

Directions for Use

Important!
Return your
Warranty
Registration Card
within 10 days.
See why inside.

Need help? Call us!

Philips representatives are ready to help you with any questions about your new product. We can guide you through Connections, First-time Setup, or any of the Features. We want you to start enjoying your new product right away!

FOR FAST HELP PLEASE CALL, **1-800-531-0039**

or Visit us on the web at www.philips.com



Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once. And take advantage of these important benefits.

Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

Congratulations on your purchase, and welcome to the "family!"

PHILIPS



Dear PHILIPS product owner:

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the PHILIPS "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction.

All of this is our way of saying welcome—and thanks for investing in a PHILIPS product.

Sincerely.

Lawrence J. Blanford

Laurence J Blanford

President and Chief Executive Officer

P.S. Remember, to get the most from your PHILIPS product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!

Know these **safety**symbols



This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, and fully insert. ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

IMPORTANT SAFETY INSTRUCTIONS Read before operating equipment

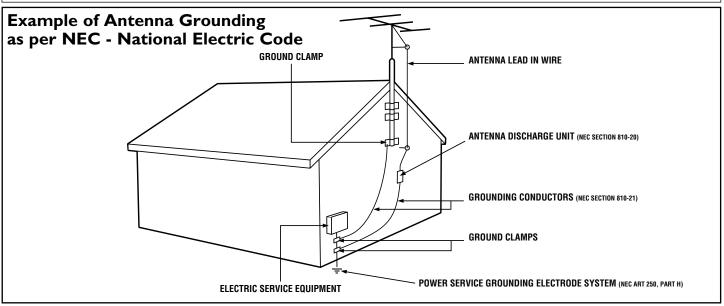
- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- **4.** Follow all instructions.
- **5.** Do not use this apparatus near water.
- **6.** Clean only with a dry cloth.
- Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and third grounding prong. The wide blade or third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- **10.** Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. This product may contain lead and mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org
- **16.** Damage Requiring Service The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or

- Objects have fallen, or liquid has been spilled into the appliance; or
- C. The appliance has been exposed to rain; or
- D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
- E. The appliance has been dropped, or the enclosure damaged.
- 17. Tilt/Stability All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.
 - Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
 - Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
- **18.** Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- **19.** Power Lines An outdoor antenna should be located away from power lines.
- 20. Outdoor Antenna Grounding If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure below.

- Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- **22. Battery Usage CAUTION -** To prevent battery leakage that may result in bodily injury, property damage, or damage to the unit:
 - Install all batteries correctly, with + and aligned as marked on the unit
 - Do not mix batteries (old and new or carbon and alkaline, etc.).
 - Remove batteries when the unit is not used for a long time.

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC 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.



PRECAUTIONS

Additional Safety Precautions:

- Do not shift or move the LCD TV around when it is powered on.
- Do not connect any AC/DC adapter to your LCD TV that does not originally come with the television. Only use the recommended part or parts that are approved by Philips Consumer Electronics.
- Caution: Do not use any cover or enclose the AC/DC adapter with any objects like a cloth or box which might shorten the life of the equipment.
- Do not touch, push or rub the surface of the LCD screen with any sharp or hard objects.
- When the surface of the LCD screen becomes dusty, wipe it gently with an absorbent cotton cloth or other soft
 material like chamois. DO NOT use acetone, toluene or alcohol to clean the surface of the screen. These chemicals will cause damage.
- Wipe off water, or saliva as soon as possible. Long exposer time to liquids can cause deformation and color fading of the LCD screen.
- Be careful of condensation when temperature changes occur. Condensation can cause damage to the LCD screen and electrically parts. After condensation fades, spots or blemishes will be present on the LCD screen.

Positioning the LCD Television:

- Place the LCD TV on a solid, sturdy base or stand. Be sure the stand is strong enough to handle the weight of the LCD TV.
- Try to leave at least 6" of space around each side of the LCD TV cabinet to allow for proper ventilation.
- Do not place the LCD TV near a radiator or other sources of heat.
- Do not place the LCD TV where it can be exposed to rain or excessive moisture.

Recycling Procedure/End of Life Disposal:

- To minimize harm to the environment, the batteries supplied with the LCD TV do not contain mercury or nickel cadmium. If possible, when disposing of batteries, use recycling means available in your area.
- The LCD TV uses materials that can be recycled. To minimize the amount of waste in the environment, check your area for companies that will recover used televisions for dismantling and collection of reusable materials, or contact your dealer for TV recycling tips.
- Please dispose of the carton and packing material through the proper waste disposal management in your area.

NOTE: It is possible that this owner's manual may be used with several different television models. Not all features (and drawings) discussed in this manual will necessarily match those found with your television system. While every effort is made to give the consumer the most accurate information possible regarding this product, normal changes in production could occur effecting the images and onscreen menu procedures outlined in this manual. This is normal and does not require you contacting your dealer or requesting service.

CONTENTS

Introduction	
Welcome/Registration of Your TV	,
Safety Instructions	
Precautions	
Table of Contents5	
Install Menu	
How to use the Language Control	,
How to use the Tuner Mode Control	
How to Auto Program TV Channels	
How to Add or Delete Channels (Channel Edit)9	į
How to use the AutoChron TM Control10)
How to use the Name Control (Channel Label)	
Picture Menu	
Picture Menu How to use the Picture Adjustment Controls	
Sound Menu	
How to use the Equalizer Controls	
How to use the Balance Control	
How to use the AVL Control	
How to use the Incredible Surround Control16	
Setting the TV to receive Stereo programming17	
Setting the TV to receive SAP (Secondary Audio	
Programming)	
How to use the Audio Out Control	
Turning the TV Speakers on or off	
Features Menu How to use the Timer Controls	
How to use the Timer Controls	
How to use the Mode Select Control	
How to set the Active Control	
Understanding the AutoLock TM Controls	
Setting up the AutoLock TM Access Code	
How to Block Channels	
How to Clear All Blocked Channels at the Same Time 27	
Blocking Programming Based on Movie Ratings	
Other AutoLock TM Blocking Options	
Using the AutoLock TM Review Screen	
Remote Control Use How to you the Closed Continuing Control	,
How to use the Closed Captioning Control	
How to use the Program List Feature	
Setting the Sleeptimer Control	
Setting the AutoPicture TM Control	
Setting the AutoSound TM Control	
Using the Surf Control	
Programming the Remote Control for Accessory Devices	
Direct Access Method	,
Code Entry Method40	
Search Code Method41	
Remote Code List	
Accessory Device Remote Control Buttons	
FM Radio Mode	
Using FM Mode Information	

HD (High Definition) Mode How to use the HD Mode and it's Features53-56
PC Mode How to use the PC Mode Features57-58
General Information Troubleshooting Tips
Cleaning and Care
Glossary of Terms
Index
Warranty

Here are a few of the features built into your new Television:

Active Control™ continuously measures and corrects all incoming signals to help provide the best picture quality. This feature monitors and corrects both the sharpness control and noise reduction control.

Audio/Video Jack Panels allows direct connections with VCRs, DVDs, PCs or other devices, providing quality TV picture and sound playback.

Audio Volume Leveler (AVL) Control keeps the TV sound at an even level. Peaks and valleys that occur during program changes or commercial breaks are reduced, making for a more consistent, comfortable sound.

AutoChron™ automatically sets the right time of day and maintains it with digital precision through brownouts, power failures, and even Daylight Savings Time adjustments.

AutoLock[™] allows you to block the viewing of certain channels or programs with certain ratings if you do not want your children to view inappropriate materials.

Auto Programming scans (when activated) for all available channels from regular antenna or cable signals and stores only active broadcast stations in the TV's memory.

AutoPicture[™] allows you to change the picture settings (color, tint, contrast, etc.) for various types of programming, such as sports, movies, multimedia (games), or weak signals with the push of one button.

AutoSoundTM allows you to select from three factory-set controls and a personal control that you set according to your own preferences through the onscreen Sound menu. The three factory-set controls (Voice, Music, and Theatre) enable you to tailor the TV sound so as to enhance the particular programming you are watching.

Closed Captioning allows the viewer to read TV program dialogue or voice conversations as onscreen text.

Infrared Remote Control works your TV and other remote-controlled devices, such as VCRs, DVD players, cable converters, and satellite receivers.

Surf Button allows you to easily switch among only the channels that are of interest to you (the ones that you have

programmed into the TV's Surf control through the onscreen menu).

Timer allows you to set your TV to turn itself ON and OFF once or daily like an alarm clock.

Active Control, Auto Lock, Auto Picture, Auto Sound, are all registered trademarks of Philips Consumer Electronics Company.

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7

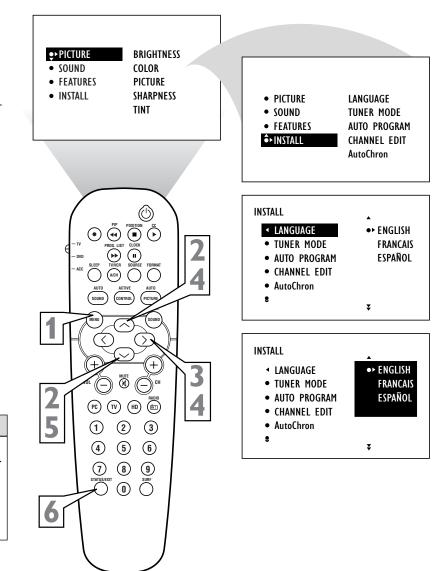
How to Use the Language Control

For or Spanish- and French-speaking TV owners, an onscreen LANGUAGE option is present. The LANGUAGE control enables you to set the TV's onscreen menu to be shown in either English, Spanish, or French.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until INSTALL is highlighted
- Press the CURSOR RIGHT button to shift the menu to the left and highlight LANGUAGE.
- Press the CURSOR RIGHT button to highlight the LANGUAGE control options.
- Press the CURSOR UP or CURSOR DOWN button to select ENGLISH, ESPANOL (Spanish), or FRANCAIS (French).
- Press the STATUS/EXIT button to clear the menu from the screen.

HELPFUL HINT

Remember, the LANGUAGE control makes only the TV's onscreen MENU items appear in English, Spanish, or French text. It does not change the other onscreen text features, such as Closed Captioning (CC), with TV shows.



How to Use the Tuner Mode Control



The TUNER MODE allows you to change the TV's signal input to CABLE, ANTENNA, or AUTO mode. It's important for the TV to know if you want to receive channels from a cable TV signal or a normal antenna signal.

NOTE: The AUTO mode setting helps the TV determine the type of signal or channels being received when AUTO PROGRAM is activated.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until INSTALL is highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left.
- Press the CURSOR DOWN button to highlight the TUNER MODE control.
- Press the CURSOR RIGHT button to highlight the tuner options.
- Press the CURSOR UP or CURSOR DOWN button to select CABLE, ANTENNA or AUTO.

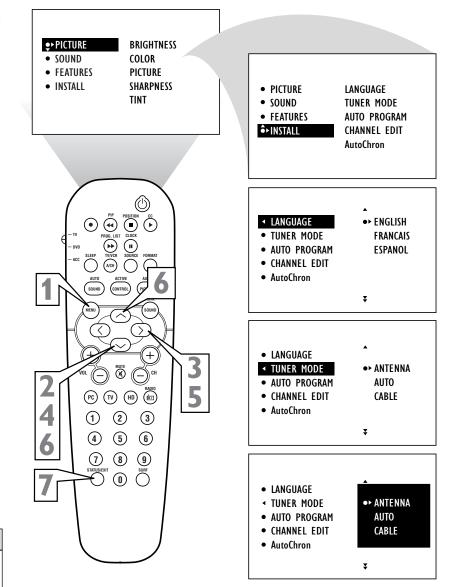
If TUNER MODE is set to AUTO, Auto Program (see below) will detect whether or not cable input is present.

Press the STATUS/EXIT button to clear the menu from the screen.

HELPFUL HINT

When CABLE is selected, channels 1–125 are available.

When ANTENNA is selected, channels 2–69 are available.



7

How to Auto Program TV Channels

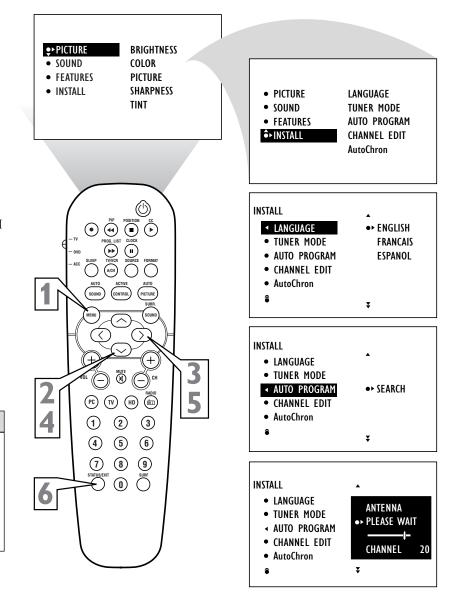
Your TV can automatically set itself for local area (or cable TV) channels. This makes it easy for you to select only the TV stations in your area by pressing the CHANNEL (+) or (-) button.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until INSTALL is highlighted
- Press the CURSOR RIGHT button to shift the menu to the left. LAN-GUAGE will be highlighted.
- Press the CURSOR DOWN button repeatedly until the AUTO PROGRAM control is highlighted.
- Press the CURSOR RIGHT button to start the Auto Program scanning of channels.
- Press the STATUS/EXIT button to clear the menu from the screen.

HELPFUL HINT

After you've run Auto Program, check out the results. Press the CHANNEL (+) or (-) button and see which channels you can select.

Remember, an antenna or cable TV signal must first be connected to your TV (see instructions for making connections on page 1 of this guide).



How to Add or Delete Channels (Channel Edit Control)



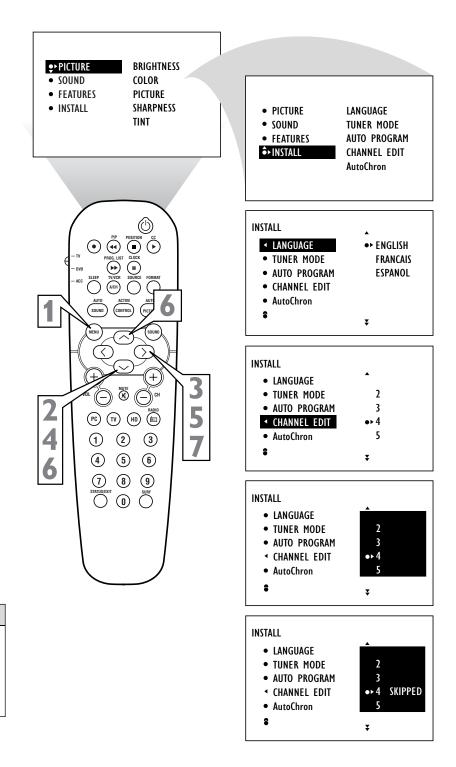
CHANNEL EDIT makes it easy for you to add or delete channels from the list of channels stored in the TV's memory.

- **Press the MENU button** on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until INSTALL is highlighted
- Press the CURSOR RIGHT button to shift the menu to the left. LANGUAGE will be highlighted.
- Press the CURSOR DOWN button repeatedly until the CHANNEL EDIT control is highlighted.
- Press the CURSOR RIGHT button to access the CHANNEL EDIT menu.
- Press the CURSOR UP or CURSOR DOWN button to scroll through the list of available channels. Or press the number buttons on your remote control to select a specific channel (for example, press 0 and then 2 to select channel 2).
- With the channel you want to edit selected, press the CURSOR RIGHT button to mark the channel as SKIPPED. The channel you've marked SKIPPED will not appear when you are changing from channel to channel while watching TV.

NOTE: When you want to add a channel that has been marked SKIPPED, press the CURSOR UP or CURSOR DOWN button to highlight the channel; then press the CURSOR RIGHT button to remove the word SKIPPED.

HELPFUL HINT

The channels available for you to edit are the ones that the AUTO PROGRAM feature found through a search of your TV antenna or cable TV signals. Channels not found during the search are marked SKIPPED.



