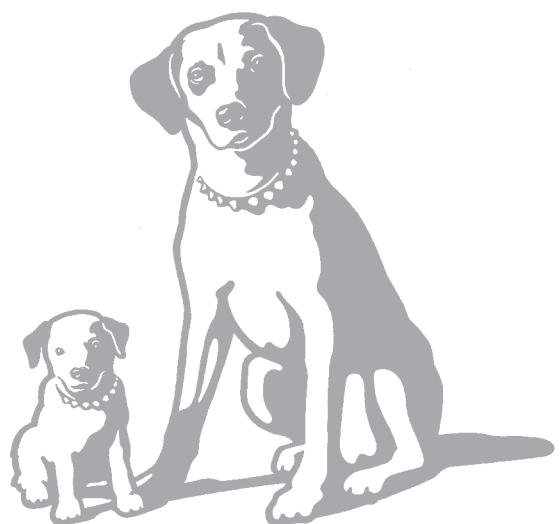


# OWNER'S MANUAL



# REST

COLOR TV

# SAFETY INFORMATION

## WARNING

RISK OF ELECTRIC SHOCK  
DO NOT OPEN

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



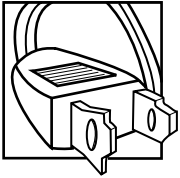
This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

## WARNING

To reduce the risk of fire or shock hazard, do not expose this TV to rain or moisture.



**Caution:** To reduce the risk of electric shock, match wide blade of plug to wide slot, fully insert.

**Attention:** Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

- 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.

If fixed (non-moving) images are left on the screen for long periods, they may be permanently imprinted on the screen. Such images include network logos, phone numbers, and video games. This damage is not covered by your warranty. Extended viewing of channels displaying these images should be avoided.

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.

NOTE TO CABLE  
TV INSTALLER

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# FIRST THINGS FIRST

## HI, MY NAME IS SCOTT...

...and I wrote this user manual. You're probably saying to yourself, "so *you're* the guy." Well, laugh if you must, but it's my job to see that you have a rewarding user manual experience. No, really.

## ARE YOU KIDDING? AN 80-PAGE INSTRUCTION BOOK?

Back in the old days, you bought a TV, stuck some rabbit ears on it, and sat back and enjoyed test patterns and bad sitcoms. Now, TVs are more like computers than radios, and you have to jump through a few hoops to get the TV up and running. Don't worry, it sounds more complicated than it is.

## READ THE FIRST FOUR CHAPTERS

These chapters cover the four big hoops: get the TV out of the box and hooked up, learn to move through the menu system, run the interactive setup routine, and program the remote to control your VCR and other stuff. That's about thirty pages' worth of user manual stuff.

The rest of the manual should be used as reference material. You can thumb through these sections whenever you get some time. If you have a specific question, refer to the table of contents or the index.

## CHECK OUT THE NOTES IN THE TEXT

I've spent a lot of time pestering the people who made your TV: engineers, designers, product managers—you name it, I cornered them. In the process, I've gotten some great advice about how to tweak the TV. I've passed on as many of these tips as I could, so keep an eye out for notes in the text.

## 1 FIRST THINGS FIRST



## 2 USING THE MENU SYSTEM



## 3 INTERACTIVE SETUP



## 4 PROGRAMMING THE REMOTE

The road map on the first page of each of the four main chapters is to let you know where you are in the setup process.

# FIRST THINGS FIRST

## STEP 1

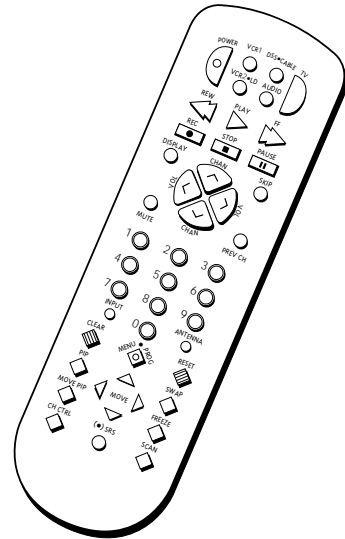
Unpack the TV and accessories. The accessories packed with TV include the Universal Remote, the four AAA batteries, an antenna adapter, and an AV jack for plugging your camcorder or other audio/video component into the front of the TV. Make sure to locate the Connections Foldout.

### Important Information:

#### Optional Stand for Table Model TVs ONLY

**CAUTION:** Matching stands were designed to be used with 25-inch and larger table model TVs. All recommended stands come with hardware to secure your TV to the stand so that it cannot be easily pulled off, pushed off, or tipped over. Your television dealer can help you choose an appropriate stand.

**If you choose not to use a recommended stand for your TV:** Make sure that the stand or other furniture on which you place the TV is properly located and of adequate size and strength. This will help prevent the TV from accidentally being pulled off, pushed off, or tipped over. Failure to use a proper stand could cause damage to the TV and/or personal injury.

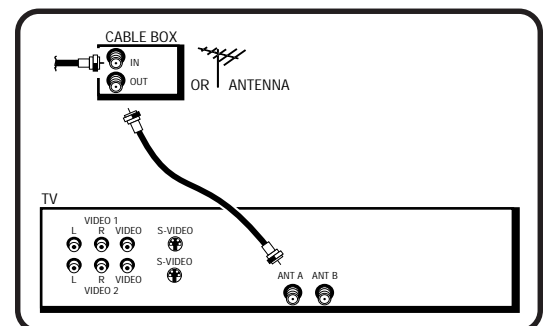


## STEP 2: CONNECTING YOUR TV

If you're only going to connect the TV to your home antenna or cable box, use the "TV Only" connection shown below. If you're going to connect the TV to a VCR, laser disc player or other component, we recommend you use the Connections Foldout. The Connections Foldout details ten diagrams that are recommended for hooking up the TV to a cable box or antenna, one or two VCRs, a laserdisc player, and a DSS® receiver.

### TV ONLY

This is a basic connection from an antenna or cable box to your TV. Connect the cable as shown. If you have a VCR or other components to connect to the TV, skip to the top of the next page.



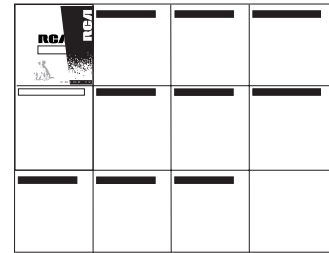
# FIRST THINGS FIRST

## TV WITH OTHER COMPONENTS

Use the Connections Foldout to connect your TV to a VCR, laserdisc player, and/or DSS® receiver. After connecting your TV and other components, proceed to the next step. See *Appendix A*, p. 55, for detailed information about using each of these connections.

If your components don't match those shown on the foldout, or if you prefer a different connection, see your dealer or specific component user manuals.

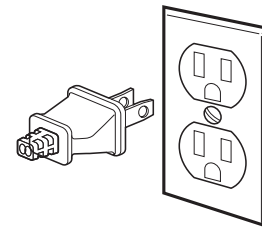
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## STEP 3

Plug in the TV.

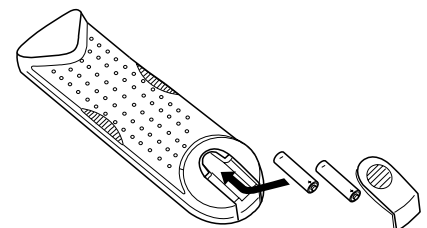
Plug the end into the wall outlet, matching the wide blade of the plug with the wide slot in the outlet. Be sure to insert the plug completely.



## STEP 4

Put batteries in the remote.

- Slide the battery compartment cover off back of the remote.
- Insert the four AAA batteries as shown, matching the + and - ends of each battery in the compartment.
- Replace the cover.



# FIRST THINGS FIRST

## STEP 5

Turn on the TV.

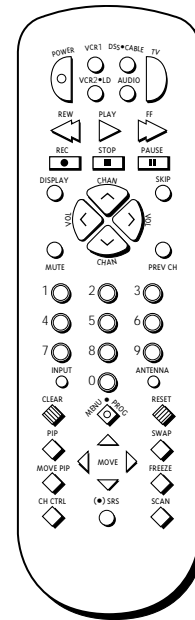
- Press TV on the remote, or press POWER on the TV itself.

## STEP 6

Read the next section, *Using the Menu System*, which is a brief overview of the basic rules for getting around in the menus.

## STEP 7

Proceed to section three, *Interactive Setup*. The interactive setup routine walks you through the steps needed to fully configure the TV. The first step is the auto channel search, which puts available cable TV or antenna signals into the TV's memory. **You must complete the auto channel search.** After this first step, you can skip any of the remaining steps and return to them later.



TV Button

*Interactive Setup* is designed to be used with the Connections Foldout.



# USING THE MENU SYSTEM

## ONE RULE TO REMEMBER

You control and customize the TV by making changes to various control panels in the menu system. The great thing is, you only need to know one rule: point and select.

### 1 FIRST THINGS FIRST



### 2 USING THE MENU SYSTEM



### 3 INTERACTIVE SETUP



### 4 PROGRAMMING THE REMOTE

If you want a lot of cool features, you have to use some kind of menuing system. Look at it this way: you only need to know one rule.

# USING THE MENU SYSTEM

## THE MENU RULE: POINT AND SELECT

You only need to know one rule to use the on-screen menus and control panels: point and select.

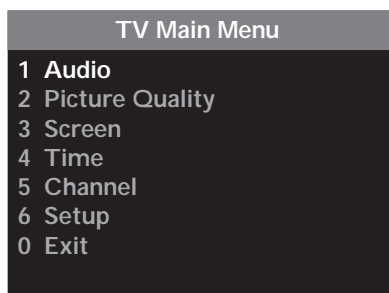
### WHAT IS POINT AND SELECT?

The point and select method has two steps.

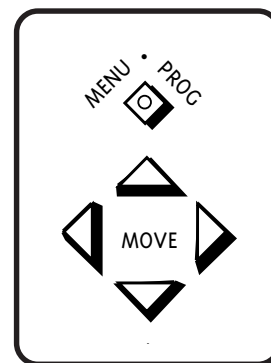
1. **Point** to a menu item using the MOVE arrows on the remote.  
To point up or down, press the up or down arrows. To point left or right, press the left or right arrows.
2. **Select** a menu item by pressing MENU•PROG.  
Selecting an item tells the TV's menu system to go ahead and make the change or go to a place you have indicated.

For example, to select the Channel menu from the Main Menu:

1. Press MENU to bring up the Main Menu.



2. Point to *Channel* by pressing the down arrow until the word Channel is highlighted in green.

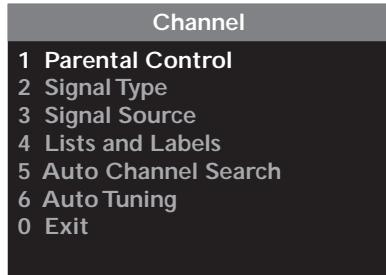


Press **CLEAR** at any time to remove all displays from the screen and return to TV viewing.

Because many VCR user manuals refer to a PROG button, the MENU button on this remote is called MENU•PROG. The rest of this manual refers to this button only as MENU.

# USING THE MENU SYSTEM

3. Press MENU to select *Channel*. The Channel menu comes up.



4. Point to *Exit* and press MENU to return to the Main Menu.
5. Point to *Exit* and press MENU to leave the menu system and return to TV viewing.

If you ever want to leave the menu system, press CLEAR.

Once you know how to point and select your way through the menus, you can apply this rule in the control panels, which do the real work in the menu system.

One way to exit out of the menus is to press zero (0) until you back out of the menu system and return to TV viewing.

# USING THE MENU SYSTEM

## MENUS AND CONTROL PANELS

There are two parts to the menu system: menus and control panels. But before you can use a control panel, you first have to move through at least one menu—the Main Menu.

### MENUS

The first menu is called the Main Menu. To bring up the Main Menu:

1. Press MENU on the remote or front panel:



Menus take you to another menu or a control panel. There are two ways to make a choice in a menu:

- Point and select with the MOVE arrows and MENU.
- Press a number button on the remote. For example, in the Main Menu press 3 to go straight to the Screen menu.

### Exiting a menu

There are three ways to exit a menu:

- Point to Exit and press MENU.
- Press 0 on the remote.
- Press CLEAR. The on-screen displays are cleared from the screen and you are returned to TV viewing.

Feel free to explore the menu system. If you ever get lost or confused in the menus, or you're just plain tired of exploring, press CLEAR to remove the menus from the screen and start over again.

# USING THE MENU SYSTEM

## CONTROL PANELS

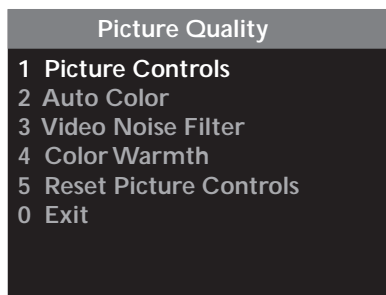
Control Panels do the work in the menu system: it's where you choose a setting, enter a number, or adjust a level such as tint or brightness. There are three kinds of control panels: sliders, choice lists, and numeric entry.

### Sliders

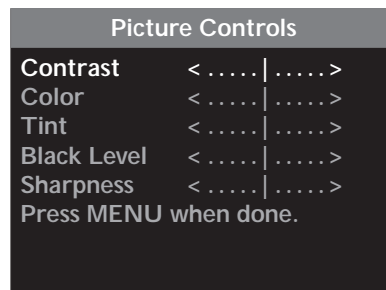
Sliders are used to make adjustments to a particular control.

For example, to adjust the TV's tint:

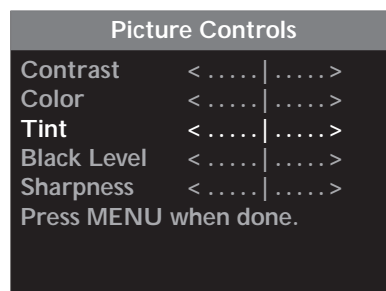
1. Press MENU to bring up the Main Menu.
2. Point to *Picture Quality* and press MENU. The Picture Quality menu comes up.



