

VR327

USER'S GUIDE

8-51-04-852

Important Informationi

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VIDEO CASSETTE RECORDER

RENT

Important Information

WARNING

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

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.

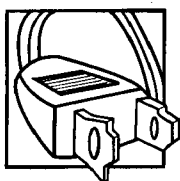


This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

Cautions



To prevent electric shock, match wide blade of plug to wide slot, fully insert.

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.

Do not defeat the safety feature of the plug. The wide blade fits into the wall socket only one way. If you need an extension cord, make sure it matches the plug of the VCR.

For U.S.A. — Operate VCR only on 120 volts, 60Hz AC power (normal house power).

For safety reasons, make sure any equipment or accessories connected to this product bears the UL listing mark, or if purchased and used in Canada, the CSA certification mark. If in doubt, contact qualified service personnel.

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

Note To Cable TV Installer

This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Product Registration

Please fill out the product registration card and return it immediately. Returning this card allows us to contact you if needed.

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

Model No. **VR327** _____

Serial No. _____

Purchase Date: _____

Dealer/ Address/Phone: _____

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Choosing a Hookup

The hookups on pages 3 through 5 are divided into two hookup types: Basic (A) and Advanced (B).

The basic hookup shows the backs of TVs that have only an antenna/cable connection. It is the easier of the two and additional accessories may not be needed.

The advanced hookup shows the VCR hooked up to a monitor/receiver (TV with audio and video jacks) using a signal splitter. This connection may improve the picture quality as well as convenience of operation.

Answer the questions to choose the hookup for your VCR.

1. How do you receive your TV signals?

Choose one answer from below.

- A. Outside antenna – Turn to page 3.
- B. Rabbit ears (set-top) and/or bow tie antenna – Turn to page 3.
- C. Cable System – Go to question 2.

2. What type of Cable-TV system* do you have?

Choose one answer from below.

- A. Cable without a box – Turn to page 3.
- B. Cable box to unscramble all the channels – Turn to page 4.
- C. Cable box to unscramble only pay channels, such as HBO, Showtime, Cinemax, etc. – Turn to page 5.

*You may need to contact your local cable company for assistance.

Optional Hookups

How to hook up two VCRs for copying tapes?

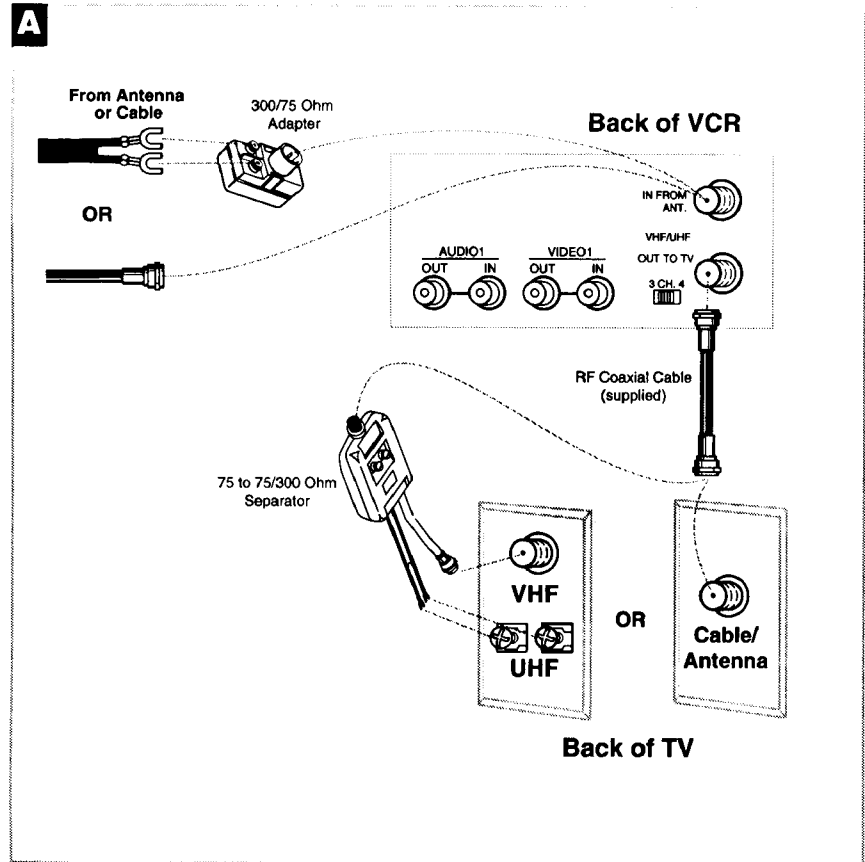
- A. Select a hookup by answering questions 1 and 2 above.
- B. Then modify the connections as shown on page 6.

Antenna or Cable System Without a Cable Box

A. Basic hookup.

Use this hookup for a simple connection which requires fewer accessories.

1. Set the 3CH.4 switch on back of VCR to either channel 3 or 4.
You will tune the TV to this channel and use the TV•VCR button to watch the VCR.
2. Connect as shown.
This connection may require additional accessories not provided.
3. Plug in power cords of VCR and TV.
4. **Continue to page 7.**

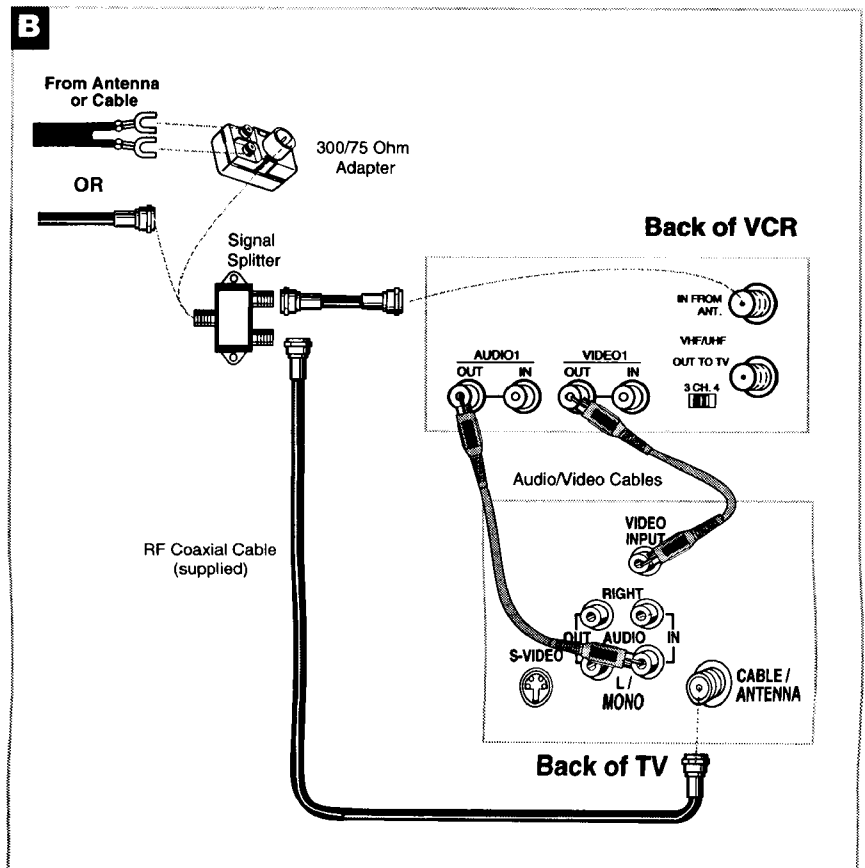


B. Advanced hookup.

Use this hookup for slightly improved picture quality and more convenient operation — use of TV•VCR button not required.

1. Connect as shown.
This connection requires additional accessories not provided.
2. Plug in power cords of VCR and TV.
3. **Continue to page 7.**

You will tune the TV to its video input to watch the VCR.



Cable System With Cable Box to Unscramble All Channels

A. Basic hookup.

Use this hookup for a simple connection which requires fewer accessories.

1. Set the **3CH.4** switch on back of VCR to either channel 3 or 4.

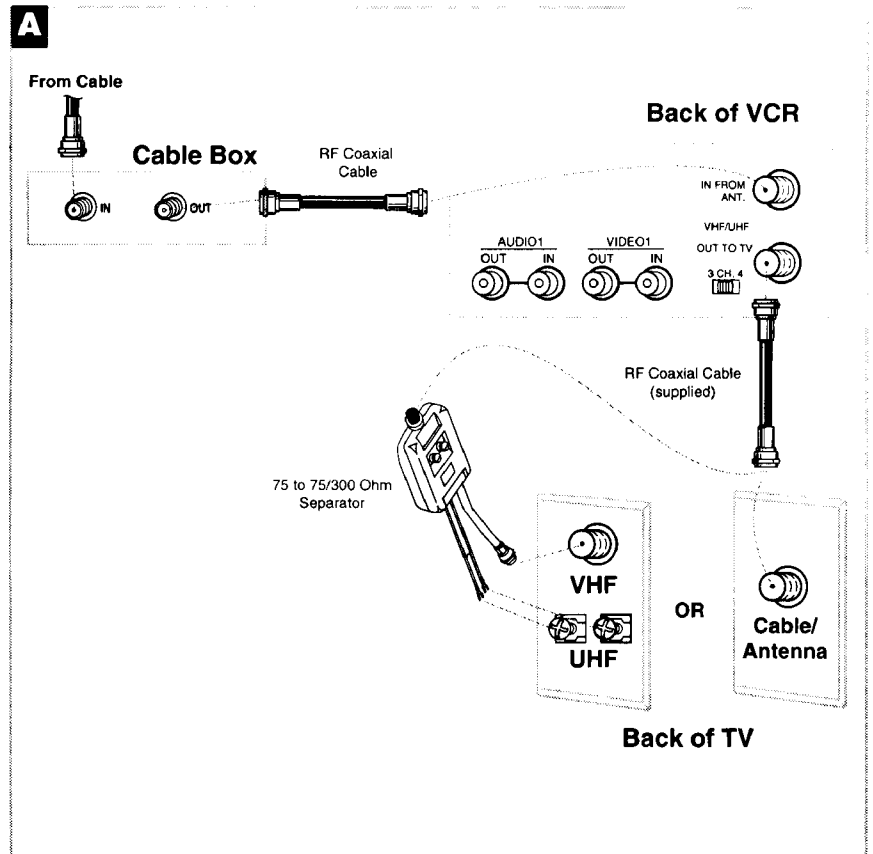
You will tune the TV to this channel and use the TV•VCR button to watch the VCR.

