



LG Electronics Inc.

LCD TV | PLASMA TV OWNER'S MANUAL

LCD TV MODELS	PLASMA TV MODELS
26LC2R*	42PC3RV*
32LC2R*	

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.

WARNING / CAUTION



**TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK). NO
USER SERVICEABLE PARTS INSIDE. REFER TO
QUALIFIED SERVICE PERSONNEL.**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING/CAUTION

TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING / CAUTION

To prevent fire or shock hazards, do not expose this product to rain or moisture.

Class B digital device

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Do not attempt to modify this product in any way without written authorization from LG Electronics. Unauthorized modification could void the user's authority to operate this product

WARNING

SAFETY INSTRUCTION

IMPORTANT SAFETY INSTRUCTIONS

WARNING

Important safety instructions shall be provided with each apparatus. This information shall be given in a separate booklet or sheet, or be located before any operating instructions in an instruction for installation for use and supplied with the apparatus.

This information shall be given in a language acceptable to the country where the apparatus is intended to be used.

The important safety instructions shall be entitled "Important Safety Instructions". The following safety instructions shall be included where applicable, and, when used, shall be verbatim as follows. Additional safety information may be included by adding statements after the end of the following safety instruction list. At the manufacturer's option, a picture or drawing that illustrates the intent of a specific safety instruction may be placed immediately adjacent to that safety instruction :

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.



- 1** Do not use this apparatus near water



- 2** Clean only with dry cloth.



- 3** Do not block any ventilation openings. Install in accordance with the manufacturer's instructions



- 4** Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



- 5** Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



- 6** Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



- 7** Only use attachments/accessories specified by the manufacturer.

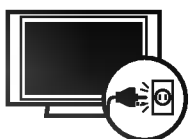


- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



S3125A

- Unplug this apparatus during lightning storms or when unused for long periods of time.



- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has exposed to rain or moisture, does not operate normally, or has been dropped.



- CAUTION concerning the Power Cord : Most appliances recommend they be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by

an authorized servicer. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.



- Outdoor Use Marking :
WARNING - To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Appliance To Rain Or Moisture



- Wet Location Marking : Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or over apparatus.



WARNING

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INTRODUCTION

What is a Plasma TV ?

Using plasma is the best way to achieve flat panel displays with excellent image quality and large screen sizes that are easily viewable. The Plasma TV can be thought of as a descendant of the neon lamp and or a series of fluorescent lamps.

How does it work?

Plasma TV is an array of cells, known as pixels, which are comprised of three sub-pixels, corresponding to the colors red, green, and blue. Gas in a plasma state is used to react with phosphors in each sub-pixel to produce colored light (red, green, or blue). These phosphors are the same types used in Cathode Ray Tube (CRT) devices such as televisions and common computer monitors.

Plasma TV offers a rich, dynamic display because each sub-pixel is individually controlled by advanced electronics to produce over 16 million different colors. This means that you get perfect images that are easily viewable in a display that is fewer than five inches thick.

160° - Wide angle range of vision

Your flat panel plasma screen offers an exceptionally broad viewing angle of over 160 degrees. This means that the display is clear and visible to viewers anywhere in the room.

Wide Screen

The wide screen offers a theater-like experience in your own home.

Multimedia

Connect your plasma display to a PC and use it for conferencing, games, and Internet browsing. The Picture-in-Picture feature allows you to view your PC and video images simultaneously.

Versatile

The light weight and thin size makes it easy to install your plasma display in a variety of locations where conventional TVs do not fit.

The Plasma TV Manufacturing Process: a few minute colored dots may be present on the Plasma TV screen

The Plasma TV is composed of 0.9 to 2.2 million cells. A few cell defects will normally occur in the Plasma TV manufacturing process. Several tiny, minute colored dots visible on the screen should be acceptable. This also occurs in other Plasma TV manufacturers' products. The tiny dots appearing does not mean that this Plasma TV is defective. Thus a few cell defects are not sufficient cause for the Plasma TV to be exchanged or returned. Our production technology minimizes these cell defects during the manufacture and operation of this product.

FOR LCD TV

If the TV feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with TV.

Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.

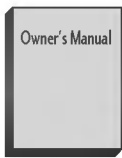
Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

On Disposal

- The fluorescent lamp used in this product contains a small amount of mercury.
- Do not dispose of this product with general household waste.
- Disposal of this product must be carried out in accordance to the regulations of your local authority.

ACCESSORIES

Ensure that the following accessories are included with your product. If an accessory is missing, please contact the dealer where you purchased the product.



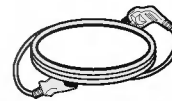
Owner's Manual



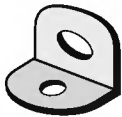
Batteries



Remote Control



Power Cord



2-Wall brackets



2-eye-bolts



2- Bolts for stand assembly
(Refer to p.14)



2-TV Bracket Bolts



2-TV Brackets,
2-Wall Brackets



Cable Management
(Refer to p.19)



Twister Holder
Arrange the wires
with the twister holder.



4-Bolts for stand assembly
(Refer to p.15)

32LC2R* only

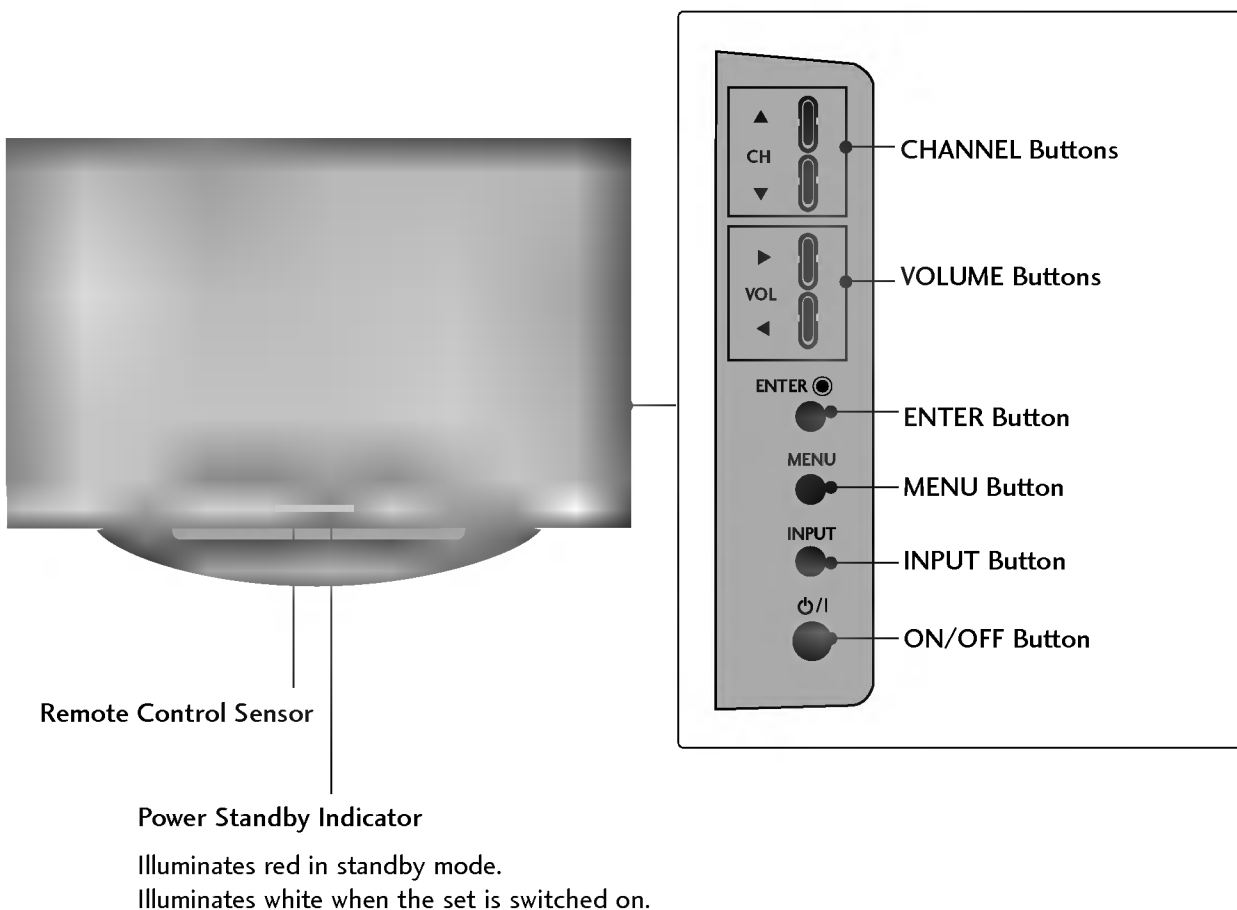
INTRODUCTION

CONTROLS

This is the front panel of models 42PC3RV* TVs.

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

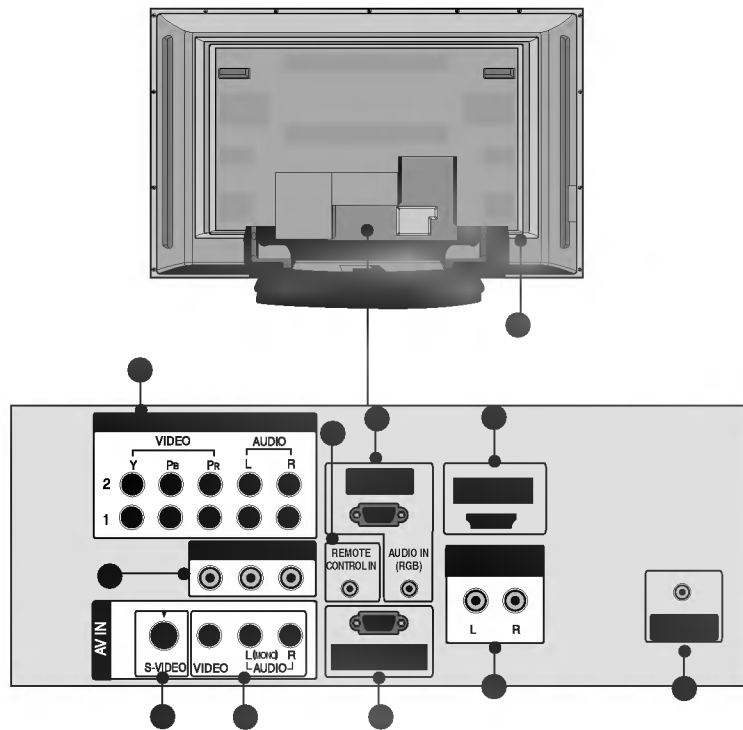
Front Panel Controls



CONNECTION OPTION

This manual explains the features available on the 42PC3RV* .

Back Connection Panel



- **COMPONENT IN**
Connect a component video/audio device to these jacks.
- **Remote Control Port**
Connect your wired remote control.
- **RGB/AUDIO IN**
Connect the output from a settop box or PC to the appropriate input port
- **HDMI IN**
Connect a HDMI signal to HDMI port with HDMI cable.
- **Power Cord Socket**
For operation with AC power.
Caution:
Never attempt to operate the TV on DC power.
- **AV OUT**
Connect a second TV or monitor.
- **S-VIDEO**
Connect S-Video out from an S-VIDEO device.
- **AV (Audio/Video) IN**
Connect audio/video output from an external device to these jacks.
- **RS-232C IN (CONTROL & SERVICE) PORT**
Connect to the RS-232C port on a PC.
- **Variable Audio Output**
Connect an external amplifier or add a subwoofer to your surround sound system.
- **ANTENNA IN**
Connect over-the air signals to this jack.

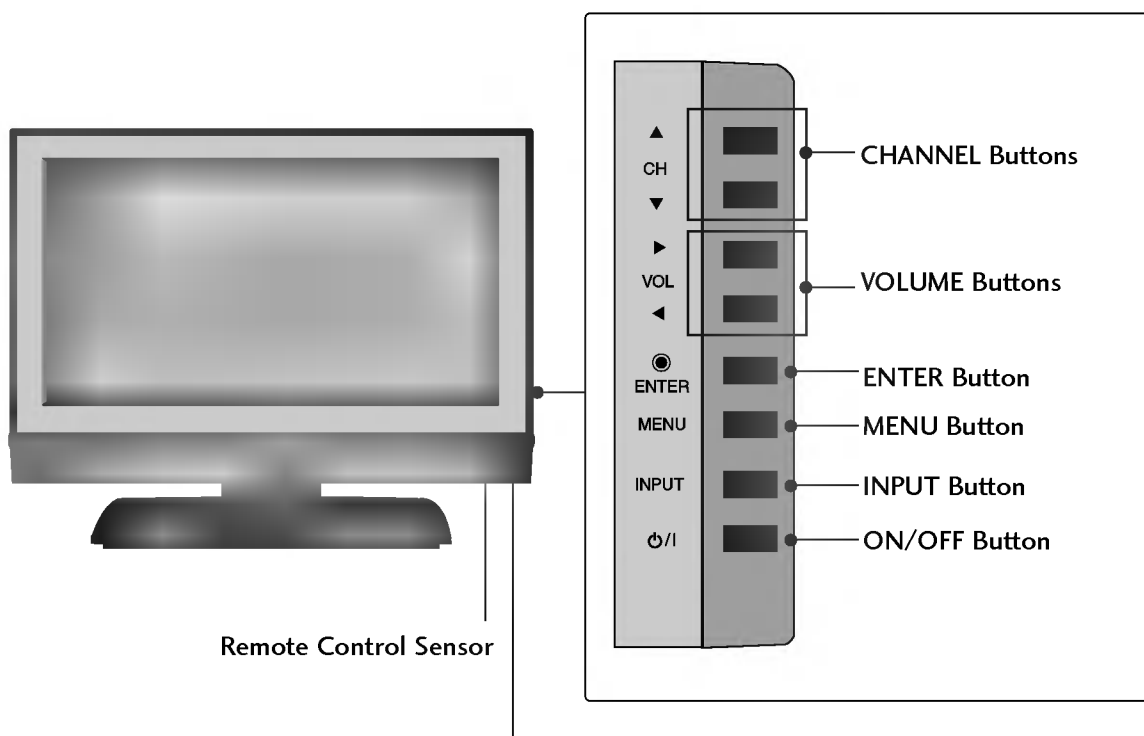
INTRODUCTION

CONTROLS

This is the front panel of models 26/32LC2R* TVs.

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

Front Panel Controls



Power Standby Indicator

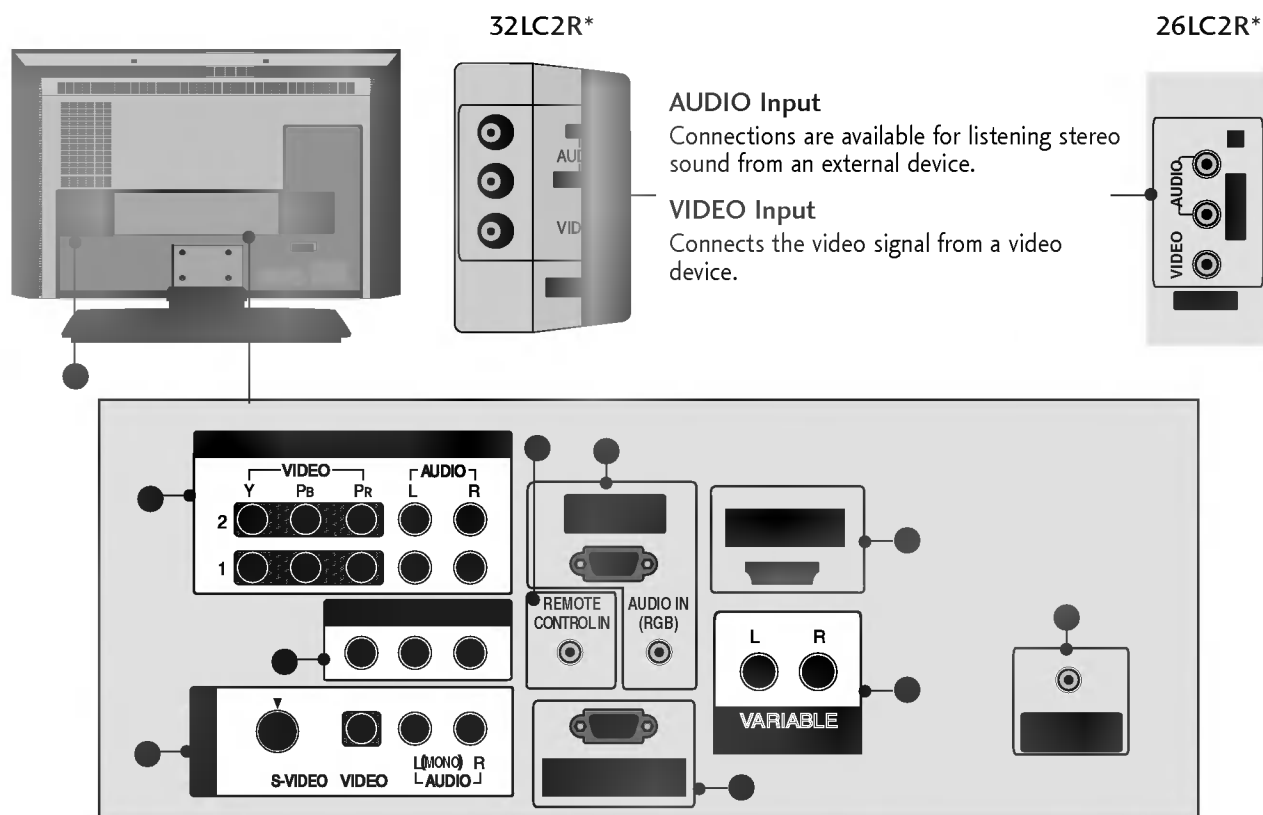
Illuminates red in standby mode.

