloping shelf unless properly secured.
- Use only a stand recommended by the manufacturer.

To Prevent Fire or Hazards:

- Always turn the display OFF if you leave the room for more than a short period of time. Never leave the display ON when leaving the house.
- Keep children from dropping or pushing objects into the display's cabinet openings. Some internal parts carry hazardous voltages.
- Do not add accessories that have not been designed for this display.
- During a lightning storm or when the display is to be left unattended for an extended period of time, unplug it from the wall outlet.

Important Precautions

On Installation

Do not allow anything to rest upon or roll over the power cord, and do not place the display where the power cord is subject to damage.

Do not use this display near water such as near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

Displays are provided with ventilation openings in the cabinet to allow the release of heat generated during operation. If these openings are blocked, built-up heat can cause failures which may result in a fire hazard. Therefore, NEVER:

- Block the bottom ventilation slots by placing the display on a bed, sofa, rug, etc.
- Place the display in a built-in enclosure unless proper ventilation is provided.
- Cover the openings with cloth or other material.
- Place the display near or over a radiator or heat source.

Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Do not press the LCD screen with your finger for a long time as this may cause some afterimages.

Some dot defects may appear as Red, Green or Blue spots on the screen. However, this will have no impact or effect on the display performance.

If possible, use the recommended resolution to obtain the best image quality for your LCD display. If used under any mode except the recommended resolution, some scaled or processed images may appear on the screen. However, this is characteristic of the fixed-resolution LCD panel.

On Cleaning

- Unplug the display before cleaning the face of the display screen.
- Use a slightly damp (not wet) cloth. Do not use an aerosol directly on the display screen because over-spraying may cause electrical shock.

On Repacking

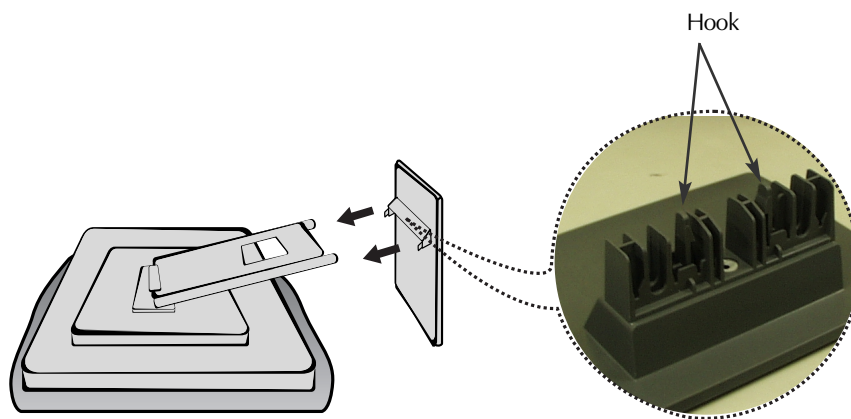
- Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it in its original material.

Connecting the Display

- Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

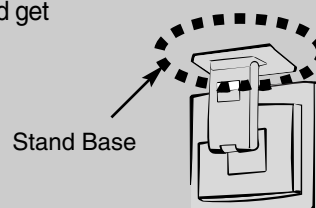
Connecting the stand base

1. Align the hooks on the stand base with the matching slots in the base of the monitor.
2. Insert the hooks into slots.



Important

- This illustration depicts the general model of connection. Your monitor may differ from the items shown in the picture.
- **To Remove the Stand Base**
 - Do not force to remove the Stand Base, but remove the screws on the back first for your safety.
 - Once you connect the stand base, try not to disconnect it.
- Do not carry the product upside down holding only the stand base. The product may fall and get damaged or injure your foot.



