

Your Television's Directions for Use

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Let's make things better.



PHILIPS

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
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.

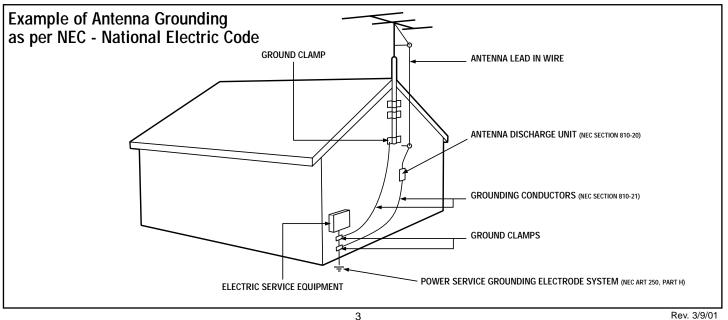
IMPORTANT SAFETY INSTRUCTIONS Read before operating equipment

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- 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.
- 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.
- 13. 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:
 - The power supply cord or the plug has been damaged:
 - Objects have fallen, or liquid has been spilled into the appliance; or
 - The appliance has been exposed to rain; or
 - The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - 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 éndanger 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.

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.



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vision models. Not all features (and illustrations) discussed here-

NOTE: This owner's manual is used with several different television models. Not all features (and illustrations) discussed herein will necessarily match your television set. This is normal and does not require that you contact your dealer or request service.

Because of continuous product improvements, the information mentioned in the documents accompanying your product are subject to change without notice.

SOUND MENU

Adjusting the Treble, Bass,
and Balance
Using the AVL (Audio Volume Leveler)
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SETUP AND QUICK USE GUIDE

Refer to the simple *Setup and Quick Use Guide* (supplied with your TV) for details on the following:

- · Basic TV Connections
- Television and Remote Operation
- On-screen Menu Controls
- How to Use the Installation Features
- Connection Options for Accessory Devices



AutoLock, AutoPicture, AutoSound, ImageMax, and Incredible Surround are trademarks of Philips Consumer Electronics Company. Copyright © 2001 Philips Consumer Electronics Company. All rights reserved.

FEATURES

Audio/Video Jack Panel allows direct connections with VCRs, DVDs, or other accessory 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 Program scans 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 push a button and adapt your television's picture to various types of programming, such as sports, movies, and multimedia (games), as well as to the occurrence of a weak broadcast signal.

AutoSound 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 to enhance the particular programming you are watching.

Bass Boost increases the low-frequency range of the TV's sound.

Channel Edit allows you to add or delete channels from the list stored in the TV's memory. Channel Edit makes it easy to limit or expand the number of channels that are available to you when you press the Channel Scan (+,-) buttons on your remote control.

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

Dynamic Noise Reduction (DNR) can help eliminate broadcast signal noise ("speckles" in the picture).

ImageMax helps you sharpen the picture quality by making dark portions of the picture darker and lighter portions brighter.

Incredible Surround boosts the TV's sound, making it broader and fuller.

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

On-screen Menu shows helpful messages and instructions for adjusting or setting TV feature controls (can be viewed in English, French, or Spanish).

Sleep Timer automatically turns the TV off after a set amount of time of your choice.

Standard Broadcast (VHF/UHF) or Cable TV (CATV) channel capability allows for viewing by antenna or cable.

Stereo capability, including a built-in audio amplifier and twin-speaker system, allows for the reception of TV programs broadcast in stereo sound.

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 on-screen menu).

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

Two Tuners (ANT[enna] "A" and PIP ANT[enna] "B") enable you to connect two different broadcast signals to your TV at once. On screen these signal sources are referred to as "Tuner-A" and "Tuner-B."

Digital-Ready Projection TV

This Projection Television is capable of connecting to both the current analog television signals of today as well as interfacing with new, upcoming digital source playback products and devices. This TV includes multiple signal connectors (Component Video, S-Video, and Composite Video), which give you a variety of equipment playback options for digital set-top boxes, satellite receivers, cable boxes, and other digital devices.

While there may exist some digital devices with connections not available on this television, you should be adequately prepared for the vast majority of products coming onto the digital consumer electronics' market. **NOTE:** You should always use the connection output on digital devices that gives the highest level of picture quality possible. As listed above, the Component Video (or Y PB PR) input delivers the best color and picture reproduction, followed by S-Video, and then Composite Video. In addition to these inputs, your television also includes the standard 75-ohm cable signal connector for use with antennas or analog cable boxes.

Items Included with This TV

As you unpack your TV, please note that this *Directions for Use* manual contains the following:

- Safety Tip Information
- Factory Service Center Locations.

Also included with your set are the following:

- Warranty Registration Card
- Remote Control Transmitter
- Batteries for Remote Control Use.

Please take a few minutes to complete your registration card. The serial number for the TV is on the back of the set.

Refer to the back of this manual for instructions in the cleaning and care of the TV.

End-of-Life Disposal

Your new projection television and its packaging contain materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and minimize the amounts that need to be properly disposed. The batteries used by your product should not be thrown away when depleted but should be handed in and disposed of as small chemical waste. Please find out about the local regulations concerning how to dispose of your old television, batteries, and packaging materials whenever it is time to replace them.

ADJUSTING THE PICTURE

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

(BEGIN)

- On the remote control to show the onscreen menu.
- 2 Press the CURSOR RING RIGHT.
 BRIGHTNESS will be highlighted and an adjustment bar will be shown to the right.
- Press the CURSOR RING RIGHT or LEFT to adjust the BRIGHTNESS level of the picture. Or press the CUR-SOR RING DOWN to select another picture control to adjust.
- Press the STATUS/EXIT button to remove the menu from the screen.





When the bar scale is centered, the control settings are at normal, midrange levels. Picture adjustment controls are described here.

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.

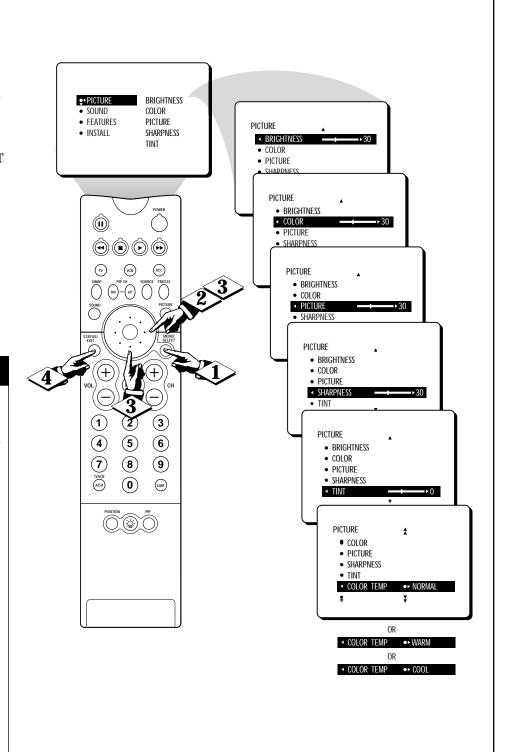
TINT—adjusts the picture to obtain natural skin tones.

COLOR TEMP—offers NOR-MAL, COOL, or WARM picture preferences.

NORMAL—keeps whites, white.

COOL—makes whites, bluish.

WARM—makes whites, reddish.



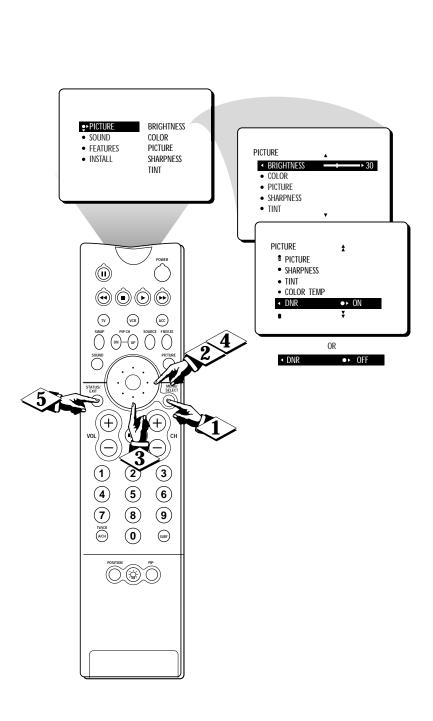
TURNING ON THE DYNAMIC NOISE REDUCTION (DNR) CONTROL



Because of poor cable reception or other difficulties, the picture can sometimes appear slightly "speckled" (an indication of signal noise in the picture). The DNR (Dynamic Noise Reduction) control can help eliminate this type of interference and improve the quality of the picture.

- Press the MENU/SELECT button on the remote to show the onscreen menu.
- Press the CURSOR RING
 RIGHT to enter the PICTURE menu.
- Press the CURSOR RING
 DOWN repeatedly until the DNR
 control is highlighted.
- 4 Press the CURSOR RING
 RIGHT or LEFT to switch DNR ON
 or OFF.
- 5 Press the STATUS/EXIT button to remove the menu from the screen.



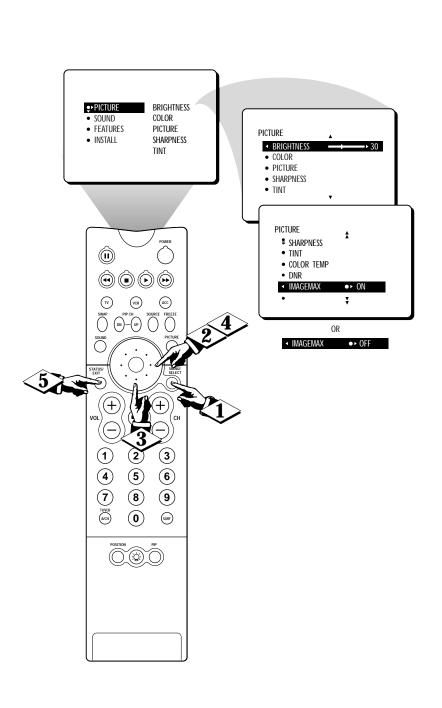


TURNING ON THE IMAGEMAX CONTROL

ImageMax helps you sharpen the picture quality by making dark portions of the picture darker and light portions of the picture brighter. Follow these steps to turn ImageMax on

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING
 RIGHT to enter the PICTURE menu.
- Press the CURSOR RING
 DOWN repeatedly until the IMAGEMAX control is highlighted.
- 4 Press the CURSOR RING
 RIGHT or LEFT to switch between
 ON and OFF.
- 5 Press the STATUS/EXIT button to remove the menu from the screen.





CONVERGE RED/BLUE

The influence of magnetic fields and changes in the position of the TV may cause screen colors not to line up properly. The result on your TV screen will be red or blue colors appearing around the edges of images.

If various images on the entire picture have red outlines, adjust the CON-VERGE RED control. Then if any red outlines remain, adjust the MULTI-POINT RED control.

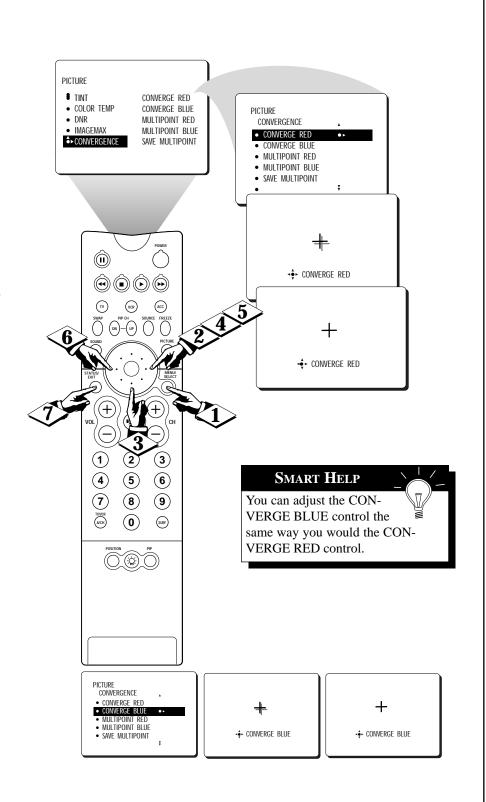
If various images on the entire picture have blue outlines, adjust the CON-VERGE BLUE control. Then if any blue outlines remain, adjust the MUL-TIPOINT BLUE control.

Use the UNDO MULTIPOINT control if you want to restore the picture screen to the way it was before you made Multipoint adjustments.

NOTE: After turning the TV set on, allow it to warm up for 15 minutes before adjusting the Convergence controls.

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING
 RIGHT to enter the PICTURE menu.
- 3 Press the CURSOR RING DOWN repeatedly until CONVERGENCE is selected.
- 4 Press the CURSOR RING RIGHT to enter the CONVER-GENCE menu.
- 5 Press the CURSOR RING RIGHT to enter CONVERGE RED mode.
- 6 Press the CURSOR RING
 LEFT, RIGHT, UP, or DOWN to
 adjust the cross image until the color
 outline around it is gone.
- 7 Press the STATUS/EXIT button to exit the menu from the screen.





CONVERGE MULTIPOINT RED/BLUE

If various images on the entire picture have red outlines, adjust the CONVERGE RED control. Then if any red outlines remain, adjust the MULTIPOINT RED control.

Likewise, if various images on the entire picture have blue outlines, adjust the CONVERGE BLUE control. Then if any blue outlines remain, adjust the MULTIPOINT BLUE control.

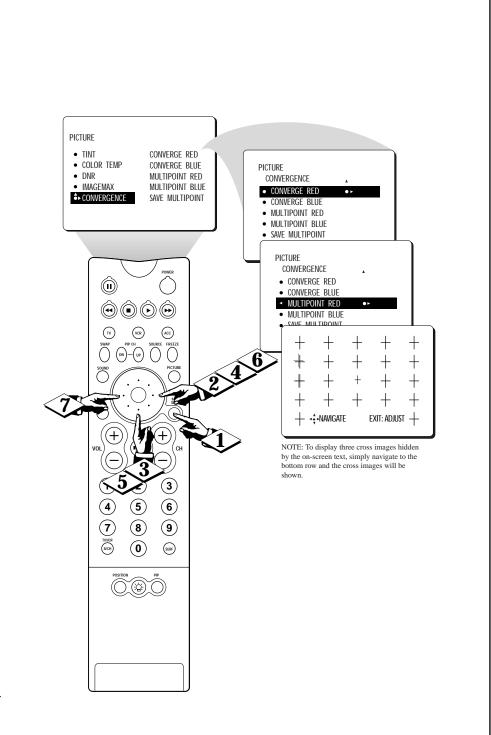
Use the UNDO MULTIPOINT control if you want to restore the picture screen to the way it was before you made Multipoint adjustments.

NOTE: After turning the TV set on, allow it to warm up for 15 minutes before adjusting the Convergence controls.

