

video cassette recorder user's guide

VR518



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FIRST THINGS FIRST

HI, MY NAME IS SUSAN...

and I wrote this User's Guide. It's my job to see that you have a rewarding user manual experience. Also, I think you'll be pleased with the features that can be accessed through the on-screen menus.

READ THE FIRST THREE SECTIONS

The first three sections of the manual introduce you to your VCR, and show you how to set the VCR up and use the on-screen menus. Reading these sections gives you the basic information you need to use your VCR.

WHAT'S LEFT?

The rest of the book highlights playback and recording information, contains a detailed connections section, and a reference section that includes troubleshooting tips, limited warranty, and index.

FIRST THINGS FIRST SETTING UP THE VCR **VCR BASICS** 4. RECORDING PROGRAMMING THE REMOTE **OTHER FEATURES** CONNECTIONS

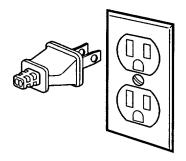
READ ME!

These note boxes give you tips for your new video cassette recorder.

FIRST THINGS FIRST

STEP 4: PLUG IN THE VCR

Match the wide blade of the plug with the wide slot in the outlet. Be sure to insert the plug completely.



STEP 5: TUNE THE TV

Tune the TV to the VCR viewing channel. The VCR viewing channel is channel 3 or 4 or the TV's video input.

- If you connect your VCR using the ANTENNA connectors with RF coaxial cable, set the 3CH.4 switch to channel 3 or channel 4--the channel you want to use on your TV.
- If you connect your VCR using the AUDIO/VIDEO jacks with audio/video cables, select the TV's video input to see the signal. See the TV Owner's Manual.

STEP 6: TURN ON THE VCR

Press POWER to turn on the VCR.

STEP 7: ACCESS THE MENUS

The MENU and number buttons let you access, select and change menu items. For example, to change the Auto Play setting, you would do the following:

1. Press MENU to display the VCR MAIN MENU.



VCR Viewing Channel

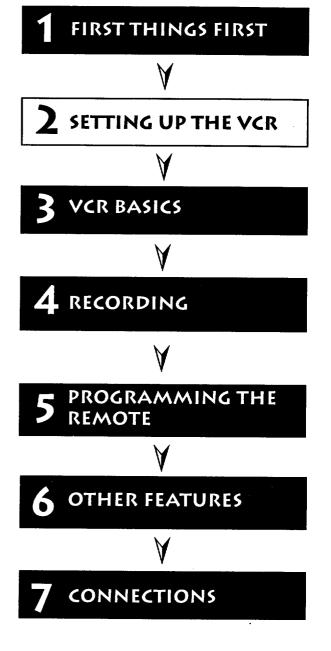
When using the ANTENNA jacks to connect your VCR, tune your TV to channel 3 or 4.

When using the audio/video jacks to connect your VCR, tune your TV to the TV's video input.

SET-UP FEATURES

Below is a list of set-up features that you may want to set up before you begin using your VCR for the first time:

- Select a Language
- Set up VCR Channel List (Auto Channel Search)
- Set Automatic Daylight-Saving Time
- Set the Time and Date
- Set up VCR Plus+ Channels
- Set the Remote VCRI/VCR2 feature
- Set the Auto Play feature
- Set the Auto TV/VCR feature



To Auto Channel Search

Auto channel search memorizes the channels available through your signal type--cable or antenna.

1. Press MENU to display the VCR MAIN MENU.

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

O Exit
```

2. Press 4 to display the CHANNELS menu.

```
CHANNELS

1 Auto Channel Search
2 Add/Remove Channels
3 Signal Type: CABLE
4 VCR Plus+ Channel List

0 Exit
```

3. Press 1 to display the AUTO CHANNEL SEARCH menu.

```
AUTO CHANNEL SEARCH
What type of signal
are you using?

1 Cable TV
2 Antenna
3→Detect Automatically
O Cancel
```

4. Select one of the three AUTO CHANNEL SEARCH options.

Choices one and two are self-explanatory. If you choose Detect Automatically, the VCR automatically detects which signal system you have attached to your VCR.