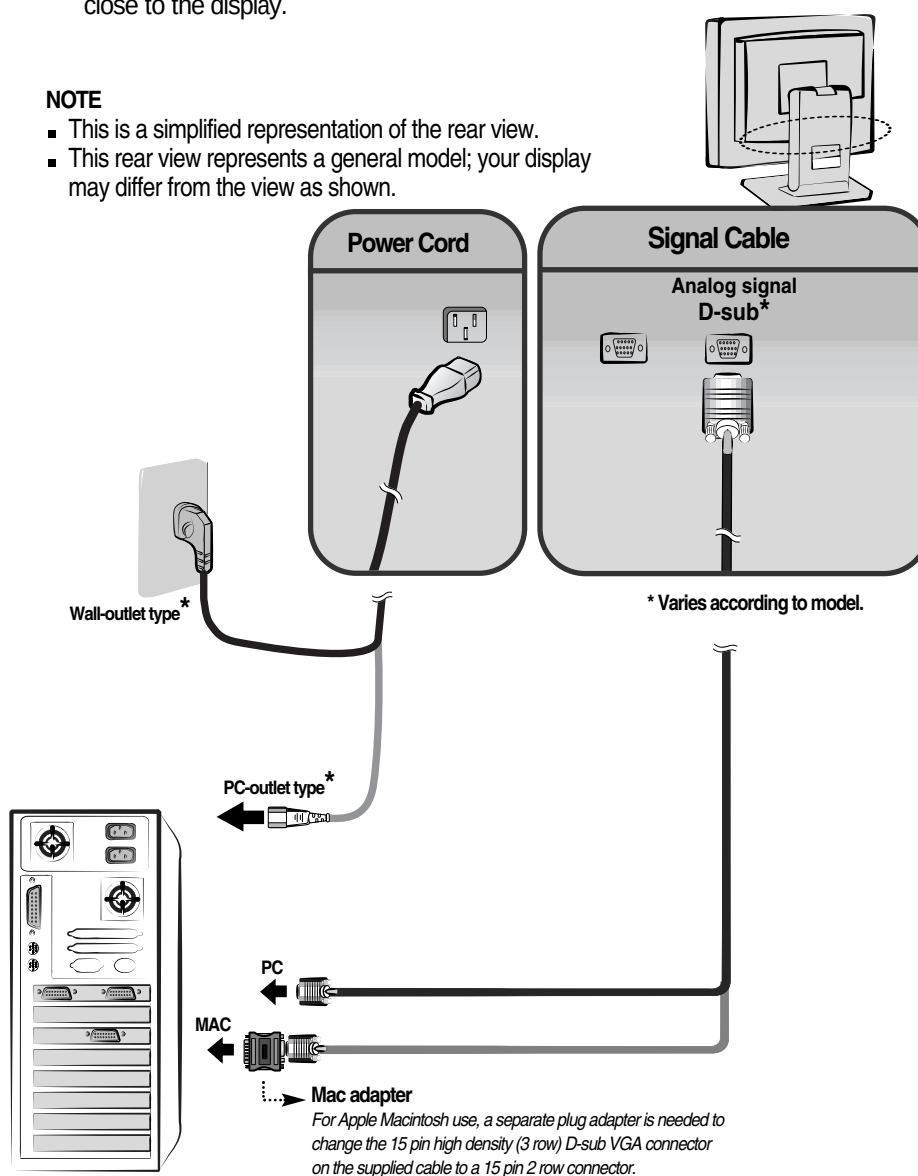
Connecting the Display

Using the Computer

1. Connect the signal cable. When attached, tighten the thumbscrews to secure the connection.
2. Connect the power cord into a proper power outlet that is easily accessible and close to the display.

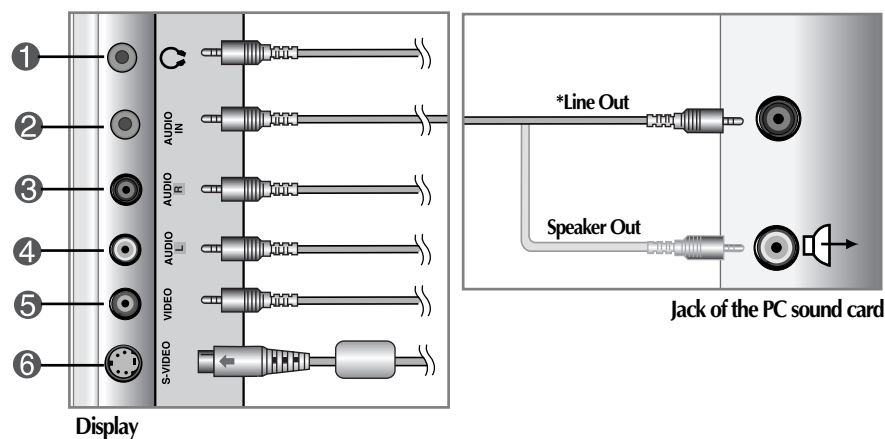
NOTE

- This is a simplified representation of the rear view.
- This rear view represents a general model; your display may differ from the view as shown.



Connecting the Display

Side Jacks



① Headphone/Earphone Input

Automatically mutes the speaker volume when the headphones are plugged in.

② Audio Input

Connects to the *LINE OUT jack of the PC sound card.

***LINE OUT**

A terminal used to connect to the speaker including a built-in amplifier (Amp). Make sure that the connecting terminal of the PC sound card is checked before connecting. If the Audio Out of PC sound card has only Speaker Out, reduce the PC volume.

If the Audio Out of the PC sound card supports both Speaker Out and Line Out, convert to Line Out using the card jumper of the program (Refer to the Sound Card Manual).

③ VCR/DVD Audio(R) Input

Connects to the Audio(R) jack of the VCR/DVD.

④ VCR/DVD Audio(L) Input

Connects to the Audio(L) jack of the VCR/DVD.

