LCD TV

OWNER'S MANUAL

MODELS: 37LP1R ▌42LP1R

Internet Home Page : http://www.lge.com
http://ar.lge.com
http://www.lge.com.br

Please read this manual carefully before operating your set.
Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the back cover and quote
this information to your dealer
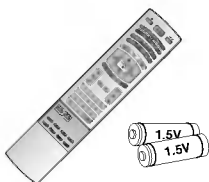**when you require service.**

Accessories

Ensure that the following accessories are included with your TV. If any accessory is missing, please contact the dealer from where you purchased the product.
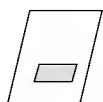
Owner's Manual

Twister Holder
Arrange the wires
with the twister holder.

Remote Control /
AA Batteries

2-TV Bracket Bolts

2-TV Brackets,
2-Wall Bracket

Power Cord

DVI-D Cable

D sub to DVI Cable

PC Sound Cable

Polishing Cloth
Polish the screen with the cloth.

* Slightly wipe stained spot on the exterior only with the polishing cloth for the product exterior if there is stain or fingerprint on surface of the exterior.
* Do not wipe roughly when removing stain. Please be cautions of that excessive power may cause scratch or discoloration.

- If the TV feels cold to the touch, there may be a small "flicker" when turned on. This is normal, there is nothing wrong with TV.
- Some dot defects may appear on the screen, like red, green or blue spots. However, this will have no adverse effect on the monitor's performance.
- Avoid touching the LCD screen or holding your fingera(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

Safety Instructions

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO
RAIN OR MOISTURE.
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER(OR BACK). NO USER-
SERVICEABLE PARTS IN SIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Cleaning
Unplug this television receiver from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
Do not use attachments not recommended by the television receiver manufacturer as they may cause hazards.

Power Supply
This television receiver should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your television dealer or local power company.

Installation
Do not use this television receiver near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
Do not place this television receiver on an unstable cart, stand, or table. The television receiver may fall, causing serious injury to a child or an adult, and serious damage to the appliance.
Use only with a cart or stand recommended by the manufacturer, or sold with the television receiver. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.
Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the television receiver, and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the

television receiver on a bed, sofa, rug, or other similar surface. This television receiver should not be placed in a builtin installation such as a bookcase unless proper ventilation is provided.
It is recommended not to operate this unit near speakers or big metallic furnitures in order to keep their magnetism from disturbing colors purity (uniformity) on the screen.

Use
Do not allow anything to rest on the power cord. Do not locate this television receiver where the cord will be abused by persons walking on it.
Do not overload wall outlets and extension cords as this can result in fire or electric shock.
Never push objects of any kind into this television receiver through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
Never spill liquid of any kind on the television receiver.

Service
Do not attempt to service this television yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified personnel.

Writing Model And Serial Numbers
The serial number and model number are found on the back of this unit. The serial number is unique to this unit. You should record requested information here and retain this guide as a permanent record of your purchase. Please retain your purchase receipt as your proof of purchase.

Date of Purchase _____
Dealer Purchased from _____
Dealer Address _____
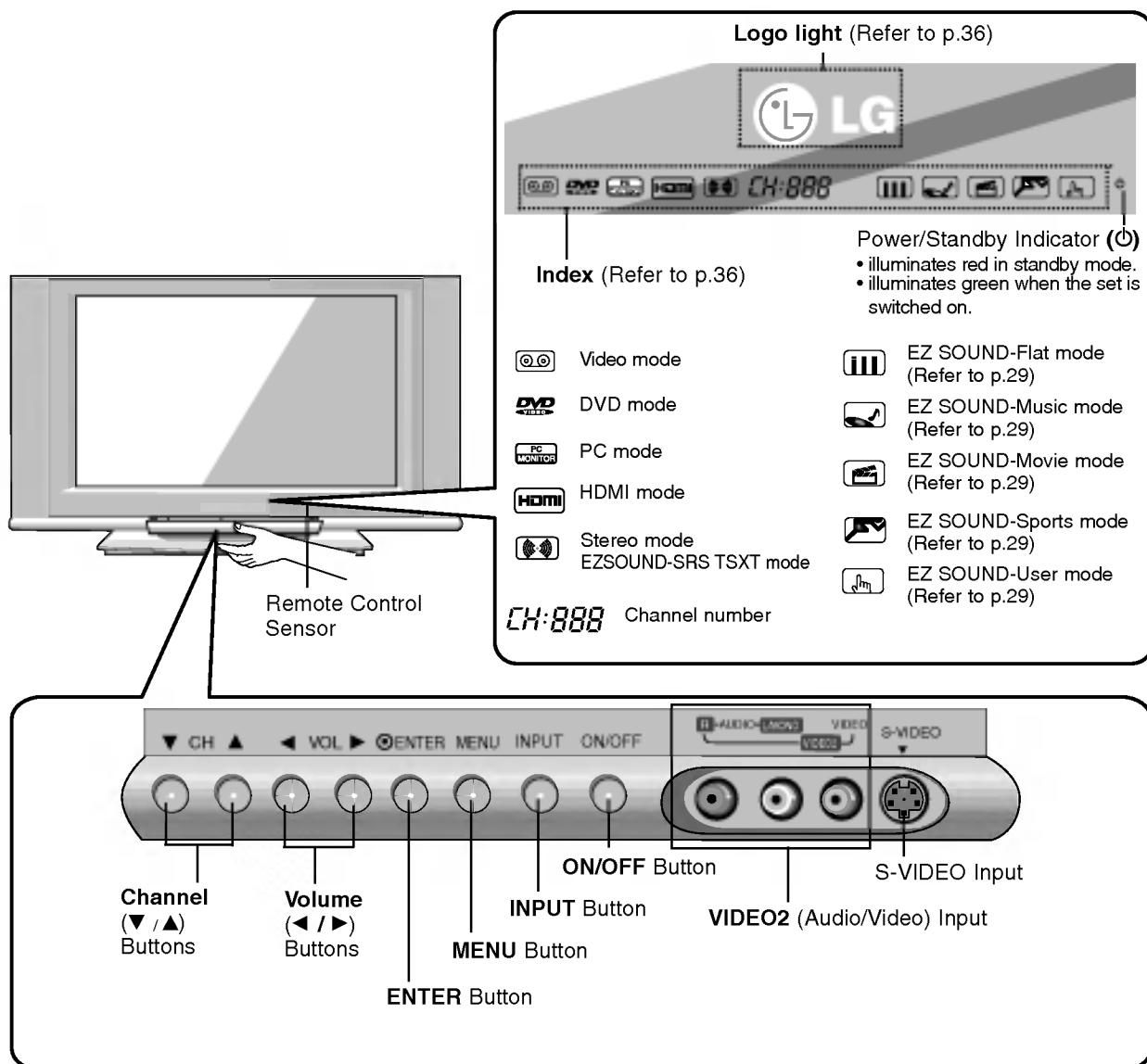Dealer Phone No. _____
Model No. _____
Serial No. _____

Contents

Operation

Special Menu Options

Screen Menu Options

PIP (Picture-in-Picture)/POP/ Double Window

Reference

Introduction
Controls

- This is a simplified representation of front panel.
- Here shown may be somewhat different from your TV.

Logo light (Refer to p.36)

Index (Refer to p.36)

Power/Standby Indicator (⏻)
• illuminates red in standby mode.
• illuminates green when the set is switched on.

Icon	Mode		Icon	Mode
	Video mode			EZ SOUND-Flat mode (Refer to p.29)
	DVD mode			EZ SOUND-Music mode (Refer to p.29)
	PC mode			EZ SOUND-Movie mode (Refer to p.29)
	HDMI mode			EZ SOUND-Sports mode (Refer to p.29)
	Stereo mode EZSOUND-SRS TSXT mode			EZ SOUND-User mode (Refer to p.29)
CH·888	Channel number			

Remote Control
Sensor

▼ CH ▲   ◄ VOL ►   ⦿ENTER MENU INPUT ON/OFF   AUDIO VIDEO   S-VIDEO

Channel
(▼ / ▲)
Buttons

Volume
(◄ / ►)
Buttons

MENU Button

ENTER Button

INPUT Button

ON/OFF Button

VIDEO2 (Audio/Video) Input

S-VIDEO Input

Connection Options

Headphone Socket

COMPONENT2 input
(Y,P$_B$,P$_R$ / Audio)

AC Input

Remote Control Port

PC SOUND Input

COMPONENT 1 Input

AC IN

REMOTE CONTROL

PC SOUND

VIDEO

AUDIO

Y

P$_B$

P$_R$

L

R

VARIABLE AUDIO OUT

RS-232C INPUT (CONTROL.SERVICE)

HDMI

DVI INPUT (PC/DTV INPUT)

VIDEO

AUDIO

L

R

MONITOR OUT

VIDEO1

COMPONENT1

Antenna (CI IN)

RS-232C Input

MONITOR OUT/
VIDEO1 (Video/Audio) Input

Antenna Input

DVI Input
(PC/DTV Input)

HDMI (High Definition Multimedia Interface) input

Variable AUDIO OUT ports

Remote Control Key Functions
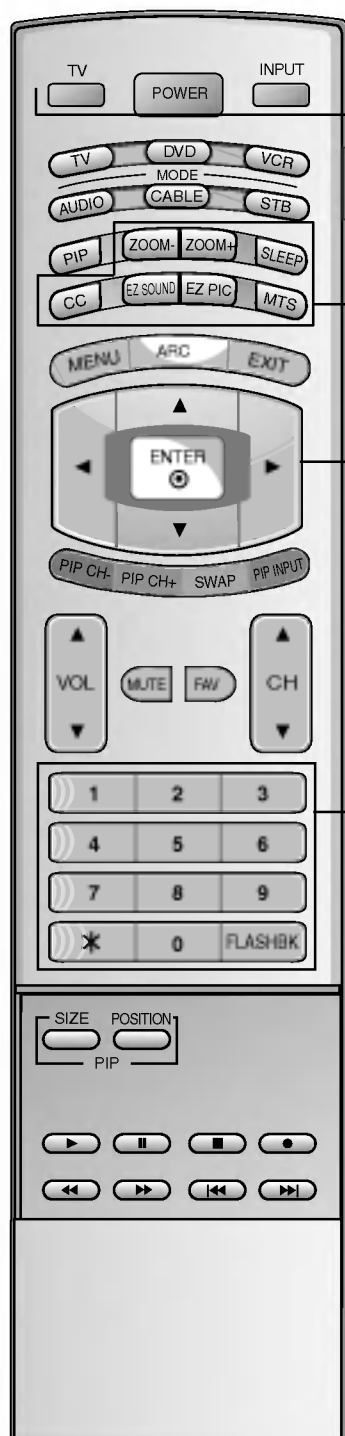
POWER
Turns your TV or any other programmed equipment on or off, depending on mode.

TV
Returns to TV viewing from any mode.

INPUT

Input
✓ TV
Video1
Video2
S-Video
Component1
Component2
DVI PC
HDMI PC

If you press the button once, the input source OSD will appear on screen as shown. Press the ▲ / ▼ button and then **ENTER** button to select the desired input source (**TV**, **Video1**, **Video2**, **S-Video**, **Component1**, **Component2**, **DVI PC/DVI DTV**, or **HDMI PC/ HDMI DTV**).

ZOOM+/ZOOM- (Refer to p.39)
Enlarges or reduces the main picture size.

SLEEP (Refer to p.33)
Sets the sleep timer.

CC (Refer to p.35)
Selects CAPTION mode.

EZ SOUND (Refer to p.29)
Selects the sound appropriate for the program's character.

EZ PIC (Refer to p.25)
Adjusts the factory preset picture according to the room.

MTS (Refer to p.31)
Selects the MTS sound: Mono, Stereo, or SAP.

THUMBSTICK (Up/Down/Left/Right/ENTER)
Allows you to navigate the on-screen menus and adjust the system settings to your preference.

NUMBER BUTTONS

FLASHBK
Returns to the last channel viewed.

✱
No function.

MODE
Selects the remote operating mode: TV, VCR, DVD, CABLE, STB or AUDIO. Select other operating modes, for the remote to operate external devices.

MENU
Brings up the main menu to the screen.

ARC (Refer to p.38)
Changes the aspect ratio.

EXIT
Clears all on-screen displays and returns to TV viewing from any menu.

PIP (Refer to p.42)
Switches between PIP, POP (Picture-out-of-Picture) and Double window modes.

PIP CH-/PIP CH+ (Refer to p.44)
Changes to next higher/lower PIP channel.

PIP INPUT (Refer to p.42)
Selects the input source for the sub picture in PIP/Double window mode.

SWAP (Refer to p.45)
Exchanges the main/sub images in PIP/Double window mode.

SIZE (Refer to p.43)
Adjusts the sub picture size.

POSITION (Refer to p.43)
Moves the sub picture in pip mode.

VOLUME UP/DOWN
Increases/decreases the sound level.

CHANNEL UP/DOWN
Selects available channels found with Automatic program and Manual program.

MUTE
Switches the sound on or off.

FAV
Use to scroll the Favorite channels.

VCR/DVD BUTTONS
Control some video cassette recorders or DVD players ("RECORD" button is not available for DVD player).

LIGHT
Illuminates the remote control buttons.

Installing Batteries

1 Open the battery compartment cover on the back side.
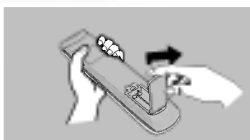
2 Insert two 1.5V AA batteries in correct polarity (+ with +, - with -). Don't mix old or used batteries with new ones.

3 Close the cover.
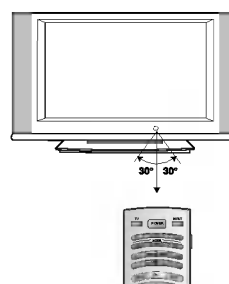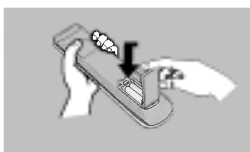
* Use a remote control 7 meter distance and 30 degree (left/right) within the receiving unit scope.

30° 30°

* Dispose of used batteries in a recycle bin to prevent environment.

Installation

Various Installation

Wall Mount installation
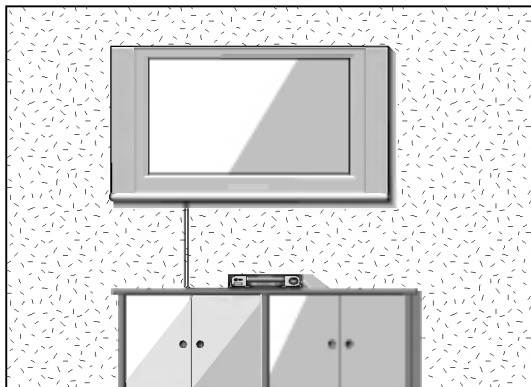
For proper ventilation, allow a clearance of 4" on each side and from the wall. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.
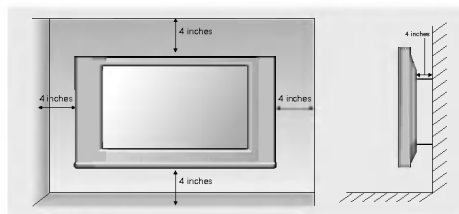
Desktop Pedestal Installation
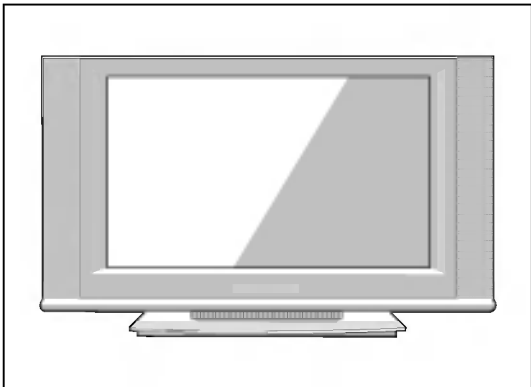
For proper ventilation, allow a clearance of 4" on each side and from the wall.
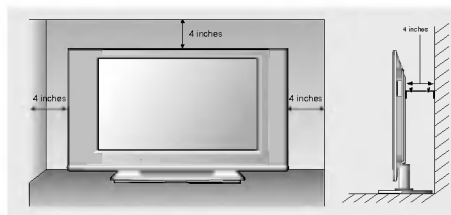
How to use back cover

1 Hold the cover with both hands and pull it backward.
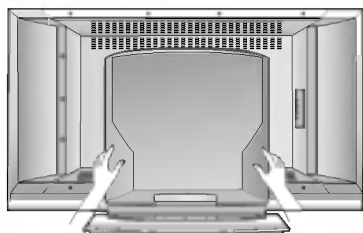
2 Install wires as necessary.
(To install various wires, refer to p.13~20.)
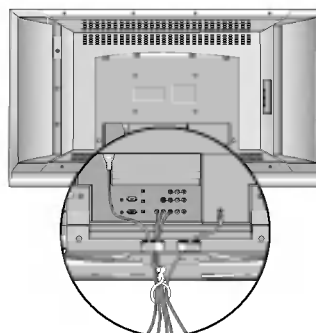
* Arrange the signal input cable and the power cord by holder, as shown.