3. Press MENU to select Picture Controls.



4. Press the down arrow to point to *Tint*.



You don't need to remember the names of the control panel types. Once you've learned how each type works, you'll be able to use any part of the menu system.

# USING THE MENU SYSTEM

5. Press the right or left arrow to adjust the indicator line.

Notice that the picture changes as you adjust the tint.

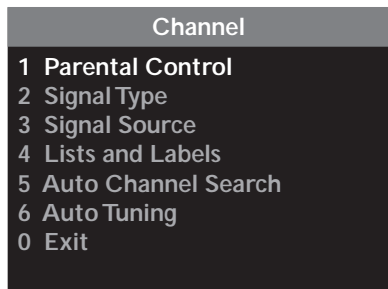
Now that you know how the Tint slider works, you know how all sliders work.

## Choice Lists

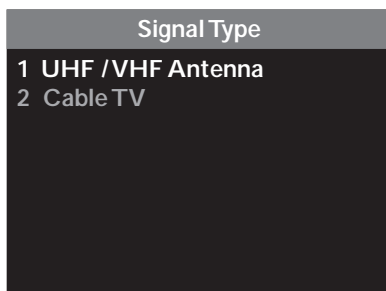
Choice lists are used to choose a particular setting from a list of settings. The current setting in a choice list is always highlighted in green.

For example, to indicate whether you're currently using a home antenna or a cable TV signals:

1. Press MENU to bring up the Main Menu.
2. Point to *Channel* and press MENU. The Channel menu comes up.



3. Point to Signal Type and press MENU. The Signal Type choice list comes up with the current setting highlighted in green. For example:



4. Point to the correct setting for your connection and press MENU. As soon as you select a choice, the TV saves your change, and you are returned to the previous menu.
5. Point to *Exit* and press MENU to return to the Main Menu.
6. Point to *Exit* and press MENU to return to TV viewing.

**You can enter numbers directly by using the number buttons.**

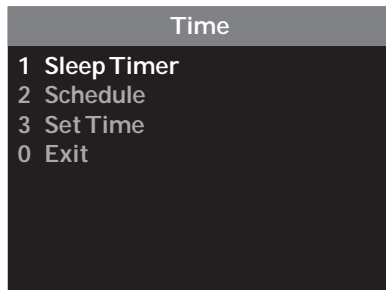
# USING THE MENU SYSTEM

## Numeric Entry

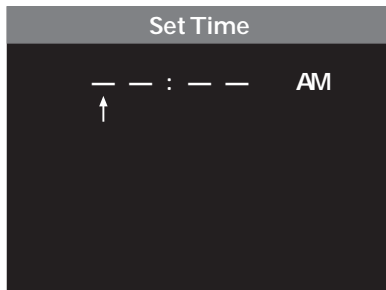
A numeric entry control panel is used to enter numbers or letters.

For example, to set the current time:

1. Press MENU to bring up the Main Menu.
2. Point to *Time* and press MENU.



3. Point to *Set Time* and press MENU. The Set Time numeric entry control panel comes up. Notice the pointer underneath the first dash.



4. Press the up arrow to enter a number in that column.
5. Press the right arrow to move to the next column, then press the up or down arrow to enter a number.
6. Repeat Step 5 until you have entered the hour and minute for the current time. Notice that when you reach the last column, pressing the up or down arrow changes whether the time reads AM or PM.

**Trivia:** This type of control panel is referred to as a "one-armed bandit." I don't know why.

If the control panel is not set at the current time, use the left arrow to go back over the columns and the up arrow to make changes.





# INTERACTIVE SETUP

## THERE'S AN ON-SCREEN SETUP ROUTINE

Your TV has software that tells it what to do, just like a computer. The interactive setup routine takes you through the steps needed to configure the TV:

- Search for available channels
- Set the time
- Make channel lists and labels
- Set the VCR1 channel
- Set the DVD/VCR2/LD channel
- Set the DSS/CABLE channel

### 1 FIRST THINGS FIRST



### 2 USING THE MENU SYSTEM



### 3 INTERACTIVE SETUP



### 4 PROGRAMMING THE REMOTE

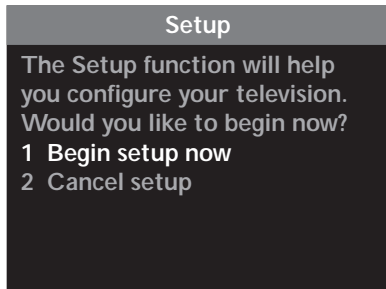
Complete the first step, auto channel search, to receive antenna or cable TV signals. After that, you can skip other steps and return to them at your convenience.

# INTERACTIVE SETUP

## ENTERING SETUP

Setup is accessed through the Main Menu:

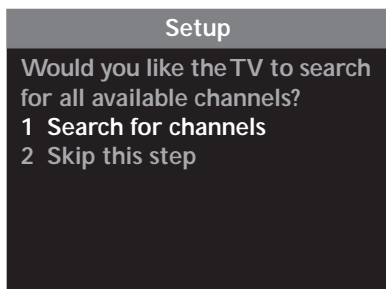
1. Press MENU to bring up the Main Menu.
2. Point to *Setup* and press MENU. The first Setup screen comes up, asking you to confirm that you want to begin.



3. Press MENU to begin the Setup routine.

## AUTO CHANNEL SEARCH

The first part of the setup routine asks you if you want the TV to search automatically for all channels available through your antenna or cable TV system. This is sometimes called "autoprogramming."



1. Press MENU to tell the TV to begin searching for channels. The display gives you a progress report and tells you when it has finished.
2. Press MENU to continue.

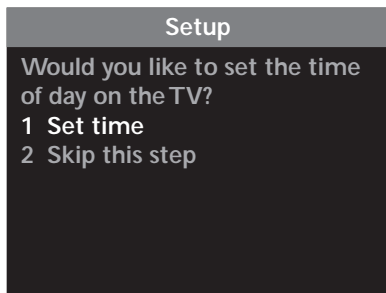
**You must complete the Auto Channel Search to receive TV signals and put channels in memory.**

**Auto Channel Search can also be accessed through the Channel menu.**

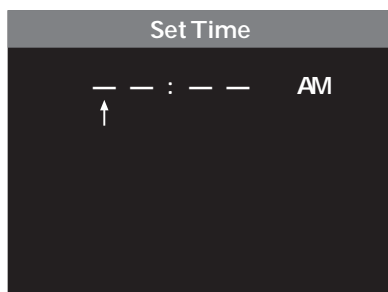
# INTERACTIVE SETUP

## SET THE TIME

The second step lets you set the time of day.



1. Press MENU to bring up the Set Time control panel.

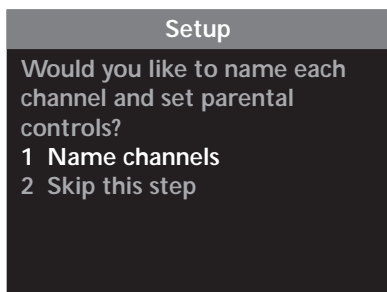


2. Use the left and right arrows to point to the hour and minutes spaces. Use the up and down arrows to scroll through the numbers and change from AM to PM.
3. Press MENU to continue.

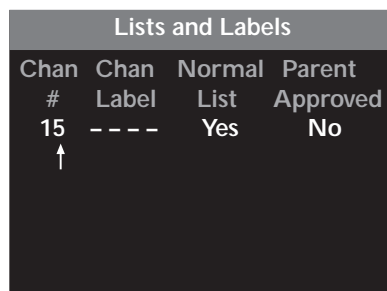
# INTERACTIVE SETUP

## LABEL THE CHANNELS

The third step lets you make your channel list, label your channels, and choose whether each channel belongs in the parent-approved channel list. (For more, see *Lists and Labels*, page 42.)



1. Press MENU to bring up the Lists and Labels control panel.



2. Use the left and right arrows to point to the four different areas of the control panel (called "fields").
3. Use the up and down arrows to scroll through the numbers and letters and select Yes or No in the Normal and Parent approved fields. You may wish to refer to the call letters listed in your newspaper's TV section for ideas on labelling the channels.
4. Repeat this process for each of your channels. Then press MENU to continue.

### Two Tips from Keith, the Design Engineer:

Use the CHAN buttons to change channels in the Chan # field. This works even if you're not in the Chan # field. Or, enter the channel number directly using the number buttons on the universal remote. To enter a number greater than 99, press and hold "1" to enter the hundreds digit, then press the two remaining numbers.

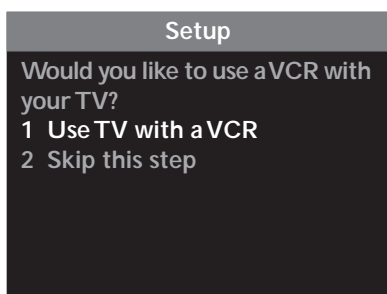
The lists and labels feature can also be accessed from the Channel menu. Because this procedure can be time consuming, feel free to skip this step and come back to it later.

# INTERACTIVE SETUP

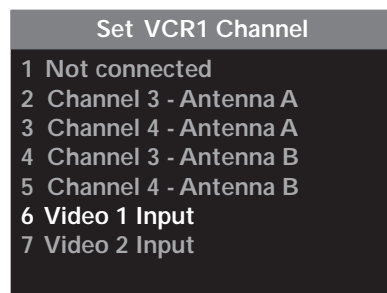
## SET THE VCR1 CHANNEL

The fourth step lets you set the VCR1 channel. When you set the VCR1 channel, you're telling the TV what channel to tune to when you press the VCR1 button on the remote.

For example, if you have a VCR connected to the Video 1 input jacks on the back of the TV, you want the TV to tune to the Video 1 input channel when you press the VCR1 button. If you don't have a VCR1 component connected to the TV, skip this step or select *Not Connected* from VCR1 Channel choice list. (For more, see *Auto Tuning*, page 43.)



1. Press MENU to bring up the VCR 1 choice list.



2. Point to the choice that matches the way you have your VCR connected to the TV.  
If you used the Connections Foldout to hook up your TV, use the table shown at the right to select the VCR1 channel.
3. Press MENU to continue.

If you used	Select
Connection A	Video 1 Input
Connection B	Video 1 Input
Connection C	Video 1 Input
Connection D	Video 1 Input
Connection E	Not Connected
Connection F	Not Connected
Connection G	Video 2 Input
Connection H	Ch3 Antenna A*
Connection I	Video 2 Input

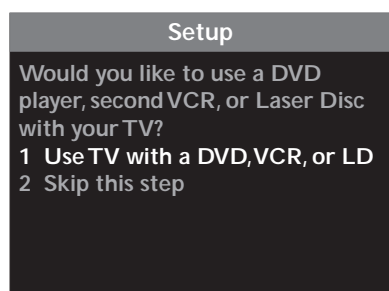
\* Or Ch4 Antenna A, depending on how your VCR's 3/4 switch is set.

# INTERACTIVE SETUP

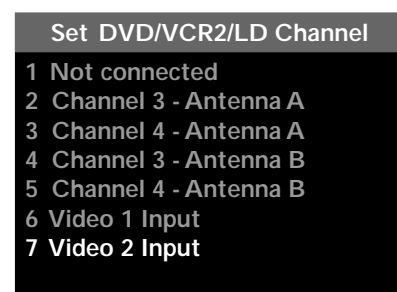
## SET THE DVD/VCR2/LD CHANNEL

The fifth step lets you set up a channel on which to run your DVD player, second VCR, or laserdisc player. When you set the DVD/VCR2/LD channel, you're telling the TV what channel to tune to when you press the VCR2•LD button on the remote. This remote player, however, will not operate your DVD player.

For example, if you have a DVD player or other component connected to the Video 2 input jacks on the back of the TV, you want the TV to tune to the Video 2 input channel when you press VCR2•LD. If you don't have a DVD/VCR2/LD component connected to the TV, skip this step or select *Not Connected* from DVD/VCR2/LD Channel choice list. (For more, see *Auto Tuning*, page 43.)



1. Press MENU to bring up the DVD/VCR2/LD choice list.



2. Point to the choice that matches the way you have your DVD player, second VCR, or laserdisc player connected to the TV.
3. Press MENU to continue.

If you used	Select
Connection A	Not Connected
Connection B	Not Connected
Connection C	Video 2 Input
Connection D	Ch3 Antenna A*
Connection E	Video 1 Input
Connection F	Not Connected
Connection G	Not Connected
Connection H	Video 2 Input
Connection I	CH3 Antenna A*

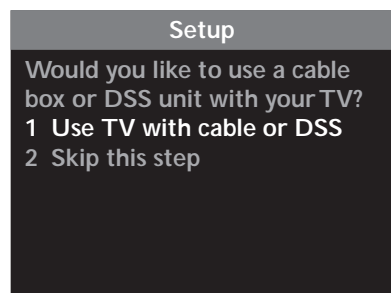
\* Or Ch4 Antenna A, depending on how your VCR's 3/4 switch is set.

# INTERACTIVE SETUP

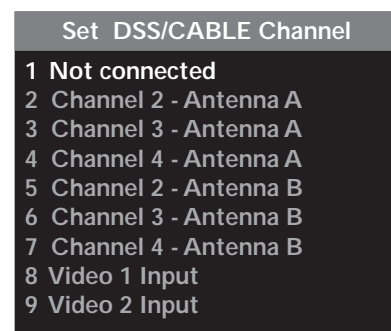
## SET THE DSS/CABLE CHANNEL

The last step lets you set the DSS/CABLE channel. When you set the DSS/CABLE channel, you're telling the TV what channel to tune to when you press the DSS•CABLE button on the remote.

For example, if you have a cable box connected to the Antenna A on the back of the TV, and you usually tune your TV to channel 3 to see cable stations, you want the TV to tune CH 3 Antenna A when you press DSS•CABLE. If you don't have a DSS receiver or cable box connected to the TV, skip this step or select *Not Connected* from the DSS/CABLE Channel choice list. (For more, see *Auto Tuning*, page 43.)



