

# PLASMATV OWNER'S MANUAL

MODELS: RP-42PY10X/10XH/11X/11XH RP-50PY10/10H/11/11H RP-60PY10/10H/11/11H

Please read this manual carefully and completely before operating your TV.

Retain this manual for future reference.

Record model number and serial number of the TV in the spaces provided below.

See the label attached on the back cover and relate this information to your dealer if you require service.

Model Number : Serial Number :

# Safety Instructions

\* Safety instructions have two kinds of information, and each meaning of it is as below.

/NOTES

The violation of this instruction may cause serious injuries and even death.

The violation of this instruction may cause light injuries or damage of the product.

⚠ Take care of danger that may happen under specific condition.

# **NWARNING**

1. Do not place the product in direct sunlight or near heat sources such as heat registers, stove and so on.

This may cause a fire.

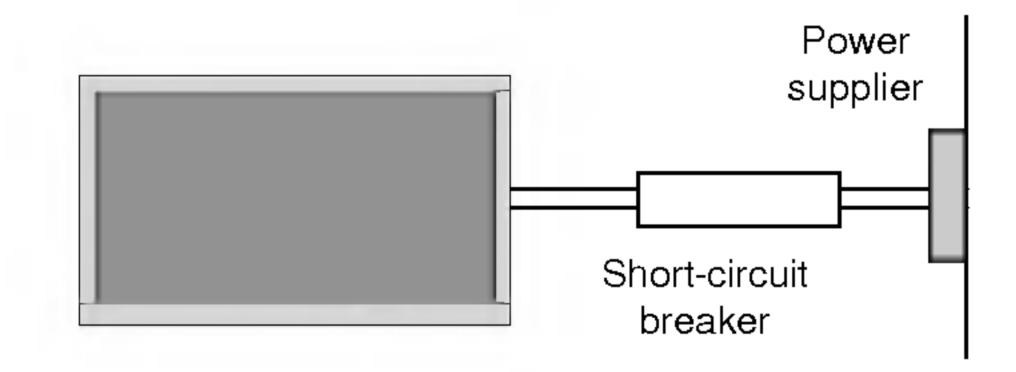
2. Do not use the product in damp place such as a bathroom or any place where it is likely to get wet.

This may cause a fire or could give an electric shock.

3. Bend antenna cable between inside and outside building to prevent rain from flowing in.

This may cause water damaged inside the product and could give an electric shock.

- 4. Earth wire should be connected.
  - If the earth wire is not connected, there is possible a danger of electric shock caused by the current leakage.
  - If grounding methods are not possible, a separate circuit breaker should be employed and installed by a qualified electrician.
  - Do not connect ground to telephone wires, lightning rods or



gas pipe.

5. Do not placing anything containing liquid on top of the product.

This may cause a fire or could give an electric shock.

### 6. 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 the apparatus.

7. Do not insert any object into the exhaust vent.

This may cause a fire or could give an electric shock.

8. Do not place heavy objects on the product.

This may cause serious injury to a child or adult.

9. Do not use water the product while cleaning.

This may cause damaged the product or could give an electric shock.

10. In case of smoke or strange smell from the product, switch it off ,unplug it from the wall outlet and contact your dealer or service center.

This may cause a fire or could give an electric shock.

11. Do not attempt to service the product yourself. Contact your dealer or service center.

This may cause damaged the product or could give an electric shock.

12. During a lightning thunder, unplug the product from the wall outlet and don't touch an antenna cable.

This may cause damaged the product or could give an electric shock.

13. Use a dedicated power cord. Do not modify or extend the power cord.

Do not install, remove, or reinstall the unit by yourself (customer).

For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center. For installation, always contact the dealer or an Authorized Service Center.

Do not use if the power cord or plug is damaged, or socket is loose. Use a dedicated outlet for this appliance.

Do not over bend the power cord and do not place anything on the power cord. Do not install the monitor near any sharp edge to avoid wire damage.

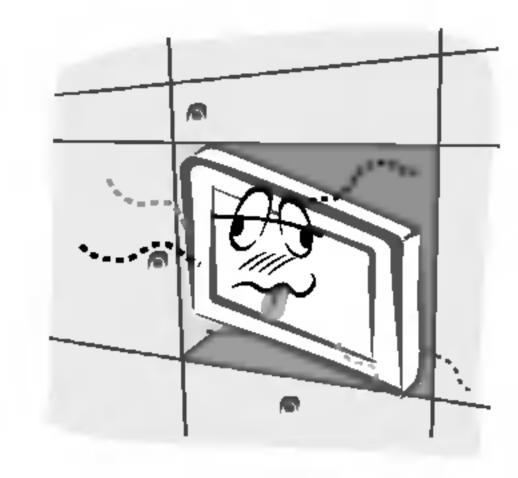
# NOTE

Never touch the power plug with a wet hand.

This may cause an electric shock.

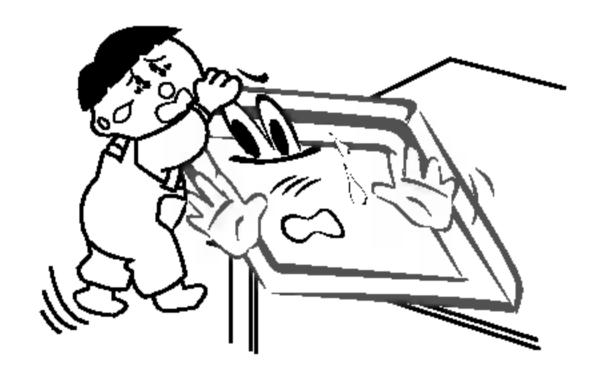
- Disconnect from the mains and remove all connections before moving.
- Do not place the product in a built-in installation such as a bookcase or rack.

Ventilation required.



When installing the product on a table, be careful not to place the edge of its stand.

This may cause the product to fall, causing serious injury to a child or adult, and serious damage to the product.



Do not place an outside antenna in the vicinity of overhead power lines or other electric light or power circuits.

This may cause an electric shock.

There should be enough distance between an outside antenna and power lines to keep the former from touching the latter even when the antenna falls.

This may cause an electric shock.

Do not pull the cord but the plug when unplugging.

This may cause a fire.

8. Ensure the power cord doesn't trail across any hot objects like a heater.

This may cause a fire or an electric shock.

Do not plug when the power cord or the plug is damaged or the connecting part of the power outlet is loose.

This may cause a fire or an electric shock.

10. Dispose of used batteries carefully to protect a child from eating them.

In case that it eats them, take it to see a doctor immediately.

11. When moving the product assembled with speakers do not carry holding the speakers.

This may cause the product to fall, causing serious injury to a child or adult, and serious damage to the product.

12. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.

This may cause damaged the product or could give an electric shock.

13. Contact the service center once a year to clean the internal part of the product.

Accumulated dust can cause mechanical failure.

14. The distance between eyes and the screen should be about 5 ~ 7 times as long as diagonal length of the screen.

If not, eyes will strain.

15. Unplug the product from the wall outlet when it is left unattended and unused for long periods of time.

Accumulated dust may cause a fire or an electric shock from deterioration or electric leakage.

16. Only use the specified batteries.

This make cause damaged the product or could give an electric shock.

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# Introduction

### What is a Plasma Display Panel (PDP)?

A plasma display panel is the latest display technology and the best way to achieve flat panel displays with excellent image quality and large screen sizes that are easily viewable. The PDP can be thought of as a descendant of the neon lamp and it can be also be viewed as a series of fluorescent lamps.

### How does it work?

PDP is an array of cells, known as pixels, which are comprised of 3 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.

You get the rich, dynamic colors that you expect. Each sub-pixel is individually controlled by advanced electronics to produce over 16 million different colors. All of this means that you get perfect images that are easily viewable in a display that is less than 5 inches thick.

### 160° - Wide angle range of vision

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

### Wide Screen

The screen of the Plasma Display is so wide that your viewing experience is as if you are in a theater.

### Multimedia

Connect your plasma display to a PC and you can 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 will not fit.

### The PDP Manufacturing Process: a few minute colored dots may be present on the PDP screen

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

### **Cooling Fan Noise**

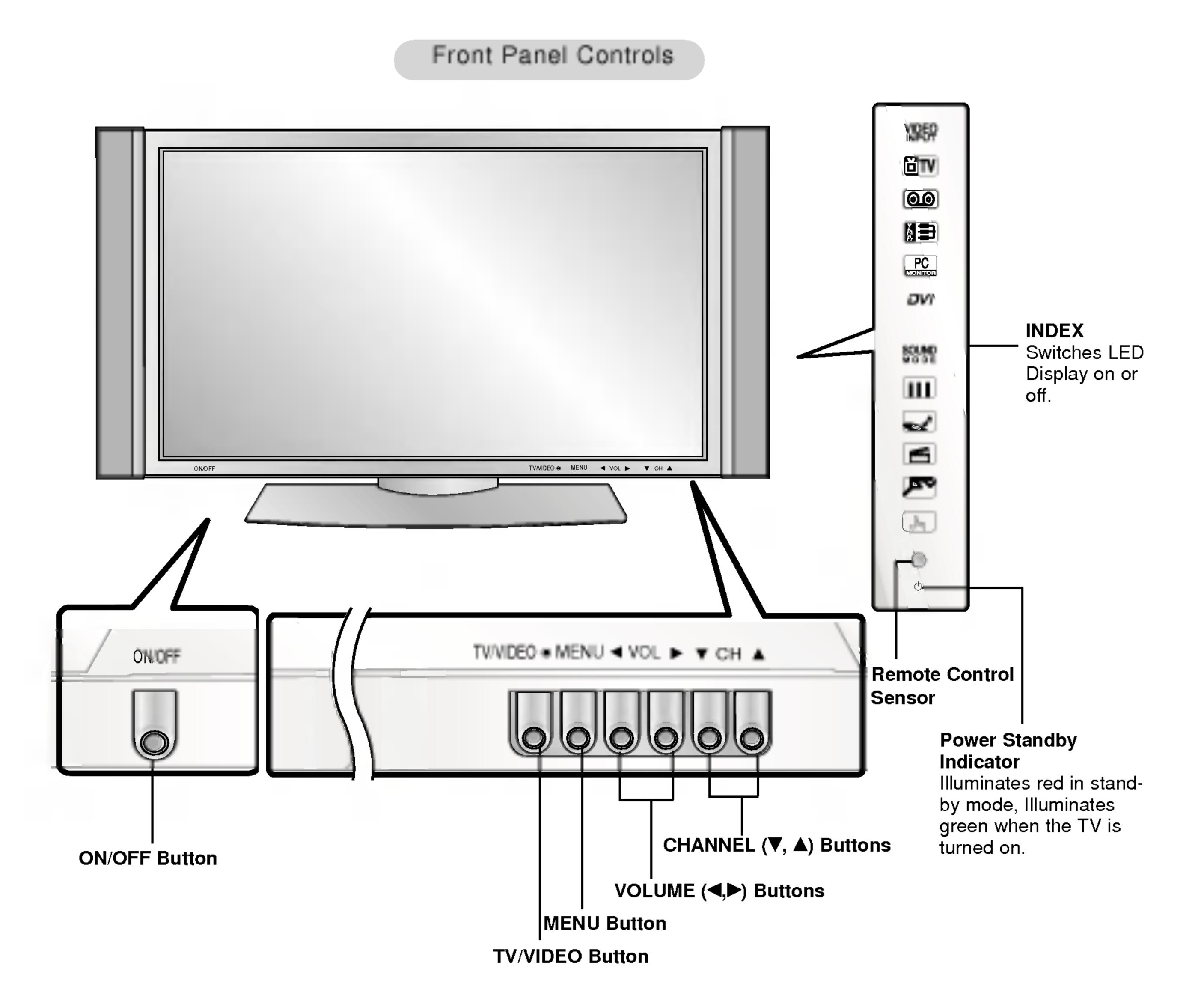
In the same way that a fan is used in a PC computer to keep the CPU (Central Processing Unit) cool, the PDP is equipped with cooling fans to cool the Monitor and improve its reliability. Therefore, a certain level of noise could occur while the fans are operating and cooling the PDP.

The fan noise doesn't have any negative effect on the PDP's efficiency or reliability. The noise from these fans is normal during the operation of this product. We hope you understand that a certain level of noise from the cooling fans is acceptable and is not sufficient cause for the PDP to be exchanged or returned.

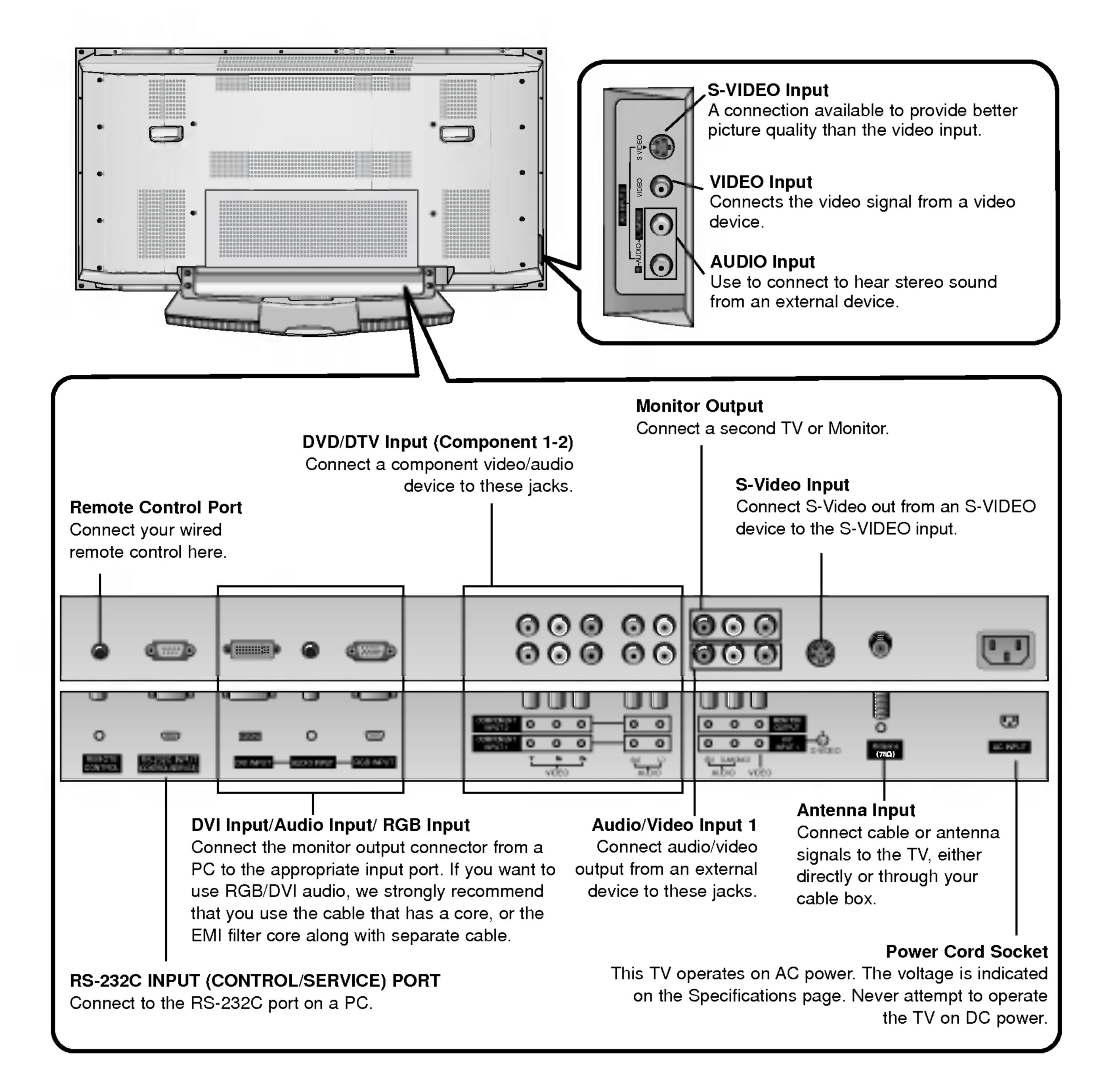
# Controls

- This is a simplified representation of front panel.

  Here shown may be somewhat different from your TV.
- This manual explains the features available on the RP-50PY10/11 series TVs.
- RP-42PY11X, 50/60PY11 series TV's stand is saled separately .