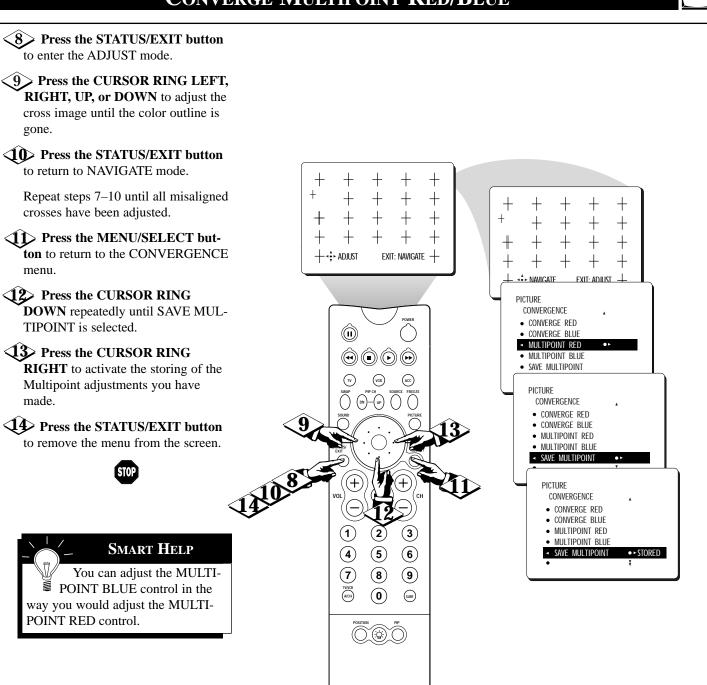
(BEGIN)

- ton on the remote control to show the on-screen menu.
- Press the CURSOR RING
 RIGHT to enter the PICTURE menu.
- 3 Press the CURSOR RING DOWN repeatedly until CONVER-GENCE is selected.
- 4 Press the CURSOR RING RIGHT to enter the CONVERGENCE menu.
- 5 Press the CURSOR RING DOWN repeatedly until MULTI-POINT RED is selected.
- 6 Press the CURSOR RING RIGHT to enter NAVIGATE mode.
- Press the CURSOR RING
 LEFT, RIGHT, UP, or DOWN to
 move to a cross image that has a color
 outline.

Go to step 8 on the next page.



CONVERGE MULTIPOINT RED/BLUE

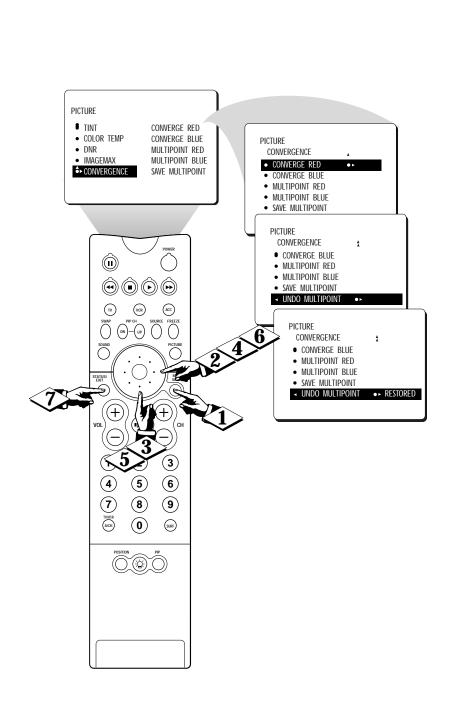


UNDO MULTIPOINT

The UNDO MULTIPOINT control allows you to restore the TV's picture screen to the way it was before you made Multipoint adjustments.

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING RIGHT to enter the PICTURE menu.
- 3 Press the CURSOR RING DOWN repeatedly until CONVER-GENCE is selected.
- Press the CURSOR RING RIGHT to enter the CONVERGENCE menu.
- 5 Press the CURSOR RING
 DOWN repeatedly until UNDO
 MULTIPOINT is selected.
- 6 Press the CURSOR RING
 RIGHT to activate the restoring of
 the previous picture screen.
- 7 Press the STATUS/EXIT button to remove the menu from the screen.





SETTING THE CLOCK



Your television comes with an onscreen clock. During normal operation, the clock appears on the screen when the STATUS/EXIT button is pressed or if the TIMER DISPLAY control is turned ON.

(BEGIN)

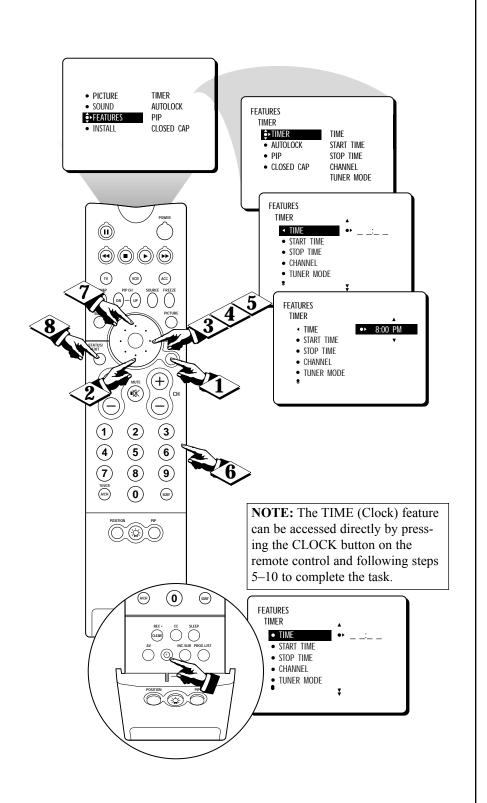
- On the remote control to show the onscreen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- 4 Press the CURSOR RING RIGHT again to shift the display left and highlight the TIME control.
- 5 Press the CURSOR RING RIGHT again to highlight the time indicator area.
- 6 Press the NUMBER buttons to enter the correct time. If you make a mistake entering the time, use the CURSOR RING LEFT or RIGHT to move among the input slots to make corrections. NOTE: You may also use the CURSOR RING UP or DOWN to cycle through digits to input the time.
- 7 Press the CURSOR RING UP or DOWN to select AM or PM.
- 8 Press the STATUS/EXIT button to remove the menu from the screen.





SMART HELP

- For single-digit entries, be sure to press 0 first and then the hour number.
- If you'd like, set the clock automatically using the AutoChron feature (page 6, Setup and Quick Use Guide).
- Clock settings may be lost when the TV is unplugged or when AC power to the set is interrupted.





SETTING THE START TIME

You can set the TV to turn itself on at a specific time, just as you would an alarm clock. Follow these steps to set the Start Time.

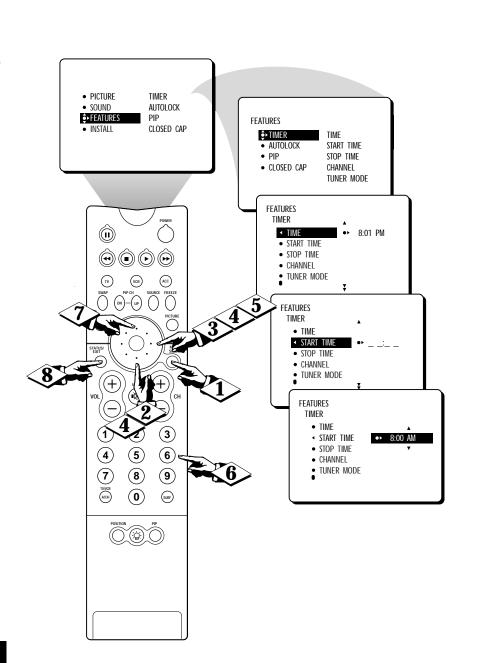
(BEGIN)

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 RIGHT again. Then press the CURSOR RING DOWN once to highlight the START TIME control.
- 5 Press the CURSOR RING RIGHT again to highlight the time indicator area.
- 6 Press the NUMBER buttons to enter the correct time. If you make a mistake entering the time, use the CURSOR RING LEFT or RIGHT to move among the time input slots to make corrections. NOTE: You can also use the CURSOR RING UP or DOWN to cycle through digits to input the time.
- Press the CURSOR RING UP or DOWN to select AM or PM.
- Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

You can set STOP TIME similarly to the way you set START TIME. Instructions are on the next page.



SETTING THE STOP TIME

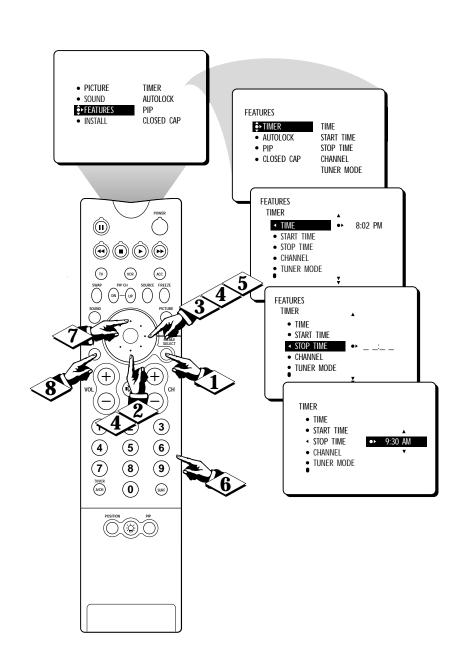


Jse the START TIME control to set the TV to turn itself on at a specific time (see the previous page). The following steps will guide you in setting the TV to turn itself off.

BEGIN

- 1 Press the MENU/SELECT button on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- 4 Press the CURSOR RING RIGHT again. Then press the CURSOR RING DOWN twice to highlight the STOP TIME control.
- 5 Press the CURSOR RING RIGHT to highlight the time indicator area.
- 6 Press the NUMBER buttons to enter the correct time. If you make a mistake entering the time, use the CURSOR RING LEFT or RIGHT to move among the input slots to make corrections. NOTE: You can also use the CURSOR RING UP or DOWN to cycle through digits to input the time.
- 7 Press the CURSOR RING UP or DOWN to select AM or PM.
- 8 Press the STATUS/EXIT button to remove the menu from the screen.





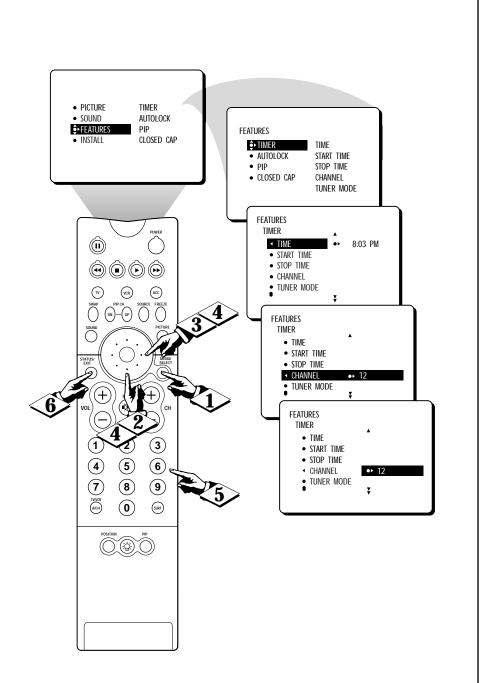


SELECTING THE CHANNEL

You can select a specific channel that the television will tune to when the timer turns the set on. Follow these steps to select the channel.

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING
 DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 RIGHT. Then press the CURSOR
 RING DOWN repeatedly until the
 CHANNEL control is highlighted.
- 5 Press the NUMBER buttons to enter the desired start-up channel. Or press the CURSOR RING RIGHT repeatedly to enter the start-up channel you want.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.





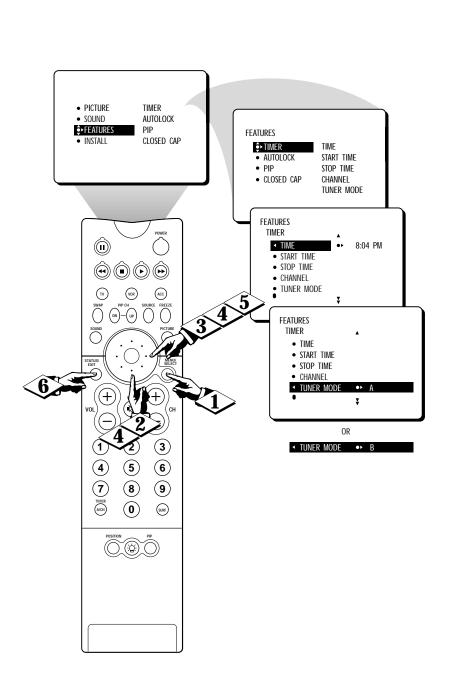
SELECTING THE TUNER



Using the START TIME feature, you can select either TUNER A (ANT[enna] "A") or TUNER B (PIP ANT[enna] "B") to be the main signal source when the TV is powered on.

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING
 DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 RIGHT. Then press the CURSOR
 RING DOWN repeatedly until the
 TUNER MODE control is highlighted.
- 5 Press the CURSOR RING RIGHT or LEFT to select A or B.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.







SETTING THE ACTIVATE CONTROL

A fter you have set the Time, Start Time, Stop Time, and Start Channel, you must activate the Timer for it to operate. Your options are to set the Timer to work ONCE or DAILY. Set ACTIVATE to OFF if you don't want to use the Timer.

(BEGIN)

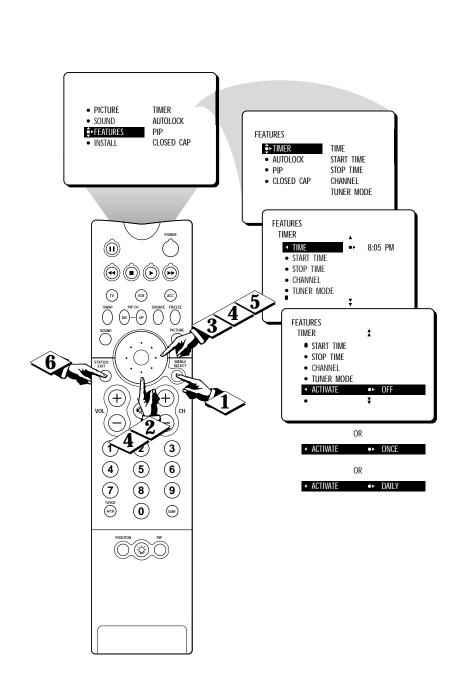
- ton on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEA-TURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 RIGHT again. Then press the CURSOR RING DOWN repeatedly until
 the ACTIVATE control is highlighted.
- Fress the CURSOR RING
 RIGHT again to set ACTIVATE to
 ONCE, press the CURSOR RING
 RIGHT again for DAILY, or press
 the CURSOR RING RIGHT again
 to toggle ACTIVATE to OFF.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

Before you set the TIMER controls, you must set the TV's clock manually within the Timer menu (see page 13) or by using the AutoChron feature described on page 6 of the Setup and Quick Use Guide.

Try it! After following the steps on pages 13–19, use your TV to wake you up like a clock radio.



CONSTANTLY DISPLAYING THE TIME ON SCREEN

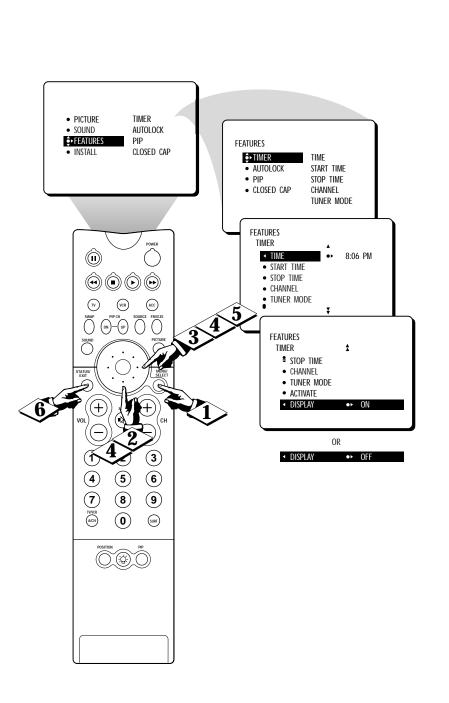


A fter you have set the TV's clock, you can use your TV to keep up with the time. The TIMER DISPLAY control allows you to permanently display the time in the upper right corner of the screen.

BEGIN

- ton on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 RIGHT again. Then press the CURSOR RING DOWN repeatedly until
 the DISPLAY control is highlighted.
- 5 Press the CURSOR RING
 RIGHT or LEFT to turn the TIMER
 DISPLAY ON or OFF.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.