1. Press MENU to bring up the DSS/CABLE choice list.



### ***Important:***

**If you have both a DSS® receiver and a cable box connected to the TV...**

...The remote cannot control both a cable box and the DSS® receiver. The chart details how to set the DSS•CABLE button to control the DSS® receiver. You must then use your cable box remote to control the cable box. You may, however, prefer to use the DSS® remote for DSS® programming, and set your DSS•CABLE button to control your cable box. It's your choice.

(Continued on next page)

# INTERACTIVE SETUP

2. Point to the choice that matches the way you have your DSS® receiver or cable box connected to the TV.

If you used the Connections Foldout to hook up your TV, use the table at the right to select the DSS/CABLE channel.

3. Press MENU to complete the Setup routine and return to TV viewing.

## WHAT NOW?

Now that you've finished the interactive setup, you can sit back, relax, and enjoy the TV. Or...

## PROGRAM THE REMOTE

Since you've gone this far, you can take a few minutes to program the remote to control your VCR, laserdisc player, and other component. To find out how to program both of the remotes, go to the next section.

If you used	With Cable Box Select	No Cable Box Select
Connection A	Ch3 Antenna A*	Not Connected
Connection B	Ch3 Antenna A*	Not Connected
Connection C	Ch3 Antenna A*	Not Connected
Connection D	Ch3 Antenna A*	Not Connected
Connection E	Ch3 Antenna A*	Not Connected
Connection F	Video 1 Input	Video 1 Input
Connection G	Video 1 Input	Video 1 Input
Connection H	Video 1 Input	Video 1 Input
Connection I	Video 1 Input	Video 1 Input

\* Or Ch4 Antenna A, depending on how your VCR's 3/4 switch is set.



# PROGRAMMING THE REMOTE

## IF YOU HAVE A VCR OR OTHER COMPONENT...

The universal remote can be programmed to control most brands of remote controllable TVs, VCRs, and cable boxes. If you own an RCA, GE, or ProScan VCR,,, you probably don't need to program it at all. Other manufacturer's brands need to be programmed.

## NOW WATCH SOME TV!

Once you've programmed the remote, you will have completed all four setup sections. Now you can sit back and enjoy the TV. If you want to know more about the different parts of the TV, see the next section, *Tour of the TV*. Refer to the other sections and appendices as needed.

### 1 FIRST THINGS FIRST



### 2 USING THE MENU SYSTEM



### 3 INTERACTIVE SETUP



### 4 PROGRAMMING THE REMOTE

# PROGRAMMING THE REMOTE

## ABOUT PROGRAMMING THE REMOTE

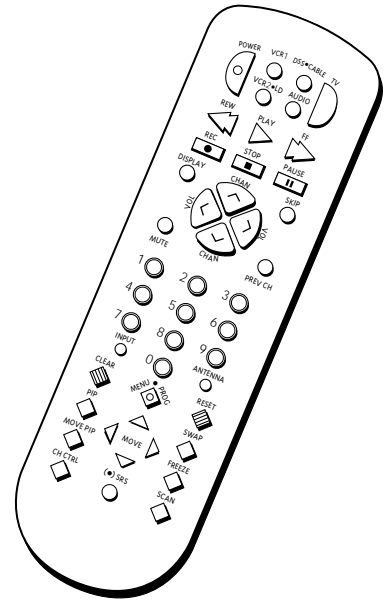
The universal remote can be programmed to control most brands of remote controllable TVs, VCRs, and cable boxes. Most RCA, GE and ProScan TVs and VCRs are already programmed. Other manufacturer's brands need to be programmed.

## PROGRAMMING THE REMOTE TO CONTROL A VCR

To determine whether the universal remote needs to be programmed, turn the VCR on, point the remote at the VCR, and press the VCR1 button. Then press POWER or CHAN UP or DOWN to see if the VCR responds to the remote commands. If not, the remote needs to be programmed.

Follow these steps to program your universal remote to control your VCR:

1. Turn on the VCR to be programmed.
2. Look up your VCR brand and code number(s) on the code list on the next page.
3. Press and hold the VCR1 button on the remote.
4. Enter the two-digit code from the code list.
5. Release VCR1 then press POWER to see if the VCR responds to the remote commands. If it doesn't, try pressing VCR1 and POWER to see if the VCR responds.



**This remote may not operate all models of the brands that are shown below. Use the codes on the next page or on the sheet packed with your remote.**

**To program the VCR2•LD button to control a second VCR, follow these steps but use the VCR2•LD button instead of the VCR1 button.**

# PROGRAMMING THE REMOTE

## Universal Remote VCR Codes

Aiwa .....	15	NEC .....	02,14,16,30
Akai .....	03,22,23	Panasonic .....	08
Audio Dynamics .....	14,16	Pentax .....	05,35
Broksonic .....	10	Philco .....	08,29
Canon .....	08	Philips .....	08,29
Capehart .....	01	Pioneer .....	05,16,33
Citizen .....	09	ProScan .....	00
Craig .....	07,12	Quartz .....	02
Curtis Mathes .....	00,08,15	Quasar .....	08
Daewoo .....	13	RCA .....	00,05,07,08,28,35,37
dbx .....	14,16	Realistic .....	02,06,08,09,12, 15,19,43
Dimensia .....	00	Samsung .....	07,13,22,32,42
Dynatech .....	15	Sansui .....	16
Emerson .....	09,10,13,15, 20,23,24,34,41	Sanyo .....	02,12
Fisher .....	02,12,18,19,43	Scott .....	04,13,41
Funai .....	15	Sears .....	02,05,09,12,18,19,35,43
GE .....	00,07,08,32,37	Sharp .....	06,24,39
Goldstar .....	09,14	Shintom .....	17,26,31
Harman Kardon .....	14	Sony .....	17,26,38
Hitachi .....	05,15,35,36	Sylvania .....	08,15,29
Instant Replay .....	08	Symphonic .....	02,15
JCL .....	08	Tashiko .....	09
JCPenney .....	02,05,07,08, 14,16,30,35	Tatung .....	30
JVC .....	02,14,16,30	Teac .....	15,30
Kenwood .....	02,14,16,30	Technics .....	08
Lloyd's .....	15	Teknika .....	08,09,15,21
Magnavox .....	08,29	Toshiba .....	05,13,19
Marantz .....	02,08,14,16,29,30	Totevision .....	07,09
Marta .....	09	Unitech .....	07
MEI .....	08	Vector Research .....	14,16
Memorex .....	08,09,12,15	Victor .....	16
MGA .....	04,27	Video Concepts .....	14,16
Minolta .....	05,35	Videosonic .....	07
Mitsubishi .....	04,05,27,35,40	Wards .....	05,06,07,08,12, 13,15,25,31,35
Montgomery Ward .....	06	Yamaha .....	02,14,16,30
MTC .....	07,15	Zenith .....	11,17
Multitech .....	07,15,31,32		

# PROGRAMMING THE REMOTE

## PROGRAMMING THE REMOTE TO CONTROL A LASERDISC PLAYER

The remote may need to be programmed for your equipment. This remote may not operate all models of the brands that are shown below. Use the codes at right or on the sheet packed with your remote.

1. Turn on the laserdisc player.
2. Look up your brand and its code number(s) on code list at right.
3. Press and hold the VCR2•LD button on the remote.
4. Enter the two-digit code from the code list.
5. Release the VCR2•LD button and press POWER or another button to see if the laserdisc player responds to the remote commands.
6. Repeat these steps using the next code listed for your brand, until the laserdisc player responds to the remote commands.

### Laserdisc Player Codes

ProScan .....	33
RCA .....	33

## PROGRAMMING THE REMOTE TO CONTROL AN RCA AUDIO DEVICE:

Your remote controls only RCA audio equipment such as an audio receiver or amplifier. It does not control other brands of audio equipment. The remote may need to be programmed for your RCA equipment. This remote may not operate all models of the brands that are shown at right. Use the codes at right or on the sheet packed in with your remote.

1. Turn on the component to be programmed.
2. Look up your brand and its code number(s) on the code list at right.
3. Press and hold the AUDIO button.
4. Enter the two-digit code from the code list.
5. Release the AUDIO button and press POWER or CHAN UP or DOWN to see if the audio device responds to the remote commands.
6. Repeat these steps using the next code listed for your brand until the audio device responds to the remote commands.

### Audio Codes

RCA/ Dimensia	
AM/FM Receiver .....	03
CD .....	07
Tape .....	06
Phono .....	05
Aux .....	04

# PROGRAMMING THE REMOTE

## PROGRAMMING THE REMOTE TO CONTROL A PROSCAN, RCA, OR GE DSS® BRAND RECEIVER

The universal remote is preprogrammed to control a ProScan, RCA, or GE DSS® brand receiver. Follow the instructions below for basic operation of the receiver. You may also want to experiment with other buttons on the remote to see if they work with your receiver.

TV Remote	(works like ) DSS® Remote
DISPLAY	SELECT/DISPLAY
PREV CH	PREV CH
ANTENNA	TV/DSS
CLEAR	CLEAR
MENU	MENU
MOVE	ARROWS

## PROGRAMMING THE REMOTE TO CONTROL A SATELLITE OR CABLE BOX

Refer to the Connection Foldout or contact your cable company to hook up your cable box. If you have a cable box with its own remote, then you may also be able to use the TV's remote with your cable box. This remote may not operate all models of the brands that are shown below. Use the codes below or on the sheet packed with your remote.

1. Turn on the cable box.
2. Look up your brand and its code number(s) on code list at right.
3. Press and hold the DSS•CABLE button on the remote.
4. Enter the two-digit code from the code list.
5. Release the DSS•CABLE button and press POWER or CHAN UP or DOWN to see if the cable box responds to the remote commands.
6. Repeat these steps using the next code listed for your brand until the cable box responds to the remote commands.

### Satellite / Cable Box Codes

ABC .....	22,46
Anvision .....	07,08
Cablestar .....	07,08
Eagle .....	08
Eastern International .....	02
General Instrument .....	04,05, ..... 15,23,24,25,30,36,46
Hamlin .....	12,13,34,48
Hitachi .....	37,43,46
Jerrold .....	04,05,15,23, ..... 24,25,30,36,45,46,47
Macom .....	37,43
Magnavox .....	07,08,19,21, ..... 26,28,29,32,33,40,41
NSC .....	09
Oak .....	01,16,38
Oak Sigma .....	16
Panasonic .....	03,27,39
Philips .....	07,08,19,21,26,28, ..... 29,32,33,40,41
Pioneer .....	18,20,44
Randtek .....	07,08
RCA .....	00,27
Regal .....	12,13
Regency .....	02,33
Samsung .....	44
Scientific Atlanta .....	03,22,35
Signature .....	46
Sprucer .....	27
Starcom .....	46
Sylvania .....	11
Teknika .....	06
Texscan .....	10,11
Tocom .....	17,21,49,50
Unika .....	31,32,41
Viewstar .....	07,08,19,21,26, ..... 28,29,32,33,40,41
Warner Amex .....	44
Zenith .....	14,42

# PROGRAMMING THE REMOTE

## USING THE REMOTE TO CONTROL A DEVICE

Once the remote has been programmed with the correct codes, you are ready to use it to control your devices.

To operate the device:

1. Press the device button (TV, VCR1, VCR2•LD, DSS•CABLE, or AUDIO) to set the remote to control the device.
2. Press OFF/ON to turn the device off or on.
3. Use the remote buttons that apply to that device.

# TOUR OF THE TV

## A PICTURE BOOK TOUR

This section talks about the TV's main parts (at least the parts you'll actually use):

- The Remote Control
- The Channel Marker
- The Back Panel
- The Front Panel

# TOUR OF THE TV

## REMOTE BUTTONS

**POWER** When in TV mode, turns off the TV. In VCR mode, and if programmed, turns on and off most VCRs.

**VCR1** If programmed, turns on VCR and puts the remote in VCR mode. Also turns on the TV.

**DSS•CABLE** Turns on DSS® receiver or, if programmed, most cable boxes. Puts the remote in DSS•CABLE mode. Also turns on the TV.

**VCR2•LD** If programmed may turn on your DVD player, second VCR, or laserdisc player. Puts the remote in VCR2•LD mode. Also turns on the TV. (**Note:** When you connect a DVD player to your TV, you can use your TV remote to select a channel on which to run your player. You may, however, need to use your DVD remote to control DVD functions.)

**TV** Turns on the TV and puts the remote in TV mode. Also displays channel information.

**AUDIO** If programmed, turns on RCA audio component and puts the remote in audio mode.

**REW, PLAY, FF, REC, STOP, PAUSE** If programmed, provide transport control for some remote-controllable VCRs, laserdisc players, tape decks, and CD players.

**VOL < or VOL >** Decreases or increases the TV's volume.

**CHAN ^ or CHAN v** 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.

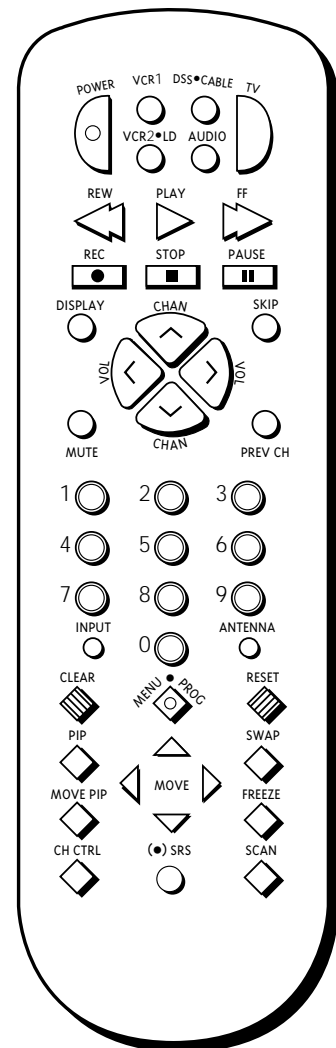
**DISPLAY** Brings up channel information. Press repeatedly to see detailed program information, if available.

**SKIP** Press once before changing channels and the TV will wait 30 seconds before returning you to the original channel. Press repeatedly to add more time.

