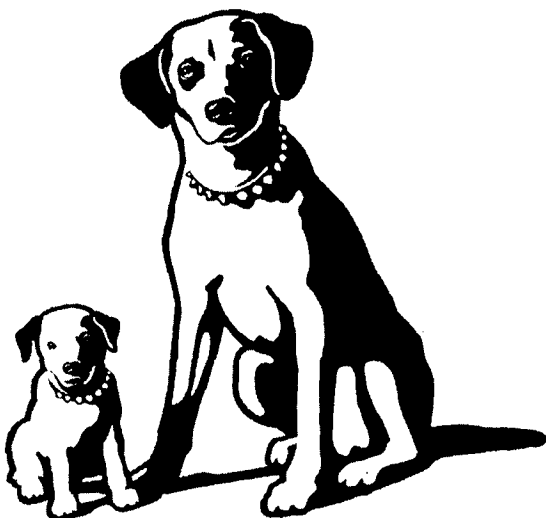


VR542

# USER'S GUIDE

S-51-04-830



VIDEO CASSETTE

RECORDER

REVIEW

## 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



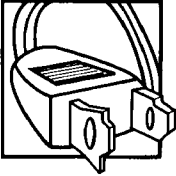
This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

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

## Cautions



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

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

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).

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

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. **VR542** \_\_\_\_\_

Serial No. \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Dealer/Address/Phone: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Table of Contents

## Important Information

Warnings	i
Cautions	i
Note to Cable TV Installer	i
Product Registration	i

## Hooking Up the VCR

Choosing a Hookup	2
Antenna or Cable System Without a Cable Box	3
Cable System With Cable Box to Unscramble All Channels	4
Cable System With Cable Box to Unscramble Pay Channels	5
RCA DSS® Satellite Receiver	6-7
Connecting Two VCRs for Copying Tapes	8

## Setting Up the VCR

### Startup

Check Accessories With VCR	9
Attach Power Cord to Back of VCR	9
Insert Batteries in Remote	9
Turn on the TV	9
Use the On-Screen Menu System	10
Turn on the VCR	10
Auto Cable/DSS Box Setup	11-12
Manual Cable Box Setup	12
Auto Channel Search and Auto Clock Set	13
Manual Channel Search	13
Manual Clock Set	14
Setup VCR Plus+ Channels	14
Program VCR for VCR1 or VCR2•LD Button	14
Add or Remove Channels from VCR's Memory	14
Use TV•VCR Button	15
Set the Auto TV/VCR Feature	15

## Using the Remote Control

Component, VCR, TV, Cable Box, and RCA DSS® Receiver Buttons	16-17
Controlling a VCR	18
Controlling a TV	19
Controlling a Cable Box or RCA DSS® Receiver	20
Controlling an Auxiliary RCA Component	21

## Playing a Tape

Operating Instructions	22
Using the Playback Features	
Auto Play Feature	23

Auto Repeat Feature	23
Pause for Stop-Action	24
Variable Speed Picture Search	24
Frame Advance	25
Slow Motion	25
Automatic Tracking	26
Manual Tracking	26
Pro-Tect Plus™ Locking Feature	26
DISPLAY Button	27
Time Counter	27
Index Search	28
Time Search	28
Zero Search	29
Blank Search	29

## COMMERCIAL▶▶ADVANCE™ Feature

Recording and Playback	30-31
------------------------	-------

## Recording a Program

Types of Recordings	32
Using the Recording Features	
Recording Speeds	32
Recording Pause	32
Basic Recording -	
Operating Instructions	33
Watch a TV Channel While VCR is Recording a Different Channel	33
Recording While You're Away	
VCR Plus+ Recording	34-36
Timer Recording	37
Check, Edit, or Clear a VCR Plus+ or Timer Recording	38
Timer Recording From the VCR's Line Input	38
Express Recording (XPR)	39
Using Two VCRs for Copying and Editing Tapes	40
Using Dual Remote with AutoEdit	40

## References

Location of Controls	
Front Panel	41
Back Panel	42
Display Panel	42-43
Specifications	44
Cleaning the VCR	44
Limited Warranty	45
Trouble Checks	46-47
Questions and Answers About COMMERCIAL▶▶ADVANCE™	48
Index	48-49

## **Choosing a Hookup**

The hookups on pages 3 through 7 are divided into two hookup types: Basic (A) and Advanced (B and C).

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). 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.
- D. RCA DSS<sup>®</sup> Satellite System and another source (A, B, C) – Go to question 3.

#### **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.

#### **3. What type of RCA brand DSS<sup>®</sup> satellite system do you have?**

Choose one answer from below.

- A. Satellite receiver connected to TV without audio/video inputs – Turn to page 6.
- B. Basic satellite receiver connected to TV with audio/video inputs – Turn to page 7.
- C. Deluxe satellite receiver connected to TV with audio/video inputs – Turn to page 7.

### **Optional Hookups**

#### **How to hook up two VCRs for copying tapes?**

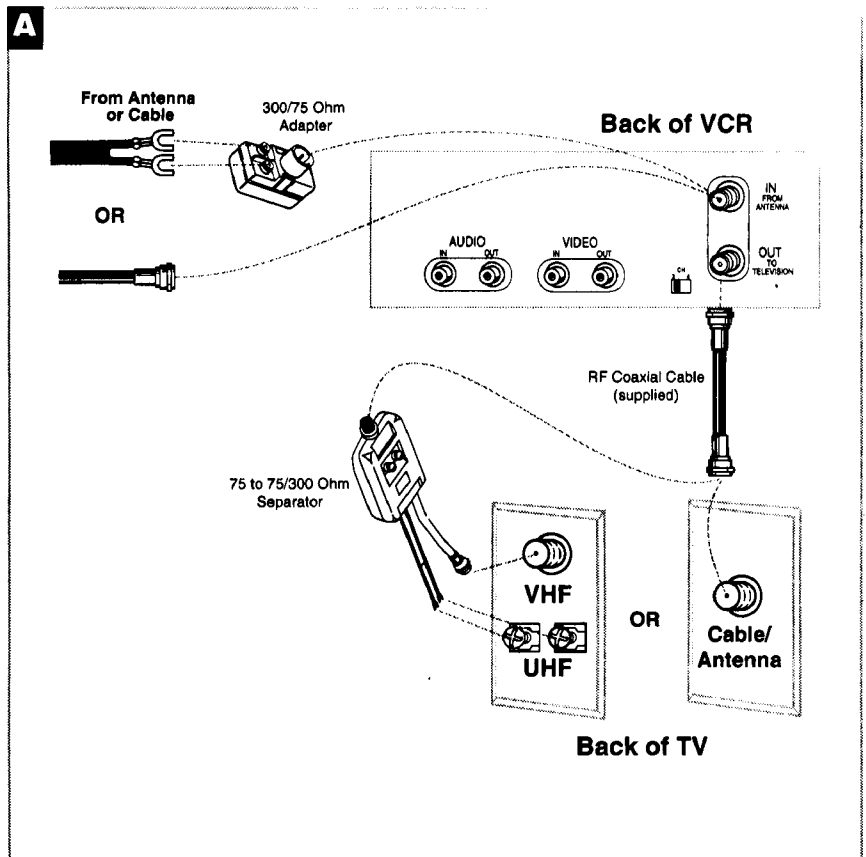
- A. Select a hookup by answering the questions above.
- B. Then modify the connections as shown on page 8.

## 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 CH3 CH4 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 9.**



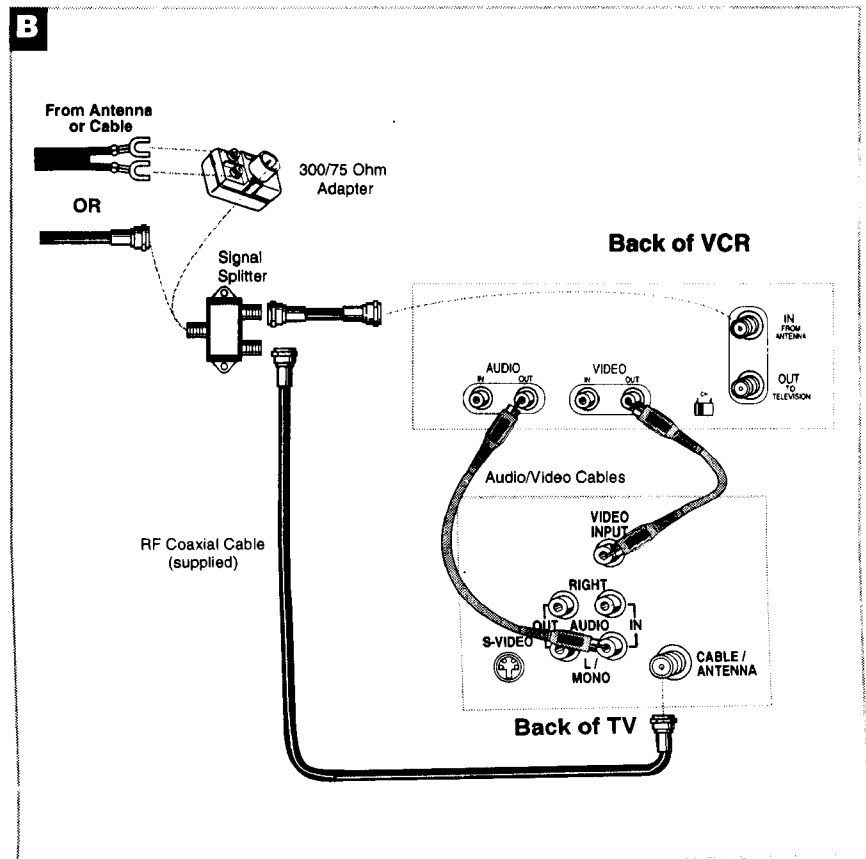
### B. Advanced hookup.

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.  
If your TV is stereo, you may need a Y-adapter to hear sound from both channels.
2. Plug in power cords of VCR and TV.
3. **Continue to page 9.**

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

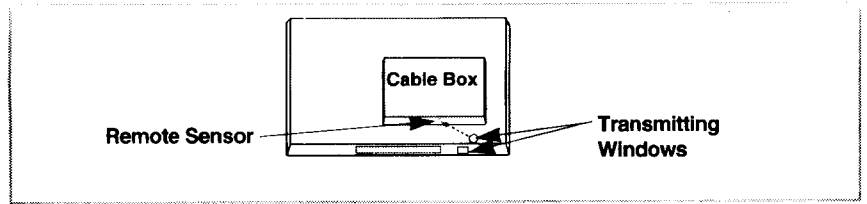
Set the Auto TV/VCR feature to OFF.  
See page 15.



# Cable System With Cable Box to Unscramble All Channels

## Position cable box.

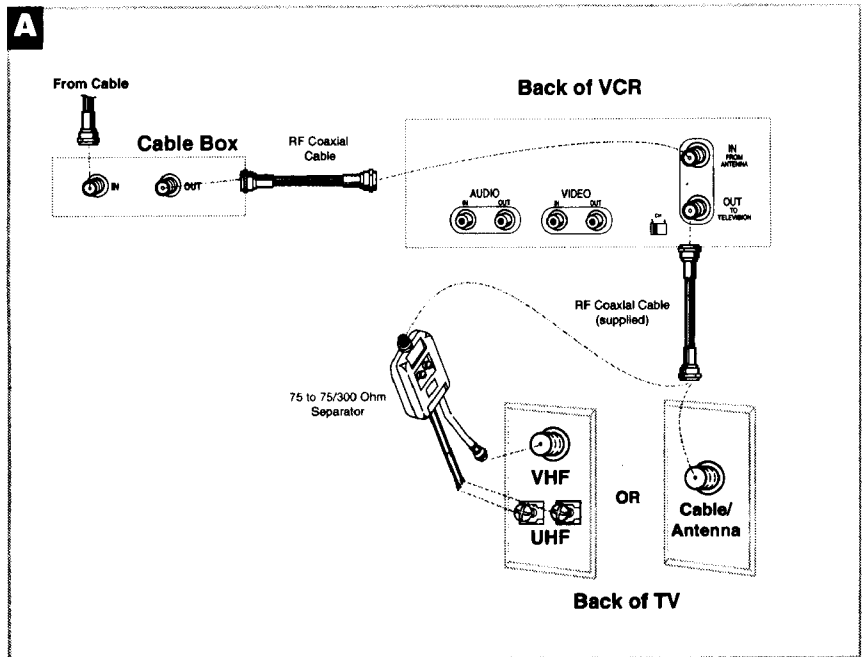
Position the remote-controllable cable box on top of the VCR. You may need to position it at different angles before the VCR can control it. Make sure the cable box does not cover the transmitting window on top of the VCR.



## A. Basic hookup.

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

1. Set the CH3 CH4 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 9.**

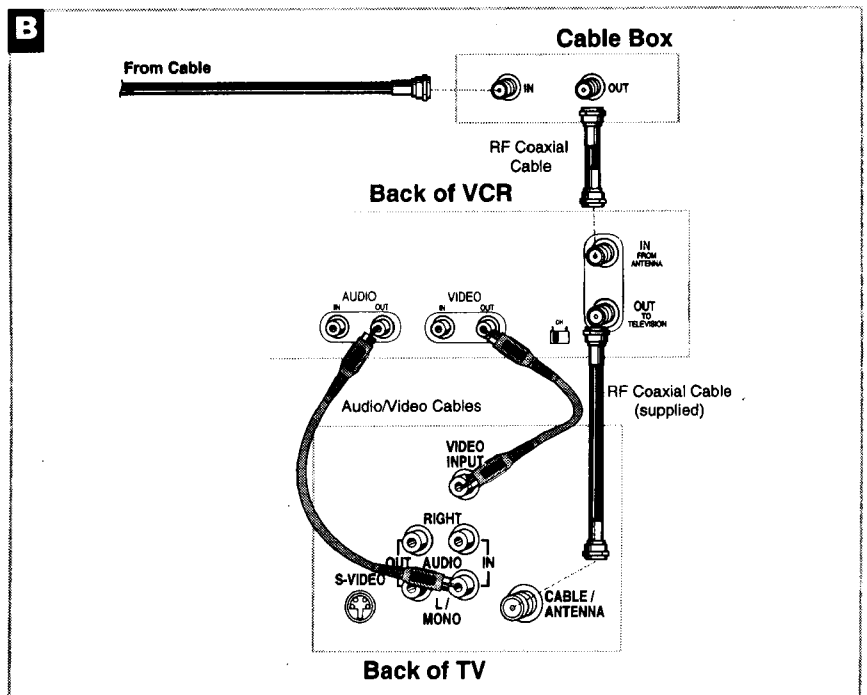


## B. Advanced hookup.

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.  
If your TV is stereo, you may need a Y-adaptor to hear sound from both channels.
2. Plug in power cords of VCR, TV, and cable box.
3. **Continue to page 9.**

You will tune the TV to its video input to watch the VCR.  
Set the Auto TV/VCR feature to OFF.  
See page 15.



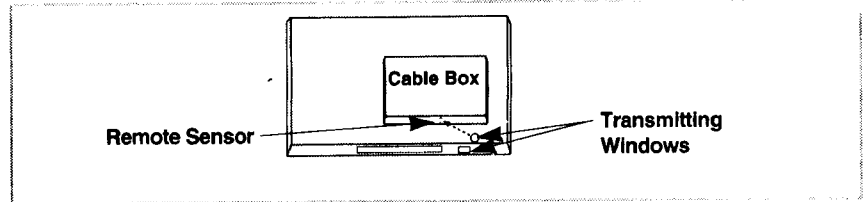
**Caution:** The unauthorized recording of satellite broadcasts, television programs, or other materials may infringe the rights of others.

# Cable System With Cable Box to Unscramble Pay Channels

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

## Position cable box.

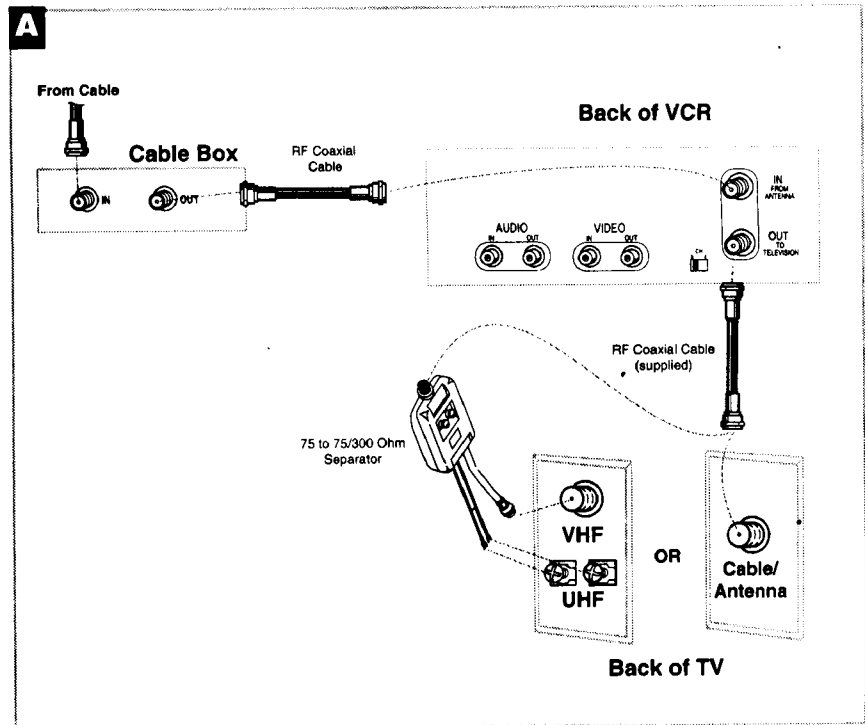
Position the remote-controllable cable box on top of the VCR. You may need to position it at different angles before the VCR can control it. Make sure the cable box does not cover the transmitting window on top of the VCR.



