Using the Remote Control

TV Codes

Akai 03	NAD 07
AOC06,12	NEC
Candle06	Panasonic 04, 08, 11
Citizen06	Philco 04, 06, 12
Colortyme06	Philips 03, 04, 06, 12
Concerto	Pioneer 06
Curtis Mathes 01,06	Portland 06, 12
Daewoo 06,12	Proscan 01
Daytron 06	Proton 06
Electrohome	Quasar 11
Emerson	Radio Shack 01, 05, 13
Envision05, 06	RCA 01, 06, 12
Fisher05, 08	Realistic 05
GE 00, 01, 06, 11	Sampo 06
Goldstar 06,12	Samsung 06, 09, 12
Hallmark06	Sanyo 05, 08
Hitachi 06,14	Sears 01, 05, 06, 07, 08, 10, 12
Infinity04	Sharp
J C Penney 00, 01, 06, 09, 12	Sony 03
JBL04	Soundesign 06
Jensen06	Sylvania
JVC 10, 11	Technics 11
Kawasho03, 06	Techwood
Kenwood06, 12	Teknika 06
Loewe04	TMK 06
Luxman 06	Toshiba 05, 07, 08, 09
LXI04, 05, 07	Universal 00
Magnavox04, 06, 12	Victor 10
Marantz04, 06	Wards 00, 01, 04, 06, 12, 13
MGA06, 12	Yamaha 12
Mitsubishi	Zenith 02
MTC06	

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Operating the TV

After you set up the remote control, see which buttons operate your TV:

- 1. Point the remote control at the TV, and press the TV button. If the TV does not turn on, press the TV button and then press the ON •OFF button.
- 2. You may want to experiment to see which buttons operate your TV. Try pressing buttons, such as VOL and MUTE. See the button descriptions in this chapter for details about what each remote control button does.

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2/7/01, 4:56 PM

Chapter 4

Using the VCR's Features

Chapter Overview:

- Recording
- Express Recording (XPR)
- Timer Recordings
- Using the VCR Plus+ System
- Copying and Editing Tapes



Recording Features

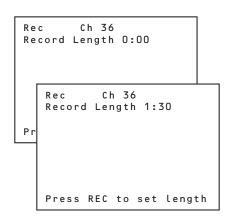
Your VCR provides many ways to capture programming:

- 1. **Recording** lets you press one button to record a program.
- 2. *Express Recording (XPR)* allows recording to start while a program is being watched. This feature automatically stops recording after a designated period of time.
- 3. **Timer Recording** program the VCR for a daily, weekly, or one-time recording which will automatically start and stop at the times you set.
- 4. **Timer Recording with the VCR Plus+ System** program the VCR by entering a PlusCode programming number found in most TV program listings.

Express Recording (XPR)

Use XPR to quickly record the remaining portion of a program being watched. XPR is a great way to capture the end of a sporting event that has run into overtime or a live broadcast that runs long.

XPR works in 30-minute increments. You can capture the last 30, 60, 90, etc. minutes of programming (depending on tape length), up to four hours total.



To Activate XPR:

- 1. If necessary, turn on the VCR and tune it to the channel with the desired programming.
 - 2. If necessary, insert a tape with its safety tab in place into the VCR. Make sure it is cued to record at the proper starting point.

Note: To override the preferred tape speed setting, press the SPEED button on the remote control repeatedly to toggle between SP and SLP choices.

- 3. Press the RECORD button on the remote control or VCR front panel to start recording.
- 4. Repeatedly press the RECORD button to set up the recording duration.
 - Each press of the RECORD button adds 30 minutes of recording time.
 - The VCR automatically turns off after recording for the set time.
 - To stop an XPR recording, press and hold the STOP button on the remote control or VCR front panel for several seconds until STOP appears on the VCR on-screen display.

Timer Recording

You can program up to eight different broadcasts to be recorded.

Notes– In order for a timer recording to work:

- The VCR's clock must be set correctly.
- Insert a tape with its safety tab in place and enough tape to record the program.
- If you've set up the VCR for a cable box for all channels, the output of your cable box appears in the channel item of the *Timer Recording* menu.
- PROGRAMS OVERLAP appears if two programs whose times overlap are entered.
- TIMER appears in the display when you turn off the VCR and a timer recording has been set. TIMER flashes if there is no tape in the VCR when a timer recording has been set and the unit is turned off.
- For a cable box or satellite receiver, turn it on and tune it to the channel you want to record before the recording is to begin.

To Set Up to as Many as Eight Timer Recording Programs:

- 1. Press the MENU button to display the VCR MAIN MENU.
- 2. Press the 2 button to choose TIMER RECORDINGS.
- 3. Press the 1 button to choose Create a New Program.
- 4. Select how often you want the program to record.
- 5. Enter the data for the program with the number buttons.

The data includes the channel number (press INPUT to select the Video Line Input if using A/V jacks to connect the VCR to the TV), and start and end times (including AM or PM). The start date is automatically entered based on the VCR clock. Both the recording date and speed can be changed.

- 6. Review the information to make sure it is correct.
- 7. Press the MENU button to save.

Stopping a Timer Recording

To stop or cancel a timer recording in progress (even an Express Recording):

Press and hold the STOP button for several seconds until *STOP* appears in the on-screen display.

Program 1 (One time) Channel 104 Cable Start Time 12:00 AM End Time 01:30 AM Start Date 11/16/01 Fri Tape Speed SLP Press CLEAR to erase Press MENU for next prog

TIMER RECORDINGS

How often should this

2 Daily (every day)

Weekly (once per week)

Remember to insert a recordable tape and

Program 1 has been saved

turn the VCR off before the program start time.

Press MENU to continue

Weekdays (M-F)

1 Create a New Program
2 Review Existing Progs.
3 Use VCR Plus+ Code

program record?