```
AUTO CHANNEL SEARCH

Now scanning channel 14

Press any key to cancel
```

Detect Automatically

A strong cable or antenna signal in your area may cause Auto Detect to mis-detect. If this should happen, select 1 or 2 for the system you have.

Auto Channel Search

Use the Auto Channel Search feature to place all available channels in memory.

If you ever change cable or antenna signals, you may need to Auto Channel Search again.

Set Daylight-Saving Time

1. Press MENU to display the VCR MAIN MENU.

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

2. Press 3 to display the TIME menu.

```
TIME

1 Set time and date
2 Auto DST: ON
```

- 3. Press 2 to turn Auto DST: ON or OFF.
 - Select ON if you want the VCR's clock to automatically adjust for daylight-saving time.
 - Select OFF if you do not want the VCR's clock to adjust for daylight-saving time.

Set the Time and Date

1. Press MENU to display the VCR MAIN MENU.

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

2. Press 3 to display the TIME menu.

```
TIME

1 Set time and date
2 Auto DST:
ON
```

Time and Date

The time and date must be set before a timer recording can be programmed.

Spring forward; Fall backward

In the Spring, daylight-saving time begins on the first Sunday in April. Because the clock automatically changes from 2:00 AM to 3:00 AM (forward one hour), remember to include the extra hour for timer recording that falls within this time frame.

In the Autumn, daylight-saving time ends on the last Sunday in October. The VCR clock automatically changes from 2:00 AM to 1:00 AM (back one hour). Therefore, it can affect your recording length.

VCR PLUS+ WORKSHEET

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

	**** *	

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

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

See next page for Canadian List

1. Press MENU to display the VCR MAIN MENU.

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

2. Press 5 to display the PREFERENCES menu.

```
PREFERENCES

1 Remote Control: VCR1
2 Auto Play: ON
3 Auto TV/VCR: ON
```

Now you are ready to select an item from the menu to set up.

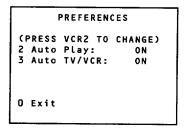
REMOTE VCR1/VCR2 OPTION

If you own a compatible RCA, GE, or ProScan remote that has a VCR2, VCR2•LD, or DVD•VCR2 button, this feature allows you to set this VCR to respond to that button.

Press 1 to select the Remote Control item. Then press the VCR2, VCR2•LD, or DVD•VCR2 button to change.