2. **Connect as shown.**

This connection may require additional accessories not provided.

3. **Plug in power cords of VCR, TV, and cable box.**

4. **Continue to page 7.**



B. Advanced hookup.

Use this hookup for slightly improved picture quality and more convenient operation — use of TV•VCR button not required.

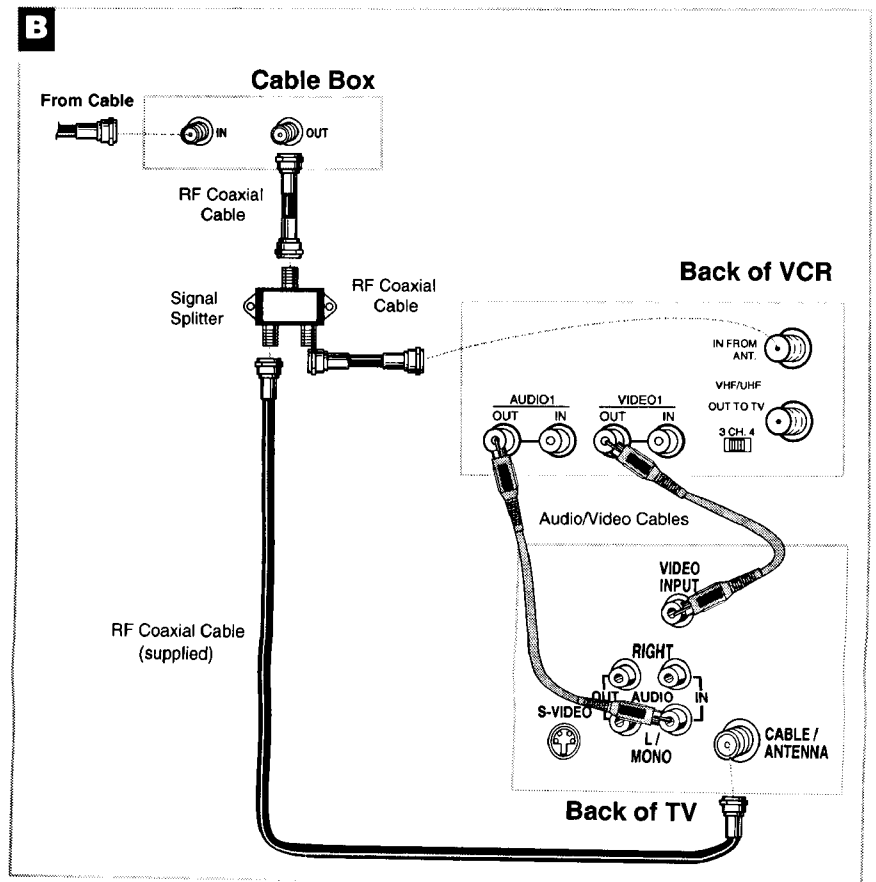
1. **Connect as shown.**

This connection requires additional accessories not provided.

2. **Plug in power cords of VCR, TV, and cable box.**

3. **Continue to page 7.**

You will tune the TV to its video input to watch the VCR.



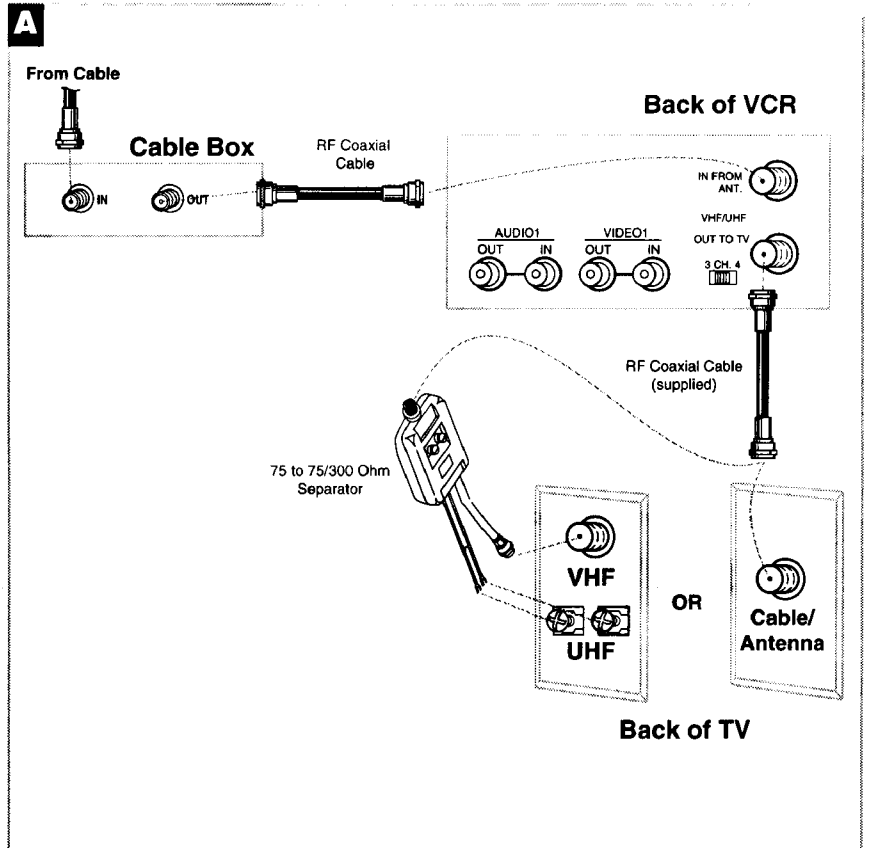
Cable System With Cable Box to Unscramble Only Pay Channels

(such as HBO, Showtime, Pay-Per-View, etc.)

A. Basic hookup.

Use this hookup for a simple connection which requires fewer accessories.

1. Set the **3CH.4** switch on back of VCR to either channel 3 or 4.
You will tune the TV to this channel and use the TV•VCR button to watch the VCR.
2. **Connect as shown.**
This connection may require additional accessories not provided.
3. Plug in power cords of VCR, TV, and cable box.
4. **Continue to page 7.**

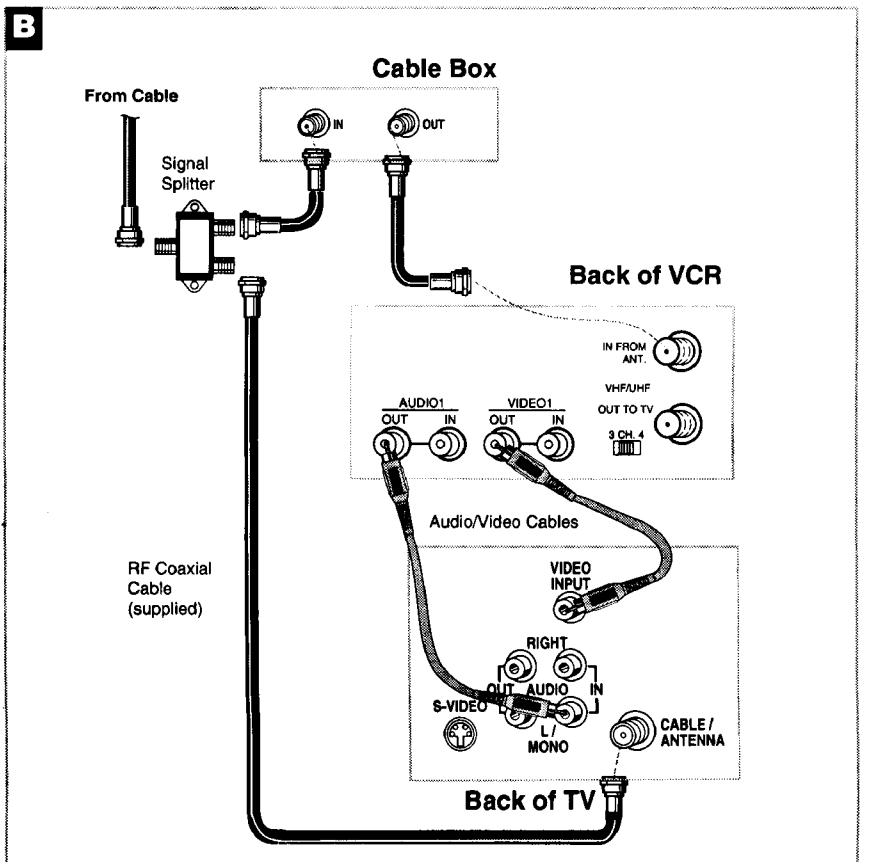


B. Advanced hookup.

Use this hookup for slightly improved picture quality and more convenient operation — use of TV•VCR button not required.

1. **Connect as shown.**
This connection requires additional accessories not provided.
2. Plug in power cords of VCR, TV, and cable box.
3. **Continue to page 7.**

You will tune the TV to its video input to watch the VCR. All pay channels are viewed through the VCR.



Connecting Two VCRs for Copying Tapes

Option A hookup.

Use this hookup for a simple connection which requires fewer accessories.