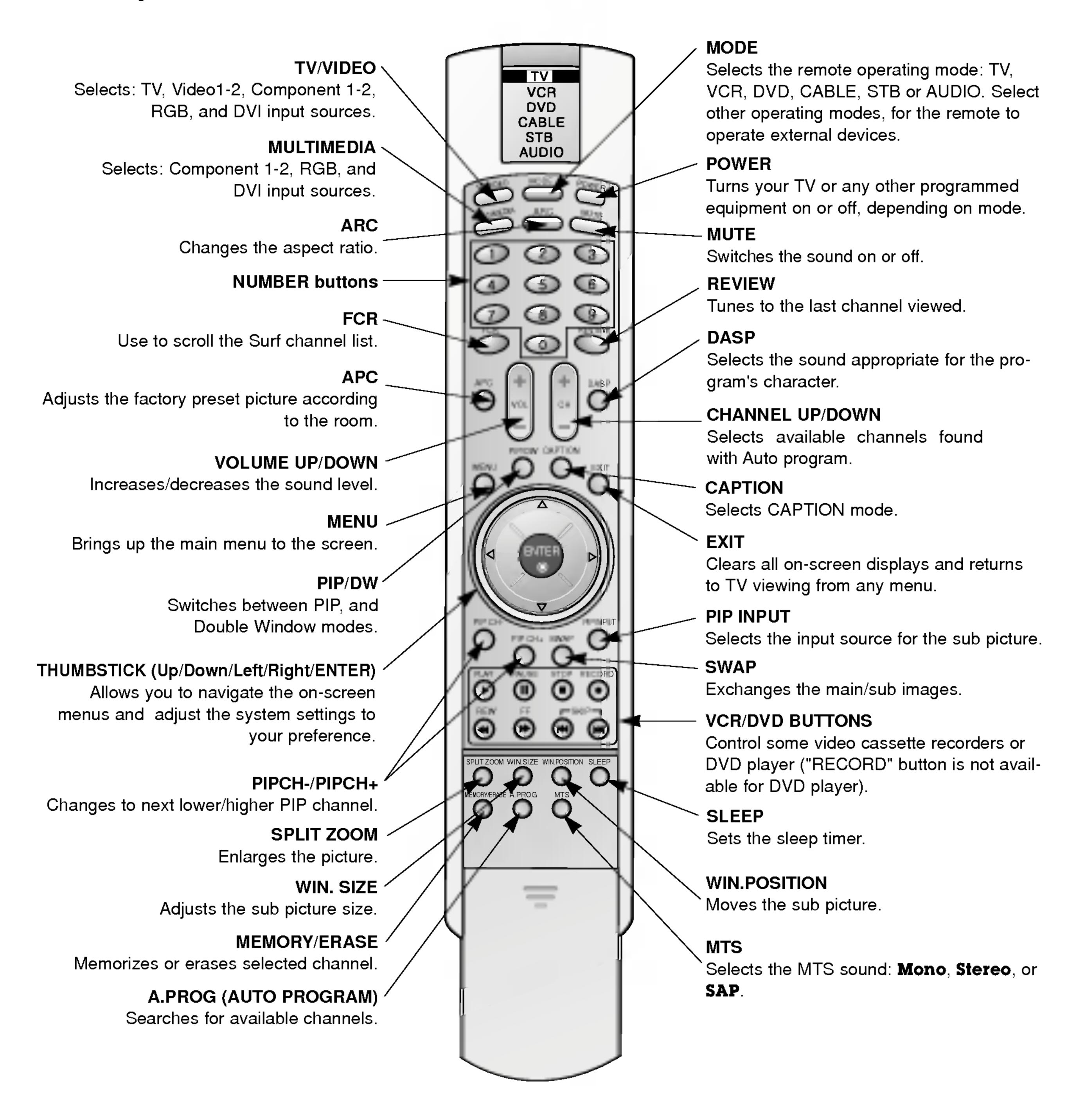


# Connection Options



# Remote Control Key Functions

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



### 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.
   Replace cover.



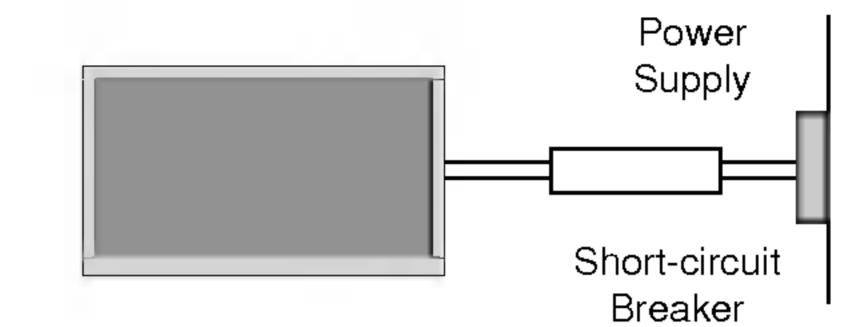
# Installation

# Installation Instructions

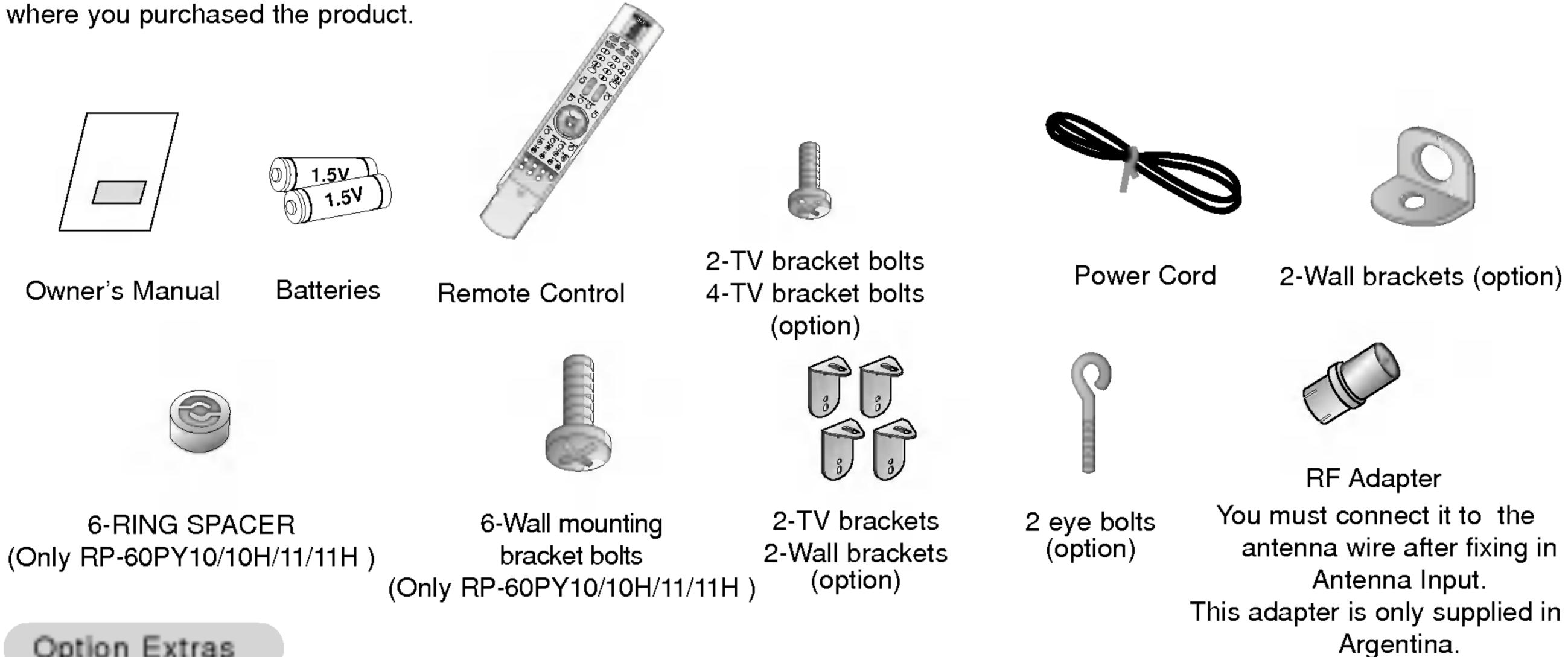
- The TV can be installed in various ways such as on a wall, or on a desktop etc.
- The TV is designed to be mounted horizontally.
- It is recommended that RP-42PY10X/11X, 50/60PY10/11 models only be used at an altitude of less than 3281 feet (1000m) to get the best quality picture and sound.
- It is recommended that RP-42PY10XH, 50/60PY10H/11H models only be used at an altitude of less than 6561 feet (2000m) to get the best quality picture and sound.

### GROUNDING

Ensure that you connect the grounding / earth 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.

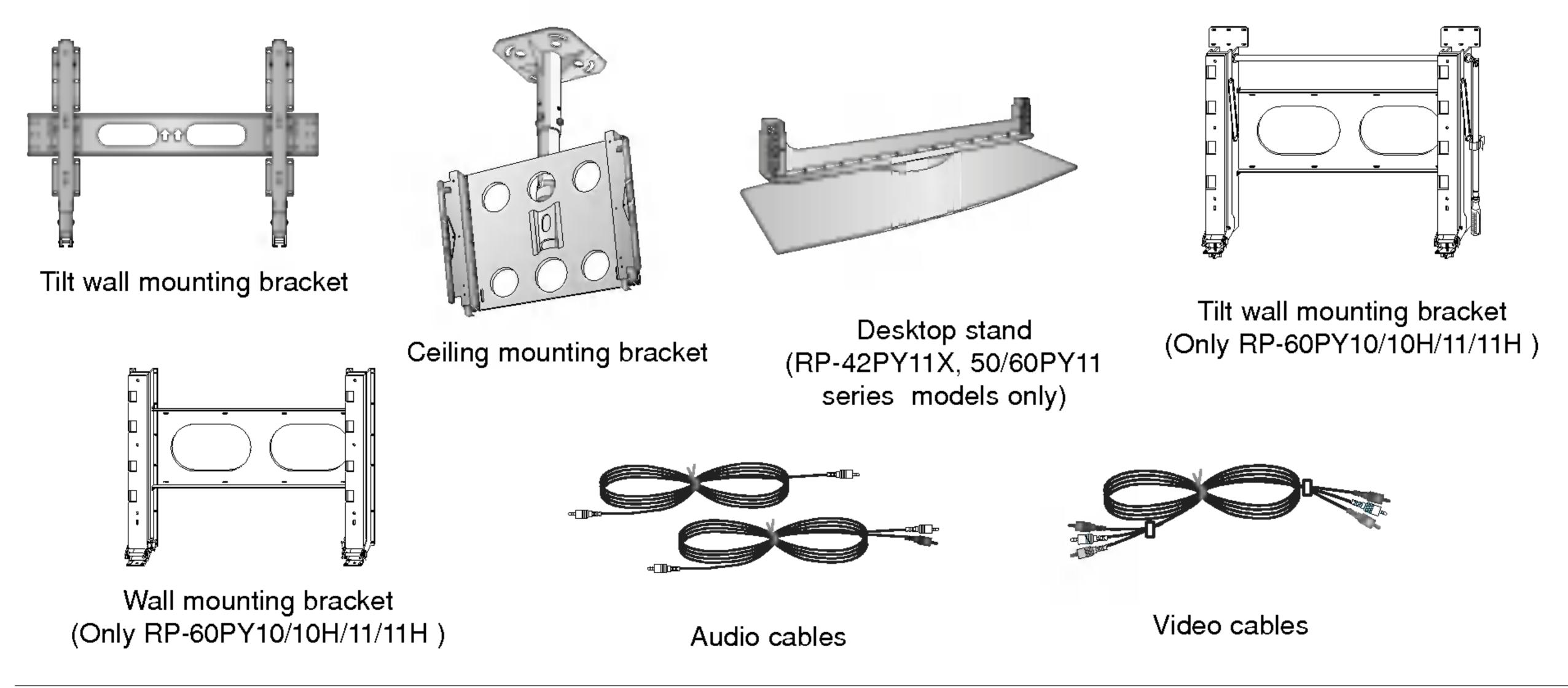


Ensure that the following accessories are included with your plasma display. If an accessory is missing, please contact the dealer



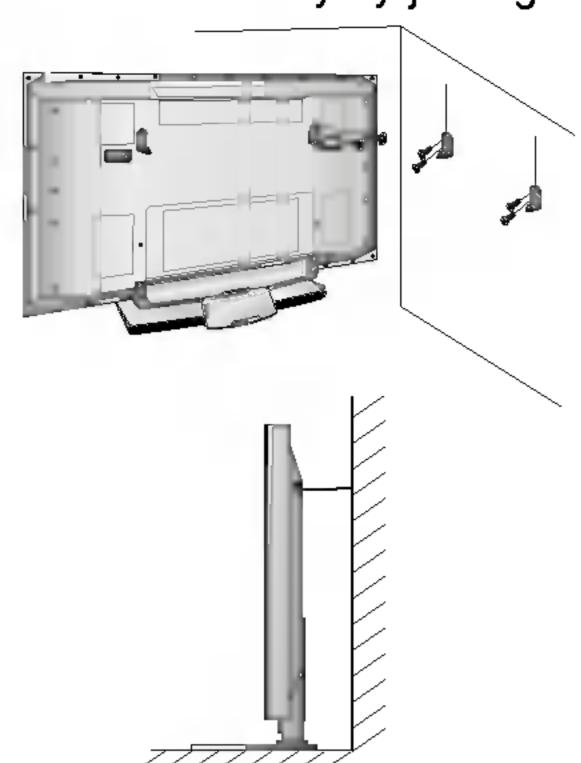
### Option Extras

- Optional extras can be changed or modified for quality improvement without any notification new optional extras can be added.
- Contract your dealer for buying these items.

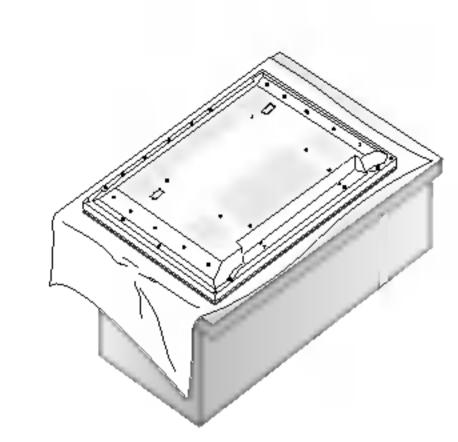


### Attaching the TV assembly to the wall

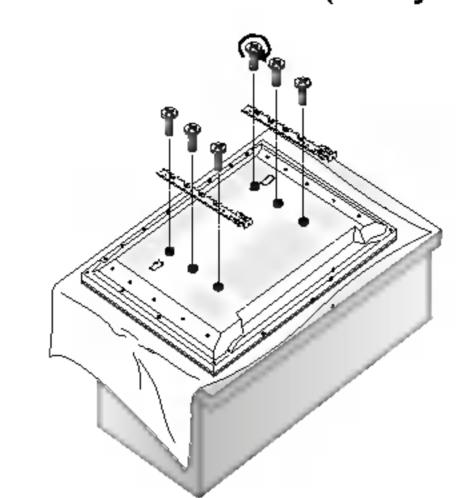
- Secure the set assembly by joining it to a wall by using the TV (or Eye Bolts)/Wall brackets.



- If the set will be mounted on a desk top, insert the 2-Eye Bolts (or 2-TV bracket bolts with 2-TV brackets) and tighten them securely in the upper holes as shown.
- Install the wall brackets on the wall with bolts, (not supplied with the product), as shown.
- Match the height of the TV brackets (or Eye Bolts) and the wall brackets.
- Check to be sure the brackets are tightened securely.
- Secure the TV assembly to the wall with strong strings or wound wire cables, (not supplied with the product), as shown.
- Install the RING SPACER with the bolts on the set as shown. (Only RP-60PY10/10H/11/11H)



1. Put the RING SPACER in the holes of the bolts before connecting to the wall mounting bracket.

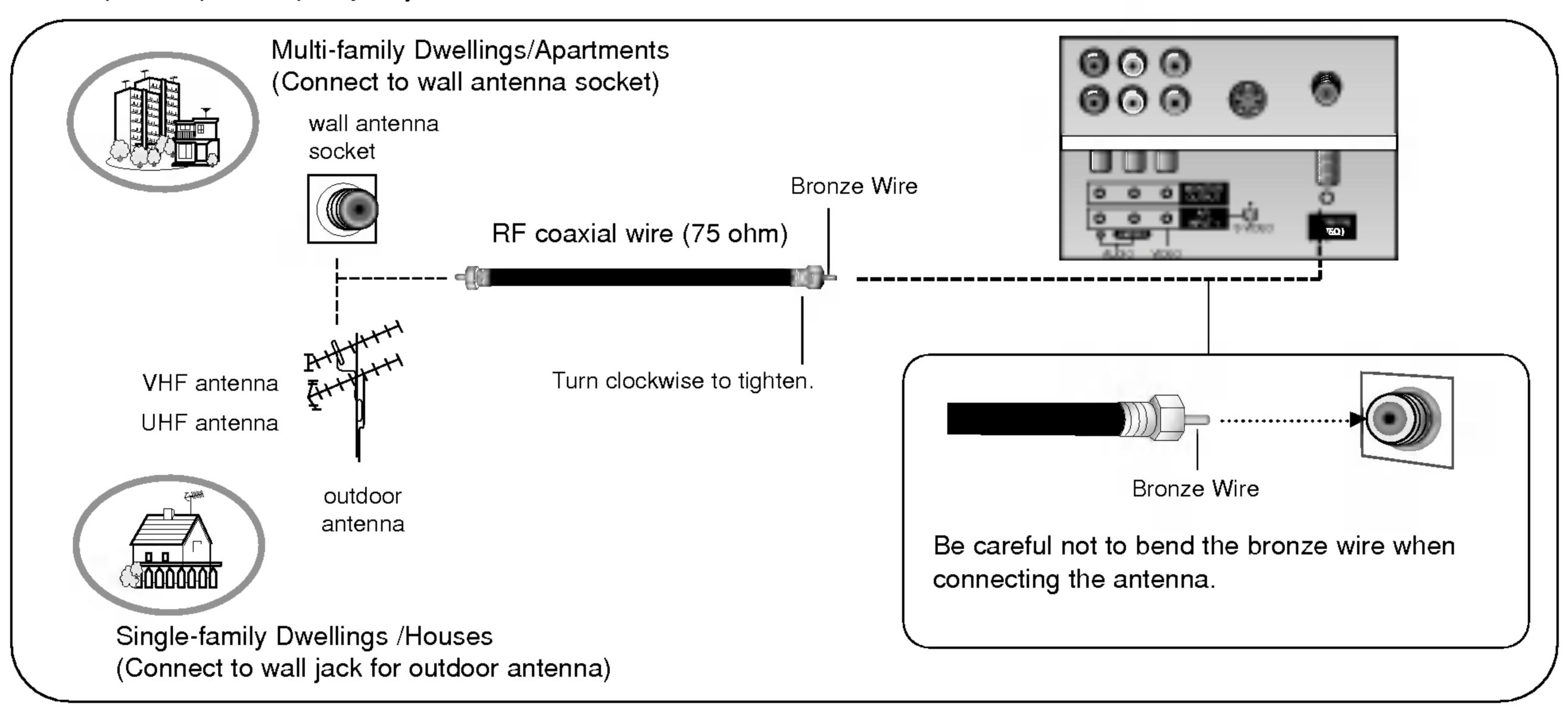


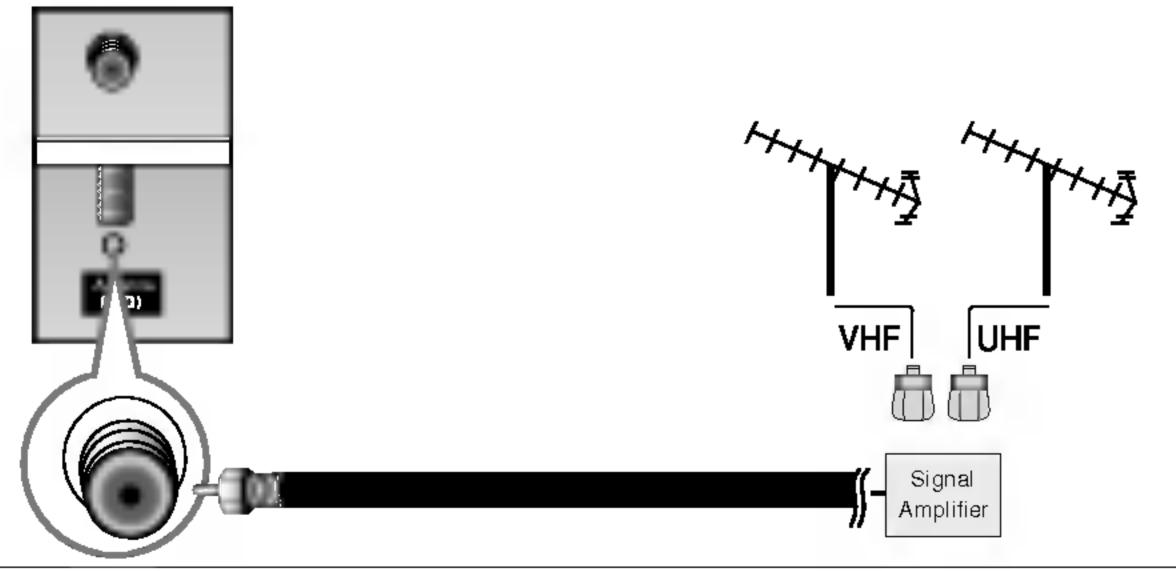
2. When you connect the wall mounting bracket to the set, connect to it by using the bolts, (supplied with the product), as shown.

# External Equipment Connections

### Antenna Connection

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





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

### NOTE: All cables shown are not included with the TV

### VCR Setup

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV
- Use the ISM Method (on the Option menu) feature to avoid having a fixed image remain on the screen for a long period of time. Typically a frozen still picture from a VCR. If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen.

### **Connection Option 1**

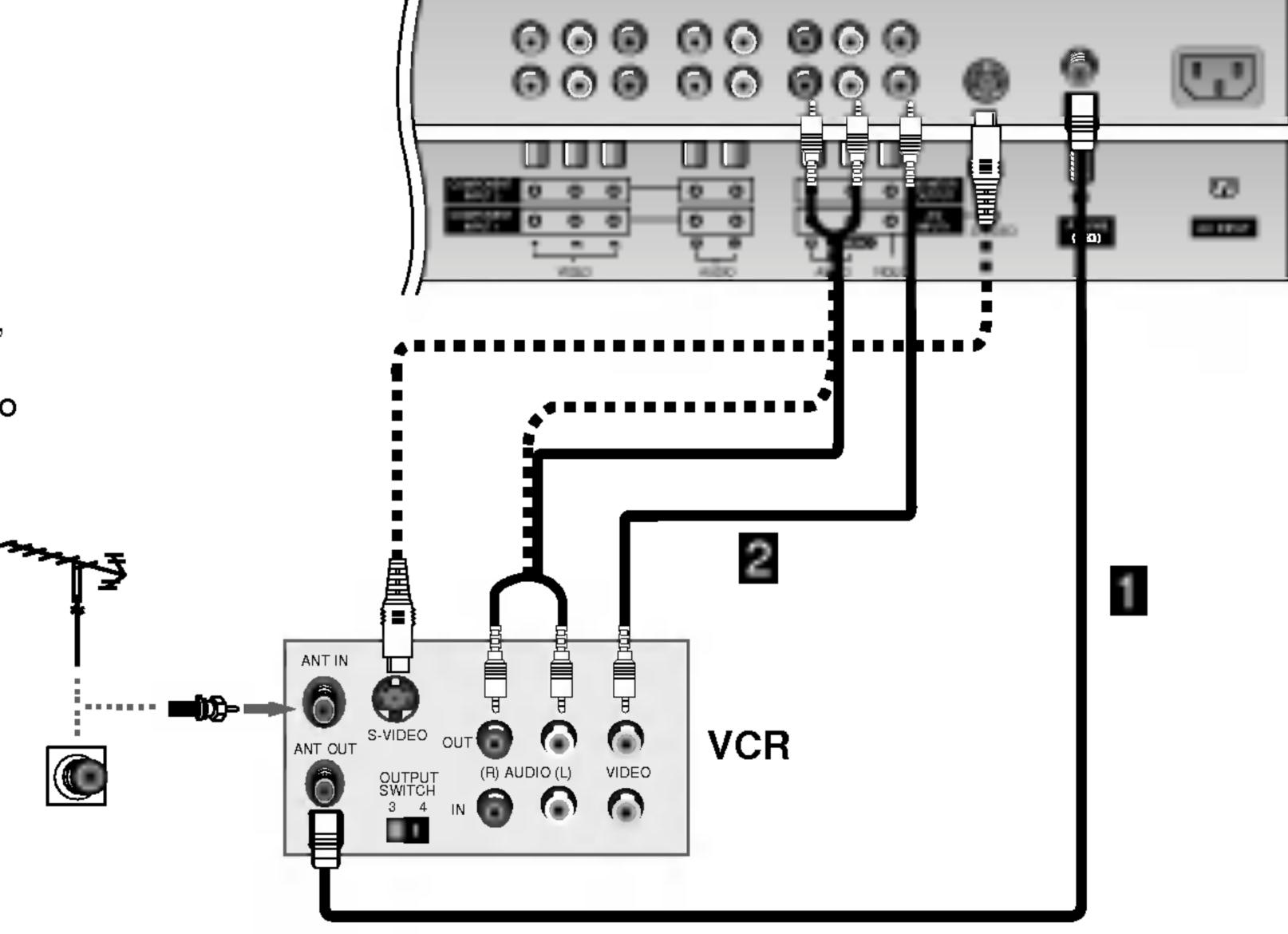
Set VCR output switch to 3 or 4 and then tune TV to the same channel number.

### **Connection Option 2**

- 1. Connect the audio and video cables from the VCR's output jacks to the TV input jacks, as shown in the figure.
  - When connecting the TV to VCR, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).
  - If you connect an S-VIDEO output from VCR to the S-VIDEO input, the picture quality is improved; compared to connecting a regular VCR to the Video input.
- 2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- 3. Select the input source with using the TV/VIDEO button on the remote control. (If connected to A/V INPUT 1, select Video 1 input source)



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.)