**MUTE** Turns off the TV's sound. Press again to restore the sound.

**PREV CH** Returns you to the previous channel.

**(0-9) Number Buttons** Enters channel numbers and time settings directly through the remote control. To enter a two-digit channel, press the two digits. To enter a three-digit channel, press and hold the first digit, then add the second two. Example: to tune to channel 123, press and hold 1, press 2, then press 3.



For more, see *Programming the Remote*, p. 23.



# TOUR OF THE TV

**INPUT** Press to toggle through the available input sources (VID1, VID2, FRNT, etc.).

**ANTENNA** When in TV mode, changes the antenna input. Functions as TV/VCR button in VCR mode and TV/DSS button in DSS•Cable Mode.

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

**MENU•PROG** Brings up the Main Menu. When in the menu system, selects highlighted items or returns you to the previous menu. When in VCR mode, it functions as a Program button.

**RESET** Returns all picture quality controls to their original settings.

**MOVE (Arrows)** Used to point to different items in the menu system. Also used to adjust the menu controls. Also move the PIP window when no menus are on the screen.

**PIP** Brings up the small picture-in-picture window. Press again to remove the PIP window.

**MOVE PIP** Moves the PIP window to the four corners of the screen.

**CH CTRL** Selects the picture window, (that is, the main or PIP window) that is changed by the CHAN ^ and CHAN v buttons.

**SWAP** Swaps the main picture with the PIP window.

**FREEZE** Freezes the video in the PIP window.

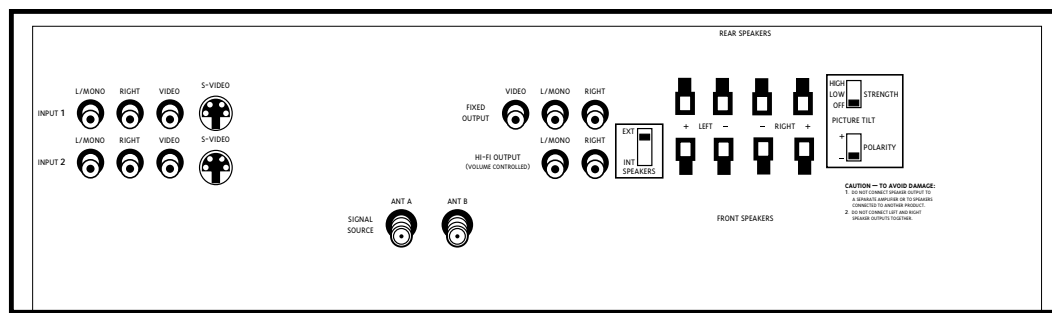
**SCAN** Briefly displays each channel from the current channel list. Press again to stop scan.

**(•) SRS\*** Press once to display the current audio processor. Press repeatedly to toggle through the available audio processors.

\*SRS and the SRS symbol (•) are registered trademarks of SRS Labs, Inc.

# TOUR OF THE TV

## BACK PANEL



**INPUT 1** Lets you connect a video component such as a VCR, DSS® receiver, or laserdisc player.

**L/MONO** Provides left audio connection. Or, if you are connecting a mono component, use the L/MONO input. The left audio connector is usually white.

**RIGHT** Provides right audio connection. The right audio connector is usually red.

**VIDEO** Provides video connection. The video connector is usually yellow.

**S-VIDEO** Lets you connect a component with S-Video capability, such as a DSS® receiver or S-VIDEO VCR. When using S-Video, make sure to connect the three audio/video cables as well as the S-Video connector.

**INPUT2** Provides connection to a second video component such as a VCR or laserdisc player.

**L/MONO** Provides left audio connection. Or, if you are connecting a mono component, use the L/MONO input. The left audio connector is usually white.

**RIGHT** Provides right audio connection. The right audio connector is usually red.

**VIDEO** Provides video connection. The video connector is usually yellow.

**S-VIDEO** Lets you connect a component with S-Video capability, such as a DSS® receiver or S-VIDEO VCR. When using S-Video, make sure to connect the three audio/video cables as well as the S-Video connector.

**SIGNAL SOURCE** Provides connection to a home antenna or cable TV system.

The ANT B input can be used for video games or home computers, and you can switch between the two inputs using the ANTENNA button on the remote.

If you are recording from INPUT 1 or 2 and you are using S-Video, remember to connect the regular INPUT 1 VIDEO cable as well.

# TOUR OF THE TV

**FIXED OUTPUT** Provides fixed-level audio and video output from the TV. These output signals are ideal for connecting to an A/V receiver or amplifier that has its own remote control. The FIXED OUTPUT jacks are also suitable for recording from the TV with a VCR, camcorder, or tape deck.

**HI-FI OUTPUT** Provides volume-controlled stereo audio output, meaning the volume changes as you change volume on the TV. The HI-FI OUTPUT jacks are ideal for connecting the TV to an amplifier that does not have its own volume control or remote.

**SPEAKER SWITCH** Lets you turn off the TV's internal (built-in) speakers and play the audio through external speakers connected to the TV. Set SPEAKER SWITCH to EXTERNAL to play audio through external speakers. Set the switch to INTERNAL to play audio through the TV's internal (built-in) speakers.

**REAR SPEAKERS** The REAR SPEAKERS terminals let you connect rear speakers to the TV.

**FRONT SPEAKERS** The FRONT SPEAKERS terminals let you connect front external speakers to the TV.

**POLARITY SWITCH** This TV has an extra-large color picture tube, which makes it vulnerable to the effects of the Earth's magnetic field. You may need to reset the POLARITY switch and STRENGTH switches if you reposition the TV or move it to a different room.

If you notice the picture tilting slightly, follow these steps to correct the tilt:

1. Make sure the STRENGTH switch is set to OFF.
2. Move the STRENGTH switch to the LOW. If the picture gets better, but not quite perfect, move the switch to HIGH.
3. If the picture gets worse, change the position of the POLARITY switch. If the picture improves, but is not quite perfect, move the STRENGTH switch to HIGH.

**Remember to set the speaker switch back to INTERNAL when you are not using the external speakers.**

**To connect a subwoofer to the TV, use the left (L/MONO) HI-FI-OUTPUT jack.**

# TOUR OF THE TV

## FRONT PANEL

**VOL <** Decreases the volume. When in the menu system, VOL < is used to point left to items and adjust menu controls.

**VOL >** Increases the volume. When in the menu system, VOL > is used to point right to items and adjust menu controls.

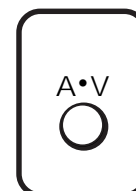
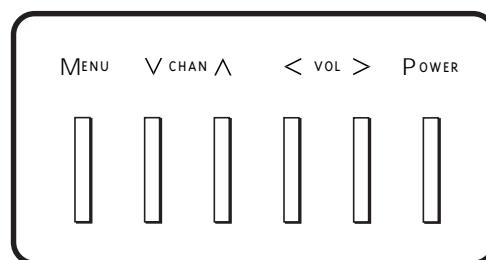
**CHAN ^** Scans up through the channel list. In the menu system, it points up to items and adjusts menu controls.

**CHAN v** Scans down through the current channel list. In the menu system, it points down to items and adjusts menu controls.

**MENU** Brings up the Main Menu. When in the menu system, it selects highlighted items. Also returns you to the previous menu.

**POWER** Turns the TV on and off.

**A•V (AV Jack)** Use the AV adapter included with your TV accessories to connect a camcorder or other device to the front of the TV. The yellow connector is for video; the white for audio.



The front panel above shows a typical button layout. The exact look of the buttons may be different from those on the front of your TV. (In other words, your mileage may vary.)

Because there are no MOVE buttons on the front panel, the CHAN and VOL buttons are used to navigate up, down, left, and right through the menu system. This is different from the way the CHAN and VOL buttons work on the remote.

If you turn Parental Control on, the front panel no longer provides access to the menus. For more information, see *Parental Control*, page 42.

# TOUR OF THE TV

## CHANNEL MARKER

There are several indicators that come up when you change channels, press the DISPLAY button, or press the TV button. This display is called the Channel Marker.

**12:01** Displays the current time.

**Mute** Displayed when you mute the audio.

**CC** Displayed when Closed Captioning is available on the current channel.

**SAP** Displayed when the current channel is broadcasting SAP (Second Audio Program) information.

**PIP Chan** Displays the current PIP channel.

**Stereo** Displayed when the current channel is broadcasting in Stereo.

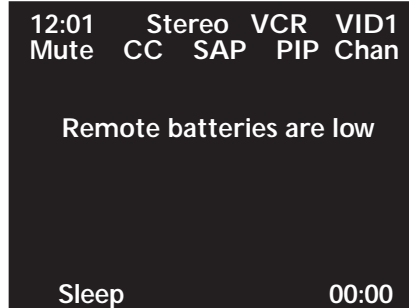
**VCR** Displays the label assigned to the current channel.

**VID1** Displays the current channel or input channel.

**Remote batteries are low** Displayed when the batteries in the remote need to be replaced.

**Sleep** Displayed when the Sleep Timer has been set.

**00:00** Displayed to count down time left on the commercial skip (SKIP) timer.



12:01	Stereo	VCR	VID1
Mute	CC	SAP	PIP Chan
Remote batteries are low			
Sleep		00:00	

The channel marker shown above is just an example, of course.



# QUICK REFERENCE

## A SHORT GUIDE TO THE MENU SYSTEM

This section provides a brief explanation of all the menu commands. These commands are organized in the chapter by their location in the Main Menu.

- **Audio** Contains the controls that let you adjust the way the TV sounds.
- **Picture Quality** Contains the controls that let you adjust the picture.
- **Screen** Contains the controls that let you adjust the Closed-Caption mode and display.
- **Time** Contains the controls that let you set the time and schedule the TV to turn off and on at specific times.
- **Channel** Contains all the commands used to control your channels, including custom-building your channel list, setting parental controls, and setting up your TV to control the components connected to the TV.

# QUICK REFERENCE

## AUDIO MENU

**Mute** Press MENU to turn the TV audio off or on.

**Tone Controls** Displays the slider controls for adjusting the TV's Treble, Bass, Balance, and Volume.

**Audio Processor** Displays a choice list of the available audio modes, which control the way the sound comes through your speakers.

**Mono** Plays the sound in mono only. Use this setting when receiving broadcasts where the distance makes the signal weak.

**Synthetic Stereo** Takes a mono audio signal and enhances it to sound more like it has stereo separation.

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

**(•) Sound Logic Stereo (SLS)** Evens out sudden fluctuations in volume. Commercials, for example, often sound louder than regular programming. SLS keeps your ears from being blasted by the increased volume.

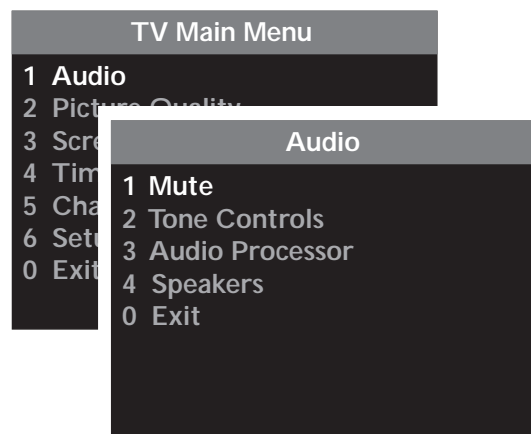
**(•) SRS Stereo** (•) SRS\* is an audio processing technology that adds greater depth and stereo separation to stereo audio signals.

**Enhanced SRS Stereo** Enhances the SRS signal to give the impression of even greater depth and stereo separation.

**SAP (Second Audio Program)** Plays the program's audio in a second language, if one is available. The TV displays the word SAP when you tune to a program that is broadcast with SAP information. SAP audio is broadcast in mono.

**SAP in Synthetic Stereo** Enhances the mono SAP (Second Audio Program) to sound like it has stereo separation.

**Speakers** Displays a choice list that lets you turn the TV's internal or external speakers on or off.



You may notice that fewer Audio Processor options are available when you're tuned to a video input than when you're watching broadcast channels.

For more on the menus, see *Using the Menu System*, p. 7.

\*SRS and the SRS symbol (•) are registered trademarks of SRS Labs, Inc.



# QUICK REFERENCE

## PICTURE QUALITY MENU

**Picture Controls** Displays the five slider controls for adjusting the way the picture looks.

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

**Color** Adjusts the richness of the color.

**Tint** Adjusts the balance between the red and green levels.

**Black Level** Adjusts the brightness of the picture.

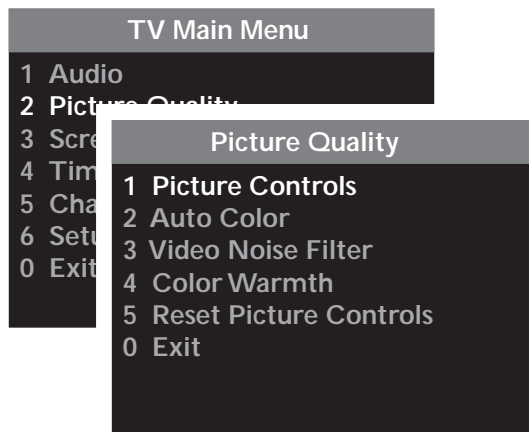
**Sharpness** Adjusts the crispness of edges in the picture.

**Auto Color** Displays a choice list that lets you turn on the feature that automatically corrects the color of the picture. (This is especially useful for tracking realistic flesh tone colors as you switch from channel to channel.) Select *Off* if you prefer to adjust the picture with the Picture Controls.

**Video Noise Filter** Displays a choice list that lets you turn on the feature that automatically filters out noise, or “snow,” from the picture.

**Color Warmth** Displays a choice list that lets you set one of three automatic color adjustments: Cool for a more blue palette of picture colors; Normal; and Warm for a more red palette of picture colors.

**Reset Picture Controls** Displays a choice list that lets you reset the picture controls to their original settings.



Turn the **Auto Color** feature OFF if you prefer to adjust the picture with the picture controls.