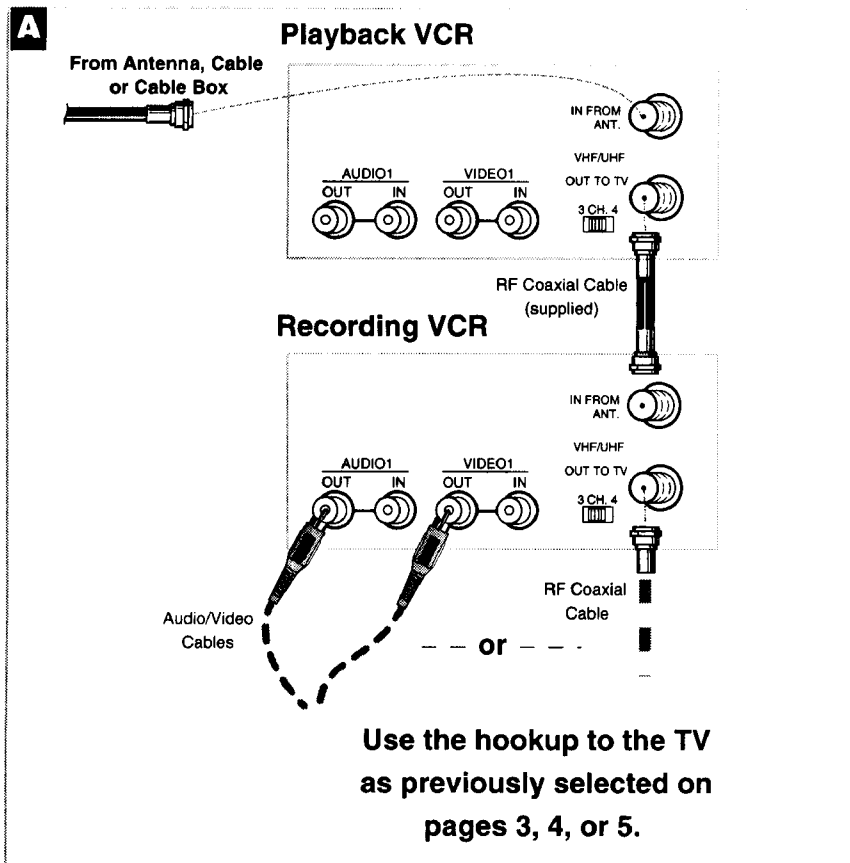
1. Select a hookup from pages 2 through 5 and then modify with this connection.
2. Set the 3CH.4 switch on the playback VCR to either channel 3 or 4.
You will tune the recording VCR to this channel to receive the signal from the playback VCR.

3. Connect as shown.

This connection may require additional accessories not provided.

4. Plug in power cords of VCRs and TV.

5. **Continue to page 7.**



Option B hookup.

Use this hookup for slightly improved copy quality and more convenient operation — use of TV•VCR button not required.

1. Select a hookup from pages 2 through 5 and then modify with this connection.

2. Connect as shown.

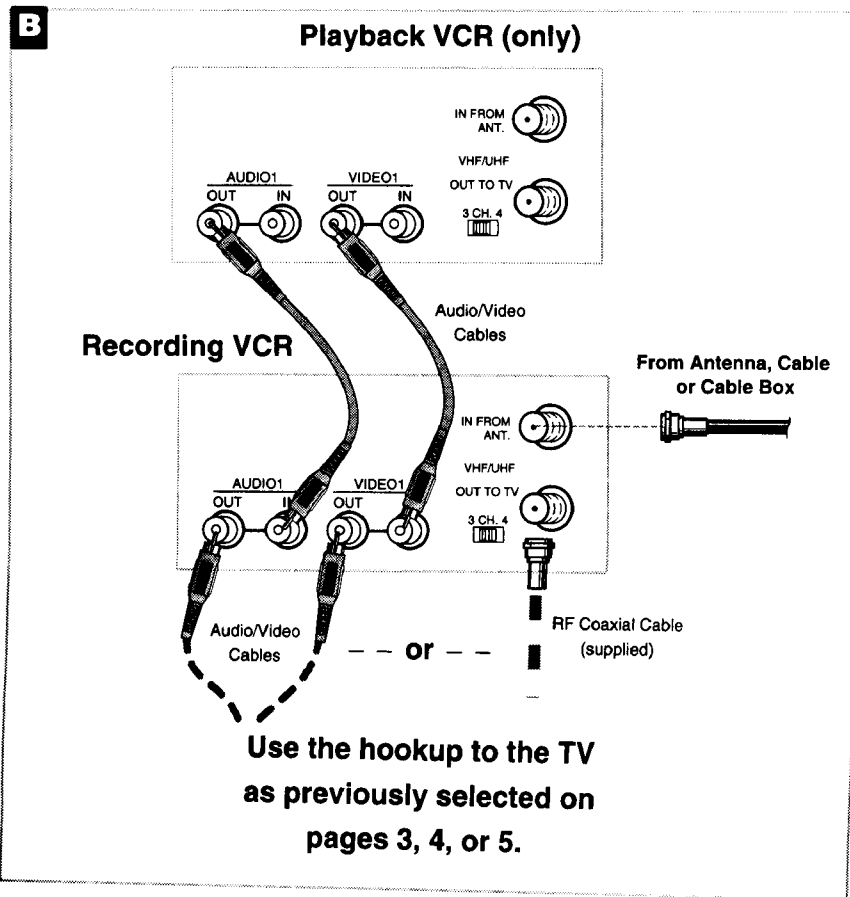
This connection requires additional accessories not provided.

3. Plug in power cords of VCRs and TV.

4. **Continue to page 7.**

You will select the line (audio/video) input on the recording VCR to receive the signal from the playback VCR.

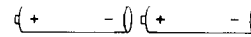
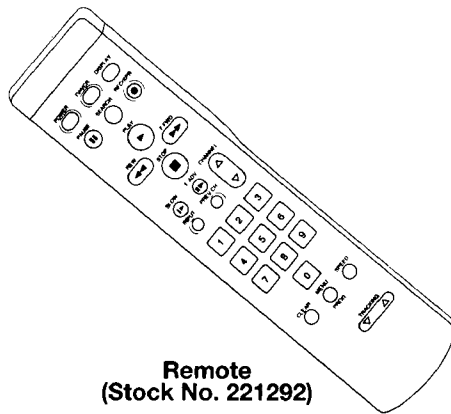
Caution: The unauthorized recording of television programs and other materials may infringe the rights of others.



Startup

1. Check accessories with VCR.

Contact your dealer if any items are missing.

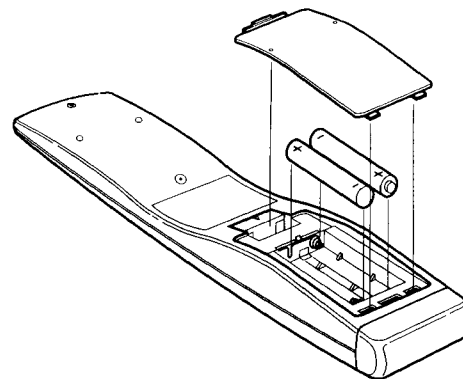
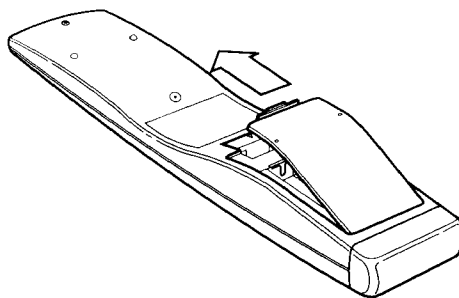


2 "AAA" Batteries



RF Coaxial Cable
(Stock No. 200710)

2. Insert batteries in remote.



3. Turn on the TV.

- A. Turn on the TV.
- B. If you used one of the basic hookups, tune the TV to the channel selected with the 3CH.4 switch on back of VCR.
If you used one of the advanced hookups, tune the TV to the TV's video input.
(See TV owner's manual for details.)

4. Turn on the VCR.

- A. Press POWER on the remote. The POWER and VCR indicators in the VCR's display panel will light. The TIMER indicator flashes until the time is set.

Startup

5. Place channels in the VCR's memory.

The first time you turn on the VCR or after a power interruption, the VCR will display a message on the TV screen prompting you to AUTO-SEARCH CHANNELS for the VCR. If the message does not appear, go to step A below. If the message appears, follow the directions on the screen.

Wait until the channel numbers stop changing. This takes about one to two minutes. The TV will then tune to the lowest channel found. Pressing CHANNEL up or down will select only the active channels.

If you ever need to manually setup the channels on the VCR because you change cable or antenna signals:

- A. Press MENU PROG to display the VCR MAIN MENU on the TV screen. If this menu does not appear:
 - Make sure TV is tuned to same channel as 3CH.4 switch on the VCR or the TV's video input (refer to TV's manual).
 - If you use a basic hookup, check the VCR indicator in display panel — it should be on. Press TV•VCR to turn it on.
 - Check the connections.
- B. Press 3 to display the CHANNEL SETUP menu.
- C. Press 1 to begin AUTO-SEARCH CHANNELS.

The VCR automatically selects CABLE (cable TV) or ANTENNA. If you need to change the setting manually, press 3.

```

AUTO-SEARCH CHANNELS

CONNECT ANTENNA CABLE...
THEN PRESS CH UP
    
```

```

VCR MAIN MENU

1 TIMER PROGRAMMING
2 REVIEW PROGRAMS
3 CHANNEL SETUP
    
```

```

CHANNEL SETUP

1 AUTO-SEARCH CHANNELS
2 ADD/REMOVE CHANNELS
3 TUNING MODE: CABLE
4 CABLE BOX SETUP

0 EXIT TO MAIN MENU
    
```

6. Add or remove channels from the VCR's memory.

You may want to add or remove channels if some of the channels are not active, have weak signals, or you do not want to watch them.

Channels must be placed in memory using the AUTO-SEARCH CHANNELS feature *described above* before you can add or remove channels.

- A. Press MENU PROG on the remote to see the VCR MAIN MENU on the TV screen.
- B. Press 3 to display the CHANNEL SETUP menu.
- C. Press 2 to display the ADD/REMOVE CHANNEL menu.
- D. Follow the directions on the screen.
- E. Add or remove more channels by using the CHANNEL up and down buttons.

```

VCR MAIN MENU

1 TIMER PROGRAMMING
2 REVIEW PROGRAMS
3 CHANNEL SETUP
    
```

```

CHANNEL SETUP

1 AUTO-SEARCH CHANNELS
2 ADD/REMOVE CHANNELS
    
```

```

ADD/REMOVE CHANNEL

          CH 03
        IS PRESENTLY ADDED

PRESS CLEAR TO REMOVE
PRESS MENU TO EXIT
    
```

Startup

7. Use TV•VCR button.

Skip this step if you used one of the advanced hookups.

