

**SAMSUNG**

PCL545R  
PCL541SR  
PCL6215R

**PROJECTION TELEVISION**



# ► Owner's Instructions

# **Warning! Important Safety Instructions**



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



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

**Note to CATV system installer:** This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

**Caution:** *FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.*

**Caution:** *To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.*

**Attention:** *pour éviter les chocs électriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.*


**Important:** One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws. Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

**To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.**

# Thank You for Choosing Samsung

Thank you for choosing Samsung! Your new Samsung Projection TV represents the latest in television technology. We designed it with easy-to-use on-screen menus and closed captioning capabilities, making it one of the best products in its class. We are proud to offer you a product that will provide convenient, dependable service and enjoyment for years to come.

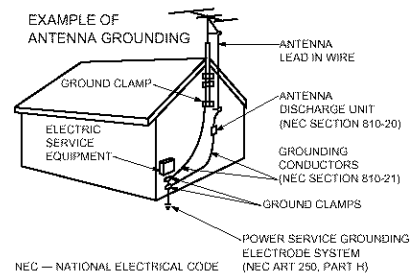
## Important Safety Information

 Always be careful when using your TV receiver. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- Read all safety and operating instructions before operating your TV.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the TV receiver and in the operating instructions.
- Follow all operating and use instructions.
- Unplug the TV receiver from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the TV receiver where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the TV on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling TV can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the TV. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the TV and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the TV receiver. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the TV receiver on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the TV receiver on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your TV receiver only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.



- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the TV.
- Ground outdoor antennas. If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



- Do not attempt to service the TV yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - when the power-supply cord or plug is damaged
  - if liquid has been spilled on the unit or if objects have fallen into the unit
  - if the TV has been exposed to rain or water
  - if the TV does not operate normally by following the operating instructions
  - if the TV has been dropped or the cabinet has been damaged
  - when the TV exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this TV, ask the service technician to perform safety checks to determine that the TV is in a safe operating condition.

**This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:**  
**(1) This device may not cause harmful interference, and**  
**(2) This device must accept any interference that may cause undesired operation.**

**This television receiver provides display of television closed captioning in accordance with § 15.119 of the FCC rules.**

# FCC Information

## User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

NOTE: 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 receptions, 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 into 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.

## User Information

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

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4 .

## Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

Declaration of conformity for products marked with FCC Logo. This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

The party responsible for product compliance:

SAMSUNG ELECTRONICS CO., LTD

America QA Lab of Samsung

85 West Tasman Drive

San Jose, CA 95134 USA

Tel) 408-544-5124

Fax) 408-544-5191

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating. For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

## IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

## Notice de Conformité IC

Cet appareil numérique de classe B respecte toutes les exigences du Règlement ICES-003 sur les équipements produisant des interférences au Canada.

## MPR II Compliance

This monitor complies with SWEDAC (MPR II) recommendations for reduced electric and magnetic fields.

## European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- EN55022 (CISPR 22) – Radio Frequency Interference
- EN50082-1 : 1992 – Electromagnetic Immunity
- EN60555-2 (IEC555-2) – Power Line Harmonics
- EN60555-3 (IEC555-3) – Voltage Fluctuations
- EN60950 (IEC950) – Product Safety.

<b>Chapter 1: Your New TV</b> . . . . .	<b>1.1</b>
List of Features . . . . .	1.1
Familiarizing Yourself with Your New TV . . . . .	1.2
Front Panel Buttons . . . . .	1.2
Front Panel Jacks . . . . .	1.3
Rear Panel Jacks . . . . .	1.4
Remote Control . . . . .	1.5
<b>Chapter 2: Installation</b> . . . . .	<b>2.1</b>
Connecting VHF and UHF Antennas . . . . .	2.1
Antennas with 300-ohm Flat Twin Leads . . . . .	2.1
Antennas with 75-ohm Round Leads . . . . .	2.2
Separate VHF and UHF Antennas . . . . .	2.2
Connecting Cable TV . . . . .	2.2
Cable without a Cable Box . . . . .	2.2
Connecting to a Cable Box that Descrambles All Channels . . . . .	2.3
Connecting to a Cable Box that Descrambles some Channels . . . . .	2.3
Connecting a VCR . . . . .	2.5
Connecting a Second VCR to Record from the TV . . . . .	2.6
Connecting a Camcorder . . . . .	2.6
Connecting a DVD (480i, 480p) Player . . . . .	2.7
Connecting a DTV Set-Top Box (480p, 1080i) . . . . .	2.8
Connecting Surround Speakers . . . . .	2.8
Installing Batteries in the Remote Control . . . . .	2.9
<b>Chapter 3: Operation</b> . . . . .	<b>3.1</b>
Turning the TV On and Off . . . . .	3.1
Plug & Play Feature . . . . .	3.1
Using the Perfect Focus Feature . . . . .	3.3
Adjusting Manual convergence . . . . .	3.4
Adjust Red Convergence . . . . .	3.5
Viewing the Menus and On-Screen Displays . . . . .	3.6
Viewing the Menus . . . . .	3.6
Viewing the Display . . . . .	3.6
Selecting a Menu Language . . . . .	3.7
Selecting the Antenna Input . . . . .	3.7
Memorizing the Channels . . . . .	3.8
Selecting the Video Signal-source . . . . .	3.8
Storing Channels in Memory (Automatic Method) . . . . .	3.9
Adding and Erasing Channels (Manual Method) . . . . .	3.9
Changing Channels . . . . .	3.10
Using the Channel Buttons . . . . .	3.10
Using the Number Buttons . . . . .	3.10
Using the Previous Channel . . . . .	3.10
Selecting Your Favorite Channels . . . . .	3.11
To Store Your Favorite Channels: . . . . .	3.11
To View Your Favorite Channels: . . . . .	3.11
Setting the Blue Screen Mode . . . . .	3.12
Labeling the Channels . . . . .	3.13
Picture Control . . . . .	3.14
Customizing the Picture . . . . .	3.14
Using Automatic Picture Settings . . . . .	3.15
Selecting the Color Tone . . . . .	3.16

<b>Chapter 3: Operation (Cont.)</b> . . . . .	<b>3.14</b>
Sound Control . . . . .	3.16
Adjusting the Volume . . . . .	3.16
Using Mute . . . . .	3.16
Customizing the Sound . . . . .	3.17
Using Automatic Sound Settings . . . . .	3.18
Setting the Clock . . . . .	3.19
Option 1: Setting the Clock Manually . . . . .	3.19
Option 2: Using the Local PBS Channel to Automatically Set the TV Clock . . . . .	3.20
Selecting a Signal Source (External A/V) . . . . .	3.21
<b>Chapter 4: Special Features</b> . . . . .	<b>4.1</b>
Fine Tuning Channels . . . . .	4.1
Digital Noise Reduction . . . . .	4.2
Changing the Screen Size . . . . .	4.3
Using the R.surf Feature . . . . .	4.4
Setting the On/Off Timer . . . . .	4.5
Setting the Sleep Timer . . . . .	4.6
Dolby Surround . . . . .	4.7
Choosing a Multi-Channel Sound (MTS) track . . . . .	4.8
Auto Volume . . . . .	4.9
Viewing Closed Captions . . . . .	4.10
Viewing Picture-in-Picture . . . . .	4.11
Activating Picture-in-Picture . . . . .	4.11
Selecting a Signal Source (Antenna or Cable) for PIP . . . . .	4.12
Selecting a Signal Source (External A/V) for PIP . . . . .	4.12
Swapping the Contents of the PIP image and Main image . . . . .	4.13
Changing the Size of the PIP Window . . . . .	4.13
Changing the PIP Channel . . . . .	4.14
Changing the Location (Rotating) the PIP mode . . . . .	4.14
Scanning the Available Channels . . . . .	4.14
Using the V-Chip . . . . .	4.15
Setting Up Your Personal ID Number (PIN) . . . . .	4.15
How to Enable/Disable the V-Chip . . . . .	4.16
How to Set up Restrictions Using the "TV guidelines" . . . . .	4.16
How to Set up Restrictions using the MPAA Ratings: G, PG, PG-13, R, NC-17, X . . . . .	4.18
How to Reset the TV after the V-Chip Blocks a Channel ("Emergency Escape") . . . . .	4.19
Customizing Your Remote Control . . . . .	4.20
Setting Up Your Remote Control to Operate Your VCR or DVD . . . . .	4.20
Setting Up Your Remote Control to Operate Your Cable Box . . . . .	4.21
<b>Chapter 5: Troubleshooting</b> . . . . .	<b>5.1</b>
Identifying Problems . . . . .	5.1
<b>Appendix</b> . . . . .	<b>A.1</b>
Cleaning and Maintaining Your TV . . . . .	A.1
Using Your TV in Another Country . . . . .	A.1
Specifications . . . . .	A.1

# Chapter One

## YOUR NEW TV

### List of Features

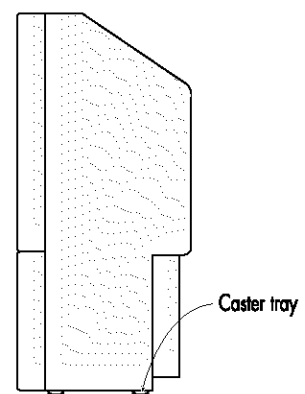
Your Samsung TV was designed with the latest technology. This TV is a high-performance unit that includes the following special features:

- Easy-to-use remote control
- Easy-to-use on-screen menu system
- Automatic timer to turn the TV on and off
- Adjustable picture and sound settings that can be stored in the TV's memory
- Automatic channel tuning for up to 181 channels
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture possible
- A built-in multi-channel sound decoder for stereo and bilingual listening
- Built-in, dual channel speakers
- A special sleep timer
- Picture-in-Picture
- Component Video Input jacks to obtain a sharper image from external sources
- Perfect Focus

---

### Precautions When Moving and Installing the Unit

- This Projection Television is provided with casters at its bottom so it can be moved easily. Depending on the material of the floor, it may get scratched when the unit is moved. Care should be taken when moving the unit.
- When you want to install the Projection Television in a given location, or use it on the carpet, make sure to use the accompanying caster trays (4 units). When placing the caster tray beneath the casters, be sure your fingers do not get caught.

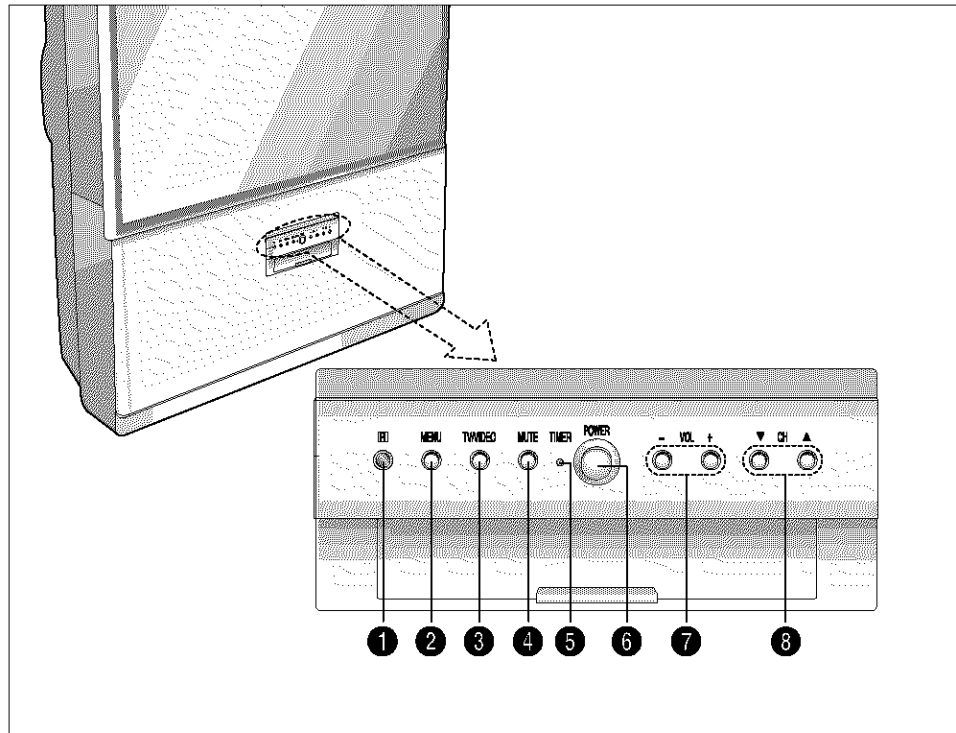




## Familiarizing Yourself with The TV

### Front Panel Buttons

The buttons on the front panel control your TV's basic features, including the on-screen menu. To use the more advanced features, you must use the remote control.



**1 Remote Control Sensor**

Aim the remote control towards this spot on the TV.

**2 MENU**

Press to see an on-screen menu of your TV's features.

**3 TV/VIDEO**

Press this button to display a menu of all the available signal sources. When the menu appears, use the Joystick up or down to highlight a particular source, and then move the joystick to the right to select it.

**4 MUTE**

Press to temporarily cut off the sound.

**5 Timer indicator**

When the TV is turned on, the Timer indicator blinks ten times.

This indicator illuminates when the Timer mode is set to the "On" position after setting the clock and either the On timer or Off timer, with the remote control. Even if the power is turned off, this indicator stays lit. (Clock must be set before using this function.)

**6 POWER**

Press to turn the TV on and off.

**7 VOL -, +**

Press to increase or decrease the volume. Also used to select items on the on-screen menu.

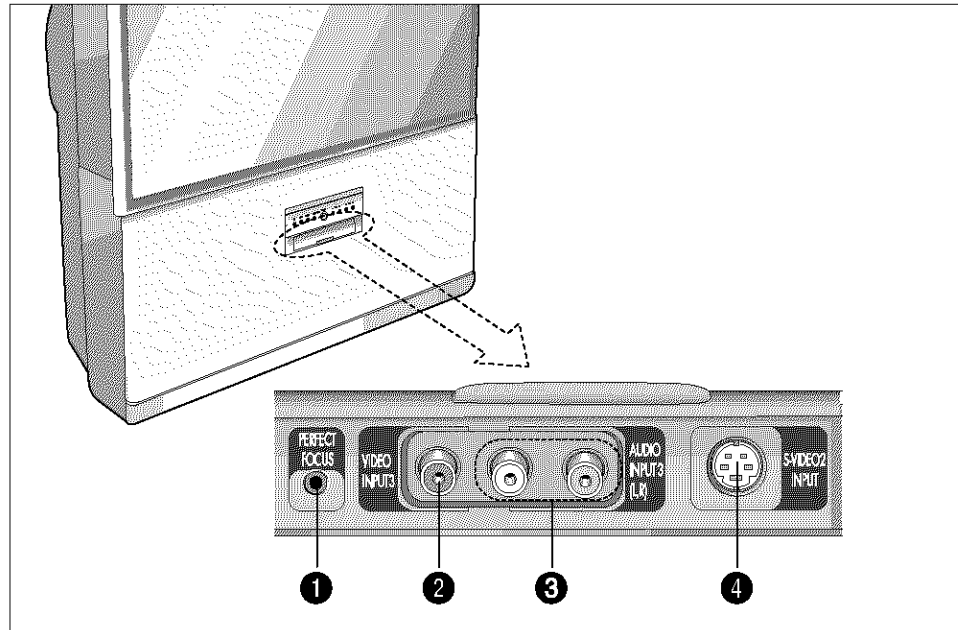
**8 CH▼ and CH▲**

Press to change channels. Also press to highlight various items on the on-screen menu.

