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LCD Users Guide

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CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN Caution: To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

WARNING

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. The apparatus shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

WARNING

The TV is unstable if it is not properly attached to the base or mounted to the wall. Please follow the base or wall mounting instructions provided in the User's Guide to ensure your safety.



This symbol indicates that this product contains mercury. Special disposal of this product for environmental reasons may be required under the laws applicable to your jurisdiction. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org.

Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.

FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Cable TV Installer: This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which 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.

Important: This television is a table model and is designed to sit on a firm, flat, surface. Don't place the TV on soft carpeting or similar surface because the ventilation slots on the bottom of the unit will be blocked resulting in reduced lifetime from overheating. To assure adequate ventilation for this product, maintain a spacing of 4 inches from the top and sides of the TV receiver and 2 inches from the rear of the TV receiver and other surfaces.

Also, make sure the stand or base you use is of adequate size and strength to prevent the TV from being accidentally tipped over, pushed off, or pulled off. This could cause personal injury and/or damage the TV. Refer to the Important Safety Instructions on the next page.

Product Registration

Please fill out the product registration card (packed separately) and return it immediately. For US customers: Your RCA Consumer Electronics product may also be registered at www.rca.com/television. Registering this product allows us to contact you if needed.

Product Information

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial and model numbers in case you need them. These numbers are located on the product.

Model No	Serial No	Purchase Date
Dealer/Address/Phone		

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Important Safety Instructions

Important Safety Instructions

- 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 dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's 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 grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If 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 the 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 the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984 (Section 54 of Canadian Electrical Code, Part 1) 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 conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See following example.



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Things to Consider Before You Connect

Protect Against Power Surges

- Connect all 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 device(s) before you connect or disconnect any cables.
- Make sure all antennas and cables are properly grounded. Refer to the Important Safety Instructions at the beginning of the User's Guide.

Protect Devices from Overheating

- Don't block ventilation holes on any of the devices. Arrange the devices so that air can circulate freely.
- Don't stack devices.
- If you place devices in a stand, make sure you allow adequate ventilation.
- If you connect an audio receiver or amplifier, place it on the top shelf so the heated air from it won't flow around other devices.

Position Cables Properly to Avoid Audio Interference

- Insert each cable firmly into the designated jack.
- If you place devices above the TV, route all cables down the side of the back of the TV instead of straight down the middle.
- If your antenna uses 300-ohm twin lead cables, do not coil the cables. Also, keep the twin lead cables away from audio/video cables.

Use Indirect Light

Don't place the TV where sunlight or room lighting will be directed toward the screen. Use soft or indirect lighting.

Check Supplied Parts

Check that the following parts were packed with your product.



Note: If you need to replace your remote, call 1-800-338-0376. A shipping and handling fee, and the appropriate sales tax, will be charged upon ordering. Have your Visa, MasterCard, or Discover Card ready.







Outdoor or Indoor antenna

Get the Picture

The first part of connecting your TV is to get the picture, also known as the signal. The back panel of your TV allows you to receive analog and/or digital channels by using the ANTENNA/CABLE INPUT. See the graphic to the left for the location of the jack.

Getting Channels

What You Need

• Antenna ("rabbit ears") or outdoor antenna with coaxial cable

OR

- Coaxial cable with cable service
- A. Do you have an indoor or outdoor antenna? If not, go to step B. If so, plug the antenna or coaxial cable from the wall outlet into the ANTENNA/CABLE INPUT to receive free off-air local digital and analog channels.
- B. Do you have cable? If so, plug the coaxial cable from the wall outlet into the ANTENNA/CABLE INPUT to receive your cable channels.
- C. Do you have a set-top box? If so, you need to call your cable company or satellite service provider. They may use special cables to allow you to view digital channels.

What You Need To Know

- Visit www.antennaweb.org to get help deciding what type of antenna to use to receive the local digital channels available to you. By entering where you live, this mapping program tells you what local analog and digital stations are available using a certain antenna.
- When you are ready to watch channels, the channel banner displays the type of channel you're viewing. Look for a *D* at the bottom of the screen for digital channels; look for an *A* for analog channels. Go to page 15 for more information.

Choose Your Connection

For additional assistance while using your RCA product, please visit www.rca.com/customersupport.

There are several ways to connect your TV. Please use the following chart to determine which connection is best for you. Proceed to the appropriate page and connect your TV.					
Jacks Used	Cables	Go to			
Video1 Audio1 R and L		Audio/Video	page 8-9		
Y Pb Pr Audio L - O Pr - O Pb - O Y - O		Component Video Audio	page 8-9		
		HDMI™ OR	page 10-11		
OVI AUDIO INPUT ■ L		HDMI™ + HDMI/DVI adapter			
		+ Audio			
VGA Video		VGA	page 12		
		Audio			

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Video (Basic) Connection

This is an example of a connection using the Video jack. Go to the top of page 9 for specific instructions.



Component Video (Advanced) Connection

This is an example of a connection using the Component Video jacks. Go to the middle of page 9 for specific instructions.





Composite cables are color coded- Yellow= video; Red= right audio; white= left audio



Connecting the Device with Video (Basic)

This connection allows you to connect a device that has a Video Out jack, for example, a DVD player.

Note: If the device you're connecting also has Component Video jacks and you have component video cables, we recommend you use the Component Video (Advanced) Connection instead. See instructions below.

Using the example of a DVD player:

If necessary, connect your cable and/or off-air antenna as described on page 6.

(2.) Connect your yellow video cable.

Connect a video cable to the VIDEO INPUT 1 jack on the back of the TV and to the Video Output jack on the DVD player.

(3.) Connect your red and white audio cables.

Connect the audio (red and white) cables to the AUDIO INPUT 1 R and L jacks on the back of the TV and to the Audio Output jacks on the DVD player.

Connecting the Device with Component Video (Advanced)

This connection allows you to connect a device that has Y Pb Pr jacks, for example, a DVD player.

Using the example of a DVD player:

1.) If necessary, connect your cable and/or off-air antenna as described on page 6.



Connect three video cables or special Y Pb Pr cables to the COMPONENT INPUT 1 (CMP1) Y Pb Pr jacks on the back of the TV and to the Y Pb Pr outputs on the DVD player.

(3.) Connect your red and white audio cables.

Connect the audio (red and white) cables to the CMP1 AUDIO R and L jacks on the back of the TV and to the Audio Output jacks on the DVD player.

Viewing the Picture from the Connected Device

- Plug in the TV (see page 13 for details) and the device, if they aren't already 1. plugged in.
- Turn on the TV and the device you want to view, for example a DVD player. 2.
- 3. Repeatedly press the INPUT button on the remote control until you see VID1 (if connected to the VIDEO INPUT 1 jack) or CMP1 (if connected to the CMP1 jacks) displayed at the bottom of the TV's screen. To go back to viewing TV channels, use the number buttons to enter the channel or press CH+/- to go to the channel list from the input list.

Note: If the picture from the DVD player appears black and white and your device is connected to the VIDEO Input, you might be tuned to the wrong input. Make sure you press INPUT until you see VID1 displayed at the bottom of the TV's screen.

> • If you're done connecting devices to your TV, go to page 13 to complete the Initial Setup.

• To continue connecting devices, go to the next page.



Component Video cables (Y Pb Pr) are color coded-Green, Blue and Red



Audio cables are color coded- Red= right audio; white= left audio





Use these buttons to view the picture of the device you've connected to the TV.

HDMI/DVI Connection

This is an example of a connection using the HDMI/DVI jack.



Connecting the Device

High-Definition Multimedia Interface (HDMI) technology is an uncompressed digital connection that carries both video and audio data by way of an integrated mini-plug cable. Since HDMI technology is based on Digital Visual Interface (DVI), the jack on the back of your TV is also compatible with devices that have a DVI output jack.





ON•OFF button



Use these buttons to view the picture of the device you've connected to the TV.

Using the example of a set-top box:

• If your set-top box has an HDMI jack, connect an HDMI cable.

Connect an HDMI cable to the HDMI1/DVI Input jack (or the HDMI2 jack if it is more convenient) on the back of the TV and to the HDMI Out jack on the back of the device.

-OR-

• If your set-top box has a DVI jack, connect an HDMI cable and an HDMI/DVI adapter.

A Connect an HDMI cable to the HDMI1/DVI Input jack on the back of the TV.

BAttach an HDMI/DVI adapter to the end of the HDMI cable, then connect the adapter to the DVI Out jack on the set-top box.

Since you're using an HDMI/DVI adapter, you need to connect Audio left and right cables to the DVI AUDIO R and L jacks on the back of the TV and to the R and L jacks on the back of the device.

Viewing the Picture from the Connected Device

The device in this connection is connected to the HDMI1/DVI jack. To view this device:

- 1. Plug in the TV (see page 13 for details) and the device, if they aren't already plugged in.
- 2. Turn on the TV and the device you want to view, for example a set-top box.
- 3. Repeatedly press the INPUT button on the remote control until you see *HDMI1* displayed at the bottom of the TV's screen. To go back to viewing TV channels, use the number buttons to enter the channel or press CH+ or CH- buttons.

• If you're done connecting devices to your TV, go to page 13 to complete the Initial Setup.

• If you experience HDMI problems, go to the HDMI Troubleshooting section on page 42.

VGA Connection

This is an example of a connection using the VGA jacks.



Connecting the Device

This connection allows you to connect to a personal computer.

1. If necessary, connect your cable and/or off-air antenna as described on page 6.

2. Connect your monitor cable.

Connect one end of a 15-pin monitor cable to the VGA VIDEO jack on the TV and the other end to the PC's video output jack. Note, if your PC's video output isn't 15-pin, you'll need an adapter that can connect to a 15-pin monitor cable.

3. Connect your audio cable.

Connect a 3.5 mm stereo mini pin cable (sometimes referred to as 1/8" stereo mini pin) to the VGA AUDIO jack on the back of the TV and the other end to the Audio Output jack on the PC.

Notes: The maximum resolution is 1024 x 768. Be sure to set your PC to the correct monitor output setting.

To hear sound from the TV while using the PC, press the PRESETS button. Highlight PC Sound source and press the right arrow to choose TV tuner.

Viewing the PC

- 1. Plug in the TV and the PC, if they aren't already plugged in.
- 2. Turn on the TV and the PC.
- 3. Repeatedly press the INPUT button on the remote control until you see *VGA* displayed at the bottom of the TV's screen. To go back to viewing TV channels, use the number buttons to enter the channel or press CH+ or CH- buttons.

Plug in the TV

Plug the end of the power cord into the back of the TV. Plug the other end into a grounded wall outlet. Insert the plug completely into the outlet. Do not plug into an outlet controlled by a light switch.

Put Batteries in the Remote

- Remove the battery compartment cover from the back of the remote by pushing the tab and lifting off the cover.
- Insert two fresh batteries. Make sure the polarities (+ and -) are aligned correctly.
- Replace the cover.

Turn on the TV

Turn on your TV by pressing the Power button on the front of the TV or ON•OFF on the remote control.



How to Use the Remote Control to Complete the Initial Setup

The technical term is "Navigation" – how you move through the onscreen menus. The theory is the same throughout the menu screens: highlight your choice and select it.

To highlight a menu item, press the arrow buttons on the remote to highlight one of the items listed on the screen. Use the up or down arrow button to move up or down. Use the right or left arrow button to view other selections for a menu choice or to display a sub-menu. More than one selection displays, for example, On...; a menu choice with a sub-menu displays dots (...).

Note: Highlighted means that the menu item stands out from other menu items on the list (appears darker, brighter, or a different color).

Тір

To access the setup menus manually, press MENU and choose Setup.

Complete the Initial Setup

The menu system in your TV allows the TV's features to work properly. The first time you turn on your TV, the language screen appears.

(English
	Français
	Español

Channel setup Go back

Auto Channel search

Signal type

Set the Menu Language

The first part of the setup allows you to select your preferred language for the menu system.

If English is your preferred language, press OK. To choose another language, press the down arrow button until that language is highlighted, and press OK.

Complete Channel Setup

Make sure you've connected the TV to cable and/or an off-air signal before you start the next part of the setup.

Set the Signal Type

If you connected Cable to your ANTENNA/CABLE jack, the option is chosen for you and you can press the down arrow button to continue. To choose *Antenna*, press the right arrow button and then press the down arrow button to continue.



If you have analog and digital channels, the TV's search might take longer since it is looking for both.



Once a channel search is complete, the Channel setup menu looks like this.

Complete the Channel Search

With *Auto Channel Search* highlighted, press OK to begin the channel search.

There are several things to be aware of when the TV's searches for channels.

If you chose Cable as your signal type, the search takes a while because it's looking for analog and digital channels, and then it's removing scrambled channels found. Here is what happens during the search:

- 1. The search first looks for digital channels and places the number of channels found next to *Digital Channels found*. This number will probably seem like a lot. This is because the number includes both scrambled (for example, Pay Per View) and non-scrambled channels. These channels are dependent upon what your cable company is sending.
- **2.** The search then looks for analog channels and places the number of channels found next to *Analog Channels found*.
- **3.** The search might appear as if it is complete, but as long as the search says *Running*, it is still in progress. What's happening at this point is the TV is removing scrambled channels from the channel list. When the search is finally complete, the *Channel setup* menu will look like the picture to the left. To exit the menu system, press CLEAR.