One time

0

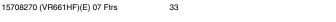
Reviewing and Clearing Programs

To review programs that you have already set up:

- 1. Press the MENU button to display the VCR Main Menu.
- 2. Press the 2 button to choose TIMER RECORDINGS.
- 3. Press the 2 button to choose *Review Existing Progs*.
- Press CLEAR to erase or MENU to see the next saved timer recording program.

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VCR Plus+ SILVER System

The VCR Plus+ SILVER system makes VCR set up easier by setting and updating the clock and channel list for you automatically. During the first-time QuickSet Guide setup, the VCR prompts you to enter your zip code. Soon after, the VCR clock will set itself and your VCR Plus+ system channel list will be input for you.

Time, date, and VCR Plus+ system information are downloaded from participating TV stations over your antenna or cable system. Time and date information are updated each time the VCR is turned off (and after every power interruption). So, when your TV stations or cable company update their lineups, your VCR will get the most current channel list automatically, freeing you from having to manually change the channel list yourself.

If your VCR Plus+ SILVER system fails to download the proper information for any reason, you can always manually map the channels. You can also turn off AUTO VCR Plus+ if you keep getting prompts about *multiple cable* services by pressing the 2 button in the *VCR Plus+ SETUP* menu.

VCR PLUS+ SETUP

Last automatic setup
was unsuccessful.
Would you like to:

1 Try again
2 Finish setup manually
3 Cancel the auto setup

Turning ON or OFF the Auto VCR Plus+ download

If the automatic VCR Plus+ download continuously fails for any reason, you will see the prompt to the left.

If you decide to turn off Auto VCR Plus+ all together, you can do this by:

- 1. Press the MENU button on the remote control to access the VCR's MAIN MENU
- 2. Press 4 to access the CHANNELS menu.
- 3. Press 4 to access the VCR Plus+ Setup menu.
- 4. Pressing 1 will take you to a screen to manually map VCR Plus+ channels. Pressing 2 will toggle between *Auto VCR Plus+: ON* or *OFF*.

Make sure this feature is turned off if you continually get *fail to download* prompts and map the channels manually.

VCR PLUS+ SETUP

1 Set channel lists
2 Auto VCR Plus+: ON

VCR Plus+ data was not found.

0 Exit

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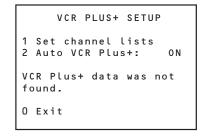




Mapping VCR Plus+ Channels Manually

Using the VCR Plus+ SILVER system can make taping timer recordings for cable or off-air antenna easier. If your VCR Plus+ SILVER system setup failed during the QuickSet, then you will need to map the channels for your local service manually. A worksheet and abbreviated codes for typical cable services in the U.S. and Canada are provided.

- 1. Press the MENU button to display the VCR MAIN MENU.
- 2. Press the 4 button to choose CHANNELS.
- 3. Press the 4 button to choose VCR Plus+ Setup.
- 4. Press 1 to display the Set Channel Lists menu.



VCR+ Channel My Channel
5 -4 -3 -> -> -2 -1 -Use CH+/- to select
Press 0-9 to change
Press MENU to save

(Screen shown is for an example only.)

5. Enter the data following the on-screen directions using your worksheet.

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Two-Digit VCR Plus+ System Channel Numbers for Cable TV (USA List)

35 American Movie Classics
39Arts &-Entertainment
57 Black Entertainment
54 Bravo
42 Cable News Network
45Cinemax
98Cinemax 2
37The Discovery Channel
53The Disney Channel
63Entertainment Television
34ESPN Sports Network
47The Family Channel
33 Home Box Office
95 Home Box Office 2
96 Home Box Office 3
51 The Learning Channel
46Lifetime
58The Movie Channel
48 Music Television
49The Nashville Network
38 Nickelodeon
64Nostalgia Television
99Quality Value Cable
41 Showtime
97 Showtime 2
59Sports Channel
52 Turner Network Television
44USA-Network
62 Video Hits 1
93 Viewer's Choice 1
94 Viewer's Choice 2
55WGN Chicago
43 WTBS Atlanta
60 WWOR-New York

Two-Digit VCR Plus+ System Channel Numbers for Cable TV (Canadian List)

67 Allarcom Pay Television/
Superchannel
44Arts & Entertainment
72 Cable News Network-
Headline News
61 Cable News Network
70 Canadian Home Shopping
Network
56Canal Famille
69 Cathay International
Television Inc.
68Chinavision Canada Corp
60Country Music Television
63 Family Channel
62First Choice
96 First Choice Two
97 First Choice Three
99First Choice Four
90 House of Commons
91La Chaine Française
51 The Learning Channel
65 MeteoMedia/The Weather
Network
48 MuchMusic Network
55MusiquePlus
52 Nashville Network
73Newsworld/CBC
53Le Reseau des Sports
43 The Sports Network
64 Super Ecran
37Super Ecran B
98 Super Ecran C
66Telatino Network
46 TV5 Montreal
92 Viewer's Choice 1
93 Viewer's Choice 2 94 Viewer's Choice 3
95 Viewer's Choice 4
71 Vision TV: Canada's
Faith Network
38 Youth TV, Canada Inc.

Note: Refer to your local TV program listings for a complete VCR Plus+ channel list for your viewing area or contact your cable company. Using the list may save you some time.



VCR Plus+ System Worksheet

Broadcast or Cable-TV Station Name	VCR Plus+ System Channel Number**	Channel Number You Receive the Station On*
НВО	33	
ESPN	34	

^{*}Check your local or cable listings for the channel number you receive this station on.

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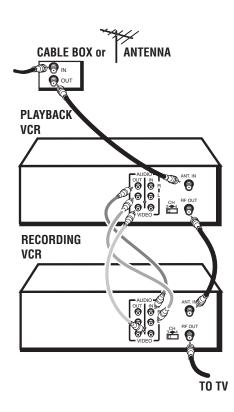


^{**}Check your local listings for broadcast or VCR Plus+ channel number assigned.

Recording Broadcast Stereo TV or SAP (Second Audio Program)

Some TV programs are broadcast with stereo audio or SAP (Second Audio Program).

