

Projection TV



Safety Instructions

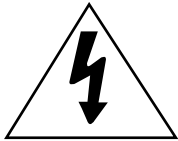


Warning! Important Safety Instructions

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

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



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



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

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.

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 possible.

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 laws.

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

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Introduction

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



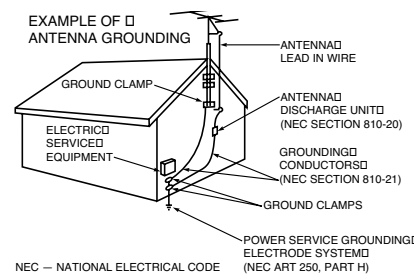
Always be careful when using your TV. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your unit.

- 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 and in the operating instructions.
- Unplug the TV 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 where contact with water is possible, 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 more likely to overturn.
- The TV 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 put the TV on a bed, sofa, rug, or other similar surface. Do not put the TV near a radiator or heat register. If you do put the TV on a rack or bookcase, make sure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your TV 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 an 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 from 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 when:
 - The power-supply cord or plug is damaged
 - Liquid has been spilled on the unit or if objects have fallen into the unit
 - The TV has been exposed to rain or water
 - The TV does not operate normally by following the operating instructions
 - The TV has been dropped or the cabinet has been damaged
 - The TV exhibits a distinct degradation in performance
 - When the LAMP(BULB ONLY) replacement is needed

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.

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Your New Wide TV

Your New Wide TV

List of Features

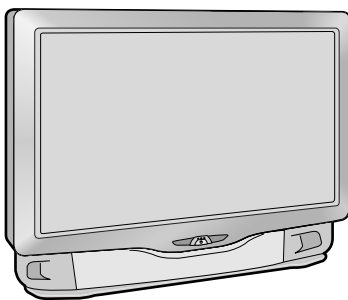
Your Samsung TV was designed and engineered using the latest technology. It is a full-featured, high-performance unit that exceeds industry standards. In addition, it has these special features:

- Easy-to-operate remote control
- Easy-to-use on-screen menu system you can access from the side panel or remote control
- Automatic timer to turn the TV on and off at any time you choose
- Adjustable picture and sound settings and the ability to memorize your favorite settings
- 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 (13 watts per channel)
- A special sleep timer
- Picture-in-Picture capability that lets you watch two channels at once
- Headphone jack for private listening
- Widescreen TV with adjustable image size
- A three-dimensional comb filter for enhanced viewing pleasure
- COMPONENT VIDEO INPUT jacks to obtain a sharper image from external sources

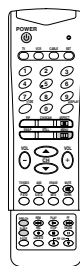
Checking Parts

Once you have unpacked your TV, check to make sure that you have all the parts shown here. If any piece is missing or broken, call your dealer.

Please fill out the registration card and return it to Samsung.



Television



Wireless Remote Control



This Manual



300-75 ohm Adapter



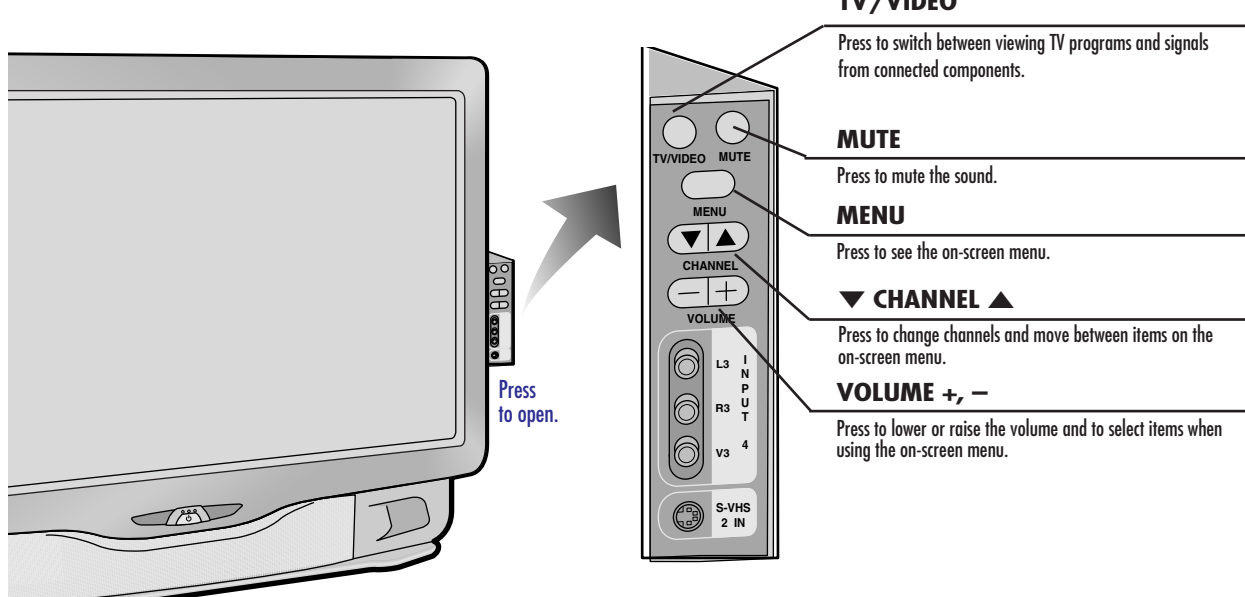
Warranty Card



RCA Cable

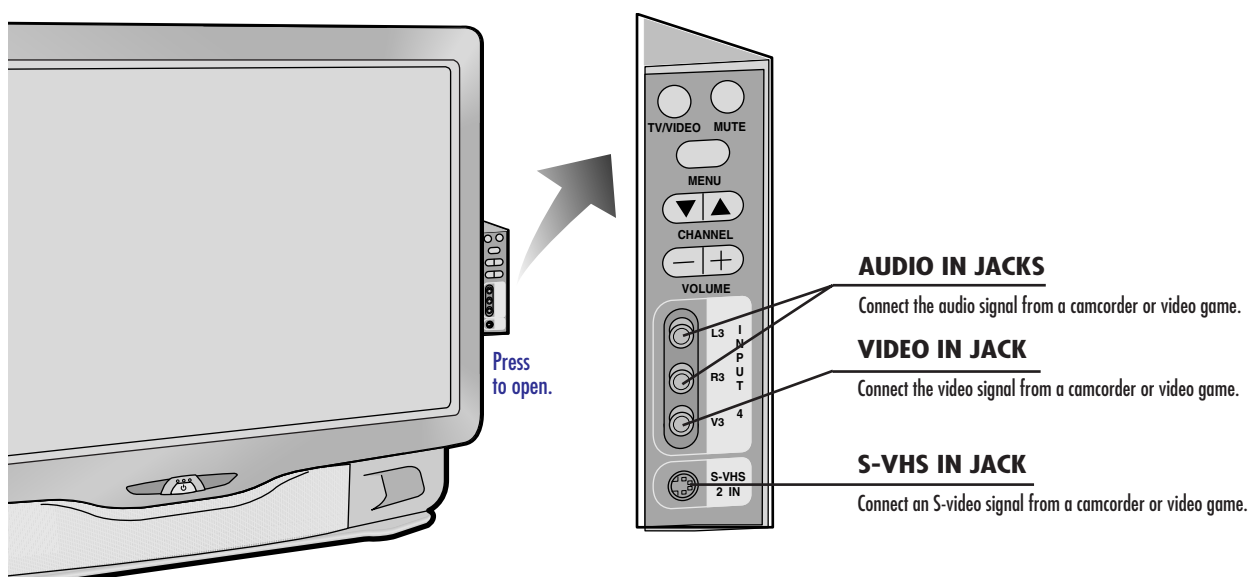
Side Panel Buttons

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



Side Panel Jacks

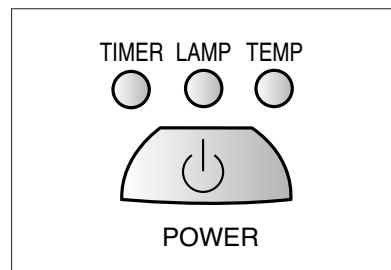
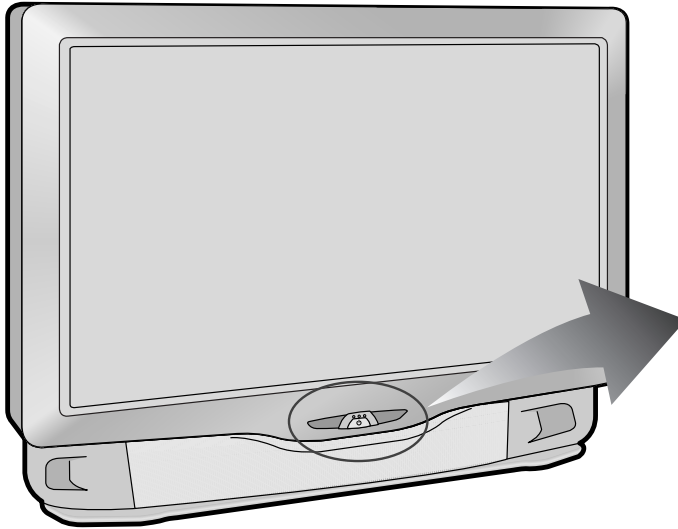
Use the side panel jacks to connect a component that is used only occasionally (a camcorder or video game, for example) .



Your New Wide TV

Front Panel LED Indicators

The three lights on the front panel indicate the status of your TV.



Indicator Light Key

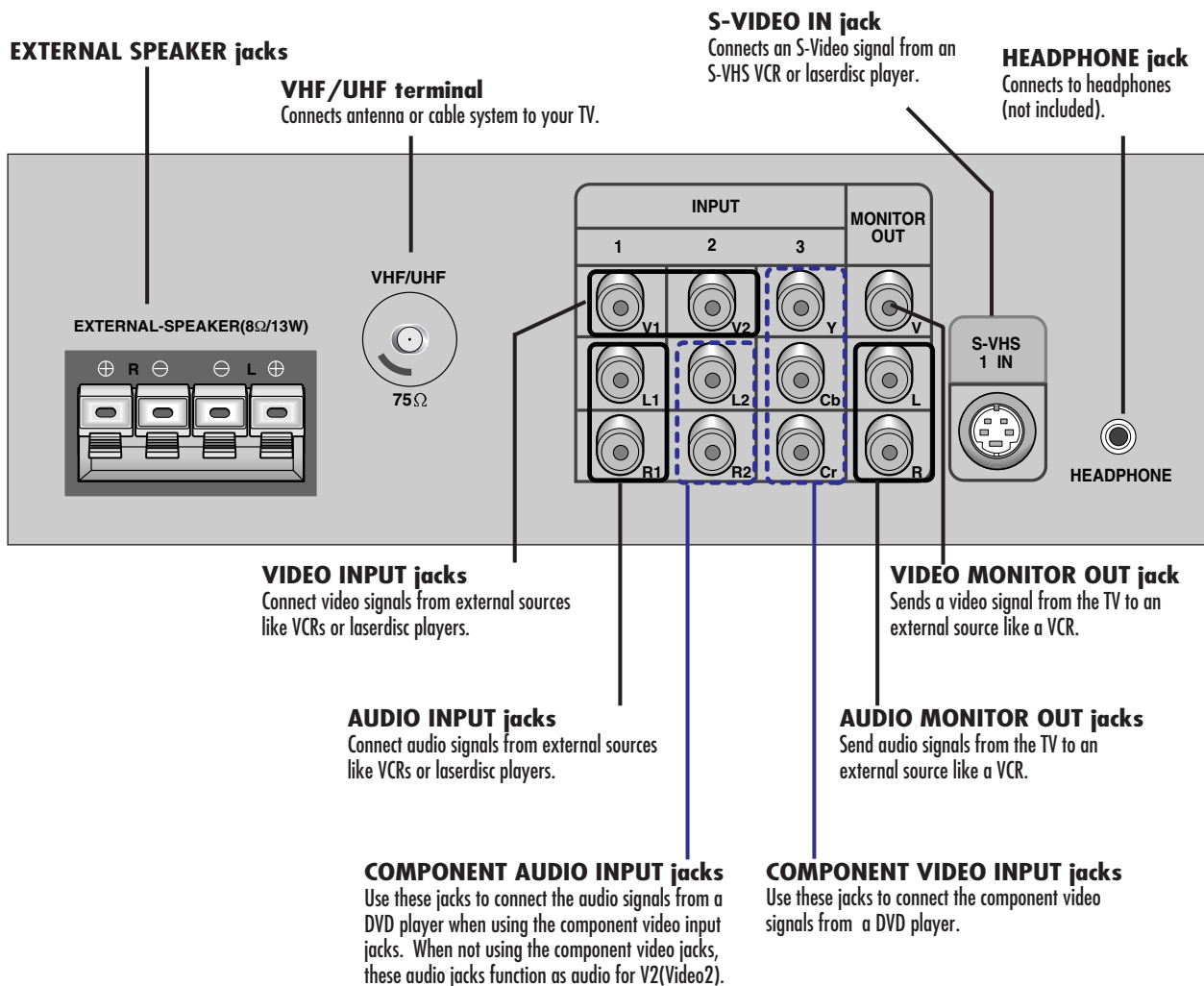
- : Light is On
- ◐: Light is Blinking
- : Light is Off

Indicator Light	Indication
Timer Lamp Temperature	
○ ● ○	Normal operation.
● ○ ○	On time or off time is set.
● ● ○	On time or off time is set. Normal operation.
○ ◐ ○	Lamp is warming up. The normal picture comes on in about 30 seconds.
◐ ○ ◐	Air vent cover at the rear of the TV is not properly installed.
○ ○ ◐	Inside temperature of the TV is too high. Turn the TV off and clean the air vent cover on the back of the TV. Turn the TV on after 1 hour.
◐ ◐ ◐	Lamp inside the TV needs to be replaced.

