HDTV Monitor with Pixel Plus™

# Your Television's Directions for Use 55PP9753 60PP9753

- Pixel Plus<sup>™</sup>
- Digital Natural Motion<sup>™</sup>
- Philips HD Optics
- Active Control<sup>™</sup> with ambient light sensor
- APAC<sup>™</sup>—Automatic Phosphor Aging Compensation
- Auto IntelliSense<sup>™</sup> Focus
- HD DVI and Component inputs
- Dolby® Virtual Surround









# 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!"**

### 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.

PHILIPS

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,

Caurence J. Blanford

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!





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.

### PHILIPS Visit our World Wide Web Site at http://www.philips.com

### IMPORTANT SAFETY INSTRUCTIONS Read before operating equipment

- 1. Read these instructions.
- **2.** Keep these instructions.
- 3. Heed all warnings.
- **4.** Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
- **8.** Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **9.** Do not defeat the safety purpose of the polarized or groundingtype 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.
- 12. 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:
  - A. The power supply cord or the plug has been damaged; or
  - **B.** Objects have fallen, or liquid has been spilled into the appliance; or
  - **C.** The appliance has been exposed to rain; or
  - **D.** The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - **E.** The appliance has been dropped, or the enclosure damaged.
- **17. Tilt/Stability** All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.

• Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.

• Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.

- **18.** Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- **19. Power Lines** An outdoor antenna should be located away from power lines.
- **20. Outdoor Antenna Grounding** If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

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

**21. 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.



### Contents

#### INTRODUCTION

Welcome/Registration of Your TV
Safety/Precautions
Features

# CONNECTING ACCESSORY DEVICES

Descriptions of Jacks, Cables, and Connectors
Panel Jack Compatibility Information7
Preconnection Recommendations
Connecting a VCR9
Connecting a VCR and Cable Box10
Connecting an S-Video Device11
Connecting a Standard DVD Player12
Connecting a Progressive-scan DVD Player13
Connecting an HD Satellite Receiver to Y Pb Pr14
Setting Color Space for HD input-AV 315
Connecting an HD Satellite Receiver to DVI16
Connecting Surround Sound Equipment17
Connecting to the Side Inputs: Video Game System18
Labeling the Audio/Video Input Sources

### USING THE REMOTE CONTROL

Programming the Remote Control	.20–21
Programming the Remote Control: Set-up Codes	.22–23
Operating Accessory Devices with the TV Remote	.24–26
Using Active Control <sup>™</sup> Plus+	27
Using AutoPicture	28
Using Active Display	29

### Using the On-screen Menus

#### PICTURE

Adjusting/Setting the Picture Controls	.30
Selecting a Digital Processing Option	.31
Selecting a Dynamic Contrast Option	.32
Selecting a DNR (Dynamic Noise Reduction) Option $\ldots$	.33
Turning on Color Enhancement	.34
Selecting a Picture Format Option35	5-36

# 

Selecting an AutoSound <sup>™</sup> Option
Selecting a TV Equalizer Option
Adjusting the TV and Headphone Volume
Turning Loudness on or off4
Adjusting TV Speaker Balance4
Selecting a Sound Mode Option4

Using Alternate Audio (SAP)	.43
Setting the TV for Stereo Programming	.44
Turning the AVL (Audio Volume Leveler) on or off	.45
Adjusting the Delta Volume	.46
Adjusting TV Speakers and Audio Out	.47
FEATURES	
Setting the Sleeptimer	.48
Setting the On Timer	
Using Zoom	.50
Using the Channel List	.51
Removing Channels from the Channel List	
Using Lock Channel	
Using Lock After	.54
Blocking Programming Based on TV Ratings	
Blocking Programming Based on Movie Ratings	
Turning the Antenna Attenuator on or off	
G	
Turning the Menu Background on or off	.58
Using Surf	
Selecting a PIP Format	
Changing Channels or Input Sources in Dual Screen/PIP .	.61
Selecting a Picture Freeze Option	.62
Resetting the Audio/Video Settings to Factory Default Values	.63
Selecting Closed Captioning Option	.64
Selecting an On-screen Display Option	.65
Setting up or Changing a PIN (Personal Identification Number)	.66
Setting the Clock—Auto Clock mode	.67
Setting the Clock Manually	.68
Selecting a Time Zone and Setting the Daylight Savings Control	.69
Manual Convergence	.70
Manual Convergence, Multipoint	.71
Additional Information	
Cleaning the TV	.72
Troubleshooting	.73
Index	.74
Factory Service Locations	5-76
Limited Warranty	.80

#### Pixel Plus<sup>™</sup>

Get more! More detail, more texture, more resolution, more high-definition-like images from any source. By doubling the number of lines and the number of pixels per line, Pixel Plus<sup>TM</sup> will take your viewing to new levels of enjoyment. Pixel Plus™ is only from Philips.

#### Digital Natural Motion<sup>™</sup>

Eliminates motion jitter from film-based sources such as DVDs for distortion-free, natural viewing.

#### **Philips HD Optics**

The Philips HD Optics gives extreme resolution HD with cutting-edge processing and display technology. Includes Philips wideband video amplifier, microphosphor CRTs, hybrid projection lenses, first-surface mirror, and fine-pitched lenticular screen.

#### Active Control Plus<sup>™</sup>

By continually adjusting picture settings over 60 times per second, Active Control Plus<sup>™</sup> ensures that the viewing experience is always optimal. Changes in ambient light are even compensated for!

#### **APAC**—Automatic Phosphor Aging Compensation

Stationary images, particularly black bars that outline 4:3 programming on a widescreen TV, could eventually leave an afterimage on the screen. APAC automatically shifts the image, just enough to blur after-image retention, which reduces the effect of stationary images.

#### Auto IntelliSense<sup>™</sup> Focus

Automatically adjust picture convergence at the push of a button. Auto IntelliSense<sup>TM</sup> Focus responds to the natural and man-made magnetic field conditions where the projection TV is located, so you can easily enjoy a well-converged picture.

#### **Dolby\* Virtual Surround**

Dolby processing circuitry for enhanced surround sound effect creates the sensation of Dolby Pro Logic without the hassle of additional rear speakers.

#### **HD DVI and Component Inputs**

DVI supports High-definition Copy-protected digital video input for connection to compliant set-top boxes. HD component connection (Y Pb Pr or RGB + HV) offers color purity, crisp color detail, and reduced color noise.

### Items Included with This TV

#### As you unpack your TV, please note the included items:

- Quick Use and Setup Guide to help you set up your new TV.
- Directions for Use manual-contains information on safety, set maintenance, Factory Service Center locations, and product warranty
- · Warranty Registration Card
- Remote Control (with supplied batteries).

Please take a few minutes to complete your registration card. The serial number for the TV is on the rear of the set. For your future reference, please write down the serial and model number of this television in the space provided on the warranty page at the back of this manual. (In the unlikely event you should need to place a service call, these numbers will be needed.)

### **End-of-Life Disposal**

Your new television and its packing 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 of. Your product also uses batteries that should not be thrown away when depleted, but should be handed in and disposed of as small chemical waste.

When you replace your existing equipment, please find out about the local regulations regarding disposal of your old television, batteries, and packing materials.



As an Energy Star® Partner, Philips Consumer Electronics has determined this product meets the Energy Star® guidelines for energy efficiency. Energy Star® is a U.S. registered mark. Using products with the Energy Star® label can save energy. Saving energy reduces air pol-

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

Active Control, APAC, Digital Natural Motion, IntelliSense, and Pixel Plus are trademarks of Philips Consumer Electronics. Copyright 2003 Philips Consumer Electronics. All rights reserved.

### **Descriptions of Jacks, Cables, and Connectors**

This page contains descriptions and illustrations of jacks, cables, and connectors you might use in making connections. The cables and connectors are not supplied with your TV, but you can purchase at your electronics dealer. Or you can order them by calling our Customer Care Center at 1-800-531-0039.

#### **DVI-D** Input Jack Cable used: DVI-D

This jack works only with DVI TMDS (Transition Minimized Differential Signaling) digital video. Allows encrypted transmissions of uncompressed digital content. The DVI-D jack used in this product is not for computer connections.



Component Video Jacks

Cables Used: Component

Video with RCA-type

Phono Plugs

S-VIDEO Jack

Cable Used: S-Video

S-VIDEC

#### **Component Video Input Jacks** Cables used: component video with **RCA-type phono plugs**

Allow you to connect accessory devices such as DVD players. Separating the video into three signals, these inputs provide excellent quality. Be sure to connect the left and right audio cables, because the Y, Pb, Pr jacks receive only the picture signal.

NOTE: See the "Helpful Hint" on page 12 for more information.

#### S-Video Input Jacks Cable used: S-Video

Provide a higher quality picture than the Video (composite) jacks because the color part of the picture is separated from the black and white portion. Be sure to connect the left and right audio cables, because the S-Video jacks receive only the picture signal.

#### Video (called "CVBS" or "composite") Input lacks Cable used: Video with RCA-type

# phono plugs

Provide better picture performance than the antenna RF input. Be sure to connect the audio cables, because the video jacks receive only the picture signal.

Your TV also has a monitor output ("Output") video ("V") jack. Use a video cable with RCAtype phono plugs to make connections.

#### Tuner (RF) Input Jack Cables used: RF coaxial cable (75 $\Omega$ )

Allows you to connect an antenna, cable TV, or components having RF outputs to the antenna input on the TV. RF coaxial cables are available in push-on or screw-on type.





Antenna RF Jack Cable Used: RF Coaxial (75 $\Omega$ ) TUNER



Push-on Screw-on Or Type Cable Type Cable

#### Signal Splitter

Allows you to route an antenna or cable TV signal to two inputs.

Signal Splitter Cables Used: RF Coaxial (75 $\Omega$ )



300- to 75-ohm

#### 300- to 75-ohm Twin-lead Adapter

Accepts twin-lead wires from an antenna and allows connection to the antenna input on the TV. If your antenna is already equipped with an RF coaxial cable you will not need this adapter.



Audio Jacks

Cables Used:

Audio with RCA-

type Phono Plugs

#### **Audio Input Jacks** Cables used: Audio with RCA-type phono plugs

Provide sound for the video inputs. If your accessory device has only one output for audio, connect it to the left (color coded white) audio jack on the TV.

Your TV also has monitor output ("MON OUT") audio ("L" and "R") jacks and a subwoofer output ("SUB OUT") jack. Use an audio cable with RCAtype phone plugs to make connections.

### 3.5mm Stereo Mini Phone Plug to RCA Jack Adapter

Allows a connection between the 3.5mm stereo audio out jack on a computer and the left and right audio inputs on the television. Connect A/V cables with RCA-type phono plugs to the adapter, then to the TV.

#### 3.5mm Stereo Mini Phone Plug to RCA Jack Adapter



#### Center Channel Amp Speaker Terminals (+ and -)

Allow a connection from a surround sound receiver. Set the EXT/INT switch to EXT to use the TV speakers as the center speakers in a surround sound arrangement.

Center Channel Amp Speaker Terminals (for the connection of speaker wires)





ANTENNA IN 75 $\Omega$  Input Jack Signals accepted: NTSC (480i). Inputs available: 75 $\Omega$  RF coaxial. This is for antenna or cable RF input.

### INPUT-AV 1/Component Video (CVI) Jacks Signals accepted: NTSC (480i).

**Inputs available (three types):** Y Pb Pr (component video), S-Video (super video), or Video (composite), plus audio left and right. Only one of the types of video inputs should be used at a time. For either an S-Video or Video connection, select the AV1 source in the onscreen display. For a Y Pb Pr connection, select CVI. For sound, connections must be made to the INPUT-AV1 audio inputs.

### 2

#### **INPUT-AV 2 Jacks Signals accepted:** NTSC (480i).

**Inputs available (two types):** S-Video (super video) or Video (composite), plus audio left and right.

Only one of the types of video inputs should be used at a time. For either an S-Video or Video connection, select the AV2 source in the onscreen display. For sound, connections must be made to the INPUT-AV 2 audio inputs.