3 Align the holes on the TV back panel with the four protuberance on the back cover and insert.
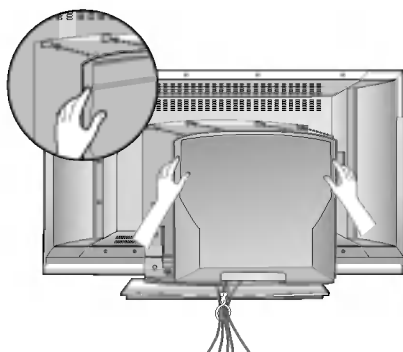
4 Reinstall the cover.
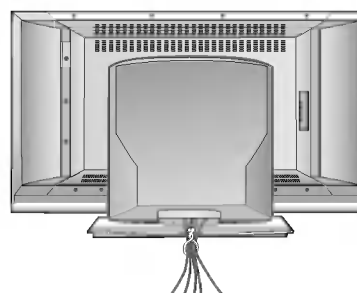
Wire Arrangement

- Pull the cables through the hole on the set.

Swivel Stand
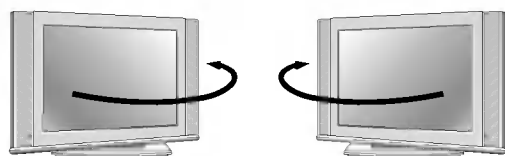
- The TV can be conveniently swivelled on its stand 30° to the left or right to provide the optimum viewing angle.

External Equipment Connections

NOTE: All cables shown are not included with the TV

Antenna Connection

- Antenna or Cable Service without a Cable Box Connection.
- For optimum picture quality, adjust antenna direction if needed.

Multi-family Dwellings/Apartments
(Connect to wall antenna socket)

Wall Antenna Socket

RF Coaxial Wire (75 ohm)

Antenna
(1[75Ω)

VHF Antenna

UHF Antenna

Turn clockwise to tighten.

Outdoor Antenna

Single-family Dwellings /Houses
(Connect to wall jack for outdoor antenna)

Bronze Wire

Be careful not to bend the bronze wire when
connecting the antenna.

VHF   UHF

Antenna
(1[75Ω)

Signal
Amplifier

- In a poor signal area to improve picture quality, purchase and install a signal amplifier.

- If the antenna needs to be split for two TV's, install a "2-Way Signal Splitter" in the connections.

- If the antenna is not installed properly, contact your dealer for assistance.

Headphone Socket

- **You can listen to the sound through the headphone.**

COMPO

VIDEO

AUDIO

1. Plug the headphone into the headphone socket.

2. To adjust the headphone volume, press the **VOL** ▲ / ▼ button. If you press the **MUTE** button, the sound from the headphone is switched off.

- While you are listening to sound through a headphone, TV speakers will not be heard.
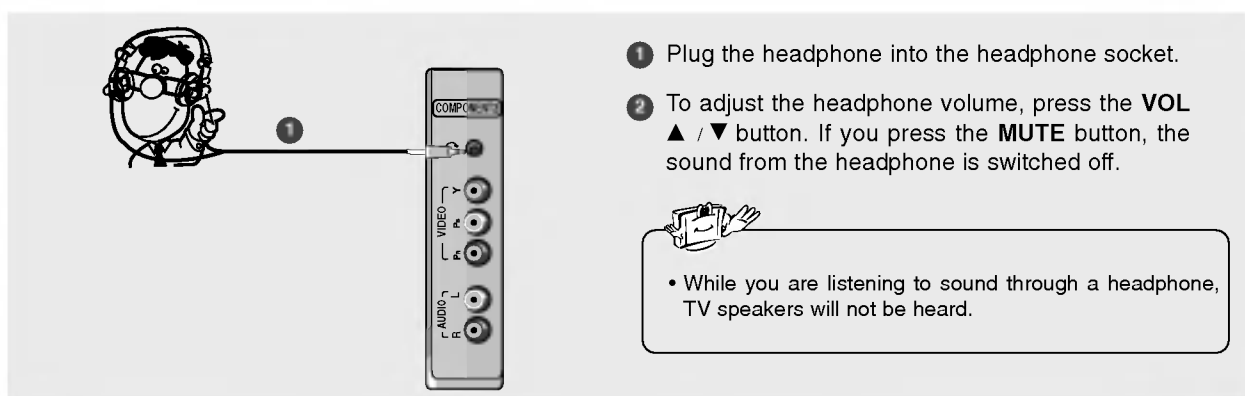
NOTE: All cables shown are not included with the TV.

VCR Setup

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV.
- Typically a frozen still picture from a VCR. If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen.

When connecting with an antenna

TV Back

VCR
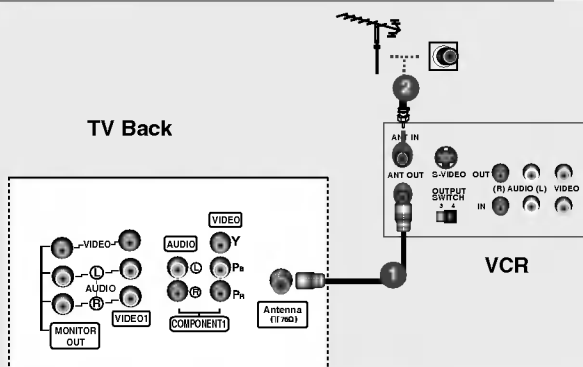
❶ Connect the RF antenna out socket of the VCR to the **Antenna** socket on the set.

❷ Connect the antenna cable to the RF antenna in socket of the VCR.

❸ Set VCR output switch to 3 or 4 and then tune TV to the same channel number.

❹ Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)

When connecting with a RCA cable

TV Back

VCR
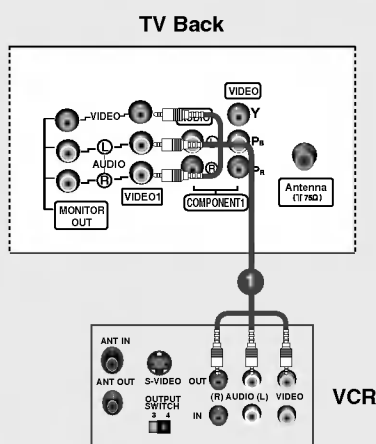
❶ Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)

❷ Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)

❸ Select **Video1** input source with using the **INPUT** button on the remote control.
  - If connected to VIDEO 2 input, select **Video2** input source.

When connecting with an S-Video cable

TV Front

VCR
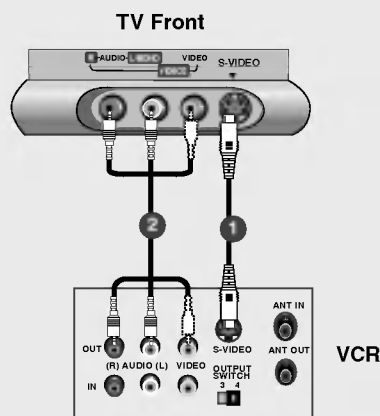
❶ Connect the an S-VIDEO output of the VCR to the **S-VIDEO** input on the set. The picture quality is improved; compared to connecting a regular VCR to the Video input.

❷ Connect the audio outputs of the VCR to the **AUDIO** input jacks on the set.

❸ Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)

❹ Select **S-Video** input source with using the **INPUT** button on the remote control.

Cable TV Setup

- After subscribing to a cable TV service from a local provider and installing a converter, you can watch cable TV programming. The TV cannot display TV programming unless a TV tuner device or cable TV converter box is connected to the TV.
- For further information regarding cable TV service, contact your local cable TV service provider(s).

When connecting with an antenna

TV Back
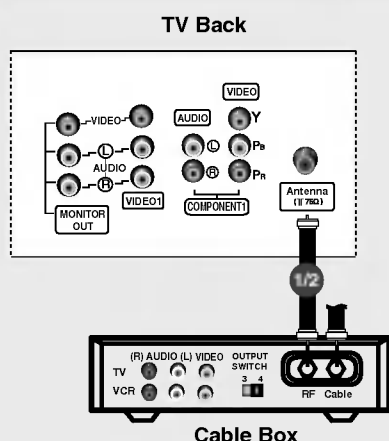
Cable Box

❶ Connect the RF antenna socket of the cable box to the **Antenna** socket on the set.

❷ Connect the antenna cable to the RF antenna socket of the cable box.

❸ Select 3 or 4 with channel switch on the cable box.

❹ Tune the TV channel to the same selected output channel on the cable box.

❺ Select channels at the cable box or with the cable box remote control.

When connecting with a RCA cable

TV Back
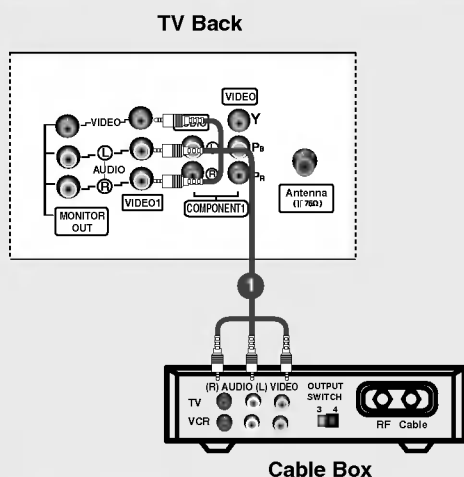
Cable Box

❶ Connect the **AUDIO/VIDEO** jacks between TV and Cable box. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)

❷ Select **Video1** input source with using the **INPUT** button on the remote control.
- If connected to VIDEO 2 input, select **Video2** input source.

❸ Select your desired channel with the remote control for the cable box.

DVD Setup

When connecting with a S-Video cable

TV Front

DVD

(R) AUDIO (L)   S-VIDEO
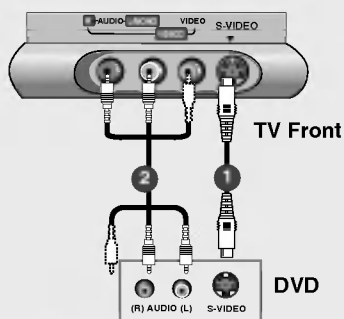
❶ Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the set.

❷ Connect the audio outputs of the DVD to the **AUDIO** input jacks on the set.

❸ Turn on the DVD player, insert a DVD.

❹ Select **S-Video** input source with using the **INPUT** button on the remote control.

❺ Refer to the DVD player's manual for operating instructions.

When connecting with a HDMI cable

REMOTE CONTROL   PC SOUND

VARIABLE AUDIO OUT

RS-232C INPUT (CONTROL/SERVICE)

HDMI

DVI INPUT (PC/DTV INPUT)

TV Back

DVD

HDMI-DVD OUTPUT
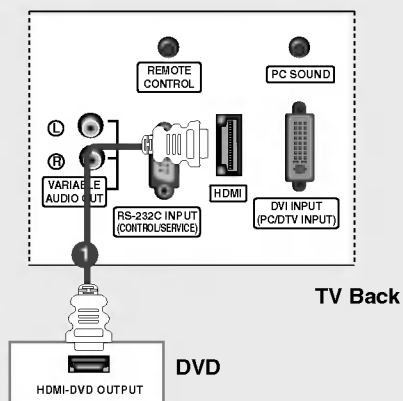
❶ Connect the HDMI output of the DVD to the **HDMI** jack on the set.

❷ Select **HDMI DTV** input source with using the **INPUT** button on the remote control.

❸ Refer to the DVD player's manual for operating instructions.

• TV can receive the video and audio signal simultaneously with using a HDMI cable.

When connecting with a component cable

TV Back

VIDEO

AUDIO

Y

Pв

Pʀ

VIDEO1   COMPONENT1

MONITOR OUT

(R) AUDIO (L)   Y   Pв   Pʀ

DVD

❶ Connect the video outputs (Y, Pв, Pʀ) of the DVD to the **COMPONENT1 VIDEO (Y, Pв, Pʀ)** jacks on the set.

❷ Connect the audio outputs of the DVD to the **COMPONENT1 AUDIO** jacks on the set.

❸ Turn on the DVD player, insert a DVD.

❹ Select **Component 1** input source with using the **INPUT** button on the remote control.
 - If connected to COMPONENT2, select **Component2** input source.

❺ Refer to the DVD player's manual for operating instructions.

• **Component Input ports**
 To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	Pв	Pʀ
Video output ports on DVD player	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pв	Pʀ

STB Setup

- To watch digitally broadcast programs, purchase and connect a digital set-top box.

When connecting with a Component cable

TV Back
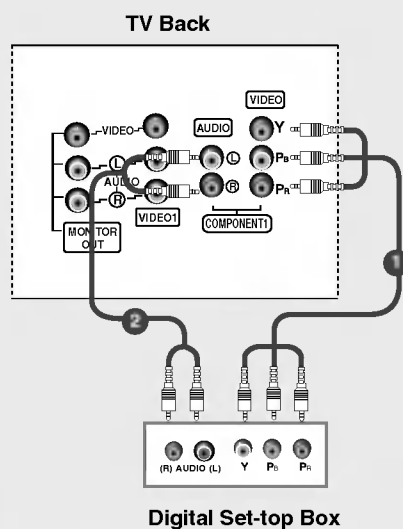
Digital Set-top Box

❶ Connect the video outputs (Y, PB, PR) of the digital set-top box to the **COMPONENT1 VIDEO (Y, PB, PR)** jacks on the set.

❷ Connect the audio outputs of the digital set-top box to the **COMPONENT1 AUDIO** jacks on the set.

❸ Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)

❹ Select **Component 1** input source with using the **INPUT** button on the remote control.
   - If connected to COMPONENT2 input, select **Component 2** input source.

When connecting with a DVI cable

TV Back
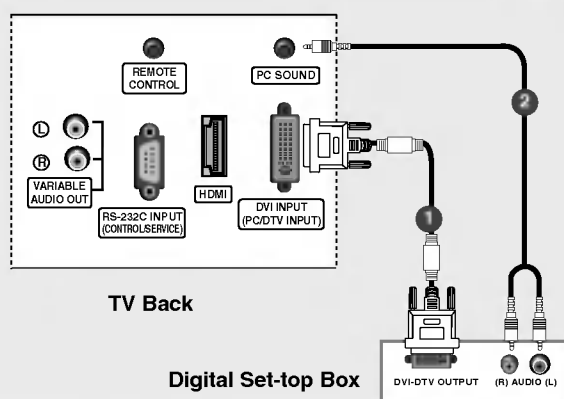
Digital Set-top Box

❶ Connect the DVI output of the digital set-top box to the **DVI INPUT (PC/DTV INPUT)** jack on the set.

❷ Connect the digital audio outputs of the set-top box to the **PC SOUND** jack on the set.

❸ Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)

❹ Select **DVI DTV** input source with using the **INPUT** button on the remote control.

When connecting with a HDMI cable

TV Back
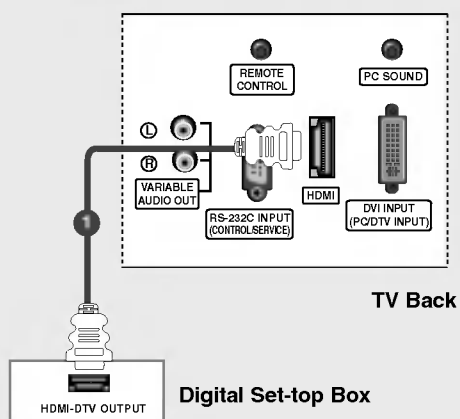
Digital Set-top Box

❶ Connect the HDMI output of the digital set-top box to the **HDMI** jack on the set.

❷ Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)

❸ Select **HDMI DTV** input source with using the **INPUT** button on the remote control.

• TV can receive the video and audio signal simultaneously with using a HDMI cable.