- It takes about 30 seconds for the TV to warm up, so normal brightness may not appear immediately.
- The TV has a fan to keep the inside lamp from overheating. You'll occasionally hear it working.

Rear Panel Jacks

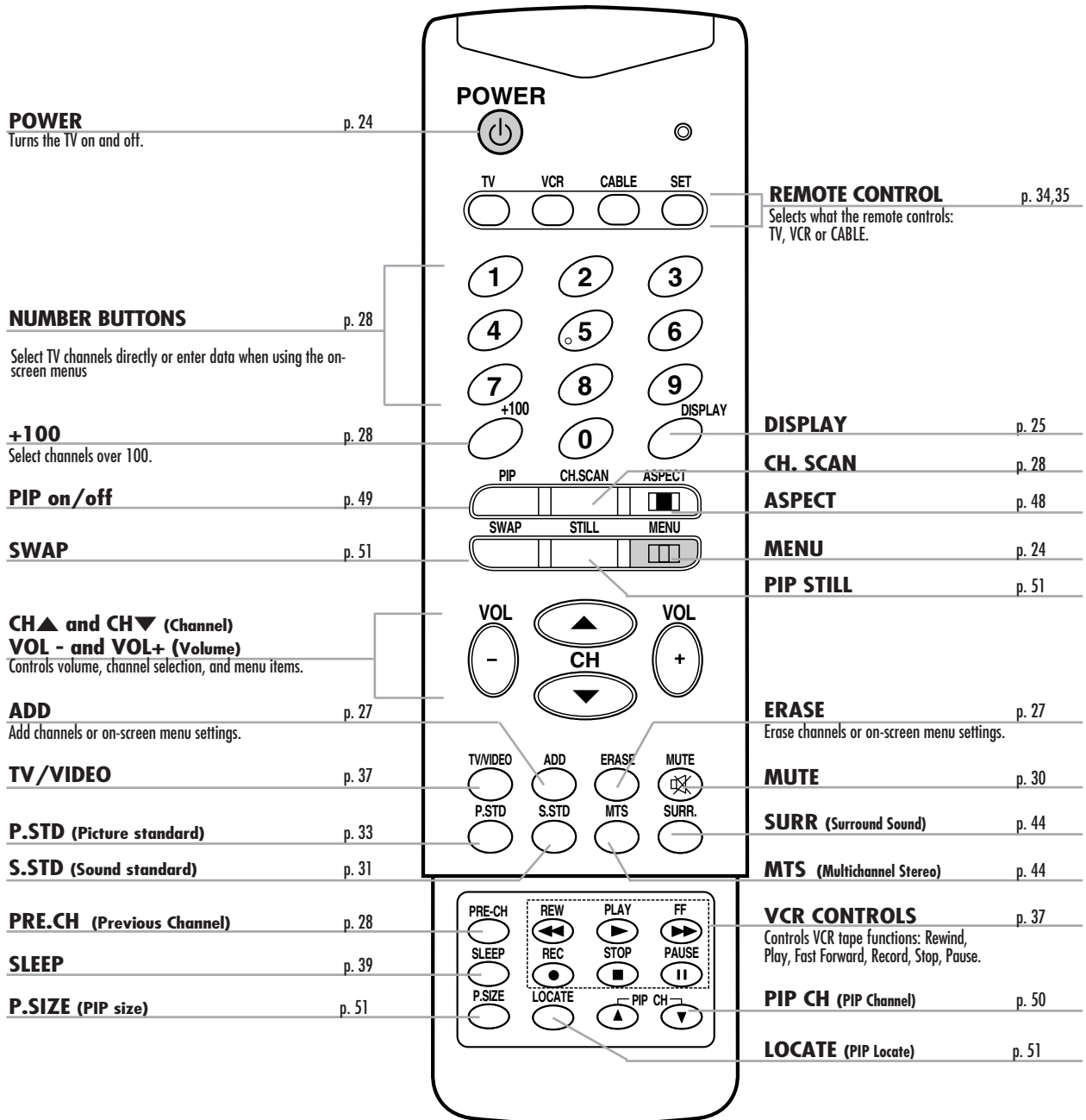
Use the rear panel jacks to connect components such as a VCR or laserdisc player. You can connect two different components such as two VCRs, a laserdisc player and a DVD player etc., because there are two sets of video input jacks and one set of component video input jacks on the rear panel of your TV. For more information, please see "Connections".



Your New Wide TV

Remote Control

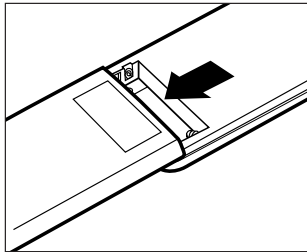
You can use the remote control up to a distance of about 23 feet from the TV. When using the remote, always point it directly at the TV. The remote control can also operate your VCR and cable box.



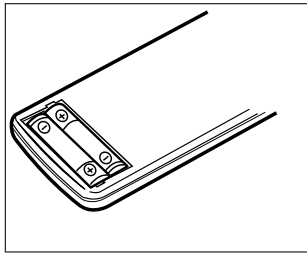
Installing Batteries in the Remote Control

With normal use, the batteries in the remote control should last about a year. If you notice a performance degradation while using the remote, the batteries may need to be replaced. Make sure you replace both batteries and do not mix old and new batteries in the remote control. If you won't be using the remote control for a long time, remove the batteries and store them in a cool dry place.

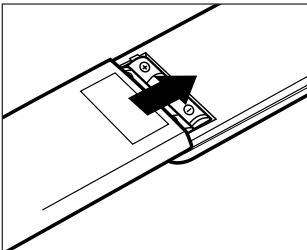
-
- 1 Slide the back cover all the way out to open the battery compartment of the remote control.



-
- 2 Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.



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- 3 Slide the cover back into place.



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Connections

Connections

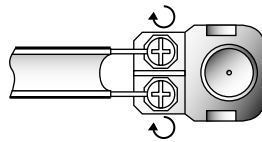
Connecting VHF and UHF Antennas

If you do not have a cable system, you will need to connect an antenna to your TV.

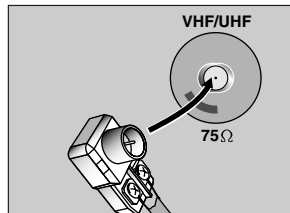
Antennas with 300-ohm Flat Twin Leads

If your antenna looks like this:  it has 300-ohm flat twin leads.

- 1 Place the wires from the twin leads under the screws on the 300-75 ohm adapter (included). Use a screwdriver to tighten the screws.



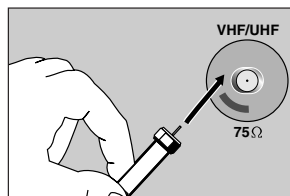
- 2 Plug the adapter into the VHF/UHF terminal on the back panel of the TV.



Antennas with 75-ohm Round Leads

If your antenna looks like this:  it is an antenna with 75-ohm round leads.

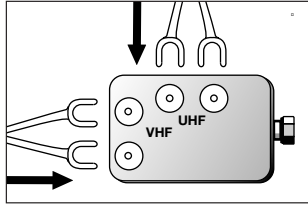
- 1 Plug the antenna lead into the VHF/UHF terminal on the back panel of the TV.



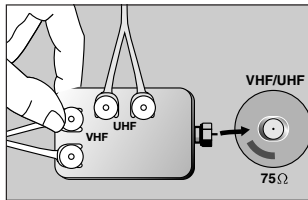
Separate VHF and UHF Antennas

If you have two separate antennas for your TV (one VHF and one UHF), you must combine the two antenna signals before connecting them to the TV. This requires a combiner attachment, which you can buy at an electronics store.

-
- 1 Connect both antenna leads to the combiner.



-
- 2 Plug the combiner into the VHF/UHF terminal on the rear panel of the TV.



Connections

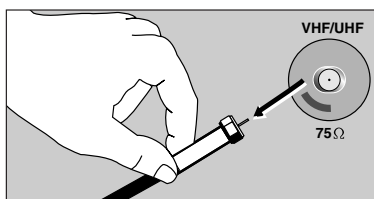
Connecting Cable TV

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:

- 1 Plug the incoming cable into the VHF/UHF antenna terminal on the back of the TV.

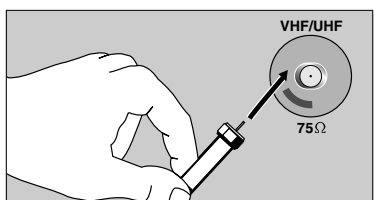


Cable with a Cable Box that Descrambles All Channels

- 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 VHF/UHF antenna terminal on the back of the TV.



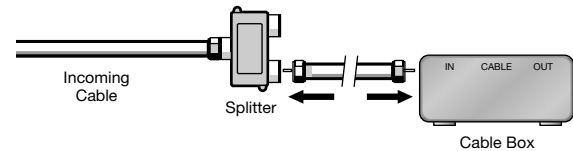
Cable with a Cable Box that Descrambles Some (But Not All) Channels

To complete this connection you will need a two-way splitter, an RF (A/B) switch and four coaxial cables (which you buy from your Samsung dealer or any electronics store).

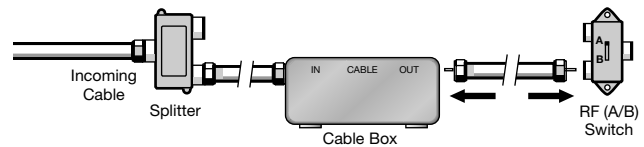
- 1 Find and disconnect the cable that is connected to the ANTENNA IN terminal on your cable box. This terminal might be labeled "ANT IN," "VHF IN," or simply, "IN." Connect this cable to a two-way splitter.



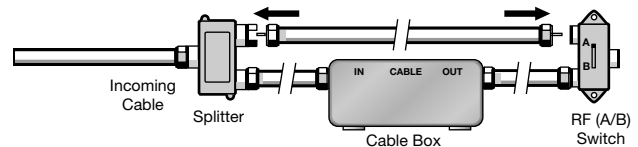
- 2 Connect a coaxial cable between an OUTPUT terminal on the splitter and the IN terminal on the cable box.



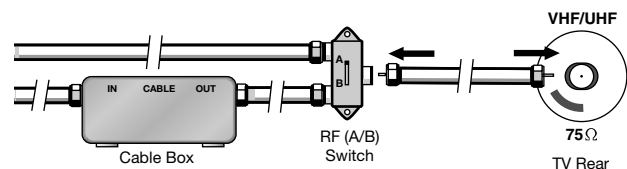
- 3 Connect a coaxial cable between the ANTENNA OUT terminal on the cable box and the B-IN terminal on the A/B switch.



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



- 5 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.

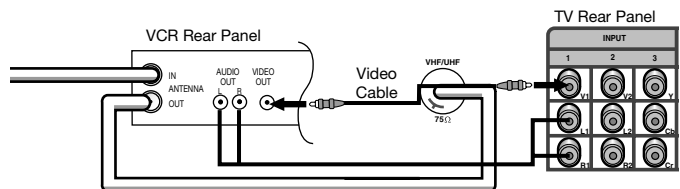
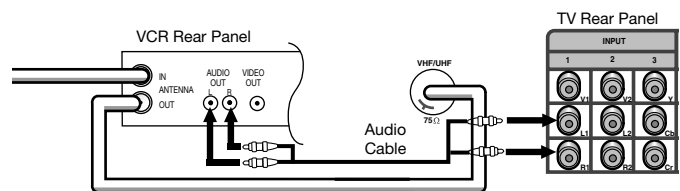
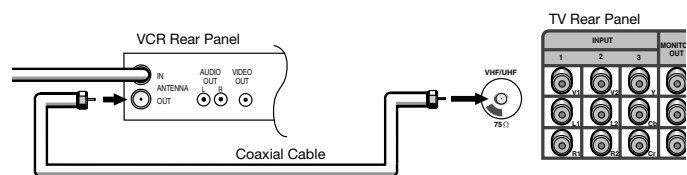
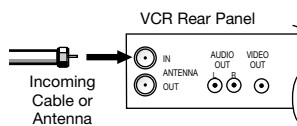
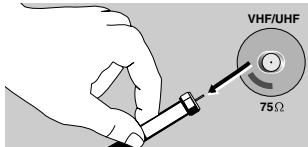


After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B," you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

Connections

Connecting a VCR

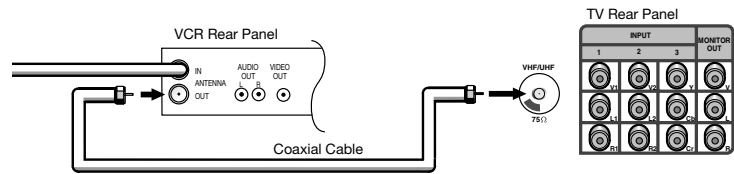
- 1 Unplug the cable or antenna from the back of the TV.
- 2 Connect the cable or antenna to the ANTENNA IN terminal on the back of the VCR.
- 3 Connect a coaxial cable between the ANTENNA OUT terminal on the VCR and the antenna terminal on the TV. A coaxial cable is usually included with the VCR.
- 4 Connect a set of audio cables between the AUDIO OUT jacks on the VCR and the AUDIO jacks on the TV. If you have a "mono" (not stereo) VCR, use the Y-connector (supplied) to hook up to the left and right audio input jacks of the TV. If your VCR is stereo, you must connect two separate sets of cables.
- 5 Connect a video cable between the VIDEO OUT jack on the VCR and the VIDEO IN jack on the TV.