#### HD INPUT-AV 3 Jacks

**Signals accepted:** 480p and 1080i, plus audio left and right.

**Inputs available (two types):** Y Pb Pr (component video) or RGB+HV sync, plus audio. For sound, connections must be made to the HD INPUT-AV 3 audio inputs.



#### HD INPUT-AV 4 Jacks

**Signals accepted:** Digital only (TMDS [Transition Minimized Differential Signaling] encoded, uncompressed); DVI 480p and 1080i, plus audio left and right.

**Inputs available:** DVI TMDS, plus audio. For sound, connections must be made to the HD INPUT-AV 4 audio inputs.



#### **OUTPUT Jacks**

Provide video and left/right audio output signals from the input source currently being viewed on screen, except for HD INPUT-AV 3 or AV 4. When HD INPUT-AV 3 or AV 4 is used, only the audio is available through the OUTPUT audio L/R jacks. The OUTPUT audio is at a fixed volume level; changing the TV volume does not affect them. Adjust the volume at your external home cinema system.

# CENTER CHANNEL AMP INPUT Click-fit Terminals

Provides speaker-wire input terminals for connection of an external home-cinema surroundsound system amplifier. For this use, set the switch to "EXT," and the TV speakers become the center speakers for the home-cinema surround-sound system.

**NOTE:** If no audio is heard from the set, check to make sure the Center Channel Amp switch is in the INT position. This switch should be in the EXT position only when an external center channel input is connected to the Click-fit Terminals.





### Why So Many Types of Inputs?

As better-quality signals have become available, new inputs have been designed into accessory devices (VCRs, DVD players, cable boxes, etc.) and TVs to carry them. The other inputs have been left in place to work with the installed base of older equipment. Here is a summary of the quality of signal offered by the different types of inputs:

**Basic:** ANTENNA IN 75 $\Omega$ . May provide the only way to connect an antenna and some older cable boxes and VCRs.

**Good: VIDEO (Composite) Input.** A small step up in quality from the ANTENNA IN 75 $\Omega$  input. Most cable boxes, VCRs, and DVD players have this type of connection.

**Better:** S-VIDEO (Super Video) Input. Separates the signal into color and brightness, improving image quality. Used with DVD players, digital cable boxes, satellite receivers, and some camcorders.

**Best: Y Pb Pr (Component Video) Input.** Carry potentially the best-quality signals. The video signal is split into three signals, two color and one brightness. Used primarily with DVD players.

#### SUBWOOFER

Provides a signal to an external powered subwoofer.

#### SIDE JACK PANEL

Signals accepted: Analog NTSC (480i). Inputs available (two kinds):

S-Video (super video) and Video (composite), plus audio left and right.

#### Output available: Headphone.

Only one of the inputs can be used at a time. Select the Side source, and the TV detects the input to which you have connected. For sound, connections must be made to the Side audio inputs.

### HELPFUL HINT

Color Coding Used on Jacks and Plugs to simplify connections: Yellow: VIDEO (Composite Video) Green, Blue, Red: Y Pb Pr (Component Video) Red: Right AUDIO White: Left AUDIO.

### **Preconnection Recommendations**

Before connecting accessory devices—VCR, DVD player, or HD satellite receiver, for example—please keep the following in mind.

#### Positioning the TV

- Allow 4 to 6 inches of space behind the TV for ventilation.
- Test various locations in the room to find the optimal spot to locate the set for best viewing.
- Do not place the TV in direct sunlight or near a heating appliance.
- Do not expose the TV to rain or moisture.
- To prevent any unsafe situations, do not place objects on top of the TV.

#### Providing Protection Against Power Surges

- Connect all accessory devices before you plug any of their power cords into the wall outlet or power strip. NEVER plug your TV into an outlet that is controlled by a wall switch.
- Turn off the TV and/or accessory devices before you connect or disconnect any cables.
- Ensure that all antennas and cables are properly grounded. See page 3, "Important Safety Instructions."

#### Protecting Accessory Devices from Overheating

- Arrange accessory devices so that air can circulate freely around them.
- Don't stack the accessory devices. Arrange them to allow for good ventilation.
- If you connect an audio receiver or amplifier, place it on the top shelf so the heated air from it will not flow around other components.

#### **Connecting Cables**

Be sure to insert each cable firmly into the correct jack.

# Using the Connection Examples in This Manual

The accessory device jack panels shown are for example purpose only. The jack panels on your accessory devices may look different. Also, note that connections can be made in various ways. The examples are presented only as guides. For safety, do not set objects on top of the TV.



### Connecting a VCR

Connect the incoming antenna or cable TV signal to the ANT IN jack on the back of the VCR.

Using a coaxial cable, connect the ANT OUT jack on the back of the VCR to the ANTENNA IN  $75\Omega$  jack on the back of the TV.

Using A/V cables, connect the AUDIO and VIDEO OUT jacks on the back of the VCR to the corresponding INPUT-AV 2 audio (L and R) and video (V) jacks on the back of the TV.

Press the Source button on the remote control to access the Source list.

Press the Cursor Up or Down button to select the AV2 input source.

Press the OK button to confirm your choice. The set is now switched to the AV2 input source for the viewing of programs from the VCR.

NOTE: Since you've connected the cable TV signal directly to the TV's tuner (step 2 above), you can watch the unscrambled programs by simply tuning to the desired channel. To store channels in the TV's memory, you must use Autoprogram, which you can access through "Install" in the TV's on-screen menu. See the Autoprogram section in the Quick Use and Setup Guide that came with the TV. If you use Autoprogram, you can select channels by pressing the CH + or - buttonson the TV remote control (in TV mode). Otherwise, you must press the digit (number) buttons to tune directly to the channel you desire.

### HELPFUL HINT

Color Coding Used on Jacks and Plugs to simplify connections: Yellow: VIDEO (Composite Video) Red: Right AUDIO White: Left AUDIO.





simplify connections:

**Red:** Right AUDIO White: Left AUDIO.

Yellow: VIDEO (Composite Video)

### Connecting a VCR and Cable Box

NOTE: A cable box with AUDIO OUT jacks Back of TV Incoming Cable TV such as the one used in the example on this Signal page might pass stereo sound to the TV. Check with your cable TV company. The RF jack output jack on a cable box (commonly labeled "OUT TO TV," "OUTPUT," or "OUT") will  $\bigcirc$ not pass stereo sound to your TV. Signal ۵ () Connect the incoming cable TV signal Splitter to a two-way signal splitter. The signal () G/Y splitter enables you to route the cable R/Pr signal to the TV without using the () B/P OUT TO TV jack on the cable box, VIDEO (( which will not pass stereo sound to the TV.  $\bigcirc$ R 🔘 ۲ Using a coaxial cable, connect one of the connectors on the signal splitter to ) e the ANTENNA IN 75 $\Omega$  jack on the ෩ඁඁඁ෧෦ back of the TV. Back of VCR Using a coaxial cable, connect the τν (example only) other connector on the signal splitter to AVI:None the CABLE IN jack on the back of the CVI: None AV2:None Source 🛞 cable box. 0 0 0 AV3:None AV4:None SIDE:None Using Audio/Video cables, connect the AUDIO and VIDEO OUT jacks on the back of the cable box and to the corresponding AUDIO and VIDEO IN jacks 0 CABLE / on the back of the VCR. Using Audio/Video cables, connect the Back of Cable Box (example only) CBL VCR DVD SAT AMP AUDIO and VIDEO OUT jacks on the Gelect 🖪 O ----back of the VCR to the corresponding ÖÖÖ AV2 audio (L and R) and video (V) input jacks on the back of the TV. NOTE: You can watch the unscrambled cable programs by simply tun-Press the Source button on the remote ing to the desired channel. To store (MENU) control to access the Source list. channels in the TV's memory, you + сн must use Autoprogram, which you Press the Cursor Up or Down button to can access through "Install" in the TV's on-screen menu. See the select the AV2 input source. 0 2 3 Autoprogram section in the Quick 0 0 0 Use and Setup Guide that came with Press the OK button to confirm your 0 0 0 the TV. If you use Autoprogram, choice. The set is now switched to the 00 you can select channels by pressing AV2 input source for the viewing of pro-the CH + or - buttons on the TV grams from the cable box or the VCR. remote control (in TV mode). Otherwise, you must press the digit (number) buttons to tune directly to the channel you desire. HELPFUL HINT Color Coding Used on Jacks and Plugs to

### **Connecting an S-Video Device**





### HELPFUL HINT

Color Coding Used on Jacks and Plugs to simplify connections: Red: Right AUDIO White: Left AUDIO. An S-Video cable must be used to make the S-Video connection.



### **Connecting a Standard DVD Player**

- - Using Audio/Video cables, connect the YPbPr jacks on the back of the standard DVD player to the Y Pb Pr jacks located under the INPUT-AV 1 label on the back of the TV.
  - Using Stereo Audio cables, connect the AUDIO OUT jacks on the back of the DVD player to the corresponding audio (L and R) jacks located under the INPUT-AV 1 label on the back of the TV.
- 3

Press the Source button on the remote control to access the Source list.

Press the Cursor Up or Down button to select the CVI (component video input) source.

Press the OK button to confirm your
choice. The set is now switched to the
CVI source for the viewing of programs
from the DVD player.

### HELPFUL HINTS

- To simplify making connections, the connectors on audio and video cables are often color coded to match the colors on TV jacks. Red for Right audio and White for Left audio.
- The names for the component video jacks may differ depending on the DVD player or accessory digital source equipment used. For example, besides Y Pb Pr, you may see R-Y/B-Y/Y; or Cr Cb Y. Although abbreviations and terms may vary, the letters *B* and *R* stand for the blue and red color component signal connectors, respectively, and *Y* indicates the luminance signal. If necessary, refer to the user manual for your DVD or digital accessory for more information.
- If you experience difficulties receiving sound with a DVD disc, check the sound settings through the DVD disc's menu.

#### Back of TV







### Connecting a Progressive-scan DVD Player

Using Audio/Video cables, connect the YPbPr jacks on the back of the progressive-scan DVD player to the HD INPUT-AV 3 Y Pb Pr jacks on the back of the TV.

Using Stereo Audio cables, connect the AUDIO OUT jacks on the back of the DVD player to the corresponding HD INPUT-AV 3 audio (L and R) jacks on the back of the TV.

If your DVD player has an I/P switch on the back, be sure it is set to the "P" position for progressive-scan mode. **NOTE:** Some DVD players have an I/P switch on the back, while others may allow the user to change the mode by pressing a button on the DVD player's remote control or by using the DVD player's on-screen menu. Also, some DVD players have dedicated progressive-scan output jacks that are labeled as such and require no switching by the user. See the user manual for your DVD player for more information on placing the player in progressivescan mode.

Press the Source button on the remote control to access the Source list.

Press the Cursor Up or Down button to select the AV3 input source.

Press the OK button to confirm your choice. The set is now switched to the AV3 input source for the viewing of programs from the DVD player.

### **HELPFUL HINTS**

- To simplify making connections, the connectors on audio and video cables are often color coded to match the colors on TV jacks.
- The names for the component video jacks may differ depending on the DVD player or accessory digital source equipment used. For example, besides Y Pb Pr, you may see R-Y/B-Y/Y; or Cr Cb Y. Although abbreviations and terms may vary, the letters *B* and *R* stand for the blue and red color component signal connectors, respectively, and *Y* indicates the luminance signal. If necessary, refer to the user manual for your DVD or digital accessory for more information.
- If you experience difficulties receiving sound with a DVD disc, check the sound settings through the DVD disc's menu.

#### Back of TV



# Connecting an HD Satellite Receiver to Y Pb Pr

Using Component Video cables, con-Back of TV nect the YPbPr jacks on the back of the ITENNA IN HD satellite receiver to the corresponding AV3 YPbPr jacks on the back of the TV. Using Stereo Audio cables, connect the AUDIO OUT jacks on the back of the HD satellite receiver to the corresponding AV3 audio (L and R) jacks on the back of the TV. Refer to the user manual for the HD satellite receiver for information. After completing HD satellite receiver connections and setup through the onscreen setup menus, press the Source button on the TV remote to access the Source list. Press the Cursor Up or Down button to select the AV3 input source. Press the OK button to confirm your choice. The set is now switched to the AV3 input source for the viewing of programs from the HD satellite receiver.