When using one of the basic hookups, the TV•VCR button lets you switch between the picture coming from the VCR or television channels. This button allows you to record a program on the VCR while watching another channel on the TV. *Details are on page 17.*

- A. Press TV•VCR to see the picture from the VCR.
The VCR indicator lights in the display panel.
- B. Press CHANNEL up or down to change channels on the VCR.
The channel number changes on the TV screen.
- C. Press TV•VCR to see the TV channels.
The VCR indicator does not light in the display panel. Change channels using the TV's remote.
- D. Return the TV to the VCR viewing channel — CH3 or CH4.
- E. Press TV•VCR to switch back to the picture from the VCR.

8. Set the time and date.

- A. Press MENU PROG on remote to see VCR MAIN MENU on the TV screen.
- B. Press 5 to display SET VCR CLOCK.
The TIMER indicator on the VCR's display panel will flash if the clock is not set.
- C. Enter the time and date with the number buttons on the remote.
 - Press 0 before single-digit numbers.
Example: press 0, then 5, then 0, then 7 for a time of 5:07. Press 1 for AM or 2 for PM.
 - Press CLEAR on the remote to change incorrect entries.
- D. Press MENU PROG to start the clock and remove SET VCR CLOCK menu from the screen.

```
VCR MAIN MENU
1 TIMER PROGRAMMING
2 REVIEW PROGRAMS
3 CHANNEL SETUP
4 VCR SETUP OPTIONS
5 SET VCR CLOCK
```

```
SET VCR CLOCK
TIME *--:--
  (HH:MM)
DATE --/--/--

PRESS CLEAR TO CORRECT
PRESS MENU TO EXIT
```

9. Set the language/Seleccione el idioma.

This feature lets you select English or Spanish as the language for your on-screen menus.

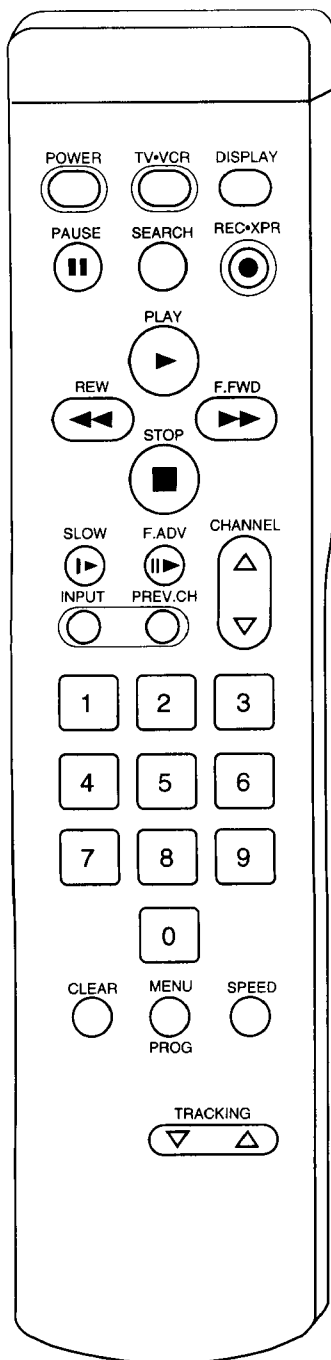
- A. Press MENU PROG on remote to see VCR MAIN MENU on the TV screen.
- B. Press 6 to switch between English or Spanish.
 - Select LANGUAGE to have the menus displayed in English.
 - Select IDIOMA to have the menus displayed in Spanish.

```
VCR MAIN MENU
1 TIMER PROGRAMMING
2 REVIEW PROGRAMS
3 CHANNEL SETUP
4 VCR SETUP OPTIONS
5 SET VCR CLOCK
6 LANGUAGE (IDIOMA)
```

```
VCR MENU PRINCIPAL
1 PROGRAMAR PARA GRAB.
2 REVISAR PROGRAMAS
3 CONFIGURAR CANALES
4 OPCIONES CONFIG. VCR
5 PONER HORA DE LA VCR
6 IDIOMA (LANGUAGE)

0 SALIR
```

VCR Function Buttons



CHANNEL Up or Down

Selects next higher or lower channel in the VCR's channel memory.

CLEAR

Resets time counter to 0:00:00.

Allows you to change entries when setting the time or VCR for a timer recording.

DISPLAY

Shows VCR operating displays on the TV screen.

Displays the time counter.

F.FWD (Fast Forward)

Fast forwards the tape when the VCR is stopped.

Searches the picture in forward motion during playback.

F.ADV (Frame Advance)

Lets you view one frame with each press of the button when tape is in stop-action pause.

INPUT

Turns the line input on or off.

Line input refers to the signal coming from the component connected to the audio/video jacks on the back of the VCR.

MENU PROG

Displays the VCR MAIN MENU on the TV screen.

Removes a menu from the screen.

VCR Function Buttons

(continued)

Numbers (0 through 9)

Select a channel up to 99 by pressing two numbers.

Select a cable channel over 99 by pressing and holding 1 until 1-- appears on the screen. Then press the other two numbers.

PAUSE

Pauses action for viewing during playback.

Pauses recording to prevent recording of unwanted scenes.

PLAY

Plays a tape.

POWER

Turns VCR on and off.

PREV. CH (Previous Channel)

Switches between two channels.

Select one channel and then select another. Press PREV. CH to switch between the two channels.

REC•XPR

Starts VCR recording.

Used for Express recording (XPR).

See page 18.

REW (Rewind)

Rewinds the tape when the VCR is stopped.

Searches the picture in reverse motion during playback.

SEARCH

Displays ZERO SEARCH menu on TV.

Advances tape 60 seconds during playback.

SLOW

Used for slow-motion playback.

SPEED (Tape Speed)

Selects a recording speed (SP, LP, SLP).

STOP

Stops the normal functions such as record, playback, rewind, fast forward, and pause of the VCR.

TRACKING Up or Down

Lets you manually reduce the streaks that may appear on the picture during play or pause.

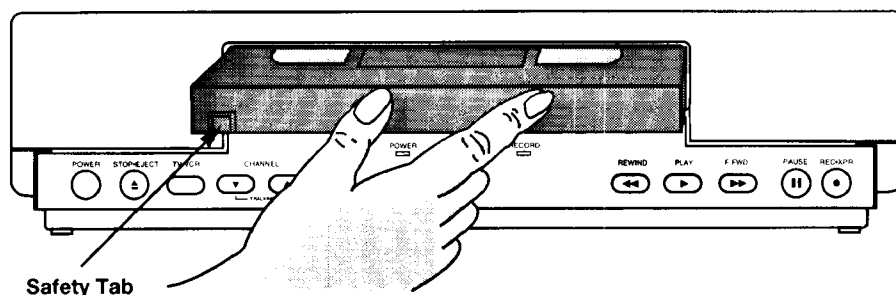
TV•VCR

Switches the picture signal so that it either comes from the VCR or the TV channel. *See page 9.*

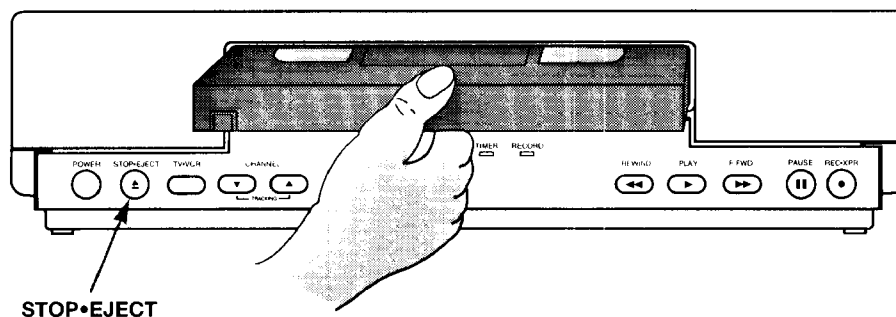
Operating Instructions

To play a tape

1. Turn on the TV and tune it to channel 3, 4, or TV's video input to see the picture from the VCR.
2. Insert a tape in the VCR.
VCR automatically turns on. The POWER and VCR indicators will light. Tape automatically begins playback if the safety tab on the cassette has been removed and the AUTO PLAY feature is turned on.



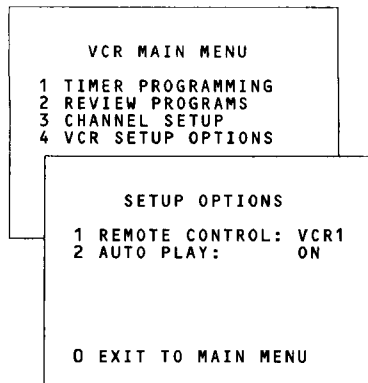
3. Press PLAY, if necessary.
4. Press TRACKING up or down to remove any streaks from the picture, if necessary. *Details are on page 16.*
5. Press STOP•EJECT on the VCR or STOP on the remote.
6. Press REWIND on the VCR or REW on the remote.
The VCR will automatically rewind the tape if it reaches the end of the tape during playback. While rewinding, you can also press POWER and the VCR will automatically turn off after rewinding.
7. Press STOP•EJECT on the VCR to eject the tape once it is completely rewound.



Using the Playback Features

Auto Play Feature

This feature lets you tell the VCR whether you want it to automatically start playing a tape that is inserted with the safety tab removed.



1. Press MENU PROG on the remote to see the VCR MAIN MENU on the TV screen.
2. Press 4 to display the SETUP OPTIONS menu.
3. Press 2 to select AUTO PLAY: ON or OFF.
 - Select ON to have a tape with its safety tab removed start playing automatically.
 - Select OFF if you do not want a tape with its safety tab removed to start playing automatically.

Picture Search

You can search a picture during playback by fast forwarding or rewinding the tape. Sound is turned off during picture search. The picture works best for tapes recorded in the SLP speed.