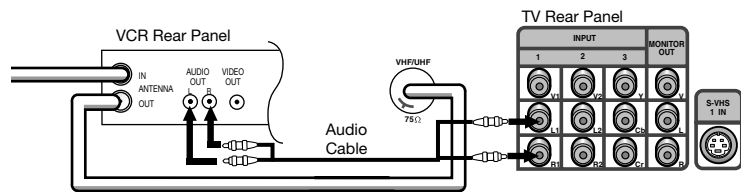
Connecting S-VHS VCR

Your TV comes ready to receive high quality S-Video signals from an S-VHS VCR.

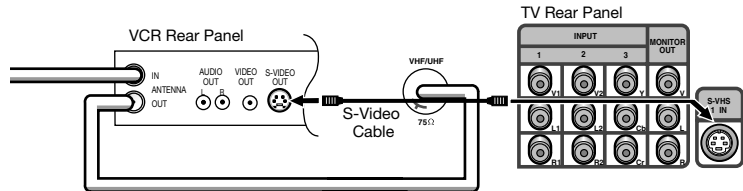
- 1 To begin, follow steps 1–3 in the previous section to connect an antenna or cable to your S-VHS VCR and your TV.



- 2 Connect a set of audio cables between the AUDIO OUT jacks on the S-VHS VCR and the AUDIO INPUT jacks on the TV. Make sure the jacks you are using are underneath the number "1."



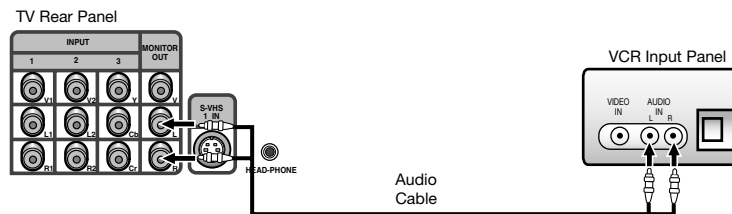
- 3 Connect an S-video cable between the S-VIDEO OUT jack on the VCR and the S-VHS INPUT jack on the TV. (An S-video cable is usually included with the S-VHS VCR.)



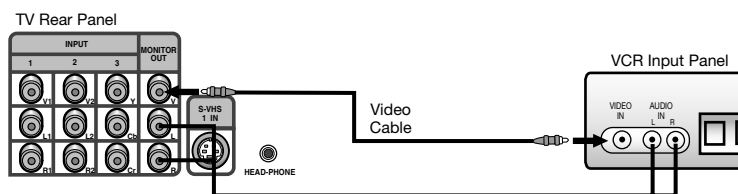
Connecting a Second VCR

Your TV can send picture and sound signals to a second, recording VCR. Refer to your VCR's instructions for more information on recording with this kind of connection.

- 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's input jacks might be on the front or back of the VCR.



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

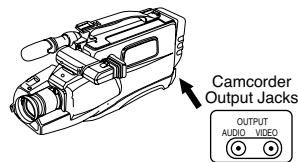


Connections

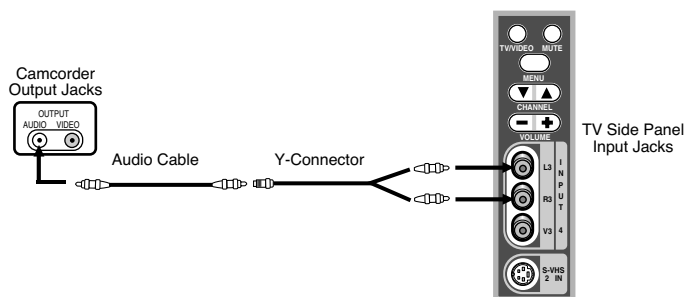
Connecting a Camcorder

The side panel jacks on your TV make it easy to connect a camcorder to your TV. You can use your camcorder to view tapes without using a VCR.

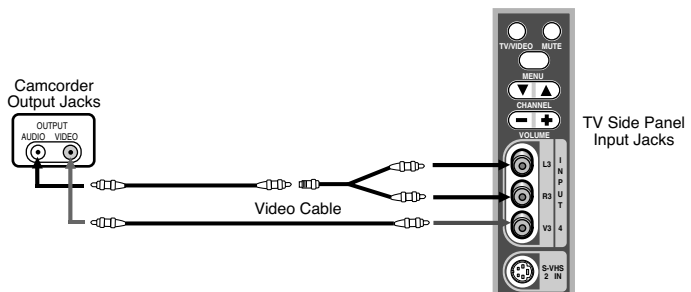
- 1 Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.



- 2 Connect an audio cable between the AUDIO OUTPUT jack on the camcorder and the AUDIO terminals on the side of the TV. If your camcorder is stereo, you must connect two separate cables. (The audio cables are usually included with the camcorder.)



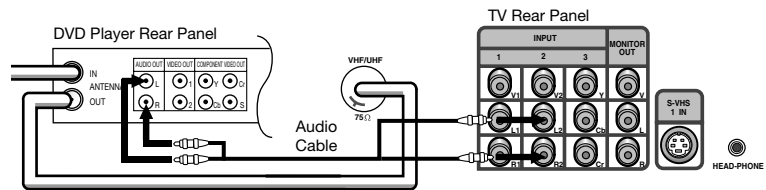
- 3 Connect a video cable between the VIDEO OUTPUT jack on the camcorder and the VIDEO terminal on the side of the TV. (A video cable is usually included with the camcorder.) To watch a tape, follow your camera's instructions and the section on "Viewing a VCR, DVD or Camcorder Tape" in this manual.



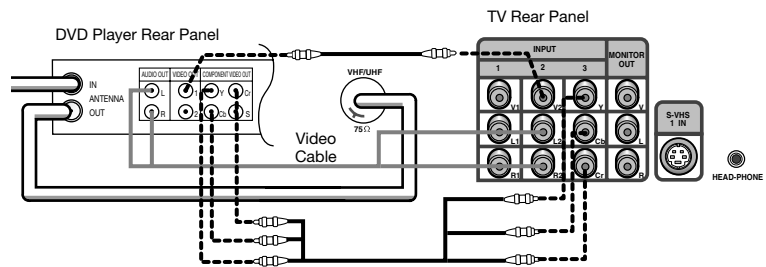
Connecting a DVD Player

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

- 1 Connect a set of audio cables between the AUDIO IN 2 jacks on the TV and the AUDIO OUT jacks on the DVD player.



- 2 Connect a video cable between the VIDEO IN jack on the TV and the VIDEO OUT jack on the DVD player. To enable Component video viewing, connect video cables between the Y, Cb and Cr inputs on the TV and Y, Cb and Cr outputs on the DVD player. Note: For an explanation of Component video, see your DVD player's owner's manual.



NOTE

In the Component Mode, the PICTURE SIZE (ASPECT) can not be adjusted and the MONITOR OUT, PIP features do not operate.

If you want to use PIP while viewing DVD, select VIDEO 2 after connecting the DVD VIDEO OUT jack to V2 on the TV.

If you want to view captions when viewing a DVD disc in the Component mode, set the DVD player's Caption function to on.

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Operation

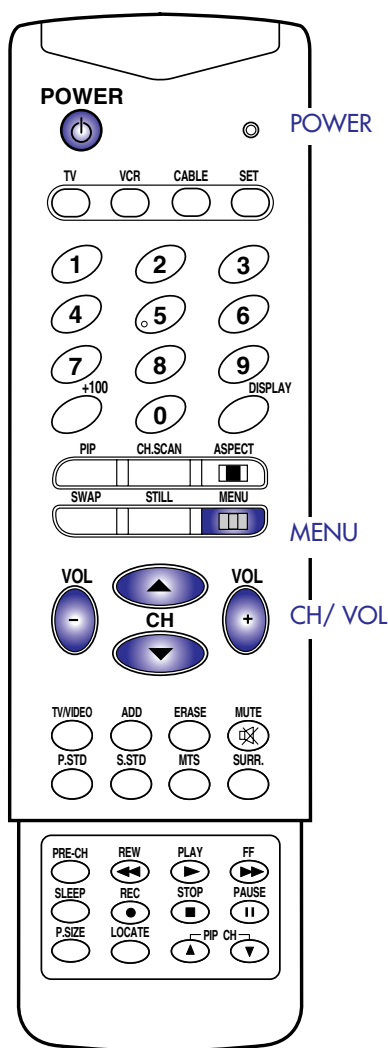
Operation

Turning the TV On and Off

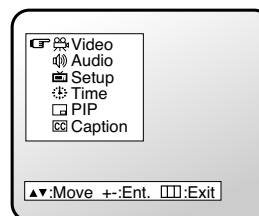
Press the POWER button on the remote control or on the front panel to turn your TV on and off.

Selecting the Menu Language

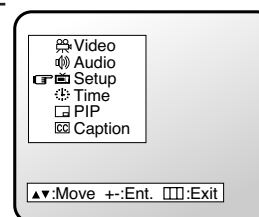
Choose a language for the on-screen menus: English, Spanish or French.



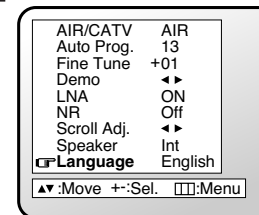
1 Press the MENU button on the remote control to display the on-screen menu.



2 Press CH▼ to select Setup. Press VOL +. The Setup menu appears.



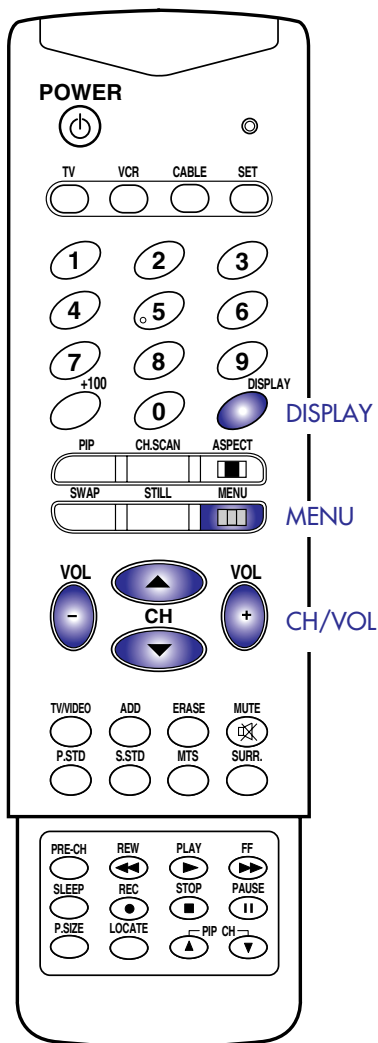
3 Press CH▼ to highlight "Language."



4 Press VOL + to select the language. Press the MENU button on the remote control to exit the menu.

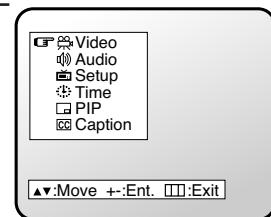
Viewing the Menus and Displays

The on-screen menu system allows you to control the settings of your TV. Access the on-screen menu system by pressing the MENU button on the remote control. Once the on-screen menu appears, use the channel (CH▲ and CH▼) and volume (VOL – and VOL +) buttons on your remote control to move between menu items, select menu items, and make adjustments. You can also view the on-screen menu system and make some adjustments using the TV's side panel buttons.



Displaying the Menus

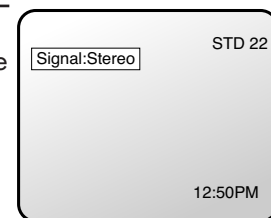
- 1 With the power on, press the MENU button on the remote control. The main menu appears on the screen. The Video menu is selected.



- 2 Use the CH▲ and CH▼ buttons to select items in the menu. Use the VOL – and VOL + buttons to display, change, or use the selected items. On-screen menus disappear from the screen automatically after about thirty seconds, or you can press the MENU button on your remote control to exit the menu.