UNDERSTANDING AUTOLOCK

The AutoLock feature can help parents censor what their children watch on TV. AutoLock receives content advisories sent by broadcasters or other program providers. After you program AutoLock, it can respond to the content advisories and block programs that contain content which you may consider objectionable—offensive language, violence, or sexual situations.

In this 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 on this page are brief explanations of AutoLock terms and program ratings.

Terms

BLOCKING control—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 BLOCK-ING control is ON, blocking will occur according to the settings you have chosen.

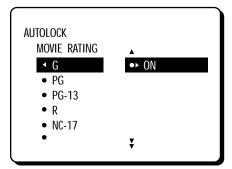
BLOCK UNRATED control—if set to ON, blocks all unrated programs.

Unrated programming consists of the kind of shows that the MPAA (Motion Picture Association of America) or the TV broadcasters have chosen not to rate.

NO RATING control—if set to ON, blocks all programming with no content advisory data.

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 can also block individual channels using the BLOCK CHANNEL control.



AUTOLOCK TV RATING TV-Y TV-Y TV-FG TV-PG TV-14

MOVIE RATINGS

(MOTION PICTURE ASSOCIATION OF AMERICA)

G (General Audience)—all ages admitted. Most parents will find programs that are rated G to be suitable for children of all ages. Such programs have little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

PG (Parental Guidance Suggested) contain material that parents may find unsuitable for younger children. Programs that are rated PG have one or more of the following: moderate violence, some sexual situations, infrequent coarse language, or some suggestive dialogue.

PG-13 (Parents Strongly Cautioned)—contain material that parents may find unsuitable for children under the age of 13. Programs that are rated PG-13 have one or more of the following: violence, sexual situations, coarse language, or suggestive dialogue.

R (Restricted)—specifically designed for adults. Anyone under the age of 17 should view programs that are rated R only with an accompanying parent or adult guardian. Such programs have 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)—should be viewed by adults only. Programs that are rated NC-17 have graphic violence; explicit sex; or crude, indecent language.

X (Adults Only)—contain one or more of the following: very graphic violence, very graphic and explicit or indecent sexual acts, or very coarse and intensely suggestive language.

TV PARENTAL GUIDELINES (TV BROADCASTERS)

TV-Y (All Children)—designed to be appropriate for all children, especially ones ages 2–6. Programs rated TV-Y are not expected to frighten younger children.

TV-Y7 (Directed to Older Children)—designed for children ages 7 and older. Programs rated TV-Y7 may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. Such programs may include mild fantasy and comic violence (FV).

TV-G (General Audience)—most parents will consider programs that are rated TV-G to be suitable for children of all ages. Such programs have little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

TV-PG (Parental Guidance Suggested)—contain material that parents may find unsuitable for younger children. This type of programming has 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—contain material that many parents will find unsuitable for children under 14 years of age. Such programs have 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)—
specifically designed to be viewed by
adults and therefore may be unsuitable
for children under 17. Such programs have
one or more of the following: graphic violence
(V); explicit sexual situations (S); or crude,
indecent language (L).

SETTING UP THE ACCESS CODE



A utoLock allows parents to block 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. Follow these steps to set up your Access Code.

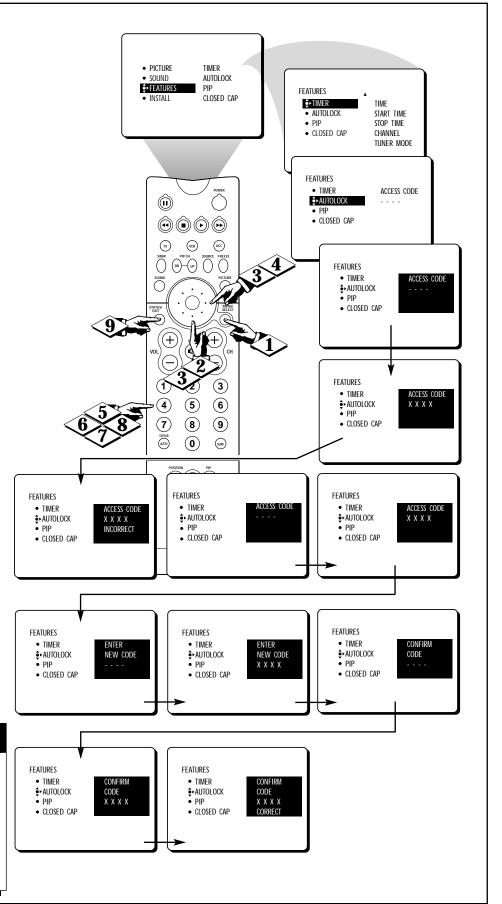
(BEGIN)

- ton on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- 4 Press the CURSOR RING RIGHT to highlight ACCESS CODE.
- 5 Press 0,7,1,1 on the remote control. INCORRECT will appear on the screen.
- 6 Press 0,7,1,1 on the remote control again. ENTER NEW CODE will appear on the screen.
- The Enter a new four-digit code using the number buttons. CONFIRM CODE will appear on the screen.
- 8 Enter your new four-digit code again. CORRECT will flash on the screen briefly.
- Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

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 you discover that your access code has been changed, you can assume that blocked channels may have been viewed.





BLOCKING CHANNELS

After you have set your personal access code (see the previous page), you are ready to select the channels or program sources you want to block.

(BEGIN)

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- 4 Press the CURSOR RING
 RIGHT again to highlight ACCESS
 CODE.
- **5** Enter your four-digit ACCESS CODE. CORRECT will flash very briefly and the menu will move to the left with BLOCK CHANNEL highlighted.
- 6 Press the CURSOR RING RIGHT to highlight the TV's available channels.
- 7 Press the CURSOR RING UP or DOWN to highlight the channel you want to block.
- 8 Press the CURSOR RING
 RIGHT to block the channel. A padlock image will appear to the right of
 the channel number.

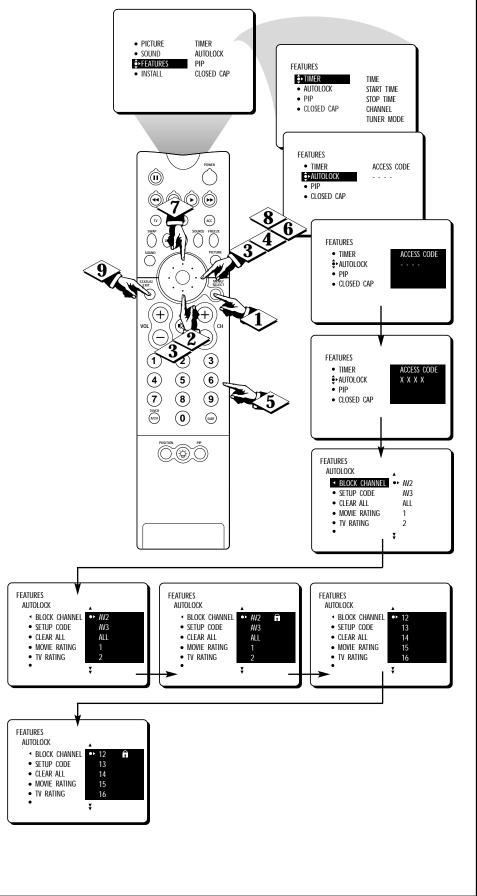
Repeat steps 7 and 8 for any channels you want to block from viewing.

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



SMART HELP

Use BLOCK CHANNEL to prevent the viewing of programs coming from a VCR, DVD, or other accessory device connected to any of the inputs on the TV.



BLOCKING BY MOVIE RATING



A fter you have set your personal access code (see page 21), you can block programs by specific movie ratings.

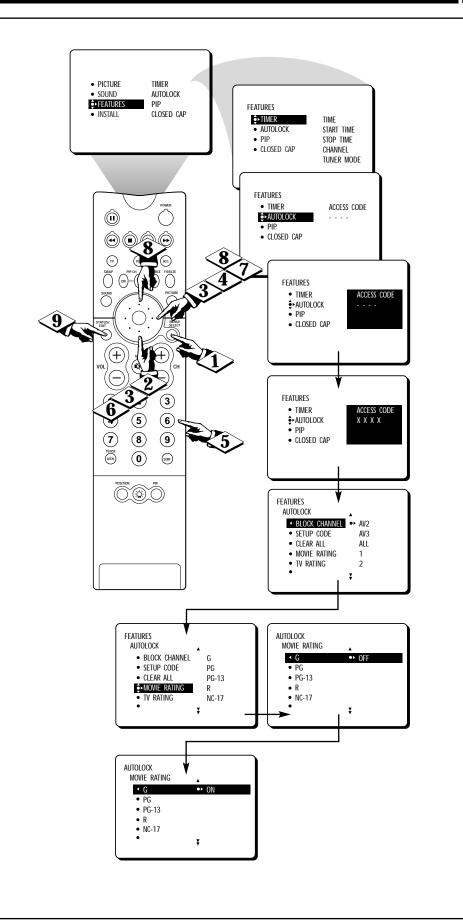
BEGIN

- ton on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN twice to highlight FEA-TURES.
- 3 Press the CURSOR RING RIGHT. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- 4 Press the CURSOR RING RIGHT again to highlight ACCESS CODE.
- **5** Enter your four-digit ACCESS CODE. CORRECT will flash very briefly in red and the menu will move to the left with BLOCK CHANNEL highlighted.
- 6 Press the CURSOR RING DOWN repeatedly until MOVIE RATING is highlighted.
- 7 Press the CURSOR RING RIGHT and the Rating menu will shift to the left with G highlighted.
- Press the CURSOR RING UP or DOWN to highlight each rating you want. Then press the CURSOR RING RIGHT to turn the rating ON or OFF. Turning the rating ON will block such programs from being seen.
- 9 Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

When a rating is set to be turned on (blocked), all higher ratings will also be blocked automatically. For example, if the R rating is turned on, the NC-17 and X ratings also will be turned on.





BLOCKING BY TV RATING

You also can block programs by specific TV ratings. Follow these simple steps.

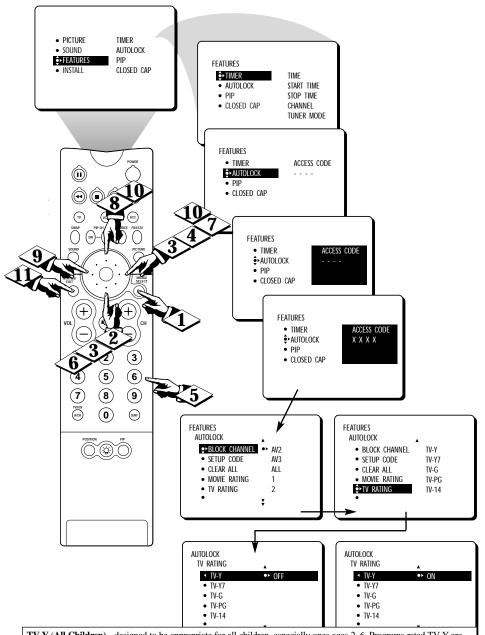
(BEGIN)

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- Press the CURSOR RING
 RIGHT again to highlight ACCESS
 CODE.
- Enter your four-digit ACCESS CODE.
- 6 Press the CURSOR RING DOWN repeatedly until TV RAT-ING is highlighted.
- Press the CURSOR RING
 RIGHT to enter the TV RATING
- 8 Press the CURSOR RING UP or DOWN to select a rating.
- 9 Press the CURSOR RING RIGHT or LEFT 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.

- To access these subratings, press the CURSOR RING RIGHT. Press the CURSOR RING UP or DOWN to select the subrating that you want to block or unblock. Then press the CURSOR RING RIGHT or LEFT button to turn the block on the subrating ON or OFF.
- Press the STATUS/EXIT button to remove the menu.





TV-Y (All Children)—designed to be appropriate for all children, especially ones ages 2–6. Programs rated TV-Y are not expected to frighten younger children.

TV-Y7 (Directed to Older Children)—designed for children ages 7 and older. Programs rated TV-Y7 may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. Such programs may include mild fantasy and comic violence (FV).

TV-G (General Audience)—likely to be considered suitable for children of all ages. Such programs have little or no violence, no strong language, and little or no sexual dialogue or sexual situations.

TV-PG (**Parental Guidance Suggested**)—contain material that parents may find unsuitable for younger children. This type of programming has 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)—contain material that many parents will find unsuitable for children under 14 years of age. Such programs have 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)—specifically designed to be viewed by adults and therefore may be unsuitable for children under 17. Such programs have one or more of the following: graphic violence (V); explicit sexual situations (S); or crude, indecent language (L).

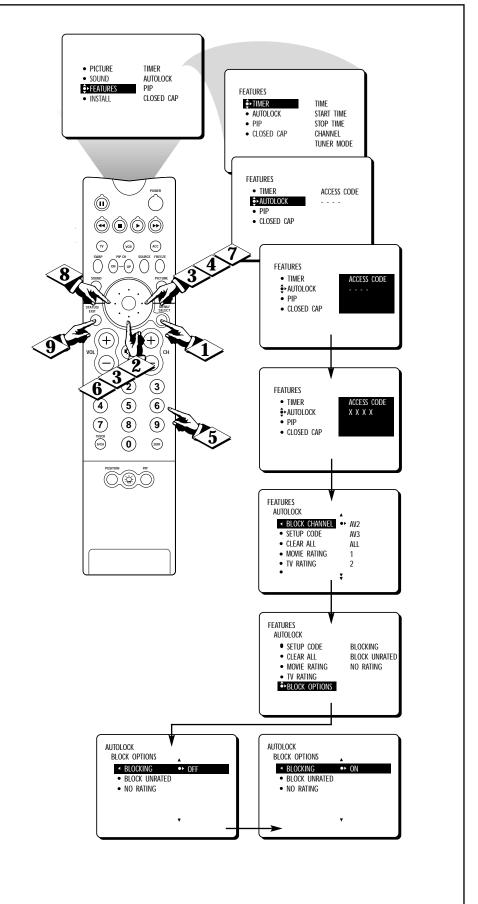
TURNING THE BLOCKING CONTROL ON OR OFF



The BLOCKING control can be thought of as the "master switch" for AutoLock. Use it to turn on or off all of the settings you have chosen to block programming.