### Cable TV Setup

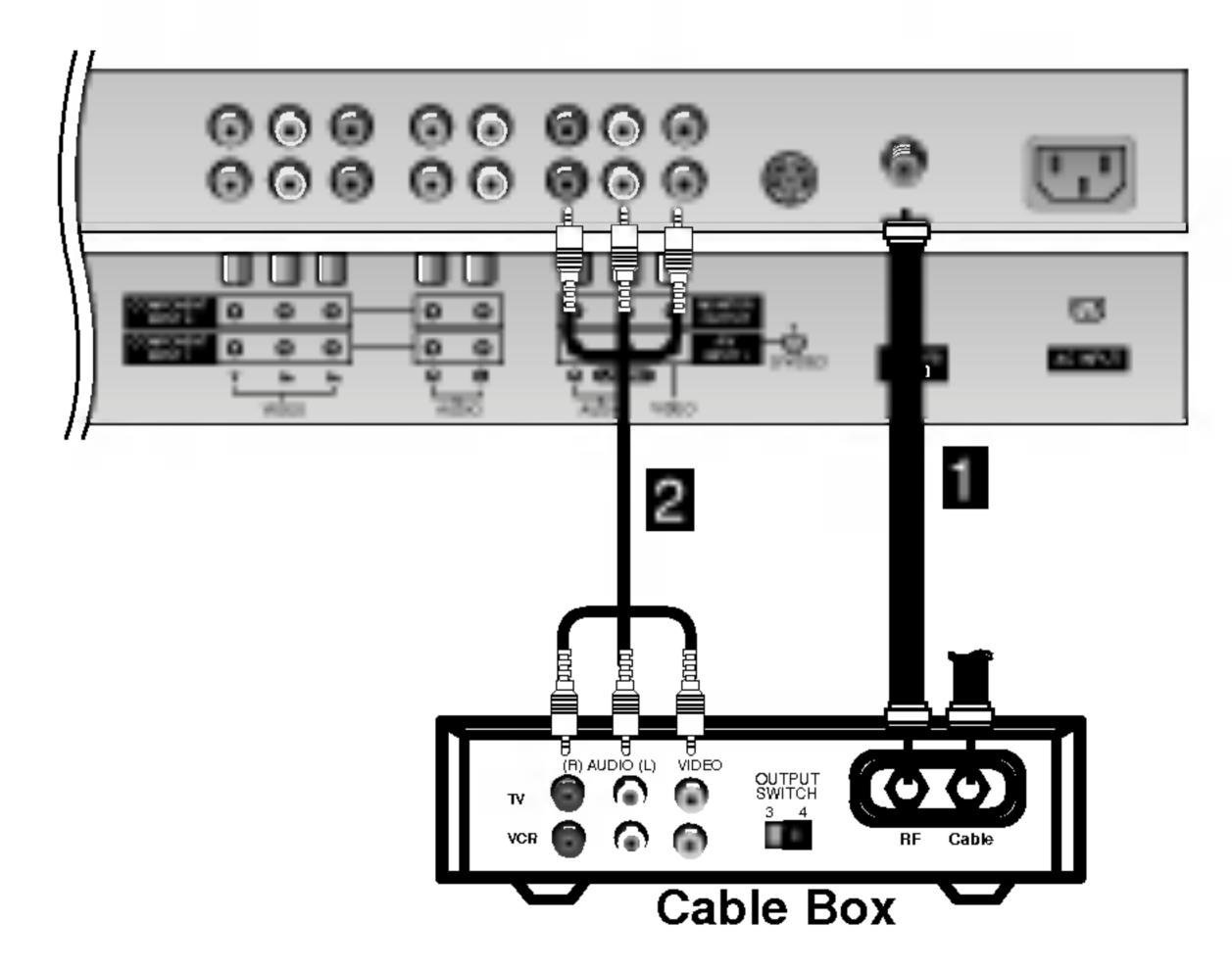
- After subscribing to a cable TV service from a local provider and installing a converter, you can watch cable TV programming. The TV cannot display TV programming unless a TV tuner device or cable TV converter box is connected to the TV.
- For further information regarding cable TV service, contact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

### **Connection Option 1**

- 1. Select 3 or 4 with channel switch on cable box.
- 2. Tune the TV channel to the same selected output channel on cable box.
- 3. Select channels at the cable box or with the cable box remote control.

### Connection Option 2

- 1. Connect the audio and video cables from the Cable Box's output jacks to the TV input jacks, as shown in the figure. When connecting the TV to a Cable Box, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).
- 2. Select the input source with using the TV/VIDEO button on the remote control. (If connected to A/V INPUT 1, select Video 1 input source)
- 3. Select your desired channel with the remote control for cable box.



### External A/V Source Setup

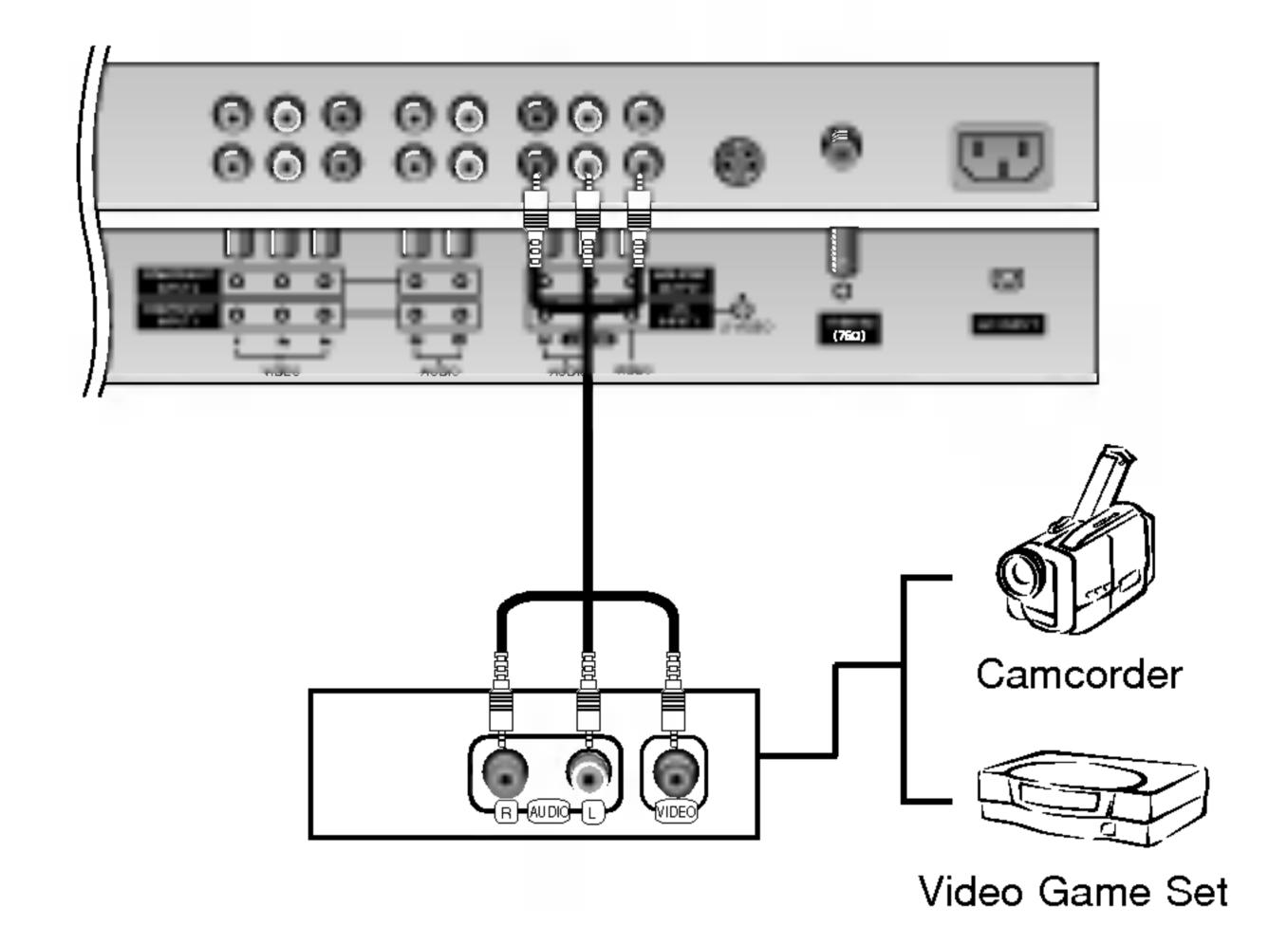
### How to connect

Connect the audio and video cables from the external equipment's output jacks to the TV input jacks, as shown in the figure.

When connecting the TV to external equipment, match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).

### How to use

- Select the input source with using the TV/VIDEO button on the remote control. (If connected to A/V INPUT 1, select Video 1 input source).
- 2. Operate the corresponding external equipment. Refer to external equipment operating guide.



### DVD Setup

### How to connect

- Connect the DVD video outputs (Y, PB, PR) to the COMPONENT (Y, PB, PR) INPUT jacks on the TV and connect the DVD audio outputs to the AUDIO INPUT jacks on the TV, as shown in the figure.
- 2. If your DVD only has an S-Video output jack, connect this to the S-VIDEO input on the TV and connect the DVD audio outputs to the AUDIO INPUT jacks on the TV, as shown in the figure.

NOTE: If your DVD player does not have component video output, use S-Video.

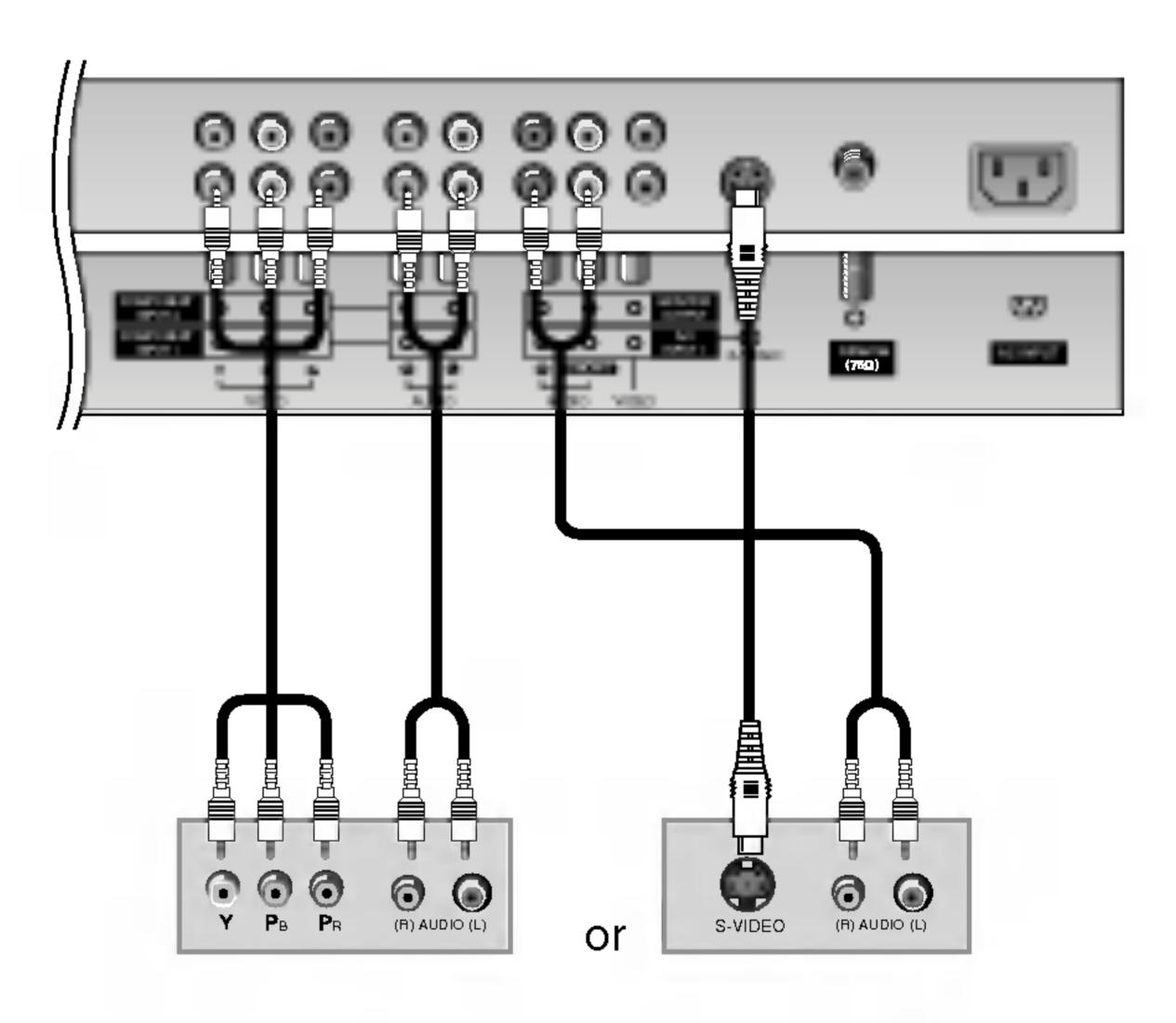
### How to use

- 1. Turn on the DVD player, insert a DVD.
- 2. Use the **TV/VIDEO** or **MULTIMEDIA** button on the remote control to select **Component 1** or **Component 2**. (If connected to S-VIDEO, select the **Video 1** or **Video 2** external input source.)
- 3. Refer to the DVD player's manual for operating instructions.

### Component Input ports

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

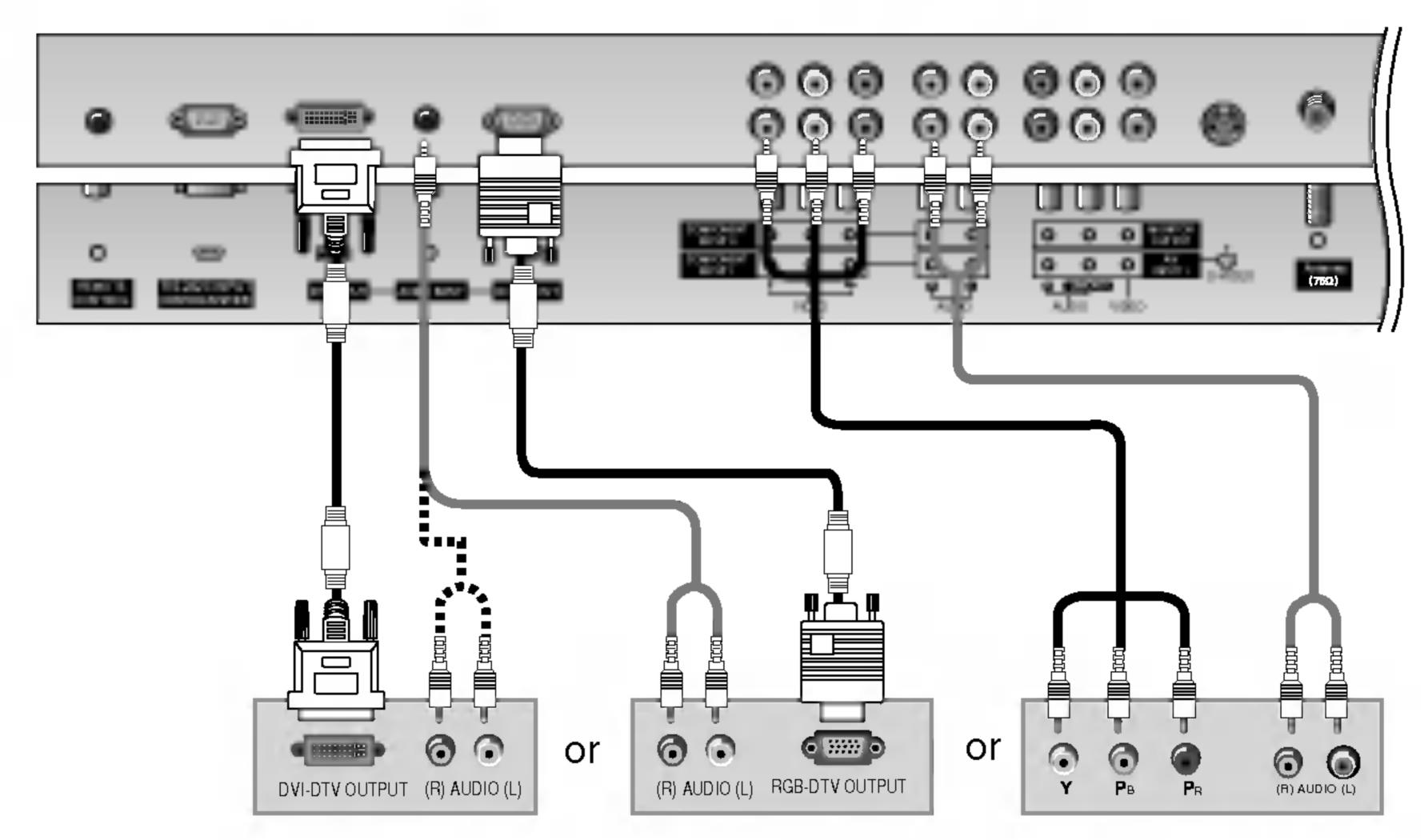
Component ports on the TV	Υ	Pn	PR
Video output ports on DVD player	Y Y Y	Pb B-Y Cb PB	Pr Cr PR



DVD

### DTV Setup

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



**Digital Set-top Box** 

### How to connect

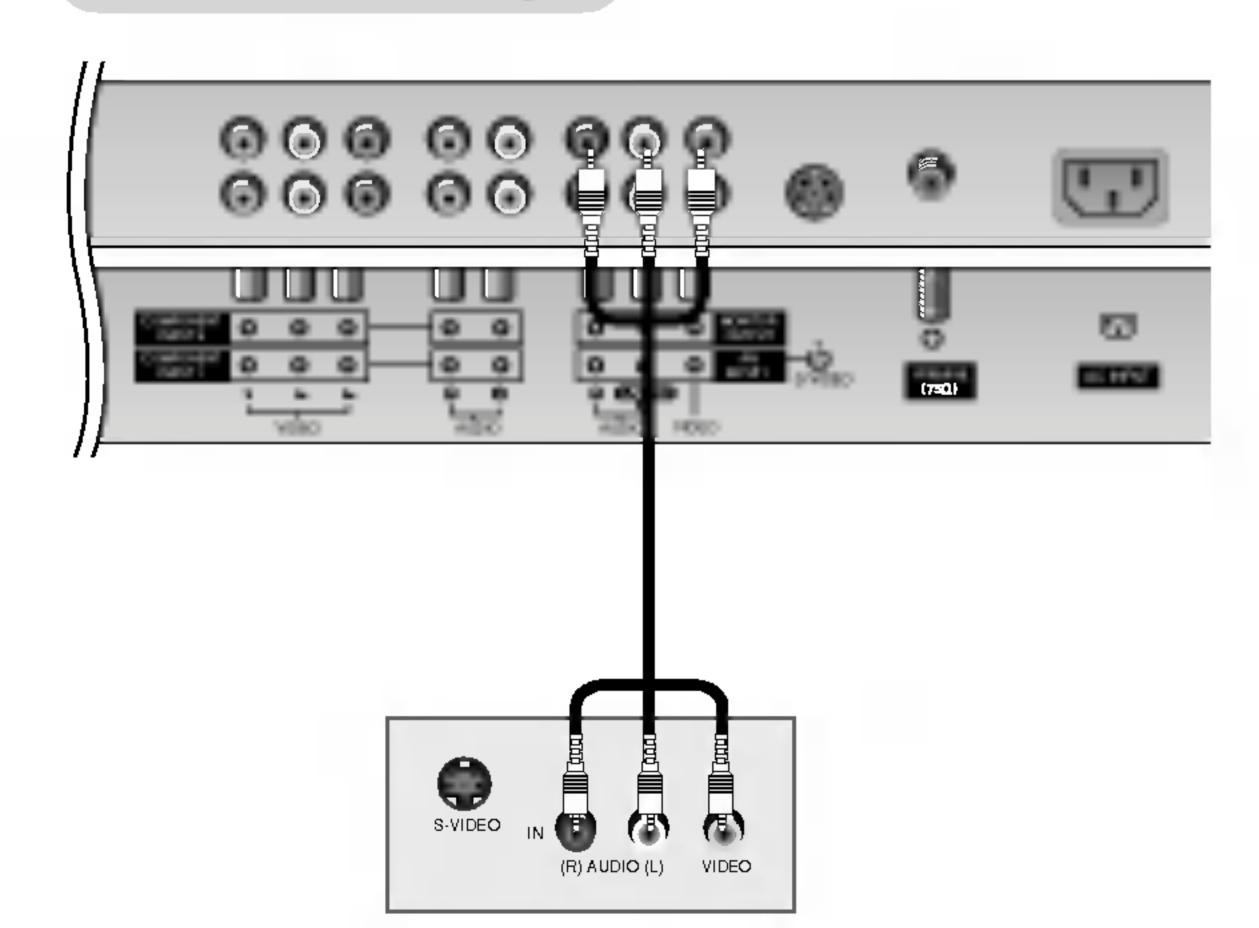
Use the TV's COMPONENT (Y, PB, PR) INPUT, RGB or DVI jack for video connections, depending on your set-top box connector. Then, make the corresponding audio connections.

### How to use

- 1. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- 2. Use TV/VIDEO or MULTIMEDIA on the remote control to select Component 1, Component 2, RGB, or DVI source.