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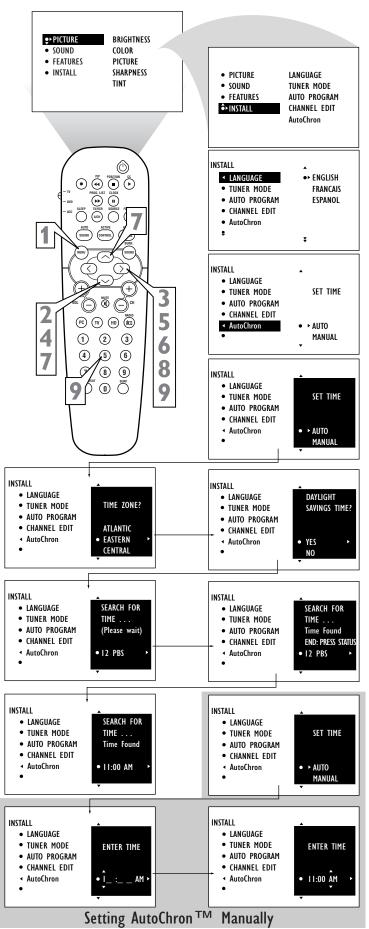
How to Use the AutoChron™ Control

A utoChron™ can automatically set the TV's onscreen clock. Because the time is received from a broadcast signal, you must be sure that a cable TV or antenna signal is present before you attempt to use the AutoChron™ feature.

- **Press the MENU button** on the remote to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until INSTALL is highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left. LANGUAGE will be highlighted.
- Press the CURSOR DOWN button until the AutoChron control is highlighted.
- Press the CURSOR RIGHT button to start the AutoChronTM feature. Then just follow the onscreen instructions to set the clock.
- Press the CURSOR RIGHT button to select AUTO. Within a few seconds, a menu for choosing your time zone will appear.
- Press the CURSOR UP or CURSOR DOWN button to highlight your correct time zone.
- With your correct time zone high-lighted, press the CURSOR RIGHT button. Within a few seconds, you will be given the option to choose whether you want to select Daylight Savings Time. If your time zone uses Daylight Savings, select YES.
- Parter your local PBS channel or any local channel that transmit the current time, and press the CURSOR RIGHT button to start the searching process. If the AutoChron™ features finds the current time you are done. If it doenot find the current time, re-enter an other channel and search again.

HELPFUL HINT

When turned ON, the AutoChronTM feature can affect the start up of your television. When the power button is press and the AutoChronTM feature is set to the AUTO position, the TV will scan the channels for a PBS channel to set the clock automatically. It may take SEVERAL seconds before the TV powers itself ON.



How to Use the Name Control (Channel Label)



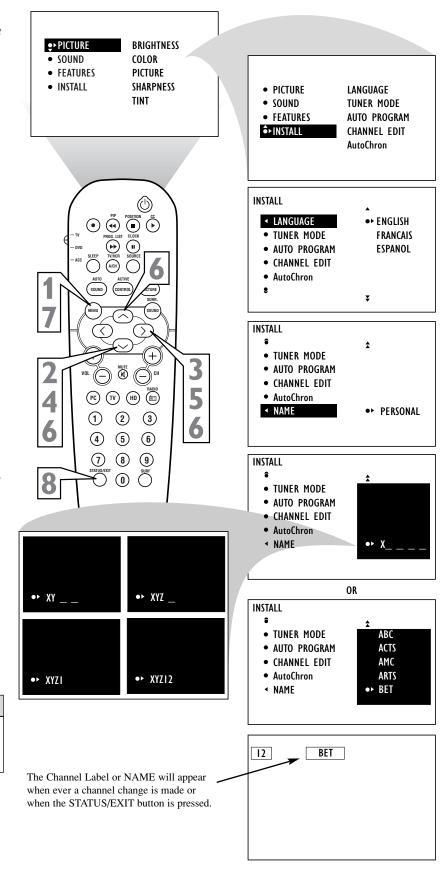
The channel NAME feature allows you to list the "call" letters of your favorite stations beside their channel numbers when they appear on the screen. The TV has in memory a list of the 50 most popular channel names (for example, ABC, NBC, FOX, etc.). You also can enter a custom name (up to five characters).

Tune to a specific channel that you want to add a label to, then;

- **Press the MENU button** on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until INSTALL in highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left. LANGUAGE will be highlighted.
- Press the CURSOR DOWN button repeatedly until the NAME control is highlighted.
- Press the CURSOR RIGHT button to highlight the NAME options area.
- Press the CURSOR RIGHT button again; then press the CURSOR UP or CURSOR DOWN button to scroll through a list of options for the first character (A through Z, 0 through 9). Press the CURSOR RIGHT button and repeat for the second, third, fourth, and fifth characters
- After you have selected a name for the channel, **press the MENU button** to save the name in the TV's memory.
- Press the STATUS/EXIT button to clear the menu from the screen.

HELPFUL HINT

The five characters that the channel NAME feature allows you to input can be letters, a dash character, or the numbers 0 through 9.



How to Use the Picture Adjustment Controls

 T^{o} adjust your TV picture controls, select a channel and follow these steps.

- Press the MENU button on the remote control to show the onscreen menu. PIC-TURE will be highlighted.
- Press the CURSOR RIGHT and the menu will shift to the left. BRIGHTNESS will be highlighted and an adjustment bar will be shown to the right.
- Use the CURSOR LEFT or RIGHT to adjust the BRIGHTNESS level of the picture.
- After adjusting the BRIGHTNESS control, press the CURSOR DOWN to select another picture adjustment: COLOR, PICTURE, SHARPNESS, TINT, COLOR TEMP, DNR, or CONTRAST +. Press the CURSOR LEFT or RIGHT to adjust the selected control.

NOTE: The menu will show only five items at a time, so you will need to continue scrolling with the CURSOR DOWN to adjust the TINT, COLOR TEMP, DNR, or CONTRAST +.

Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Remember, when the bar scale is centered , the control settings are at normal, mid-range levels. Picture adjustments are described here.

NOTE: The SHARPNESS and TINT Controls will not be available for adjustments when tuned to the CVI Inputs (CVI Channel).

BRIGHTNESS – adds or subtracts light from the darkest part of the picture.

COLOR – adds or eliminates color.

PICTURE – improves the detail of the lightest parts of the picture.

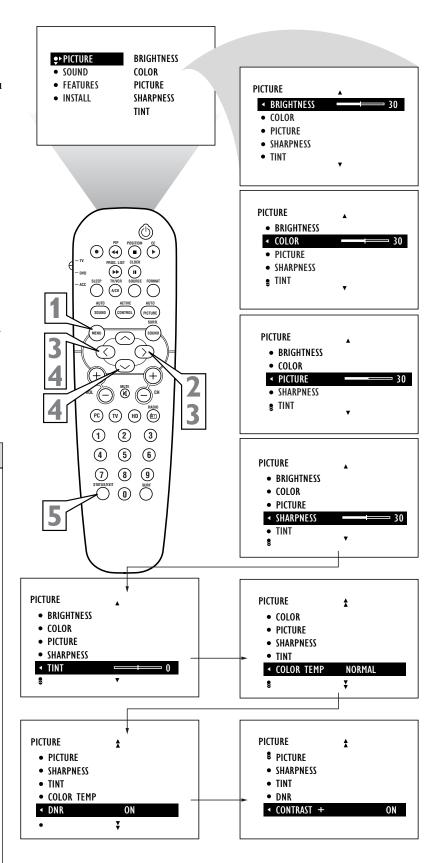
SHARPNESS – improves the detail in the picture.

TINT – adjusts the picture to obtain natural skin tones.

COLOR TEMP – offers NORMAL (keeps whites, white), COOL (makes whites, bluish), or WARM (makes whites, reddish) picture preferences.

DNR – can help eliminate slightly "speckled" picture (an indication of signal noise in the picture).

CONTRAST + – helps to "sharpen" the picture quality. The black portions of the picture become richer in darkness and the whites become brighter.

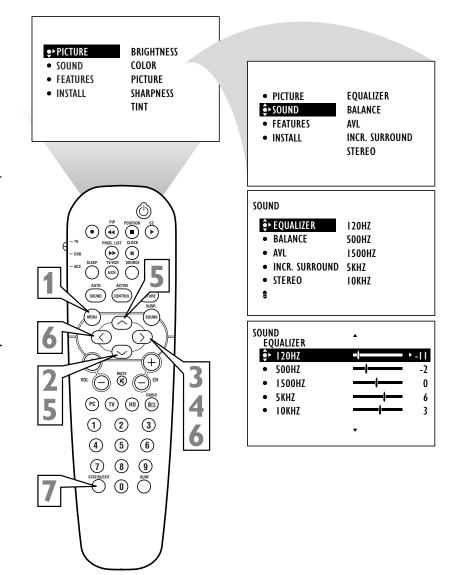


How to Use the Equalizer Controls



The Equalizer Controls allow you to adjust the sound frequencies to suit the type of programming be watched.

- **Press the MENU button** on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button repeatedly until SOUND in highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left. EQUALIZER will be highlighted.
- Press the CURSOR RIGHT button to highlight the EQUALIZER options area.
- Press the CURSOR UP or DOWN buttons to highlight any of the frequency options.
- Press the CURSOR RIGHT or LEFT buttons to adjust the control slider to the level desired.
- Once all the Equalizer controls have been set, **press the STATUS/EXIT button** to clear the menu from the screen.



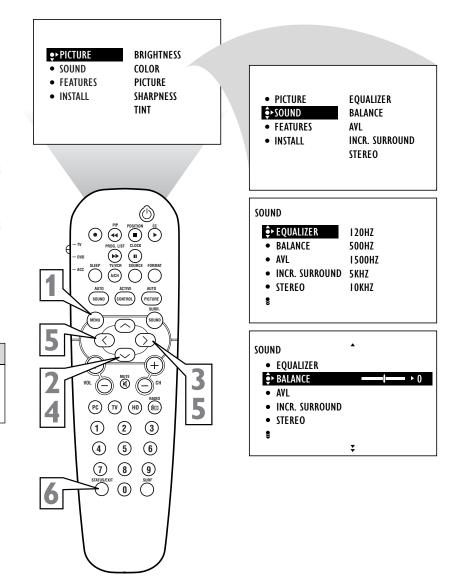
How to Use the Balance Control

The Balance Control will allow you to adjust the sound levels between the right and left speaker output.

- Press the MENU button on the remote control to show the onscreen menu. PIC-TURE will be highlighted.
- Press the CURSOR DOWN button repeatedly until SOUND in highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left. EQUALIZER will be highlighted.
- Press the CURSOR DOWN to highlight the BALANCE control.
- Press CURSOR RIGHT or LEFT buttons to adjust the sound between the right and left speakers.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

When the Balance Control slider is at a setting of "0", both left and right speakers should have equal sound level between them.

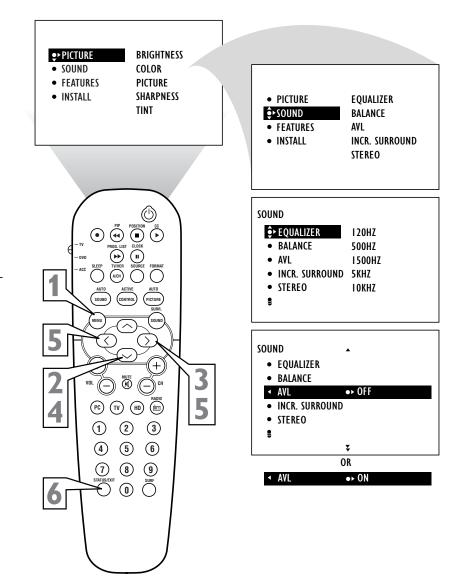


How to Use the AVL Control



In most cases, the volume levels coming from broadcast programming or commercials are never the same. With the AVL (Audio Volume Leveler) control turned ON, you can have the TV level out sound that is being heard. This makes for a more consistent sound by reducing the peaks and valleys that occur during program changes or commercial breaks. To turn the AVL ON, follow these steps.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight SOUND.
- Press the CURSOR RIGHT and the menu will shift to the left. EQUALIZ-ER will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR DOWN repeatedly until AVL is highlighted.
- Press the CURSOR RIGHT or LEFT to toggle AVL ON or OFF.
- Press the STATUS/EXIT button to remove the menu from the screen.





How to Use the Incredible Surround Control

The Incredible Surround feature adds greater depth and dimension to both monaural (MONO) and stereo TV sound. With the control set to INCR. SURROUND (Incredible Surround), the TV's speakers can add even wider sound separation to normal broadcasts.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight SOUND.
- Press the CURSOR RIGHT and the menu will shift to the left. EQUALIZ-ER will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR DOWN repeatedly until INCR. SURROUND is highlighted. (Incredible Surround)
- Press the CURSOR RIGHT or LEFT to toggle the INCR. SUR-ROUND control settings.

If signal is Stereo: Select STEREO, INCR. SURROUND, or DOLBY VIRTUAL.

If signal is MONO: Select MONO, or SPATIAL.

You can also change the INCR. SUR-ROUND onscreen menu control settings by pressing the SURR. (surround) SOUND button on the remote control.

Press the STATUS/EXIT button to

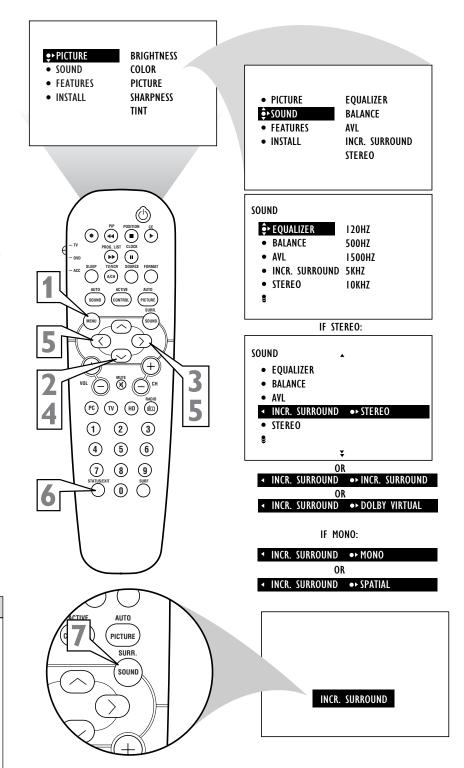
HELPFUL HINT

SPATIAL – widens the sound, simulating a broader, fuller sound.

INCR. SURROUND – widens the sound, simulating a broader, fuller sound.

DOLBY* VIRTUAL (with Virtual Dolby Surround signals) simulates the surround-sound experience from two speakers using Dolby Pro Logic* providing the listener with the sensation of being surrounded by additional speakers.

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



How to Set the TV to Receive Stereo Programming

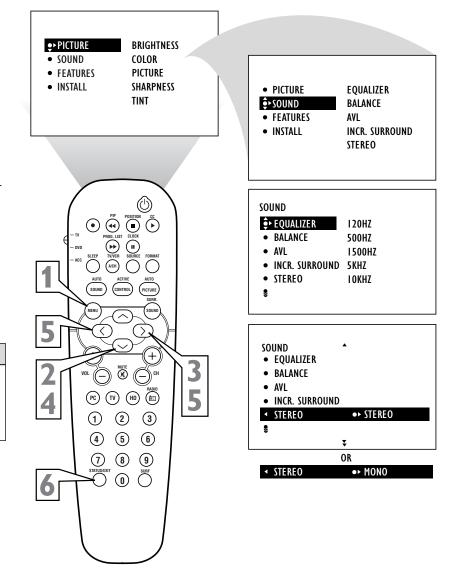


You can receive broadcast stereo TV programs. The TV has both an amplifier and twin speakers through which the stereo sound can be heard.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight SOUND.
- Press the CURSOR RIGHT and the menu will shift to the left. EQUALIZ-ER will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR DOWN repeatedly until STEREO is highlighted.
- Press the CURSOR RIGHT or LEFT to toggle the STEREO control to Stereo or Mono.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Remember, if stereo is not present on a selected show and the TV is placed in the STEREO mode, the sound coming from the set will remain monaural.





How to Set the TV to Receive SAP (Secondary Audio Programming)

SAP is an additional part of the stereo broadcast system. Sent as a third audio channel, an SAP can be heard apart from the current TV program sound. TV stations are free to use SAP for any number of purposes.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight SOUND.
- Press the CURSOR RIGHT and the menu will shift to the left. EQUALIZ-ER will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR DOWN repeatedly until SAP is highlighted.
- Press the CURSOR RIGHT or LEFT to toggle the SAP control to On or Off.

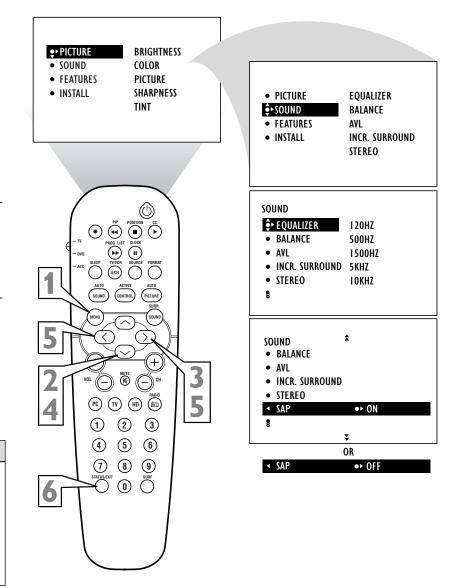
Note: If SAP is not broadcasted on the selected program your watching, NOT AVAIL-ABLE will appear in the onscreen menu option.