Illuminates white when the set is switched on.

CONNECTION OPTIONS

This manual explains the features available on the 26/32C2R* .

Back Connection Panel



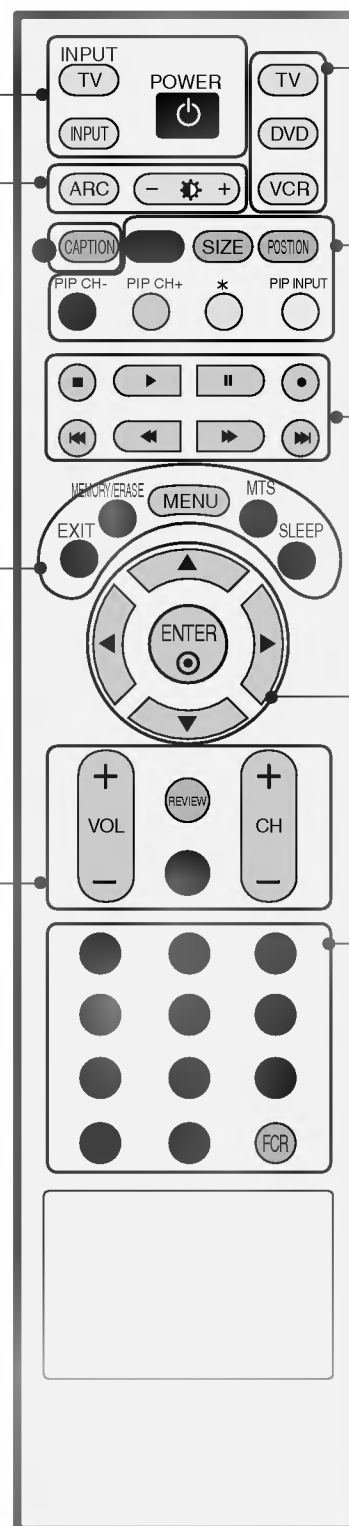
- **COMPONENT IN**
Connect a component video/audio device to these jacks.
- **AV OUT**
Connect a second TV or monitor.
- **AV (Audio/Video) IN 1**
Connect audio/video output from an external device to these jacks.
S-VIDEO
Connect S-Video out from an S-VIDEO device.
- **Remote Control Port**
Connect your wired remote control.
- **RGB/AUDIO IN**
Connect the output from a settop box or PC to the appropriate input port.
- **HDMI IN**
Connect a HDMI signal.
Or DVI(VIDEO)signal to the this port with a DVI to HDMI cable.
- **VARIABLE AUDIO OUT**
Connect an external amplifier or add a subwoofer to your surround sound system.
- **RS-232C IN (CONTROL &SERVICE) PORT**
Connect to the RS-232C port on a PC.
- **ANTENNA IN**
Connect over-the air signals to this jack.
- **Power Cord Socket**
For operation with AC power.
Caution: Never attempt to operate the TV on DC power.

INTRODUCTION

REMOTE CONTROL KEY FUNCTIONS

When using the remote control, aim it at the remote control sensor on the TV.

POWER Turns your TV or any other programmed equipment on or off, depending on mode. TV INPUT Returns to the TV mode. INPUT 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, AV (or AV1/2), Component 1, Component 2, RGB, or HDMI).	
ARC Change the aspect ratio. ► p.70 Brightness adjustment • Adjusts brightness on screen. • It returns to the default settings brightness by changing mode source.	
EXIT Clears all on-screen displays and returns to TV viewing from any menu. MEMORY/ERASE Memorizes or erases selected channel. ► p.35 MENU Displays the main menu. MTS Selects the MTS sound: Mono, Stereo, or SAP. ► p.51 SLEEP Select the amount of time before your TV turns off automatically. ► p.56	
VOLUME UP /DOWN Increases/decreases the sound level. REVIEW Tune to the last channel viewed. MUTE Switches the sound on or off. CHANNEL UP/DOWN Select available channels.	
● CAPTION Selects CAPTION mode. ► p.60	



MODE Selects the remote operating mode: TV, VCR, DVD.

PIP Switches the sub picture PIP, DW mode. ► **p.31**

SIZE Adjusts the sub picture size. ► **p.32**

POSITION Moves the sub picture. ► **p.32**

PIP CH - / + Selects a channel for the sub picture. ► **p.31**

* Not functional

PIP INPUT Select the connected input source for the sub-picture. ► **p.31**

VCR/DVD control buttons Control video cassette recorders or DVD players.

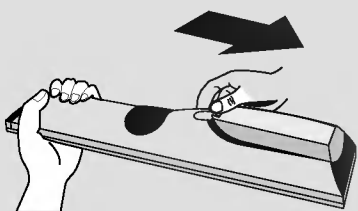
THUMBSTICK (Up/Down/Left/Right/ENTER) Navigate the on-screen menus and adjust the system settings to your preference.

NUMBER button

* Not functional

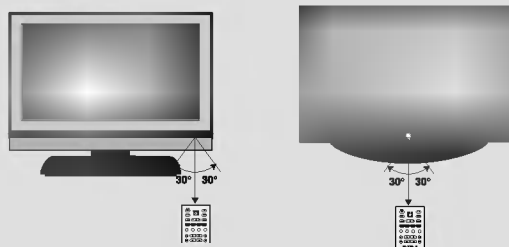
FCR Scroll through the programmed Favorite channels.

Installing Batteries



- Open the battery compartment cover on the back side and install the batteries matching correct polarity (+with +,-with -).
- Install two 1.5V AA batteries. Don't mix old or used batteries with new ones.
- Close cover.

Remote control effective range

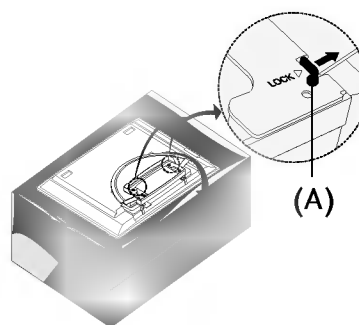


- Use a remote control up to 7 meters distance and 30 degree (left/right) within the receiving unit scope.
- Dispose of used batteries in a recycle bin to preserve environment.

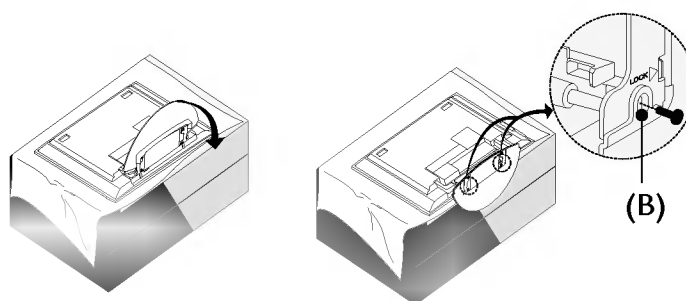
INSTALLATION

UNFOLDING THE STAND BASE (For 42PC3RV*)

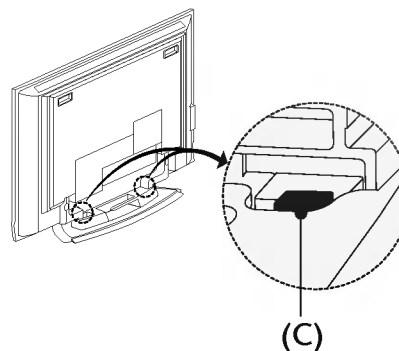
- Place the set with the screen facing down on a cushion or soft cloth as shown.
Before unfolding the stand, please make sure two locks (A) on the bottom of the stand push outward.



- Pull the stand out as shown.
After unfolding the stand, please insert and tighten the screws (provided as parts of the product) in the holes (B) on the bottom of the stand.



- When connecting cables to the set, Do not disengage the lock (C).
This may cause the set to fall, causing serious bodily injury and serious damage to the set.

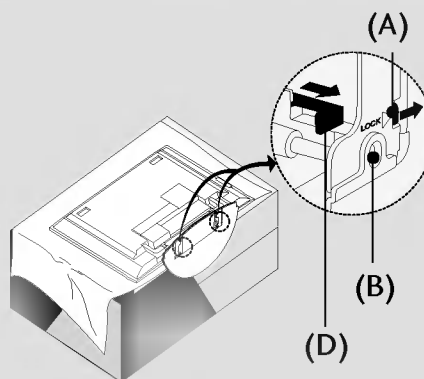


● NOTE

Image shown here may be slightly different from your set.

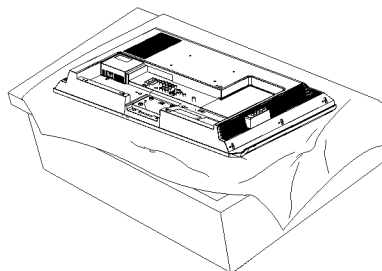
► When closing the stand for storage

- First remove the screws in the holes (B) on the bottom of the stand. And then pull two Hooks (D) of the stand bottom and fold the stand into the back of the set.
- After folding, push the two Locks (A) of the stand bottom outward.

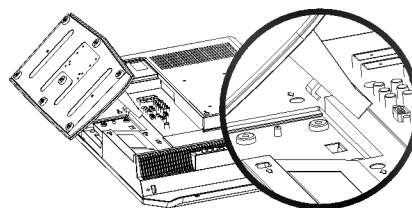


STAND INSTALLATION (For 32LC2R*)

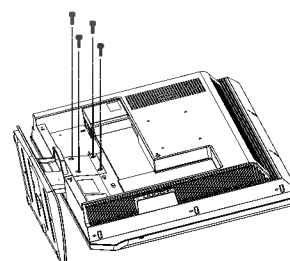
- 1 Carefully place the product screen side down on a cushioned surface that will protect product and screen from damage.



- 2 Place the product stand on the product as shown.



- 3 Install the 4 bolts securely, in the back of the product in the holes provided.

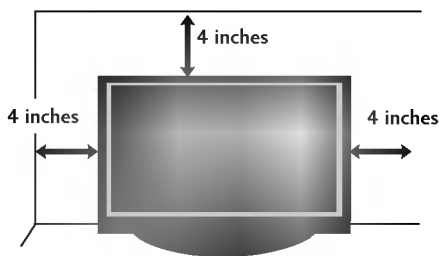


INSTALLATION

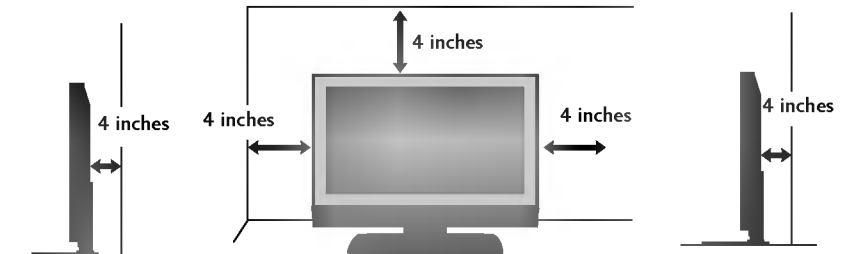
DESKTOP PEDESTAL INSTALLATION

For proper ventilation, allow a clearance of 4 inches on each side from the wall.

42PC3RV*



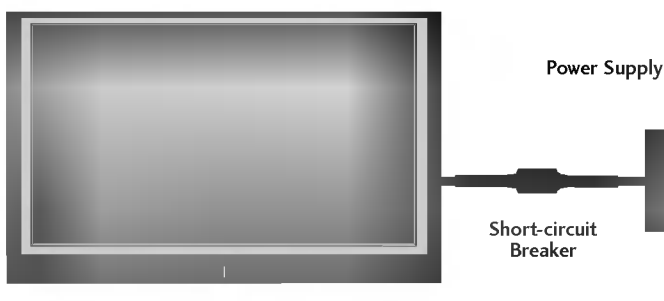
26/32LC2R*



▲ CAUTION

- Ensure adequate ventilation by following the clearance recommendations.

- Here shown may be somewhat different from your TV.



GROUNDING

Ensure that you connect the earth ground wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

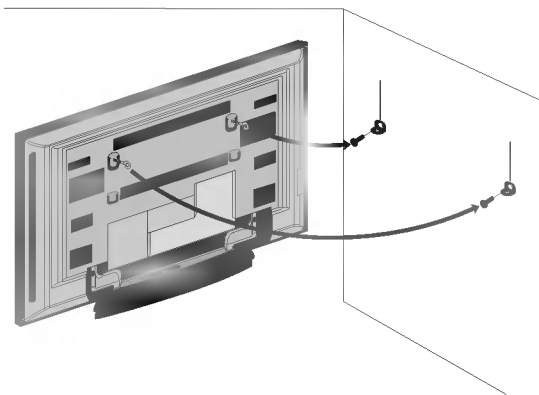
Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.

ATTACHING THE TV TO A WALL

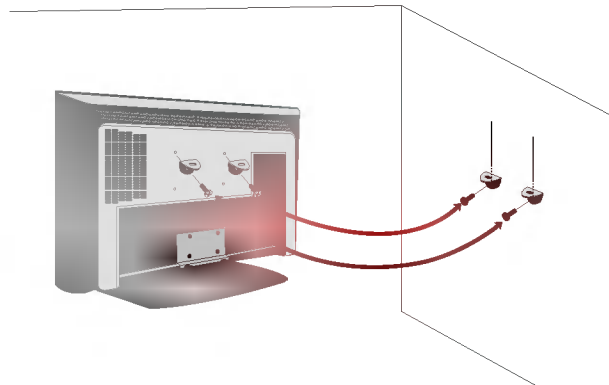
We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards. Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

Caution: Please make sure that children don't climb on or hang from the TV.

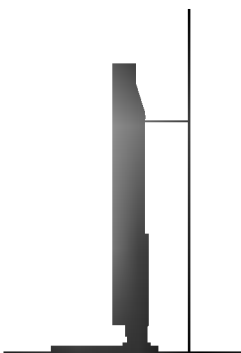
42PC3RV*



26LC2R*/32LC2R*



- Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
 - * If your product has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the bolts.
- Secure the wall brackets with the bolts (not provided as parts of the product, must purchase separately) on the wall. Match the height of the bracket that is mounted on the wall to the holes in the product.
- Ensure the eye-bolts or brackets are tightened securely.



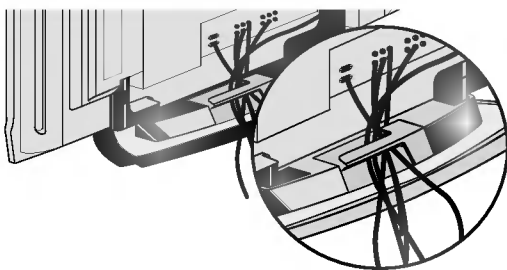
- Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

INSTALLATION

BASIC CONNECTION (For 42PC3RV*)

- Connect the cables as necessary.
After connecting the cables neatly, arrange the cables to the Cable Holder.
To connect an additional equipment, see the **Connections & Setup** section.

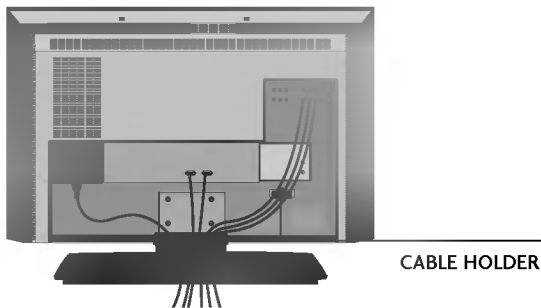
- Arrange the cable as shown.



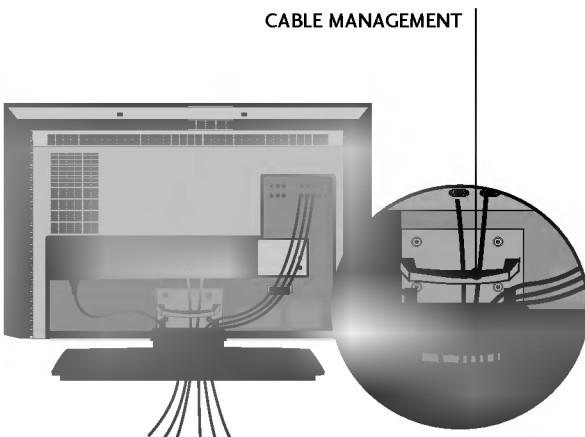
WIRE ARRANGEMENT (Only 26/32LC2R*)

This function explains the features available on the 26/32LC2R*.