Signal	Component 1/2	RGB,DVI
480i	Yes	о 2
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes

### Monitor Out Setup



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

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

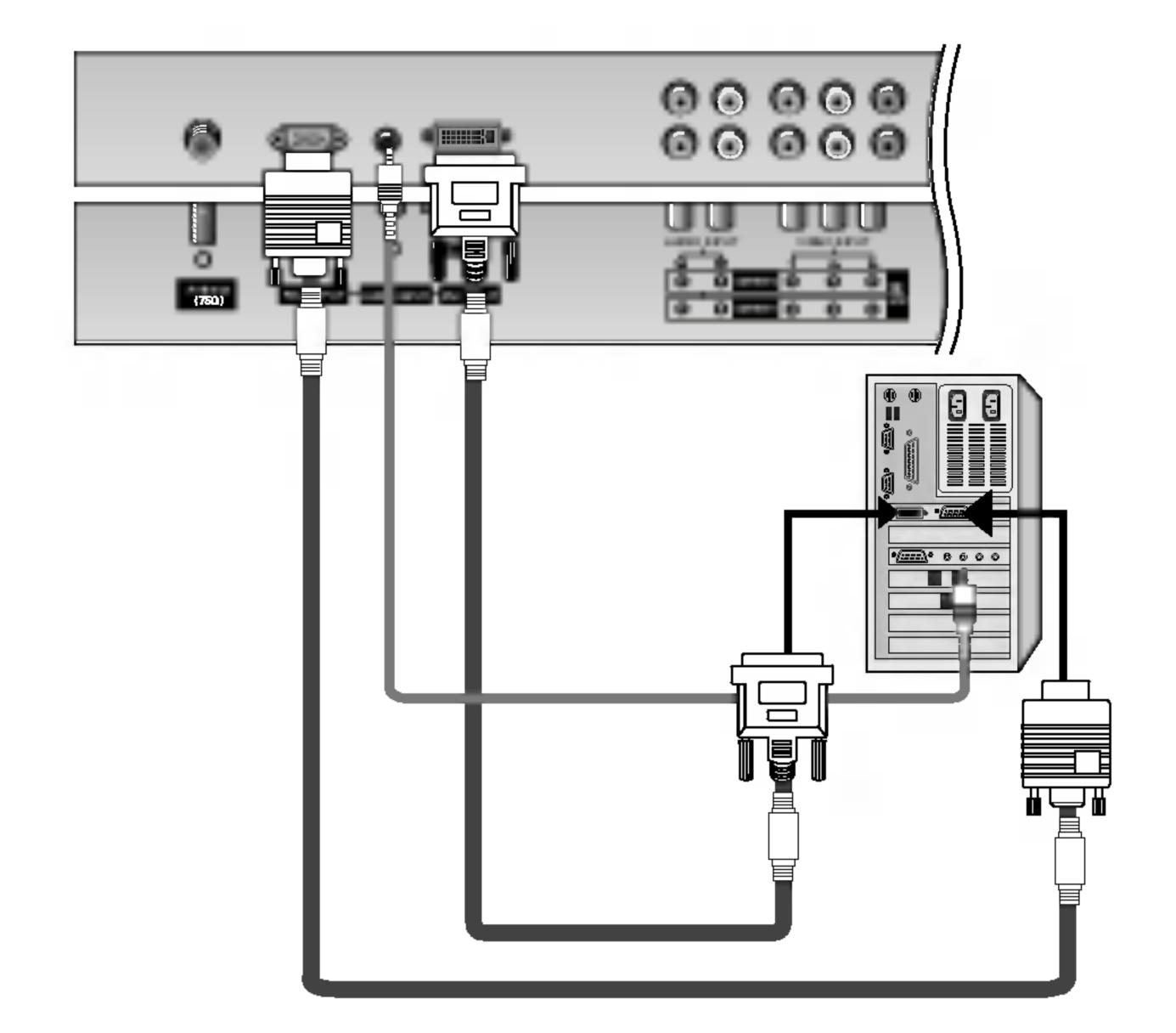
### NOTE

 Component, RGB-PC/RGB-DTV, DVI-PC/DVI-DTV input sources cannot be used for Monitor out.

### PC Setup

### How to connect

- 1. To get the best picture quality, adjust the PC graphics card to 640x 480, 60Hz.
- Use the TV's RGB INPUT or DVI (Digital Visual Interface) INPUT port for video connections, depending on your PC connector.
  - If the graphic card on the PC does not output analog and digital RGB simultaneously, connect only one of either RGB INPUT or DVI INPUT to display the PC on the TV.
  - If the graphic card on the PC does output analog and digital RGB simultaneously, set the TV to either RGB or DVI; (the other mode is set to Plug and Play automatically by the TV.)
- 3. Then, make the corresponding audio connection. If using a sound card, adjust the PC sound as required.



### How to use

- 1. Turn on the PC and the TV.
- 2. Turn on the display by pressing the POWER button on the TV's remote control.
- 3. Use TV/VIDEO or MULTIMEDIA on the remote control to select RGB, or DVI source.
- 4. 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 mode to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the 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.

### NOTES: • Use a DVI cable.

- Avoid keeping a fixed image on the TV's screen for a long period of time. The fixed image may become permanently imprinted on the screen. Use the Orbiter screen saver when possible.
- The synchronization input form for Horizontal and Vertical frequencies is separate.

# Displayable Monitor Specifications

RGB / DVI Mode

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
040X330	37.861	85.08
720x400	31.469	70.08
720X400	37.927	85.03
	31.469	59.94
	35.000	66.66
640x480	37.861	72.80
	37.500	75.00
	43.269	85.00
	31.500	60.00
848x480	37.799	70.00
	39.375	75.00
	31.500	60.00
852x480	37.799	70.00
	39.375	75.00
	35.156	56.25
	37.879	60.31
800x600	48.077	72.18
	46.875	75.00
	53.674	85.06
832x624	49.725	74.55
	48.363	60.00
1024x768	56.476	70.06
10248766	60.023	75.02
	68.677	85.00
1360x768	47.700	60.00
(RGB)	59.625	75.02
1366x768	47.700	60.00
(RGB)	59.625	75.02
	54.348	60.05
1152x864	63.995	70.01
(RGB)	67.500	75.00
	77.487	85.00
1152x870(RGB)	68.681	75.06
1280x768	47,693	60.00
(RGB)	60.091	75.00
, , ,	68.504	85.00
1280x960(RGB)	60.023	60.02
1280x1024(RGB)	63.981	60.02
•		

RP-42PY10X/10XH/11X/11XH series

RGB / DVI Mode

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
040x330	37.861	85.08
720x400	31.469	70.08
/20x400	37.927	85.03
	31.469	59.94
	35.000	66.66
640x480	37.861	72.80
	37.500	75.00
	43.269	85.00
	31.500	60.00
848x480	37.799	70.00
	39.375	75.00
	31.500	60.00
852x480	37.799	70.00
	39.375	75.00
	35.156	56.25(RGB)
	37.879	60.31
800x600	48.077	72.18
	46.875	75.00
	53.674	85.06
832x624	49.725	74.55
	48.363	60.00
10045760	56.476	70.06
1024x768	60.023	75.02
	68.677	85.00
	47.700	60.00
1360x768	59.625	75.02
	68.500	85.00
	47.700	60.00
1366x768	59.625	75.02
	69.500	85.00
	54.348	60.05
1152x864	63.995	70.01
1102,004	67.500	75.00
	77.487	85.00
1152x870	68.681	75.06
	47,693	60.00
1280x768	60.091	75.00
	68.504	85.00
1280x960	60.023	60.02
1280x1024	63.981	60.02

RP-50/60PY10/10H/11/11H series

# Operation

# Turning the TV On

\* In this manual, the OSD (On Screen Display) may be different from your TV's because it is just an example to help you with the TV operation.

### Turning on the TV just after installation

- 1. Connect power cord correctly.
- Press the ON/OFF button on the TV. At this moment, the TV is switched to standby mode. Press the TV/VIDEO, CH (▲ / ▼) button on the TV or press the POWER, TV/VIDEO, MULTIMEDIA, Number (0 ~ 9) button on the remote control and then the TV will turn on.

### Turning on the TV (power cord is still connected)

- 1. If the TV was turned off with the ON/OFF button on the TV
- Press the **ON/OFF** button on the TV to turn the TV on.
- 2. If the TV was turned off with the remote control and then the ON/OFF button on the TV
- Press the ON/OFF button on the TV and then press the TV/VIDEO, CH (▲ / ▼) button on the TV or
  press the POWER, TV/VIDEO, MULTIMEDIA, Number (0 ~ 9) button on the remote control to turn
  the TV on.

### NOTE

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

# Menu Language Selection

- The menus can be shown on the screen in the selected language. First select your language.
- 1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select Language.
- 3. Press the ▶ button and then use ▲ / ▼ button to select your desired language. From this point on, the on-screen menus will be shown in the language of your choice.
- 4. Press the ENTER button to save.

# Channel Menu Options

Auto Program should be used to memorize all the active channels in your area before you are able to use the TV.

There are two ways of storing channels in the TV's memory. You can use either.

One is called AUTO PROGRAM and the other is called 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.

### Auto Program: Channel Search

- Redo Auto Program if the Plasma Display is ever moved to another location.
- Auto Program will search for channels only through the ANT IN 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:



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

 Press the A.PROG button and then press the ► button. AUTO PROGRAM starts the channel search.

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

• You can also select the Auto program option and do a channel search in the **CHANNEL** menu.



### Manual Program: Adding/Deleting Channels

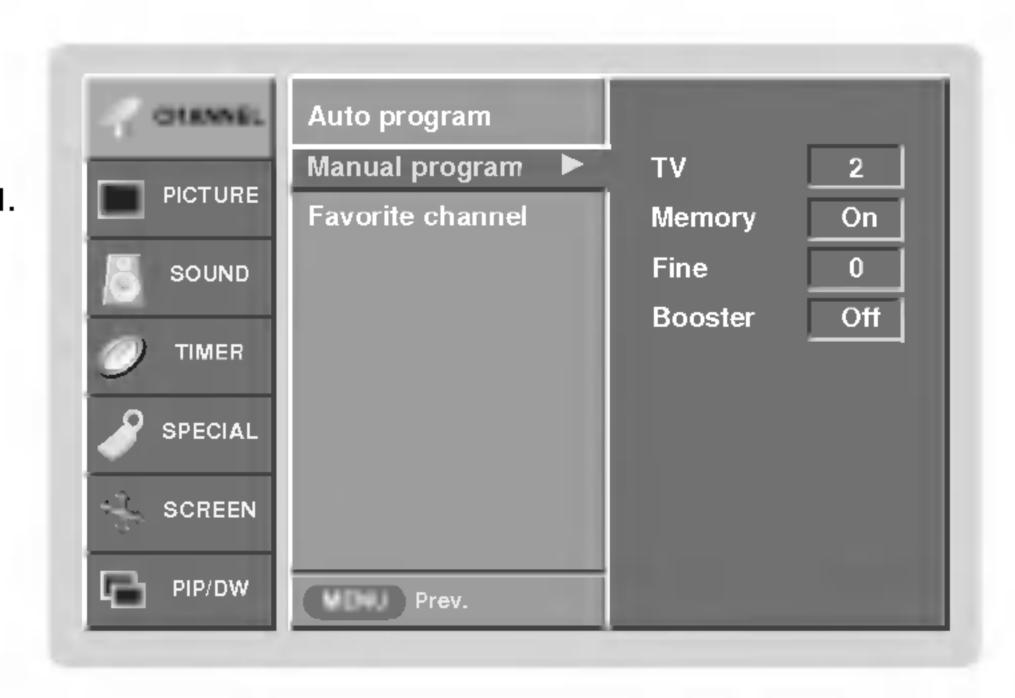
- You can add or delete channels from the channel scan manually.
- 1. Use the ▲ /▼ or NUMBER buttons to select the channel number you want to add or delete.
- Press the MEMORY/ERASE button.
- 3. Use the MEMORY/ERASE button to select Memory or Erase.
- 4. Press the **ENTER** button.
  - You can also do Manual program with the CHANNEL menu.

### Fine Tuning Adjustment

- Use this function to correct the picture's instability and condition if it is poor.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **CHANNEL** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Manual program**.
- 3. Press the ▶ button and then use ▲ /▼ button to select **Fine**.
- Use the ◀ /► button to adjust the picture to your preference.
- Press the ENTER button to save.

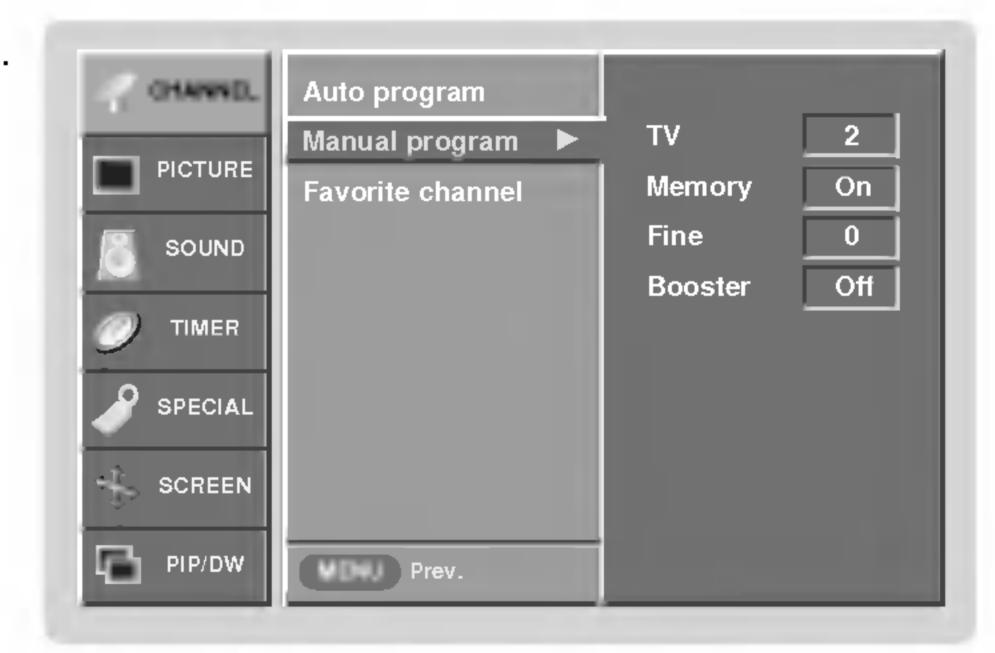
### NOTES

- 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.



### Signal Reception Booster

- If TV signal reception is poor because you are in a fringe area, set Booster to On. If the picture condition is good, set Booster to Off.
- Adjustments for one channel don't affect the adjustment for other channels. Set booster to on or off for each channel separately.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **CHANNEL** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Manual program**.
- 3. Press the ▶ button and then use ▲ /▼ button to select **Booster**.
- 4. Use **◄** /▶ button to select **On** or **Off**.
- 5. Press the **ENTER** button to save.



### 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.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **CHANNEL** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select Favorite channel.
- 3. Press the ▶ button and then use ▲ / ▼ button to select the first favorite channel position.
- 4. Use the ◀ /▶ button to set the desired channel number for first favorite channel.
- 5. Repeat steps 3 to 4 to memorize other favorite channels.
- 6. Press the **ENTER** button to save.
  - To tune to a favorite channel, press the FCR (Favorite Channel Review) button repeatedly. The eight favorite channels appear on the screen in numerical order.



# Picture Menu Options

### APC (Auto Picture Control)

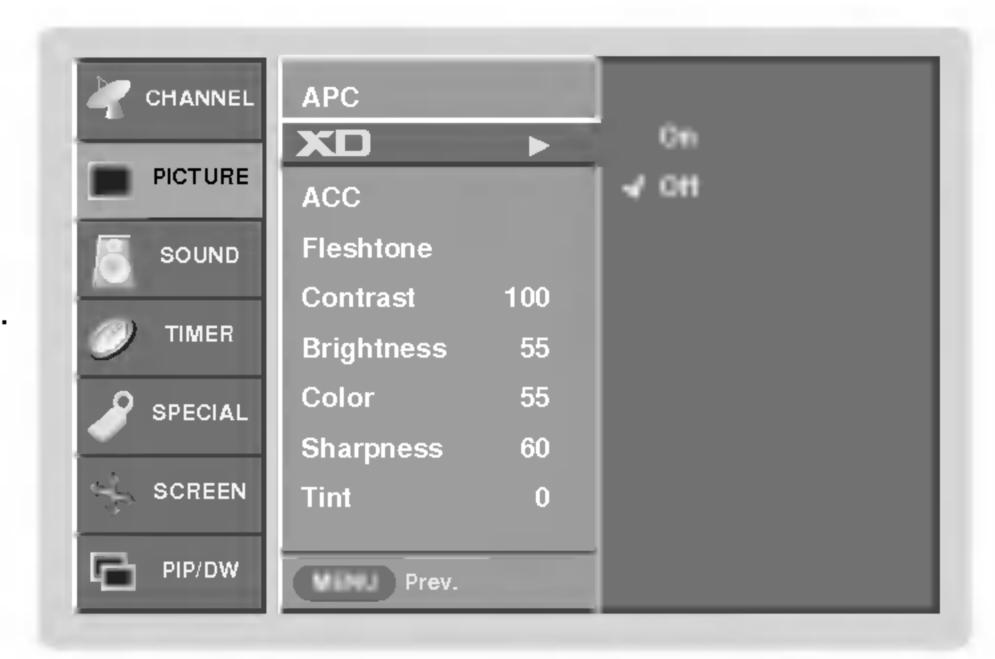
- APC adjusts the TV to the best picture appearance.
- If adjusting picture options (contrast, brightness, color, sharpness, or tint) manually, APC automatically changes to **User**.
- 1. Press the **APC** button repeatedly to select the picture appearance setup option as shown below.



- You can also adjust APC in the PICTURE menu.
- Clear, Optimum, and Soft settings are preset for good picture quality at the factory and cannot be changed.

### 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 (Clear, Optimum and Soft), XD is automatically change to On.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **PICTURE** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **XD**.
- 3. Press the button and then use **△** / **v** button to set **On** or **Off**.
- Press the ENTER button to save.



### Color Temperature Control

### **Auto Color Temperature Control**

- To initialize values (reset to default settings), select the Normαl option.
- 1. Press the **MENU** button and then use **▲** / **▼** button to select the **PICTURE** menu.
- 2. Press the 

  button and then use 

  /▼ button to select ACC.
- 3. Press the ▶ button and then use ▲ /▼ button to select either: **Cool** (Preset), **Normal** (Default), or **Warm** (Preset).
- 4. Press the **ENTER** button to save.

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

- You can adjust red, green, or blue to any color temperature you prefer.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **PICTURE** menu.
- 2. Press the button and then use **A** / **V** button to select **ACC**.
- 3. Press the ▶ button and then use ▲ /▼ button to select **User**.
- Press the button and then use y value button to select Red, Green or Blue.
- Use the ◀ / ► button to make appropriate adjustments.
  - The adjustment range of **Red**, **Green**, and **Blue** is -30 ~ +30.
- Press the ENTER button to save.



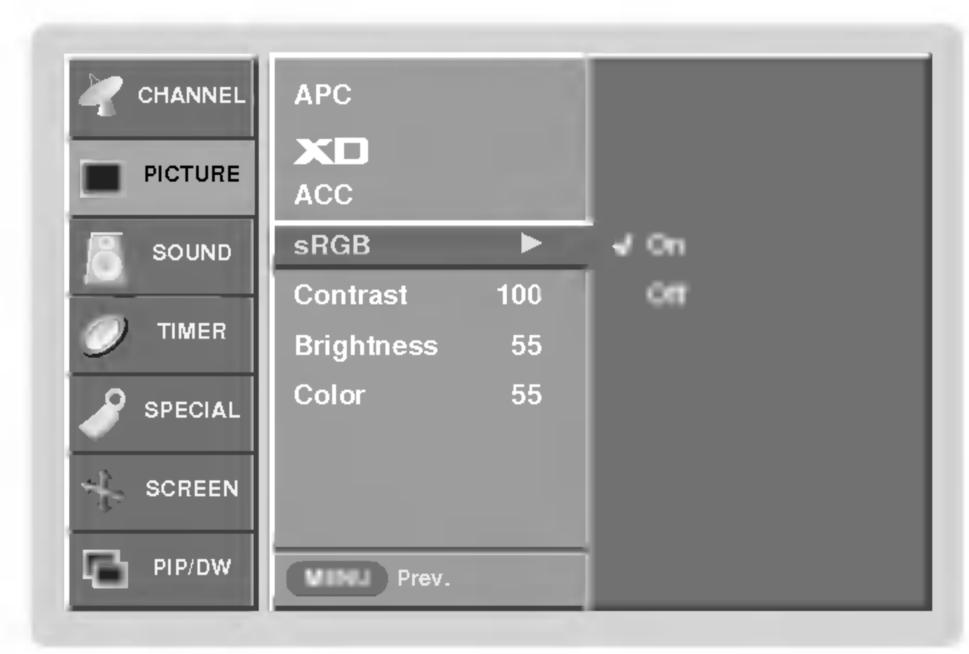
### Fleshtone (TV, Video1-2, Component 1-2, RGB-DTV, and DVI-DTV Mode only)

- Use Fleshtone to select the desired skin color option.
- 1. Press the **MENU** button and then use ▲ / ▼ button to select the **PICTURE** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Fleshtone**.
- 3. Press the ▶ button and then use ◀ / ▶ button to make appropriate adjustments.
  - The adjustment range is 0 ~ 3.
- 4. Press the **ENTER** button to save.