	List and Labels		
	Go back		
	Channel Number	10	
(In Channel List		
	Channel Label	ABC	
	Favorite Channel		

You might find there are still some channels in your list that are unavailable to view. To get rid of these channels, press MENU and choose *Setup*. Highlight and select *List and Labels*. Note that removing channels from your channel list may be time consuming, so you might want to do it later. Go to page 36 for details on editing your channel list.

What To Expect

Watching TV

• **Remember:** Look for an *A* at the bottom of the screen to see if you're watching an analog channel.

Analog video is sent in a 4/3 format, which your TV displays these channels in a 16/9 format. Press the ZOOM+/- button to view the different formats available. Go to page 32 for more explanation of screen formats.

• **Remember:** Look for a *D* at the bottom of the screen to see if you're watching a digital channel.

Most digital video is sent in a 16/9 format which does fill your screen, but sometimes is sent in 4/3 which does not fill your screen. It depends on how the station or source device is formatting the video. **If there are bars on-screen, press the ZOOM+/- button to try a different format that may eliminate the bars.** Some bars can't be removed because of the way the format is sent by the broadcaster. Go to page 32 for more explanation of screen formats.

Changing Channels

- Digital channels can have both primary channels (like the analog channel number) and sub-channels. To tune to a digital channel with a sub-channel, such as 10-1 as shown in the graphic to the left, enter the primary channel number (10), then press either the right arrow or the SUB CH button. Enter the sub-channel number (1) and press OK.
- Depending upon the type of signals you have connected to your HDTV, you might notice that the channels change slower than you're used to. This is perfectly normal. Digital cable channels sometimes take longer to tune.

A 10 CBS

Look for the *A* at the bottom of the screen to see if you're watching an analog channel.

D 10-1 CBS

Look for the *D* at the bottom of the screen to see if you're watching a digital channel.





Explanation of Jacks (in alphabetical order)

This section describes the jacks on the back panel of your TV. There are several ways to connect devices.

ANTENNA/CABLE INPUT Lets you connect a coaxial cable to receive the signal from your antenna, cable, or cable box.

AUDIO/VIDEO INPUT 1 (VID1) Lets you connect a device that has composite video jacks, such as a VCR or DVD player.

- **LAUDIO** Provides left audio connection when using the VIDEO INPUT 1 jack. The left audio connector is usually white.
- **R AUDIO** Provides right audio connection when using the VIDEO INPUT 1 jack. The right audio connector is usually red.

COMPONENT INPUTS Lets you connect a device that has component video jacks, such as a DVD player.

- **CMP1 Y Pb Pr (Component Video)** Provides optimum picture quality because the video is separated into three signals. Use three video-grade or component video cables for the connection. When using CMP1 Y Pb Pr, make sure you connect left and right audio cables to the CMP1 L and R AUDIO jacks.
- **CMP1 L AUDIO** Provides left audio connection when using the CMP1 video inputs. The left audio connector is usually white.
- **CMP1 R AUDIO** Provides right audio connection when using the CMP1 video inputs. The right audio connector is usually red.
- **CMP2 Y Pb Pr (Component Video)** Same as described for CMP1 Y Pb Pr and CMP1 Audio above. Make sure you connect the left and right audio cables to the CMP2 L and R AUDIO jacks.

DIGITAL AUDIO OUTPUT (Coaxial) Use a digital coaxial cable to connect your TV to a compatible audio receiver.

FIXED/VARIABLE AUDIO OUTPUT Use left and right audio cables to connect your TV to a compatible audio receiver. Make sure you set the *Audio Output* option correctly in the Advanced Sound menu. Go to page 35 for more information.

HDMI1/DVI INPUT Lets you connect a device, such as a digital cable box, with an HDMI or a DVI output.

- **HDMI1/DVI INPUT** (High-Definition Multimedia Interface/Digital Visual Interface) Provides an uncompressed digital connection that carries both video and audio data by way of an integrated mini-plug cable. Since HDMI technology is based on Digital Visual Interface (DVI), the jack on the back of your TV is also compatible with DVI devices.
- **DVI AUDIO L (used for DVI only)** Provides left audio connection when using the HDMI1 jack for DVI. The left audio connector is usually white.
- **DVI AUDIO R (used for DVI only)** Provides right audio connection when using the HDMI1 jack for DVI. The right audio connector is usually red.

Note: Remember to connect the left and right audio cables because the DVI cable carries only the picture signal, not the sound.

HDMI2 Input Lets you connect a device, such as a digital cable box, with an HDMI output.

VGA INPUT Connect your computer, or other device with a VGA output, to this jack using a 15 pin D-sub cable.

VGA AUDIO (Stereo mini jack) Use to obtain sound when a PC is connected to the VGA jack. Use a 3.5 mm stereo mini pin cable (sometimes referred to as 1/8" stereo mini pin) to connect a PC to your TV.

VIDEO OUTPUT Connect a VCR or DVD-recorder to record digital and analog programs from the ANTENNA/CABLE INPUT (excluding copy-protected programs and component video formats) while the TV is turned on. You must leave the TV on the same channel you are recording.

Buttons and Other Jacks On Your TV

Side Input Jacks

(Headphones) Allows you to connect headphones to listen to the sound coming from the TV. To adjust volume control of the headphones, go to the *Headphone Settings* option in the *Sound* menu.

S-VIDEO INPUT Allows you to connect an S-Video cable from another device. Make sure you also connect audio cables from the device to the TV. To access a device connected to the S-VIDEO jack, press the INPUT button on your remote until *VID2* appears at the bottom of the screen.

VIDEO INPUT 2 Receives video from another device such as a camcorder, video game console, VCR, or DVD player. To access a device connected to the VIDEO jack, press the INPUT button on your remote until *VID2* appears at the bottom of the screen.

Note: Do not connect an S-Video and a regular video cable to the side jacks at the same time.

AUDIO L and R Receives audio from another device such as a camcorder, video game console, VCR, or DVD player. Use when connecting to the VIDEO or S-VIDEO Input.

Side Panel Buttons

If you cannot locate your remote, you can use the side panel buttons of your TV to operate many of the TV's features.

POWER Turns the TV on and off.

MENU/OK Brings up the TV Main menu. When in the menu system, displays sub-menus and selects highlighted items.

VOL ^ Increases the volume. In the TV menu system, acts like the right arrow button on the remote control and adjusts menu controls.

VOL \vee Decreases the volume. In the TV menu system, acts like the left arrow button on the remote control and adjusts menu controls.

CH \land Scans up through the channel list.

CH \lor Scans down through the channel list.

Chapter 2: Using the Remote Control



Remote control part number R301F1

Note: If you need to replace your remote, call 1-800-338-0376. A shipping and handling fee, and the appropriate sales tax, will be charged upon ordering. Have your Visa, MasterCard, or Discover Card ready.

The Buttons on the Remote Control

Alphanumeric Buttons Enter channel numbers; time settings; and options with letters, such as the *Message* option, using these buttons. To enter a channel, press the number buttons and press OK (or just let the entry timeout).

To enter a digital channel with a sub-channel, enter the main channel, then press the SUB CH or right arrow button to enter the sub-channel and press OK.

Arrows Used to highlight different items in the TV menu and to adjust the menu controls. **When viewing a channel, press the left or right arrow to change the screen format:** 4/3, 16/9 zoom, **Cinerama, and 16**/9. Go to page 32 for more information on screen formats.

CH + or CH - Scans up or down through the current channel list. Press once to change the channel up or down; press and hold to continue changing channels.

CH CTRL This button doesn't have a function for your model of TV.

CLEAR Removes any menu or display from the screen and returns you to normal viewing.

DVD Places the remote in DVD mode. If Auto Tuning is enabled, turns on the TV and tunes it to the DVD Channel. This button lights when you press a valid button in DVD mode (see *Modes of Operation* on page 21 for more details).

GO BACK Returns you to the previous channel.

GUIDE Displays an electronic program guide (when available).

INFO If no menus are on-screen, displays the channel banner; press again to clear the screen.

INPUT Accesses the available video input channels (*VID1, VID2, CMP1, CMP2, VGA, HDMI1* and *HDMI2*). To resume TV viewing, press the number buttons to enter the channel or press CH+ or CH- buttons.

MENU Brings up the Main menu.

MUTE Reduces the TV's volume to its minimum level. Press again to restore the volume. To program this button to work with an audio system, follow the instructions for *Volume Punchthrough Feature* on page 21.

OK When in the menu system, selects highlighted items.

ON•OFF When in TV mode, turns the TV on or off. If in another mode (SAT•AUX or DVD) and programmed, will turn the device on or off.

PIP This button doesn't have a function for your model of TV.

PRESETS Displays *Picture* and *Sound preset*; *CC Settings*; *Current Audio Track, PC Sound source*; and *CH+/CH- buttons* (which works with the *Favorite Channels* option. Go to page 37 for more information).

REVERSE, PLAY, FORWARD, RECORD, STOP, PAUSE (buttons at bottom of the remote) If programmed, provides transport control for some remote-controllable devices, for example, VCRs or DVD players.

SAT•AUX Places the remote in SAT•AUX mode. If Auto Tuning is enabled, turns on the TV and tunes it to the satellite or cable box Video Input Channel. This button lights when you press a valid button in SAT•AUX mode (see *Modes of Operation* on page 21 for more details).

SUB CH When entering a digital channel that has a subchannel, press this button to access the subchannel entry field. Once the channel is entered, press the OK button to tune to the channel.

TV Turns on the TV and puts the remote in TV mode. Also displays current status.

VOL – or VOL + Decreases or increases the TV's volume. To program this button to work with an audio system, follow the instructions for *Volume Punchthrough Feature* on page 21.

ZOOM– or ZOOM + When viewing a channel, press to change the screen format: 4/3, 16/9 zoom, Cinerama, and 16/9. Go to page 32 for more information on screen formats.

Using the INPUT Button

Use the INPUT button to scroll through the available video input channels and view devices you have connected to the TV.

- 1. Make sure the device you want to view is turned ON.
- 2. Press INPUT to tune to an available video input source and view the device.
- 3. To return to the previous channel, press INPUT until you return to the channel.



The darkened buttons are the device buttons that can be programmed.

Programming the Remote to Operate Other Devices

The universal remote can be programmed to operate many brands of remote-controllable VCRs, audio devices, DVD players, cable boxes, satellite receivers and other devices. In addition to being programmed to operate your television, it's already programmed to operate some RCA devices.

Notes: The TV button can't be programmed on this remote to control any device; it controls only this TV.

The remote may not be compatible with all models of all brands of devices. It also may not operate all functions of your device.

Find Out If You Need to Program the Remote

To determine whether the universal remote needs to be programmed to operate one of the devices connected to your TV, such as a VCR, do the following:

- 1. Turn on the device (in this example, a VCR).
- 2. Point the remote at the device.
- 3. Press the corresponding device button (in this example, VCR).
- 4. Press ON•OFF to see if the VCR responds. If the VCR doesn't respond, you need to program the remote to operate it.



You'll use these darkened buttons for Direct Entry.

Programming the Remote

There are three ways to program the remote control to operate other devices: *Direct Entry, Manual Code Search,* and *Automatic Code Search.* If you have recently purchased the device you want to control or if the device has many codes, you might want to try the manual code search first.

Using Direct Entry

- 1. Turn on the device you want to control.
- 2. Look up the brand and code number(s) for the device in the code list at the end of this section.
- On your remote control, simultaneously press and hold the ON•OFF and MUTE buttons (approximately 3 seconds) until a device button remains lit. Then release the buttons.
- 4. Press and release the device button (SAT•AUX or DVD) you want to program.
- 5. Enter a three digit code from the code list.
- 6. To test the code you've programmed for that device button, point the remote at the device and then press ON•OFF to see if the device responds to the remote control.

If the device turns off, you've entered the correct programming code for your device. Circle the code you entered for future reference.

If the device doesn't turn off, repeat these steps until you've tested all codes for your device's brand or try to run a manual code search.

Using Manual Code Search

Note: Before using manual code search, you must use Direct Entry first. This lets the remote know which type of device to begin searching codes. Then proceed with the following steps.

- 1. Turn on the device you want to control.
- 2. On your remote control, simultaneously press and hold the ON•OFF and MUTE buttons (approximately 3 seconds) until a device button remains lit. Then release the buttons.
- 3. Press and release the device button (SAT•AUX or DVD) you want to program.
- 4. Repeatedly press and release the ON•OFF button, watching for the device to respond. If it does turn off, press and release the OK button within 3 seconds to save the code. If you accidentally passed the code before saving it, press the left arrow button to backtrack through the codes; then use the right arrow button to go forward through the codes again.

When all codes have been searched, the device button flashes 3 times, then the remote exits manual code search and returns to normal operation.

Using Automatic Code Search

- 1. Turn on the device you want to control.
- 2. On your remote control, simultaneously press and hold ON•OFF and MUTE (approximately 3 seconds) until a device button remains lit. Then release the buttons.
- 3. Press and release the device button you want to program.

continued on next page...

4. Press and release the ON•OFF button once. There is a delay of approximately 6 seconds before the remote starts the code search.

The device buttons blinks each time the remote control sends a code to test with your device. Keep pointing the remote at the device.