Displaying Status Information

- 1 Press the DISPLAY button on the remote control. The TV will display the channel, current time, audio signal you are listening to.



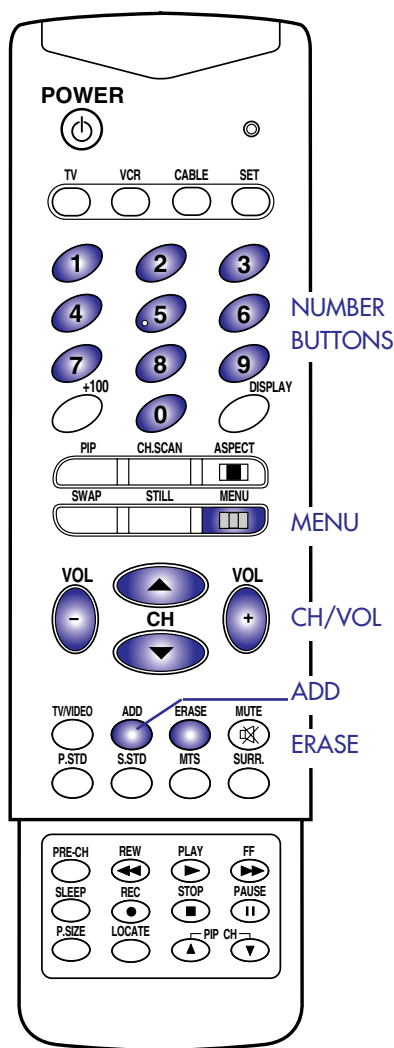
Operation

Channel Memory

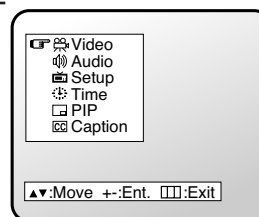
Your TV can memorize and store all of the channels available. Once the channels are memorized, you can use the CH ▲ and CH ▼ buttons to scan through the available channels.

Selecting the Broadcast Source

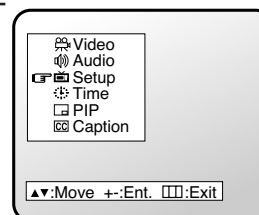
Before memorizing available channels, you must select what broadcast source your TV is connected to either an antenna or a cable system.



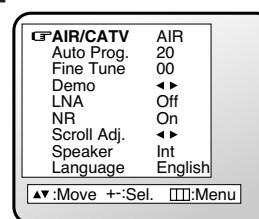
- 1 Press the MENU button on the remote control to display the on-screen menu.



- 2 Press CH ▼ to select "Setup."



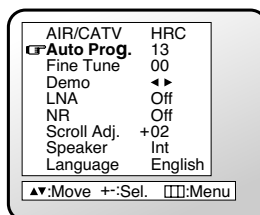
- 3 Press VOL +. The Setup menu will appear. The first line of the menu is highlighted.



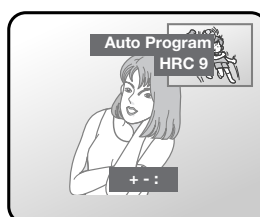
- 4 If you are connected to an antenna, leave "AIR" displayed. If you connected cable, press VOL + to display the type of cable system: "STD," "HRC," or "IRC." (If you are not sure which type of cable system you have, contact your cable company.)

Storing Channels in Memory Automatically

- 1 First, select the broadcast source as described on the previous page. With the Setup menu on screen, press CH ▼ to select "Auto Prog."



- 2 Press VOL +. The TV will begin memorizing all of the available station. This takes about two minutes. Press VOL + at any time to interrupt the memorization process.



Adding and Erasing Channels

- 1 Use the number buttons to select the channel you want to add or erase.

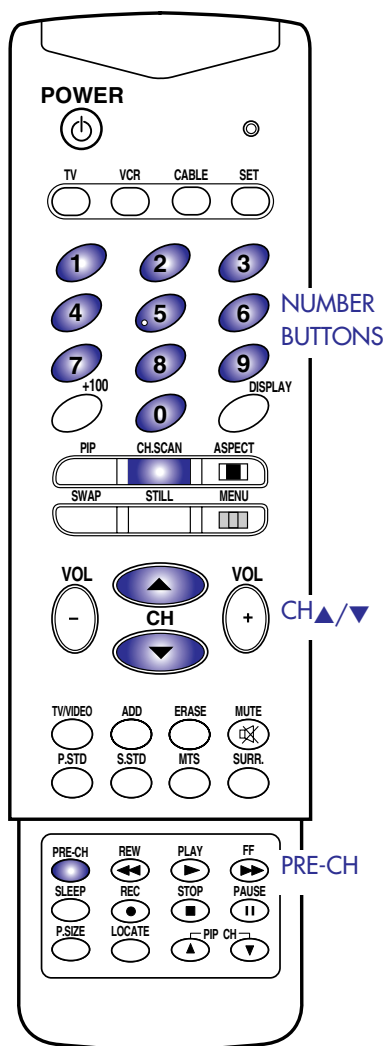
- 2 To add a channel, select it and press the ADD button on the remote control. The channel will be added to the TV's memory and the word "Add" will appear in the corner of the screen.

- 3 To erase a channel, select it and then press the ERASE button on the remote control. The word "Erase" will appear in the corner of the screen. You can still view a channel that has been erased from memory by using the number buttons on the remote control to select the channel directly.

Operation

Changing Channels

You can change channels on your TV using the CH ▲ and CH ▼ buttons, or by direct selection using the number buttons. You can use the number buttons to tune to any channel (even one that has been erased or has not been memorized).



Using the Channel Buttons

- 1 Press the CH ▲ or CH ▼ buttons to change channels. The TV changes each channel in order, up or down, depending on which button you press. 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 not memorized or have been erased.

Using the Number Buttons

- 1 To change to single-digit channels (0–9) faster, press “0” before the single digit.

Example: For channel 4, press “0,” then “4.”

To select a channel over 100, press the +100 button first.

Example: For channel 122, press “+100,” then “2,” then “2.”

Using the Previous Channel

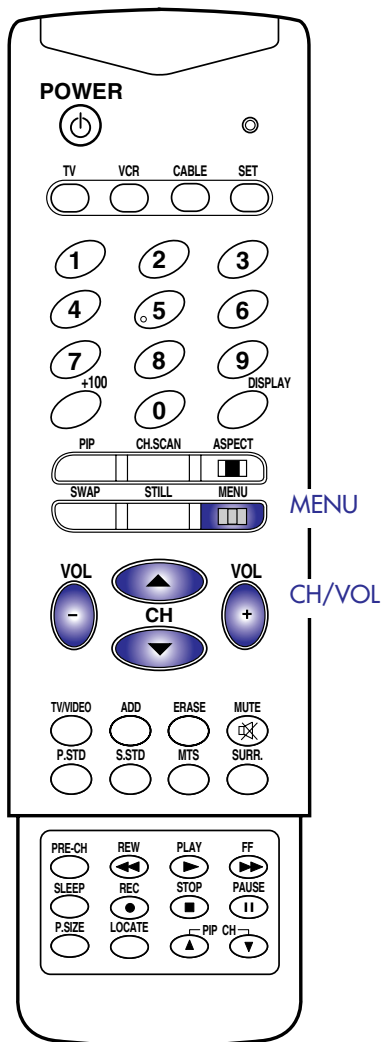
- 1 Press the PRE-CH button on the remote control. The TV changes to the last channel you were watching.

Scanning channels

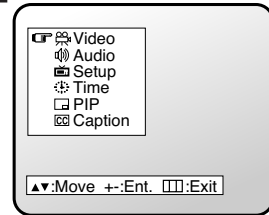
- 1 You can automatically scan all of the channels in memory at the touch of just one button. Press the CH.SCAN button on the remote control. The TV will change the channels automatically, one by one. To stop channel scan, press CH.SCAN button again.

Setting the Clock

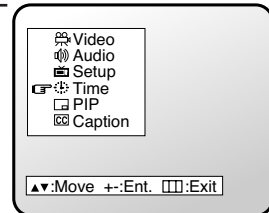
This TV has a built-in clock that will appear on screen when you press the DISPLAY button on the remote control. Setting this clock also allows you to use the TV's times, which can automatically turn the TV on or off.



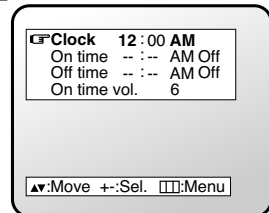
- 1 Press the MENU button on the remote control to display the on-screen menu.



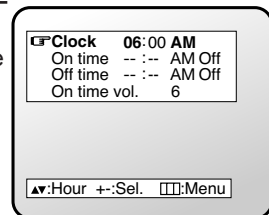
- 2 Press CH ▼ to select the "Time" menu.



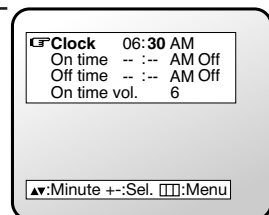
- 3 Press VOL + to display the Time menu. Press VOL + again. The hour will be highlighted.



- 4 Press the CH ▲ or CH ▼ button to select the correct hour. Make sure the correct time of day (AM or PM) appears next to the hour. After selecting the correct hour, press VOL + again. The minute will be highlighted.



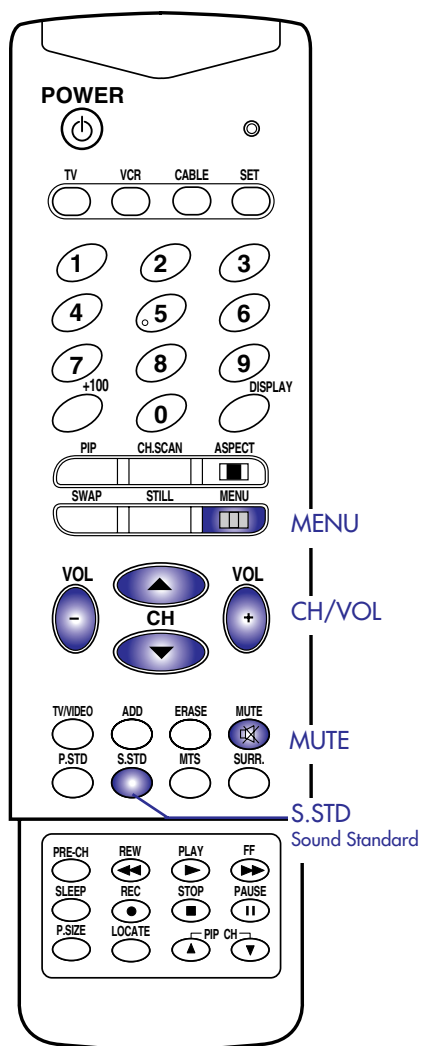
- 5 Press the CH ▲ or CH ▼ button to select the minute. When you have selected the correct minute, press MENU twice to exit the menus.



Operation

Sound Control

You can control and customize the sound levels and settings of the TV with the remote control. Using the on-screen menus, you can change the TV's bass, treble, and balance settings.



Adjusting the Volume

- 1 Press VOL + to raise the volume or VOL - to lower the volume.

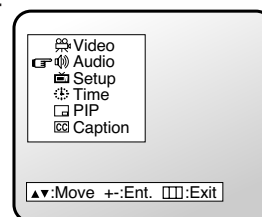
Using the Mute Button

- 1 Press the MUTE button on the remote control to silence the volume. The word "Mute" will appear in the lower left corner of the screen.

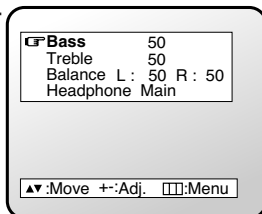
To turn mute off, press the MUTE button again, or raise or lower the volume with the VOL - and VOL + buttons.

Customizing the Sound

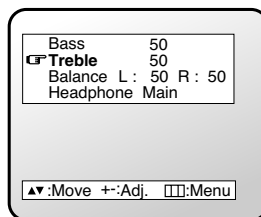
- 1 Press the MENU button on the remote control to display the on-screen menu. Press CH ▼ to select the audio menu.



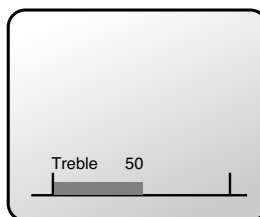
- 2 Press VOL + to display the audio menu. You will see the items "Bass," "Treble," "Balance," and "Headphone."



- 3 Press CH ▼ to select the item you want to change.



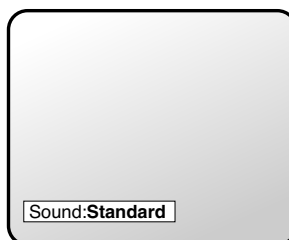
- 4 Press VOL - or VOL + to raise or lower the value of the item, using the on-screen gauge as your guide.



When you are finished adjusting an item, wait a moment. The level indicator will disappear and the Audio menu will return. You can continue to make adjustments, or press the MENU button to exit.

Using Automatic(Standard) Sound Settings

- 1 Press the S.STD button on the remote control to change the automatic sound setting.



- 2 Press the S.STD button again to select the "Standard," "Music," "Movie," "Speech," or "Custom" sound setting.