```
PREFERENCES

1 Remote Control: VCR1
2 Auto Play: ON
3 Auto TV/VCR: ON
```



The VCR will only respond to the compatible remote's VCR2, VCR2•LD, or DVD•VCR2 button. If you change the remote setting to VCR2, the remote that came with your VCR will no longer control it.

Use the compatible remote to change the remote setting back to VCR1. Display the PREFERENCES menu, press 1, and then press VCR1. Then the remote that came with the VCR will be able to control this VCR again.

Remote Control Option

Changing the remote option to VCR2 disables the remote that came with your VCR.

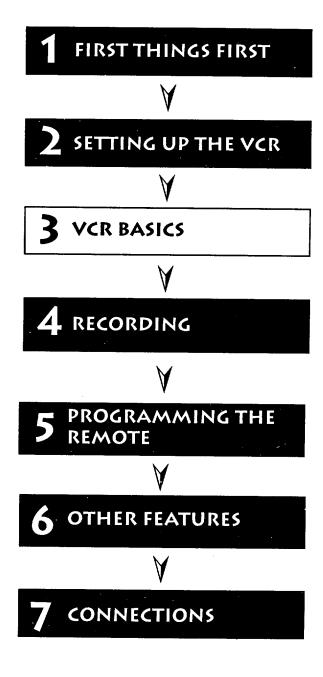


VCR BASICS

LEARN THE BASICS TO GET YOU STARTED

These VCR basics should be enough for you to begin enjoying your VCR. Learning the remote control functions, playing a recorded tape, and recording a program should do just that.

However, there are other features that enhance the enjoyment of your VCR, but they aren't necessary to get you started. If you want to learn more about your VCR, just keep reading.



VCR BASICS

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.

OFF Turns off the VCR when the remote is set to control the VCR. Turns off other components if remote is programmed.

PAUSE Pauses playback or recording. Press PAUSE again to return to playback or recording.

PLAY Plays a tape.

RECORD Starts VCR recording. Also used for express recording.

REVERSE Rewinds the tape when the VCR is stopped. Searches backward through a tape during playback. Starts slow-motion playback when tape is paused.

SEARCH Displays Index and Zero Search menus on TV screen when VCR is stopped. Advances the tape 30 seconds of recorded material during playback. Each press advances the tape an additional 30 seconds up to five minutes.

SPEED Selects a recording speed (SP or SLP).

STOP Stops the current VCR function such as record, playback, rewind, or fast forward.

TRACKING Up or Down Lets you manually reduce the streaks that may appear on the picture during play, slow motion, or pause. Reduces picture "jitter" during stop-action playback.

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

TV FUNCTION BUTTONS

CHAN Up or Down Selects next higher or lower channel in the TV's channel memory.

CLEAR Removes menus or status displays from the screen.

GO BACK Switches between two channels. Select one channel and then select another using the number buttons. Press GO BACK to switch between the two channels.

INFO Shows the TV's status displays on the TV screen.

MUTE Reduces volume to minimum level.

TV Buttons

The TV buttons may not control all features of all models of RCA, ProScan, and GE TVs.

VCR BASICS

RECORDING

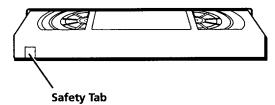
If you want to record something that you're watching, you can use basic recording.

- 1. Set the tape speed by pressing SPEED on the remote (see margin note for information about tape speed settings).
- 2. Press RECORD to begin recording.
- 3. Press STOP•EJECT on the VCR (STOP on the remote) to stop recording.

If you just want to pause the recording for a short time (like during a commercial), press PLAY•PAUSE on the VCR (PAUSE on the remote) instead of STOP.

CHECK THE SAFETY TAB

No matter which recording option you use, you need to make sure there is a tape in the VCR, and that the tape's safety tab is in place. You cannot record on a tape with the safety tab removed.



If the safety tab is removed and you want to record over it, simply cover the hole with vinyl tape.

AUTOMATIC REWIND

During playback, the VCR automatically rewinds the tape and stops when the tape reaches the end.

During recording, the VCR automatically rewinds and ejects the tape when the tape reaches the end. While rewinding, you can press POWER and the VCR turns off after rewinding.

Tape Speeds

SP (Standard Play)

Gives the best quality recording, but fewer programs can be recorded on the tape. Special effects such as pause, slow motion, picture search, and frame advance work well when you play back tapes recorded in this speed.

LP (Long Play)

Your VCR is capable of playing back tapes recorded in LP. You cannot record in the LP speed.

SLP (Super Long Play)
Gives three times the

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 when you play back tapes recorded in this speed.

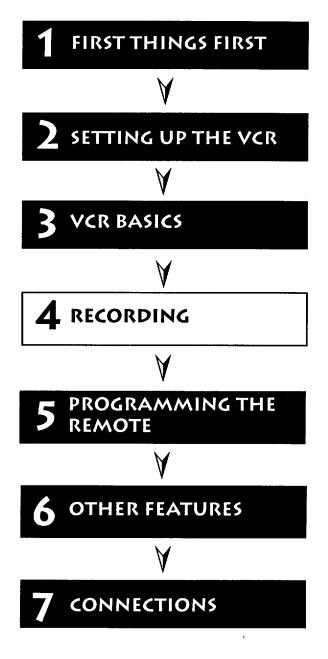
	Recordin	g Time
Cassette	SP	SLP
T-120	2Hr	6Hr
T-160	2Hr 40 M in	8Hr

SEVERAL RECORDING OPTIONS

Now that you've gone through the necessary steps to operate your VCR, I'll explain the different recording features that are available to suit your needs.

Recording Features:

- Recording (explained in VCR Basics section)
- Express Recording
- Timer Recording
- Timer Recording with VCR Plus+
- Copying and Editing Tapes



TIMER RECORDING

You can set up as many as eight timer recording programs.

1. Press MENU to display the VCR MAIN MENU.

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

2. Press 2 to display the TIMER RECORDINGS menu.

```
TIMER RECORDINGS

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

0 Exit
```

3. Select 1 to Create a New Program.

```
How often should this program record?

1 One time
2 Daily (every day)
3 Weekdays (M-F)
4 Weekly (once per week)

O Cancel
```

4. Select how often you want the program to record.