6

Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

If an SAP signal is not present with a selected program, the SAP option cannot be selected. Also, if SAP is selected on a channel (with SAP) and you select another channel, when you return to the original channel, SAP will be OFF. You will have to reselect the SAP feature.



How to Use the Audio Out Control



If you have connected the TV's AUDIO OUTPUT jacks to the AUDIO INPUT jacks on a stereo receiver (see the Quick Use Guide for connection instructions), set AUDIO OUT to either VARIABLE or FIXED to determine whether you adjust the volume at the stereo or at the TV. If you select VARIABLE, change the volume at the TV using the TV's remote control. If you select FIXED, adjust the volume at the stereo using the stereo's controls. To select FIXED or VARIABLE, follow these steps.

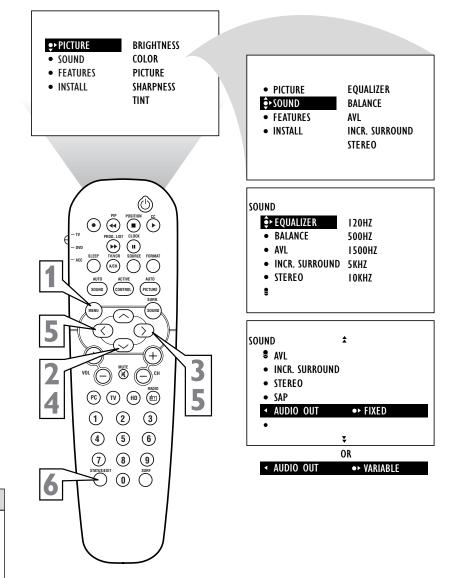
- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight SOUND.
- Press the CURSOR RIGHT and the menu will shift to the left. EQUALIZ-ER will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR DOWN repeatedly until AUDIO OUT is highlighted.
- Press the CURSOR RIGHT or LEFT to toggle the AUDIO OUT control to Fixed or Variable.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

FIXED – If FIXED is selected, the sound coming from the TV and being heard through an external audio system is not adjustable with the television's volume controls. The volume would have to be adjusted at the audio system.

VARIABLE – If VARIABLE is selected, the sound coming from the TV and being heard through an external audio system can be adjusted at the TV using the Volume + or – buttons on the television or remote control.

The connection instructions for an external audio system can be found in the Quick Use Guide supplied with your TV.



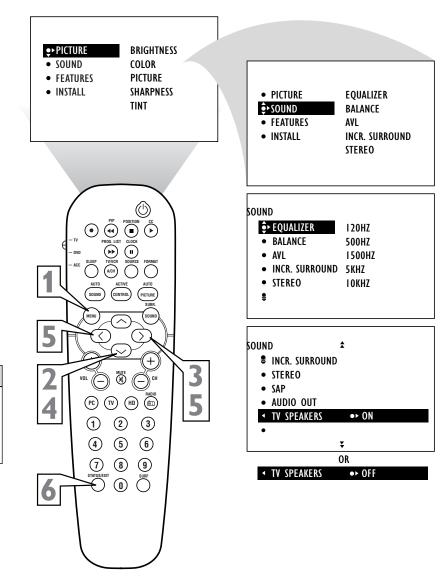
How to Turn the TV Speakers On or Off

Using the TV's Audio (Monitor) Output jacks or the External Speaker connections, the TV speakers can be turned off allowing the television sound to be heard only from the external audio system or the external speakers.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight SOUND.
- Press the CURSOR RIGHT and the menu will shift to the left. EQUALIZ-ER will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR DOWN repeatedly until TV SPEAKERS is highlighted.
- Press the CURSOR RIGHT or LEFT to toggle the TV SPEAKERS On or Off.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Be sure to first refer to the Quick Use Guide supplied with your TV to connect an external audio system to the television's Monitor Output (audio) jacks.



How to Use the Timer Controls



Your television comes with an on-screen clock. The TV also can be set to turn on or off at a specific time and tune to a specific channel when it powers its self on.

- Press the CLOCK button on the remote control to show the TIMER onscreen menu.
- Press the CURSOR RIGHT button and the TIMER options will shift to the left. TIME will be highlighted.
- Press the CURSOR UP or DOWN buttons repeatedly to highlight one of the TIMER controls. These controls are the TIME, START TIME, STOP TIME, CHANNEL, ACTIVATE, or DISPLAY.
- Press the CURSOR RIGHT or LEFT button to make adjustments or set the control options.

TIME: Enter the current time with the numbered buttons. Use the Cursor Right button to move to the AM/PM area and use the Cursor Left and Right buttons to toggle AM or PM.

START TIME: Use the Numbered buttons to enter a start-up time for the TV to turn on or tune a specific channel

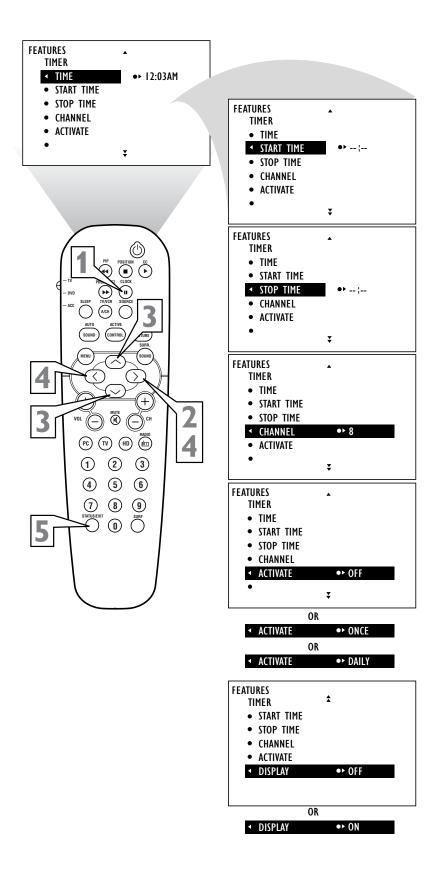
STOP TIME: Use the Numbered buttons to enter a time for the TV to shut itself off.

CHANNEL: Use the Numbered buttons or the CH + or – buttons to select a specific channel for the TV to tune to at the specific Start Time.

ACTIVATE: Set the Timer to preform it's function ONCE or DAILY.

DISPLAY: Set to ON or OFF. When ON, the time will be displayed ALL the time the TV is ON. When OFF, the time will only appear when the STATUS/EXIT button is pressed.

Press the STATUS/EXIT button to remove the menu from the screen.



How to Use the Mode Select Control

The Mode Select Control will allow you to use set the TV into the TV, FM, HD, or PC Modes. Depending on how the TV will be used, these modes may have their own onscreen menus controls to optimize there use when used with computers, radios, or high-definition receivers.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN to highlight FEATURES.
- Press the CURSOR RIGHT and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN repeatedly until MODE SELECT is highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left. the first option, FM RADIO will be highlighted.
- Press the CURSOR UP or DOWN buttons to highlight the desired mode option (FM RADIO, HD, or PC).
- Press the CURSOR RIGHT button to change the TV to the desired mode. Please refer to each specific mode later in this manual.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

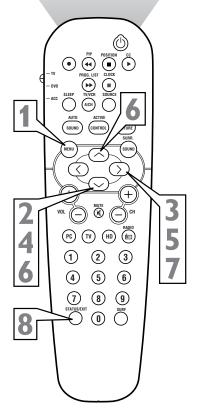
Specific information regarding each of the MODE SELECT options can be found later in this manual.

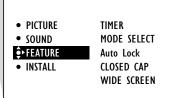
FM RADIO - refer to page 46-49.

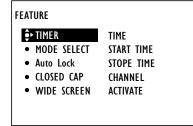
HD - refer to page 50-53.

PC - refer to page 54.

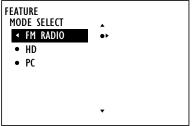


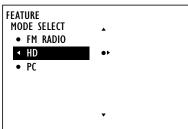


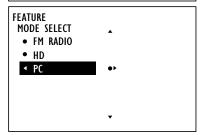




TIMER	FM RADIO
♦ ► MODE SELECT	HD
Auto Lock	PC
 CLOSED CAP 	
 WIDE SCREEN 	







How to SET THE ACTIVE CONTROL



The Active Control monitors and adjusts incoming video signals to help provide the best picture quality.

When you choose to turn the Active Control ON, the picture sharpness and noise reduction are controlled automatically. Active Control adjusts these picture settings continuously and automatically.

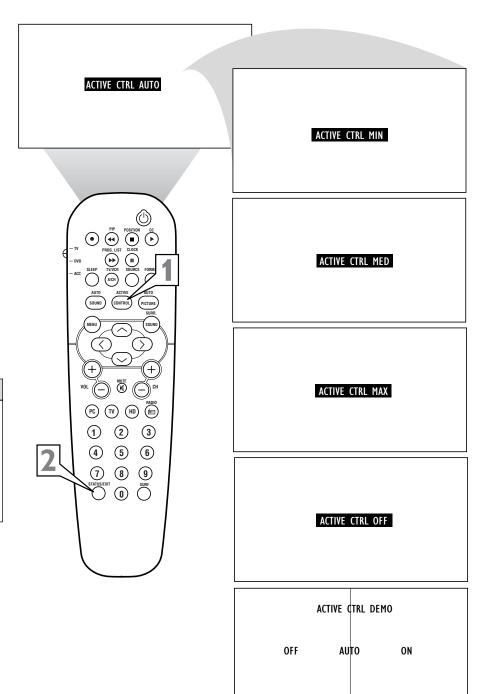
You have a choice of 5 modes:

Choose from ACTIVE CONTROL AUTO, ACTIVE CONTROL MIN, ACTIVE CON-TROL MED, ACTIVE CONTROL MAX, ACTIVE CONTROL OFF or ACTIVE CON-TROL DEMO.

- Press the ACTIVE CONTROL button on the remote control to toggle among the five options and select your desired mode.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Toggle the ACTIVE CONTROL to ACTIVE CONTROL DEMO with the remote control and a screen display will appear showing picture quality differences between the Active Control when ON at the right had side of the screen and Active Control OFF at the left hand side of the screen.



Understanding the AutoLock™ Controls

The AutoLock™ feature receives and processes data sent by broadcasters or other program providers that contain program content advisories. When programmed by the viewer, a TV with AutoLock™ can respond to the content advisories and block program content that may be found objectionable (such as offensive language, violence, sexual situations, etc.). This is a great feature to censor the type of programming children may watch.

In the AutoLockTM section, you'll learn how to block channels and programming that is not rated, is unrated, or has no rating. You will also find out how to turn these blocking features ON or OFF. Following are brief explanations of some terms and ratings related to the AutoLockTM feature.

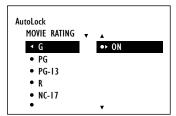
AutoLockTM offers various Blocking Options from which to choose:

BLOCKING: The BLOCKING control is what can be thought of as the "master switch" for AutoLock™. This control affects the settings you have chosen for blocking programs according to movie ratings or TV ratings, or for blocking programs that have no rating or are unrated. When the BLOCKING control is OFF, the blocking or censoring of programs is disabled. When the BLOCKING control is ON, blocking will occur according to the settings you have chosen.

NO RATING: ALL programming with no content advisory data can be blocked if NO RATING is set to ON.

Programming that has No Rating is not encoded with any rating information from the MPAA or the Parental Guidelines. Any programming could fall into this category.

You also can block individual channels or block programming based on ratings of the MPAA and TV broadcasters. (See a description of the ratings on this page.)



AutoLock TV RATING TV-Y TV-Y7 TV-G TV-PG TV-14

MOVIE RATINGS

(MOTION PICTURE ASSOCIATION OF AMERICA)

G: General Audience - All ages admitted. Most parents would find this programming suitable for all ages. This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

PG: Parental Guidance Suggested - This programming contains material that parents may find unsuitable for younger children. It may contain one or more of the following: Moderate violence, some sexual situations, infrequent coarse language, or some suggestive dialogue.

PG-13: Parents Strongly Cautioned - This programming contains material that parents may find unsuitable for children under the age of 13. It contains one or more of the following: violence, sexual situations, coarse language, or suggestive dialogue.

R: Restricted -This programming is specifically designed for adults. Anyone under the age of 17 should view this programming only with an accompanying parent or adult guardian. It contains one or more of the following: intense violence; intense sexual situations; strong, coarse language; or intensely suggestive dialogue.

NC-17: No one under the age of 17 will be admitted. - This type of programming should be viewed by adults only. It contains graphic violence; explicit sex; or crude, indecent language.

X: Adults Only - This type of programming contains one or more of the following: very graphic violence, very graphic and explicit or indecent sexual acts, very coarse and intensely suggestive language.

TV PARENTAL GUIDELINES (TV BROADCASTERS)

TV-Y: (All children -- This program is designed to be appropriate for all children.) Designed for a very young audience, including children ages 2-6. This type of programming is not expected to frighten younger children.

TV-Y7: (Directed to Older Children - This program is designed for children ages 7 and above.) It may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. This programming may include mild fantasy and comic violence (FV).

TV-G: (General Audience -- Most parents would find this program suitable for all ages.) This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

TV-PG: (Parental Guidance Suggested -- This program contains material that parents may find unsuitable for younger children.) This type of programming contains one or more of the following: Moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).

TV-14: (Parents Strongly Cautioned - This program contains some material that many parents would find unsuitable for children under 14 years of age.) This type of programming contains one or more of the following: intense violence (V); intense sexual situations (S); strong, coarse language (L); or intensely suggestive dialogue (D).

TV-MA: (Mature Audience Only -This program is specifically designed to
be viewed by adults and therefore may
be unsuitable for children under 17.) This type
of programming contains one or more of the
following: graphic violence (V); explicit sexual
situations (S); or crude, indecent language (L).

SETTING UP THE AUTOLOCK™ ACCESS CODE



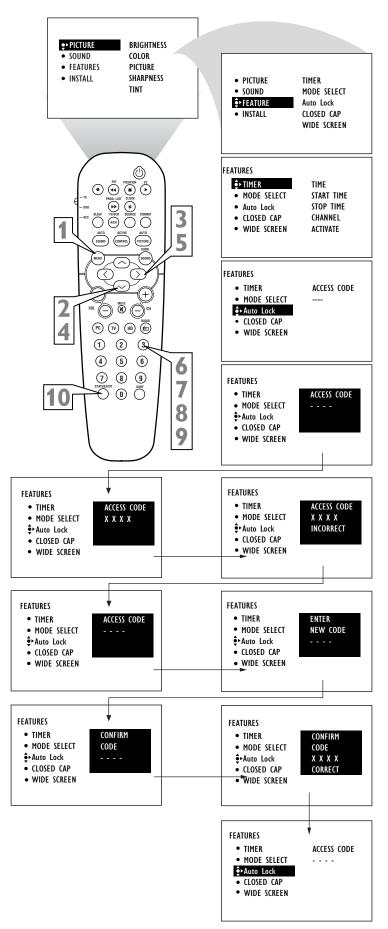
A utoLock™ allows parents to block out or "censor" any channels they think children should not watch. A channel blocked by the AutoLock™ control cannot be viewed until a correct access code is used to unlock the channel for viewing. First, let's set your AutoLock access code.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN button repeatedly until AutoLock is highlighted.
- Press the CURSOR RIGHT button to highlight ACCESS CODE.
- Press 0,7,1,1 on the remote control. *INCORRECT* will appear on the screen.
- Press 0,7,1,1 on the remote control again. ENTER NEW CODE will appear on the screen.
- Enter a new four-digit code using the number buttons. CONFIRM CODE will appear on the screen.
- **Enter your new four-digit code** again. *CORRECT* will flash on the screen briefly and the highlight bar goes back to AutoLock.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Remember that 0711 is the default AutoLock™ code. If your access code has been changed by someone other than you (a child, for example) or you have forgotten the code, you can always get in by inputting the default code.

NOTE TO PARENTS: It isn't possible for your child to unblock a channel without knowing your access code or changing it to a new one. If your code has been changed without your knowledge, then you will become aware that blocked channels may have been viewed.



How to Block Channels Using AutoLock™

A fter your personal access code has been set (see the previous page), you are ready to select the channels or inputs you want to block out or censor.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN button repeatedly until AutoLock is highlighted.
- Press the CURSOR RIGHT button to highlight ACCESS CODE.
- Enter your four-digit ACCESS
 CODE. CORRECT will flash very briefly and the menu will move to the left with BLOCK CHANNEL highlighted.
- Press the CURSOR RIGHT button to highlight the TV's available channels
- Press the CURSOR UP or DOWN button to highlight the channel you want to block.
- Press the CURSOR RIGHT button to block the channel. A padlock image appears to the right of the channel number.