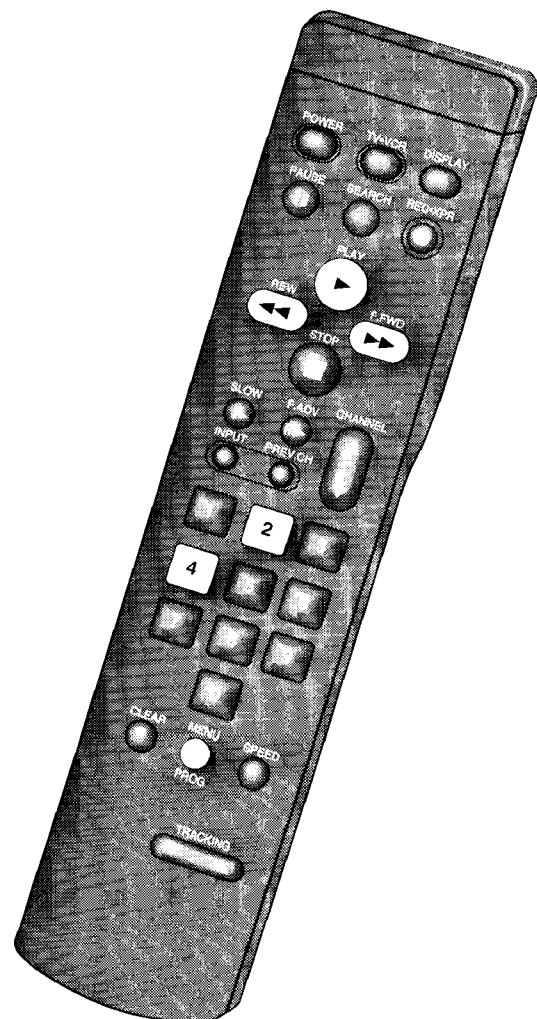
Fast Forward Search

1. Press F.FWD to search forward at a faster-than-normal speed.
2. Press F.FWD or PLAY to return to playback.

Rewind Search

Use REW instead of F.FWD for the same steps in "Fast Forward Search."

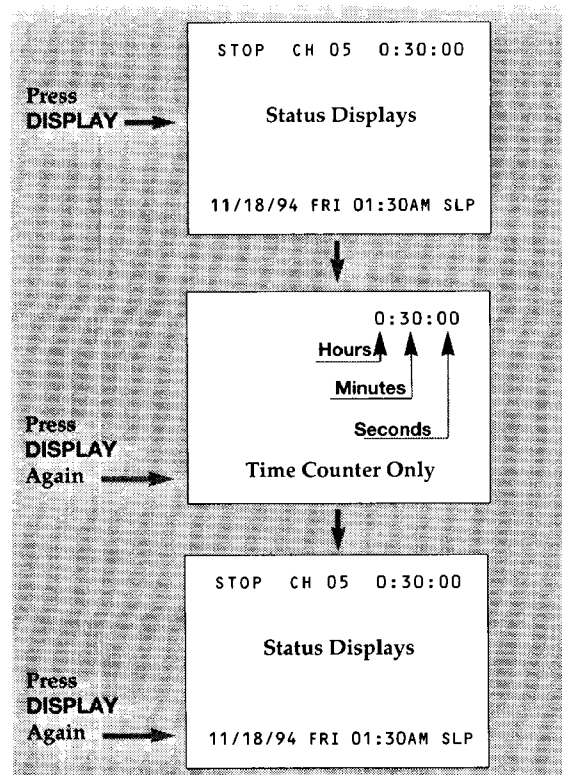
No displays appear on the TV screen during search.



Using the Playback Features

DISPLAY Button

1. Press DISPLAY to display the status of the VCR, channel number, time counter, date, time, and tape speed on the TV screen.
The time and date must be set before they are displayed. If you do not press DISPLAY again, this display will time out.
2. Press DISPLAY again to continually display the time counter on the TV screen.
3. Press DISPLAY again to return to status displays.
The displays will automatically time out.



Time Counter

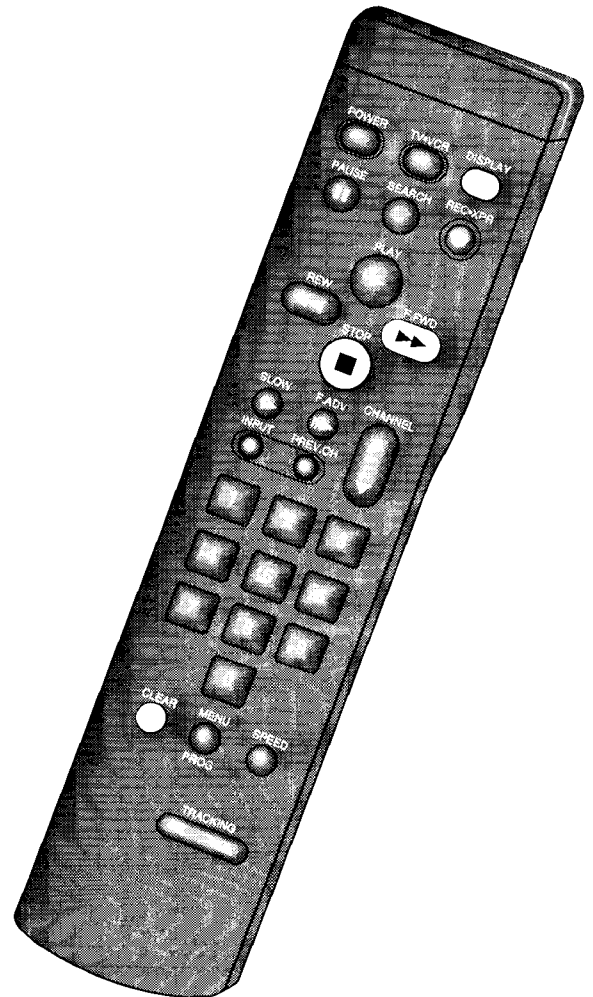
The time counter shows the actual time it takes to record a program or play back a segment of a prerecorded tape. It helps locate the beginning or end of programs you taped. The time counter resets to 0:00:00 whenever the tape is ejected from the VCR.

For example, if a 30-minute program was recorded at the beginning of the tape, you would:

1. Insert the prerecorded tape.
2. Press DISPLAY twice to display only the time counter on the TV screen.
3. Press F.FWD to fast forward the tape until the time counter reads 0:30:00. Press STOP.
This is the end of the program and you can begin recording at this spot.
4. Press CLEAR on the remote to reset the time counter to 0:00:00.
5. Press DISPLAY to return to status displays. These displays will time out.

The time counter is removed from the TV screen during picture search.

Press CLEAR to display the time counter on the TV screen.

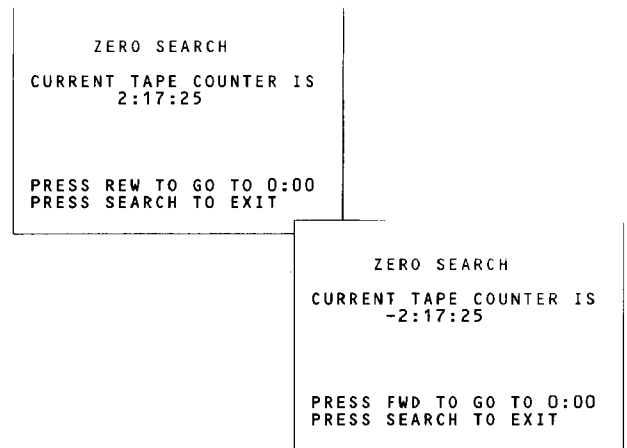


Using the Playback Features

Zero Search

The zero search feature allows you to quickly return to a counter reading of 0:00:00 at any spot on the tape. This is especially convenient when you want to watch a segment of the tape several times.

1. Insert the prerecorded tape.
2. Press DISPLAY twice to display only the time counter on the TV screen.
3. Use PLAY, F.FWD, or REW to advance to the spot on the tape where you want to return to quickly.
4. Press CLEAR on the remote to reset the time counter to 0:00:00.
5. Continue playing the tape.
6. Press STOP.
7. Press SEARCH in the stop mode to display the ZERO SEARCH menu on the TV screen. The current time counter is displayed.
8. Press REW or F.FWD to return to 0:00:00. The time counter is displayed in the upper right corner of the TV screen during search.



Commercial Scan

This is useful for scanning commercials or short program segments.

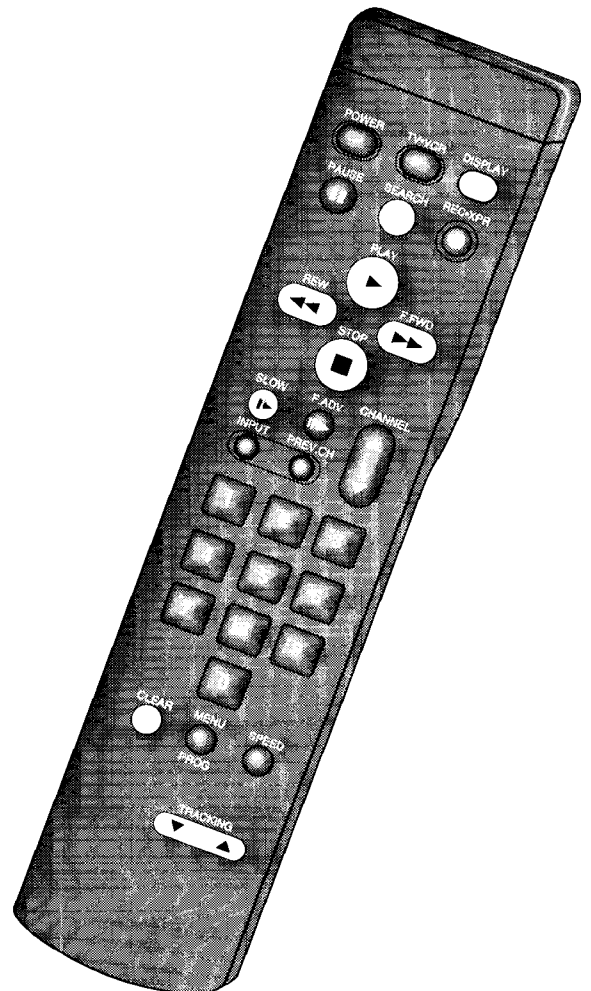
1. Press SEARCH once during playback to advance the tape approximately 60 seconds.