```
Program 1 (One time)

Channel --
Start Time --:--
End Time --:--
Start Date --/---
Tape Speed SLP

Press MENU to cancel
```

5. Enter the data for the program with the number buttons.

The data includes the channel number (press INPUT to select the line input), start time including AM or PM, and end time. The start date is automatically entered based on the VCR

Timer Recording Information

Clock must be set correctly.

Insert a tape with the safety tab in place and enough tape to record the program.

PROGRAMS OVERLAP appears if you have entered two programs where the times overlap.

For cable box, turn on the cable box and tune it to the channel you want to record before the recording is to begin.

3. Enter the VCR PlusCode shown in your local television programming guide.

VCR PLUS+

Enter pluscode number
(from TV listing)
12876

Press CLEAR to correct
Press MENU when done

4. Press MENU to enter the VCR PlusCode number.

How often should this program record?

1 One time
2 Daily (every day)
3 Weekdays (M-F)
4 Weekly (once per week)

O Cancel

5. Indicate how often you want the program to be recorded.

Program 1 (One time)

Channel 03 Cable
Start Time 08:00 PM
End Time 09:30 PM
Start Date 10/24/97 Fri
Tape Speed SLP

Press CLEAR to correct
Press MENU to save

Change the speed with the SPEED button on the remote or the program end time with the CLEAR button on the remote (if necessary).

Changing the end time comes in handy when you are recording a program such as a sporting event that may exceed the scheduled broadcast time.

7. Press MENU to save the program.

VCR Plus+ Recording

Clock must be set correctly.

Insert a tape with the safety tab in place and enough tape to record the program.

PROGRAMS OVERLAP appears if you have entered two programs where the times overlap.

UNRECOGNIZED NUMBER... PLEASE RE-ENTER appears when the VCR does not recognize the PlusCode number.

Turn on the cable box and tune it to the channel you want to record before the recording is to begin.

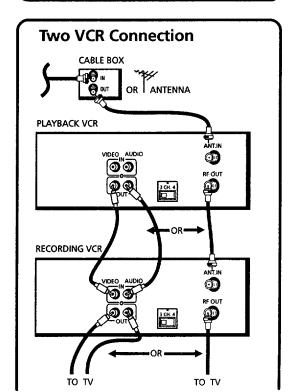
USING TWO VCRS FOR COPYING AND EDITING TAPES

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

- 1. Turn on the TV and VCRs.
- 2. Tune the TV to the VCR viewing channel (either 3, 4, or TV's video input).
- 3. If you connected your VCR using the ANT.IN and RF OUT jacks, tune the *recording VCR* to channel 3 or 4—the one selected on the back of the *playback VCR*.
 - If you connected your VCR using the audio/video jacks, press INPUT on the recording VCR's remote to select the line input.
- 4. Insert the tape you want to copy into the *playback VCR*. Insert a blank tape with safety tab in place into the *recording VCR*.
- 5. When you reach the point on the tape or program where you want to begin copying, press PLAY•PAUSE and then PLAY•PAUSE again on the *playback VCR*. You may need to adjust the tracking.
- 6. Press the RECORD button, then press PLAY•PAUSE, on the recording VCR.
- 7. Press the PLAY•PAUSE buttons on both VCRs at the same time to begin copying the tape.
- 8. To edit segments that you do not want to copy:
 - Press PLAY*PAUSE on recording VCR to pause copying.
 - Locate the next segment you want to copy on playback VCR by using FWD, REV, and PLAY•PAUSE, and then press PLAY•PAUSE.
 - Press PLAY•PAUSE on both VCRs at the same time to resume copying.
- 9. Press STOP•EJECT on both VCRs when you are finished.

Caution:

The unauthorized recording of television programs or other materials may infringe on the rights of others.



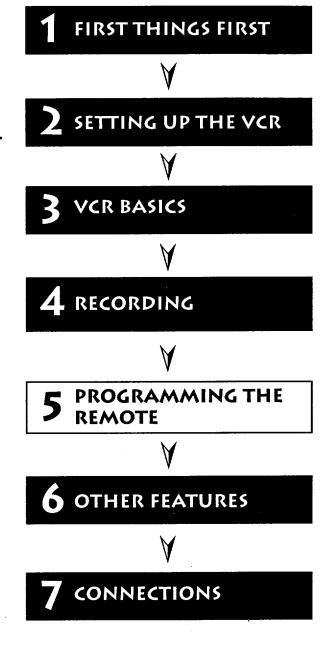


PROGRAMMING THE REMOTE

CONTROL YOUR OTHER COMPONENTS...