- 5. Once the device turns off, quickly press the OK button to save the code.
- 6. If you accidentally passed the code before saving it, press the left arrow button to backtrack through the codes; then use the right arrow button to go forward through the codes again.

When all codes have been searched, the device button flashes 3 times, then the remote exits automatic code search and returns to normal operation.

How to Use the Remote After You've Programmed It

Once the remote has been programmed successfully, you are ready to use it to operate your devices.

To operate the device:

- 1. Press the appropriate device button (SAT•AUX or DVD) to set the remote to control the device, for example, press DVD to control your DVD player.
- 2. Press ON•OFF to turn the device ON or OFF.
- 3. Use the remote buttons that apply to that device.

Note: The remote control may not be compatible with all brands and models of devices.

Modes of Operation

The button corresponding to the mode the remote is in lights up when you press any button that works in that mode. For example, if you're in TV mode and you press the VOL+ button, the TV button lights up. This tells you that the command to increase the volume is being sent to the TV (and not the satellite receiver, for example).

Volume Punchthrough Feature

You may find this feature helpful if you've connected your devices to an audio system, and you want to use the TV's remote control to operate the volume for a device that is connected to the audio system. An example follows:

Let's say you've connected your DVD player to your audio system. You've also programmed your TV remote control to operate your DVD player. Since the DVD player sends its volume through the audio system, you would have to bounce back and forth between two remote controls: the audio system's remote to adjust the volume and the TV's remote control to operate the DVD player.

The Volume Punchthrough feature eliminates the need for you to use two remote controls and saves a button press when you're using the TV remote to adjust the volume. In effect, you are telling the TV remote to retrieve and send volume commands from the audio system whenever the TV remote is in DVD mode.

Therefore, after you've successfully set up the Volume Punchthrough feature, whenever the TV remote is in DVD mode (press the DVD button) and you want to adjust the volume, you only have to press the VOL +/- or MUTE buttons. Follow the instructions below to set up Volume Punchthrough.

- 1. On your remote control, simultaneously press and hold the ON•OFF and MUTE buttons (approximately 3 seconds) until a device button remains lit. Then release the buttons.
- 2. Press and hold the MUTE button until the device button blinks off, then release the MUTE button.
- 3. Press and release the device button that you programmed to operate the audio system (receiver or amplifier).
- 4. Press and release the MUTE button.
- 5. Now, test it by turning on your audio system.
- 6. Turn on the device that is connected to the audio system (satellite receiver, for example).
- 7. Put the TV's remote in SAT•AUX mode by pressing the SAT•AUX button.
- 8. Press VOL+ or VOL-. The volume from the audio system should increase or decrease accordingly.

Deleting ALL Volume Punchthrough Commands

To delete all programmed Volume Punchthrough settings and return the remote control back to the factory defaults:

- 1. Simultaneously press and hold the ON•OFF and MUTE buttons (approximately 3 seconds) until a device button remains lit. Then release the buttons.
- 2. Press and hold the MUTE button until the device button blinks off, then release the MUTE button.
- 3. Press and release the MUTE button until the device button light turns off.
- 4. The remote returns to normal Volume/Mute control.

Remote Code List

Note: The codes are programmable to any of the device buttons (SAT•AUX or DVD) on the remote.

Audio Codes

AIWA
APEX
BOSE
CARVER 825
CITIZEN 826
CDITEDION 4/9
DENON
DEINON
DELPHI
FISHER
GOLDSTAR
HARMAN KARDON
JVC
KENWOOD
KOSS 415
MAGNAVOX 796 814 915 756
MADANT7 688 82/
MITCUDICII
MITSUDISTI
NAD
NEO
NORCENT
ONKYO
OPTIMUS
PANASONIC
PHILIPS
PIONEER 837 866 867 878 893
RADIO SHACK 706 754 703 806 865 866 867 868 875
RADIO SHACK ./00 /)4 / 95 800 805 800 807 808 875
RCA/1//20//2/81/95/82/845/800/80/8/08/1
REALISTIC
SABA
SAMSUNG
SANYO
SCOTT
SHARP 671 684 809
SHFRWOOD 706 806 858 859
SITERWOOD
SCINI 222 770 770 707 707 707
SUNY
TAO
TEAC
TECHNICS
TEVION
VENTURER
XM RADIO
YAMAHA 801 802 838 840 841 846 847 848 849
ZENITH 676 730 740 750 765 766 784 814 787 850
LENTITE
403

Cable

ABC	464 465 466 463
ADELPHIA	
ALLEGRO	
AMERICAST	
ANTRONIX	
ARCHER	. 468 469 470 471
AT&T	
BELL SOUTH	
CABLETENNA	
CABLEVIEW	
CABLEVISION	
CENTURY	
CITIZEN	
COGECO	
COLOR VOICE	
COMCAST	
COMTRONICS	
CONTEC	
DIGITAL MUSIC EXPRESS	
EASTERN	
EVERQUEST	
GARRARD	
GC ELECTRONICS	
GEMINI	
GE	
OAK	
PACE	
PANASONIC	
PARAGON	
PHILIPS	485 490 491 492
PHILIPS-MAGNAVOX	505 534

PIONEER
PULSAR
RADIO SHACK 505 534 525
RCA
REALISTIC
REGAL
REGENCY
REMBRANDT
ROGERS
RUNCO
SAMSUNG
SCIENTIFIC ATLANTA 498 497 506 535 512 466 496
SHAW
SIGNAL
SIGNATURE
SL MARX
SPRUCER
STANDARD
STARCOM
STARGATE
STAR SIGHT
STAR TRAK
TANDY
TELEVIEW
TEXSCAN
TIME WARNER
ТОСОМ
TOSHIBA
TV86
UNIKA
UNITED CABLE
UNIVERSAL 468 469 470 471 502 524
VIDEOWAY
VIDEOTRON
VIEWSTAR
VIDEO TECH
ZENITH
ZENITH NETWORK

CD

ADC		660
ADCOM	. 661	714
AIWA	707	842
AKAI715	737	830
AUDIO TECHNICA		665
CALIFORNIA AUDIO LABS		716
CAPETRONIC		669
CARVER	668	825
CASIO		777
CITIZEN		826
CURTIS MATHES		777
DENON		670
EMERSON	. 661	673
FISHER	677	718
GENEXXA673	678	719
GOLDSTAR		720
HARMAN KARDON	. 680	691
НІТАСНІ		678
INKEL		681
C PENNEY	. 690	777
IVC	. 682	813
KENWOOD	728	828
KRELL		666
KYOCERA		660
LUXMAN	729	738
LXI		777
MAGNAVOX666	731	800
MARANTZ666 688	689	732
MCS	. 690	777
MGA		691
MISSION		666
MITSUBISHI	. 691	692
NAD	. 721	743
NAKAMICHI693	694	831
NEC		690
NIKKO665	673	676
NSM		666
ONKYO695 696	722	811
OPTIMUS 667 668 678 679 697 698 699 700	744	747
		751
PANASONIC	820	862
PHILIPS	731	825

PIONEER			.678	701	702	719	750	837	876
PROTON									.666
QUASAR									.716
RADIO SHAG	CK	668	699	706	750	786	868	874	876
RCA	661 6	67 703	723	750	795	844	873	874	876
REALISTIC		661	667	669	673	678	689	697	699
ROTEL									.666
5AE									.666
SAMSUNG									.741
SANSUI						.666	704	723	734
SANYO					.667	705	718	735	742
SCOTT								.661	673
SEARS							.679	689	777
SHARP								.679	689
SHERWOOD					.681	689	698	706	859
HURE									.690
50NY						.707	792	794	800
5TS									.660
SYLVANIA									.666
SYMPHONIC									.709
FEAC			.676	689	699	709	710	711	856
FECHNICS						.716	733	820	862
THETA DIGI	TAL								.731
OSHIBA									.721
/ICTOR									.682
AMAHA					.665	712	713	724	846
ZENITH					.676	730	759	784	850
		D	VC)					

ADVENT				.922
AFREEY				.417
AIWA				.414
AKAI			395	435
AMES				.431
AMW			917	918
ANABA			· · ·	961
APEX	439	445	457	459
	938	949	913	401
ASPIRE	/00	/ -/	/-0	933
A-TREND				303
AUDIOVOX				921
AXION				021
R & K				078
BIAUDINKT				/20
PODVSONIC				417
POSE		•••••		672
DOSE	•••••	204	022	0/2
CENTEDIOC		394	952	907
CENTRIOS	•••••	•••••		.951
CHANGHONG				.401
CINEVISION		•••••		.405
CLASSIC			401	431
COBY	916	445	928	894
CONCEPT				.430
CRITERION				.448
CURTIS INTERNATIONAL			929	928
CYBERHOME		393	985	939
CYTRON			446	388
DAEWOO	441	444	971	965
DENON			400	421
DENZEL				.428
DESAY				.958
DIAMOND VISION		948	892	896
DIGIX		·		.934
DIGITREX				.445
DISNEY				458
DUAL	984	956	428	446
DURABRAND			449	405
DVD 2000				402
FITA			434	435
FMFRSON 405	456	458	940	800
FSA	1,00	1,0	10	056
FADENIHEIT				060
FISHED				416
FINAL			456	/50
CE		•••••	400	400
COLDSTAD			409	405
GOLDSTAK	071	 / = /-		.405
GO-VIDEO	9/1	474	902	901
		•••••	930	944
GRADIENTE				.415
GREENHILL		•••••		.430
HAAZ			451	452
HAIER				.935

