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ENGLISH

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Safety Precautions

Please read these safety precautions carefully before using the monitor.

⚠ Warning If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

⚠ Caution If you ignore the caution message, you may be slightly injured or the product may be damaged

Precautions in installing the Monitor

⚠ Warning

■ **Keep away from heat sources like electrical heaters.**
- Electrical shock, fire, malfunction or deformation may occur.

■ **Keep the packing anti-moisture material or vinyl packing out of the reach of children.**
- Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.

■ **Do not put heavy objects on the monitor or sit upon it.**
- If the monitor collapses or is dropped, you may be injured. Children must pay particular attention.

■ **Do not leave the power or signal cable unattended on the pathway.**
- The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.

■ **Install the monitor in a neat and dry place.**
- Dust or moisture can cause electrical shock, fire or product damage.

■ **If you can smell smoke or other odors or hear a strange sound unplug the power cord and contact the service center.**
- If you continue to use without taking proper measures, electrical shock or fire can occur.

■ **If you dropped the monitor or the case is broken, turn off the monitor and unplug the power cord.**
- If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.

■ **Do not drop metallic objects such as coins, hair pins, chopsticks or wire into the monitor, or inflammable objects such as paper and matches. Children must pay particular attention.**
- Electrical shock, fire or injury can occur. If a foreign object is dropped into the monitor, unplug the power cord and contact the service center.

⚠ Caution

■ **Make sure the monitor ventilation hole is not blocked. Install the monitor in a suitably wide place (more than 10cm from the wall)**
- If you install the monitor too close to the wall, it may be deformed or fire can break out due to internal heat.

■ **Do not block the ventilation hole of the monitor by a tablecloth or curtain.**
- The monitor can be deformed or fire can break out due to overheating inside the monitor.

■ **Install the monitor on a flat and stable place that has no risk of dropping the monitor.**
- If the monitor is dropped, you may be injured or the monitor may be broken.

■ **Install the monitor where no EMI occurs.**

■ **Keep the monitor away from direct sunlight.**
- The monitor can be damaged.

Electrical Power Related Precautions

⚠ Warning

■ **Make sure to connect the power cable to the grounded current.**
- You may be electrocuted or injured.

■ **Use the rated voltage only.**
- The monitor can be damaged, or you may be electrocuted.

■ **During a thunder or lightning storm, unplug the power cable or signal cable.**
- You may be electrocuted or a fire can break out.

■ **Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the computer.**
- A fire can break out due to overheating.

■ **Do not touch the power plug with wet hands. Additionally, it the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off.**
- You may be electrocuted due to excess moisture.

■ **If you don't intend to use the monitor for a long time, unplug the power cable from the monitor.**
- Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.

■ **Fix the power cable completely.**
- If the power cable is not fixed completely, a fire can break out.

■ **Hold the plug when pulling out the power cable. Do not bend the power cord with excessive force or put heavy objects on the power cord.**
- The power line can be damaged, which may cause electric shock or fire.

■ **Do not insert a conductor (like a metal chopstick) into one end of the power cable while the other end is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal.**
- You may be electrocuted.

⚠ Caution

■ **Do not unplug the power cord while the monitor is in use.**
- Electrical shock can damage the monitor.

Precautions in Moving the Monitor

⚠ Warning

■ **Make sure to turn off the monitor.**
- You may be electrocuted or the monitor can be damaged.

■ **Make sure to remove all cables before moving the monitor.**
- You may be electrocuted or the monitor can be damaged.

Safety Precautions

⚠ Caution

■ **Do not shock the monitor when moving it.**
- You may be electrocuted or the monitor can be damaged

■ **Do not dispose the product-packing box. Use it when you move.**

■ **Make the panel face forward and hold it with both hands to move.**
- If you drop the monitor, the damaged monitor can cause electric shock or fire. Contact with the service center for repair.

Precautions in Using the Monitor

⚠ Warning

■ **Do not disassemble, repair or modify the monitor at your own discretion.**
- Fire or electric shock accident can occur.
- Contact the service center for check, calibration or repair.

■ **Do not spray water on the monitor or scrub with an inflammable substance (thinner or benzene). Fire or electric shock accident can occur**

■ **Keep the monitor away from water.**
- Fire or electric shock accident can occur.

⚠ Caution

■ **Do not put or store inflammable substances near the monitor.**
- There is a danger of explosion or fire due careless handling of the inflammable substances.

■ **When cleaning the brown tube surface, unplug the power cord and scrub with soft cloth to prevent scratching. Do not clean with a wet cloth.**
- The water can sink into the monitor, which can cause electric shock or serious malfunction.

■ **Take a rest from time to time to protect your vision.**

■ **Keep the monitor clean at all times.**

■ **Take a comfortable and natural position when working with a monitor to relax the muscles.**

■ **Take a regular break when working with a monitor for a long time.**

■ **Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.**

■ **Keep the proper distance from the monitor.**
- Your vision may be impaired if you look at the monitor too closely.

■ **Set the appropriate resolution and clock by referring to the User's Manual.**
- Your vision can be impaired.

■ **Use authorized detergent only when cleaning the monitor. (Do not use benzene, thinner or alcohol.)**
- Monitor can be deformed.

Accessories

ENGLISH

Please check the accessories in the product package.
* The monitor and the accessories can be different from the figures shown here.

Monitor

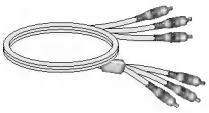
Remote Controller/Batteries (AAA x 2)

User's Manual /Diskette

DVI-A Signal Cable

DVI-D Signal Cable

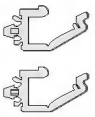
Power Cord



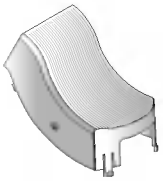
RCA Cable

S-Video Cable

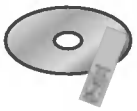
Audio Cable (PC)



Cable Holder (x 2)



Cable Cap

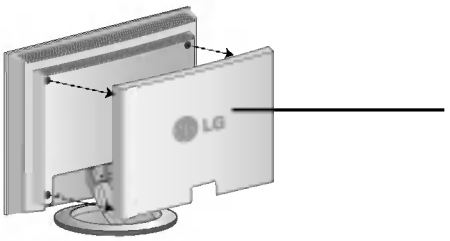


Colorific CD

Accessories

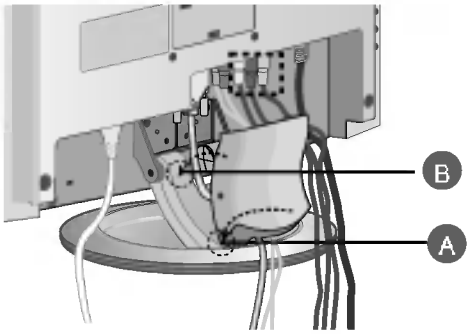
To arrange the cables

1. First, pull out the back cap attached to the rear of the monitor to detach, as shown in Figure 1.

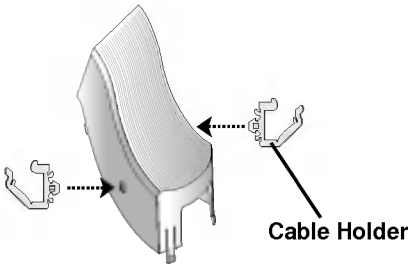


[Figure 1]

2. Neatly connect the signal input cable and audio cable, as shown in Figure 2. Place the A and B cable cabs on the stand hole (in that order), and insert the cable holder into the grooves on both sides of the cable cab, as shown in Figure 3.

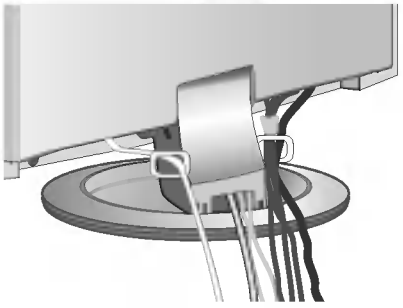


[Figure 2]



[Figure 3]

3. Affix the power cord and antenna cable (not included) to the cable holder.



[Figure 4]

Important Monitor Features

ENGLISH

Swapping Function

You can swap the main screen and the sub-screen when the PIP/POP/PBP function is used.

Spectacle Function

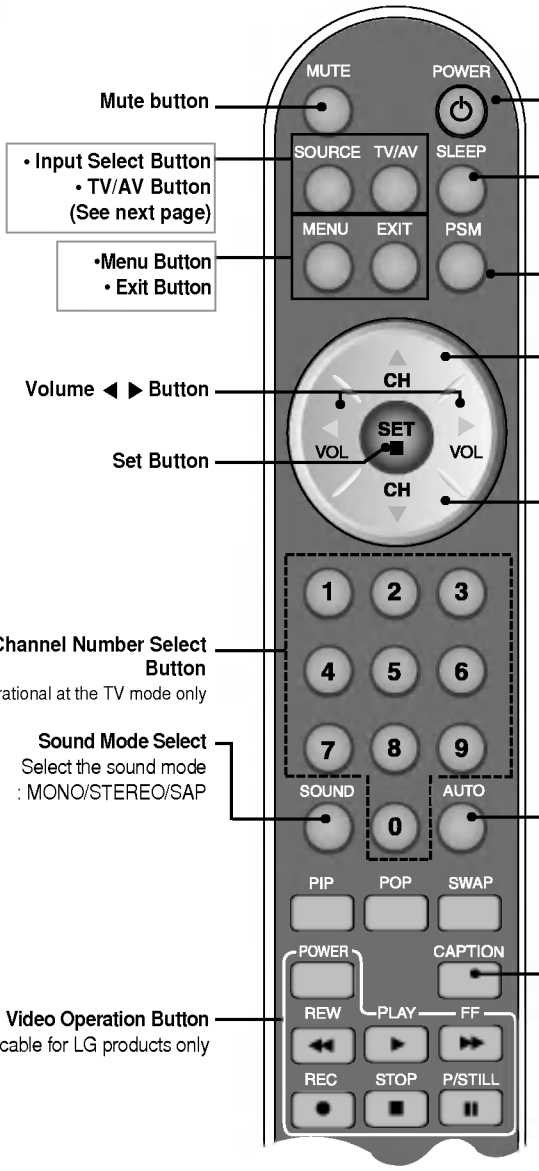
The screen center area is close to a 4:3 ratio and the outskirt area is expanded by more than 15:9. Therefore, the different screen ratio is applied for each area. Because most ordinary people concentrate their focus on the screen center, a non-linear ratio increase at the outskirt area is not recognized, which makes it possible to watch 4:3 TV screen with a wide screen.
However, the spectacle function is useful in watching TV or motion pictures but is not suitable for the PC environment in which you perform graphic or document work.