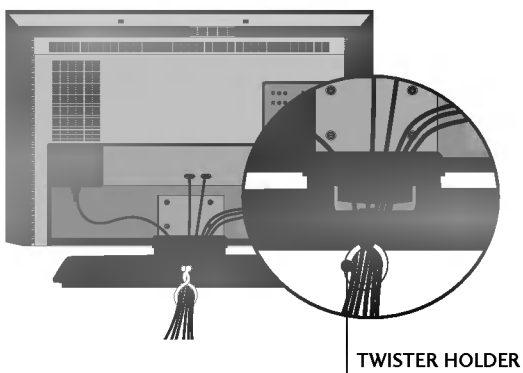
- Connect the cables as necessary.
After connecting the cables neatly, arrange the cables to the Cable Holder.
To connect an additional equipment, see the **External equipment Connections** section.



- Install the **CABLE MANAGEMENT** as shown.

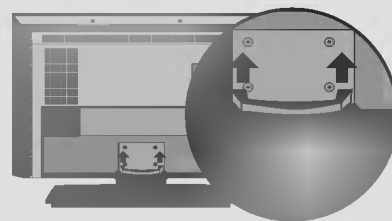


- Bundle the cables using the supplied twister holder.



How to remove the CABLE MANAGEMENT

- Hold the **CABLE MANAGEMENT** with both hands and pull it upward.



● NOTE

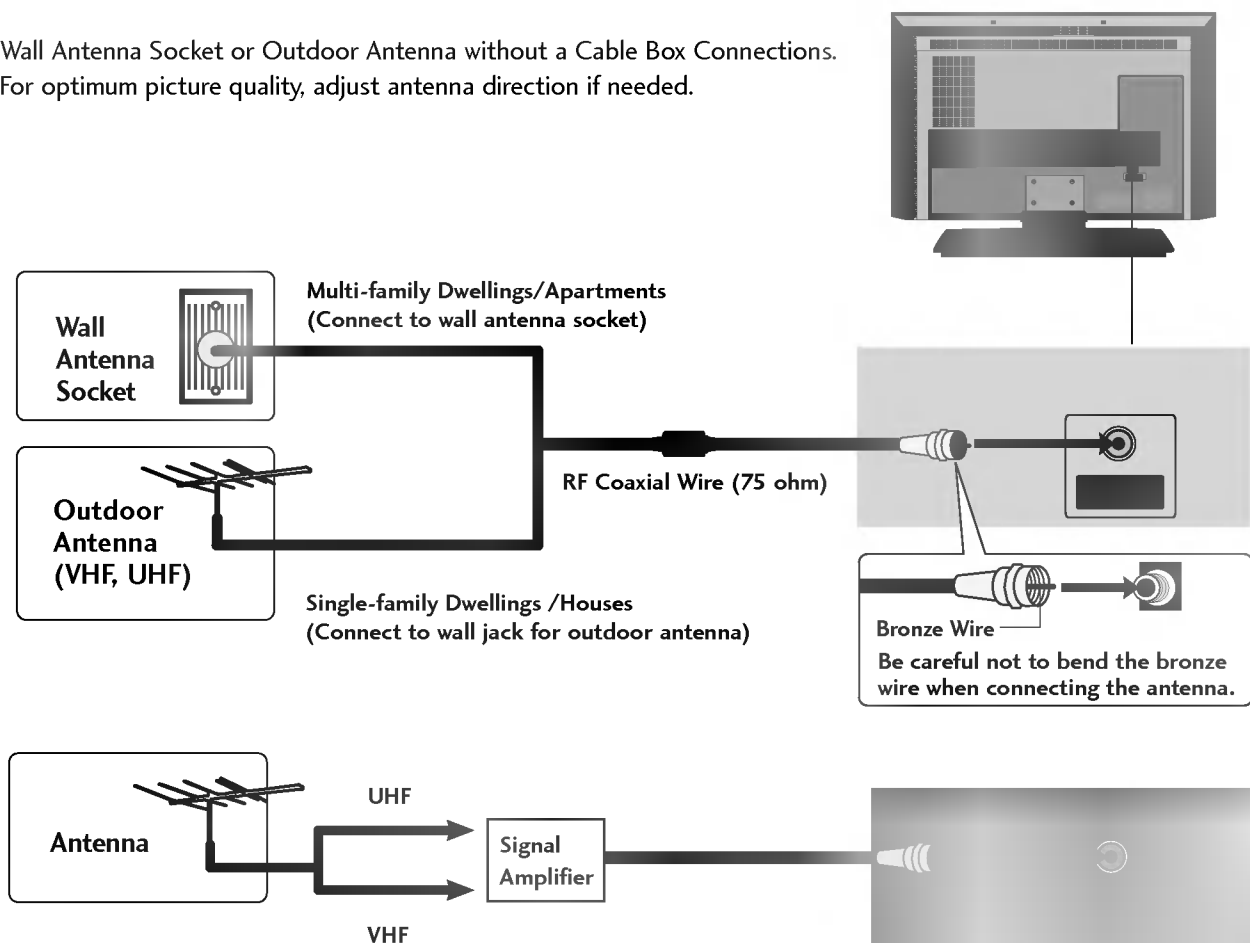
- Do not hold the **CABLE MANAGEMENT** when moving the product.
- If the product is dropped, you may be injured or the product may be broken.

CONNECTIONS & SETUP

'Connections & Setup' part explains the features available on the 26/32LC2R*.

ANTENNA CONNECTION

Wall Antenna Socket or Outdoor Antenna without a Cable Box Connections.
For optimum picture quality, adjust antenna direction if needed.



- To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- If the antenna is not installed properly, contact your dealer for assistance.

● NOTE

- The TV will let you know when the analog, cable, and digital channel scans are complete.

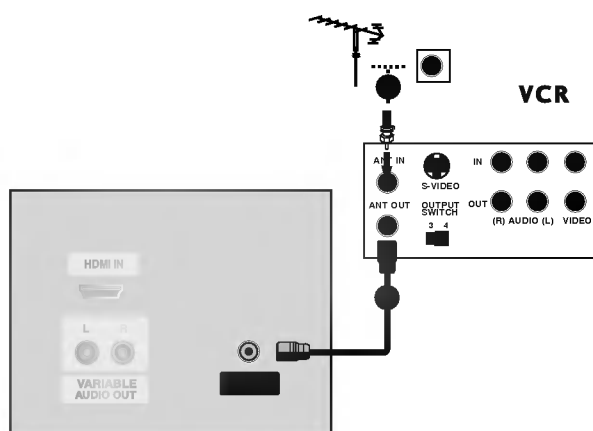
VCR SETUP

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV
- If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen. This phenomenon is common to all manufactures and in consequence the manufactures warranty does not cover the product bearing this phenomenon.

When connecting with an antenna

1. How to connect

- Connect the RF antenna out socket of the VCR to the **Antenna** socket on the set.
- Connect the antenna cable to the RF antenna in socket of the VCR.



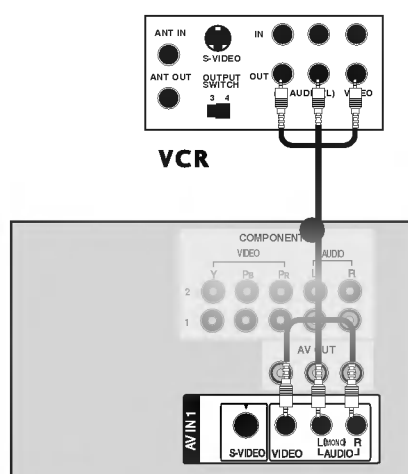
2. How to use

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

1. How to connect

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



2. How to use

- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select **AV** or **AV1** input source with using the **INPUT** button on the remote control.
- If connected to **AV IN2**, select **AV2** input source. (For 26/32LC2R*)

● NOTE

- If you have a mono VCR, connect the audio cable from the VCR to the **AUDIO L/MONO** jack of the set.

VCR SETUP

When connecting with an S-Video cable

1. How to connect

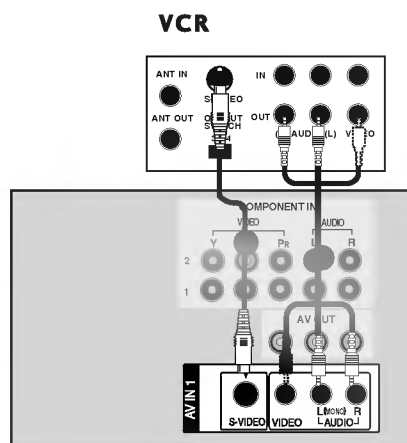
- Connect the **S-VIDEO** output of the VCR to the **S-VIDEO** input on the set.
- Connect the audio outputs of the VCR to the **AUDIO** input jacks on the set.

2. How to use

- Insert a video tape into the VCR and press **PLAY** on the VCR. (Refer to the VCR owner's manual.)
- Select **AV** or **AV1** input source with using the **INPUT** button on the remote control.

● NOTE

- ▶ The picture quality is improved: compared to normal composite (RCA cable) input.



▲ CAUTION

- ▶ Do not connect to both Video and S-Video at the same time. In the event that you connect both Video and the S-Video cables, only the S-Video will work.

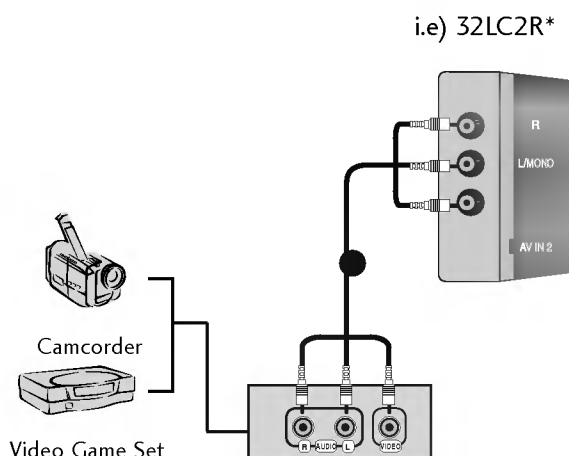
EXTERNAL EQUIPMENT CONNECTIONS

1. How to connect

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

2. How to use (Some models)

- Select **AV2** input source with using the **INPUT** button on the remote control.
- If connected to **AV IN1** (or **AV IN**) input, select **AV1** (or **AV**) input source.
- Operate the corresponding external equipment.

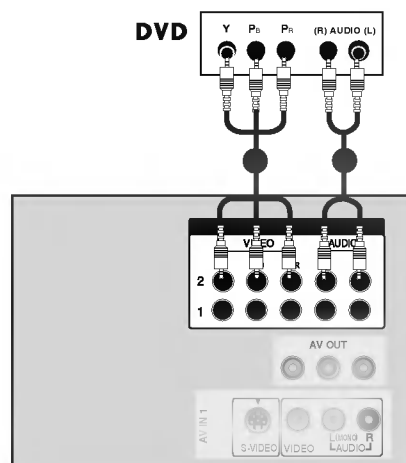


DVD SETUP

When connecting with a component cable

1. How to connect

- Connect the video outputs (Y, Pb, Pr) of the DVD to the **COMPONENT IN VIDEO2** jacks on the set.
Match the jack colors (Y = green, Pb = blue, and Pr = red).
- Connect the audio outputs of the DVD to the **COMPONENT IN AUDIO2** jacks on the set.



2. How to use

- Turn on the DVD player, insert a DVD.
- Select **Component 2** input source with using the **INPUT** button on the remote control.
- If connected to **COMPONENT IN 1** input, select **Component 1** input source.
- Refer to the DVD player's manual for operating instructions.

● NOTE

Component Input ports

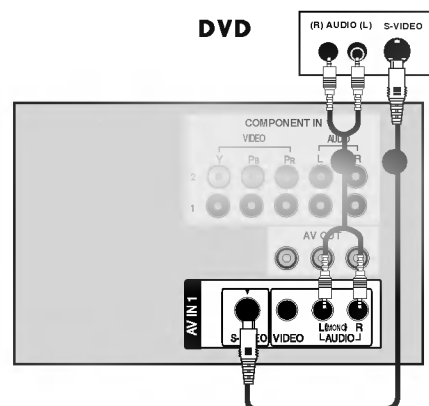
To get better picture quality, connect a DVD player to the component input ports as shown.

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

When connecting with a S-Video cable

1. How to connect

- Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the set.
- Connect the audio outputs of the DVD to the **AUDIO** input jacks on the set.



2. How to use

- Turn on the DVD player, insert a DVD.
- Select **AV** or **AV1** input source with using the **INPUT** button on the remote control.
- Refer to the DVD player's manual for operating instructions.

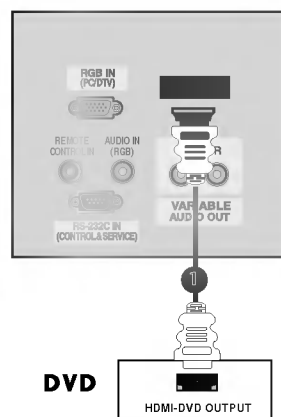
CONNECTIONS & SETUP

When connecting with a HDMI cable

1. How to connect

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

- No separated audio connection is necessary.



2. How to use

- Select **HDMI** input source with using the **INPUT** button on the remote control.
- Refer to the DVD player's manual for operating instructions.

● NOTE

- ▶ If the DVD supports Auto HDMI function, the DVD output resolution will be automatically set to 1280x720p.
- ▶ If the DVD does not support Auto HDMI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the DVD to 1280x720p.

EXTERNAL STEREO

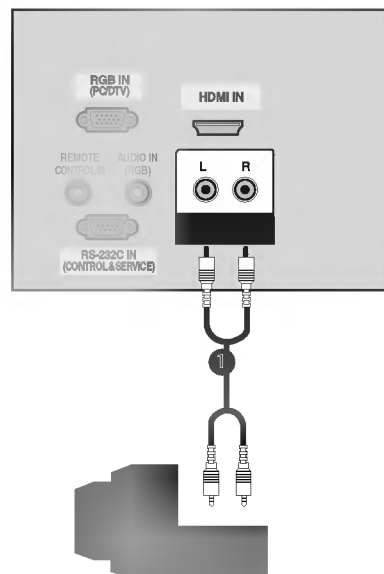
Use to connected either an external amplifier, or add a sub-woofer to your surround sound system.

1. How to connect

- Connect the input jack of the stereos amplifier to the **VARIABLE AUDIO OUT** jacks on the set.
- Set up your speakers through your analog stereo amplifier, according to the instructions provided with the amplifier.

● NOTE

- ▶ When connecting with external audio equipments, such as amplifiers or speakers, please turn the TV speakers off. (▶ p.50)



HDSTB SETUP

When connecting with a component cable

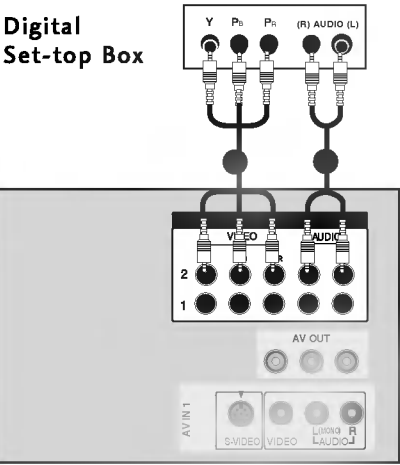
1. How to connect

- Connect the video outputs (Y, PB, PR) of the digital set top box to the **COMPONENT IN VIDEO2** jacks on the set. Match the jack colors (Y = green, PB = blue, and PR = red).
- Connect the audio output of the digital set-top box to the **COMPONENT IN AUDIO2** jacks on the set.

2. How to use

- Turn on the digital set-top box.
(Refer to the owner’s manual for the digital set-top box.)
- Select **Component 2** input source with using the **INPUT** button on the remote control.
- If connected to **COMPONENT IN1** input, select **Component 1** input source.

480i	Yes	No
480p/720p/1080i	Yes	Yes



When connecting with a HDMI to DVI cable

1. How to connect

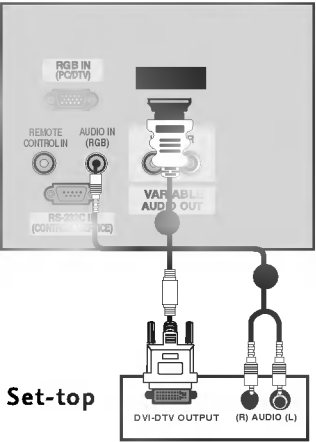
- Connect the DVI output of the digital set-top box to the **HDMI IN** jack on the set.
- Connect the audio output of the digital set-top box to the **AUDIO IN (RGB)** jack on the set.

2. How to use

- Turn on the digital set-top box. (Refer to the owner’s manual for the digital set-top box.)
- Select **HDMI** input source with using the **INPUT** button on the remote control.

● NOTE

- ▶ If the digital set-top box supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- ▶ If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the source device to 1280x720p.