## YOUR NEW TV

### Front Panel Jacks

You can use the front panel jacks to connect an A/V component that is used only occasionally, such as a camcorder or video game. (For information on connecting equipment, see pages 2.1 – 2.8.)



**❶ PERFECT FOCUS**

Press to adjust for the optimum picture set in the Factory.

**❷ VIDEO INPUT jack**

Use to connect a video signal from a camcorder or a video game.

**❸ AUDIO INPUT jacks**

Use to connect the audio signals from a camcorder or video game.

**❹ S-VIDEO INPUT jack**

Use to connect an S-Video signal from a camcorder or a video game.

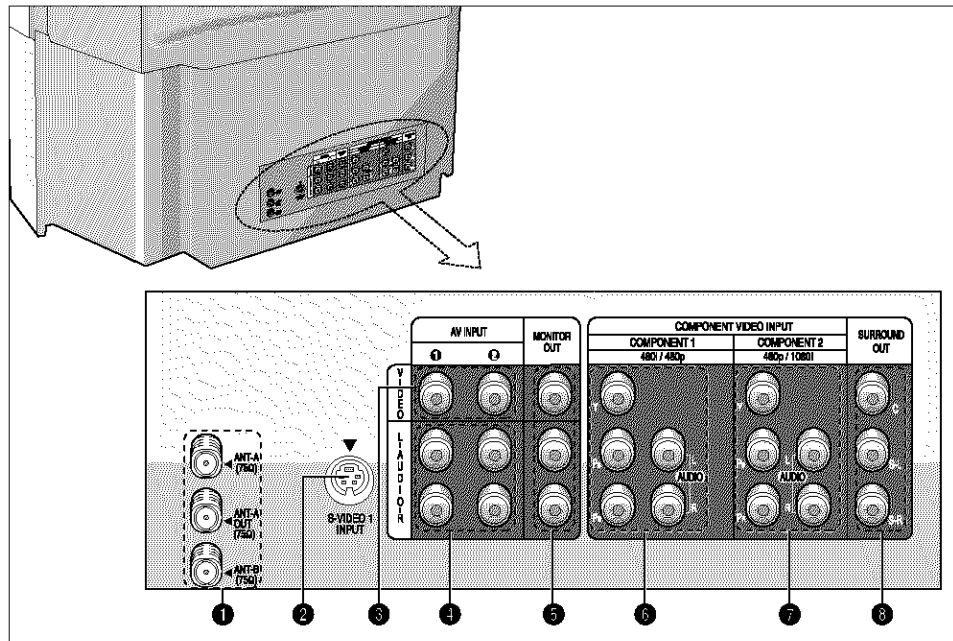
## YOUR NEW TV

### Rear Panel Jacks

Use the rear panel jacks to connect an A/V component that will be connected continuously, such as a VCR or a DVD player.

Because there are two sets of input jacks, you can connect two different A/V components (i.e., a VCR and a DVD, 2 VCRs, etc.)

For more information on connecting equipment, see pages 2.1 – 2.8.



#### ❶ ANTENNA terminals

Two independent cables or antennas can be connected to these terminals. Use ANT-A and ANT-B terminals to receive a signal from VHF/UHF antennas or your cable system. Use the ANT-A OUT terminal to send the signal being received by the ANT-A terminal out to another component (such as a Cable Set Top Box). The PIP channel can be received only when a signal source is connected to ANT-A.

#### ❷ S-VIDEO INPUT jack

Connect to an S-VHS VCR or DVD player.

#### ❸ VIDEO INPUT jacks

Connect to the video output jacks of VCRs, DVD players and similar devices (Two sets are available: Video1 and Video2).

#### ❹ AUDIO INPUT jacks

Connect to the audio output jacks of VCRs, DVD players and similar devices.

#### ❺ AUDIO-VIDEO MONITOR OUTPUT jacks

Connect to the audio/video input jacks of a recording VCR.

Note: The monitor out does not operate in DVD or DTV mode.

#### ❻ COMPONENT 1(480i, 480p) INPUT jacks

Connect a source that outputs 480i/480p Y, P<sub>B</sub> and P<sub>R</sub> signals, such as a DVD Player.

#### ❼ COMPONENT 2(480p, 1080i) INPUT jacks

Connect a source that outputs 480p/1080i Y, P<sub>B</sub> and P<sub>R</sub> signals, such as a DTV Set-Top Box.

#### ❽ SURROUND OUT

Connects to a (optional) rear-surround amp: Surround Left, Surround Right and Center.

## YOUR NEW TV

### Remote Control

You can use the remote control up to about 23 feet from the TV. When using the remote, always point it directly at the TV.

You can also use your remote control to operate your VCR and cable box. See page 4.19 for details.

#### 1 Power

Turns the TV on and off.

#### 2 +100

Press to select channels over 100. For example, to select channel 121, press "+100," then press "2" and "1."

#### 3 Menu

Displays the main on-screen menu.

#### 4 CH $\nabla$ and CH $\wedge$ (Channel Up/Down)

Press CH $\nabla$  or CH $\wedge$  to change channels.

#### VOL -, VOL +

Press increase or decrease the volume.

#### 5 Mute

Press to temporarily cut off the sound.

#### 6 Display

Press to display the current channel and the audio-video settings.

#### 7 Aspect

Press to change the screen size.

#### 8 $\square$ Surround

(For model PCL545R) Selects one of Phantom modes (Off, Normal, Phantom or Wide).

#### 9 MTS (Multichannel Television Stereo)

Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

#### 10 MODE

Selects a target device to be controlled by the Samsung remote control (i.e., TV, VCR, Cable box, or DVD).

#### 11 Pre-CH

Tunes to the previous channel.

#### 12 TV/Video

Press to display all of the available video sources (i.e., Antenna/cable, VCR, DVD, Video1-3, S-Video 1-2, DVD, and DTV).

#### 13 Joystick

Use to select on-screen menu items and change menu values.

#### 14 Caption

Controls the caption decoder.

#### 15 PIP

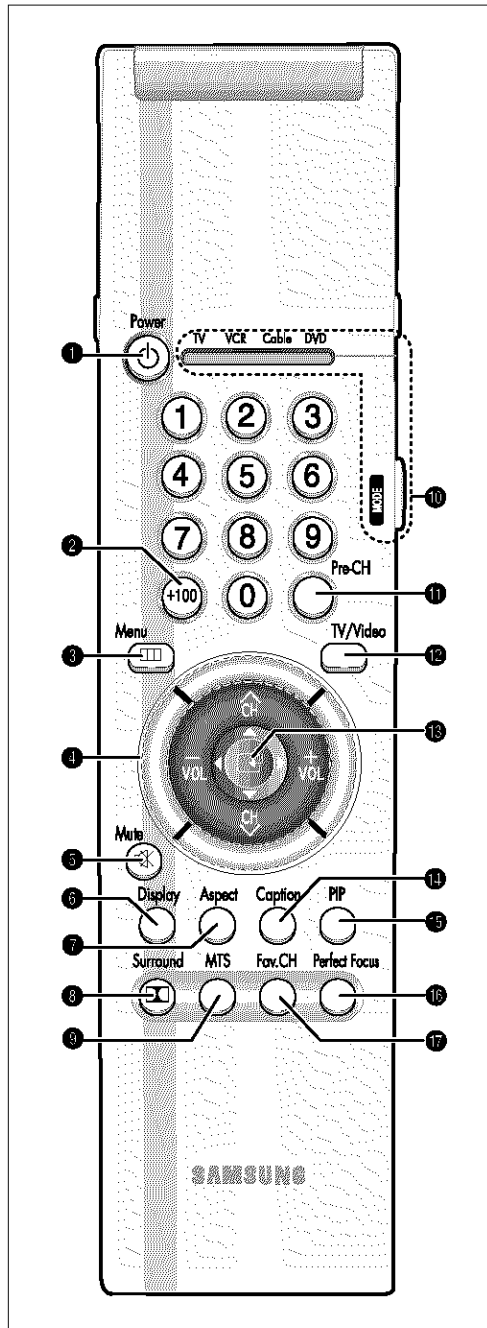
Activates picture in picture.

#### 16 Perfect Focus

Press to adjust for the optimum picture set in the Factory.

#### 17 Fav. CH (Favorite Channel)

Press to switch between your favorite channels.



# YOUR NEW TV

## Remote Control (continued)

### 18 ANT A/B

Press to select the ANT A or ANT B.

### 19 R.surf

Press to automatically return to a preferred channel after a user-preset time delay.

### 20 S.Mode

Adjust the TV sound by selecting one of the preset factory settings (or select your personal, customized sound settings).

### 21 P.Mode

Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings).

### 22 VCR controls

Controls VCR tape functions: Rewind, Play, fast Forward, Stop, Pause.

### 23 PIP Controls

#### Source

Press to select one of the available signal sources for the PIP window.

#### Scan

Press to memorize (scan) the available channels.

#### Locate

Press to move the PIP window to any of the four corners of the TV screen.

#### Swap

Exchanges the video signal that is currently displayed on the main screen with the signal in the PIP window.

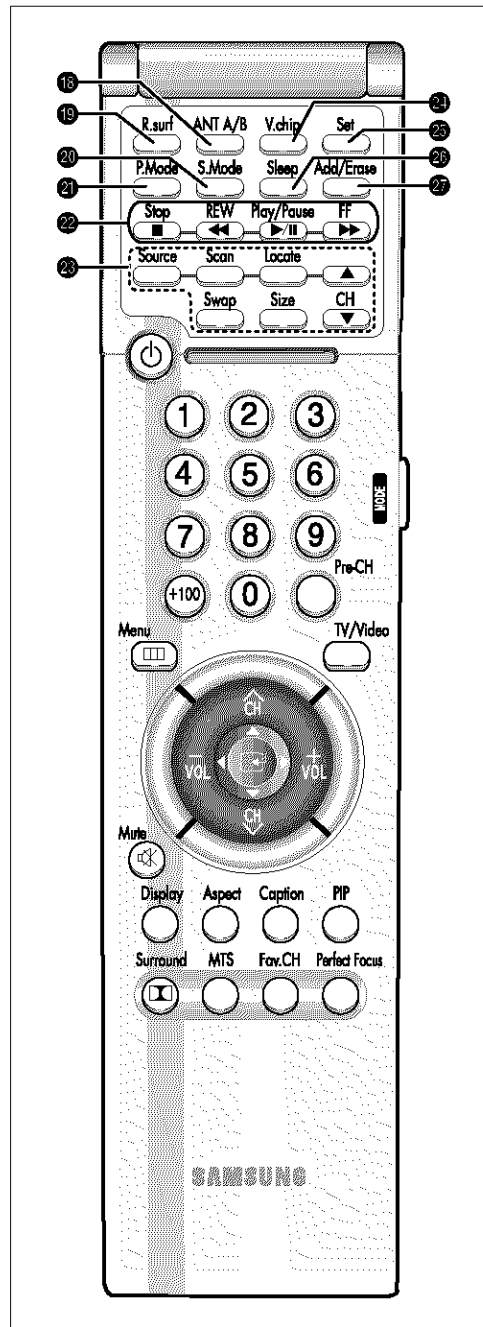
#### Size

Press to make the PIP window small, large or double screen.

• Double window doesn't function on the models PCL5415R/PCL6215R.

#### CH

Displays the available channels in sequence. (These buttons change channels in the PIP window only).



### 24 V.chip

Press to set up and activate the parental locks.

### 25 Set

Used during set up of this Samsung remote control, so that it will work compatibly with other devices (VCR, cable box, DVD.)

### 26 Sleep

Press to select a preset time interval for automatic shutoff.

### 27 Add/Erase

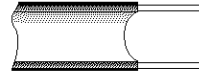
Press to add or erase channels in the TV's memory.

# Chapter Two

## INSTALLATION

### Connecting VHF and UHF Antennas

If your antenna has a set of leads that look like this, see “Antennas with 300-ohm Flat Twin Leads,” below.



If your antenna has one lead that looks like this, see “Antennas with 75-ohm Round Leads,” on page 2.2.



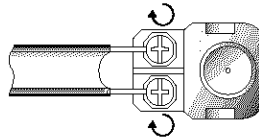
If you have two antennas, see “Separate VHF and UHF Antennas,” on page 2.2.

#### Antennas with 300-ohm Flat Twin Leads

If you are using an off-air antenna (such as a roof antenna or “rabbit ears”) that has 300-ohm twin flat leads, follow the directions below.

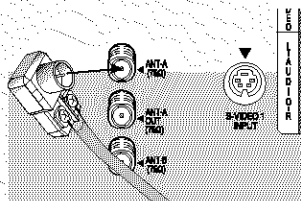
**1**

Place the wires from the twin leads under the screws on the 300-75 ohm adaptor (not supplied). Use a screwdriver to tighten the screws.



**2**

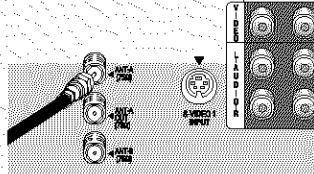
Plug the adaptor into the ANT-A or ANT-B terminal on the rear panel.



## INSTALLATION

### Antennas with 75-ohm Round Leads

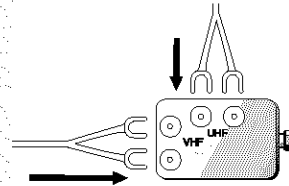
Plug the antenna lead into the ANT-A or ANT-B terminal on the rear panel.



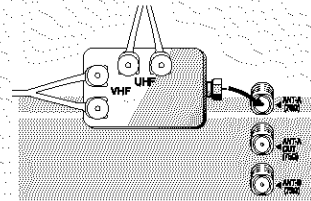
### Separate VHF and UHF Antennas

If you have two separate antennas for your TV (one VHF and one UHF), you must combine the two antenna signals before connecting the antennas to the TV. This procedure requires an optional combiner-adaptor (available at most electronics shops).

**1**  
Connect both antenna leads to the combiner.



**2**  
Plug the combiner into the ANT-A or ANT-B terminal on the rear panel.



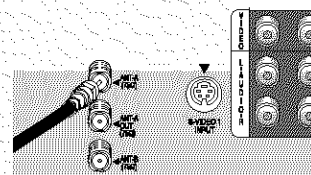
### Connecting Cable TV

You can connect different cable systems to your TV, including cable without a cable box, and cable with a cable box that descrambles some or all channels.

#### Cable without a Cable Box

If you want to connect cable, and you do not need to use a cable box:

Plug the incoming cable into the ANT-A or ANT-B antenna terminal on rear of the TV.