Slow Motion

You can view the picture in slow motion during play or play pause. Sound is turned off during slow-motion playback. Slow motion works best in the SLP speed.

1. Press SLOW to begin slow-motion playback.
2. Use TRACKING up or down to adjust the streaks for the best possible picture.
3. Press SLOW or PLAY to return to playback.

The VCR will automatically switch from slow-motion playback to stop after a few minutes.



Using the Playback Features

Pause for Stop Action

This feature stops the tape in action and allows you to examine the details of the scene. Stop action works best for tapes recorded in the SLP speed.

1. Press PAUSE during playback to stop the action.
2. Press PAUSE or PLAY to return to playback.

The VCR will automatically switch from stop-action playback to stop after a few minutes.

Frame Advance (F.ADV Button)

Frame advance lets you view one stop-action frame after another. Frame advance works best for tapes recorded in the SLP speed.

1. Press PAUSE to stop the action.
2. Press F.ADV each time you want to view a frame of the scene.
3. Press PAUSE or PLAY to resume normal playback.

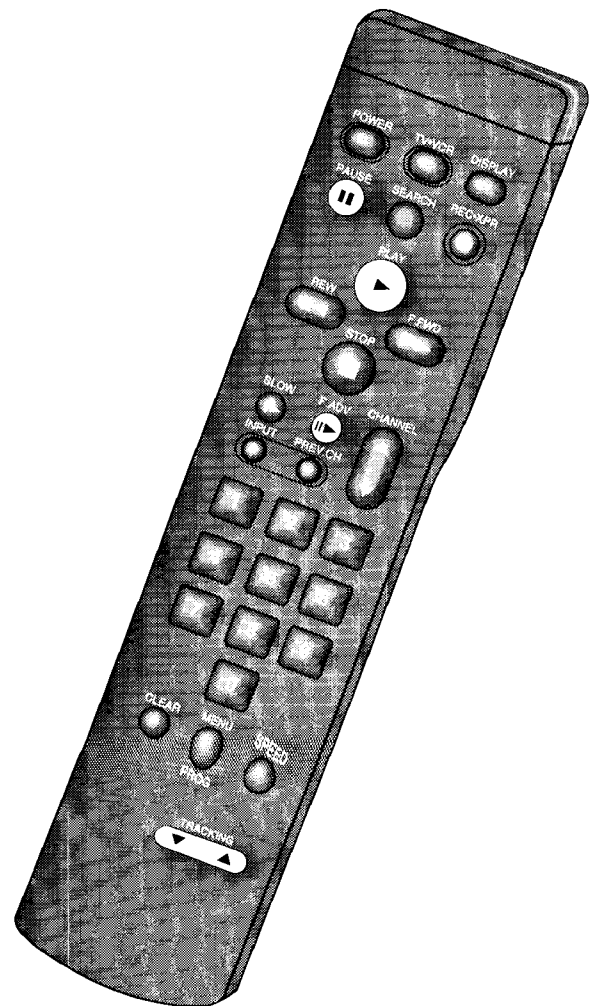
Automatic Tracking

The VCR has automatic tracking which adjusts the picture when playing back a tape recorded on another VCR. Automatic tracking is turned on whenever a tape is inserted or the VCR's power is turned on.

Manual Tracking

Occasionally, you may need to manually adjust tracking on a tape recorded on a different VCR or camcorder. Tracking is used when playing a tape. It has no effect during recording.

When streaks or snow appear, press TRACKING up or down on the remote or VCR to adjust for the best possible picture.



Types of Recordings

Your VCR provides different types of recording. These types are explained in the following sections:

- Basic Recording – Operating Instructions
- Express Recording (XPR)
- Recording While You're Away
- Timer Recording
- Using Two VCRs for Copying Tapes

Recording Speeds

Press **SPEED** on the remote to select a recording speed (SP, LP, or SLP). The speed you select appears on the TV screen.

SP (Standard Play) gives the best quality recording. That is why most prerecorded, rental tapes are recorded in SP. Fewer programs can be recorded on the tape.

LP (Long Play) gives twice the recording time of tapes recorded in SP.

SLP (Super Long Play) gives three times the recording time of tapes recorded in SP. Special effects such as pause, frame advance, slow motion, and picture search work best in this speed.

Cassette	Recording Time		
	SP	LP	SLP
T-120	2Hr	4Hr	6Hr
T-160	2Hr 40Min	5Hr 20Min	8Hr

Recording Pause

This feature allows you to prevent recording short passages of unwanted material.

Press **PAUSE** during recording to stop and start recording.

The VCR will automatically switch from pause to stop after a few minutes.

Basic Recording – Operating Instructions

To make a recording

Turn on the TV and tune it to the VCR viewing channel, either 3, 4, or TV's video input channel.

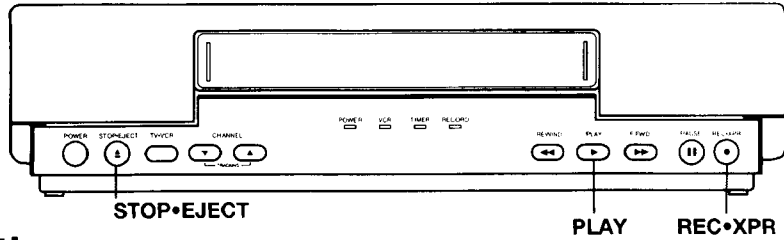
1. Insert a tape with safety tab in place.
2. If using one of the basic hookups, make sure the VCR indicator appears in the VCR's display panel. If not, press **TV•VCR** to turn it on.
3. Use **SPEED** on the remote to select a recording speed. The tape speed indicator appears on the TV screen.
4. Select the channel to be recorded. The channel number appears on the TV screen.
5. Press **REC•XPR** on the remote or **REC•XPR** and **PLAY** together on the VCR to begin recording. The **RECORD** indicator appears in the VCR's display panel while the VCR is recording.

Watch a TV channel while VCR is recording a different channel

1. Follow steps 1 through 5 above.
2. If using one of the basic hookups, press **TV•VCR** to switch to the TV channel. The VCR indicator will turn off in the display panel.
3. Select the channel you want to watch with the TV's channel buttons.
4. Press **STOP•EJECT** on VCR or **STOP** on remote when recording is finished.

Express Recording (XPR)

Express recording lets you record up to four hours without using the timer program feature. The VCR will turn off automatically at the end of the recording.



Operating Instructions

1. Turn on the VCR.
 2. Insert a tape with safety tab in place.
 3. Select the channel you want to record.
 4. Use SPEED on the remote to select a recording speed.
 5. Press REC•XPR and PLAY together on the VCR or REC•XPR on the remote to activate express recording.
 6. Press REC•XPR repeatedly until the amount of recording time for the program is displayed on the TV screen.
- Each press of REC•XPR increases the time — 30 minutes up to 4 hours.

	Press REC•XPR	Recording Time
<p>RECORD LENGTH 0:00 CH 04</p>	0:30	(30 Min)
	1:00	(1 Hr)
	1:30	(1 Hr, 30 Min)
	2:00	(2 Hrs)
	3:00	(3 Hrs)
	4:00	(4 Hrs)
	0:00	(XPR Turns Off)

Express Recording Display on TV Screen

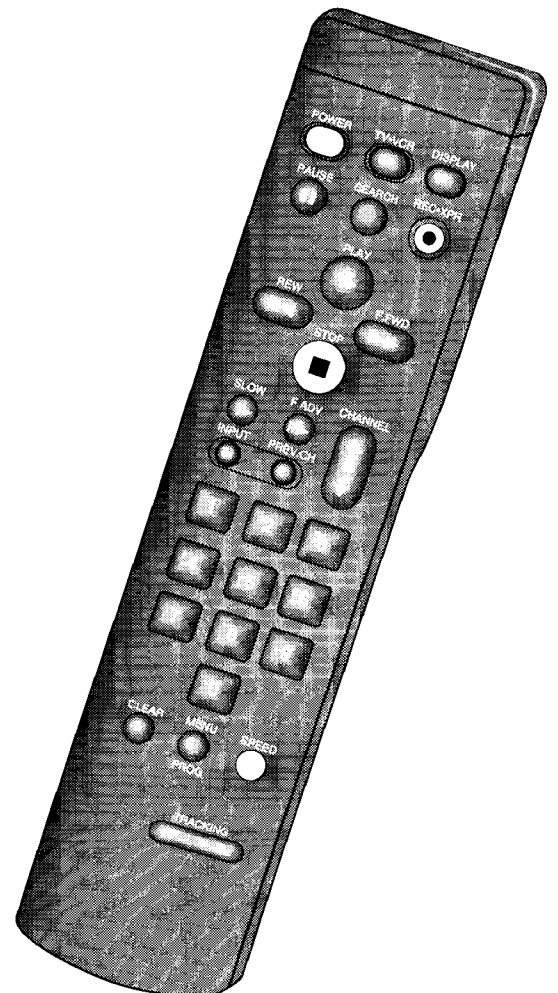
The RECORD indicator appears in the VCR's display panel.

During XPR recording press REC•XPR and PLAY together on the VCR or REC•XPR on the remote to display time remaining on the TV screen. Press REC•XPR again to increase recording time.

Stopping a Recording in Progress

With the VCR: Press POWER and then STOP•EJECT within a few seconds.

With the Remote: Press POWER and then STOP within a few seconds.



Recording While You're Away (Timer Recording)

Select cable box viewing channel (Required only if all channels received from a cable box.)