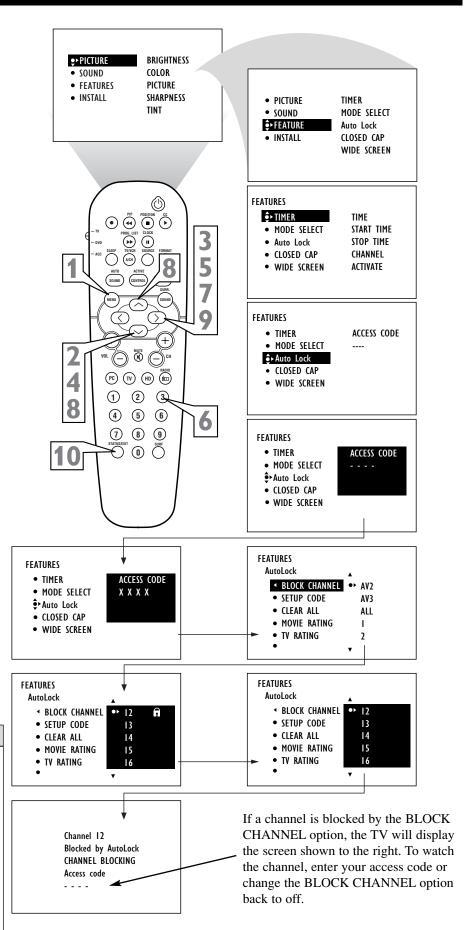
Repeat steps 7 and 8 for any channels you want to block from viewing.

Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Remember that 0711 is the default AutoLockTM code. If your access code has been changed by someone other than you (a child, for example) or you have forgotten the code, you can always get in by inputting the default code.

NOTE: You also can block out the use of the A/V external inputs on the rear of the TV. This stops the viewing of VCR, DVD, and other sources that can be shown through the A/V input jacks.



How to Clear All Blocked Channels at the Same Time



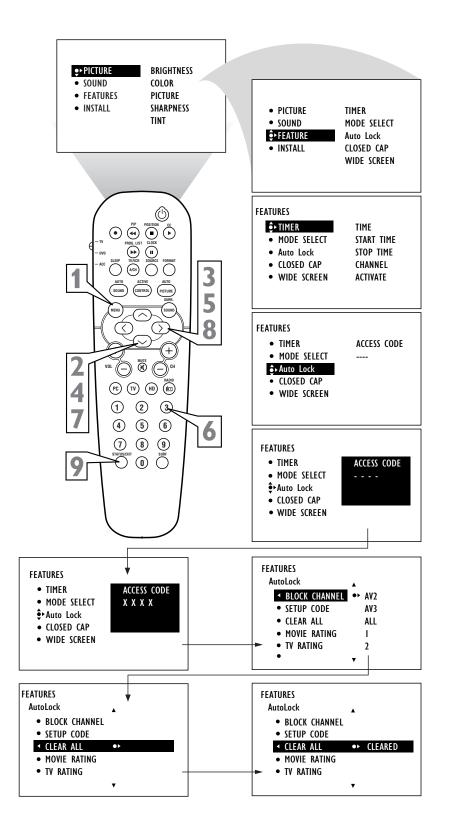
Various onscreen messages will appear when someone tries to view blocked programming. The message is determined by how the current programming is blocked. You may view the blocked programming and turn OFF the AutoLockTM feature by using the Clear All control or by entering your access code

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN button repeatedly until AutoLock is highlighted.
- Press the CURSOR RIGHT button to highlight ACCESS CODE.
- Enter your four-digit ACCESS
 CODE and the menu will move to the left with BLOCK CHANNEL highlighted.
- Press the CURSOR DOWN button until CLEAR ALL is highlighted.
- Press the CURSOR RIGHT twice.
 The CLEAR ALL option will display the word *CLEARED*. All blocked channels and programming are now viewable.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

If you tune to a specific channel that has been blocked by BLOCK CHANNEL or any of the AutoLockTM RATING options, simply enter your four-digit access code to view the channel.

NOTE: This will unblock ALL channels until the TV is shut OFF. When powered back ON, all previously blocked channels will be blocked again.





BLOCKING PROGRAMS BASED ON MOVIE RATINGS

A fter your personal access code has been set, you can select specific movie ratings that you want to censor.

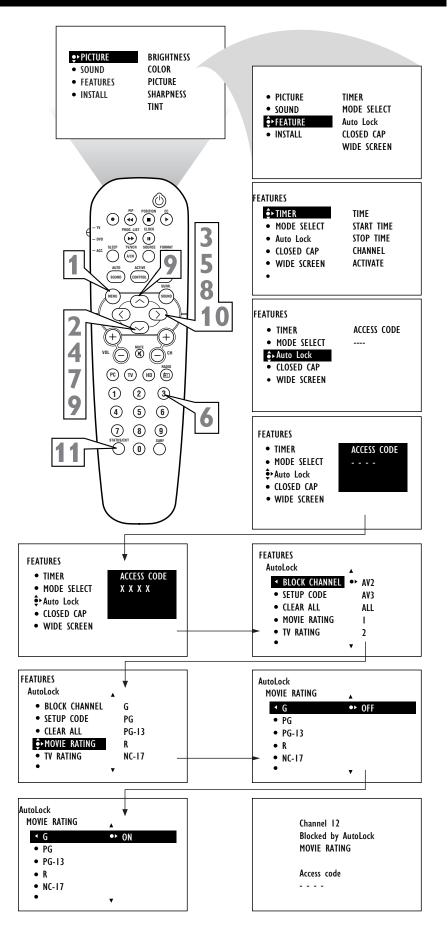
- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN button repeatedly until AutoLock is highlighted.
- Press the CURSOR RIGHT button to highlight ACCESS CODE.
- Enter your four-digit ACCESS
 CODE. CORRECT will flash very
 briefly and the menu will move to the
 left with BLOCK CHANNEL highlighted.
- Press the CURSOR DOWN repeatedly until MOVIE RATING is highlighted.
- Press the CURSOR RIGHT and the Rating menu shifts to the left with *G* highlighted.
- Press the CURSOR UP or DOWN to highlight each rating you want.
- Press the CURSOR RIGHT to turn the rating ON or OFF. Turning the rating ON will block programs with that rating from being seen.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

When a rating is turned ON, all higher ratings also will be turned on automatically. For example, if the *R* rating is turned on, the *NC-17* and *X* ratings also will be turned on.

All Movie Ratings can be turned ON or OFF.

Refer to page 23 for Movie Rating definitions.



BLOCKING PROGRAMS BASED ON TV RATINGS



You can select specific TV ratings that you want to censor by following these steps.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN button repeatedly until AutoLock is highlighted.
- Press the CURSOR RIGHT button to highlight ACCESS CODE.
- Enter your four-digit ACCESS
 CODE. CORRECT will flash very briefly and the menu will move to the left with BLOCK CHANNEL highlighted.
- Press the CURSOR DOWN repeatedly until TV RATING is highlighted.
- Press the CURSOR RIGHT and the menu will shift to highlight the TV RATING options.
- Press the CURSOR UP or DOWN to select a rating.
- Press the CURSOR RIGHT to turn the block on the rating ON or OFF.

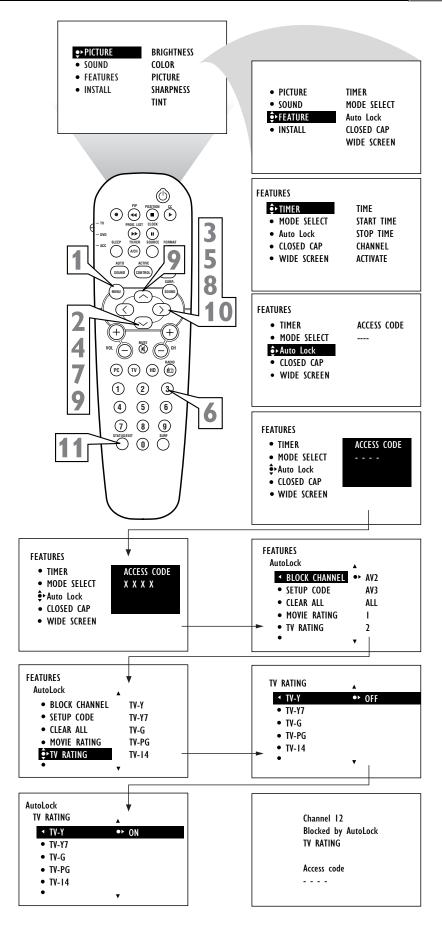
NOTE: More specific subratings (for violence, sexual content, dialogue, or fantasy violence) are available for TV-Y7, TV-PG, TV-14, and TV-MA. (Refer to page 31 for definitions.)

To access these subratings, with the main rating selected, **press the CURSOR RIGHT.** Then, repeat steps 9 and 10 to turn the sub-ratings ON or OFF.

Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

When a rating is turned ON, all higher ratings also will be turned on automatically. For example, if the *R* rating is turned on, the *NC-17* and *X* ratings also will be turned on.



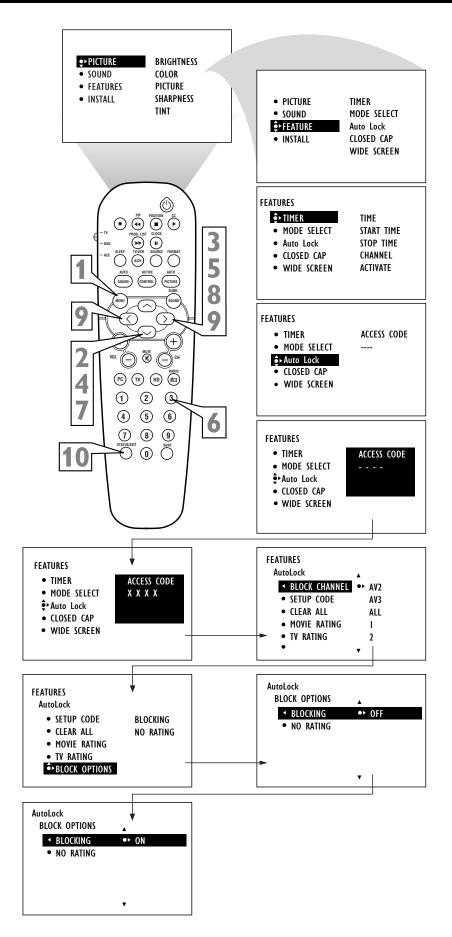
OTHER AUTOLOCKTM BLOCKING OPTIONS

The BLOCKING control is what can be thought of as the "master switch" for AutoLock™. This control affects the settings you have chosen for blocking programs according to movie ratings or TV ratings, or for blocking programs that have no rating. When the BLOCKING control is OFF, the blocking or censoring of programs is disabled. When the BLOCKING control is ON, blocking will occur according to the settings you have chosen. Follow these steps to toggle BLOCKING OFF or ON.

- Press the MENU button on the remote control to show the onscreen menu.
- Press the CURSOR DOWN button to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left. TIMER will be highlighted.
- Press the CURSOR DOWN button repeatedly until AutoLock is highlighted.
- Press the CURSOR RIGHT button to highlight ACCESS CODE.
- Enter your four-digit ACCESS
 CODE. CORRECT will flash very
 briefly and the menu will move to the
 left with BLOCK CHANNEL highlighted.
- Press the CURSOR DOWN repeatedly until BLOCK OPTIONS is highlighted.
- Press the CURSOR RIGHT to enter the BLOCK OPTIONS menu.
 BLOCKING will be highlighted. Or choose NO RATING.
- Press the CURSOR RIGHT or LEFT to toggle BLOCKING (or NO RATING) ON or OFF.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Remember, when the BLOCKING control is OFF, the blocking or censoring of programs is disabled. When the BLOCKING control is ON, blocking will occur according to the settings you have chosen.



Using the AutoLockTM Review Screen



To remind you which ratings you have blocked and which Block Options you have selected, a review screen is available to review your AutoLock™ settings. To access this screen follow the steps below.

Press the STATUS/EXIT button on your remote control TWICE. Your AutoLock™ settings will appear on the screen.

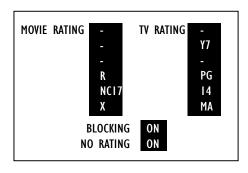
NOTE: If you have blocked specific subratings, such as *V* for Violence in the TV-PG category, these blocked subratings will not appear in the review. The subratings however, are still blocked according to your selections.

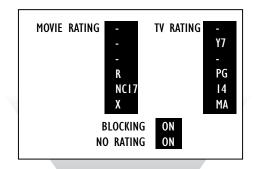
After a few seconds, the settings will leave the screen automatically, or you can **press the STATUS/EXIT button** a third time to remove them from the screen.

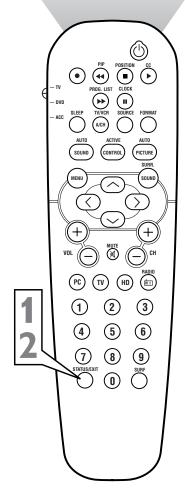
HELPFUL HINT

The AutoLockTM Status screen will only appear if the BLOCKING option is set to ON. For details, see previous page for details.

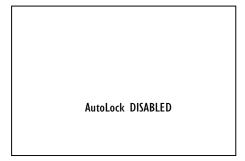
This display will appear after the step 1 above is completed if the AutoLock™ BLOCKING option is set to ON.







This display will appear after the step 1 above is completed if the AutoLock™ BLOCKING option is set to OFF.





How to Use the Closed Captioning Controls

*losed Captioning (CC) allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, this feature uses onscreen "text boxes" to show dialogue and conversations while the TV program is in progress.

- Press the MENU button on the remote control to show the on-screen menu.
- Press the CURSOR DOWN button twice to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left.
- Press the CURSOR DOWN button repeatedly until the CLOSED CAP control is highlighted.
- Press the CURSOR RIGHT button again. The menu will shift to the left and CAPTION MODE will be highlighted.
- Press the CURSOR RIGHT button to highlight CAPTION MODEs.
- Press the CURSOR UP or DOWN button to select a CAPTION MODE: CC1, CC2, CC3, CC4, CC MUTE, TXT1, TXT2, TXT3, or TXT4. CC DISPLAY turns text OFF or ON if the TV station broadcasting on the channel is making CLOSED CAPTIONING available. With CC DISPLAY highlighted, press the CURSOR RIGHT to toggle Closed Captioning ON or OFF.
- **NOTE:** You also can **press the CC** button on the remote control to turn the CC option ON or OFF.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

Not all TV programs and product commercials are broadcast with Closed Captioning (CC). Nor are all Closed Captioning MODEs (CAPTION 1-4 or TEXT 1-4) necessarily being used by broadcast stations during the transmission of a program offering Closed Captioning. Refer to your area's TV program listings for the stations and times of shows being broadcast with Closed Captioning.

♥ PICTURE

- SOUND
- FEATURES

BRIGHTNESS

- COLOR **PICTURE**
- SHARPNESS INSTALL

TINT

 PICTURE SOUND **∮**►FEATURE INSTALL

TIMER MODE SELECT Auto Lock CLOSED CAP

WIDE SCREEN

FEATURES

●►TIMER MODE SELECT

TIME START TIME STOP TIME

- Auto Lock CLOSED CAP
- CHANNEL
- WIDE SCREEN

ACTIVATE

FEATURES

CLOSED CAP TIMER

CAPTION MODE CC DISPLAY

- MODE SELECT

Auto Lock

♦ CLOSED CAP WIDE SCREEN

FEATURES CLOSED CAP

◆ CAPTION MODE CC DISPLAY

CCI CC3 CC4

CC MUTE

FEATURES

CLOSED CAP ◆ CAPTION MODE CC DISPLAY

•> CC1 CC2 CC3

CC4 CC MUTE

FEATURES CLOSED CAP

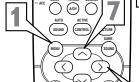
- CAPTION MODE CC DISPLAY
- CCI CC2CC3
 - CC4 CC MUTE

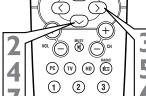
CLOSED CAP

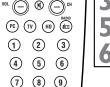
- CAPTION MODE
- ◆ CC DISPLAY

◆ CC DISPLAY

8











CAPTION Mode **Example Display**



TEXT Mode Example Display -The TV screen will be blocked from viewing.