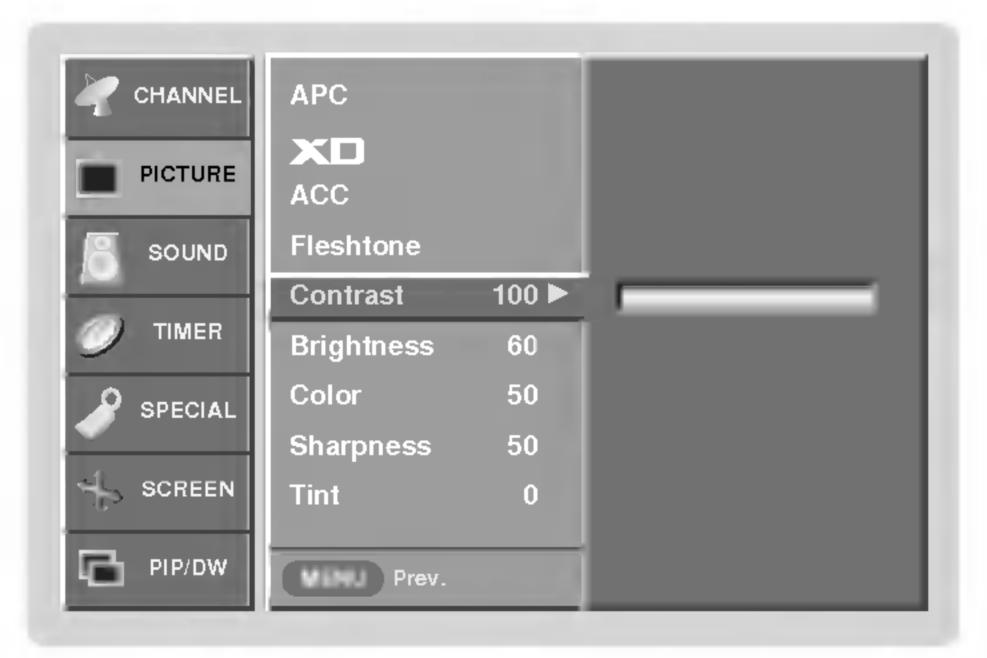
### sRGB (only RGB-PC, DVI-PC Modes)

- If the TV is connected to external equipment using sRGB, set sRGB to On to adjust for the color difference.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **PICTURE** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **sRGB**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- 4. Press the ENTER button to save.



### Manual Picture Control (APC set to User option)

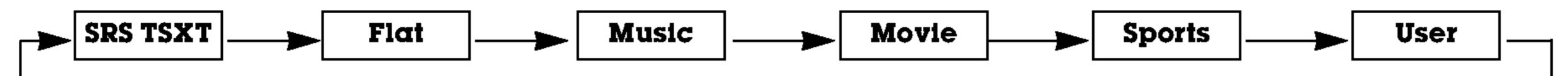
- You can adjust picture contrast, brightness, color, sharpness, and tint options to the levels you prefer.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **PICTURE** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select the desired picture option (Contrast, Brightness, Color, Sharpness, Tint).
- 3. Press the ▶ button and then use ◀ / ▶ button to make appropriate adjustments.
- 4. Press the **ENTER** button to save.



# Sound Menu Options

### DASP (Digital Auto Sound Processing)

- This function lets you enjoy the best sound without any special adjustment because the TV has the appropriate sound options based on the program content.
- If you adjust sound options (Treble and Bass) manually, DASP automatically changes to User.
  - 1. Press the DASP button repeatedly to select the appropriate sound setup as shown below.



- You can also adjust DASP in the SOUND menu.
- SRS TSXT, Flαt, Music, Movie, and Sports are preset for good sound quality at the factory and cannot be changed.
- is a trademark of SRS Labs, Inc.
- TruSurround XT technology is incorporated under license from SRS Labs, Inc.

### BBE

- BBE High Definition Sound restores clarity and presence for better speech intelligibility and music realism.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SOUND** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **BBE**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- 4. Press the ENTER button to save.
- BBE. Manufactured under license from BBE Sound, Inc.
- Treble, Bass or BBE aren't suitable for **SRS TSXT** mode.

# CHANNEL PICTURE AVL Balance 0 Treble 50 Bass 50 SPECIAL PIP/DW Prev.

### AVL (Auto Volume Leveler)

- AVL maintains an equal sound level; even if you change channels.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SOUND** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **AVL**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- 4. Press the **ENTER** button to save.



### Manual Sound Control (DASP user option and balance)

- You can adjust sound options Balance, Treble, and Bass to the levels you prefer.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SOUND** menu.
- Press the button and then use button to select the desired sound option (Balance, Treble, Bass).
- 3. Press the ▶ button and then use ◀ / ▶ button to make appropriate adjustments.
- 4. Press the ENTER button to save.



### Stereo/SAP Broadcasts Setup

- The TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program; if the broadcaster transmits one additional sound signal in addition to the original one.
- Mono: The primary language is heard from left and right speakers. Signal mode is mono.
- Stereo: The primary language is heard from left and right speakers. Signal mode is stereo.
- SAP: The secondary language is heard from left and right speakers in mono sound.
  - 1. Press the MTS button repeatedly.



- 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.

### NOTE:

 To enjoy quality sound performance with external audio connection, please set the volume of PDP TV to 'Mute'.

# Timer Menu Options

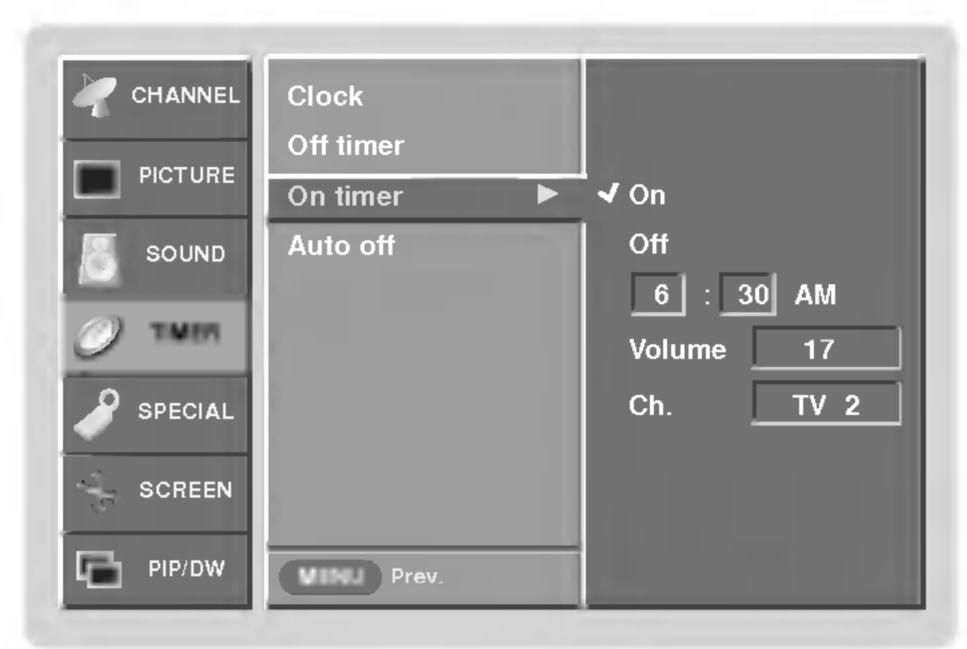
### Clock Setup

- If current time setting is wrong, reset the clock manually.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **TIMER** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Clock**.
- 3. Press the ▶ button and then use ▲ / ▼ button to set the hour.
- 4. Press the ▶ button and then use ▲ / ▼ button to set the minutes.
- Press the ENTER button to save.



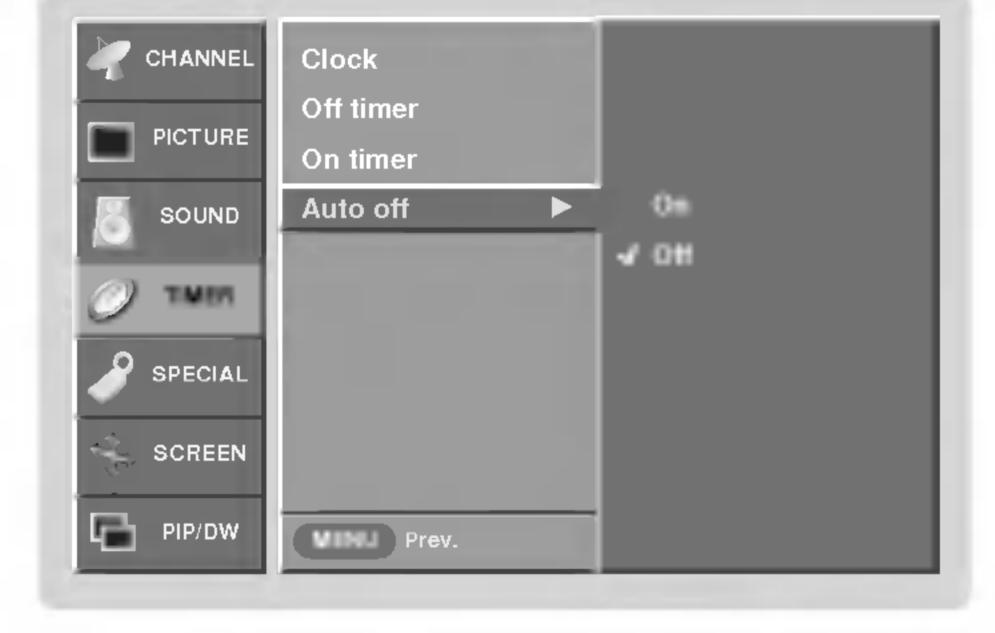
### On/Off Timer Setup

- Timer function operates only if current time has been set.
- Off-Timer function overrides On-Timer function if they are set both set to the same time.
- The TV must be in standby mode for the On-Timer to work.
- If you do not press any button within 2 hours after the TV turns on with the On Timer function, the TV will automatically revert to standby mode.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **TIMER** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Off timer** or **On timer**.
- 3. Press the ▶ button and then use ▲ /▼ button to select On.
  - To cancel On/Off timer function, select Off.
- 4. Press the ▶ button and then use ▲ /▼ button to set the hour.
- 5. Press the  $\triangleright$  button and then use  $\triangle$  / $\nabla$  button to set the minutes.
- 6. For only On timer function
  - Press the  $\triangleright$  button and then use  $\triangle$  / $\nabla$  button to select the channel at turn-on.
  - Press the  $\triangleright$  button and then use  $\triangle$  / $\nabla$  button to set the sound level at turn-on.
- Press the ENTER button to save.



### Auto Off

- If set to on and there is no input signal, the TV turns off automatically after 10 minutes.
- 1. Press the **MENU** button and then use  $\triangle$  / $\nabla$  button to select the **TIMER** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Auto off**.
- 3. Press the button and then use ▲ / ▼ button to select **On** or **Off**.
- Press the ENTER button to save.



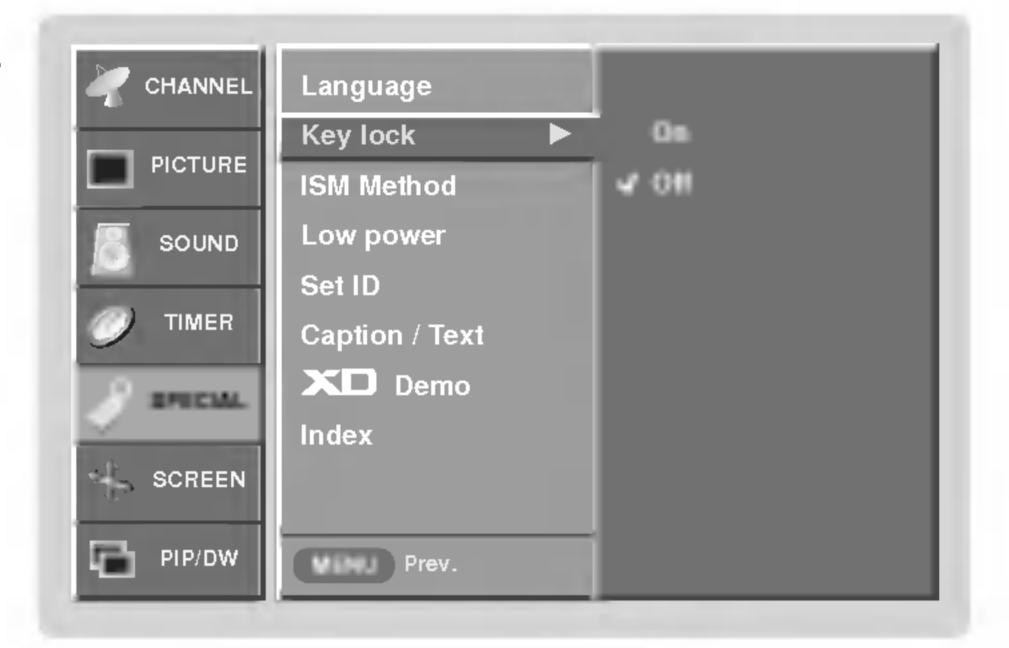
### Sleep Timer

- The Sleep Timer turns the TV off at the preset time. Note that this setting is cleared when the TV is turned off.
- 1. Press the **SLEEP** button repeatedly to select the number of preset minutes. First the 🕮 --- **Min** option appears on the screen, followed by the following sleep timer turn off times:
  - 10, 20, 30, 60, 90, 120, 180, and 240 minutes.
- 2. When the number of minutes you want is displayed on the screen, press the ENTER button. The timer begins to count down from the number of minutes selected.
- 3. To check the remaining minutes before the TV turns off, press the **SLEEP** button once.
- 4. To cancel the Sleep Timer, press the **SLEEP** button repeatedly until (1912 --- **Min** appears.

# Special Menu Options

### Key Lock

- The TV can be set up so that it can only be used with the remote control.
- This feature can be used to prevent unauthorized viewing by locking out the front panel controls.
- This TV is programmed to remember which option it was last set to even if you turn the TV off.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Key lock**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- 4. Press the ENTER button to save.
  - With the Key lock On, the display 'A Key lock' appears on the screen if any button on the front panel is pressed.



### ISM (Image Sticking Minimization) Method

- A frozen still picture from a PC/video game displayed on the screen for prolonged periods will result in a ghost image remaining even when you change the image. Avoid allowing a fixed image to remain on the TV's screen for a long period of time.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **ISM Method**.
- Press the ▶ button and then use ▲ / ▼ 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.

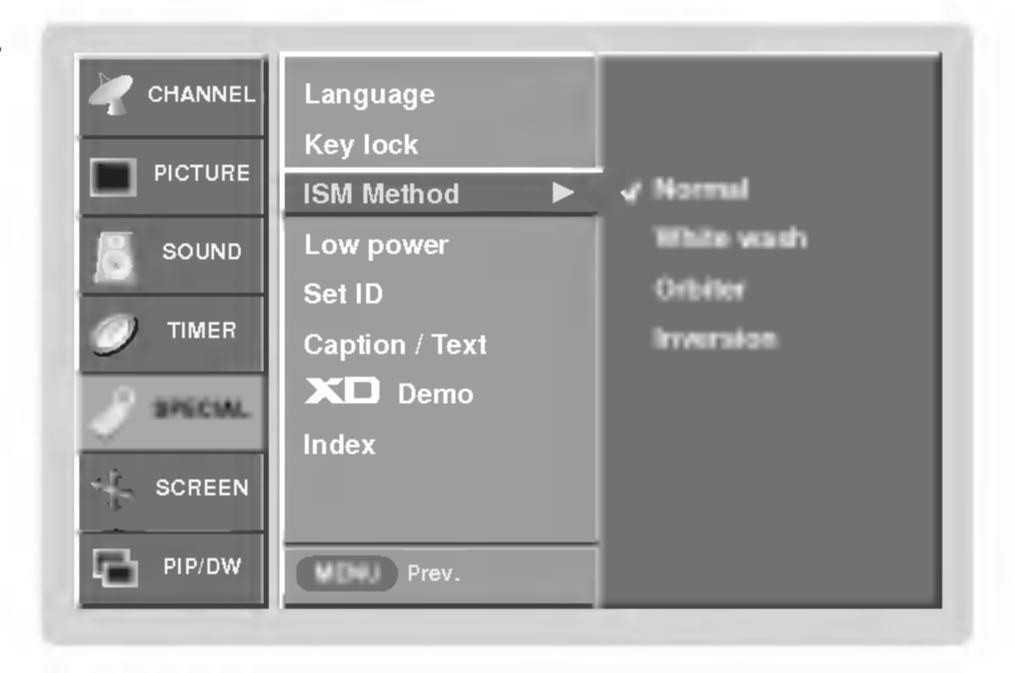
Orbiter

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 every 2 minutes: Right → Right → Downside → Downside → Left → Left → Upside → Upside.

Inversion

Inversion will automatically invert the TV panel color every 30 minutes.

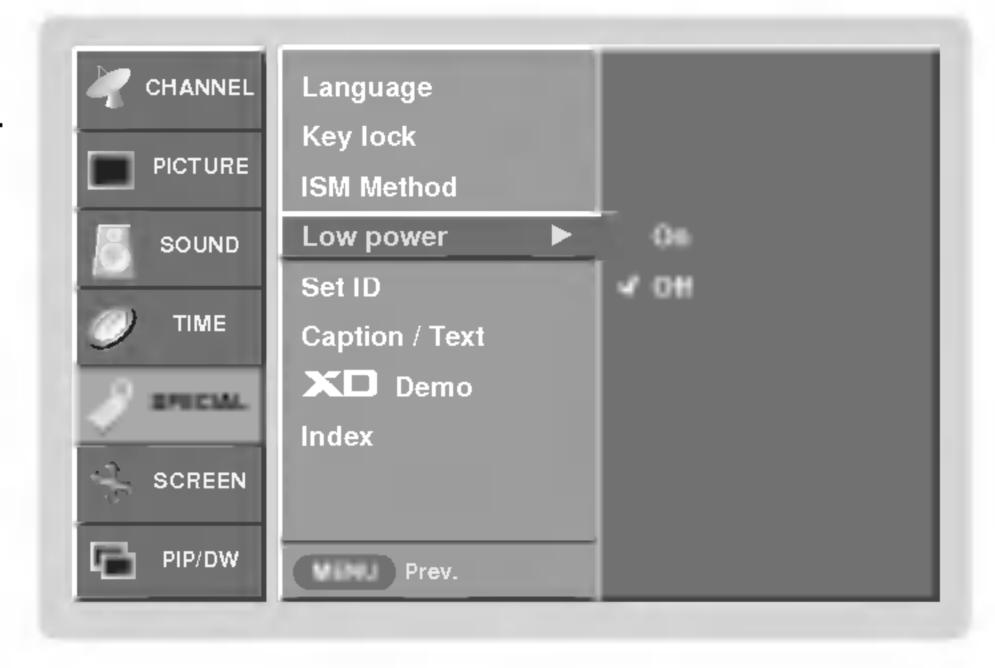
4. Press the **ENTER** button to save.



# Special Menu Options continued

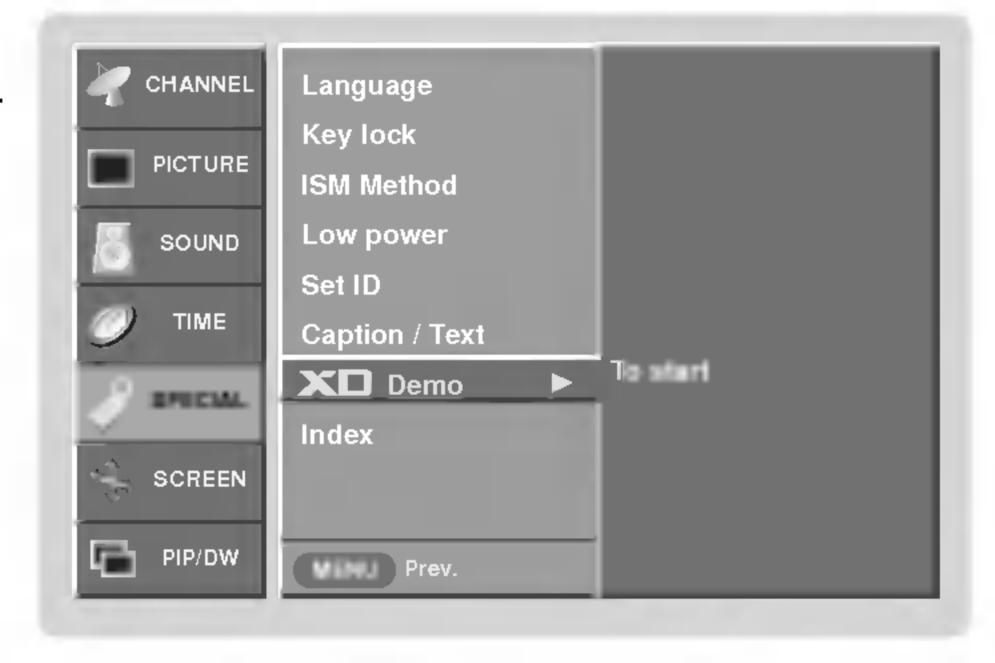
### Low Power

- Low power reduces the plasma display power consumption.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select **Low power**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
  - When you select On, the screen darkens.
- 4. Press the **ENTER** button to save.