# Setting Color Space for HD INPUT-AV 3



*Color space* refers to how colors are defined and appear on your TV. The INPUT-AV 3 color space needs to match the output of the accessory device you have connected to the output, either YPbPr or RGB. The default setting for HD INPUT-AV 3 is YPbPr. Change the setting to RGB if necessary for your accessory device.

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

Press the Cursor Down button to select "Settings."

Press the Cursor Right button repeatedly to select the "Source" menu.

Press the Cursor Down button repeatedly until "AV3 input" is selected. The current Color Space setting is highlighted.

If you need to change the setting, press the Cursor Right button.

Press the Menu button to remove the on-screen menu from the TV screen.





# Connecting an HD Satellite Receiver to DVI

Back of TV

ANTENNA IN 75

 $\odot$ 

- - Using a DVI cable, connect the DVI jack on the back of the HD satellite receiver to the corresponding HD INPUT-AV 4 jack on the back of the TV.
  - Using Stereo Audio cables, connect the AUDIO OUT jacks on the back of the HD satellite receiver to the corresponding HD INPUT-AV 4 audio (L and R) jacks on the back of the TV.
  - Refer to the user manual for the HD satellite receiver for information.
  - After completing HD satellite receiver connections and setup through the onscreen setup menus, press the Source button on the TV remote to access the Source list.
    - Press the Cursor Up or Down button to select the AV4 input source.
  - Press the OK button to confirm your choice. The set is now switched to the AV4 input source for the viewing of programs from the HD satellite receiver.

### HELPFUL HINT

Because DVI is such new technology, the electronics industry is still working toward a single standard. Philips testing has determined that compatibility issues exist with respect to a limited number of high-definition receivers when they are connected to the DVI input on this television. If you should experience difficulties, please contact our Customer Care Center at 1-800-531-0039.









•

### **Connecting Surround Sound Equipment**

(III)





2

Δ

6

receiver.

get a fuller, deeper sound.



### Connecting to the Side Inputs: Video Game System

- Using the Audio/Video cable supplied with your video game system, connect to the back of the game system and to the corresponding S-VIDEO and AUDIO (L and R) jacks in the Side panel of the TV.
- Press the Source button on the TV remote control to access the Source list.

3

Press the Cursor Up or Down button to select the Side input source.

Press the OK button to confirm your choice. The set is now switched to the Side input source for the viewing of your video game system.

# 🗹 Снеск Іт Оит

You can press the Cursor Up or Down button to pan the screen up and down on your to see excluded parts of the picture. Use this feature with Super Zoom, Movie Expand 14:9, Movie Expand 16:9, and 16:9 Subtitle. See pages 35-36 for details on using the Picture Format options.

Left and right panning is possible with the Side input source when the source has been labeled "Game." See page 19 for details on labeling input sources.



# Labeling the Audio/Video Input Sources





### **Programming the Remote Control**

The remote control supplied with your television will also operate a variety of infraredcontrolled accessory devices such as cable boxes, VCRs, DVD players, satellite receivers, and amplifiers.

The TV remote's default mode at power up and after replacing the batteries is TV. You must press the Select button to switch the remote to one of the accessory modes—CBL, VCR, DVD, SAT, or AMP.

Depending on the accessory device you have, programming may not be necessary, because default codes for certain accessory devices have already been programmed into the remote. So before attempting to program, try this test:

- Press the Select button to cycle through the accessory modes—CBL, VCR, DVD, SAT, or AMP. The green light indicates the selected mode. Two seconds after selection, the accessory-mode light will begin to blink. The blinking light means the remote is in the selected accessory mode.
- Point the remote toward the accessory device, then press the Standby–On button to see if the accessory device responds. If not, follow the steps below to program the remote. **Suggestion:** The programming process is easy, but you may want to read the following steps first to familiarize yourself with what you'll be doing, then go back through the steps again, reading and performing them.

Press the Select and Standby–On buttons at the same time, then release.

**NOTE:** When inputting the digits as described below, you must not allow more than 20 seconds to pass between the input of each digit or you will need to return to step 1 and begin the programming process again.

Input the appropriate digit provided below for the type of accessory device you want to operate:

- 1 Cable (CBL)
- 2 VCR
- 3 DVD
- 4 Satellite (SAT)
- 5 Amplifier (AMP).

Input the 4-digit code for the type and brand of accessory device. The codes are listed on pages 22-23.



### **Programming the Remote Control**

Continued from page 20.

The green light behind the Standby–On button will blink for 3 seconds to show that a valid code was input. If a valid code was not entered, the light will stay on continuously for 3 seconds. If that occurs, go back to step 1 and begin the programming process again.

5

Now you will try to use the TV remote with the accessory device.

Press the Select button on the remote to cycle across the accessory mode dial. Stop pressing the button when the mode you desire is lighted. The light will stay on for 2 seconds and then begin blinking. The blinking means that the remote is in the accessory mode you have selected.

Within 60 seconds from the time the blinking starts, point the remote toward the accessory device and press the Standby–On button.

If the device does not respond to the Standby-On command, follow the steps for programming the remote again using a different setup code for the type and brand of accessory device you wish to operate. Refer again to the code list on pages 22-23. If no more codes are listed for the type and brand of accessory device, the remote likely will not operate your particular model of accessory device. NOTE: Your TV remote is not necessarily capable of being programmed to operate all models of the brands of accessory devices listed on pages 22-23. You may want to try the programming process again. Try using the number(s) that are listed for your type and brand of device to be sure you did not make a mistake in inputting the digits during your first attempt at programming.

#### HELPFUL HINT

If the remote control is in one of the accessory modes (a mode light is flashing)— CBL, VCR, DVD, SAT, AMP—and you don't press any of the remote buttons for sixty seconds, a "time-out" occurs, returning the remote to TV mode.



### 🗹 Снеск Іт Оит

You can change the duration of the time-out mode by simultaneously pressing the Select button and a digit button, 1–4. Using digit 1 will set the time-out to 15 seconds; digit 2, 30 seconds; digit 3, 60 seconds; and digit 4, 120 seconds. The default time-out setting after you replace the batteries in the remote is 60 seconds. All modes will have the same timeout setting.

21



# **Programming the Remote Control: Setup Codes**

#### Amplifier

Carver
Curtis Mathes
GE0105
JVC
Linn
Magnavox
Marantz
Optimus
Philips
Pioneer
Polk Audio
RCA
Realistic
Sony
Soundesign
Victor
Wards
Yamaha

#### Cable Box

ABC	0030, 0034, 0035
Allegro	
Archer	
BellSouth	
Century	
Everguest	
	0047, 0036, 0286, 0061
Hytex	
	0042, 0180, 0342
	.0030, 0039, 0503, 0042,
Memorex	
Motorola	
Movie Time	
Oak	
Optimus	
Panasonic	0048, 0134, 0027
Paragon	
Philips	0180, 0332, 0344
•	
Radio Shack	0042, 0910, 0342, 0824
Recoton	
Sciontific Atlanta	
Signal	
Sprucer	
Starcom	
1 V 86	

Teleview
Tocom
Toshiba
Tusa
Unika
United Artists
Universal
Viewstar
Zenith
Zentek

#### Surround Sound Receiver

· · · · • · · · · · · · · · · · · · · ·	
Capetronic	
	0069, 1116, 1216
JVC	
Kenwood	.1054, 0069, 0213, 1340
Lloyd's	
MCS	
	0418, 1116, 0558, 1216
Marantz	1116, 1216, 0066
Modulaire	
Nakamichi	
Onkyo	
Optimus	.1050, 0213, 0558, 0069
Panasonic	
Penney	
Philips	1116, 1216, 1296, 0418
Pioneer	
Proscan	
RCA	
Realistic	
Sansui	
Sherwood	
Sony	
Teac	
	.0066, 1335, 1545, 1336

#### Satellite Receiver

AlphaStar
Echostar
Expressvu
GE
General Instrument0388, 0896, 0654
HTS
Hitachi
Hughes Network Systems0776
JVČ
Jerrold
Magnavox
Memorex
Next Level
Panasonic
Philips
Primestar

RCA
Radio Shack
Samsung
Sony
Star Choice
Toshiba
Uniden
Zenith

#### VCR

	VCR
Admiral	
Adventura	
Akai	
America Action	
Audiovox	
Beaumark	
	0148, 0211, 0029, 0236, 0506
CCE	
Calix	
Cineral	
Citizen	
Colt	
	.0064, 0099, 0074, 0267, 0298
Cvbernex	
Dynatech	
Electrohome .	
Emerson	
 Fisher	
 Fisher	
Fisher	
Fisher Fuji Fuji	
Fisher Fuji Funai GE	
Fisher Fuji Funai GE	
Fisher Fuji Funai GE Garrard	
Fisher Fuji Funai GE Garrard	
Fisher Fuji Funai GE Garrard Go Video	
Fisher Fuji Funai GE Garrard Go Video GoldStar	
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente	
Fisher Fuji Funai GE Garrard Goldstar Gradiente HI-Q	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Goldstar Gradiente HI-Q	
Fisher Fuji GE Garrard GoldStar Gradiente HI-Q Harley Davidson	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood	
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi	
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi	
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Hitachi Hughes Networ	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Hitachi Hughes Networ JVC	
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley DavidSon Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard GoldStar GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH Kenwood	0148, 0506, 0027, 0064, 
Fisher Fuji Funai Ge Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Harman/Kardon Harwood Harman/Kardon Harwood Harman/Kardon Harwood Harman/Kardon Kardon Harwood KEC KLH Kenwood Kodak	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard GoddStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH Kenwood Kodak LXI	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard GoddStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH Kenwood Kodak LXI	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH Kenwood Kadak LXI Lloyd's	0148, 0506, 0027, 0064, 
Fisher Fuji Gunai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Harley Davidson Harwood Hughes Networ JVC Jensen KEC KLH Kenwood Kodak Loyd's Logik	0148, 0506, 0027, 0064, 
Fisher Fuji Gurari GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harman/Kardon Harwood Hitachi Hughes Networ JVC Jensen KEC KLH Kenwood Kodak Loyd's Logik MEI	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Harley Davidson Harwood Harley Davidson Harwood Harley Davidson Harwood Kather Kec KEC KEC KLH Kodak Lloyd's Logik MGA	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Harwood Harwood Harwood Harwood Hughes Networ JVC Jensen KEC KLH Kenwood Kodak Loyd's Logik MGA MGA	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Harwood Harwood Harwood Harwood Hughes Networ JVC Jensen KEC KLH Kenwood Kodak Loyd's Logik MGA MGA	0148, 0506, 0027, 0064, 
Fisher Fuji Funai GE Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Harwood Harwood Harwood Harwood Harwood Kec KEC KLH Kenwood Kodak Lloyd's Logik MGA MGN Technolog MTC	0148, 0506, 0027, 0064, 
Fisher Fuji Funai Funai Ge Garrard Go Video GoldStar Gradiente HI-Q Harley Davidson Harwood Harman/Kardon Harwood Harman/Kardon Harwood Harman/Kardon Harwood Harwood Harwood Kardon Hughes Networ JVC Jensen KEC KLH Kenwood KEC KLH Logik Logik MGA MGN Technolog MTC Magnasonic Magnasonic	0148, 0506, 0027, 0064, 

# Programming the Remote Control: Setup Codes



VCR (continued)			
Magnin			
Marantz			
Marta			
Matsushita			
Memorex			
Minolta			
Mitsubishi			
Motorola			
Multitech			
NEC			
Nikko			
Noblex			
Olympus			
Optimus			
Orion			
Panasonic			
· · · · ·			
Pentax			
Philips			
Pilot			
Pioneer			
Polk Audio			
Profitronic			
Proscan			
Protec			
Pulsar			
Quasar			
RCA			
Radio Shack			
Radix			
Randex			

Realistic
Runco
STS
Samsung
Sanky
Sansui0068, 0506, 0027, 0094, 0236, 0298
Sanyo
Scott
Semp
Sharp
Shintom
Shogun
Singer
Sony
Sylvania
Symphonic
Tatung
Teac
Technics
Teknika
Thomas
Tivo
Toshiba
Totevision
Vector
Vector Research
Video Concepts
Videosonic
Wards
White Westinghouse0099, 0305, 0236

XR-1000	0099, 0027, 0062
Yamaha	
Zenith	.0066, 0027, 0236, 0506

#### Digital Video Disc (DVD)

Digital video Disc (DVD)		
Apex		
Denon		
Fisher		
GE		
Hitachi		
Hiteker		
JVC		
Kenwood		
Konka		
Magnavox		
Marantz		
Mitsubishi		
Onkyo		
Optimus		
Oritron		
Panasonic		
Philips		
Pioneer		
Proscan		
RCA0549, 0598		
Samsung		
Sharp		
Sony		
Technics		
Theta Digita		
Toshiba		
Yamaha		
Zenith		

### **Operating Accessory Devices with the TV Remote**

(100)

After having programmed your TV remote, use the illustrations on pages 25-26 as a reference to the functions of the remote buttons with accessory devices.