⑤ VCR/DVD Video Input

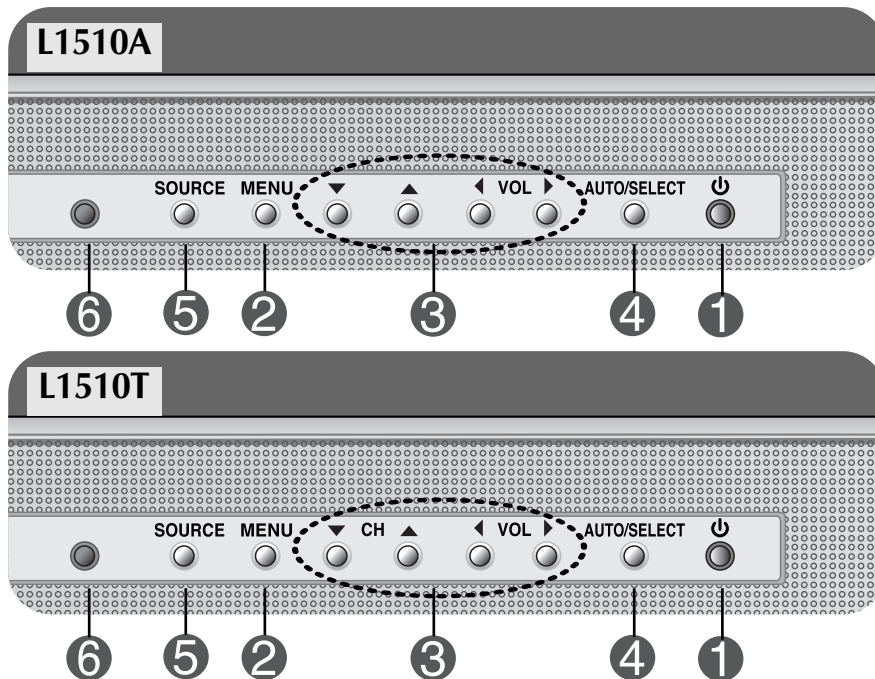
Connects to the Video jack of the VCR/DVD.

⑥ VCR/DVD S-Video Input

Connects to the S-Video jack of the VCR/DVD.

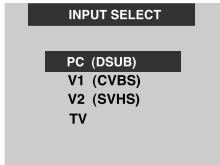
Control Panel Functions

Front Panel Controls



Control	Function
1 Power Button	Use this button to turn the display on or off.
Power (DPMS) Indicator	This Indicator lights up green when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.
2 MENU Button	Use this button to enter or exit the On Screen Display.
3 ▼▲◀▶ Buttons	Use these buttons to choose or adjust items in the On Screen Display.
4 AUTO/SELECT Button	Use this button to enter a selection in the On Screen Display.
6 Remote Control Sensor	

Control Panel Functions

Control	Direct Access Function
	3 CHANNEL: ▼ ▲ Use these buttons to go up and down the channel when the TV source is available.
	VOLUME: ◀ ▶ Use these buttons to decrease or increase the volume level.
	4 AUTO adjustment function When adjusting your display settings, always press the AUTO/SELECT button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). The best display mode is 1024x768 .
	5 Source Selection: SOURCE → ▼▲ → AUTO/SELECT Use this button to select an input signal. • PC (DSUB) : 15-pin D-sub analog signal • V1 (CVBS) : Composite video • V2 (SVHS) : S video • TV: TV

On Screen Display (OSD) Control Adjustment

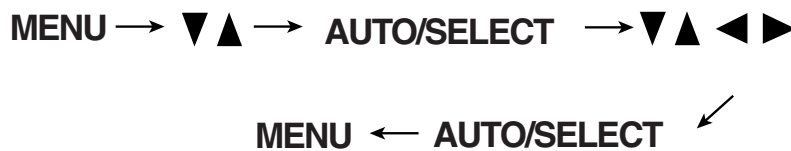
Screen Adjustment

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

NOTE

- Allow the display to stabilize for at least 30 minutes before making image adjustments.

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



- 1 Press the MENU Button, then the main menu of the OSD appears.
- 2 To access a control, use the ▼ or ▲ Buttons. When the icon you want becomes highlighted, press the AUTO/SELECT Button.
- 3 Use the ▼ ▲ ◀ ▶ Buttons to adjust the item to the desired level.
- 4 Accept the changes by pressing the AUTO/SELECT Button.
- 5 Exit the OSD by Pressing the MENU Button.

On Screen Display(OSD) Selection and Adjustment

The following table indicates all the On Screen Display control, adjustment, and setting menus.