The remote can be programmed to control a television.

It is initially programmed to control an RCA, GE, or ProScan TV. Other manufacturer's brands need to be programmed.



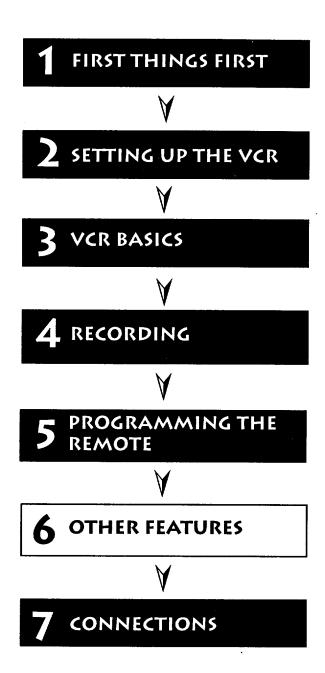
PROGRAMMING THE REMOTE

TV Codes	
Akai03	NAD07
AOC 06,12	NEC06
Candle06	Panasonic 04,08,11
Citizen06	Philco04,06,12
Colortyme06	Philips 03,04,06,12
Concerto06	Pioneer06
Curtis Mathes 01,06	Portland 06,12
Daewoo 06,12	ProScan01
Daytron06	Proton06
Electrohome 06,12	QuasarII
Emerson06	Radio Shack 01,05,13
Envision 05,06	RCA01,06,12
Fisher 05,08	Realistic05
GE00,01,06,11	Sampo06
Goldstar 06,12	Samsung 06,09,12
Hallmark06	Sanyo 05,08
Hitachi 06,14	Sears01,05,06,07,
Infinity04	08,10,12
J C Penney 00,01,06,09,12	Sharp 06,13
JBL04	Sony03
Jensen06	Soundesign06
JVC10,11	Sylvania 04,06,12
Kawasho 03,06	TechnicsII
Kenwood 06,12	Techwood06
Loewe04	Teknika06
Luxman06	TMK06
LXI04,05,07	Toshiba 05,07,08,09
Magnavox 04,06,12	Universal00
Marantz 04,06	Victor10
MGA06,12	Wards 00,01,04,06,12,13
Mitsubishi 06,12	Yamaha12
MTC06	Zenith 02

OTHER FEATURES

FEATURES TO ENHANCE VCR OPERATION

- Picture Search Options
- Time Counter
- On-Screen Displays
- Tracking



OTHER FEATURES

FRAME ADVANCE

Frame advance lets you view one-stop action frame after another during playback. Frame advance works best for tapes recorded at the SP or SLP speed.

- Press PAUSE (PLAY PAUSE) to "freeze" the action during playback.
- 2. Press F.ADV on the remote each time you want to view the next frame of the scene.
- 3. Press PAUSE or PLAY (PLAY•PAUSE) to return to normal playback.

INDEX SEARCH

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

To Search:

- 1. Press STOP.
- 2. Press SEARCH on the remote until the INDEX SEARCH menu appears on the TV screen.
- If you want to search through a certain number of index marks, press two number buttons to enter the number of marks you want to search. Press CLEAR on the remote to correct an entry.
- 4. Press FORWARD (FWD) to search forward or REVERSE (REV) to search in reverse. The VCR will locate your index mark and begin playback. If you did not enter a specific index number, the VCR will locate the next index mark and begin playback.
- 5. Press STOP to stop index 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

INDEX SEARCH

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

INDEX SEARCH

Press REV or FWD
to begin search

Index number
12

Press SEARCH to exit

INDEX SEARCH Searching for index number 12...

Press STOP to cancel

OTHER FEATURES

ON-SCREEN DISPLAYS

The INFO button shows the status of the VCR (STOP, PLAY, RECORD, etc.), channel number, time counter, date, time, and tape speed on the TV screen. The date and time must be set before they can be displayed.

- 1. Press INFO to see the on-screen displays.
- 2. Press INFO again to have only the time counter remain on the screen.
- Press INFO again to return to the normal display.Turning off the VCR also resets the displays.

TRACKING

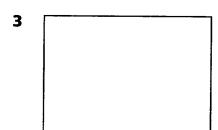
Your VCR has automatic tracking which removes the streaks or snow from the picture. Automatic tracking is activated when you insert a tape or turn on the VCR. Occasionally you may need to manually adjust tracking, especially if the tape was recorded on a different VCR. Just use the TRACKING buttons to remove the streaks or snow. You can also use tracking when you PAUSE a tape to reduce jittering of the picture.

When you manually adjust the picture, automatic tracking is turned off. To turn automatic tracking back on, press both TRACKING buttons on the front of the VCR at the same time, or eject the tape and re-insert it.