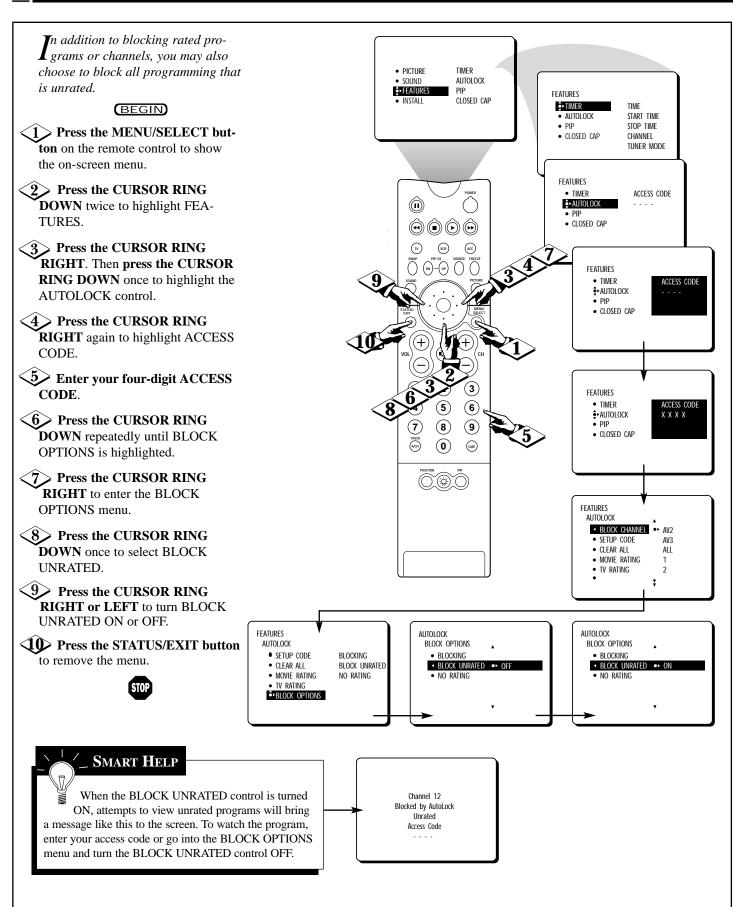
- ton on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- Press the CURSOR RING RIGHT button. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- Press the CURSOR RING
 RIGHT again to highlight ACCESS
 CODE.
- Enter your four-digit ACCESS CODE.
- 6 Press the CURSOR RING DOWN repeatedly until BLOCK OPTIONS is highlighted.
- 7 Press the CURSOR RING RIGHT to enter the BLOCK OPTIONS menu. BLOCKING will be highlighted.
- 8 Press the CURSOR RING RIGHT or LEFT to toggle BLOCK-ING ON or OFF.
- Press the STATUS/EXIT button to remove the menu.







BLOCKING UNRATED BROADCASTS



START TIME

STOP TIME

ACCESS CODE

CHANNEL TUNER MODE

FEATURES

€►TIMER

PIP

AUTOLOCK

CLOSED_CAP

FEATURES

TIMER

AUTOLOCKPIPCLOSED CAP

FEATURES

FEATURES

• TIMER

FEATURES AUTOLOCK

♦►AUTOLOCK

CLOSED CAP

◆ BLOCK CHANNEL

• SETUP CODE • CLEAR ALL • MOVIE RATING

TV RATING

X X X X

• TIMER • AUTOLOCK

CLOSED CAP

BLOCKING BROADCASTS THAT HAVE NO RATING

PICTURE

GUIIO2

FEATURES

LIATZALI

TIMER

 $\Theta \bullet \bullet \bullet$

ON)—(up) O

AUTOLOCK

CLOSED CAP

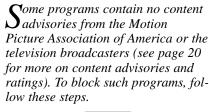
(3)

(6)

(9)

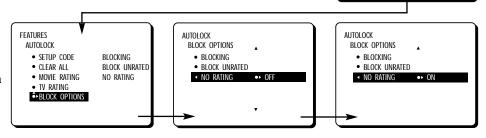
SURF





(BEGIN)

- ton on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- 4 Press the CURSOR RING RIGHT again to highlight the ACCESS CODE input area.
- Enter your four-digit ACCESS CODE.
- 6 Press the CURSOR RING DOWN repeatedly until BLOCK OPTIONS is highlighted.
- 7 Press the CURSOR RING RIGHT to enter the BLOCK OPTIONS menu.
- 8 Press the CURSOR RING
 DOWN twice to highlight NO RATING.
- 9 Press the CURSOR RING RIGHT or LEFT to turn NO RAT-ING ON or OFF.
- Press the STATUS/EXIT button to remove the menu.





SMART HELP

If the NO RATING control is turned on, all programs having no content advisory information will activate a screen like this. To watch the channel, enter your access code or turn the NO RATING option OFF.

Channel 12 Blocked by AutoLock No rating Access Code



REVIEWING YOUR SETTINGS

You can access a screen that shows your AutoLock settings.

(BEGIN)

1

1> Press the STATUS/EXIT but-

ton on your remote twice. Your AutoLock settings will appear on the screen.

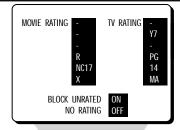
NOTE: If you have blocked specific subratings, such as *V* for Violence in the TV-PG category, these blocked subratings will not appear in the review. Nonetheless, the subratings are still blocked according to your selections.

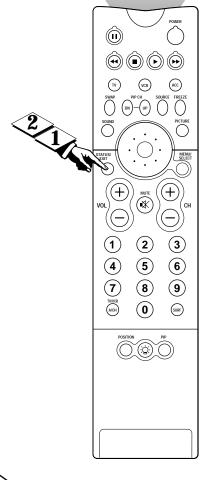
After a few seconds, the settings will leave the screen automatically, or you can **press the STATUS/EXIT button** to remove them from the screen.



SMART HELP

The AutoLock review screen will appear only if you have turned ON the BLOCK-ING control (see page 25).





MOVIE RATING - TV RATING - Y7 - R PG NC17 X MA

BLOCK UNRATED NO RATING OFF

MOVIE RATING—shows all the movie ratings that you have chosen to block within the MOVIE RATING control. NOTE: If a lower rating is blocked, higher ratings will also be blocked automatically. For example, if you block R-rated programs, those that are rated X will also be blocked.

TV RATING—shows all the TV ratings that you have chosen to block within the TV RATING control. NOTE: If a lower rating is blocked, higher ratings will also be blocked automatically. For example, if you block TV-PG-rated programs, those rated TV-14 and TV-MA will also be blocked. The TV rating controls also have subratings for Violence (V), Fantasy Violence (FV), Sexual Situations (S), Coarse Language (L), and Suggestive Language (D). If you turn off a main rating but turn on a subrating of that main rating control, programs having the subrating will be blocked; however, the main rating will not appear within the AutoLock review menu because you did not turn it ON.

BLOCK UNRATED—shows whether you have turned this control ON or OFF.

BLOCK NO RATING—shows whether you have turned this control ON or OFF.

CLEARING ALL BLOCKED CHANNELS



The CLEAR ALL control will allow you to remove all channel blocks that have been turned on through the BLOCK CHANNEL control. To clear all channel blocks, follow the simple steps below.

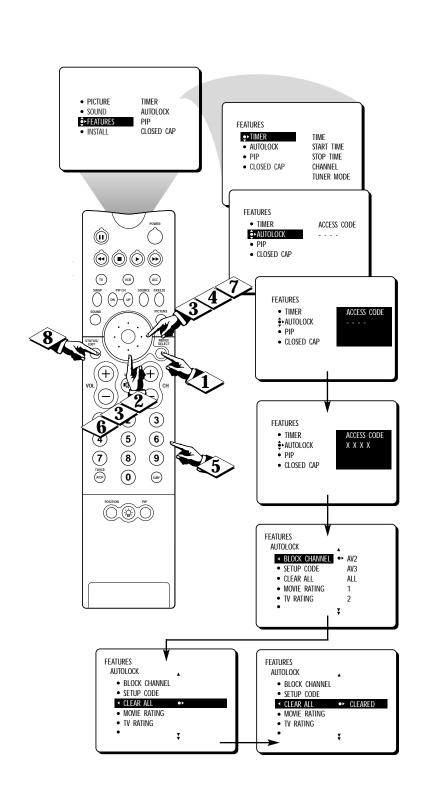
(BEGIN)

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT. Then press the CURSOR RING DOWN once to highlight the AUTOLOCK control.
- 4 Press the CURSOR RING RIGHT again to highlight ACCESS CODE.
- Enter your four-digit ACCESS CODE.
- Press the CURSOR RING
 DOWN twice to highlight CLEAR
 ALL.
- 7 Press the CURSOR RING RIGHT. The CLEAR ALL option will display the word *CLEARED*. All blocked channels will then be viewable.
- Press the STATUS/EXIT button to remove the menu.



SMART HELP

This control clears only the blocks placed on channels through use of the BLOCK CHANNEL control and will not turn off the MOVIE RATING, TV RATING, BLOCK UNRATED, or NO RATING control settings.



USING THE CLOSED CAPTIONING CONTROL

Closed 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 on-screen text boxes to show dialogue and conversations while the TV program is in progress.

(BEGIN)

- ton on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN twice to highlight FEA-TURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 DOWN repeatedly until the
 CLOSED CAP control is highlighted.
- Fress the CURSOR RING RIGHT. The menu will shift to the left and CAPTION MODE will be highlighted. Then press the CURSOR RING RIGHT again to highlight the CAPTION MODEs area.
- 6 Press the CURSOR RING UP or DOWN to select a CAPTION MODE.
- 7 Press the STATUS/EXIT button to remove the menu from the screen.



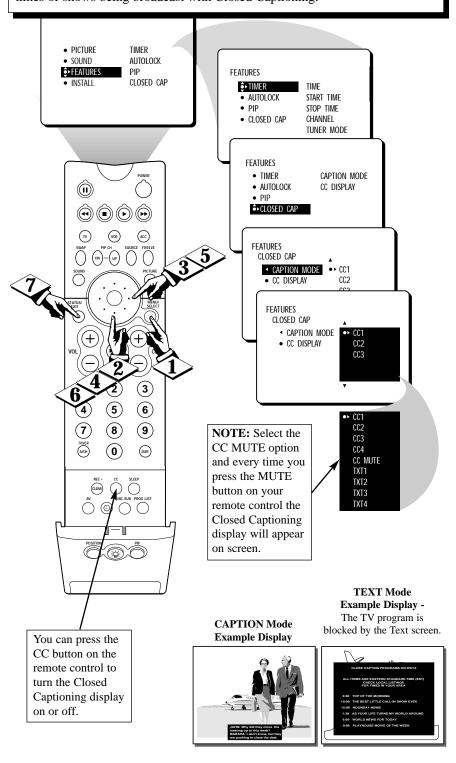
SMART HELP

CC DISPLAY—turns text
on or off if the TV station broadcasting on the channel is making
Closed Captioning available.
Highlight CC DISPLAY and press the
CURSOR RING RIGHT to turn this
feature on or off.

CC MUTE—turns the Closed Captioning mode on whenever the MUTE button on the remote control is pushed. Select CC MUTE in the onscreen menu to turn this feature on. Closed Captioning cannot be used on the CVI (Component Video input) source.

SMART HELP

Not all TV programs and product commercials are broadcast with Closed Captioning (CC). Nor are all Closed Captioning MODEs necessarily being used by broadcast stations during 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.



ADJUSTING THE TREBLE, BASS, AND BALANCE



Besides the normal volume level control, your TV also has individual sound-adjustment controls. You can use TREBLE (high frequency), BASS (low frequency), and Speaker BALANCE to further adjust the sound playback of TV programs.

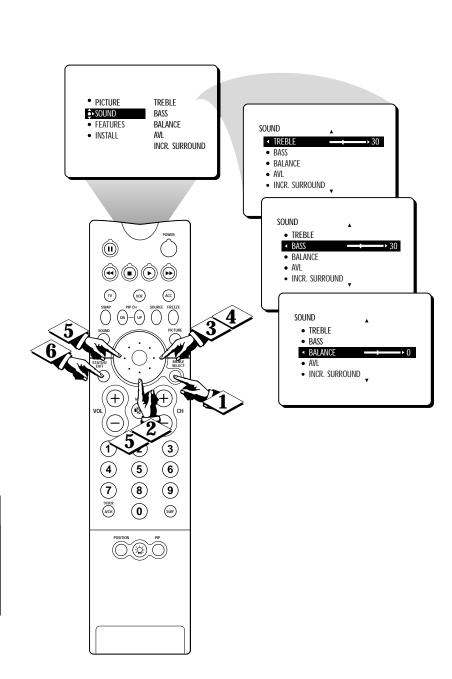
(BEGIN)

- ton on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN once to highlight SOUND.
- 3 Press the CURSOR RING RIGHT to enter the SOUND menu.
- Press the CURSOR RING
 RIGHT or LEFT to adjust the TREBLE level of the television's sound.
- 5 After adjusting the TREBLE control, press the CURSOR RING
 DOWN to select another sound
 adjustment: BASS or BALANCE.
 Then Press the CURSOR RING
 RIGHT or LEFT to adjust the
 selected control.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

Remember, when the bar scale is centered, speaker sound BALANCE is centered between the TV's left and right side speakers.





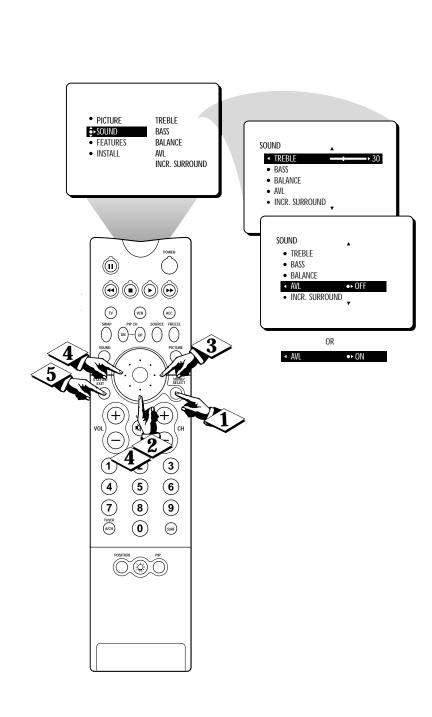
USING THE AVL (AUDIO VOLUME LEVELER) CONTROL

You may have noticed the peaks and valleys of sound that occur between program changes or at commercial breaks. The volume levels often vary considerably. By turning ON the AVL (Audio Volume Leveler) control, you can make your TV produce a more consistent volume level. Follow these steps to turn the AVL ON.

BEGIN

- ton on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN once to highlight SOUND.
- 3 Press the CURSOR RING RIGHT to enter the SOUND menu.
- 4 Press the CURSOR RING
 DOWN repeatedly until AVL is highlighted. Then press the CURSOR
 RING RIGHT or LEFT to turn AVL
 ON or OFF.
- 5 Press the STATUS/EXIT button to remove the menu from the screen.





USING INCREDIBLE SURROUND



The Incredible Surround feature will boost the TV's sound by making it broader and fuller. Set the INCREDIBLE SURROUND control to INCREDIBLE SURROUND to enhance stereo programs. Or set the INCREDIBLE SURROUND control to SPATIAL to give a "surround" effect to mono programs.

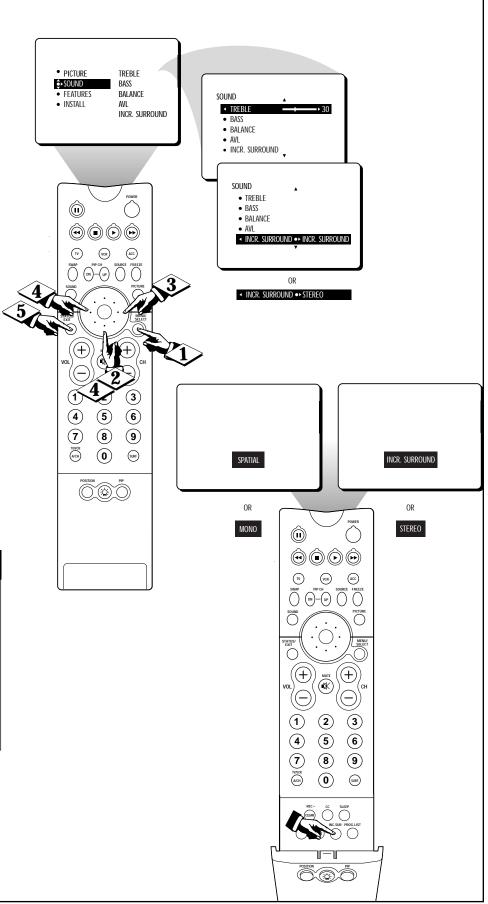
(BEGIN)

- 1 Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN once to highlight SOUND.
- 3 Press the CURSOR RING RIGHT to enter the SOUND menu.
- 4 Press the CURSOR RING
 DOWN repeatedly until INCR. SURROUND is highlighted. Then press
 the CURSOR RING RIGHT or
 LEFT to select SPATIAL or MONO
 for a mono program, or INCR. SURROUND or STEREO for a stereo program.
- 5 Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

Press the INC. SUR button on the remote to toggle between the same INCR. SUR-ROUND control options discussed above: SPATIAL or MONO and INCR. SURROUND or STEREO. The options available to you will be determined by the program the TV is on when you push the INC. SUR button.