Using the computer				
Main menu	Sub menu			Reference
BRIGHTNESS CONTRAST	BRIGHTNESS		●	To adjust the brightness and contrast of the screen
	CONTRAST		●	
COLOR	PRESET	9300K	●	To customize the color of the screen
		6500K	●	
	R/G/B(User Color)		●	
POSITION	V POSITION		●	To adjust the position of the screen
	H POSITION		●	
TRACKING	AUTO		●	To improve the clarity and stability of the screen
	CLOCK		●	
	PHASE		●	
AUDIO	VOLUME		●	To adjust the audio function
	MUTE		●	
	BASS		●	
	TREBLE		●	
	BALANCE		●	
SETUP	LANGUAGE		●	To customize the screen status for a user's operating environment
	OSD POSITION		●	
PIP	PIP ON/OFF		●	To adjust the PIP of the screen
	PIP SOURCE		●	
	PIP SIZE		●	
	PIP SOUND		●	
	PIP POSITION		●	
	TRANSPARENCY		●	
● : Adjustable				

NOTE

- The order of icons may differ depending on the model (A9~A13).

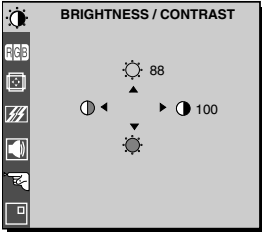
On Screen Display(OSD) Selection and Adjustment

Using the VCR/DVD/TV				
Main menu	Sub menu	V	T	Reference
CHANNEL	CHANNEL MODE		●	To select the TV channel settings and adjust the channel quality.
	AUTO CHANNEL		●	
	MANUAL CHANNEL		●	
	ADD/DELL CH.		●	
	FINE TUNE		●	
VIDEO	CONTRAST	●	●	To improve the clarity and stability of the screen
	BRIGHTNESS	●	●	
	SHARPNESS	●	●	
	COLOR	●	●	
	TINT	●	●	
AUDIO	VOLUME	●	●	To adjust the audio function
	MUTE	●	●	
	BASS	●	●	
	TREBLE	●	●	
	BALANCE	●	●	
	SOUND	●	●	
SETUP	LANGUAGE	●	●	To customize the screen status for a user's operating environment
	OSD POSITION	●	●	
● : Adjustable V : VCR/DVD T : TV				

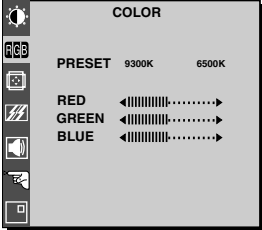
On Screen Display(OSD) Selection and Adjustment

You were introduced to the procedure of selecting and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the all items shown on the Menu.

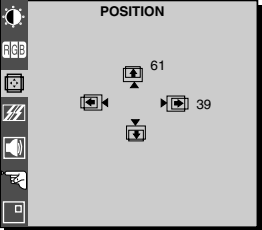
To adjust the brightness and contrast of the screen

OSD Adjust	Description
	 BRIGHTNESS To adjust the brightness of the screen.  CONTRAST To adjust the contrast of the screen.

To customize the color of the screen

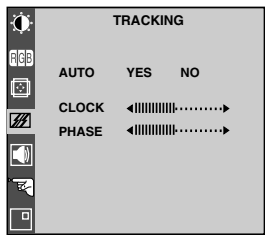
OSD Adjust	Description
	PRESET 9300K/6500K Select the screen color. • 9300K: Slightly bluish white. • 6500K: Slightly reddish white. RED GREEN BLUE Set your own color levels.

To adjust the position of the screen

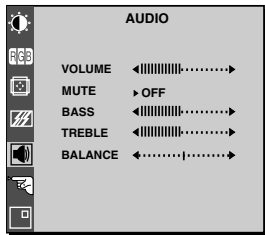
OSD Adjust	Description
	 Vertical Position To move image up and down.  Horizontal Position To move image left and right.

On Screen Display(OSD) Selection and Adjustment

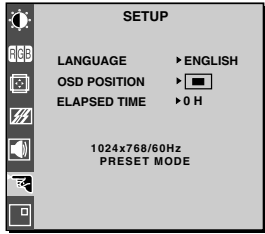
To improve the clarity and stability of the screen

OSD Adjust	Description
 The image shows the 'TRACKING' OSD menu. It has a vertical sidebar with icons for various settings. The main area contains: 'AUTO' with 'YES' and 'NO' options, 'CLOCK' with a horizontal bar graph, and 'PHASE' with a horizontal bar graph.	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.

To adjust the audio function

OSD Adjust	Description
 The image shows the 'AUDIO' OSD menu. It has a vertical sidebar with icons. The main area contains: 'VOLUME' with a horizontal bar graph, 'MUTE' with 'OFF' and 'ON' options, 'BASS' with a horizontal bar graph, 'TREBLE' with a horizontal bar graph, and 'BALANCE' with a horizontal bar graph.	VOLUME To decrease or increase volume level. MUTE Used to select mute on (means sound off) and mute off (means sound on). BASS To raises or lowers Bass level. TREBLE To raises or lowers Treble level. BALANCE To adjust the balance level.