- 1. Turn on the TV and tune it to the VCR viewing channel (either 03, 04, or the TV's Video Line Input).
- 2. Insert a tape with its safety tab in place.
- 3. If your VCR viewing channel is 3 or 4, make sure the VCR indicator appears in the front display. If not, press the TV•VCR button on the remote control to turn it on.
- 4. Press the SPEED button on the remote control if you want to override the preferred Tape Speed setting. The tape speed indicator appears on the TV screen.
- 5. Select the channel or Video Line Input to be recorded.
- 6. Set the *Reception: STEREO/MONO/SAP* feature for the type of audio you want to record.
- 7. Press RECORD to start recording.
- 8. Press STOP when finished.



Caution:

The unauthorized recording of satellite broadcasts, television programs, or other copyrighted materials may infringe the rights of others.

Copying and Editing Tapes Using Two VCRs

Use one VCR as the *playback* VCR and the other as the *recording* VCR.

- 1. Turn on the TV and VCRs.
- 2. Tune the TV to the VCR viewing channel (either 03, 04, or the TV's Video Line Input).
- 3. If you connected your VCR using the ANT. IN and RF OUT jacks, tune the *recording* VCR to channel 3 or 4—whichever is selected on the back of the *playback* VCR.
 - If you have connected your VCR using the A/V jacks, press INPUT on the *recording* VCR's remote control to select the Video Line Input. Select L1 for the jacks on the back of the VCR or L2 for the jacks on the front.
- 4. Insert the tape you want to copy into the *playback* VCR. Insert a tape with its safety tab in place into the *recording* VCR.
- 5. Press PLAY on the *playback* VCR to begin playback. When you reach the point on the tape or program where you want to begin copying, press the PAUSE button. You may need to adjust the tracking.
- 6. Press the RECORD button, then press PAUSE on the recording VCR.
- 7. Press the PAUSE buttons on *both* VCRs at the same time to begin copying the tape.
- 8. To edit segments that you do not want to copy:
 - Press PAUSE on *recording* VCR to pause copying.
 - Locate the next segment you want to copy on the *playback* VCR by using FWD, REV, and PLAY, and then press PAUSE.
 - Press PAUSE on both VCRs at the same time to resume copying.
- 9. Press STOP on both VCRs when finished.

Picture Search Options

The basic way to search during playback is using the remote control's FORWARD or REVERSE buttons (FWD and REV on the VCR). This section contains several other options available for searching a tape.

Insert Tape:

Don't forget to insert a recorded tape when using the search features.

Forward and Reverse Search

You can search a tape during playback either forward or reverse in direction.

Note: Sound is turned off during picture search.

- 1. Press the FORWARD button to search forward or the REVERSE button to search backwards.
- 2. Press the FORWARD , REVERSE, or PLAY button to return to normal playback.

Slow Motion

You can view a tape during play or play-pause mode using Slow Motion search.

- 1. In pause mode, press the FORWARD (FWD) or REVERSE (REV) button to start slow-motion playback.
- 2. Press the FORWARD button to increase or the REVERSE button to decrease the search speed.
- 3. Use the TRACKING + or buttons to remove any streaks from the picture.
- Press the PLAY button to return to normal playback.
 The VCR switches automatically from slow-motion playback to stop after a few uninterrupted minutes.

Frame Advance

Frame Advance lets you view single-frame action during playback.

- 1. While playback is in progress, press the remote control's PAUSE button (PLAY/PAUSE on the VCR) to freeze the action.
- 2. Press the F. ADV button on the remote control each time you want to view the next frame of the recording.
- 3. Press the PAUSE or PLAY button on the remote control (PLAY/PAUSE on the VCR) to return to normal playback.

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Index Search

The VCR has a "VHS Index Search System" that automatically records index marks on the tape every time you start a recording. During playback you can locate the program you want to play by the number of index marks or by scanning. The VCR will search forward or reverse from the location you are at on the tape.

Press REV or FWD
to begin scanning
OR
enter a specific
index number
-Press SEARCH to exit

INDEX SEARCH

To Activate Index Search:

- 1. While playing back, press the STOP button to freeze the action.
- 2. Press the SEARCH button on the remote control to display the *INDEX SEARCH* screen on the TV screen.
- 3. If you want to search through a certain number of index marks, press two number buttons to enter the number of marks you want to search. Press the CLEAR button on the remote control to correct an entry.
- 4. Press the FORWARD button to search forward or the REVERSE button to search in reverse. The VCR will locate your index mark and begin playback. If you did not enter a specific index number, the VCR will locate the next index mark and begin playback.
- 5. Press STOP to stop Index Search.

Notes– Certain index marks may be missed by the VCR including:

- Marks too close to the current location of the tape.
- Those at the beginning of a recording lasting five minutes or less.
- Index marks that start at the beginning of the tape.

GO-TO SEARCH

Current tape counter is 2:17:25

Press REV or FWD to go to -:--:00

Press SEARCH to exit

Go-To Search

The Go-To Search feature enables the VCR to quickly locate a counter reading anywhere on the tape. When the VCR locates the counter reading, it will begin playback.

- 1. Press the STOP button.
- 2. Repeatedly press the SEARCH button on the remote control until the *GO-TO SEARCH* menu appears on the screen.
- Use the number buttons to enter the hour and/or minute of the counter reading you want the VCR to go to. If necessary, press the CLEAR button on the remote control to correct an entry.
- 4. Press the FORWARD button to search ahead or the REVERSE button to search behind.
- 5. Press the STOP button to end a Go-To search.

COMMERCIAL >> ADVANCE®

This feature uses patented technology to detect and mark most commercials on your tape for any recording that is more than 15 minutes long. Once recording is finished, the VCR rewinds the tape to the beginning of the recording and determines where the commercials are located. It then marks the beginning and end of the detected commercial segments, and when finished, returns the tape to the end of the recording. **It does not erase commercials from the tape.**

During playback, the VCR automatically skips the detected commercial segments, or you can chose to manually skip them. This feature reduces three minutes of commercials to approximately 8-12 seconds of fast forwarding in the SLP speed. You can select a background display of blue or see the video as the commercials are skipped.