HARMAN KARDON	427	7
HITACHI	404 407 419 428	3
HITEKER	445	ŝ
HUMAX		2
IIO	950)
INFINITY	417	7
INSIGNIA	405 456 905 921 430)
INITIAL	430	Ś
INTEGRA	422	2
IBL	427	7
IVC	406 418 923 964 900)
IWIN	390 893 895	5
KAWASAKI	945 449	Ś
KENWOOD	400 429)
KISS	428	3
KLH	430 906 386	5
KONKA		5
KOSS		3
KXD		í
LASONIC	451 948	3
LENOXX		5
LG		7
LINN		3
LITEON		3
MAGNAVOX 398 408 979	981 980 456 915 914 969)
MARANTZ		L
MAXENT		3
MEDION		5
MEMOREX		5
MICROSOFT)
MINTEK)
MITSUBISHI		2
MUSTEK		l
MYRON & DAVIS		2
NAD		3
NAKAMICHI		2
NESA)
NEXXTECH	952 954 955 956	5
NORCENT		3
ONKYO		5
OPTIMUS		É.
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PANASONIC	7 396 400 437 974 950 970)
D. OTDIO	446	5
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PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\398\ 408\ 423\ 979\ 980\\403\ 404\ 976\ 977\ 968\ 905\\385\ 949\ 957\\385\ 949\ 957\\385\ 949\ 957\\385\ 949\ 957\\409\ 409\ 980\\926\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 922\\409\ 430\ 449\ 453\ 919\ 926\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 456\407\ 892\ 891\ 891\ 891\ 891\ 891\ 891\ 891\ 891$))))7 15 5 5)) 5)) 1 1 5)) 7 5)))7
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PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 909\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 915\\\ 407\ 454\ 455\ 942\ 963\ 891\\\ 416\ 904\\\ 394\ 456\\\ 416\ 904\\\ 416\ 904\\\ 430\ 430\ 430\ 430\ 430\ 430\ 430\ 430$))))7155))5))11))5)17445375)))7513
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\398\ 408\ 423\ 979\ 980\\403\ 404\ 976\ 977\ 968\ 905\\385\ 949\ 957\\385\ 949\ 957\\385\ 949\ 957\\385\ 949\ 957\\398\ 408\ 981\\435\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\ 991\\407\ 454\ 455\ 942\ 963\ 891\ 991\ 911\ 953\407\ 953\ 988\ 989\ 989\ 989\ 980\ 9910\ 911\ 953\456\ 945\ 945\ 945\ 945\ 945\ 945\ 945\ 945$	
PACIFIC PHILIPS	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 909\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 435\\\ 435\\\ 435\\\ 435\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 455\ 942\ 963\ 891\\\ 416\ 904\\\ 394\ 456\\\ 422\\\ 397\ 897\ 889\ 889\ 389\ 399\ 986\\\ 910\ 911\\\ 955\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 556\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\\ 456\\ 456\\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456$)))7155))5)11)5017445375))751355
PACIFIC PHILIPS	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 909\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 455\ 942\ 963\ 891\\\ 417\\\ 416\ 904\\\ 416\ 904\\\ 416\ 904\\\ 422\\\ 397\ 897\\\ 425\\\ 430\\\ 430\\\ 430\\\ 937\\\ 937\\\ 987\ 988\ 989\ 389\ 399\ 988\\\ 910\ 911\\\ 955\\\ 456\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\ 456\ 458\\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\\ 458\$)))7255))5))22)552455375)))7523553
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 409\ 990\\\ 926\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 455\ 942\ 963\ 891\\\ 416\ 904\\\ 416\ 904\\\ 426\\\ 397\ 897\\\ 897\ 988\ 989\ 389\ 389\ 399\ 986\\\ 910\ 911\\\ 915\\\ 456\ 456\\\ 456\ 458\ 895\\ \end{array}$)))7255))5))22))5)27445375))7523553)
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 403\ 404\ 976\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 435\\\ 409\ 990\\\ 920\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 456\ 456\ 958\\\ 989\\\ 910\ 911\\\ 955\\\ 988\ 989\ 389\ 389\ 399\ 986\\\ 910\ 911\\\ 955\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 404\ 444\ 945\ 895\\\ 404\ 444\ 445\ 904\ 446\ 904\ 446\ 904\ 906\ 906\ 906\ 906\ 906\ 906\ 906\ 906$))))7255))5))121))5)1274455375)))75135553))
PACIFIC PHILIPS	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 909\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 435\\\ 435\\\ 435\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 455\ 942\ 963\ 891\\\ 456\ 458\\\ 956\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\ 890\\\ 400\ 449\ 450\\ 449\\\ 400\\ 449\ 445\\ 445\\\ 400\\ 400\\ 449\ 445\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400\\ 400$))))7155))5))11)5)174455375)))7513553)))
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 909\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 408\\\ 980\\\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 453\ 910\ 920\\\ 449\ 455\ 942\ 963\ 891\\\ 417\\\ 416\ 904\\\ 416\ 904\\\ 416\ 904\\\ 416\ 904\\\ 422\\\ 397\ 897\\\ 425\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 456\ 458\\\ 400\ 443\\\ 400\ 443\\\ 400\ 443\\\ 400\ 443\\\ 400\ 443\\\ 433\\\ 400\ 443\\\ 400\ 443\\\ 433\\\ 400\ 443\\\ 400\ 443\\\ 400\ 443\\\ 433\\\ 433\\ 433\\ 433\\\ 433\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435\\ 435$)))7155))5))11))5)17445375))7513553))3
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 423\ 979\ 980\\\ 398\ 408\ 977\ 968\ 909\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 890\\\ 926\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 456\ 456\ 891\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\ 456\ 458\ 895\ 456\ 458\ 895\ 456\ 458\ 895\ 456\ 458\ 895\ 456\ 458\ 895\ 456\ 458\ 895\ 456\ 456\ 458\ 895\ 456\ 456\ 456\ 456\ 456\ 456\ 456\ 45$)))7155)5))11)5)17445375)))7513553)))33
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 403\ 404\ 976\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 435\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 449\ 453\ 919\ 920\\\ 450\ 453\ 919\ 920\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\\\ 450\ 450\ 450\ 450\\\ 450\ 450\ 450\ 450\\\ 450\ 450\ 450\ 450\ 450\\\ 450\ 450\ 450\ 450\ 450\ 450\ 450\ 450$))) 7 155)) 5) 110) 5) 17 115375)) 7 5 1 35530) 332
PACIFIC PHILIPS	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\398\ 408\ 423\ 979\ 980\\398\ 408\ 423\ 979\ 980\\403\ 404\ 976\ 977\ 968\ 909\\398\ 408\ 981\\398\ 408\ 981\\409\ 409\ 950\\987\ 980\ 982\\409\ 409\ 400\ 980\\926\\409\ 430\ 449\ 453\ 919\ 920\\409\ 430\ 449\ 453\ 920\ 890\\931\\407\ 454\ 455\ 942\ 963\ 891\\937\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\ 999\ 986\\407\ 454\ 455\ 942\ 963\ 891\ 999\ 986\\406\ 446\ 445\\456\ 458\ 899\\456\ 458\ 899\\404\ 449\\404\ 449\\404\ 449\\404\ 449\\404\ 449\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\\404\ 445\ 445\ 445\ 445\ 445\ 445\ 445\ $)))7155))5))11))5)17445375))7513553)))3324
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 403\ 404\ 976\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 890\\\ 926\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 926\\\ 449\ 453\ 919\ 926\\\ 449\ 453\ 919\ 926\\\ 449\ 453\ 919\ 926\\\ 449\ 453\ 920\ 890\\\ 915\\\ 449\ 455\ 942\ 963\ 891\\\ 416\ 904\\\ 416\ 904\\\ 416\ 904\\\ 416\ 904\\\ 416\ 904\\\ 428\\\ 397\ 897\\\ 425\\\ 456\ 458\ 899\\\ 456\ 458\ 899\\\ 446\ 447\ 448\ 450\ 451\ 452\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\\ 912\ 905\\ 912\ 905\\ 912\ 912\ 905\\ 912\ 912\ 912\ 912\ 912\ 912\ 912\ 912$)))7155))5))11))5)14(5)375))7513553)))332(4)
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 403\ 404\ 976\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 890\\\ 926\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 915\\\ 449\ 453\ 919\ 920\ 890\\\ 410\ 406\\ 456\ 458\ 891\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 456\ 895\\ 456\ 895\\ 456\ 456\ 895\\ 456\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\ 895\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\$)))7155))5))11))5017445375)))7513553)))3324)3
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 403\ 404\ 976\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 435\\\ 445\\\ 435\\\ 409\ 890\\\ 926\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 926\\\ 456\ 458\ 919\\\ 456\ 458\ 959\\\ 987\ 988\ 989\ 389\ 389\ 399\ 986\\\ 910\ 911\\\ 915\\\ 957\ 988\ 989\ 389\ 389\ 399\ 986\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\ 895\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\ 458\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\\ 456\$)))7155))))11))5))17445375)))7513553)))3324)31
PACIFIC PHILIPS	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\398\ 408\ 423\ 979\ 980\\403\ 404\ 976\ 977\ 968\ 905\\398\ 408\ 977\ 968\ 909\ 957\\398\ 408\ 981\\407\ 407\ 454\ 455\ 942\ 963\ 891\\409\ 430\ 449\ 453\ 919\ 920\\409\ 430\ 449\ 453\ 920\ 890\\931\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\\407\ 454\ 455\ 942\ 963\ 891\ 997\ 897\\407\ 454\ 455\ 942\ 963\ 891\ 997\ 897\\407\ 454\ 455\ 942\ 963\ 891\ 997\ 897\\407\ 454\ 455\ 942\ 963\ 891\ 997\ 897\\407\ 454\ 455\ 942\ 963\ 891\ 997\ 897\ 987\ 988\ 989\ 389\ 399\ 986\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\ 892\456\ 458\456\ 458\ 892\456\ 458\456\ 458\456\ 458\456\ 458\456\ 458\456\ 458\456\ 458\456\ 458\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\456\ .$	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
PACIFIC	$\begin{array}{c} 979\ 981\ 980\ 456\ 458\ 966\\\ 398\ 408\ 423\ 979\ 980\\\ 403\ 404\ 976\ 977\ 968\ 905\\\ 385\ 949\ 957\\\ 385\ 949\ 957\\\ 398\ 408\ 981\\\ 415\\\ 409\ 890\\\ 926\\\ 449\ 453\ 919\ 922\\\ 449\ 453\ 919\ 920\\\ 849\ 850\\\ 919\\\ 449\ 453\ 919\ 920\\\ 849\ 850\\\ 919\\\ 449\ 453\ 919\ 920\\\ 849\ 850\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 849\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 849\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 849\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 849\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 849\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 849\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 447\ 448\ 450\ 451\ 452\\\ 8446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4446\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 4466\ 44$)))7 155)5))1 1 1 5) 1 7 4 4 5 3 7 5))7 5 1 3 5 5 3)) 3 3 2 4) 3 1)

WHITE WESTINGHOUSE	458	
X-BOX		
XENIUS		
ҮАМАНА	400 420 979 980	
YAMAKAWA	438 428	
ZENITH	405 907	
DVD/VCR Combo Codes		

Where the code is listed as [### ###] the first is for the DVD and the second is for the VCR. Otherwise just the one code operates both the DVD and the VCR.

APEX	
BROKSONIC	
CINEVISION	
DAEWOO	
DIAMOND VISION	
DURABRAND	
EMERSON	
FISHER	
FUNAI	
GO-VIDEO	
HITACHI	
INSIGNIA	
IVC	
LG	
MAGNAVOX	
MEDION	
PANASONIC	
PHILIPS	
POLAROID	
RCA	[409 255]
SAMSUNG	455 963
SANSUI	394
SANYO	[416 267]
SEARS	394
SONY	389
SYLVANIA	456 [458 227] [458 236]
SYMPHONIC	456 [458 227] [899 236]
TOSHIBA	924
WHITE WESTINGHOUSE	[458 227]
ZENITH	[405 245]
	[+0] 2+7]

DVR/DVD Combos

HUMAX	
PANASONIC	
PIONEER	
TIVO	
TOSHIBA	

DVR Codes

Where codes are shown like this [###] each one can be used if you have 2 or more of the SAME device.

АТ&Т	
HUGHES	
HUMAX	
PANASONIC	
PHILIPS	[371] [344] [345]
PIONEER	
RCA	
REPLAYTV	
SONIC BLUE	
SONY	
TiVo	. 371 372 344 345 657 983 912 909
TOSHIBA	

DVR/Cable Combos

CABLEVISION	506
ILLICO	506
PIONEER	506
ROGERS	506
SCIENTIFIC ATLANTA	506
TIME WARNER	506
VIDEOTRON	506

DVR/SAT Combos

BELL EXPRESSVU	647 655
DISH NETWORK	
DREAMBOX	
ECHOSTAR	
EXPRESSVU	
FORTEC STAR	569 555 556
HUGHES NETWORK	
RCA	
PHILIPS	
PROSCAN	

SAMSUNG	
SONY	657 659
ULTIMATE TV	653 659
ZENITH	656

Home Theatre in a Box

Where the code is listed as [### ###] the first is for the DVD and the second is for the AUDIO. Otherwise just the one code operates both the DVD and the AUDIO.

AIWA	
AMW	
APEX	
BOSE	
CRITERION	
DURABRAND	
EMERSON	
IVC	
KLH	
KOSS	
LENOXX	
LG	
MAGNAVOX	915 [969 756] [408 756]
MYRON & DAVIS	
NORCENT	
ONKYO	
PANASONIC	
PHILIPS	
PIONEER	
RADIO SHACK	449 894 895 [453 879]
RCA	
REGENT	
SABA	
SAMSUNG	
SONY	
TEVION	
ZENITH	[405 787]

Satellite/DTV Receivers

Where codes are shown like this [###] each one can be used if you have 2 or more of the SAME device or brand.

AMPLICA
BELL EXPRESSVU
CHANNEL MASTER 577 578 579
CHAPPARAL
CHEYENNE
DRAKE
DREAMBOX
DIRECTV 622 632 629 621 623 576 586 616 613 630
634 636 638641 652 653 657 659 607 619 641
DISH NETWORK . [655] [647] 628 612 654 588 589 590
DISHPRO
DX ANTENNA
ECHOSPHERE
ECHOSTAR
EXPRESSVU
FORTEC STAR 569 555 556 557 558 559
FUJITSU
GE
GEMINI
GENERAL INSTRUMENT (GI) [627] [642] [643] [644] 648
640 645 564 565 566 593
GO VIDEO
UITACUI 629 620 620 622 641 607
1111AC111
HUGHES NETWORK 621 641 607 580 [632] [638] [629]
HUGHES NETWORK 621 641 607 580 [632] [638] [629]
HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] [VC
HIACHI
HILGHES NETWORK 621 641 607 580 [632] [638] [629] [630] [VC
HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC
HILGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC
HILGHES NETWORK 621 641 607 580 [632] [638] [629] [630] VC
HITACHI 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [630] JVC 638 KENWOOD 598 LUXOR 599 MAGNAVOX 576 612 639 MITSUBISHI 641 632 638 629 630 607 MOTOROLA 648 618
HITACHI 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [630] JVC [KENWOOD 598 LUXOR 599 MAGNAVOX 576 612 639 MACOM 600 MITSUBISHI 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601
HITACHI 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [639] JVC 638 029 030 032 041 007 JVC 638 029 030 052 041 007 MAGNAVOX 576 612 639 MACOM 600 MITSUBISHI 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601 PACE 614 615 646
HILGHE
HITACHI 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [639] JVC 628 KENWOOD 598 LUXOR 599 MAGNAVOX 576 612 639 MACOM 600 MITSUBISHI 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601 PACE 614 615 646 PANASONIC 626 586 596
HITACHI 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [641 632 638 629 630 607 MOTOROLA 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601 PALE 614 615 646 PANSAT 584 PANASONIC 6
HILACHT 038 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] JVC 628 KENWOOD 598 LUXOR 599 MAGNAVOX 576 612 639 MACOM 641 632 638 629 630 607 MOTOROLA 641 632 638 629 630 607 MOTOROLA 641 615 646 PARE 614 615 646 PANSAT 584 PANASONIC 626 586 596 PRIMESTAR 627 640 PHILIPS 576 612 621 629 630 632 638 641 607 639
HITACHT 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [641 632 638 629 630 607 MOTOROLA 641 632 638 629 630 607 MOTOROLA 644 618 NORSTAT 601 PACE 614 615 646 NORSTAT 584 PANASONIC 626 586 596 PRIMESTAR 627 640 PHILIPS 576 612 621 629 630 632 638 641 67 639 PHILIPS 576 612 621 629 630 632 638 641 67 639
HITACHT 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [641 632 638 629 630 607 MOTOROLA 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601 PACE 614 615 646 PANASONIC 626 586 596 PRIMESTAR 627 640 PHILIPS 576 612 621 629 630 632 638 641 607 639 PHILIPS-MAGNAVOX 576 612 632 632 638 641 607 639 PIONEER 604
HITACHI 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [641 632 638 629 630 607 630 MOTOROLA 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 641 615 646 PANASONIC 626 586 596 PRIMESTAR 626 586 596 PHILIPS 576 612 621 629 630 632 638 641 607 639 PHILIPS 576 612 621 629 630 632 638 641 607 639 PHONEER 604 PROSAT 563
HILGHT 038 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] JVC 628 KENWOOD 598 LUXOR 599 MAGNAVOX 576 612 639 MACOM 600 MTSUBISHI 641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601 PACE 614 615 646 PANASONIC 626 586 596 PRIMESTAR 627 640 PHILIPS 576 612 629 630 632 638 641 607 639 PHILIPS-MAGNAVOX 576 612 639 PIONEER 604 PROSCAN 636 637 650 653 651 652
HITACHT 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [641 632 638 629 630 607 MOTOROLA 648 618 NORSTAT 601 PACE 614 615 646 PANASONIC 626 586 596 PRIMESTAR 627 640 PHILIPS 576 612 621 622 630 632 638 641 607 639 PHILIPS-MAGNAVOX 576 612 632 638 651 651 652 PIONEER 604 PROSAT 563 PROSAT 563 636 637 651 652 098
HITACHT 638 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] [630] JVC [641 632 638 642 630 607 MOTOROLA 641 632 638 643 618 NORSTAT 641 632 638 641 607 639 PHILIPS 576 612 621 629 630 632 638 641 607 639 PHILIPS-MAGNAVOX 576 612 631 632 048 PHONEER 604 PROSAT 563 PROSAT 563 PROSAT 563 PROASCAN 636 637 650 653 650 1651 652 REALISTIC 567 603
HILGHT 038 029 030 032 041 007 HUGHES NETWORK 621 641 607 580 [632] [638] [629] JVC 628 KENWOOD 598 LUXOR 599 MAGNAVOX 576 612 639 MACOM 641 632 638 629 630 607 MOTOROLA 641 632 638 629 630 607 MOTOROLA 641 615 646 PANSAT 584 PANSAT 584 PANSONIC 626 586 596 PRIMESTAR 627 640 PHILIPS 576 612 621 629 630 632 638 641 607 639 PHILIPS-MAGNAVOX 576 612 631 652 638 641 607 639 PINDER 604 PROSAT 563 PROSAT 563 651 652 098 REALISTIC 567 603 SAMSUNG 594 583 613 616 619