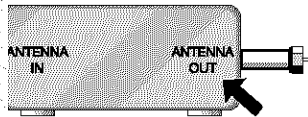


# INSTALLATION

## Cable with a Cable box that Descrambles All Channels

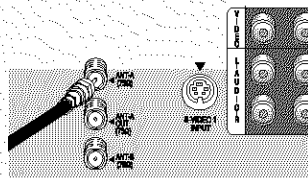
**1**

Find the cable that is connected to the ANTENNA OUT terminal on your cable box. This terminal might be labeled "ANT OUT", "VHF OUT", or simply, "OUT".



**2**

Connect the other end of this cable to the ANT-A or ANT-B terminal on the rear of the TV.

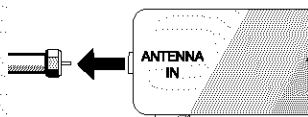


## Connecting to a Cable Box that Descrambles Some Channels

If your cable box descrambles only some channels (such as premium channels), follow the instructions below. You will need a two-way splitter, an RF (A/B) switch, and four lengths of coaxial cable. (These items are available at most electronics stores.)

**1**

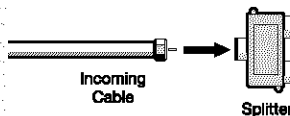
Find and disconnect the cable that is connected to the ANTENNA IN terminal on your cable box.



◀ This terminal might be labeled "ANT IN," "VHF IN," or simply, "IN."

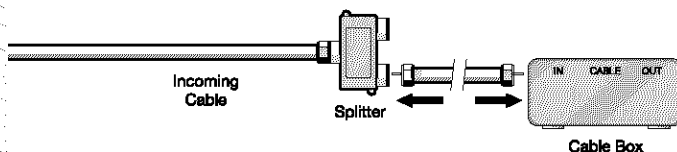
**2**

Connect this cable to a two-way splitter.



**3**

Connect a coaxial cable between an OUTPUT terminal on the splitter and the IN terminal on the cable box.

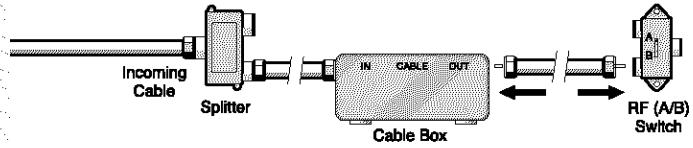




## INSTALLATION

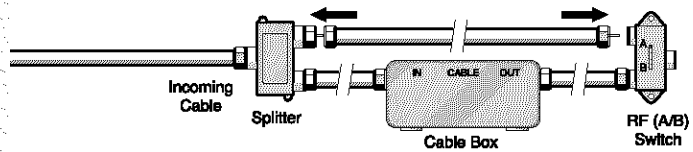
**4**

Connect a coaxial cable between the ANTENNA OUT terminal on the cable box and the B- IN terminal on the A/B switch.



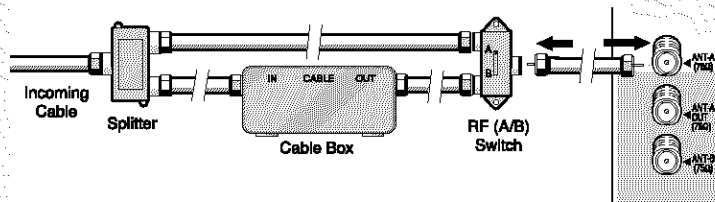
**5**

Connect another cable between the other OUT terminal on the splitter and the A- IN terminal on the RF (A/B) switch.



**6**

Connect the last coaxial cable between the OUT terminal on the RF (A/B) switch and the VHF/UHF terminal on the rear of the TV.



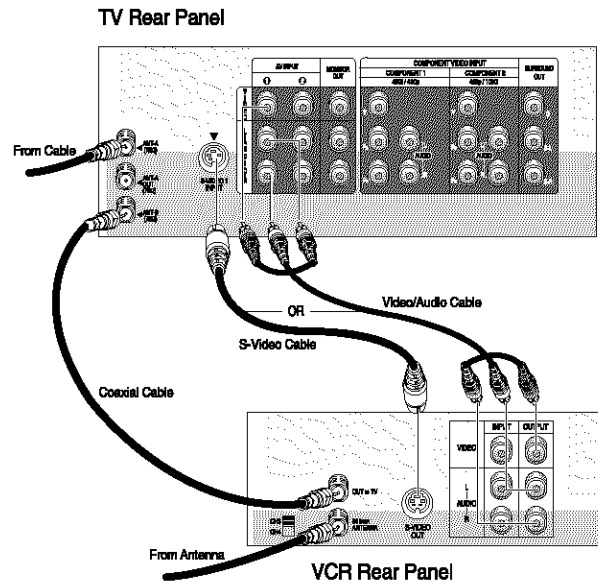
After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B," you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

## INSTALLATION

### Connecting a VCR

These instructions assume that you have already connected your TV to an antenna or a cable TV system (according to the instructions on pages 2.1-2.3). Skip step **1** if you have not yet connected to an antenna or a cable system.

- 1** Connect a coaxial cable between the ANTENNA OUT terminal on the VCR and the antenna terminal on the TV.  
A coaxial cable is usually included with a VCR. (If not, check your local electronics store).
- 2** Connect a set of audio cables between the AUDIO OUT jacks on the VCR and the AUDIO jacks on the TV.  
If you have mono VCR, connect L(mono) to VCR audio out using only one audio cable.
- 3** Connect a video cable between the VIDEO OUT jack on the VCR and the VIDEO jack on the TV.  
If you have a S-VHS VCR, use the S-Video connections and remove the video cable. Do not connect the video cable and the S-Video cable to video 1 simultaneously.  
Follow the instructions in "Viewing a VCR or Camcorder Tape" to view your VCR tape.



## INSTALLATION

### Connecting a Second VCR to Record from the TV

Your TV can send out signals of its picture and sound to be recorded by a second VCR. To do this, connect your second VCR as follows:

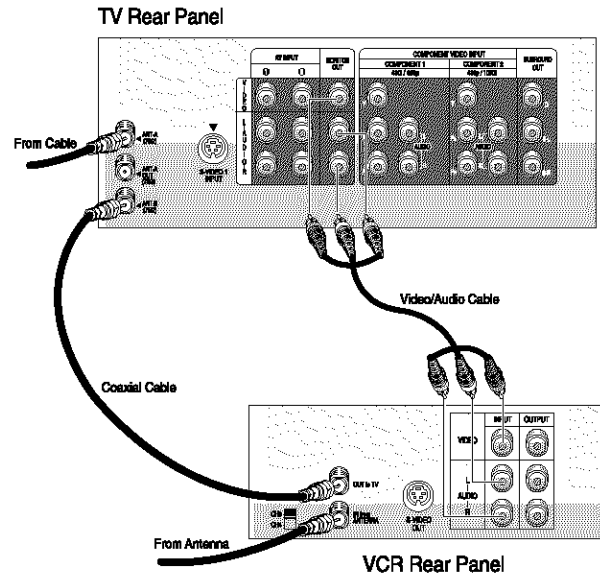
**1**

Connect a set of audio cables between the AUDIO OUT jacks on the TV and the AUDIO IN jacks on the VCR. (The VCR input jacks might be either on the front or rear of the VCR.)

**2**

Connect a video cable between the VIDEO OUT jack on the TV and the VIDEO IN jack on the VCR.

Refer to your VCR's instructions for more information about how to record using this kind of connection.



### Connecting a Camcorder

The front panel jacks on your TV make it easy to connect a camcorder to your TV. They allow you to view the camcorder tapes without using a VCR. (Also see "Selecting a Signal Source (External A/V)" on page 3.21)

**1**

Locate the A/V output jacks on the camcorder. They are usually found on the side or rear of the camcorder.

**2**

Connect an audio cable between the AUDIO OUTPUT jack on the camcorder and the AUDIO terminals on the front of the TV.

If you have mono camcorder, connect L(mono) to camcorder audio out using only one audio cable.

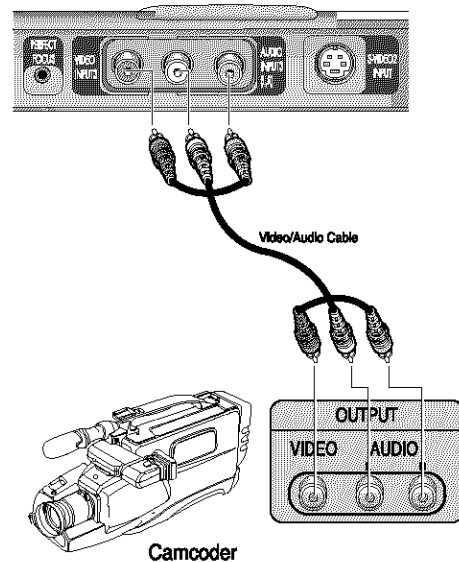
**3**

Connect a video cable between the VIDEO OUTPUT jack on the camcorder and the VIDEO terminal on the front of the TV.

The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.)

If your camcorder is stereo, you need to connect a set of two cables.

TV Front Panel



## INSTALLATION

### Connecting a DVD (480i, 480p) Player

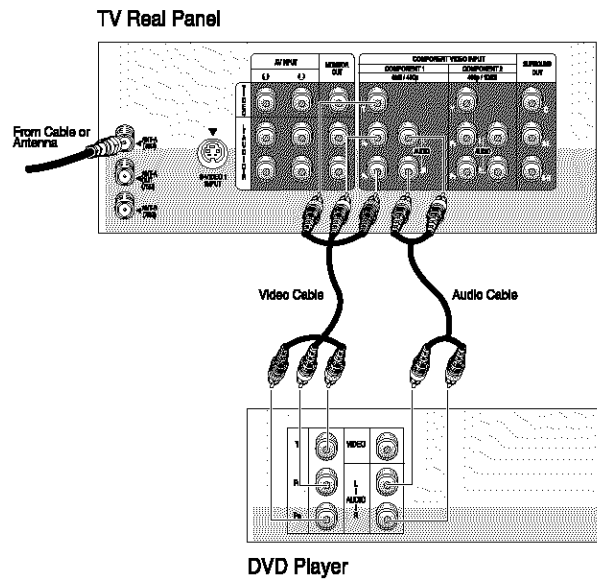
The rear panel jacks on your TV make it easy to connect a DVD player to your TV.

#### Connecting Y, P<sub>B</sub>, P<sub>R</sub>

**1** Connect a set of audio cables between the DVD audio in jacks on the TV and the AUDIO OUT jacks on the DVD player.

**2** To enable Component video viewing, connect video cables between the Y, P<sub>B</sub>, and P<sub>R</sub> inputs on the TV and Y, P<sub>B</sub>, and P<sub>R</sub> (or Y, C<sub>B</sub>, C<sub>R</sub>) outputs on the DVD player.

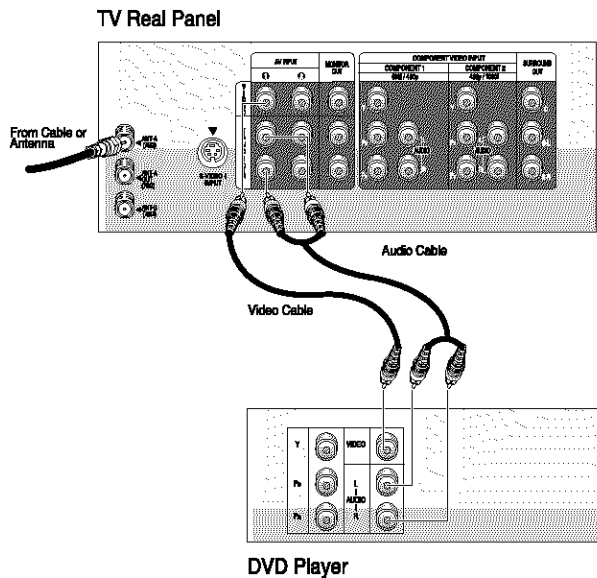
Note: For an explanation of Component video, see your DVD player's owner's instruction.



#### Connecting audio and video jacks

**1** Connect a set of audio cables between the AUDIO IN jacks on the TV and the AUDIO OUT jacks on the DVD player.

**2** Connect video cables between the VIDEO OUT jack on the DVD player and the VIDEO IN jack on the TV.



## INSTALLATION

### Connecting a DTV Set-Top Box (480p, 1080i)

When switching to the DTV mode, either 480p or 1080i format is automatically selected according to the input signal.

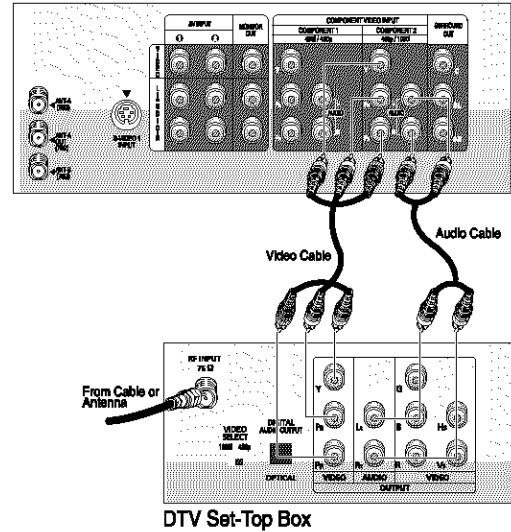
Note: Only 480p and 1080i formats are supported.

**1** Connect a set of audio cables between the DTV Set-Top Box audio in jacks on the TV and the AUDIO OUT jacks on the DTV Set-Top box.

**2** To enable Component video viewing, connect video cables between the Y, P<sub>B</sub>, and P<sub>R</sub> inputs on the TV and Y, P<sub>B</sub>, and P<sub>R</sub> (or Y, C<sub>B</sub>, C<sub>R</sub>) outputs on the DTV Set-Top box.

Note: For an explanation of Component video, see your DTV Set-top box's owner's instruction.

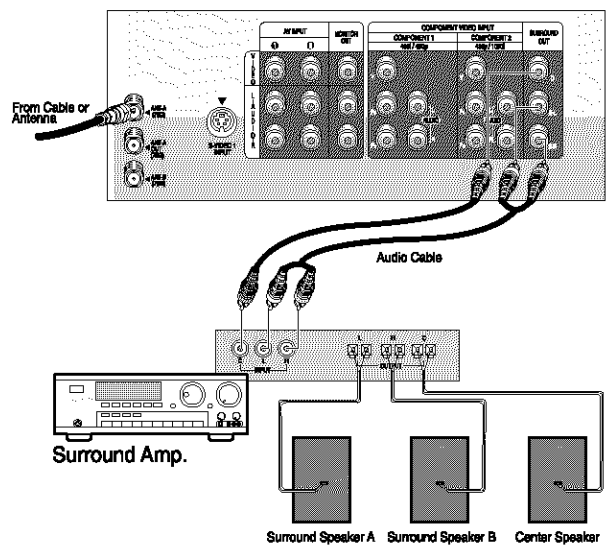
TV Real Panel



### Connecting Surround Speakers

**1** Connect inputs of an amplifier to the SURROUND OUT outputs of the TV. Then connect the surround speakers to your amp.