Sleep Function

When watching AV/HDTV/TV – The monitor will be automatically turned off after a certain period of time.
Press this button repetitively to select an appropriate time duration.

Name and Function of the Parts

Name of the Remote Controller Buttons



Mute button

• Input Select Button
• TV/AV Button
(See next page)

•Menu Button
• Exit Button

Volume ◀ ▶ Button

Set Button

Channel Number Select Button
Operational at the TV mode only

Sound Mode Select
Select the sound mode
: MONO/STEREO/SAP

Video Operation Button
Applicable for LG products only

Power On/Off Button

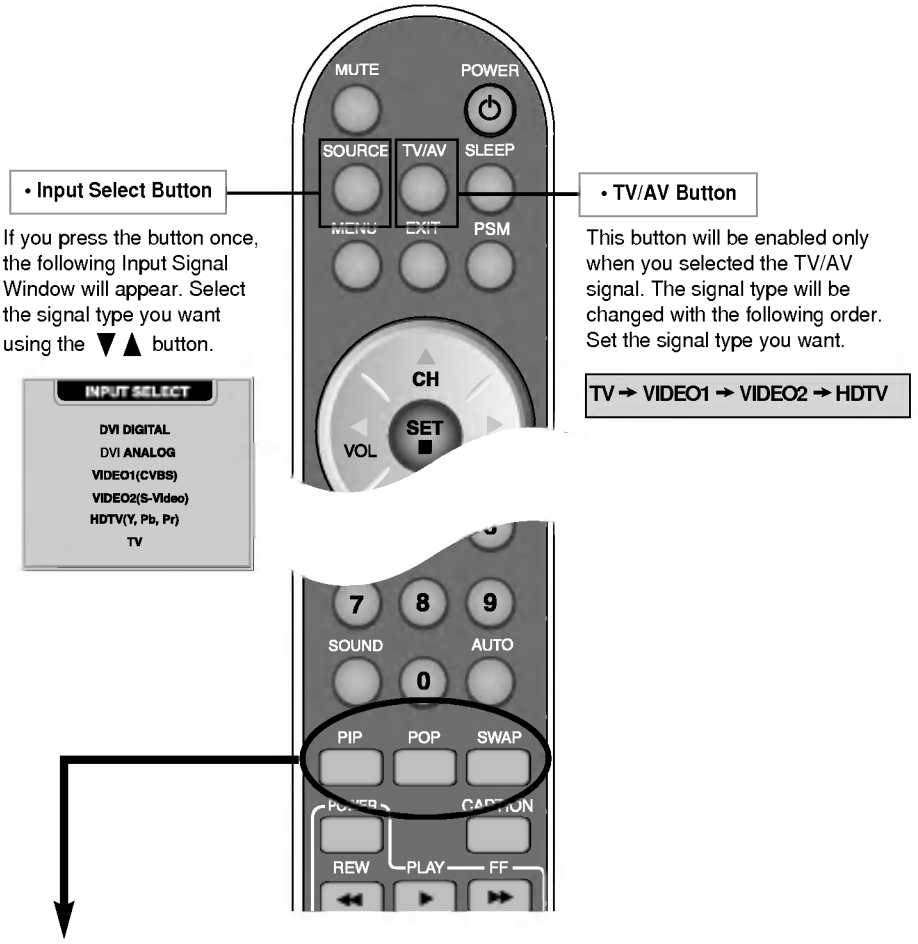
Sleep Button
When watching AV/HDTV/TV
- The monitor will be automatically turned off after a certain period of time.
Press this button repetitively to select an appropriate time duration

PSM Button
When watching AV/HDTV/TV
- Automatically adjusts the image.
Press this button repetitively to set the intended screen. (See A27)

Channel Up/Down Button

Auto Channel Button
- TV: Automatic TV channel setup
- PC: Automatic adjustment function
(Operational for the analog signal only)

CAPTION Button
(See A33)



1. **PIP (Picture in Picture) Button**

The sub-screen moves to the next mode whenever you press this button.
: Small -> Large -> Off

2. **POP (Picture out Picture) Button**

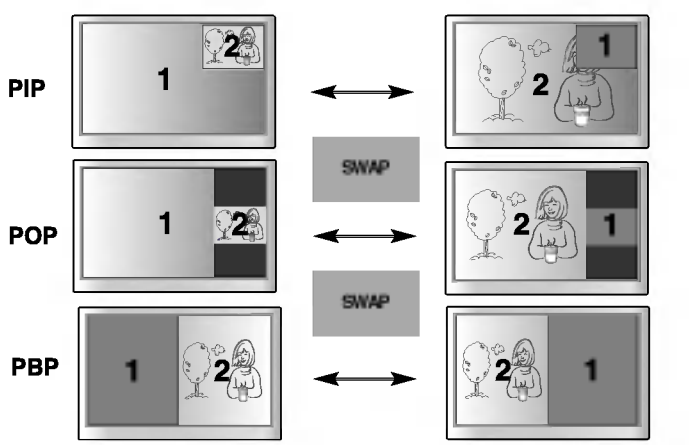
The sub-screen moves to the next mode whenever you press this button.
: POP ON -> PBP(FULL) -> PBP(4:3) -> OFF

POP ON PBP (FULL) PBP (4:3)

Name and Function of the Parts

3. Swap Button

You can swap the main screen and the sub-screen when the PIP/POP/PBP function is used..



When **'Input Signal 1'** comes on in the main screen, only **'Input Signal 2'** can be displayed on the sub-screen. On the contrary, if the main screen displays **'Input Signal 2'**, the sub-screen can display **'Input Signal 1'** only. You can swap **'Input Signal 1'** and **'Input Signal 2'** using the SWAP button.

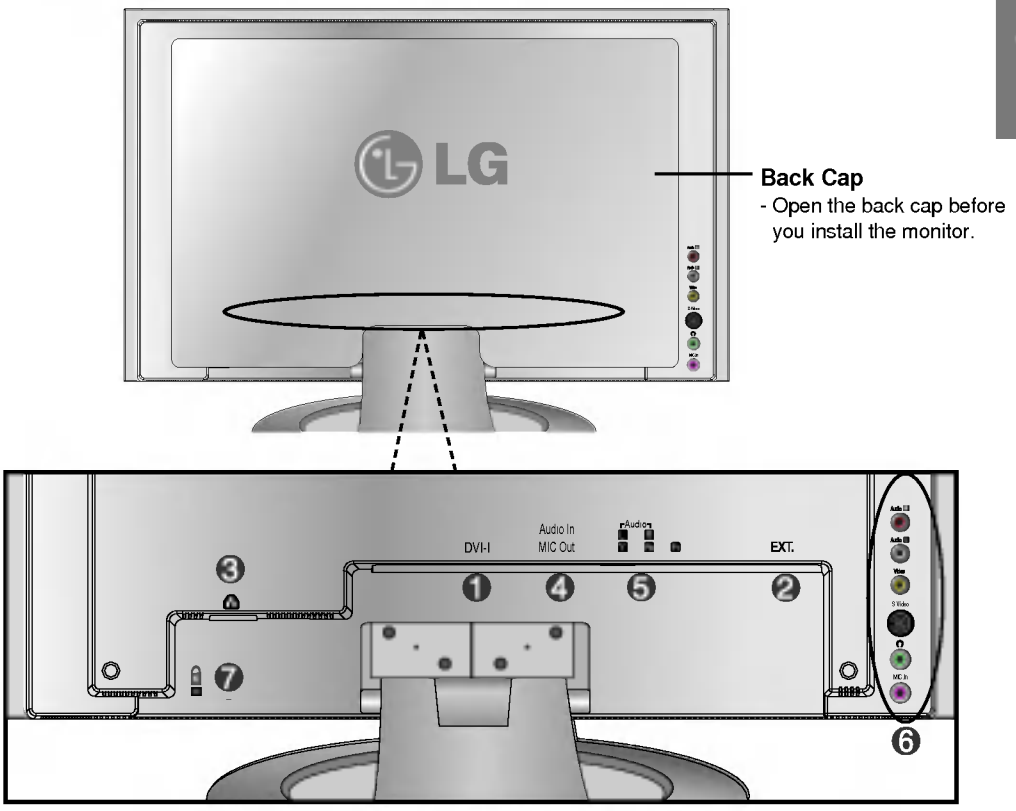
<Table of PIP/POP/PBP Function Support>

Main Screen / Sub Screen	DVI-D	DVI-A	VIDEO1	VIDEO2	HDTV	TV
DVI-D	X	X	●	●	●	●
DVI-A	X	X	●	●	X	●
VIDEO1	●	●	X	X	●	X
VIDEO2	●	●	X	X	●	X
HDTV	●	X	●	●	X	●
TV	●	●	X	X	●	X

Inserting batteries into remote controller.