## A. Basic hookup.

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

1. **Set the CH3 CH4 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 9.**

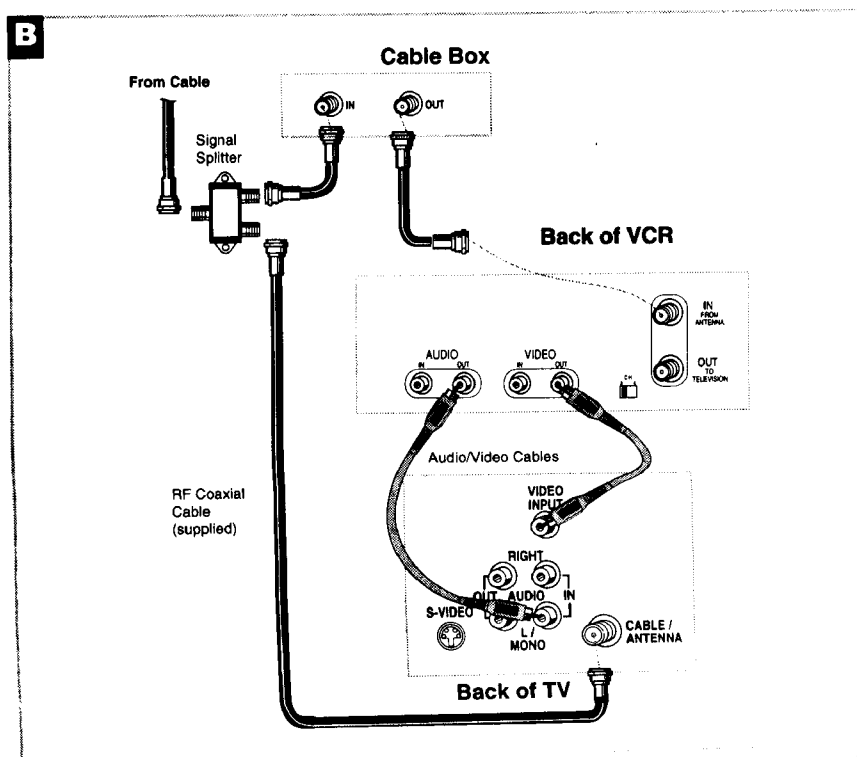


## B. Advanced hookup.

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.  
If your TV is stereo, you may need a Y-adaptor to hear sound from both channels.
2. **Plug in power cords of VCR, TV, and cable box.**
3. **Continue to page 9.**

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

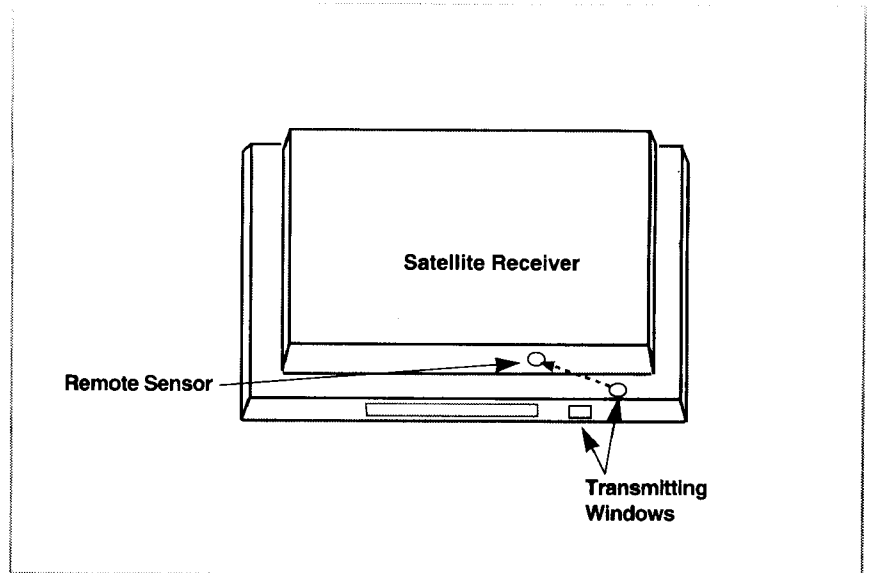


# RCA DSS<sup>®</sup> Satellite Receiver

## Position RCA DSS<sup>®</sup> receiver.

Position the receiver on top of the VCR. You may need to position it at different angles before the VCR can control it. Make sure the receiver does not cover the transmitting window on top of the VCR.

Do not stack electronic components or other objects on top of the RCA DSS<sup>®</sup> receiver. The slots on top of the receiver must be left uncovered to allow proper airflow to the unit. Blocking the airflow to the unit could impair performance or damage your receiver and other components. Also, do not stack the RCA DSS<sup>®</sup> receiver on top of a "hot component" such as an audio power amplifier.

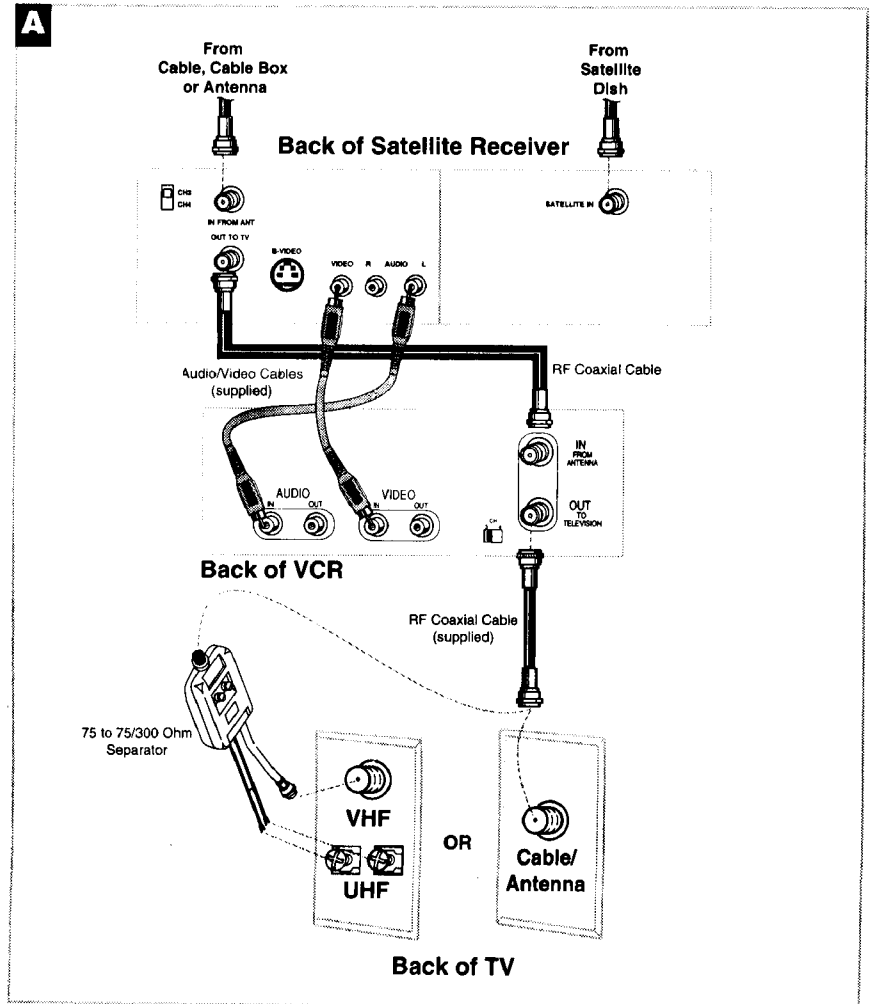


## A. Basic hookup.

Use this hookup if your TV does not have audio/video jacks.

1. Set the **CH3 CH4** switch on back of satellite receiver to either channel 3 or 4.  
You will tune the VCR to this channel or its line input (L1) to record from the receiver.  
To watch the satellite receiver, turn off the VCR. If you want to watch or record the signal from your antenna, cable, or cable box, make sure the satellite receiver is turned off.
2. Set the **CH3 CH4** 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.
3. Connect as shown.  
This connection may require additional accessories not provided.
4. Plug in power cords of VCR, TV, and receiver.
5. **Continue to page 9.**

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





# RCA DSS® Satellite Receiver

## B. Advanced hookup with basic receiver.

Use this hookup if your TV has audio/video jacks and your receiver has one set of AUDIO/VIDEO jacks.

1. Set the CH3 CH4 switch on back of receiver to either channel 3 or 4.

You will tune the VCR to this channel to record from the satellite receiver.

To watch the satellite receiver, tune your TV to its video input channel.

If you want to watch or record the signal from your antenna, cable, or cable box, make sure the satellite receiver is turned off.

2. Set the CH3 CH4 switch on back of VCR to either channel 3 or 4.

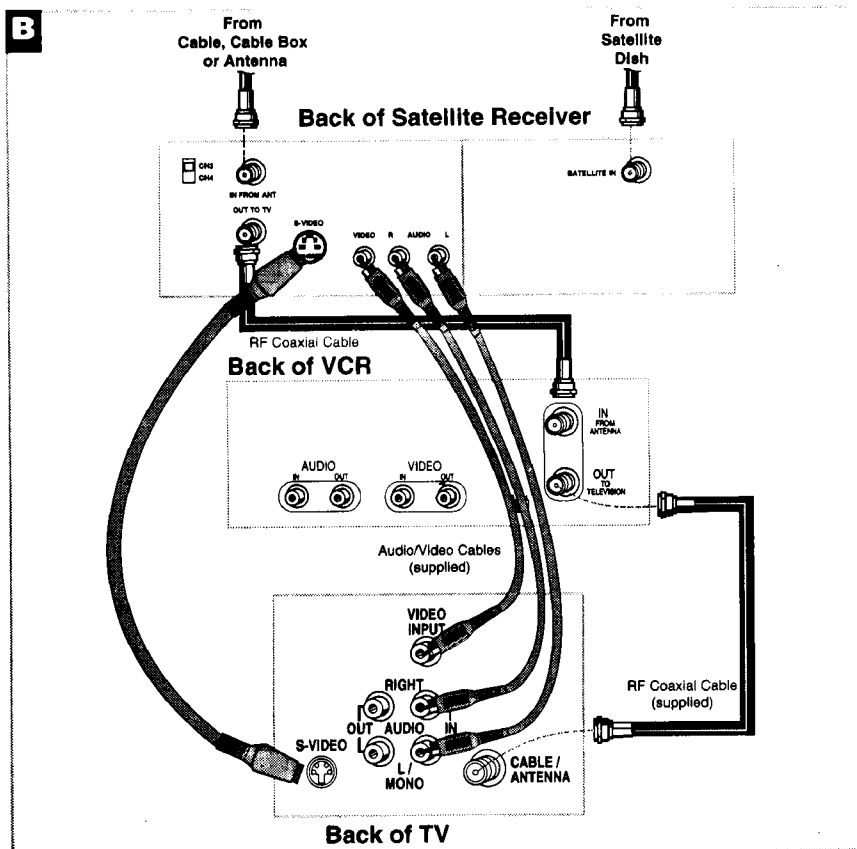
You will tune the TV to this channel and use the TV•VCR button to watch the VCR.

3. Connect as shown.

This connection may require additional accessories not provided.

4. Plug in power cords of VCR, TV, and receiver.

5. **Continue to page 9.**



## C. Advanced hookup with deluxe receiver.

Use this hookup if your TV has audio/video jacks and your receiver has two sets of AUDIO/VIDEO jacks.

1. Set the CH3 CH4 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.

To record from the satellite receiver, you will tune the VCR to its line input (L1).

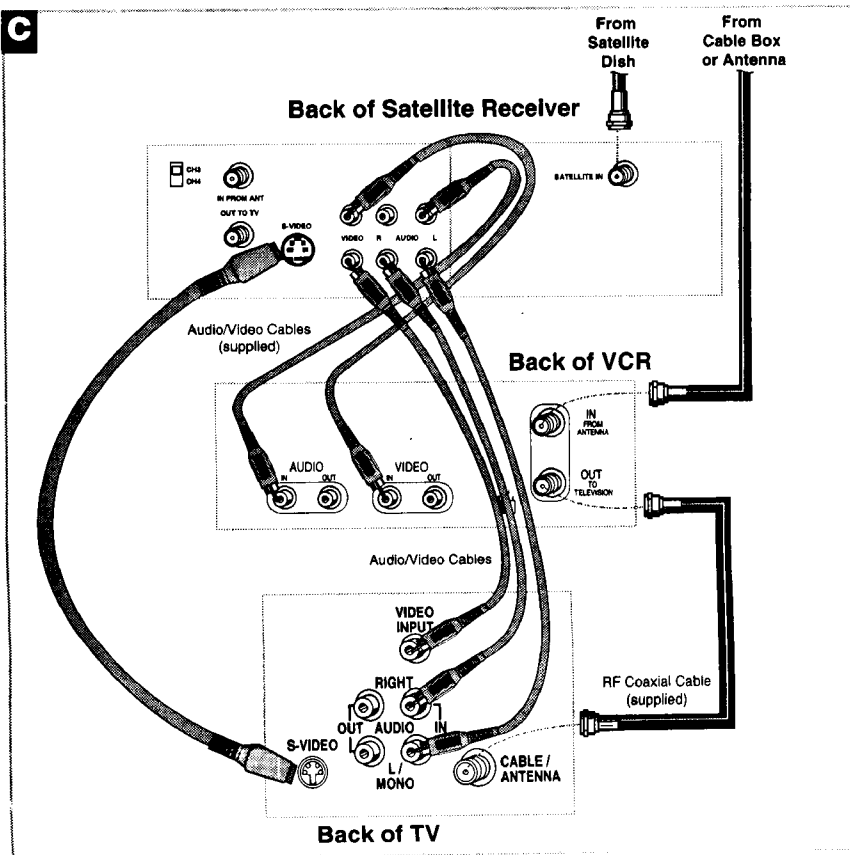
To watch the satellite receiver, tune your TV to its video input channel.

2. Connect as shown.

This connection may require additional accessories not provided.

3. Plug in power cords of VCR, TV, and receiver.

4. **Continue to page 9.**



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

## 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 7 and then modify with this connection.
2. Set the CH3 CH4 switch on the playback VCR to either channel 3 or 4.

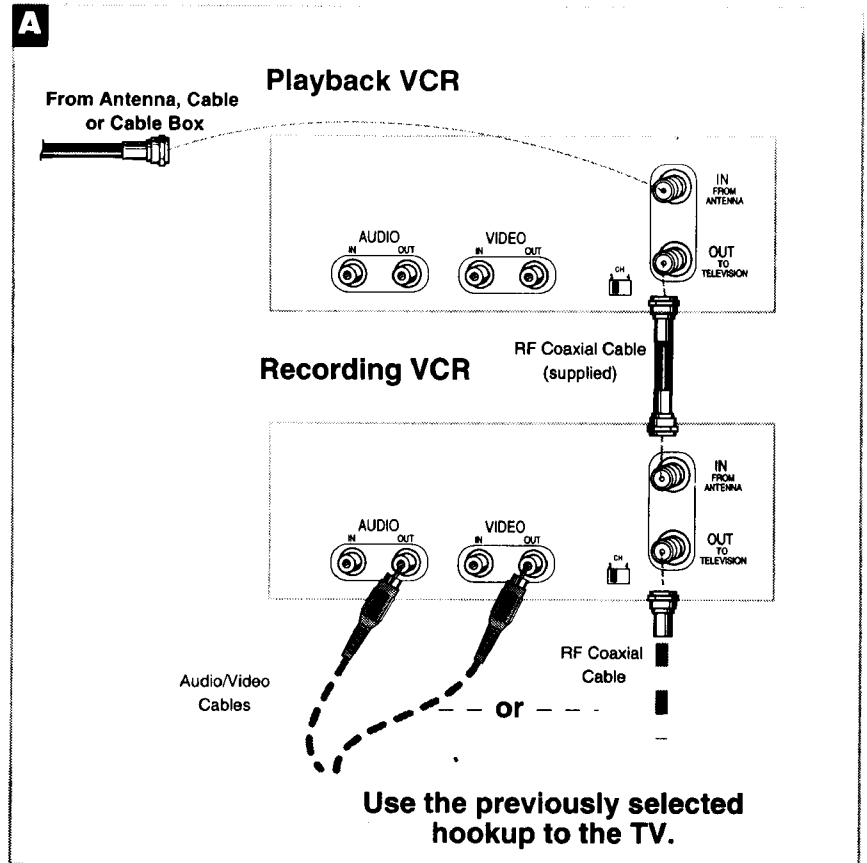
You will tune the recording VCR to this channel to receive the signal from the playback VCR.