# QUICK REFERENCE

## SCREEN MENU

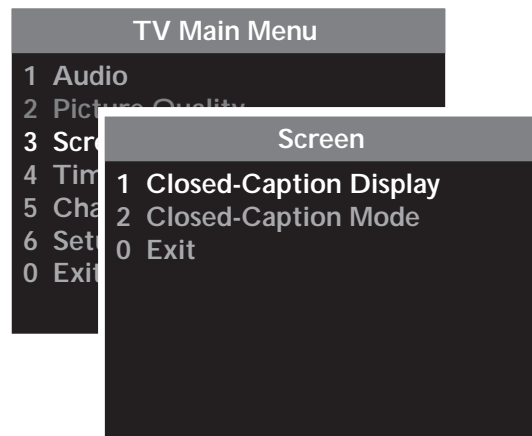
**Closed Caption Display** Displays a choice list that lets you choose the way closed captioning information is shown on the screen.

**Off** No captioning information displayed.

**On Always** Captioning information shown always, when available.

**On When Sound is Muted** Displays captioning information, when available, whenever you press the MUTE button. The captioning information is not displayed when the sound is not muted.

**Closed Caption Mode** Displays a choice list that lets you choose which captioning mode is used for displaying captioning information.



Captioning information is not available on all channels at all times. For more on using closed captioning, see *Advanced Features*, p. 51

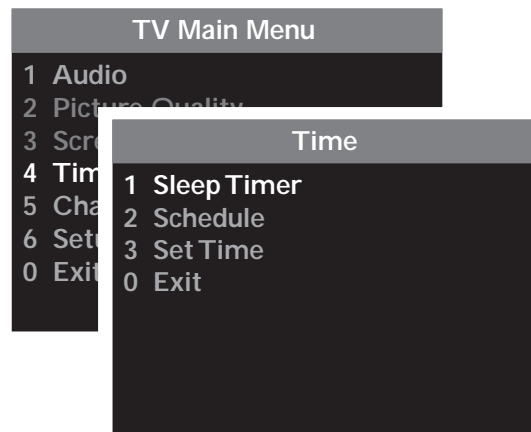
# QUICK REFERENCE

## TIME MENU

**Sleep Timer** Displays a control panel that lets you select the amount of time you want to give the TV before it shuts itself off.

**Schedule** Displays a control panel that lets you set up a schedule for turning the TV on and off automatically. **Make sure to turn the schedule On.** The on-screen directions guide you through the steps needed to set the schedule.

**Set Time** Displays a control panel that lets you enter the current time. The on-screen directions guide you through the steps needed to set the schedule.



**You have to set the current time before using the Schedule function.**

### Tip for Using Schedule:

To turn the TV into an alarm clock, press RESET to blank both the Start and Stop Time fields. Then set the Start Time. The TV will come on in the morning, and stay on until you turn it off. (I try to stay away from early morning news programs, because the newscasters' voices seem to lull me back to sleep.)

# QUICK REFERENCE

## CHANNEL MENU

**Parental Control** Displays a choice list that lets you adjust the Parental Control feature.

**On** The front panel CHAN buttons will tune only to channels that you have marked as “Parent Approved” in the Lists and Labels control panel (see below).

**Important:** When Parental Control is on, the TV’s front panel no longer provides access to the menus. Parents may prefer to hide the remote and let children use the front panel to change channels.

**Off** The TV shows all channels, whether they are marked as “Parent Approved” or not.

**Signal Type** Displays a choice list that lets you select the current antenna type. Choose UHF/VHF Antenna if you are currently using an antenna for TV signals.

**UHF/VHF Antenna** Choose this if you are currently using an off-air antenna for TV signals.

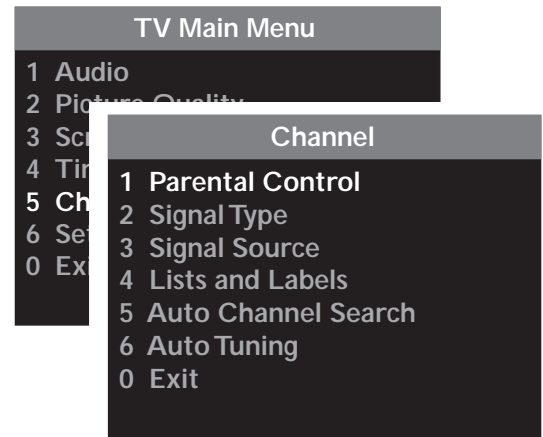
**Cable TV** Choose this if you are currently using cable or a cable box for TV signals.

**Signal Source** Displays a choice list that lets you choose whether you are currently using a signal plugged into the Antenna A or Antenna B jacks on the back of the TV. Usually, the antenna or cable is connected to Antenna A. Pressing the ANTENNA button on the remote is a quick way to change the signal source from Antenna A to Antenna B.

**Lists and Labels** Displays a control panel that lets you custom-build your Normal channel list, choose a four-character label for each channel, and set whether each channel is “parent-approved.” Follow the on-screen directions to enter your channels and other information.

**Chan #** Use the up and down arrows to scroll up and down through the channel scan list. You can enter the channel number directly using the number buttons.

**Labels** Use the up and down arrows to enter a four-character label for each channel. Hold the button down to scroll quickly through the characters (there are a bunch of them). Press RESET to clear a label. **The TV can store up to 67 labels in memory.**



**Connect your video game to Antenna B. Then, when you want to play video games, press ANTENNA on the remote to change the Signal Source to Antenna B.**

**You may prefer to include only a dozen or so of your favorite channels in the Normal list, and use the number buttons on the remote to access the rest of the channels as desired.**

# QUICK REFERENCE

**Normal List** Only the channels included in the Normal list are available when you scan up and down using the CHAN buttons. Use the up and down arrows to indicate whether the channel number indicated is included (YES) or is not included (NO) in the Normal channel list.

**Parent Approved** Use the up and down arrows to choose whether the channel indicated should be shown when the Parental Control feature is turned on. Select YES to indicate that the channel can be shown at any time, regardless of whether Parental Control is turned on. Select NO to indicate that the front panel cannot tune to that channel when Parental Control is turned on. **Important:** You must turn on the Parental Control feature ON in the Parental Control control panel (see above).

**Auto Channel Search** Displays a control panel that lets you tell the TV to search automatically for all the channels available through the antenna input(s). When the TV finds an active channel, it places it in the channel list; inactive channels (weak stations or channels with no signal at all) will be removed from the channel list.

**Auto Tuning** Displays a choice list that lets you set up TV to automatically tune to the correct input channel when you press VCR1, VCR2•LD, or DSS•CABLE.

**Set VCR 1 Channel** Displays a choice list that lets you select the channel that the TV tunes to when you press the VCR1 button. The choices are:

**Not Connected** Choose this if you do not have a VCR connected to an antenna or Video input on the back of the TV, or if you don't want the TV to tune to a channel when the VCR1 button is pressed.

**Channel 3 Antenna A** Choose this if your VCR is connected to the Antenna A jack on the back of the TV, and you want the TV to tune to channel 3 when you press the VCR1 button. Reminder: Make sure the VCR's Ch 3/4 switch is set to channel 3.

**Channel 4 Antenna A** Choose this if your VCR is connected to the Antenna A jack on the back of the TV, and you want the TV to tune to channel 4 when you press the VCR1 button. Reminder: Make sure the VCR's Ch 3/4 switch is set to channel 4.

**Auto Tuning is part of the interactive setup routine. For more, see *Interactive Setup*, p. 15.**

# QUICK REFERENCE

**Channel 3 Antenna B** Choose this if your VCR is connected to the Antenna B jack on the back of the TV, and you want the TV to tune to channel 3 when you press the VCR1 button. Reminder: Make sure the VCR's Ch 3/4 switch is set to channel 3.

**Channel 4 Antenna B** Choose this if your VCR is connected to the Antenna B jack on the back of the TV, and you want the TV to tune to channel 4 when you press the VCR1 button. Reminder: Make sure the VCR's Ch 3/4 switch is set to channel 4.

**Video 1 Input** Choose this if your VCR is connected to the Video 1 jacks on the back of the TV and you want the TV to tune to Video 1 input when you press the VCR1 button.

**Video 2 Input** Choose this if your VCR is connected to the Video 2 jacks on the back of the TV and you want the TV to tune to Video 2 input when you press the VCR1 button.

**Set DVD/VCR 2/LD Channel** Displays a choice list that lets you select the channel that the TV tunes to when you press the VCR2•LD button.

The choices are the same as those listed under Set VCR 1 Channel, above, except that the component is the second VCR or laserdisc player, and the remote button being programmed is VCR2•LD. For example:

**Video 2 Input** Choose this if your second VCR or laserdisc player is connected to the Video 2 jacks on the back of the TV and you want the TV to tune to Video 2 input when you press the VCR2•LD button. This is a typical setting for a second VCR or laserdisc player.

**Set DSS/Cable Channel** Displays a choice list that lets you select the channel that the TV tunes to when you press the DSS•CABLE button. Usually, DSS•CABLE can control either a DSS® receiver connected to the Video 1 input jacks, or a cable box connected to the Antenna A jack.

The choices are the same as those listed under Set VCR 1 Channel, above, except that the component is either a DSS® Receiver or a cable box, and the button being programmed is DSS•CABLE. Here is an example for each:

# QUICK REFERENCE

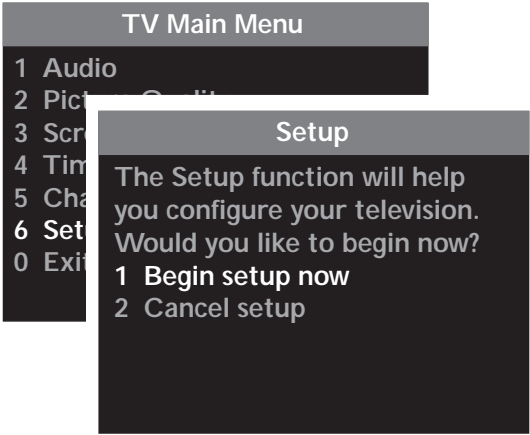
**Video 1 Input** Choose this if your DSS® Receiver is connected to the Video 1 jacks on the back of the TV and you want the TV to tune to Video 1 input when you press the DSS•CABLE button. (This is the typical setting for a DSS® Receiver.)

**Ch 3 Antenna A** Choose this if your cable box is connected to the Antenna A jack on the back of the TV and you want the TV to tune to channel 3 when you press the DSS•CABLE button. (This is a typical setting for a cable box.)

# QUICK REFERENCE

## SETUP

The Setup routine is detailed in Interactive Setup, pages 15-22.





# ADVANCED FEATURES

## THIS SECTION DETAILS HOW TO USE FOUR OF THE TV'S IMPORTANT FEATURES:

- PIP (Picture-in-Picture) Operation
- Displaying On-Screen Program Details
- Using Closed Captioning
- Choosing an Audio Processor

For more about the different menus and control panels in the menu system, see *Quick Reference*, p. 37.

# ADVANCED FEATURES

## PIP (PICTURE-IN-PICTURE) OPERATION

The PIP feature (picture-in-picture) lets you display a second, smaller picture on top of the main picture.



There are six remote buttons that control the way the PIP window works:

**PIP** Brings up the PIP window. Press PIP again to remove the window.

**MOVE PIP** Lets you move the PIP window to the four corners of the screen. (You can also use the MOVE arrows to position the PIP window.)

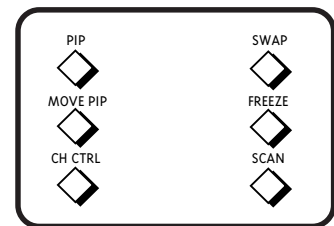
**FREEZE** Takes a snapshot of the video in the PIP window. To unfreeze the video, change channels in the PIP window or press SWAP.

**SWAP** Switches, or “swaps,” the video from the PIP window with the main picture.

**CH CTRL** (Channel Control) Pressing PIP automatically places channel control in the PIP window. CH CTRL lets you transfer channel control back to the main picture.

**SCAN** Pressing SCAN causes the TV to automatically scan through your channel list. If channel control (see above) is on the main picture, the main picture will scan through the channels. If channel control is on the PIP window, the PIP picture will scan through the channels. Each channel is displayed for four seconds before the TV automatically tunes to the next channel in the list.

Press SCAN again to stop the channel scan.



**If you press FREEZE before the PIP window is displayed, the current channel's video is frozen in the PIP window, allowing you to change channels on the main picture while keeping the snapshot of the original channel in the PIP window.**

**A typical use of SWAP is to scan through channels in the PIP window, and when you find a channel you like, press SWAP to display that channel in the main picture, sending the current channel to the PIP window.**

# ADVANCED FEATURES

## TWO TIPS FOR USING PIP BUTTONS

### **Automatic Channel Surfing in the Main Picture**

You can auto-surf through the channels between commercials using the SKIP and SCAN buttons.

1. Press SKIP to set the commercial skip timer and send the current channel to the PIP window.
2. Press SCAN. The main picture auto-surfs through the channel list. When the SKIP feature times out, the original channel will return automatically to the main picture.

### **Automatic Channel Surfing in the PIP Window**

You can use the PIP window to auto-surf through channels as well.

1. Press PIP to bring up the PIP window.
2. Press SCAN. The TV begins displaying each channel in the PIP window. If you see a channel that interests you, press SWAP.

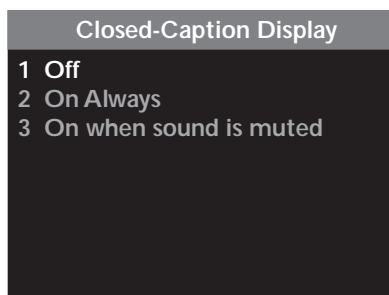
# ADVANCED FEATURES

## CLOSED CAPTIONING

Many programs are encoded with closed captioning information, which lets you display the audio portion of a program as text on the TV screen. You can tell the TV to display closed captioning: a) never, b) whenever it is available, or c) whenever the MUTE button is pressed.

### TO DISPLAY CLOSED CAPTIONING

1. Press MENU to bring up the Main Menu.
2. Point to Screen and press MENU. The Screen Menu comes up with Closed Caption Display highlighted.
3. Press MENU to select Closed Caption Display.