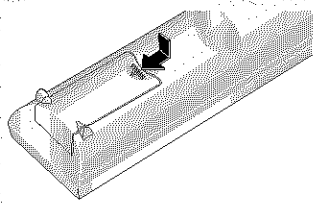
TV Real Panel



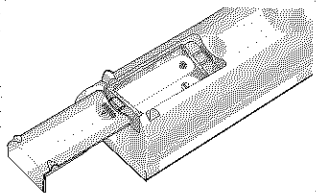
## INSTALLATION

### Installing Batteries in the Remote Control

**1**  
Slide the back cover all the way out to open the battery compartment of the remote control.

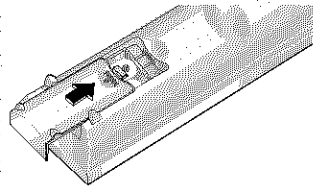


**2**  
Install two AAA size batteries.



◀ Make sure to match the “+” and “-” ends of the batteries with the diagram inside the compartment.

**3**  
Replace the cover.



◀ Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

The remote control can be used up to about 23 feet from the TV.

(Assuming typical TV usage, the Batteries last for about one year.)

# Chapter Three

## OPERATION

### Turning the TV On and Off

Press **POWER**.

You can also use the **POWER** button on the front panel.

### Plug & Play Feature

When the TV is initially powered On, five basic customer settings proceed automatically and subsequently: Setting the language, Setting the Clock, Setting the Antenna, Ant. input check, and Auto program.

**1**

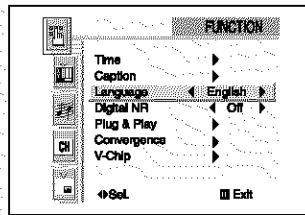
Press the **POWER** button on the remote control.

The message "Plug & Play" is displayed. It flickers for a little while and then the "Language" menu is automatically displayed.



**2**

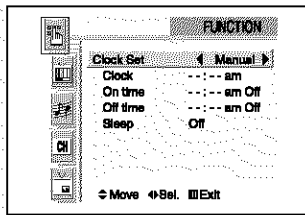
Move the joystick to the right or left to select the desired language. Press **Menu** to enter the language, and then the "Clock Set" menu is automatically displayed.



**3**

Move the joystick down to select "Clock". Set the hour or minute by moving joystick (refer to "Setting the clock" on page 3.19.)

Press **Menu** to enter the setting the clock, and then the "Antenna" menu is automatically displayed.

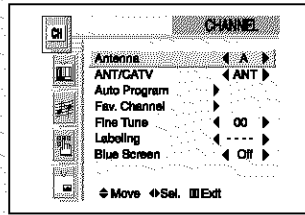


*continued...*

## OPERATION

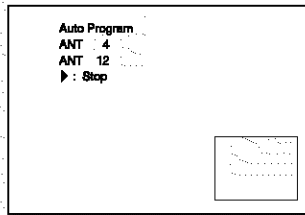
### 4

Move the joystick left or right to select "A" or "B". Press the **Menu** button to enter the Antenna Setting, and then "Ant. Input Check" is automatically displayed.



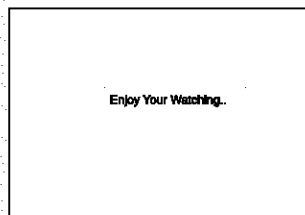
### 5

Make sure that the antenna is connected to the TV. Then move the joystick left or right to activate "Auto Program" or press **Menu** to skip. (refer to "Auto program" on page 3.9.)



### 6

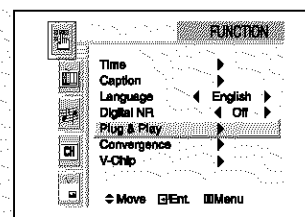
When you have finished, press the **Menu** button. The message "Enjoy your watching.." is displayed.



### 7

**If you want to reset this feature**

- (1) Press the **Menu** button.
- (2) Move the joystick down to select the "FUNCTION" menu and press the joystick to enter.
- (3) Move the joystick down to select "Plug & Play" and press the joystick to enter.  
The message "Plug & Play" is displayed.



Note: Plug & Play feature doesn't work when the V-chip is on or when in the A/V mode.



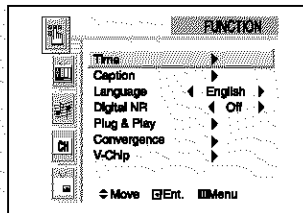
## Using the Perfect Focus Feature

When the picture size is distorted after moving the TV set, use the Perfect Focus feature to adjust for the optimum picture size set in the Factory.

**1**

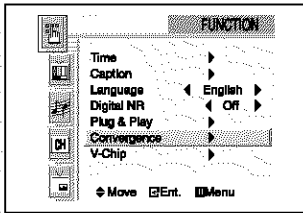
Press the **Menu** button.

Move the joystick down to select "FUNCTION", then press the joystick to enter.



**2**

Move the joystick down to select "Convergence", then press the joystick to enter.

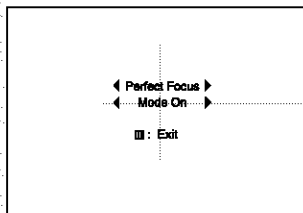
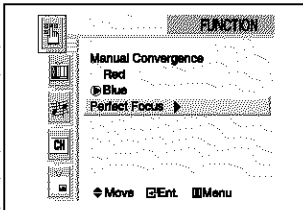


**3**

Move the joystick down to select "Perfect Focus", then press the joystick to enter.

Perform Perfect Focus in the following sequence: green → red → Blue. The Perfect Focus feature ends after the cursor flickers for one second.

Press **Menu** button to exit.



### Notes

- If any error happens during Perfect Focus, then perform Perfect Focus once again.
- If you can't make adjustments after Perfect Focus, then make manual adjustments. If you still can't make adjustments, contact your Service Center.

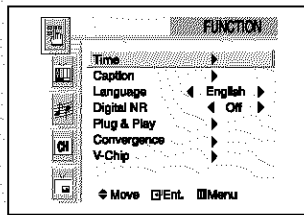
## Adjusting Manual Convergence

If the color appears spread out or “smeared” on the screen, the convergence probably needs alignment. Be sure to use the remote control for the convergence adjustments.

First steps:

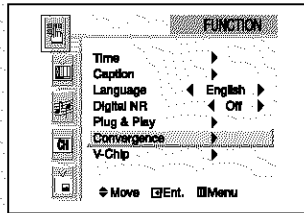
**1**

Press the **Menu** button .  
Move the joystick down to select “FUNCTION”, then press the joystick to enter.



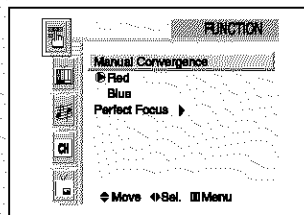
**2**

Move the joystick down to select “Convergence”, then press the joystick to enter.



**3**

The “Manual Convergence” screen will appear, and the word “Red” will be highlighted.

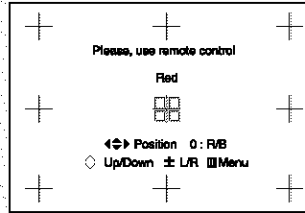


*continued...*

### Adjust Red Convergence

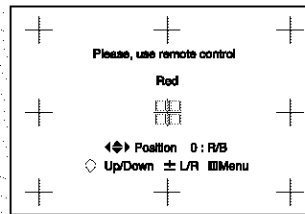
**4**

While "Red" is highlighted, press the joystick to enter. A crosshair pattern will appear on the screen. Move the joystick up/down/left/right to select where to adjust Convergence.



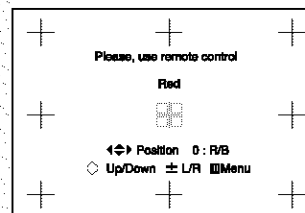
**5**

If a horizontal red line is visible, use **CH ^** and **CH v** buttons to move the line so that it is superimposed on the horizontal center-line (i.e., make a single horizontal line that is as white as possible.)



**6**

If a vertical red line is visible, use the **VOL +** and **VOL -** buttons to move the line so that it is superimposed on the vertical-center line (i.e., make a single vertical line that is as white as possible.)



**7**

For 'Blue' adjustment, do the same as the above.

After the red convergence is correctly adjusted, press **Menu** to exit all the menus.

Note: Since the center convergence adjustments can't be done after completing the side convergence adjustments, do the center convergence adjustments first. If you have done the side convergence adjustments first, then end the Convergence Adjustments by pressing the Menu button, Then re-start from No. 3 on page 3.4 to adjust the center convergence.

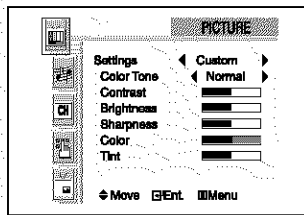
## Viewing the Menus and On-Screen Displays

### Viewing the Menus

**1**

With the power on, press the **Menu** button.

The PICTURE menu appears on the screen. Its left side has five icons: PICTURE, SOUND, CHANNEL, FUNCTION and DOUBLE SCREEN.



◀ The on-screen menus disappear from the screen after thirty seconds.

**2**

Use the joystick (up and down) to move items in the menu (the icons blink when highlighted). Use joystick (left, right) to display, change, or use the selected items. Use the joystick (↵) to enter items in the menu.

◀ You can also use the MENU, CHANNEL, and VOLUME buttons on the control panel of the TV to make selections.

**3**

Press the **Menu** button to exit.

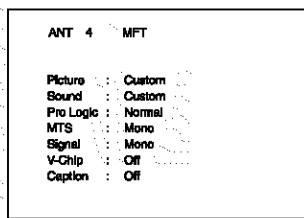
### Viewing the Display

The display identifies the current channel and the status of certain audio-video settings.

**1**

Press the **Display** button on the remote control.

The TV will display the channel, the type of audio, and the status of certain video and audio settings.



(\* MFT\* indicates a channel has been manually fine tuned.)

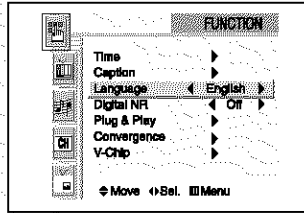
◀ The on-screen displays disappear after ten seconds.

## Selecting a Menu Language

**1**

Press the **Menu** button.

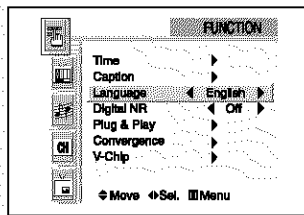
Move the joystick down to select "FUNCTION", then press the joystick to enter.



**2**

Move the joystick down to select "Language", then move the joystick to the left or right to select the language.

Press the **Menu** button to exit.



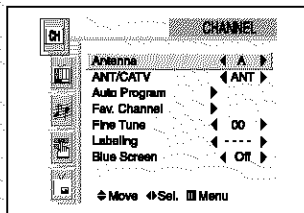
## Selecting the Antenna Input

You can connect to two different signal sources by choosing the antenna input (Antenna A or Antenna B).

**1**

Press the **Menu** button.

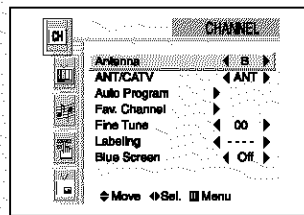
Move the joystick down to select "CHANNEL", then press the joystick to enter.



**2**

Move the joystick to the left or right to select "A" or "B".

Press the **Menu** button to exit.



## Memorizing the Channels

Your TV can memorize and store all of the available channels for both “off-air” (antenna) and cable channels. After the available channels are memorized, use the CH $\wedge$  and CH $\vee$  buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

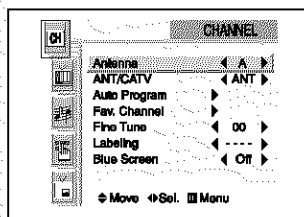
### Selecting the Video Signal-source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna or a cable system).

**1**

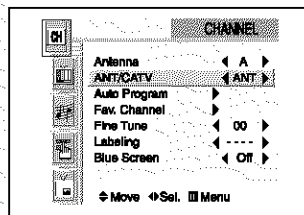
Press the **Menu** button.

Move the joystick down to select “CHANNEL”, then press the joystick to enter.



**2**

Move the joystick down to select “ANT/CATV”, then move the joystick to the left or right to cycle through these choices:  
ANT (antenna)  
STD, HRC or IRC (all cable TV).



Note: STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.

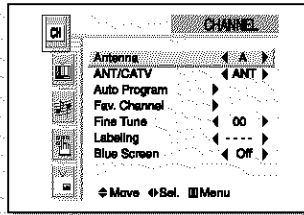
At this point the signal source has been selected. Proceed to “Storing Channels in Memory” (next page).

### Storing Channels in Memory (Automatic Method)

**1**

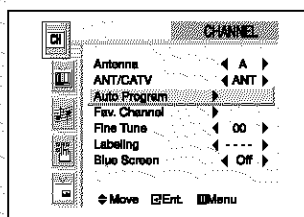
First, select the correct signal source (ANT, STD, HRC, IRC). See steps 1~2 on previous page.

Press the **Menu** button. Move the joystick down to select "CHANNEL", then press the joystick to enter.



**2**

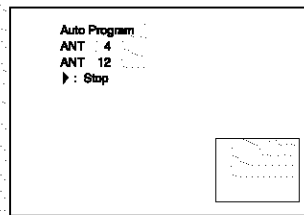
Move the joystick down to select "Auto Program", then press the joystick to enter.



**3**

The TV will begin memorizing all of the available channels.

After all the available channels are stored, the Auto program menu reappears. Press the Menu button to exit.



◀ The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes.

Move the joystick to the right at any time to interrupt the memorization process and return to the Setup menu.

Note: Channel auto program does not function when the V-chip is active.

### Adding and Erasing Channels (Manual Method)

**1**

Use the number buttons to directly select the channel that will be added or erased.

**2**

Press the **Add/Erase** button. Repeatedly pressing this button will alternate between "Channel added" and "Channel erased."

Press the **Menu** button to exit.

You can view any channel (including an erased channel) by using the number buttons on the remote control.

## Changing Channels

### Using the Channel Buttons

Press the **CH $\wedge$**  or **CH $\vee$**  button to change channels.

When you press **CH $\wedge$**  or **CH $\vee$** , the TV changes channels in sequence. You will see all the channels that the TV has memorized. (The TV must have memorized at least three channels.) You will not see channels that were either erased or not memorized.

### Using the Number Buttons

Use the number buttons to quickly tune to any channel.

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2," then "7." The TV will change channels when you press the second number.

When you use the number buttons, you can directly select channels that were either erased or not memorized.

To select a channel over 100, press the +100 button. (For channel 122, press "+100," then "2," then "2.")

To change to single-digit channels (0–9) faster, press "0" before the single digit. (For channel "4," press "0," then "4.")