To customize the screen status for a user's operating environment

OSD Adjust	Description
 The image shows the 'SETUP' OSD menu. It has a vertical sidebar with icons. The main area contains: 'LANGUAGE' with 'ENGLISH' and 'OTHER' options, 'OSD POSITION' with a small diagram showing screen placement, 'ELAPSED TIME' with '0 H' and '1 H' options, and '1024x768/60Hz PRESET MODE' at the bottom.	LANGUAGE To choose the language in which the control names are displayed. OSD POSITION To adjust position of the OSD window on the screen. ELAPSED TIME To display the use time of display.

On Screen Display(OSD) Selection and Adjustment

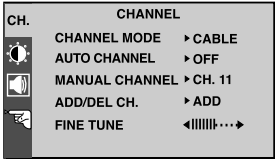
To adjust the PIP of the screen

OSD Adjust	Description
	This PIP (Picture-in-Picture) function allows the image from the TV, 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. PIP SIZE To adjust the size of the PIP screen: SMALL/LARGE PIP SOUND To turn the PIP sound on/off. PIP POSITION To adjust the position of PIP screen. TRANSPARENCY To adjust the transparency of the OSD menu screen.

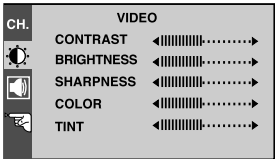
On Screen Display(OSD) Selection and Adjustment

To adjust the screen when using the VCR/DVD/TV

To select TV channel settings and adjust the channel quality

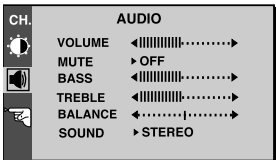
OSD Adjust	Description
	CHANNEL MODE To select the channel reception type. : AIR/CABLE AUTO CHANNEL To automatically search the available channels. MANUAL CHANNEL To change the channel. ADD/DELL CH. To add/delete the selected channels. FINE TUNE To adjust the channel quality.

To improve the clarity and stability of the screen

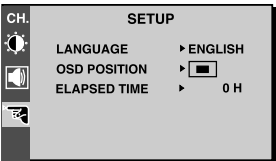
OSD Adjust	Description
	CONTRAST To adjust the contrast of the screen. BRIGHTNESS To adjust the brightness of the screen. SHARPNESS To adjust the clearness of the screen. COLOR To adjust the color to desired level. TINT To adjust the tint to desired level. This function is available only in NTSC broadcasting mode.

On Screen Display(OSD) Selection and Adjustment

To adjust the audio function

OSD Adjust	Description
 The screenshot shows the 'AUDIO' menu with options: VOLUME (a horizontal bar with a playhead), MUTE (set to OFF), BASS (a horizontal bar with a playhead), TREBLE (a horizontal bar with a playhead), BALANCE (a horizontal bar with a playhead), and SOUND (set to STEREO). On the left, there are icons for channel selection (CH.), volume, and a speaker icon.	VOLUME To decrease or increase volume level. MUTE Used to select mute on (means sound off) and mute off (means sound on). BASS To decrease or increase bass level. TREBLE To decrease or increase treble level. BALANCE To adjust the balance level. SOUND To select the audio mode. : MONO/STEREO

To customize the screen status for a user's operating environment

OSD Adjust	Description
 The screenshot shows the 'SETUP' menu with options: LANGUAGE (set to ENGLISH), OSD POSITION (a small square icon), and ELAPSED TIME (set to 0 H). On the left, there are icons for channel selection (CH.), volume, and a speaker icon.	LANGUAGE To choose the language in which the control names are displayed. OSD POSITION To adjust position of the OSD window on the screen. ELAPSED TIME To display the use time of display.

Troubleshooting

Check the following before calling for service.

No image appears	
● Is the power cord of the display connected?	• Check and see if the power cord is connected properly to the power outlet.
● Is the power indicator light on?	• Press the Power button.
● Is the power on and the power indicator green?	• Adjust the brightness and the contrast.
● Is the power indicator amber?	• If the display is in power saving mode, try moving the mouse or pressing any key on the keyboard to bring up the screen. • Make sure if the power is on. • Try to turn on the PC.
● Do you see an "OUT OF RANGE" message on the screen?	• This message appears when the signal from the PC (video card) is out of horizontal or vertical frequency range of the display. See the 'Specifications' section of this manual and configure your display again.
● Do you see a "CHECK SIGNAL CABLE " message on the screen?	• This message appears when the signal cable between your PC and your display is not connected. Check the signal cable and try again.