Guide to Automatic Sound Settings

- Choose Standard for the "factory" settings (the best choice for most people)
- Choose Music when watching music videos or concerts.
- Choose Movie when watching a movie.
- Choose Speech when watching a show that is mostly dialogue, like a news show.
- Choose Custom if you want to adjust the settings yourself.

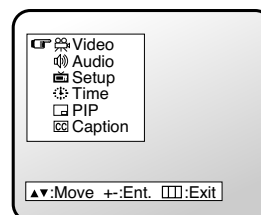
Operation

Picture Control

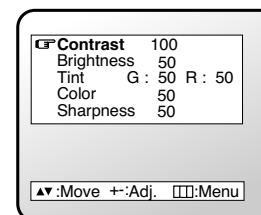
Using the remote, you can change the contrast, brightness, tint, color, and sharpness settings of the TV.

Customizing the Picture

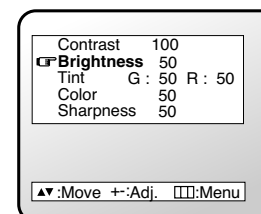
- 1 Press the MENU button on the remote control.



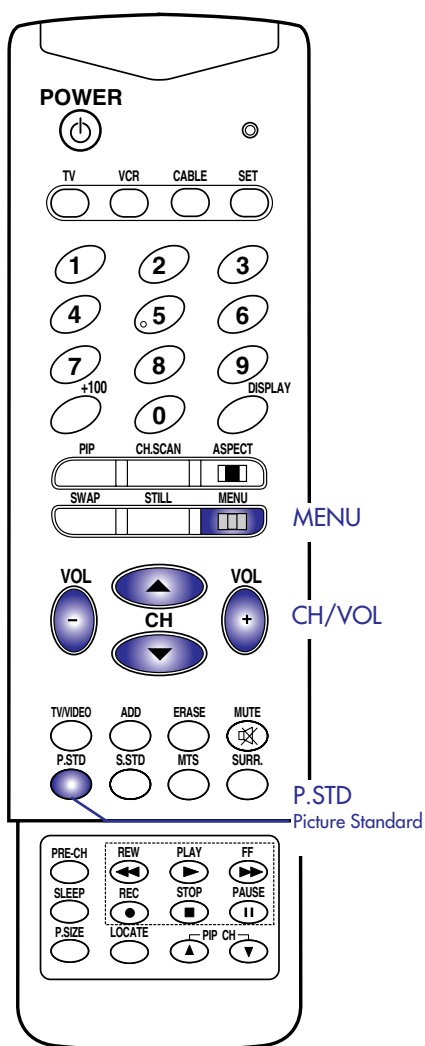
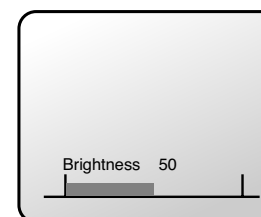
- 2 Press VOL + to select the video menu. You will see the items "Contrast," "Brightness," "Tint," "Color," and "Sharpness."



- 3 Press CH ▼ to select the item you want to change.



- 4 Press VOL - or VOL + to raise or lower the value of the item.



When you are finished adjusting an item, wait a moment. The level indicator will disappear and the Video menu will return. You can continue to make adjustments, or press the MENU button to exit.

Using Automatic ("Standard") Picture Settings

- 1 Press the P.STD button on the remote control to change the picture settings.



- 2 Press P.STD repeatedly to select the "Standard," "Mild," or "Custom" picture setting.

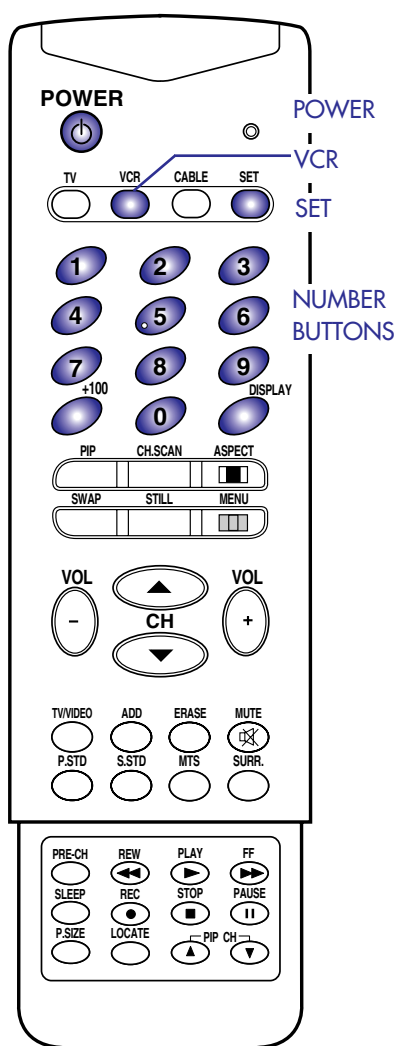
Guide to Automatic Picture Settings

- Choose Standard to set the TV to operate at top performance according to your TV's specifications.
- Choose Mild when viewing the TV in low light, or when playing video games.
- Choose Custom if you want to adjust the settings yourself.

Operation

Setting Up Your Remote Control

This TV's remote control can operate almost any VCR or cable box. After it has been set up properly, your remote control can operate in three different modes: TV, VCR or Cable. Pressing the corresponding button on the remote control allows you to switch between these modes, and control whichever piece of equipment you choose.

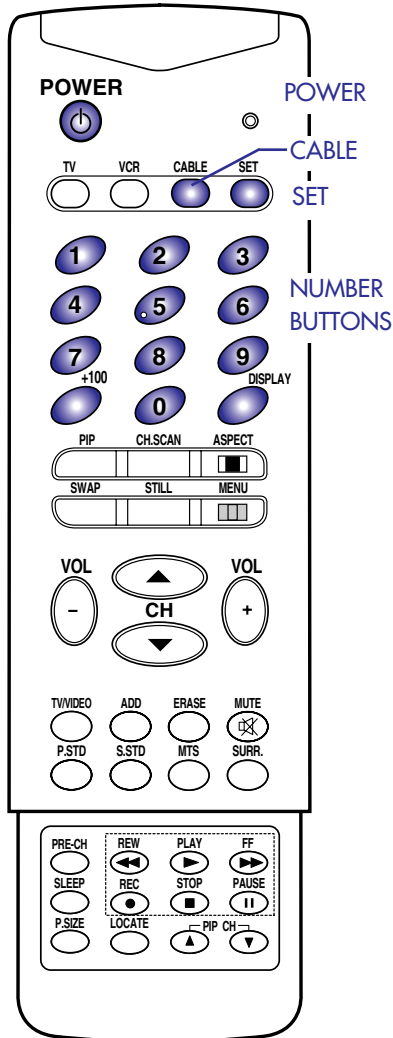


Setting Up the Remote to Operate Your VCR

- 1 Turn off your VCR.
- 2 Press the SET button on your TV's remote control.
- 3 Press the VCR button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter both digits of the VCR code listed on page 36 of this manual for your brand of VCR. Make sure you enter both digits of the code, even if the first digit is a "0." (If more than one code listed, try the first one.)
- 5 Press the POWER button on the remote control. Your VCR should turn on if your remote is set up correctly.

If your VCR does not turn on after set up, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of VCR. If no other codes are listed, try each VCR code, 00 through 72.

Setting Up the Remote to Operate Your Cable Box



- 1 Turn off your cable box.
- 2 Press the SET button on your TV's remote control.
- 3 Press the CABLE button on your TV's remote control.
- 4 Using the number buttons on your remote control, enter both digits of the cable box code listed on page 36 of this manual for your brand of cable box. Make sure you enter both digits of the code, even if the first digit is a "0." If there is more than one code listed, try the first one.
- 5 Press the POWER button on the remote control. Your cable box should turn on if your remote is set up correctly.

If your cable box does not turn on after set up, repeat steps 2, 3, and 4, but try one of the other codes listed for your brand of cable box. If no other codes are listed, try each code, 00 through 35.

Notes on Using Remote Control Modes: VCR, Cable and TV

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

Operation

Remote Control Codes

VCR Codes

Aiwa	00	Memorex	00, 09, 11	Sanyo	19, 20, 43
Akai	15, 22, 26, 30, 45, 66		13, 20, 21, 43	Scott	47, 53, 58, 60
Anam	71, 72	MGA	17, 30	Sears	09, 11, 16, 19
Broksonic	47, 53, 59	Minolta	16, 44		20, 27, 33, 43, 44
Capehart	05	Mitsubishi	30, 37, 52, 61, 66	Sharp	21, 31
Canon/ Curtis Mathes	09	Mitsubishi (Unified)	17	Shintom	36
Craig	20, 65, 67	MTC	00, 65	Sony	02, 06, 07, 08, 09
Daewoo	03, 05, 18, 39, 68, 70	Multitech	00, 36	STS	16
Daytron	05	NAD	28	Sylvania	09, 17, 46
Dynatech	00, 21	NEC	12, 14, 15, 23, 34	Symphonic	00
Emerson	00, 01, 10, 11, 30, 35	Optonica	21, 31	Tandy	00, 43
	40, 47, 53, 56, 57, 59, 60	Panasonic	09, 63	Tatung	15
Fisher	20, 27, 33, 43	Penney	09, 12, 14, 16, 65	Teac	00, 15
Funai	00	Pentax	16, 32, 44	Technics	09
GE	09, 29, 32	Philco	09	Teknika	00, 09, 11, 25
LG	04, 11, 12	Philips	09, 31, 38, 46	TMK	10
Harman/Kardon	12, 37	Pilot	11	Totevision	11, 65
Hitachi	00, 15, 16, 32, 44, 51, 64	Pioneer Unified	28, 34	Toshiba	17, 18, 33, 58, 60
JCL	09	Portland	05	Unitech	65
Jensen	15	Pulsar	13	Vector Research	12, 14
JVC	15, 34, 55	Quartz	19, 49	Victor	34
Kenwood	15, 19, 34	Quasar	09, 41	Video Concepts	14, 30, 62
Lloyd	00	RCA	09, 16, 32, 44, 48, 54	Videosonic	65
Logik	36	RCA (Unified)	29	Wards	00, 09, 16, 20, 21
LXI	11	Realistic	00, 09, 11, 19, 20		31, 36, 48, 60, 65
Magnavox	09, 38, 42, 46, 48		21, 31, 33, 43, 65	Yamaha	12, 15
Marantz	09, 12, 38, 50	Ricoh	08	Zenith	07, 08
Marta	11	Samsung	18, 24, 26, 65	Zenith (Unified)	13
MEI	09	Sansui	15, 34, 67		

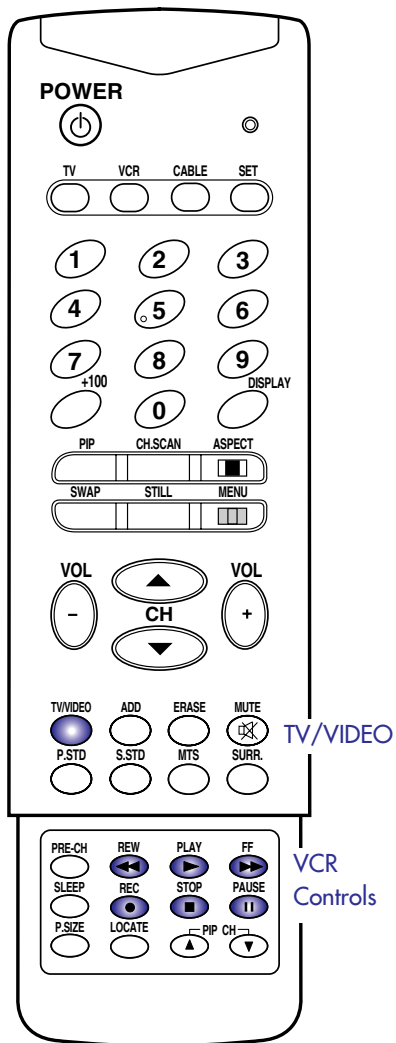
Cable Box Codes

ABC	0, 07, 09, 12	Paragon	00	Starcom	02, 11, 19, 23
Antronix	26	Pioneer	16, 25, 31	Stargate	11, 18
Archer	26	Pulsar	00	Tandy	29
Comtronics	18	RCA	15	TeleCaption	27
Eagle Comtronics	18	Realistic	26	Texscan	22
Eastern	01	Regal	14, 30, 32, 34	Tocom	08, 09, 21
Gemini	11	Regency	01	Toshiba	00
General Instruments	07	Samsung	18, 25	Unika	26
Hamlin	06, 14, 30, 32	Scientific Atlanta	03, 05, 12, 33	United Artists	04
Hitachi	07	Signal	18	United Cable	02
Jerrold	02, 07, 10, 11, 19, 23	Signature	07	Universal	26
Memorex	00	SL Marx	18	Viewstar	29
Oak	04, 13, 28	Sprucer	15, 35	Zenith	00, 20
Panasonic	15, 24				

Viewing a VCR, DVD or Camcorder Tape

Selecting the Signal Source

Use the remote control to switch between viewing signals from connected equipment, such as VCRs, DVD or laserdisc players, and the TV source (broadcast or cable).