Monitor Out Setup

- **The TV has a special signal output capability which allows you to hook up a second TV or monitor.**

TV Back
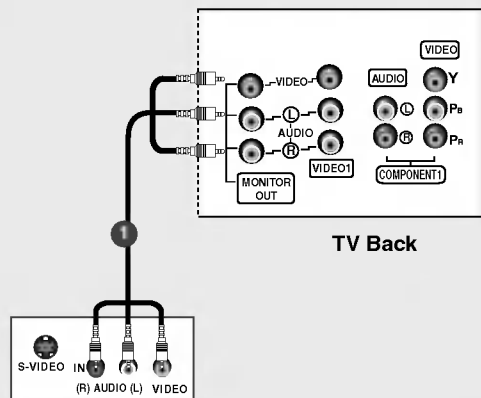
❶ Connect the second TV or monitor to the TV's **MONITOR OUT** jacks.

❷ See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

- S-Video, Component 1-2, DVI PC/DVI-DTV, HDMI PC/HDMI DTV input sources cannot be used for Monitor out.

External AV Source Setup

TV Front

Camcorder

Video Game Set
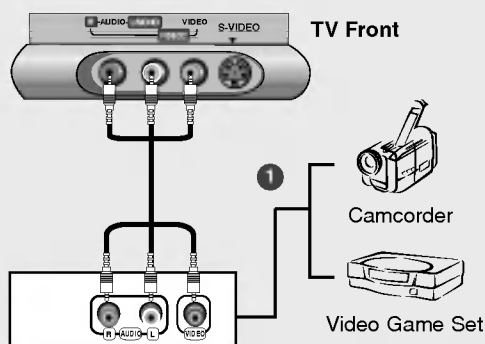
❶ Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).

❷ Select **Video2** input source with using the **INPUT** button on the remote control.
- If connected to **VIDEO1** input, select **Video1** input source.

❸ Operate the corresponding external equipment. Refer to external equipment operating guide.

External Stereo

- **Use to connected either an external amplifier, or add a sub-woofer to your surround sound system.**

Analog Stereo Amplifier
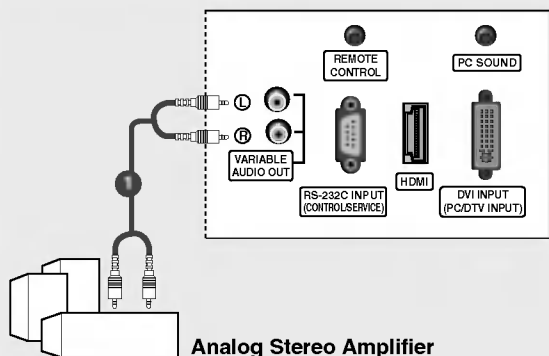
❶ Connect the input jack of the stereo's amplifier to the **VARIABLE AUDIO OUT** jacks on the set.

❷ Set up your speakers through your analog stereo amplifier, according to the instructions provided with the amplifier.
- When connecting with external audio equipments, such as amplifiers or speakers, please turn the TV speakers off. (Refer to p.31)

PC Setup

- **This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings.**

When connecting with a DVI-D cable
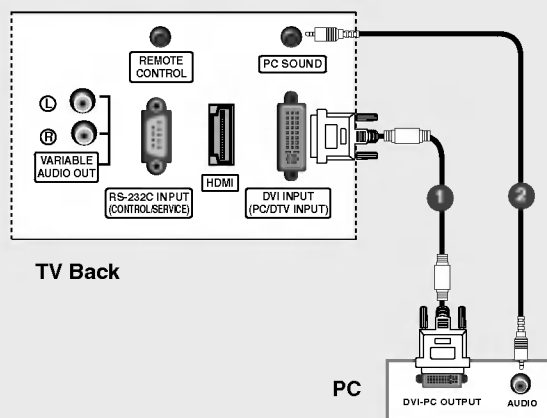
TV Back

PC

❶ Connect the DVI output of the PC to the **DVI INPUT (PC/DTV INPUT)** jack on the set.

❷ Connect the PC audio outputs to the **PC SOUND** jack on the set.

❸ Turn on the PC and the set.

❹ Select **DVI PC** input source with using the **INPUT** button on the remote control.

• Connect the signal cable (DVI-D cable, Not DVI to D-Sub cable) from the DVI output socket of the PC to the DVI input socket of the set when using a PC with DVI output. In some video cards, DVI-Analog output may not be supported.

When connecting with a DVI to D-Sub cable

TV Back

PC
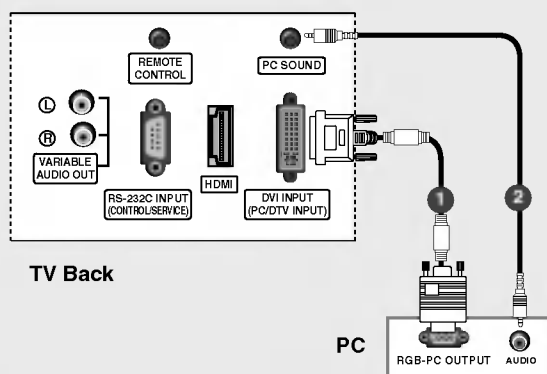
❶ Connect the RGB output of the PC to the **DVI INPUT (PC/DTV INPUT)** jack on the set.

❷ Connect the PC audio outputs to the **PC SOUND** jack on the set.

❸ Turn on the PC and the set.

❹ Select **DVI PC** input source with using the **INPUT** button on the remote control.

When connecting with a HDMI to DVI cable

TV Back

PC
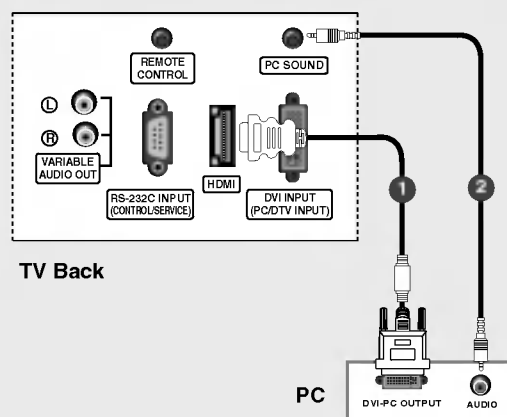
❶ Connect the DVI output of the PC to the **HDMI** jack on the set.

❷ Connect the PC audio output to the **PC SOUND** jack on the set.

❸ Turn on the PC and the set.

❹ Select **HDMI PC** input source with using the **INPUT** button on the remote control.

• If the PC has a DVI output and no HDMI output, a separated audio connection is necessary.
• It's not available to connect with a HDMI to DVI cable to the **DVI INPUT** jack on the set.

Supported Display Resolution

■ PC

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x400	31.468	70
640x480	31.469	60
	37.500	75
800x600	37.879	60
	46.875	75
832x624	49.725	75
1024x768	48.363	60
	56.470	70
	60.123	75
1280 x 768	47.776	60
1360 x 768	47.720	60
1366 x 768	47.720	60

a. For optimum picture quality, use standard WXGA 1360x768 computer output at a 60Hz refresh rate. Using other formats (VGA, SVGA, etc.) or refresh rates may result in reduced picture quality. (To change the computer video output format, please refer to the operating manual for the computer you are using).
b. If the message **No signal** appears on the screen, adjust the PC output to a format listed in the **Monitor Display Specifications** table.
c. The synchronization input form for Horizontal and Vertical frequencies is separate.

DPM (Display Power Management) mode
If the PC goes to power saving mode, the monitor automatically switches to DPM mode.
If you don't use the PC cable provided, DPM mode may not work.

* In HDMI PC mode, DPM mode is not available.

■ DTV

Terminal / Mode	Component	DVI (DTV)	HDMI (DTV)
480i	o	x	x
480p	o	o	o
720p	o	o	o
1080i	o	o	o

Power Cord Connection

- Connect the power cord as shown.
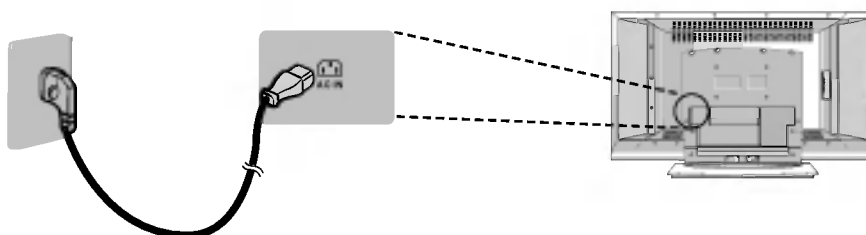
Operation
Basic operation

Turning on the TV

1. First, connect power cord correctly. At this moment, the TV switches to standby mode.

   Press the **ON/OFF**, **INPUT**, **CH ▲ / ▼** button on the TV or press the **POWER**, **TV**, **INPUT**, **CH ▲ / ▼**, Number (0 ~ 9) button on the remote control and then the TV will turn on.

2. Select the viewing source by using **INPUT** button on the remote control.
   This TV is programmed to remember which power state it was last set to, even if the power cord is out.

3. When finished using the TV, press the **POWER** button on the remote control. The TV reverts to standby mode.

Volume Adjustment

1. Press the **VOL ▲ / ▼** button to adjust the volume.
2. If you want to switch the sound off, press the **MUTE** button.
3. You can cancel this function by pressing the **MUTE** or **VOL ▲ / ▼** button.

Channel Selection

Press the **CH ▲ / ▼** or NUMBER buttons to select a channel number.

- If you intend to be away on vacation, disconnect the power plug from the wall power outlet.

Menu Language Selection

- *The menus can be shown on the screen in the selected language. First select your language.*

1 Press the **MENU** button and then use **▲ / ▼** button to select the **SPECIAL** menu.

2 Press the **▶** button and then use **▲ / ▼** button to select **Language**.

3 Press the **▶** button and then use **▲ / ▼** button to select your desired language. From this point on, the on-screen menus will be shown in the selected language of your choice.

4 Press the **EXIT** button to save and return to TV viewing.

How to adjust the OSD screen

1. Press the **MENU** button and then ▲ / ▼ button to select each menu.

2. Press the ► button and then use ▲ / ▼ / ◄ / ► button to display the available menus.

* some models

CHANNEL
Auto program
Manual program
Favorite channel
System color

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

SOUND	
EZ SOUND	
BBE	
AVL	
Balance	0
Treble	50
Bass	50
TV Speaker	

* In DVI PC and HDMI PC mode, **sRGB** is displayed on screen instead of **ACM**.

PIP/DW
Input
DW
PIP
PIP Input
Win.size
Win.position
PIP Trasnparency

SCREEN
Auto config.
Manual config.
XGA Mode
ARC
Zoom +/-
Position
Cinema
NR
Reset

SPECIAL
Language
Key lock
Set ID
Caption/Text
XD Demo
Logo light
Index

TIMER
Clock
Off timer
On timer
Auto off

• Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

Channel Menu Options

- *Auto Program should be used to memorize all the active channels in your area before you are able to use the TV.*
- *There are two ways of storing channels in the TV's memory. You can use either.*
- *One is called AUTO PROGRAM and the other is called MANUALPROGRAM.*
- *In AUTO PROGRAM mode, the TV will memorize the channels in ascending numerical order. If there are additional channels you want to add or delete, you can manually add or delete those channels with Manual Program.*

Auto Program: Channel Search

CHANNEL
Auto program
Manual program
Favorite channel
System color

⟫

CHANNEL
Auto program ▶
Manual program
Favorite channel
System color
To start

Auto program

TV 12

◉ Stop

MENU Prev.
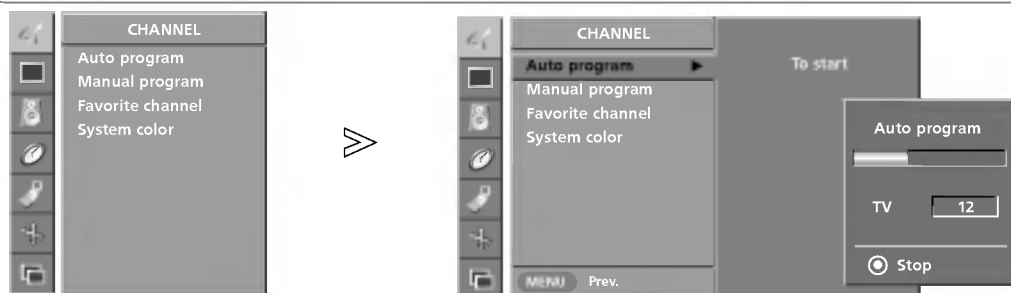
- *Redo **Auto program** if the TV is ever moved to another location.*
- ***Auto program** will search for channels only through the Antenna jack.*
- *If channels numbers for broadcast over-the air TV and cable TV are duplicated where different channels have the same number, press the same number buttons again to toggle between:*

Broadcast TV Channels	◄►	Cable TV Channels
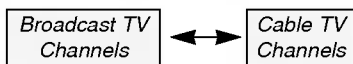
(For example, press 17 to go to the channel, press 17 again to go to the duplicated channel.)

1 Press the **MENU** button and then use ▲ / ▼ button to select the **CHANNEL** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **Auto program**.

3 Press the ▶ button. AUTO PROGRAM starts the channel search.

4 If you want to stop auto programming, press the **ENTER** button. Only the channels found up to at that time are memorized.

Manual Program: Adding/Deleting Channels

CHANNEL
Auto program
Manual program
Favorite channel
System color

⟫

CHANNEL
Auto program
Manual program ▶
Favorite channel
System color

TV 3
Memory On
Fine 0

MENU Prev.
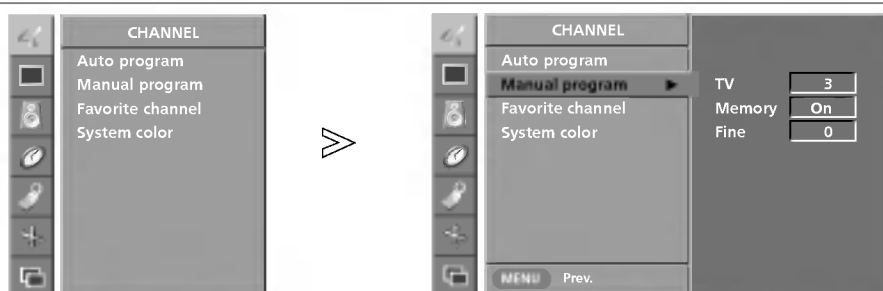
- *You can add or delete channels from the channel scan manually.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **CHANNEL** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **Manual program**.

3 Press the ▶ button and then use ◄ / ▶ button to select a channel you want to add or erase.

4 Press the ▼ button and then use ◄ / ▶ button to select **On (memory)** or **Off (erase)**.

5 Press the **EXIT** button to return to normal TV viewing. The current channel is added to Memory or Erased from the channel list.