SETTING THE TV FOR STEREO AND SAP

STEREO MODE

You can enjoy stereo programs on your TV. It has both an amplifier and twin speakers through which stereo sound can be heard. Follow these steps to select the STEREO mode.

(BEGIN)

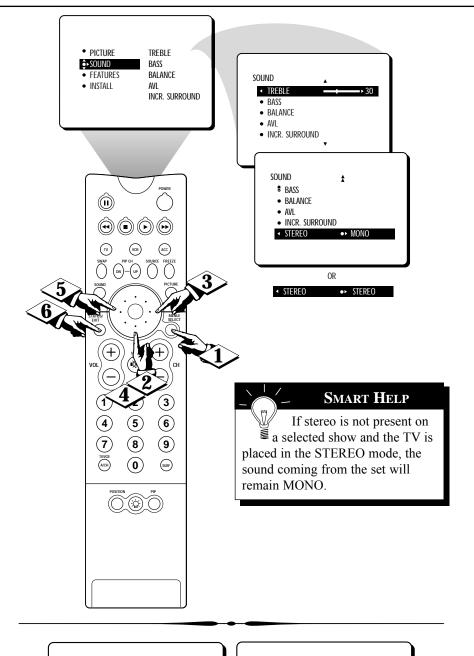
- ton on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN once to highlight the SOUND menu.
- 3 Press the CURSOR RING RIGHT to enter the SOUND menu.
- 4 Press the CURSOR RING
 DOWN repeatedly until the STEREO
 control is highlighted.
- Fress the CURSOR RING
 RIGHT or LEFT to select STEREO
 or MONO. When STEREO has been
 selected, the television will reproduce
 any stereo signal it receives.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.



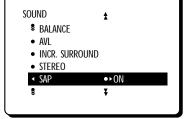
SECOND AUDIO PROGRAM (SAP)

A Second Audio Program, or 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, such as the broadcast of a second language or other audio information.

If an SAP signal is not present with a selected program, the SAP option cannot be selected; NOT AVAILABLE will appear on screen. Also, if SAP is selected on a channel and you change to another channel, when you return to the original channel, SAP will be off. You will have to reselect the SAP feature.







IF A SECOND AUDIO PROGRAM
IS NOT BEING BROADCAST:

◆ SAP

◆ NOT AVAILABLE

OR

◆ SAP

◆ OFF

IF A SECOND AUDIO PROGRAM
IS BEING BROADCAST:

SAP

OR

SAP

OPF

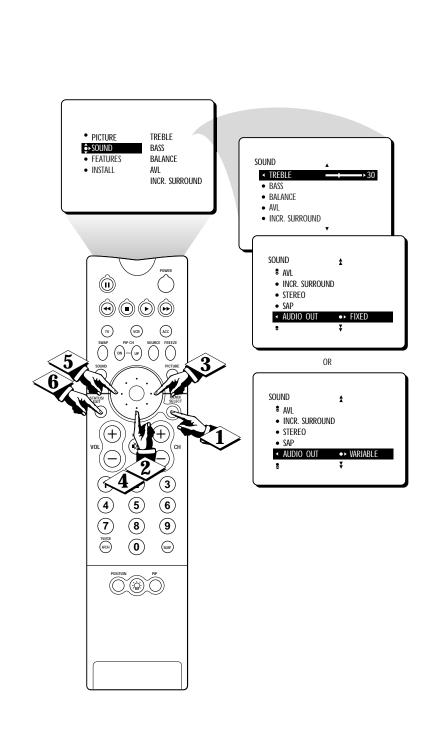
SETTING THE AUDIO OUT CONTROL



If you have connected the TV's AUDIO OUTPUT jacks to the AUDIO INPUT jacks on a stereo receiver, set AUDIO OUT to either VARIABLE or FIXED to determine whether you adjust the volume at the at the TV or at the stereo. 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. Follow these steps to make your selection.

- ton on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN once to highlight SOUND.
- 3 Press the CURSOR RING RIGHT to enter the SOUND menu.
- Press the CURSOR RING
 DOWN repeatedly until AUDIO
 OUT is highlighted.
- **5** Press the CURSOR RING LEFT or RIGHT to set the AUDIO OUT to VARIABLE or FIXED.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.







USING THE TV SPEAKER CONTROL AND AUDIO OUTPUTS

Would you like to hear TV programs through your audio hifi system? The TV's Audio Outputs and SPEAKERS ON/OFF control work together to offer you this TV sound option.

(BEGIN)

- Use audio cables to connect the R(ight) and L(eft) AUDIO OUT(puts) on the TV to the AUX/TV INPUTs on your amplifier or sound system. Set the audio system's volume to a normal listening level.
- ON. You can now adjust the sound level coming from the audio system with the VOL(ume) (+,-) buttons on the TV or remote control.

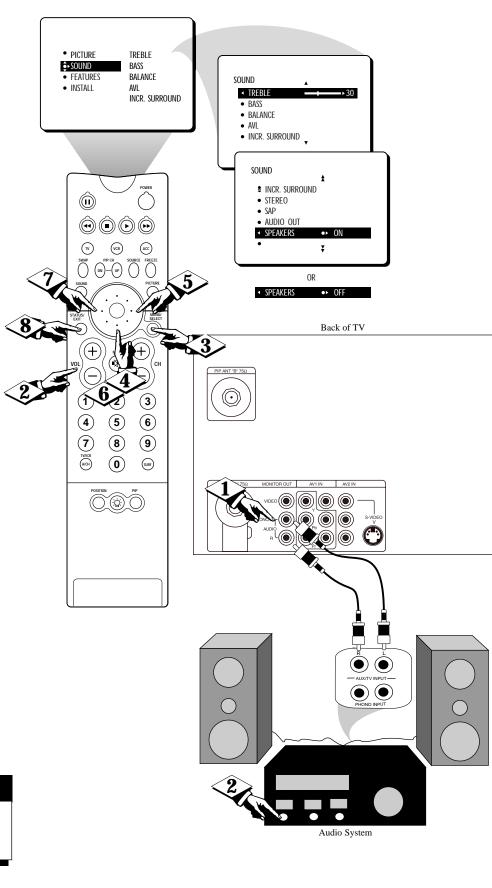
To hear the TV sound from only the audio system speakers:

- 3 Press the MENU/SELECT button on the remote control to show the on-screen menu.
- Press the CURSOR RING DOWN once to highlight SOUND.
- Fress the CURSOR RING RIGHT to enter the SOUND menu.
- 6 Press the CURSOR RING DOWN repeatedly until the SPEAKERS control is highlighted.
- 7 Press the CURSOR RING
 RIGHT or LEFT to turn the television's speakers ON or OFF. With
 the SPEAKERS control set to OFF,
 you should hear the TV sound coming only from the audio system
 speakers.
- 8 Press the STATUS/EXIT button to remove the menu from the screen.



SMART HELP

The audio system may have to be in AUX(iliary) mode to play sound from the TV.



USING THE BASS BOOST CONTROL

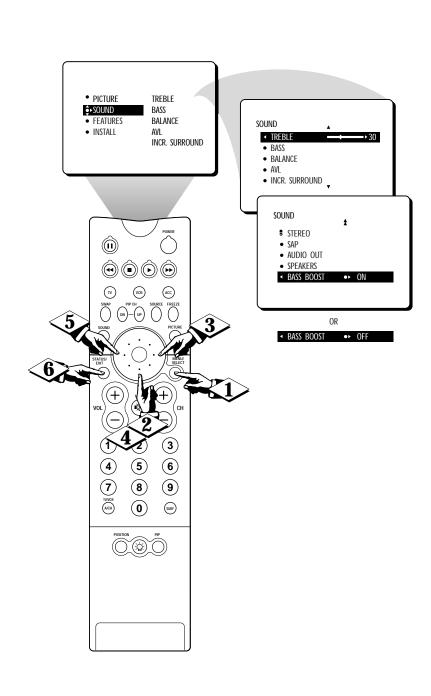


The BASS BOOST control allows you to increase the low-frequency range of the TV's sound. This creates a deeper, fuller sound. Follow these steps to turn BASS BOOST ON.

(BEGIN)

- Press MENU/SELECT button on the remote control to show the onscreen menu.
- Press the CURSOR RING
 DOWN once to highlight SOUND.
- Press the CURSOR RING RIGHT to enter the SOUND menu.
- Press the CURSOR RING
 DOWN repeatedly until BASS
 BOOST is highlighted.
- 5 Press the CURSOR RING RIGHT or LEFT to turn BASS BOOST ON or OFF.
- 6 Press the STATUS/EXIT button to remove the menu from the screen.





USING AUTOPICTURE

Whether you're watching a movie or playing 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 AutoPicture settings are the ones that you made through the PIC-TURE options within the on-screen тепи.

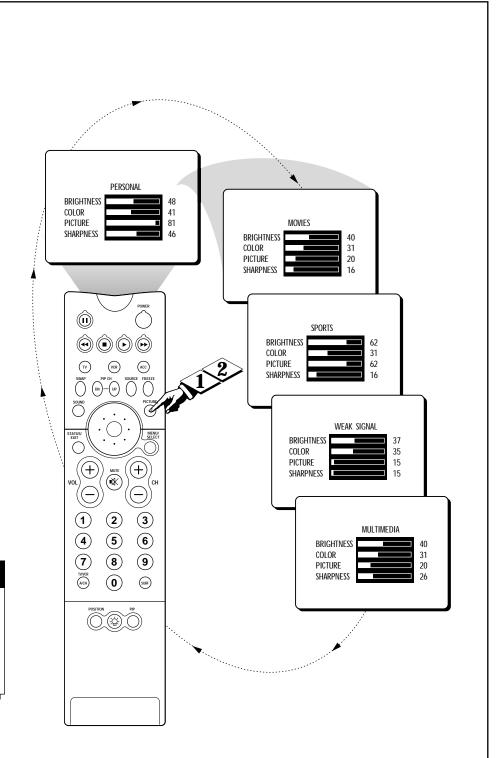
(BEGIN)

- 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 PERSON-AL, MOVIES, SPORTS, WEAK SIGNAL, or MULTIMEDIA picture settings.



SMART HELP

You determine the PER-SONAL setting by adjustments you make within the PICTURE menu. The other AutoPicture settings are made at the factory and cannot be adjusted.



USING AUTOSOUND

A utoSound allows you to select from three factory-set controls and a personal control that you set according to your own preferences through the on-screen 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.

(BEGIN)

- 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 cycle through the four settings: PERSONAL, VOICE, MUSIC, or THEATRE.



SMART HELP

You determine the PER-SONAL setting by adjustments you make within the SOUND menu. The other AutoSound settings are made at the factory and cannot be adjusted.

AutoSound works only with the programs coming through the ANTEN-NA/CABLE (ANT "A" or PIP ANT "B") inputs on the back of the TV. AutoSound will not control the sound levels of the other inputs on the back of the TV set.

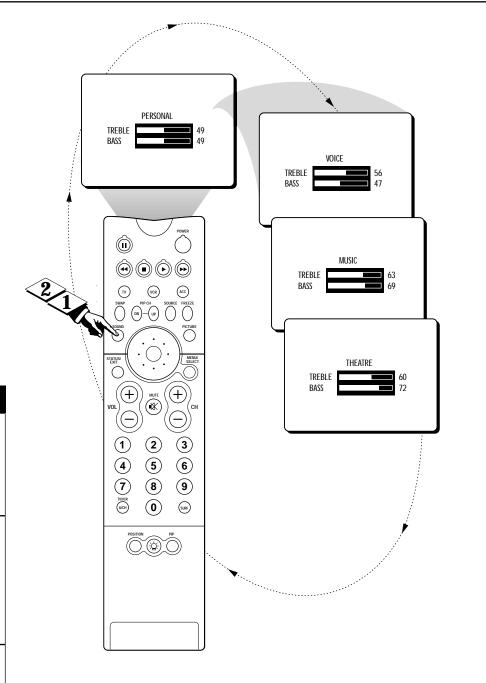
AutoSound Choices

PERSONAL—presents the TV's sound according to the settings you make within the SOUND menu.

VOICE—brings voices to the forefront and emphasizes them. Moves music to the background.

MUSIC—emphasizes music over voices.

THEATRE—provides a balance between voices and music.



USING SURF, ALTERNATE CHANNEL, AND PROGRAM LIST

SURF

A list of previously viewed channels can be selected with the SURF button on your remote control. With SURF, 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.

(BEGIN)

- Press the CH(annel) Scan (+,-) buttons (or the NUMBER buttons) to select a channel to add to the SURF list.
- Press the SURF button on the remote control. The on-screen 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 RING RIGHT** to add the present channel to the SURF list.
- If you want to delete the present channel from the SURF list, **press the CURSOR RING RIGHT** again.

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



•• 12 ADD: **•** 12 DELETE? SURF LIST EMPTY \bigcirc $\hat{\Theta}$ $\hat{\Theta}$ $\hat{\Theta}$ VCR ACC (DN)—(UP) () () DELETE? (+(3) **(2) (6)** ADD: (5) 7 (8) 9 DELETE? \bigcirc

- SMART HELP

I Along with the broadcast channels, the external video source connections can be added to the SURF list. This means that the AV 1, CVI, AV 2, and AV 3 signal sources can be added to your SURF list. Just press the AV button on your remote to select the signal source and then follow steps 2−4 in the "Surf" section on this page.

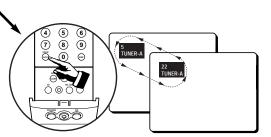
PROGRAM LIST

Dress the Program List button on your remote to display a list of channel numbers and their names (see the "Tuner Mode" "Auto Program,"
"Channel Edit," and "Name" sections
in the Setup and Quick Use Guide that came with your \widetilde{TV} for proper setup). You can also access the Program List by pressing the button in the center of the Cursor Ring. Each channel will appear as a selectable menu item. The current channel will be highlighted by default. Only five channels will be shown on screen at one time. Press the top or bottom part of the Cursor Ring to scroll the list and and highlight a channel. Press the right side of the Cursor Ring to tune to the highlighted channel. Channels marked "Skipped" in the "Channel Edit" control will not appear in the list. Any channel that is being blocked by AutoLock will appear with a padlock icon to indicate that the channel is not viewable.

ALTERNATE CHANNEL (A/CH)

Your remote also has an A/CH (Alternate Channel) button.

Pressing this button will toggle between the current channel and one previous channel.



8 9

0

Have you ever fallen asleep in front of the TV, only to be awakened in the middle of the night by the screeching sound that accompanies the on-screen test pattern of a station that's signed off? Your TV can enable you to avoid that discomfort by automatically turning itself off. You choose the amount of time before the set turns off.