Before the remote will operate an accessory device, you must select the correct mode: CBL (cable box), VCR, DVD, SAT (satellite), or AMP (amplifier). Here's how:

> Press the Select button to cycle across the accessory mode dial. Stop pressing the button when the mode you desire is lighted. The light will stay on for two seconds and then begin blinking. The blinking means that the remote is in the accessory mode you have selected.

**NOTE:** If you do not use the remote for 60 seconds from the time the accessory mode light begins blinking, the light will switch off, and the TV will go back to TV mode. Each time you press any of the remote buttons when an accessory mode light is blinking, a timer is reset to keep the remote in the accessory mode you have selected.

Point the front of the remote toward the front of the accessory device, then press the button to perform the desired function.

### HELPFUL HINT

If the remote control is in one of the accessory modes (mode light flashing)—CBL, VCR, DVD, SAT, AMP—and you don't press any of the remote buttons for sixty seconds, a "time-out" occurs, returning the remote to TV mode.

### 🗹 Снеск Іт Оит

You can change the duration of the time-out mode by simultaneously pressing the Select button and a digit button, 1–4. Using digit 1 will set the time-out to 15 seconds; digit 2, 30 seconds; digit 3, 60 seconds; and digit 4, 120 seconds. The default time-out setting after you replace the batteries in the remote is 60 seconds. All modes will have the same timeout setting.



Point the front of the remote toward the front of the accessory device, then press the necessary buttons to perform the functions you desire. Refer to pages 25-26 to see the functions of the buttons in the respective accessory modes.

#### To backlight the -Qremote control but-Select tons, press and hold the Select button for two seconds. If you do not press any remote buttons for five seconds, the backlight switches off. Each time you press a remote button while the backlight is on, the five-second time-out function is reset. After the backlight switches off, you must press and hold the Select button for two seconds to turn it back on.

# **Operating Accessory Devices with the TV Remote**

#### CBL (Cable) Mode

VCR Mode



\*Point remote at TV when using this button.

\*Point remote at TV when using this button.

### **Operating Accessory Devices with the TV Remote**

**WIEB**<sup>M</sup>



#### **AMP** mode

### Using Active Control<sup>™</sup> Plus+

Active Control<sup>TM</sup> Plus+ monitors incoming video signals from the Tuner, AV1, AV2, and Side inputs and adjusts key picture settings for best picture quality. In addition to measuring picture noise, this feature uses an ambient light sensor (located on the front of the TV) to adjust the picture settings according to viewing conditions in the room. When you choose to turn Active Control<sup>TM</sup> Plus+ on, you have the options Minimum, Medium, or Maximum. Maximum is the recommended option.

**NOTE:** Active Control<sup>TM</sup> Plus is disabled with the AV3 and AV4 input sources.

Press the Active Control<sup>™</sup> button on the remote control to display the "Active Control" menu.

2 Press select "Me

Press the Cursor Up or Down button to select one of the options: "Minimum," "Medium," "Maximum," or "Off.".

**NOTE**: The Active Control<sup>TM</sup> values shown in the information window will based on the current AutoPicture<sup>TM</sup> setting: Personal, Rich, Natural, Soft, Multimedia, or Eco.

Press the Active Control button to remove the on-screen menu from the TV screen.

### 

#### Active Control<sup>TM</sup> Plus+ Settings

**Minimum**—Sharpness, Dynamic Contrast, and Noise Reduction are controlled automatically.

**Medium**—Sharpness, Color, Dynamic Contrast, and Noise Reduction are controlled automatically.

**Maximum**—Sharpness, Color, Contrast, Dynamic Contrast, and Noise Reduction are controlled automatically.

Active Control	Active picture	Active display
() <u>Medium</u> () Medium	¢	•
Contrast		Q 63
Dynamic contrast		Q 15
Color		Q 36
Sharpness		Q 52
DNR		Q 20
Motion	0	<b>() 04</b>
Tint		Q 44





# Selecting an AutoPicture<sup>™</sup> Option

Whether you're watching a movie or playing a video game, your TV has automatic video control settings to match your current program source or content. AutoPicture<sup>TM</sup> 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 Personal AutoPicture<sup>TM</sup> settings are the same as the Picture control adjustments made within the on-screen menu.

Press the Active Control<sup>™</sup> button on the remote control to display the "Active Control" menu.

Press the Cursor Right button to select Auto picture

Press the Cursor Down button to select one of the AutoPicture<sup>™</sup> options: "Personal," "Rich," "Natural," "Soft," "Multimedia," or "Eco."

4

Press the Menu button to remove the on-screen menu from the TV screen.

NOTE: You can also adjust the Auto picture in the on-screen menu.

•Press Menu to display the menu.

•Then use the cursor buttons to navigate to "Picture," and "Auto picture."

•Use the Cursor Up and Down buttons to select "Personal," "Rich," "Natural," "Soft," "Multimedia," or "Eco."

#### Active Control Auto picture Active display C Medium XI 0 63 Contrast Dynamic contrast 2 015 Color £) 36 $\sim$ Sharpness t) 52 DNR t) 20 Motion 0 04 6 Tint t) 44





switched off. **NOTE:** This option can also be used with the Pixel Plus<sup>TM</sup> control to soften the appearance of harsh screen elements. See page 31 for information about Pixel Plus<sup>TM</sup>.

**Multimedia** emphasizes soft colors, a good choice for playing computer games, for example.

**ECO** reduces brightness and contrast settings to low levels as a power consumption saving measure.

### 🗹 Снеск Іт Оυт

To view the picture without the menu bars, go to Active Display and select "Off."

### **Using Active Display**



Use Active display to turn off the Active control Bars as well as view a sample of various display options.

> Press the Active Control<sup>TM</sup> button on the remote control twice to display the "Active Control" menu.

Press the Cursor Right button to select Active Display

Press the Cursor Down button to select "Show Bars," as well as a sample screen for "Dynamic Contrast," "Pixel Plus," or "Digital Natural Motion." The last option is "Off," which applies to the bars in the Active Control and Auto Picture displays. To turn the bars back on, select "Show bars."

After selecting "Dynamic Contrast," "Pixel Plus," or "Digital Natural Motion" the menu will disappear and the screen will display a sample where one side has the feature turned off and the other has the feature turned on. Press Cursor Up or Down to active the menu

Press the Menu button to remove the on-screen menu from the TV screen.





# **Adjusting/Setting the Picture Controls**

To adjust your TV picture controls, select a channel and follow these steps. Picture Sound Features Channels TV Settings Picture Sound Features Channels Press the Menu button on the remote con-T٧ Demo trol to show the on-screen menu. Contrast Install Brightness Press the Cursor Right button to select Color "Picture." Sharpness Press the Cursor Down button to select one of the picture adjustments: "Auto picture," "Contrast," "Brightness," "Color," Picture "Sharpness," "Color temperature," τv (0)"Digital processing," "Dynamic contrast," Personal Auto picture Rich "DNR," "Color enhancement," "Tint," Contrast Natural CBL VCR DVD SAT AMP Brightness and "Picture format." Descriptions for Soft Multimedia Color (D) (Select) (11) some of these options are provided below. Eco Sharpness Pages that follow contain details about the Ö ÒÒÖ other Picture menu options.  $\bigcirc$ (cc) If the menu item has a sublist of items, Picture τv press the Cursor Right button to enter the ОК Auto picture sublist, then press the Cursor Up or Down Contrast ( े आगामि अ button to select the item. Brightness (64) (MENU) If the item has a bar scale, press the Color Cursor Right or Left button to adjust. Sharpness СН (⊯) Press the Menu button to remove the on-3 screen menu from the TV screen. (2) (4)(5) (6) $\overline{(7)}$ (8) (9) HELPFUL HINTS (1)  $\bigcirc$ (P•P) The tint control will not be available for O adjustment when the TV is tuned to the AV3 or AV4 input sources. **Picture Control Settings Contrast** adjusts the difference in bright-٠ ness between the light and dark portions of the picture. Brightness adds or subtracts light from the • darkest part of the picture. Color adds or eliminates color. Sharpness improves the detail in the pic-• ture. **Tint** adjusts the picture to obtain natural ٠ skin tones.

- Color temperature offers "Normal," "Cool," or "Warm" picture preferences.
- Normal keeps whites, white.
- Cool makes whites, bluish.
- Warm makes whites, reddish.

### Selecting a Digital Processing Option

ġ,

The Digital Processing control gives you a choice of different picture scanning modes.

**Progressive Scan** doubles the number of picture lines, eliminating line flicker and providing a jitter-free picture.

**Movies Plus** provides motion compensation to prevent bands of light (a halo effect) that may occur around moving images in the picture.

**Pixel Plus** improves the picture quality and appearance of on-screen images. The number of picture lines is increased along with the number of pixels per line, giving normal broadcast signals, DVD reproduction or Digital TV signals, unparalleled sharpness and depth. This gives the viewer near highdefinition and natural-looking detail without the high-definition signal.

Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button to select "Picture."

Press the Cursor Down button repeatedly until the "Digital processing" control is selected.

Press the Cursor Right button to enter the digital processing submenu.

Press the Cursor Up or Down button to select Progressive Scan or Pixel Plus.

Press the Menu button to remove the onscreen menu from the TV screen.

### HELPFUL HINT

The Digital Processing control is not available for use with the AV3 or AV4 input sources.







### Selecting a Dynamic Contrast Option



# Selecting a DNR (Dynamic Noise Reduction) Option



### **Turning on Color Enhancement**

The Color Enhancement control can dramatically improve the picture quality of pictures with a high saturation of color. This control works in four ways:

Dynamic Blue Stretch corrects the white colors toward a more bluish-colored white without changing the other colors. Improves the sharpness of the picture.

Green Enhancement offers a more saturated green color in case of low green broadcasts, giving landscapes a fresher and brighter look. Color-dependent Sharpness improves the sharpness of the picture through the color information. Gives the picture more details, especially in red colors.

Skin-tone Correction adjusts for over saturation of red that often appears in skin tones.



Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button to select "Picture."

Press the Cursor Down button repeatedly until the "Color enhancement" control is selected.

Press the Cursor Right button to turn the color enhancement control on or off.

Press the Menu button to remove the

on-screen menu from the TV screen.

### HELPFUL HINT

The color enhancement control is not available for use with the AV3 or AV4 input sources.





### **Selecting a Picture Format Option**

Your TV's wide screen (16:9 aspect ratio) delivers a home-cinema experience that isn't possible with a conventional (4:3 aspect ratio) set. The 16:9 format of high-definition (HD) programs and other widescreen-format video sources appear more lifelike, dramatic, and theatrical. Black or gray bars are diminished or eliminated. As the television industry moves toward the high-definition format standard and more HD broadcasts become available, you will be able to see the broadcasts as they were intended—in 16:9 format.

For flexibility in viewing conventional 4:3format video sources on your TV's wide screen, you have the options Automatic," "Super zoom," "Panoramic," "4:3," "Movie expand 14:9," "Movie expand 16:9," "16:9 subtitle," or "Wide screen."