Fine Tuning Adjustment

```
        CHANNEL
  Auto program
  Manual program
  Favorite channel
  System color
```

```
        CHANNEL
  Auto program
  Manual program        TV        3
  Favorite channel      Memory    On
  System color          Fine    ◄► 0

                        ⊙ Prev.
```
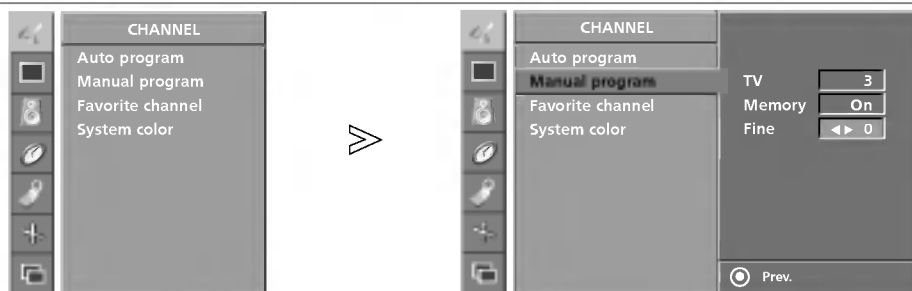
- *Use this function to correct the picture's instability and condition if it is poor.*
- *To remove fine tuning from a channel, reprogram the finely-tuned channel with Auto program or Manual Program.*
- *If a finely-tuned channel is memorized, the color of the channel number changes to yellow.*

1 Press the **MENU** button and then use ▲/▼ button to select the **CHANNEL** menu.

2 Press the ► button and then use ▲/▼ button to select **Manual program**.

3 Press the ► button and then use ▲/▼ button to select **Fine**.

4 Use ◄/► button to adjust the picture to your preference.

5 Press the **EXIT** button to return to normal TV viewing.

Favorite Channels Setup

```
        CHANNEL
  Auto program
  Manual program
  Favorite channel
  System color
```

```
        CHANNEL
  Auto program      ✓ ----- [ --- ]
  Manual program      ----- [ --- ]
  Favorite channel ► ----- [ --- ]
  System color        ----- [ --- ]
                      ----- [ --- ]
                      ----- [ --- ]
                      ----- [ --- ]
                      ----- [ --- ]
  MENU  Prev.
```
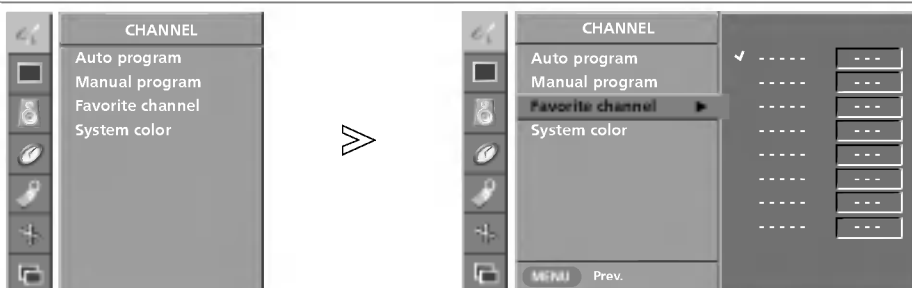
- *Favorite Channels is a convenient feature that lets you quickly scan up to 8 channels of your choice without having to wait for the TV to scan through all the in-between channels.*
- *To tune to a favorite channel, press the **FAV** button repeatedly. The eight favorite channels appear on the screen in numerical order.*

1 Press the **MENU** button and then use ▲/▼ button to select the **CHANNEL** menu.

2 Press the ► button and then use ▲/▼ button to select **Favorite channel**.

3 Press the ► button and then use ▲/▼ button to select the first favorite channel position.

4 Use the ◄/► button to set the desired channel number for first favorite channel.

5 Press the **ENTER** button to save.

6 Repeat steps 3 to 5 to memorize other favorite channels.

System color (Some models)

```
        CHANNEL
  Auto program
  Manual program
  Favorite channel
  System color
```

```
        CHANNEL
  Auto program
  Manual program
  Favorite channel
  System color  ►    PAL-M
                     PAL-N
                     NTSC
                   ✓ Multi
  MENU  Voltar
```
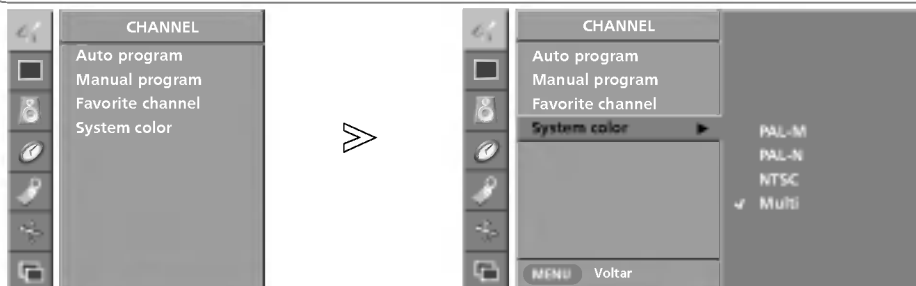
- *When the screen is wrong color, you can adjust this function.*
- *It's avaiable to use this function in TV mode. (This function doesn't work for sub picture in PIP mode.)*

1 Press the **MENU** button and then use ▲/▼ button to select the **CHANNEL** menu.

2 Press the ► button and then use ▲/▼ button to select **System color**.

3 Press the ► button and then use ▲/▼ button to select **PAL-M**, **PAL-N**, **NTSC** ou **Multi**.

4 Press the **EXIT** button to return to normal TV viewing.

Picture Menu Options

EZ PICTURE

- **EZ PICTURE** adjusts the TV to the best picture appearance.

- If adjusting picture options (**Contrast**, **Brightness**, **Color**, **Sharpness**, or **Tint**) manually, **EZ PICTURE** automatically changes to **User**.

- **Clear**, **Optimum**, and **Soft**, settings are preset for good picture quality at the factory and cannot be changed.
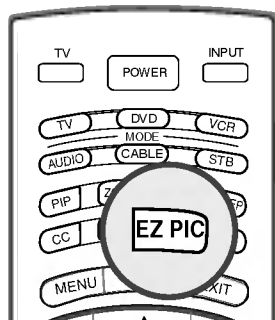
1 Press the **EZ PIC** button repeatedly to select the picture appearance setup option as shown: **Clear**, **Optimum**, **Soft**, and **User**.
• You can also adjust **EZ PICTURE** in the **PICTURE** menu.

2 Press the **EXIT** button to return to normal TV viewing.

XD

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

≫

PICTURE		
EZ PICTURE		
ACC		
XD	►	✓ On
ACM		Off
Contrast	100	
Brightness	45	
Color	50	
Sharpness	50	
Tint	0	
MENU Prev.		

- **XD** is LG Electronic's unique picture improving technology to display a real HD source through an advanced digital signal processing algorithm.

- When selecting **EZ PICTURE** options (**Clear**, **Optimum**, and **Soft**), **XD** is automatically change to **On**.

- If **XD** setting is **Off**, **EZ PICTURE** is automatically change to **User** and **ACM** function is not available.

- This function is not available in DVI PC and HDMI PC sources.

1 Press the **MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.

2 Press the ► button and then use ▲ / ▼ button to select **XD**.

3 Press the ► button and then use ▲ / ▼ button to set **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

Picture Menu Options Continued

Color Temperature Control

* Auto Color Temperature Control

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

≫

PICTURE		
EZ PICTURE		
ACC	►	Cool
XD		✓ Normal
ACM		Warm
Contrast	100	User
Brightness	45	Red 0
Color	50	Green 0
Sharpness	50	Blue 0
Tint	0	
MENU Prev.		

- *To initialize values (reset to default settings), select the **Normal** option.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.

2 Press the ► button and then use ▲ / ▼ button to select **ACC**.

3 Press the ► button and then use ▲ / ▼ button to select either: **Cool** (Preset), **Normal** (Default), or **Warm** (Preset).

4 Press the **EXIT** button to return to normal TV viewing.

* Manual Color Temperature Control (**ACC** set to **User** option)

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

≫

PICTURE		
EZ PICTURE		
ACC		Cool
XD		Normal
ACM		Warm
Contrast	100	✓ User
Brightness	45	Red ◄► 0
Color	50	Green 0
Sharpness	50	Blue 0
Tint	0	
		Prev.

- *You can adjust red, green, or blue to any color temperature you prefer.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.

2 Press the ► button and then use ▲ / ▼ button to select **ACC**.

3 Press the ► button and then use ▲ / ▼ button to select **User**.

4 Press the ► button and then use ▲ / ▼ button to select **Red**, **Green**, or **Blue**.

5 Use the ◄ / ► button to make appropriate adjustments.
• The adjustment range of **Red**, **Green**, or **Blue** is -30 ~ +30.

6 Press the **EXIT** button to return to normal TV viewing.

ACM (Active Color Management)

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

≫

PICTURE			
EZ PICTURE			
ACC			
XD			
ACM	▶	Fleshtone	1
Contrast	100	Greentone	1
Brightness	45	Bluetone	1
Color	50		
Sharpness	50		
Tint	0		
MENU Prev.			

- Adjust the **ACM** to select the desired skin color option.

- This function is not available in DVI PC and HDMI PC sources.

1 Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.

2 Press the ▶ button and then ▲ / ▼ button to select **ACM**.

3 Press the ▶ button and then ▲ / ▼ button to select **Fleshtone**, **Greentone**, or **Bluetone**.

4 Press the ◀ / ▶ button to make appropriate adjustments.
• The adjustment range of **Fleshtone**, **Greentone**, or **Bluetone** is 0 ~ 3.

5 Press the **EXIT** button to return to normal TV viewing.

sRGB (DVI PC or HDMI PC mode only)

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

≫

PICTURE		
EZ PICTURE		
ACC		
XD		
sRGB	▶	✓ On
Contrast	100	Off
Brightness	45	
MENU Prev.		

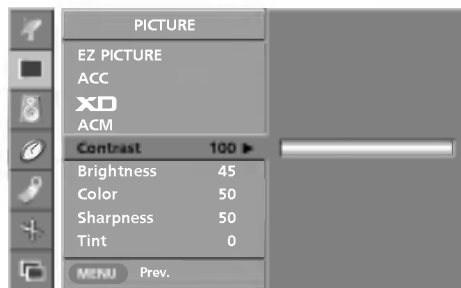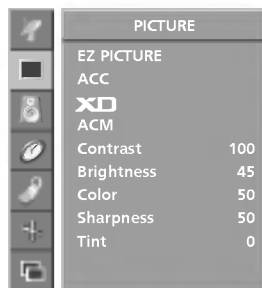- If the TV is connected to external equipment using sRGB, set sRGB to On to adjust for the color difference.

1 Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.

2 Press the ▶ button and then ▲ / ▼ button to select **sRGB**.

3 Press the ▶ button and then ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

Picture Menu Options Continued

Manual Picture Control (**EZ Picture** set to **User** option)

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100
Brightness	45
Color	50
Sharpness	50
Tint	0

≫

PICTURE	
EZ PICTURE	
ACC	
XD	
ACM	
Contrast	100 ▶
Brightness	45
Color	50
Sharpness	50
Tint	0
MENU Prev.	

- *You can adjust picture **Contrast**, **Brightness**, **Color**, **Sharpness**, and **Tint** options to the levels you prefer.*

- *In the broadcasting system PAL-M/N, the picture item **Tint** is not displayed.*

- *In PC mode, **Color**, **Sharpness**, and **Tint** is not available.*

1 Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.

2 Press the ▶ button and then ▲ / ▼ button to select the desired picture option (**Contrast**, **Brightness**, **Color**, **Sharpness**, or **Tint**).

3 Press the ▶ button and then ◀ / ▶ button to make appropriate adjustments.

4 Press the **EXIT** button to return to normal TV viewing.

Sound Menu Options

EZ SOUND

- This function lets you enjoy the best sound without any special adjustment because the TV has the appropriate sound options based on the program content.

- If you adjust sound options (**Treble** and **Bass**) manually, **EZ SOUND** automatically changes to **User**.

- **SRS TSXT**, **Flat**, **Music**, **Movie**, and **Sports** are preset for good sound quality at the factory and cannot be changed.

- If **SRS TSXT** is selected, **BBE**, **Treble**, and **Bass** functions are not available.

1 Press the **EZ SOUND** button repeatedly to select the appropriate sound setup as shown below: **SRS TSXT**, **Flat**, **Music**, **Movie**, **Sports**, and **User**.
• You can also adjust **EZ SOUND** in the **SOUND** menu.

2 Press **EXIT** button to save and return to TV viewing.

- • **SRS(●)** is a trademark of SRS Labs, Inc.
- • TruSurround XTtechnology is incorporated under license from SRS Labs, Inc.

BBE

SOUND	
EZ SOUND	
BBE	
AVL	
Balance	0
Treble	50
Bass	50
TV Speaker	

≫

SOUND		
EZ SOUND		
BBE ►	✔ On	
AVL	Off	
Balance	0	
Treble	50	
Bass	50	
TV Speaker		
MENU Prev.		

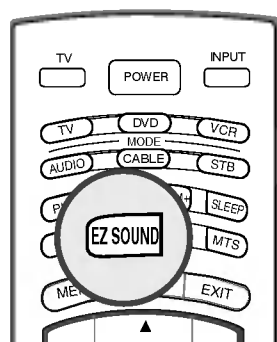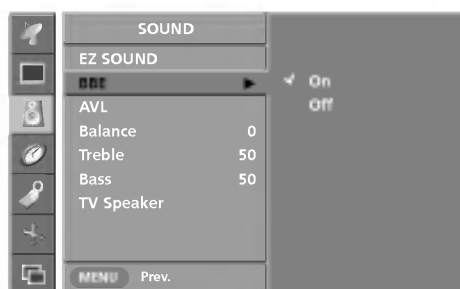- **BBE** High Definition Sound restores clarity and presence for better speech intelligibility and music realism.

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.

2 Press the ► button and then use ▲ / ▼ button to select **BBE**.

3 Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

- • **BBE.** Manufactured under license from BBE Sound, Inc.

Sound Menu Options continued

AVL (Auto Volume Leveler)

SOUND	
EZ SOUND	
BBE	
AVL	
Balance	0
Treble	50
Bass	50
TV Speaker	

≫

SOUND			
EZ SOUND			
BBE			
AVL	▶	✓ On	
Balance	0	Off	
Treble	50		
Bass	50		
TV Speaker			
MENU Prev.			
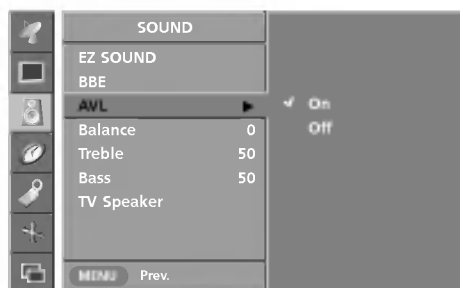
- **AVL** *maintains an equal sound level; even if you change channels.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **AVL**.

3 Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

Manual Sound Control

SOUND	
EZ SOUND	
BBE	
AVL	
Balance	0
Treble	50
Bass	50
TV Speaker	

≫

SOUND		
EZ SOUND		
BBE		
AVL		
Balance	0 ▶	[IIIIIIIIIII IIIIIIIIIII]
Treble	50	
Bass	50	
TV Speaker		
MENU Prev.		

- *You can adjust sound options* **Balance**, **Treble**, *and* **Bass** *to the levels you prefer.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select the desired sound option (**Balance**, **Treble**, or **Bass**).

3 Press the ▶ button and then use ◀ / ▶ button to make appropriate adjustments.

4 Press the **EXIT** button to return to normal TV viewing.

TV Speakers Setup

SOUND	
EZ SOUND	
BBE	
AVL	
Balance	0
Treble	50
Bass	50
TV Speaker	

≫

SOUND		
EZ SOUND		
BBE		
AVL		
Balance	0	
Treble	50	
Bass	50	
TV Speaker	►	✓ On
		Off

MENU Prev.

- *You can adjust internal speaker status.*

- *If you want to use your external hi-fi stereo system, turn off the internal speakers of the set.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.

2 Press the ► button and then use ▲ / ▼ button to select **TV Speaker**.

3 Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

Stereo/SAP Broadcasts Setup

- *The TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program; if the broadcaster transmits one additional sound signal in addition to the original one.*

- **Mono**: *The primary language is heard from left and right speakers. Signal mode is mono.*

- **Stereo**: *The primary language is heard from left and right speakers. Signal mode is stereo.*

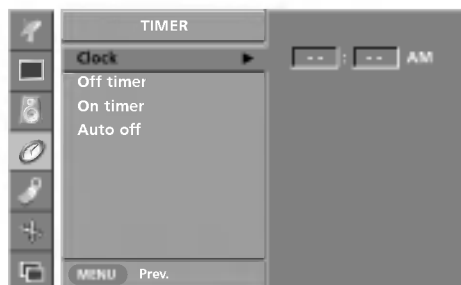- **SAP**: *The secondary language is heard from left and right speakers in mono sound.*
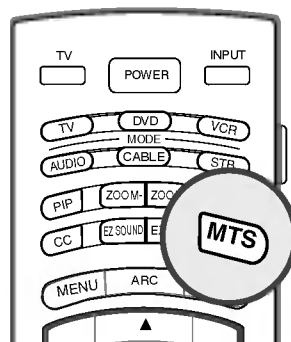
1 Press the **MTS** button repeatedly. **Mono**, **Stereo**, or **SAP** appear in turn.
  • Select mono sound mode if the signal is not clear or in poor signal reception areas.
  • **Stereo**, **SAP** modes are available only if included on the broadcast signal.

2 Press the **ENTER** button to save.
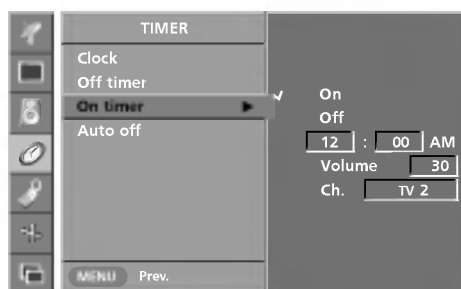
Timer Menu Options

Clock Setup

- *If current time setting is wrong, reset the clock manually.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Clock**.