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 9.**



### 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 7 and then modify with this connection.

2. Connect as shown.

This connection requires additional accessories not provided.

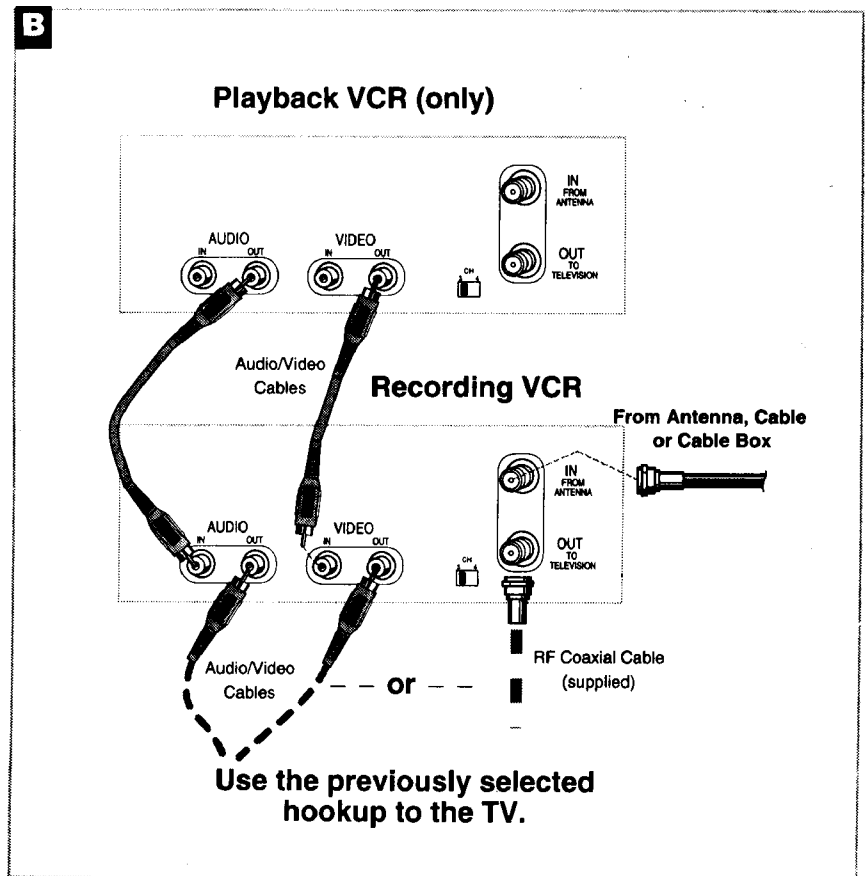
If your TV is stereo, you may need a Y-adaptor to hear sound from both channels.

3. Plug in power cords of VCRs and TV.

4. **Continue to page 9.**

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

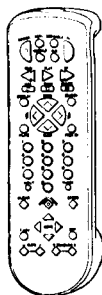
**Caution:** The unauthorized recording of satellite broadcasts, television programs, or other materials may infringe the rights of others.



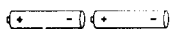
# Startup

## 1. Check accessories with VCR.

Contact your dealer if any items are missing.



Remote  
(Stock No. 225529)



2 "AAA" Batteries

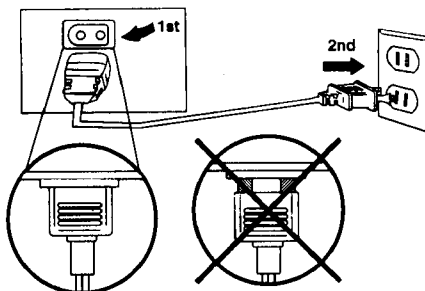


RF Coaxial Cable  
(Stock No. 221396)

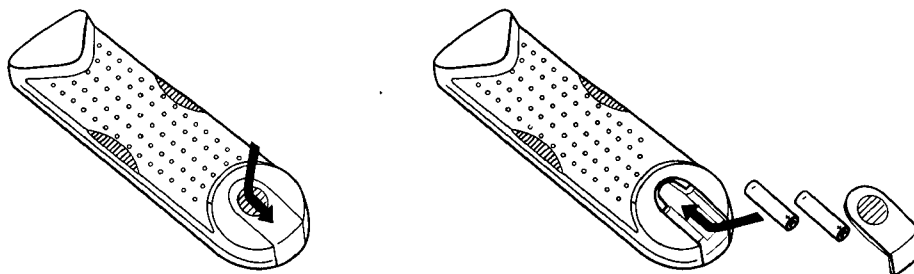


Power Cord  
(Stock No. 218104)

## 2. Attach power cord to back of VCR.



## 3. Insert batteries in remote.



## 4. 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 CH3 CH4 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.)

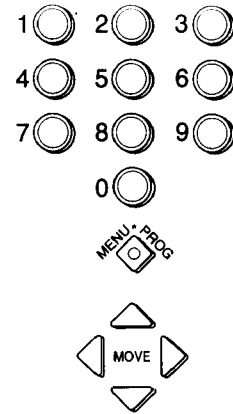
# Startup

## 5. Use the on-screen menu system.

Point and Select is the method you use to move through the menu system. There are two ways to select (or change) a menu or feature.

- **Using the Number Buttons:** Press MENU•PROG to display the VCR MAIN MENU. Then use the number button on the remote that corresponds to the number on the menu to select (or change) an item. Using the number button allows you to point and select a menu item at the same time.
- **Using the MOVE Arrows:** Press MENU•PROG to display the VCR MAIN MENU. Then use the  $\triangle$  or  $\nabla$  MOVE arrow button to point to a menu or item. Press MENU•PROG to select (or change) the item.

Although there are two ways to access the menu system, only the number buttons are referenced throughout this manual to explain the VCR features and operations.



## 6. Turn on the VCR.

- A. Press VCR1 on the remote.

The first time you turn on the VCR, the SETUP menu will appear. Follow the steps on the screen to automatically set-up the cable box or RCA DSS® satellite receiver, auto channel search, automatically set the time, and select some feature options.

1. Press number button 1 on the remote to Begin setup. *Proceed to Step 7.*
2. Press number button 2 on the remote to Cancel the setup.

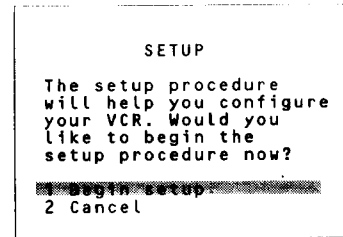
If you choose not to use the SETUP menu, follow the steps in this section to manually set up the VCR so it will operate properly.

If you skip auto channel search during setup, the auto clock set feature will not be performed.

If the SETUP menu does not appear or you prefer, you can manually select the SETUP menu. Each of these features (except the automatic clock set) may also be performed individually.

To manually select the SETUP menu.

1. Press MENU•PROG to display the VCR MAIN MENU.
2. Press 5 to display the SETUP menu.



# Startup

## 7. Auto cable/DSS box setup.

The cable/DSS box setup allows the VCR to record programs from the cable box or RCA DSS® receiver.

- If your cable box can be controlled by a remote, the VCR may be able to tune it to the channel you want to record during VCR Plus+ and timer recordings and automatically set the clock after power failures. Position the remote-controllable cable box on top of the VCR to receive the infrared remote signal. See pages 4-5.
- The VCR will turn on an RCA DSS® receiver and tune it to the channel you want to record during timer recordings. Position the receiver on top of the VCR to receive the infrared remote signal. See pages 6-7.

**A. Cable box or satellite receiver not used for all channels:**

Press 2. You are finished with CABLE BOX SETUP. Skip to Step 8.

**Cable box or RCA DSS® receiver used for all channels:**

Press 1 to continue.

**B. Press two numbers on the remote to enter the output channel of your cable box or satellite receiver. Press 0 before a single-digit number. Valid numbers are 01 - 99.**

If you connected your cable box or satellite receiver to the VCR using the box's AUDIO/VIDEO OUT jacks, press INPUT to select the VIDEO1 option.

Press CLEAR on the remote to correct an entry.

**C. Press MENU•PROG to proceed.**

The VCR now automatically enters the output channel of your cable box or satellite receiver as the channel to be recorded in the VCR PLUS+ and TIMER RECORDINGS menus.

**D. Press MENU•PROG to proceed.**

```

          SETUP
Is a cable box or DSS
receiver being used
with the VCR for all
channels?
1 Yes
2 No, skip this step
    
```

```

          CABLE/DSS BOX SETUP
Enter the output
channel of the cable
box or DSS receiver.
          **
Press 01-99 or INPUT
Press MENU to exit
    
```

```

          CABLE/DSS BOX SETUP
The VCR will now receive
all channels from the
cable box or DSS
receiver on VCR Ch 03
          **
Press MENU to proceed
    
```

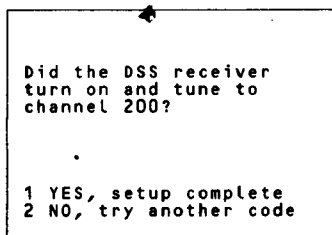
```

          CABLE/DSS BOX SETUP
Enter the code for
your cable box or DSS
receiver from the list
in your User's Manual.
          **
Press MENU to proceed
    
```

- E. **Manually Controlled Cable Box:** You are finished with cable box setup. Press MENU•PROG to exit. *Proceed to Step 8.*

**RCA DSS® Receiver or Remote Controlled Cable Box:**

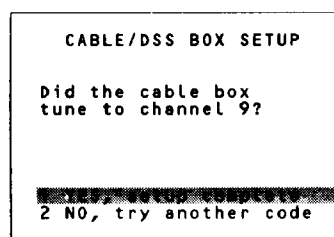
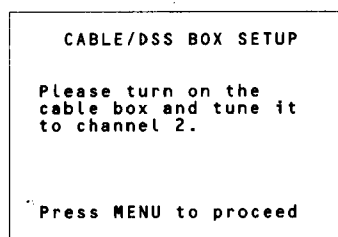
- **RCA DSS® Receiver:** Enter 00 for the code. The receiver should turn on and tune to channel 200.



The VCR will now tune your receiver to the correct channel during timer recordings. --- DSS will appear for the channel in the timer program menu.

AUTO CLOCK set does not support DSS. *Proceed to Step 8, and manually set the clock.*

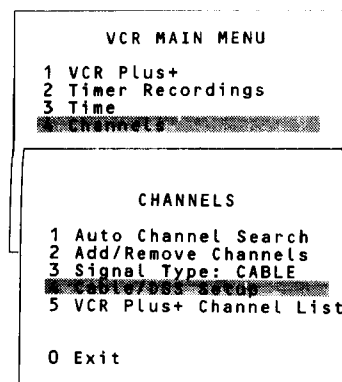
- **Remote Controlled Cable Box:** Enter your cable box code from the chart on page 20 and follow the on-screen directions.



- The VCR changes the cable box from channel 02 to channel 09 when you enter the correct code for your cable box. If the cable box changes channels, press 1. *Proceed to Step 8.*
- If none of the codes work, try repositioning the cable box and entering the codes again. If the codes still do not work, this VCR cannot control your cable box during timer recordings or automatically set the clock. Press MENU•PROG. *Proceed to Step 8.*

## Manual cable box setup.

- If you ever want to manually set up the cable box:
- Press MENU•PROG to display the VCR MAIN MENU on the TV screen.
  - Press 4 to select CHANNELS menu.
  - Press 4 to select Cable/DSS Setup.
  - Perform steps A-E as shown in Step 7.



# Startup

## 8. Auto channel search and auto clock set.

Follow the steps on the screen to auto channel search and automatically set the clock\*. You can also perform each of these operations separately from the VCR MAIN MENU.

**RCA DSS® Receiver:** If you receive all channels through an RCA DSS® satellite receiver, set the clock manually.

**Cable Box:** The VCR will proceed to automatic clock set.

**No Cable Box:** Follow the directions on the screen to automatically auto search channels and set the clock using the Coordinated Universal Time information transmitted by some broadcast stations.

If the SET TIME ZONE screen appears, follow these steps to place the channels in the VCR's memory and set the clock.

- A. Press a number (1-6) on the remote corresponding to the time zone you live in. If you do not know your time zone, press 7 and an automatic setting will be made.

If you select **Don't Know** for your time zone, the VCR will set the clock using the first Coordinated Universal Time information it finds. If the time is not correct, set the clock manually.

- B. Set daylight savings. When the SET DAYLIGHT SAVINGS screen appears, press 1 if your area observes daylight savings time from April to October, or press 2 if it does not. If you do not know, press 3.

- C. Press MENU•PROG on the remote if all antenna or cable connections are completed. The AUTO CHANNEL SEARCH will be performed, followed by automatic clock set.

**Notes:** If The Auto Clock Set was unsuccessful message appears, then set the clock manually. The clock must be set before you can use the timer recording feature.

If you receive all channels through a cable box, the VCR will *not* reset the clock after a power outage unless the cable box is set to the channel carrying the broadcast signal. (Call your local cable operator to find out what channel carries the broadcast signal.)

\* Signal not available in all areas.

```

SET TIME ZONE
What is your time zone?
1 Eastern
2 Central
3 Mountain
4 Pacific
5 Alaska
6 Hawaii
7 Don't Know
Press MENU to continue
    
```

```

SET DAYLIGHT SAVINGS
Does your area observe
Daylight Savings Time
from APRIL to OCTOBER?
1 Yes, DST is observed
2 No
3 Don't Know
Press MENU to continue
    
```

```

AUTO CHANNEL SEARCH

Now scanning channel 14

Press any key to cancel
    
```

```

AUTO CLOCK SET

The VCR is now setting
the clock. This may
take several minutes.

Press MENU to cancel
    
```

### Manual channel search.

If you ever need to manually Auto Channel Search 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 the CH3 CH4 switch on the back of the VCR or the TV's video input (refer to TV's manual).
  - Press VCR1, then press MENU•PROG again.
  - If you use a basic hookup, check VCR indicator in display panel – it should be on. Press TV•VCR to turn it on.
  - Check the connections.
- B. Press 4 to display the CHANNELS menu.
- C. Press 1 to begin Auto Channel Search.

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

```

VCR MAIN MENU
1 VCR Plus+
2 Timer Recordings
3 Time
4 Channels
    
```

```

CHANNELS
1 Auto Channel Search
2 Add/Remove Channels
3 Signal Type: CABLE
4 Cable/DSS Setup
5 VCR Plus+ Channel List

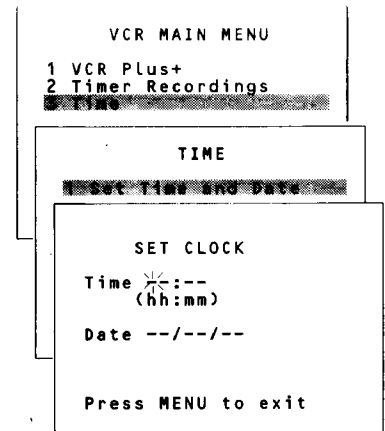
0 Exit
    
```

# Startup

## Manual clock set.

If the AUTO CLOCK SET was unsuccessful or you want to manually set the clock, follow the steps below. If you set the clock manually during setup, Auto Clock Set will be set to OFF.

- A. Press MENU•PROG on remote to display the VCR MAIN MENU on the TV screen.
- B. Press 3 to point and select the TIME menu.
- C. Press 1 to display Set Time and Date.
- D. 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.
- E. Press MENU•PROG on remote to remove SET CLOCK from the TV screen and start the clock. The time will appear in the VCR's display panel and the time and date will appear on the TV screen when you press DISPLAY.



## 9. Setup VCR Plus+ channels.

The VCR must be setup with the VCR Plus+ channels before you can record using VCR Plus+. This can be done now or at a later time. *Details are on page 34.*

## 10. Program VCR for VCR1 or VCR2•LD button.

You can program this VCR to respond to the VCR1 or VCR2•LD button on the remote. *Details are on page 18.*

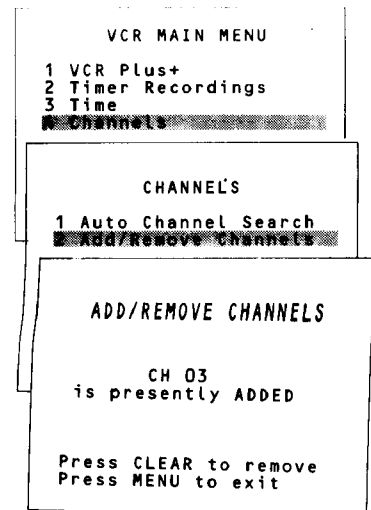
Remember you must press VCR1 or VCR2•LD on the remote — whichever you selected in the menu — before the remote will operate this VCR.

## 11. 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.

We recommend channels be placed in memory using the Auto Channel Search feature *described in step 8* before adding or removing channels. Channels 2-13, and L1 are preset at the factory.

- A. Press VCR1 on the remote.
- B. Press MENU•PROG on the remote to see the VCR MAIN MENU on the TV screen.
- C. Press 4 to display the CHANNELS menu.
- D. Press 2 to display the ADD/REMOVE CHANNELS menu.
- E. Follow the directions on the screen.
- F. Add or remove more channels by entering channel numbers or using CHANNEL up or down.