Page 36 explains how to select a picture format option.

### 🗹 Снеск Іт Оυт

You can press the Cursor Up or Down button to pan the screen up and down to see excluded parts of the picture. Use this feature with Super Zoom, Movie Expand 14:9, Movie Expand 16:9, and 16:9 Subtitle.

Left and right panning is possible with the Side input source when the source has been labeled "Game." See page 19 for details on labeling input sources.

### HELPFUL HINT

The term *aspect ratio* refers to the relationship between the width and height of a TV screen. Historically, TV screen width has been 33 percent greater than its height, amounting to a 4:3 aspect ratio. The width of your widescreen TV, however, is nearly 80 percent greater than its height, which means its aspect ratio is 16:9. This screen corresponds well with the tendency of the eyes to feel more comfortable with fields of view and action planes that are horizontally oriented. The wide screen is also proportionally truer to the formats in which movies are filmed and presented in theaters.





Your TV's 16:9 Screen Size

### Your TV's Picture Format Options

**Automatic** Makes the picture fill the screen as much as possible.



**Panoramic** Evenly stretches the edges of the picture to fill the TV's wide screen.



**4:3** Displays a conventional 4:3 picture without change. Black or gray bars will show at the left and right sides.



**Movie expand 16:9** Alters the image both horizontally (stretched) and vertically (cropped) to fill the TV's wide screen. Part of the top and bottom portions of the picture will be excluded from the screen.



**Wide screen** Evenly stretches the width of the picture to fill the screen.



Super zoom

Removes the black or gray bars on the sides of a 4:3-format picture with minimal distortion. Part of the top and bottom portions of the picture are excluded from the screen.



#### Movie expand 14:9

Expands the picture to 14:9 movie aspect ratio. Part of the top and bottom portions of the picture are excluded from the screen. Black or gray bars are shown at the left and right sides.



#### 16:9 subtitle

Zooms the picture for a full view of subtitles or other information displayed at the bottom of the picture. Part of the top portion of the picture is excluded from the screen.



# **Selecting a Picture Format Option**

Choose a picture format size to match the type of program you're watching. Select the Picture Sound Features Channels TV 4:3 aspect ratio or a variety of widescreen for-Settings Picture Sound Features Channels mats. τv Demo Auto picture Install Press the Menu button on the remote to Contrast display the on-screen menu. Brightness Color Press the Cursor Right button to select Sharpness "Picture." Picture Press the Cursor Down button repeat-TV . edly until the "Picture format" control Color enhancement is selected. (O)Tint Picture format Automatic Press the Cursor Right button to enter CBL VCR DVD SAT AMP Super zoon the picture-format submenu. Panoramic (D) (Select) (II) 4:3 ÓÓÖ Ő Press the Cursor Down button to select one of the seven screen formats:  $\bigcirc$ ( cc Picture "Automatic," "Super zoom," τv "Panoramic," "4:3," "Movie expand ОК 14:9," "Movie expand 16:9," "16:9 subtitle," or "Wide screen." Picture format Automatic Super zoor MENU The Automatic option senses the pres-Panoramic ence of black or gray bars around the 4:3 picture and s the picture to reduce or (\*) CH ⊿ eliminate the bars. \_ Picture 3 τv 2  $\left(1\right)$ Press the Menu button to remove the 4 6 (5) on-screen menu from the TV screen. Automatic  $\bigcirc$ (8) (9) Picture format 🕷 Super zoom You can also select a picture format Panoramic  $\bigcirc$ (P+P) ⊕ simply by pressing the Picture Format 4:3 Movie expand 14:9 button on the remote control. Ð
# Selecting an AutoSound<sup>™</sup> Option

AutoSound<sup>TM</sup> allows you to select from four factory-set controls and a personal control. The personal control consists of settings you adjust through the on-screen Sound menu. The four factory-set controls—Speech, Music, Movie, or Multimedia—enable you to tailor the TV sound to enhance the particular program you are watching. Follow these steps to select any of the options.

1

Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until the "Auto sound" control is selected.

Press the Cursor Right button to enter the AutoSound<sup>TM</sup> submenu.

Press the Cursor Up or Down button to select an option: "Speech," "Music," "Movies," "Multimedia," or "Personal."

Press the Menu button to remove the on-screen menu from the TV screen.

### **HELPFUL HINTS**

#### AutoSound<sup>™</sup> Options

**Personal** presents the TV's sound according to the settings you make within the sound menu.

**Speech** brings voices to the forefront and emphasizes them. Moves music to the background.

Music emphasizes music over voices.

**Movies** provides a balance between voices and music.

**Multimedia** provides sound balance best suited for gaming consoles or interactive media.





# Selecting a TV Equalizer Option

Sound Features Channels

Auto sound

Equalizer Volume

The Equalizer control will change the dynamics of the sound being heard through the TV. You can adjust the settings for the Personal Equalizer option. The other options have been preset at the factory and cannot be changed.

Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until the "Equalizer" control is selected.

Press the Cursor Right button to enter the equalizer submenu. Continue to press the Cursor Right button to select one of the options: "Speech," "Music," "Movie," "Multimedia," or "Personal."

5 If you select the Personal option and want to make adjustments, press the Cursor Down button to select an adjustment, then press the Cursor Left or Right button to adjust the slider control to the desired position.

**NOTE:** If you attempt to change the settings for the factory-preset options Speech, Music, Movie, or Multimedia, the Equalizer control will default to the Personal option.



Press the Menu button to remove the on-screen menu from the TV screen.





# ∎≫

# Adjusting the TV and Headphone Volume

Besides the normal volume level control, your TV also has a headphone volume control. This control can be adjusted when using headphones without having to adjust the main volume control for the TV cabinet speakers.

#### To control the television volume:

Press the Volume + button on the remote control to increase the television volume level.

Press the Volume – button on the remote control to decrease the television volume level.

**NOTE:** The Volume level can also be adjusted within the on-screen menu. Select the Sound menu and cursor down to the Volume control. Use the Cursor Left and Right buttons to adjust.

#### To control the Headphone volume:

Press the Menu button on the remotecontrol to display the on-screen menu.

Press the Cursor Right button to select "Sound."

Press the Cursor Down button repeatedly until the "Headphone volume" control is selected.

Press the Cursor Right button to increase the headphone volume level.

Press the Cursor Left button to decrease the headphone volume level.

Press the Menu button on the remote control to remove the on-screen menu from the TV screen.

### **HELPFUL HINTS**

When using headphones with PIP viewing, you will only be able to hear the audio for each PIP window if the primary window is a main signal, i.e. antenna or cable. If the primay window is from an aux source (VCR, DVD, etc.) you will only be able to hear the primary window.





# **Turning Loudness on or off**

Turning the Loudness control on provides a volume-dependent bass-boost effect to the speakers. Follow the steps here to turn the Loudness control on.

Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until the "Loudness" control is selected.

Press the Cursor Right to toggle loudness on or off.

Press the Menu button to remove the on-screen menu from the TV screen.





# Adjusting TV Speaker Balance

You can adjust the balance of the TV speaker sound. Picture Sound Features Channels TV Settings Sound Features Channels Press the Menu button on the remote to TV Demo display the on-screen menu. Auto sound Install Equalizer Press the Cursor Right button repeated-Volume Balance ly to select "Sound." Loudness Headphone volume Press the Cursor Down button repeatedly until the "Balance" control is selected. Sound TV Press the Cursor Right or Left button Auto sound (O)Equalizer to adjust speaker balance. Volume CBL VCR DVD SAT AMP Balance 🕅 📶 🖓 2 Press the Menu button to remove the Loudness E Select (II) Headphone volume on-screen menu from the TV screen. Ö ÓÓ Ő  $\bigcirc$ (cc) Sound TV . ОК Auto sound Equalizer Volume Balance 🕲 🛛 🖓 🛛 🖉 MENU 64 Loudness Headphone volume (\*) CH \_ 3 (1)2 6 (4)(5)  $\bigcirc$ 9 8 0 PP 

# **(**)

# Selecting a Sound Mode Option

The Sound Mode control allows you to place the TV sound into either Incredible Picture Sound Features Channels TV Surround<sup>TM</sup> or Dolby\* Virtual mode. The Settings steps below explain how to select one of Demo those options. Install Press the Menu button on the remote to display the on-screen menu. Press the Cursor Right button repeatedly to select "Sound." Press the Cursor Down button repeatedly until the "Sound mode" control is (0)selected. CBL VCB DVD SAT AME Press the Cursor Right button to enter the sound mode submenu. 0

 Press the Cursor Up or Down button to select one of modes, either "Incr. Surround" or "Dolby Virtual."

**Incr. Surround** enhances stereo programs by making the sound broader and fuller.

**Dolby Virtual** creates a virtualized surround-sound experience from two speakers. Dolby Virtual retains all the original multichannel audio information and provides the listener with the sensation of being surrounded by additional speakers.

6

When finished, press the Menu button to remove the on-screen menu from the TV screen.

You can also select a sound mode option simply by pressing the Surround Sound button on the remote control.





Incredible Surround is a trademark of Philips Consumer Electronics. Copyright 2003 Philips Consumer Electronics. All rights reserved.

# Using Alternate Audio (SAP)

For broadcasts that contain SAP (Secondary Audio Program) information, the Alt Audio Control can be set to SAP. Sent as a third audio channel, SAP is an additional part of the stereo broadcast system that can be heard apart from the current TV program sound. TV stations are free to use SAP for any number of purposes.

If an SAP signal is not present with a selected program, the "Alt Audio" option in the TV's on-screen menu cannot be selected and will appear grayed out.

If SAP is available on the tuned channel:

Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until the Alt Audio control is selected.

Press the Cursor Right button to toggle and select either "Main" or "SAP."

Press the Menu button to remove the on-screen menu from the TV screen.

You can also select SAP by simply pressing the Alternate Audio button on the remote control.





Sound Features Channels

# **N**

# Setting the TV for Stereo Programming

Your TV can output stereo sound. It has both a Hi Fi Stereo amplifier and stereo two-way speakers through which the stereo sound can be heard.

Press the Menu button on the remote to display the on-screen menu.

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until the "Mono/Stereo" control is selected.

Press the Cursor Right button to toggle and select either Mono or Stereo.

**NOTE:** If the signal being received is in mono, it cannot be set to Stereo. If, however, the signal is being received in Stereo, the TV can be placed in the Mono mode. (If you select the Mono option, remember to return the Mono/Stereo control back to Stereo when using the TV with stereo programming.)

Press the Menu button to remove the on-screen menu from the TV screen.





# Turning the AVL (Audio Volume Leveler) on or off

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 the steps below to turn AVL on.



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

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until AVL is highlighted.

Press the Cursor Right button to toggle the control on or off.

Press the Menu button to remove the menu from the TV screen.





# ◀测

# Adjusting the Delta Volume

The volume level coming from channel to channel and broadcast to broadcast can vary widely. The Delta Volume control will allow the volume to be increased for channels with weaker audio signals while allowing other channels with stronger signals to be reduced. When the Delta Volume control is adjusted or changed, it will affect only the currently tuned channel. The TV will store the setting for that channel in its memory and remember it when the channel is tuned again.

**NOTE:** The Delta Volume control does not work with the headphones.

Press the CH + or – button on the remote control to tune to a specific channel.

Press the Menu button on the remote control to show the on-screen menu.

Press the Cursor Right button repeatedly to select "Sound."

Press the Cursor Down button repeatedly until "Delta volume" is highlighted.

Press the Cursor Left button to decrease the overall volume, or press the Cursor Right button to increase the overall volume for the tuned channel.

Repeat the steps above to adjust the delta volume for additional channels.

6

Press the Menu button to remove the on-screen menu from the TV screen.