3 Press the ► button and then use ▲ / ▼ button to set the hour.

4 Press the ► button and then use ▲ / ▼ button to set the minutes.

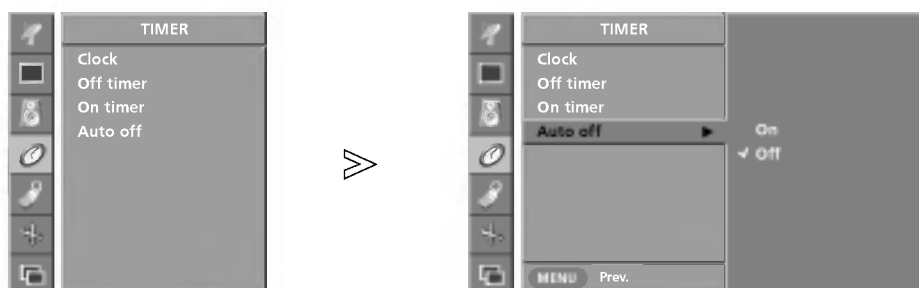**5** Press the **EXIT** button to return to normal TV viewing.

On/Off Timer Setup

- *TIMER function operates only if current time has been set.*

- **Off timer** *function overrides* **On timer** *function if they are set both set to the same time.*

- *The TV must be in standby mode for the* **On timer** *to work.*

- *If you do not press any button within 2 hours after the TV turns on with the* **On timer** *function, the TV will automatically revert to standby mode.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Off timer** or **On timer**.

3 Press the ► button and then use ▲ / ▼ button to select **On**.
• To cancel **On/Off timer** function, select **Off**.

4 Press the ► button and then use ▲ / ▼ button to set the hour.

5 Press the ► button and then use ▲ / ▼ button to set the minutes.

6 **For only On timer function**
Press the ► button and then use ▲ / ▼ button to set the volume level at turn-on.
Press the ► button and then use ▲ / ▼ button to select the channel at turn-on.

7 Press the **EXIT** button to return to normal TV viewing.

Auto Off

	TIMER
	Clock
	Off timer
	On timer
	Auto off

≫

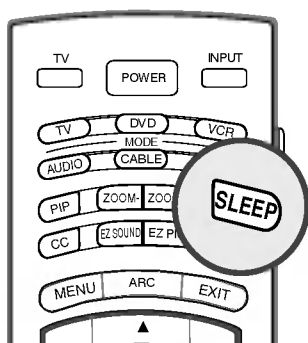|	TIMER	
	Clock	
	Off timer	
	On timer	
	Auto off ▶	On
		✓ Off
	MENU Prev.	

- *If set to on and there is no input signal, the TV turns off automatically after 10 minutes.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **Auto off**.

3 Press the ▶ button and then use ▲ / ▼ button to select **Off** or **On**.

4 Press the **EXIT** button to return to normal TV viewing.

Sleep Timer

- *The Sleep Timer turns the TV off at the preset time. Note that this setting is cleared when the TV is turned off.*

1 Press the **SLEEP** button repeatedly to select the number of preset minutes. First the - - - option appears on the screen, followed by the following sleep timer options: 10, 20, 30, 60, 90, 120, 180, and 240 minutes.

2 When the number of minutes you want is displayed on the screen, press the **ENTER** button. The timer begins to count down from the number of minutes selected.

3 To check the remaining minutes before the TV turns off, press the **SLEEP** button once.

4 To cancel the Sleep Timer, press the **SLEEP** button repeatedly to select until - - - appears.

🔑 Special Menu Options

Key Lock

```
        SPECIAL                         SPECIAL
  Language                        Language
  Key lock                        Key lock        ►    ✓ On
  Set ID                          Set ID                 Off
  Caption/Text                    Caption/Text
  XD Demo          ≫              XD Demo
  Logo light                      Logo light
  Index                           Index

                                  MENU  Prev.
```
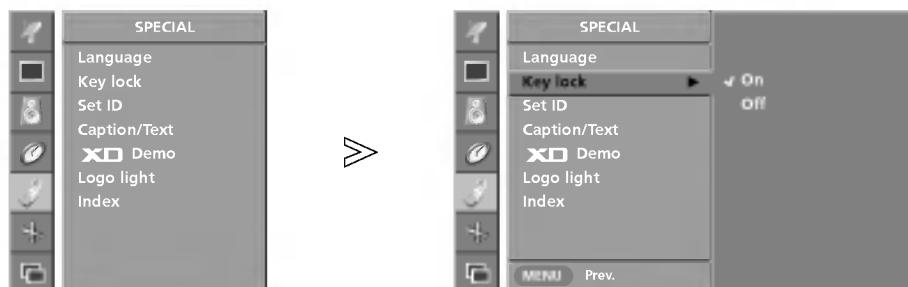
- *The TV can be set up so that it can only be used with the remote control.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Key lock**.
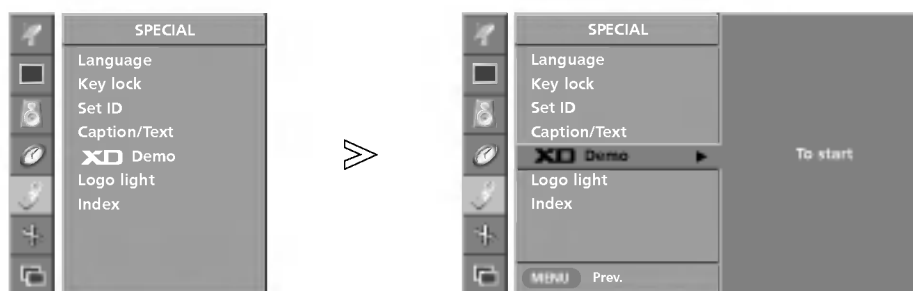
3 Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

• This feature can be used to prevent unauthorized viewing by locking out the front panel controls.
• This TV is programmed to remember which option it was last set to even if you turn the TV off.
• With the Key lock On, the display '⚠**Key lock**' appears on the screen if any button on the front panel is pressed.
• In **Key lock** 'On', if the set is turned off, press the **POWER**, **INPUT**, **CH** ▲ / ▼ button on the set or **POWER**, **INPUT**, **CH** ▲ / ▼ or NUMBER buttons on the remote control.

XD Demo

```
        SPECIAL                         SPECIAL
  Language                        Language
  Key lock                        Key lock
  Set ID                          Set ID
  Caption/Text                    Caption/Text
  XD Demo          ≫              XD Demo          ►    To start
  Logo light                      Logo light
  Index                           Index

                                  MENU  Prev.
```

- *Use it to see the difference between XD Demo on and XD Demo off.*

- *This function is not available in DVI PC and HDMI PC sources.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2 Press the ► button and then use ▲ / ▼ button to select **XD Demo**.

3 Press the ► button to begin **XD Demo**.

**4** Press the **EXIT** button to stop **XD Demo**.

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. Its 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.

• The picture at left shows a typical caption.
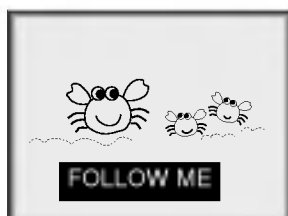
Caption Tips

• Not all TV broadcasts include closed caption signals.
• Sometimes TV stations broadcast four different caption signals on the same channel. By selecting **Model to Mode2**, you can choose which signal you view. **Model** is usually the signal with the captions, while **Mode2** might show demonstration or programming information.
• Your TV might not receive caption signals normally in the following situations.

1. 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.

2. An old, bad, or illegally recorded tape is being played.
3. Strong, random signals from a car or airplane interfere with the TV signal.
4. The signal from the antenna is weak.
5. The program wasn't captioned when it was produced, transmitted, or taped.

Caption/Text
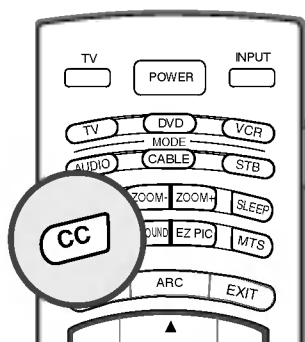
1 Press the **CC** button repeatedly to select your caption selection as shown below: **Model**, **Mode2**, **Text1**, **Text2**, or **Off**.
• You can also adjust **Caption/Text** in the **SPECIAL** menu.

2 Press the **EXIT** button to return to normal TV viewing.

Special Menu Options Continued

Logo Light

SPECIAL
Language
Key lock
Set ID
Caption/Text
XD Demo
Logo light
Index

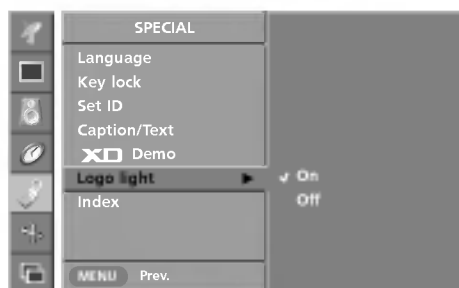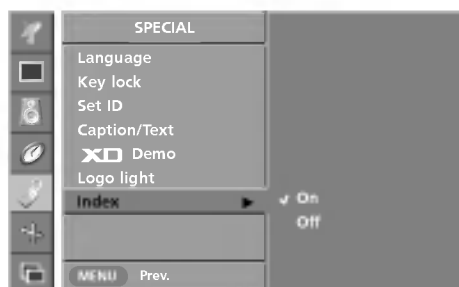| SPECIAL	
Language	
Key lock	
Set ID	
Caption/Text	
XD Demo	
Logo light ►	✓ On
Index	Off
MENU Prev.	

- *If you select on, LG logo of TV front panel turns on.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Logo light**.

3 Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

Index

SPECIAL
Language
Key lock
Set ID
Caption/Text
XD Demo
Logo light
Index

SPECIAL	
Language	
Key lock	
Set ID	
Caption/Text	
XD Demo	
Logo light	
Index ►	✓ On
	Off
MENU Prev.	

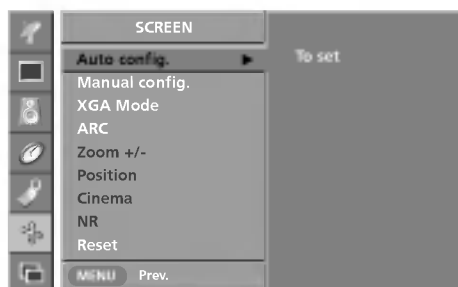- *Switches LED Display on or off.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Index**.

3 Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.
• When you select On mode, the LED Display illuminutes brightly.

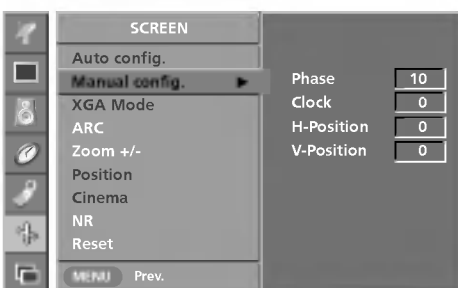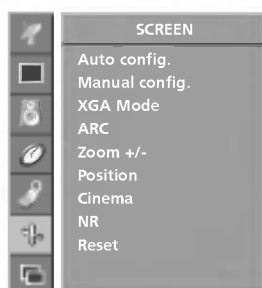**4** Press the **EXIT** button to return to normal TV viewing.

Screen Menu Options

Auto Adjustment (DVI PC (RGB), Analogue PC mode only)

SCREEN
Auto config.
Manual config.
XGA Mode
ARC
Zoom +/-
Position
Cinema
NR
Reset

≫

SCREEN	
Auto config. ▶	To set
Manual config.	
XGA Mode	
ARC	
Zoom +/-	
Position	
Cinema	
NR	
Reset	
MENU Prev.	

- *Automatically adjusts picture position and minimizes image shaking.*

- *After adjustment, if the image is still not correct, your TV is functioning properly but needs further adjustment.*

- *Automatically adjusts the screen position, clock, and phase. (The displayed image will disappear for a few seconds while Auto-configuration is in progress.)*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **Auto config.**.

3 Press the ▶ button to run Auto configure.
• When **Auto config.** has finished, OK will be shown on screen.
• If the position of the image is still not correct, try Auto adjustment again.

4 If the image needs to be adjusted more after using **Auto config.**, you can make further adjustments with the **Manual config.** option.

Manual Configure

SCREEN
Auto config.
Manual config.
XGA Mode
ARC
Zoom +/-
Position
Cinema
NR
Reset

≫

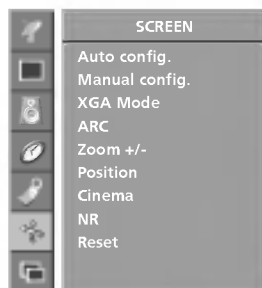| SCREEN		
Auto config.		
Manual config. ▶	Phase	10
XGA Mode	Clock	0
ARC	H-Position	0
Zoom +/-	V-Position	0
Position		
Cinema		
NR		
Reset		
MENU Prev.		

- *If the image still isn't clear after auto adjustment and especially if characters are still jittery, adjust the picture Phase manually.*

- *To correct the screen size, adjust* **Clock**.

- *This function is available in DVI PC (RGB) and Component sources. (In some input mode, the **Manual config.** options (**Phase, Clock, H-Position,** or **V-Position**) may not work.)*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **Manual config.**.

3 Press the ▶ button and then use ▲ / ▼ button to select **Phase, Clock, H-Position,** or **V-Position**.
• **Phase**: Remove any horizontal noise and clear up or sharpen the character images.
• **Clock**: Minimizes any vertical bars or stripes appearing on the screen background.
• **H-Position / V-Position**: Adjusts picture left/right and up/down.

4 Press the ◀ / ▶ button to make appropriate adjustments.

5 Press the **EXIT** button to return to normal TV viewing.

Screen Menu Options continued

Selecting XGA mode (DVI PC (RGB) and XGA/WXGA (60Hz) mode only)

SCREEN
Auto config.
Manual config.
XGA Mode
ARC
Zoom +/-
Position
Cinema
NR
Reset

SCREEN	
Auto config.	
Manual config.	
XGA Mode ▶	✓ 1024x768
ARC	1280x768
Zoom +/-	1360x768
Position	1366x768
Cinema	
NR	
Reset	
MENU Prev.	

- *For more improved or better picture quality, select the same mode corresponding to computer resolution.*

**1** Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **XGA Mode**.

3 Press the ▶ button and then use ▲ / ▼ button to select the desired XGA resolution.
From this point on, the adjustment starts.

Setting Picture Format

- *Caution: If a 4:3 fixed image is on the screen for a long time, it may remain visible.*

- *Set every aspect ratio for TV, Video, and S-Video input sources.*

1 Press the **ARC** button repeatedly to select the desired picture format.
• You can also adjust **ARC** in the **SCREEN** menu.

• 4:3
Choose 4:3 when you want to view a picture with an original 4:3 aspect ratio, with black bars appearing at both the left and right sides.

• 16:9
Choose 16:9 when you want to adjust the picture horizontally, in a linear proportion to fill the entire screen.

• Horizon
Choose Horizon when you want to adjust the picture in a non-linear proportion, that is, more enlarged at both sides, to create a spectacular view.

• Zoom
Choose Zoom when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.
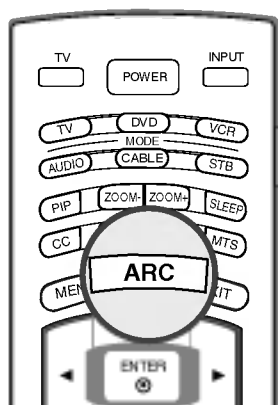
• Use 4:3, or 16:9 for other RGB-PC and HDMI-PC sources.
• In the DW (Double Window) mode, ARC function isn't available.
• In Component, DVI DTV and HDMI DTV mode, only **4:3**, **16:9** and **Zoom** aspect ratios are available.

Picture Size Zoom
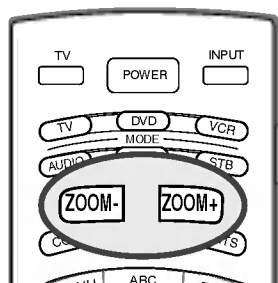
- *When enlarging or reducing the picture, the screen may be display unnatural picture.*

- *You can also adjust **Zoom+/-** in the **SCREEN** menu.*

- *This function is not available in DVI PC (RGB) source.*

1 Press the **Zoom+/Zoom-** button.

2 Press the **Zoom+/Zoom-** button to enlarge or reduce the picture size.
  • The adjustment range of Zoom is 100 ~ 300.

3 Adjust the picture position using the ▲ / ▼ / ◄ / ► buttons while in enlarged picture mode.

Screen Position
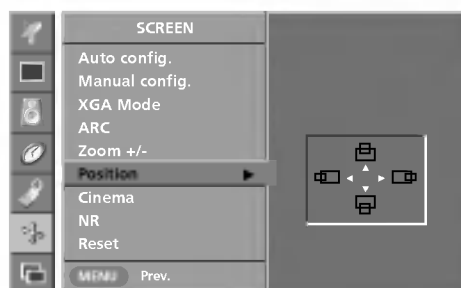
- *When screen is enlarged, you can change the position of the picture.*

- *You are available to this function after adjusting **Zoom+/-**.*

- *This function is not available in DVI PC (RGB) source.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Position**.