Because television signals do not indicate where commercials are located, this feature finds and marks them through a set of formulas based on how television is broadcast today. Since television stations broadcast differently and insert their own commercials, you may experience some variations in this feature's effectiveness. Station promotions, identifications, and announcements are not considered commercials, but might be skipped. For more information, see "Questions and Answers About COMMERCIAL ADVANCE" in the *Reference* section.

All of the COMMERCIAL ADVANCE features are accessed through the COMMERCIAL ADVANCE menu.

- 1. Press MENU to display the VCR MAIN MENU.
- 2. Press 6 to display the PREFERENCES menu.
- 3. Press 8 to display the COMMERCIAL ADVANCE menu.

PREFERENCES

1 Remote Control: VCR1
2 Auto Play: ON
3 Auto TV/VCR: ON
4 EnergySaver: 2:00
5 Front Panel: AUTO
6 Tape Speed: SLP
7 Set Auto Repeat
8 COMMERCIAL ADVANCE
0 Exit

Now you can select one of the COMMERCIAL ADVANCE features.

COMMERCIAL ADVANCE 1 Marking: ON 2 Playback: AUTO 3 Display: Blue O Exit

The VCR is waiting to mark commercials in the program you recorded.

1 Mark them now 2 Mark them later 3 Don't mark commercials

The VCR will begin marking in 30 seconds...

COMMERCIAL ADVANCE Marking

Press 1 to turn commercial Marking ON or OFF.

- Select ON, and the VCR will mark commercials within approximately 30 seconds for the following types of recording:
 - Timer, Timer with VCR Plus+, or Express Recording
 VCR to automatically mark commercials after the power is tuned off
 - Recording Allows the VCR to prompt you to mark the commercials when you've stop the recording.
- Select OFF and the VCR will not mark the commercials.

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COMMERCIAL ADVANCE
1 Marking: ON
2 Playback: AUTO
3 Display: Blue

0 Exit

Timer Recordings and COMMERCIAL ADVANCE

When using Timer Recordings to tape two back-to-back programs on the same channel, you may want to program each show separately so that the beginnings and ends of programs are not automatically skipped by COMMERCIAL ADVANCE.

COMMERCIAL ADVANCE Playback

Press 2 to switch between Playback: AUTO and MANUAL.

 Select AUTO to have the VCR automatically advance through the blocks of marked commercials.

It works with most 30, 45, and 60-second commercials.

A commercial group starting with the first two minutes or last two minutes of a recording will not automatically be skipped.

A commercial will not be skipped if a recording starts in the middle of a commercial segment, one isolated commercial is shown without others, or a commercial is longer than one minute. Press FWD on the VCR (FORWARD on remote) to scan through the commercial.

Part of a recorded program may be skipped if the program segment is between commercials and less than one minute or there are frequent dark and quiet scenes.

 Select MANUAL and the VCR won't advance through the blocks of marked commercials until you press SEARCH.

To Override Automatic Skipping

If part of the program you've recorded is passed over, you can temporarily override the automatic skipping feature of COMMERCIAL ADVANCE.

- 1. While the desired portion of the program is being skipped, press the PLAY or STOP button on the remote control or VCR front panel.
- 2. To view the portion of the tape that was skipped, rewind the tape back to a position before the skipping started using the REVERSE (REV) button.
- 3. Press the PLAY button to start playback. The portion of the tape will no longer be skipped.

Automatic skipping will be enabled again after the VCR detects the end of the commercial group.

Notes: If you press SEARCH during playback of material other than commercials, the VCR advances to the end of the next "marked" commercial block and resumes playback.

The VCR resumes playback when it reaches the end of the marked commercials.

COMMERCIAL ADVANCE Display

Press 3 to switch between Display: BLUE or VIDEO.

- Select BLUE to display a blue background when the VCR advances through the block of marked commercials.
- Select VIDEO to display the recorded video when the VCR advances through the block of marked commercials.

MOVIE >>ADVANCE®

MOVIE ADVANCE helps you locate certain parts of prerecorded movies (rented or purchased). This feature works two ways: 1) you can go to the beginning of the movie, or, 2) you can skip from one preview to the next. MOVIE ADVANCE works only on tapes with the safety tab removed recorded in SP speed.

MOVIE ADVANCE What type of tape is this?

1 Purchased/Rented Movie
2 Home Recording
3 Other

Press CLEAR to cancel

MOVIE ADVANCE

Would you like to go to the start of the movie or to the next preview?

1 Go to movie 2 Go to preview

Press CLEAR to cancel

- 1. To select MOVIE ADVANCE, insert a tape with its safety tab removed and press the SEARCH button on the remote control.
- 2. Press 1 if the tape is a purchased or rented movie, press 2 if it's a recording made at home, or press 3 if it's something else, you don't know, or you do not want to select MOVIE ADVANCE.

Pressing 2 or 3 gives the same response and takes you to a different search feature. If you accidentally make a wrong selection, press STOP•EJECT on the VCR (STOP on remote) and reinsert the tape. Press SEARCH.

If you press 1, the MOVIE ADVANCE menu appears.

- 3. Press 1 to advance directly to the beginning of the movie or press 2 to view the first (next) preview.
 - Press 1 to Go To Movie. The following screen appears with a blue background.

When the movie is found, you will see a message reading *The movie is ready. Press PLAY to start.*

Note: You can press the STOP button to cancel the MOVIE ADVANCE search.

• Press 2 to Go To Preview. The on-screen display will tell you that the VCR is looking for the start of the next preview.

MOVIE ADVANCE

The movie is ready. Press PLAY to start.

Press STOP to cancel

Searching for preview

Press SEARCH to reverse Press STOP to cancel When a preview is detected, the VCR cues it and begins playing.

To Override the Show Previews Mode:

Press the SEARCH button while a tape is being searched.