# Adjusting Audio Out, TV Speakers

If you have connected the TV's AUDIO OUTPUT jacks to the AUDIO INPUT jacks Picture Sound Features Channels TV on an external audio system, you can turn off Settings Sound Features Channels the TV Speakers. Once the TV Speakers are TV Demo off, you can adjust the Audio Out to either Install Auto sound constant or variable output. With Variable Equalizer Volume output, adjustments made to the TV volume Balance will change the level going to the external Loudness Headphone volume audio system. NOTE: If TV Speakers are "On" then Audio Out is geyed out and cannot be selected. It is Sound automatically set to "Constant." The TV TV Speakers must be "Off" to adjust Audio Out. (0)0n • 0f TV Speakers 🛞 Audio Out Press the Menu button on the remote CBL VCR DVD SAT AMP control to display the on-screen menu. (D) (Select) Ĩ Ő ÓÓÓ Press the Cursor Right button repeatedly to select "Sound."  $\bigcirc$ Press the Cursor Down button repeat-Sound τv edly until "Audio Out" or "TV 0K Speakers" is highlighted. TV Speakers Audio Out 簲 Constant • Variable MENU Press the Cursor Right button to toggle the control On or Off for "TV (\*) CH Speakers", Constant or Variable for "Audio Out." 3 (2) Press the Menu button to remove the (4) 6 (5) menu from the TV screen. (7)(9) (8) (P.P)  $\bigcirc$ 

### **A**

# **Setting the Sleeptimer**

The Sleeptimer feature allows you to set a timer to automatically switch the TV off after a period of time you choose—5 minutes up to 180 minutes in 5-minute increments.



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

Press the Cursor Right button repeatedly until "Features" is selected.

Press the Cursor Down button repeatedly to select "Sleeptimer."

Press the Cursor Right button to set the sleeptimer in 5-minute increments, from 5 minutes to 180 minutes.

Press the Menu button to remove the on-screen menu from the TV screen.

### **HELPFUL HINTS**

- To see how many minutes remain before the TV shuts itself off, press the Information Plus+ ⊕ button.
- An on-screen countdown will appear during the last minute before the TV shuts itself off. At this time, you may cancel the Sleeptimer setting by pressing the OK button on the remote control.





During the last minute of a sleeptimer setting, the TV will display a countdown screen that will allow you to cancel the setting.

The sleeptime seconds.	r will switch off the TV in 49
	Cancel 🞯

# **Setting the On Timer**

The On Timer control allows you to set a time for the TV to come on automatically at a certain time of day. The on timer can be set to work once or daily at a time you specify.

menu.

Press the Menu button on the remote control to display the on-screen

Press the Cursor Right button repeatedly to select "Features."

Press the Cursor Down button repeatedly to select the "On timer" control.

Press the Cursor Right button to enter the On Timer submenu.

Press the Cursor Up or Down button to select "On."

Press the Cursor Right button to shift the menu to the start-channel submenu.

Press the Cursor Up or Cursor Down button to select the channel you would like the TV to tune to when it turns on.

Press the Cursor Right button to shift the menu to the day/daily submenu.

Press the Cursor Up or Down button to select the day to turn on or select "Daily."

Press the Cursor Right button to enter the AM/PM submenu.

Press the Cursor Up or Down button to select "AM" or "PM."

Press the Cursor Right button to enter the start time.

Press the Number buttons to enter the time. Use "0" first if entering a signal digit (for example, input "0, 1, 3, 0" for 1:30).

Press the OK button to confirm.

Press the Menu button to remove the on-screen menu from the TV screen.







# Using Zoom

The Zoom feature allows you to zoom the picture by a factor of 4x, 9x, and 16x.



6

CH

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

Press the Cursor Right button repeatedly until "Features" is selected.

Press the Cursor Down button repeatedly to select "Zoom."

Press the Cursor Right button display the Zoom controls.

Press the Cursor Buttons to place the crosshairs where you would like the enlarged picture to be centered.

Press Press OK to zoom to picture by 1x (no zoom), 4x, 9x, 16x, and back to 1x.

Press the Menu button to remove the on-screen menu from the TV screen.



# Using the Channel List

The Channel List control shows all the available channels that Auto Programming placed in the TV memory. The channels can be selected from this list.

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

Press the Cursor Right button repeatedly to select "Channels."

Press the Cursor Down button to select the "Channel list" control.

Press the Cursor Right button to enter the Channel List submenu.

Press the Cursor Up or Down button to select a specific channel from the list.

Press the OK button. The television will tune to the selected channel.

Press the Menu button to remove the on-screen menu from the TV screen.





0

# **Removing Channels from the Channel List**



# **Using Lock Channel**

For various reasons, you may want to block the viewing of materials on a specific channel or channels or through the audio/video (AV) inputs. Lock Channel provides this capability.

Before using the Lock Channel feature for the first time, you will be asked to enter the PIN number. Use the digit buttons on the remote control to enter the PIN you choose. All number combinations from 0000 to 9999 are valid. After you enter the number once, you will be asked to confirm the number, and then the number is stored.

To change your PIN number, see page 66.

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

Press the Cursor Right button repeatedly to select "Channels."

Press the Cursor Down button repeatedly to highlight the "Channel lock" control.

Press the Cursor Right button to enter the channel lock submenu.

Press the Cursor Up or Down button to select a specific channel from the list.

Press the OK button. The oval in front of the channel number will change to yellow to show that the channel is locked.

Repeat steps 5 and 6 for other channels you want to lock.

Press the MENU button to remove the on-screen menu from the TV screen.

**NOTE:** To unlock a locked channel, enter your personal PIN number.

### HELPFUL HINT

If you tune to a channel or input source that is locked and you enter your PIN, all locked channels or input sources will be unlocked until the television is shut off. When the television is turned back on again, previously locked channels or input sources will be locked again.



This screen will appear when tuned to a locked channel. To view the channel, enter your PIN.

# **Using Lock After**

You may want to block programming after a certain time of day. This feature is excellent for Picture Sound Features Channels TV limiting the amount of time your children watch Settings Channels TV or for preventing them watching unsuitable Demo T٧ programs that are often shown at night. Channel list Install NOTE: The set automatically unlocks after Lock after 3 a.m. Channel lock TV ratings lock Press the Menu button on the remote control to display the on-screen menu. Channels τv Press the Cursor Right button repeat-Channel list (0)0ff edly to select "Channels." Lock after Ωn SAT AMP Channel lock Press the Cursor Down button TV ratings lock repeatedly to select the "Lock after"  $(\pi)$ control. Ö (cc) Press the Cursor Right button to Ò Channels enter the Lock After submenu (with the options "Off" or "On"). Off ОК Lock after РМ Press the Cursor Up or Down button (H (MENU) to select "On" from the submenu. A submenu with the options of "AM" or "PM" will appear. CH (\*) Press the Cursor Right button to 6 1 3 Channels 2 enter the AM/PM submenu. A box 5 6 0ff AM with the time (or area where the time PM 8 11:30 Lock after 0r can be entered) will appear. (8) (9) 7 œ  $\bigcirc$ PIP Press the Cursor Up or Down button to select AM or PM. Active Control Press the Cursor Right button to enter the Lock After time. Channels T٧ Press the Number buttons to enter the time you want the television to lock all channels. Press the Menu button to remove the on-screen menu from the TV screen.

### HELPFUL HINT

If you tune to a channel or input source that is locked and you enter your PIN, all locked channels or input sources will be unlocked until the television is shut off. When the television is turned back on again, previously locked channels or input sources will be locked again.

CH

# **Blocking Programming Based on TV Ratings**

You can select specific TV Ratings to block broadcast signals that have unsuitable content. Picture Sound Features Channels TVO Setting Channels Press the Menu button on the remote τv Demo control to display the on-screen menu. Channel list Instal Lock afte Press the Cursor Right button repeated-Channel lock ly to select "Channels." TV ratings lock Press the Cursor Down button repeatedly to select the "TV ratings lock" control. Channels τv Press the Cursor Right button to enter Channel list ((U)) the TV Ratings Lock list of options. Lock after 0 All (CBL VCR DVD SAT AMP Channel lock 0 None Press the Cursor Up or Down button to TV ratings lock 0 TV-Y D) 0 TV-Y7 select one of the ratings. Press the OK button to activate your choice. P Channel **NOTE:** Whenever a rating is turned τv on, all higher ratings (with their subrat-0 All ings) will also be turned on, or 0 None TV ratings lock TV-Y blocked. оту-у7 NOTE: Some of the TV Rating options con-(\*) СН tain specific subratings. "TV-Y7" contains the "(FV) Fantasy Violence" subrating; "TV-PG" and "TV-14" contain "(D) Dialogue," "(L) Channels (2) (3)1 Language," "(S) Sex," and "(V) Violence" O AII (4)(5) (6) subratings; "TV-MA" contains "(L) 0 None • TV-Y Language," "(S) Sex," and "(V) Violence" (7) (8) (9) (FV) Fantasy TV ratings lock 0 TV-Y7 subratings. (i) (P+P) TV-G Violence  $(\mathbf{0})$ Ð Press the Menu button to remove the on-screen menu from the TV screen. Some TV Ratings have subrating options.

### TV Ratings (from TV Broadcasters)

None-programs that are either rated "None" or have no content advisory. Selecting this option will block all such programs.

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

**TV-Y7** (Directed to Older Children)—programs designed for children ages 7 and older. These programs 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)—programs 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**)—programs contain material that many parents will find unsuitable for children under 14 years of age. These 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).

CH

55

# **Blocking Programming Based on Movie Ratings**



NR (Not Rated)—programs that the Motion Picture Association of America has chosen not to rate.

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. These programs 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. These programs 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.

### Turning the Antenna Attenuator on or off

If you live near a television station's transmitter tower, you may receive an interfering sig-Picture Sound Features Channels TV nal from the station while watching other TV Settings Channels channels. Your television's Antenna Demo TV Attenuator control is designed to reduce the Install Channel list strength of such a signal in the presence of a Lock after strong main signal. The default setting for the Channel lock Antenna Attenuator is "Off." If you need to TV ratings lock use the feature, simply toggle it "On" in the on-screen menu. Press the Menu button on the remote Channels τv control to display the on-screen menu. ()Movie ratings lock Press the Cursor Right button repeat-Channel remove CBL VCR DVD SAT AMP edly to select "Channels." Antenna attenuator 🔊 Off • On (D) (Select) Press the Cursor Down button repeat-١ ÓÓ Ő edly to select the "Antenna attenuator" OR  $\bigcirc$ (cc) control. Channels TV . Press the Cursor Right button to toggle 0K Movie ratings lock the control "On" or "Off." Channel remove Antenna attenuator 🏵 On • Off MENU Press the Menu button to remove the on-screen menu from the TV screen. (\*) CH \_ 5 3 2 6 (5) (4)9  $\bigcirc$ (8)  $\bigcirc$ PP œ 

CH

# Turning the Menu Background on or off

You have the option of turning on a background that will make reading the on-screen Picture Sound Features Channels TV menu easier. The Menu Background control Settings places a light colored field behind the on-T٧ Demo Clock General screen menu that makes it easier to see. When Settings Install turned on, the menu background appears only Demo while the on-screen menu is displayed on the Install TV screen. Press the Menu button on the remote control to display the on-screen menu. Clock General 1 Settings Press the Cursor Down button to select Menu background "Settings." (O)Surf **PIP** format Press the Cursor Right button to select CBL VCR DVD SAT AMP Freeze format the "General" menu. Reset AV settings (II) Caption service ÓÓÓ Ő Press the Cursor Down button to select the "Menu background" control.  $\bigcirc$ (CC) General I Settings Menu background Press the Cursor Right button to toggle No • Yes ОК Surf the menu background control "On" or PIP format "Off." Freeze format (MENU) Reset AV settings Press the Menu button to remove the Caption service on-screen menu from the TV screen. (\*) СН -6 General 3 Settings 2 1 Menu background Yes (5) (6) (4) Surf (7)(8) (9) PIP format Freeze format  $\bigcirc$ (P+P) Reset AV settings Caption service Genera Settings Settings Menu b Menu background Surf PIP format Freeze format Freez Reset AV set Reset AV settings Caption service Caption service