3 Press the ► button and then use ▲ / ▼ / ◄ / ► button to adjust the position.

4 Press the **EXIT** button to return to normal TV viewing.

⤡ **Screen Menu Options continued**

Cinema Mode Setup (TV, Video1-2, S-Video and Component 480i mode only)

SCREEN
Auto config.
Manual config.
XGA Mode
ARC
Zoom +/-
Position
Cinema
NR
Reset

≫

SCREEN	
Auto config.	
Manual config.	
XGA Mode	
ARC	
Zoom +/-	
Position	
Cinema ▶	✓ On
NR	Off
Reset	
MENU Prev.	
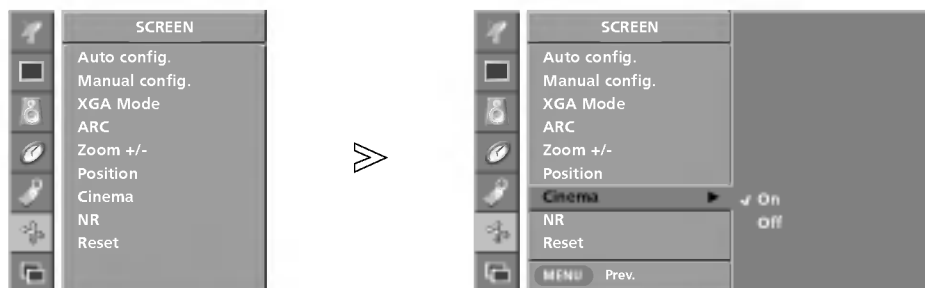
- *Sets up the TV for the best picture appearance for viewing movies.*

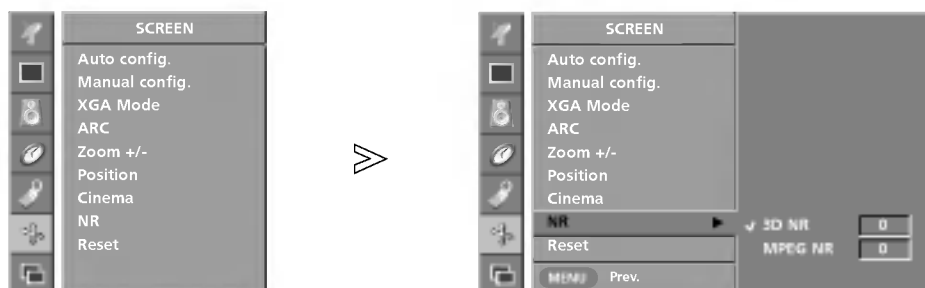**1** Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **Cinema**.

3 Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.

4 Press the **EXIT** button to return to normal TV viewing.

## NR (Noise Reduction)

SCREEN
Auto config.
Manual config.
XGA Mode
ARC
Zoom +/-
Position
Cinema
NR
Reset

≫

SCREEN		
Auto config.		
Manual config.		
XGA Mode		
ARC		
Zoom +/-		
Position		
Cinema		
NR ▶	✓ 3D NR	0
Reset	MPEG NR	0
MENU Prev.		

- *You can select **3D NR** or **MPEG NR** to reduce the picture noise which may appear on the screen during watching in TV mode.*

- *This function is not available for use in **DVI PC**, **HDMI PC** mode.*

- ***3D NR** is not available or use in **Component**, **DVI DTV**, **HDMI DTV** mode.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ▶ button and then use ▲ / ▼ button to select **NR**.

3 Press the ▶ button and then use ▲ / ▼ button to select **3D NR** or **MPEG NR**.

4 Press the ◀ / ▶ button to make appropriate adjustments.
• The adjustment range of **3D NR** is 0~2.
• The adjustment range of **MPEG NR** is 0~15.

5 Press the **EXIT** button to return to normal TV viewing.

Reset to original factory value (Initializing)
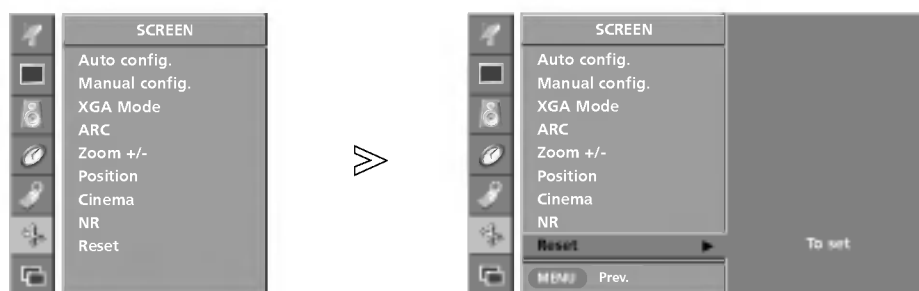
- *You can initialize Zoom +/-, Position, Manual Config., PIP size, PIP position and sub picture size for Double window.*

- *This function operates in every mode. To initialize the adjusted value.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.

2 Press the ► button and then use ▲ / ▼ button to select **Reset**.

3 Press the ► button.
The display **Ok** will appear.

PIP (Picture-In-Picture) / DW (Double Window) Menu

- PIP lets you view 2 different inputs (sources) on your TV screen at the same time. One source will be large, and the other source will show a smaller inset image.
- Double Window mode splits the screen into 2, allowing 2 picture sources to be shown on the TV screen at the same time. Each source is given half the screen.

Watching PIP/POP/Double Window

Press the **PIP** button to access the sub picture. Each press of PIP changes the PIP options as shown below.
You can hear the main picture sound in PIP mode. Exchange the main and sub picture to hear the sub picture sound.
• You can also adjust **PIP** and **DW** in the **PIP/DW** menu.

PIP Mode

DW1 Mode

PIP Off

POP Mode

DW2 Mode
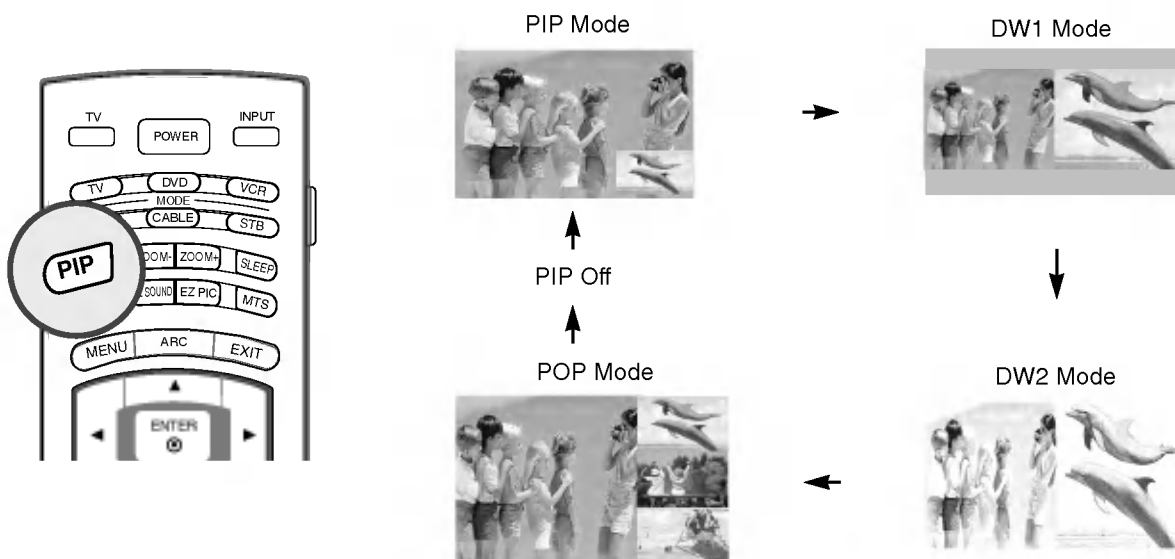
POP (Picture-out-of-Picture: Channel Scan) Mode
• Use POP to search the programs of all the memorized channels one-by-one on the 3 PIP screen display, (while the main picture source remains the current channel). The pictures of all the programmed channels are searched with the 3 POP screen.
• Use the **SWAP** button to enlarge the selected channel being searched on the POP screen to shift it for viewing on the main screen.
• Run Auto programm channel search before using POP mode.

Selecting an Input Signal Source for PIP/Double Window
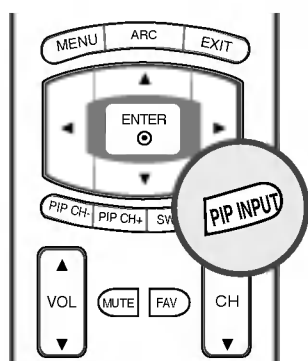
Use the **PIP INPUT** button to select the input source for the sub picture.
Each press of **PIP INPUT** button changes the PIP source.
• You can also select sources for the **PIP Input** in the **PIP/DW** menu.

Main picture	Sub picture	
	PIP/DW	POP
TV	All	
Video1	All (Except Video1)	
Video2	All (Except Video2)	
S-Video	All (Except S-Video)	TV
Component1	All (Except Component1)	
Component2	All (Except Component2)	
DVI PC / DVI DTV	All (Except DVI, HDMI)	
HDMI PC / HDMI DTV	All (Except DVI, HDMI)	

PIP Size
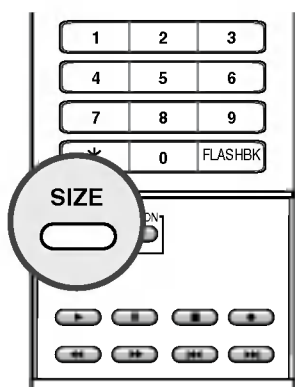
Press the **SIZE** button and then use ◄ **/** ► button to change the sub picture size.

• Using the **Win.size** function in Double Window mode, main and sub picture sizes are changed simultaneously. Using the **Win.size** function in PIP mode, sub picture size is changed.

• You can also change the sub picture size with **Win.size** in the **PIP/DW** menu.

Moving the PIP (PIP Mode only)
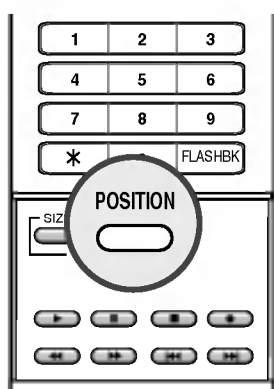
Press the **POSITION** button.

Press the ▲ **/** ▼ **/** ◄ **/** ► button repeatedly until desired position is achieved. The sub picture moves up/down/left/right.

• You can also move the PIP position with **Win.position** in the **PIP/DW** menu.

PIP (Picture-In-Picture) / DW (Double Window) Menu continued
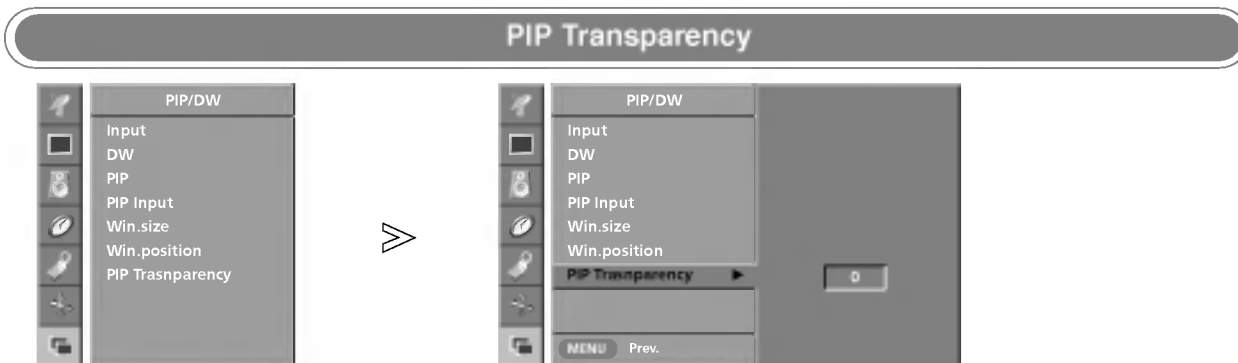
PIP Transparency

- *This function is to make the PIP clear or opaque.*

1 Press the **MENU** button and then use ▲ / ▼ button to select the **PIP/DW** menu.

2 Press the ► button and then use ▲ / ▼ button to select **PIP Transparency**.

3 Press the ► button and then use ◄ / ► button to adjust PIP transparency.
• The adjustment range of **PIP Transparency** is 0 ~ 10.

4 Press the **EXIT** button to return to normal TV viewing.

TV Program Selection for PIP
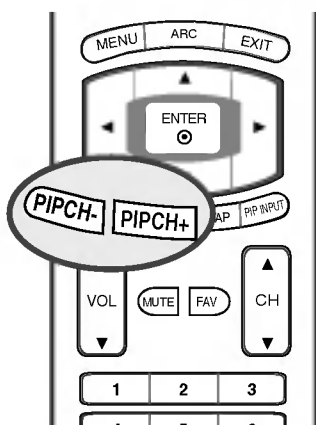
1 Press the **PIPCH+ / PIPCH-** button to select a channel for the sub picture in PIP mode.

Swapping the PIP/Double Window

Use the **SWAP** button to switch the main and sub pictures.

PIP

Main Picture   Sub Picture

DW1

Main Picture   Sub Picture

DW2

Main Picture   Sub Picture
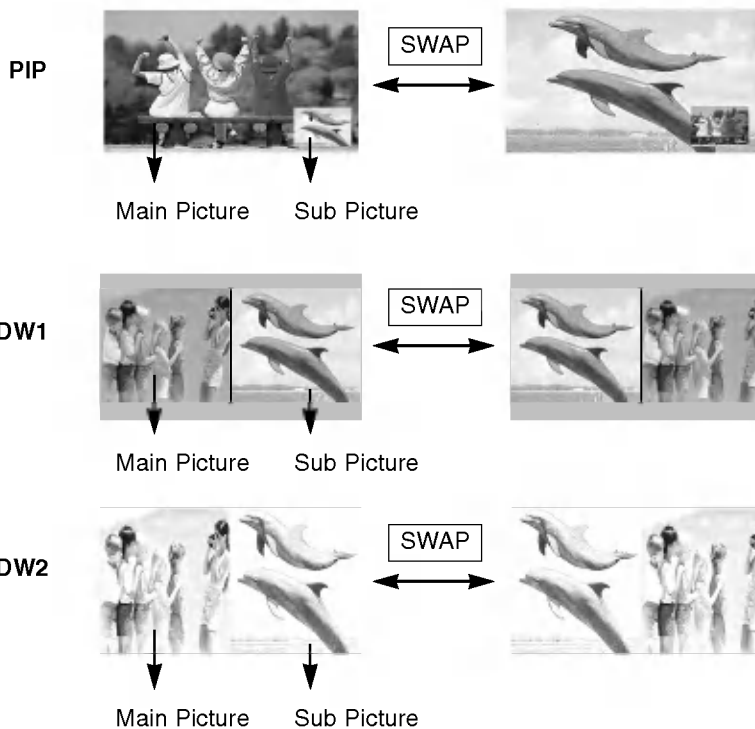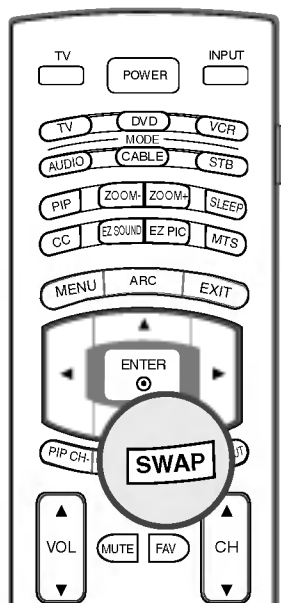
• In some case of PIP/DW mode, picture quality can be different between main picture and sub picture. The sub picture may appear poor as compared to main picture.

Reference

External Control Device Setup

- Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.
- Connect the serial port of the control device to the RS-232C jack on the TV back panel.
- RS-232C connection cables are not supplied with the TV.