CONNECTIONS & SETUP

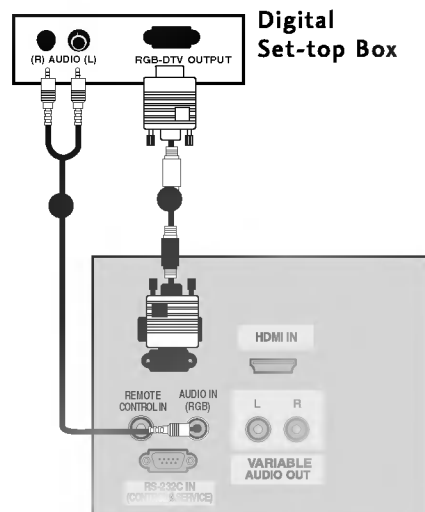
When connecting with a D-sub 15 pin cable

1. How to connect

- Connect the RGB output of the digital set-top box to the **RGB IN (PC/DTV)** jack on the set.
- Connect the audio outputs of the set-top box to the **AUDIO IN (RGB)** jack on the set.

2. How to use

- Turn on the digital set-top box.
(Refer to the owner's manual for the digital set-top box.)
- Select **RGB-DTV** input source with using the **INPUT** button on the remote control.



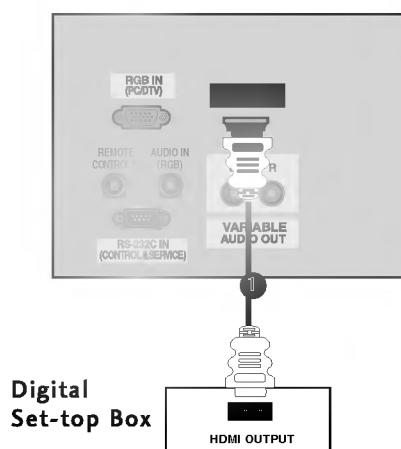
When connecting with a HDMI cable

1. How to connect

- Connect the digital set-top box to **HDMI IN** jack on the set.
- No separated audio connection is necessary.

2. How to use

- Turn on the digital set-top box.
(Refer to the owner's manual for the digital set-top box.)
- Select **HDMI** input source with using the **INPUT** button on the remote control.



● NOTE

- ▶ If the digital set-top box supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- ▶ If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriately.
To get the best picture quality, adjust the output resolution of the source device to 1280x720p.

PC SETUP

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

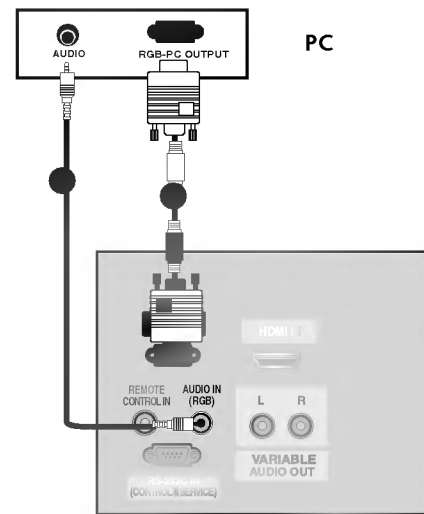
When connecting with a D-sub 15 pin cable

1. How to connect

- Connect the RGB output of the PC to the **RGB IN (PC/DTV)** jack on the set.
- Connect the PC audio output to the **AUDIO IN (RGB)** jack on the set.

2. How to use

- Turn on the PC and the set.
- Select **RGB-PC** input source with using the **INPUT** button on the remote control.



● NOTE

- Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the VIDEO menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.

CONNECTIONS & SETUP

● NOTE

- ▶ To get the the best picture quality, adjust the PC graphics card to 640x480, 60Hz (42PC3RV*) /1360x768, 60Hz (26/32LC2R*).
- ▶ Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- ▶ When Source Devices connected with HDMI Input, output TV SET Resolution (480p, 720p, 1080i) and TV SET Display fit EIA/CEA-861-B Specification to Screen. If not, refer to the Manual of HDMI Source Devices or contact your service center.
- ▶ If the HDMI Source Device is not connected to the Cable or if there is a poor cable connection, "No signal" is displayed in the HDMI Input. In this case, that Video Resolution is not supported.
- ▶ Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- ▶ The synchronization input form for Horizontal and Vertical frequencies is separate.
- ▶ When you use too long RGB-PC cable, there might be a noise on the screen. We recommend using under 5m of the cable. It provides the best picture quality.
- ▶ This set does not support HDMI-PC

Supported Display Resolution (RGB[PC] mode)
(26/32LC2R*)

640x350	31.5	70.1
720x400	31.5	70.1
640x480	31.5	59.9
800x600	37.9	60.3
1024x768	48.4	60.0
1280x768	47.8	59.9
1360x768	47.7	59.8
1366x768	47.7	59.8

Supported Display Resolution (RGB[PC] mode)
(42PC3RV*)

640x350	31.5	70.1
720x400	31.5	70.1
640x480	31.5	59.9
848x480	31.5	60.0
852x480	31.5	60.0
800x600	37.9	60.3
1024x768	48.4	60.0

BASIC OPERATION

TURNING THE TV ON

- First, connect power cord correctly.
At this moment, the TV switches to standby mode.
- In standby mode to turn TV on, press the **⏻/I**, **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 switch on.

CHANNEL SELECTION

- Press the **CH +/-** or **NUMBER** buttons to select a channel number.

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

- Press the **VOL +/-** button to adjust the volume.
- If you want to switch the sound off, press the **MUTE** button.
- You can cancel the Mute function by pressing the **MUTE**, **VOL +/-** or **MTS** button.

● NOTE

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



BASIC OPERATION

ON-SCREEN MENUS 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 ▲ or ▼ button to select the **Special** menu.
-

- 2 Press the ► button and then use ▲ or ▼ button to select **Language**.
-

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

- 4 Press the **EXIT** button to return to TV viewing or press **MENU** to return to the previous menu.
-

SPECIAL FUNCTIONS | PIP / TWIN PICTURE

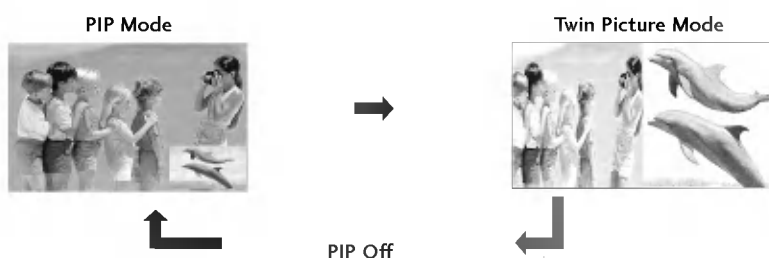
PIP lets you view 2 different inputs (sources) on your TV screen at the same time. One source will be large, and the other source will show a smaller inset image.

Twin Picture mode splits the screen into two images, allowing two picture sources to be shown on the TV screen at the same time. Each source is given half the screen.

PIP function is available in the Component, RGB, HDMI mode. (But, it can't adjust 480i resolution of Component/HDMI mode.)

Watching PIP/Twin Picture

Press the **PIP** button to access the sub picture.
Each press of PIP changes the PIP options as shown below.



TV Program Selection for PIP

- Use the **PIP CH +/-** button to select a channel for the sub picture.
The selected channel number is displayed just below the input source of main picture.

Selecting an Input Signal Source for PIP/Twin Picture

Use the **PIP INPUT** button to select the input source for the sub picture.
Each press of **PIP INPUT** button changes the PIP source.

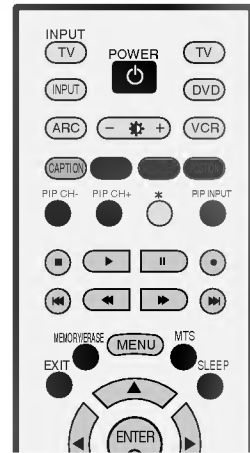
TV, AV1, and AV2	X
Component1, Component2, RGB, HDMI	TV, AV1, and AV2

SPECIAL FUNCTIONS | PIP / Twin Picture

Sub Picture Size Adjustment (PIP mode only)

Press the **SIZE** button to adjust the sub picture size.

With **SIZE** button in PIP mode, sub picture is adjusted.



Moving the Sub Picture (PIP mode only)

Press the **POSITION** button.

Repeatedly press the **POSITION** button then sub picture moves.

TV MENU

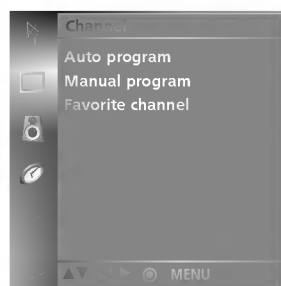
ON SCREEN MENUS SELECTION AND ADJUSTMENT

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

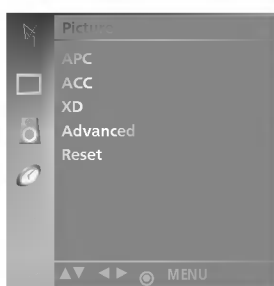
- Press the **MENU** button and then use ▲ or ▼ button to select the each menu.

- Press the ► button and then use ▲ ▼ ◀ ▶ button to display the available menus.

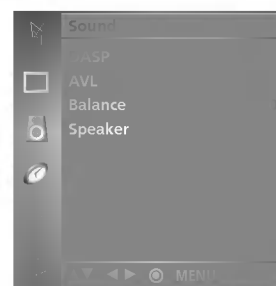
Channel menu



Picture menu



Sound menu

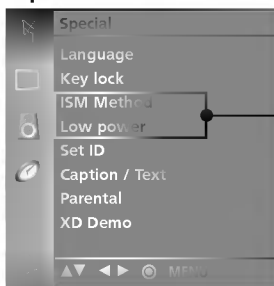


Screen menu



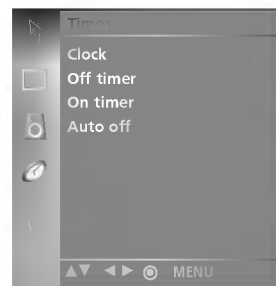
- VGA Mode: 42PC3RV*
- XGA Mode: 26/32LC2R*

Special menu



Only 42PC3RV* model

Timer menu



TV MENU | SETUP (CHANNEL)

AUTO PROGRAM: CHANNEL SEARCH

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 MANUAL PROGRAM.

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.

- 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

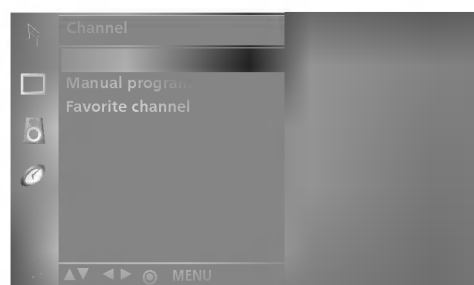
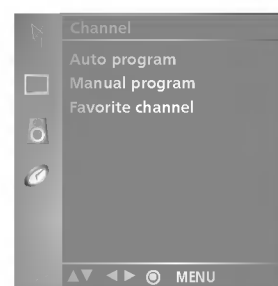
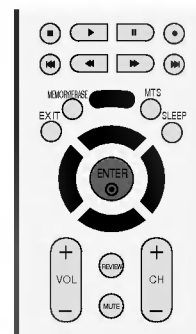
(For example, press 17 to go to the channel, press 17 again to go to the duplicated channel.)

- Press the **MENU** button and then ▲ or ▼ button to select the **Channel** menu.

- Press the ► button and then ▲ or ▼ button to select **Auto program**.

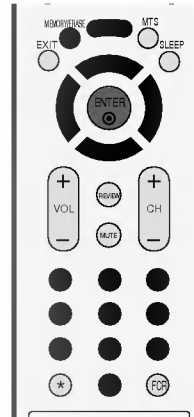
- Press the ► button. **Auto program** starts the channel search.

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



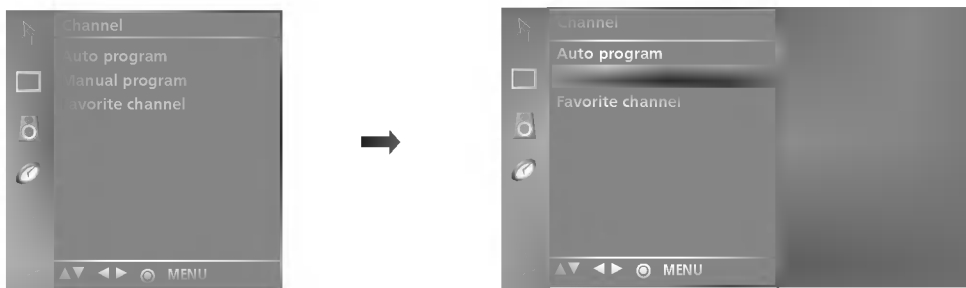
MANUAL PROGRAM: ADDING/DELETING CHANNELS

You can add or delete channels from the channel scan manually.



- Use the **CH-/+** or **NUMBER** buttons to select the channel number you want to add or delete.
- Press the **MEMORY/ERASE** button.
- Press the **MEMORY/ERASE** button to select **On** or **Off**.
- Press the **ENTER** button.

- You can also use the **Channel** menu to adjust **Manual program**.



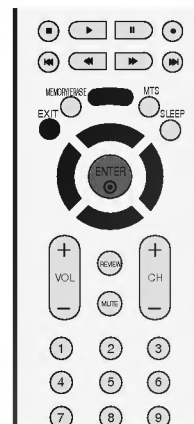
TV MENU | SETUP (CHANNEL)

FINE TUNING ADJUSTMENT

Normally fine tuning is only necessary if reception 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.



- Press the **MENU** button and then **▲** or **▼** button to select the **Channel** menu.

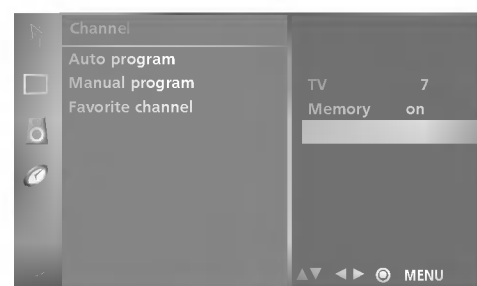
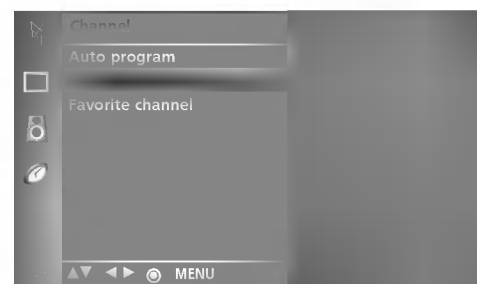
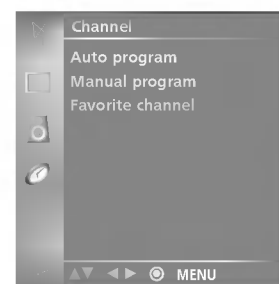
- Press the **▶** button and then **▲** or **▼** button to select **Manual program**.

- Press the **▶** button and then **▲** or **▼** button to select **Fine**.

- Press the **◀** or **▶** button to adjust the picture to your preference.

- Press the **ENTER** button to store it.

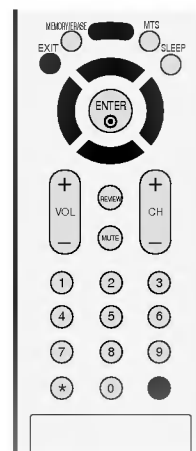
- Press the **EXIT** button to return to normal TV viewing.



FAVORITE CHANNELS SETUP

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 **FCR** (Favorite Channel Review) button repeatedly. The 8 favorite channels appear on the screen in numerical order.



- 1 Press the **MENU** button and then ▲ or ▼ button to select the **Channel** menu.

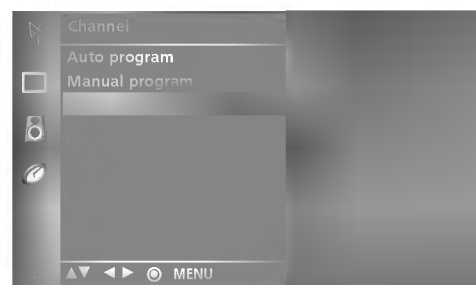
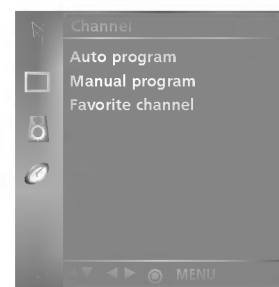
- 2 Press the ► button and then ▲ or ▼ button to select **Favorite Channel**.

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

- 4 Use the ◀ or ▶ button to set the desired channel number for first favorite channel.

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

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



TV MENU | PICTURE ADJUSTMENT

AUTO PICTURE CONTROL (APC)

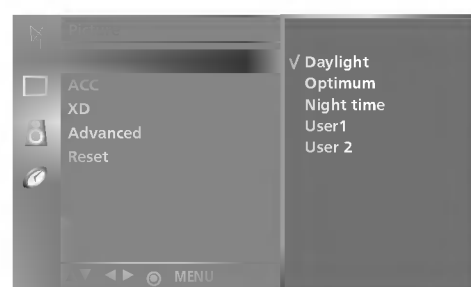
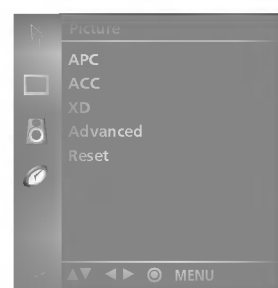
APC adjusts the TV for the best picture appearance. Select the preset value in the APC menu based on the program category.