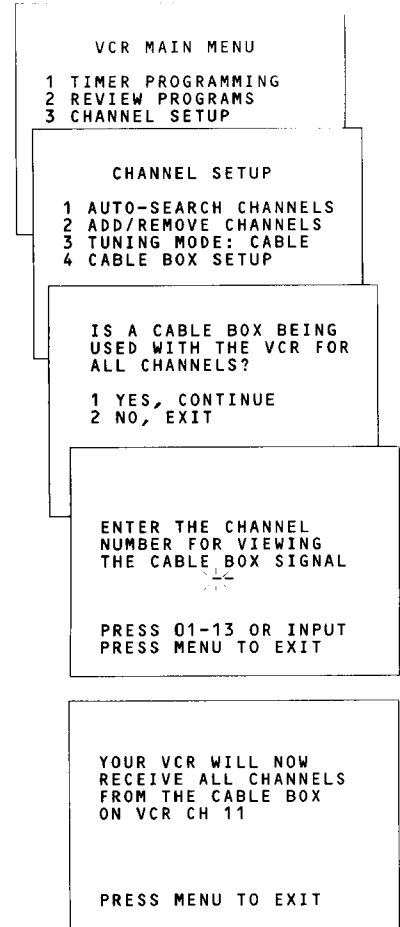
1. Press MENU PROG on the remote to display the VCR MAIN MENU on the TV screen.
2. Press 3 to display CHANNEL SETUP menu.
3. Press 4 to display CABLE BOX SETUP menu.
4. Press 1 when the CABLE BOX SETUP menu appears.
5. Press two numbers on the remote to enter the output channel of your cable box. Press 0 before a single-digit number. (Valid numbers are 01 - 13.)

Press CLEAR on the remote to correct an entry.

If you connected your cable box to the VCR using the cable box's AUDIO/VIDEO OUT jacks, press INPUT on the remote to select the VIDEO option.

6. Press MENU PROG. A message appears which will time out or press MENU PROG again to return to CHANNEL SETUP.

The VCR will now automatically enter the output channel of your cable box and CABLE in the TIMER PROGRAMMING menu.



Recording While You're Away (Timer Recording)

The timer program feature lets you program the VCR to record up to four different programs within a one year period. Before setting the timer, make sure that:

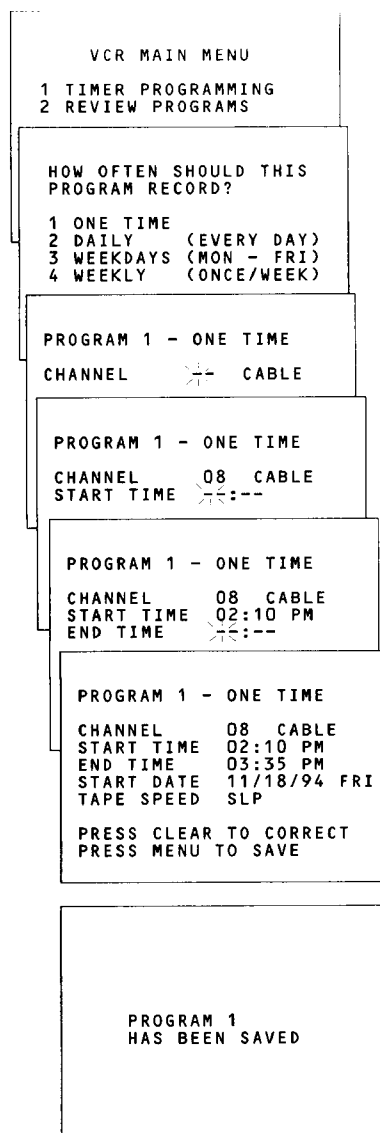
- The clock is set correctly.
- A tape with safety tab has been inserted with enough tape to record the programs.
- If you receive all channels from a cable box, make sure you have completed CABLE BOX SETUP. See page 19.

Setting a Timer Recording

1. Press MENU PROG on the remote to display the VCR MAIN MENU.
2. Press 1 to display the TIMER PROGRAMMING menu.
3. Press 1, 2, 3, or 4 to select type of program.
 - 1 ONE TIME — single program recorded once.
 - 2 DAILY — program recorded at same time every day.
 - 3 WEEKDAYS — program recorded at same time Monday through Friday.
 - 4 WEEKLY — program recorded at same time once a week.
4. Press number buttons on the remote to enter the channel number (or INPUT on the remote to select line input), start time including AM or PM, end time, and start date of the recording. Just follow the on-screen prompts.

Press CLEAR on remote to correct an entry.

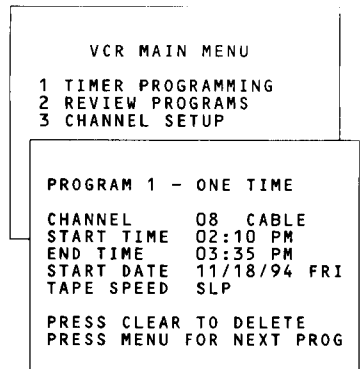
If you receive all channels from a cable box and have completed CABLE BOX SETUP, the output channel of your cable box and CABLE will automatically appear on the menu. See page 19.
5. Use SPEED on the remote to select a recording speed.
6. Press MENU PROG to enter your program. A reminder appears which will time out or you can press MENU PROG to return to the VCR MAIN MENU.
7. Repeat steps 2 – 6 for additional programs or press MENU PROG to remove the menu from the TV screen.
8. **Turn off the VCR** before recording begins. The TIMER indicator appears in the VCR's display panel.
9. If using a cable box, leave it turned on and tuned to the channel you want to record.



Recording While You're Away (Timer Recording)

Checking or Clearing Timer Recordings

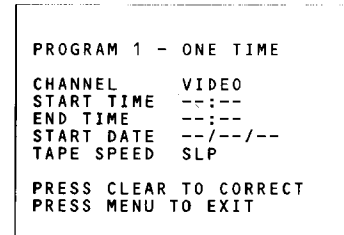
1. Press MENU PROG on remote to display VCR MAIN MENU on TV screen.
2. Press 2 for REVIEW PROGRAMS.
Each entered program is displayed for a few seconds in sequence.
3. Press MENU PROG or 2 to display information at a faster pace.
4. Press CLEAR on remote when the program you want to erase appears on the screen.



Timer Recording From the VCR's Line Input

The line input refers to the signal coming from the AUDIO1 and VIDEO1 IN jacks of the VCR. Recording from the line input is convenient if you have a satellite receiver or similar component attached to these jacks. To timer record from the component connected to the VCR's line input:

Press INPUT on the remote to enter VIDEO instead of the channel number on the TV screen during timer programming.



Stopping a Timer Recording in Progress

With the VCR: Press POWER and then STOP•EJECT within a few seconds.

With the Remote: Press POWER and then STOP within a few seconds.

Using Two VCRs for Copying and Editing Tapes

Operating Instructions (Refer to hookup on page 6.)

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

Caution: The unauthorized recording of television programs and other materials may infringe the rights of others.

1. Turn on the TV and VCRs.
2. Tune TV to the VCR viewing channel, either 3, 4, or TV's video input.
3. If you have connected your VCR using Option A, (page 6), tune recording VCR to channel 3 or 4 – the one selected on the back of the playback VCR.
If you have connected your VCR using Option B, (page 6), press INPUT on recording VCR's remote to select the line input.
4. Insert the tape you want to copy into playback VCR. Insert a blank tape with safety tab in place into recording VCR.
5. Press PLAY, then PAUSE on playback VCR when you reach the point on the tape or program where you want to begin copying. If the tape was not recorded on the playback VCR, streaks may appear and you may need to adjust tracking.
6. Press REC•XPR and PLAY together on the recording VCR or REC•XPR on the remote. Then press PAUSE on recording VCR.
7. Press PAUSE buttons on both VCR at the same time to begin copying the tape.*
8. Edit out segments that you do not want to copy by pressing PAUSE on recording VCR to stop copying the tape. Then, locate the next segment you want to copy on playback VCR by using F.FWD, REWIND, and PLAY. Press PAUSE on the playback VCR. Press PAUSE at the same time on both VCRs to resume copying.
9. Press STOP•EJECT on both VCRs when you are finished.

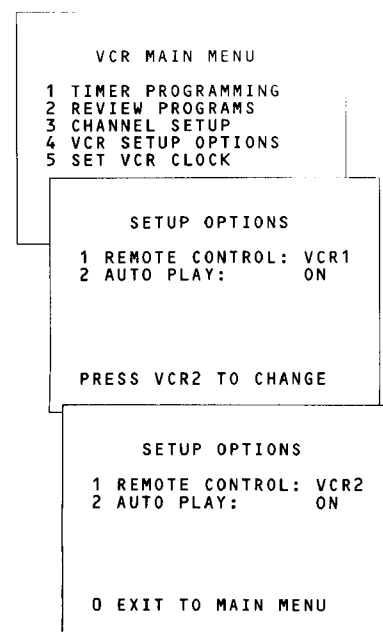
* You may turn off the TV after the recording has started as it does not have to be on to copy a tape.

Copying and editing using compatible remote

If you have a compatible RCA or ProScan remote with VCR1 and VCR2 buttons you can program this VCR to respond to VCR1 (VCR2). This will allow you to control both VCRs with one remote for easier copying and editing.

Set the REMOTE CONTROL feature of this VCR to VCR1 or VCR2 position. The compatible remote then controls the VCR with either the VCR1 or VCR2 button — whichever position you select in the menu.

1. Press MENU PROG to display the VCR MAIN MENU.
2. Press 4 to display SETUP OPTIONS.
3. Press 1 to activate the REMOTE CONTROL: VCR1 or VCR2 feature.
4. Press VCR1 or VCR2 on your compatible VCR's remote to change the setting and program the VCR to respond to VCR1 or VCR2 — whichever you select.



Specifications

Format:	VHS
Record/Playback System:	Video: 2-Head Audio: Mono 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:	18 watts
Dimensions:	3.5 inches high (89 mm) 15 inches wide (380 mm) 11.2 inches deep (285 mm)
Weight:	8.2 pounds (3.7 kg)
Storage Temperature Range:	- 22°F to +149°F
Operating Temperature Range:	+41°F to +104°F

*Check your cable company's compatibility requirements.