## Startup

### 12 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 the picture from the TV channel. This button lets you record a program on the VCR while watching another channel on the TV. *Details are on page 33.*

- A. Press VCR1 to set the remote to control the VCR.
- B. Press TV•VCR to see the picture from the VCR.  
The VCR indicator lights in the display panel.
- C. Press CHANNEL up or down on the VCR or CHAN on VCR's remote to change channels on the VCR.  
The channel number changes in the display panel.
- D. 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.
- E. Return the TV to the VCR viewing channel — CH3 or CH4.
- F. Press VCR1, then TV•VCR to switch back to the picture from the VCR.

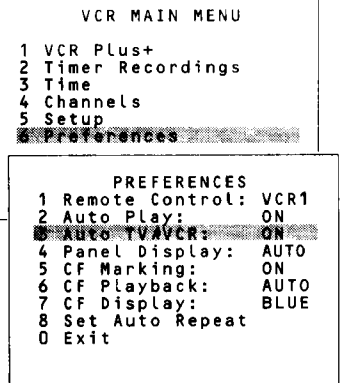
### 13 Set Auto TV/VCR feature.

If you used one of the basic hookups and did not connect the audio/video jacks of the VCR to the TV, leave the Auto TV/VCR feature set to ON.

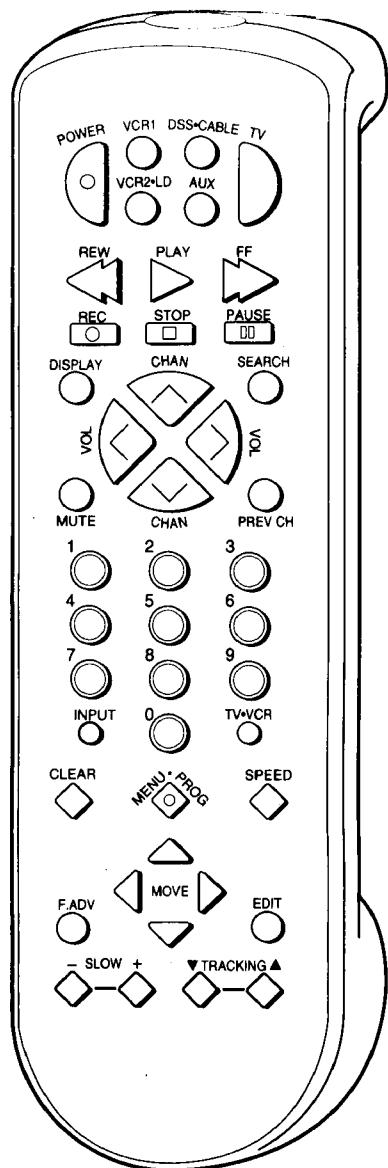
If you have connected your VCR using the audio/video input of your TV, you can prevent the VCR indicator from turning on automatically and interrupting the cable or antenna signal to your TV.

- A. Press MENU•PROG on remote to see VCR MAIN MENU on the TV screen.
- B. Press 6 to display PREFERENCES.
- C. Press 3 to select Auto TV/VCR: ON or OFF.
  - Select ON if you used one of the basic hookups and watch your VCR on channel 3 or 4 of your TV. The VCR will automatically switch the TV•VCR setting to VCR every time the VCR is turned on, a tape with the safety tab removed is inserted, or you press PLAY.
  - Select OFF if you used one of the advanced hookups and watch your VCR on the video input channel of your TV. The VCR indicator will not turn on automatically and the signal from your antenna or cable to your TV will not be interrupted.

Pressing TV•VCR on the remote will still turn the VCR indicator on or off and switch the antenna signal.



# Buttons



## Component Buttons

Press one of the buttons to set the remote to operate that component.

### AUX (Auxiliary)

Used with POWER button to turn on compatible RCA audio component. *See page 21.*

Used with POWER button to turn on another brand of TV, other than RCA, when the remote is programmed to control that TV. *See page 19.*

### DSS•CABLE

Turns on a compatible RCA cable box or RCA DSS® satellite receiver. *See page 20.*

Used with POWER button to turn on another brand of cable box, other than RCA, when the remote is programmed to control that cable box. *See page 20.*

### VCR1

Turns on a compatible RCA, ProScan, or GE VCR and sets remote to control the VCR.

### VCR2•LD

Turns on a compatible RCA, ProScan, or GE VCR and sets remote to control VCR when it has been setup. *See page 18.*

Used with POWER button to turn on compatible RCA or ProScan LaserDisc player.

### TV

Turns on a compatible RCA, ProScan, or GE TV and sets the remote to control the TV.

## VCR Function Buttons

Press VCR1 (VCR2•LD) to set remote to control the VCR to use the function buttons.

### Arrow Buttons (MOVE )

Allow you to move through the menus, enter data and change settings of selected features. *See page 10.*

### FF (Fast Forward)

Fast forwards the tape when the VCR is stopped.

Searches the picture in forward motion during playback.

### CHAN Up or Down

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

### INPUT

Turns the line input on or off. L1 appears in VCR's display panel and VIDEO1 appears on TV screen.

### CLEAR

Resets time counter to 0:00:00.

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

Allows you to change entries when setting the clock or VCR for a VCR Plus+ or timer recording.

### MENU•PROG

Displays the VCR MAIN MENU on the TV screen.

### DISPLAY

Shows VCR operating displays on the TV screen.

Removes a menu from the screen.

Displays the time counter.

### EDIT

Signals two properly connected compatible VCRs to begin copying a tape. *See page 40.*

### 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.

### F.ADV (Frame Advance)

Lets you view one frame with each press of the button while the tape is paused.

## Buttons

### VCR Function Buttons

(continued)

#### PAUSE

Pauses action for viewing during playback.

Pauses recording to prevent recording of unwanted scenes.

#### PLAY

Plays a tape.

#### POWER

Turns off VCR when remote is set to control the VCR.

#### PREV CH (Previous Channel)

Switches between two channels.

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

#### REC

Starts VCR recording.

Used for express recording (XPR). See page 39.

#### REW (Rewind)

Rewinds the tape when the VCR is stopped.

Searches the picture in reverse motion during playback.

#### SEARCH

Displays INDEX, TIME, ZERO, and BLANK SEARCH menus on TV.

Used with COMMERCIAL▶▶ADVANCE™ feature. See page 31.

#### SLOW - / +

Used for slow-motion playback.

#### SPEED (Tape Speed)

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

#### STOP

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

#### TRACKING Up and Down

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

Reduces picture "jitter" during stop-action playback.

#### TV•VCR

Switches the picture signal so that it either comes from the VCR or the TV channel. See page 15.

### TV Function Buttons

Press the TV button to set remote to control a compatible TV. Some buttons may not work with every TV.

#### Arrow Buttons (MOVE )

Allow you to move through the menus, enter data and change settings of selected features.

#### CHAN Up or Down

Selects next higher or lower channel in the TV's channel memory when remote is set to control a TV.

#### CLEAR

Removes menus or status displays from the screen.

#### DISPLAY

Shows the status displays on the screen.

Removes menus or displays from the screen.

#### MUTE

Turns the TV sound on or off.

#### 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.

#### POWER

Turns off a compatible TV when remote is set to control TV.

Used with TV button to turn on a compatible TV, other than RCA, when the remote is programmed to control that TV. See page 19.

#### PREV CH (Previous Channel)

Switches between two channels.

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

#### SLOW - / +

Used with the TV's menus to select and adjust features.

#### VOL Up and Down

Raises and lowers sound.

### Cable Box and RCA DSS® Receiver Function Buttons

Press the DSS•CABLE button to set remote to control a compatible cable box or satellite receiver. Some buttons may not work with every cable box or receiver. If you have an RCA DSS® receiver, test the "TV Function Buttons" to see which ones operate the receiver.

#### CHAN Up or Down

Selects next higher or lower channel.

#### Numbers (0 through 9)

Select a channel using the number buttons.

#### POWER

Turns off a compatible cable box or satellite receiver.

DSS® is a registered trademark of DIRECTV, Inc., a unit of Hughes Electronics Corporation.

## Controlling a VCR

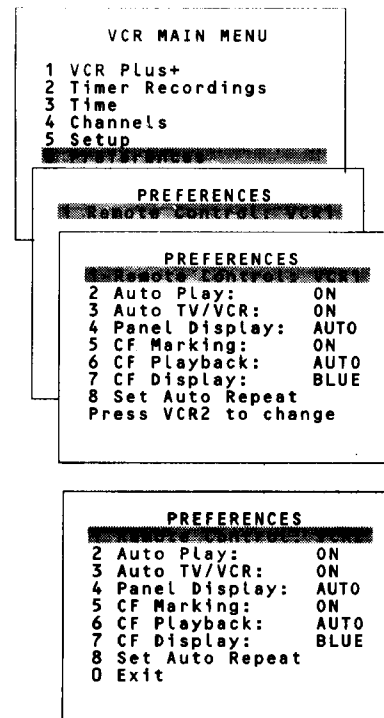
The VCR's remote controls two compatible RCA, ProScan, or GE VCRs with the VCR1 and VCR2•LD buttons. Most compatible VCRs automatically respond to VCR1 without being programmed. If you own two compatible VCRs, test them to see if VCR1 turns on both VCRs. If it does, then you may want to program this VCR to respond to the VCR2•LD button on the remote.

### Program the VCR for Remote Control

Set the Remote Control feature of the VCR to the VCR1 or VCR2 position. The remote then controls the VCR with either the VCR1 or VCR2•LD button — whichever position you select in the menu.

1. Press MENU•PROG to display the VCR MAIN MENU.
2. Press 6 to display PREFERENCES.
3. Press 1 to activate the Remote Control feature.
4. Press VCR1 or VCR2•LD to change the setting and program this VCR to respond to the VCR1 or VCR2•LD button — whichever you select.

**Important Reminder:** Remember you must press VCR1 or VCR2•LD on the remote — whichever you selected in the menu — before the remote will operate this VCR.



## Controlling a TV

The VCR's remote is preprogrammed to control the basic functions of a compatible RCA, ProScan, or GE TV. The remote can also be setup to control other manufacturer's brands. To program the remote, use the remote buttons that correspond to your brand.

### Program the Remote for a TV

1. Turn on the TV.
2. Point the VCR's remote at the TV.
3. Hold the TV button and press two number buttons for your brand. If the TV changes channels when the CHAN up or down button is pressed, setup is complete.
4. Release the buttons.
5. Repeat steps 2 - 4 with two other buttons if the first ones do not work.

**Helpful Hint:** Notice the difference between the TV and VCR on-screen displays. This is one way to tell if the remote is set to control the VCR or the TV.

Brand *	Remote Button	Brand *	Remote Button
Akai	03	NAD	07
AOC	06	NEC	06
Candle	06	Panasonic	04,11
Citizen	06	Philco	04,06
Colortyme	06	Philips	03,04,06
Concerto	06	Pioneer	06
Curtis Mathes	01,06	Portland	06
Daewoo	06	ProScan	01
Daytron	06	Proton	06
Electrohome	06	Quasar	11
Emerson	06	Radio Shack	01,05,13
Envision	05,06	RCA	01,06
Fisher	05,08	Realistic	05
GE	00,01,06,11	Sampo	06
Goldstar	06	Samsung	06,09
Hallmark	06	Sanyo	05,08
Hitachi	06	Sears	01,05,06,07,08,10,
Infinity	04		
J C Penney	00,01,06,09	Sharp	06,13
JBL	04	Sony	03
Jensen	06	Soundesign	06
JVC	10,11	Sylvania	04,06
Kawasho	03,06	Technics	11
Kenwood	06	Techwood	06
Loewe	04	Teknika	06
Luxman	06	TMK	06
LXI	04,05,07	Toshiba	05,07,09
Magnavox	04,06	Universal	00
Marants	04	Victor	10
Marantz	04,06,12	Wards	00,01,04,06,
MGA	06		13
Mitsubishi	06,12	Zenith	02
MTC	06		

\* The remote may not be able to control every model TV of the brands listed.

### Operate the TV

After you have set up your remote to control your TV, test the TV buttons to see which ones operate your TV.

1. Point the remote at the TV and press TV.
2. If TV does not turn on in step 1, press TV and then POWER.
3. Use the "TV Function Buttons" as described on page 17.

## Controlling a Cable Box or an RCA DSS® Receiver

The DSS•CABLE button on the VCR's remote is preprogrammed to control either a compatible RCA cable box or RCA DSS® satellite receiver. If your cable box is another manufacturer's brand and has its own remote, you will probably be able to program the VCR's remote to control your cable box. To program the VCR's remote, enter the code that corresponds to your brand.

### Program the Remote

1. Turn on the cable box.
2. Point the VCR remote at the cable box.
3. Hold the DSS•CABLE button and press two number buttons to enter the code for your brand.
4. Release the buttons.
5. Press POWER on the remote. If the cable box turns off, setup is complete.
6. Repeat steps 2 – 5 with a different code if the first one does not work.

Brand of Cable-TV Box*	Code Number(s)
ABC	53,54
Anvision	07, 08
Cablestar	07, 08
Eagle	07,08
Eastern International	02
General Instrument	04, 05, 15, 23, 24, 25, 30, 36
Hamlin	12, 13, 34,48
Hitachi	37, 43
Jerrold	04, 05, 15, 23, 24, 25, 30, 36, 45, 46,47
Macom	37, 43
Magnavox	07, 08, 19, 26, 28, 29, 32, 33, 40, 41
NSC	09
Oak	01, 16, 38
Oak Sigma	16
Panasonic	03, 27, 39
Philips	07, 08, 19, 26, 28, 29, 32, 33, 40, 41
Pioneer	18, 20, 44
Randtek	07, 08
RCA	00, 27
Regal	12, 13
Regency	02, 33
Samsung	44
Scientific Atlanta	03, 22, 35
Sylvania	11
Teknika	06
Texscan	10, 11
Tocom	17, 21,49, 50
Unika	31, 32, 41
Universal	51, 52
Viewstar	07, 08, 19, 26, 28, 29, 32, 33, 40, 41
Warner Amex	44
Zenith	14, 42

\* The remote may not be able to control every cable box of the brands listed.

### Operate the Cable Box or RCA DSS® Satellite Receiver

After you have setup your remote (if required) to control your cable box, test the buttons to see which ones operate your cable box or satellite receiver.

1. Point the remote at the cable box or satellite receiver and press DSS•CABLE.
2. If the cable box does not turn on in step 1, press DSS•CABLE and then POWER. If the RCA DSS® satellite receiver does not turn on in step 1, reprogram the remote using 00.
3. Use the "Cable Box or RCA Receiver Function Buttons" for the cable box and test the "TV Function Buttons" to see which ones operate the satellite receiver. See page 17.

## **Controlling an Auxiliary RCA Component**

The remote that came packed with your VCR is also capable of controlling one compatible RCA audio component, such as an AM/FM radio, CD player, tape player, or phonograph. The remote must be programmed for the specific component it is to control. To program the remote, use the code that corresponds to your component.

### **Program the Remote for an Auxiliary Component**

1. Turn on the component.
2. Point the VCR's remote at the component.
3. Hold the AUX button and press two number buttons to enter the code for your component.
4. Release the buttons.
5. Press **POWER** on the remote. If the component turns off, setup is complete.

<b>Type of Auxiliary Audio Equipment and Code*</b>				
	<b>AM/FM</b>	<b>CD</b>	<b>Tape</b>	<b>Phono</b>
<b>RCA</b>	03	07	06	05

\* The remote may not be able to control every RCA model of audio equipment listed.

### **Operate the Auxiliary Component**


After you have setup your remote to control your component, test the buttons to see which ones operate the component.

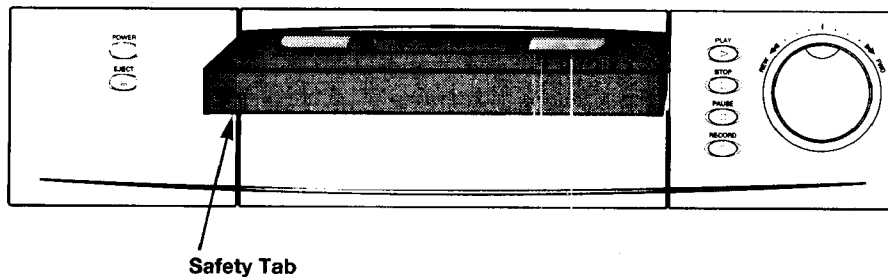
1. Point the remote at the component and press AUX.
2. If the component does not turn on in step 1, press AUX and then POWER.
3. Test the buttons on the remote to see which ones operate your component.

## 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 cassette-in  indicator lights, and the VCR indicator lights if the Auto TV/VCR feature is set to ON. The 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. **PLAY** appears in the VCR's display panel.
4. Press **TRACKING** up or down to remove any streaks from the picture, if necessary. *Details are on page 26.*
5. Press **STOP**.
6. Press **REW** on the remote or turn the shuttle ring toward **REW** on the VCR.  
The VCR will automatically rewind the tape if it reaches the end of the tape during playback. While rewinding, you can press **POWER** and the VCR will turn off after rewinding.
7. Press **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 6 to display the PREFERENCES 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.