(BEGIN)

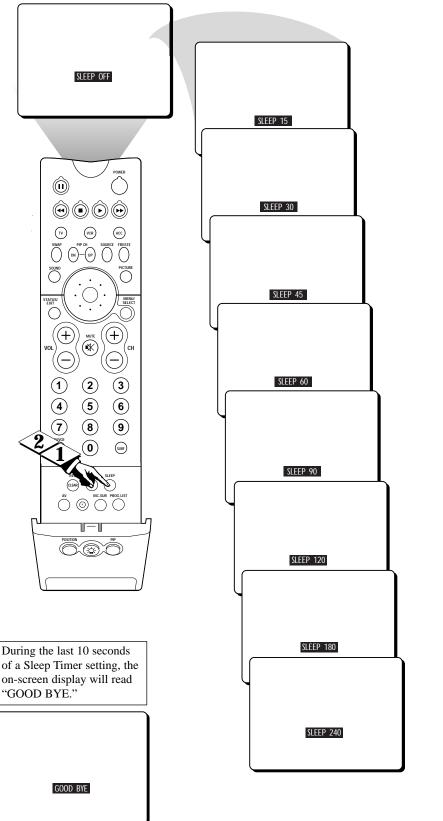
- 1 Press the SLEEP button on the remote control. The SLEEP Timer onscreen display will appear in the upper part of the screen.
- 2 Within five seconds, press the SLEEP button repeatedly to pick the amount of time before the TV will turn itself off.

An on-screen countdown will appear during the last minute before the TV turns off.



SMART HELP

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



During the last minute of a Sleep Timer setting, an onscreen countdown will be displayed.

50 SEC

of a Sleep Timer setting, the on-screen display will read "GOOD BYE."

USING THE VOLUME BUTTONS

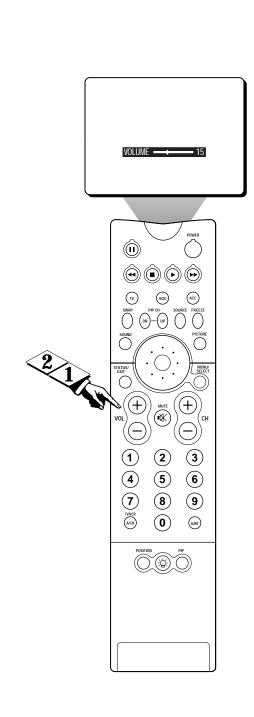
Press the VOL(ume) (+, -) buttons on the remote and the volume adjustment bar will appear on screen and move to illustrate the adjustments you make.

BEGIN

Press the VOL(ume) (+,-) buttons on the remote control to show the VOLUME bar display on the screen.

Press the VOL(ume) (+,-) buttons to adjust the TV's sound level.





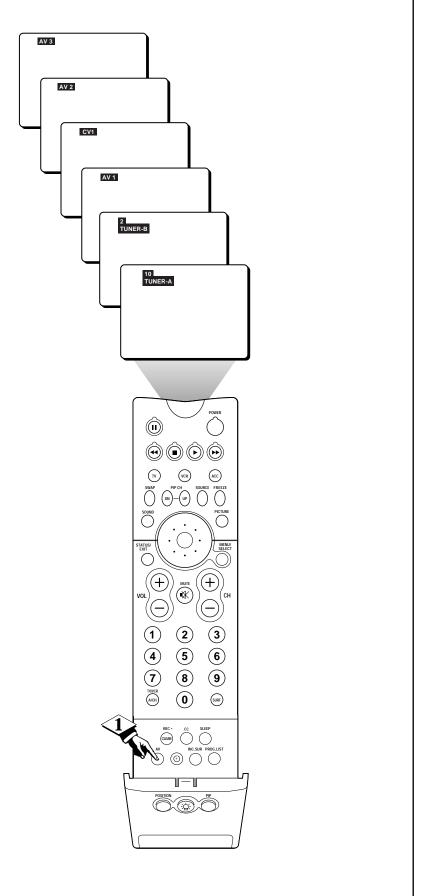
USING THE AV BUTTON

The AV button on your remote control allows you to choose from among the signal sources you have connected to your TV. The possibilities are TUNER-A (the ANT[enna] "A" input), TUNER-B (the PIP ANT[enna] "B" input), AV 1, CVI, AV 2, and AV 3 (your TV's side inputs).

BEGIN

Press the AV button on the remote control to choose a signal source for viewing.





SETTING THE TV REMOTE TO WORK ACCESSORY DEVICES

Your TV remote is capable of working not only your TV but also infrared remote (IR) controlled devices such as VCRs, cable TV converter boxes, satellite receivers, DVD players, and laser disc players.

If you want to use your TV remote to operate a VCR or other accessory device, you will need to perform this initial check explained in this section. You may also need to go to the sections on the "Direct Access Method" and the "Search Method" in the pages that follow.

(BEGIN)

Press the VCR or ACC(essory)
mode button on the TV remote for
the desired accessory device category.

NOTE: pressing the ACC(essory) mode button allows access to the product codes for cable TV converters, DVD players, satellite receivers, and laser disc players.

Point the TV remote toward the desired accessory device and press the POWER button.

Does the remote turn the accessory device on?

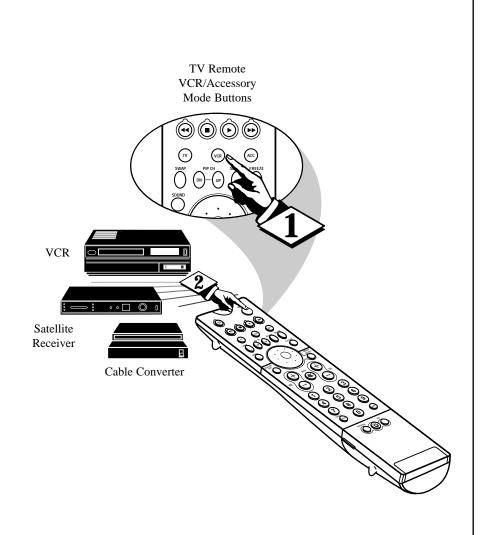
If yes, and try other function buttons on the TV remote. If they also work the accessory device, then the remote is ready and no further steps are needed.

If no, do the following:

Look up a **three-digit remote code number** on page 47 or 48 for your brand of accessory device. Then go through the simple Direct Access Method steps shown on page 45.

SMART HELP

If more than one number is listed, you may have to try more than the first three-digit code given to locate your device's correct code.



DIRECT ACCESS METHOD

Now that you have looked up the three-digit Remote Control Direct Entry Code for your brand of accessory device, you are ready to follow the simple steps shown below.

Please read through all the steps before beginning.

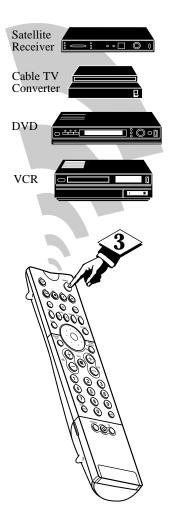
(BEGIN)

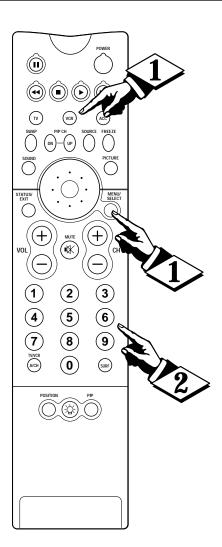
- First, press and hold down the VCR or ACC (for an accessory device other than a VCR) mode button on the TV remote. Then press and hold down the MENU/SELECT button at the same time for a brief moment. Release the buttons. The TV remote back light will switch on.
- 2 Within 30 seconds of pressing the VCR (or ACC) button and MENU/SELECT button, enter a three-digit code for the accessory device (see pages 47 and 48).
- **3 Point the remote at the accessory device.** Then press the POWER button on the remote to turn the device on.



SMART HELP

- Pressing the ACC(essory) mode button allows access to the product codes for accessory devices.
- If the procedure explained above does not work the first time, repeat the steps using the same remote code number.
- If after a second try the remote does not operate your accessory device, and more code numbers are listed for your brand, use the next listed code number.
- If after repeated attempts the Direct Access Method does not allow you to work your accessory device with your TV remote, try the Search Method explained on the next page.





NOTES:

- If you do not enter a complete code within 30 seconds, you will need to perform step 1 of the Direct Access Method again.
- If you enter more than three digits, the unit will retain the first three digits entered.

SEARCH METHOD Your TV remote can be set to work

A various accessory devices (VCRs, cable converters, and satellite receivers, for example) by what is called the Search Method.

NOTE: The Search Method works only with devices equipped with Channel Display Indicators or that capability. If the Direct Access code number method (shown in the previous section) did not enable your TV remote to work your accessory device, then follow the easy steps listed below. Please read the steps once before performing them.

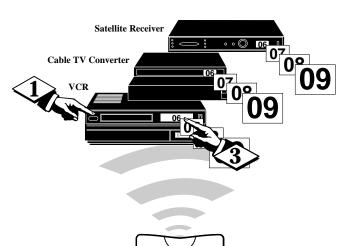
(BEGIN)

Turn on the desired device. Press and hold down the VCR or ACC (for an accessory device other than a VCR) mode button on the TV remote. Then press and hold down the SURF button as you hold down the desired mode (VCR or ACC) button.

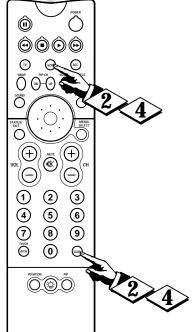
NOTE: You must press and hold down the desired mode (VCR or ACC) button first and then press and hold down the SURF button second.

- While holding down the SURF and the desired mode (VCR or ACC) buttons at the same time, point the remote toward the accessory device and continue holding the buttons down.
- Watch the Channel Indicator on your accessory device. Channel numbers will scan up when the TV remote has identified the correct code for your accessory device. This may take several minutes.
- 4 Release the mode (VCR or ACC) and SURF buttons as soon as channel numbers start to scan up. The scanning means that your TV remote has found the code for your accessory device.





NOTE: The remote's back light will blink as the remote moves through its product code list. After the remote identifies the product code for your accessory device and you release the remote buttons, the back light will blink twice.



SMART HELP

- Your TV remote may locate the accessory device's code quickly or require several minutes to do so.
- Don't let the accessory device scan up more than five channels when the correct code is found—the remote may pass up the right code and have to repeat the search cycle.
- If no channel change happens after several minutes, repeat steps 1–4. Then if a channel change still does not occur, the remote will not work the desired accessory device.

SETTING THE TV REMOTE TO WORK ACCESSORIES

Remote Control Direct Entry Codes

	MOTE CODE(S)
Admiral	
Adventura	
Aiko	305
Aiwa	334, 495, 027, 064
Akai 133, 080, 06	
America Action	
American High	
Asha	
Audiovox	
Beaumark	
Bell & Howell	
Broksonic	
DIOKSOINC	
CCE	
Calix	
Canon	
Capehart	
Carver	
Cineral	
	305, 064
Colt	
Craig	
Curtis Mathes	062, 068, 087, 189
Cybernex	
Daewoo	305, 588, 047, 072
Daytron	047
Denon	
Dynatech	
Electrohome	
Electrophonic	
Emerex	
Emerson 211, 029, 236	
	1, 506, 088, 115, 239,
	(0. 095. 322. 388. 537.
Fisher	
	074, 131, 081, 093
Fuji	
Fuji Funai	074, 131, 081, 093 060, 062 027
Fuji Funai GE .062, 08	074, 131, 081, 093 060, 062 027 7, 075, 092, 229, 267
Fuji Funai GE .062, 08 Garrard	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027
Fuji Funai GE .062, 08 Garrard Go Video	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259
Fuji Funai GE .062, 08 Garrard Go Video GoldStar .06	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259 .4, 045, 065, 498, 507
Fuji Funai GE .062, 08 Garrard Go Video GoldStar .06 Gradiente	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259 .4, 045, 065, 498, 507 035, 027, 435
Fuji Funai GE .062, 08 Garrard Go Video GoldStar .06 Gradiente Grundig	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259 035, 027, 435 035, 027, 435
Fuji Funai GE	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259 035, 027, 435 035, 027, 435 222
Fuji	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259 .4, 045, 065, 498, 507 035, 027, 435 222
Fuji	074, 131, 081, 093 060, 062 027 .7, 075, 092, 229, 267 027 306, 459, 553, 259 .4, 045, 065, 498, 507 035, 027, 435 222
Fuji	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	
Fuji Funai GE	
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093
Fuji Funai GE	074, 131, 081, 093

MTC	1	
MTC	logy	.267
Magnasonic		
Magnasome.	062, 108, 137, 130, 027, 066,	176
Marantz	108,	062
	1, 074, 506, 027, 064, 075, 062,	
	7, 334, 066, 189, 236, 481, 828,	829
Minolta		069
	.070, 200, 088, 102, 241, 269,	
094, 470	.070, 200, 000, 102, 211, 207,	075,
	0.62	07.5
NAD		.085
NEC	065, 067, 068, 077, 094, 109,	131
Noblex		.267
Olympus		253
Optonica		.089
Orion		322
	062, 189, 481, 253, 104,	
	129, 252, 254, 273, 827, 828,	
	062, 267, 064, 069, 065, 067,	
Philco		506
	108, 062, 089, 137, 830,	
Polk Audio .		.108
Doutland		
Portiana		.047
Profitronic		.267
Profitronic Proscan		.267 229
Profitronic Proscan Protec		.267 229 .099
Profitronic Proscan Protec		.267 229 .099
Profitronic Proscan Protec Pulsar		.267 229 .099 078
Profitronic Proscan Protec Pulsar Quarter		.267 229 .099 078 .073
Profitronic Proscan Protec Pulsar Quarter Quartz		.267 229 .099 078 .073
Profitronic Proscan Protec Quarter Quartz Quasar		.267 229 .099 078 .073 .073
Profitronic Proscan Protec Quarter Quartz Quasar RCA		.267 229 .099 078 .073 .073 828 062,
Profitronic Proscan Protec Quarter Quartz Quasar RCA		.267 229 .099 078 .073 .073 828 062,
Profitronic Proscan Protec Quarter Quartz Quasar		.267 229 .099 078 .073 .073 828 062, 304
Profitronic Proscan		.267 229 .099 078 .073 .073 828 062, 304
Profitronic Proscan		.267 229 .099 078 .073 .073 828 062, 304 .027
Profitronic Proscan		.267 229 .099 078 .073 .073 828 062, 304 .027 .064
Profitronic Proscan		.267 229 .099 078 .073 .073 828 062, 304 .027 .064 .064
Profitronic Proscan		.267 229 .099 078 .073 .073 828 062, 304 .027 .064 .064
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .064 075, 3, 93
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .064 075, 3, 93 280
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 075, .3, 93 280 .066
Profitronic		.267 229 .099 078 .073 .073 828 062, 304 .064 075, 3, 93 280 .066 .069
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .064 075, .3, 93 .280 .066 .069
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .064 075, .3, 93 .280 .066 .069
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .075, .3, 93 .280 .066 .069 .102 .267
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .075, .3 ,93 .280 .066 .069 .102 .267 .075
Profitronic		.267 229 .099 .073 .073 .073 828 062, .304 .064 .075, .3, 93 .280 .066 .069 .102 .267 .075 .298
Profitronic		.267 229 .099 .073 .073 .073 828 062, .304 .027 .064 .064 075, .3, 93 280 .066 .069 .102 267 075 298 267
Profitronic		.267 229 .099 .073 .073 .073 828 062, .304 .027 .064 .064 075, .3, 93 280 .066 .069 .102 267 075 298 267
Profitronic		.267 229 .099 078 .073 .073 828 062, 304 .027 .064 .075, 3, 93 280 .069 .102 267 075 298 267 239
Profitronic		.267 229 .099 078 .073 .073 828 062, 304 .027 .064 .075, 3, 93 .280 .069 .102 .267 .075 .298 .298 .207 .298 .207 .207 .207 .207 .207 .207 .207 .207
Profitronic		.267 229 .099 078 .073 .073 828 062, .304 .027 .064 .075, .3, 93 .280 .066 .069 .102 .267 .075 .298 .239 .027, .131
Profitronic Proscan Protec Pulsar Quarter Quartz Quasar RCA Radio Shack Radix Randex Realistic Ricoh Ricoh Runco STS Salora Samsung Sansui Sanyo Scott Sears Semp		.267 229 .099 .073 .073 .073 .828 .062 .064 .075 .3, 93 .280 .066 .069 .102 .267 .075 .298 .267 .239 .027 .031 .031 .031 .031 .031 .031 .031 .031
Profitronic Proscan Protec Pulsar Quarter Quartz Quasar RCA Radio Shack Radix Randex Realistic Ricoh Ricoh Runco STS Salora Samsung Sansui Sanyo Scott Sears Semp		.267 229 .099 .073 .073 .073 .828 .062 .064 .075 .3, 93 .280 .066 .069 .102 .267 .075 .298 .267 .239 .027 .031 .031 .031 .031 .031 .031 .031 .031