Daylight, Optimum, Night Time Settings are preset for optimum picture quality at the factory and are not adjustable.

In the **User1** and **User2** modes only, you can directly adjust the contrast, brightness, color, sharpness, tint.



- Press the **MENU** button and then ▲ or ▼ button to select the **Picture** menu.
- Press the ► button and then ▲ or ▼ button to select **APC**.
- Press the ► button and then ▲ or ▼ button to select **Daylight, Optimum, Night time, User1** or **User2**.
- Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

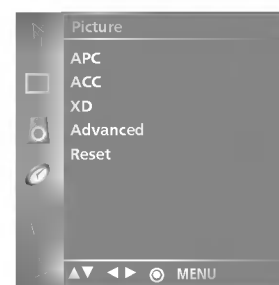


MANUAL PICTURE CONTROL (APC-USER OPTION)

Adjust the picture appearance to suit your preference and viewing situations.



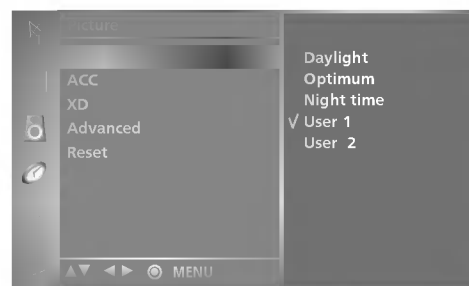
- Press the **MENU** button and then **▲** or **▼** button to select the **Picture** menu.



- Press the **▶** button and then **▲** or **▼** button to select **APC**.

- Press the **▶** button and then **▲** or **▼** button to select **User 1** or **User 2**.

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

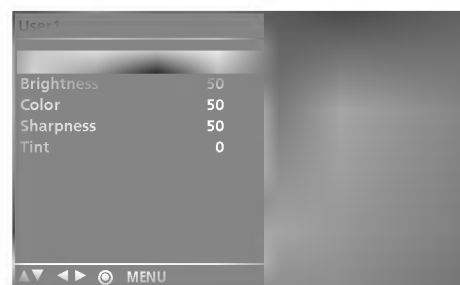


- Press the **▶** button and then **◀** or **▶** button to make appropriate adjustments.

- Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

● NOTE

- ▶ In RGB-PC mode, you can't adjust color, sharpness and tint to the levels you prefer.



TV MENU | PICTURE ADJUSTMENT

AUTO COLOR TEMPERATURE CONTROL (ACC)

Choose one of three automatic color adjustments. Set to warm to enhance hotter colors such as red, or set to cool to see less intense colors with more blue.

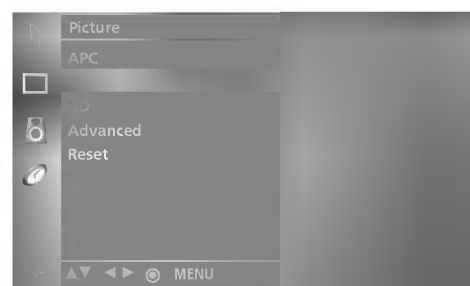
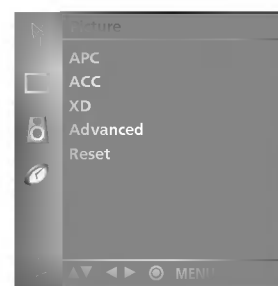


● Press the **MENU** button and then ▲ or ▼ button to select the **Picture** menu.

● Press the ► button and then ▲ or ▼ button to select **ACC**.

● Press the ► button and then ▲ or ▼ button to select either **Cool**, **Normal**, **Warm**, or **User**.

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



MANUAL COLOR TEMPERATURE CONTROL (ACC - USER OPTION)

You can also adjust the detailed settings (Red, Green, Blue) by selecting the **user** menu.

● Press the **MENU** button and then ▲ or ▼ button to select the **Picture** menu.

● Press the ► button and then ▲ or ▼ button to select **ACC**.

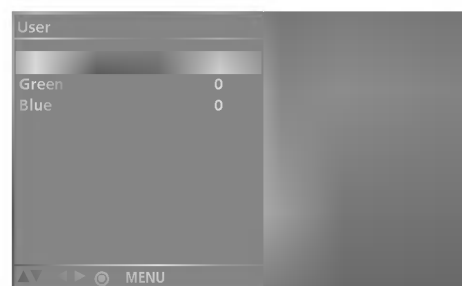
● Press the ► button and then ▲ or ▼ button to select **User**.

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

● Press the ► button and then ◀ or ▶ button to make appropriate adjustments.

- The adjustment range of **RGB**, **Green**, or **Blue** is -30~+30.

● Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.



TV MENU | PICTURE ADJUSTMENT

XD

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

When selecting APC options (Daylight, Optimum and Night time), XD is automatically changed to Auto.

When selecting APC options (User 1 and User 2), you can choose the Auto / Manual.

When selecting the Manual, you can adjust the XD Contrast, XD color and XD Noise.

It's not available to use this function in RGB-PC mode.



- Press the **MENU** button and then use ▲ or ▼ button to select the **Picture** menu.

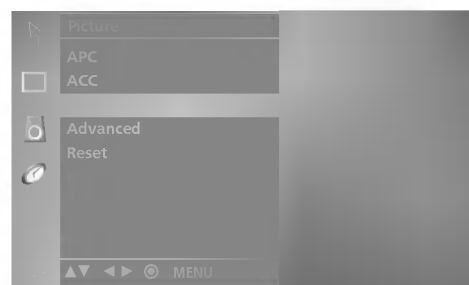
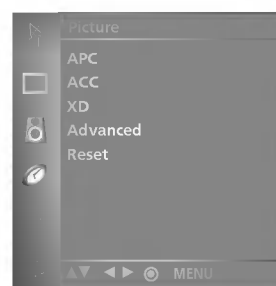
- Press the ► button and then use ▲ or ▼ button to select **XD**.

- Press the ► button and then use ▲ or ▼ button to select **Auto** or **Manual**.

Selecting the Manual

- Press the ► button and then use ▲ or ▼ button to select **XD Contrast**, **XD Color** or **XD NR (Noise)**.
 - **XD Contrast:** Optimizing the contrast automatically according to the brightness of the reflection.
 - **XD Color:** Adjusting the colors of the reflection automatically to reproduce as closely as possible to the natural colors.
 - **XD NR (Noise) :** Removing the noise up to the point where it does not damage the original picture.
- Press the ► button and then ▲ or ▼ button to select **On** or **Off**.

- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



ADVANCED-CINEMA MODE SETUP

Set up the TV for the best picture appearance for viewing movies.

When you operate Cinema (3:2 Pull-Down Mode or Cinema Correction Mode), the TV will adjust 24 fps video from movies to 30 fps video for display.

This feature operates only in Analog TV, AV and Component 480i mode.

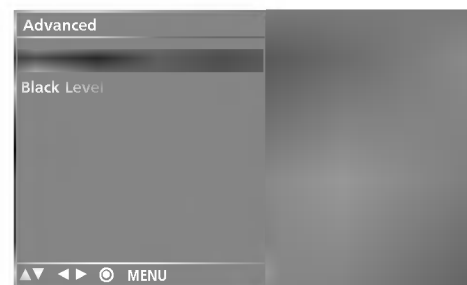
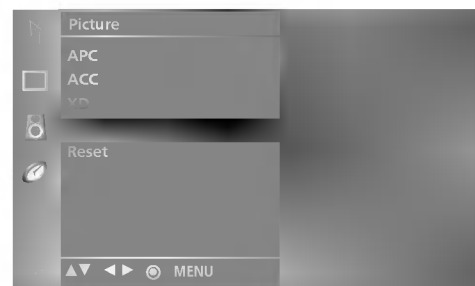
● Press the **MENU** button and then ▲ or ▼ button to select the **Picture** menu.

● Press the ► button and then ▲ or ▼ button to select **Advanced**.

● Press the ► button and then ▲ or ▼ button to select **Cinema**.

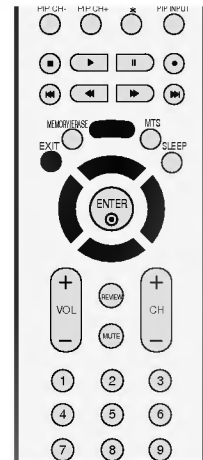
● Press the ► button and then ▲ or ▼ button to select **On** or **Off**.

● Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.



RESET

Use to quickly reset all the Picture menu options to their original factory preset values.

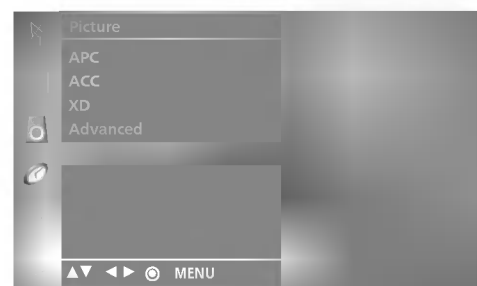
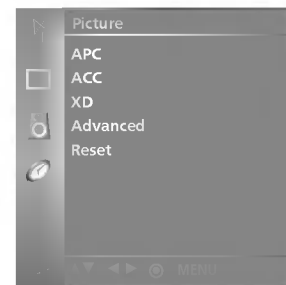


● Press the **MENU** button and then ▲ or ▼ button to select the **Picture** menu.

● Press the ► button and then ▲ or ▼ button to select **Reset**.

● Press the ► button to initialize the adjusted value.

- Returns to the default settings APC, ACC, XD, Advanced at the factory.



TV MENU | AUDIO ADJUSTMENT

DIGITAL AUTO SOUND PROCESSING (DASP)

You can select your preferred sound setting; Surround Max, Flat, Music, Movie or Sports and you can also adjust the sound frequency of the equalizer.

DASP lets you enjoy the best sound without any special adjustment because the TV sets the appropriate sound options based on the program content.

Surround MAX, Flat, Music, Movie, and Sports are preset for good sound quality at the factory and are not adjustable.



Surround MAX Select this option to sound realistic.

Flat The most commanding and natural audio.

Music Select this option to enjoy the original sound when listening to the music.

Movie Select this option to enjoy sublime sound.

Sports Select this option to watch sports broadcasting.

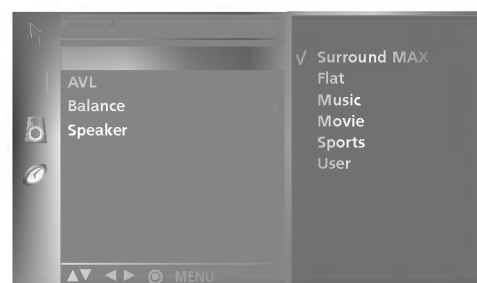
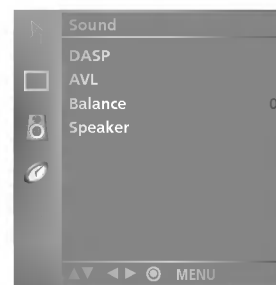
User Select this option to use the user-defined audio settings.

● Press the **MENU** button and then ▲ or ▼ button to select the **Sound** menu.

● Press the ► button and then ▲ or ▼ button to select **DASP**.

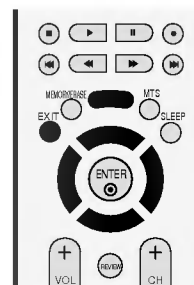
● Press the ► button and then ▲ or ▼ button to select **Surround MAX, Flat, Music, Movie, Sports** or **User**.

● Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.



SOUND FREQUENCY ADJUSTMENT (DASP - USER OPTION)

Adjust the sound equalizer.



- Press the **MENU** button and then ▲ or ▼ button to select the **Sound** menu.

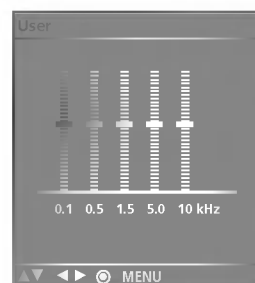
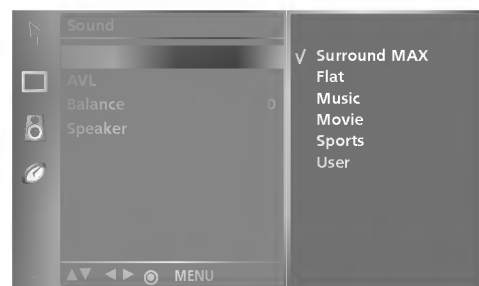
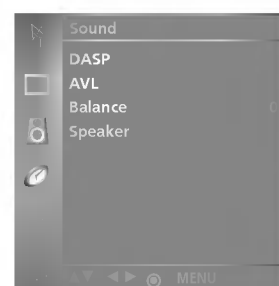
- Press the ► button and then ▲ or ▼ button to select **DASP**.

- Press the ► button and then ▲ or ▼ button to select **User**.

- Press the ► button.

- Select a sound band by pressing the ◀ or ▶ button.
Make appropriate sound level with the ▲ or ▼ button.

- Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

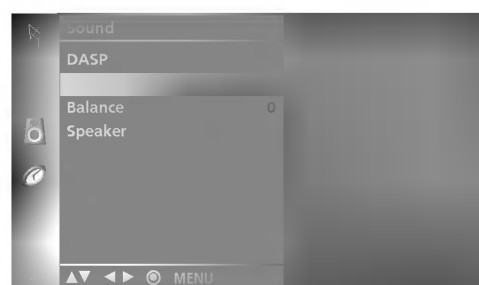
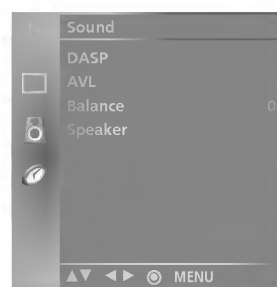


TV MENU | AUDIO ADJUSTMENT

AUTO VOLUME LEVELER (AVL)

AVL automatically keeps on an equal volume level even if you change program.

- Press the **MENU** button and then ▲ or ▼ button to select the **Sound** menu.
- Press the ► button and then ▲ or ▼ button to select **AVL**.
- Press the ► button and then ▲ or ▼ button to select **On** or **Off**.
- Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

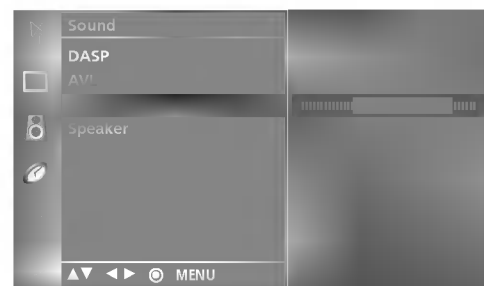
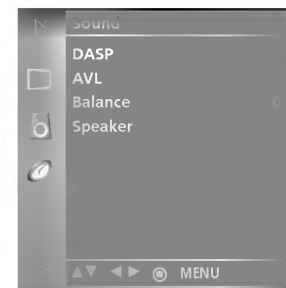


BALANCE ADJUSTMENT

Adjust the left/right sound of speaker to suit your taste and room situations.



- Press the **MENU** button and then ▲ or ▼ button to select the **Sound** menu.
- Press the ► button and then ▲ or ▼ button to select **Balance**.
- Press the ► button and then ◀ or ▶ button to make desired adjustment.
- Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.



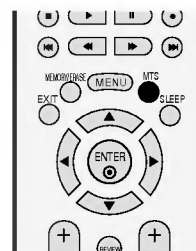
STEREO/SAP BROADCASTS SETUP

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.



- Use the **MTS** button to select your desired MTS mode in analog signal. Each time you press the **MTS** button, **Mono**, **Stereo**, or **SAP** appear in turn.

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

● NOTE

- ▶ 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.

TV MENU | TIME SETTING

AUTO CLOCK SETUP

The time is set automatically from a PBS channel signal.

The PBS channel signal includes information for the current time provided by the broadcasting station.

Set the clock manually if the current time is set incorrectly by the auto clock function.

- 1 Press the **MENU** button and then **▲** or **▼** button to select the **Timer** menu.

- 2 Press the **►** button and then **▲** or **▼** button to select **Clock**.

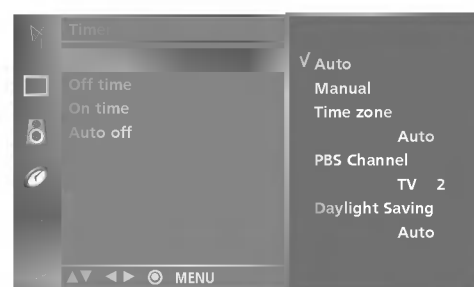
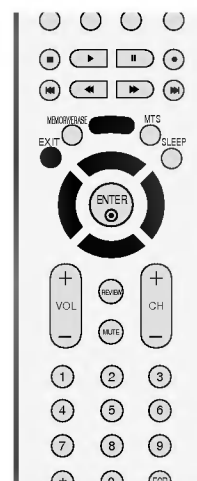
- 3 Press the **►** button and then use **▲** or **▼** button to select **Auto**.

- 4 Press the **►** button and then use **▲** or **▼** button to select your viewing area time zone. Your choices are: **Auto**, **Nfld** (Newfoundland), **Atlantic**, **E.S.T** (Eastern Standard Time), **C.S.T** (Central Standard Time), **M.S.T** (Mountain Standard Time), **P.S.T.** (Pacific Standard Time).