How to Use the Widescreen (Format) Control

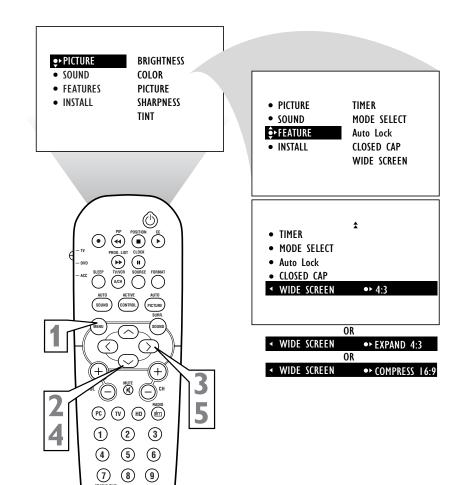


You can change the screen format size to match the type of program you're watching. Select the normal 4:3, EXPAND 4:3, or COMPRESS 16:9 aspect ratios.

- Press the MENU button on the remote control to show the on-screen menu.
- Press the CURSOR DOWN button twice to highlight FEATURES.
- Press the CURSOR RIGHT button and the menu will shift to the left.
- Press the CURSOR DOWN button repeatedly until the WIDESCREEN control is highlighted.
- Press the CURSOR RIGHT button repeatedly to toggle among the three screen format sizes; 4:3, EXPAND 4:3, or COMPRESS 16:9.
- Press the STATUS/EXIT button to remove the menu from the screen.

HELPFUL HINT

When in the TV Mode and no onscreen menu displayed, **pressing the CURSOR RIGHT and LEFT buttons** will toggle the FORMAT options.









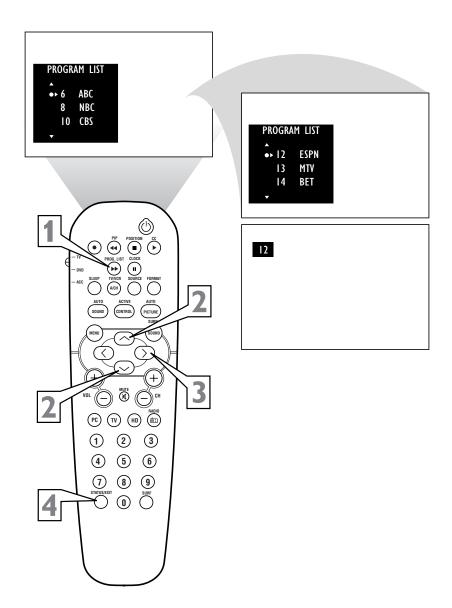
EXPAND 4:3

COMPRESS 16:9

How to Use the Program List Control

The Program List Control will allow you to quickly overview all the programmed channels that have been placed into the televisions memory (see the Auto Programming section of this manual for more details). Program List will let you easily select the desired channels your looking for. Program List will display the channel number, the name of the channel if you have given it one, and whether it have AutoLock turn on or off.

- Press the PROGRAM LIST button on the remote control to show the current list of installed channels (the current channel will be highlighted).
- Press the CURSOR UP or DOWN buttons to scroll the list of channel, highlighting the one you want to activate.
- Press the CURSOR RIGHT button to activate the channel. The TV will tune to that channel.
- **Press the STATUS/EXIT button** to remove the menu from the screen.



How to set the Sleeptimer control



Have you ever fallen asleep in front of the TV, only to have it wake you up at two in the morning with a test pattern sound screeching in your ears? Well, your TV can enable you to avoid that discomfort by automatically turning itself off. With the Sleep Timer feature, you can set a timer to automatically switch the TV OFF after a period of time you choose (15-minute increments up to 60 minutes, then 30-minute increments up to 240 minutes).

Press the SLEEP button on the remote control. The SLEEP timer onscreen display will appear in the upper part of the screen.

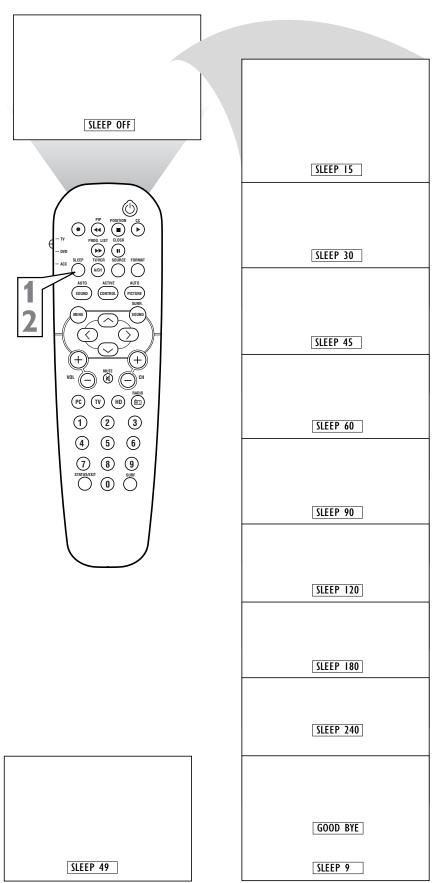
Within five seconds, press the SLEEP button repeatedly to pick the amount of time (15-minute increments up to 60 minutes, then 30-minute increments up to 90 minutes, then 60-minute increments up to 240 minutes) before the TV will turn itself off.

An onscreen countdown will appear during the last minute before the TV shuts itself off.

HELPFUL HINT

To see how many minutes remain before the TV shuts itself off, press the STATUS/EXIT button.

A Sleep Timer setting can be cancelled by pressing any button during the last minute of the operation.



During the last minute of a SLEEP timer setting an onscreen countdown will be displayed.

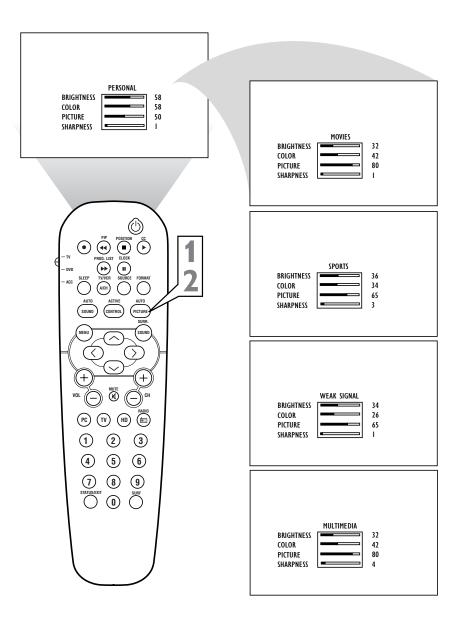
During the last 10 seconds of a SLEEP timer setting, an onscreen display will read GOOD BYE.

How to Use the AutoPicture™ Control

Thether you're watching a movie or a video game, your TV has automatic video control settings that will match with your current program source or content. AutoPicture™ quickly resets your TV's video controls for a number of different types of programs and viewing conditions that you may have in your home. The Movies, Sports, Weak Signal, and Multimedia AutoPicture™ controls have been preset at the factory to automatically adjust the TV's brightness, color, picture, sharpness, tint, and color temperature levels. The Personal AutoPictureTM settings are the ones that you made through the PICTURE options within the onscreen menu

- Press the PICTURE button on the remote control. The current AutoPicture™ setting will appear in the middle of the screen.
- Press the PICTURE button repeatedly to select either PERSONAL, MOVIES, SPORTS, WEAK SIGNAL, or MULTIMEDIA picture settings.

NOTE: The PERSONAL setting and the PICTURE options within the onscreen menu are the same. This is the only option in AutoPicture™ that can be changed. To adjust these settings, use the PICTURE options within the onscreen menu. All other settings are set up at the factory during production and cannot be adjusted.



NOTE: The values shown in the diagram above are sample values only. Your television's values may vary and display different numbers.

How to Use the AutoSound™ Control



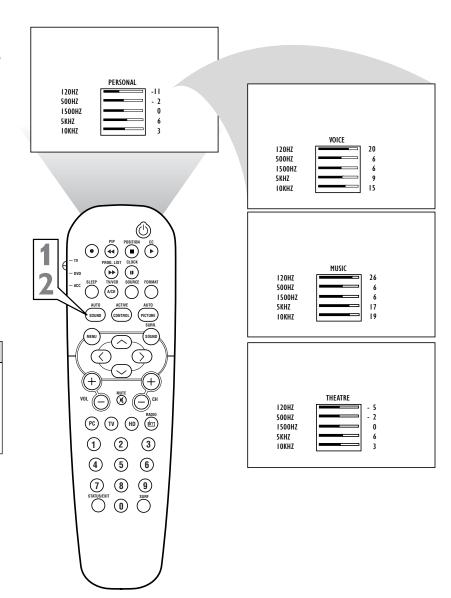
A utoSoundTM allows you to select from three factory-set controls and a personal control that you set according to your own preferences through the onscreen Sound menu. The three factory-set controls (Voice, Music, and Theatre) enable you to tailor the TV sound so as to enhance the particular program you are watching. Follow these steps to select any of the options.

- Press the SOUND button on the remote control. The current AutoSound™ setting will appear in the middle of the screen.
- Press the SOUND button repeatedly to toggle among the four settings: PERSONAL, VOICE, MUSIC, or THEATRE.

Remember, only the PERSONAL control can be changed by the viewer. This changes the settings in the main onscreen menu's SOUND controls

HELPFUL HINT

AutoSound™ works only with the programs coming through the ANTENNA/CABLE (ANT) input on the rear of the TV (RF audio). It will not control the sound levels for the external connections.



NOTE: The values shown in the diagram above are sample values only. Your television's values may vary and display different numbers.

How to Use the Surf Control

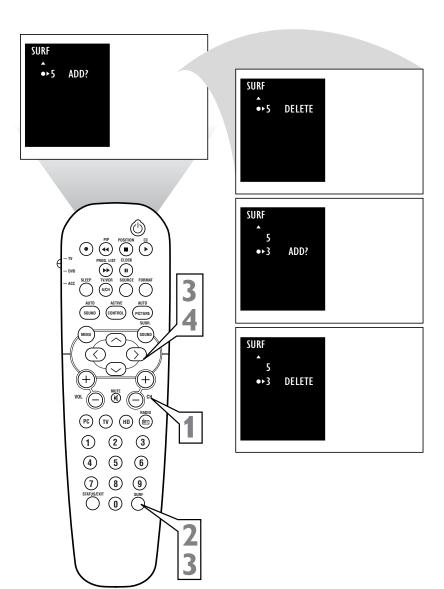
A list or series of previously viewed channels can be selected with the SURF button on your remote control. With this feature, you can easily switch between different TV channels that currently interest you. The SURF control allows you to set up to ten channels in its quick viewing list.

- Press the CHANNEL(+) or (-) button (or the numbered buttons) to select a channel to add to the SURF list.
- Press the SURF button on the remote control. The onscreen display may read, "SURF LIST EMPTY." The number of the current channel will be shown with "ADD?" to the right.
- While the SURF list message or the SURF channel list appears on the screen, press the CURSOR RIGHT button to add the present channel to the SURF list.
- If you want to delete the present channel from the SURF list, press the CURSOR RIGHT button again.

Repeat steps 1 through 3 to add more channels (up to 10) to the SURF list.

HELPFUL HINT

Along with regularly programmed channels, the external video source connections can be added to the SURF list. This means that the external A/V Jacks and their channels can be added to your SURF list. Use the Source button to tune their channel and use the same procedure described on this page.



REMOTE CONTROL USE WITH ACCESSORY DEVICES - DIRECT METHOD



Your remote control is set to work your TV and many infrared remote (IR) control VCRs, Cable Boxes, Satellite Systems, DBS, DVD, etc. However, an easy onetime step may be necessary before the remote will work your VCR.

Try this initial Direct Access Method to see if going on to the following section is necessary.

Place the TV/DVD/ACC Mode Switch in the proper position.

Point the remote control at the device and press the POWER button.

Does the remote turn the device ON?

If YES, stop and try other function buttons on the remote. If they also work the device, then the remote is ready and no further steps are needed.

If NO, continue...

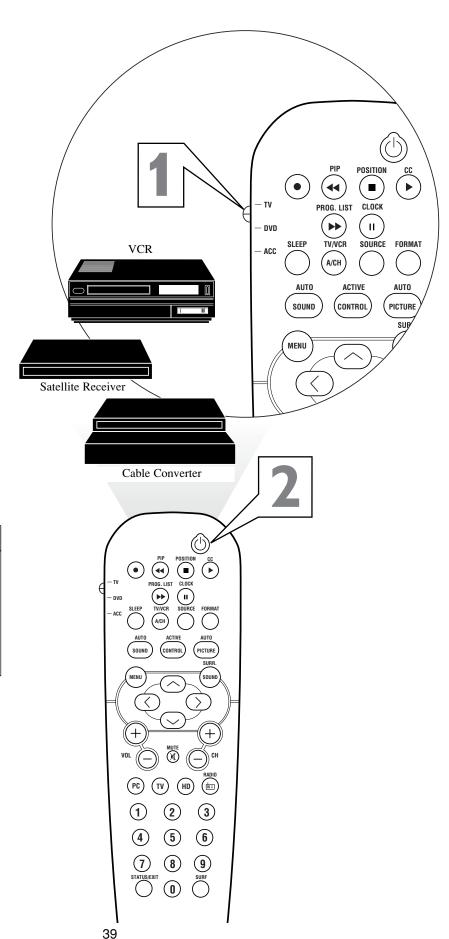
First look up a **FOUR-DIGIT remote control number** for your brand of Device before going through the simple steps on the following page.

Find your Four-Digit Code on pages 42-44.

HELPFUL HINT

If more than one number is listed, you may have to try more than the first Four-Digit code given in order to locate your Device's remote code.

NOTE: Setting up the remote is for use with external accessory devices only and not for use with other television brands.



(*****

REMOTE CONTROL USE WITH ACCESSORY DEVICES - CODE ENTRY METHOD

Now that you have looked up the three-digit Remote Code Number for your brand of device, you are ready to follow the four simple steps below.

Please read through steps 1-4 before beginning.

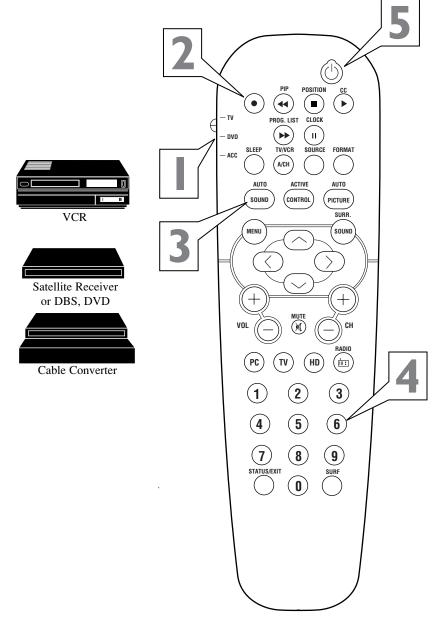
- Place the TV/DVD/ACC Mode Switch in the proper position.
- Press the RECORD button on the remote control and release.
- Press the AUTO SOUND button on the remote within 30 seconds, then release.
- 4 Enter the FOUR-DIGIT REMOTE CODE NUMBER (page 42-44) for your desired device. The remote is now ready to send commands to the unit.
- Point the remote at the Device. Press the POWER button on the remote to turn the unit ON. If this works you are finished. If it does not work the first time, repeat the steps using a different remote code number.

HELPFUL HINT

After a second try and the remote does not operate your device, see if there is another four-digit code number (pages 42-44) listed for your device and repeat the steps above using the new number.

If after repeated attempts the code number method does not work you device, try the **SEARCH METHOD** on the next page.

NOTE: Setting up the remote is for use with external accessory devices only and not for use with other television brands.



REMOTE CONTROL USE WITH ACCESSORY DEVICES - SEARCH METHOD



Your TV remote can be set to work various external devices such as VCRs, Cable Boxes, Satellite Receivers, DBS, DVD, etc. by what is called the search method of remote control programming.

If the "Remote Code" number method shown on the previous page did not set your remote to work your external device, then follow the easy steps listed below.

Please read steps 1-4 before beginning.

- Press the POWER button on the device your are attempting to program to turn it ON.
- Place the TV/DVD/ACC Mode Switch in the proper position.
- Press the RECORD and the AUTO SOUND buttons simultaneously and hold them down. The remote will continue to send programming codes, one ever 1.5 seconds.
- The device will begin to change channels after the remote identifies the correct code. When the channels start to change release the RECORD and AUTO SOUND buttons. The remote should be ready to operate the device.