Pressing the SEARCH button while:

- The tape is reversing will begin searching for the start of the next preview or long commercial.
- The tape is searching forward for the next preview will reverse the tape back to the start current preview.
- The VCR is playing will advance the tape to the start of the next preview, long commercial, or the start of the movie (whichever comes first).

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Pro-Tect Plus™ Locking Feature

To protect set timer recordings and to disable the VCR for use, the unit can be locked so that the buttons on the front panel or remote control won't work.

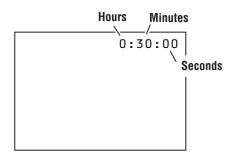
- **To Lock**: Press and hold either the remote control's ON•OFF or VCR button until the front panel display flashes.
- **To Unlock**: Press and hold either the remote control's ON•OFF or VCR button until the front panel display flashes for several seconds. Unlocking is the only way to turn on and use the VCR.

Tracking

Your VCR has automatic tracking which removes streaks and noise from the picture. Automatic tracking is activated when you insert a tape or turn on the VCR. Occasionally you may need to manually adjust tracking, especially if the tape was recorded on a different VCR. Use the TRACKING -/+ buttons on the VCR front panel or remote control to remove streaks and noise. You can also use tracking when pausing a tape to reduce the noise of the stilled picture.

When manually adjusting the picture, automatic tracking is turned off. To turn automatic tracking back on, eject the tape and reinsert it.

Note: Tracking has no effect when recording—only during playback.



Time Counter

The time counter shows the actual time used when recording or playing back a tape. The time counter helps locate the beginning or end of recorded events. It resets to 0:00:00 whenever a tape is ejected from the VCR.

For example, if you record a 30-minute program at the beginning of a tape, rewind it, and then want to go to the end of the first program to start another recording:

- 1. Press the INFO button **twice** to display only the time counter.
- 2. Press the CLEAR button to reset the time counter to 0:00:00.
- 3. Press the remote control's FORWARD button (FWD on the VCR) to advance a tape until the time counter reads 0:30:00.
- 4. Press the STOP button. This is the approximate end of a 30-minute program (you may want to press the PLAY button to verify). When the tape is cued correctly, you can begin recording.
- Press the INFO button to remove the time counter from the screen and return to the normal display mode.

On-Screen Displays

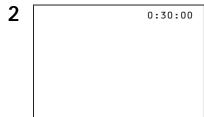
Pressing the INFO button displays the status of the VCR (Stop, Play Record, etc.) as well as the channel number, time counter position, date, time, and tape speed on the TV screen.

Note: The date and time must be set before they can be displayed.

_					
1	Stop	Ch (0.5	0:30:	00
	11/18/0	1 Si	ın 1	30PM	SIP

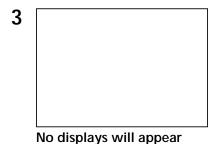
1. Press the INFO button to show the on-screen displays. The current time is displayed in the VCR's front panel.

On-screen display (times out)



2. Press INFO again to have only the time counter remain on the screen. The time counter is also displayed in the VCR's front panel.

Time counter only (does not time out)



3. Press INFO again to have no displays appear on the TV screen. The time counter remains in the VCR's display panel. This is useful for dubbing tapes.

(useful for dubbing)

4. Press the INFO button again to return to the normal display. The current time is displayed in the VCR's display panel.

Note: Turning off the VCR also resets the displays.

2/7/01, 4:56 PM

AUDIO

1 Reception: STEREO 2 Tape Playback: HI-FI

0 Exit

Audio Set-Up Features

Your VCR's audio setup features affect both tape playback and recordings. The features in this section are accessed through the *AUDIO* menu.

To Display the Audio Menu:

- 1. Press the MENU button to bring up the VCR MAIN MENU.
- Press 7 to choose AUDIO.

With the AUDIO menu displayed, you are ready to select an item from the menu to set up.

Reception

Some TV programs are broadcast with stereo audio or a Second Audio Program (SAP) which offers a second language. The Reception feature lets you select the type of audio you want to record. Press 1 repeatedly to switch between *Reception: STEREO, MONO,* or *SAP*.

- STEREO

 used for normal or stereo broadcast TV recording. The HI-FI
 indicator lights on the VCR front panel when the VCR's tuned station is
 broadcasting in stereo.
- MONO– used if the stereo signal is weak or the sound is too noisy.
- SAP

 used to hear/record a Second Audio Program instead of the normal
 audio on both the Hi-Fi and linear tracks.

Tape Playback

The VCR records the same audio on both the Hi-Fi stereo and linear tracks on the tape. Hi-Fi sound is recorded on separate left and right stereo channels. Monaural sound is recorded on the linear track. In the *AUDIO* menu, press the 2 button repeatedly to switch between *Tape Playback: Hi-Fi, LINEAR*, and *MIX*.

To enjoy Hi-Fi sound, connect your VCR to a stereo television or amplifier/receiver using the audio jacks. The Tape Playback feature lets you select which audio you play back.

- Hi-Fi- use to play back sound recorded on the Hi-Fi tracks and for normal use
- LINEAR— use to play back the sound recorded on the linear monaural track, such as a Second Audio Program, or a dubbed voice-over.
- MIX- used to play back the sound recorded on both the linear track and the Hi-Fi track, sound-on-sound. The Hi-Fi indicator lights when MIX is active.



Chapter 5

Other Information

Chapter Overview:

- Troubleshooting
- COMMERCIAL ADVANCE Q&A
- Front, Rear, and Display Panel Diagrams
- Specifications
- · Care and Cleaning
- Warranty Information
- Finding the TV's Video Line Input
- Advanced Connection Diagram
- Glossary
- Index





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Troubleshooting Tips

In this section, you will find answers to common recording, playback, and general VCR questions. Consulting with this section first when there is problem may help you answer common questions.

General VCR Problems

No power

- Check to make sure it is plugged into an operating outlet.
- Check to make sure your connections are correct.