**Off** No closed captioning information will be displayed.

**On always** Closed captioning will be displayed whenever it is available.

**On when muted** Closed captioning will be displayed only when you mute the sound by pressing MUTE.

4. Point to your choice and press MENU to select it and return to the Screen menu.

Closed captioning is not available on all channels at all times. Only specific programs encoded with closed captioning information are applicable. When a program is closed captioned, the letters CC are displayed in the channel marker.

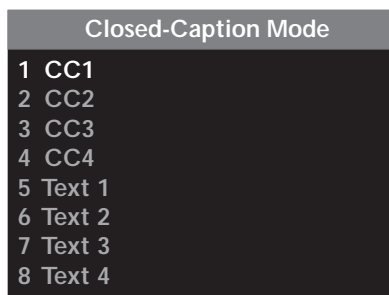
# ADVANCED FEATURES

## CLOSED CAPTIONING MODES

The TV offers eight closed-captioned modes, including four text modes.

### To Set the Closed Captioning Mode:

1. Select Screen from the Main Menu
2. Point to Closed-captioned mode and press MENU. This choice list comes up:



3. Point to your choice and press MENU to select it and return to the Screen menu.

## TURNING OFF CLOSED CAPTIONING

1. Select Screen from the Main Menu.
2. Press MENU to select Closed Captioned Display
3. Point to Off and press MENU. The closed captioning is turned off and you are returned to the Screen menu.

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.

# ADVANCED FEATURES

## ON-SCREEN PROGRAM DETAILS

Program providers have the option of sending information through the airwaves along with their programs. If this information is available, the TV can display it when you press DISPLAY. To display the on-screen program details:

1. Press DISPLAY once to bring up the channel marker.
2. Press DISPLAY again to bring up the program title and the program's length and elapsed time.
3. Press DISPLAY again for other program details such as the story line and whether Closed-Captioning is available.
4. Press DISPLAY again to clear the screen.

**Whether all (or any) of the program details are displayed depends on whether the program provider has sent the information along with the program.**

# ADVANCED FEATURES

## CHOOSING AN AUDIO PROCESSOR

Changing the audio processor changes the way your TV sounds. There are two ways to change the audio processor: a) from the Audio menu, and b) by pressing (•)SRS on the remote. For more, see *Audio*, page 40.

### Choosing an audio processor from the Audio Menu

1. Press MENU to bring up the Main Menu.
2. Press MENU again to select the Audio menu.
3. Point to *Audio Processor* and press MENU. The Audio Processor choice list comes up, with the current mode highlighted.
4. Point to an audio processor mode and press MENU to select it and return to the Audio menu. The options are:

**Mono** Plays the sound in mono only.

**Synthetic Stereo** Takes a mono audio signal and enhances it to sound more like it has stereo separation.

**Stereo** Splits the incoming stereo audio signal into left and right channels.

**(•) Sound Logic Stereo (SLS)** Evens out sudden fluctuations in volume. Commercials, for example, often sound louder than regular programming. SLS keeps your ears from being blasted by the increased volume.

**(•) SRS Stereo** (•) SRS\* is an audio processing technology that adds greater depth and stereo separation to stereo audio signals.

**Enhanced (•)SRS Stereo** Enhances the SRS signal to give the impression of even greater depth and stereo separation.

**SAP (Second Audio Program)** Plays the program's audio in a second language, if one is available. Setting the audio processor to SAP tells the TV to play the program's audio in this second language, if one is available.

**SAP in Synthetic Stereo** Enhances the mono SAP (Second Audio Program) to sound like it has stereo separation.

### Choosing an audio processor from the remote

1. Press (•)SRS to display the current audio processor mode on the screen.
2. Press (•)SRS repeatedly to toggle through the different audio modes. The TV displays the name of the current audio processor mode each time you press (•)SRS.



The number of audio processor choices available depends on the type of signal you are currently using. For example, depending on the way you have your VCR connected to the TV, the number of choices is greater when you are watching TV than when you are watching a video tape.

\*SRS and the SRS symbol (•) are registered trademarks of SRS Labs, Inc.





# APPENDIX A: USING THE TV CONNECTIONS

## THINGS TO DO BEFORE CONNECTING COMPONENTS

### Protect your components from power surges

- Connect all components before plugging any power cords into the wall outlet.
- Always turn off the TV and/or component before you connect or disconnect any cables.

### Position cables correctly to avoid audio hum or interference

- Insert all cable plugs firmly into their jacks.
- Place the audio/video cables to the sides of the TV's back panel instead of straight down the middle after you connect your components.
- Try not to coil any twin-lead cables and keep them away from the audio/video cables as much as possible.
- Make sure all antennas and cables are properly grounded. Refer to the Safety Tips sheet packed with your TV.

### Protect your components from overheating

- Do not block ventilation holes in any of the components. Arrange the components so that air can circulate freely.
- Do not stack components.
- Allow adequate ventilation when placing your components in a stand.
- Place an amplifier on the top shelf of the stand so heated air rising from it will not flow around other components.

### Connect audio/video cables for best results

- Required for picture-in-picture feature.

**Important:** This section assumes that you have already used the Interactive Setup and programmed the remote.

# APPENDIX A: USING CONNECTION A

## TV AND MONO VCR (CONNECTION A)

This information applies to Connection A in the Connections Foldout.

### Connection A provides:

- Stereo sound from broadcast programs
- Mono sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel

### To use this connection you must have:

- (2) audio/video cables
- (2) coaxial cable

### To connect:

1. Connect cables as shown in Connection A.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

## USING CONNECTION A

### To watch TV programs:

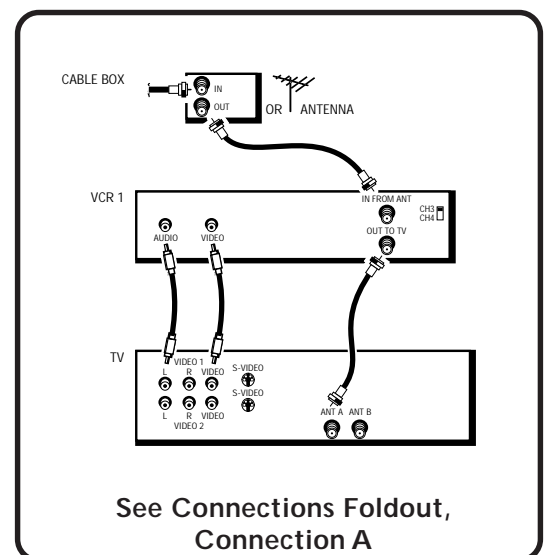
1. Turn VCR off.
2. Press TV and tune to a channel.

### To record one program and watch another:

1. Press VCR1 and tune to a channel.
2. Begin recording.
3. Make sure the TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.

### To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.



## APPENDIX A: USING CONNECTION B

### TV AND STEREO VCR (CONNECTION B)

This information applies to Connection B in the Connections Foldout.

#### Connection B provides:

- Stereo sound from broadcast programs
- Stereo sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel

#### To use this connection you must have:

- (2) coaxial cables
- (3) audio/video cables
- (1) S-Video cable (optional)

#### To connect:

1. Connect cables as shown in Connection B.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

### USING CONNECTION B

#### To watch TV programs:

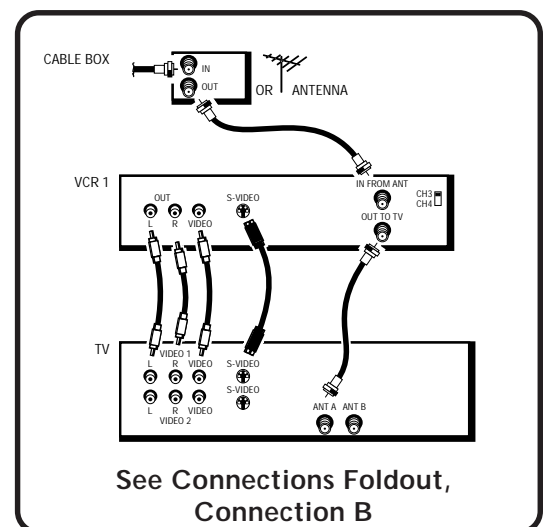
1. Turn VCR off.
2. Press TV and tune to a channel.

#### To record one program and watch another:

1. Press VCR1 and tune to a channel.
2. Begin recording.
3. Make sure the TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.

#### To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.



## APPENDIX A: USING CONNECTION C

### TV, VCR AND LASERDISC PLAYER (CONNECTION C)

This information applies to Connection C in the Connections Foldout.

#### Connection C provides:

- Stereo sound from broadcast programs
- Stereo sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel

#### To use this connection you must have:

- (2) coaxial cables
- (6) audio/video cables
- (2) S-Video cables (optional)

#### To connect:

1. Connect cables as shown in Connection C.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

### USING CONNECTION C

#### To watch TV programs:

1. Turn VCR off.
2. Press TV and tune to a channel.

#### To record one program and watch another:

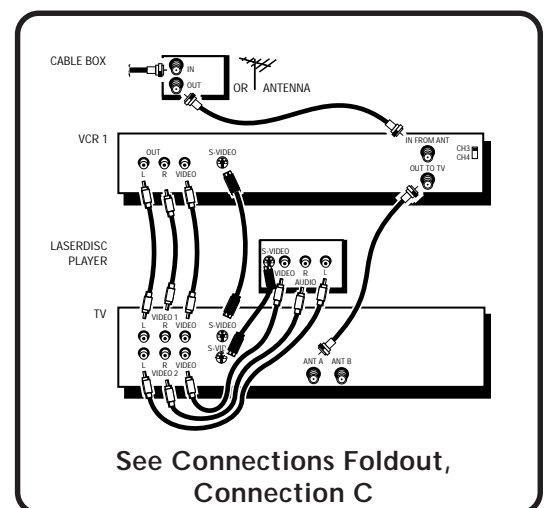
1. Press VCR1 and tune to a channel.
2. Begin recording.
3. Make sure the TV/VCR switch on the VCR is set to TV.
4. Press TV and tune to a channel.

#### To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.

#### To play a laserdisc:

1. Press VCR2.
2. Press PLAY.



# APPENDIX A: USING CONNECTION D

## TV AND (2) VCRS (CONNECTION D)

This information applies to Connection D in the Connections Foldout.

### Connection D provides:

- Stereo sound from broadcast programs
- Stereo sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel
- Record from one VCR to the other

### To use this connection you must have:

- (3) coaxial cables
- (6) audio/video cables
- (1) S-Video cables (optional)

### To connect:

1. Connect cables as shown in Connection D.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

## USING CONNECTION D

### To watch TV programs:

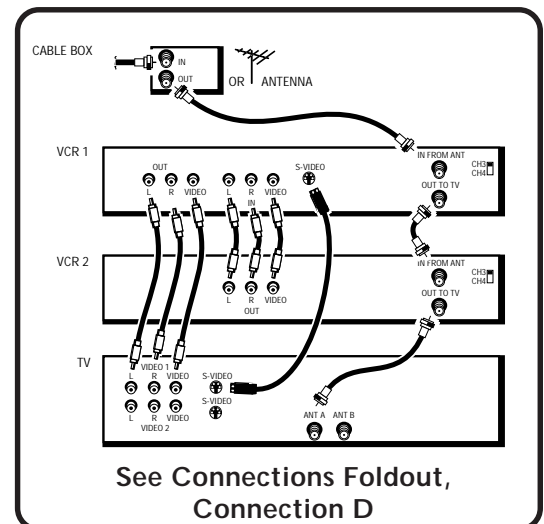
1. Turn VCR off.
2. Press TV and tune to a channel.

### To record one program and watch another:

1. Turn VCR2 off.
2. Press VCR1 and tune to a channel.
3. Begin recording.
4. Make sure the TV/VCR switch on the VCR1 is set to TV.
5. Press TV and tune to a channel.

### To play a tape on the VCR:

1. Press VCR1.
2. Press PLAY.



## APPENDIX A: USING CONNECTION D

### To record from one tape to another (tape dubbing):

1. Insert original tape into VCR2.
2. Insert blank tape into VCR1.
3. Press VCR1.
3. Set VCR to line input (for more, see your VCR User Manual).
4. Press RECORD to begin recording.
5. Press VCR2•LD, then press PLAY.
6. If you want to watch a different channel, set both the TV/VCR switch on both VCRs to TV; press TV; then tune to a channel.

**Caution:** The unauthorized recording of copyrighted material may infringe upon the rights of others.

## APPENDIX A: USING CONNECTION E

### TV AND LASERDISC PLAYER (CONNECTION E)

This information applies to Connection E in the Connections Foldout.

#### Connection E provides:

- Stereo sound from broadcast programs
- Picture in Picture (PIP)

#### To use this connection you must have:

- (1) coaxial cable
- (3) audio/video cables
- (1) S-Video cable (optional)

#### To connect:

1. Connect cables as shown in Connection E.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

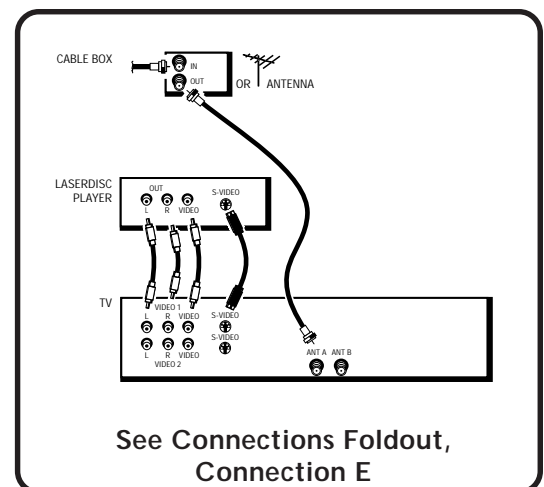
### USING CONNECTION E

#### To watch TV programs:

1. Press TV and tune to a channel.

#### To play a laserdisc:

1. Press VCR2•LD.
2. Press PLAY.



## APPENDIX A: USING CONNECTION F

### TV AND DSS® RECEIVER (CONNECTION F)

This information applies to Connection F in the Connections Foldout.