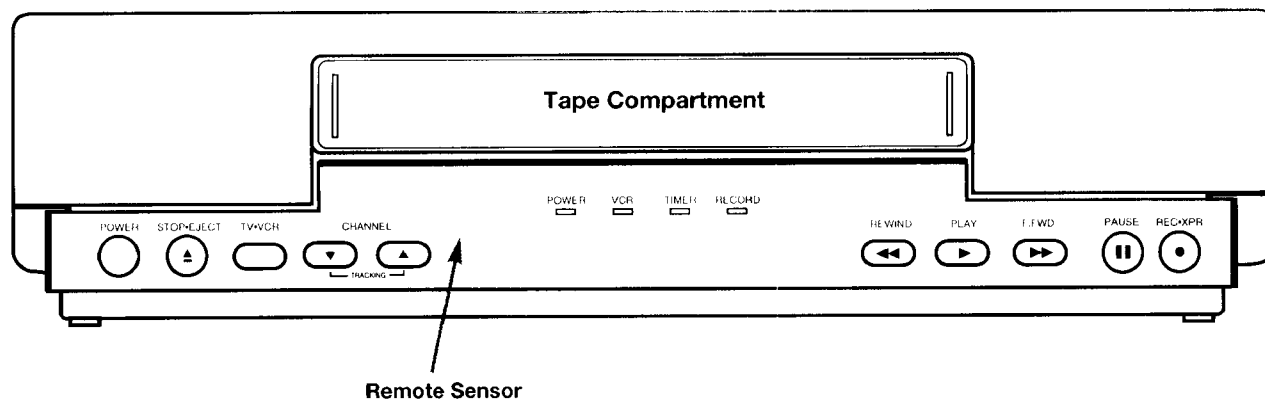
Cleaning the VCR

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 cabinet.

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 non-abrasive, anti-static cleaner and polisher.

Location of Controls

Front Panel



CHANNEL or TRACKING Up or Down
Selects next higher or lower channel in the VCR's channel memory.

Adjusts tracking when a tape is playing.

F.FWD (Fast Forward)
Fast forwards the tape when the VCR is stopped.

Searches the picture forward during playback.

PAUSE
Pauses action for viewing during playback.

Pauses recording to prevent recording of unwanted scenes.

PLAY
Plays a tape.
Press REC•XPR and PLAY to start VCR recording.

POWER
Turns the VCR on or off.

REC•XPR
Press REC•XPR and PLAY to start VCR recording.

Used for express recording (XPR).

Remote Sensor
Receives signals from the remote control. Aim the remote at this sensor with no objects between them.

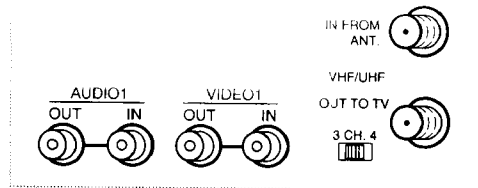
REWIND
Rewinds the tape when the VCR is stopped.
Searches the picture in reverse during playback.

STOP•EJECT
Stops the normal functions such as record, playback, rewind, fast forward, or pause.
Press when the VCR is stopped to eject the cassette.

TV•VCR
Switches the picture signal so that it either comes from the VCR or the TV channel.
See page 9.

Location of Controls

Back Panel



3CH.4 Switch

Selects the channel to which you will tune the TV to see the VCR picture if you connect the VCR using one of the basic hookups.

IN FROM ANT. (Antenna) Connector

Receives a signal from an antenna or cable system when attached.

OUT TO TV Connector

Passes signal to TV using the cable supplied.

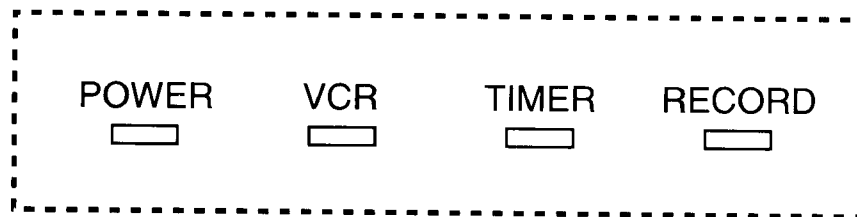
VIDEO1 IN and AUDIO1 IN Jacks

Receives signals from another component, like a VCR or camcorder, when it is connected to these jacks. Use INPUT on the remote to select.

VIDEO1 OUT and AUDIO1 OUT Jacks

Sends signals from VCR to another component, like a VCR or camcorder, when it is connected to these jacks.

Display Panel



POWER Indicator

Lights when the VCR is turned on.

RECORD Indicator

Lights when the VCR is recording.

TIMER Indicator

Shows VCR is set for timer recording when VCR is turned off.

Flashes when the clock is not set or a timer recording is set and there is no cassette in the VCR.

VCR Indicator

Lights when using the TV•VCR button.

When using one of the basic hookups:

- When VCR indicator is on, the picture comes from the VCR.
- When VCR indicator is off, picture is from the television channels.

Trouble Checks

Sometimes problems can be easily solved by checking a few basic things. Check below before you call for help or take your VCR to an Authorized RCA VCR Servicenter.

Trouble	Here's what to try:
No power	<ul style="list-style-type: none"> • Plug VCR into an operating outlet. • Check connections.
VCR does not respond to remote	<ul style="list-style-type: none"> • Aim remote at VCR with no objects between them. • Change batteries. • Check setting of REMOTE CONTROL: VCR1 (VCR2) feature. <i>See page 22.</i>
Poor or no picture for normal TV viewing	<ul style="list-style-type: none"> • Press TV•VCR to turn VCR indicator off. • Switch TV to an active channel. • Check antenna connections.
Snowy or no picture during playback	<ul style="list-style-type: none"> • Press TV•VCR to turn VCR indicator on. • Check TV channel selected (3 or 4) to make sure it matches the channel selected with 3CH.4 switch on back of VCR. • Check TV's fine tuning. • Check video cable connections between VCR and TV monitor. • Set TV monitor to video input channel. • Try another tape. • Some snow/streaks are normal during search, stop action, frame advance, and slow motion playback.
Streaks in picture during normal playback	<ul style="list-style-type: none"> • Press one of the TRACKING buttons on the remote or VCR to move streaks up or down for the best picture. • Check tape — it may be worn out or of poor quality.
Time counter not working	<ul style="list-style-type: none"> • 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.
Will not record or play	<ul style="list-style-type: none"> • No cassette in VCR. • Eject and reinsert cassette. • Broken tape — try another cassette. • VCR is in pause mode. Press PAUSE.
Will not record	<ul style="list-style-type: none"> • Safety tab removed from cassette. • Make sure the line indicator (VIDEO) does not appear on the TV screen for normal recording from the VCR's tuner. Press INPUT on the remote to turn the line input off.

Trouble Checks

Trouble

Here's what to try:

Rewind does not operate	<ul style="list-style-type: none"> • Tape already rewound.
Timer recording not made or wrong program recorded	<ul style="list-style-type: none"> • Cable box was not turned on at time recording was to begin. • Program entered incorrectly (wrong channel or times). • Power interruption. Reset clock. <i>See page 9.</i> • Check to see if time and date are correct — including AM/PM. • Program exceeded tape's length or tape was not rewound beforehand. • VCR was not turned off at the time recording was to start. • No tape in VCR or cassette's safety tab broken off. • VCR ejects cassette when the end of the tape is reached during a timer recording.
Incorrect time or date	<ul style="list-style-type: none"> • Clock was not set accurately (check AM/PM and date). <i>See page 9.</i>
VCR makes noise when stopped	<ul style="list-style-type: none"> • VCR is removing tape from heads. 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.
Will not AutoProgram active channels correctly	<ul style="list-style-type: none"> • Check antenna connections. • Check TUNING MODE: CABLE/ANTENNA feature. <i>See page 8.</i>
Cannot add or remove channels	<ul style="list-style-type: none"> • Channels must be placed in memory using AUTO-SEARCH CHANNELS feature before channels can be added or removed from channel memory. <i>See page 8.</i>
Cannot select channels over 69	<ul style="list-style-type: none"> • Cable channels over 69 can only be selected if TUNING MODE: CABLE/ANTENNA feature is set to CABLE. <i>Details are on page 8.</i>
Cassette with safety tab removed does not start to play automatically	<ul style="list-style-type: none"> • Set AUTO PLAY ON/OFF feature to ON. <i>Details are on page 13.</i>
Tape plays back in slow motion	<ul style="list-style-type: none"> • Press SLOW or PLAY to return to normal playback.
TIMER indicator flashes	<ul style="list-style-type: none"> • Clock was not set. <i>See page 9.</i> • Timer recording programmed and no cassette in VCR.
On-screen menus are in Spanish	<ul style="list-style-type: none"> • Language feature set to IDIOMA. <i>See page 9.</i>
Time counter disappears while searching	<ul style="list-style-type: none"> • This is normal. <i>Details are on page 14.</i>

Limited Warranty

What your warranty covers:

- Any defect in material or workmanship.

For how long after your purchase:

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

The warranty period for rental units begins with the first rental.

What we will do:

- Pay any Authorized RCA VCR Servicenter the labor charges to repair your VCR.
- Pay any Authorized RCA VCR Servicenter 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 Servicenter. To identify your nearest Authorized RCA VCR Servicenter, ask your dealer, look in the Yellow Pages, or call 1-800-336-1900.
- Show the service technician your evidence of purchase date.
- 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.
- Remote control 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 USA.

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 this 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 outside the United States:

- See your dealer for details.

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If you would like a copy of this manual in French, please follow the
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Si un livret d'instructions en français n'est pas inclus avec votre
appareil, vous pouvez en obtenir un (indiquer le numéro de modèle,
votre nom, et votre adresse) en vous adressant à:

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P.O. Box 0944
Indianapolis, IN 46206-0944

If your VCR needs service, please contact your dealer or the nearest
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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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