1 Press the TV/VIDEO button on the remote control repeatedly. You will switch between viewing the signals coming from equipment connected to the TV's A/V jacks, and the TV signal. On screen text indicates which signal source you are viewing: Video 1, Video 2, Video3, Component, S-VHS 1, S-VHS 2 or the active TV channel (broadcast or cable).

2 To return to normal TV viewing, press TV/VIDEO until you see the TV's picture.

When you connect equipment to the TV, you can choose between the following sets of jacks: Video 1, Video 2, Component or S-VHS 1 on the TV's rear panel, and Video3 or S-VHS 2 on the TV's side panel.

Remote Control VCR Buttons

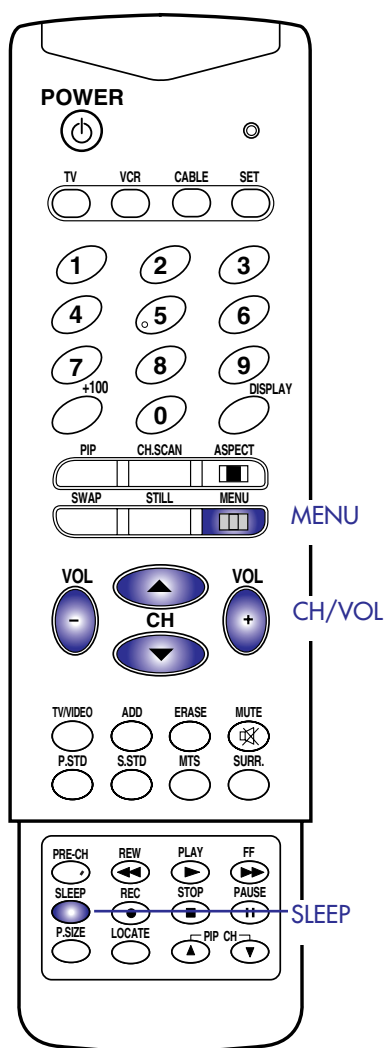
Slide the bottom panel of the remote control down to access buttons that can control the tape functions of a connected VCR, including Rewind, Play, Fast Forward, Record, Stop and Pause.

1 Slide the bottom panel of your remote control unit back for access to the tape function controls. Press the appropriate buttons to control your VCR.

Operation

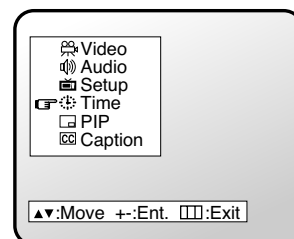
Setting the Timers

This TV can be set to turn on or off automatically at specific times that you choose. Before using the timers, you must set the TV's clock, as described previously.

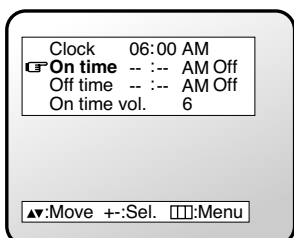


Setting the On/Off Timer

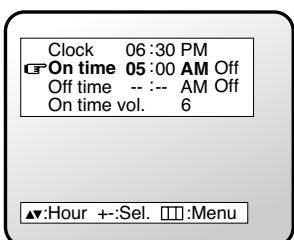
- 1 Press the MENU button on the remote control to display the menu. Press CH ▼ to select the "Time" menu.



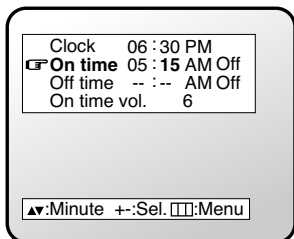
- 2 Press VOL + to display the Time menu. Press CH ▼ to select the "On time."



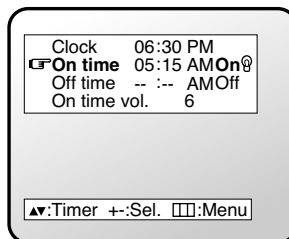
- 3 Press VOL + to highlight the "On time" hour. Press CH ▲ or CH ▼ to select the hour for the TV to turn on. Make sure the correct time of day (AM or PM) appears next to the hour.



- 4 Press VOL + to highlight the "On time" minute. Press CH ▲ or CH ▼ to select the minute when you want the TV to turn on.

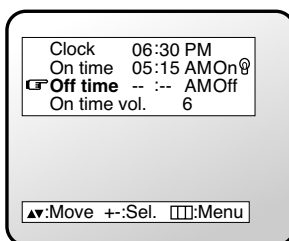


-
- 5 Press VOL + to highlight the On/Off setting. Press CH ▲ or CH ▼ to turn the on-timer "On."



-
- 6 When you are finished, press VOL+.

-
- 7 If you want to set the Off time, press CH ▼ to highlight the "Off time." Set the "Off time" just as you set the "On time."

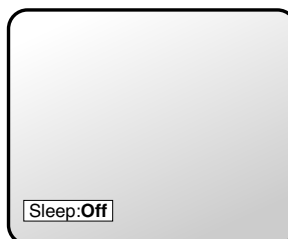


-
- 8 If you want to set the volume level when the TV turns on, press CH ▼ to highlight "On time vol." Press VOL+ to set the volume level you want when the TV turns on. Press the MENU button twice to return to normal viewing.

Setting the Sleep Timer

You can set your TV to automatically turn off after a preset interval.

-
- 1 Press the SLEEP button on the remote control.



-
- 2 You'll see "Sleep: Off" at the bottom left of the screen. Press the SLEEP button to select the time interval for the TV to stay on. The interval can range from 10 to 120 minutes in ten minutes steps.

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Special Features



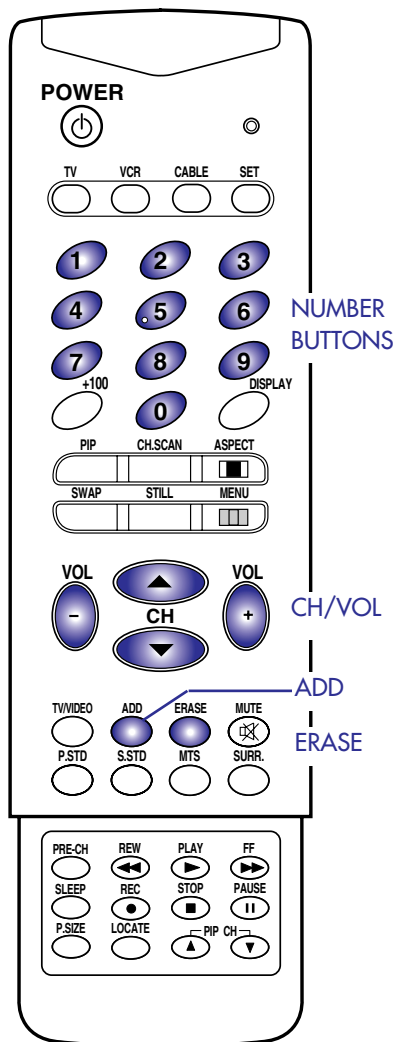
Special Features

Special Video Features

This TV's special video features can help you get a clearer broadcast picture.

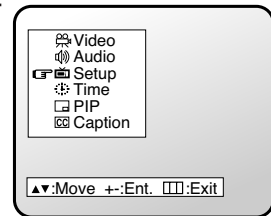
Fine Tuning Channels

Fine tuning lets you manually adjust the TV's tuner if you have difficulty tuning in a channel.

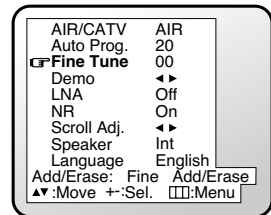


1 Using the number buttons on the remote control, select the channel you want to fine tune.

2 Press the MENU button on the remote control to display the menu. Press CH▼ to select the "Setup" menu.



3 Press VOL + to display the Setup menu. Press CH▼ to select "Fine Tune."



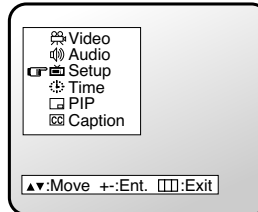
4 Press the VOL - and VOL + buttons to adjust the fine tuning.

5 If you want to add the fine tuning setting to the TV's memory, press the ADD button on the remote control. If you want to return the setting to "00," press ERASE. Press the MENU button twice to return to normal viewing.

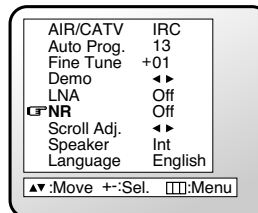
NR (Noise Reduction)

If the TV picture you are watching has “ghosts” or “snow”, it may be because the channel’s broadcast signal is weak. Turning on the “NR” feature can help reduce this kind of picture noise.

- 1 While watching a channel that has excessive “noise,” press the MENU button on the remote control to display the menu. Press CH ▼ to select the “Setup” menu.



- 2 Press VOL + to display the Setup menu. Press CH ▼ to select “NR.”

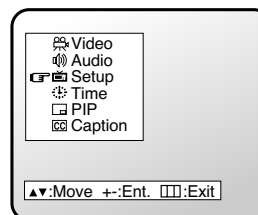


- 3 Press VOL + to activate “NR.” Press the MENU button twice to return to normal viewing.

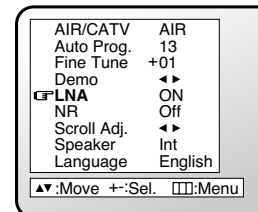
LNA (Low Noise Amplification)

LNA can give you a clearer picture by amplifying the incoming broadcast signal as it reaches your TV.

- 1 Press the MENU button on the remote control to display the menu. Press CH ▼ to select “Setup.”



- 2 Press VOL +. Press CH ▼ to select “LNA.”



- 3 Press VOL + to turn “LNA” on. (The LNA effect depends on each Channel.) Press the MENU button twice to return to normal viewing.

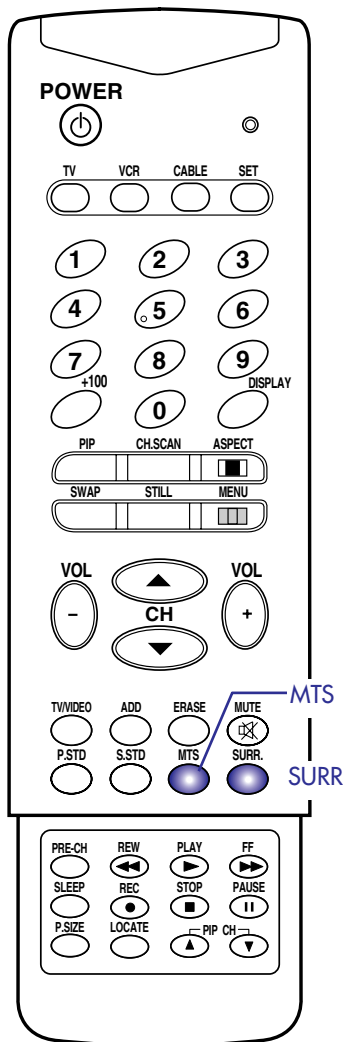
IMPORTANT NOTE

When the warning “Not available in video mode” appears, it means the function you tried to activate will not operate in video mode. Changing to TV mode will make the function available.

Special Features

Special Audio Features

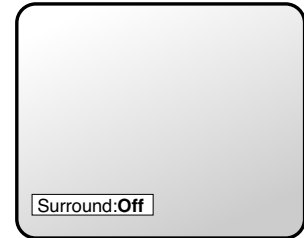
This TV's special audio features can simulate the surround-sound ambience of a movie theater, or allow you to listen to any one of the audio soundtracks available during a television broadcast.



Surround Sound

1 Press the SURR. button on the remote control. You can choose "Off," "Mono," "Concert" or "Stadium" when you press the SURR. button.

The "Concert" and "Stadium" modes only work when the channel you are watching is broadcasting in stereo. Press MENU twice to return to normal viewing.



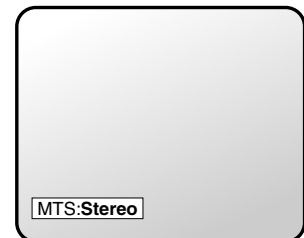
Guide to Surround Sound

- Choose Off to cancel the surround effect.
- Choose Mono when watching programs broadcast in mono.
- Choose Concert when watching music programs.
- Choose Stadium when viewing sports programs.

MTS Settings: Choosing a Soundtrack

When watching a program broadcast in stereo, you can set your TV to play the soundtrack in stereo or in mono. Some stations also broadcast a Secondary Audio Program (SAP). SAP programs are usually versions of the program in another language, but they sometimes carry additional information like news or weather.


1 Press the MTS button on the remote control. You can choose between "Stereo," "SAP" and "Mono." The text at the bottom left of the screen tells you if this channel is broadcasting a stereo, SAP, or mono signal.