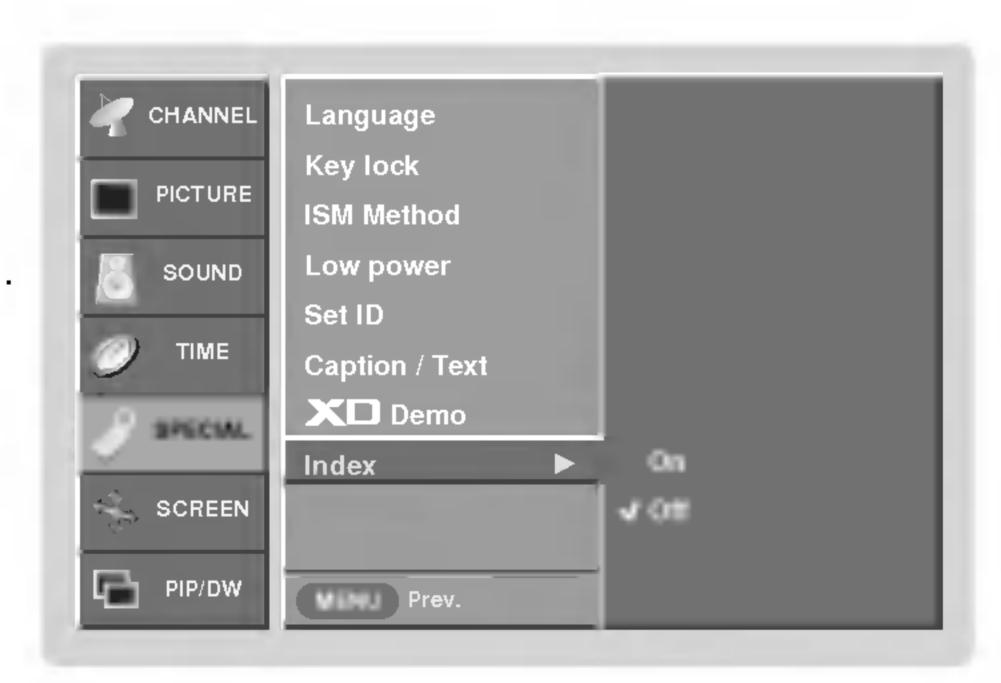
### XD Demo

- Use it to see the difference between XD Demo on and XD Demo off.
- 1. Press the **MENU** button and then use ▲ / ▼ button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select ➤□ Demo.
- 3. Press the ▶ button to begin **XD Demo**.
- 4. Press the **EXIT** button to stop **XD Demo**.



### Index

- Switches LED Display on or off.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Index**.
- 3. Press the ▶ button and then use ▲ /▼ button to select **On** or **Off**.
  - When you select **On** mode, the LED Display illuminutes brightly.
- 4. Press the **ENTER** button to save.



### Closed Captions

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

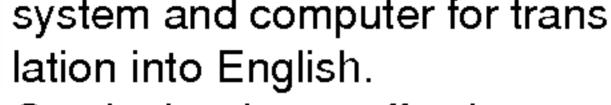
### **Using Closed Captions**

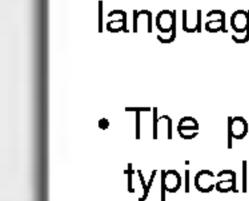
Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. Its possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand

system and computer for trans-

Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

 The picture at left shows a typical caption.





### **Caption Tips**

- Not all TV broadcasts include closed caption signals.
- Sometimes TV stations broadcast four different caption signals on the same channel. By selecting Model to Mode2, you can choose which signal you view. **Model** is usually the signal with the captions, while **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.

### Caption/Text

- Low power reduces the plasma display power consumption.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **SPECIAL** menu.
- 3. Press the button and then use ▲ / ▼ button to select caption: Model, Mode2, Textl, or Text2.

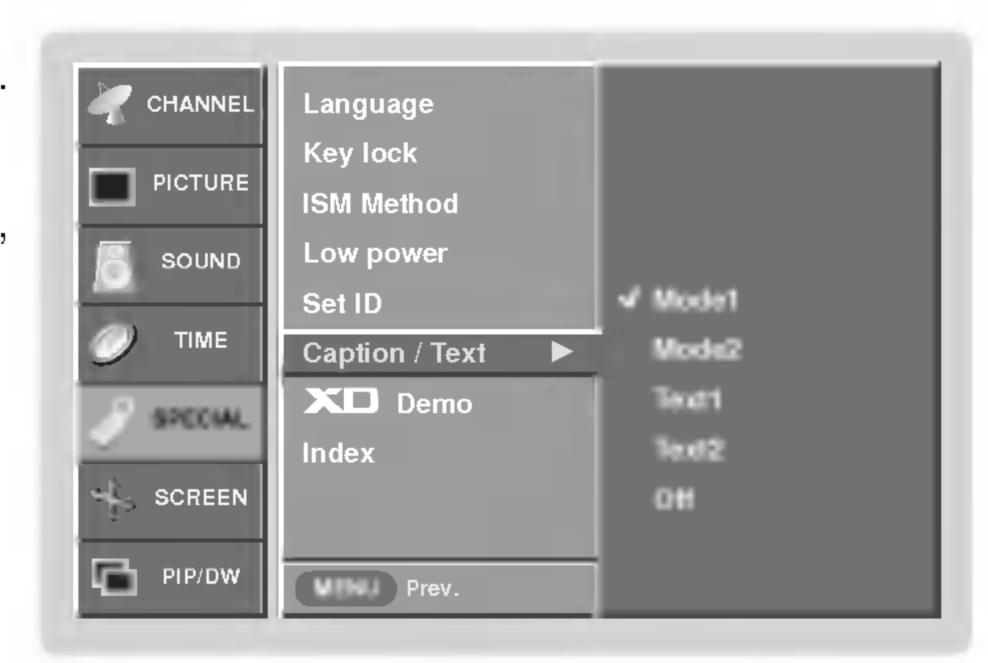
### CAPTION

The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.

### • TEXT

The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

Press the ENTER button to save.



# Screen Menu Options

### Auto Adjustment

- RGB (PC) mode only; This function doesn't work for RGB-DTV mode.
- Automatically adjusts picture position and minimizes image shaking.
- After adjustment, if the image is still not correct, your TV is functioning properly but needs further adjustment.
- The Auto config. and Manual config. are not active in DVI mode.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select Auto config..
- Press the ► button to run Auto configure.
  - When Auto config. has finished, OK will be shown on screen.
  - If the position of the image is still not correct, try Auto adjustment again.
- 4. In RGB (PC) mode, if the image needs to be adjusted more after using **Auto config.**, you can make further adjustments with the **Manual config.** option.



### Setting Picture Format

- Caution: If a 4:3 fixed image is on the screen for a long time, it may remain visible.
- Set every aspect ratio for TV, Video, Component 480i sources.
- Use 4:3, or 16:9 for other RGB-PC and DVI-PC sources.
- Horizon is not available for Component (480p,720p,1080i), DTV (480p,720p,1080i) sources.
- 1. Press the ARC button repeatedly to select the desired picture format. You can also adjust ARC in the SCREEN menu.

### · 4:3

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

### · 16:9

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

### Horizon

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

### · Zoom

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

### Screen Position

- This function works in the following modes:
   RGB-PC, RGB-DTV (480p,720p,1080i), DVI-DTV (480p,720p,1080i), COM-PONENT (480p,720p,1080i).
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Position**.
- 3. Press the ▶ button and then use ▲ /▼ / ▼ / ▶ button to adjust the position.
- 4. Press the **ENTER** button to save.



### Manual Configure (RGB-PC mode only)

- If the image still isn't clear after auto adjustment and especially if characters are still jittery, adjust the picture Phase manually.
- To correct the screen size, adjust Clock.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select Manual config..
- 3. Press the ▶ button and then use ▲ /▼ button to to select Phase or Clock.
- 4. Use the ◀ /▶ button to make appropriate adjustments.
  - The **Phase** adjustment range is 0 ~ 30.
  - The Clock adjustment range is -127 ~ +128.
- 5. Press the ENTER button to save.

### Selecting VGA/XGA mode (RGB-PC mode only)

- To see a normal picture, match the resolution of RGB XGA mode (1024x768, 1360x768, 1366x768) with the selection for XGA mode and the resolution of RGB VGA mode (640x480, 848x480, 852x480) with the selection for VGA mode in the **SCREEN** menu.
- If the input source is RGB VGA mode, the screen menu option is changed from **XGA Mode** to **VGA Mode** automatically.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select VGA Mode/XGA Mode.
- 3. Press the ▶ button and then use ▲ /▼ button to select the desired VGA/XGA resolution.
- 4. Press the ENTER button to save.



CHANNEL

PICTURE

SOUND

SPECIAL

S SCREEN

PIP/DW

Auto config.

Manual config.

Phase 0

Clock 0

ARC

Reset

XGA Mode

Prev.

Position

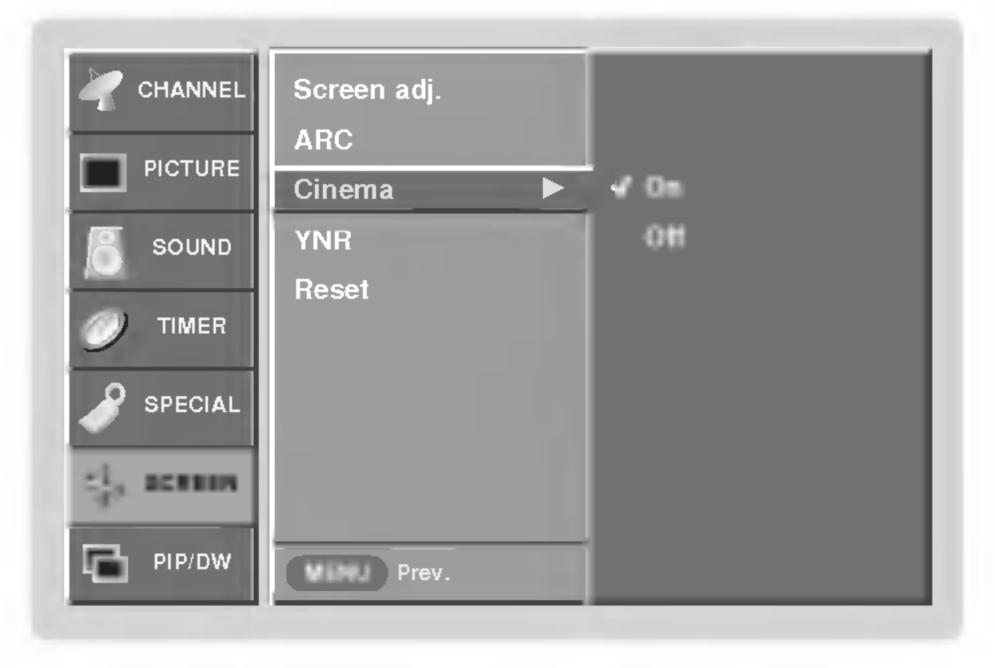
### Screen Adjustments (TV, Video1-2 and Component 480i mode only)

- Use this function to correct jittering or picture instability while viewing a video tape.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Screen αdj.**.
- 3. Press the ▶ button and then use ▲ / ▼ button to select TV or VCR.
  - Select the **VCR** option if watching a VCR.
  - Select the **TV** option for other equipment. (Except VCR)
- 4. Press the **ENTER** button to save.



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

- Sets up the TV for the best picture appearance for viewing movies.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select Cinema.
- 3. Press the ▶ button and then use ▲ / ▼ button to select **On** or **Off**.
- 4. Press the **ENTER** button to save.



## Screen Menu Options continued

### Luminance Noise Reduction (TV, Video 1-2 and Component 480i modes only)

- Use YNR to reduce the picture noise that may appear on the screen.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select YNR.
- 3. Press the  $\triangleright$  button and then use  $\triangle$  /  $\bigvee$  button to select **On** or **Off**.
- 4. Press the **ENTER** button to save.



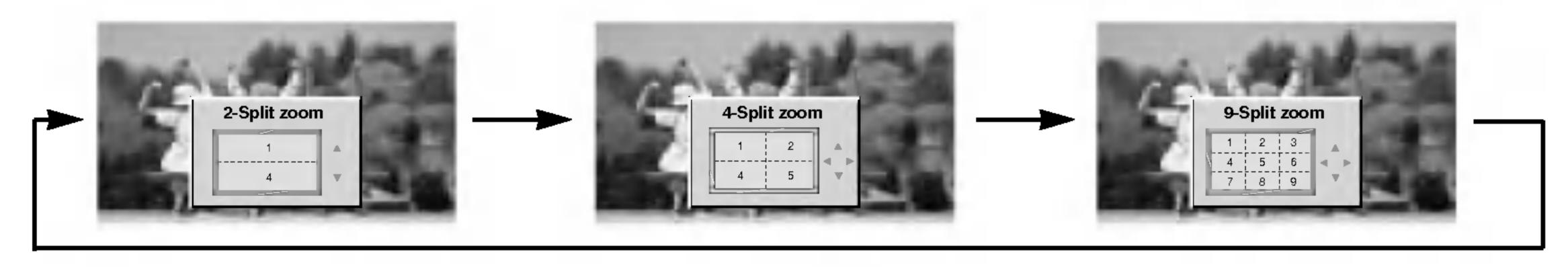
### Initializing (Reset to original factory value)

- Reset is unique to each function: Manual config., Position, Split zoom, PIP position and sub picture size for double window.
- Use the Reset option to initialize the adjusted settings.
- 1. Press the **MENU** button and then use  $\triangle / \nabla$  button to select the **SCREEN** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Reset**.
- Press the ▶ button.
  - You can initialize Position, Split zoom, PIP Transparency, PIP position, PIP size and sub picture size for double window.

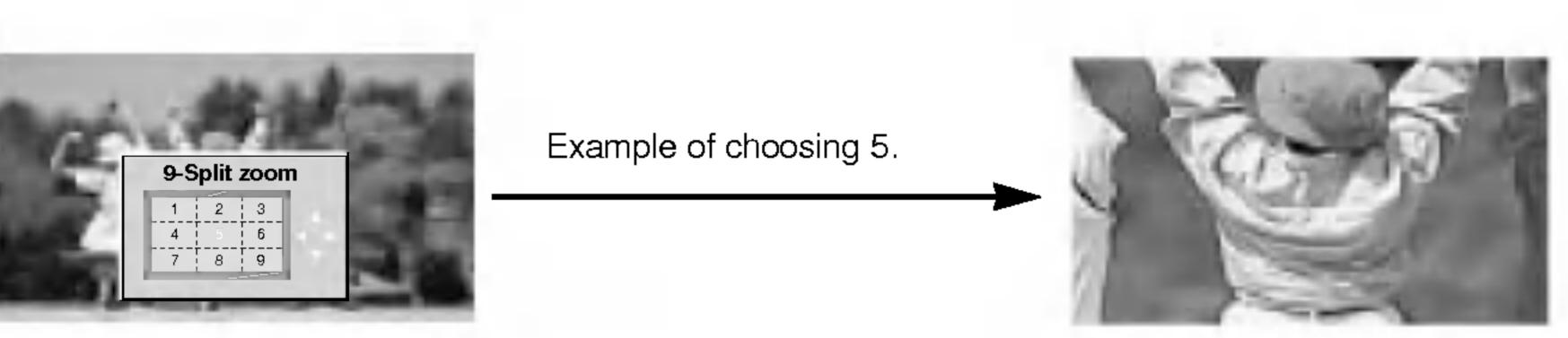


### Split Zoom

- Enlarges the picture in correct proportions.
- Split Zoom can be used for all input sources.
- In 2-Split Zoom mode, you can only move the image up or down.
- If an image is enlarged, a section can be viewed without using Split Zoom.
- 1. Press the SPLIT ZOOM button repeatedly to select either 2, 4, or 9 Split Zoom.



2. Press the number button corresponding to the section you wish to enlarge. You can move within the enlarged picture using the ▲ /▼ /◀ /▶ button. To return to normal viewing, press the SPLIT ZOOM button again.



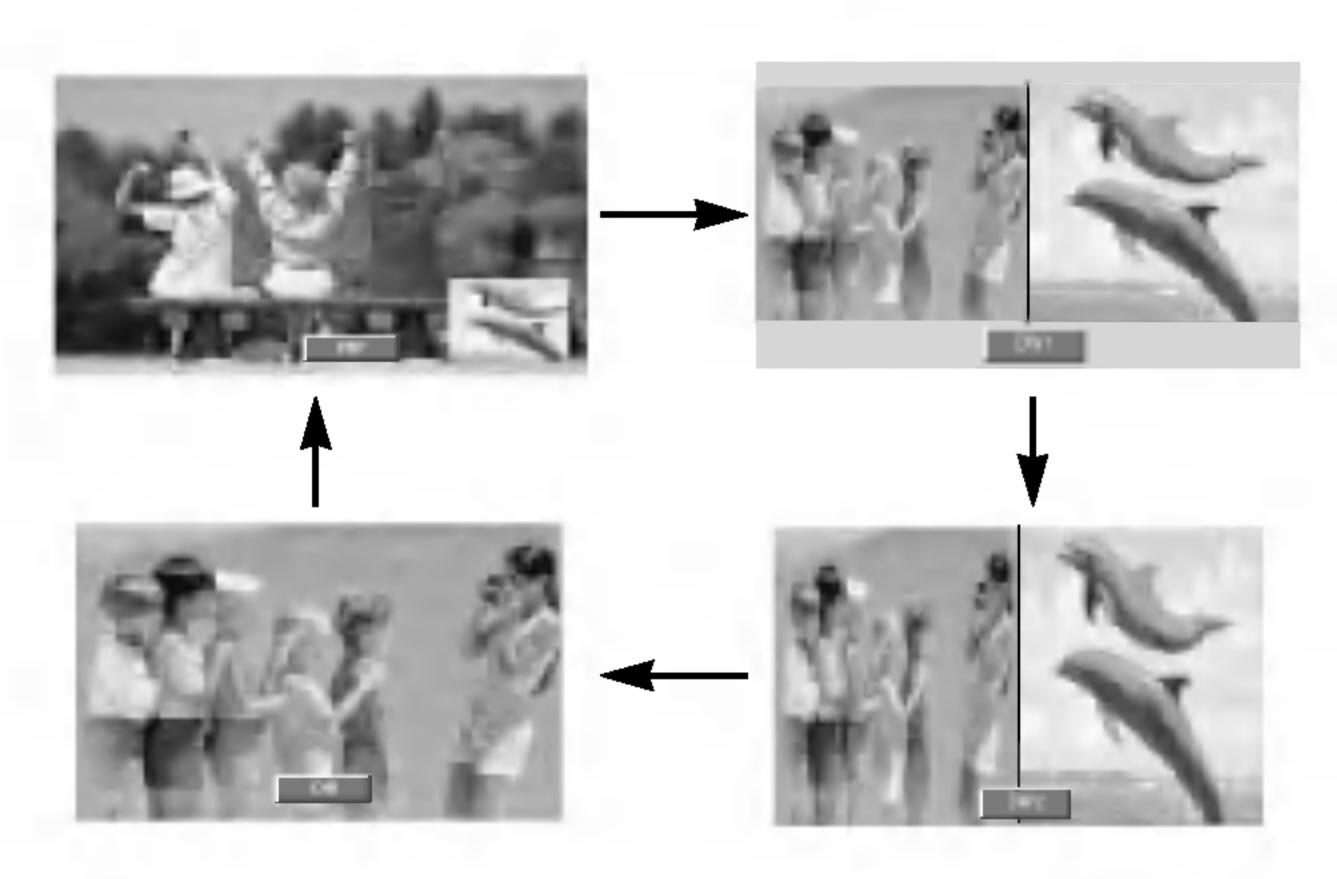
Section 5 is enlarged to fill the screen.