- 5 Press the **►** button and then use **▲** or **▼** button to set **PBS channel**.

- 6 Press the **►** button and then use **▲** or **▼** button to select **Auto**, **On**, **Off**, depending on whether or not your viewing area observes Daylight Saving time.

- 7 Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



MANUAL CLOCK SETUP

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

-
- Press the **MENU** button and then ▲ or ▼ button to select the **Timer** menu.
-

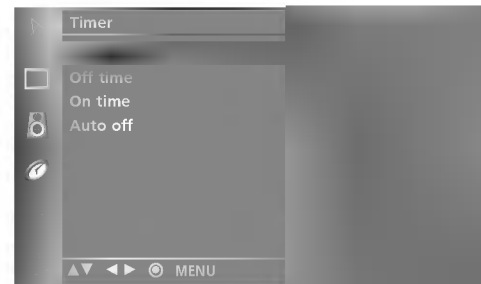
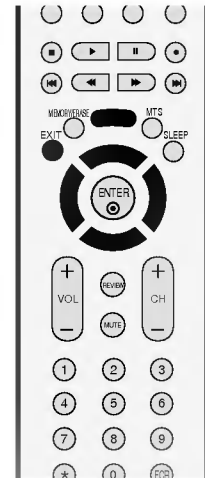
- Press the ► button and then ▲ or ▼ button to select **Clock**.
-

- Press the ► button and then use ▲ or ▼ button to select **Manual**.
-

- Press the ► button and then use ▲ or ▼ button to set the hour.
-

- Press the ► button and then use ▲ or ▼ button to set the minutes.
-

- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.
-



TV MENU | TIME SETTING

ON/OFF TIMER SETUP

The timer function operates only if the current time has been set.

The Off-Timer function overrides the On-Timer function if they are 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.

- Press the **MENU** button and then ▲ or ▼ button to select the **Timer** menu.

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

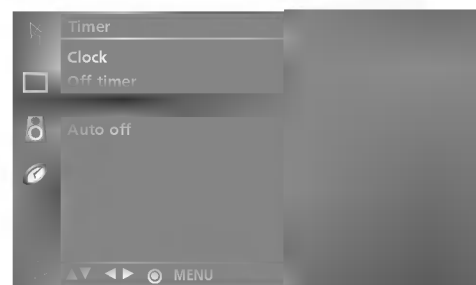
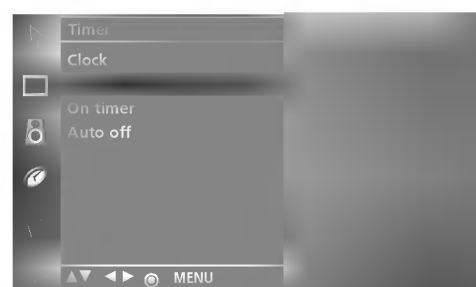
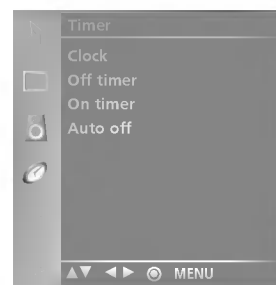
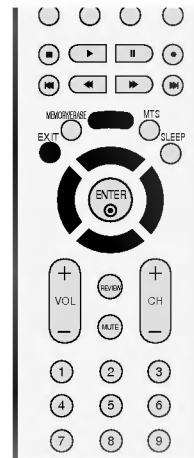
- Press the ► button and then use ▲ or ▼ button to select **On**.
 - To cancel the **On/Off timer** function, select **Off**.

- Press the ► button and then use ▲ or ▼ button to set the hour.

- Press the ► button and then use ▲ or ▼ button to set the minutes.

- **Only On timer**
 Press the ► button and then use ▲ or ▼ to set the sound level at turn-on.
 Press the ► button and then use ▲ or ▼ to select the channel at turn-on.

- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



AUTO OFF

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

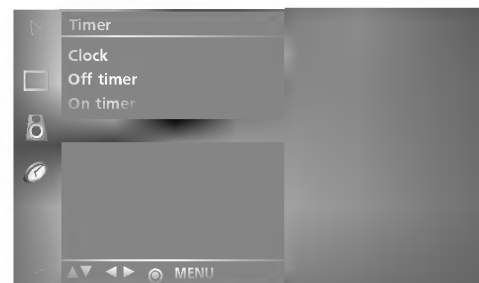
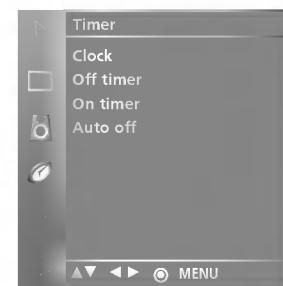


● Press the **MENU** button and then use ▲ or ▼ button to select the **Timer** menu.

● Press the ► button and then use ▲ or ▼ button to select **Auto Off**.

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

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.

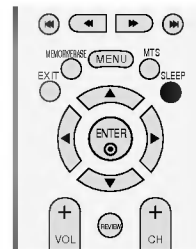


TV MENU | TIME SETTING

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.



- Press the **SLEEP** button repeatedly to select the number of 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.
- 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.
- To check the remaining minutes before the TV turns off, press the **SLEEP** button once.
- To cancel the Sleep Timer, press the **SLEEP** button repeatedly to select - - -.

TV MENU | SPECIAL FEATURES

KEY LOCK

The TV can be set so that the remote control is needed to control it.

This feature can be used to prevent unauthorized viewing by locking out the front panel controls.

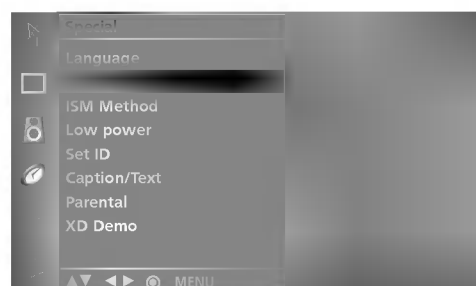
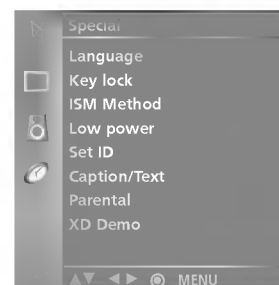
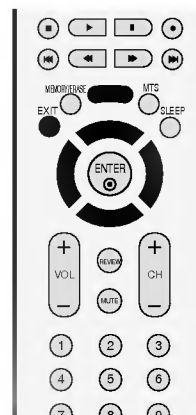
This TV is programmed to remember which option it was last set to even if you turn the set off.

● Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.

● Press the ► button and then use ▲ or ▼ button to select **Key lock**.

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

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



● NOTE

- ▶ In **Key lock 'On'**, if the set is turned off, press the **⏻ / I**, **INPUT**, **CH ▲ / ▼** button on the set or **POWER**, **INPUT**, **TV**, **CH +/-** or **NUMBER** buttons on the remote control.
- ▶ With the **Key lock On**, the display '**Key lock**' appears on the screen if any button on the front panel is pressed while viewing the set.

TV MENU | SPECIAL FEATURES

ISM (IMAGE STICKING MINIMIZATION) METHOD

- for 42PC3RV* only

A frozen still picture from a PC/video game displayed on the screen for prolonged periods will result in a ghost image. Use our unique method to minimize any fixed image on the screen.

● Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.

● Press the ► button and then use ▲ or ▼ button to select **ISM Method**.

● Press the ► button and then use ▲ or ▼ button to select either **Normal**, **White wash**, **Orbiter** or **Inversion**.

■ Normal

If image sticking is never a problem, ISM is not necessary - set to Normal.

■ White Wash

White Wash removes permanent images from the screen.

● NOTE

- An excessive permanent image may be impossible to clear entirely with White Wash. To return to normal viewing, press any button.

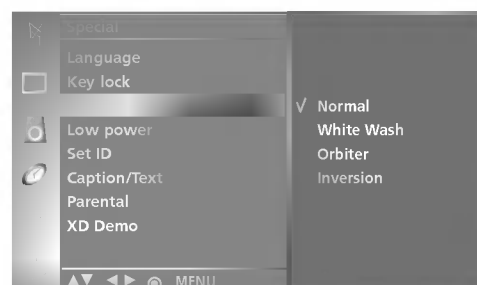
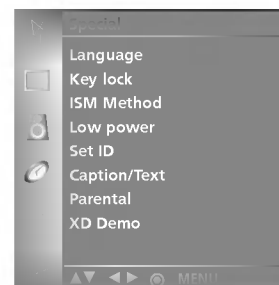
■ Orbiter

Orbiter may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the image will move once per 2 minutes.

■ Inversion

Inversion will automatically invert the plasma display panel color every 30 minutes.

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



LOW POWER

- for 42PC3RV* only

Low power reduces the plasma display power consumption.

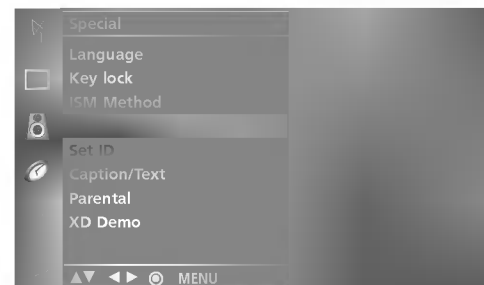
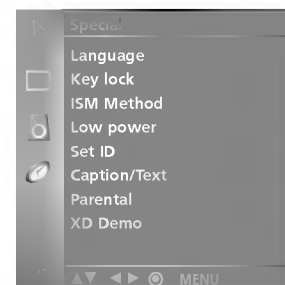
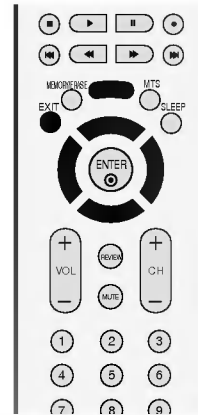
- Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.

- Press the ► button and then use ▲ or ▼ button to select **Low power**.

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

- When you select **On**, the screen darkens.

- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



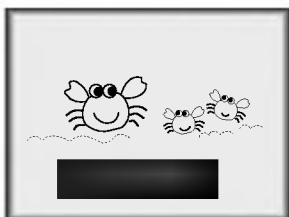
TV MENU | SPECIAL FEATURES

CLOSED CAPTIONS

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

Using Closed Captions

Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. It's 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 CC1 to CC4, you can choose which signal you view. CC1 is usually the signal with the captions, while another mode 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.

- Use the **CAPTION** button repeatedly to select your caption CC1 ~ CC 4, Text1 ~ Text4, Off.

- Press the **EXIT** button to return to TV viewing.

- You can also adjust **Caption/Text** in the **Special** menu.

XD DEMO

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

It's not available to use this function in RGB[PC] mode.

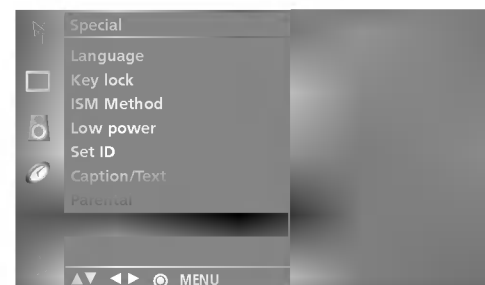
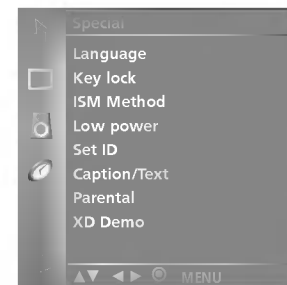


● Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.

● Press the ► button and then use ▲ or ▼ button to select **XD Demo**.

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

● To stop **XD Demo**, press the **MENU** button.



• XD Demo



TV MENU | LOCK ADJUSTMENT

Parental Control can be used to block specific channels, ratings and other viewing sources.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by choosing the type of the program and the categories. It is also possible to block all program viewing for a time period. To use this function, the following must be done :

1. Set ratings and categories to be blocked.
2. Specify a password
3. Enable the lock

V-Chip rating and categories

Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

Ratings for Television programs including made-for-TV movies :

- | | |
|---------------------------------------|----------------------------------|
| ■ TV-G (General audience) | ■ TV-MA (Mature audience only) |
| ■ TV-PG (Parental guidance suggested) | ■ TV-Y (All children) |
| ■ TV-14 (Parents strongly cautioned) | ■ TV-Y7 (Children 7 years older) |

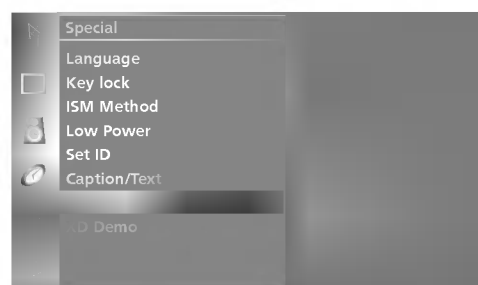
SETTING UP YOUR PASSWORD

Set up blocking schemes to block specific channels, ratings, and external viewing sources.

A password is required to gain access to this menu.

● Press the **MENU** button and then use **▲** or **▼** button to select the **Special** menu. Then, press the **►** button.

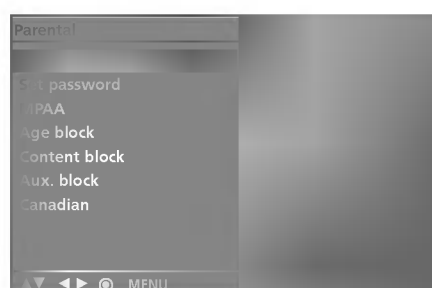
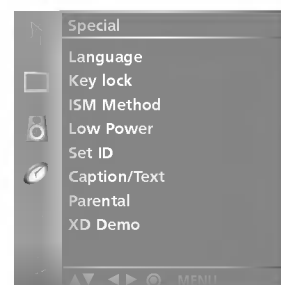
- Enter the password as requested.
- The TV is set up with the initial password "0-0-0-0".



LOCK SYSTEM

Enables or disables the blocking scheme you set up previously.

- Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.
- Press the ► button and then use the ▲ or ▼ button to select **Parental**.
- Press the ► button and then use the ▲ or ▼ button to select **Lock**.
- Press the ► button and then use the ▲ or ▼ button to select **On** or **Off**.
 - When you select **On**, the Lock System is enable.
- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



SET PASSWORD

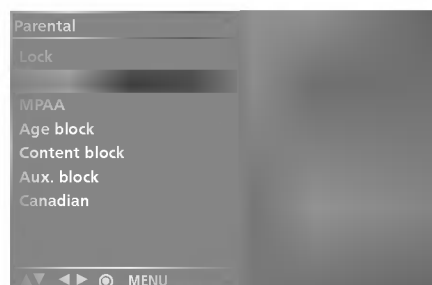
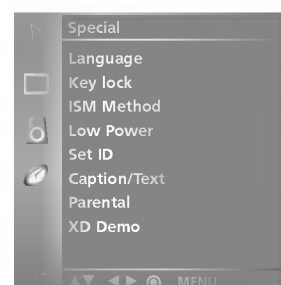
Change the password by inputting a new password twice.

- Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.
- Press the ► button and then use the ▲ or ▼ button to select **Parental**.
- Press the ► button and then use the ▲ or ▼ button to select **Set password**.
- Press the ► button and then choose any 4 digits for your new password.

As soon as the 4 digits are entered, re-enter the same 4 digits on the **Confirm**.

Then your changed password has been memorized.

- Press **EXIT** to return to TV viewing or press **MENU** to return to the previous menu.



NOTE

- If you ever forget your password, key in '7', '7', '7', '7' on the remote control.

TV MENU | LOCK ADJUSTMENT

MOVIE RATING (MPAA)

Blocks movies according to the movie ratings limits specified, so children cannot view certain movies. You can set the ratings limit by blocking out all the movies with the ratings above a specified level. Keep in mind that the movie ratings limit only applies to movies shown on TV, not TV programs, such as soap operas.

● Press the **MENU** button and then use **▲** or **▼** button to select the **Special** menu.

● Press the **►** button and then use the **▲** or **▼** button to select **Parental**.

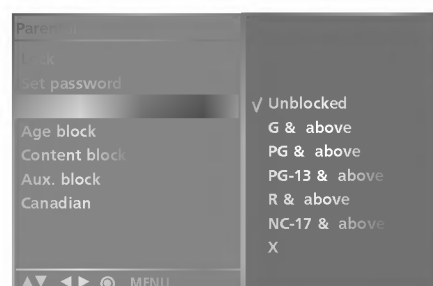
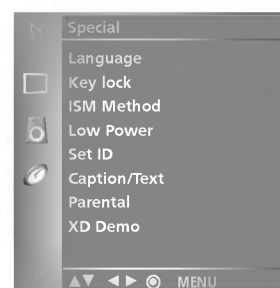
● Press the **►** button and then use the **▲** or **▼** button to select **MPAA**.

● Press the **►** button and then use the **▲** or **▼** button to select block options.