With Menu Background off

With Menu Background on

# **Using Surf**

You can access a list of previously viewed Picture Sound Features Channels channels with the Previous Program/Surf but-TV ton (labeled " $P \triangleleft P$ ") on the remote control. Settings With Surf you can easily switch between dif-T٧ Demo General Clock ferent TV channels that currently interest you. Install Settings Surf allows you to set up the television to Demo cycle through two or nine channels by press-Install ing the Surf ( $P \triangleleft P$ ) button on the remote con-Press the Menu button on the remote Clock General control to display the on-screen menu. Settings Menu background Press the Cursor Down button to select (O) Surf "Settings." PIP format CBL VCR DVD SAT AMP Press the Cursor Right button to select Freeze format Reset AV settings the "General" menu. (D) (Select) Caption service ÓÓÓ Ô Press the Cursor Down button repeatedly to select the "Surf" control.  $\bigcirc$ (cc) General Settings Press the Cursor Right button to toggle Menu background the Surf control to "2 channels" or "9 ОК Surf 💓 2 channels • 9 channels channels." PIP format Freeze format Press the Menu button to remove the Reset AV settings on-screen menu from the TV screen. Caption service (\*) СН If you selected the "2 channels" Surf option, OR General pressing the  $P \triangleleft P$  (Surf) button allows you to 3 Settings (2)1 alternate between the currently viewed chan-Menu background (5) (4)(6) nel and the previously viewed channel. Surf 9 channels • 2 channels (8) PIP format  $\overline{(7)}$ (9) If you selected the "9 channels" Surf option, Freeze format  $\bigcirc$ Ð Reset AV settings Surf list in which you can place up to 9 Caption service favorite channels. A/V sources also can be included in the list. Using 9 Channels Surf, place up to 9 favorite To add a channel to the list, tune to the chanchannels in the Surf list. nel, press the  $P \triangleleft P$  (Surf) button, then press the Cursor Right button. 10 🔘 s If you attempt to add more than 9 channels to the list, the last channel will be automatically 2 Channels Surf removed to make room for the newly added channel. Press > to add 22 After you have placed your favorite channels in the list, press the  $P \triangleleft P$  (Surf) button as If you decide you don't want a channel in the many times as necessary to tune to the list, you can remove it. desired favorite channel. Or, with the Surf list 9 Channels Surf displayed, press the Cursor Down or Up buttons to tune to the desired channel. To remove a channel from the list, press the  $P \triangleleft P$  (Surf) button to display the list, press the Cursor Down or Up buttons until you Press > to remove 0 select the channel you want to remove, then press the Cursor Right button. 59

G

trol.

### Selecting a PIP Format

The Dual Screen feature, also referred to as Picture In Picture (PIP), will allow you to choose the size of the dual screen window to be displayed when the Dual Screen/PIP button is pressed on the remote control. The window can be set to Dual Screen, PIP, PIP 3, or PIP 6.



Press the Cursor Down button to select "Settings."

Press the Cursor Right button to select the "General" menu.

Press the Cursor Down button repeatedly to select the "PIP Format" control. A submenu or list of options will appear.

Press the Cursor Right button to enter the list of options.

Press the Cursor Up or Down button to select the desired PIP format. Choose from "Dual screen," "PIP," "PIP 3," or "PIP 6."

Press the Menu button to remove the on-screen menu from the TV screen.

Press the Dual Screen/PIP button on the remote control to display the second video window in the format you have chosen.

Continuing to hold the Dual Screen/PIP button will cycle through the Dual Screen/PIP options.

Press the Dual Screen button again to return the television to the main video screen.

See the next page for information on changing channels or input sources in Dual Screen/PIP mode, and for re-positioning the PIP screens.



Dual Screen

PIF



### Changing Channels or Input Sources in Dual Screen/PIP

#### When using Dual Screen:



G

A light-colored border indicates the selected screen. If the screen whose channel or input source you want to change is not selected, press the Cursor Right or Left button to select the desired screen.

To change channels in the selected screen, press the CH (Channel Selection) + or - buttons. Or:

To change the input source, first press the Source button. Then, within 6 seconds, press the Cursor Up or Down until your desired input source is highlighted. Press the OK button to confirm. The desired input source appears in the selected screen.

NOTE: If the list of input sources "times out" (leaves the screen) before you can make your selection, press the Source button again to display the list again.

#### When using PIP:

When the PIP window is on screen, press the Cursor Up or Down button to select either the main or PIP screen. A light-colored border surrounds the PIP screen when it is selected. The PIP screen must be selected before its channel or input source can be changed.

To switch the PIP window and the main window press OK.

To change channels in the PIP screen, press the CH (Channel Selection) + or – buttons. Or:

To select a different input source, first press the Source button. Then, within 6 seconds, press the Cursor Up or Down until your desired input source is highlighted. Press the OK button to confirm. The desired input source appears in the PIP screen. NOTE: If the list of input sources "times out" (leaves the screen) before you can make your selection, press the Source button again to display the list again.

### To reposition or resize the PIP screen:



Press the Cursor Down button to select Position or Size and press OK.

If you select Position, a direction indicator appears on the screen. If you select size a slider bar appears with 12 size options. Use Cursor Up, Down, Left, and Right to adust the position or the Size slider bar.

Press OK to return to the PIP menu. The menu will disappear in several seconds.

### When using PIP3 or PIP6:

To change channels when in PIP3 or PIP6 modes, press the Cursor Right, Left, Up, or Down buttons to select the screen whose channel or source you want to change. Then follow step 2 or 3 in either section above to change channels or input sources.























# **Selecting a Picture Freeze Option**

The Freeze control provides three ways for you to stop the action of programs. The Freeze control options allow you to get a better look at exciting sports plays or copy down broadcasted addresses or phone numbers. The steps below explain how to select an option.

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

Press the Cursor Down button to select "Settings."

Press the Cursor Right button to highlight the "General" menu.

Press the Cursor Down button repeatedly to highlight the "Freeze format" control. A submenu will appear.

Press the Cursor Right button to enter the submenu.

Press the Cursor Up or Down button to select the desired freeze format. Choose from "Freeze," "Replay," or "Photo finish."

**Freeze** stops motion in the main screen image while the audio continues to play. **Replay** displays and replays a few seconds of stored video information in the single-PIP window.

**Photo finish** displays a series of frozen frames in six PIP windows. A TV picture consists of a series of very fastmoving frames.

7 8 Press the Menu button to remove the on-screen menu from the TV screen.

Press the Freeze Format button on the remote control to display the format you have chosen.

**NOTE:** Continuing to hold the Freeze Format button will cycle the TV through the Freeze modes.

To return the television to the main video screen, press the Freeze button again.



**Freeze** Stops motion on the main screen.



**Replay** Replays a few seconds of stored video.



**Photo finish** Displays six still frames from a TV picture while the current program continues to play on the main (center) screen. **NOTE:** Frame order will vary.





# **Resetting the Audio/Video Settings to Factory Default Values**

You can reset the TV's Sound and Picture settings to the factory default values.

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

Press the Cursor Down button to select "Settings."

Press the Cursor Right button to select the "General" menu.

Press the Cursor Down button repeatedly to select the "Reset AV settings" control.

Δ

Press the OK button to reset the AV settings to factory values.

Press the Menu button to remove the on-screen menu from the TV screen.





# **Using Closed Captioning**

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. Captions will appear on screen during captioned broadcasts.

# Follow steps 1 through 7 to select a Closed Captioning option:

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

Press the Cursor Down button repeatedly to select "Settings."

Press the Cursor Right button to select "General."

Press the Cursor Down button repeatedly to select "Caption service."

Press the Cursor Right button to enter the caption service submenu.

Press the Cursor Up or Down button to select one of the caption modes: **CC-1, CC-2, CC-3, or CC-4**—Dialogue (and descriptions) for the action on the captioned TV program shows on screen. CC-1 is used most frequently. CC-2 may be used for alternate languages if they are being transmitted.

**T-1, T-2, T-3, or T-4**—Often used for a channel guide, schedules, bulletin board information for captioned programs, news, weather information, or stock market reports.

#### NOTES

- Text Modes (T-1 through T-4) appear on screen as boxes and
- may block portions of the TV screen.Not all caption services are necessarily being used by a TV channel during the transmission of a captioned program.

Press the Menu button to remove the onscreen menu from the TV screen.

#### To turn Closed Captioning on or off:

Press the CC button on the remote control.

Press the Cursor Up or Down button repeatedly to select "Off," "On," or "On during mute." **Off**—Closed captioning service will not be displayed on the TV screen.

**On**—Closed captioning information (if available) will display on the TV screen. **On during mute**—Closed Captioning information will turn on only when the Mute button is pressed. Turns the Closed Captioning information off when the TV volume is restored.



Press the Menu button on the remote to remove the on-screen display from the TV screen.



**NOTES:** • The captions do not always use correct spelling and grammar. • Not all TV programs and product commercials made for broadcast include Closed Captioning information. Refer to your area's TV program listings for the TV channels and times of shows with Closed Captioning. The captioned programs are usually noted in the TV listings with service marks such as "CC."

# Selecting an On-screen Display Option



# Setting up or Changing a PIN (Personal Identification Number)

In the General menu, you can set up a new PIN number or change an existing one for the Lock Channel feature.



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

Press the Cursor Down button to select "Settings."

Press the Cursor Right button to select the "General" menu.

Press the Cursor Down button repeatedly to select either "Set PIN" or "Change PIN."

#### NOTES:

- If no PIN exists yet, the menu will show "Set PIN." Simply follow the on-screen instructions to set your PIN.
- If a PIN has previously been entered, the menu will show "Change PIN."
- All number combinations from 0000 to 9999 are valid numbers.

Press the OK or Cursor Right button to begin the process.

Enter your current PIN using the Digit buttons on the remote control.

If you have forgotten your PIN, you can enter the overriding code 0-7-1-1.



Enter a new four-digit PIN.

Re-enter your new PIN using the Digit buttons to confirm the code. Your PIN is now changed.



Press the Menu button on the remote control to remove the on-screen menu from the TV screen.



# Setting the Clock—Auto Clock Mode

There are several features which require the TV clock to be set. You can either set the clock manually or have the TV acquire the time from the appropriate TV channel.

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

Press the Cursor Down button to highlight "Settings."

Press the Cursor Right button repeatedly to select the "Clock" menu.

Press the Cursor Down button to select Auto Clock Mode. Then Press Cursor Right Button to Select "Automatic" or "Manual." Select Automatic to have the TV acquire the time from a the TV signal. Choose "Manual" to set the time yourself.

If you choose to set the time Automatically you will need to set the "AutoClock Channel" by continuing with steps 5-8 below. If you select manual you will need to make the correct settings by continuing on page 68.

#### Auto Clock Channel



After following steps 1-4 above, press the Cursor Down button to select Auto Clock Channel.



- Press the Cursor Right button to enter the channel list. Select your local PBS channel by using the Cursor Up or Down buttons to scroll through the channel list or inputing the the channel using the number buttons.
- 7

Press the Menu button on the remote control to remove the on-screen menu from the TV screen.



### HELPFUL HINT

When the clock is set to "automatic" there will be a several second delay when the TV is turned on and off. During this delay the blue LED will blink. This is normal.



# Setting the Clock Manually

G

6



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

Press the Cursor Down button to highlight "Settings."

Press the Cursor Right button repeatedly to select the "Clock" menu.

Press the Cursor Down button to select Time.

Press the Cursor Right and Up or Down buttons to select AM or PM.

Press the Cursor Right button and use the number buttons to enter the current time. (For example, enter 0, 8, 3, and 0 if the time is 8:30 or 1, 2, 4, and 5 if the time is 12:45.) You can also use the Cursor buttons (Up, Down, Right, Left) and scroll through each number. Press Cursor Right to move to the next place.

Next press the Cursor Left button repeatedly to back out to the Clock Menu.

Press Cursor Down to select "Day". Then press Cursor Right to enter the list of days.

Press the Cursor Up or Down buttons to select the current day.

Press the Menu button on the remote control to remove the on-screen menu from the TV screen.

Next Set the Time Zone and Daylight Savings Time. See page 69 for instructions.





# Selecting a Time Zone and Setting the Daylight Savings Control



### Manual Convergence

When the Red and Blue projections line up they are in Convergence. Sometimes the projections don't line up and images on the screen will have a red or blue fringe. You can use IntelliSense to correct convergence, but if it does not completely solve the problem, you will need to adjust convergence manually.