1. **Take out the battery cap.**
2. **Insert the battery with correct polarity (+/-).**
3. **Close the battery cap.**
   - You can use a remote controller 7 meter distance and 30 degree (left/right) within the receiving unit scope.
   - Dispose of used batteries in the recycle bin to prevent environmental pollution.

Rear View



1 DVI Digital Signal Connector (DVI-D or DVI-A)

2 TV Tuner Jack: Connect the antenna.

3 Connect the power cord.

4 Connent to the jack in the PC sound card(See page A11).

5 HDTV Input Terminal

6 AV Input Terminal

7 Theft prevention locking device

Name and Function of the Parts

AV Input Terminal

AV(CVBS) Input Terminal(Audio)

AV(CVBS) Input Terminal(Video)

S-Video Input Terminal

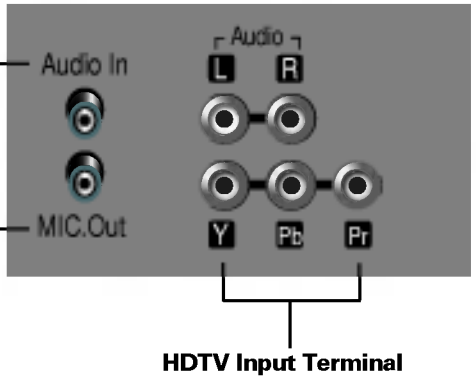
Headphone/Earphone Connection Terminal

Microphone Connection Terminal

Sound card Connection Terminal / HDTV Input Terminal

PC Audio Input Terminal
- Connect the audio cable to the LINE OUT jack in the PC sound card.

Microphone Connection Terminal
- Connect the microphone cable to the MIC jack in the PC sound card.



HDTV Input Terminal

Connecting the sound card output terminal

• Make sure to check the sound card connection terminal in the PC before connecting to the monitor.
If the PC sound card supports both Speaker Out and Line Out, change it to Line Out by setting the jumper or the PC application. (For more details, refer to the sound card user's manual.)
- **Speaker Out :** The terminal connected to the speaker that is not equipped with an amplifier.
- ***Line Out :** The terminal connected to the speaker equipped with an amplifier.
If Audio Out in the PC sound card has only Speaker Out, reduce the PC volume. This monitor is integrated with an amplifier.

Connecting to External Devices

ENGLISH

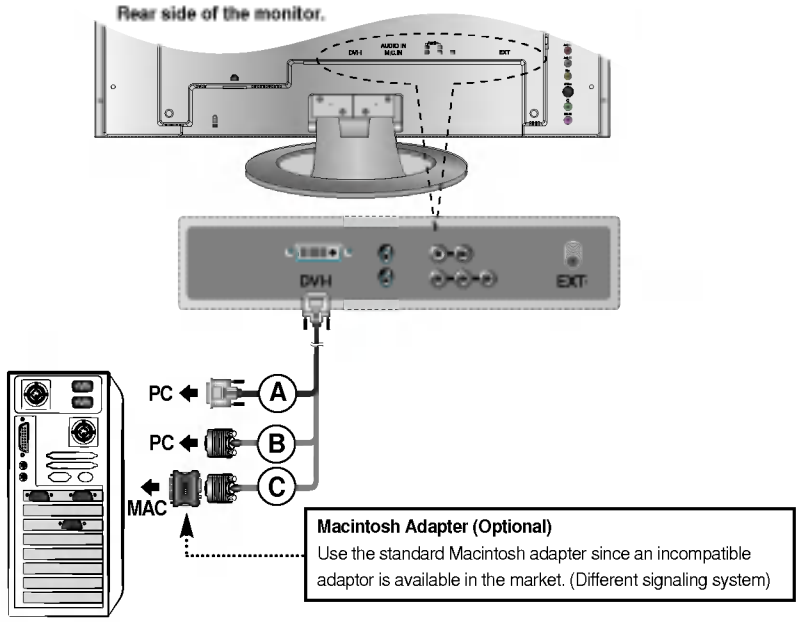
When Connecting to your PC

1 First of all, see if the computer, monitor and the peripherals are turned off. Then, connect the signal input cable.

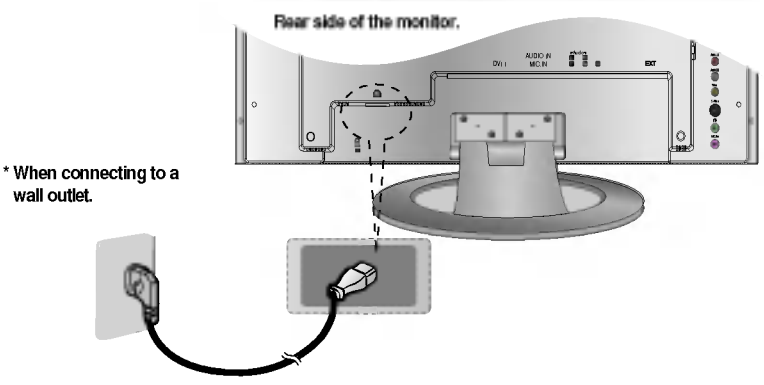
(A) When connecting with the DVI-D signal input cable.

(B) When connecting with the DVI-A signal input cable. (IBM compatible PC)

(C) When connecting with the DVI-A signal input cable. (Macintosh)

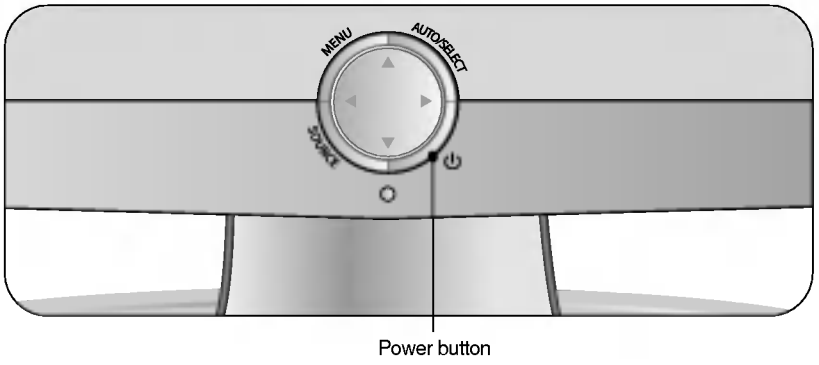


2 Connect the power cord.



Connecting to External Devices

3 (A) Turn on power by pressing the power button on the monitor.



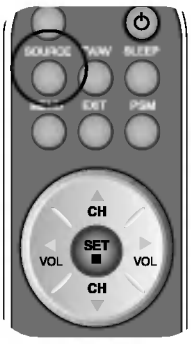
(B) Turn on the PC.

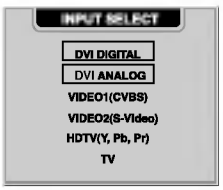
4 Select an input signal.
Press the Input Select button on the remote controller to select the input signal.
Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

(A) When connecting with a DVI-D signal input cable.
• Select DVI DIGITAL: DVI-D digital signal.

(B) When connecting with a DVI-A signal input cable.
• Select DVI ANALOG: DVI-A analog signal





Note

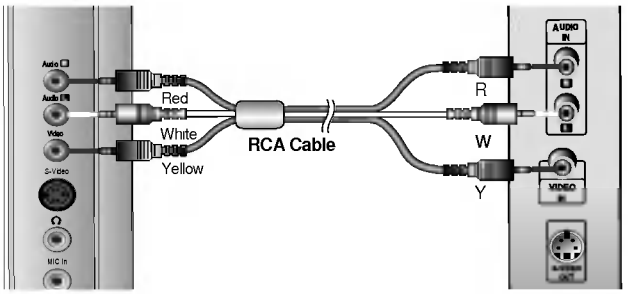
• Directly connect to a grounded power outlet on the wall or a power bar with a ground wire.

When watching Video

1 **Connect the video cable as shown in the below figure and then connect the power cord (See page A12).**

(A) When connecting with an RCA cable.

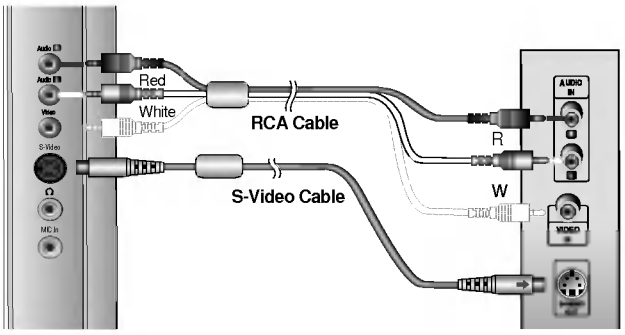
• Connect the input terminal with a proper color match. **(Video – Yellow, Sound (left) – White, Sound (right) – Red)**



Rear side of the Monitor **Video**

(B) When connecting with an S-Video cable.

• Connect to the S-Video input terminal to watch high image quality movies.