Tracking has no effect during recording--only playback.

STOP	CH O	5 0:3	0:0
11/17	07 Ma	n 01:30P	M C

2	 0:30:00
Î	



Time counter only (does not time out)

Normal display



CONNECTIONS

THINGS TO KNOW BEFORE CONNECTING COMPONENTS

PROTECT YOUR COMPONENTS FROM POWER SURGES

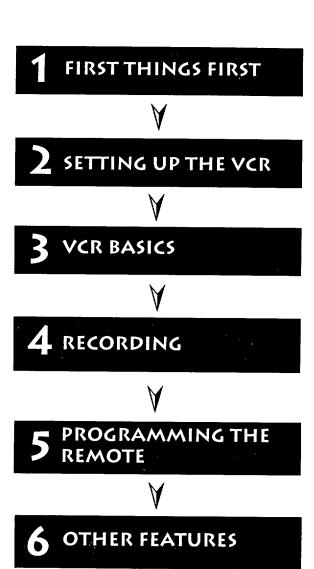
- Connect all components before plugging any power cords into the wall outlet.
- Always turn off the TV and other components before you connect or disconnect any cables.

POSITION CABLES CORRECTLY TO AVOID AUDIO HUM OR INTERFERENCE

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

PROTECT YOUR COMPONENTS FROM OVERHEATING

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



CONNECTIONS

CONNECTIONS

CHOOSING A VCR CONNECTION

There are several different ways to hook up your VCR, depending on whether or not you have cable, and if you have cable, whether you have a cable box, and if some of the channels are scrambled and...well, you get the picture.

Three connections are described in this section and one of them should provide you with a VCR hookup that works.

- TV with RF jack only
- TV with audio/video jacks
- TV with audio/video jacks and cable box to unscramble pay channels only

If you need to hook up additional components not shown in the diagrams here (and are unsure of how to connect them), refer to the instruction manual that came with that particular component.

ADVANTAGES OF AUDIO/VIDEO CABLE CONNECTIONS

Using a simple coaxial cable connection gives you good picture quality. If your television has A/V jacks, I highly recommend using them to get even better picture quality when recording and playing back videotapes. These connections give you more convenient operation by not sharing the signal from the RF cable.

DON'T FORGET ABOUT THE AUTO TV/VCR FEATURE

The TV/VCR switch controls whether the picture signal is coming from the VCR or the TV. You can change the setting manually by using the TV•VCR button on the remote, or you can set the Auto TV/VCR feature to automatically switch to VCR mode when the VCR is turned on. Set the Auto TV/VCR feature to ON when using only ANT.IN and RF OUT jacks and OFF when using the A/V output jacks--so your TV signal is not interrupted when the VCR is turned on.



CONNECTIONS

TV WITH AUDIO/VIDEO JACKS

This connection assumes:

- You are connecting an antenna, cable, or cable box system.
- Your television has audio/video jacks.

This connection provides:

- Mono sound playback from VCR.
- Record one channel while watching another (except when using a cable box for all channels).

To use this connection, you must have:

- (1) coaxial cable for cable/antenna connection; (2) for cable box
- (2) audio/video cables

To connect:

- 1. Connect cables as shown.
- 2. Return to First Things First, then follow the steps.

Using This Connection

Tune your TV to its video input channel. Use of the TV•VCR button is not required.

Auto TV/VCR Setting:

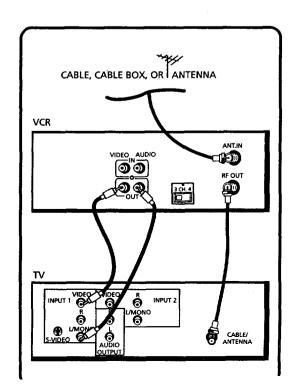
Set the Auto TV/VCR feature to OFF.

To play a tape:

- 1. Insert a tape.
- 2. If necessary, press PLAY.

To record one program and watch another:

- 1. Begin recording a program using one of the recording options.
- 2. Select a different channel on the TV.





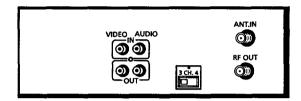
This section gives you some additional information about the VCR, including a description of the unit's controls and display.

You also will find a Troubleshooting Tips section in this Appendix, which might help to resolve some of those simple problems.

Finally, this section contains your warranty information.