# PIP (Picture-In-Picture)/Double Window Feature

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

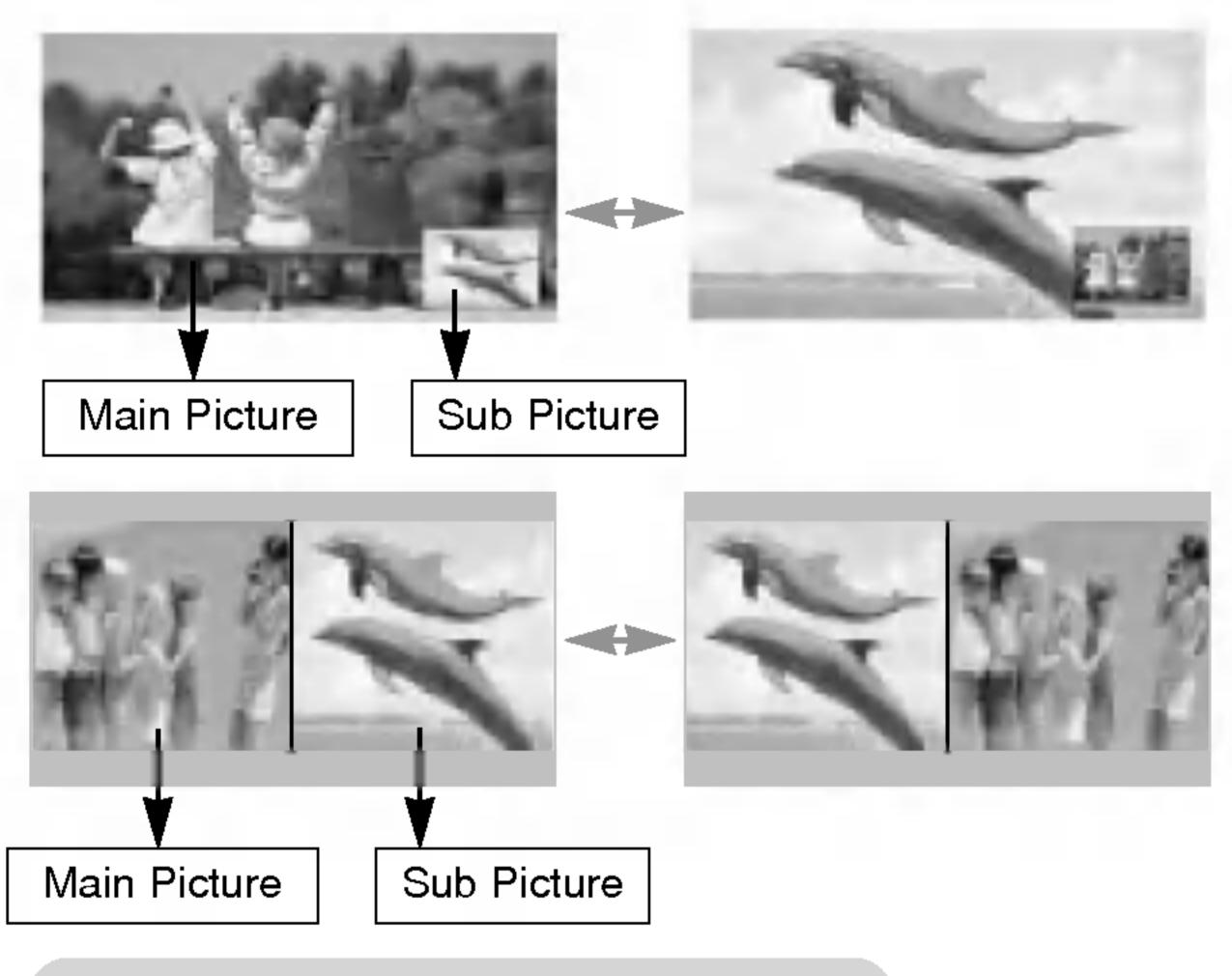
### Watching PIP/Double Window

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



### Swapping the PIP/Double Window

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



### TV Program selection for PIP

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

### Selecting an Input Signal Source for PIP/Double Window

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

### Moving the PIP (PIP Mode only)

Press the **POSITION** button.

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

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



### PIP Size

Press the WIN.SIZE button and then use ◀ / ▶ button to change the sub picture size.

- Using the Win.size function in Double Window mode, main and sub picture sizes are changed simultaneously.
   Using the Win.size function in PIP mode, sub picture size is changed.
- You can also change the sub picture size with Win.size in the PIP/DW menu.



### PIP Transparency (PIP Mode only)

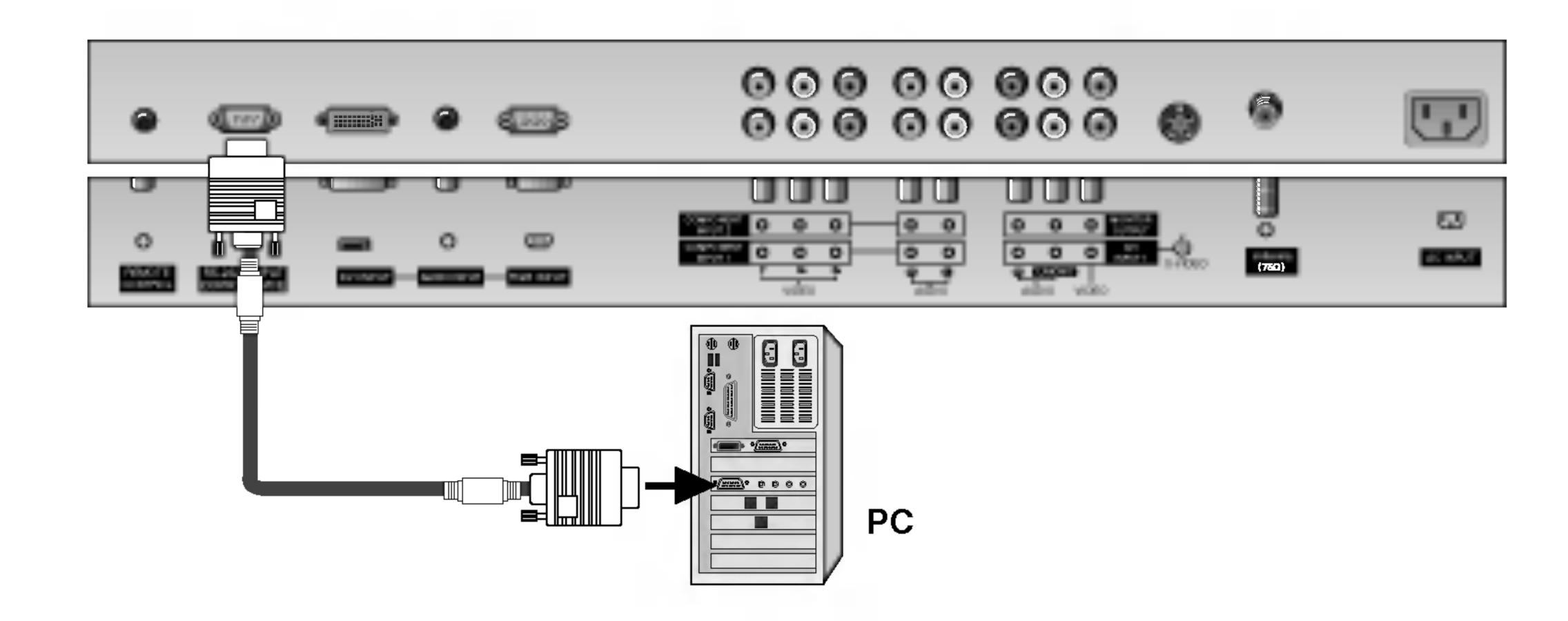
- To make the PIP clear or opaque
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **PIP/DW** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select PIP Transparency.
- Press the ► button and then use ◄ /► button to adjust PIP transparency.
- 4. Use the ◀ /▶ button to make appropriate adjustments.
  - The adjustment range of **PIP Transparency** is 0 ~ 10.
- 5. Press the **ENTER** button to save.

Main Picture Source	Available Sub Picture Sources
TV, Video 1-2, Component 480i	TV, Video 1-2, Component 480i/480p/720p/1080i, RGB and DVI
Component 480p/720p/1080i, RGB and DVI	TV, Video 1-2, Component 480i

# External Control Device Setup

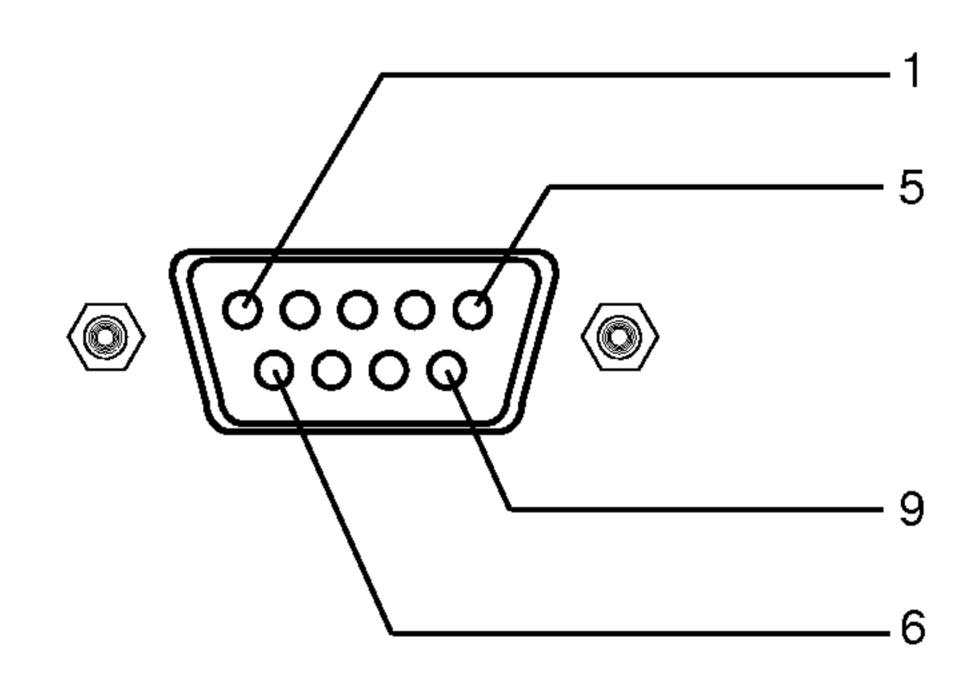
- Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.
- Connect the serial port of the control device to the RS-232C jack on the Monitor back panel.
- RS-232C connection cables are not supplied with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

### RS-232C Setup



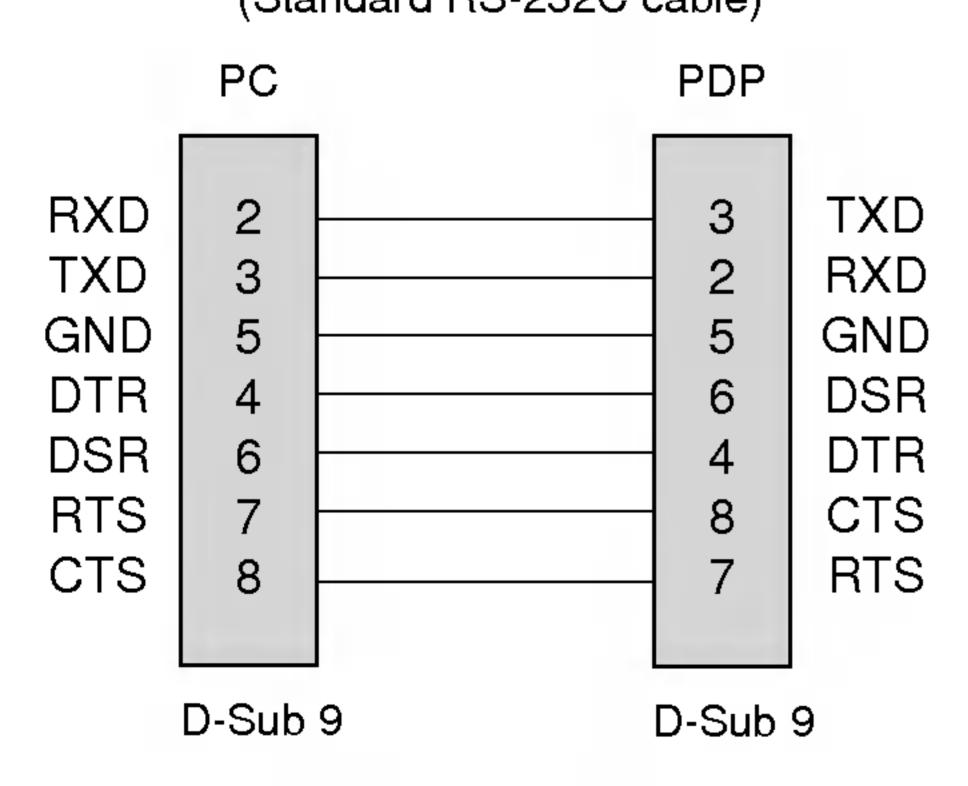
### Type of Connector; D-Sub 9-Pin Male

2	No connection
2	
	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection

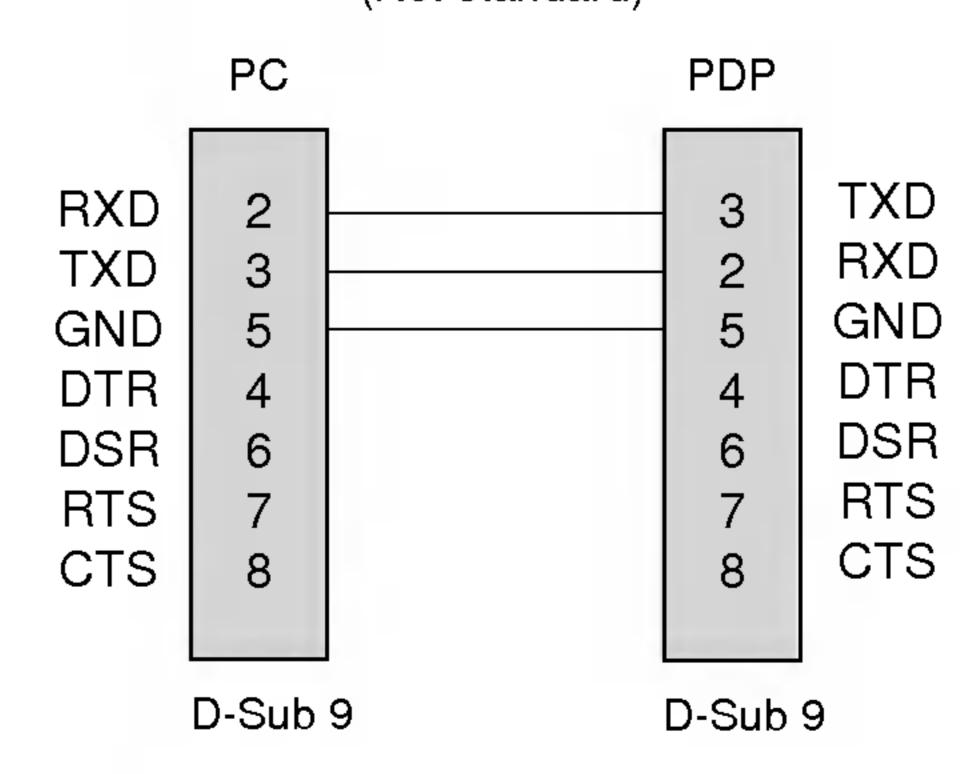


### RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)

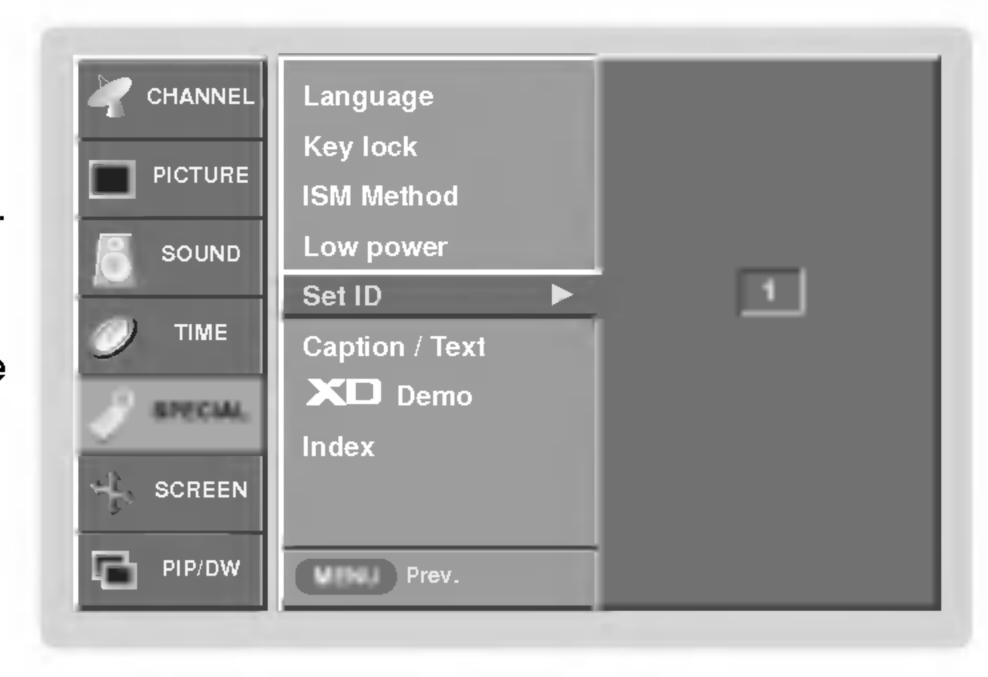


# 3-Wire Configurations (Not standard)



### Set ID

- Use this function to specify a monitor ID number.
- Refer to 'Real Data Mapping 1'. See page 32.
- 1. Press the **MENU** button and then use ▲ /▼ button to select the **SPECIAL** menu.
- 2. Press the ▶ button and then use ▲ /▼ button to select **Set ID**.
- 3. Press the ▶ button and then use ◀ / ▶ button to adjust **Set ID** to choose the desired monitor ID number. The adjustment range of **Set ID** is 1 ~ 99.
- 4. Press the **ENTER** button to save.



### Communication Parameters

• Baud rate :9600 bps (UART)

Data length: 8 bits

Parity : None

\* Use a crossed (reverse) cable.

### Stop bit : 1 bit

• Communication code : ASCII code

### Command Reference List

	OMMAND 1	COMMAND 2	DATA (Hexadecimal)
01. Power	k	а	0 ~ 1
02. Input Select	k	b	0~6
03. Aspect Ratio	k	С	0 ~ 3
04. Screen Mute	k	d	0 ~ 1
05. Volume Mute	k	е	0 ~ 1
06. Volume Control	k	f	0 ~ 64
07. Contrast	k	g	0 ~ 64
08. Brightness	k	h	0 ~ 64
09. Color	k	i	0 ~ 64
10. Tint	k	j	0 ~ 64
11. Sharpness	k	k	0 ~ 64
12. OSD Select	k	I	0 ~ 1
13. Remote Control Loc	k Mode k	m	0 ~ 1
14. PIP/DW	k	n	0 ~ 3
15. Split Zoom	k	р	0 ~99
16. PIP Position	k	q	0 ~ 3
17. Treble	k	r	0 ~ 64
18. Bass	k	s	0 ~ 64
19. Balance	k	t	0 ~ 64
20. Color Temperature	e k	u	0 ~ 3
21. Red Adjustment	k	V	0 ~ 3C
22. Green Adjustment	k	W	0 ~ 3C
23. Blue Adjustment	k	\$	0 ~ 3C
24. PIP Input Source	k	У	0 ~ 6
25. Abnormal State	k	Z	0 ~ a
26. ISM Method	j	р	0 ~ 3
27. Low Power	j	q	0 ~ 1
28. Orbiter Time Settin	ng j	r	1 ~ FE
29. Orbiter Pixel Settin	ng j	s	1~9
30. Picture Size	j	t	0 ~14
31. Auto Config	j	u	1
CO	M- COM-	DATA 0	DATA 1 DA

### Transmission / Receiving Protocol

### **Transmission**

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

- \* [Command 1]: First command to control PDP set. (j, k or m)
- \* [Command 2]: Second command to control PDP set.
- \* [Set ID]: You can adjust the set ID to choose desired monitor ID number in Special menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected PDP set is controlled. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x63) on transmission/receiving protocol.
- \* [DATA]: To transmit command data.

Transmit 'FF' data to read status of command.

\* [Cr]: Carriage Return ASCII code '0x0D'

\* [ ]: ASCII code 'space (0x20)'

### OK Acknowledgement

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

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

### Error Acknowledgement

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

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

Data 1: Illegal Code

2: Not supported function

3: Wait more time

	COM-	COM-	DATA 0 (Hexadecimal) (	DATA 1	DATA 2	DATA 3
32. Tune Commar		a	01 ~ 7D	0		nainsub/TuneBand
33. Channel Add/E		b	0 ~ 1	_		
34. Key	m	С	Key code			

### 01. Power (Command2:a)

To control Power On/Off of the TV.

### Transmission

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

Data 0 : Power Off

: Power On

### <u>Acknowledgement</u>

[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.

### 02. Input Select (Command2:b) (Main Picture Input)

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

### <u>Transmission</u>

### [k][b][ ][Set ID][ ][Data][Cr]

Data 0 : TV

4 : Component 2

1 : Video 1

5 : RGB

2 : Video 2

6 : DVI

3 : Component 1

<u>Acknowledgement</u>

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

### 03. Aspect Ratio (Command2:c) (Main picture format)

To adjust the screen format.

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

### <u>Transmission</u>

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

Data 0 : Normal screen (4:3)

1 : Wide screen (16:9)

2 : Horizon

3 : Zoom

### <u>Acknowledgement</u>

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

### 04. Screen Mute (Command2:d)

To select screen mute on/off.

### <u>Transmission</u>

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

Data 0 : Screen mute off (Picture on)

1 : Screen mute on (Picture off)

### <u>Acknowledaement</u>

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

### 05. Volume Mute (Command2:e)

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

### <u>Transmission</u>

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

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

### <u>Acknowledgement</u>

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

### 06. Volume Control (Command2:f)

To adjust volume.

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

### <u>Transmission</u>

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1' as shown below.

### <u>Acknowledgement</u>

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

### 07. Contrast (Command2:g)

To adjust screen contrast.

You can also adjust contrast in the Picture menu.

### <u>Transmission</u>

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1' as shown below.

### <u>Acknowledgement</u>

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

### 08. Brightness (Command2:h)

To adjust screen brightness.

You can also adjust brightness in the Picture menu.

### <u>Transmission</u>

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1' as shown below.

### <u>Acknowledgement</u>

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

0 : Step 0

Real data mapping 1

A: Step 10 (SET ID 10)

F: Step 15 (SET ID 15) 10 : Step 16 (SET ID 16)

63 : Step 99 (SET ID 99)

64 : Step 100

### 09. 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 32.

### <u>Acknowledgement</u>

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

### 10. Tint (Command2:j)

To adjust the screen tint.

You can also adjust tint in the Picture menu.