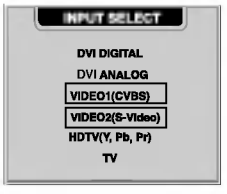
Rear side of the Monitor **Video**

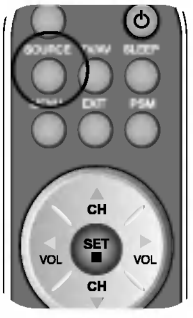
2 **Select an input signal.**
Press the SOURCE button on the remote controller to select the input signal. Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

(A) When connecting with a RCA cable.
• Select VIDEO 1 (CVBS).

(B) When connecting with a S-Video cable.
• Select VIDEO 2 (S-Video).



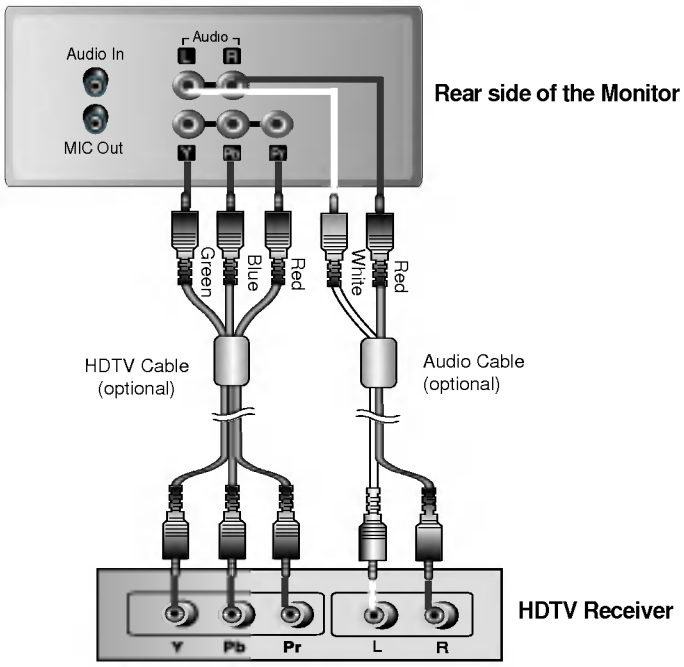


Connecting to External Devices

When watching HDTV (720p/1080i)

1 Connect the video/audio cable as shown in the below figure and then, connect the power cord (See page A12).

• Connect the input terminal with a proper color match.



Rear side of the Monitor

HDTV Receiver

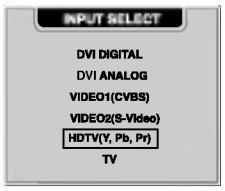
* The HDTV terminal also supports SDTV (480i/480p).

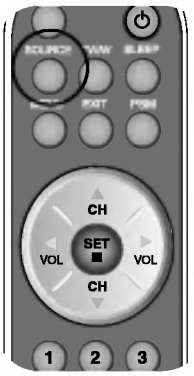
2 Select an input signal.
Press the SOURCE button on the remote controller to select the input signal. Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

When connecting with an HDTV/audio cable.

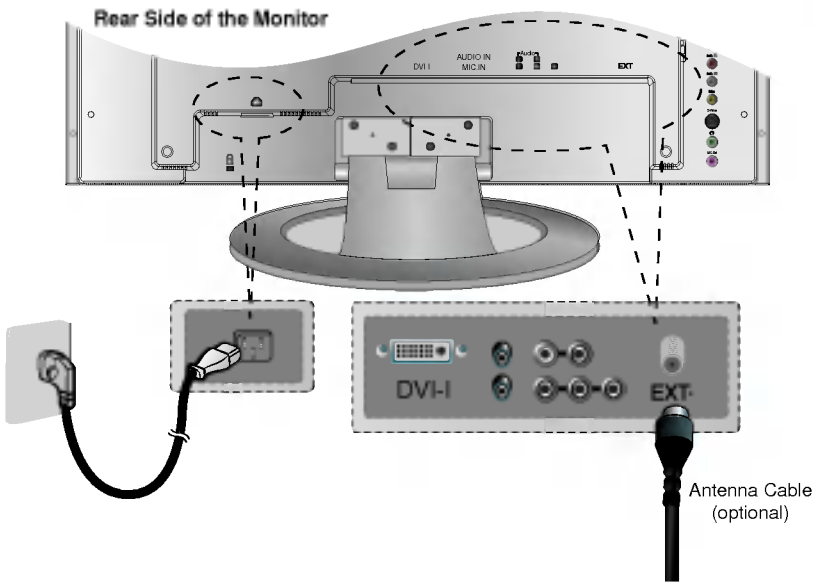
• Select HDTV (Y, Pb, Pr)





When watching TV

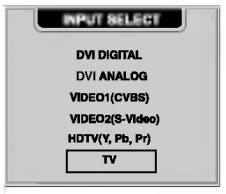
1 See if the antenna cable is connected at the rear side of the monitor and then, connect the power cord (See page A12).

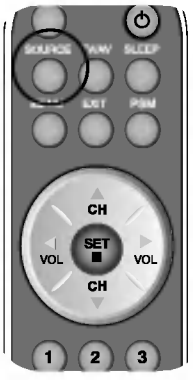


2 Select an input signal.
Press the SOURCE button on the remote controller to select the input signal. Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

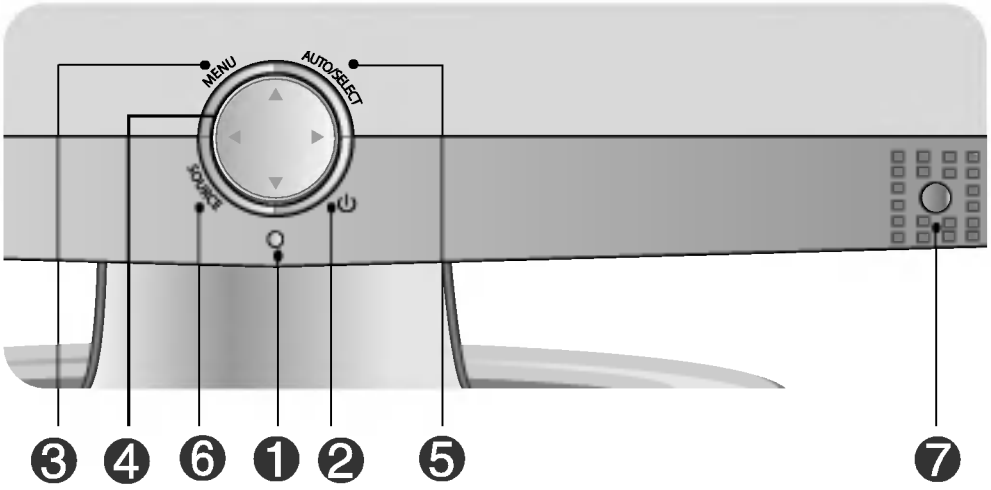
• Select TV





Selecting and Adjusting the Screen

Name of the Buttons in the Screen Adjustment Unit



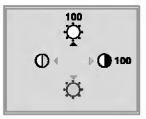
1 **Power LED**
- This Indicator lights up green when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.

2 **Power Button**
- Press the button to turn on the power. Press the button again to turn it off.

3 **MENU Button**
- Use this button to show/hide the OSD (On Screen Display) menu screen.

4 **OSD Select/Adjust Button**
- Use the button to select an icon or adjust the setting in the OSD screen.

▼▲
- Use this button to directly control brightness and contrast of the PC signal (DVI-D/DVI-A).
- Use this button to control the channel for the TV signal.



◀ ▶ • Adjust the volume.

Name of the Buttons in the Screen Adjustment Unit

5 AUTO/SELECT Button

[For DVI-ANALOG signal]

- Select the icon to adjust on the OSD screen.
- If you press the [AUTO/SELECT] button, automatic screen adjustment will be started.

[Other signals that DVI-ANALOG]

- The current signal and mode information will be displayed.

6 SOURCE Button

SOURCE → ▼▲ → AUTO/SELECT

- Select the input signal

DVI DIGITAL	DVI digital signal
DVI ANALOG	DVI analog signal
VIDEO1(CVBS)	Composite video
VIDEO2(S-Video)	S-Video
HDTV(Y, Pb, Pr)	HD television
TV	Television

7

- The unit that receives the signal from the remote controller.

OSD Lock/Unlock Button

Menu button + ▶

■ Use this button to lock/unlock OSD screen adjustment.
(Activated when pressed together longer than 5 seconds.)

• OSD is locked

• OSD is unlocked.

■ Under the **CAPTION & VCHIP** menu, it is also possible to lock/unlock the OSD screen adjustment with the **'KEY LOCK'** tab. PAGE A33

Selecting and Adjusting the Screen

OSD Menu – When Connected to Your PC

Icon	Function Description
Adjustment	Adjusts screen brightness, contrast and color that you prefer.
Tracking	Adjusts position of the screen, clock or phase.
Audio	Adjusts the audio function.
Setup	Adjusts the screen status according to the circumstances.
PIP/POP/PBP	Adjusts PIP/POP/PBP mode function.