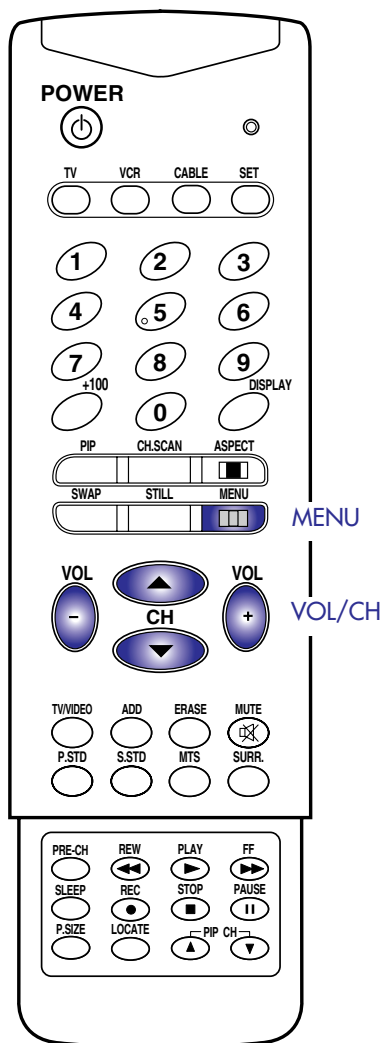


Guide to MTS Settings

- Choose Mono if the channel is broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose Stereo for channels broadcasting in stereo.
- Choose SAP when you want to listen to the Secondary Audio Program, which is usually a soundtrack in another language.

Viewing Closed Caption Information

Your TV decodes and displays the closed-caption information that is broadcast along with some television shows. These captions are usually subtitles for the hearing impaired or translations into other languages. All VCRs record the closed caption signal from television programs, so pre-recorded video tapes can also deliver closed-caption information. Check for the closed caption symbol () on the tape's package or your TV program-schedule.

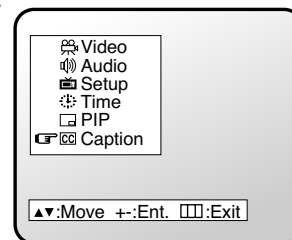


NOTE

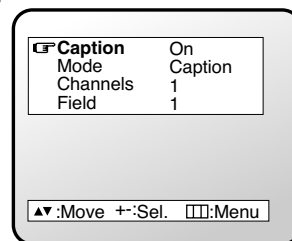
- If you want to view captions when viewing a DVD disc in the Component mode, set the DVD player's Caption function to on.
- In the caption mode, the characters are not displayed in color.

Closed Captions

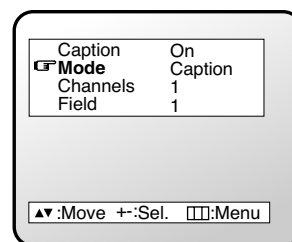
- 1 Press MENU to display the menu. Press CH▼ to select the Caption menu.



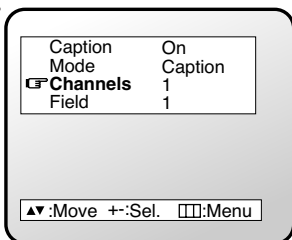
- 2 Press VOL + to display the caption menu. Press VOL – or VOL+ to turn closed captioning on/off. Misspelling and unusual characters sometimes occur in closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. (These do not indicate the TV is malfunctioning.)



- 3 Press CH ▼ to select the "Mode". Press VOL – or VOL + to choose "Caption" or "Text." 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.



- 4 If you wish, use CH ▲, CH ▼ or VOL+ to change the captioning channel or field. Then, press MENU twice to return to normal viewing. Different channels and fields display different information. For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.



Special Features

Using External Speakers

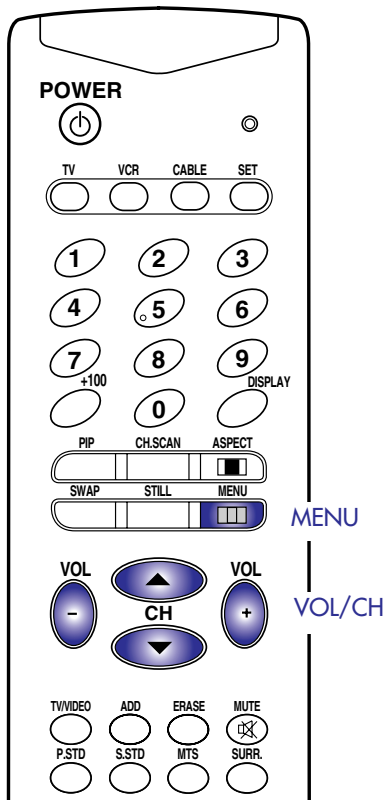
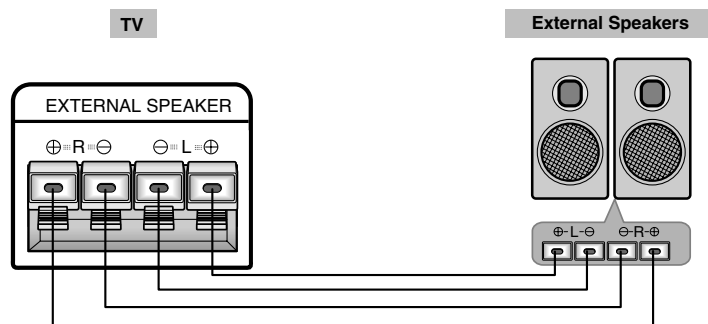
You can hear more vivid stereo sound if you connect external speakers to your TV.

Connecting External Speakers

The "external speaker" jacks on the back of your TV are only for connecting to external speakers, and using them for any other connection can damage your TV.

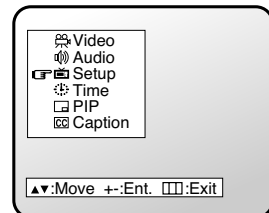
1 Disconnect all cables between the external speakers and your audio system.

2 Connect speaker cables from the "L" and "R" EXTERNAL SPEAKER jacks on the back of the TV to the "L" and "R" jacks on external speakers. When connecting external speakers match the colors of the jacks on the TV and speakers.

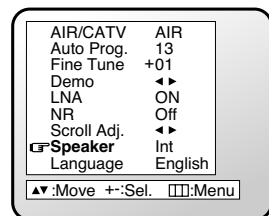


Setting Up External Speakers

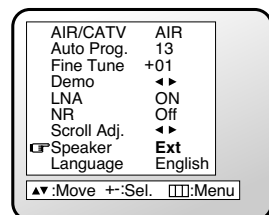
1 Press the MENU button on the remote control to display the menu. Press CH▼ to select "Setup."



2 Press VOL + to display the Setup menu. Press CH▼ to select "Speaker."



3 Press VOL + to select the "Ext." option. Press VOL + to switch between the "Int." and "Ext." options. Press MENU until the menus disappear.



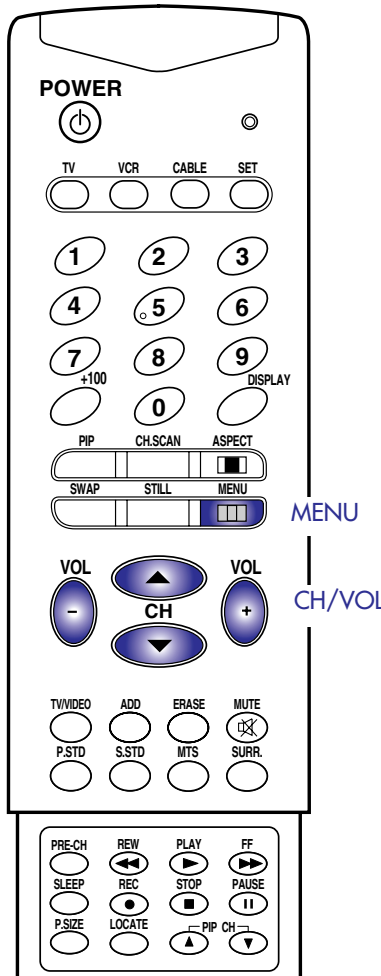
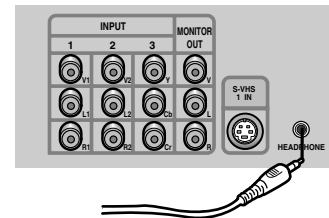
Using Wireless Headphones

Wireless headphones allow you to move around freely while you listen to your TV. When using wireless headphones, remember that if anything blocks the signal between the transmitter and the headphones, the headphones' sound may be affected.

Connecting Wireless Headphones

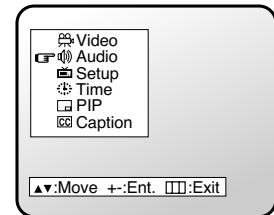
- 1 Connect the transmitter cable to the wireless headphone jack on the TV's back panel. Turn the transmitter and wireless headphones on, and adjust the sound volume.

Rear of TV

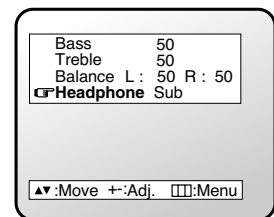


Selecting the Headphones' Audio

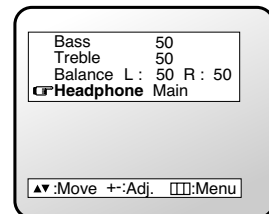
- 1 Press the MENU button on the remote control for on-screen menus. Press CH▲ or CH▼ to select the Audio menu. Press VOL+ for the Audio menu.



- 2 Press CH ▼ to select "Headphone."



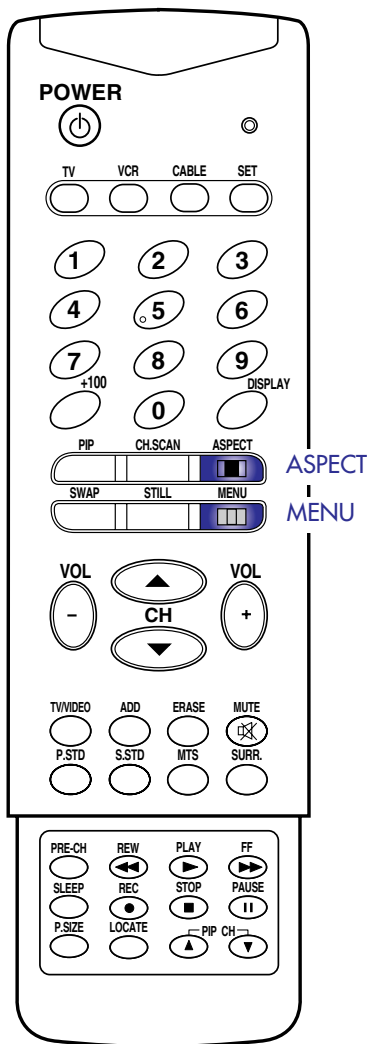
- 3 Press VOL + to switch the Headphones between the Main or Sub audio source. MAIN is for the main TV picture audio, and SUB is for the PIP picture audio.
Note: Sub is only available in the PIP mode.



Special Features

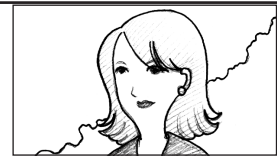
Changing the Screen Size

When you press the ASPECT button on the remote control, the TV's screen mode choices appear in sequence. The screen displays in this order: Wide, Panorama, Zoom1, Zoom2, Normal. The name of the screen mode will be displayed at the bottom of the TV screen.



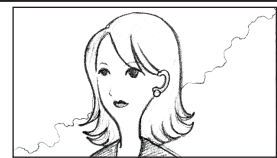
Wide

Sets the picture to 16:9 wide mode.



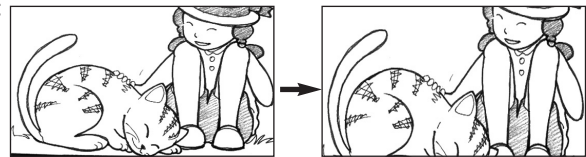
Panorama

Use this mode for the wide aspect ratio of a panoramic picture.



Zoom1

Magnifies the size of the picture on screen.



Zoom2

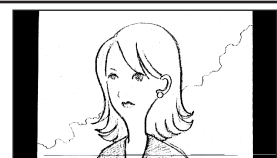
Magnifies the size of the picture more than Zoom1. You can also move the picture on screen using the "Scroll adj" function.



To access Scroll adj, press MENU on your remote control, and select Scroll adj from the SETUP menu. Then, press VOL+ or VOL - to scroll the picture up and down.

Normal

Sets the picture to 4:3 normal mode. This is a standard TV screen size.