### Using the Previous Channel

Press the **Pre-CH** button. The TV changes to the last channel you were watching.



## Selecting Your Favorite Channels

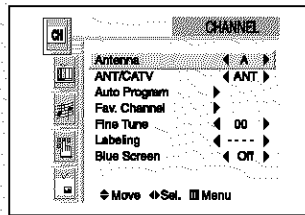
You can store up to ten of your favorite channels for each available input source (such as TV and CATV). Then, when you press the Fav.CH button on the remote control, the TV displays only the favorite channels you previously stored, allowing you to quickly and easily find frequently watched channels.

### To Store Your Favorite Channels:

**1**

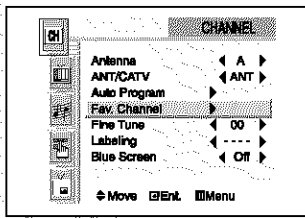
Press the **Menu** button.

Move the joystick down to select "CHANNEL", then press the joystick to enter.



**2**

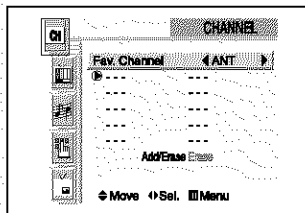
Move the joystick down to select "Fav. Channel", then press the joystick to enter.



**3**

Move the joystick to the left or right to select channel.

To erase the memorized Favorite Channel, select the channel you erase by moving the joystick up/down and then press the Add/Erase button.



◀ Note: Only memorized channels can be set as Favorite channels.

### To View Your Favorite Channels:

Press the Fav. CH button repeatedly to jump from one favorite channel to another.

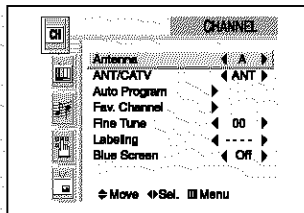
## Setting the Blue Screen Mode

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue screen" mode to "Off".

**1**

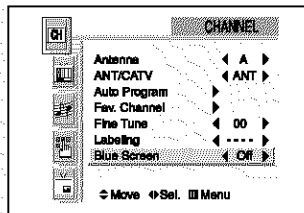
Press the **Menu** button.

Move the joystick down to select "CHANNEL", then press the joystick to enter.



**2**

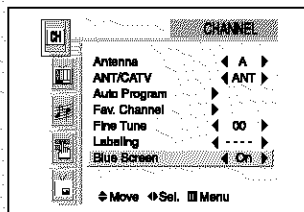
Move the joystick down to select "Blue Screen".



**3**

Move the joystick to the left or right to select "On" or "Off".

Press the Menu button to exit.



## Labeling the Channels

Use this feature to assign an easy-to-remember label to any channel (i.e., "CBS", "ESPN", "PBS2", "CNN1", etc.) A label consists of four fields, where each field is a letter, a number, "\*", or a blank. When the DISPLAY button is pressed, the channel label will appear next to the channel number.

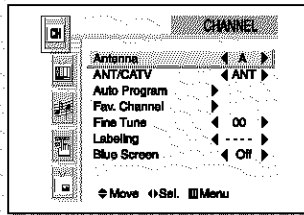
**1**

Press **CH**  $\wedge$  or **CH**  $\vee$  to tune to the channel that will be labeled.

**2**

Press the **Menu** button.

Move the joystick down to select "CHANNEL", then press the joystick to enter.

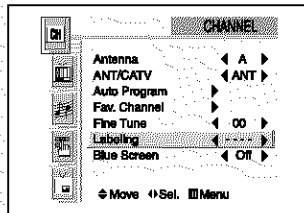


◀ Note: You cannot select "Labeling" in the A/V mode.

**3**

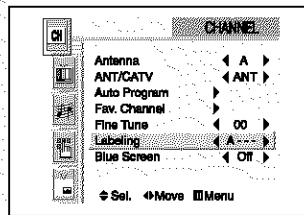
Move the joystick down to select "Labeling".

Move the joystick to the right to begin labeling. The left-most field will be highlighted. (Each label has four fields. See top paragraph.)



**4**

Move the joystick up or down to select a letter, a number, or a blank. (Moving joystick up or down results in this sequence: A,B,...Z, blank, 0,1,...9).

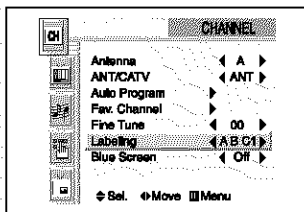


**5**

Move the joystick to the right switch to the next field, which will be highlighted. Select a second letter or digit using the joystick (up or down), as above.

Repeat the process to select the last two digits.

Press the Menu button to exit menu.



## Picture Control

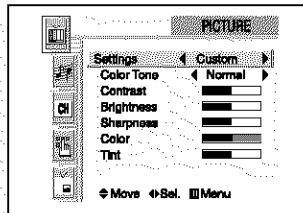
You can use the on-screen menus to change the contrast, brightness, tint, color, and sharpness according to personal preference. (Alternatively, you can use one of the "automatic" settings. See next page.)

### Customizing the Picture

**1**

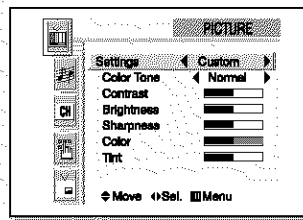
Press the **Menu** button.

The "PICTURE" icon will be highlighted (starts blinking), then press the joystick to enter.



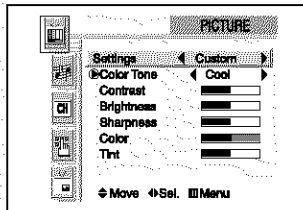
**2**

Move the joystick to the left or right repeatedly, until the word "Custom" is selected. (When Custom is selected, the words "Contrast," "Brightness," "Sharpness," "Color," and "Tint" will appear on the screen.)



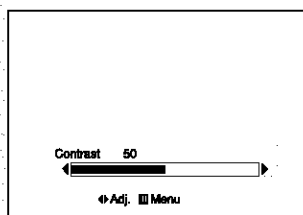
**3**

Move the joystick up or down to select a particular item.



**4**

Move the joystick to the left or right to increase or decrease the value of a particular item.



◀ After adjusting an item, the gauge will automatically disappear (after about 5 seconds).

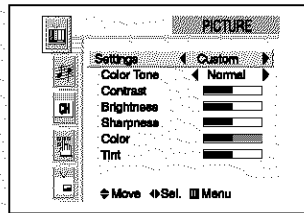
### Using Automatic Picture Settings

Your TV has two automatic picture settings (“Standard”, “Dynamic” and “Mild”) that are pre-set at the factory. You can activate either Standard, Dynamic or Mild by pressing P.Mode (or by making a selection from the menu). Or, you can select “Custom” which automatically recalls your personalized picture settings.

**1**

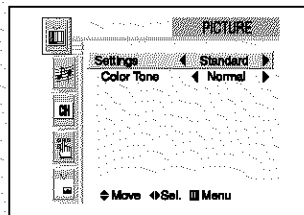
Press the **Menu** button. PICTURE icon will be highlighted (blinking).

Press the joystick to enter.

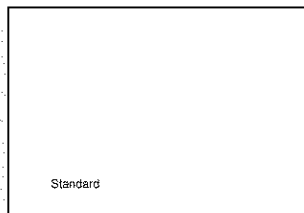


**2**

Move the joystick to the left or right to select the “Standard,” “Dynamic,” “Mild,” or “Custom” picture setting.



Alternate method:  
Simply press the **P.Mode** button on the remote control to select one of the standard picture settings.



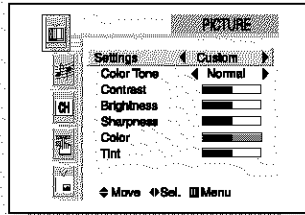
- Choose *Standard* for the standard factory settings.
- Choose *Dynamic* for viewing the TV during the day or when there is bright light in the room.
- Choose *Mild* (“Mild Contrast”) when viewing the TV in low light, or when playing video games.
- Choose *Custom* if you want to adjust the settings according to personal preference (see “Customizing the Picture, page 3.14).

## Selecting the Color Tone

**1**

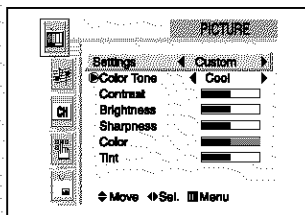
Press the **Menu** button.

The "PICTURE" icon will be highlighted (starts blinking). Then press the joystick to enter.



**2**

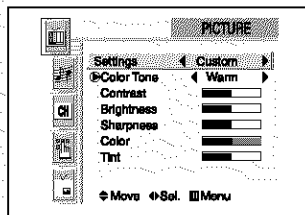
Move the joystick down to select "Color Tone".



**3**

Move the joystick to the left or right to select "Normal," "Warm," or "Cool."

Press the Menu button to exit.



## Sound Control

### Adjusting the Volume

Press the VOL- or VOL+ buttons to increase or decrease the volume.

### Using Mute

At any time, you can temporarily cut off the sound using the Mute button.

**1**

Press the **Mute** button and the sound cuts off.

The word "Mute" will appear in the lower-left corner of the screen.

**2**

To turn mute off, press the **Mute** button again, or simply press either the VOL- or VOL+ button.

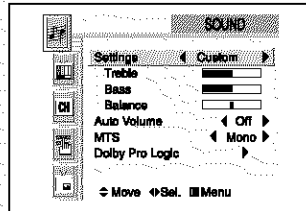
### Customizing the Sound

You can use the on-screen menus to adjust the bass, treble, and balance according to individual preference. (Alternatively, you can use one of the “automatic” settings. See next page.)

**1**

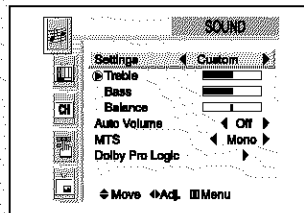
Press the **Menu** button.

Move the joystick down to select “SOUND”, then press the joystick to enter.



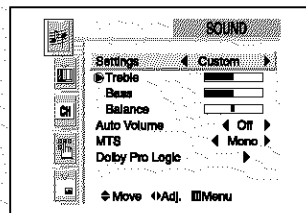
**2**

Move the joystick to the left or right repeatedly, until the word “Custom” is selected. (When Custom is selected, the words “Treble,” “Bass,” and “Balance” will appear on the screen.)



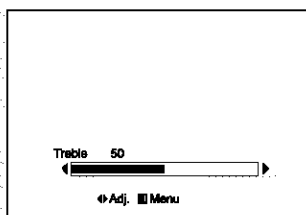
**3**

Move the joystick up or down to select a particular item to be changed.



**4**

Move the joystick to the right left or right to increase or decrease the value of a particular item.



◀ When you are finished adjusting an item, wait about 10 seconds. The gauge will disappear and the Audio menu will return.

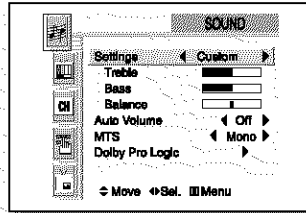
### Using Automatic Sound Settings

Your TV has four automatic sound settings (“Standard,” “Music,” “Speech,” and “Movie”) that are preset at the factory. You can activate any of them by pressing the S.Mode button (or by making a selection from the on-screen menu). Or, you can select “Custom,” which automatically recalls your personalized sound settings.

**1**

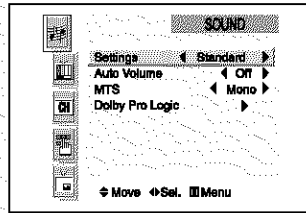
Press the **Menu** button.

Move the joystick down to select “SOUND”, then press the joystick to enter.

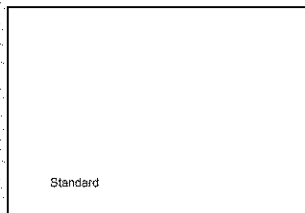


**2**

Move the joystick to the left or right repeatedly to select “Standard,” “Music,” “Speech,” “Movie” or “Custom” audio settings.



Alternate method:  
Simply press the **S.MODE** button on the remote control to select one of the standard sound settings.



- Choose *Standard* for the standard factory settings.
- Choose *Music* when watching music videos or concerts.
- Choose *Speech* when watching a show that is mostly dialogue (i.e., news).
- Choose *Movies* when watching movies.
- Choose *Custom* to recall your personalized settings.



## Setting the Clock

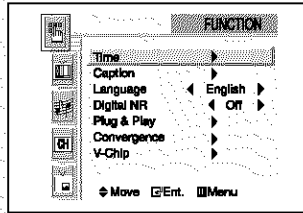
Setting the clock is necessary in order to use the various timer features of the TV. Also, you can check the time while watching the TV. (Just press Display)

### Option 1: Setting the Clock Manually

**1**

Press the **Menu** button.

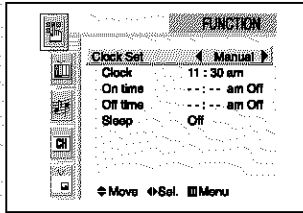
Move the joystick down to select "FUNCTION", then press joystick to enter.



**2**

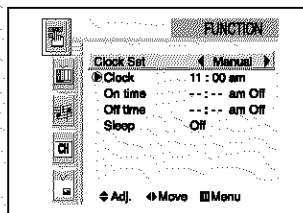
Move the joystick down to select "Time", then press the joystick to enter.

Move the joystick to the left or right to select "Manual". Move the joystick down to select "Clock".



**4**

Move the joystick to the right (the hours digits will start blinking). Move the joystick up or down to select the correct hour.

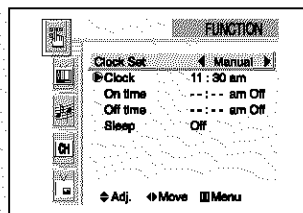


◀ When selecting the hours, be sure to select the proper time of day (AM or PM).

**5**

Move the joystick to the right (the minutes digits will start blinking). Move the joystick up or down to select the correct minute.

Press the **Menu** button to exit.

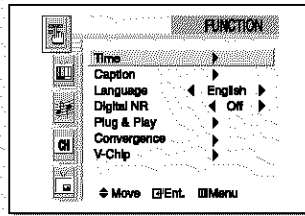


◀ The time will appear every time you press th Display button.

**Option 2: Using the Local PBS Channel to Automatically Set the TV Clock**

**1**

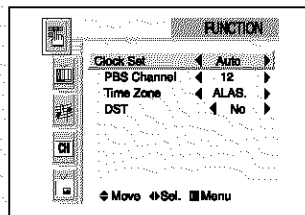
Press the **Menu** button.  
Move joystick down to select "FUNCTION", then press the joystick to enter.



**2**

Move the joystick down to select "Time", then press the joystick to enter.

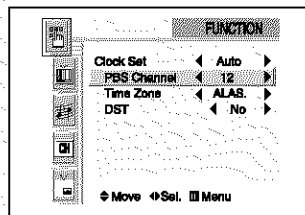
Move the joystick to the left or right to select "Auto".