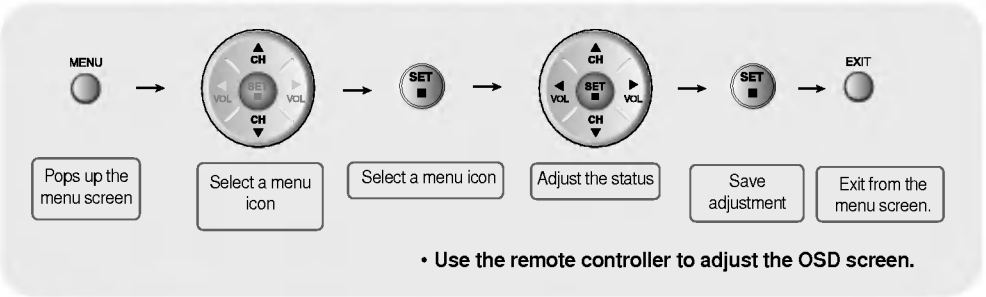
OSD Menu – When Watching Video/HDTV/TV

Icon	Function Description
Channel Setup	Sets/Selects the channel. (available only when watching TV)
Video	Adjusts the screen video.
Audio	Adjusts the audio function.
Setup	Adjusts the screen status according to the circumstances.
PIP/POP/PBP	Adjusts PIP/POP/PBP mode function.
CAPTION&VCHIP	Adjusts the CAPTION&VCHIP function.

Note

OSD(On Screen Display)
The OSD function enables you to adjust the screen status conveniently since it provides graphical presentation.

How to adjust the OSD (On Screen Display) screen.



• **Use the remote controller to adjust the OSD screen.**

1. Press the **MENU** Button, then the main menu of the OSD appears.
2. To access a control, use the ▼ ▲ Buttons.
3. When the icon you want becomes highlighted, press the **SET** Button.
4. Use the ▼ ▲ ◀ ▶ 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 **EXIT** Button.

How to adjust the screen automatically.

You need to adjust the screen display when connecting the monitor to a new computer or changing the mode. Refer to the following section to set an optimal monitor screen.

Press the AUTO/SELECT button (**AUTO button** in a remote controller) in the PC analog signal. Then, an optimal screen status will be selected that fits into the current mode.

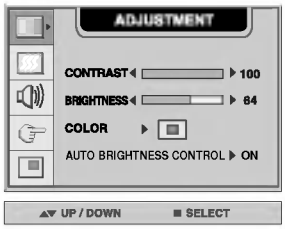
If adjustment is not satisfactory, you need to adjust screen position, clock and phase in the OSD menu.

AUTO IN PROGRESS

Selecting and Adjusting the Screen

OSD Menu – When Connected to Your PC

Adjusting Screen Color



CONTRAST To adjust the contrast of the screen.

BRIGHTNESS To adjust the brightness of the screen.

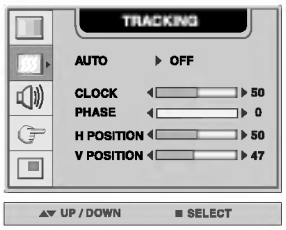
COLOR Adjusting screen color. Press the ▶ button to display the submenu for COLOR.

USER **9300K/6500K**
Selecting a factory setting color set.
• 9300K: Slightly bluish white.
• 6500K: Slightly reddish white.

RED
GREEN Set your own color levels.
BLUE

AUTO BRIGHTNESS CONTROL This menu automatically adjusts computer screen brightness to an optimal state. If you set the menu to 'On,' the brightness will be automatically adjusted to the surrounding environment whenever you use the computer while watching TV.

Adjusting Screen CLOCK/PHASE and Position



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.

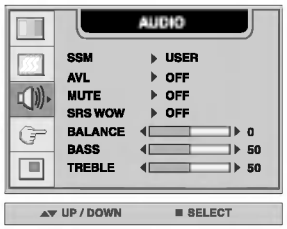
H POSITION To move image left or right

V POSITION To move image up or down.

Note

When connected to your computer and the digital input signal (DVI-DIGITAL), only ADJUSTMENT, AUDIO, SETUP and PIP/POP/PBP menu are enabled. TRACKING menu items will be automatically adjusted.

Adjusting the audio function



SSM The best sound tone quality will be selected automatically depending on the video type that you're currently watching.
- **USER** : Select this option to use the user-defined audio settings.
- **FLAT** : The most commanding and natural audio.
- **MOVIE** : Select this option to enjoy sublime sound.
- **MUSIC** : Select this option to enjoy the original sound when listening to the music.
- **SPORTS** : Select this option to watch sports broadcasting.

AVL To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select ON.

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

SRS WOW Set the SRS WOW menu on.
The SRS WOW function plays back the mono or stereo sound input with the dynamic surround effects. It will provide rich and profound sound tone. If you set the SRS WOW on, bass/treble will be automatically adjusted.

BALANCE Use this function to balance sound from the left and right speakers.

BASS To raises or lowers Bass level.

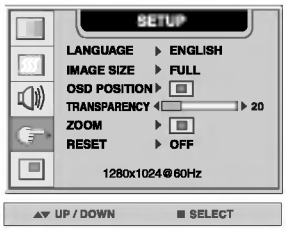
TREBLE To raises or lowers Treble level.

Note

When connected to your computer and the 'SSM' setting in the audio menu is one of FLAT, MOVIE, MUSIC or SPORTS, the available menus are AVL, MUTE and BALANCE.

Selecting and Adjusting the Screen

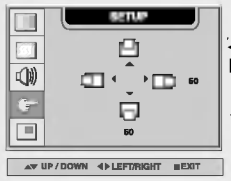
Selecting the options



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

IMAGE SIZE To select the image size of the screen. (FULL/1:1)

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

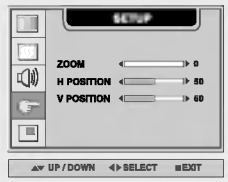


◀ Left
▶ Right
Moving the OSD screen position horizontally

▲ Up
▼ Down
Moving the OSD screen position vertically

TRANSPARENCY To adjust the transparency of the OSD menu screen.

ZOOM Use this function to zoom in the screen. When you turn the monitor off and on again, the default screen size will be restored. Press the ▶ button to display the submenu for OSD POSITION.



* If the zooming value is set to '0', vertical and horizontal positioning cannot be adjusted.

RESET Use this function to reset the monitor to the factory default. However, language selection will not be initialized.

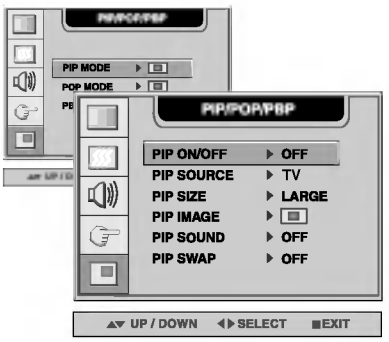
Note

When you use the computer

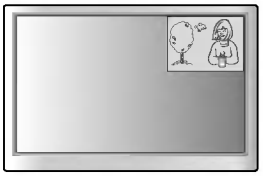
- The "IMAGE SIZE" and "ZOOM" menus are disabled when the input signal is a digital signal (DVI-DIGITAL).
- The "IMAGE SIZE" and "ZOOM" menus are disabled if the resolution is higher than recommended one (1280x768) when the input signal is an analog signal (DVI-ANALOG).
- The **Zoom menu** will be disabled if the screen size is 1:1 or PIP/POP/PBP is in use.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PIP(PICTURE IN PICTURE) of the screen



PIP ON/OFF After selecting **ON** in the **PIP ON/OFF** menu, the following menu items can be adjusted.



PIP SOURCE To select an input signal for PIP.

PIP SIZE To adjust the size of the PIP screen. (SMALL/LARGE)

PIP IMAGE To adjust the image of the PIP screen; Press the ▶ button to display the submenu for PIP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

- ■ **PIP POSITION** Adjust the PIP screen position
- ■ **PIP CONTRAST** Adjust PIP screen contrast
- ■ **PIP BRIGHTNESS** Adjust PIP screen brightness
- ■ **PIP SHARPNESS** Adjust PIP screen sharpness
- ■ **PIP COLOR** Adjust the PIP screen color
- ■ **PIP TINT** Adjust the PIP screen tint

* The sub-menu can differ according to the type of the input signal

PIP SOUND To turn the PIP sound on/off.

PIP SWAP To swap the main-screen and sub-screen in PIP mode.

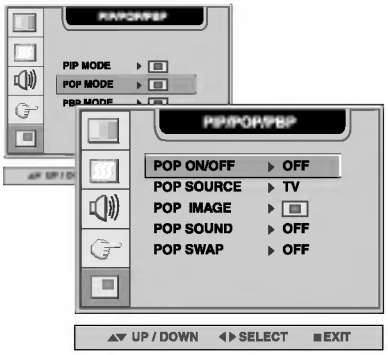
Note

- PIP/POP/PBP will be enabled only when the main image size is full.

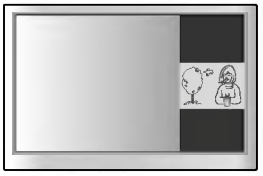
Selecting and Adjusting the Screen

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the POP(PICTURE OUT PICTURE) of the screen



POP ON/OFF After selecting **ON** in the **POP ON/OFF** menu, the following menu items can be adjusted.



POP SOURCE To select an input signal for POP.

POP IMAGE To adjust the image of the POP screen; Press the ▶ button to display the submenu for POP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level.

- ■ **POP CONTRAST** Adjust POP screen contrast
- ■ **POP BRIGHTNESS** Adjust POP screen brightness
- ■ **POP SHARPNESS** Adjust POP screen sharpness
- ■ **POP COLOR** Adjust the POP screen color
- ■ **POP TINT** Adjust the POP screen tint

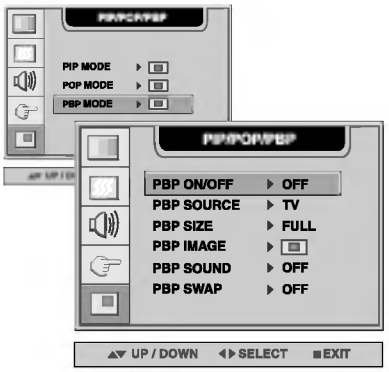
* The sub-menu can differ according to the type of the input signal

POP SOUND To turn the POP sound on/off.