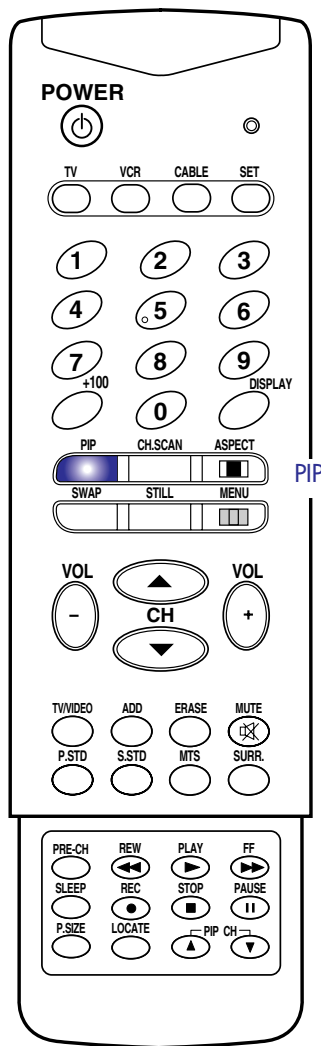
NOTE

When PIP or CAPTION is selected in the ZOOM1 or ZOOM2 mode, the Mode is automatically converted into the WIDE mode. When PIP or CAPTION selected in the WIDE mode, the ZOOM1 and ZOOM2 mode can't be selected.

You can adjust only WIDE, ZOOM1, ZOOM2 screen size in the Component Mode.

Viewing Picture-in-Picture

One of the most best features of your TV is the Picture-in-Picture (PIP) feature. The advanced PIP system allows you to watch two different pictures at once, even if you don't have a VCR connected to your TV. (If you are using a cable box, you may not be able to use all of the PIP features. Contact your cable company for more information.)

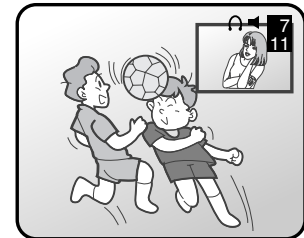


Selecting a PIP Screen

- 1 Press the PIP button to display the PIP image.

Note: If you turn the TV off while watching and turn it on again, then the mode will return to Normal view.

- 2 The PIP image will appear in the corner of the screen.



- 3 Press the PIP button again to turn off the PIP image.



NOTE

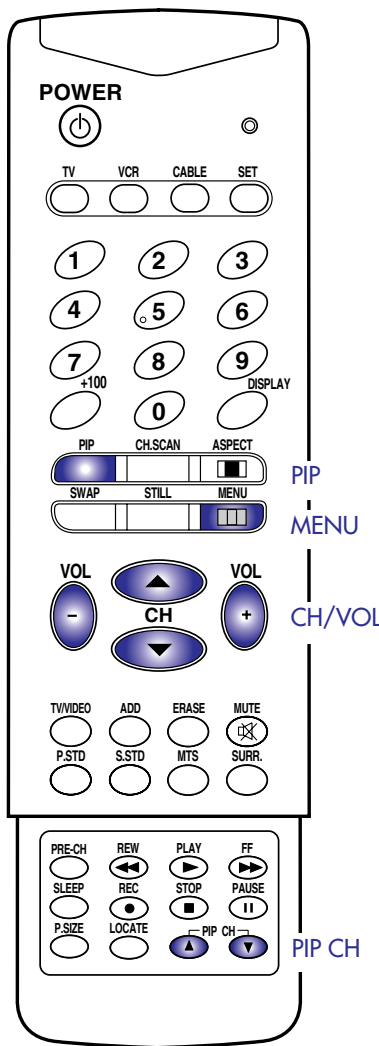
PIP does not operate in the Component mode.

The channel number indicated on the upper right corner of the screen is for the main image. The channel displayed underneath that one is for the PIP image.

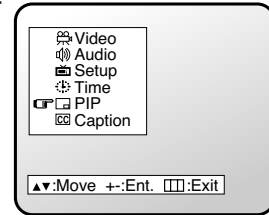
Special Features

Selecting an External Signal

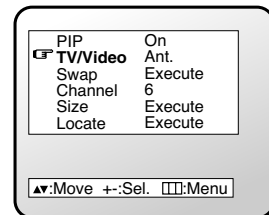
You can use PIP to view a signal from an external source, such as a VCR.



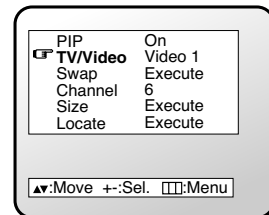
- 1 Press the MENU button on the remote, to display the on-screen menu. Press CH ▼ to highlight PIP.



- 2 Press VOL + to display the PIP menu. Press CH ▼ to select "TV/Video".



- 3 Press VOL – or VOL + to select an external signal. You can choose between "Ant.," "Video 1," "Video 2," "Video 3," or "S-VHS 1,2." The signal from these inputs will not appear if you have not connected any equipment to the TV's input jacks.



For more information about external signals, see "Viewing a VCR, DVD or Camcorder Tape" on page 37. If you select "Ant." the PIP image is the same as the main image.

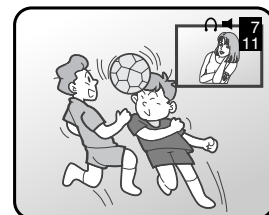
NOTE

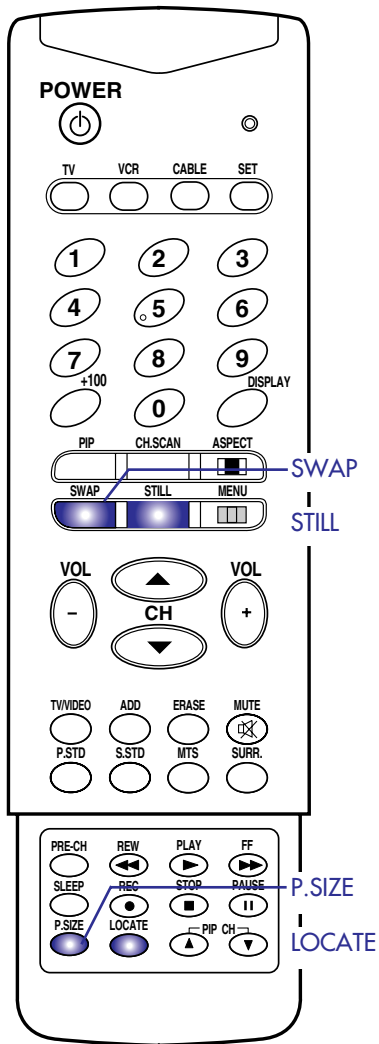
When an external signal is selected in the PIP mode, COMPONENT video can not be selected.

Changing the Picture-in-Picture Channel

After you set the PIP signal source (antenna or cable), it is easy to change channels.

- 1 Press the PIP CH ▲ or CH ▼ to change the channel of the PIP image.
- 2 The PIP channel will appear in the upper right corner of the screen, above the main image.



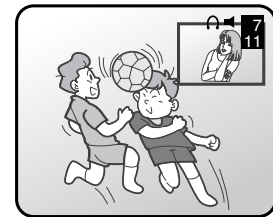


Swapping the Contents of the PIP Image and Main image

- 1 Press SWAP button. The channel in the PIP image will appear in the main image, and vice versa.

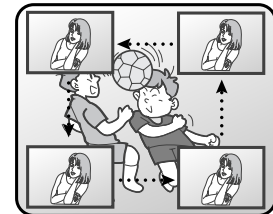
Freezing the PIP image

- 1 Press STILL to freeze a moving picture in picture. Press again to resume picture movement.



Changing the Location of the PIP image

- 1 Press LOCATE button repeatedly to move the PIP image from corner to corner on the screen.



Changing the Size of the PIP image

- 1 Press P.SIZE button repeatedly to change the size of the PIP image. You can choose between a small size (shown), and a 4:3 size.

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Appendix



Appendix

Troubleshooting

Before you call a service technician, please scan this list of problems and possible solutions. It may save you time and money.

Problem	Possible Solution
Poor picture quality.	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality or no sound.	Try another channel. Adjust the antenna. Make sure the "Mute" button is off.
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 or wrong colors.	Make sure the program is broadcast in color. Adjust the picture settings.
Picture rolls vertically.	Adjust the antenna. Check all wire connections. If you are using a VCR, check the tracking.
Erratic operation, or intermittent failure.	Unplug the TV for 30 seconds, then try again.
Remote control failure.	Press the "TV" button to put your remote control into TV mode. Make sure the remote has batteries.
TV won't switch on.	Make sure the wall outlet is working. Make sure the remote has batteries.

Care and Maintenance

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

Placement

- Do not put the TV near extremely hot, cold, humid or dusty places.
- Do not put the TV near appliances that create magnetic fields.
- Keep the ventilation openings clear.
- Do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in an upright position only.

Liquids

- Do not handle liquids near or on the TV.

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 for at least two hours so that moisture that may have formed inside the unit can dry completely.

Using the TV in Another Country

If you plan to take your TV 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.

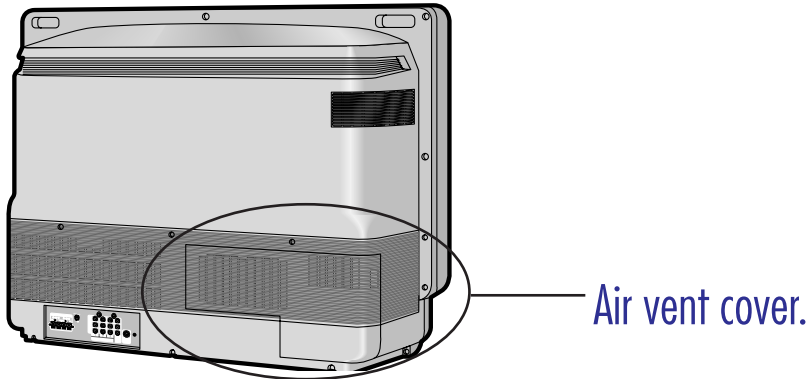
Specifications

Model	PLH403W
Voltage	AC 127V \pm 10%
Frequency of Operation	60Hz

Appendix

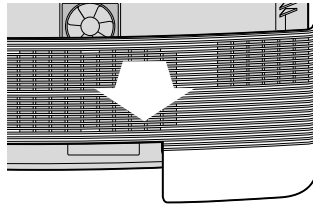
Rear Panel Air Vent

It is important to clean the panel that covers the rear vent of your projection TV every six months to keep the unit from overheating.

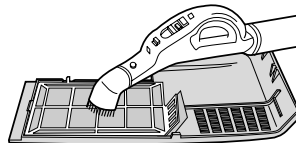


1 Turn the TV off and unplug it.

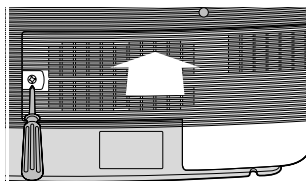
2 Remove the screw and take off the cover.



3 Remove the dust from the vent cover using a vacuum cleaner.

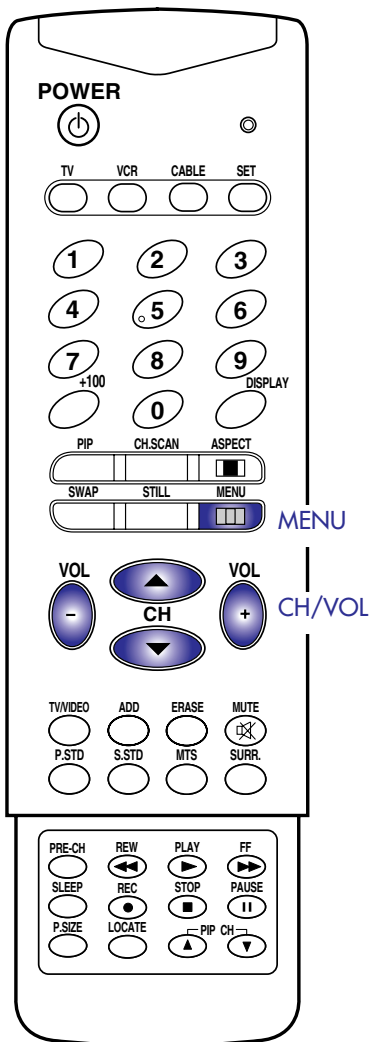


4 Replace the cover and the screw.

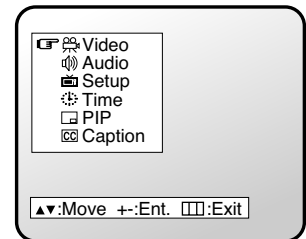


Demonstration Mode

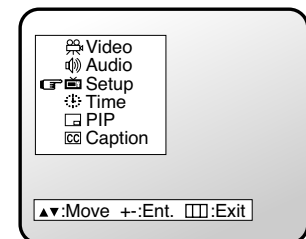
Your TV has a Demo mode that can show you all of the TV's functions, in sequence.



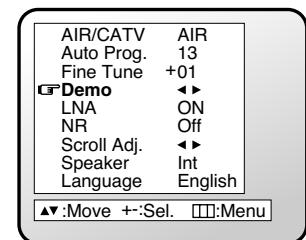
- 1 Press the MENU button on the remote control to display the on-screen menu.



- 2 Press CH ▼ to select Setup. Press VOL + to display Setup menu.



- 3 Press CH ▼ until Demo is selected. Press VOL + to activate Demo mode and you will see all the functions of the TV. To stop the demo, press any button (except POWER button). Press MENU to return to normal operation.





ELECTRONICS

IMPORTER

Samsung Electronics Mexico S.A. de C.V.
Saturno No. 44, Col Nueva Industrial Vallejo
Gustavo A. Madero C.P. 07700, Mexico
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EXPORTER

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