Shintom
Shogun078, 267
Singer
Sony
Sunpak
Sylvania
Symphonic
TMK
Tatung
Teac
Technics
Teknika
Thomas
Toshiba
Totevision
Unitech
Vector
Vector Research
Video Concepts
Videosonic
Wards
White Westinghouse
XR-1000
Yamaha
Zenith
CARLE CONVERTED ROAND AND

CABLE CONVERTER BRAND AND REMOTE CODE(S)

REMOTE CODE(S)
ABC
Allegro
Antronix
Archer
BBT
Belcor
Bell & Howell
Cable Star
Cabletenna
Cableview
Century
Citizen
Colour Voice
Comband
Comtronics
Contec
Digi
Eastern
Emerson
Everquest
Focus
GC Electronics
GE
Garrard
Gemini
General Instrument
GoldStar
Goodmind
Hamlin
Hitachi
Hytex
Jasco

SETTING THE TV REMOTE TO WORK ACCESSORY DEVICES

Remote Control Direct Entry Codes

CABLE CONVERTER BRAND AND
REMOTE CODE(S)
Jerrold
503, 038, 051, 042, 837
Linsay
Macom
Magnavox
Memorex
Movie Time
NSC
Novaplex
Oak
Optimus
Panasonic
Panther
Paragon
Philips
Pioneer
Popular Mechanics
Prelude
Pulsar
Quasar
RCA
Radio Shack
Realistic
Recoton
Regal
Regency
Rembrandt
Runco
SL Marx
Samsung
Scientific Atlanta
Seam
Signal
Signature
Sprucer
StarSight
Starcom
Stargate
Starquest
Sylvania
TFC337
TV86
Tandy
TeleCaption
Teleview
Texscan
Timeless
Tocom
Toshiba
Tusa
Unika
United Artists
Universal
Viewstar
Zenith
Zentek
SATELLITE RECEIVER BRAND AND
REMOTE CODE(S)
AlphaStar
1 11 p 11 a 2 tai 2 tai 2 tai 4 tai 5 tai 6 tai

Amway	. 070,	102
Arunta		548
Astro Industries		122
BMC		
BSR		
Cable Innovations		
Capetronic		
Century		122
Channel Master		
Chaparral		
Citoh		
Conifer		
Curtis Mathes	. 088,	099
DX Antenna		068
Drake	2, 045,	176
Echostar	5. 186.	296
Expressvu		
General Instrument 388, 896, 574	 1 581	654
Gould		
HNS		
HTS		
Hitachi		
Homecable		
Hughes Network Systems		
Hytek		122
IQ		237
IQ Prism		237
Intersat		070
JVC		
Janeil		
Jerrold		
Legend		
Macom	. 000,	043
Magnavox	. 749,	751
Memorex		
Next Level		
Norsat		
Panasonic		
Philips	7, 749,	751
Pico		
Primestar	. 654,	388
RCA	3, 170,	882
Radio Shack	. 581,	896
Ramsey		
Realistic		
STS		
Sony		
Star Choice		
Star Trak		
Strong.		
Toshiba 109, 776		
Town & Country		
Uniden 265, 079	, 101,	397,
581, 751, 103		
Zenith	1, 883,	088
DVD PRAND AND DEMOCRE CO	one/	•)
DVD BRAND AND REMOTE CO	`	_
Denon		
GE		
Harman/Kardon		.871

Mitsubishi
Onkyo
Optimus
Panasonic
Philips
Pioneer
Proscan
RCA
Samsung
Sony
Technics
Theta Digital
Toshiba
Yamaha
Zenith
Zemin
LASER DISC BRAND AND REMOTE

L CODE(S)

ADS	.880
Aiwa	
Carver	858
Denon	
Disco Vision	848
Funai	
Harman/Kardon	
Hitachi	848
Kenwood	
Magnavox	
Marantz853,	
Mitsubishi	849
NAD	
NEC	
Nikkodo	.884
Optimus	
Panasonic	.856
Philips	
Pioneer	
Polk Audio	
Quasar	.856
RCA	
Realistic	855
Samsung	
Sega	
Sharp	873
Sony	878
Technics	
Гheta Digital	853
Victor	
Yamaha	

USING PIP (BASIC CONNECTIONS)

Picture-In-Picture (PIP) is the showing of two pictures on the TV screen at the same time (one main screen picture and one small picture, or PIP). This TV has two separate inputs (ANT[enna] "A" and PIP ANT[enna] "B") for your home's Antenna and/or Cable TV system signals. ANT "A" is referred to on screen as "TUNER-A," and PIP ANT "B" is referred to as "TUNER-B."

The ANT "A" input is primarily for the TV's main screen picture. The PIP ANT "B" input is provided as a second dedicated source option for the TV's PIP "window" and its feature operations. The signal connected to the PIP ANT "B" input can be either a split signal input (as described and illustrated on this page) or a separate external signal source (such as an additional home antenna, satellite dish system, or video accessory device).

See the following steps on how channels connected to the PIP ANT(enna) "B" input can be shown and used within the PIP window.

BEGIN

- Use an RF coaxial cable to connect a cable or satellite signal to the single 75-ohm input plug on a two-way signal splitter (not supplied).
- 2 Connect two lengths of RF coaxial cable to the two output plugs on the two-way signal splitter.
- Connect one of the RF coaxial cables coming from the two-way signal splitter to the ANT(enna) "A" input on the back of the set. Then connect the other RF coaxial cable coming from the two-way signal splitter to the PIP ANT(enna) "B" input on the back of the TV.

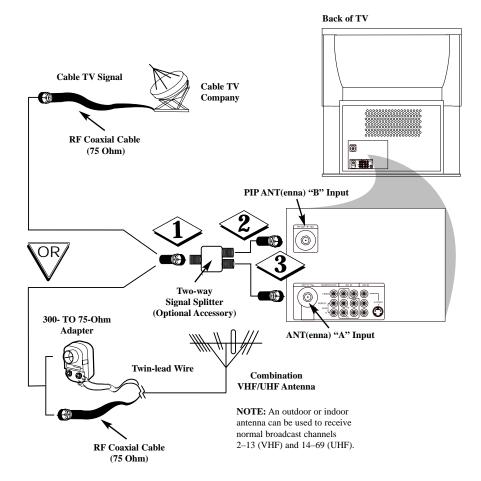
Continue to the next page.

SMART HELP

If you need accessories to complete the described PIP connections, see your dealer or call our Parts Information Center at 1-800-851-8885.

See pages 1, 2, 7, and 8 in the *Setup* and *Quick Use Guide* that came with your set and pages 53 and 54 in this manual for more information on connections.

Main Screen
Picture
Display the signal supplied primarily through the ANT(enna) "A" input on the back of the TV.



NOTE: The purpose of the PIP ANT(enna) "B" input (referred to as "TUNER-B" on your TV screen) is to provide an easily connected, dedicated signal source for use with PIP. A split signal (as illustrated on this page) is not the only option in connecting to the PIP ANT(enna) "B" input. An additional outdoor or indoor antenna or a video game player, for example, could also be connected and displayed on the TV's PIP screen window through the use of the PIP ANT(enna) "B" input.



SELECTING THE PIP SIGNAL SOURCE

Now that you have completed at least a basic connection (as shown on the previous page), you are ready to use PIP.



$\stackrel{4}{\searrow}$ Plug in the TV and turn it on.

- 5 Press the PIP button on the remote control. The PIP window will appear in one of the corners of the TV screen.
- **6** Press the SOURCE button on the remote control to access the PIP ANT(enna) "B" input in the PIP window.
- With a dedicated signal source connected to the PIP ANT(enna) "B" input on the back of the TV, you can press the PIP CH(annel) DN/UP buttons to change channels in the PIP window.

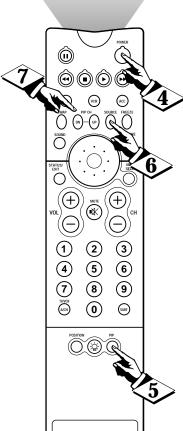
Details on the rest of the PIP remote buttons are on the next page.



SMART HELP

You can connect accessory devices to the AV1, AV2, AV3, and S-VIDEO inputs for viewing in the PIP window. (The Component Video Inputs cannot be shown in the PIP window.) After connecting accessory devices, simply press the SOURCE button to cycle through and choose a signal source to display in PIP. See pages 7 and 8 in the Setup and Quick Use Guide that came with your TV and pages 53 and 54 of this manual for details on, and examples of, accessory-device connection options.





USING THE PIP REMOTE CONTROL BUTTONS

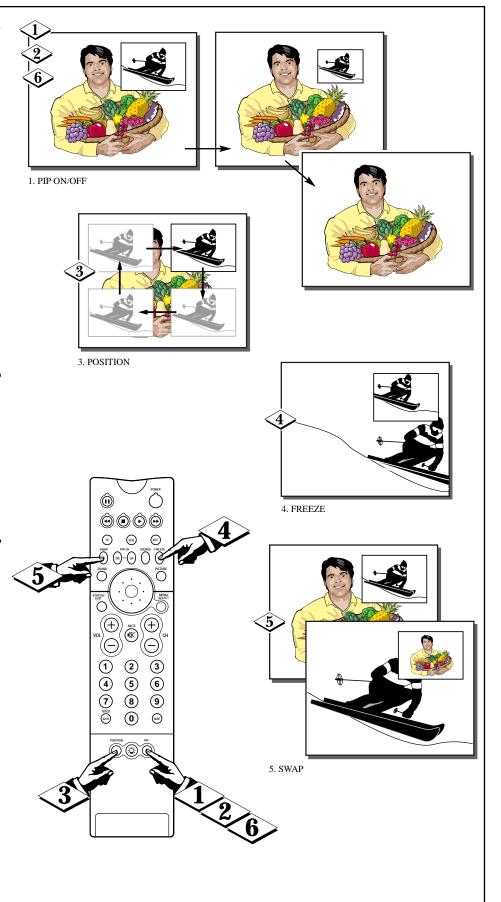


Follow these steps to practice using the PIP buttons. You can change the size of the PIP window, reposition it, freeze its image, or swap its picture with the main picture.

(BEGIN)

- Press the PIP ON/OFF button to show the PIP window. PIP appears in one of the four corners of the screen. Press the PIP ON/OFF button again to reduce the window size. Press the PIP ON/OFF button a third time to remove the PIP window from the main screen.
- Press the PIP ON/OFF button to show the PIP window again.
- Press the POSITION button to move the PIP picture to any of the four corners.
- 4 Press the FREEZE button to stop the action within the PIP window. Press the FREEZE button again to resume normal viewing.
- the main screen picture with the PIP picture. Press the SWAP button again to return the main and PIP screens to their original positions.
- When you are finished using PIP, press the PIP ON/OFF button twice to remove PIP from the screen.





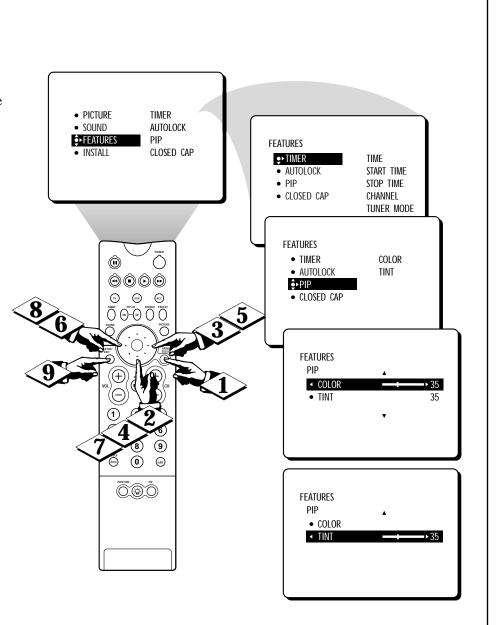
ADJUSTING THE PIP COLOR AND TINT CONTROLS

The Picture-in-Picture (PIP) COLOR and TINT controls allow you to make fine-tune adjustments to the PIP picture settings.

(BEGIN)

- Press the MENU/SELECT button on the remote control to show the on-screen menu.
- 2 Press the CURSOR RING DOWN twice to highlight FEATURES.
- 3 Press the CURSOR RING RIGHT to enter the FEATURES menu.
- Press the CURSOR RING
 DOWN twice to highlight PIP.
- Press the CURSOR RING
 RIGHT again to shift the display to the COLOR adjustment bar.
- 6 Press the CURSOR RING RIGHT or LEFT to adjust the COLOR bar to the desired level.
- 7 Press the CURSOR RING
 DOWN to highlight the TINT adjustment bar.
- 8 Press the CURSOR RING
 RIGHT or LEFT to adjust the TINT
 bar to the desired level.
- 9 Press the STATUS/EXIT button to remove the menu from the screen.





USING CONNECTION OPTIONS



Cable Box/DBS • VCR • TV

Here is an example of how you can make a cable box • VCR • TV connection.

(BEGIN)

- Connect a cable TV signal to a two-way signal splitter.
- Connect an RF coaxial cable to each of the two output plugs on the two-way signal splitter.
- Connect one of the RF coaxial cables you just hooked up to the two-way signal splitter to the PIP ANT(enna) "B" input on the back of the TV.
- Connect the other RF coaxial cable from the two-way splitter to the IN(put) on the cable box
- Use another RF coaxial cable to connect the OUT(put) on the cable box to the ANTENNA IN(put) on a VCR.
- 6 Use another RF coaxial cable to connect the ANTENNA OUT(put) on the VCR to the ANT(enna) "A" input on the back of the TV.
- VIDEO OUT(put) on the VCR to the AV1 IN(put) for VIDEO on the back of the TV.
- 8 Use audio cables to connect the R(ight) and L(eft) AUDIO OUT(puts) on the VCR to the AV1 IN(puts) for AUDIO on the back of the TV.

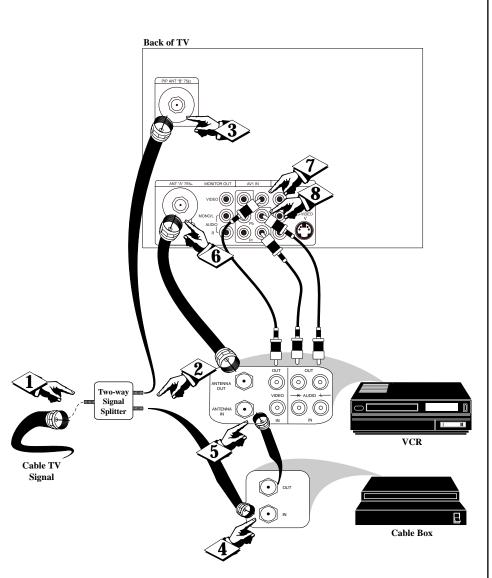


SMART HELP

See page 43 for details on how to select the signal sources you have connected.