### <u>Transmission</u>

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

Data Red: 0 ~ Green: 64

• Refer to 'Real data mapping 1'. See page 32.

### <u>Acknowledgement</u>

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

### 11. 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 32.

### <u>Acknowledgement</u>

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

### 12. OSD Select (Command2:I)

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

### **Transmission**

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

Data 0: OSD off

1: OSD on

### <u>Acknowledgement</u>

[I][ ][Set ID][ ][OK][Data][x]

### 13. Remote Control Lock Mode (Command2:m)

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

### **Transmission**

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

Data 0: Lock off 1: Lock on

### <u>Acknowledgement</u>

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

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

### 14. PIP / DW (Command2:n)

To control the PIP (Picture In picture)/DW (Double Window). You can also control the PIP/DW using the PIP/DW button on the remote control or in the PIP/DW menu.

### Transmission

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

Data 0: PIP/DW off 2: DW1 1: PIP 3: DW2

### <u>Acknowledgement</u>

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

### 15. Split Zoom (Command2:p)

To operate split zoom function and select the split zoom section number.

### Transmission

[k][p][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max:99

• Refer to 'Real data mapping 2'.

### **Acknowledgement**

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

### \* Real data mapping 2

0 : Reset split zoom

21: Selection 1 of 2 split zoom

24: Selection 4 of 2 split zoom

41: Selection 1 of 4 split zoom

42: Selection 2 of 4 split zoom

44: Selection 4 of 4 split zoom

45: Selection 5 of 4 split zoom 91: Selection 1 of 9 split zoom

:

99: Selection 9 of 9 split zoom

### 16. PIP Position (Command2:q)

To select sub picture position for PIP.

You can also adjust the sub picture position using

WIN.POSITION on the remote control or in the PIP/DW menu.

### **Transmission**

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

Data 0: Right down on screen

1: Left down on screen

2: Left up on screen

3: Right up on screen

### <u>Acknowledgement</u>

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

### 17. Treble (Command2:r)

To adjust treble.

You can also adjust treble in the Sound menu.

### **Transmission**

[k][r][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1'. See page 32.

### <u>Acknowledgement</u>

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

### 18. Bass (Command2:s)

To adjust bass.

You can also adjust bass in the Sound menu.

**Transmission** 

[k][s][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max: 64

• Refer to 'Real data mapping 1'. See page 32.

**Acknowledgement** 

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

### 19. Balance (Command2:t)

To adjust balance.

You can also adjust balance in the Sound menu.

<u>Transmission</u>

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping 1'. See page 32.

<u>Acknowledgement</u>

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

### 20. 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

<u>Acknowledgement</u>

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

### 21. Red Adjustment (Command2:v)

To adjust red in color temperature.

**Transmission** 

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

Data Min: 0 ~ Max: 3C

• Refer to 'Real data mapping 3' as shown right.

<u>Acknowledgement</u>

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

### 22. Green Adjustment (Command2:w)

To adjust green in color temperature.

Transmission

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

Data Min: 0 ~ Max: 3C

Refer to 'Real data mapping 3' as shown right.

<u>Acknowledgement</u>

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

### 23. Blue Adjustment (Command2:\$)

To adjust blue in color temperature.

**Transmission** 

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

Data Min: 0 ~ Max: 3C

• Refer to 'Real data mapping 3' as shown below.

<u>Acknowledaement</u>

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

### \* Real data mapping 3

0 : -30 1 : -29 2 : -28

**!** 1E : 0

. . . .3A · ⊥:

3A: +28 3B: +29

3C:+30

### 24. PIP Input Select (Command2:y)

To select input source for sub picture in PIP mode.

<u>Transmission</u>

[k][y][ ][Set ID][ ][Data][Cr]

Data 0 : TV 4 : Component 2

3 : Component 1

<u>Acknowledgement</u>

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

### 25. Abnormal State (Command2:z)

To recognize an abnormal state.

<u>Transmission</u>

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

Data FF:Read

<u>Acknowledgement</u>

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

Data 0: Normal (Power on and signal exist)

- 1: No signal (Power on).
- 2: Turn the monitor off with remote control.
- 3: Turn the monitor off with Sleep Time function.
- 4: Turn the monitor off with RS-232C function.
- 5: 5V down.
- 6: AC down.
- 7: Turn the monitor off with Fan Alarm function.
- 8: Turn the monitor off with Off Time function.
- 9: Turn the monitor off with Auto Off function.
- a: Turn the monitor off with On Time function.

(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.)

<sup>\*</sup> This function is "read only".

### 26. ISM Method (Command2:p)

To avoid having a fixed image remain on screen.

### <u>Transmission</u>

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

Data 0: Normal

2: Orbiter

1: White wash

3: Inversion

<u>Acknowledgement</u>

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

### 27. Low Power (Command2:q)

To control the low power function on/off.

### <u>Transmission</u>

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

Data 0: Low power off

1: Low power on

<u>Acknowledgement</u>

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

### 28. Orbiter Time Setting (Command2:r)

To adjust orbiter operation time term.

<u>Transmission</u>

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

Data Min: 1 ~ Max: FE

### <u>Acknowledgement</u>

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

### 29. Orbiter Pixel Setting (Command2:s)

To adjust pixel number in orbiter function.

<u>Transmission</u>

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

Data Min: 1 ~ Max: 9

### <u>Acknowledgement</u>

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

### 30. Picture Size Setting for Double Window mode (Command2:t)

To adjust main window size in Double Window mode.

<u>Transmission</u>

[j][t][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max: 14

Refer to 'Real data mapping1'. See page 32.

<u>Acknowledgement</u>

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

### 31. Auto Configure (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

<u>Acknowledgement</u>

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

### 32. Tune command (Command: m a)

Tune channel to following physical number

### <u>Transmission</u>

[m][a][ ][Set ID][ ][Data0][ ][Data1][ ][Data2][ ][Data3][Cr]

Data 0: Air: 02 ~ 45, Cable: 01, 0E ~ 7D

1:0

2:0

3: High → Main Channel: 0, Sub Channel: 1 Low → Air: 0, CATV: 1

### <u>Acknowledgement</u>

[a][ ][Set ID][ ][OK][Data0][ ][Data1][ ][Data2][ ][Data3][x]

### 33. Channel Add/Del (Command: m b)

To add and delete the channels

**Transmission** 

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

Data 0: Channel Memory

1: Channel Erase

### <u>Acknowledgement</u>

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

### 34. Key (Command: m c)

To send IR remote key code

<u>Transmission</u>

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

Data Key code: Refer to page 37.

### <u>Acknowledgement</u>

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

# IR Codes

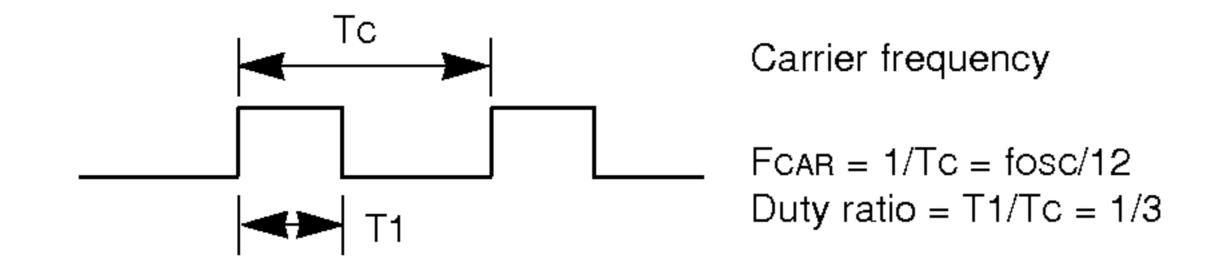
### How to Connect

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

### Remote Control IR Code

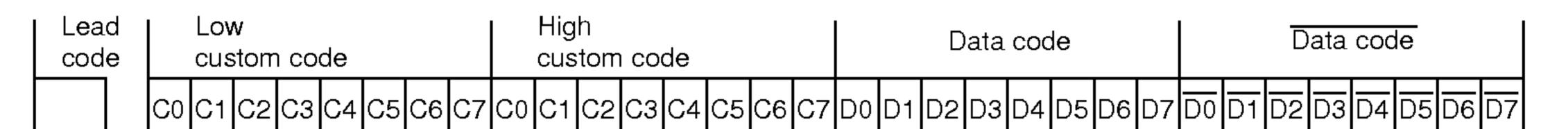
### Output waveform

Single pulse, modulated with 37.917KHz signal at 455KHz

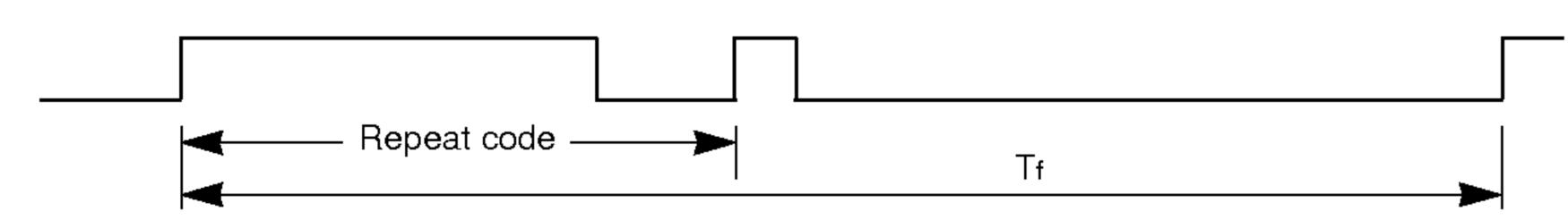


### Configuration of frame

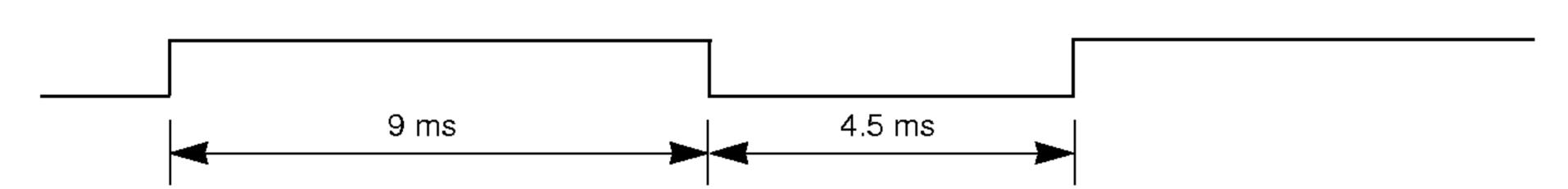
1st frame

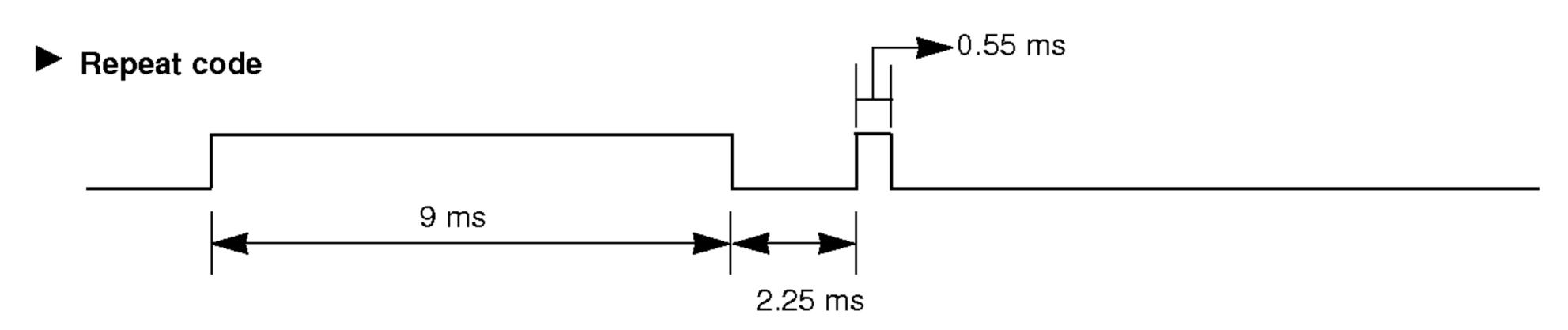


Repeat frame

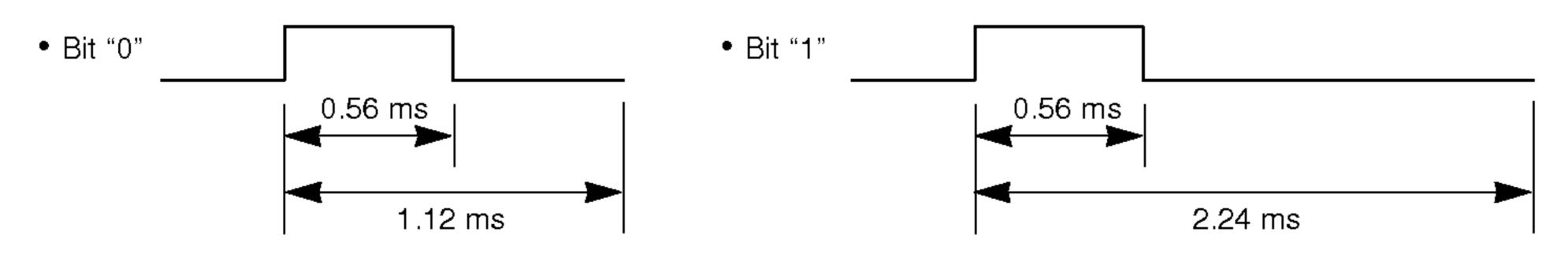


### ► Lead code



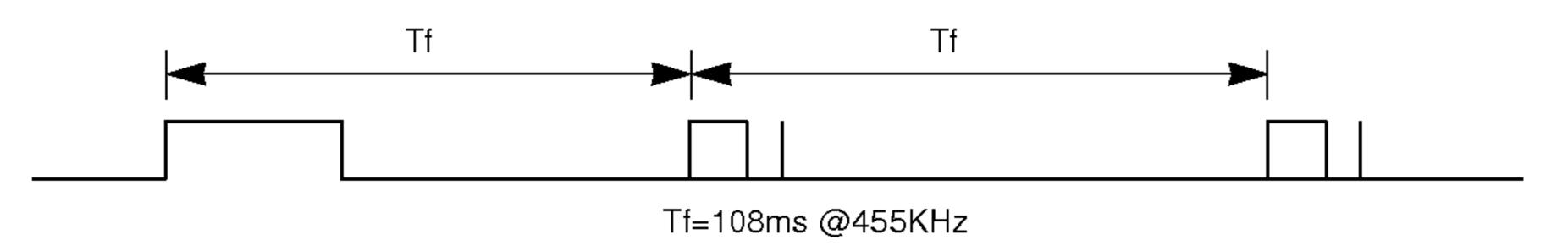


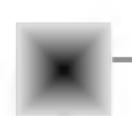
### Bit description



### Frame interval : Tf

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





Code (Hexa)	Function	Note
<u> </u>	CH +	
00	CH -	R/C Button R/C Button
02	VOL +	R/C Button
03	VOL -	R/C Button
08	POWER	R/C Button (Power On/Off)
C4	POWER ON	Discrete IR Code (Only Power On)
C5	POWER OFF	Discrete In Code (Only Power Off)  Discrete IR Code (Only Power Off)
09	MUTE	R/C Button
10	Number Key 0	R/C Button
11	Number Key 1	R/C Button
12	Number Key 2	R/C Button
13	Number Key 3	R/C Button
14	Number Key 4	R/C Button
15	Number Key 5	R/C Button
16	Number Key 6	R/C Button
17	Number Key 7	R/C Button
18	Number Key 8	R/C Button
19	Number Key 9	R/C Button
40	<b>A</b>	R/C Button
41	_	R/C Button
07	· ·	R/C Button
06		R/C Button
ОВ	TV/VIDEO	R/C Button
98	MULTIMEDIA	R/C Button
D6	TV	Discrete IR Code (Input TV Selection)
5A	VIDEO1	Discrete IR Code (Input VIDEO1 Selection)
DO	VIDEO2	Discrete IR Code (Input VIDEO2 Selection)
BF	COMPONENT1	Discrete IR Code (Input COMPONENT1 Selection)
D4	COMPONENT2	Discrete IR Code (Input COMPONENT2 Selection)
C6	DVI	Discrete IR Code (Input DVI Selection)
D5	RGB	Discrete IR Code (Input RGB Selection)
OE	SLEEP	R/C Button
43	MENU	R/C Button
44	ENTER	R/C Button
4D	APC	R/C Button
52	DASP	R/C Button
60	PIP/DW	R/C Button
61	PIP INPUT	R/C Button
63	SWAP	R/C Button
64	WIN.SIZE	R/C Button
62	POSITION	R/C Button
71	PIP CH+	R/C Button
72 7D	PIP CH-	R/C Button
7B	SPLIT ZOOM	R/C Button
79 76	ARC	R/C Button
76	ARC (4:3)	Discrete IR Code (Only 4:3 mode)
77 AF	ARC (16:9)	Discrete IR Code (Only 16:9 mode)
1E	ARC (Zoom)	Discrete IR Code (Only Zoom mode)
1A	FCR	R/C Button
54	REVIEW AUTO PROGRAM	R/C Button R/C Button
55	MEMORY/ERASE	R/C Button
0A	MTS	R/C Button
39	CAPTION	R/C Button
99	AUTO CONFIG	Discrete IR Code

# Troubleshooting Checklist

No picture & No sound  Picture OK &	<ul> <li>Check whether the TV is turned on.</li> <li>Is the power cord inserted into wall power outlet?</li> <li>Test the wall power outlet, plug another product's power cord into the outlet where the TV's power cord was plugged in.</li> <li>Press the VOLUME (+) button.</li> </ul>
No sound	Sound muted? Press MUTE button.
The remote control doesn't work	<ul> <li>Check to see if there is any object between the TV and the remote control causing obstruction.</li> <li>Are batteries installed with correct polarity (+ to +, - to -)? (Refer to p.8)</li> <li>Correct remote operating mode set: TV, VCR etc.?</li> <li>Install new batteries. (Refer to p.8)</li> </ul>
Picture appears slowly after switching on	This is normal, the image is muted during the TV startup process. Please contact your service center, if the picture has not appeared after five minutes.
	• Select <b>Color</b> in the <b>Picture</b> menu and press the ▶ button.
No or poor color or poor picture	<ul> <li>(Refer to p.18)</li> <li>Keep a sufficient distance between the TV and the VCR.</li> <li>Activate any function to restore the brightness of the picture.</li> <li>(If still picture is on the screen for more than 5 minutes, the screen gets dark.)</li> </ul>
	<ul> <li>(Refer to p.18)</li> <li>Keep a sufficient distance between the TV and the VCR.</li> <li>Activate any function to restore the brightness of the picture.</li> </ul>
or poor picture  Horizontal/vertical bars	<ul> <li>(Refer to p.18)</li> <li>Keep a sufficient distance between the TV and the VCR.</li> <li>Activate any function to restore the brightness of the picture.</li> <li>(If still picture is on the screen for more than 5 minutes, the screen gets dark.)</li> </ul>

# Product Specifications

MODELS	RP-42PY10X/10XH	RP-42PY11X/11XH			
Width (inches / mm)	48 / 1216	48 / 1216			
Height (inches / mm)	27 / 691	25 / 630			
Depth (inches / mm)	10.7 / 271.4	3.8 / 96			
Weight (pounds / kg)	86.4 / 39.2	70.5 / 32			
Resolution	852 x 480 (Dot)				
Power requirement	AC100-240V, 50/60Hz				
Television System	NTSC, PAL-M/N				
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 125				
External Antenna Impedance	75 $\Omega$				
Color	16,770,000 (256 steps of each R, G and B)				
Operating Temperature Range	32 ~ 104°F (0 ~ 40°C)				
Operating Humidity Range	Less than 80%				

MODELS	RP-50PY10/10H	RP-50PY11/11H			
Width (inches / mm)	55 / 1402	55 / 1402			
Height (inches / mm)	31.4 / 798.5	29 / 734			
Depth (inches / mm)	12 / 302.5	3.9 / 98			
Weight (pounds / kg)	116.8 / 53	98 / 44.5			
Resolution	1366 x 768 (Dot)				
Power requirement	AC100-240V, 50/60Hz				
Television System	NTSC, PAL-M/N				
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 125				
External Antenna Impedance	75 $\Omega$				
Color	16,770,000 (256 steps of each R, G and B)				
Operating Temperature Range	32 ~ 104℃ (0 ~ 40℃)				
Operating Humidity Range	Less than 80%				

MODELS	RP-60PY10/10H	RP-60PY11/11H			
Width (inches / mm)	67 / 1708	67/ 1708			
Height (inches / mm)	37 / 931	34 / 862			
Depth (inches / mm)	13 / 320.7	3.9 / 99			
Weight (pounds / kg)	189.1 / 85.8	146 / 66.2			
Resolution	1366 x 768 (Dot)				
Power requirement	AC100-240V, 50/60Hz				
Television System	NTSC, PAL-M/N				
Program Coverage	VHF 2 ~ 13, UHF 14 ~ 69, CATV 1 ~ 125				
External Antenna Impedance	75 $\Omega$				
Color	16,770,000 (256 steps of each R, G and B)				
Operating Temperature Range	32 ~ 104°F (0 ~ 40°C)				
Operating Humidity Range	Less than 80%				

<sup>•</sup> The specifications shown above may be changed without notice for quality improvement.

# Notes

# Notes