VCR does not respond to the remote control

- Check to make sure there are no objects between the VCR and the remote control.
- The remote control's batteries may need changing.
- You are not in VCR-controlling mode. Press the remote control's VCR button to control it.

There's poor or no picture for normal TV viewing

- Make sure the VCR indicator is off.
- Make sure the TV is switched to an active channel.
- Make sure the antenna connections are secure and correct.

Rewind does not operate

Check to make sure the tape is not already rewound.

The clock shows an incorrect time or date

- There may have been a power interruption. Reset the VCR's time and date.
- Make sure the clock is set accurately (check AM/PM and date).
- Check the Daylight-Saving setting. The clock may have adjusted for Daylight-Saving Time.
- Time did not adjust for Daylight-Saving time.
- Check to make sure the Daylight-Saving Time feature is set correctly.

The VCR makes noise when stopped

• The VCR is removing the tape from the playheads. This is normal. The head cylinder inside the VCR will continue to rotate for a few minutes after you put the VCR in the stop mode.

Cannot select channels over 69

• Cable channels over 69 can only be selected if Signal Type: CABLE/ANTENNA feature is set to CABLE.

TIMER flashes on the VCR front panel display

- The clock is not set.
- Check to make sure there is a cassette in the VCR when a timer recording is set ad the power is turned
 off

On-screen menus appear in English, French, or Spanish

Check the LANGUAGE feature for the preferred on-screen language.



Recording Problems

Will not record

- Make sure there is a recordable tape in the VCR.
- Eject then reinsert the tape.
- Make sure the tape is not broken.
- Make sure the VCR is not in pause mode. Press PAUSE or PLAY to return to normal playback.
- Make sure the Pro-Tect Plus feature is not active.

A VCR Plus+ system or timer recording was not made or the wrong program recorded

- Make sure the correct PlusCode programming number is entered.
- Make sure the program was entered correctly (the wrong channel or times may be entered).
- Make sure the cable box or satellite receiver was turned on when recording was to begin.
- There may have been a power interruption. Reset the time and date.
- Check to see if time and date are correct including AM/PM.
- Make sure the program did not exceed the tape's length or that the tape was not rewound beforehand.
- Make sure the VCR was turned off at the time recording started.
- Make sure there was a tape in the VCR with its safety tab intact.
- The VCR ejects tapes when the end is reached during a timer recording.
- Make sure the VCR Plus+ system setup was completed correctly.

Will not record

- Make sure the tape's safety tab is intact.
- Make sure the VCR is not in Video Line Input mode. Press INPUT on the remote control to return to normal viewing.

Playback Problems

Snowy or no picture during playback

- Press the remote control's TV•VCR button to activate VCR-controlling mode. *VCR* appears in the front panel display when active.
- Check the TV channel selected (3 or 4) to make sure it matches the channel selected with CH. 3/4 switch on the back of the VCR.
- Check to make sure the TV's fine tuning is correct for the channel selected.
- If you use A/V cables and jacks to connect the VCR to the TV, check all connections for snug and correct connections.
- Check to make sure the TV monitor is set to Video Line Input (see *How to Find Your TV's Video Line Input* in this section of the manual for detailed information).
- Try another tape.
- Some snow/streaks are normal during search, stop action, frame advance, and slow-motion playback.

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Streaks in picture during normal playback

- Press one of the TRACKING buttons to move streaks up or down for the best picture.
- Check to make sure the tape is of good quality and not worn out.

Time counter not working or time counter not working in search modes

- The time counter does not advance during unrecorded portions of tape. When an unrecorded segment of tape is encountered, the time counter will hold its count until recorded material is detected again.
- A minus (–) will appear in front of the time if you rewind the tape farther back than a counter reading of 0:00:00.
- The time counter disappears during search; this is normal.

Will not play

- Check to make sure there is a tape in the VCR.
- Try ejecting and reinserting the cassette.
- Check to make sure the tape is not broken.
- Check to make sure the VCR is not in pause mode. Press PAUSE or PLAY to return to normal playback.
- Check the Pro-Tect Plus™ feature.

Will not Auto Channel Search active channels correctly

- Check to make sure the antenna connections are secure and correct.
- Check to make sure the Signal Type: CABLE/ANTENNA feature is set correctly.
- If Detect Automatically was selected for the Signal Type in the AUTO CHANNEL SEARCH menu, try using either CABLE TV or ANTENNA instead.
- May not be necessary if using a cable box for all channels. Contact your local cable company for more information.

Tape plays back in slow motion

• Press PLAY to return to normal playback.

Cassette with safety tab removed does not start to play automatically

• Check to make sure the AUTO PLAY ON/OFF feature is set to ON.

Time counter disappears during searching

• This is normal.

There is no stereo sound during playback

- Make sure the Tape Playback feature is set to *Hi-Fi* to hear stereo sound during playback.
- You must use A/V cables (not provided) and jacks to connect the VCR to the TV (or stereo) to hear true stereo sound during playback.

The stereo Audio is too noisy

- The stereo signal is weak. Set the Reception: STEREO/SAP/MONO to MONO.
- Press either the TRACKING or + button to minimize picture noise.



Questions and Answers About COMMERCIAL >> ADVANCE®

Will commercials be scanned through only on playback of recordings?

Yes. The VCR rewinds and marks commercial segments after a recording is finished.

How fast does this feature scan through commercial breaks?

In SLP tape speed, a 3-minute commercial break is scanned through in approximately 8-12 seconds. In SP, it takes about 25-35 seconds.

Are commercials still recorded if I want to watch them?

Yes. The recorded program, including commercials, can be viewed by setting the Playback feature to MANUAL.

What if the VCR scans forward through part of my program?

Press PLAy or STOP while the tape is being automatically skipped. rewind the tape back to a position before skipping started, then press PLAY. Automatic skipping will start again after the end of the commercial group is detected by the VCR.

Once a recording has been marked, does COMMERCIAL ADVANCE work each time the tape is played?