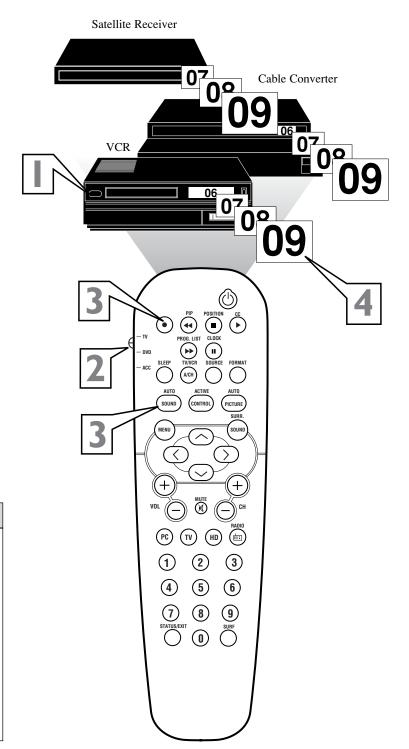
HELPFUL HINT

This method can take several minutes to perform.

Don't let the device scan up more than five channels. If you do the remote may pass up the right code and another search cycle will have to be repeated.

If no channel change happens within two minutes, repeat steps 1-4. Should a channel change still not occur, the remote will not work the desired device.

NOTE: Setting up the remote is for use with external accessory devices only and not for use with other television brands.





REMOTE CONTROL DIRECT ENTRY CODES

VCR CODES

Admiral 2027, 2052	Electrophonic	Lloyd's
Adventura	Emerex	Loewe2004, 2005, 2017, 2035
Aiko	Emerson2001, 2002, 2017, 2023,	Logik
Aiwa2001, 2017, 2062, 2070, 2072		Luxor2023, 2025, 2027, 2037, 2038
Akai2021, 2029, 2038, 2060, 2063	2059, 2078, 2083	LXI
Akiba	ESC2057, 2059	M Electronic
Alba2011, 2034, 2052,	Ferguson2021, 2039, 2064, 2065	Magnasonic
2059, 2063, 2072	Fidelity	Magnavox2001, 2015, 2019, 2035
Ambassador	Finlandia	Magnin
American Action	Finlux2001, 2022, 2035, 2037	Manesth
American High	Firstline2017, 2023, 2024, 2034, 2052	Marantz2003, 2005, 2015, 2035
Amstrad2001, 2059, 2067, 2068	Fisher2025, 2026, 2030, 2037	Marta
Anam	Frontech	Matsui2004, 2016, 2036,
	Fuji	2052, 2070, 2072
Anam National2042, 2054, 2087	Funai	Matsushita2015, 2042, 2055
Anitech	Garrard	Mei
Asa	GE2015, 2027, 2032, 2057	Melectronic
Asha	GEC	Memorex2001, 2015, 2017, 2019,
Asuka	General	
Audiovox	Go Video2077, 2081	
Baird2001, 2021, 2037, 2039	Goldhand	Memphis
Basic Line2011, 2034, 2059	Goldstar2017, 2018, 2053, 2079	Metz2003, 2005, 2017,
Beaumark	Goodmans 2001, 2017, 2034, 2059, 2075	2042, 2048, 2055, 2069
Bell & Howell	Gradiente	
	· · · · · · · · · · · · · · · · · · ·	MGA
Blaupunkt2003, 2005, 2010, 2014,	Graetz2005, 2021, 2037, 2057	MGN Technology
2041, 2042, 2048, 2054, 2055, 2075	Granada	Mincrya
Brandt2047, 2064, 2065	Grandin2001, 2017, 2034	Minerva2005, 2010, 2048
Brandt Electronic	Grundig2003, 2005, 2007, 2010,	Minolta
Broksonic 2002, 2040, 2046, 2052, 2078		Mitsubishi 2023, 2027, 2033, 2035, 2045
Bush2034, 2052, 2059, 2072		Motorola
Calix	Hanseatic	MTC2001, 2057
Canon	Harley Davidson2001	Multitech
Capehart	Harman/Kardon2018, 2035	Murphy
Carver	Harwood	NAD
Catron	HCM2034	National
CCE	Headquarter	NEC2018, 2020, 2021, 2033, 2037
CGE	Hinari2004, 2034, 2057, 2072	Neckermann
Cimline	Hi-Q	Nesco
Cineral	Hitachi	Nikko
Citizen2017, 2059		Nikon
Clatronic	Hughes Network Systems2022	Noblex
Colt	Hypson	Nokia2025, 2037, 2038, 2057
Combitech	Imperial	Nokia2021, 2025, 2037, 2038, 2057
Condor	Ingersol	Nordmende2021, 2061, 2064,
Craig2017, 2026, 2034, 2057, 2058	Interfunk	
Crown	ITT2005, 2021, 2025, 2037,	Oceanic
Curtis Mathes2015, 2021, 2032, 2042	2038, 2057, 2074	Okano
Cybernex	ITV	Olympus
Cyrus	Jensen	Optimus 2017, 2027, 2031, 2037,
Daewoo2011, 2024, 2025, 2059, 2083	JVC2008, 2021, 2033, 2049,	
Dansai		Orion2002, 2004, 2016, 2036,
Daytron	Kaisui	
De Graaf	KEC	Osaki
Decca	Kendo	Otto Versand
Denon	Kenwood2018, 2021, 2033	Palladium2005, 2017, 2021, 2034
Dual	KLH	Panasonic2015, 2042, 2053,
Dumont	Kodak	
Dynatech	Korpel	Pathe Cinema
Elbe	Layco	Pathe Marconi
Elcatech	Lenco	Penny
Electrohome	LG	
Licentification	LG	

REMOTE CONTROL DIRECT ENTRY CODES



	VCR CODES (see the see the	
	VCR CODES (continued)	
Pentax	Sanky	TEC2011
Perdio	Sansui2001, 2021, 2033,	Technics
Philco2015, 2018, 2052, 2078		Teknika2001, 2015, 2007, 2017
Philips2015, 2035 (DEFAULT VCR),	Sanyo2025, 2026, 2037, 2057	Teleavia
	Saville	Telefunken 2021, 2047, 2058, 2064, 2074 Tenosal2034
Phonola	Schaub Lorenz2001, 2005, 2021, 2037	Tensai
Pioneer	Schneider	Thomas
Portland	Scott2023, 2024, 2040, 2046	Thomson
Profex	Sears2001, 2015, 2017,	Thorn
Profitronic	2022, 2025, 2026, 2037	TMK
Proline	SEG	Toshiba2021, 2023, 2024, 2035, 2074
Proscan	SEI	Totelevision
Pulsar	Semp	Uher
Pye	Sentra	Unitech
Quarter	Sharp	Universum2001, 2006, 2010, 2017,
Quartz	Shintom2034, 2037	
Quasar	Shogun	Vector
Quelle	Shorai	Vector Research
Radio Shack	Silva	Victor
Radiola	Singer	Video Concepts2020, 2024 Videosonic
RCA 2015, 2022, 2027, 2032, 2038, 2057	Solavox	Wards2001, 2015, 2022, 2026,
Realistic2001, 2015, 2017,	Sonolor	
2025, 2026, 2027, 2037	Sontec	White Westinghouse2052, 2059
REX	Sony2001, 2012, 2013, 2014, 2015	XR-1000
RFT	STS	XR-1001
Ricoh	Sunkai .2070 Sunstar .2001	XR-1002
Runco	Suntronic	Yamishi
Saba2021, 2049, 2050, 2061, 2	Sylvania 2001, 2015, 2023, 2035	Yokan
	Symhonic	Yoko
Saisho2004, 2016, 2036, 2052	Tashiko	Zenith2001, 2014, 2019, 2052, 2078
Salora	Tatung	
Samsung2024, 2057, 2076, 2077	Teac	
	DIGITAL VIDEO DISC CODES	
Akai	Panasonic	Sony
Harman/Kardon	Philips5302, 5308 (DEFAULT DVD)	Technics
JVC	Pioneer	Theta Digital
Magnavox	RCA	Toshiba
Mitsubishi	Samsung	Yamaha
Onkyo5302, 5317, 5319	Sharp5320	14.14.14
	1	
	CABLE CODES	
ABC3002, 3003, 3004, 3006, 3008	Decsat	Jerrold3002, 3004, 3005, 3006,
Andover	Everquesst	3007, 3020, 3031, 3046
Bell & Howell	Filmnet	LG Alps3044
Birgmingham Cable Communication	France Telecom	Memorex
	GEC	Mnet
British Telecom	Gemini	Now
Cabletime3016, 3019, 3025, 3029 Clyde3011	General Instrument	Oak .3009 Pacific .3039
Contec	Goldstar	Panasonic
Cryptovision	Grundig	Paragon
Daehan	Hitachi	Pioneer
Daeryung3003	Jasco3007	Pulsar3001



REMOTE CONTROL DIRECT ENTRY CODES

CABLE CODES (continued)					
PVP Stereo Visual Matrix 3002 Quasar 3001 Radio Shack 3007 Rembrandt 3004 Runco 3001 Salora 3026 Samsung 3014, 3040 Satbox 3024 Scientific 3003, 3032, 3049 Scientific Atlanta 3003, 3008, 3021 Seawoo 3045	Signal 3007 Signature 3004 Starcom 3002, 3007 Stargate 3007 Starquest 3007 STS 3015 Taihan 3043 Tele+1 3028 Teleservice 3022 Tocom 3005 Tongkook 3 042, 3048	Toshiba 3001 Tudi 3023 Tusa 3007 United Cable 3002 Videoway 3017 Visicable+ 3033 Westminster 3012 Wolsey Gene 3037 Zenith 3001, 3034			
	SATELLITE CODES				
Absat	Grundig .4008, 4010, 4048 G-sat .4009 Hinari .4009 Hirschimann .4008, 4032, 4039, .4040, 4049 Hitachi .4037 Houston .4053 Huth .4013, 4015, 4019, 4026 Intervision .4050 Invideo .4061 ITT .4005 Johansson .4022 JVC .4048 Kathrein .4004, 4006, 4008, .4011, 4035, 4041 Kreiselmeyer .4008 Kyostar .4034 La Sat .4043, 4045 Lenco .4034 Lennox .4050 Lupus .4030 Luxor .4005, 4049 Manhattan .4037, 4045, 4050 Marantz .4011 Maspro .4004, 4023 Matsui .4024, 4048	Pioneer .4021, 4059 Planet .4061 Promax .4037 Prosat .4019 Quadral .4029, 4044 Radiola .4011 Radix .4031, 4064 RFT .4011, 4013, 4019 Saba .4023, 4045 Sabre .4037 Sagem .4056 Salora .4005 SAT .4027, 4038 Satcom .4026, 4051 Satec .4009 Satmaster .4026 Satpartner .4026 Satpartner .4026 Schwaiger .4009, 4041 Seemann .4031, 4046 SEG .4030, 4034 Siemens .4008 Skymaster .4019, 4044, 4051 Sony .4017, 4018 Strong .4062 Sunstar .4023, 4037 Tachniland .4023, 4037			
Comlink .4019 Connexions .4031 Crown .4015 Cyrus .4011 D. D. .4054	Mediamarkt .4015 Mediasat .4059 Minerva .4048 Morgan's .4015, 4043	Techniland .4026 Technisat .4001, 4039 Telefunken .4034 Teleka .4015, 4052 Teleka .4051			
D-Box	Navex .4022 Neuhaus .4039 Neusat .4057 Newhaus .4013 Nokia .4005, 4032, 4037, .4049, 4054, 4063 Nordmende .4029	Telesat .4051 Thomson .4037, 4059 Tonna .4026, 4053 TPS .4056 Triad .4027 Triasat .4040 Unitor .4022			
Finlux .4005, 4024, 4032, 4037 Fracarro .4061 Freecom .4034 FTE Humax .4060 Fube .4030, 4031, 4034 Galaxis .4019, 4057, 4060	Orbitech .4039 Oxford .4024 Pace .4002, 4009, 4014, 4023, .4037, 4055, 4058 Palladium .4048 Palsat .4039	Universum .4008, 4049 Ventana .4011 Vortec .4034 Vtech .4027 Winersat .4022 Wisi .4008, 4027, 4031, 4037			
Galaxis .4019, 4037, 4000 General Instrument .4012 Gold Box .4059 Gooding .4048 Goodmans .4010	Panda	Xcom Multimedia .4065 Xsat .4006, 4065 Zehnder .4033, 4045			

REMOTE CONTROL ACCESSORY DEVICE RELATED BUTTONS

44

A/CH

CONTROL

MUTE

(TV)

- ACC

TV/VCR

■.

SOURCE

ORMAT



When using the TV remote with an accessory device, first make certain it is set to control your accessory device (by the REMOTE CODE or SEARCH method).

Set the TV/DVD/ACC mode switch to the proper position on the remote.

Point the top of the remote toward the front of the accessory device (remote sensor window) when pressing the buttons.

SYSTEM SWITCH

Set in the proper position to send remote commands to the accessory device.

RECORD • BUTTON

Hold the VCR • RECORD button down to begin a VCR recording.

REWIND BUTTON ◀◀ -

Press to rewind tapes. For some VCR's the STOP button may have to be pressed first, then REWIND. May be used to scan back through chapters or titles on DVD movies.

FAST FORWARD BUTTON ▶▶

Press to rapidly advance a tape or DVD. For some accessory devices, you may need to press the STOP button first, then the FAST FORWARD button. In playback mode hold the button down to view the picture moving rapidly in the forward direction.

TV/VCR BUTTON -

Press while in the VCR mode (VCR indicator on the front of the unit will light) to view the playback of a tape. Press again to place in the TV position (VCR indicator light will go off) to view one program while recording another program. When used in the TV mode, the TV/VCR button will will have no functionality.

POWER BUTTON

Press to turn the accessory device ON and OFF.

PLAY BUTTON ▶

Press to begin playback of a video tape, DVD, etc.

STOP BUTTON ■

Press to stop the motion of a tape or to stop the playback of a DVD.

PAUSE BUTTON II

Press to temporarily stop the tape during a playback or recording or pause the playback of a DVD. Press again to release Pause.

CHANNEL + & - BUTTONS

Press to scan up or down through the channel numbers if your accessory device will change channels.

NUMBER BUTTON

Press buttons for direct channel selections. May also be used for direct number entries in certain onscreen menu feature settings.

HELPFUL HINT

The buttons on the remote will not operate your accessory device if those features are not found on your accessory's remote control.

Note: All functions (particularly Search, Rewind, Fast Forward, etc.) will operate the same as with the original remote control provided with your accessory device.

INSTALL CONTROLS

T his TV also provides you with an FM Radio. An FM Radio signal must be connected to the FM Antenna 75 Ω Jack located on the bottom of the TV.

- To enter the FM Mode, press the RADIO button on the remote control. The FM Mode has its own onscreen menu options.
- Press the MENU button on the remote control to display the FM Mode onscreen menu.
- Press the CURSOR UP or DOWN buttons to scroll through the available FM Mode onscreen options. These options include: Language, Auto Program, Manual Store, Sort, or Name.

LANGUAGE - Choose to view the onscreen menu in English, French or Spanish.

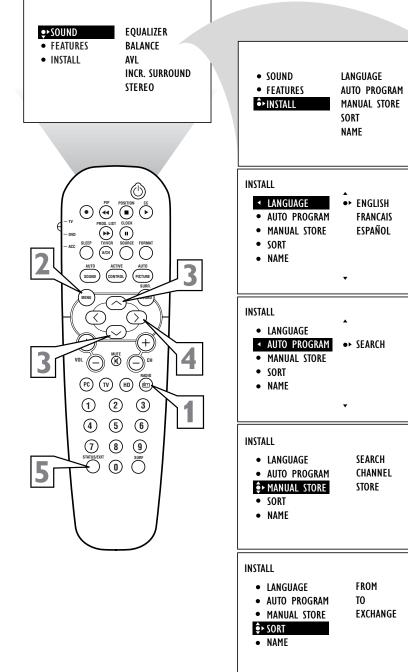
AUTO PROGRAM - The Auto Program control will search the FM antenna signal and store any FM channel it finds in the TV's memory.

MANUAL STORE - This control will allow you to manually tune any available FM signals.

SORT - The Sort Control will allow you to rearrange your stored FM stations in the order you prefer.

NAME - You can label or apply a name to your programmed FM radio stations. Add your own personal name or choose one from the predefined list.

- Press the CURSOR RIGHT button to adjust or select items within the highlighted feature sub-menu.
- Press the STATUS/EXIT button to remove the onscreen menu from the TV screen when finished. Or, let the display time out and the menu will disappear after a few second.



INSTALL

• LANGUAGE

SORT

■ NAME

AUTO PROGRAMMANUAL STORE

◆ PERSONAL



MANUAL STORE/SORT

T o Manually search, store and sort FM channels follow the instructions below:

If in the FM Mode, press the MENU button on the remote control to display the FM Mode onscreen menu.

Press the CURSOR DOWN buttons to highlight the MANUAL STORE option.

Press the CURSOR RIGHT button to shift the menu to the left. SEARCH will be highlighted.