SHARP	
SKY NETWORK	614 615 646
SIERRA I II III	
SONY	.623 657 659 602
STARCHOICE	
STAR SIGHT	633
STAR TRAK	608
STS	568 570 571
SUPER GUIDE	
SYLVANIA	
TOSHIBA 641 632 638 629 630 607	572 624 625 631
ULTIMATE TV	653 659
UNIDEN	633 573 611
UNITED	
VIDEO CIPHER II	
WEB TV	612 585
ZENITH617 634 656 595 646	562 574 587 635
VCR Codes	

Where codes are shown like this [###] each one can be used if you have 2 or more of the SAME device or brand.

ACCELE					354
ADMIRAL					226
ADVENTURA					251
AIKO					252
A TW/A		2/15	227	260	251
AIWA		. 24.)	24/	209	227
AKAI	5 230	231	254	505	33/
ALLEGRO			247	329	243
AMERICAN HIGH					292
APEX					949
ASHA					354
AT&T					373
AUDIO DYNAMICS			376	377	234
AUDIOVOV			5/0	5//	245
DELL & LIOWELL	•••••	•••••		•••••	24)
DELL & HOWELL	•••••	•••••		•••••	200
BEAUMARK					354
BROKSONIC	/ 310	394	967	237	289
CALIX					245
CANDLE	0 245	354	234	242	244
CANNON			.225	292	339
CAPEHART					329
CARVER					287
CCF				252	356
CINEVISION				2)2	245
CITEVISION	- 252	254	224	242	24)
CITIZEN	5 252	354	234	242	244
COLORTYME	• • • • • • • • •	•••••		• • • • • • •	234
COLT					356
CRAIG		. 245	354	356	248
CURTIS MATHES 225 287 227 334	4 354	358	234	249	292
CYBERNEX					354
DAEWOO 279 240 250 252	2 334	242	244	251	971
DBX	- 551		376	377	234
DIAMOND VISION			5/0	5//	201
DIAMOND VISION	•••••	•••••		•••••	090
DIMENSIA	•••••	•••••		•••••	227
DURABRAND	• • • • • • • • •	•••••		• • • • • • •	245
DYNATECH				227	251
ELECTROHOME				245	254
ELECTROPHONIC					245
EMERSON 250 245 252 256 257	7 290	310	325	354	240
233 227 265 266 268 269 456 458	3 2 3 1	237	249	251	254
259 262 263 270	289	292	301	330	341
FISHER 304 268 26	7 287	234	248	273	274
EIII	/ 20/	254	240	220	202
ГUJI			4.51	450	292
FUNAI	•••••	. 22/	450	458	251
GARRARD					251
GE	1 335	342	354	278	292
GOLDSTAR	7 245	338	329	346	234
GRADIENTE					251
GO-VIDEO 354 375	5 407	426	455	971	368
HARLEY DAVIDSON					251
HARMAN KARDON				234	254
HARWOOD					356
HEADOLIAPTEP					268
HEADQUARTER	260		247	202	222
	309	22/	547	505	334
HI-Q	• • • • • • • • •	•••••	•••••	•••••	248
INFINITY					288
INSIGNIA					245
INSTANT REPLAY				227	292
INTEQ					245
JC PENNEY . 225 245 268 354 369	9 376	377	292	303	332
	2.0	- · ·		343	234
ICI				5.5	202
IFNSEN				360	302
JEROEN	7 260	247	/10	22%	202
JVC	/ 208	24/	418	234	303
KENWOOD	268	5/6	5/7	234	503
KLH				••••	356
KODAK				245	292
LG		. 227	329	338	907

LLOYD				227	251
LOGIK					356
LXI				227	245
MAGNAVOX 287 288 329 226 225	456	286	235	227	914
				969	292
MAGNIN					354
MARANTZ 287 268 376	377	289	292	339	234
MARTA					245
MATSUSHITA					292
MEDION					896
MEI					292
MEMOREX 287 245 268 304 310	329	354	226	227	337
			248	251	292
MGA				290	254
MGN TECHNOLOGY					354
MIDLAND					278
MINOLTA				369	332
MITSUBISHI	369	376	377	254	295
MONTGOMERY WARD	5.07		5	226	300
MOTOROLA				226	292
MTC			227	354	251
MULTITECH	227	354	251	278	356
NEC 268 376 377 289	301	302	303	234	240
NEC	501	502	505	2,54	245
NOBLEY					25/
OLYMPUS					202
ODTIMUS 220 254 262	245	261	274	201	294
OPTONICA	4 1)	501	5/4	25%	200
OPION			•••••	334	210
DANASONIC 2(2,201	274	272	225	4270	202
FAINASUNIC	3/4	3/3	247	43/	292
PENIAX			209	254	352 202
PHILCO		287	225	235	292
PHILIPS 287 288 344 345 371	378	383	456	286	292
PHILIPS-MAGNAVOX			287	288	226
PILOT					245
PIONEER	. 305	369	376	377	343
PORTLAND				242	244
PROSCAN				225	308
PROTEC					356
PULSAR					329
OUARTER					268
ÕUARTZ					268
OUASAR	363	374	225	381	292
RADIO SHACK	505	225	226	201	
fulbro officiat minimum		2 . Z . A	2.20	221	239
245 268 342 354 361 363 248 251	254	274	220	22/	239
. 245 268 342 354 361 363 248 251 Radix	254	274	226 292	227 300	239 337 245
. 245 268 342 354 361 363 248 251 RADIX RANDEX	254	274	226 292	300	239 337 245 245
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA [225] 245 [308] 309 311 312	254 313	274 314	226 292 	22/ 300	239 337 245 245 335
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312	254 313	274 314	226 292 315	227 300 316	239 337 245 245 335 342
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312	254 313 369	274 314 228	226 292 315 278	22/ 300 316 202	239 337 245 245 335 342 332
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 SEAUSTIC	254 313 369	274 314 228	226 292 315 278	22/ 300 316 292 248	239 337 245 245 335 342 332 251
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 	254 313 369 354 254	274 314 228 361	226 292 315 278 363 202	22/ 300 316 292 248	239 337 245 245 335 342 332 251 327
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 	254 313 369 354 254	274 314 228 361 274	226 292 315 278 363 292	22/ 300 316 292 248 300	239 337 245 245 335 342 332 251 337
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 	254 313 369 354 254	274 314 228 361 274	226 292 315 278 363 292	227 300 316 292 248 300	239 337 245 245 335 342 332 251 337 373
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 354 REALISTIC 225 226 227 245 268 REPLAYTV RICOH	254 313 369 354 254	2274 314 228 361 274	226 292 315 278 363 292	227 300 316 292 248 300	239 337 245 245 335 342 332 251 337 373 353
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 	254 313 369 354 254	274 314 228 361 274	226 292 315 278 363 292	227 300 316 292 248 300	239 337 245 245 335 342 332 251 337 373 353 329
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 	254 313 369 354 254 455	2274 314 228 361 274 942	226 292 315 278 363 292 963	227 300 316 292 248 300 230	239 337 245 245 335 342 332 251 337 373 353 329 337
. 245 268 342 354 361 363 248 251 RADIX RANDEX RCA[225] 245 [308] 309 311 312 	254 313 369 354 254 455	2274 314 228 361 274 942	226 292 315 278 363 292 963	227 300 316 292 248 300 230 226 256	239 337 245 245 335 342 332 251 337 373 353 329 337 329
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Web TV

JVC	
SONY	

Chapter 3: Using the TV's Features

Channel Banner

There are several indicators that might appear when you press the INFO button on the remote. This display is called the Channel Banner. The following list describes the items on the Channel Banner screen (left to right and top to bottom).

Stereo	SA	Þ	CC	
D 10 CBS		4/3 Format	Zzz 00:25	6:05 PM
7	TV-14	The current program	m rating.	
S	Stereo	<i>Stereo</i> appears whe <i>Mono</i> appears whe	en the current in the current	channel is broadcasting in stereo channel is broadcasting in mono.
	SAP	The current channel information.	el is broadcast	ting SAP (Second Audio Program)
	CC	Closed Captioning	is available o	n the current channel.
D 10	O CBS	The <i>D</i> means it's a is displayed. The cl channels) and progviewing are display	digital chann hannel, sub-ci gram (only for zed.	el. If it's an analog channel, <i>A</i> hannel (if available for digital digital channels) you're currently
4/3 or 16/9 fo	ormat	Current screen form	nat. If there a	re bars on-screen you might be al

	8 1 7
or 16/9 format	Current screen format. If there are bars on-screen you might be able
	to get rid of them by pressing the ZOOM buttons on the remote. Go
	to page 32 for more information on screen formats.
Zzz 00:25	Current time left on sleep timer, if the sleep timer is set.

6:05 pm Current time.

Autotuning

Note: This feature only works with other RCA devices.

The Autotuning feature automatically tunes the TV to the correct video input channel for different devices you have connected to your TV. When you set up Autotuning in the menu system you don't have to remember to change your TV to the VID1 input, for example, when you want to watch a tape on the VCR. To set up the Autotuning feature:

	Setup	
	Go back	
	Channel setup	
	List and Labels	
(Autotuning	
	Closed caption	
	Preferences	
	Message	

- 1. Press MENU (the MAIN MENU appears).
- 2. Highlight Setup and press OK on your remote control.
- 3. Highlight Autotuning and press OK.
- 4. Choose which device button you would like to set:

Set VCR Channel If the DVD or SAT•AUX button is programmed to your VCR, lets you set up the channel the TV tunes to when you press the corresponding button.

Set DVD Channel Lets you set up the channel the TV tunes to when you press the DVD button.

Set SAT • AUX Channel Lets you set up the channel the TV tunes to when you press the SAT•AUX button.



5. Press the right arrow button to select the choice that matches the way you have the device connected to this TV.

You can select from the following inputs or channels: *Disabled* Choose this if you don't have a device connected to the TV, or if you don't want the TV to automatically tune to the correct channel/input when you're using this device.

Channel 3 or 4 Device is connected to the ANTENNA/CABLE jack on the back of the TV, and you want the TV to tune to channel 3 when you press the corresponding button on the remote. Reminder: make sure the device's Channel 3/4 switch is set to channel 3.

VID1 or VID2 (Video Input) Device is connected to the VIDEO INPUT 1 jack on the back of the TV or the VIDEO INPUT 2 jack on the side of the TV and you want the TV to tune to the VIDEO input channel when you press the corresponding device button.

CMP1 or CMP2 (Component Video Input) Compatible component video source, such as an HDTV tuner or satellite receiver, is connected to the three COMPONENT VIDEO INPUT jacks (Y Pb Pr) on the back of the TV and you want the TV to tune to the component video input channel (CMP1 or CMP2) when you press the corresponding device button.