Yes. If the Playback feature is set to AUTO, the marked commercials should be skipped each time the tape is played in a COMMERCIAL ADVANCE VCR.

After marking commercials, is the tape left at the beginning or end of the recording?

The tape is left at the end of the recording so it is in position to begin additional programmed recordings.

Does the marking process interfere with other programmed recordings?

No. If two or more recordings are programmed together without sufficient time to mark the first recording, marking will take place after all recordings are completed.

What happens if the marking process is interrupted?

Marking can be interrupted to allow use of the VCR. Marking will resume again when the VCR's power is turned off as long as the tape has not been ejected from the VCR.

Does COMMERCIAL ADVANCE work in all recording speeds?

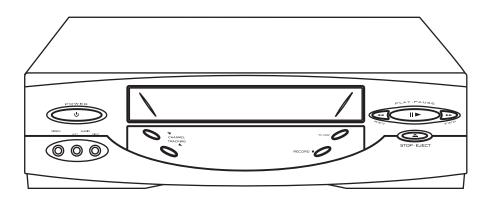
Yes, COMMERCIAL ADVANCE works in SP and SLP.

Will COMMERCIAL ADVANCE marked recordings work in non-Commercial Advance VCRs?

A COMMERCIAL ADVANCE marked recording will play in a non-Commercial Advance VCR, but commercials will not automatically be skipped.

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Front Panel

AUDIO (LEFT and RIGHT) and VIDEO In Jacks Receives signals from another component (like another VCR or camcorder) when connected to the VCR using A/V jacks. Use the INPUT button to select L2 to record from these jacks (L1 indicates the rear panel A/V jacks being active).

CHANNEL TRACKING Up and Down Adjusts the image quality by removing picture "noise" and distortion.

FWD Forwards the tape when the VCR is stopped. Searches the picture forward during playback. Starts slow motion during play-pause and increases slow-motion speed.

PLAY • PAUSE Plays a tape. Pauses action for viewing during playback. Pauses recording to prevent recording of unwanted scenes.

POWER Turns the VCR on or off.

RECORD Starts VCR recording. Also used for Express Recording (XPR).

REV Rewinds the tape when the VCR is stopped. Searches the picture in reverse during playback. Starts slow motion during play-pause and decreases slow-motion speed.

STOP/EJECT A single press of this button stops normal VCR functions such as record, playback, rewind, fast-forward, or pause. If pressed a second time, this button ejects an inserted tape.

TV•VCR Switches the picture signal so that it either comes from the VCR or the TV cable/antenna signal.





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Display Panel

Clock/Counter Displays current time, time counter, tape speed, or channel numbers when switching channels.

FUNCTION DISPLAYS:

dn & Ld (Down and Load) Front panel display alternates between these two words when time data is being downloaded.

REC (Recording indicator) The VCR is recording. REC flashes on the front panel display when a recording is paused.

(Timer indicator) Displayed when an Express Recording (XPR) or timer recording is under way or when the VCR is set for a timer recording and the power is turned OFF. *TIMER* flashes on the VCR front panel when a timer recording is set and no tape is inserted in the VCR.

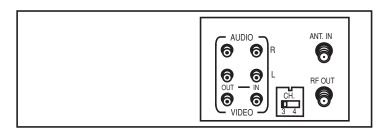
VCR indicator Indicates that the VCR is in VCR-display mode. Press the TV•VCR button to toggle between VCR and TV viewing modes.

- VCR indicator is ON when the picture displayed is from the VCR's tuner.
- VCR indicator is OFF when the picture displayed is from the TV's tuner.





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Back Panel

CH. 3/4 switch Determines the channel to which the TV must be tuned in order to see the VCR's picture. Not used when connecting the VCR to the TV using A/V cables.

AUDIO (LEFT and RIGHT) and VIDEO IN jacks Receives signals from another component, such as another VCR or camcorder, when connected to these jacks. Use the INPUT button on the VCR or remote control to select the rear video line input A/V jacks (L1) to record from these jacks.

AUDIO (Right and Left) and VIDEO OUT jacks Sends signals from the VCR to another component, like a TV or another VCR, when the other component is connected to these jacks.

ANT. IN jack Receives a signal from an antenna or cable system when the VCR is attached with RF cables.

RF OUT jack Passes the VCR's signal to a TV using the supplied RF cable.





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Specifications

Format: VHS

Record/Playback Video: 4-head

System: Audio: VHS Hi-Fi record/playback system

Video Signal System: EIA standard: NTSC color

Antenna: 75-ohm external VHF/UHF combined

antenna terminal

Tuner: USA: 181 channels capability*

(125 cable channels)

Canada: 178 channels capability*

(122 cable channels)

Type: AutoProgramming frequency synthesis

Power Requirement: 120V AC, 60 Hz

Power Consumption: 17 watts (standby < 3 watts)

Dimensions: 3.64 inches high (91 mm)

14.4 inches wide (360 mm) 9.4 inches deep (230 mm)

Weight: 6.4 pounds (2.9 kg)

Other: Automatic head cleaner

Storage Temperature $-22^{\circ}F$ to $+149^{\circ}F$ Range: $-30^{\circ}C$ to $+65^{\circ}C$)

Operating $+41^{\circ}F$ to $+104^{\circ}F$ Temperature Range: $+5^{\circ}C$ to $+40^{\circ}C$)

*Check your cable company's compatibility requirements.

Cleaning the VCR

Use a soft cloth or dusting attachment of your vacuum cleaner to dust your VCR. Remove dust from the ventilation holes on the top, back, sides, and bottom of the VCR and all connected components.

Plastic surfaces are easily scratched and can be marred by alcohol and various solvents. Avoid excessive use of oil-based furniture polishes since the materials used in the cabinet will accumulate more dust. We recommend using a nonabrasive, antistatic cleaner and polisher. If part of the program is skipped, rewind the tape to the beginning of the skipped program segment and press PLAY.

Chapter 5 55

RCA VCR Limited Warranty

What your warranty covers:

· Any defect in materials or workmanship.