#### Connection F provides:

- Stereo sound from broadcast programs
- Stereo sound from the DSS® receiver
- Picture in Picture (PIP)

#### To use this connection you must have:

- (3) coaxial cables
- (3) audio/video cables
- (1) S-Video cable (optional)
- Stereo sound from DSS® programming

#### To connect:

1. Connect cables as shown in Connection F.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

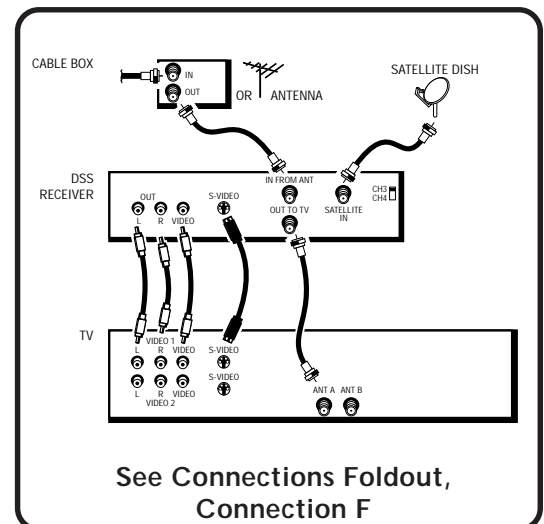
### USING CONNECTION F

#### To watch TV programs:

1. Turn DSS® receiver off.
2. Press TV and tune to a channel.

#### To watch DSS® programming:

1. Press DSS•CABLE and tune to a channel.





## APPENDIX A: USING CONNECTION G

### TV, VCR, AND DSS® RECEIVER (CONNECTION G)

This information applies to Connection G in the Connections Foldout.

#### Connection G provides:

- Stereo sound from broadcast programs
- Stereo sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel

#### To use this connection you must have:

- (4) coaxial cables
- (6) audio/video cables
- (2) S-Video cables (optional)

#### To connect:

1. Connect cables as shown in Connection G.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

### USING CONNECTION G

#### To watch TV programs:

1. Turn VCR and DSS® receiver off.
2. Press TV and tune to a channel.

#### To watch DSS® programming:

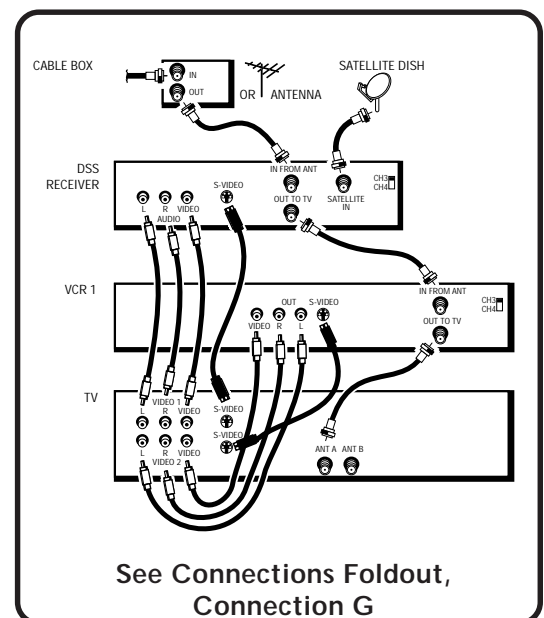
1. Press DSS•CABLE and tune to a channel.

#### To record off-air broadcasts and watch a different channel:

1. Turn DSS® receiver off.
2. Press VCR1 and tune to a channel.
3. Begin recording.
4. To watch another channel, make sure the TV/VCR switch on the VCR is set to TV; then press TV and tune to a channel.

#### To play a tape on the VCR:

1. Press VCR1 and then press PLAY.



## APPENDIX A: USING CONNECTION H

### TV, VCR, DSS® RECEIVER, AND LASERDISC PLAYER (CONNECTION H)

This information applies to Connection H in the Connections Foldout.

#### Connection H provides:

- Stereo sound from broadcast programs
- Stereo sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel

#### To use this connection you must have:

- (4) coaxial cables
- (6) audio/video cables
- (2) S-Video cables (optional)

#### To connect:

1. Connect cables as shown in Connection H.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

### USING CONNECTION H

#### To watch TV programs:

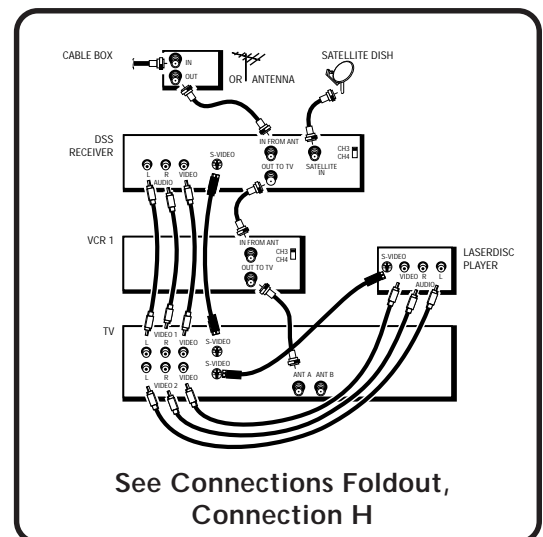
1. Turn VCR and DSS® receiver off.
2. Press TV and tune to a channel.

#### To watch DSS® programming:

1. Press DSS•CABLE and tune to a channel.

#### To record off-air (cable or antenna) broadcasts and watch a different channel:

1. Turn DSS® receiver off.
2. Press VCR1 and tune to a channel.
3. Press RECORD to begin recording.
4. To watch another channel, make sure the TV/VCR switch on the VCR is set to TV; then press TV and tune to a channel.



## APPENDIX A: USING CONNECTION H

### **To play a tape on the VCR:**

1. Press VCR1 and then press PLAY.

### **To play a laserdisc:**

1. Press VCR2•LD and then press PLAY.

## APPENDIX A: USING CONNECTION I

### TV, (2) VCRS, AND DSS® RECEIVER (CONNECTION I)

This information applies to Connection I in the Connections Foldout.

#### Connection I provides:

- Stereo sound from broadcast programs
- Stereo sound from VCR
- Picture in Picture (PIP)
- Watch one channel on TV while recording another channel

#### To use this connection you must have:

- (5) coaxial cables
- (9) audio/video cables
- (2) S-Video cables (optional)

#### To connect:

1. Connect cables as shown in Connection I.
2. Return to *First Things First*, then follow the steps in the Interactive Setup.

### USING CONNECTION I

#### To watch TV programs:

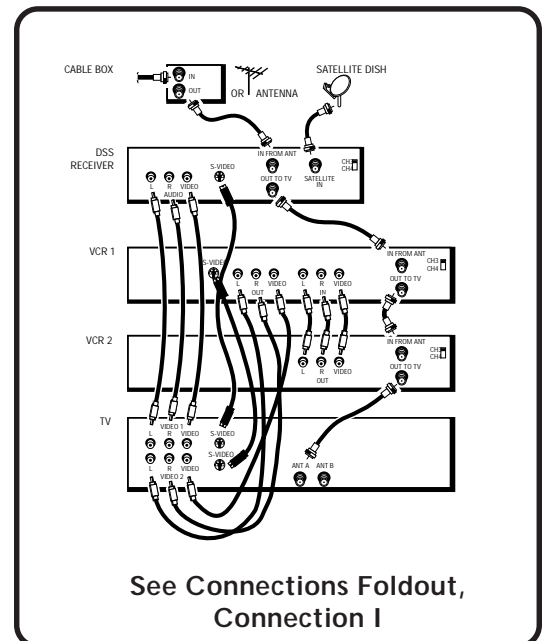
1. Turn VCR and DSS® receiver and laserdisc player off.
2. Press TV and tune to a channel.

#### To watch DSS® programming:

1. Press DSS•CABLE and tune to a channel.

#### To record from one VCR to the other (tape dubbing):

1. Turn DSS® receiver off.
2. Insert original tape into VCR2.
3. Insert blank tape into VCR1.
4. Press VCR1.
5. Set VCR to line input (for more, see your VCR User Manual).
6. Press RECORD to begin recording.
7. Press VCR2•LD, then press PLAY.
8. If you want to watch a different channel, set the TV/VCR switch on both VCRs to TV; press TV; then tune to a channel.



## APPENDIX A: USING CONNECTION I

**To record off-air (cable or antenna) broadcasts and watch a different channel:**

1. Turn off VCR2.
2. Insert blank tape into VCR1.
3. Press VCR1.
4. Make sure to set VCR1 to line input.
5. Press RECORD to begin recording
6. To watch another channel, make sure the TV/VCR switch on the VCR is set to TV; then press TV and tune to a channel.

**To play a tape on VCR1:**

1. Press VCR1 and then press PLAY.

**Caution:** The unauthorized recording of copyrighted material may infringe upon the rights of others.

## APPENDIX B: CONNECTING OTHER COMPONENTS

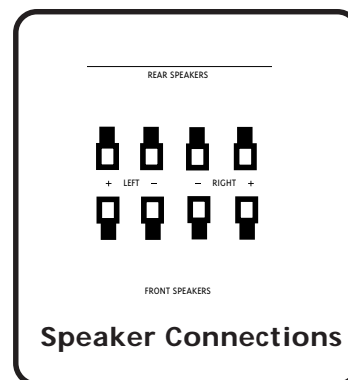
### CONNECTING EXTERNAL SPEAKERS

You can connect up to four additional speakers to the TV: two to the FRONT SPEAKERS terminals and two to the REAR SPEAKERS terminals.

#### FRONT SPEAKERS

To connect external speakers:

1. Connect speakers to the FRONT SPEAKERS terminals.
2. Set the SPEAKER SWITCH to EXTERNAL.



#### REAR SPEAKERS

To connect rear speakers for surround sound effects.

1. Connect two speakers to the REAR SPEAKERS terminals.
2. Position them behind you in your TV room. To improve the surround sound effect, you may prefer to set or mount the several feet off the ground.

### CONNECTING SPEAKERS TO THE TV

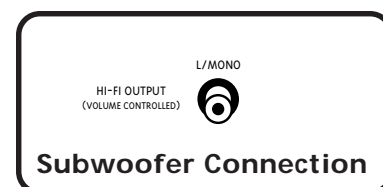
1. If necessary, remove the vinyl covering from the ends of the speaker wire and twist the wire core.
2. Press down and hold the lever on the speaker terminal.
3. Insert the wire core into the hole. Be sure to connect the (+) to (+) and (-) to (-).
4. Release the lever. Pull gently on the wire to see that it's connected securely.

**Important:** When connecting the speaker wire, make sure you connect the positive (+) terminal on the TV to the positive (+) terminal on the speaker. One side of the speaker wire is usually marked with a white stripe to help you match up the terminals correctly. If the (+) and (-) terminals are not matched properly, the speakers will not be "in phase," causing reduction in bass frequencies.

### CONNECTING A SUBWOOFER

To connect a subwoofer to the TV:

1. Connect the subwoofer's audio input to the left (L/MONO) HI-FI OUT jack.



#### IMPORTANT

**Do not allow the wire core to touch other wires or terminals. Damage to components could result if the cores of two wires touch each other.**

**The TV's internal speakers are turned off when you set the switch to EXTERNAL, so be sure to reset the switch back to INTERNAL if you ever disconnect the speakers from the TV.**

## APPENDIX B: CONNECTING OTHER COMPONENTS

### CONNECTING AUDIO COMPONENTS

#### CONNECTING A STEREO AMPLIFIER

1. Connect the amplifier's TV audio inputs to the left (L/MONO) and right (R) HI-FI OUTPUT jacks.
2. You may prefer to turn off the TV's internal speakers by selecting *Speakers* from the Audio menu, then turning the speakers off.

If your audio amplifier is part of a system that uses its own remote control, you may prefer to connect it to the TV using the Fixed Output jacks.

**Important:** Do not use the amplifier's PHONO inputs. If the amplifier is not stereo, use the L/MONO HI-FI OUT jack. Consult the amplifier's owner's manual for the manufacturer's recommended hookup.

#### CONNECTING A TAPE DECK

To use a tape deck to record audio from TV:

1. Connect the tape deck's audio inputs to the FIXED OUTPUT jacks on the back of the TV.

The FIXED OUTPUT jacks provide a fixed level audio signal, making them ideal for audio recording, or for use with an audio amplifier that has its own remote control. No matter how the volume changes on the TV, the output volume stays the same.

## APPENDIX B: CONNECTING OTHER COMPONENTS

### CONNECTING A CAMCORDER FOR PLAYBACK

There are two connections recommended for playing back from the camcorder to the TV:

#### FRONT CONNECTION PLAYBACK

1. Locate the AV adapter included with your TV accessories.
2. Connect the camcorder's video **output** to the adapter's video input (yellow).
3. Connect the camcorder's audio **output** to the adapter's audio input (white).
4. Connect the adapter to the A•V jack on the front of the TV.
5. Press INPUT on the remote until the channel marker displays FRNT.
6. Start playback on the camcorder.



#### BACK CONNECTION PLAYBACK

1. Connect the camcorder's audio/video outputs to the INPUT1 audio and video jacks on the TV.
2. Press INPUT on the remote until the channel marker displays VID1.
3. Start playback on the camcorder.

#### PLAYBACK FROM AN S-VHS CAMCORDER

To connect a camcorder with S-Video capability:

1. Connect an S-Video cable from the camcorder to the S-VIDEO jack on the TV.
2. Connect the camcorder's audio/video outputs to the INPUT1 audio and video jacks on the TV.
3. Press INPUT on the remote until the channel marker displays VID1.
4. Start playback on the camcorder.

The AV adapter and the A•V jack on the front of the TV can be used to connect many types of audio-video components, not just camcorders. For example, if you need to connect a VCR temporarily, use the A•V jack and adaptor and connect it to the front of the set. It's easy and quicker than connecting to the regular AV jacks on the back of the TV.



## APPENDIX B: CONNECTING A CAMCORDER

### CONNECTING A CAMCORDER TO RECORD FROM THE TV

TO RECORD FROM THE TV TO THE CAMCORDER:

1. Connect the camcorder's audio/video input cables to the TV's FIXED OUTPUT jacks.
2. Consult your camcorder's owner's manual for instructions on camcorder recording.