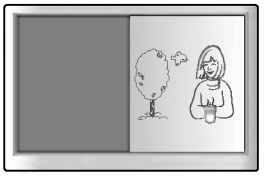
POP SWAP To swap the main-screen and sub-screen in POP mode.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PBP(PICTURE BY PICTURE) of the screen



PBP ON/OFF After selecting **ON** in the **PBP ON/OFF** menu, the following menu items can be adjusted.



PBP SOURCE To select an input signal for PBP.

PBP SIZE To adjust the size of the PBP screen. (FULL/4:3)

PBP IMAGE To adjust the image of the PBP screen; Press the ▶ button to display the submenu for PBP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

- ■ **PBP CONTRAST** Adjust PBP screen contrast
- ■ **PBP BRIGHTNESS** Adjust PBP screen brightness
- ■ **PBP SHARPNESS** Adjust PBP screen sharpness
- ■ **PBP COLOR** Adjust the PBP screen color
- ■ **PBP TINT** Adjust the PBP screen tint

* The sub-menu can differ according to the type of the input signal

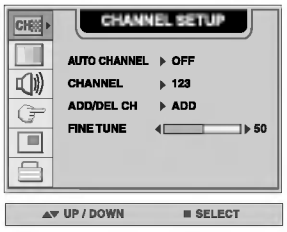
PBP SOUND To turn the PBP sound on/off.

PBP SWAP To swap the main-screen and sub-screen in PBP mode.

Selecting and Adjusting the Screen

OSD Menu – When Watching Video/HDTV/TV

Setting up the channel - Available only when watching TV.



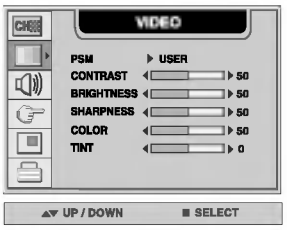
AUTO CHANNEL — To automatically search the available channels. Select On using ◀ ▶ to start automatic channel setup.

CHANNEL — To change the channel.

ADD/DEL.CH — To add/delete the selected channels.

FINE TUNE — To adjust the channel quality. Adjust the screen using ◀ ▶ until you can see a sharp screen.

Adjusting Screen Image



PSM — The PSM function automatically adjusts the screen image quality depending on the AV/TV usage environment.
- **USER :** Select this option to use the user-defined settings.
- **GAME :** Select this option to enjoy dynamic image when playing a game.
- **STANDARD :** The most general and natural screen display status.
- **DYNAMIC :** Select this option to display with a sharp image.
- **MILD :** Select this option to display with a mild image.

CONTRAST — To adjust the contrast of the screen.

BRIGHTNESS — To adjust the brightness of the screen.

SHARPNESS — To adjust the clearness of the screen.

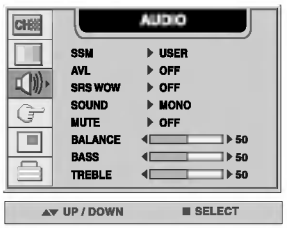
COLOR — To adjust the color to desired level.

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

Note

If the **'PSM'** setting in the Video menu is set to GAME, STANDARD, DYNAMIC or MILD the subsequent menus will be automatically set.

Adjusting the audio function



SSM The best sound tone quality will be selected automatically depending on the video type that you're currently watching.
- **USER** : Select this option to use the user-defined audio settings.
- **FLAT** : The most commanding and natural audio.
- **MOVIE** : Select this option to enjoy sublime sound.
- **MUSIC** : Select this option to enjoy the original sound when listening to the music.
- **SPORTS** : Select this option to watch sports broadcasting.

AVL To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select ON.

SRS WOW Set the SRS WOW menu on.
The SRS WOW function plays back the mono or stereo sound input with the dynamic surround effects. It will provide rich and profound sound tone. If you set the SRS WOW on, bass/treble will be automatically adjusted.

SOUND To select the audio mode.
: MONO/STEREO/SAP

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

BALANCE Use this function to balance sound from the left and right speakers.

BASS To raises or lowers Bass level.

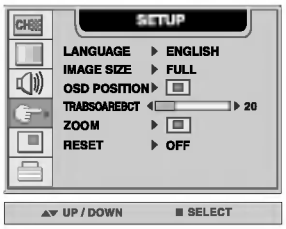
TREBLE To raises or lowers Treble level.

Note

If the **'SSM'** setting in the audio menu is one of FLAT, MOVIE, MUSIC or SPORTS, the available menus are AVL, SOUND, MUTE and BALANCE. Other menu items will be automatically adjusted.

Selecting and Adjusting the Screen

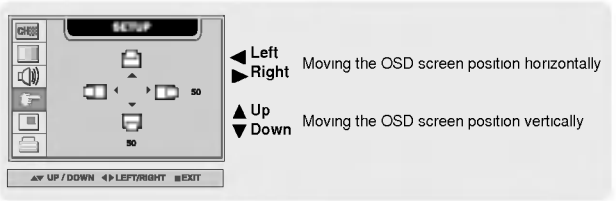
Selecting the options



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

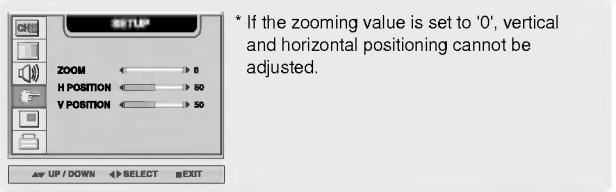
IMAGE SIZE To select the image size of the screen. (FULL/4:3/SPECTACLE/1:1)

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



TRANS -PARENCY To adjust the transparency of the OSD menu screen.

ZOOM Use this function to zoom in the screen. When you turn the monitor off and on again, the default screen size will be restored. Press the ▶ button to display the submenu for OSD POSITION.



RESET Use this function to reset the monitor to the factory default. However, language selection will not be initialized.

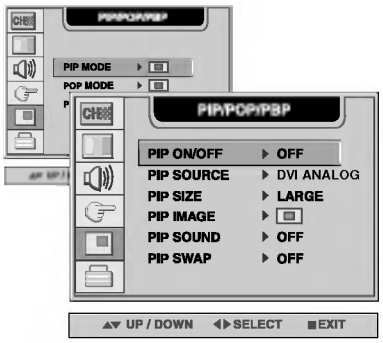
Note

- The "IMAGE SIZE" and "ZOOM" menus are disabled at the recommended higher resolution (780p) when the input signal is HDTV.
- The **'ZOOM'** menu will be disabled when the screen size is 4:3, spectacle or 1:1, or PIP/POP/PBP is activated.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

ENGLISH

To adjust the PIP(PICTURE IN PICTURE) of the screen



PIP ON/OFF After selecting **ON** in the **PIP ON/OFF** menu, the following menu items can be adjusted.

PIP SOURCE To select an input signal for PIP.

PIP SIZE To adjust the size of the PIP screen. (SMALL/LARGE)

PIP IMAGE To adjust the image of the PIP screen; Press the ▶ button to display the submenu for PIP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

- ■ **PIP POSITION** Adjust the PIP screen position
- ■ **PIP CONTRAST** Adjust PIP screen contrast
- ■ **PIP BRIGHTNESS** Adjust PIP screen brightness

* The sub-menu can differ according to the type of the input signal

PIP SOUND To turn the PIP sound on/off.

PIP SWAP To swap the main-screen and sub-screen in PIP mode.

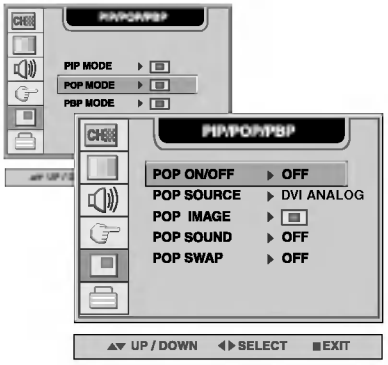
Note

- PIP/POP/PBP will be enabled only when the main image size is full.
- The **'PIP IMAGE'** menu will be disabled if the PIP screen input is video of HDTV.

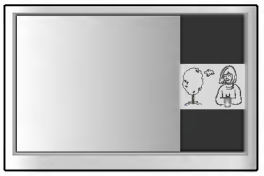
Selecting and Adjusting the Screen

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the POP(PICTURE OUT PICTURE) of the screen



POP ON/OFF After selecting **ON** in the **POP ON/OFF** menu, the following menu items can be adjusted.



POP SOURCE To select an input signal for POP.

POP IMAGE To adjust the image of the POP screen; Press the ▶ button to display the submenu for POP IMAGE. Use the ◀ ▶buttons to adjust the item to the desired level.

■ **POP CONTRAST** Adjust POP screen contrast
■ **POP BRIGHTNESS** Adjust POP screen brightness

* The sub-menu can differ according to the type of the input signal

POP SOUND To turn the POP sound on/off.

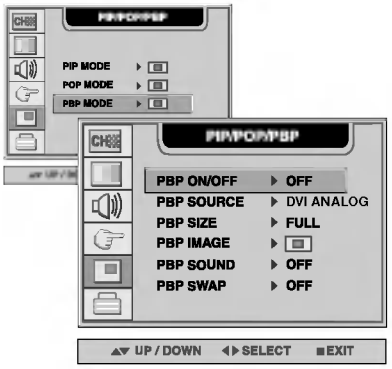
POP SWAP To swap the main-screen and sub-screen in POP mode.