**3**

Move the joystick down to select "PBS channel".  
Move the joystick to the right to activate the channel-number field.

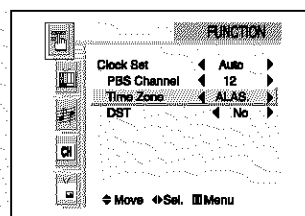
Move the joystick up or down to select your local PBS channel, then move the joystick to the right.



**4**

Move the joystick down to select "Time Zone".  
Move the joystick to the left or right to change the Time zone.

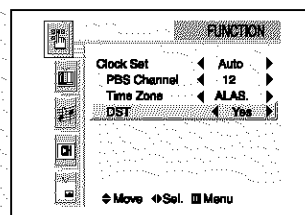
Sequence: ATL., EAST, CEN., MTN., PAC., ALAS., HAW.



**5**

Move the joystick down to select "DST". (Daylight saving time).  
Move the joystick to the left or right to indicate "Yes" or "No".

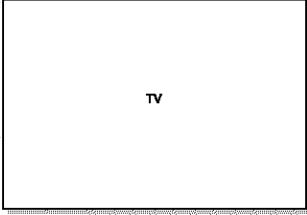
The clock is set.  
Press the **Menu** button to exit.



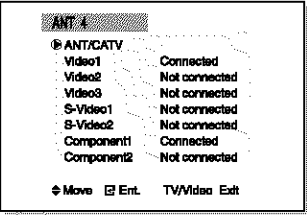
## Selecting a Signal Source (External A/V)

You must select the appropriate mode in order to view the VCR or Camcorder signal on the TV.

**1**  
Make sure that the remote control is controlling the TV set. (Press the **MODE** button and make sure that the "TV" LED is illuminated.)

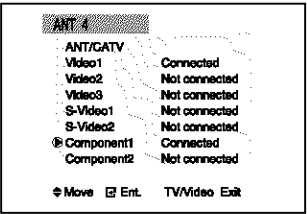


**2**  
Press the **TV/Video** button.



Signal Source	Connection Status
ANT/CATV	Connected
Video1	Not connected
Video2	Not connected
Video3	Not connected
S-Video1	Not connected
S-Video2	Not connected
Component1	Connected
Component2	Not connected

**3**  
Move the joystick up or down to highlight a particular signal source, and then press the joystick to enter.  
Press **TV/Video** to exit.



Signal Source	Connection Status
ANT/CATV	Connected
Video1	Not connected
Video2	Not connected
Video3	Not connected
S-Video1	Not connected
S-Video2	Not connected
Component1	Connected
Component2	Not connected

When you press the TV/Video button, the on-screen display identifies all the active video sources (and their corresponding input jacks):

Select	Video jack	Audio jack
Video 1	Video 1 (rear panel)	Audio 1 "L+R"
Video 2	Video 2 (rear panel)	Audio 2 "L+R"
Video 3	Video 3 (front panel)	Audio 3 "L+R"
S-Video 1	S-Video 1 (rear panel)	Audio 2 "L+R"
S-Video 2	S-Video 2 (front panel)	Audio 3 "L+R"
Component 1	Component 1-Y, Pb, Pr (rear panel)	Component 1-Audio "L+R"
Component 2	Component 2-Y, Pb, Pr (rear panel)	Component 2-Audio "L+R"

# Chapter Four

## SPECIAL FEATURES

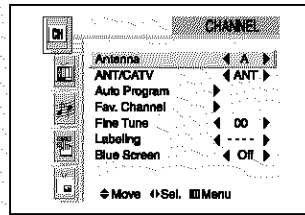
### Fine Tuning Channels

Use fine tuning to manually adjust a particular channel for optimal reception.

**1**

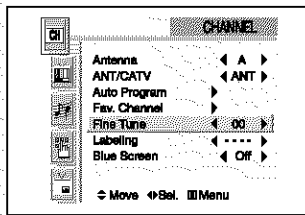
Select the appropriate channel.

Press the **Menu** button. Move the joystick down to select "CHANNEL", then press the joystick to enter.



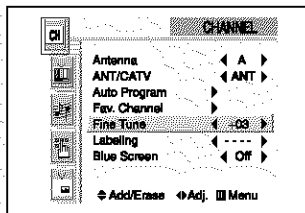
**2**

Move the joystick down to select "Fine Tune".



**3**

Move the joystick to the left or right to adjust the fine tuning.

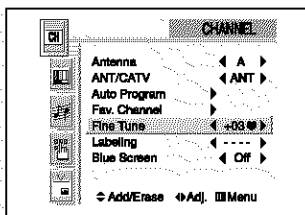


**4**

To store the fine tuning setting in the TV's memory, move the joystick up. (A heart icon will appear.)

To reset the fine tuning to "00," move the joystick down.

Press the **Menu** button to exit.



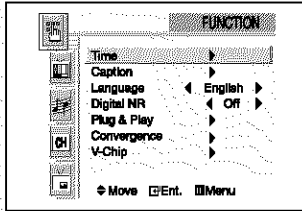
◀ After you adjust the fine tuning, the letters "MFT" will appear when you press the Display button while watching this channel.

## Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

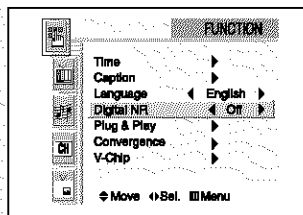
**1**

Press the **Menu** button. Move the joystick down to select "FUNCTION", then press the joystick to enter.



**2**

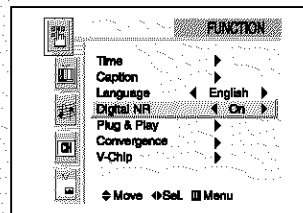
Move the joystick down to select "Digital NR".



**3**

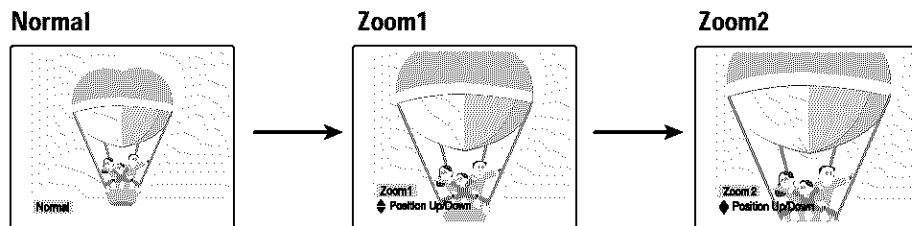
Move the joystick to the left or right to select "On".

Press the **Menu** button to exit.



## Changing the Screen Size

Press the **Aspect** button to change the screen.



- Normal: Sets the picture to 4:3 normal mode.
- Zoom1: Magnifies the size of the picture on screen.  
You can also move the picture on screen using the joystick up or down.
- Zoom2: Magnifies the size of the picture more than Zoom1.  
You can also move the picture on screen using the joystick up or down.

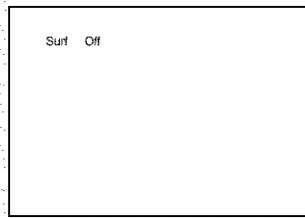
Notes: Screen size cannot be changed in the PIP mode. When the Aspect button is selected and then the appropriate OSD is displayed, the Channel Up/Down buttons don't operate for about three seconds.

## Using the R.surf feature

This feature allows you to set the TV to return to a particular channel after a certain amount of time. For example, you may be watching a channel when commercials start. You can set the R.Surf to “5 minutes”, then switch channels. After 5 minutes, the TV will return to the original channel. To use the R.surf:

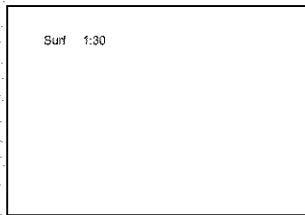
**1**

While you are watching the channel to which you want to return, press the **R.surf** button. The on-screen display will read “Surf off”.



**2**

Press the **R.surf** button again to set the timer in thirty second intervals, up to five minutes.



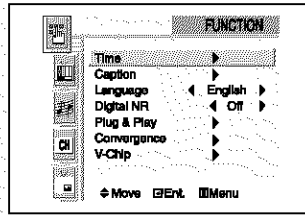
**3**

The time you set will begin counting down on the screen. When the time runs out, the TV will return to the channel you were watching when you set the timer.

## Setting the On/Off Timer

**1**

Press the **Menu** button. Move the joystick down to select "FUNCTION", then press the joystick to enter.

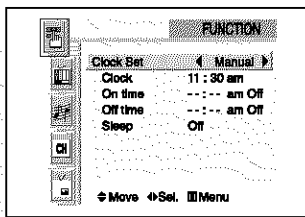


◀ Before using the timer, you must set the TV's clock. (See "Setting the Clock" on page 3.19)

When any of the timers are set, the "Timer" LED will illuminate (front panel of TV).

**2**

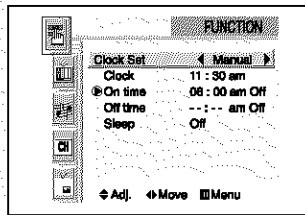
Press the joystick to enter "Time". Move the joystick to the left or right to select clock set "Manual".



**3**

Move the joystick down to select "On time", move the joystick to the right to highlight the On time "hour". (The hours digits will start blinking.)

Move the joystick up or down to select the appropriate hours.

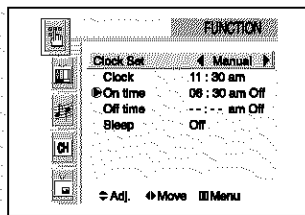


◀ When you set the hours, make sure the correct time of day (AM or PM) appears to the left of the hour.

**4**

Move the joystick to the right to highlight the On time "minutes". (The minutes digits will start blinking.)

Move the joystick up or down to select the appropriate minute.



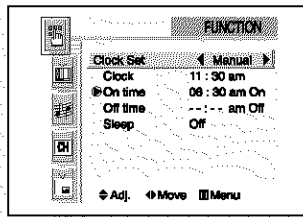


## SPECIAL FEATURES

**5**

Move the joystick to the right to highlight "On/Off", then move the joystick up or down to select "On" or "Off".

When finished, move the joystick to the right.

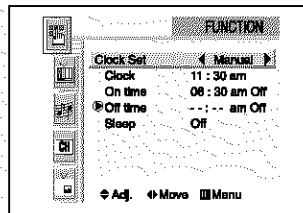


◀ To deactivate the "On time," select "Off" during this step.

**6**

To set the Off time, move the joystick down to highlight "Off time."

Move the joystick to the right and set the hours and minutes. (Follow the same procedure as in steps 1-5 above.)



**7**

When finished setting the timer, press the **Menu** button to exit.

## Setting the Sleep Timer

The sleep timer automatically shuts off the TV after a preset time (from 10 to 360 minutes).

**1**

Press the **Sleep** button on the remote control.

**2**


Press **Sleep** repeatedly until the appropriate time interval appears (any of the preset values from "Off" to "360").

◀ After about 5 seconds, the sleep display will disappear from the screen, and the time interval will be set.

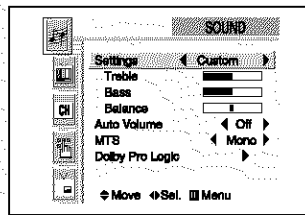
## Dolby Surround (PCL545R)

The Dolby Surround Pro Logic option allows you to enjoy programs in surround sound.

### Dolby Pro Logic

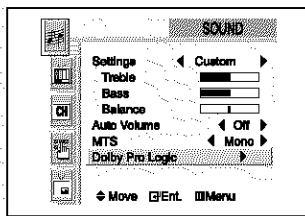
Dolby Pro Logic will provide you with full surround sound from Dolby Surround encoded program sources. For best results, look for programs and movies that are marked with the following logo:  DOLBY SURROUND

- 1 Press the **Menu** button. Move the joystick down to select "SOUND", then press the joystick to enter.

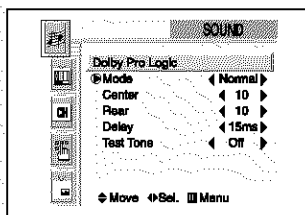


◀ Quick way to access dolby surround mode: Simply press the "Surround" button on the remote control.

- 2 Move the joystick down to select "Dolby Pro Logic", then press the joystick to enter.



- 3 Move the joystick to the left or right to select appropriate mode ("Wide", "Phantom", or "Normal"). Some recommended settings:



**Phantom :** Selected when the center speaker is either not present or not used. In Phantom Mode, the center sound is output through both left and right speakers.

**Normal :** Selected when the center speaker is smaller than the left and right speakers and can not reproduce bass sounds effectively. In Normal Mode, the bass frequencies of the center channel are reproduced by the left and right speakers.

**Wide :** Selected when the center speaker can accurately reproduce bass frequencies. In wide Mode, all center channel sounds are reproduced by the center speaker.

After selecting the mode, move the joystick down, and highlight "Center." Next, move the joystick to the left or right and, depending on personal preference, select any value between -12 and +12. Follow a similar procedure for "Rear" and "Delay." (Some trial-and-error experimenting is necessary to find the optimal setting, which will vary according to individual preference).

After entering values for "Center," "Rear," and "Delay," use the joystick to activate "Test Tone." During "Test Tone," a tone will cycle through the speakers so you can hear the surround effect and make additional changes as needed.

Press the Menu button to exit.

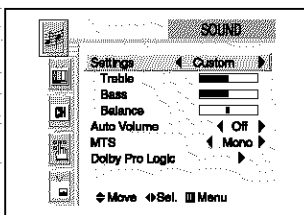
*Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.*

## Choosing a Multi-Channel Sound (MTS) track

Depending on the particular program being broadcast, you can listen to stereo, mono, or a Separate Audio Program. (SAP audio is usually a foreign-language translation. Sometimes SAP has unrelated information like news or weather.)

**1**

Press the **Menu** button. Move the joystick down to select "SOUND", then press the joystick to enter.

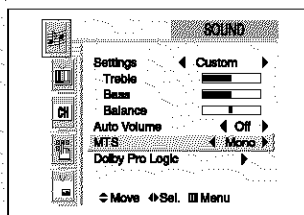


◀ Quick way to access the MTS menu: Just press the "MTS" button on the remote control.

**2**

Move the joystick down to select "MTS", then move the joystick to the left or right to select "Mono," "SAP," or "Stereo."

Press the **Menu** button to exit.



◀ The text at the bottom of the menu tells you if the incoming audio is stereo, SAP, or mono.

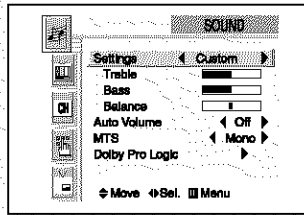
- Choose *Stereo* for channels that are broadcasting in stereo.
- Choose *Mono* for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose *SAP* to listen to the Separate Audio Program, which is usually a foreign-language translation.