### RECORDING FROM AN S-VHS CAMCORDER

The TV does not supply video output in S-Video form. Use the connection described above.

**The TV must remain on during recording. If you change channels on the TV, the channel change will be recorded.**

**Signals from the S-Video connector do not come through the FIXED OUTPUT video jack. To record to an S-Video component, remember to connect its regular video cable as well as the S-Video cable.**

# APPENDIX C: TROUBLESHOOTING TIPS

## TROUBLESHOOTING

Troubles sometimes are caused by simple “faults” that you can correct without the help of a service technician. If you experience any difficulty with your TV, check a few basic remedies before calling your service technician.

### **TV will not turn on**

- Check to make sure it is plugged in.
- Check the wall receptacle (or extension cord) to make sure it is “live” by plugging in something else.
- Maybe batteries in remote control are “dead.”
- Maybe remote control was not aimed at remote sensor.

### **Controls don’t work**

- If using remote control, make sure remote is in TV mode by first pressing TV button.
- Try unplugging set for two minutes and then plug it back in and turn it on again.

### **Problems with Remote**

- Maybe something was between the remote and the remote sensor.
- Maybe the remote was not aimed directly at the component (TV or VCR) you were trying to control.
- Maybe remote is not in TV Mode. Press the TV button so remote will control TV.
- Maybe batteries in remote are weak or dead. Try replacing batteries.
- Maybe batteries were installed incorrectly. Try replacing batteries correctly.

### **Turns off while playing**

- Schedule function may have been activated.
- 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.

### **TV Turns on unexpectedly**

- Schedule On function may have been activated.

### **Schedule does not turn off the TV at the set time**

- Check schedule on/off function (it must be set to On).
- Check to make sure clock is set to the correct time.

## APPENDIX C: TROUBLESHOOTING TIPS

### **Blank screen**

- Maybe the device connected to the input jacks is not turned on.
- Try another channel.
- Press RESET, in case the picture controls are set too low.

### **No sound, picture okay**

- Maybe sound is muted. Try pressing volume up button to restore sound.
- Maybe TV's speakers are turned off. Check Speakers On/Off function.
- If using an S-VHS component, remember to also connect the component's L and R AUDIO OUT jacks to the TV's L and R INPUT 1 jacks.
- Maybe SPEAKER switch on the back of the TV is not in the INTERNAL position.

### **Can't select certain channel**

- If using a VCR, check to make sure the TV/VCR switch on the VCR is in the correct position.

### **Noisy stereo reception**

- May be a weak station. Use SRS button to change to mono mode instead of stereo.

### **No picture, no sound but power light is on**

- Maybe someone changed cable/air function to wrong position.
- Maybe a vacant channel is tuned.
- If watching VCR (connected only through antenna input), make sure TV is tuned to channel 3 or 4 – same as CH3/4 switch on VCR. Also check to make sure TV/VCR switch on VCR is in correct position.

### **Sound okay, picture poor**

- Check antenna connections.
- Try adjusting sharpness function to improve weak signals.

### **Black Box appears on the screen:**

- Captioning may be turned on. Check the Closed-Caption Display control panel in the Channel Menu.

# APPENDIX D: LIMITED WARRANTY

## LIMITED WARRANTY

### What your warranty covers:

- Any defect in material or workmanship.

### For how long after your purchase:

- 90 days for labor charges.
- One year for parts.
- Two years for picture tube.

(The warranty period for rental units begins with the first rental or 45 days from the date of shipment to the rental firm, whichever comes first.)

### What we will do:

- Pay any Authorized RCA Television Servicenter the labor charges to repair your television.
- Pay any Authorized RCA Television Servicenter for the new or, at our option, refurbished replacement parts and picture tube required to repair your television.

### How you get service:

- For screen sizes 20" and smaller: Take your RCA television to any Authorized RCA Television Servicenter, and pick up when repairs are complete.
- For screen sizes larger than 20": Request home service from any Authorized RCA Television Servicenter.
- To identify your nearest Authorized RCA Television Servicenter, ask your dealer, look in the Yellow Pages, or call 1-800-336-1900.
- Show the service technician your evidence of purchase date or first rental.

### What your warranty *does not* cover:

- Acts of God, such as but not limited to lightning damage.
- Customer instruction. (Your Owner's Manual clearly 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 replaceable fuses.
- Images burnt onto the screen.
- 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.

### Product Registration:

- Please complete and mail the Product Registration Card packed with your set. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

### How state law relates to this warranty:

- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

### What if you purchased your television outside the U.S.A.:

- This warranty does not apply. See your dealer for details.

## APPENDIX E: CARE AND CLEANING

### CARE AND CLEANING

You can clean the TV as required, using a soft cloth or the dusting attachment for your vacuum cleaner. Be sure to occasionally vacuum the ventilation slots in the cabinet to help assure adequate ventilation.

To clean the TV screen, use a diluted soap and water mixture and a soft cloth. Do not use furniture polish on the TV cabinet or screen.

**While cleaning do not allow liquid to run down the screen and inside the TV. Also, avoid placing drinks or vases with water on top of the TV. This could cause damage to the TV.**

# ACCESSORY CABLES

## General Cable Information

Antenna (or cable-TV) connections are made with either coaxial antenna cable or twin-lead cable. Coaxial cables are shielded so they are less susceptible to hum or interference from adjacent cables.



Slip-on Connector



Screw-on Connector

Round 75-ohm coaxial cable



Flat 300-ohm twin-lead cable

Most audio/video connections between components can be made with shielded audio and video cables that have RCA-type phono connectors.



Standard Audio/Video Cable with RCA-type phono plugs

## Color-Coded Jacks

The jacks on the TV's monitor panel are color-coded for ease of use. The VIDEO jacks are yellow, the right AUDIO jacks are red, and the left AUDIO JACKS are white. When connecting components to each other, be sure that you always connect left outputs to left inputs and right outputs to right inputs. If a component has only one output (mono), connect it to the R/MONO INPUT jack.

To connect S-VHS (Super-VHS) components, an S-VHS video cable is required.

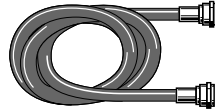


## Gold-Plated Jacks and Gold-Tipped Cables

Your RCA monitor panel is equipped with gold-plated jacks. The gold plating helps prevent oxidation of contacts which provides much less loss than conventional contacts. A complete line of gold-tipped cables is available to help you obtain optimum performance from your equipment.

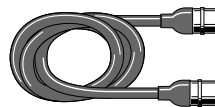
The following accessories are available from most RCA dealers and electronics supply stores in case you want to position your components farther apart or need additional cables.

## Antenna Cables



### Screw-on Cable

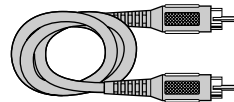
Attaches to the round antenna connectors (called 75-ohm F-type) on the back of your VCR or TV. The ends screw onto the connectors for a secure connection.



### Push-on Cable

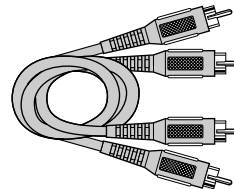
Attaches to the round antenna connectors (called 75-ohm F-type) on the back of your VCR or TV. Ends push on for a quick connection.

## Audio/Video Cables



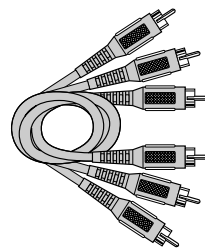
### Audio/Video Cable

Shielded cable for connecting AUDIO and VIDEO jacks. Has an RCA-type phono plug on each end.



### Monaural VCR Dubbing Cable

Double cable that lets you connect the VIDEO and AUDIO JACKS of two VHS VCRs to duplicate tapes. Can also be used to connect a VCR to your TV. Cable is color-coded and shielded. Has RCA-type phono plugs on each end.

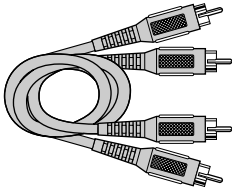


### Stereo VCR Dubbing Cable

Triple cable that lets you connect the VIDEO and AUDIO jacks of stereo components.

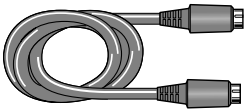
# ACCESSORY ORDER FORM

## Audio/Video Cables *continued*



### Stereo Audio Cable

Double gold-tipped cable generally used for connecting stereo audio components.



### S-VHS Video Cable

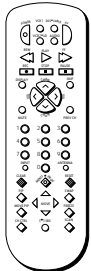
Has multi-pin connectors on each end for connecting S-VHS components to your TV.



228449

### Audio•Video Adapter

Use the Audio•Video adapter to plug a cam-corder into the front of the TV. Replacements or spares can be ordered as needed.



CRK70A1

### Remote Control

This is the remote control that came packed with your TV. Replacements or spares can be ordered as needed.

## Accessory Order Form for RCA TV Models

Description	Part No.	Price	Qty
Signal Splitter	AH047	\$ 3.95	
Gold-Tip Push-on Antenna Cable (6-ft)	AH065G	\$ 5.95	
Gold-Tip Push-on Antenna Cable (10-ft)	AH066G	\$ 4.95	
Gold-Tip Audio/Video Cable (3-ft)	AH069G	\$ 3.95	
Gold-Tip Audio/Video Cable (5-ft)	AH070G	\$ 7.99	
Gold-Tip Stereo Cable (3-ft)	AH072G	\$ 11.95	
Gold-Tip Monaural Dubbing Cable (6-ft)	AH075G	\$ 5.95	
Gold-Tip Stereo Dubbing Cable (6-ft)	AH077G	\$ 9.95	
Screw-on Antenna Cable (3-ft)	AH037	\$ 4.95	
Wireless Headphone System	PSWH100	\$149.95	
S-Video Cable (3-ft)	VAA014	\$ 27.55	
S-Video Cable (8-ft)	VAA020	\$ 29.95	
Remote Control (CRK70A1)	221115	\$ 41.00	
Audio•Video Adapter	228449	\$ 4.35	

Prices are subject to change without notice.

Total Merchandise (\$10 Minimum Order) .....

\$

Sales Tax .....

\$

We are required by law to collect the appropriate sales tax for each individual state, country, and locality to which the merchandise is being sent.

Shipping, Handling, and Insurance .....

\$ 5.00

Total Amount Enclosed .....

\$

Use VISA or MasterCard preferably.  
Money order or check must be in U.S. currency only.  
No COD or CASH.

Detach Here

All accessories are subject to availability.  
Where applicable, we will ship a superseding model.

Please complete other side also

# ACCESSORIES

Charge your order on your VISA  
or MasterCard by  
filling in below

## USE YOUR CREDIT CARD

**IMPORTANT:** Copy complete account number  
from your VISA card



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

My card expires: 

--	--

--	--

**IMPORTANT:** Copy complete account number  
from your MasterCard



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Copy Number  
above your  
name on  
MasterCard

--	--	--	--

My card  
expires:

--	--	--	--

AUTHORIZED SIGNATURE

Prices are subject to change without notice.

**To order accessories, contact your local RCA Dealer.**

If a dealer is not nearby, you can also follow the instructions below to order by telephone.

## United States and Canadian Orders

To place your order by phone, have your Visa or MasterCard ready and call the toll-free number listed below between 8AM and 8PM Eastern Standard Time. **Use this number only to place an order for accessory items listed on this order form.**

**1 - 800 - 338 - 0376**

**PLEASE**



Print or type your name and  
address clearly. This will be your  
mailing label.

A complete and correct order will  
save you days of waiting.

Name: \_\_\_\_\_

Street: \_\_\_\_\_

\_\_\_\_\_ Apt: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_



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**THOMSON CONSUMER ELECTRONICS**

## CREATING A GREENER FUTURE

At **Thomson Consumer Electronics** we are dedicated to the preservation of our natural heritage and to a healthy and safe way of life for current and future generations. This is a global effort which encompasses every THOMSON facility throughout the world.

We believe that clean air, clean water, a protected earth, and healthy people are not only practical and desirable goals, but achievable ones as well. Our Corporate Environmental, Health and Safety Charter acknowledges our commitment to protect these precious assets and provides a challenging vision and guideline for conducting our business.

Below are a few examples of **Thomson's** achievements in our efforts to preserve our natural resources.

### THE EARTH

**Thomson** reclaims millions of pounds of hazardous waste annually, diverting it from landfills.

**Thomson** treats millions of pounds of waste water sludge annually and renders it non-hazardous.

**Thomson** recycles over 50 million pounds of non-hazardous material annually that otherwise would have been treated as trash, an overall recovery rate of 50%.

**Thomson** globally recycles millions of pounds of broken television picture tube glass annually through both internal and external reclaim processes.

### THE AIR

**Thomson** has replaced solvent-based paints at many locations resulting in an 80% reduction in toxic air emissions for equivalent material used.

**Thomson** has eliminated the use of ozone-depleting substances at television manufacturing facilities around the world.

**Thomson** collects and returns over 1.5 million pounds of glass and furnace dust to the glass making process annually.

**Thomson** has launched worldwide energy savings programs which contribute to efforts to reduce air emissions from electrical generating facilities.

### THE WATER

**Thomson** recovers over 2 million pounds of fine glass particles from process water each year and recycles them back into its glass furnaces.

**Thomson's** state-of-the-art waste water treatment plants filter out over 26 million pounds of solids from process water each year.

**Thomson's** U.S. glass factory recycles 2,500 gallons of water per minute and cleans 2.6 million gallons of water per day.

**Thomson** is researching new processes and is developing new manufacturing equipment and technologies to further reduce large volume water use.

**Thomson** has also increased its usage of recycled materials for packaging of our products. For example, in the U.S. and Mexico our television plants use recycled content in our television cartons and instruction booklets. The inks used for the print on cartons and instruction booklets are soy based. For a free brochure regarding **Thomson's** Environmental Health and Safety Programs, write to Thomson Consumer Electronics' address below, attention Environmental Programs: INH340.

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.

## **THOMSON CONSUMER ELECTRONICS**

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