Press the Cursor Down button to select "Settings."

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

Press the Cursor Right button to select the "Converge" menu.

Press the Cursor Down button repeatedly to select "Manual Convergence."

Press the Cursor Right button to enter the menu. Press the Cursor Down button to select Converge Red or Converge Blue (according to the color of the fringes) and press Cursor Right again to enter the adjust mode.

Press Cursor Up, Down, Left and Right to converge the Red or Blue cross with the golden center cross

 Press MENU to return to the menu and make further adjustments if needed.
 Press the Menu button on the remote control to remove the on-screen menu from the TV screen.

# Manual Convergence, Multipoint



### CARE AND CLEANING OF THE TV



### WARNING Concerning Stationary Images on the TV Screen:

# Do not leave picture border bars or stationary images on screen for extended periods of time. This can cause uneven picture tube aging.

Normal use of the TV should involve the showing of pictures that contain constantly moving and changing images that fill the screen. Be careful not to leave nonmoving images on screen for extended periods of time, or to display the same images on screen too frequently, because subtle ghost images can be left on the picture tubes. Avoid showing pictures with border bars or the same stationary images more than 15 percent of your total viewing in any one week. Sources of stationary images may be broadcast channels, cable channels, satellite channels, digital television boxes, DVD discs, laser discs, video games, CD-i discs, videotapes, and others. Here are some examples of stationary images (this is not an all-inclusive list; you may encounter others in your viewing): Border bars—solid bars shown when viewing a standard (4:3) picture and some widescreen movies on your widescreen (16:9) TV; DVD menus—listings of DVD disc content; Video-game images and scoreboards; Television station logos—present a problem if they are bright and stationary; moving or low-contrast graphics are less likely to cause uneven aging of the picture tube; Stock-market tickers—presented at the bottom of the TV screen; Shopping channel logos and pricing displays—bright and shown constantly or repeatedly in the same location on the TV screen.

All picture tubes age with use, with their light output diminishing over time. But by maintaining normal use—mixing television picture types—you will create conditions in the tubes age at an even rate. The result will be a TV picture that is evenly bright over the entire screen.

### WARNING

# To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning.

### **Cleaning the Cabinet**

- Regularly dust the TV cabinet with a dry, nonscratching duster.
- Gently wipe the cabinet surfaces with a soft, clean cloth. Even if the surfaces are very dirty, do not apply cleaner to them directly. Soak the cloth in a solution of cool, clean water and mild soap or detergent. Wring out the cloth and wipe the cabinet surfaces clean. Then use a clean, dry cloth to dry the wiped surfaces.
- Occasionally vacuum the ventilation slots on the back cover of the set. See the next section on "Cleaning or Replacing the Filters."
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.
- The television contains plastic parts. DO NOT use benzine, thinners, or other chemicals to clean. DO NOT use insecticide or other volatile substances nearby. DO NOT allow the TV to come into contact for extended periods of time with rubber or vinyl products.

### **Cleaning the Screen**

• Wipe the screen with a clean cloth dampened with water. Screen-cleaning kits with antistatic cleaners and cloths are available. Contact our Customer Care Center at 1-800-531-0039 to purchase the kit.

When cleaning the screen, take care not to scratch or damage the screen surface. Avoid wearing jewelry or using anything abrasive.



Be sure the TV is unplugged before cleaning it.

Use a nonscratching duster.



## Troubleshooting

### **Review This List of Symptoms and Checks 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. Our representative will be happy to assist you. **To reach our Customer Care Center, call 1-800-531-0039.** 

#### The TV won't switch on.

- Make sure the power plug is plugged in.
- If you're using the TV remote control to turn the TV on, be sure the remote is in TV mode.
- Plug something else in to be sure the wall outlet (or extension cord) is receiving power.
- The remote control could have a problem. See the troubleshooting section "Remote-related Checks" on the next page.

#### The TV switches off unexpectedly.

• The Sleeptimer may have been set to turn the TV off. Turn the TV back on if desired.

#### The TV switches on unexpectedly.

- The On Timer may have been set.
- If the TV experienced a power outage, it will switch on when power is restored.

#### You have a picture but no sound.

- Make sure Mute is not on.
- The TV speakers may be turned off. Make sure the Center Channel Amp Switch on the back of the TV is in the INT position.

#### You have no picture.

- If you have made a connection to the TV's ANTENNA IN  $75\Omega$  jack, be sure to use Autoprogram. to program channels into the TV's memory.
- If you want to view materials from an accessory device (DVD player, VCR, or satellite receiver, for example) be sure you have selected the input source to which you have connected the device—AV1, AV2, AV3, AV4, or Side.
- Make sure you have made connections correctly.

#### You see scrolling images.

• Make sure you have made connections correctly.

#### The picture appears doubled or tripled.

• If you are using an antenna, be sure it is facing in the correct direction for proper reception. Also, check to see if it may be receiving signals that are being reflected off of mountains or buildings.

#### The picture shakes or is not clear.

- If you are using an antenna, make sure it is not broken or shorted, and make sure the antenna cable is connected properly and securely.
- If you are using a VCR and selecting channels on the TV, make sure the TV/VCR mode on the VCR is set to TV.

#### The picture has no colors or colors are not correct.

- Make sure you have made connections correctly.
- If you have connected accessory equipment, such as an HD satellite receiver, make sure the color space setting (either YPbPr or RGB) on the accessory equipment is correct. If you have connected to HD INPUT-AV 3, make sure the color space setting for the AV3 input in the TV's Sources submenu (within the Settings menu) matches that of the accessory equipment—either YPbPr or RGB. See the section in this manual on setting the color space for AV3, and refer to the user manual for the HD satellite receiver.

#### The TV sound has an unusual quality.

• Check the TV's Equalizer control to be sure it is set to the option you want.

#### The remote control does not work.

- Make sure nothing is blocking the path between the remote control and the TV or accessory device you want to operate.
- Make sure you point the remote directly at the TV or accessory device you want to operate.
- If you want to operate the TV, make sure the remote is in TV mode. If you want to operate an accessory device, program the remote to operate the device if necessary and make sure the remote is in the appropriate mode for the device.
- Make sure you have installed the batteries correctly.
- The batteries could be dead. When the batteries in the remote run low, the remote will send a "Battery Low" command to the TV. The TV will then display a message on the screen reminding you to replace the batteries as soon as possible.
- You may want to try taking the remote batteries out and then putting them back in. **NOTE:** After taking the batteries out, you may need to reprogram the remote for use with accessory devices.

### Index

### Α

Active Control<sup>™</sup> Plus+, 27 Active Control<sup>™</sup> Plus+ Window, \*Q5 Active Standby Window, \*Q5 Alternate Audio (SAP), 43 Antenna Attenuator, 57 Audio/Video Input Sources, Labeling, 19 Audio Out, 47 AutoPicture<sup>™</sup> Options, 28 AutoSound<sup>™</sup> Options, 37 AVL (Auto Volume Leveler), 45

### В

Blocking Programs Based on TV Ratings, 55 Based on Movie Ratings, 56

### С

Cabinet Buttons, \*Q5 Windows, \*Q5 Channel List, 51 Channels, Programming into the TV's Memory, \*Q8 Cleaning the TV, 72 Clock Auto Clock Mode. 67 Manual Setting. 68 Time Zone and Daylight savings, 69 Closed Captioning, 64 Color Enhancement, 34 Connections Camcorder, 18 HD Satellite Receiver to DVI, 16 HD Satellite Receiver to YPbPr. 14 Progressive-scan DVD Player, 13 Standard DVD Player, 12 Surround Sound, 17 S-Video, 11 VCR, 9 VCR and Cable Box, 10 Video Game System, 18

### D

Daylight Savings, Setting, 69 Delta Volume, 44 Digital Processing Options, 30 Dolby<sup>sek</sup> Virtual (See Sound Mode Options) PIP Format Changing Channels or Input Sources, 61 Selecting, 60 DVI Input Jack, 6–7, 16 Dynamic Contrast Options, 32 Dynamic Noise Reduction Options, 33

### F

Factory Service Locations,75-76

### Η

Headphone Volume, Adjusting, 39

### I

Incredible Surround<sup>™</sup> (See Sound Mode Options)

### J

Jacks/Cables/Connectors, Descriptions, 6

### L

Language, Setting for the On-screen Menu, \*Q8 Lock After, 54 Lock Channel, 53 Loudness, 40

### Μ

Menu Background, 58

### 0

On-screen Displays Options, 65 On Timer, 49 Overheating, Preventing, \*Q1-2, 8

### Ρ

Panel Jacks, Compatibility Information, 6-7 Panning the Screen (with Cursor Buttons), \*Q6, 18, 35 Picture Controls, 30 Picture Format Options, 35–36 Picture Freeze Options, 62 PIN, Setting up or Changing, 66 PIP, 60 Power Surges, Protecting Against, 8 Pre-connection Recommendations, 8 Product End of Life Disposal, 5

### R

Remote Control Programming, 22–23 Using with the TV, \*Q6, 24-26 Using with Accessory Devices, 24-26 Remote Sensor Window, \*Q5 RGB+HV Input Jack, 6-7

### S

Safety Information/Instructions, \*Q1,\*Q2, 2, 3, 8 SAP (See Alternate Audio Control) Service (See Factory Service Locations) Signal Splitter, \*Q4, 6, 10 Sleeptimer, 48 Sound Mode Options, 42 Stereo, Selecting, 44 Subwoofer Output Jack, 6–7, 17 Control (in on-screen menu), 17 Surf Options, 59 Surround Sound (See Connections and Sound Mode Options) S-Video Input Jacks, 6-7, 11

### Т

Time Zone, Selecting, 69 Troubleshooting, 73 Tuner (RF) Input Jack, \*Q3–5, 7–8 TV Equalizer Options, 38 TV Signals Information on, 6 Ways of Receiving, 6 TV Speaker Balance, 41 TV Speakers, 47 Twin-lead Adapter, 8

### V

Video Game System (See Connections) Volume, Adjusting Headphone, 39 TV, 39 W Warranty, 80

Welcome, 2

### Υ

YPbPr Input Input Jacks, 6-7, 12-13

\*Q refers to the Quick Use and Setup Guide that came with your TV.

### **Factory Service Locations**



**NOTE:** If you reside in one of our Philips Factory Service Branch areas (see the directory on the next page), 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) 1-800-531-0039 (English or Spanish speaking)

#### <u>Au Canada</u>

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) 1-800-531-0039 (Anglais ou Espagnol)

#### 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) 1-800-531-0039 (Inglés o Español))

### **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 PAIS 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 550 Franklin Road., Suite F Marietta, GA 30067 800-273-1501

#### TAMPA

Philips Factory Service 1911 US Highway 301 North, Suite 100 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

#### LOS ANGELES

Philips Factory Service 20930 Bonita, Ste. V Carson, CA 90746 800-300-9013

#### CHICAGO

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

#### KNOXVILLE

Philips Factory Service One Philips Drive Building 2 Knoxville, TN 37914 800-821-1767

#### PHILADELPHIA

Philips Factory Service 354 Dunks Ferry Rd. Bensalem, PA 19020 800-847-9320 This page is intentionally left blank.

This page is intentionally left blank.

This page is intentionally left blank.

### **Limited Warranty**

### **PHILIPS TELEVISION**

One Year Free Labor One Year Free Service on Parts 30 days Free Service on Television 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 TV screen), all parts will be repaired or replaced, and labor and transportation are free. After one year from the day of purchase, you pay for the replacement or repair of all parts 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:

I-800-53 I-0039, if calling from the USA (English or Spanish Speaking)
I-800-66 I-6162, if calling from Canada (French Speaking)
I-800-53 I-0039, if calling from Canada (English or Spanish Speaking).

#### **REMEMBER...**

Please record below the model and serial numbers found on the product. 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.

Philips Consumer Electronics, P.O. Box 520890, Miami, FL 33152, (402) 536-4171

EL6551E001 / 3-03