Note

- PIP/POP/PBP will be enabled only when the main image size is full.
- The **'POP IMAGE'** menu will be disabled if the POP screen input is video of HDTV.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PBP(PICTURE BY PICTURE) of the screen



PBP ON/OFF After selecting **ON** in the **PBP ON/OFF** menu, the following menu items can be adjusted.

PBP SOURCE To select an input signal for PBP.

PBP SIZE To adjust the size of the PBP screen. (FULL/4:3)

PBP IMAGE To adjust the image of the PBP screen; Press the ▶ button to display the submenu for PBP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

■ **PBP CONTRAST** Adjust PBP screen contrast
■ **PBP BRIGHTNESS** Adjust PBP screen brightness

* The sub-menu can differ according to the type of the input signal

PBP SOUND To turn the PBP sound on/off.

PBP SWAP To swap the main-screen and sub-screen in PBP mode.

Note

- PIP/POP/PBP will be enabled only when the main image size is full.
- The **'PBP IMAGE'** menu will be disabled if the PBP screen input is video of HDTV.

Selecting and Adjusting the Screen

To adjust the CAPTION&VCHIP function

CAPTION/TEXT Use the ◀ ▶ buttons to select caption mode.
Text services give a wide variety of information on all kind of subjects(ex. captioned program lists, weather forecasts, stock exchange topics, news for hearing-impaired....) on up to half of the TV screen. But not all stations offer text services, even though they might offer captioning.
In the event you are receiving a poor signal, an empty black box may appear and disappear, even when the text mode is selected. This is a normal when receiving a poor signal.
This TV is programmed to remember the CAPTION/TEXT mode it was last set to, when you turn the power off.

CAPTION Use the ◀ ▶ buttons to select captions.

[Remote Control]
■ Press the CAPTION button repeatedly to display the caption option as shown below.
Prees the ENTER button to select the caption option.

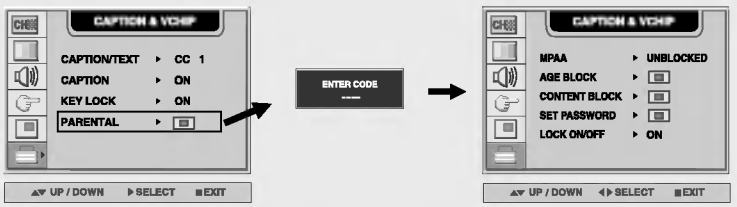
CC OFF → CC ON → CC EZ MUTE

*** CC EZ MUTE**
: If sound is on, the caption will be off. On the contrary, if sound is off, the caption will be on.

KEY LOCK Use the ◀ ▶ buttons to select ON or OFF. The TV can be set up so that it can only be used with the remote control. This feature can prevent unauthorized viewing.

In order to lock the OSD screen adjustment, set the KEY LOCK tab to the 'on' position.
In order to unlock it, do the following :
1) Push the menu button on the remote control and set KEY LOCK to the 'off' position.
2) Simultaenously push the menu button on the bottom of the monitor and the ▶ button for 5 seconds.

PARENTAL This Function is used to block program viewing based on the ratings sent by the broadcast station. The default setting is to allow all programs to be viewed. Viewing can be blocked by the type of program and by the categories chosen to be blocked. It is also possible to block all program viewing for a time period.

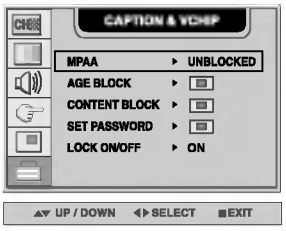


Select the PARENTAL menu and click ▶ button. The **'ENTER CODE'** window will appear. Once the correct four-digit password is entered, sub-menu that allows a user to control various blocks will be enabled. The initial password is set for '7777' and it can be changed through **'SET PASSWORD'** menu. PAGE A35

■ **V-CHIP rating and categories**

- Rating guidelines are provided by broadcast station. Most television programs and television movies can be blocked by TV rating and/or individual categories. Movies that have been shown at the theaters or direct-to-video movies use the Movies Rating System(MPAA) only.

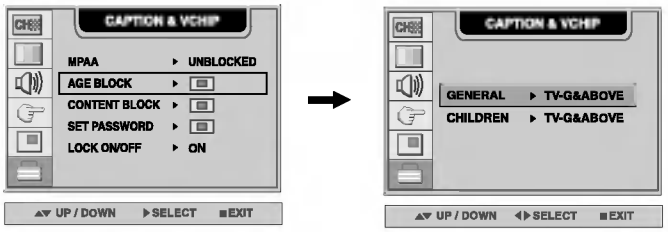
■ **For movies previously shown in theaters.**



MPAA ■ **Movie Ratings :**

- UNBLOCKED
- G&ABOVE : General audience
- PG&ABOVE : Parental guidance suggested
- PG-13&ABOVE : 13 years and up
- R&ABOVE : Restricted
- NC-17&ABOVE : 17years and up
- X : Adult

If you set PG-13&ABOVE, G and PG movies will be available : PG-13, R, NC-17, and X will be blocked.

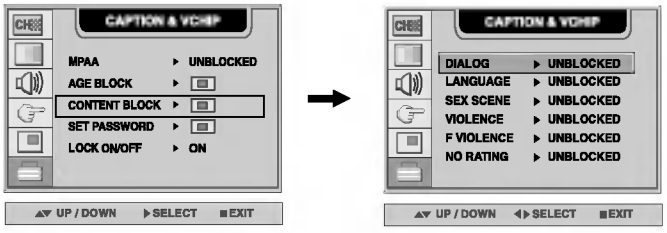


AGE BLOCK ■ **GENERAL TV Rating :**

- TV-G&ABOVE : General audience / Individual categories do not apply.
- TV-PG&ABOVE : Parental guidance suggested
- TV-14&ABOVE : 14 years and up
- TV-MA : Mature audience
- UNBLOCKED

■ **CHILDREN TV Rating :**

- TV-Y&ABOVE : Youth / Individual content categories do not apply.
- TV-Y7 : Youth, 7 years and up.
- UNBLOCKED

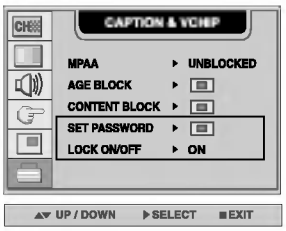


CONTENT BLOCK ■ **CONTENT Categories :**

- DIALOGUE(sexual dialogue) : Applies to TV-PG&ABOVE, TV-14.
- LANGUAGE(adult language) : Applies to TV-PG&ABOVE, TV-14&ABOVE, TV-MA.
- SEX SCENE(sexual situations) : Applies to TV-PG&ABOVE, TV-14&ABOVE, TV-MA.
- VIOLENCE : Applies to TV-PG&ABOVE, TV-14&ABOVE, TV-MA.
- F VIOLENCE(fantasy violence) : Applies only to TV-Y7.
- NO RATING : Blocks all viewing.

Selecting and Adjusting the Screen

To adjust the CAPTION&VCHIP function



SET PASSWORD This menu is to be used to change passwords. Once the correct current password is entered using the number panel in a remote control, the window for new password will appear. Enter your choice of new four-digit password.

LOCK ON/OFF To select the VCHIP function ON/OFF.

Setting a password

You control access to the parental controls with a password. The default passworld is '7777'. You can change the password to any four-digit number.

1. Open the OSD. -> Press the ▼ ▲buttons to select the **CAPTION&VCHIP** menu, then press **SET** to open the menu. -> Press the ▼ ▲buttons to select the **PARENTAL** sub-menu, then press the ▶ button to open the sub-menu.

2. Use the number pad to enter your password when prompted. If you have not set a passwod, enter 7777. If you have forgotten your password, enter 7777.

3. Press the ▼ ▲buttons to select the **SET PASSWORD** sub-menu, then press the ▶ button to change the setting. Use the number button pad to enter a new four-digit password when prompted.

4. Re-enter the new four-digit password when prompted.

Closed Captions

Closed captioning is a process which converts the audio portion of a television program into written words which then appear as subtitles on the television screen. Closed captions allow viewers to read the dialogue and narration of television programs.

Using Closed Captions

Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. It is possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand system and computer for translation into English.
Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

Caption Tips

1. Not all TV broadcasts include closed caption signals.
2. Sometimes TV stations broadcasts four different caption signals on the same channel. By selecting **From CC1 ~ CC4**, **TEXT1 ~ TEXT4** you can choose which signal you view **CC1** is usually the signal with the captions, while **Another mode** might show demonstration or programmimg information.
3. Your TV might not receive caption signals normally in the following situations.

- Poor reception conditions are encountered :
  - **IGNITION** :
    Picture may flutter, drift, suffer from black spots, or horizontal streaking. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.
  - **GHOSTS** :
    Ghosts are caused when the TV signal splits and follows two paths. One is the direct path and the other is reflected off tall buildings, hills or other objects. Changing the direction or position of the antenna may improve reception.
  - **SNOW** :
    If your receiver is located at the weak, fringe area of a TV signal, your picture may be marred by small dots. It may be necessary to install a special antenna to improve the picture.
- An old, bad or illegally recorded tape is playing.
- Strong, random signals from a car or airplane interfere with the TV signal.
- The signal from the antenna is weak.
- The program wasn't captioned when it was produced, transmitted, or taped.