VGA Device is connected to the VGA jack on the back of the TV and you want the TV to tune to the VGA input channel when you press the corresponding device button

HDMI1 or HDMI2 Device is connected to the HDMI1/DVI or HDMI2 jack on the back of the TV and you want the TV to tune to the HDMI input channel when you press the corresponding device button.

Parental Controls and V-Chip

The choices in the *US V-Chip* and *Canada V-Chip* menus involve software inside your TV (referred to as V-Chip) which allows you to block TV programs and movies. TV programs can be blocked by age-based ratings, such as TV-MA, which is explained on page 30. If available, TV programs can also be blocked by content, such as adult language (L). This is explained on page 30. Movies can only be blocked by age-based ratings. This is explained on page 31.

Once you block programs, you can unblock programs by entering a password.

By default, the software inside your TV is turned off or unlocked. For instructions to lock V-Chip, see below.

Note: Parental control settings are not available for HDMI1, HDMI2, CMP1, or CMP2 inputs. These settings must be set in the connected device's parental controls.

How V-Chip Works for USA and Canada

V-Chip reads the program's age-based rating (TV-MA, TV-14, etc.) and content themes [(Violence (V), Adult Language (L), etc.)]. If you have blocked the rating and/or content themes that the program contains, you will receive the message *This channel is blocked. Change channel or press OK to enter your password and temporarily deactivate the parental controls.*

Broadcasters are not required to provide content themes, so programs received with no content themes will only be blocked if you block their age-based rating. You can also block out programs that have been given an Exempt rating, and programs that are considered unrated. Go to page 44 for the US and Canada ratings explanations.

6	Parental control	
	Go back	
(Lock Parental Control	
	Select Channel	51 MTV
	Block Channel	
	Front Panel Block	
	US V-Chip	
	Canada V-Chip	
	Unrated/Exempt Ratings	View

Lock/Unlock Parental Controls

Selecting this option lets you lock and unlock parental controls settings using a password.

If you do not lock parental controls, none of the settings for V-Chip, Channel Block, or Front Panel Block will take effect.

If you forget your password, turn off the TV. Simultaneously press and hold VOL v on the side panel and CLEAR on the remote for 10 seconds. Next time you enter the *Parental control* menu enter a new password.

The V-Chip Rating Screen

The following is an example of where items are located within the Rating Limit screen.

Rating Status Field

Lets you select whether the status of the age-based rating limit to the left is View or Block.



Content Status Fields

Lets you select which content themes to view for the selected rating, and whether the status of the content theme is currently unlocked (🕒) or locked (🗎).

Hierarchy of Age-Based Ratings		
TV-MA	Mature Audience Only	
TV-14	Parents Strongly Cautioned	
TV-PG	Parental Guidance Suggested	
TV-G	General Audience	
TV-Y7	Directed to Children 7 years and older	
TV-Y	All Children	



US V-Chip TV Ratings

Blocking Age-Based Ratings

You can automatically block all program ratings above a specified agebased rating level.

- 1. Choose Parental control from the Main Menu. If Parental controls have previously been locked, you must enter your password.
- Highlight and select US V-Chip. Then select TV ratings. 2.
- 3. Press the up or down arrow button to scroll to the rating corresponding with the lowest rating you do not want the child to watch.
- 4. Press the OK button to toggle between *View* and *Block*. The status for the rating and all higher ratings automatically changes to Block.
- 5. Use the up/down arrow buttons to highlight Go back and press OK.
- Select Lock Parental Controls from the Parental Control menu for 6 rating limits to take effect.

Note: If you forget your password, turn off the TV. Simultaneously press and hold VOL v on the side panel and CLEAR on the remote for 10 seconds. Next time you enter the Parental control menu enter a new password.

To view age-based ratings after you've locked them, follow the same steps as above to unlock.

Content Themes		
D	Sexually explicit dialogue	
L	Adult language	
S	Sexual situations	
V	Violence	
FV	Fantasy Violence	

TV ratings							
Go back							
	Status	D	L	S	V	FV	
TV-MA	View			\mathbf{h}			
TV-14	View		Œ				
TV-PG	View			∩∎	∩∎		
TV-G	View						
TV-Y7	View						
TV-Y	View						

Blocking Specific Content Themes

You can block programs based on their content. (Content is represented by the *D*, *L*, *S*, *V* and *FV* on your screen.) When you block a content theme for a particular rating, you automatically block that content theme for higher rated programs as well.

To block program content:

- 1. Determine the content themes you want to block.
- 2. Press the down arrow button to scroll to the rating whose content theme you want to change.
- 3. Press the right arrow button to move the highlight to a particular content theme.
- 4. Press the OK button to change its status to lock. (In the example to the left, you block the language (L) corresponding with TV-14. The language for TV-MA is blocked as well.)

Notes: Broadcasters are not required to provide content themes or age-based ratings.

You must remember to lock Parental controls for rating limits to take effect.

To view content theme after you've locked them, follow the same steps as above to unlock. Note that if you unlock the language corresponding with TV-14, the language for TV-MA doesn't unlock. You have to unlock the content theme status for each rating separately.

0	English ratings	
	Go back	
		Status
(18+	Block
	14+	Block
	PG	Block
	G	View
	C8+	View
	С	View



Blocking Canadian V-Chip Ratings

If you receive Canadian programs you can block Canadian English and French V-Chip by ratings only. When you block a particular rating, you automatically block the higher rated programs as well.

To block Canadian English and French program ratings:

- 1. Select *Canada V-Chip* from the *Parental control* menu.
- 2. Highlight English ratings or French ratings and press OK.
- 3. Determine the rating you want to block.
- 4. Press the down arrow button to scroll to the rating you want to change.
- 5. Press the OK button to change its status to block (all ratings above the one you selected change to block).

	Movie ratings		
	Go back		
		Status	
	NR (No Rating)	Block	
	Х	Block	
(NC-17	Block	
	R	View	
	PG-13	View	
	PG	View	
	G	View	

V-Chip Movie Rating Limit

Set movie rating limits by blocking movies rated above a specified level.

To access the Movie Rating Limit menu:

- 1. Press MENU on the remote control (the TV's Main Menu appears).
- 2. Select Parental Control.
- 3. Select US V-Chip.
- 4. Select Movie Ratings.

Blocking Movie Ratings

Once you are in the *Movie Ratings* menu, follow the same steps described for blocking Canadian ratings.

Parental control Go back Lock Parental Control Select Channel Select Channel Front Panel Block US V-Chip Canada V-Chip Unrated/Exempt Ratings

Parental control Go back Lock Parental Control Select Channel 51 MTV Block Channel Ø Front Panel Block US V-Chip Canada V-Chip Unrated/Exempt Ratings



Block Channels

Turn this option on to block the channel you choose in the *Select Channel* option.

Use the number buttons to enter the channel you want to block, then press the down arrow button. Press OK to place a check mark in the *Block Channel* box to block the channel. When you tune to that channel you'll need to enter a password to view the channel if the TV is locked.

Front Panel Block

Select this option to block (disable) or unblock (enable) the TV's side panel buttons so that they can't be used by someone, like a young child. The remote still tunes to any channel. If you're using this to keep children from changing channels, remove access to any remote that is capable of operating the television while you have the front panel blocked.

Don't forget to lock parental controls after you change the status. If you don't, the front panel block will not take effect.

Blocking Unrated/Exempt Programs

The *Unrated/Exempt* Ratings option lets you decide if programs that the V-Chip recognizes as unrated or exempt can be viewed. Unrated TV programs may include news, sports, political, religious, local and weather programs, emergency bulletins, public announcements, and programs without ratings. The Exempt option applies to both USA and Canadian unrated programs and Canadian programs rated *E*.

View All unrated programs are available. *Block* All unrated programs are not available.

Note: You must remember to lock Parental controls for rating limits to take effect.

Press the down arrow button to highlight *Unrated/Exempt Ratings*. Then press the right arrow button to toggle between *View* and *Block*.

Future Rating Region

You might notice an option in your Parental control menu that wasn't there before. This is because broadcasters have the capability to add a new rating system for TV programs. These ratings let you define additional parameters for parental controls. This option and its name are dependent on the content acquired from the broadcaster.

Note: These ratings are available only if the broadcaster is sending them.

Additional Features

There are additional features available unrelated to Parental Controls. These features can be found in other menus.

EN-Y Picture Processing

With a focus on exceptional picture performance, all RCA models feature Enhanced Natural Vision (EN-V). EN-V picture processing is designed to provide enhanced color and contrast so you can enjoy a bright, crisp picture.

Go to page 35 to adjust picture settings.

Screen Formats

Screen format is the way the picture is displayed on your TV. Press the ZOOM +/- button on your remote to see if a different format is available for the video you are viewing. The format changes as you press the ZOOM buttons and the format type is displayed at the bottom of the screen.

Analog video is sent in a 4/3 format, which your TV displays in a 16/9 format. Most digital video is sent in a 16/9 format which does fill your screen, but sometimes is sent in 4/3 which does not fill your screen. It depends on how the station or device connected to your TV is formatting the video. If there are bars on-screen, press the ZOOM +/- button to try a different format that may eliminate the bars. Some bars can't be removed because of the way the format is sent by the broadcaster.

The different formats available and what they look like follow. Each format is available for analog video, but might not be available for digital video.





16/9

4/3



16/9 zoom



Cinerama

Chapter 4: Using the TV's Menu System



Using the Menu System

This section explores the menus of your TV. Each menu is outlined and detailed to help you get the most from your TV. The *Parental control* menu is discussed in the Features chapter.

To access the menu system:

- 1. Press the MENU button.
- 2. Use the up and down arrow buttons to highlight an option and press OK to display it. The name of the menu is displayed at the top of the menu screen.
- 3. Press the up and down arrow buttons to move to a different option within the menu. If necessary, press the OK button to display the choices of the option you've highlighted. If available, use the text at the bottom of each screen for help.
- 4. To return to the Main Menu, press the MENU button until it's displayed.

Note: Options in the menus that are grayed-out and can't be highlighted are unavailable or in progress.

Descriptions of each menu are discussed in the order they appear.

There are two ways to exit a menu:

• Press the CLEAR button. The menus are cleared from the screen and you return to TV viewing.

• Press the MENU button repeatedly until the menus disappear.

Channel List Menu

The Channel List menu allows you to view all the channels available in your channel list. Press the up or down arrow button to highlight a channel then press OK to tune to the channel and exit the menu.

Sound Menu

The Sound menu lets you adjust audio output. To access the Sound menu, press MENU on the remote, and then select *Sound* from the Main Menu. The following audio items can be adjusted:

Equalizer The five-band graphic equalizer lets you adjust the audio frequency settings. You can select one of the five-band Equalizer Presets or create your own personal preset.

Sound Preset Allows you to choose a specific sound preset. Press the right arrow to cycle through the options: *Standard*, *Movie*, *Voice*, *Music* and *Personal*.

Frequency Range Displays the different graphic equalizer bands set for each Sound preset option. Choose a band and make adjustments. When you make adjustments, the *Sound preset* option automatically changes to *Personal*. Press the left or right arrow button to select the frequency (100Hz, 300Hz, 1kHz, 3kHz, 10kHz) you want to adjust. Then use the up or down arrow button to adjust the level. When you're done adjusting the levels, press the MENU button to exit.

	Sound	
	Go back	
(Equalizer	
	Sound Type	Stereo
	Sound Mode	Normal
	Dynamic Bass	Medium
	Balance	
	Auto Volume Level	
	Internal Speakers	
	Headphone Settings	
	Advanced Settings	

Using the TV's Menu System







To view the frequency range of another *Sound Preset* option, press the right or left arrow until no band is selected and *Frequency Range* is highlighted. Then press the up arrow to highlight *Sound Preset*.

Sound Type Controls the way the sound comes through your speakers. The options available vary according to the input selected.

Mono (available for regular TV viewing only) Plays the sound in mono only. Use this setting when receiving broadcasts with weak stereo signals.

Stereo Splits the incoming stereo audio signal into left and right channels. Most TV programs and recorded materials have stereo audio. The word *Stereo* appears in the channel banner when you tune to a program that is broadcast in stereo.

Sound Mode Provides special processing through your speakers (depending on the setting you chose as your *Sound Type*). The available audio modes are:

Normal Does not give any special processing, simply provides the mono or stereo sound provided by the signal you're watching.

Wide (available only for mono signals) "Widens" sound from mono broadcasts and mono devices connected to your TV for a fuller, more spacious sound.

Stereo Wide Available only for stereo signals. Gives a surround effect with more bass.

BBE. Restores clarity and presence for better speech intelligibility and musical realism.

Dynamic Bass Improves bass output. Displays a choice list of available settings you can adjust: *Off, Medium* and *High*.

Balance Adjusts how much audio is sent to the left and right speakers.

Auto Volume Level Reduces the annoying blasts in volume during commercial breaks, and also amplifies softer sounds in program material. Eliminates the need to constantly adjust the volume.

Internal Speakers Turn on or off the internal speakers. If you have a device connected to the Audio Output jacks on the back of the TV and you want to control the sound by the device instead, uncheck the box.

Headphone Settings Displays a choice list of available settings you can adjust: *Volume, Bass* and *Treble.* The *Headphone sound* option allows you to choose *Stereo, Mono* or *Auto.* These descriptions are same as for *Sound Type* (see above).