## Auto Volume

Each broadcasting station has its own signal conditions, and so it is not easy for you to adjust the volume every time the channel is changed. "Auto Volume" lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

**1**

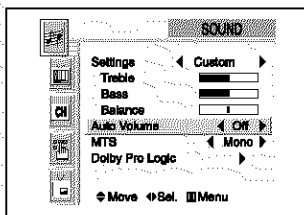
Press the **Menu** button. Move the joystick down to select "SOUND", then press the joystick to enter.



**2**

Move the joystick down to select "Auto Volume", then move the joystick to the left or right to select "On," or "Off."

Press the **Menu** button to exit.

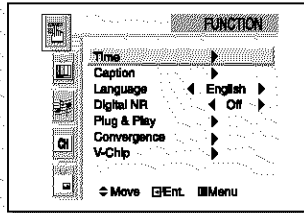


## Viewing Closed Captions

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: **CC**.

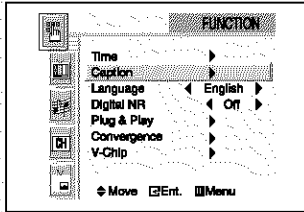
**1**

Press the **Menu** button. Move the joystick down to select "FUNCTION", then press the joystick to enter.



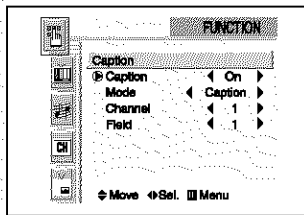
**2**

Move the joystick down to select "Caption", then press the joystick to enter.



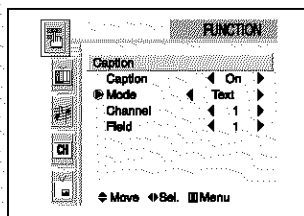
**3**

Move the joystick to the left or right to turn closed captioning "on" or "off".



**4**

Move the joystick down to select "Mode", then move the joystick to the left or right to select "Caption" or "Text".



**5**

Depending on the particular broadcast, it might be necessary to make changes to "Channel" and "Field": Use the joystick buttons to make the changes. (Follow the same procedure as in steps 3-4 above.)

Press the **Menu** button to exit.

◀ Quick way to access captions menu: Simply press the "Caption" button on the remote control:

◀ Misspellings and unusual characters sometimes occur during closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. These are not malfunctions of the TV.

◀ In caption mode, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture.

In text mode, information unrelated to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.

◀ Different channels and fields display different information: Field 2 carries additional information that supplements the information in Field 1. (For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.)

Note: The Caption feature doesn't work in Component1 (480p), Component2, Zoom1, or Zoom2 mode.

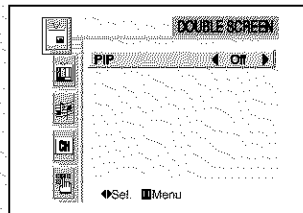
## Viewing Picture-in-Picture

You can use the PIP feature to simultaneously watch two video sources.

### Activating Picture-in-Picture

**1**

Press the **Menu** button. Move the joystick down to select "PIP", then press the joystick to enter.

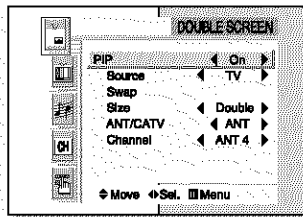


◀ Quick way to access the PIP menu: Simply press the "PIP" button on the remote control.

**2**

Move the joystick to the left or right to select PIP "On".

Press the **Menu** button to exit.



◀ If you turn TV off while watching and turn it on again, the PIP window will disappear.

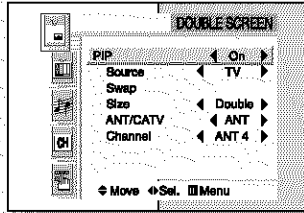
### Notes

- Picture-in-Picture doesn't function when the V-chip is active.
- Screen size cannot be changed in the PIP mode.
- The PIP feature doesn't work with Component1 (480p) or Component2 signals.
- When the cable box output is connected to ANT-B, it cannot be viewed in the PIP window.
- Double Window doesn't function on models PCL5415R/PCL6215R.

### Selecting a Signal Source (Antenna or Cable) for PIP

**1**

Press the **Menu** button. Move the joystick down to select "PIP", then press the joystick to enter.



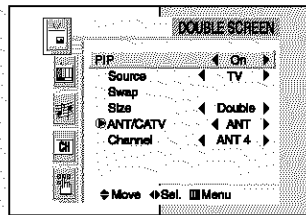
**2**

Move the joystick down to select "ANT/CATV."

If an antenna is connected, the setting is "ANT."

If a Cable TV system is providing the signal, move the joystick to the left or right until the appropriate type of cable system is displayed ("STD," "HRC," or "IRC").

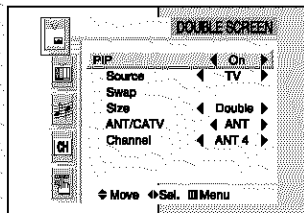
Press the **Menu** button to exit.



### Selecting a Signal Source (External A/V) for PIP

**1**

Press the **Menu** button. Move the joystick down to select "PIP", then press the joystick to enter.



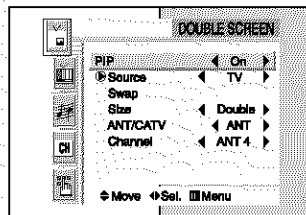
◀ Quick way to access the signal source (PIP): Simply press the "Source" button on the remote control.

**2**

Move the joystick down to select "TV/Video," then move the joystick to the left or right to cycle through all of the available signal sources:

- "TV," "Video 1," "Video 2,"
- "Video 3," "S-Video 1,"
- "S-Video 2," and
- "Component1(480i)."

Press the **Menu** button to exit.

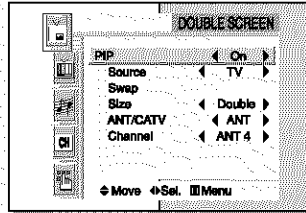


◀ For more information about external A/V components and signals, see "Selecting a Signal Source (External A/V)" on page 3.21. If you select "TV", the PIP image is the same as the main image.

Models PCL5415R/PCL6215R do not support Component1, Component2 on the PIP subscreen.

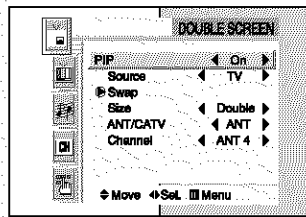
### Swapping the Contents of the PIP Image and Main Image

**1**  
Press the **Menu** button.  
Move the joystick down to select "PIP", then press the joystick to enter.



◀ Quick way to access swapping:  
Simply press the "Swap" button on the remote control.

**2**  
Move the joystick down to select "Swap," then move the joystick to the left or right.  
The image in the PIP window will appear on the main screen, and vice versa.

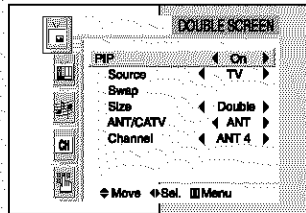


Press the **Menu** button to exit.

Note: When the selection of ANT-B or Component mode is made, the PIP Swap function doesn't work.

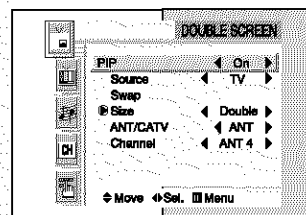
### Changing the Size of the PIP Window

**1**  
Press the **Menu** button.  
Move the joystick down to select "PIP", then press the joystick to enter.



◀ Quick way to access PIP size:  
Simply press the "Size" button on the remote control.

**2**  
Move the joystick down to select "Size," then move the joystick to the left or right to select the "Small," "Double," or "Large"



Press the **Menu** button to exit.

◀ Double Window doesn't function on the models PCL5415R/PCL6215R.

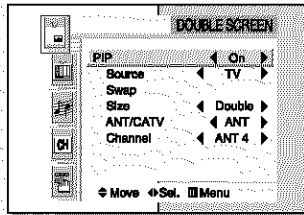


## SPECIAL FEATURES

### Changing the PIP Channel

**1**

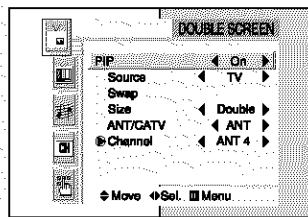
Press the **Menu** button.  
Move the joystick down to select "PIP", then press the joystick to enter.



◀ Quick way to access PIP CH:  
Simply press the (PIP) "CH" button  
on the remote control.

**2**

Move the joystick down to select "Channel," then move the joystick to the left or right to change the channel that appears in the PIP window.



Press the **Menu** button to exit.

Note: The PIP channels are not available when RF is set to ANT-B.  
(The PIP channels link to ANT-A).

### Changing the Location (Rotating) in PIP mode

When you press the **Locate** button repeatedly, the PIP window moves from corner to corner on the TV screen.

### Scanning the Available Channels

This procedure scans all of the available channels and then stores them in memory.

Press the **Scan** button, and the memorized channels will appear in sequence for 2 to 3 seconds per channel.  
Press the **Scan** button again to stop the scanning process.

When Scan stops, the viewing mode will return to its original setting.

## Using the V-Chip

The V-Chip feature automatically locks out programming that is deemed inappropriate for children. The user must first enter a PIN (personal ID number) before any of the V-Chip restrictions can be set up or changed.

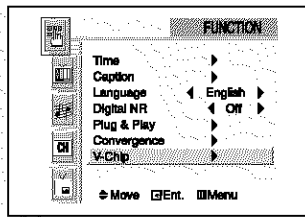
Note : When the V-chip feature is active, the PIP and channel-auto program features do not function.

### Setting Up Your Personal ID Number (PIN)

**1**

Press the **Menu** button.

Move the joystick down to select "FUNCTION," then press the joystick to enter.

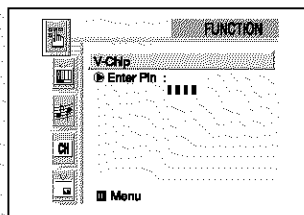


◀ Quick way to access the V-Chip menu: Simply press the V.Chip button on the remote control.

**2**

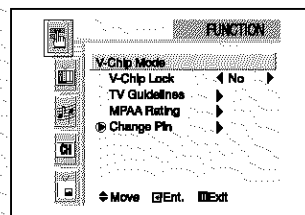
Move the joystick down to select "V-Chip," then press the joystick to enter.

The "Enter pin" screen will appear. Enter your 4-digit PIN number. Note: The default PIN number for a new TV set is "0-0-0-0."



**3**

The "V-chip mode" screen will appear. Move the joystick down to select "Change Pin," then press the joystick to enter.

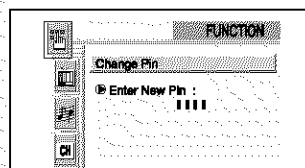


**4**

The Change pin screen will appear. Choose any 4-digits for your PIN and enter them.

As soon as the 4 digits are entered, the "Confirm New Pin" screen appears. Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.

Press the **MENU** button to exit.



◀ Note: If you forget the PIN, press the remote-control keys in the following sequence, which resets the pin to 0-0-0-0:

Power Off → Mute → 8 → 2 → 4 → Power On.

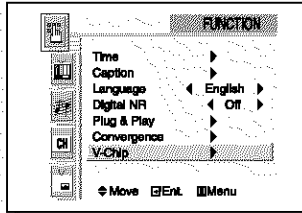
## SPECIAL FEATURES

### How to Enable/Disable the V-Chip

**1**

Press the **Menu** button.

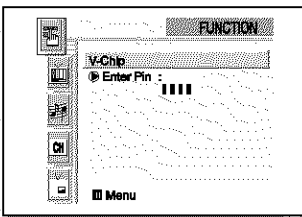
Move the joystick down to select "FUNCTION," then press the joystick to enter.



**2**

Move the joystick down to select "V-Chip," then press the joystick to enter.

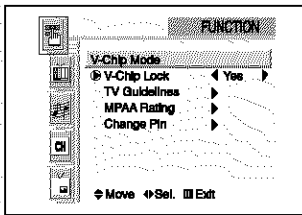
The "Enter Pin" screen will appear. Enter your 4-digit PIN number.



**3**

The "V-Chip Mode" screen will appear, and "V-Chip Lock" will be highlighted.

To enable the V-Chip feature, move the joystick to the right so that the "V-Chip Lock" field is Yes. (Move the joystick to the left or right will alternate between Yes and No.)



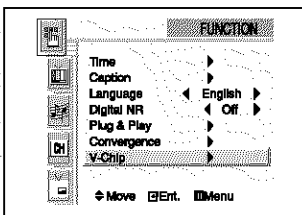
### How to Set up Restrictions Using the "TV guidelines"

First, set up a personal identification number (PIN), and enable the V-Chip. (See previous section.) Parental restrictions can be set up using either of two methods: The TV guidelines or the MPA rating.

**1**

Press the **Menu** button.

Move the joystick down to select "FUNCTION," then press the joystick to enter.

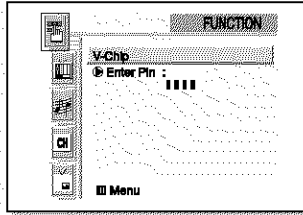


## SPECIAL FEATURES

**2**

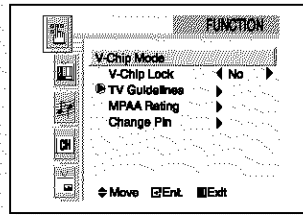
Move the joystick down to select "V-Chip," then press the joystick to enter.

The "Enter Pin" screen will appear. Enter your 4-digit PIN number.



**3**

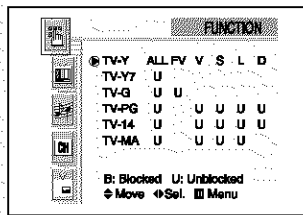
The "V-chip mode" screen will appear. Move the joystick down to highlight the field for "TV Guidelines," press the joystick to enter.



**4**

The "TV guidelines" screen will appear. Move the joystick up or down to highlight one of the six age-based categories:

- TV-Y Young children
- TV-Y7 Children 7 and over
- TV-G General audience
- TV-PG Parental guidance
- TV-14 Viewers 14 and over
- TV-MA Mature audience



◀ Note: These categories consist of two separate groups: TV-Y and TV-Y7 (young children through age 7), and TV-G through TV-MA (everybody else). The TV-Y and TV-Y7 categories are colored blue.

The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group. (See next step.)

**5**

At this point, one of the TV-Ratings is highlighted.

Move the joystick to the right: Depending on your existing setup, a letter "U" or "B" will start blinking. (U= Unblocked, B= Blocked)

While the "U" or "B" is blinking, move the joystick up or down to block or unblock the category.

Move the joystick to the right to save the TV guidelines. A TV-Rating will be highlighted, and no letters will blink. To select a different TV-Rating, move the joystick up or down and then repeat the process.