VCR MAIN MENU

- 1 VCR Plus+
- 2 Timer Recordings
- 3 Time
- 4 Channels
- 5 Setup
- 6 **PREFERENCES**

PREFERENCES

- 1 Remote Control: VCR1
- 2 **Auto Play: ON**
- 3 Auto TV/VCR: ON
- 4 Panel Display: AUTO
- 5 CF Marking: ON
- 6 CF Playback: AUTO
- 7 CF Display: BLUE
- 8 Set Auto Repeat
- 0 Exit

## Auto Repeat Feature

The VCR will automatically repeat a segment of tape.

1. Locate the beginning of the segment you want the VCR to repeat, and press STOP.
2. Press DISPLAY to display the time counter, and press CLEAR to reset it to 0:00:00.
3. Press MENU•PROG on the remote to see the VCR MAIN MENU on the TV screen.
4. Press 6 to display the PREFERENCES menu.
5. Press 8 to display the AUTO REPEAT menu.
6. Use the number buttons to enter the length of time of the segment you want the VCR to repeat.
7. Press MENU•PROG to remove the menu from the screen.

VCR MAIN MENU

- 1 VCR Plus+
- 2 Timer Recordings
- 3 Time
- 4 Channels
- 5 Setup
- 6 **PREFERENCES**

PREFERENCES

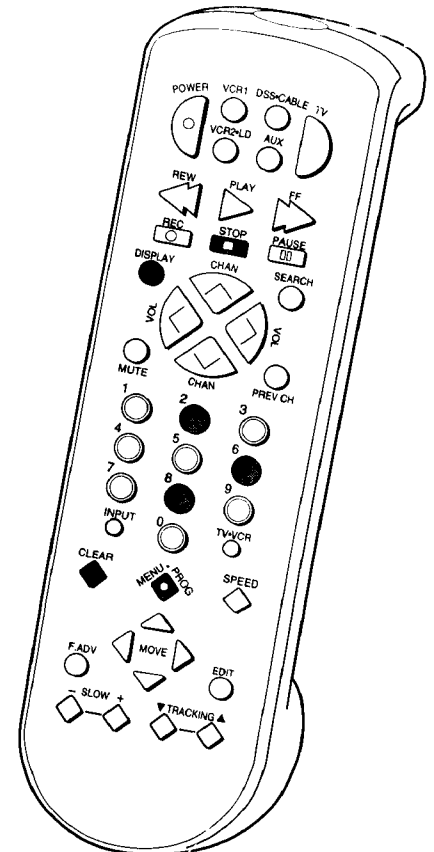
- 1 Remote Control: VCR1
- 2 Auto Play: ON
- 3 Auto TV/VCR: ON
- 4 Panel Display: AUTO
- 5 CF Marking: ON
- 6 CF Playback: AUTO
- 7 CF Display: BLUE
- 8 **Set Auto Repeat**

AUTO REPEAT

Set the length of time you want the tape to play in a repeating loop  
 Loop from 0:00 to  $\frac{\text{H}}{\text{M}}\text{:mm}$

Press MENU to exit.

- The VCR will play the tape until the specified counter reading is reached, rewind the tape and replay the segment over and over.
8. To stop auto repeat, display the AUTO REPEAT menu and press CLEAR.



## 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 SP and SLP speed.

1. Press PAUSE during playback to stop the action.  
STILL appears in the VCR's display panel.
2. Press TRACKING up or down to reduce any jittering of the picture.
3. Press PAUSE or PLAY to return to playback.  
The VCR will automatically switch from stop-action playback to stop after a few minutes.

### Variable Speed 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 is best for tapes recorded in the SP or SLP speed.

#### Variable Speed Search

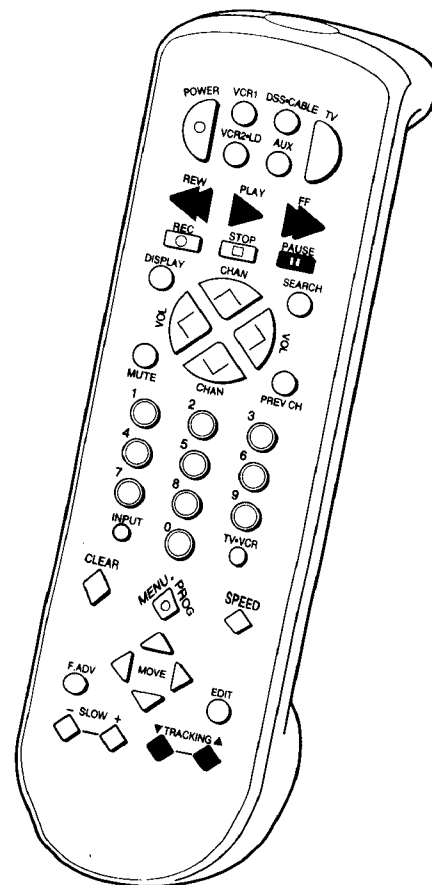
1. Press PAUSE during playback to stop the action.
2. Turn the shuttle ring on the front of the VCR either direction.  
The speed of the search increases with the amount the shuttle ring is turned.
3. Release the shuttle to return to pause.
4. Press PAUSE or PLAY to return to playback.  
The VCR will automatically switch from stop-action playback to stop after a few minutes.

#### Fast Forward Search

1. Press FF on the remote or turn the shuttle ring clockwise toward FWD on the VCR to search forward at a faster-than-normal speed.
2. To return to playback, press FF on the remote, PLAY, or turn the shuttle ring again.

#### Rewind Search

1. Press REW on the remote or turn the shuttle ring counterclockwise toward REW on the VCR to search in reverse at a faster-than-normal speed.
2. To return to playback, press REW on the remote, PLAY, or turn the shuttle ring again.



## Using the Playback Features

### Frame Advance

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

### Slow Motion

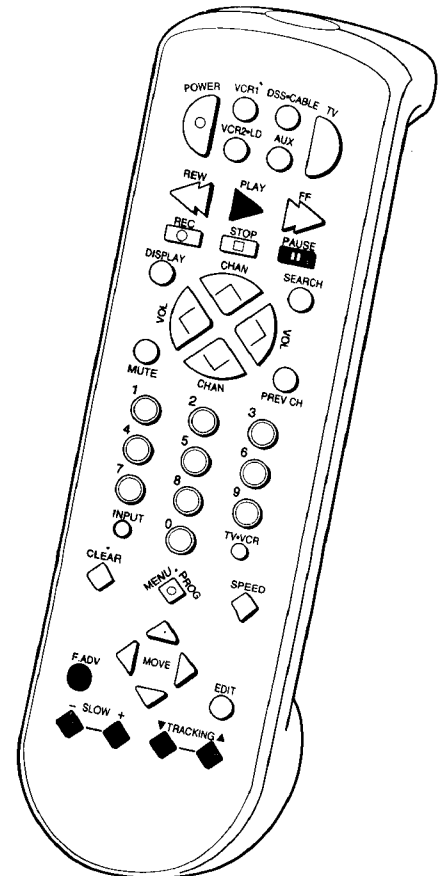
You can view the picture in slow motion during play or play pause. SLOW - and + allow you to change the speed. Sound is turned off during slow-motion playback. Slow motion works best in the SP or SLP speed.

1. During playback, Press SLOW + or - to start slow-motion playback.

SLOW appears in the VCR's display panel.

2. Press SLOW + to increase the speed or - to decrease the speed.
3. Use TRACKING up or down to remove any streaks from the picture.
4. Press PLAY to return to playback.

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



## Using the Playback Features

### 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. The TRACKING buttons on the remote or VCR are used when playing a tape. They have no effect during recording.

- When streaks or snow appear, press TRACKING up or down for the best possible picture.
- Press TRACKING up or down during stop-action pause to reduce picture "jitter".
- Press both TRACKING buttons at the same time to turn automatic tracking back on.

### Pro-Tect Plus™ Locking Feature

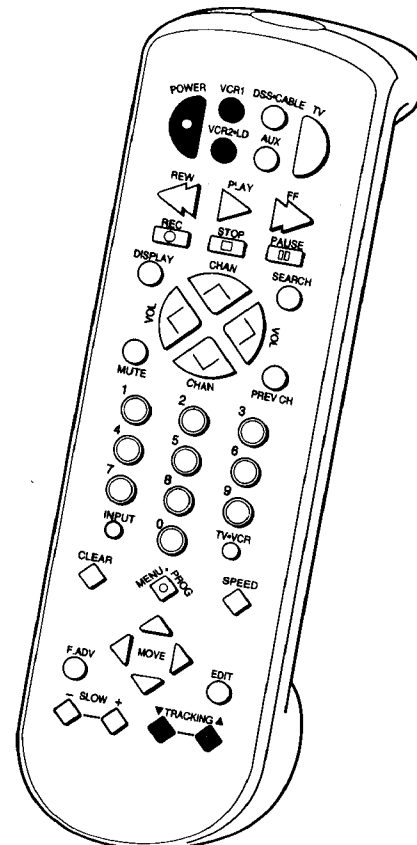
To protect your timer recordings from any unwanted changes, lock the VCR. The buttons on the VCR and remote will not operate the VCR. Just follow the directions below.

#### To Lock the VCR

1. Set up your VCR for a timer recording.
2. Insert a cassette with safety tab intact.
3. Place VCR in stop mode.
4. Press and hold POWER on the remote for at least six seconds until LOCK appears in the VCR's display panel.

#### To Unlock the VCR

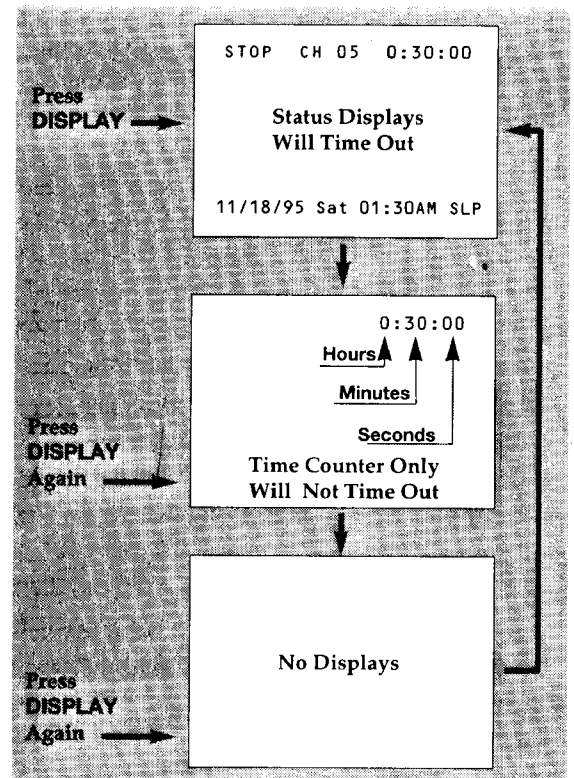
Press and hold VCR1 (VCR2•LD) on the remote until HELLO appears in the VCR's display panel to unlock the controls.



## 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 will appear in the display panel.  
The time and date must be set before they are displayed. If you do not press DISPLAY again, these displays will time out.
2. Press DISPLAY again to have only the time counter remain on the TV screen. The time counter will appear instead of the time in the VCR's display panel.
3. Press DISPLAY again to remove the time counter from the TV screen.  
The time counter will remain in the VCR's display panel and no status displays will appear on the TV screen. This is convenient for editing tapes.
4. Press DISPLAY again to return to the normal status displays.  
Turning off the VCR automatically returns the displays to normal.

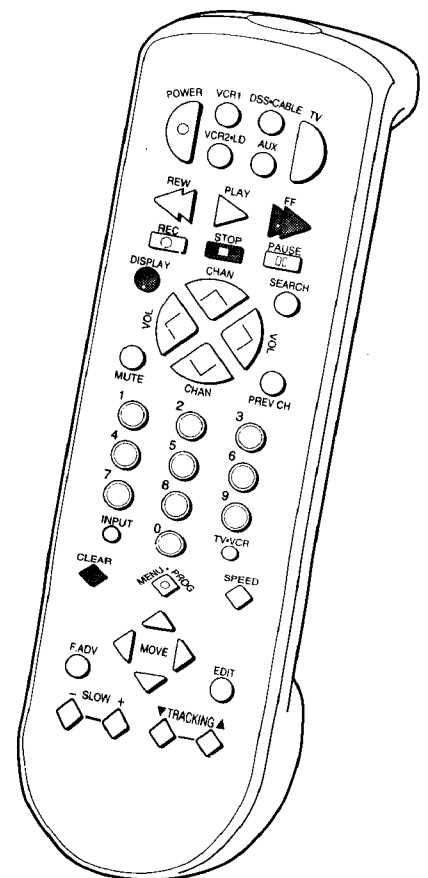


### Time Counter

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. Press STOP. Make sure the tape is rewound.
2. Press DISPLAY twice to display only the time counter on the TV screen.
3. Press CLEAR to reset the time counter to 0:00:00.
4. Press FF on remote or turn the shuttle on the VCR clockwise to fast forward the tape until the time counter reads 0:30:00. Press STOP.  
This is the approximate end of the program and you can begin recording at this spot.
5. Press DISPLAY twice to remove the time counter from the screen and return to the normal displays.



## Using the Playback Features

### Index Search

The VCR has a "VHS Index Search System" that automatically records an index mark on the tape every time you stop and then start a new recording. During playback you can locate the program you want to play by the number of index marks.

The VCR will automatically locate the index number you select. The VCR will search forward or reverse from the location you are on the tape.

1. Insert the prerecorded tape and press STOP.
2. Press SEARCH on the remote to display the INDEX SEARCH menu on the TV screen.
3. Press two number buttons to enter the number of index marks you want the VCR to search.

Press CLEAR to correct an entry.

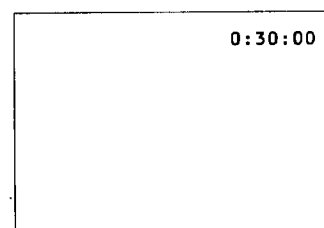
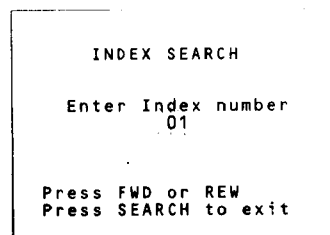
4. Press FF on remote or turn the shuttle ring clockwise toward FWD on the VCR to search forward.

Press REW on remote or turn the shuttle ring counterclockwise toward REW on the VCR to search in reverse.

5. Press STOP to stop index searching.

Some index marks may be missed by the VCR.

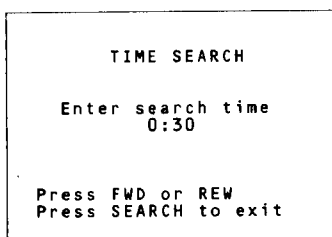
- A mark too close to your location on the tape.
- The mark at the beginning of a recorded segment of five minutes or less.
- The first index mark on the tape when you start at the beginning of the tape.



### Time Search

The VCR will search forward or reverse the amount of time you select from the location you are on the tape.

1. Insert the prerecorded tape, and press STOP.
2. Press SEARCH on the remote twice to display the TIME SEARCH menu on the TV screen.



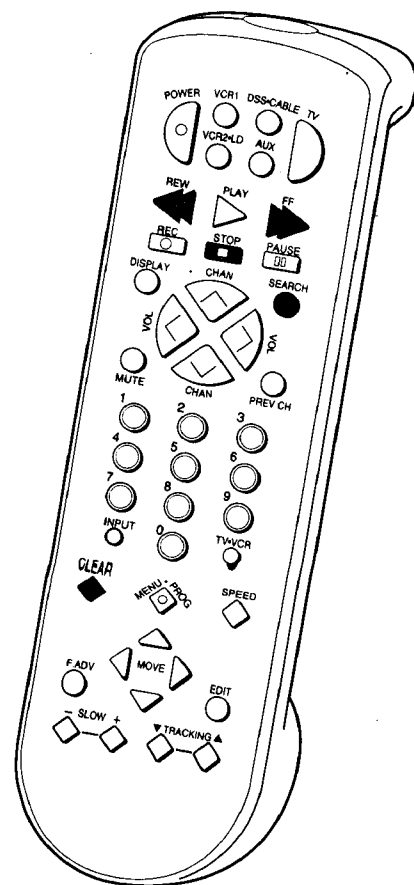
3. Press number buttons to enter the hour(s) and minute(s) of the time counter reading you want the VCR to search.

Press CLEAR to correct an entry.

4. Press FF on remote or turn the shuttle ring clockwise toward FWD on the VCR to search forward.

Press REW on remote or turn the shuttle ring counterclockwise toward REW on the VCR to search in reverse.

5. Press STOP to stop time searching.

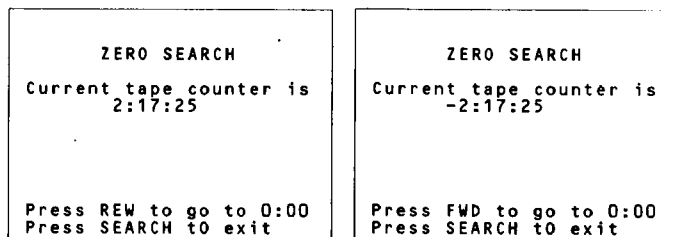


## Using the Playback Features

### 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 convenient when you want to watch a segment of the tape several times.

1. Insert the prerecorded tape, and press STOP.
2. Press DISPLAY twice to display only the time counter on the TV screen.