Press the CURSOR RIGHT button to begin the Manual Search of available FM stations. When a station is found, the search will end until activated again.

If the station found is one that you want to keep, press the CURSOR DOWN button to highlight CHANNEL.

Press the CURSOR RIGHT button repeatedly to toggle a list of 40 channel references (FM1 to FM40).

Press the CURSOR DOWN button to highlight STORE. Then, press the CURSOR RIGHT button to store the station to the selected channel reference. The onscreen menu will changed to STORED.

Repeat the process for any other FM Stations.

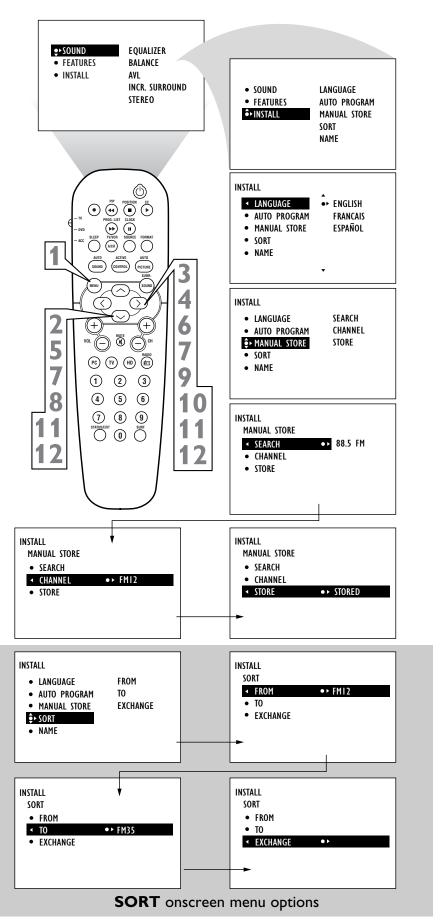
To SORT the channels stored, press the CURSOR DOWN (while in the INSTALL menu options) to highlight the word SORT.

Press the CURSOR RIGHT to shift the menu left. FROM will be highlighted.

Press the CURSOR RIGHT button repeatedly to select one of the channel references (FM1 to FM40) you wish to move.

Press the CURSOR DOWN button to highlight TO. Press the CURSOR RIGHT button repeatedly to select one of the channel references (FM1 to FM40) you want to swap the reference chosen in the previous step to.

Press the CURSOR DOWN to high-light EXCHANGE. Press the CURSOR RIGHT to swap the channel reference.



SOUND CONTROLS

To ensure the best sound quality from the FM Radio feature of this TV, several Sound Controls are available for adjustment.

To enter the FM Mode, press the RADIO button on the remote control. The FM Mode has its own onscreen menu options.

Press the MENU button on the remote control to display the FM Mode onscreen menu.

Press the CURSOR DOWN button until SOUND is highlighted.

Press the CURSOR RIGHT button to shift the menu to the left, accessing the SOUND onscreen menu options. these option include: EQUALIZER, BALANCE, STORE, AVL, INCREDIBLE SURROUND, STEREO, AUDIO OUT, or SPEAKERS.

EQUALIZER - Allows the listener to change the sound frequencies to their liking.

BALANCE - This controls the sound level balance between the right and left TV speakers.

STORE - Once Sound controls are adjusted, activating the STORE control will save those settings in the TV's memory.

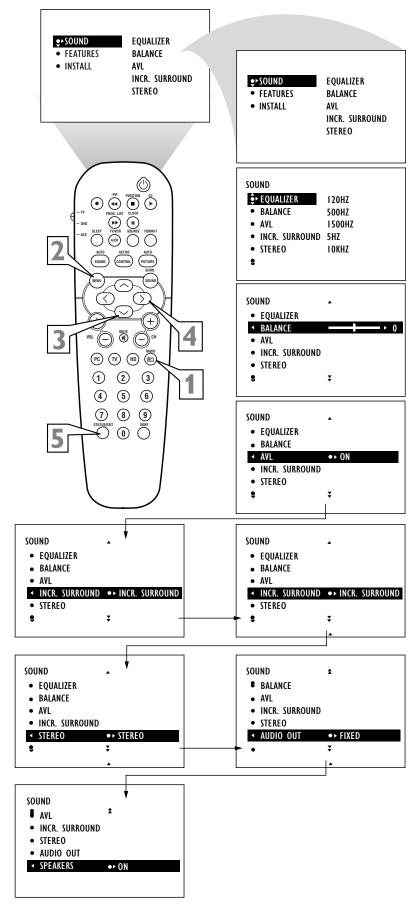
AVL - Automatic Volume Leveler, when ON, will keep the volume level at a consistent level should there be sudden peaks and valleys in sound levels during commercial breaks or channel changes.

INCREDIBLE SURROUND - Allows the user to select a predefined Incredible Surround setting or Stereo when the signal is stereo or Spatial and Mono when the signal is being received in mono.

STEREO - Select Stereo or Mono. If the signal is being received in Mono the control cannot be placed in Stereo.

AUDIO OUT - When using an external stereo for sound reproduction, the Audio Out control will allow FIXED or VARIABLE output options.

SPEAKERS - When using an external speaker system, the Speaker control will allow you to turn the TV speakers ON or OFF.





TIMER CONTROLS

The FM Radio within the TV can be set to turn on and off at a specific time, or tune to a specific channel when it powers on. The Timer controls also allows the FM Display to be turned on or off.

- To enter the FM Mode, press the RADIO button on the remote control. The FM Mode has its own onscreen menu options.
- Press the MENU button on the remote control to display the FM Mode onscreen menu.
- Press the CURSOR DOWN button until TIMER is highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left, accessing the TIMER onscreen menu options. these option include: TIME, START TIME, STOP TIME, CHANNEL, ACTIVATE, or DISPLAY.

TIME - This is simply the Clock setting. Allows you to enter the current time.

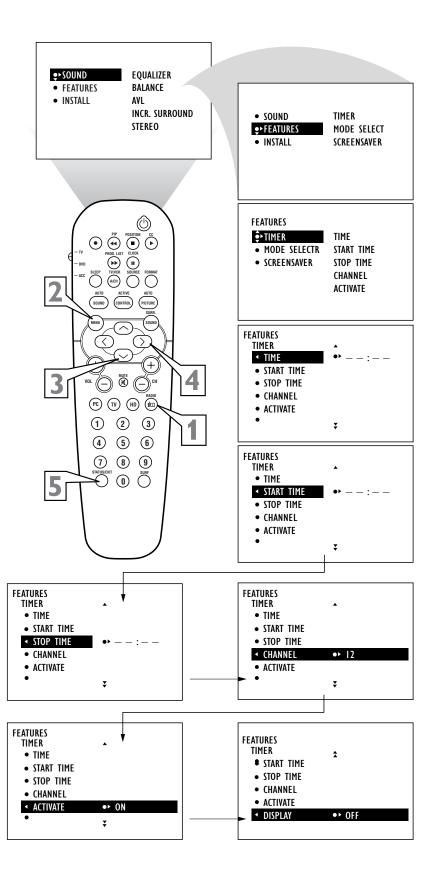
START TIME - This control allows you to set a specific time you want the FM Radio to turn ON.

STOP TIME - This control allows you to set a specific time you want the FM Radio to turn OFF.

CHANNEL - This controls allows you to set a specific channel you want the FM Radio to tune to when it powers on.

ACTIVATE - Once the Time and channel controls have been adjusted, set Activate to ONCE or DAILY. ONCe will activate the process one time, while DAILY will activate the TIMER controls every week day.

DISPLAY - If set to ON, the Display control will display the current time on the TV screen when in the FM Mode.



MODE SELECT CONTROLS

The Mode Select options allow you to move to other operating modes within he TV. When in the FM Mode, choose from TV, PC, or HD Modes.

If in the FM mode, press the MENU button on the remote control to display the FM Mode onscreen menu.

Press the CURSOR DOWN button until MODE SELECT is highlighted.

Press the CURSOR RIGHT button to shift the menu to the left, accessing the Mode Select onscreen menu options.

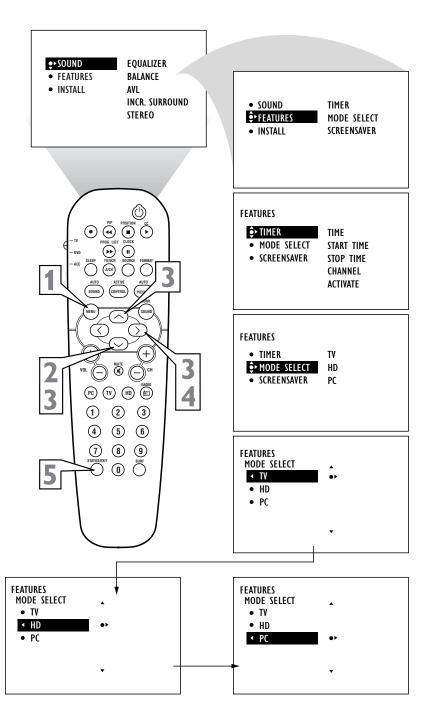
Press the CURSOR UP or DOWN buttons to choose TV, PC, or HD.

TV - This will switch the TV back to the TV Mode of operation.

PC - This control will switch the TV to the PC Mode of operation. Note a PC signal must be present for this to work, or the TV will go into standby mode.

HD - This control will set the TV to the High Definition Mode.

Press the CURSOR RIGHT button to activate the selected control and change to the highlighted mode.





SCREENSAVER CONTROL

While in the FM Mode, there is a Screensaver option that can be used. The Screensaver control, when on, will circulate the screen station indication around the display.

If in the FM mode, press the MENU button on the remote control to display the FM Mode onscreen menu.

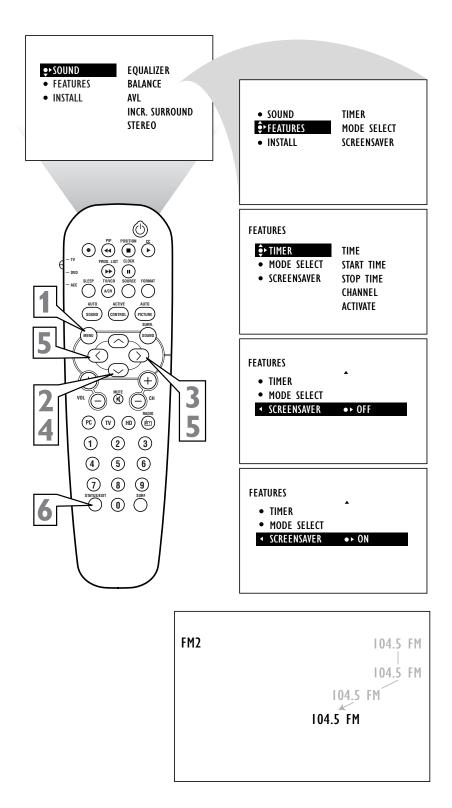
Press the CURSOR DOWN button until FEATURES is highlighted.

Press the CURSOR RIGHT button to shift the menu to the left. TIMER will be highlighted.

Press the CURSOR DOWN button until SCREENSAVER is highlighted.

Press the CURSOR RIGHT or LEFT button to toggle the Screensaver control ON or OFF.

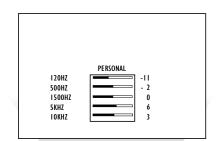
With the Screensaver control set to ON, the display will shift around the screen pausing in one place for a brief moment.

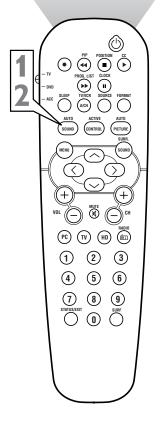


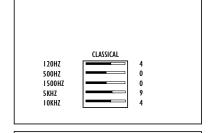
AUTOSOUND™ CONTROLS

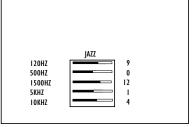
A utoSound™ allows you to select from four factory-set controls and a personal control that you set according to your own preferences through the onscreen Sound menu within the FM Mode. The four factory-set controls (Classical, Jazz Pop, or Rock) enable you to tailor the sound so as to enhance the particular program you are listening to.

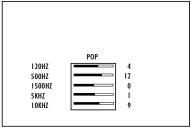
- If in the FM mode, press the AUTO SOUND button on the remote control to display the first AutoSoundTMoption on the screen.
- Press the AUTO SOUND button repeatedly to toggle through the factory pre-defined setting for the following musical styles: CLASSICAL, JAZZ, POP, ROCK or PERSONAL (the way you set the equalizer).

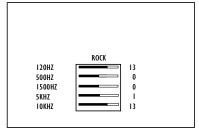














PICTURE CONTROLS

The HD Mode offers certain Picture, Sound and Blocking options within its onscreen menu. Below is a list of Picture Menu options.

Press the HD button on the remote control to place the TV in the HD Mode (HD1).

Press the MENU button on the remote control to display the HD Mode onscreen menu. The PICTURE option will be highlighted.

Press the CURSOR UP or DOWN buttons until PICTURE is highlighted.

Press the CURSOR RIGHT button to shift the menu to the left, accessing the Picture onscreen menu options.

Press the CURSOR UP or DOWN buttons to highlight any of the HD Mode Picture Controls. Choose from: BRIGHTNESS, COLOR, PICTURE, SHARPNESS, TINT, COLOR TEMP, or VIEW FORMAT.

BRIGHTNESS - This control will adds or subtracts light from the darkest part of the picture.

COLOR - This control adds or eliminates color intensity from the picture.

PICTURE - This control improves the detail of the lightest parts of the picture.

SHARPNESS - This control improves the detail in the picture.

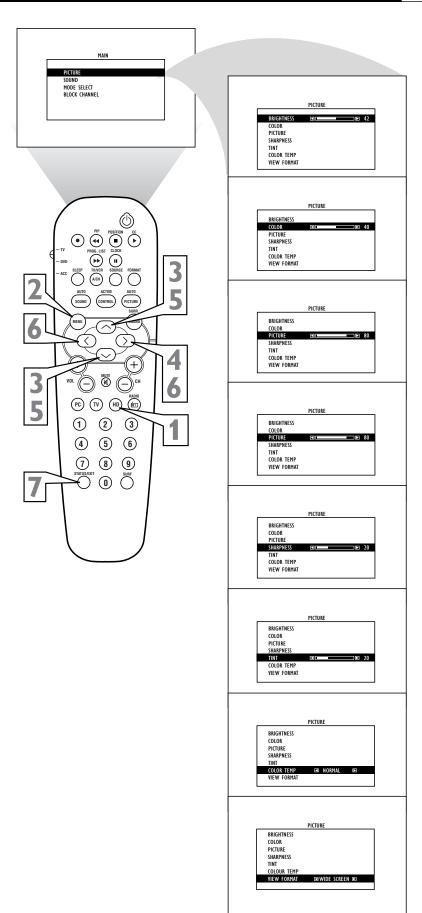
TINT - This control adjusts the picture to obtain natural skin tones.

COLOR TEMP - Choose from NOR-MAL (keeps whites, white), COOL (makes whites, bluish), or WARM (makes whites, reddish) picture preferences.

VIEW FORMAT - Choose between the FULL SCREEN or WIDE SCREEN formats.

Press the CURSOR RIGHT or LEFT

buttons to adjust the selected control.
 Press the STATUS/EXIT button to remove the onscreen menu from the TV screen when finished. Or, let the display time out and the menu will disappear after a few second.



SOUND CONTROLS

The HD Mode also offers certain Sound control adjustments to fine tune the sound being heard when in the HD Mode.

- Press the HD button on the remote control to place the TV in the HD Mode (HD1).
- Press the MENU button on the remote control to display the HD Mode onscreen menu. The PICTURE option will be highlighted.
- Press the CURSOR UP or DOWN buttons until SOUND is highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left, accessing the SOUND onscreen menu options.
- Press the CURSOR UP or DOWN buttons to highlight any of the HD Mode Sound Controls. Choose from: EQUALIZER, BALANCE, or AVL.

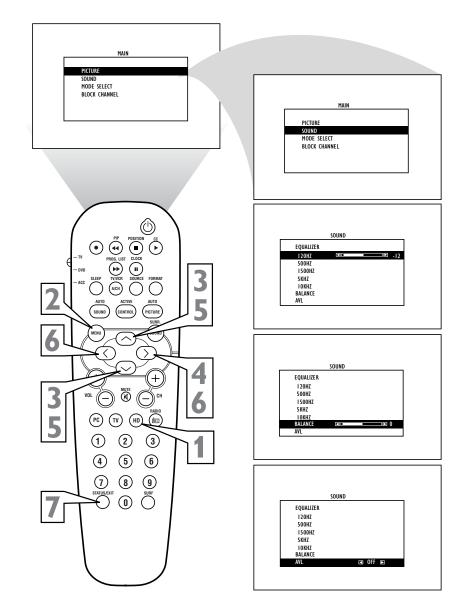
EQUALIZER - Allows the listener to change the sound frequencies to their liking.