RS-232C Setup

PC
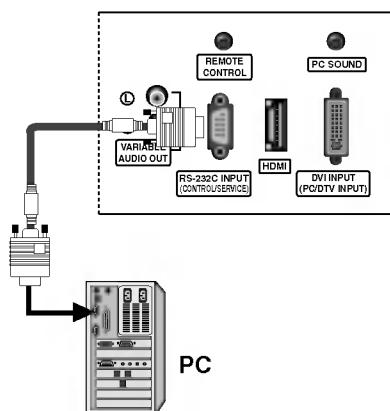
Type of Connector; D-Sub 9-Pin Male

No.	Pin Name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection
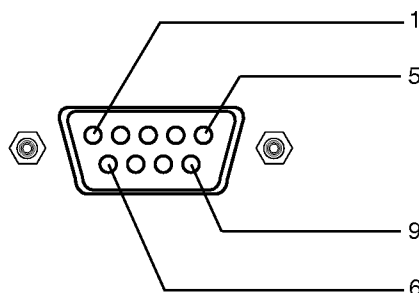
RS-232C Configurations

7-Wire Configurations
(Serial female-female NULL modem cable)

	PC		TV	
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		6	DSR
DSR	6		4	DTR
RTS	7		8	CTS
CTS	8		7	RTS

D-Sub 9   D-Sub 9
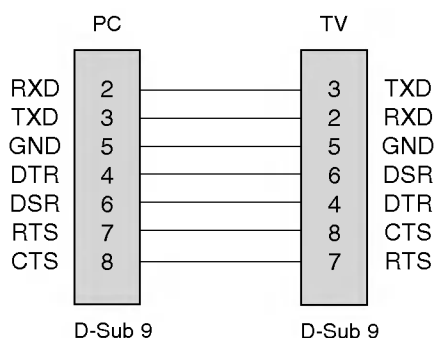
3-Wire Configurations
(Not standard)

	PC		TV	
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		4	DTR
DSR	6		6	DSR
RTS	7		7	RTS
CTS	8		8	CTS

D-Sub 9   D-Sub 9
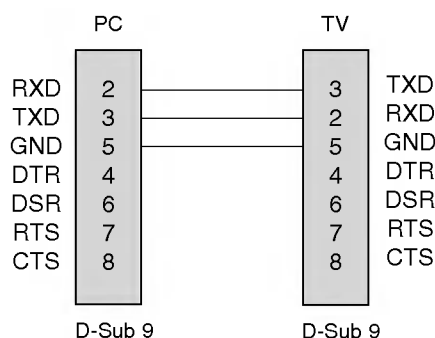
Set ID

- Use this function to specify a TV ID number.
- Refer to 'Real Data Mapping'. See page 48.

1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.

2. Press the ► button and then use ▲ / ▼ button to select **Set ID**.

3. Press the ► button and then use ▲ / ▼ button to adjust **Set ID** to choose the desired TV ID number. The adjustment range of **Set ID** is 1 ~ 99.

4. Press **EXIT** button to return to normal TV viewing.

SPECIAL
Language
Key lock
Set ID ►
Caption/Text
XD Demo
Logo light
Index

MENU Prev.
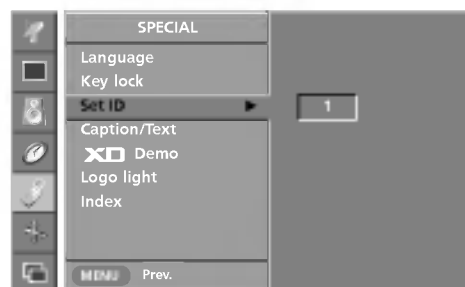
Communication Parameters

• Baud rate : 9600 bps (UART)
• Data length : 8 bits
• Parity : None
• Stop bit : 1 bit
• Communication code : ASCII code

* Use a crossed (reverse) cable.

Command Reference List

	COMMAND 1	COMMAND 2	DATA (Hexadecimal)
01. Power	k	a	0 ~ 1
02. Input Select (Main Picture)	x	b	*
03. Input Select (Sub Picture)	x	y	*
04. Aspect Ratio	k	c	0 ~ 3
05. Screen Mute	k	d	0 ~ 1
06. Volume Mute	k	e	0 ~ 1
07. Volume Control	k	f	0 ~ 64
08. Contrast	k	g	0 ~ 64
09. Brightness	k	h	0 ~ 64
10. Color	k	i	0 ~ 64
11. Tint	k	j	0 ~ 64
12. Sharpness	k	k	0 ~ 64
13. OSD Select	k	l	0 ~ 1
14. Key Lock	k	m	0 ~ 1
15. Balance	k	t	0 ~ 64
16. Key	m	c	Key Code

* : Refer to '02~03 Input select'. See page 48.

Transmission / Receiving Protocol

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1]: First command. (k, x or m)
* [Command 2]: Second command.
* [Set ID]: You can adjust the set ID to choose desired monitor ID number in Special menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected TV set is controlled. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x63) on transmission/receiving protocol.
* [DATA]: To transmit command data. Transmit 'FF' data to read status of command.
* [Cr]: Carriage Return ASCII code '0x0D'
* [ ]: ASCII code 'space (0x20)'

OK Acknowledgement

[Command2][ ][Set ID][ ][OK][Data][x]

* The Monitor transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][ ][Set ID][ ][NG][Data][x]

* The Monitor transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data 1: Illegal Code
      2: Not supported function

Error messages
1. **Illegal ID** : If Wrong or no ID in the command is written.
2. **B_TokenLength !=2** : If the first argument of the command does not equals to 2.
3. **Error ==TOKEN_ERROR** : If some Special character or Numeric are written to the first argument of the command or wrong Space position is written to the first argument of the command.
4. **Illegal Opcodes** : If the Wrong Alphabet is written to the first argument of the command.
5. **Illegal Params** : If the Wrong parameter is supplied to the end of the command line (means that value of the parameter that is not supported).

01. Power On (Command:a)

▶ To control Power On/Off of the TV.

Transmission

[k][a][ ][Set ID][ ][Data][Cr]

Data 0 : Power Off   1   : Power On

Acknowledgement

[a][ ][Set ID][ ][OK][Data][x]

▶ To show Power On/Off.

Transmission

[k][a][ ][Set ID][ ][FF][Cr]

Acknowledgement

[a][ ][Set ID][ ][OK][Data][x]

Data 0 : Power Off   1   : Power On

02. Input Select (Command:b) (Main Picture Input)

▶ To select input source for the TV.
You can also select an input source using the INPUT button on the TV's remote control.

Transmission

[x][b][ ][Set ID][ ][Data][Cr]

Data	10 : TV	41	: Component2
	20 : Video1	50 or 60 : DVI PC
	21 : Video2	51 or 61 : DVI DTV
	30 : S-Video	90	: HDMI PC
	40 : Component1	91	: HDMI DTV

Acknowledgement

[b][ ][Set ID][ ][OK][Data][x]

03. Input Select (Command:y) (Sub Picture Input)

Transmission

[x][y][ ][Set ID][ ][Data][Cr]

Data	10 : TV	41	: Component2
	20 : Video1	50 or 60 : DVI
	21 : Video2	90	: HDMI
	30 : S-Video		
	40 : Component1		

Acknowledgement

[y][ ][Set ID][ ][OK][Data][x]

04. Aspect Ratio (Command:c) (Main picture format)

▶ To adjust the screen format.
You can also adjust the screen format using the ARC (Aspect Ratio Control) button on remote control or in the Screen menu.

Transmission

[k][c][ ][Set ID][ ][Data][Cr]

Data 0 : Normal screen (4:3)
     1 : Wide screen (16:9)
     2 : Horizon
     3 : Zoom
* In PC mode only 16:9 and 4:3 aspect ratios are available.

Acknowledgement

[c][ ][Set ID][ ][OK][Data][x]

05. Screen Mute (Command:d)

▶ To select screen mute on/off.

Transmission

[k][d][ ][Set ID][ ][Data][Cr]

Data 0 : Screen mute off (Picture on)
     1 : Screen mute on (Picture off)

06. Volume Mute (Command:e)

▶ To control volume mute on/off.
You can also adjust mute using the MUTE button on remote control.

Transmission

[k][e][ ][Set ID][ ][Data][Cr]

Data 0 : Volume mute on (Volume off)
     1 : Volume mute off (Volume on)

Acknowledgement

[e][ ][Set ID][ ][OK][Data][x]

07. Volume Control (Command:f)

▶ To adjust volume.
You can also adjust volume with the volume buttons on remote control.

Transmission

[k][f][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
      ● Refer to 'Real data mapping 1' as shown below.

Acknowledgement

[f][ ][Set ID][ ][OK][Data][x]

08. Contrast (Command:g)

▶ To adjust screen contrast.
You can also adjust contrast in the Picture menu.

Transmission

[k][g][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
      ● Refer to 'Real data mapping 1' as shown below.

Acknowledgement

[g][ ][Set ID][ ][OK][Data][x]

* **Real data mapping 1**

0 : Step 0
⋮
A : Step 10
⋮
F : Step 15
10 : Step 16
⋮
64 : Step 100

* Tint : R50 ~ G50
* Balance : L50 ~ R50

09. Brightness (Command:h)

► To adjust screen brightness.
You can also adjust brightness in the Picture menu.

Transmission

```
[k][h][ ][Set ID][ ][Data][Cr]
```

Data   Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
    • Refer to 'Real data mapping 1'. See page 48.

Acknowledgement

```
[h][ ][Set ID][ ][OK][Data][x]
```

10. Color (Command:i)

► To adjust the screen color.
You can also adjust color in the Picture menu.

Transmission

```
[k][i][ ][Set ID][ ][Data][Cr]
```

Data   Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
    • Refer to 'Real data mapping 1'. See page 48.

Acknowledgement

```
[i][ ][Set ID][ ][OK][Data][x]
```

11. Tint (Command:j)

► To adjust the screen tint.
You can also adjust tint in the Picture menu.

Transmission

```
[k][j][ ][Set ID][ ][Data][Cr]
```

Data   Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
    • Refer to 'Real data mapping 1'. See page 48.

Acknowledgement

```
[j][ ][Set ID][ ][OK][Data][x]
```

12. Sharpness (Command:k)

► To adjust the screen sharpness.
You can also adjust sharpness in the Picture menu.

Transmission

```
[k][k][ ][Set ID][ ][Data][Cr]
```

Data   Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
    • Refer to 'Real data mapping 1'. See page 48.

Acknowledgement

```
[k][ ][Set ID][ ][OK][Data][x]
```

13. OSD Select (Command:l)

► To select OSD (On Screen Display) mute on/off.

Transmission

```
[k][l][ ][Set ID][ ][Data][Cr]
```

Data   0: OSD mute on   1: OSD mute off

Acknowledgement

```
[l][ ][Set ID][ ][OK][Data][x]
```

14. Key Lock (Command:m)

► To lock the front panel controls on the TV.

Transmission

```
[k][m][ ][Set ID][ ][Data][Cr]
```

Data 0: Lock off   1: Lock on

Acknowledgement

```
[m][ ][Set ID][ ][OK][Data][x]
```

• If you're not using the front panel controls on the TV, use
this mode. When main power is on/off, remote control lock
is released.

15. Balance (Command:t)

► To adjust balance.

Transmission

```
[k][t][ ][Set ID][ ][Data][Cr]
```

Data   Min: 0 ~ Max: 64 (transmit by Hexadecimal code)
    • Refer to 'Real data mapping 1'. See page 48.

Acknowledgement

```
[t][ ][Set ID][ ][OK][Data][x]
```

16. Key (Command:m c)

► To send IR remote key code.

Transmission

```
[m][c][ ][Set ID][ ][Data][Cr]
```

Data: Key code (Refer to P.51)

Acknowledgement

```
[c][ ][Set ID][ ][OK][Data][x]
```

IR Codes

How to Connect

► Connect your wired remote control to the Remote Control port on the TV.

Remote Control IR Codes

► **Output waveform**

Single pulse, modulated with 37.917KHz signal at 455KHz

Tc

Carrier frequency

$F_{CAR} = 1/T_C = f_{OSC}/12$
Duty ratio = $T1/T_C = 1/3$

T1
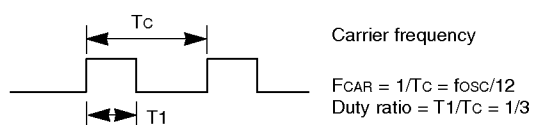
► **Configuration of frame**

• 1st frame

Lead code	Low custom code								High custom code								Data code								Data code							
	C0	C1	C2	C3	C4	C5	C6	C7	C0	C1	C2	C3	C4	C5	C6	C7	D0	D1	D2	D3	D4	D5	D6	D7	D0	D1	D2	D3	D4	D5	D6	D7

• Repeat frame

Repeat code

Tf

► **Lead code**

9 ms

4.5 ms

► **Repeat code**

0.55 ms

9 ms

2.25 ms
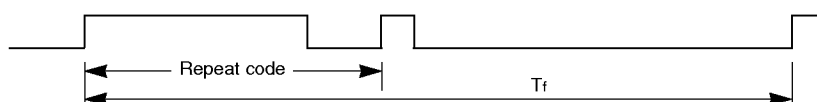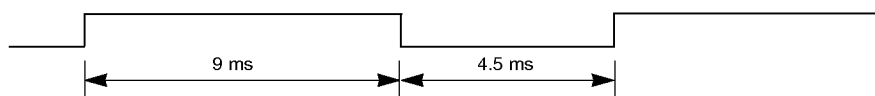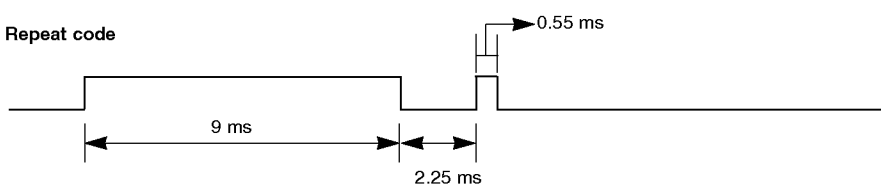
► **Bit description**

• Bit "0"

0.56 ms

1.12 ms

• Bit "1"

0.56 ms

2.24 ms
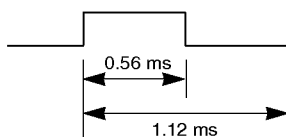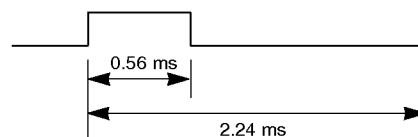
► **Frame interval : Tf**

The waveform is transmitted as long as a key is depressed.

Tf

Tf

Tf=108ms @455KHz
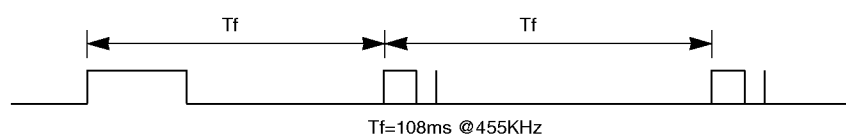
Code (Hexa)	Function	Note
0F	TV	Remote Control Button
08	POWER	Remote Control Button
0B	INPUT	Remote Control Button
C4	POWER ON	Discrete IR Code (Only Power On)
C5	POWER OFF	Discrete IR Code (Only Power OFF)
60	PIP	Remote Control Button
5D	ZOOM-	Remote Control Button
5C	ZOOM+	Remote Control Button
0E	SLEEP	Remote Control Button
39	CC	Remote Control Button
52	EZ SOUND	Remote Control Button
4D	EZ PIC	Remote Control Button
0A	MTS	Remote Control Button
43	MENU	Remote Control Button
79	ARC	Remote Control Button
5B	EXIT	Remote Control Button
07	◄	Remote Control Button
06	►	Remote Control Button
40	▲	Remote Control Button
41	▼	Remote Control Button
44	ENTER	Remote Control Button
72	PIP CH-	Remote Control Button
71	PIP CH+	Remote Control Button
63	SWAP	Remote Control Button
61	PIP INPUT	Remote Control Button
02	VOL ▲	Remote Control Button
03	VOL ▼	Remote Control Button
00	CH ▲	Remote Control Button
01	CH ▼	Remote Control Button
09	MUTE	Remote Control Button
1E	FAV	Remote Control Button
10~19	Number Key 0~ 9	Remote Control Button
1A	FLASHBK	Remote Control Button
64	SIZE	Remote Control Button
62	POSITION	Remote Control Button

Programming the Remote

► The remote control is a multi-brand or universal remote control. It can be programmed to operate most remote-controllable devices of other manufacturers.
Note that the remote control may not control all models of other brands.