Display image is incorrect	
● Display Position is incorrect.	- Press the AUTO/SELECT button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, adjust the image position using the H position and V position icon in the on screen display. - Check Control Panel --> Display --> Settings and see if the frequency or the resolution were changed. If yes, readjust the video card to the recommend resolution.
● On the screen background, vertical bars or stripes are visible.	Press the AUTO/SELECT button to automatically adjust your display image to the ideal setting. 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 portrayed.	- Press the AUTO/SELECT button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the horizontal bars using the PHASE icon in the on screen display. - Check Control Panel --> Display --> Settings and adjust the display to the recommended resolution or adjust the display image to the ideal setting. Set the color setting higher than 24 bits (true color).
● The screen color is mono or abnormal.	- Check if the signal cable is properly connected and use a screwdriver to fasten if necessary. - Make sure the video card is properly inserted in the slot. - Set the color setting higher than 24 bits (true color) at Control Panel - Settings.
● The screen blinks.	- Check if the screen is set to interlace mode and if yes, change it to the recommend resolution. - Make sure the power voltage is high enough, It has to be hgher than AC100-240V 50/60Hz.

Troubleshooting

Have you installed the display driver?

- | | |
|--|---|
| <ul style="list-style-type: none">● Have you installed the display driver?● Do you see an "Unrecognized monitor, Plug&Play (VESA DDC) monitor found" message? | <ul style="list-style-type: none">• Be sure to install the display driver from the display driver CD (or diskette) that comes with your display. Or, you can also download the driver from our web site: http://www.lge.com.• Make sure to check if the video card supports Plug&Play function. |
|--|---|

Audio function

- | | |
|---|--|
| <ul style="list-style-type: none">● No sound.● Sound is too high pitched or too low pitched.● Sound level is too low. | <ul style="list-style-type: none">• Check if the audio cable is correctly connected.• Check the volume level.• Adjust the TREBLE to an appropriate level.• Adjust the BASS to an appropriate level.• Check the volume level. |
|---|--|

TV function

- | | |
|--|---|
| <ul style="list-style-type: none">● TV signal is not received. | <ul style="list-style-type: none">• Check the channel system and make sure you chose the correct channel system.• Check the AUTO CHANNEL function to automatically search the available channels.• Check and see if the TV adapter is properly connected between your display and antenna cable. |
|--|---|

Specifications

Display	15 inches (38.1cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating 15 inches viewable 0.3 mm pixel pitch		
Sync Input	Horizontal Freq.	30 - 63kHz (Automatic)	
	Vertical Freq.	56 - 75Hz (Automatic)	
	Input Form	Separate TTL, Positive/Negative	
Video Input	Signal Input	15 pin D-Sub Connector	
	Input Form	RGB Analog (0.7Vp-p/75ohm)	
Resolution	Max	VESA 1024 x 768@75Hz	
	Recommend	VESA 1024 x 768@60Hz	
Plug&Play	DDC 2B		
Audio Signal	Input	PC : 700mVrms TV:100%modulation Video : 400mVrms	
	Audio output and its ratio	1W + 1W (left+right)/10%	
	Speaker Impedance	8Ω	
Power Consumption	Normal	:	30W
	Stand-by/Suspend	≤	5W
	DPMS Off	≤	5W
Dimensions & Weight (with tilt stand)	Width	36.02 cm / 14.18 inches	
	Height	35.98 cm / 14.17 inches	
	Depth	15.30 cm / 6.02 inches	
	Net	4.15 kg (9.15 lbs)	
Tilt Range	Tilt	-5°~30°	
Power Input	AC 100-240V 50/60Hz 0.6A		
Environmental Conditions	Operating Conditions		
	Temperature	10°C to 35 °C	
	Humidity	10 % to 80 % non-Condensing	
	Storage Conditions		
	Temperature	-20°C to 60 °C	
	Humidity	5 % to 95 % non-Condensing	
Tilt Stand	Attached(), Detached (O)		
Signal cable	Attached(), Detached (O)		
Power cord	Wall-outlet type or PC-outlet type		
Regulations	TCO99		

NOTE

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

Specifications

Preset Modes (Resolution)