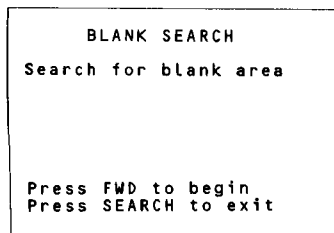
3. Locate the point on the tape that you want to return to quickly.
4. Press CLEAR to reset the time counter to 0:00:00.
5. You can continue to play the tape or perform other functions. When you are finished, press STOP.
6. Press SEARCH three times to display the ZERO SEARCH menu. The current tape counter is displayed.
7. Press REW on the remote or turn the shuttle ring counterclockwise toward REW on the VCR to return to 0:00:00. The time counter is displayed in the upper right corner of the TV screen during search.

If the time counters reading has a minus (-) in front of it, press FF on the remote or turn the shuttle ring clockwise toward FWD to return to a reading of 0:00:00.

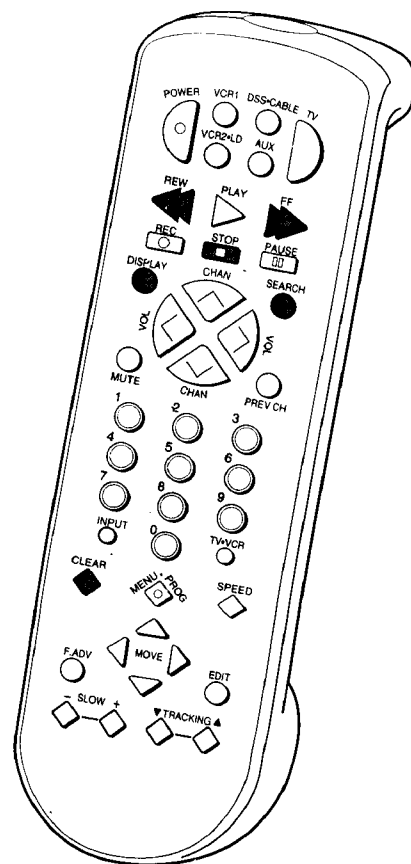
### Blank Search

The VCR searches for blank portions of the tape that are more than six seconds in length.

1. Insert the tape and press STOP.
2. Press SEARCH on the remote four times to display the BLANK SEARCH menu on the TV screen.



3. Press FF or REW to begin search for six seconds of blank tape. A message appears on the screen if a blank area is not found.
4. Press STOP to stop blank searching.



## Recording and Playback

COMMERCIAL▶▶ADVANCE™ is a patented technology that detects and marks most commercials on your tape for any recording that is more than 15 minutes long. During playback, the VCR automatically skips the detected commercial segments or you can choose to manually skip them. This feature reduces three minutes of commercials into approximately 8-12 seconds of fast forwarding in the SLP mode. You can select a background of blue or see the video as the commercials are skipped.

After recording, the VCR rewinds the tape and determines where the commercials are located. It then marks the beginning and end of the detected commercial segments and returns the tape to the end of the recording. *It does not erase the commercials from the tape.*

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 broadcasted 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.

See page 48 for answers to common questions about COMMERCIAL▶▶ADVANCE™.

### COMMERCIAL▶▶ADVANCE™ Marking

1. Press MENU•PROG to display the VCR MAIN MENU.
2. Press 6 to display the PREFERENCES menu.
3. Make sure CF Marking is set to ON. If not, press 5.

The VCR will mark most commercials for the following types of recording.

**VCR Plus+, Timer, or Express Recording:** The VCR will automatically mark the commercials after the power is turned off.

**Manual Recording:** When you press STOP to stop recording, the VCR will ask you if you want to mark the commercials. Just follow the on-screen display.

MARK/COMM appear in the display panel while the VCR is marking commercials.

#### To Stop COMMERCIAL▶▶ADVANCE™ Marking

Press STOP to cancel commercial marking.

#### To Turn Off Marking

For special VCR use (editing or copying) or if you decide not to use this feature, turn COMMERCIAL▶▶ADVANCE™ marking (CF Marking) off.

1. Press MENU•PROG to display the VCR MAIN MENU.
2. Press 6 to display the PREFERENCES menu.
3. Press 5 to select CF Marking: OFF.

The VCR will not mark the commercials.

COMMERCIAL▶▶ADVANCE™ is a trademark of Arthur D. Little Enterprises, Inc. A Jerry Iggulden invention licensed by Arthur D. Little Enterprises, Inc.

```
VCR MAIN MENU
1 VCR Plus+
2 Timer Recordings
3 Time
4 Channels
5 Setup
6 Preferences
```

```
PREFERENCES
1 Remote Control: VCR1
2 Auto Play: ON
3 Auto TV/VCR: ON
4 Panel Display: AUTO
5 CF Marking
```

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

```
2 Mark them Later
3 Don't mark commercials
The VCR will begin marking in 30 seconds...
```

Marking Commercials...  
Press STOP to cancel

```
PREFERENCES
1 Remote Control: VCR1
2 Auto Play: ON
3 Auto TV/VCR: ON
4 Panel Display: AUTO
5 CF Marking: OFF
6 CF Playback: AUTO
7 CF Display: BLUE
8 Set Auto Repeat
0 Exit
```



## Recording and Playback

### To Select a Background for Playback

1. Press MENU•PROG to display the VCR MAIN MENU.
2. Press 6 to display the PREFERENCES menu.
3. Press 7 to select CF Display: BLUE or VIDEO.
  - Select BLUE to have the VCR display a blue screen while it advances through the block of marked commercials.
  - Select VIDEO to have the VCR display the video as it advances through the block of marked commercials.

```

                PREFERENCES
1 Remote Control: VCR1
2 Auto Play:      ON
3 Auto TV/VCR:   ON
4 Panel Display: AUTO
5 CF Marking:    ON
6 CF Playback:   AUTO
7 CF Display:    BLUE
8 Set Auto Repeat
0 Exit
    
```

### To Play Back a Recording Made Using COMMERCIAL▶ADVANCE™

1. Press MENU•PROG to display the VCR MAIN MENU.
2. Press 6 to display the PREFERENCES menu.
3. Press 6 to select CF Playback: AUTO or 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 within the first two minutes or last two minutes of a recording will not be automatically skipped.

A commercial will not be skipped if the 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 FF to scan through the commercial.

It is possible that part of a recorded program might be skipped if the program segment is between commercials and less than one minute or there are frequent dark and quiet scenes. If part of the program is skipped, rewind the tape to the beginning of the skipped program segment and press PLAY.

- Select MANUAL and the VCR will not advance through the blocks of marked commercials until you press SEARCH.

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

If you press SEARCH during playback of material other than commercials, the VCR will still advance to the end of the next "marked" commercial block and resume playback.

```

                VCR MAIN MENU
1 VCR Plus+
2 Timer Recordings
3 Time
4 Channels
5 Setup
6 PREFERENCES
    
```

```

                PREFERENCES
1 Remote Control: VCR1
2 Auto Play:      ON
3 Auto TV/VCR:   ON
4 Panel Display: AUTO
5 CF Marking:    ON
6 CF Playback:   AUTO
7 CF Display:    BLUE
8 Set Auto Repeat
0 Exit
    
```

## Types of Recordings

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

**Basic Recording – Operating Instructions**

**Recording While You're Away**

**VCR Plus+ Recording**

**Timer Recording**

**Express (XPR) Recording**

**Using Two VCRs for Copying Tapes**

## Using the Recording Features

### 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 and in the VCR's display panel. The VCR automatically selects the playback speed (SP, LP, or SLP).

Cassette Type	Recording Time		
	SP	LP	SLP
T120	2Hr	4Hr	6Hr
T160	2Hr 40Min	5Hr 20Min	8Hr

**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. Special effects such as pause, slow motion, picture search, and frame advance work well.

**LP (Long Play)** gives twice the recording time of tapes recorded in SP. Special effects in playback are not recommended in LP.

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

### Recording Pause

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


Press **PAUSE** during recording to stop and start recording. **REC P** appears in the VCR's display panel.

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.  
The cassette-in indicator  lights in the VCR's display panel.
2. Press VCR1 (VCR2•LD) to set remote to control the VCR.
3. 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.
4. Select recording speed using SPEED on the remote.  
The tape speed indicator appears in the VCR's display panel and on the TV screen.
5. Select the channel to be recorded.  
The channel number appears in the VCR's display panel and on the TV screen.
6. Press RECORD on the VCR or REC on the remote to begin recording. REC 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 6 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. Press TV to set the remote to control TV functions for a compatible TV.
4. Select the channel you want to watch with the TV's channel buttons.
5. Press STOP when recording is finished.

# Recording While You're Away (VCR Plus+\* Recording)

## VCR Plus+ Setup for Antenna or Unscrambled Cable Systems (Not Requiring a Cable Box or Cable Box VCR Can Control)

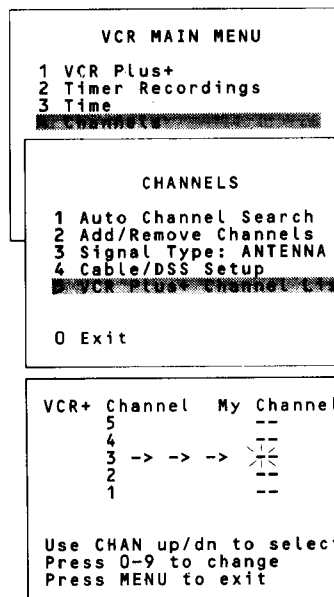
A VCR Plus+ channel number is assigned for each broadcast or cable channel. These numbers are listed in most publications that list PlusCode\* numbers.

1. Prepare the worksheet on the opposing page for the VCR Plus+ channels that are different than the channels you receive them on. Refer to the chart below for standardized VCR Plus+ channel numbers.

Broadcast or Cable-TV Station Name	VCR Plus+ Channel Number	Channel Number You Receive This Station On
HBO	33	See Note 1
ESPN	34	See Note 1
ABC	See Note 2	See Note 1
FOX	See Note 2	See Note 1

**Note 1:** Check your local or cable listing for the channel number you receive this station on.  
**Note 2:** Check your local listing for the broadcast or VCR Plus+ channel number assigned to this station.

2. Press MENU•PROG on the remote to display the VCR MAIN MENU on the TV screen.
3. Press 4 to display CHANNELS menu.
4. Press 5 to display VCR Plus+ Channel List menu.
5. Using your worksheet, press two numbers to enter each channel number you receive on a **different** channel than the assigned VCR Plus+ channel number.  
 Press CHAN up or down to move the numbers up or down on the menu.  
 Press CLEAR on the remote to erase a number.
6. Press MENU•PROG when you are finished.  
 Auto channel search must be performed before setting the VCR Plus+ channel list.



Standardized VCR Plus+ Channel Numbers for Cable-TV					
<b>U.S.A. List</b>	58	The Movie Channel	<b>Canadian List</b>	65	MeteoMedia/The Weather Network
35 American Movie Classics	48	Music Television	67 Allarcom Pay Television/Superchannel	48	MuchMusic Network
39 Arts & Entertainment	49	The Nashville Network	44 Arts & Entertainment	55	MusiquePlus
57 Black Entertainment	38	Nickelodeon	72 Cable News Network-Headline News	52	Nashville Network
54 Bravo	64	Nostalgia Television	61 Cable News Network	73	NewsWorld/CBC
42 Cable News Network	99	Quality Value Cable	70 Canadian Home Shopping Network	53	Le Reseau des Sports
45 Cinemax	41	Showtime	56 Canal Famille	43	The Sports Network
98 Cinemax 2	97	Showtime 2	69 Cathay International Television Inc	64	Super Ecran
37 The Discovery Channel	59	Sports Channel	68 Chinavision Canada Corp	37	Super Ecran B
53 The Disney Channel	52	Turner Network Television	60 Country Music Television	98	Super Ecran C
63 Entertainment Television	44	USA Network	63 Family Channel	66	Telatino Network
34 ESPN Sports Network	62	Video Hits 1	62 First Choice	46	TV5 Montreal
47 The Family Channel	93	Viewer's Choice 1	96 First Choice Two	92	Viewer's Choice 1
33 Home Box Office	94	Viewer's Choice 2	97 First Choice Three	93	Viewer's Choice 2
95 Home Box Office 2	55	WGN Chicago	99 First Choice Four	94	Viewer's Choice 3
96 Home Box Office 3	43	WTBS Atlanta	90 House of Commons	95	Viewer's Choice 4
51 The Learning Channel	60	WWOR New York	91 La Chaîne Française	71	Vision TV: Canada's Faith Network
46 Lifetime			51 The Learning Channel	38	Youth TV, Canada Inc

\*VCR Plus+ and PlusCode are trademarks of Gemstar Development Corporation.



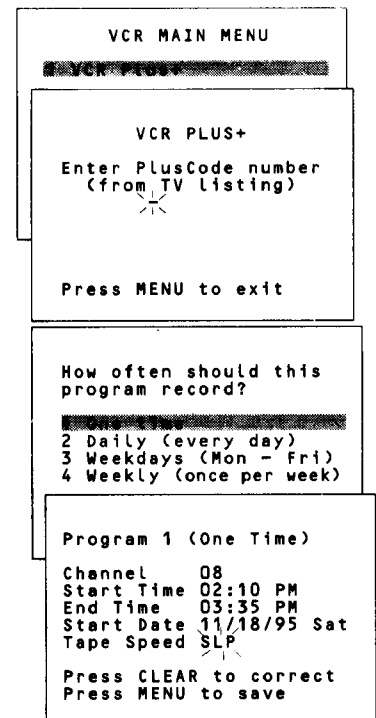
## Recording While You're Away (VCR Plus+ Recording)

The VCR Plus+ and timer program features let you program the VCR to record up to eight different programs within a one year period. Before using VCR Plus+ to record a program, make sure that:

- The clock is set correctly.
- A tape with safety tab has been inserted with enough tape to record the programs.
- The remote is set to control the VCR — using VCR1 (VCR2•LD).
- The VCR is setup for VCR Plus+ programming.
  - If you receive all channels through a cable box, setup the cable box as shown on pages 11-12.
  - If you do not use a cable box or RCA DSS® satellite receiver for all channels, complete VCR Plus+ setup on page 34.

### Setting a VCR Plus+ Recording

1. Press MENU•PROG on the remote to display the VCR MAIN MENU on the TV screen.
2. Press 1 to display the VCR PLUS+ menu.
3. Press numbers on the remote to enter the PlusCode number for the program you want to record. PlusCode numbers are found in most local TV listings.  
Press CLEAR on the remote to correct an entry.
4. Press MENU•PROG to enter the program.  
If the VCR does not recognize the PlusCode number, Unrecognized number... Please re-enter appears on the TV screen. Check the number and enter it again.
5. 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.
6. Select recording speed using SPEED on the remote.
7. Press CLEAR if you want to change the program end time.  
This feature allows you to extend the recording time on VCR Plus+ programs. This option may be useful when recording programs such as sporting events that could go past scheduled broadcast times.
8. Press MENU•PROG to enter your program. A reminder appears which will time out.  
PROGRAMS OVERLAP may appear on the screen if you entered two programs where the times overlap.
9. The TIMER RECORDINGS menu appears. Press 3 to enter an additional VCR Plus+ program, or press 0 to exit.
10. **Turn off the VCR** before recording time.  
TIMER appears in the VCR's display panel when the timer has been programmed.
11. **If using a cable box, leave it turned on. If the VCR cannot control the cable box, tune it to the channel you want to record.**



### Stopping a Recording in Progress

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

**With the Remote:** Press VCR1 (VCR2•LD) and then STOP within a few seconds.

## Recording While You're Away (Timer Recording)

The VCR Plus+ and timer program features let you program the VCR to record up to eight 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.
- The remote is set to control the VCR — using VCR1 (VCR2•LD).
- If you receive all channels through a cable box or RCA DSS® satellite receiver, setup the cable box or RCA DSS® satellite receiver on pages 11-12.

### Setting a Timer Recording

1. Press MENU•PROG on remote to display VCR MAIN MENU.
2. Press 2 to display TIMER RECORDINGS menu.
3. Press 1 to display Create a New Program menu.
4. 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.
5. Press number buttons on the remote to enter the channel number (or INPUT to select line input), start time including AM or PM, end time, and start date of the recording. Just follow the on-screen prompts.
 

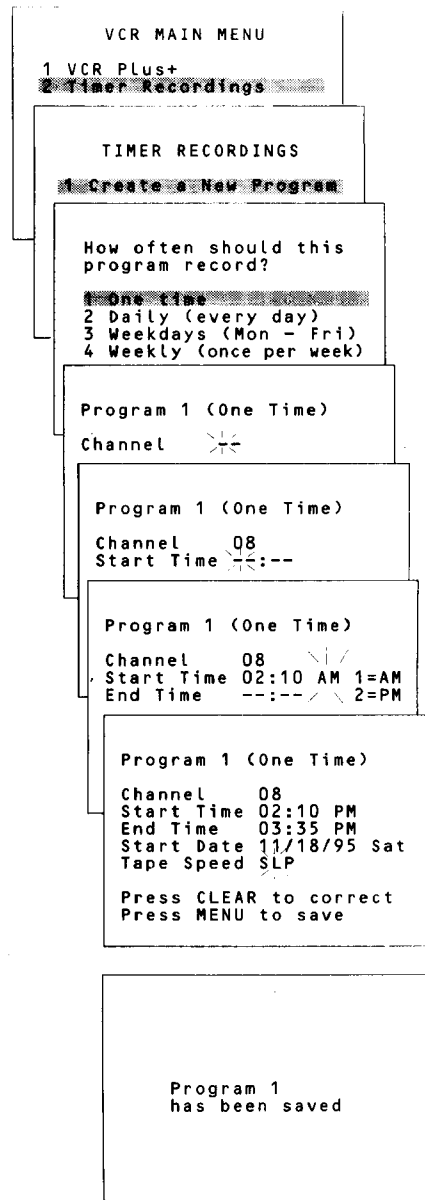
Press CLEAR to correct an entry.