Advanced Settings

Second Audio Program (SAP) Plays the program's audio in a second language, if one is available. The letters *SAP* appear in the channel banner when you tune to a program that is broadcast with SAP information. SAP audio is broadcast in mono. SAP is also used to broadcast a program's audio with descriptions of the video for the visually impaired.

BBE Manufactured under license from BBE Sound, Inc.

	Advanced settings	Advanced settings	
	Go back		
	SAP		
(Audio Output	Fixed	
	Default Audio Langua	ge English	
	Current Audio Track	English	

Audio Output Lets you choose a setting for the FIXED/ VARIABLE AUDIO OUTPUT jacks.

- *Variable* Provides variable output from the AUDIO OUTPUT jacks. Use this setting if the TV is not connected to an audio receiver or amplifier and the volume is controlled by the TV.
- *Fixed* Provides fixed output from the AUDIO OUTPUT jacks to a receiver or amplifier. With the Fixed Output, the TV's volume control, graphic equalizer, and mute are disabled. This output is ideal when connecting to an audio receiver or amplifier that has its own remote control for controlling the volume.

Default Audio Language Choose the language you prefer for dialog on digital channels. If your preferred language is being broadcast with a program, then the TV plays it. If not, then the TV plays the default audio for the program (usually English in the U.S.). The default digital channel audio language options are *English, Spanish, French, German, Italian, Japanese, Chinese,* and *Korean.*

Current Audio Track Press the right arrow to choose from the audio languages available for the program you're watching. The language you choose becomes your preferred audio language for all digital channels until you turn the TV off. If the language you choose here is not being broadcast with a program, then the TV plays the default audio for the program (usually English in the U.S.).

Picture Menu

The *Picture* menu contains menus and controls to configure how the picture looks. The Picture menu options apply to the video for the main TV and video input selections. All picture options can be applied to each input- VID1, VID2, CMP1 or CMP2, HDMI1 or HDM2, and VGA.

Picture Preset (not available on VGA) Displays a choice list that lets you select one of the preset picture settings: *Vibrant, Cinematic, Natural, Sports,* or *Personal.* Choose the setting that is best for your viewing environment.

Brightness Adjusts the brightness of the picture.

Color Adjusts the richness of the color.

Sharpness (not available on VGA) Adjusts the crispness of the edges in the picture.

Tint (not available on VGA) Adjusts the balance between the red and green levels.

Contrast Adjusts the difference between the light and dark areas of the picture.

Color Warmtb Displays a choice list that lets you set one of three automatic color adjustments: *Cool* for a more blue palette of picture colors; *Normal*; or *Warm* for a more red palette of picture colors. The warm setting corresponds to the NTSC standard of 6500 K.

When you change any of these picture settings, the *Picture Preset* changes to *Personal*. Use the left or right arrow button to make adjustments. To return to the *Picture* menu, press the up or down arrow button.





Advanced Picture Settings (not available on VGA)

Film Mode (3:2 Pulldown) Automatically detects video sources that were originally recorded on film (like most movies) and subsequently converted to a different format (for TV broadcast, for example). Film mode processes the converted signal so that it looks as close as possible to the original. Another name for this process is reverse 3:2 pulldown.

Advanced (recommended) enables the feature only when the TV detects that movie playback quality could be improved. *Advanced* is the default setting.

The *Off* setting turns off film mode upconversion. Try using this setting if you think the reverse 3:2 pulldown is causing distortions in your picture.

Noise Reduction Reduces picture "static" or any type of interference. This feature is especially useful for providing a clearer picture in weak analog signal conditions. Press the right arrow to choose between: *Off* for no noise reduction; *Low* for a softer, smoother picture that retains picture sharpness and detail; *Medium* for a slightly softer picture than the *Low* setting; *High* for an even softer, smoother picture than the other settings (the picture detail is somewhat decreased).

Note: Video noise reduction is available for the CMP1 and CMP2 inputs only if the signal is 480i.

Setup Menu

The Setup menu lets you configure the TV to fit its surroundings and your preferences. To access the *Setup* menu, press MENU on the remote, and then select *Setup* from the Main Menu.

Channel Setup

Signal Type Choose the type of signal you have connected to the ANTENNA/CABLE INPUT.

Auto Channel Search Searches for channels the signal is receiving. Go to page 14 for more information.

List and Labels Edit the channels in the list or choose labels for each channel.

Channel Number Use the number buttons on your remote to enter the channel number.

In Channel List If you've entered a channel you want to add to the channel list, highlight *In Channel List* and press the right arrow to place a check in the check box. If you've entered a channel you want to delete from the channel list, press the right arrow button to uncheck the box.

Channel Label Allows you to add a five character label, which is displayed on-screen when you tune to the channel entered in the *Channel Number* option. Press the up or down arrow button to enter a character. Continue to press the right arrow button to highlight the next space to add another character.

	Setup	
	Go back	
(Channel setup	
	List and Labels	
	Autotuning	
	Closed caption	
	Preferences	
	Message	

	List and Labels		
	Go back		
	Channel Number	10	
(In Channel List		
	Channel Label	ABC	
	Favorite Channel		

Favorite Channel The channel you entered for *Channel Number* can be saved as a favorite channel. You can have up to 6 favorite channels. To access your favorite channels after they've been set, exit the menu system. Press the PRESETS (down arrow) button and then highlight *CH+/CH- Buttons*. Press the right arrow to choose *Favorite Channels*. Press the CLEAR button. When you press the CH+/CH- buttons, only the favorite channels you set will be available.

Autotuning Go to Chapter 3 for details about the Autotuning feature.

Closed Caption Many programs are encoded with closed-captioning information, which lets you display the audio portion of a program as text on the TV screen.

Note: Closed caption settings are not available for HDMI1, HDMI2, CMP1, or CMP2 inputs. These settings must be set in the connected device's menu.

Closed captioning is not available on all channels at all times. Only specific programs encoded with closed-captioning information. When a program is closed captioned, *CC* is displayed in the channel banner. See Chapter 3 for more information about the channel banner. The closed caption options are:

CC Setting Lets you choose the way closed captioning information appears on the screen.

Off No captioning information displayed.

On Always Captioning information shown always, when available.

On When Muted Displays captioning information, when available, whenever the TV's sound is muted by pressing the MUTE button. The captioning information is not displayed when the sound is not muted.

Analog CC Type If available, lets you select the captioning mode used for displaying captioning information. If you are unsure of the differences among the modes, you may prefer to leave the closed captioned mode set to CC1, which displays complete text of the program in the primary language in your area.

Digital CC Type If available, lets you select a closed caption service mode (1-6) for digital channels.

Digital CC Preset If available, lets you select between *Default* and *Custom* options. Custom changes according to what you set for the options below.

Digital CC Style If available, lets you customize the following display options:

Digital CC Size Lets you set the size of the digital closed-caption text. You can choose *Standard*, *Large*, or *Small*.

	Setup	
	Go back	
	Channel setup	
	List and Labels	
	Autotuning	
(Closed caption	
	Preferences	
	Message	



	Digital CC style	
	Go back	
(Digital CC Size	Standard
	Digital CC Font	Ashley
	Digital CC Opacity	Solid
	Digital CC Color	White
	Digital CC Back. Opacity	Solid
	Digital CC Back. Color	Black

Digital CC style
Go back
Digital CC Size Standard
Digital CC Font Ashley
Digital CC Opacity Solid
Digital CC Color White
Digital CC Back. Opacity Solid
Digital CC Back. Color Black

	Preferences	
	Go back	
(Ch. Number Display	
	Language	English
	Maximum TV volume	
	Power Save Mode	

	Message	
	Go back	
(Display	
	Start Time	6:00PM
	Recurrence	30min
	Stop Time	
	Erase Message	
	Message	

Digital CC Font Lets you select a character design for the digital closed-caption text. A font is a complete assortment of letters, numbers, punctuation marks, etc. in a given design. You can choose from a variety of fonts (Ashley, Floridian, etc.).

Digital CC Opacity Lets you set the appearance of the digital closed-caption text: *Solid*, *Transparent*, *Translucent*, or *Flashing*.

Digital CC Color Lets you choose the color of the digital closed-caption text: *White, Black, Red, Green, Blue, Yellow, Magenta,* or *Cyan.*

Digital CC Back. Opacity Lets you set the appearance of the space behind the digital closed-caption text: *Solid*, *Transparent*, *Translucent*, or *Flashing*.

Digital CC Back. Color Lets you choose the color of the area of the screen behind the digital closed-caption text: *White, Black, Red, Green, Blue, Yellow, Magenta,* or *Cyan.*

Note: These captioning style options only have an effect on true digital closed captions.

Not all captioning on digital channels is digital captioning it depends on what the broadcaster is sending. If the closed captioning for a program is not digital, the Digital CC style settings will not have an effect.

Preferences

Cb. Number Display Turn this feature on if you want the channel number always available when you press the CH+ or CH- button.

Language Lets you select your preferred language for the menus: *English, Español* or *Français*.

Maximum TV volume This feature is intended to prevent volume from being turned up too loudly. Set the volume at the loudest level you'd want to hear. Press and hold OK to hear the maximum volume you set.

Power Save Mode If no signal is detected from the VGA input jack for 5 minutes, puts the TV in power save mode.

Message Set a message that appears at the bottom of the TV screen. Press the CLEAR button to clear the message. If *Display* is turned on, the message appears when the TV is turned back on after being turned off.

Display Turns on or off to display a message on the TV.

Start Time Set the time you want to display the message. Not available if the time hasn't been set in the *Time* menu.

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	Message		
	Go back		
(Display		
	Start Time	6:00PM	
	Recurrence	30min	
	Stop Time		
	Erase Message		
	Message		

Recurrence Set how often to display the message- 10min- 60 min.

Stop Time Set the time you want to the message to stop.

Erase Message Clears all lines of text you've entered.

Message Press OK to enter a message. Enter up to 4 lines of text- 25 characters per line. Press the right arrow button to start entering text on a line, then press the up and down arrow buttons to change characters. Press OK when you're done entering text for a line.

Parental Control Menu

The Parental control menu was explained in Chapter 3. Go to page 28 for more information.



Time Menu

Sleep Timer Lets you set the TV to turn off after a given amount of time.

Auto Time Channel Choose your PBS station to have the TV set the time for you. Wait about one minute for the time to be set.

Enter Time If you didn't set the time reference channel, enter the current time manually. If it is eight o'clock, for example, you must first enter the number zero, then number eight. Use the OK button to choose between AM and PM.

Wake up Timer Lets you set the TV to turn itself on.

Note: The Wake up timer is available only when the time has been set.

Wake up Time Lets you set the time you want the TV to turn itself on.

Wake up Channel Lets you select a specific channel the TV tunes to when the wake up timer is set.

Turn off Timer Lets you set the TV to turn itself off.

Turn off Time Lets you set the time you want the TV to turn itself off.

Frequently Asked Questions (FAQs)

What's the quickest way to view High Definition (HD) video?

Connect an off-air antenna to the ANTENNA/CABLE Input to view free local digital channels. You might need to purchase an antenna. Go to page 6 for more information.

Visit www.antennaweb.org to get help deciding what type of antenna to use to receive the local digital channels available to you. By entering where you live, this mapping program tells you what local analog and digital stations are available using a certain antenna.

Are there other ways to view High Definition (HD) video?

Besides using an off-air antenna as mentioned above, you can also use a set-top box to receive digital video. Contact your cable company or satellite provider to purchase digital programming and have them connect the box for you to ensure you're viewing channels the best way.

How do I tell an analog channel from a digital channel?

Press the INFO button to display the channel banner. Look at the bottom left corner of the screen. An A is displayed for an analog channel. A D is displayed for a digital channel.

Why are there bars on my screen and can I get rid of them?

Most digital video is sent in a 16/9 format which does fill your screen, but sometimes is sent in 4/3 which does not fill your screen. It depends on how the station or device connected to your TV is formatting the video. If there are bars on-screen, press the ZOOM +/- button to try a different format that may eliminate the bars. Some bars can't be removed because of the way the format is sent by the broadcaster. The format changes as you press the ZOOM buttons and the format type is displayed at the bottom of the screen. For more information on screen formats, go to page 32.

Why does channel search find a lot of channels, but when I try to tune to them there's nothing there?

Some channels are enabled by the cable company that don't carry programming, such as videoon-demand. When channels are unavailable, your TV's screen is blank or appears like snow. You probably want to get rid of these so they no longer appear in your channel list. Remove these in the *Channel List* menu. Go to page 36 for more information.

Why does the first channel search take a long time?

If you have both analog and digital channels, the TV is looking for all available channels in the channel list. If you do have digital channels, the TV is also searching for scrambled channels, non-scrambled channels, and each sub-channel of that digital channel.

Troubleshooting

Most problems you encounter with your TV can be corrected by consulting the following troubleshooting list.

TV Problems

TV won't turn on

- Make sure the TV is plugged in.
- Check the wall receptacle (or extension cord) to make sure it is "live" by plugging in something else.
- The front panel controls may be locked (disabled). Use the remote control to unlock the front panel controls by selecting the *Front Panel Block* in the *Parental control* menu and press OK to uncheck the box.