- Unblocked (Permits all programs)
- G & above (General audience)
- PG & above (Parental guidance suggested)
- PG-13 & above (Parents strongly cautioned)
- R & above (Restricted)
- NC-17 & above (No one 17 and under admitted)
- X (Adult only)

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

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



AGE BLOCK

TV Rating General

Based on the ratings, blocks certain TV programs that you and your family do not want to view.

TV Rating Children

Prevents children from watching certain children's TV programs, according to the ratings limit set. The children rating does not apply to other TV programs. Unless you block certain TV programs intended for mature audiences in the TV Rating - sub menu, your children can view those programs.

● Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.

● Press the ► button and then use the ▲ or ▼ button to select **Parental**.

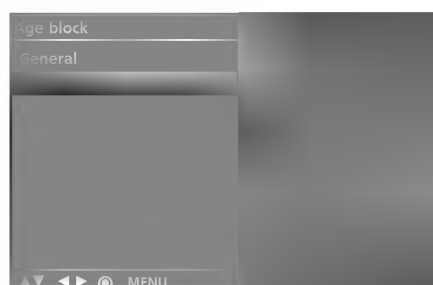
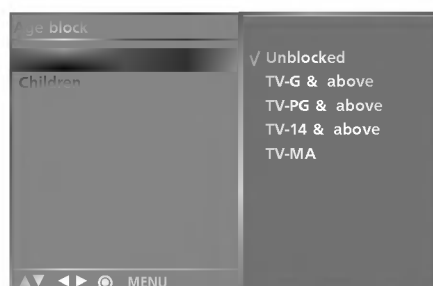
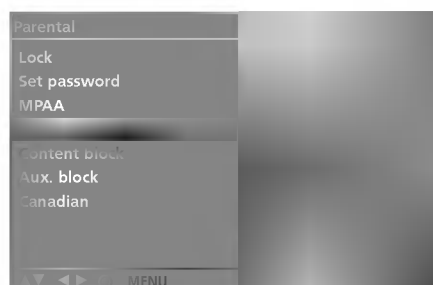
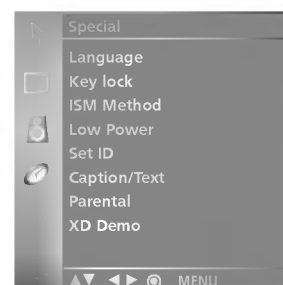
● Press the ► button and then use the ▲ or ▼ button to select **Age block**.

● Press the ► button and then use the ▲ or ▼ button to choose **General** or **Children**.

Press the ► button and then use the ▲ or ▼ button to select block options.

- Unblocked (Permits all programs)
- TV-G & above (General audience)
- TV-PG & above (Parental guidance suggested)
- PG-14 & above (14 years and older)
- TV-MA (Mature audience only)
- TV-Y & above (All children)
- TV-Y7 (Children 7 years older)

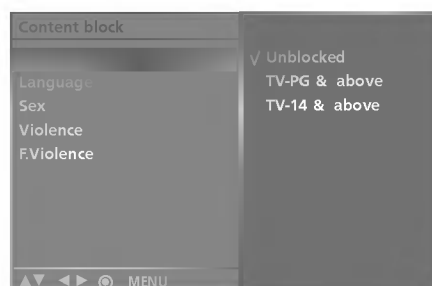
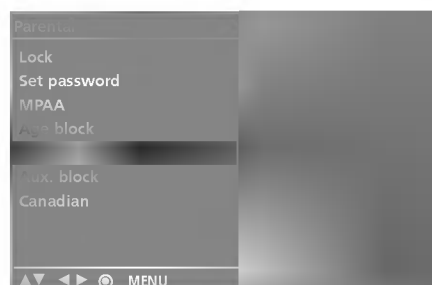
● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



TV MENU | LOCK ADJUSTMENT

CONTENT BLOCK

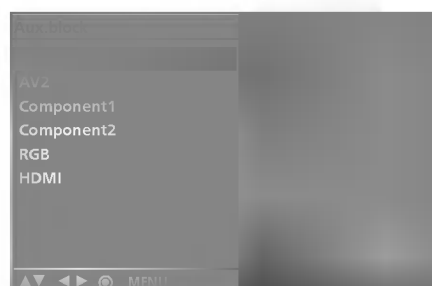
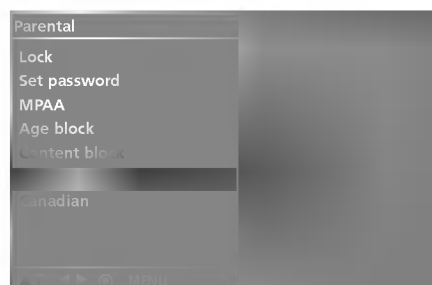
- Press the **MENU** button and then use **▲** or **▼** button to select the **Special** menu.
- Press the **►** button and then use the **▲** or **▼** button to select **Parental**.
- Press the **►** button and then use the **▲** or **▼** button to select **Content block**.
- Press the **►** button and then use the **▲** or **▼** button to select **Dialog, Language, Sex, Violence** or **F.Violence**. Press the **►** button and then use the **▲** or **▼** button to select block options.
 - Dialogue- sexual dialog (applies to TV-PG & above, TV-14 & above,)
 - Language- adult language (applies to TV-PG & above, TV-14 & above, TV-MA)
 - Sex- sexual situations (applies to TV-PG & above, TV-14 & above, TV-MA)
 - Violence (applies to TV-PG & above, TV-14 & above, TV-MA)
 - F.Violence-Fantasy Violence (applies to TV-Y7)
- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



AUX. BLOCK

Enables you to select a source to block from the external source devices you have hooked up.

- Press the **MENU** button and then use **▲** or **▼** button to select the **Special** menu.
- Press the **►** button and then use the **▲** or **▼** button to select **Parental**.
- Press the **►** button and then use the **▲** or **▼** button to select **Aux.Block**.
- Press the **►** button and then use the **▲** or **▼** button to select **AV1 -2, Component 1 -2, RGB** or **HDMI**.
- Press the **►** button and then use the **▲** or **▼** button to select **Unblocked** or **Blocked**.
- Press **EXIT** to return to TV viewing or press **MENU** to return to the previous menu.



CANADIAN

TV Rating English

Selecting canadian english language rating system.

TV Rating French

Selecting canadian french language rating system.

● Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.

● Press the ► button and then use the ▲ or ▼ button to select **Parental**.

● Press the ► button and then use the ▲ or ▼ button to select **Canadian**.

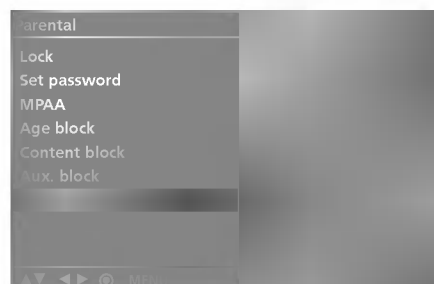
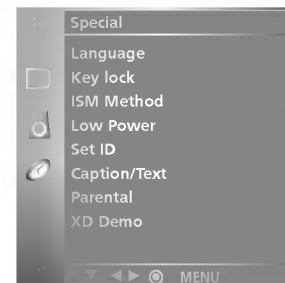
● Press the ► button and then use the ▲ or ▼ button to choose **English** or **French**.

● Press the ► button and then use the ▲ or ▼ button to select block options.

- Unblocked (Permits all programs)
- C & above (Children)
- C8+ (Children eight years and older)
- G & above (General programming, suitable for all audiences)
- PG & above (Parental Guidance)
- 14+ (Viewers 14 years and older)
- 18+ (Adult programming)

- G & above (General)
- 8ans+ (General-Not convenient for little children)
- 13ans+ (Not convenient for children of 13 years and younger)
- 16ans+ (Not convenient for children of 16 years and younger)
- 18ans+ (This programs is only for adults)

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



TV MENU / LOCK ADJUSTMENT

TV MENU | SCREEN ADJUSTMENT

AUTO CONFIGURE (RGB [PC] MODE ONLY)

Automatically adjusts picture position and minimizes image shaking.

Although the image is still not correct, your set is functioning properly but needs further adjustment.



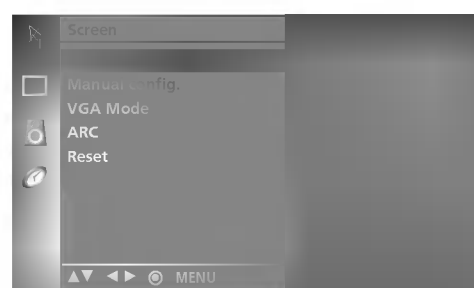
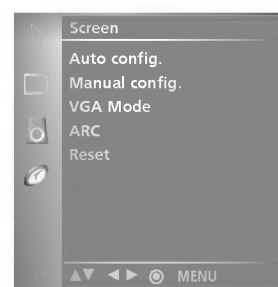
- Press the **MENU** button and then use ▲ or ▼ button to select the **Screen** menu.

- Press the ► button and then use ▲ or ▼ button to select **Auto config.**

- Press the ► button to start **Auto config.**
 - 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.

- If the picture needs to be adjusted more after Auto adjustment in RGB (PC), you can adjust the **Manual config.**

- Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.



TV MENU | SCREEN ADJUSTMENT

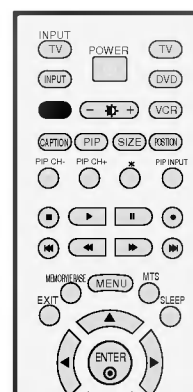
ASPECT RATIO CONTROL (ARC)

This feature lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV. When you receive an analog picture with a 4:3 aspect ratio on your 16:9 TV, you need to specify how the picture is to be displayed.

- Component (480p,720p,1080i), RGB-PC/DTV, HDMI DTV input source use 4:3 or 16:9 aspect ratio.

NOTE

- ▶ If a fixed image is displayed on the screen for a long time, the image may become imprinted on the screen and remain visible. This phenomenon is common to all manufactures and in consequence the manufactures warranty does not cover the product bearing this phenomenon.



- 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.



16:9

Adjust the picture horizontally, in a linear proportion to fill the entire screen.



Horizon

The screen size is, more enlarged at both sides, to create a spectacular view.



Zoom 1

Choose Zoom 1 when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.

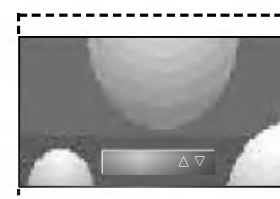
You can move the Zoom1 screen using ▲ or ▼ button.



Zoom 2

Choose Zoom 2 when you want the picture to be altered, both vertically extended and cropped. The picture taking a halfway trade off between alteration and screen coverage.

You can move the Zoom2 screen using ▲ or ▼ button.



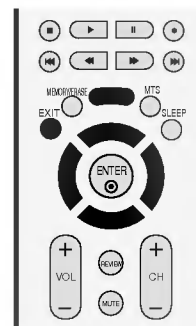
SELECTING WIDE VGA/XGA MODE

To see a normal picture, match the resolution of RGB mode and selection of VGA/XGA mode.

This function works in the following mode: RGB[PC] mode.

VGA Mode: 42PC3RV

XGA Mode: 26/32LC2R

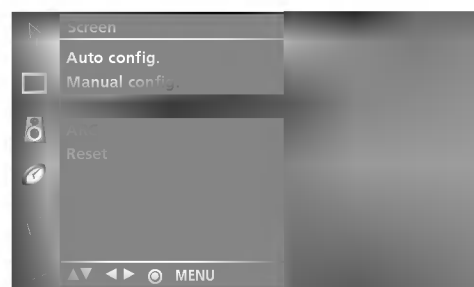


● Press the **MENU** button and then use ▲ or ▼ button to select the **Screen** menu.

● Press the ► button and then use ▲ or ▼ button to select **VGA mode** (or **XGA mode**).

● Press the ► button and then use ▲ or ▼ button to select the desired VGA/XGA resolution.

● Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



TV MENU | SCREEN ADJUSTMENT

INITIALIZING (RESET TO ORIGINAL FACTORY SETTINGS)

This function operates in current mode.

To initialize the adjusted value.

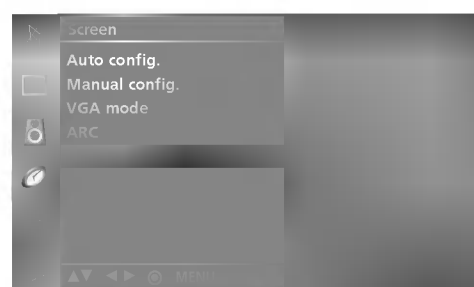


● Press the **MENU** button and then use ▲ or ▼ button to select the **Screen** menu.

● Press the ► button and then use ▲ or ▼ button to select **Reset**.

● Press the ► button.

- You can initialize Position, PIP size, PIP position. (PIP size and PIP position are available to work in PIP mode only.)



APPENDIX

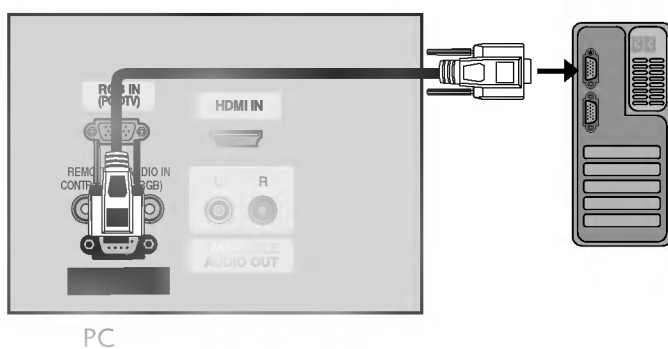
EXTERNAL CONTROL DEVICE SETUP

Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

Connect the serial port of the control device to the RS-232C jack on the product back panel.

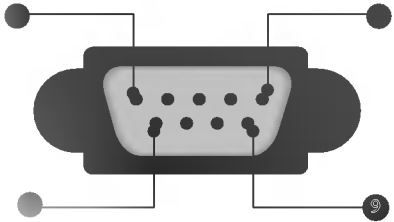
Note: RS-232C connection cables are not supplied with the product.

RS-232C Setup



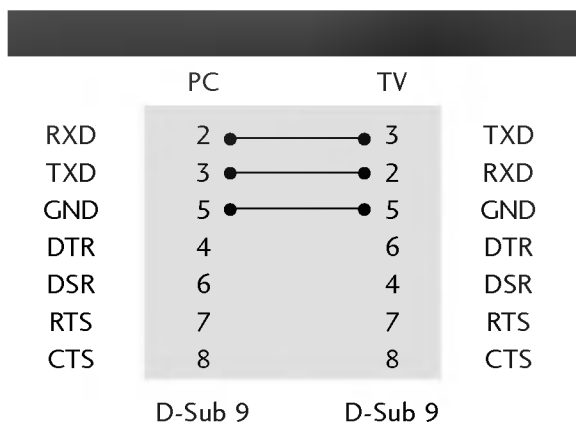
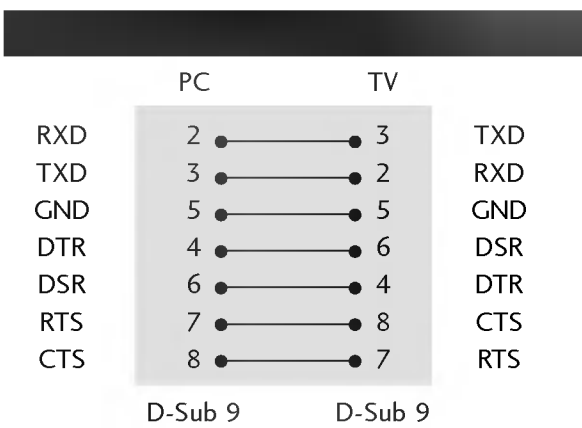
Type of Connector; D-Sub 9-Pin Male

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



APPENDIX

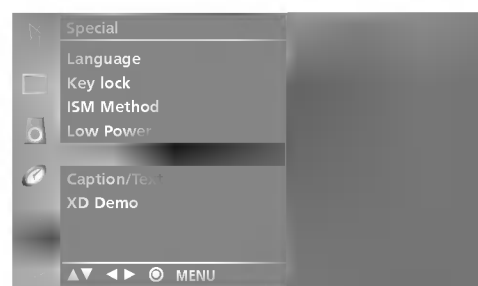
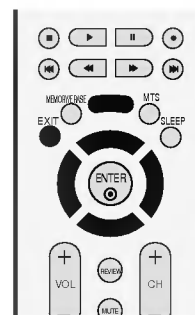
RS-232C Configurations



Set ID

Use this function to specify a TV ID number.
Refer to 'Real Data Mapping 1'. ► **p.78**.

- Press the **MENU** button and then use ▲ or ▼ button to select the **Special** menu.
- Press the ► button and then use ▲ or ▼ button to select **Set ID**.
- 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.
- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.