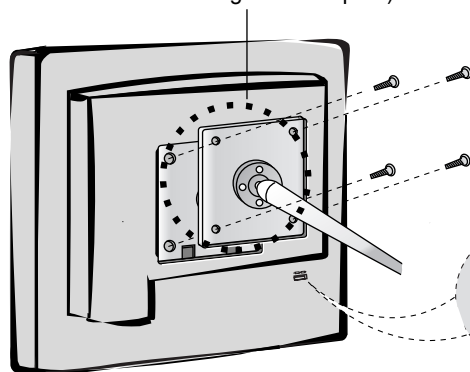
	Display Modes (Resolution)		Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	VGA	640 x 350	31.468	70
2	VGA	720 x 400	31.468	70
3	VGA	640 x 480	31.469	60
4	VESA	640 x 480	35.000	66.67
5	VESA	640 x 480	37.861	72.8
6	VESA	640 x 480	37.500	75
7	VESA	800 x 600	35.156	56.25
8	VESA	800 x 600	37.879	60
9	VESA	800 x 600	48.077	72
10	VESA	800 x 600	46.875	75
11	MAC	832 x 624	49.725	75
*12	VESA	1024 x 768	48.363	60
13	VESA	1024 x 768	56.476	70
14	VESA	1024 x 768	60.023	75

*Recommended

Unlike CRT monitors, which require a high refresh rate to minimize flickering, TFT technology is inherently flicker-free. If possible, configure your computer for 1024 x 768 addressability at 60Hz vertical refresh rate.

VESA wall mounting

Connected to another object (stand type and wall-mounted type. This monitor accepts a VESA-compliant mounting interface pad.)



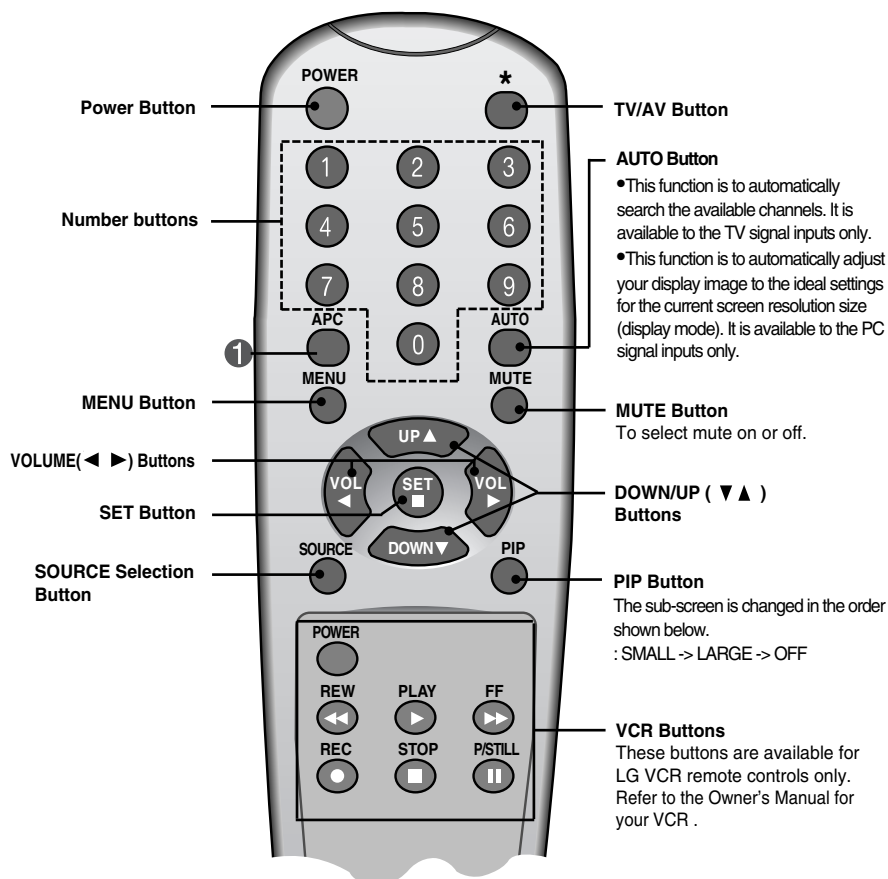
Kensington Security Slot- optional

Connected to a locking cable that can be purchased separately at most computer stores

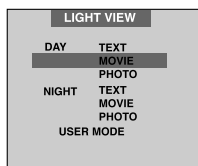
Using the Remote Control

For detailed instructions of each button on the remote control, refer to the appropriate pages of this manual.

Remote Control



1 LIGHT VIEW



This function optimizes the brightness, contrast or color value to the surrounding conditions and settings and enables you to enjoy the most suitable picture by adjusting the surroundings (DAY/NIGHT/USER MODE).

- TEXT: For viewing letters
- MOVIE: For viewing movies
- PHOTO: For viewing pictures or the photographs
- USER MODE: This function memorizes the manual adjustment -Brightness, Contrast and Color value on the On Screen Display.

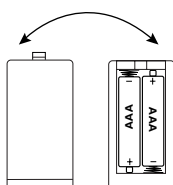
* You can use this function only with the remote control.

Using the Remote Control

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.