No picture, no sound but TV is on

- You might be tuned to an input with no device connected to it to view. If you're trying to view a connected device, press INPUT until the picture from that device appears.
- Maybe the Signal Type option is set incorrectly. Go to page 14 for detailed instructions.
- The channel might be blank change channels.
- If you're watching your VCR and it's connected with coaxial cable to the ANTENNA/CABLE jack, tune the TV to channel 3 or 4 (whichever channel is selected on the 3/4 switch on the back of your VCR). Also check to make sure the TV/VCR button on the VCR is in the correct mode (press the TV/VCR button on your VCR).

Sound okay, picture poor

- If you're getting a black and white picture from a device you've connected to your TV, you might have your video cables connected to the wrong jacks. A yellow Video cable connects to the yellow VIDEO input jack on the side or back of your TV; three video cables or bundled component video cables (red, blue, and green) connect to the corresponding COMPONENT INPUT jacks on the back of your TV.
- If you're getting no picture from a device you've connected to your TV, you might have your video cable connected to the VIDEO OUTPUT jack on the back of your TV. These jacks are used to connect recording devices. A yellow Video cable connects to the yellow VIDEO input jack on the side or back of your TV.
- Check antenna connections. Make sure all of the cables are firmly connected to the jacks.
- Try adjusting sharpness function to improve weak signals. Go to page 35 for more instructions.

No sound, picture okay

- Maybe the sound is muted. Try pressing the volume up button to restore sound.
- If using DVI, S-Video, or Y, PB, PR, remember to also connect the device's left and right audio output jacks to the TV's L and R Audio Input jacks.
- The sound settings may not be set correctly. Go to page 33 for more information.
- The internal speakers might be turned off. Go to page 34 for more information.

Blank screen

- Check your connections. If you used yellow, red, and white cables to connect, make sure they're connected to the yellow, red, and white VIDEO INPUT jacks on the side or back of the TV, not to the VIDEO OUTPUT jacks on the back of the TV.
- If you're trying to watch something that's playing on a device connected to the TV (like a DVD), press INPUT until you get to the correct video input channel.
- Make sure the device connected to the TV is turned on.
- Try another channel.

Buttons don't work

- The front panel controls may be locked (disabled). Use the remote control to unlock the front panel controls by selecting the *Front Panel Block* in the *Parental control* menu and press OK to uncheck the box.
- Unplug the TV for ten minutes and then plug it back in. Turn the TV on and try again.

TV turns off unexpectedly

- Sleep timer may have been activated. Go to page 39 for instructions.
- Electronic protection circuit may have been activated because of a power surge. Wait 30 seconds and then turn on again. If this happens frequently, the voltage in your house may be abnormally high or low.
- Unplug. Wait ten minutes. Plug in again.

TV turns on unexpectedly

• Wake up timer might have been activated. Go to page 39 for instructions.

Can't select certain channel

- Channel may be blocked or not approved in the Parental Controls menu.
- If using a VCR, check to make sure the TV/VCR button on the VCR is in the correct mode (press the TV/VCR button on your VCR).
- Press the TV button and then try to change channels.

Noisy stereo reception

• May be a weak station. Use *Sound* menu to choose mono sound.

Black box appears on the screen

• Closed-captioning might be on. Check *Closed Caption* in the *Setup* menu. Go to page 37 for more instructions.

Problems with HDMI Connection

- Make sure the HDMI or DVI device is turned on and the cables are firmly connected. If problems still occur, turn off your device. Re-connect your device. Reset the power by unplugging the power cord and plugging it back in.
- If you are tuned to the HDMI 1 or 2 input and you're receiving *Unusable Signal* message on-screen, press the INFO button on the remote. If *Acquiring Channel* appears in the channel banner, the HDMI or DVI device isn't responding. Contact the manufacturer of the HDMI or DVI device for further assistance.
- If you tune to the HDMI 1 or 2 input and you see snow, the video goes in and out, or the video takes a long time to appear, your HDMI or DVI device is having trouble sending video information to the TV. Re-connect your device. Reset the power by unplugging the power cord and plugging it back in. If problems persist, try connecting the Y Pb Pr jacks instead if they are available or contact the manufacturer of the HDMI or DVI device for further assistance.
- If you have black bars on each side of your picture, the device you connected might have a switch or a menu option allowing you to change the picture quality output that will fix this. Choose either 720p or 1080i.
- 480i signals aren't supported by the HDMI1/DVI or HDMI2 input.

The Remote Control Doesn't Work

- Something might be between the remote and the remote light sensor on the front of the TV. Make sure there is a clear path.
- Maybe the remote isn't aimed directly at the TV.
- Maybe batteries in remote are weak, dead, or installed incorrectly. Put new batteries in the remote. (Note, if you remove the batteries, you may have to reprogram the remote to operate other devices.)

Problems with V-Chip/Parental Controls

The rating limits don't work

• You must lock the settings. Go to the *Main Menu* (press MENU on your remote), select *Parental control*, select *Lock Parental Controls*.

I don't remember my password and I want to unlock the TV

• If you forget your password, turn the TV off. Simultaneously press and hold VOL v on the side panel and CLEAR on the remote for 10 seconds. Next time you enter the *Parental control* menu enter a new password

The V-Chip won't let me watch a program even though it's not rated as violent.

• Maybe the movie was given an NR (Not Rated) status. After you block movie ratings, you must set *NR* to *View* separately in order to view movies with an NR rating.

What Else Can I Do?

If you've been through the Troubleshooting section and nothing has fixed your problem, try rebooting your TV. Note that after a reboot you may need to run your TV through the setup process again. To do a reboot, unplug the power cord from the wall outlet, power strip, etc. Keep your TV unplugged for about 5 minutes. Then plug the TV back in, turn on the TV, and see if the problem is fixed. If the problem remains, then please visit www.rca.com/television for updated FAQs or contact RCA Customer Support at the support number provided in your Warranty under *How To Get Service*.



Bottom of the base



Remove the screws from the four holes on each side of the bottom of the TV's base.

Mounting Your TV to the Wall

Caution: The wall mount must bear a minimum of five times the TV's net weight without causing damage.

To mount your TV to the wall you need to purchase a VESA wall mount. For models L37WD22 and L42WD22, purchase a VESA 400 x 400, M6 x 10mm; and model L46WD22 purchase a VESA 600 x 400, M6 x 10mm (400 x 400, for example, means the mounting measurements are 400mm horizontally and 400mm vertically; M6 x 10mm is the type screw that needs to be used).

- 1. You need to remove the base first before attaching the wall mount.
 - A. Place the TV facedown on a surface that is soft, yet strong enough to hold the TV.
 - B. Use a screwdriver to remove the screws from the four holes on each side of the bottom of the TV's base as the arrows indicate to the left.
- 2. Make sure all cables are already connected to the TV.
- 3. Follow the directions included with the wall mount to mount the TV to the wall.

V-Chip Rating Explanations

US V-Chip Rating System

TV-MA (Mature Audience Only) Specifically designed to be viewed by adults and may be unsuitable for children under 17. It contains one or more of the following content themes: crude indecent language (L), explicit sexual activity (S), or graphic violence (V).

TV-14 (Parents Strongly Cautioned) Contains some material that many parents would find unsuitable for children under 14. Parents are strongly urged to exercise greater care in monitoring this program and are cautioned against letting children under the age of 14 watch unattended. This program contains one or more of the following content themes: intensely suggestive dialogue (D), strong coarse language (L), intense sexual situations (S), or intense violence (V).

TV-PG (Parental Guidance Suggested) Contains material that parents may find unsuitable for younger children. Many parents may want to watch it with their younger children. The program contains one or more of the following content themes: some suggestive dialogue (D), infrequent coarse language (L), some sexual situations (S), or moderate violence (V).

TV-G (General Audience) Most parents would find this program suitable for all ages. It contains little or no sexual dialogue (D) or situations (S), no strong language (L), and little or no violence (V).

TV-Y7 (Directed to Children 7 years and older) Designed for children ages 7 and above. It may be more appropriate for children who have acquired the developmental skills needed to distinguish between make-believe and reality. Themes and elements in this program may include mild fantasy violence (FV) or comedic violence, or may frighten children under the age of 7.

TV-Y (All Children) Themes and elements in this program are designed for a young audience, including children from ages 2-6. It is not expected to frighten younger children.

Canadian English V-Chip Rating System

18+ (Adults) Programming intended for adults 18 and older. It may contain elements of violence, language, and sexual content which could make it unsuitable for viewers under 18. Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex.

14+ (Viewers 14 and over) Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity.

PG (Parental Guidance) Programming intended for a general audience but which may not be suitable for younger children (under the age of 8). Parents may consider some content inappropriate for unsupervised viewing by children aged 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity.

G (General Audience) Programming considered acceptable for all ages groups. While not designed specifically for children, it is understood younger viewers may be part of the audience. Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity.

C8+ (Children 8 and Older) Programming generally considered acceptable for children 8 years and over to watch on their own. Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content.

C (**Children**) Programming intended for children under age 8. Violence Guidelines: Careful attention is paid to themes which could threaten children's sense of security and well being. There will be no realistic scenes of violence. Depictions of aggressive behaviour will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content.

Canadian French V-Chip Rating System

18+ (Adults) Programming is for adults only. This program contains sustained violence or extremely violent scenes.

16+ (Viewers 16 and over) Programming is not suitable for those under age 16. This program contains frequent scenes of violence or intensely violent scenes.

13+ (Viewers 13 and over) Programming may not be suitable for children under the age of 13. This program either contains several violent scenes or one or more scenes that are violent enough to affect them. Viewing in the company of an adult is therefore strongly recommended for children under the age of 13.

8+ (Viewers 8 and over) Not recommended for young children. This program is suitable for most audiences, but it contains mild or occasional violence that could upset young children. Viewing in the company of an adult is therefore recommended for young children (under the age of 8) who do not distinguish between reality and imagination.

G (General Audience) This program is suitable for audiences of all ages. It contains no violence, or any violence that it does contain is either minimal or is presented in a humorous manner, as a caricature, or in an unrealistic way.

Limited Warranty

What your warranty covers:

• Defects in materials or workmanship to the first consumer purchaser.

For how long after your purchase:

- 90 days from date of purchase for labor charges for screen sizes 32" and smaller. One year from date of purchase for labor charges for screen sizes larger than 32". At our option, we will either pay an Authorized RCA Service Center the labor to repair your television or replace your television with a new or refurbished unit.
- One year from date of purchase for parts. At our option, we will either supply new or refurbished parts to an Authorized RCA Service Center for them to repair your television or replace your television with a new or refurbished unit. After 90 days, labor charges will be at your expense for screen sizes 32" and smaller.

How you get service:

- Call 1-800-951-9582 or visit www.rca.com. Please have your unit's date of purchase and model/serial number ready. The model/serial number information can be found on the back of your unit.
- Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the product is within the warranty period must be presented to obtain warranty service. For rental firms, proof of first rental is also required.

What your warranty does not cover:

- Customer instruction. (Your Owner's Manual describes how to install, adjust, and operate your television. Any additional information should be obtained from your dealer).
- Installation and related adjustments.
- Signal reception problems not caused by your television.
- Damage from misuse or neglect.
- Batteries.
- Customer replacement fuses.
- Damage from images burnt onto the screen.
- Special, incidental or consequential damages.
- A television that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- A television purchased or serviced outside the U.S.A.
- Acts of nature, such as but not limited to lightning damage.

Product registration:

• Please complete and mail the Product Registration Card packed with your TV or register on-line at www.rca.com/television. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

Limitation of Warranty:

• THE WARRANTY STATED ABOVE IS THE ONLY WARRANTY APPLICABLE TO THIS PRODUCT. NO VERBAL OR WRITTEN INFORMATION GIVEN BY TTE TECHNOLOGY, INC., ITS AGENTS OR EMPLOYEES SHALL CREATE A GUARANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY. • REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. TTE TECHNOLOGY, INC. SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. THIS DISCLAIMER OF WARRANTIES AND LIMITED WARRANTY ARE GOVERNED BY THE LAWS OF THE STATE OF INDIANA. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

How state law relates to warranty:

- Some states do not allow the exclusion nor limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your product outside the United States:

• This warranty does not apply. See your dealer for warranty information.

Service calls which do not involve defective materials or workmanship are not covered by this warranty. Costs of such service calls are the sole responsibility of the purchaser.

Care and Cleaning

CAUTION: Turn OFF your TV before cleaning.

You can clean the TV as required, using a soft lint-free cloth. Be sure to occasionally dust the ventilation slots in the cabinet to help assure adequate ventilation.

IMPORTANT: Never use strong cleaning agents, such as ammonia-based cleaners, or abrasive powder. These types of cleaners will damage the TV.

The TV's screen may be cleaned with a soft, lint-free cloth as well. Take care not to scratch or mar the screen. If necessary, you may use a cloth dampened with warm water. While cleaning do not spray liquid directly on the screen, or allow liquid to run down the screen and inside the TV. Also, never place drinks or vases with water on top of the TV. This could increase the risk of fire or shock hazard or damage to the TV.



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FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

Visit the RCA website at www.rca.com/television

Please do not send any products to the Indianapolis address listed in this manual or on the carton. This will only add delays in service for your product.

TTE

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