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

01. Power	k	a	0 ~ 1	16. Color Temperature	k	u	0 ~ 3
02. Aspect Ratio	k	c	1 ~ 5	17. Red Adjustment	k	v	0 ~ 3C (or 50)
03. Screen Mute	k	d	0 ~ 1	18. Green Adjustment	k	w	0 ~ 3C (or 50)
04. Volume Mute	k	e	0 ~ 1	19. Blue Adjustment	k	\$	0 ~ 3C (or 50)
05. Volume Control	k	f	0 ~ 64	20. Abnormal Status	k	z	FF
06. Contrast	k	g	0 ~ 64	21. ISM Method	j	p	0 ~ 3
07. Brightness	k	h	0 ~ 64	22. Low Power	j	q	0 ~ 1
08. Color	k	i	0 ~ 64	23. Orbiter Time Setting	j	r	1 ~ FE
09. Tint	k	j	0 ~ 64	24. Orbiter Pixel Setting	j	s	1 ~ 3
10. Sharpness	k	k	0 ~ 64	25. Auto Configure	j	u	1
11. OSD Select	k	l	0 ~ 1	26. Channel Tuning	m	a	Refer to p.78
12. Remote Control lock mode	k	m	0 ~ 1	27. Channel Add/Del	m	b	0 ~ 1
13. PIP/Twin picture	k	n	0 ~ 2	28. Key	m	c	Refer to p.79
14. PIP Position	k	q	0 ~ 3	29. Input select (Main)	x	b	Refer to p.79
15. Balance	k	t	0 ~ 64	30. Input select (PIP)	x	y	Refer to p.79

Only 42PC3RV* model

Transmission / Receiving Protocol

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

[Command 1] : First command to control the set.(j,k,mor x)

[Command 2] : Second command to control the set.

[Set ID] : You can adjust the set ID to choose desired TV ID number in Special menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected the TV 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)'

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

The TV 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.

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

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

Data1: Illegal Code

Data2: Not supported function

Data3: Wait more time

APPENDIX

01. Power (Command2:a)

To control Power On/Off of the TV.

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

Data 0 : Power Off Data 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]

* In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feedback presents status about each function.

* To change the Power on input the transmission more than twice.

02. Aspect Ratio (Command2:c) (Main picture size)

To adjust the screen format. (Main picture 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]

Date 1: Normal screen (4:3)

Date 4: Full screen (Zoom1)

Date 2: Wide screen (16:9)

Date 5: Full screen (Zoom2)

Date 3: Horizon

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

* Using the RGB-PC, RGB-DTV, Component or HDMI input, you select either 16:9 or 4:3 screen aspect ratio.

03. Screen Mute (Command2:d)

To select screen mute on/off.

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

Data 0 : Screen mute off (Picture on)

Data 1 : Screen mute on (Picture off)

Acknowledgement [d][][Set ID][][OK][Data][x]

04. Volume Mute (Command2: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 off (Volume on)

Data 1 : Volume mute on (Volume off)

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

05. Volume Control (Command2: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

Refer to 'Real data mapping 1'. See page 78.

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

06. Contrast (Command2: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

Refer to 'Real data mapping 1'. See page 78.

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

07. Brightness (Command2: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

Refer to 'Real data mapping 1'. See page 78.

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

08. Color (Command2: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

Refer to 'Real data mapping 1'. See page 78.

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

09. Tint (Command2:j)

To adjust the screen tint.

You can also adjust tint in the Picture menu.

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

Data Red : 0 ~ Green : 64

Refer to 'Real data mapping 1'. See page 78.

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

10. Sharpness (Command2: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

Refer to 'Real data mapping 1'. See page 78.

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

11. OSD Select (Command2:l)

To select OSD (On Screen Display) on/off when controlling remotely.

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

Data 0: OSD off

Data 1: OSD on

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

12. Remote Control Lock Mode (Command2:m)

To lock the remote control and the front panel controls on the set.

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

Data 0: Lock off

Data 1: Lock on

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

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

13. PIP / Twin picture (Command2:n)

To control the PIP (Picture In picture)/Twin picture.

You can also control the PIP/Twin picture using the PIP button on the remote control.

Transmission [k][n][][Set ID][][Data][Cr]

Data 0: PIP/Twin picture off

Data 1: PIP

Data 3: Twin picture

Acknowledgement [n][][Set ID][][OK][Data][x]

14. PIP Position (Command2:q)

To select sub picture position for PIP.

You can also adjust the sub picture position using POSITION button on the remote control.

Transmission [k][q][][Set ID][][Data][Cr]

Data 0: Right down on screen

Data 1: Left down on screen

Data 2: Left up on screen

Data 3: Right up on screen

Acknowledgement [q][][Set ID][][OK][Data][x]

15. Balance (Command2:t)

To adjust balance.

You can also adjust balance in the Sound menu.

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1'. See page 78.

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

16. Color Temperature (Command2:u)

To adjust color temperature.

You can also adjust ACC in the Picture menu.

Transmission [k][u][][Set ID][][Data][Cr]

Data 0: Cool 1: Normal 2: Warm 3: User

Acknowledgement [u][][Set ID][][OK][Data][x]

17. Red Adjustment (Command2:v)

To adjust red in color temperature.

Transmission [k][v][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 3C (or 50)

Refer to 'Real data mapping 2'. See page 78.

Acknowledgement [v][][Set ID][][OK][Data][x]

18. Green Adjustment (Command2:w)

To adjust green in color temperature.

Transmission [k][w][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 3C (or 50)

Refer to 'Real data mapping 2'. See page 78.

Acknowledgement [w][][Set ID][][OK][Data][x]

19. Blue Adjustment (Command2:\$)

To adjust blue in color temperature.

Transmission [k][\$][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 3C (or 50)

Refer to 'Real data mapping 2'. See page 78.

Acknowledgement [\$][][Set ID][][OK][Data][x]

APPENDIX

20. Abnormal State (Command2:z)

To recognize an abnormal state. (This feature is not available for all models.)

Transmission [k][z][][Set ID][][FF][][Cr]

Data FF: Read

Acknowledgement [z][][Set ID][][OK][Data][x]

Data 0: Normal (Power on and signal exist)

Data 1: No signal (Power on)

Data 2: Turn the TV off by remote control

Data 3: Turn the TV off by sleep time function

Data 4: Turn the TV off by RS-232C function

Data 5: 5V down

Data 6: AC down

Data 7: Turn the TV off by Fan Alarm function (option)

Data 8: Turn the TV off by Off time function

Data 9: Turn the TV off by Auto sleep function

* This function is "read only".

21. ISM Method (Command1:j, Command2:p)

To control the ISM method. You can also adjust ISM Method in Special menu. (This feature is not available for all models.)

Transmission [j][p][][Set ID][][Data][Cr]

Data 0: Normal Mode Data 1: White Wash

Data 2: Orbiter Data 3: Inversion

Acknowledgement [p][][Set ID][][OK][Data][x]

22. Low Power (Command1:j, Command2:q)

To reduce the power consumption of the monitor. You can also adjust Low Power in SPECIAL menu. (This feature is not available for all models.)

Transmission [j][q][][Set ID][][Data][][Cr]

Data 0: Off Data 1: On

Acknowledgement [q][][Set ID][][OK][Data][x]

23. Orbiter Time Setting (Command1:j, Command2:r)

To adjust orbiter operation time term. (This feature is not available for all models.)

Transmission [j][r][][Set ID][][Data][][Cr]

Data Min: 1 ~ Max: FE

Refer to 'Real data mapping 1'.

Acknowledgement [r][][Set ID][][OK][Data][x]

24. Orbiter Pixel Setting (Command1:j, Command2:s)

To adjust pixel number in orbiter function.

(This feature is not available for all models.)

Transmission [j][s][][Set ID][][Data][Cr]

Data Min: 1 ~ Max: 3

Refer to 'Real data mapping 1'.

Acknowledgement [s][][Set ID][][OK][Data][x]

25. Auto Configure (Command1:j, Command2:u)

To adjust picture position and minimize image shaking automatically. It works only in RGB (PC) mode.

Transmission [j][u][][Set ID][][Data][Cr]

Data 1: To set

Acknowledgement [u][][Set ID][][OK][Data][x]

26. Channel Tuning (Command1:m, Command2:a)

Tune channel to following physical number.

Transmission [m][a][][Set ID][][Data0][][Data1][][Data2][][Data3][][Data4][][Data5][][Cr]

Data 0: Air: 02 ~ 45, CATV: 01, 0E ~ 87

Refer to 'Real data mapping 1'.

Data 1: Don't care

Data 2: Don't care

Data 3: Don't care

Data 4: Don't care

Data 5: 0 : Main[Air] 80 : Sub[Air] (option)

1 : Main[Cable] 81 : Sub [Cable]

Acknowledgement [a][][Set ID][][OK][Data0][x]

Data Min: 0 ~ Max: 87

* Real data mapping 1

0 : Step 0
⋮
A : Step 10 (Set ID 10)
⋮
F : Step 15 (Set ID 15)
10 : Step 16 (Set ID 16)
⋮
64 : Step 100
⋮
6E : Step 110
⋮
73 : Step 115
74 : Step 116
⋮
C7 : Step 199

FE : Step 254
FF : Step 255

* Real data mapping 2

0 : -30
1 : -29
2 : -28
⋮
1E : 0
⋮
3A : +28
3B : +29
3C : +30

27. Channel Add/Del (Command1:m, Command2:b)

To add and delete the channels

Transmission [m][b][][Set ID][][Data][Cr]

Data 0: Channel Delete

Data 1: Channel Add

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

28. Key (Command1:m, Command2:c)

To send IR remote key code.

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

Data: Key code - Refer to page 81.

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

29. Input select (Command1:x, Command2:b)**(Main Picture Input)**

To select input source for TV.

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

Data: Structure

MSB				LSB			
0	0	0	0	0	0	0	0
└ External Input ┘				└ Input Number ┘			

0	0	0	1	Analog
0	0	1	0	AV
0	1	0	0	Component
0	1	0	1	RGB-DTV
0	1	1	0	RGB-PC
1	0	0	1	HDMI (option)

0	0	0	0	Input1
0	0	0	1	Input2

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

30. Input select (Command1:x, Command2:y)

To adjust input source for sub picture in PIP mode.

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

Data: Structure

MSB				LSB			
0	0	0	0	0	0	0	0
└ External Input ┘				└ Input Number ┘			

0	0	0	1	Analog
0	0	1	0	AV

0	0	0	0	Input1
0	0	0	1	Input2

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

APPENDIX

IR CODES

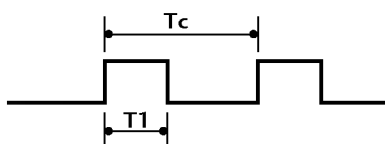
1. How to Connect

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

2. Remote Control IR Codes

■ Output waveform

Single pulse, modulated with 37.917KHz signal at 455KHz



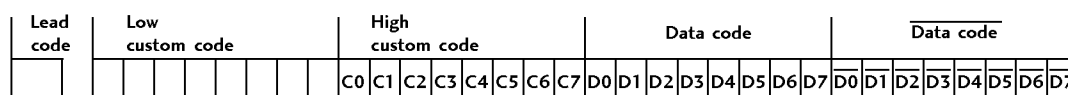
Carrier frequency

$$FCAR = 1/TC = fOSC/12$$

$$\text{Duty ratio} = T1/TC = 1/3$$

■ Configuration of frame

1st frame



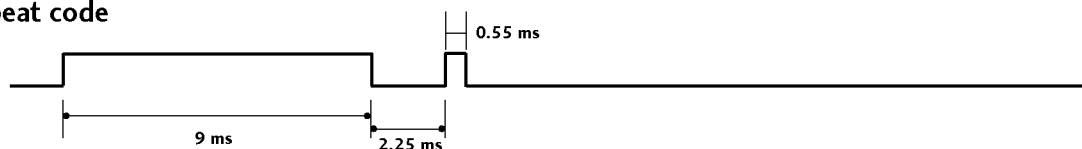
Repeat frame



■ Lead code

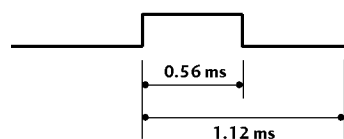


■ Repeat code

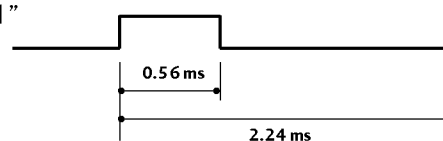


■ Bit description

Bit "0"



Bit "1"



■ Frame interval: Tf

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



Tf=108ms @455KHz

0F	TV	Remote control Button	44	ENTER	Remote control Button
0B	INPUT	Remote control Button	72	PIP CH-	Remote control Button
08	POWER	Remote control Button (Power On/Off)	71	PIP CH+	Remote control Button
C4	POWER ON	Discrete IR Code (Only Power On)	61	PIP INPUT	Remote control Button
C5	POWER OFF	Discrete IR Code (Only Power OFF)	02	VOL +	Remote control Button
60	PIP	Remote control Button	03	VOL -	Remote control Button
0E	SLEEP	Remote control Button	00	CH +	Remote control Button
38	Caption/Text	Remote control Button	01	CH -	Remote control Button
0A	MTS	Remote control Button	09	MUTE	Remote control Button
43	MENU	Remote control Button	55	Memory/Erase	Remote control Button
79	ARC	Remote control Button	10 ~ 19	Number Key 0 ~ 9	Remote control Button
5B	EXIT	Remote control Button	1E	FCR	Remote control Button
07	◀	Remote control Button	1A	REVIEW	Remote control Button
06	▶	Remote control Button	64	SIZE	Remote control Button
40	▲	Remote control Button	62	PIP: POSITION,	Remote control Button
41	▼	Remote control Button	E0	⚙+ (Brightness)	Remote control Button
			E1	⚙- (Brightness)	Remote control Button

APPENDIX

PROGRAMMING THE REMOTE CONTROL

The provided universal remote control can be programmed to operate most remote-controllable devices. Note that the remote may not control all models of other brands.

Programming a code into a remote mode

- To find out whether your remote control can operate each device without programming, turn on the device (such as a VCR) and press the corresponding mode button on the remote.
After that, press the **POWER** button. If the device is turned off and it responds properly the remote control need not be programmed. If not, the remote should be programmed to operate the device. The programming procedures are explained below.
- Press the **MENU** and **MUTE** button continuously at the same time for two seconds; the currently selected device button is illuminated.
If you don't press any button for 20 seconds, the light on the mode button will be turned off. In that case, you have to repeat from step 2.
- Enter the appropriate code from the code table on the following pages. When pressing the button, the light blinks at a time. If the device turned off, the programming is successful.
- Press the **MENU** button to store the code. After blinking twice, this code is stored.
- Test the remote control functions to see if the device responds properly. If not, steps 2-5.

PROGRAMMING CODES

DVD

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

VCRs

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

APPENDIX

TROUBLESHOOTING CHECKLIST

The remote control doesn't work	■ Check to see if there is any object between the product and the remote control causing obstruction. Ensure you are pointing the remote control directly at the TV. ■ Ensure that the batteries are installed with correct polarity (+ to +, - to -). ■ Ensure that the correct remote operating mode is 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.

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).

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.

The signal is out of range.	■ Adjust resolution, horizontal frequency, or vertical frequency. ■ Check the input source.
Vertical bar or stripe on back- ground & Horizontal Noise & Incorrect position	■ Work the Auto configure or adjust clock, phase, or H/V position. (Option)
Screen color is unstable or single color	■ Check the signal cable. ■ Reinstall the PC video card.

APPENDIX

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have your new TV. Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

- Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
- Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

- To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth.
- Please be sure not to use a wet cloth.

Extended Absence

▲ CAUTION

- ▶ If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

PRODUCT SPECIFICATIONS

Dimensions (Width x Height x Depth)	including stand	26.8 x 21.3 x 6.8 inches 681.0 x 542.0 x 172.0 mm	31.9 x 24.8 x 9.3 inches 811.0 x 630.0 x 235.0 mm
	excluding stand	26.8 x 19.3 x 4.6 inches 681.0 x 490.8 x 119.0 mm	31.9 x 22.3 x 4.9 inches 811.0 x 566.8 x 123.5 mm
Weight	including stand	40.8 pounds / 18.5 kg	48.2 pounds / 21.9 kg
	excluding stand	33.5 pounds / 15.2 kg	40.8 pounds / 18.5 kg
Power requirement		AC100-240V -50/60Hz, 1.3A	
Television System		NTSC	
Program Coverage		VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 135	
External Antenna Impedance		75 ohm	
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)	
	Operating Humidity	Less than 80%	
	Storage temperature	-4 ~ 140°F (-20 ~ 60°C)	
	Storage Humidity	Less than 85%	

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

PRODUCT SPECIFICATIONS

Dimensions (Width x Height x Depth)	including stand	44.4 x 29.5 x 15.0 inches 1129.0 x 748.5 x 380.0 mm
	excluding stand	44.4 x 27.4 x 3.8 inches 1129.0 x 695.0 x 98.5 mm
Weight	including stand	62.6 pounds / 28.4 kg
	excluding stand	54.0 pounds / 24.5 kg
Power requirement		AC100-240V -50/60Hz, 2.8A
Television System		NTSC
Program Coverage		VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 135
External Antenna Impedance		75 ohm
Environment condition	Operating Temperature	32 ~ 104°F (0 ~ 40°C)
	Operating Humidity	Less than 80%
	Storage Temperature	-4 ~ 140°F (-20 ~ 60°C)
	Storage Humidity	Less than 85%

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