BACK PANEL



3 CH. 4 Switch Selects the channel to which you will tune the TV to see the VCR picture if you connect the VCR using the ANT.IN and RF OUT jacks.

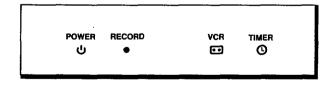
ANT. IN Jack Receives a signal from an antenna or cable system when attached.

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

AUDIO and VIDEO OUT Jacks Sends signals from VCR to another component, like a TV or VCR, when it is connected to these jacks.

RF OUT Jack Passes signal to TV using the cable supplied.

INDICATOR PANEL



POWER Indicator Lights when the VCR is turned on.

RECORD Indicator Lights when the VCR is recording.

TIMER Indicator Lights during an express or timer recording, or when the VCR is set for a timer recording and the VCR is turned off. Flashes when the clock is not set, and there is no cassette in the VCR.

VCR Indicator (Applies Only if the VCR Viewing Channel is 3 or 4). Press the TV•VCR button to turn on or off.

- VCR indicator on: Picture from VCR.
- VCR indicator off: Picture from TV channel.



- Try another tape.
- Some snow/streaks are normal during search, stop action, frame advance, and slow-motion playback.

Streaks in picture during normal playback

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

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

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

Will not record or play

- Check to make sure there is a tape in the VCR.
- Try ejecting and reinserting the cassette.
- Check to make sure the tape is not broken.
- Check to make sure the VCR is not in pause mode. Press PAUSE or PLAY on the remote (PLAY•PAUSE on the VCR) to return to normal playback.

Will not record

- Check to make sure the safety tab is intact.
- Check to make sure the VCR is not in the line mode. Press INPUT on the remote.

Rewind does not operate

Check to make sure the tape is not already rewound.

VCR plus+ or timer recording not made or wrong program recorded

- Check to make sure the correct VCR PlusCode is entered.
- Check to make sure the cable box was turned on when recording was to begin.
- Check to make sure the program was entered correctly (wrong channel or times).
- Power interruption. Reset the clock.
- Check to see if time and date are correct including AM/PM.
- Check to make sure the program did not exceed the tape's length or the tape was not rewound beforehand.
- Check to make sure the VCR was turned off at the time recording was to start.
- Check to make sure there was a tape in the VCR and the cassette's safety tab was intact.
- VCR ejects cassette when the end of the tape is reached during a timer recording.
- Check to make sure VCR plus+ setup was completed correctly.

SPECIFICATIONS

Format:

VHS

Record/Playback

Video: 4-Head

System:

Audio: Mono record/playback system

Video Signal System:

EIA standard: NTSC color

Antenna:

75-ohm external VHF/UHF combined

antenna terminal

Tuner:

USA:

181 channels capability*

(125 cable channels)

Canada: 178 channels capability*

(122 cable channels)

Type:

AutoProgramming frequency synthesis

Power Requirement:

120V AC, 60 Hz

Power Consumption:

17 watts

Dimensions:

3.54 inches high (90 mm)

14.1 inches wide (360 mm)

10.9 inches deep (278 mm)

Weight:

7.92 pounds (3.6 kg)

Storage Temperature

- 22°F to +149°F

Range:

(-30°C to +65°C)

Operating

+41°F to +104°F

Temperature Range:

(+5°C to +40°C)

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 nonabrasive, antistatic cleaner and polisher.

^{*}Check your cable company's compatibility requirements.

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