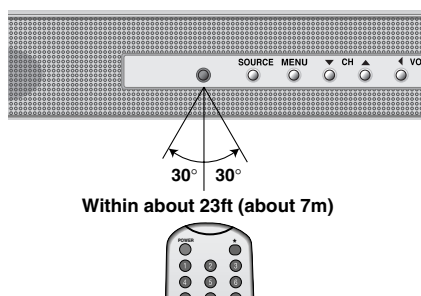
Note

- 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.

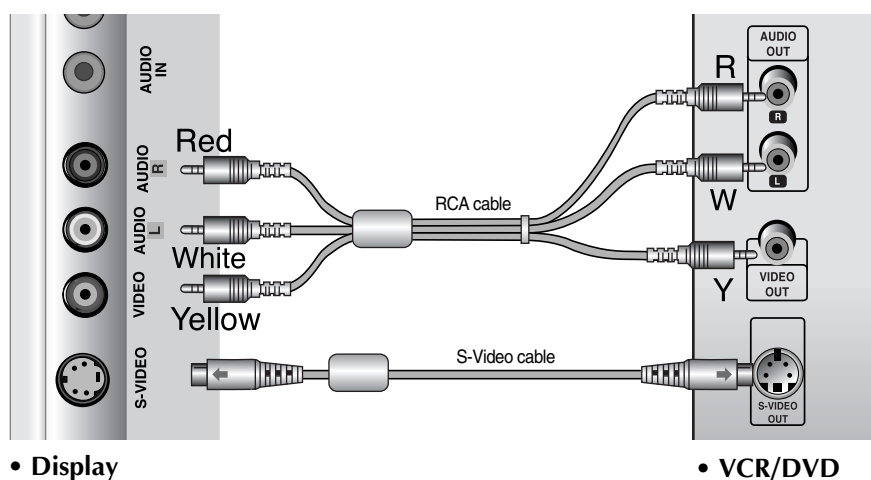
Note

- 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.

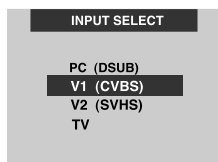
Connection of external equipment

Connecting the VCR/DVD

1. Connect the each audio/video output jack of the VCR/DVD to the corresponding input port as shown on the Display.
If you connect the S-Video input port to external equipment, you can have an improved definition image.



2. Select an input signal.



SOURCE → ▼▲ → AUTO/SELECT

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

- V1(CVBS): Composite video
- V2(SVHS): S video

Connection of external equipment

Watching TV- Optional

- Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

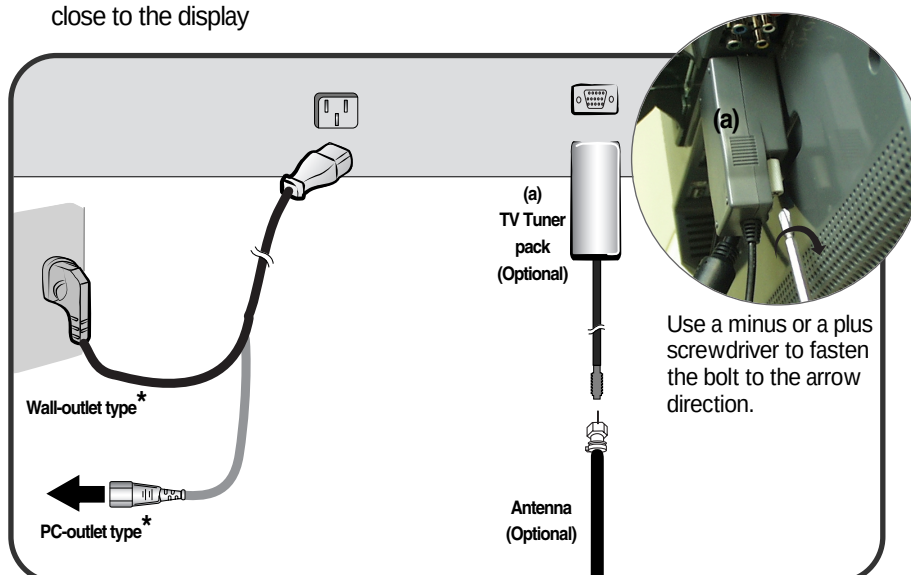
1. As you see in the picture, connect the TV tuner pack to the monitor and use your hand or a screwdriver to fasten the thumbscrews. And then connect the antenna to the TV tuner pack.

(a) TV tuner pack (Optional):

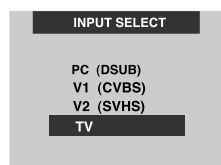
L1510T model includes TV tuner pack.

For L1510A models, TV tuner can be purchased as an option from the LGE monitor dealers.

2. Connect the power cord into a proper power outlet that is easily accessible and close to the display



4. Select an input signal.



SOURCE → ▼▲ → AUTO/SELECT

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

- TV: TV