Programming a code into a remote mode
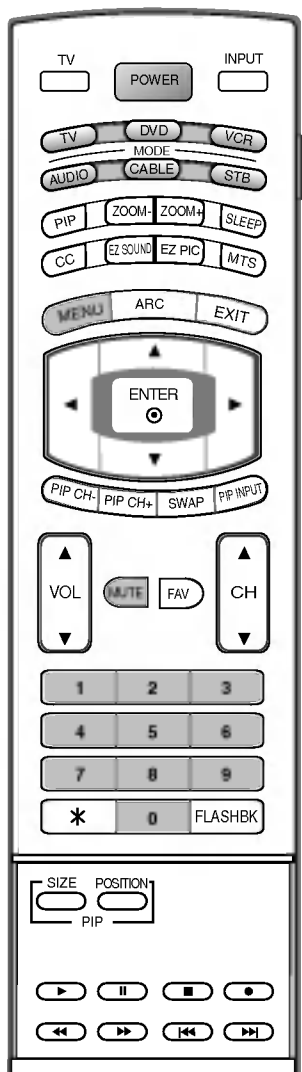
1 Test your remote control.
To find out whether your remote control can operate the component without programming, turn on the component such as a VCR and press the corresponding **MODE** button (VCR) on the remote control, while illuminating on the selected component. Test the **POWER** button to see if the component responds properly. If not, the remote requires pro-gramming to operate the device.

2 Turn on the component to be programmed, then press the correspond-ing **MODE** button on the remote control.

3 Press the **MENU** and **MUTE** buttons simultaneously for 2 seconds, the button selected component lights on the remote control. If you don't press any button for 20 seconds, the button selected component will turn off on the remote control. At a moment, you have to repeat from step 2.

4 Enter a code number using the number buttons on the remote. When pressing the button, the light is blinked at a time. Programming code numbers for the corresponding component can be found on the follow-ing pages. Again, if the code is correct, the device will turn off.

5 Press the **MENU** button to store the code. After blinking twice, this code is stored.

6 Test the remote control functions to see if the component responds properly. If not, repeat from step 2.

Programming Codes

VCRs

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
AIWA	034	KENWOOD	014 034 039 043	PORTLAND	108	TATUNG	039 043
AKAI	016 043 046 124		047 048	PULSAR	072	TEAC	034 039 043
	125 146	LG (GOLDSTAR)	001 012 013 020	QUARTZ	011 014	TECHNICS	031 033 070
AMPRO	072		101 106 114 123	QUASAR	033 066 075 145	TEKNIKA	019 031 033 034
ANAM	031 033 103	LLOYD	034	RCA	013 020 033 034		101
AUDIO DYNAMICS	012 023 039 043	LXI	003 009 013 014		040 041 062 063	THOMAS	034
BROKSONIC	035 037 129		017 034 101 106		107 109 140 144	TMK	006
CANON	028 031 033	MAGIN	040		145 147	TOSHIBA	008 013 042 047
CAPEHART	108	MAGNAVOX	031 033 034 041	REALISTIC	003 008 010 014		059 082 112 131
CRAIG	003 040 135		067 068		031 033 034 040	TOTEVISION	040 101
CURTIS MATHES	031 033 041	MARANTZ	012 031 033 067		053 054 101	UNITECH	040
DAEWOO	005 007 010 064		069	RICO	058	VECTOR RESEARCH	012
	065 108 110 111	MARTA	101	RUNCO	148	VICTOR	048
	112 116 117 119	MATSUI	027 030	SALORA	014	VIDEO CONCEPTS	012 034 046
DAYTRON	108	MEI	031 033	SAMSUNG	032 040 102 104	VIDEOSONIC	040
DBX	012 023 039 043	MEMOREX	003 010 014 031		105 107 109 112	WARDS	003 013 017 024
DYNATECH	034 053		033 034 053 072		113 115 120 122		031 033 034 040
ELECTROHOME	059		101 102 134 139		125		053 054 131
EMERSON	006 017 025 027	MGA	045 046 059	SANSUI	022 043 048 135	YAMAHA	012 034 039 043
	029 031 034 035	MINOLTA	013 020	SANYO	003 007 010 014	ZENITH	034 048 056
	036 037 046 101	MITSUBISHI	013 020 045 046		102 134		058 072 080 101
	129 131 138 153		049 051 059 061	SCOTT	017 037 112 129		
FISHER	003 008 009 010		151		131		
FUNAI	034	MTC	034 040	SEARS	003 008 009 010		
GE	031 033 063 072	MULTITECH	024 034		013 014 017 020		
	107 109 144 147	NEC	012 023 039 043		031 042 073 081		
GO VIDEO	132 136		048		101		
HARMAN KARDON	012 045	NORDMENDE	043	SHARP	031 054 149		
HITACHI	004 018 026 034	OPTONICA	053 054	SHINTOM	024		
	043 063 137 150	PANASONIC	066 070 074 083	SONY	003 009 031 052		
INSTANTREPLAY	031 033		133 140 145		056 057 058 076		
JCL	031 033	PENTAX	013 020 031 033		077 078 149		
JCPENNY	012 013 015 033		063	SOUNDESIGN	034		
	040 066 101	PHILCO	031 034 067	STS	013		
JENSEN	043	PHILIPS	031 033 034 054	SYLVANIA	031 033 034 059		
JVC	012 031 033 043		067 071 101		067		
	048 050 055 060	PILOT	101	SYMPHONIC	034		
	130 150 152	PIONEER	013 021 048	TANDY	010 034		

Cable Box

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
ABC	003 004 039 042	GOLDEN CHANNEL	030		065 085 090	SPRUCER	047 078
	046 052 053	HAMLIN	049 050 055	PIONEER	034 051 052 063	STARCOM	002 004 008 009
AJIN	112	HITACHI	052 055		076	STARGATE	008 030
ANTRONIK	014	HOSPITALITY	070 077	POST NEWS WEEK	016	TADIRAN	030
ARCHER	005 007 014 024	JERROLD	002 003 004 008	PRUCER	059	TAEKWANG	110
CABLE STAR	026		009 010 052 069	PTS	011 048 071 072	TAIHAN	105
CENTURION	092		074		073 074	TANDY	017
CENTURY	007	LG (GOLDSTAR)	001 106 101 005	PULSAR	100	TEXSCAN	029
CITIZEN	007	M-NET	037	RCA	047	TOCOM	039 040 056
COLOUR VOICE	065 090	MACOM	033	REGAL	049 050	TOSHIBA	100
COMBANO	080 081	MAGNAVOX	010 012 064 079	REGENCY	057	UNIKA	007 014 024
COMTRONICS	019 030	MEMOREX	100	REMBRANT	025	UNITED CABLE	004 053
DIAMOND	023	MOVIE TIME	028 032	SAMSUNG	102 107 030 068	UNIVERSAL	005 007 014 024
EAGLE	020 030 040	NSC	015 028 038 071	SCIENTIFIC ATLANTA	003 011 041 042		026 027 032 035
EASTERN	057 062 066		073		043 045 046	VIEWSTAR	012 015 018 086
ELECTRICORD	032	OAK	016 031 037 053	SHERITECH	022		087 088 089
GE	072	PANASONIC	044 047	SIGNAL	030	ZENITH	100 114 060 093
GEMINI	008 022 025 054	PARAGON	100	SIGNATURE	052		
GI	052 074	PHILIPS	006 012 013 020	SL MARX	030		

Digital Cable/Satellite Box

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
ALPHASTAR DSR	123		133 134	PACE SKY SATELLITE	143		088 090 107 130
AMPLICA	050	GENERAL INSTRUMENT	003 004 016 029	PANASONIC	060 142		137
BIRDVIEW	051 126 129		031 059 101	PANSAT	121	TOSHIBA	002 127
CHANNEL MASTER	013 014 015 018	HITACHI	139 140	PERSONAL CABLE	117	UNIDEN	016 025 042 043
	036 055	HOUSTON TRACKER	033 037 039 051	PHILIPS	071		044 045 048 049
CHAPARRAL	008 009 012 077		057 104	PICO	105		078 079 080 086
CITOH	054	HUGHES	068	PRESIDENT	019 102		101 135 136
CURTIS MATHES	050 145	JANIEL	060 147	PRIMESTAR	030 110 111	VIEWSTAR	115
DRAKE	005 006 007 010	JERROLD	061	PROSAT	072	WINEGARD	128 146
	011 052 112 116	KATHREIN	108	RCA	066 106	ZENITH	081 082 083 084
	141	LEGEND	057	REALISTIC	043 074		091 120
DX ANTENNA	024 046 056 076	LG	001	SAMSUNG	123		
ECHOSTAR	038 040 057 058	LUTRON	132	SATELLITE SERVICE CO	028 035 047 057		
	093 094 095 096	LUXOR	062 144		085		
	097 098 099 100	MACOM	010 059 063 064	SCIENTIFIC ATLANTA	032 138		
	122		065	SONY	103		
ELECTRO HOME	089	MEMOREX	057	STARCAST	041		
EUROPLUS	114	NEXTWAVE	028 124 125	SUPER GUIDE	020 124 125		
FUJITSU	017 021 022 027	NORSAT	069 070	TEECOM	023 026 075 087		

Audio

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
AIWA	014 028 070 096	JVC	004 013 141	PHILIPS	026 112 143	TOSHIBA	137
	125 129 139 229	KEC	185 186 187	PIONEER	039 042 043 063	THE	061
	230	KENWOOD	038 050 067 089		065 091 093 094	VICTOR	088 131
AKAI	163		170 171 197 206		115 123 127 250	WARDS	089
ANAM	003 014 017 023		215 222	QUASAR	113	YAMAHA	054 055 066 092
	059 106 189 216	KOHEL	030	RCA	080		199
	217 235 236	NAD	045 046	RCX	092		
BURMECTER	252	LOTTE	014 016 036 098	REALISTIC	103 106		
CARVER	086		100 172 173 174	SAMSUNG	124 145 146 182		
CLARION	199		175 176 177 178		193 194 195 203		
DAEWOO	027 053 060 084		179 180 181 183		204 244 245 246		
	102 148 198 221		201 202 208 213	SANSUI	011 135 138 144		
DENON	015 075 130 143		214 219 223 232	SANYO	019 083 234		
FANTASIA	071		238 240	SCOTT	106 186		
FINEARTS	022	LXI	103	SHARP	031 032 051 052		
FISHER	089 099	MAGNAVOX	111		072 082 117 119		
LG(GOLDSTAR)	001 021 024 029	MARANTZ	002 018 020 025		156 184 199 200		
	087 107 108 110		034 041 081 090		206 209		
	190 191 192 210		097 112	SHERWOOD	005 006 158		
	211 212 239	MCINTOSH	049	SONY	044 045 109 114		
HAITAI	034 035 188 222	MCS	104		118 126 248 249		
HARMAN/KARDON	068	MEMOREX	107	TAEKWANG	012 020 073 074		
INKEL	037 058 062 069	NAD	046		076 077 105 161		
	078 079 095 121	ONKYO	013 040 041 047		162 163 164 165		
	122 149 150 151		048 056 057 132		166 167 168 169		
	152 153 154 155		133 140		205 231 233 242		
	157 158 159 160	OPTIMUS	158	TEAC	010 085 106 136		
	189 207 222 224	PANASONIC	007 033 064 113		185 187 237		
	225 226 227 243		142 220 241 251	TECHNICS	101 113 128 134		
	247	PENNEY	104		147 218		

DVD

Brand	Codes	Brand	Codes	Brand	Codes	Brand	Codes
APEX DIGITAL	022	MAGNAVOX	013	PHILIPS	013	SONY	007
DENON	020 014	MARANTZ	024	PIONEER	004 026	THOMPSON	005 006
GE	005 006	MITSUBISHI	002	PROCEED	021	TOSHIBA	019 008
HARMAN KARDON	027	NAD	023	PROSCAN	005 006	YAMAHA	009 018
JVC	012	ONKYO	008 017	RCA	005 006	ZENITH	010 016 025
LG	001 010 016 025	PANASONIC	003 009	SAMSUNG	011 015		

Troubleshooting Checklist

The operation does not work normally.	
The remote control doesn't work	• Check to see if there is any object between the product and the remote control causing obstruction. • Are batteries installed with correct polarity (+ to +, - to -)? • Correct remote operating mode set: TV, VCR etc.? • Install new batteries.
Power is suddenly turned off	• Is the sleep timer set? • Check the power control settings. Power interrupted • No broadcast on station tuned with Auto off activated.

The video function does not work.	
No picture & No sound	• Check whether the product is turned on. • Try another channel. The problem may be with the broadcast. • Is the power cord inserted into wall power outlet? • Check your antenna direction and/or location. • Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	• This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.
No or poor color or poor picture	• Adjust Color in menu option. • Keep a sufficient distance between the product and the VCR. • Try another channel. The problem may be with the broadcast. • Are the video cables installed properly? • Activate any function to restore the brightness of the picture.
Horizontal/vertical bars or picture shaking	• Check for local interference such as an electrical appliance or power tool.
Poor reception on some channels	• Station or cable product experiencing problems, tune to another station. • Station signal is weak, reorient antenna to receive weaker station. • Check for sources of possible interference.
Lines or streaks in pictures	• Check antenna (Change the direction of the antenna).

The audio function does not work.	
Picture OK & No sound	• Press the **VOL** or **VOLUME** button. • Sound muted? Press **MUTE** button. • Try another channel. The problem may be with the broadcast. • Are the audio cables installed properly?
No output from one of the speakers	• Adjust Balance in menu option.
Unusual sound from inside the product	• A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.

| There is a problem in PC mode. (Only PC mode applied)	
The signal is out of range.	• Adjust resolution, horizontal frequency, or vertical frequency. • Check it whether the signal cable is connected or loose. • Check the input source.
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	• Work the Auto configure or adjust clock, phase, or H/V position.
Screen color is unstable or single color	• Check the signal cable. • Reinstall the PC video card.

Product Specifications

MODEL	37LP1R	42LP1R
Width (inches / mm)	45.6 / 1158	50.8 / 1290
Height (inches / mm)	28.3 / 719	31.7 / 804
Depth (inches / mm)	8.4 / 213.1	9.7 / 247.5
Weight (pounds / kg)	91.5 / 41.5	101.4 / 46
Power Requirement	AC 100-240V~ 50/60Hz 2.4A	AC 100-240V~ 50/60Hz 3.5A
Power Consumption	190W	230W
Television System	NTSC, PAL - M/N	
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, Cable 1 ~ 125	
External Antenna Impedance	75 Ω	

• The specifications shown above may be changed without prior notice for quality improvement.

How to join the product assembly to the wall to protect the set tumbling

- Set it up close to the wall so the product doesn't fall over when it is pushed backwards.
- The instructions shown below is a safer way to set up the product, which is to fix it on the wall so the product does-n't fall over when it is pulled in the forward direction. It will prevent the product from falling forward and hurting peo-ple. It will also prevent the product from damage caused by fall. Please make sure that children don't climb on or hang from the product.
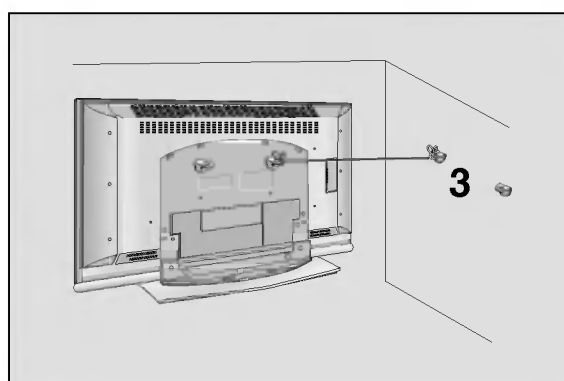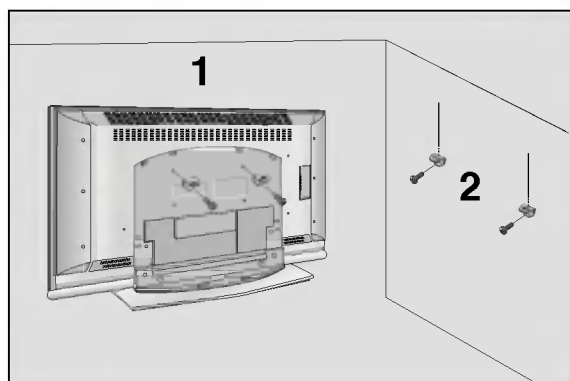
1   Use the bracket and the bolt to fix the product to the wall as shown in the picture.

2   Secure the bracket with the bolt (not provided as parts of the product, must purchase separately) on the wall.

3   Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

Notes
- When moving the product to another place undo the ropes first.
- Use a product holder or a cabinet that is big and strong enough for the size and weight of the product.
- To use the product safely make sure that the height of the bracket that is mounted on the wall is same as that of the product.