BALANCE - This controls the sound level balance between the right and left TV speakers.

AVL - Automatic Volume Leveler, when ON, will keep the volume level at a consistent level should there be sudden peaks and valleys in sound levels during commercial breaks or channel changes.

Press the CURSOR RIGHT or LEFT buttons to adjust the selected control.

Press the STATUS/EXIT button to remove the onscreen menu from the TV screen when finished. Or, let the display time out and the menu will disappear after a few second.

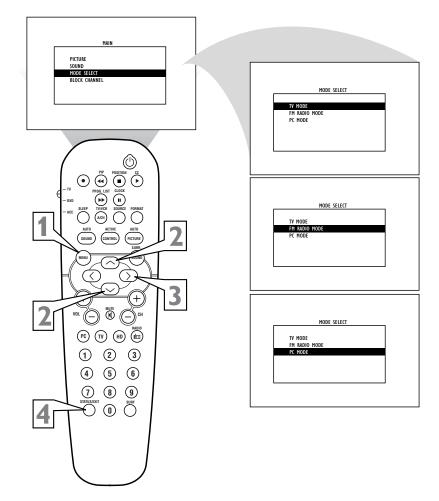




HD SELECT CONTROL

The HD Select Control will allow you to quickly change from the HD Mode of operation to the TV, FM Radio, or PC Modes.

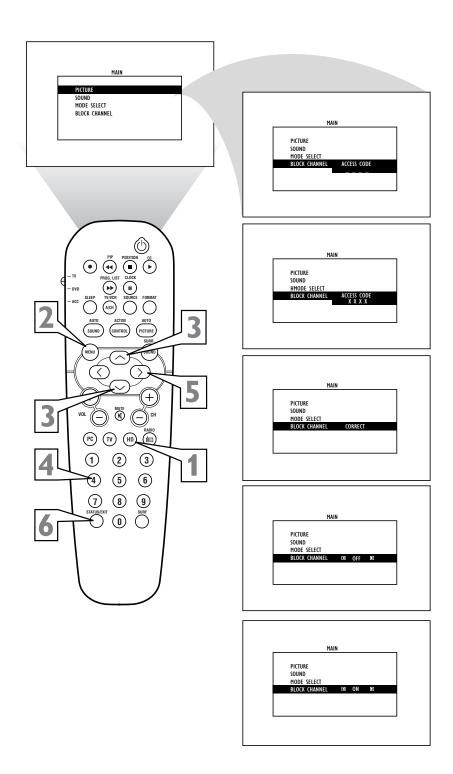
- **If in the HD Mode, press the MENU button** on the remote control to display the HD Mode onscreen menu. The PIC-TURE option will be highlighted.
- Press the CURSOR UP or DOWN buttons until MODE SELECT is highlighted.
- Press the CURSOR RIGHT button to shift the menu to the left displaying the MODE SELECT options. Choose from TV MODE, FM RADIO MODE, or PC MODE.
- **Press the CURSOR RIGHT button** to activate the highlighted mode control.



BLOCK CHANNEL CONTROL

The HD Mode channel can be blocked to censor the viewing of programming not suitable for children. To block the HD Mode channel, follow the steps below.

- Press the HD button on the remote control to place the TV in the HD Mode (HD1).
- Press the MENU button on the remote control to display the HD Mode onscreen menu. The PICTURE option will be highlighted.
- Press the CURSOR UP or DOWN buttons until BLOCK CHANNEL is highlighted.
- Press the NUMBERED buttons and enter your four digit Access Code that was setup for the TV AutoLock feature. The Block Channel Control will be available for adjustment
- Press the CURSOR RIGHT button to toggle the control ON or OFF. If set to ON, the HD1 channel (mode) will not allow viewing of programs. This control would have to be set to OFF to make the HD1 channel (mode) viewable.
- Press the STATUS/EXIT button to remove the onscreen menu from the TV screen when finished.



SETTING UP THE PC MODE (PERSONAL COMPUTER MONITOR)



PC Mode Controls

The TV can be used as a PC Monitor. A PC video signal must be present or the TV will go into standby mode.

Follow the steps below to access and adjust the onscreen PC Menu controls.

Press the PC button on the remote control to place the TV in the PC Mode.

Press the MENU button on the remote control to display the PC Mode onscreen menu. The AUDIO SELECTION option will be highlighted.

Press the CURSOR UP or DOWN buttons to highlight any of the listed onscreen menu options.

Choose from:

AUDIO SELECTION - Will allow the Audio Source to come from the PC, the TV, or the FM Radio.

BRIGHTNESS & CONTRAST -

Allows you to adjust the Brightness and Contrast picture levels.

ADJUST COLOR - This control allow you to set the Color Temperature of the picture. Choose between the Normal, Cool or Warm pre-defined settings.

VIDEO NOISE - Will allow you to remove any flickering Vertical or Horizontal bars that may appear on the screen.

ADJUST POSITION - This control will allow you to move the onscreen picture horizontally or vertically for better viewing pleasure.

AUTO ADJUST - The Auto Adjust will automatically adjust the control based on the signal being received to give the best possible picture.

PIP CONTROLS - change the Size and Position of the PIP window on the screen when the PIP button is used.

MODE SELECT - Enter the TV or FM Mode using this control.

RESET TO FACTORY SETTINGS -

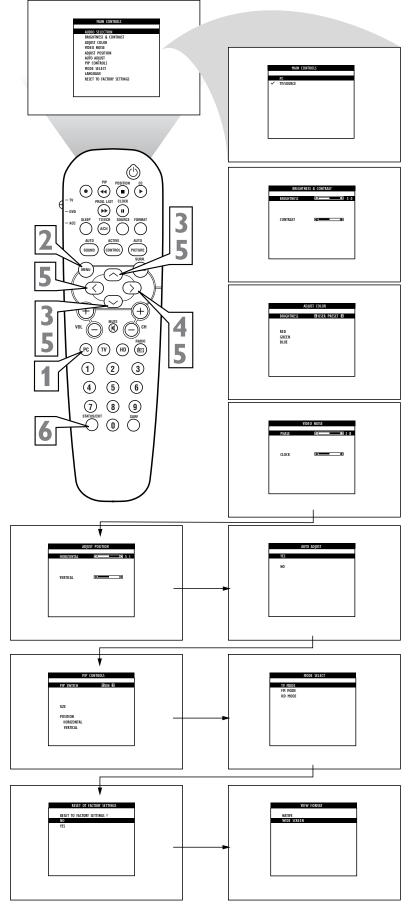
Will reset all setting to the factory default values.

VIEW FORMATS - Choose between the NATIVE (the format that is dictated by the type of accessory device being used) and WIDE SCREEN formats.

Press the CURSOR RIGHT button to enter the sub-menu of any of the high-lighted onscreen menu controls.

Use the CURSOR UP, DOWN, RIGHT or LEFT buttons to navigate, adjust or activate the specific controls.

Press the STATUS/EXIT button to remove the onscreen menu from the TV screen when finished.





SETTING UP THE PC MODE (PERSONAL COMPUTER MONITOR)

No.	Resolution	Refresh Rate	Vertical Sync	Horizontal Sync	Horizontal Polarity	Pixel Frequency
I	640 x 480	60 Hz	N	31,500 kHz	N	25,175 MHz
2		67 Hz	N	35,000 kHz	N	30,240 MHz
3		72 Hz	N	37,900 kHz	N	31,500 MHz
4		75 Hz	N	37,500 kHz	N	31,500 MH
5		85 Hz	N	43,300 kHz	N	36,000 MHz
6	720 x 400	70 Hz	P	31,469 kHz	N	28,322 MHz
7	800 x 600	56 Hz	Р	35,100 kHz	Р	36,000 MHz
8		60 Hz	Р	37,900 kHz	P	40,000 MHz
9		72 Hz	P	48,100 kHz	P	50,000 MHz
10		75 Hz	P	46,900 kHz	Р	49,500 MHz
П		85 Hz	P	53,700 kHz	Р	56,250 MHz
12	832 x 624	75 Hz	P	49,700 kHz	Р	57,300 MHz
13	1024 x 768	60 Hz	N	48,400 kHz	N	65,000 MHz
14		70 Hz	N	56,500 kHz	N	75,000 MHz
15		75 Hz	P	60,000 kHz	P	78,750 MHz
16		85 Hz	P	68,700 kHz	P	94,500 MHz
17	1152 x 864	75 Hz	P	67,500 kHz	Р	108,000 MHz
18	1280 x 960	60 Hz	P	60,000 kHz	Р	108,000 MHz
19	1280 x 1024	60 Hz	P	64,000 kHz	Р	108,000 MHz
20		75 Hz	P	80,000 kHz	P	135,000 MHz

TROUBLESHOOTING TIPS



No Power

- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the POWER button again.
- Check that the outlet is not on a wall switch.
- Be sure the fuse is not blown on the AC power strip, if one is being used.

No Picture

- Check antenna/cable connections. Are they properly secured to the TV's ANT 75Ω plug?
- Check the TUNER MODE control for the correct tuner setting.
- Try running the Auto Program feature to find all available channels.
- Press the SOURCE button on the remote to make sure the correct signal source is selected.
- If using an accessory device, be sure that it is functioning properly.
- If in PC Mode, a video signal MUST BE present or the TV will turn off.

No Sound

- · Check the VOLUME buttons.
- Check the MUTE button on the remote control.
- If you're attempting to hook up auxiliary equipment, check the audio jack connections.

TV Only Produces MONO Sound

- If using a cable box with RF only type connections, the signal coming from the cable box will be produced in MONO only.
- Check Sound control setting. Change setting to Stereo.

Remote Does Not Work

- Check the batteries. If necessary, replace them with AA Heavy Duty (Zinc Chloride) or Alkaline batteries.
- Clean the remote control and the remote control sensor window on the TV.
- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the POWER button again.
- Be sure the fuse is not blown on the AC power strip, if one is being used.
- Check to be sure the TV outlet is not on a wall switch.
- Be sure that the remote is in the correct operating mode.
- Be sure the remote is pointed at the Remote Sensor Window on the TV. See page 1 of the *Quick Use Guide* for details.

TV Displays Wrong Channel or No Channels Above 13

- Repeat channel selection.
- Add the desired channel numbers (using the CHANNEL EDIT control) into the TV's memory.
- Check to be sure the TUNER MODES are set to the CABLE option and run the Auto Program feature to find all available channels.

CLEANING AND CARE



WARNING Concerning Stationary Images on the TV Screen:

Do not leave stationary or letterbox images on screen for extended periods of time. This can cause uneven display aging.

Normal use of the TV should involve the showing of pictures that contain constantly moving and changing images that fill the screen. Be careful not to leave nonmoving images on screen for extended periods of time, or to display the same images on screen too frequently, because subtle ghost images can be left on the picture tubes. Sources of stationary images may be DVD disks, laser disks, video games, CD-i disks, videotapes, digital television boxes, broadcast channels, cable channels, satellite channels, and others. Here are some examples of stationary images (this is not an all-inclusive list; you may encounter others in your viewing):

- DVD menus—listings of DVD disk content
- **Letterbox black bars**—shown at the top and bottom of the TV screen when a wide screen (16:9) movie is viewed on a TV with standard (4:3) aspect ratio.
- · Video-game images and scoreboards
- **Television station logos**—present a problem if they are bright and stationary; moving or low-contrast graphics are less likely to cause uneven aging of the picture tube
- Stock-market tickers—presented at the bottom of the TV screen
- Shopping channel logos and pricing displays—bright and shown constantly or repeatedly in the same location on the TV screen.

PLACEMENT OF THE TV

- To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot; for example, in direct sunlight or near a heating appliance.
- Be sure to allow a free flow of air to and from the perforated back cover of the set.

CLEANING

- To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning.
- Regularly dust the TV with a dry, nonscratching duster to keep the TV clean.
- When cleaning the TV, take care not to scratch or damage the screen surface. Avoid wearing jewelry or using anything abrasive. Do not use household cleaners. Wipe the front screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning.
- Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool, clear water and a mild soap or detergent. Use a clean, dry cloth to dry the wiped surfaces.
 Do not use acetone, toluene, or alcohol to clean the screen.
- Occasionally vacuum the ventilation holes or slots in the back cover of the set.
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.



GLOSSARY OF TERMS

Active Control • Active Control continuously measures and corrects the incoming signals to provide the best picture possible.

Audio/Video Inputs • Jacks (standard RCA), located on the back of the TV, used for external accessory devices. These jacks are designed to receive higher picture resolution and offer sound-connection options.

Auto Programming • When activated, this feature scans for all available channels from regular antenna or cable signals and stores only active broadcast stations in the TV's memory.

Channel Edit • The feature that allows you to add or delete channels from the list of channels stored in the TV's memory.

Closed Captioning • The broadcast standard feature that allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, Closed Captioning shows dialogue and conversations while a TV program is in progress.

Coaxial Cable • A single solid wire normally matched with a metal plug (F-type) end connector that screws (or pushes) directly onto a 75-ohm input found on the television or VCR.

Component Video Inputs • Inputs that allow the separate reception of blue, red, and luminance signals. These inputs provide the highest possible color and picture resolution in the playback of digital signal-source material, such as the kind available from DVD players.

Composite Video Input • An input in which all the components required for displaying the onscreen image are combined in one signal.

High-definition Television (HDTV) • High-resolution digital television.

Incredible Surround • False acoustic management of the audio signal that produces a dramatic expansion of the wall of sound that surrounds the listener and heightens overall viewing pleasure.

Menu • An onscreen list of feature controls available for you to adjust or set.

Onscreen Displays (OSD) • The wording or messages generated by the television (or VCR) to help you with specific feature controls (color adjustment or programming, for example).

Remote Control Sensor Window • The window or opening found on the television control panel through which infrared remote control command signals are received.

Second Audio Program (SAP) • An additional audio channel provided for in the Multichannel Television Sound (MTS) broadcast standard. A monaural soundtrack included within the recorded or video signal (usually containing a second language translation for the displayed programming).

Status/Exit Button • The remote control function that allows you to quickly confirm what channel number you are watching. Status/Exit can also be used to clear the television of onscreen displays or information. You can use Status/Exit rather than having to wait for the displays to "time out," or automatically disappear from the screen.

S-Video Input • Signal input that allows direct connection of high-resolution video sources, such as a satellite receiver, DVD player, S (Super)-VHS videocassette recorder, or video games. Provides improved picture resolution, sharpness, and clarity.

Tint • TV function that allows you to change the general color balance between cool and warm. Adjust tint according to your personal preference.

INDEX



Cleaning and Care	AutoLock Controls	
	Access Code	25
FM Radio Mode Controls	Block Channels	26
AutoSound TM Control	Blocking Options	30
Install Menu Controls	Clear All Blocked Channels	27
Auto Program Control	Movie Ratings	28
Language Control	Review Screen	31
Manual Store Control	TV Ratings	29
Name (FM Channel Label) Control	Understanding the AutoLock TM Control	24
Sort Control	AutoSound TM Control	37
Mode Select Control	Auto Program Control	8
Screensaver Control	AutoPicture TM Control	36
Sound Adjustment Controls	AVL (Auto Volume Leveler) Control	15
Audio Out Control	Balance Control	14
AVL (Auto Volume Leveler) Control	Channel Edit (Add or Delete Channels) Control	9
Balance Control	Closed Captioning Control	32
Equalizer Controls	Equalizer Control	
Incredible Surround Control	Incredible Surround Control	16
Speaker Control	Language Control	6
Stereo Control	Mode Select Control	22
<i>Timer Controls</i>	Name (Channel Label) Control	11
Glossary of Terms	Picture Adjustment Controls	12
HD Mode Controls	Program List Control	34
Block Channel Control56	Remote Control Programming for Accessory Devices	
HD Installation Control55	Accessory Device Remote Control Buttons	45
<i>Mode Select Control</i>	Code Entry Method	40
Picture Adjustment Controls53	Code List	12-44
Sound Adjustment Controls54	Direct Access Method	39
Index	Search Method	41
PC Mode Controls	SAP (Secondary Audio Programming) Control	18
Registration Information	Sleeptimer Control	35
Safety/Precautions	Stereo/Mono Control	17
Table of Contents	Surf Control	38
Troubleshooting Tips	Timer Controls	21
TV Mode Controls	Tuner Mode Control	7
Active Control	TV Speaker Control	20
Audio Out Control	Widescreen (Screen Format) Control	33
AutoChron TM Control	Warranty	

RENEWED 90 DAY LIMITED WARRANTY