If you need accessories or parts to complete the described connections, contact your dealer, or our Parts Information Center at

1-800-851-8885.



USING CONNECTION OPTIONS

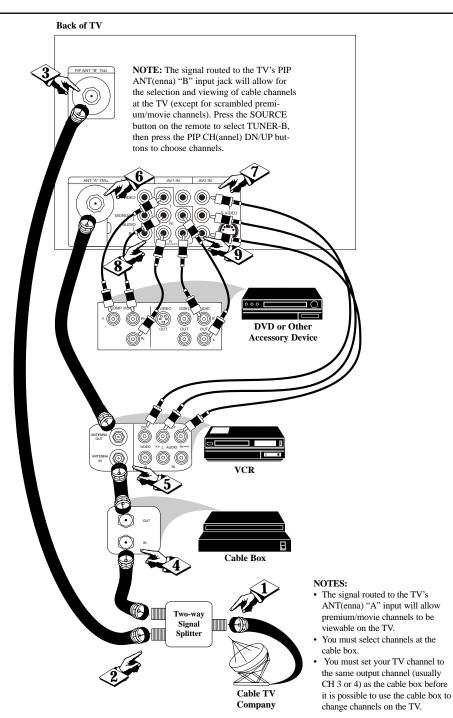
Cable Box • VCR • DVD

The example presented here **I** includes the connection of a DVD or other accessory device to the Component Video inputs (labeled Y, Pb, Pr) on the back of the TV. Component Video provides you with the best possible color and picture resolution.

NOTE: The Component Video inputs signal is viewable only on the main screen, not in the PIP window.

(BEGIN)

- **1** Connect a cable TV signal to a two-way signal splitter.
- **2** Connect two RF coaxial cables to the two-way signal splitter.
- Connect one of the RF coaxial cables you just hooked up to the twoway splitter to the PIP ANT(enna) "B" input on the back of the TV.
- $\stackrel{\textstyle <}{}4$ $\stackrel{\textstyle >}{}$ Connect the other RF coaxial cable to the IN(put) on the cable box.
- **5** Use another RF coaxial cable to connect the OUT(put) on the cable box to the ANTENNA IN(put) on a VCR.
- **6** Use another RF coaxial cable to connect the ANTENNA OUT(put) on the VCR to the ANT(enna) "A" input on the back of the TV.
- 7 Use a video cable to connect the VIDEO OUT(put) on the VCR to the AV2 IN(put) for VIDEO on the back of the TV. Also use audio cables to connect the AUDIO OUT(puts) L(eft) and R(ight) from the VCR to the AV2 IN(puts) for AUDIO on the back of the TV.
- **8** Use component video cables to connect the Component Video outputs (Y, Pb, Pr) on the back of the DVD to the Component Video inputs on the back of the TV.
- **9** Use audio cables to connect the AUDIO OUT(puts) L(eft) and R(ight) on the back of the DVD to the AV1 IN(puts) for AUDIO on the back of the TV.



SMART HELP

viewable on the TV.

You must set your TV channel to

See page 43 for details on how to select the signal sources you have connected.

If you need accessories or parts to complete the described connections, contact your dealer, or our Parts Information Center at

1-800-851-8885.



HELPFUL HINTS



If you are having difficulties with your product, check this list of difficulties and possible solutions before requesting service. You may be able to solve the problem yourself. Charges for TV installation and adjustment of customer controls are not covered under your warranty. If you need to call a customer service representative, please know the model number and serial number of your product before you call. This information is displayed on the back of the product. Also, please take a moment to identify the problem you are having, and be prepared to explain this to the representative. If you believe the representative will need to help you with operations, please stay near the product. Our representative will be happy to assist you.

CAUTION

The continual presence of nonmoving images on your TV screen can damage the picture tube.

A video source such as a video game, CDI, or TV information channel that shows a constant nonmoving pattern on the TV screen can damage the picture tube. When your TV is continuously used with such a source, the nonmoving portion of the on-screen image can become permanently fixed on the picture tube. When you are not using the video source, turn it off. Also, regularly alternate the use of such video sources with normal TV viewing.

Cleaning and Care

- To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning.
- When you are cleaning the TV, take care not to scratch or damage the screen surface. Avoid wearing jewelry or using anything abrasive. Wipe the front screen with a 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. Use a clean, dry cloth to dry the wiped surfaces.
- Never use thinners, insecticide sprays or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.

No power

- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the remote control power or TV power/standby button again. *The location of the TV power/standby button is illustrated on page *S-2.*
- Check that the outlet is not on a wall switch.
- If you are using an AC power strip, be sure the fuse on the power strip is not blown.

No picture

- Check antenna or cable connections to your TV. Be sure they are secure. Details are on pages *S-1, *S-2, 49, 53, and 54.
- Check the Tuner Mode control for the correct tuner setting. *Details are on page *S-5*.
- Try running the Auto Program feature. Details are on page *S-5.
- Press the AV button on the remote to ensure that the correct signal source is selected (Tuner-A, Tuner-B, AV 1, CVI, AV 2, or AV 3). *Details are on page 43*.

No Sound

- Check the volume buttons. *Details are on pages *S-2, *S-3, and 42*.
- Check the mute button on the remote. *Details are on page *S-3*.
- Check the Audio Out and Speaker controls. *Details are on pages 35 and 36*.
- If you are attempting to connect auxiliary equipment, check the audio connections. Details are on pages *S-7, *S-8, 53, and 54.
- If applicable, check the audio receiver for the correct operating mode. Details are on page 36.

Remote does not work

- Check the batteries. If necessary, replace them with AA heavy duty (zinc chloride) or alkaline batteries. Details are on page *S-2.
- Clean the remote control and the remote sensor window on the TV. To locate the TV remote sensor window, see page *S-2.
- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert the plug into the outlet and push the remote power or TV power/standby button again. *To locate the TV power/standby button, see page *S-2.*
- If you are using an AC power strip, be sure the fuse on the power strip is not blown.
- Check to be sure the TV is not on a wall switch.

TV displays wrong channel or no channels above 13

- Select the channel again.
- Add the desired channel numbers into the TV using the Channel Edit control. Details are on page *S-6.
- Check to be sure the tuner mode is properly set.

^{*}S refers to the Setup and Quick Use Guide that came with your TV.



GLOSSARY OF TELEVISION TERMS

Audio/Video Inputs • Connectors (RCA phono-type plug), located on the back of the TV, used for the input of audio and video signals. These inputs are designed for use with VCRs (or other accessories) to receive higher picture resolution and offer sound-connection options.

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 uses on-screen text boxes to show dialogue and conversations while a TV program is in progress.

Component Video Input • The input that allows the separate reception of blue, red, and luminance signals. Provides the highest possible color and picture resolution in the playback of digital signal source material, such as the kind available from DVD players. Allows improved bandwidth information not possible through composite video (A/V) or S-Video Connections.

Identify • The method by which a TV remote control searches and finds an operating code for another product (such as a VCR or a cable converter). After the code has been "identified," the TV remote control can operate and send commands to the other product.

Incredible Stereo (or 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 on-screen list of feature controls that are available for you to adjust.

Multichannel Television Sound (MTS) • The broadcast standard that allows for stereo sound to be transmitted with the TV picture.

On-screen 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).

Picture-in-Picture • The showing of two pictures on the TV screen at the same time (one main screen picture and one small picture, or PIP).

Programming • The process of adding or deleting channel numbers in the television's memory circuits. Through programming, the TV "remembers" only the locally available or desired channel numbers and skips over any unwanted channel numbers.

PTV • Projection Television. (Rear- and/or front-projection design systems are available.)

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

RF • Radio Frequency or modulated signal design used as the carrier for television broadcasts.

RF coaxial cable • Used to connected a broadcast or cable signal to the TV. Also can be used to connect a VCR to the TV (or cable box or DBS).

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 • Allows the user to quickly confirm what channel number is currently being viewed. Status can also be used to clear the TV of on-screen displays or information (rather than waiting 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 satellite, DVD (digital video disc), S (Super)-VHS videocassette recorder, or video games. Provides improved picture resolution, sharpness, and clarity.

Twin–lead Wire • The more commonly used name for the twostrand, 300-ohm antenna wire used with many indoor and outdoor antenna systems. In many cases, this type of antenna wire requires an additional adapter (or balun) in order to connect to the 75-ohm input terminals designed into the more recent TVs and VCRs.

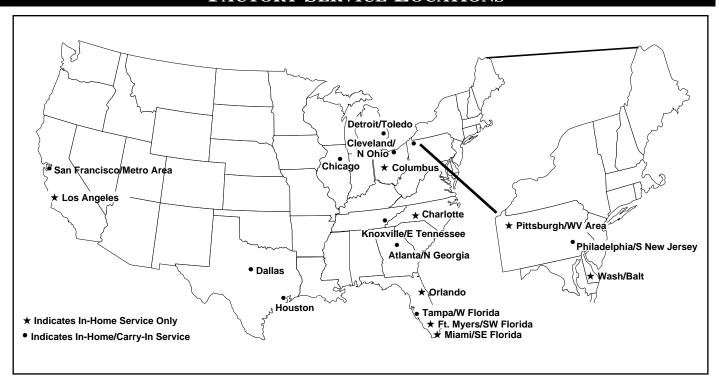
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^{*}S refers to the Setup and Quick Use Guide that came with your TV.

FACTORY SERVICE LOCATIONS



NOTE: If you reside in one of our Philips Factory Service Branch areas (see directory on back), you can contact the nearest Service Branch to obtain efficient and expedient repair for your product. If your product is In-Warranty, you should have proof-of-purchase to ensure No Charge Service. For Out-of-Warranty service, call the location nearest you.

NOTA: Si vous résidez dans une des régions desservies par une succursale de service après vente du fabricant Philips (voir liste ci-dessous), vous pourrez contacter la branche de service après vente la plus près de chez vous pour obtenir un service après vente rapide et efficace. Si le produit est sous garantie, il suffira de présenter une preuve d'achat pour bénéficier d'un service sans frais. Pour les produits non couverts par la garantie, contactez le centre le plus près de chez vous.

NOTA: Si Ud. reside en una de nuestras zonas para sucursales Philips de servicio al de fábrica (ver directorio más abajo), Ud. puede comunicarse con la sucursal de servicio más cercana para obtener una reparación oportuna y eficaz de su producto. Si su producto está todavía bajo garantía, Ud. debe presentar comprobante de compra para no ocasionar ningunos cargos por servicio. Para servicio después del vencimiento de la garantía, llame al lugar más cercano de los abajo indicados.

In Canada

How you can obtain efficient and expedient carry-in, mail-in, or in-home service for your product

Please contact Philips at 1-800-661-6162 (French speaking) 1-800-363-7278 (English speaking)

Au Canada

Comment obtenir le service après-vente pour les produits apportés ou envoyés par la poste à notre centre de service ou le service à domicile

Veuillez contacter philips á: 1-800-661-6162 (Francophone)

1-800-363-7278

En el Canadá

Cómo recibir servicio efficiente para su producto, en persona, por correo o a domicillo

Favor de comunicarse con Philips al: 1-800-661-6162 (francófono)

1-800-363-7278 (anglófono)

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FACTORY SERVICE LOCATIONS

QUALITY SERVICE IS AS CLOSE AS YOUR TELEPHONE! SIMPLY LOOK OVER THE LIST BELOW FOR THE NUMBER OF A FACTORY SERVICE CENTER NEAR YOU. YOUR PRODUCT WILL RECEIVE EFFICIENT AND EXPEDIENT CARRY-IN, MAIL-IN, OR IN-HOME SERVICE, AND YOU WILL RECEIVE PEACE OF MIND, KNOWING YOUR PRODUCT IS BEING GIVEN THE EXPERT ATTENTION OF PHILIPS' FACTORY SERVICE.

COMMENT OBTENIR NOTRE SERVICE APRÈS VENTE RAPIDE ET EFFICACE SOIT PAR COURRIER, À DOMICILE, OU EN SE PRÉSENTANT À UN CENTRE DE SERVICE PHILIPS. PLUS DE 600 CENTRES DE RÉCEPTION DE PRODUITS À RÉPARER À TRAVERS LE PAYS: CONTACTER LE CENTRE DE SERVICE AUX CONSOMMATEURS LE PLUS PROCHE POUR SAVOIR L'EMPLACEMENT DE CES DÉPÔTS DANS UN RAYON DE 50 À 75 MILES (80 KM À 120 KM) DU CENTRE DE SERVICE LOCAL.

CÓMO OBTENER UN SERVICIO OPORTUNO Y EFICIENTE POR CORREO, EN CASA O EN PERSONA PARA SU PRODUCTO A TRAVÉS DE UN CENTRO PHILIPS DE SERVICIO. MAS DE 600 SITIOS POR TODO EL PAÍS PARA LA RECEPCION DE PRODUCTOS NECESITADOS DE REPARACIONES: COMUNICARSE CON EL CENTRO DE SERVICIO DE FABRICA MAS CERCANO PARA ESTOS LUGARES DENTRO DE UN RADIO DE 80 A 120 KM (50 A 75 MILLAS) DEL CENTRO DE SERVICIO LOCAL.

ATLANTA

Philips Factory Service 200 N. Cobb Pkwy., Suite 120 Marietta, GA 30062 800-273-1501

TAMPA

Philips Factory Service 1911 US Highway 301 North Tampa, FL 33619 800-442-2027

SAN FRANCISCO

Philips Factory Service 681 East Brokaw Rd. San Jose, CA 95112 800-300-9013

HOUSTON

Philips Factory Service 1110 N. Post Oak Rd., Suite 100 Houston, TX 77055 800-952-3254

CLEVELAND

Philips Factory Service 950 Keynote Circle Brooklyn Heights, OH 44131 800-331-7037

DETROIT

Philips Factory Service 25173 Dequindre Madison Heights, MI 48071 800-438-1398

DALLAS

Philips Factory Service 415 N. Main Street, #107 Euless, TX 76040 800-952-3254

CHICAGO

Philips Factory Service 1279 W. Hamilton Pkwy. Itasca, IL 60143 800-531-2922

KNOXVILLE

Philips Factory Service 6700 D Papermill Rd. Knoxville, TN 37919 800-821-1767

PHILADELPHIA

Philips Factory Service 352 Dunks Ferry Rd. Bensalem, PA 19020 800-847-9320

LIMITED WARRANTY

PROJECTION TELEVISION

One Year Free Labor

One Year Free Service on Parts

Two Years Free Service on Cathode Ray Tube Parts / 30 days Free Service on Projection TV Screen This product can be repaired in-home.

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. for one year thereafter (30 days for the projection TV screen), all parts will be repaired or replaced, and labor and transportation are free. From one to two years from the day of purchase, you pay for the replacement or repair of all parts except the cathode ray tube and the "Clear-Vu" lens, and for all labor and transportation charges. After two years from the day of purchase, you pay for the replacement or repair of all parts except the "Clear-Vu" lens (which is guaranteed against manufacturer's defects for the life of the product), and for all labor and transportation charges.

All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product used for commercial or institutional purposes.

WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call

TO GET WARRANTY SERVICE...

Repair must be performed by an authorized service center or a factory service center. If you do not live near a factory service center, contact your dealer. If your dealer is an authorized service center, he will arrange repair. If your dealer is not an authorized service center, he will direct you to the authorized service center engaged by him to service the products he sells.

(In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

IF YOU HAVE QUESTIONS...

Please contact Philips at:

1-800-661-6162 (French Speaking) 1-800-363-7278 (English Speaking)

REMEMBER...

Please record the model and serial numbers found on the product below. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL#	
SERIAL#	

This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.