If you receive all channels from a cable box or satellite receiver and have completed CABLE/DSS BOX SETUP, the output channel of your cable box or satellite receiver will automatically appear on the menu.

Channels with numbers less than 100 will record from the DSS antenna connection. Channels with numbers 100 and over will record from the corresponding DSS channel.
6. Select recording speed using SPEED on the remote.
7. Press MENU•PROG to enter your program. A reminder appears which will time out or you can press MENU•PROG to return to the main menu.
 

PROGRAMS OVERLAP may appear on the screen if you have entered two programs where the times overlap.
8. The TIMER RECORDINGS menu appears. Press 1 to enter an additional timer program, or press 0 to exit.
9. **Turn off the VCR** before recording begins.
 

TIMER appears in the VCR's display panel when the timer has been programmed.
10. If using a cable box, leave it turned on. If the VCR cannot control the cable box, tune it to the channel you want to record.



### Stopping a Recording in Progress

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

**With the Remote:** Press VCR1 (VCR2•LD) and then STOP within a few seconds.

## Recording While You're Away

### Check, Edit, or Clear a VCR Plus+ or Timer Recording

1. Press MENU•PROG on remote to display VCR MAIN MENU on TV screen.
2. Press 2 to display the TIMER RECORDINGS menu.
3. Press 2 for Review Existing Progs. feature.

The first program in the timer is displayed.

- **Check the Programs:** Press MENU•PROG to display information for the next program.
- **Edit the Program:** Press DISPLAY to edit the program. The frequency menu appears first so you can change how often you want to record the program.

```

How often should this
program record?
1 One Time
2 Daily (every day)
3 Weekdays (Mon - Fri)
4 Weekly (once per week)

0 Cancel
    
```

Press a number button to select the type of program you want to record.

```

Program 1 (One Time)
Channel      08
Start Time  02:10 PM
End Time    03:35 PM
Start Date  11/18/95 Sat
Tape Speed  SLP

Press CLEAR to correct
Press MENU to save
    
```

Edit the rest of the program using the CLEAR and number buttons.

- **Clear the Program:** Press CLEAR when the program appears.

```

VCR MAIN MENU
1 VCR Plus+
-----
TIMER RECORDINGS
1 Create a New Program
-----
Program 1 (One Time)
Channel      08
Start Time  02:10 PM
End Time    03:35 PM
Start Date  11/18/95 Sat
Tape Speed  SLP

Press CLEAR to delete
Press MENU for next prog
    
```

### Timer Recording From the VCR's Line Input

The line input refers to the signal coming from the AUDIO and VIDEO 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 to enter the channel number when you program the timer. Enter VIDEO1 to record from the jacks on the back of the VCR.

```

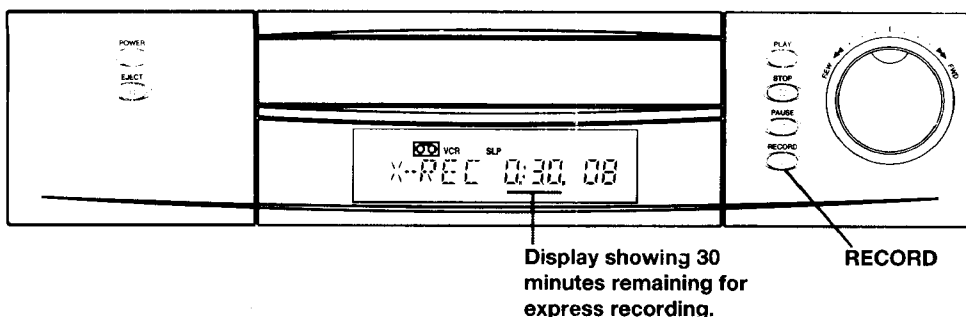
Program 1 (One Time)
Channel      VIDEO1
Start Time   -:--
End Time     -:--
Start Date   --/--/--
Tape Speed  SLP

Press CLEAR to correct
Press MENU to exit
    
```



## 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. Select the desired recording speed using SPEED on the remote.
5. Press RECORD on the VCR or REC on the remote to activate recording.
6. Press RECORD on the VCR or REC on the remote repeatedly until the amount of recording time for the program is displayed in the VCR's display panel or on the TV screen.

Press RECORD	Recording Time
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)

RECORD LENGTH 0:00 CH 04
Press REC to set length

**Express Display on TV Screen**

Each press increases the time — 30 minutes up to four hours.

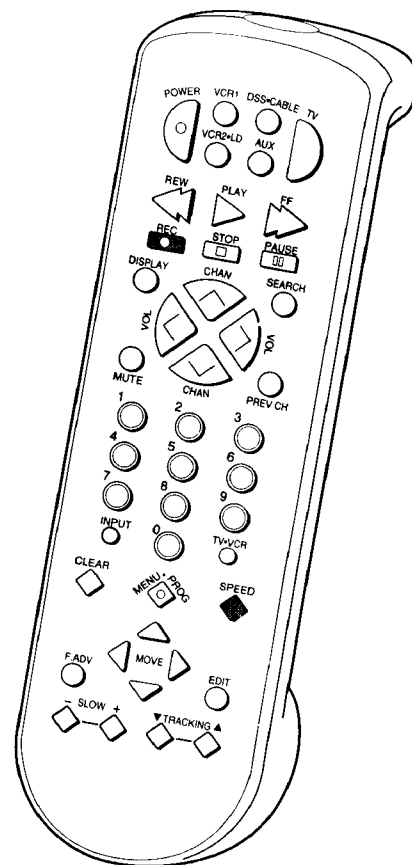
The amount of time the VCR will record and X-REC will appear in the VCR's display panel.

You can increase the amount of recording time by pressing REC on the remote or RECORD on the VCR.

### Stopping a Recording in Progress

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

**With the Remote:** Press VCR1 (VCR2•LD) and then STOP within a few seconds.



## Using Two VCRs for Copying and Editing Tapes

### Operating Instructions (Refer to hookup on page 8.)

Use this VCR as the playback VCR and the other as the recording VCR. If you have two compatible VCR's, use the AutoEdit feature *described below*.

**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 8), 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 8), press INPUT on recording VCR to select the line input. Select L1 to record from jacks on the back of the VCR.
  4. Insert the tape you want to copy into playback VCR. Insert a blank tape with safety tab in place into recording VCR.  
To prevent recording on-screen displays from the playback VCR, press DISPLAY three times. See page 27 for details.
  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 RECORD, then PAUSE, on recording VCR.
  7. Press PAUSE buttons on both VCRs 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 the playback VCR by using FWD, REW, and PLAY. Press PAUSE on the playback VCR. Press PAUSE at the same time on both VCRs to resume copying.
  9. Press STOP 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.

### Using Dual Remote with AutoEdit™

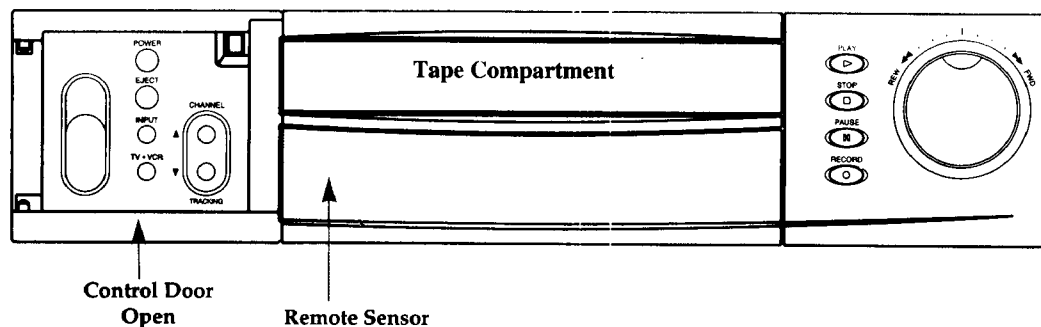
Use this VCR as the playback VCR and set it to respond to VCR2•LD on the remote as described on page 18.

Use your other compatible VCR as the recording VCR, which should respond to VCR1.

1. Follow steps 1 – 4 in the "Operating Instructions" above.
2. Press VCR1 on remote to control recording VCR. Press RECORD, then PAUSE, to put recording VCR in pause mode.
3. Press VCR2•LD on remote to control playback VCR.
4. Use FF, REW, and PLAY to locate the point where you want to begin copying. Press PAUSE while VCR is playing to put playback VCR in pause mode.
5. Press EDIT on remote to start the VCRs copying.
6. Press EDIT again when you want to stop the tape from copying.
7. Repeat steps 4 – 6 as needed.
8. Press VCR1, STOP, then VCR2•LD, STOP, when you are finished.

# Location of Controls

## Front Panel



### CHANNEL/TRACKING Up or Down

Selects next higher or lower channel in the VCR's channel memory.  
Adjusts tracking when a tape is playing.

### EJECT

Press when the VCR is stopped to eject the cassette.

### INPUT

Turns the line input on or off. L1 appears in VCR's display panel and VIDEO1 appears on the TV screen.

Line input refers to the signal coming from the component connected to the audio/video input jacks on the back (L1) of the VCR.

### PAUSE

Pauses action for viewing during playback.

Pauses recording to prevent recording of unwanted scenes.

### PLAY

Plays a tape.

### POWER

Turns the VCR on or off.

### RECORD

Starts 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.

### Shuttle Ring

Rewinds and fast forwards the tape when the VCR is stopped.

Searches the picture in variable speed during play pause.

Searches the picture in forward and reverse during playback.

### STOP

Stops the normal functions such as record, playback, rewind, fast-forward, or pause.

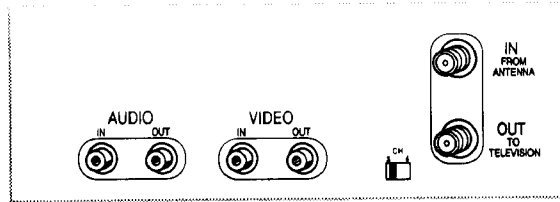
### TV-VCR

Switches the picture signal so that it either comes from the VCR or the TV channel.

See page 15.

# Location of Controls

## Back Panel



### CH3 CH4 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 ANTENNA Connector

Receives the signal from an antenna, cable system, or satellite receiver that is attached to this connector.

### OUT TO TELEVISION Connector

Passes signal to TV using the cable supplied.

### VIDEO and AUDIO IN Jacks

Receives signals from another component, like a VCR or camcorder, when it is connected to these jacks. Use INPUT to select L1 in the VCR's display panel.

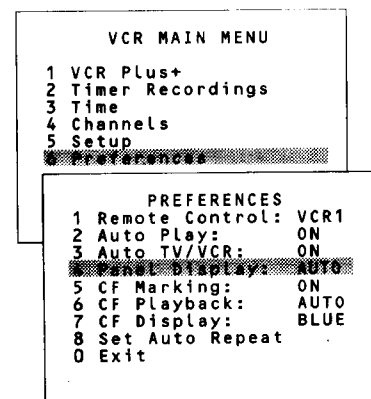
### VIDEO and AUDIO OUT Jacks

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

## Display Panel

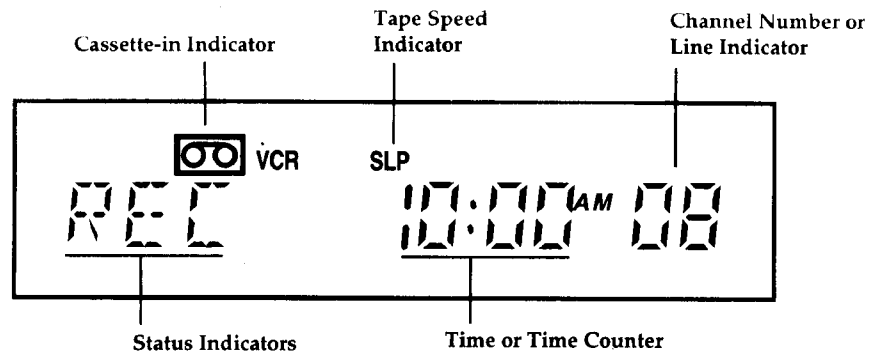
This VCR has a feature where you can change the brightness level of the fluorescent display panel.

1. Press MENU•PROG on the remote to see the VCR MAIN MENU on the TV screen.
2. Press 6 to display the PREFERENCES menu.
  - Select AUTO to keep the display panel bright when VCR is on and dim when it is off.
  - Select BRIGHT to keep the display panel bright.
  - Select DIM to keep the display panel dim.



# Location of Controls

## Display Panel



### Cassette-in Indicator ( )

Lights when a tape is in the VCR.

### Channel Number or L1

The channel number or line input is displayed. Select L1 to record from the jacks on the back of the VCR.

### Status Indicators

Show what the VCR is doing.

COMM	
/MARK	CF marking in progress
EJECT	Ejecting Tape
FFWD	Fast forward
HELLO	Turned on or unlocked
LOCK	Pro-Tect Plus turned on
MARK 30	Marking process countdown
PLAY	Playback
REC	Record
REC P	Record pause
REW	Rewind
SRCH +	Forward search

SRCH -	Reverse search
SLOW +	Slow motion
SLOW -	Slow motion
STILL	Frame advance
STILL	Play pause
STOP	VCR stopped
TAPE flashes	Set for timer - no tape
TIMER	Timer recording set
X-REC	Express recording in progress

### Tape Speed Indicators (SP, LP, or SLP)

Press SPEED to change.

### Time or Time Counter

Press DISPLAY to switch between the current time and elapsed-time counter.

### VCR Indicator (Applies Only to Basic Hookups)

Press TV•VCR to turn on or off.

VCR indicator on: Picture from VCR.

VCR indicator off: Picture from TV channel.

## Specifications

<b>Format:</b>	VHS
<b>Record/Playback System:</b>	Video: 4-Head Audio: 2 Mono record/playback system
<b>Video Signal System:</b>	EIA standard: NTSC color
<b>Antenna:</b>	75-ohm external VHF/UHF combined antenna terminal
<b>Tuner:</b>	USA: 181 channels capability* (125 cable channels) Canada: 178 channels capability* (122 cable channels)
<b>Type:</b>	AutoProgramming frequency synthesis
<b>Power Requirement:</b>	120V AC, 60 Hz
<b>Power Consumption:</b>	19 watts
<b>Dimensions:</b>	3.5 inches high (90 mm) 15.5 inches wide (393 mm) 12.5 inches deep (318 mm)
<b>Weight:</b>	9.3 pounds (4.2 kg)
<b>Other:</b>	Automatic Head Cleaner
<b>Storage Temperature Range:</b>	- 22°F to +149°F
<b>Operating Temperature Range:</b>	+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.