For how long after your purchase:

- 90 days for labor charges.
- One year for parts.

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

What we will do:

- Pay any Authorized RCA VCR Service Center the labor charges to repair your VCR.
- Pay any Authorized RCA VCR Service Center for the new or, at our option, refurbished replacement parts required to repair your VCR.

How you get service:

- Take your VCR to any Authorized RCA VCR Service Center. To identify your nearest Authorized RCA VCR Service Center, ask your dealer, look in the Yellow Pages, or call 1-800-336-1900.
- Show the Authorized Service Center Representative your evidence of purchase date or first rental.
- · Pick up your VCR when repairs are completed.

What your warranty does not cover:

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

Product Registration:

• Please complete and mail the Product Registration Card packed with your VCR. 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 warranty:

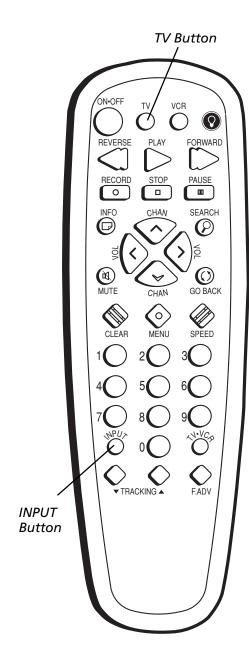
• This warranty gives you specific legal rights and you also may have other rights that vary from state to state.

If you purchased your VCR unit outside the United States:

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

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





Finding the TV's Video Line Input

You need to tune your TV to the video line input if you are using the VCR's Audio/Video (A/V) OUT jacks to connect to the TV's A/V input jacks. You must select the TV's video line input before you can see the VCR's menus, the cable/antenna reception, and the content that's on a tape.

The video line input for TVs varies by brand and model. Below are some steps to try to find your TV's video line input:

- If your TV brand is RCA, GE, or Proscan, press the TV button on the VCR's remote control, then press the INPUT button.
- If you have another brand of TV, see the chapter *Using the Remote Control* to see if the VCR's remote can be programmed to control your TV. If so, once completed, follow the step above.

If those options do not work, try the following ideas. You might access the video line input by:

- Pressing a button on the TV's remote control (see the table below).
- Selecting a specific channel from the TV's on-screen menu system (see the table below).
- Tuning directly to the video line input by selecting a specific channel number (see the table below)
- Going through all available channels by pressing the channel up or down buttons on the TV or its remote control.

Common Video Line Input scenarios:

Video Inpu	ıt Channel Varia	tions
Button/Switch on the TV	Button on the TV Remote	Channel Number
VIDEO SIGNAL VID 1 VID 2 S-VID S-VIDEO	VID 1 LINE VID VIDEO S-VID INPUT S-VIDEO SOURCE AUX	00 90 91 92 93 VID 1 VID 2

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Advanced Connection

TV + VCR + Satellite Receiver

Using A/V and RF Coaxial Cables

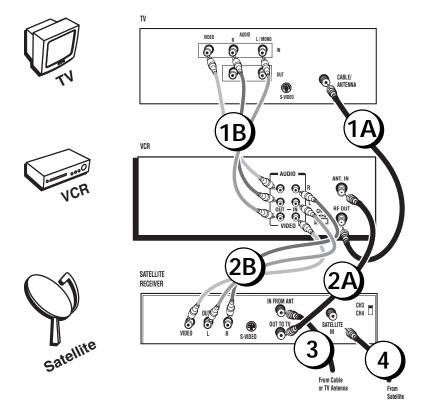
Note: Your satellite receiver and television back panels may not look exactly like the models shown here. This connection can also be used for a cable box.

1. Connect the VCR to the TV

- A. Connect one end of the supplied RF coaxial cable to the RF OUT jack on the back of the VCR and the other end to the TV's antenna input jack.
- B. Connect the A/V cables. Connect audio cables to the VCR's R and L Audio OUT jacks and the other ends to the TV's corresponding audio input jacks (if your TV only has one audio input jack, use the VCR's L audio jack to connect). Connect one end of the video cable to the VCR's VIDEO OUT jack, and the other end to the TV's video input jack.

2. Connect the satellite receiver to the VCR

- A. Connect one end of a second RF coaxial cable (not included) to the VCR's ANT.
 IN jack. Connect the other end to the satellite receiver's antenna output jack.
- B. Connect the A/V cables. Connect audio cables to the VCR's R and L audio IN jacks and the other ends to the satellite receiver's audio output jacks. Connect one end of the video cable to the VCR's VIDEO IN jack, and the other end to the satellite receiver's video output jack.



3. Connect a TV antenna or cable feed to the satellite receiver

If you have cable or a standard TV antenna, connect its RF coaxial cable (not included) to the antenna input jack on the satellite receiver.

4. Connect the satellite antenna's cable to the satellite receiver

Connect the satellite antenna's RF coaxial cable feed (not included) to the receiver's satellite input jack.

Note: To hear stereo output from the satellite receiver, you must use the TV's video line input "channel." RF coaxial cable only carries mono sound.

Glossary

A/V Jacks & Cables Commonly called "RCA-type" cables. Improves picture and sound quality over RF Coaxial cables. A/V cables are required for stereo audio.

EnergySaver Automatically turns the VCR off after a user-defined period of inactivity.

Express Recording (XPR) A method of timer recording which tapes for a set period of time using 30-minute increments.

Pro-Tect PlusTM Allows the VCR to be disabled so that the front panel and remote control buttons don't work. Useful for protecting timer recordings.

QuickSet Guide An first-time use, interactive, menu-based system that walks you through several setup steps in a series of questions. The QuickSet Guide is also available in the VCR's Main Menu.

SAP (Second Audio Program) A second sound track that may be included with a stereo broadcast. Usually used for foreign language dubs of programs.

VCR Channels List The active list of channels available to the VCR using the CHANNEL +/- buttons.

XPR See *Express Recording* above.







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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.

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