Troubleshooting

No image is displayed

◉ Is the monitor power cord connected?	• See if the power cord is properly connected to the outlet.
◉ Does the power LED is turned on?	• See if the power switch is turned on.
◉ Power is on, power LED is green but the screen appears extremely dark.	• Adjust brightness (☼) and contrast (◑) again.
◉ Does the power LED look amber?	• If the monitor is in power saving mode, move the mouse or press any key.
◉ Does the 'Out of Range' message appear?	• The signal from the PC (video card) is out of the vertical or horizontal frequency range of the monitor. Adjust the frequency range by referring to the Specifications in this manual. * **Maximum resolution** DVI-A : 1280 x 1024 @60Hz DVI-D : 1280 x 1024 @60Hz
◉ Does the 'Check Signal Cable' message appear?	• The signal cable between PC and monitor is not connected. Check the signal cable. • Press the 'SOURCE' button in the remote controller to check the input signal.

'Unknown Monitor' message appears when the monitor is connected.

◉ Did you install the driver?	• Install the monitor driver, which is provided with the monitor, or download it from the web site. (http://www.lge.com) • See if the plug&play function is supported by referring to the video card user manual.

'Controls Locked' message appears.

◉ The "Controls locked" message appears when pressing the Menu button.	• The control locking function prevents unintentional OSD setting change due to careless usage. To unlock the controls, simultaneously press the Menu button and ▶ button for 5 seconds. (You cannot set this function using the remote controller buttons. You can set this function in the monitor only.)

Note

* **Vertical frequency:** To enable the user to watch the monitor display, screen image should be changed tens of times every second like a fluorescent lamp. The vertical frequency or refresh rate is the times of image display per second. The unit is Hz.
* **Horizontal frequency:** The horizontal interval is the time to display one vertical line. When the 1 is divided by horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

Troubleshooting

The screen image looks abnormal.

◉ Is the screen position wrong?	• DVI-A analog signal – Press the "AUTO" button in the remote controller to automatically select the optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Position OSD menu. • See if the video card resolution and frequency are supported by the monitor. If the frequency is out of range, set to the recommended resolution in the Control Panel – Display – Setting menu.
◉ Do thin lines appear on the background screen?	• DVI-A analog signal – Press the "AUTO" button in the remote controller to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Clock OSD menu.
◉ Horizontal noise appears or the characters look blurred.	• DVI-A analog signal – Press the "AUTO" button in the remote controller to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Phase OSD menu.
◉ Unable to adjust the horizontal / vertical position in the Zoom menu.	• See if the Zoom value is set to 0. If it is, you cannot adjust the H/V Position value.
◉ Screen size is automatically adjusted when connected to the PC.	• If the screen size is not full when connected to the PC, execute the PIP/POP/PBP to change to full screen mode.
◉ No sound appears in the TV channel display window.	• See if the TV sound is set to mono. If it is, the sound will not be displayed.
◉ Brightness differs in the main and sub screen when connected to the PC.	• You cannot adjust brightness in the PIP/POP/PBP Screen menu for the sub-screen among PIP/POP/PBP menus. Therefore, brightness can be different for the sub-screen.

After-image appears on the monitor.

◉ After-image appears when the monitor is turned off.	• If you use a fixed image for a long time, the pixels may be damaged quickly. Use the screensaver function.

Troubleshooting

The audio function does not work.

◉ No sound?	• See if the audio cable is connected properly. • Adjust the volume. • See if the sound is set properly.
◉ No sound is available when the PIP/POP/PBP mode is engaged.	• See if the Sound is set to On in the PIP/POP/PBP menu.
◉ Sound is too dull.	• Select the appropriate treble sound. • Select the appropriate bass sound.
◉ Sound is too low.	• Adjust the volume.

The TV function does not work.

◉ The TV signal is not being received.	• See if you have selected the proper channel mode. • Use the automatic channel setup function. • See if the TV antenna is properly connected.

The "IMAGE SIZE" function in the OSD menu does not work.

◉ The "IMAGE SIZE" function in the OSD menu does not work.	• See if the PIP/POP/PBP function is in use. If the PIP/POP/PBP function is in use, the "IMAGE SIZE" function may not work.

Screen color is abnormal.

◉ Screen has poor color resolution (16 colors).	• Set the number of colors to more than 24 bits (true color) Select Control Panel – Display – Settings – Color Table menu in Windows.
◉ Screen color is unstable or mono-colored.	• Check the connection status of the signal cable. Or, re-insert the PC video card.
◉ Do black spots appear on the screen?	• Several pixels (red, green, white or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. It is not a malfunction of the LCD.

Specifications

ENGLISH

The product specifications can change without prior notice for product improvement.

LCD Panel	**Screen Type**	17 inches (43.438cm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 43.438cm
	Pixel Pitch	0.291mm
Video Signal	**Max. Resolution**	DVI-A : 1280 X 1024 @60Hz DVI-D : 1280 X 1024 @60Hz
	Recommended Resolution	DVI-A : WXGA 1280 X 768 @60Hz DVI-D : WXGA 1280 X 768 @60Hz
	Horizontal Frequency	DVI-A : 30 - 66 kHz DVI-D : 30 - 66 kHz
	Vertical Frequency	56 - 85 Hz
	Synchronization Type	Separate/Composite/SOG (Sync On Green)/Digital
Input Connector		DVI-A(analog), DVI-D (digital), S-Video, Composite video, HDTV, TV
Power	**Rated Voltage**	AC 100-240V~ 50/60Hz 1.1A
	Power Consumption	Normal operation: 70W Power saving preparation state: ≤5W Power saving state: ≤ 5W Power switch on: ≤ 5W
Dimension/Weight	**Size (WxLxH)**	505.5mm x 231.5 mm x 365mm
	Weight (excl. package)	6.6 kg
Environmental Conditions	**Operational Condition**	Temperature: 10˚C ~ 35˚C , Humidity: 10% ~ 80%
	Storage Condition	Temperature: -20˚C ~ 60˚C , Humidity: 5% ~ 95%

Specifications

PC Mode – Preset Mode

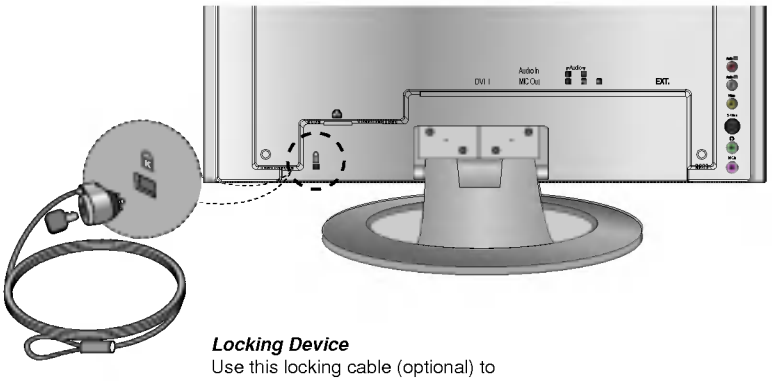
	Preset mode	Horizontal Frequency (kHz)	Vertical Frequency (kHz)		Preset mode	Horizontal Frequency (kHz)	Vertical Frequency (kHz)
1	VGA 640 x 350	31.469	70	8	VESA 800 x 600	53.674	85
2	VGA 720 x 400	31.468	70	9	MAC 832 x 624	49.725	75
3	VGA 640 x 480	31.469	60	10	VESA 1024 x 768	48.363	60
4	VESA 640 x 480	37.500	75	11	VESA 1024 x 768	60.123	75
5	VESA 640 x 480	43.269	85	12	VESA 1280 x 1024	63.981	60
6	VESA 800 x 600	37.879	60	13	VESA 1280 x 768	47.7	60
7	VESA 800 x 600	46.875	75				

HDTV Mode
Composite Video Input YPbPr

	Preset mode	Horizontal Frequency (kHz)	Vertical Frequency (kHz)
1	720 x 483	31.50	59.94
2	1280x 720	45.00	60.00
3	1280x 720	44.96	59.94
4	1920x 1080	33.75	60.00
5	1920x 1080	33.72	59.94

Power LED

Mode	Monitor
Normal Operation	Green
Pre-power Saving State	Amber
Power Saving State	Amber
Power Switch Off	-

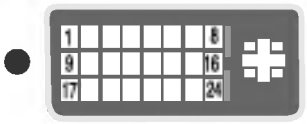


Locking Device
Use this locking cable (optional) to prevent theft.

Specifications

ENGLISH

DVI-I



No.	Signal
1	T. M. D. S. Data 2-
2	T. M. D. S. Data 2+
3	T. M. D. S. Data 2/4 Shield
4	T. M. D. S. Data 4-
5	T. M. D. S. Data 4+
6	DDC Clock
7	DDC Data
8	Analog Vertical Synchronization
9	T. M. D. S. Data 1-
10	T. M. D. S. Data 1+
11	T. M. D. S. Data 1/3 Shield
12	T. M. D. S. Data 3-
13	T. M. D. S. Data 3+
14	+5V Power
15	Grounding (return for +5V, horizontal sync and vertical sync)
16	Hot Plug Detect
17	T. M. D. S. Data 0-
18	T. M. D. S. Data 0+
19	T. M. D. S. Data 0/5 Shield
20	T. M. D. S. Data 5-
21	T. M. D. S. Data 5+
22	T. M. D. S. Clock Shield
23	T. M. D. S. Clock+
24	T. M. D. S. Clock

T.M.D.S. (Transition Minimized Differential Signaling)