Note 1: The TV-Y7, TV-PG, TV-14 and TV-MA have additional options. See the next step to change any of the following sub-ratings:

- FV: Fantasy violence
- D: Dialog
- L: L
- S: Sexual situation
- V: Violence

Note 2: The V-Chip will automatically block certain categories that are "more restrictive." For example, if you block "TV-Y" category, then TV-Y7 will automatically be blocked. Similarly, if you block the TV-G category, then all the categories in the "young adult" group will be blocked (TV-G, TV-PG, TV-14 and TV-MA). The sub-ratings (D, L, S, V) work together similarly. (See next section.)

## SPECIAL FEATURES

### 6

How to set the FV, D, L, S and V sub-ratings.

First, highlight one of these TV-Ratings: TV-Y7, TV-PG, TV-14 or TV-MA (See Step 4, on previous page).

Next, while the TV-Rating is highlighted, repeatedly move the joystick to the right. This will cycle through the available sub-ratings (FV, L, S, D or V).

A blinking letter ("U" or "B") will be displayed for each sub-rating. While the "U" or "B" is blinking, move the joystick up or down to change the sub-rating.

Move the joystick to the right to save the TV guidelines. A TV-Rating will be highlighted, and no letters will blink. To select a different TV-Rating, move the joystick up or down and then repeat the process.

Note: The V-chip will automatically block certain categories that are "More restrictive". For example, if you block "L" sub-rating in TV-PG, then the "L" sub-ratings in TV-14 and TV-MA will automatically be blocked.

### 7

Press the **Menu** button to clear all the screens. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes).

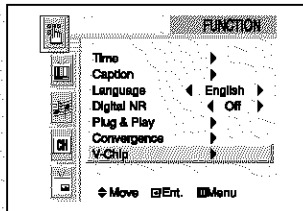
## How to Set up Restrictions using the MPAA Ratings: G, PG, PG-13, R, NC-17, X

The MPAA rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. (Eventually, movie videocassettes will be encoded with MPAA ratings.) When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable ratings (either MPAA or TV-Ratings).

### 1

Press the **Menu** button.

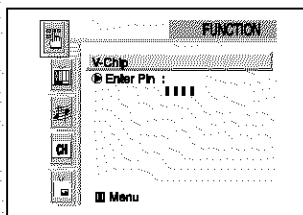
Move the joystick down to select "FUNCTION," then press the joystick to enter.



### 2

Move the joystick down to select "V-Chip," then press the joystick to enter.

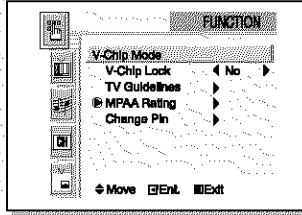
The "Enter Pin" screen will appear. Enter your 4-digit PIN number.



## SPECIAL FEATURES

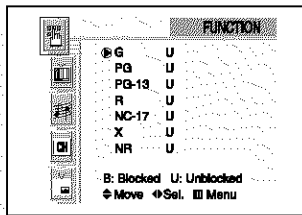
**3**

The "V-chip Mode" screen will appear. Move the joystick down to highlight "MPAA Rating," press the joystick to enter.



**4**

The "MPAA rating" screen will appear. MPAA category. Moving the joystick up or down will cycle through the MPAA categories:



<b>G</b>	General audience (no restrictions).
<b>PG</b>	Parental guidance suggested.
<b>PG-13</b>	PG-13 (Parents strongly cautioned).
<b>R</b>	R (Restricted. Children under 17 should be accompanied by an adult).
<b>NC-17</b>	No children under age 17.
<b>X</b>	X (Adults only).
<b>NR</b>	Not rated.

While a particular category is highlighted, move the joystick to the right to activate it. A blinking letter ("U" or "B") will be displayed. Move the joystick up or down to select "U" or "B".

Move the joystick to the right to save the settings.

Note: The V-Chip will automatically block any category that is "more restrictive." For example, if you block the "PG-13" category, then "R," "NC-17," and "X" will automatically be blocked also.

### How to Reset the TV after the V-Chip Blocks a Channel ("Emergency Escape")

If the TV is tuned to a restricted channel, the V-Chip will block it. The screen will go blank and the following message will appear: "Excessive rating."

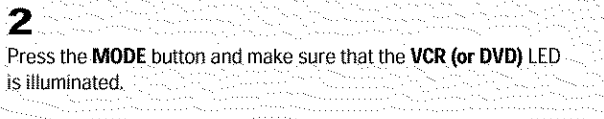
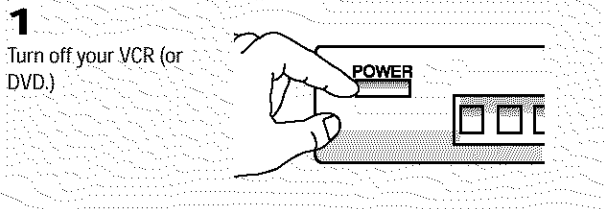
To resume normal viewing, tune to a different channel using the number buttons. Under certain conditions (depending on the rating of the local TV programs) the V-Chip might lock out all the channels. In this case, use the V-Chip button for an "emergency escape":

Press the V-chip button on the remote control. Enter your PIN number, and move the joystick to the right to temporarily disable the V-Chip Lock.

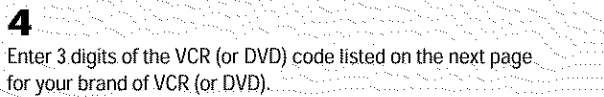
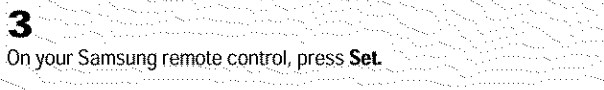
## Customizing Your Remote Control

Your TV comes equipped with a “universal” remote control. In addition to controlling the TV, the universal remote can also operate a VCR, DVD and cable box (even if your VCR and cable box are made by manufacturers other than Samsung).

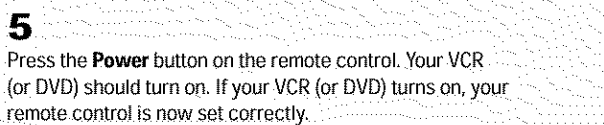
### Setting Up Your Remote Control to Operate Your VCR (or DVD)



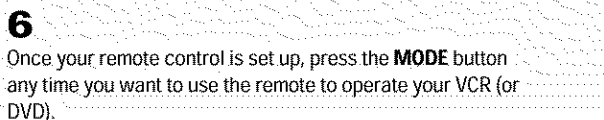
◀ The remote control has four “modes”: “TV,” “VCR,” “Cable” and “DVD.” Press the “MODE” button to switch the remote control to the “VCR” (or DVD) mode.



◀ Make sure you enter 3 digits of the code, even if the first digit is a “0.”  
If more than one code listed, try the first one.



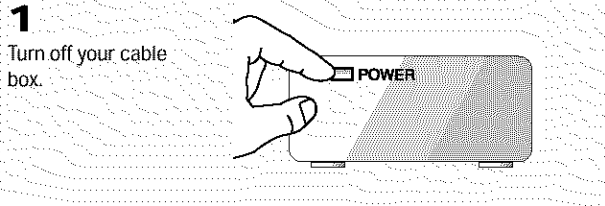
◀ If your VCR (or DVD) does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for the brand of your particular VCR (or DVD).  
If no other codes are listed, try each code, 000 through 089.



◀ When your remote control is in the “VCR” (or DVD) mode, the volume buttons still control your TV’s volume.

When your remote is in the “TV” mode, the VCR control buttons (PLAY, PAUSE, etc.) will still operate your VCR.

### Setting Up Your Remote Control to Operate Your Cable Box



**2**  
Press the **MODE** button and make sure that the **Cable** LED is illuminated.

◀ The remote control has four "modes": "TV," "VCR," "CABLE" and "DVD."

Press the "MODE" button to switch the remote control to the "Cable" mode.

**3**  
On your Samsung remote control, press **SET**.

**4**  
Enter 3 digits of the cable box code listed below for your brand of cable box.

◀ Make sure you enter 3 digits of the code, even if the first digit is a "0." (If more than one code listed, try the first one.)

**5**  
Press **Power**. Your cable box should turn on. If your cable box turns on, your remote control is now "set up" correctly.

◀ If your cable box does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for your particular brand of cable box. (If no other codes are listed, try each cable box code, 000 through 077.)

**6**  
Once your remote control is set up, press the **MODE** button any time you want to use the remote to operate your cable box.

◀ When your remote control is in the "CABLE" mode, the volume buttons still control your TV's volume. Also, the VCR control buttons (PLAY, PAUSE, etc.) will still operate your VCR.



## SPECIAL FEATURES

### VCR Codes

Admiral	006, 079	KLH	073	RCA	000, 005, 007, 008, 028, 035, 037, 054, 069
Aiwa	015	LG	009, 014, 046, 060	Samsung	007, 013, 022, 032, 042, 077
Akai	017, 022, 023, 027, 030	Lloyd	015	Sansui	016
Audio Dynamics	014, 016	Logik	031	Sanyo	002, 012
Bell & Howell	002	LXI	015	Scott	013, 041, 049, 068
Broksonic	010	Magnavox	008, 029, 053, 056	Sears	002, 005, 009, 012, 018, 019, 035, 043, 048
Candle	007, 009, 013, 045, 046, 052	Marantz	002, 008, 014, 016, 029, 030, 046, 061	Sharp	006, 027, 039, 045
Cannon	008, 053	Marta	009	Shintom	017, 026, 031, 055
Citizen	007, 009, 013, 045, 046, 052	MEI	008	Signature	015
Colortyme	014	Memorex	008, 009, 012, 015	Sony	017, 026, 038
Craig	007, 012	MGA	027	Sylvania	008, 015, 029, 053, 056
Curtis-Mathes	000, 007, 008, 014, 015, 046, 053, 064, 067	Midland	032	Symphonic	015
Daewoo	013, 045, 076	Minota	005, 035	Tandy	002, 015
DBX	014, 016	Mitsubishi	005, 027, 035, 040	Tashiko	009
Dimensia	000	Montgomery ward	006	Tatung	030
Dynatech	015	MTC	007, 015	Teac	015, 030, 069
Electrohome	027	Multitech	007, 015, 031, 032	Technics	008
Emerson	008, 009, 010, 013, 015, 020, 023, 027, 034, 041, 042, 047, 049, 057, 062, 065, 067, 068, 070	NEC	002, 014, 016, 030, 046, 061, 064	Ternika	008, 009, 015, 021
Fisher	002, 012, 018, 019, 043, 048, 058	Optimus	006	TMK	067
Funai	015	Panasonic	008, 053, 075, 077	Toshiba	005, 013, 019, 048, 049
GE	000, 007, 008, 032, 053	Pentax	005, 035	Totevision	007, 009
Go Video	007	Pentex Reserch+	046	Unitech	007
Harman Kardon	014	Philco	008, 029, 053, 056	Vector Research	014, 016
Hitachi	005, 015, 035, 036	Philips	008, 029	Victor	016
Instant Replay	008	Pioneer	005, 016, 033, 050	Video Concepts	014, 016
JC Penney	002, 005, 007, 008, 014, 016, 030, 035, 051, 053	Portland	044, 045, 052	Videosonic	007
JCL	008, 002, 014, 016, 030, 046	ProScan	000	Wards	005, 006, 007, 008, 009, 012, 013, 015, 027, 031, 035
JVC	002, 014, 088, 089	Quartz	002	Yamaha	002, 014, 016, 030, 046
Kenwood	002, 014, 016, 030, 046	Quasar	008, 053	Zenith	011, 017, 026, 079
		Radio Shack/Realistic	002, 006, 008, 009, 012, 015, 019, 027, 045, 053		

### Cable Box Codes

Arvvision	007, 008	NSC	009	Signature	046
Cablestar	007, 008	Oak	016, 038	Sprucer	027
Eagle	007, 008	Osk Sigma	016	Starcom	046
Eastern Int.	002	Panasonic	003, 027, 039, 061, 073, 074	Stargate 2000	058
General Instrument	046	Philips	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041	Sylvania	011, 059
GI	004, 005, 015, 023, 024, 025, 030, 036, 067, 068, 069	Pioneer	018, 020, 044, 074, 077	Texscan	011, 059
Hamlin	003, 012, 013, 034, 048	Randtek	007, 008	Tocom	017, 021, 049, 050, 055, 073
Hitachi	037, 043, 046	RCA	000, 027, 066	Unika	031, 032, 041
Jerrold	004, 005, 015, 023, 024, 025, 030, 036, 046, 062, 065	Regal	003, 012, 013	Universal	051, 052
Macom	037, 043	Regency	002, 033	Viewster	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041
Magnavox	007, 008, 019, 021, 026, 028, 029, 032, 033, 040, 041	SA	070, 071, 072	Warner Amex	044
		Samsung	044, 003, 022, 063, 064	Zenith	014, 042, 057, 061, 075, 076

### DVD Codes

Philips	001
Proscan	002
RCA	002
Toshiba	003
Panasonic	004
Sony	008
Samsung	000

# Chapter Five

## TROUBLESHOOTING

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, then call your nearest service center.

### Identifying Problems

Problem	Possible Solution
Poor picture.	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality.	Try another channel. Adjust the antenna.
No picture or sound.	Try another channel. Press the TV/Video button. Make sure the TV is plugged in. Check the antenna connections.
No color, wrong colors or tints.	Make sure the program is broadcast in color. Adjust the picture settings.
Picture rolls vertically.	Adjust the antenna. Check all wire connections.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it again.
Your remote control does not operate your TV.	Press the "MODE" button to put your remote control in the "TV" mode.
The TV won't turn on.	Make sure the wall outlet is working.

**Note:** If you watch a still image or the screen in the 16:9 aspect ratio format for a long time, images may be burned onto the screen.

## Cleaning and Maintaining Your TV

With proper care, your TV unit will give you many years of service. Please follow these guidelines to get the maximum performance from your TV.

### Placement

- Do not place the TV near extremely hot, cold, humid or dusty places.
- Do not place the TV near appliances with electric motors that create magnetic fields, such as vacuum cleaners.
- Keep the ventilation openings clear; do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in a vertical position only.

### Liquids

- Do not handle liquids near or on the TV. Liquids that spill into it can cause serious damage.

### Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.

### Temperature

- If your TV is suddenly moved from a cold to a warm place, unplug the power cord, and allow at least two hours for moisture that may have formed inside the unit to dry completely.

## Using Your TV in Another Country

If you plan to take your TV with you to a foreign country, please be aware of the different television systems that are in use around the world. A TV designed for one system may not work properly with another system due to differences in the TV channel frequencies

## Specifications

Model	PCL545R / PCL5415R / PCL6215R
Voltage	AC 120V
Frequency of Operation	60Hz
Power Consumption	230 Watts
Dimensions	PCL545R / PCL5415R : 1161 x 605 x 1400mm; 45.70 x 23.82 x 55.12 inches PCL6215R : 1319 x 705 x 1529mm; 51.93 x 27.76 x 60.20 inches
Weight	PCL545R / PCL5415R : 68 Kg; 149.92 lbs PCL6215R : 88 Kg; 194.00 lbs