## 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.
- Acts of God, 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 this warranty:

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

### What if you purchased your VCR outside the United States:

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

## Trouble Checks

Sometimes problems can be easily solved by checking a few basic things. Check below

Trouble	Here's what to try:
No power	<ul style="list-style-type: none"> <li>• Plug VCR into an operating outlet.</li> <li>• Check connections.</li> </ul>
Clock shows incorrect time or date	<ul style="list-style-type: none"> <li>• Make sure time zone and daylight savings information is entered correctly. <i>See page 13.</i></li> <li>• Clock was not set accurately (check AM/PM and date).</li> <li>• Time counter display appears in display panel. Press DISPLAY on remote.</li> </ul>
Remote locks up	<ul style="list-style-type: none"> <li>• Remove batteries and hold down one or more buttons for several seconds to drain the microprocessor inside the remote to reset it. Reinstall the batteries and try remote again.</li> </ul>
VCR does not respond to remote	<ul style="list-style-type: none"> <li>• Press VCR1 (VCR2•LD) to set remote to control the VCR. <i>See page 18.</i></li> <li>• Aim remote at VCR with no objects between them.</li> <li>• Change batteries.</li> </ul>
Remote no longer controls an RCA TV	<ul style="list-style-type: none"> <li>• Press TV to set remote to control the corresponding compatible TV. <i>See page 19.</i></li> <li>• Reprogram remote for RCA TV. <i>See page 19.</i></li> <li>• Aim remote at TV with no objects between them.</li> <li>• Change batteries.</li> </ul>
Remote no longer controls a compatible TV, cable box, satellite receiver, or auxiliary component	<ul style="list-style-type: none"> <li>• Press TV, AUX, or DSS•CABLE to set remote to control a compatible component. <i>See pages 18-21.</i></li> <li>• Aim remote at component with no objects between them.</li> <li>• Reprogram remote after batteries have been changed.</li> <li>• Reprogram remote to 00 to operate RCA DSS® satellite receiver.</li> <li>• Change batteries.</li> </ul>
VCR only responds to VCR2•LD button on remote	<ul style="list-style-type: none"> <li>• Check setting of Remote Control: VCR1/VCR2 feature. <i>See page 18.</i></li> </ul>
No picture when VCR turned on – using a basic hookup	<ul style="list-style-type: none"> <li>• Press TV•VCR to turn VCR indicator on. <i>See page 15.</i></li> <li>• Check to see if Auto TV/VCR feature is set to OFF. <i>See page 15.</i></li> </ul>
Poor or no picture for normal TV viewing	<ul style="list-style-type: none"> <li>• Press TV•VCR to turn VCR indicator off.</li> <li>• Switch TV to an active channel.</li> <li>• Check antenna connections.</li> </ul>
Snowy or no picture during playback	<ul style="list-style-type: none"> <li>• Press TV•VCR to turn VCR indicator on.</li> <li>• Check TV channel selected (3 or 4) to make sure it matches the channel selected with CH3 CH4 switch on back of VCR.</li> <li>• Check TV's fine tuning.</li> <li>• Check video cable connections between VCR and TV monitor.</li> <li>• Set TV monitor to video input channel.</li> <li>• Try another tape.</li> <li>• Some snow/streaks are normal during search, frame advance, slow-motion, or stop-action playback.</li> </ul>
Time counter not working	<ul style="list-style-type: none"> <li>• 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.</li> <li>• A minus (-) will appear in front of the time if you rewind the tape farther back than a counter reading of 0:00:00.</li> </ul>



## Trouble Checks

### Trouble

### Here's what to try:

Will not record or play	<ul style="list-style-type: none"> <li>• No cassette in VCR.</li> <li>• Eject and re-insert cassette.</li> <li>• Broken tape — try another cassette.</li> </ul>
Streaks in picture during normal playback	<ul style="list-style-type: none"> <li>• Some snow/streaks are normal during search, frame advance, slow-motion, or stop-action playback.</li> </ul>
Will not record	<ul style="list-style-type: none"> <li>• VCR is in pause mode. Press PAUSE.</li> <li>• Safety tab removed from cassette.</li> <li>• Make sure the line indicator (L1) is turned off in VCR's display panel for normal recording from the VCR's tuner. Press INPUT to turn off the line indicator.</li> </ul>
Rewind does not operate	<ul style="list-style-type: none"> <li>• Tape already rewound.</li> </ul>
VCR Plus+ or timer recording not made or wrong program recorded	<ul style="list-style-type: none"> <li>• Wrong PlusCode number entered.</li> <li>• Cable box or satellite receiver was not turned on at time recording was to begin. VCR cannot control cable box or satellite receiver, or component is positioned incorrectly.</li> <li>• Program entered incorrectly (wrong channel or times).</li> <li>• Power interruption. Clock area in display panel will show - -: - .</li> <li>• Check to see if time and date are correct — including AM/PM.</li> <li>• Program exceeded tape's length or tape was not rewound beforehand.</li> <li>• VCR was not turned off at the time recording was to start.</li> <li>• No tape in VCR or cassette's safety tab broken off.</li> </ul>
VCR makes noise when stopped	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
Will not auto search active channels correctly	<ul style="list-style-type: none"> <li>• Check antenna connections.</li> <li>• Check Signal Type: CABLE/ANTENNA feature. <i>See page 13.</i></li> </ul>
Cannot select channels over 69	<ul style="list-style-type: none"> <li>• Cable channels over 69 can only be selected if Signal Type: CABLE/ANTENNA feature is set to CABLE. <i>Details are on page 13.</i></li> </ul>
Cassette with safety tab removed does not start to play automatically	<ul style="list-style-type: none"> <li>• Set Auto Play ON/OFF feature to ON. <i>Details are on page 23.</i></li> </ul>
Segment of tape plays over and over	<ul style="list-style-type: none"> <li>• Auto Repeat feature turned on. <i>Details are on page 23.</i></li> </ul>
VCR forwards through commercials or momentarily displays a blue screen during playback	<ul style="list-style-type: none"> <li>• COMMERCIAL▶▶ADVANCE™ CF Playback feature set to AUTO. <i>See page 31.</i></li> </ul>
COMMERCIAL▶▶ADVANCE™ feature does not mark commercials	<ul style="list-style-type: none"> <li>• CF Marking: ON/OFF feature set to OFF. <i>See page 30.</i></li> <li>• Recording was less than 15 minutes.</li> <li>• A single isolated commercial cannot be marked.</li> <li>• Recording started in the middle of a commercial segment.</li> <li>• The commercial is longer than one minute.</li> <li>• A commercial group within the first or last two minutes of a recording.</li> <li>• Accuracy and effectiveness can vary depending upon program content and the characteristics of the commercials.</li> <li>• Effectiveness may vary when local television stations insert their own commercials.</li> <li>• It does not mark commercials between 30-and-45 seconds and 45-and-60 seconds</li> </ul>
Commercials recorded even though COMMERCIAL▶▶ADVANCE™ feature was turned on.	<ul style="list-style-type: none"> <li>• COMMERCIAL▶▶ADVANCE™ is designed to record the commercials, mark them, and then skip over the marked commercials during playback.</li> </ul>

# Questions and Answers About COMMERCIAL▶▶ADVANCE™

Question	Answer
Will commercials be scanned through only on playback of recordings?	Yes. The VCR does not rewind and mark commercial segments until after recording.
How fast does the COMMERCIAL▶▶ADVANCE™ VCR scan through the 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 CF Playback feature to MANUAL.
What if the VCR scans forward through part of my program?	Simply rewind the tape to just before the skipped segment, and press PLAY to view the program.
Once a recording has been marked, does COMMERCIAL▶▶ADVANCE™ work each time the tape is played?	Yes. If the CF Playback feature is set to AUTO, the marked commercials should be skipped each time the tape is played in the 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 complete.
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, LP, 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.

## Index

Accessories, Included . . . . .9	Cable System With Cable	COMM and MARK Indicators . . . . .30,43
Add or Remove Channels	Box Connections . . . . .2,4-5	COMMERCIAL▶▶ADVANCE™
from Memory . . . . .14	Cable System Without Cable	Playback . . . . .31
ADD/REMOVE CHANNELS Menu . .14	Box Connections . . . . .2,3	Questions and Answers About . .48
Antenna Connections . . . . .2,3	Cable/DSS Box Setup . . . . .11-12	Recording . . . . .30
Arrow Buttons . . . . .10,16-17	Card, Registration . . . . .i	Stopping . . . . .30
AUDIO and VIDEO	Cassette-In Indicator . . . . .22,33,43	Turning On and Off . . . . .30
Jacks . . . . .3-8,21,38,40,42	CF Display Feature . . . . .31	Connections . . . . .2-8
Audio Components, RCA . . . . .21	CF Marking Feature . . . . .31	Antenna . . . . .2,3
AUTO REPEAT Menu . . . . .23	CF Playback Feature . . . . .31	Audio/Video Jacks . . . . .2,3-6
Auto Cable/DSS Box Setup . . . .11-12	CH3 CH4 Switch . . . . .3-7,9,42	Cable-TV . . . . .2,3-5
Auto Channel Search Feature . . . .13	CHAN and CHANNEL Up or	Choosing . . . . .2
Auto Clock Set . . . . .13	Down Buttons . . . . .15,16-17,34,41	RCA DSS® Satellite Receiver .2,6-7
Auto Play Feature . . . . .22,23	Channel Number Indicator . . . . .43	Two VCRs . . . . .8
Auto Repeat Feature . . . . .23	CHANNELS Menu . . . . .12,13,34	Contents . . . . .1
Auto TV/VCR Feature . . . . .3-5,15	Checking Timer and VCR Plus+	Controlling a TV . . . . .19
AutoEdit . . . . .40	Programs . . . . .38	Controls
Automatic Tracking . . . . .26	Checks, Trouble . . . . .46-47	Back Panel . . . . .42
AUX (Auxiliary) Button . . . . .16,21	Choosing a Hookup . . . . .2	Display Panel . . . . .42-43
Back Panel . . . . .42	Cleaning the VCR . . . . .44	Front Panel . . . . .41
Basic Recording . . . . .33	CLEAR Button	Remote Control Buttons . . . .16-17
Batteries, Inserting in Remote . . . .9	. . . . .11,14,16-17,23,27,28,29,34,36,37,38	Copying Tape, Connections . . . . .2,8
BLANK SEARCH Menu . . . . .29	Clearing Timer and VCR	Date, Set . . . . .13-14
Blank Search Feature . . . . .29	Plus+ Programs . . . . .38	Design Specifications . . . . .44
Cable Box Function Buttons . . . . .17	Clock Set, Automatic . . . . .13	DISPLAY Button . . . . .16-17,27,38
Cable Box, Programming Remote . .20	Clock Set, Manual . . . . .14	Display Panel . . . . .42-43

## Index (continued)

- Displays, Status ..... 27
- DSS Satellite Receiver Function  
Buttons ..... 17
- DSS•CABLE Button ..... 16,20
- EDIT Button ..... 16,40
- Editing and Copying Tapes ..... 40
- Editing Timer and VCR Plus+  
Programs ..... 38
- EJECT Button ..... 22,41
- Express Recording ..... 39
- Express Recording, Stopping ..... 39
- F.ADV (Frame Advance) Button ..... 16,25
- FF (Fast Forward) Button  
..... 16,24,27,28,29,40
- First-Time Operation ..... 9-15
- Frame Advance ..... 25
- Front Panel ..... 41
- Hookups  
Antenna ..... 2,3  
Audio/Video Jacks ..... 2,3-6  
Cable-TV ..... 2,3-5  
Choosing ..... 2  
RCA DSS® Satellite Receiver ..... 2,6-7  
Two VCRs ..... 8
- IN FROM ANTENNA Connector ..... 3-8,42
- Index Feature ..... 28
- INDEX SEARCH Menu ..... 28
- INPUT Button ..... 16,38,40,41,42
- L1 Indicator ..... 16,40,41,42,43
- Limited Warranty ..... 45
- Line Input, Recording From ..... 38
- LOCK Indicator ..... 26
- Locking Feature ..... 26
- LP Speed ..... 32
- Manual Cable/DSS Box Setup ..... 12
- Manual Clock Set ..... 14
- Manual Tracking ..... 26
- MARK and COMM Indicators ..... 30,43
- Menu System, Using ..... 10
- MENU•PROG Button  
..... 10,11-12,14,15,16,23,30-31,34,36,37
- MOVE Buttons ..... 10,16-17
- MUTE Button ..... 17
- Number Buttons ..... 10-15,16-17  
..... 18-21,23,34,35,36,37,38
- On-Screen Displays ..... 27
- Operation  
Basic Recording ..... 33  
COMMERCIAL▶▶ADVANCE™  
Playback ..... 31  
COMMERCIAL▶▶ADVANCE™  
Recording ..... 30  
Express Recording ..... 39  
First Time ..... 9-15  
Playback ..... 22  
Timer ..... 37  
VCR Plus+ Recording ..... 34-36
- OUT TO TELEVISION Connector ..... 3-8,42
- Panel Display Feature ..... 42
- PAUSE Button ..... 17,24,32,40
- Pause for Stop Action ..... 24
- Pause, Recording ..... 32
- Picture Search, Variable Speed ..... 24
- PLAY Button ..... 17,22,24,27,40,41
- Playing a Tape ..... 22
- POWER  
Button ..... 17,19-21,26,36,37,39,41
- PREFERENCES  
Menu ..... 15,18,23,30-31,42
- PREV CH (Previous Channel)  
Button ..... 17
- Pro-Tect Plus™ Feature ..... 26
- Problems, Solving ..... 46-47
- Product Registration ..... i
- Program VCR for VCR1 or VCR2•LD  
Button Using SETUP Menu ..... 14
- Programming Remote for Cable  
Box ..... 20
- Programming Remote to  
Control VCR ..... 18
- Questions about  
COMMERCIAL▶▶ADVANCE™ ..... 48
- RCA DSS® Satellite Receiver ..... 2,6-7,20
- REC and RECORD  
Buttons ..... 17,33,39,40,41
- REC Indicator ..... 33,43
- REC P (Record Pause) Indicator ..... 32,43
- Recording ..... 32-40
- Recording  
Basic ..... 33  
COMMERCIAL▶▶ADVANCE™ ..... 30  
Copying and Editing Tapes ..... 40  
Express ..... 39  
Timer ..... 37  
VCR Plus+ ..... 34-36
- Recording, Basic ..... 33
- Recordings, Types of ..... 32
- Registration Card ..... i
- Remote Control ..... 16-21
- Remote Control: VCR1/VCR2  
Feature ..... 18
- Remote Function Buttons ..... 16-17
- Remote Sensor ..... 41
- Remove or Add Channels  
from Memory ..... 14
- REMOVE/ADD CHANNELS Menu ..... 14
- REW (Rewind)  
Button ..... 17,22,24,28,29,40
- Safety Precautions ..... i
- Satellite Receiver ..... 2,6-7,20
- SEARCH Button ..... 17,28,29,31
- Search Time ..... 28
- Sensor, Remote ..... 41
- Set the Time and Date ..... 13-14
- Setting a Timer Recording ..... 37
- Setting a VCR Plus+ Recording ..... 36
- Setting Up the VCR ..... 9-15
- SETUP Menu ..... 10
- Setup VCR Plus+ Channels  
Using SETUP Menu ..... 14
- Shuttle Ring ..... 41
- Signal Type: CABLE/ANTENNA  
Feature ..... 13
- SLOW + and - Buttons ..... 17,25
- Slow Motion ..... 25
- SLP Speed ..... 32
- Solving Problems ..... 46-47
- SP Speed ..... 32
- Specifications ..... 44
- SPEED Button ..... 17,32,33,36,37
- Speeds, Recording ..... 32
- Standardized VCR Plus+  
Channel Number Chart ..... 34
- Startup ..... 9-15
- Status Displays ..... 27,43
- STOP Button  
..... 17,22,28,29,33,36,37,39,40,41
- Stop Action Pause ..... 24
- Stopping a Timer Recording ..... 37
- Stopping a VCR Plus+ Recording ..... 36
- Stopping an Express Recording ..... 39
- Table of Contents ..... 1
- Tape Speed Indicators ..... 32,43
- Tape, Playing ..... 22
- TIME SEARCH Menu ..... 28
- Time and Date, Set ..... 13-14
- Time Counter ..... 27,43
- Time Display ..... 14,43
- Time Search ..... 28
- Time, Set ..... 13-14
- TIMER Indicator ..... 36,37,39,43
- TIMER RECORDINGS Menu ..... 36,37
- Timer Recording  
Checking a Recording ..... 38  
Clearing a Recording ..... 38  
Editing a Recording ..... 38  
Setting a Recording ..... 37  
Stopping a Recording ..... 37
- TRACKING Buttons ..... 17,22,24,25,26,41
- Tracking, Automatic and Manual ..... 26
- Trouble Checks ..... 46-47
- Turn on VCR ..... 10
- TV Button ..... 16,19
- TV Control with Remote ..... 19
- TV Function Buttons ..... 17
- TV, Turn On ..... 9
- TVs, Compatible Chart ..... 19
- TV•VCR Button ..... 15,17,33,41,43
- Types of Recordings ..... 32
- Using the On-Screen Menu System ..... 10
- Variable Speed Picture Search ..... 24
- VCR Controls ..... 41-43
- VCR Function Buttons ..... 16-17
- VCR Indicator ..... 15,22,33,43
- VCR MAIN MENU ..... 10,12,13,14,15  
..... 18,23,30-31,34,36,37,38,42
- VCR PLUS+ Menu ..... 36
- VCR Plus+ Channel Worksheet ..... 35
- VCR Plus+ Recording  
Channel Worksheet ..... 35  
Checking a Recording ..... 38  
Clearing a Recording ..... 38  
Editing a Recording ..... 38  
PlusCode Numbers ..... 36  
Setting a Recording ..... 36  
Setup VCR Plus+ Channels ..... 34  
Standardized Channel  
Number Chart ..... 34  
Stopping a Recording ..... 36
- VCR, Cleaning ..... 44
- VCR, Turn On ..... 10
- VCR1 and VCR2•LD Buttons  
..... 10,16,18,26,33,36,37,39,40
- VCR1/VCR2 Feature ..... 18
- VCRs Memory, Placing Channels In ..... 13
- VCRs, Connecting for  
Tape Copying ..... 2,8
- VOL Up or Down Button ..... 17
- Warranty, Limited ..... 45
- Watch One Channel While  
Recording Another ..... 33
- X-REC Display ..... 39,43
- XPR Recording ..... 39
- ZERO SEARCH Menu ..... 29

For your nearest Authorized Servicenter  
call toll-free in the U.S.A.

1-800-336-1900

Canadian Consumers –  
Your toll free numbers are:

English: 1-800-522-0338

French: 1-800-522-0445

If your VCR needs service, please contact your dealer  
or the nearest Servicenter from the yellow pages.  
Please do not send any products to the Indianapolis  
address listed in this manual or on the carton. This  
will only add delays in service for your product.

 **THOMSON CONSUMER ELECTRONICS**

10330 North Meridian Street  
Indianapolis, IN 46290-1024

©1995 Thomson Consumer Electronics, Inc.  
Trademark(s)® Registered  
Marca(s) Registrada(s)  
Printed in Singapore  
Part Number 95-VR542-1



**100%**  
**RECYCLED PAPER**