

M 53 06 477

VR4156

VR4256HF

VR4156



WARNING

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL. TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Safety Tips

Refer to the "Safety Tips" section of this operating guide for important safety considerations.

Note to Cable TV System Installer

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the NEC that 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 the cable entry as practical.

Power-Cord Polarization

This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other.) This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug by altering it in any way.

CAUTION

TO PREVENT 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.

Regulatory Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

"Ce appareil numérique de la class b respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada."

SAFETY TIPS

Important safeguards for you and your new product

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product, and save them for future reference.

Observing the simple precautions discussed in this section of the operating guide can help you get many years of enjoyment and safe operation that are built into your new product.

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Follow Instructions

All operating and use instructions should be followed.

3. Retain Instructions

The safety and operating instructions should be retained for future reference.

4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Water and Moisture

Do not use this product near water — for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

7. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8. Transporting Product

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



PORTABLE CART WARNING

9. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

10. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Line-Cord Polarization

This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. Power-Cord Protection

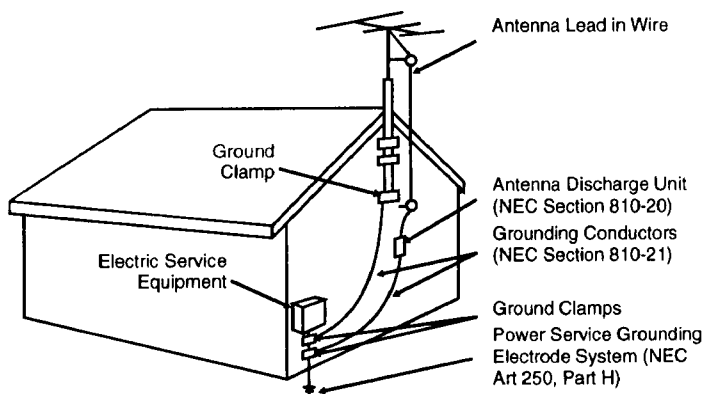
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

SAFETY TIPS

14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS



NEC - NATIONAL ELECTRICAL CODE

15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- If the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or the cabinet has been damaged.
- If the product exhibits a distinct change in performance.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

24. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

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GENERAL INFORMATION

Introduction

Welcome into the family of Zenith Video Cassette Recorder owners. This guide provides instructions on how to operate your new VCR. It includes a section containing Safety Tips. We urge you to read this publication carefully so that you will receive full enjoyment from your new Zenith VCR for many years to come.

Your VCR has been designed and built to give you the very best in quality, features and performance. There are thousands of Zenith authorized video recorder service centers throughout the U.S., Canada and Mexico who can attend promptly and effectively to ordinary service needs.

If you should have an unusual performance or service problem that cannot be satisfactorily resolved by your Zenith authorized video recorder service center, contact us at:

Zenith Electronics Corporation

Customer Service Department

1000 Milwaukee Avenue

Glenview, Illinois 60025-2493

Telephone: (847) 391-8752

Mon-Fri, 8:00 a.m. - 4:30 p.m. Central Time

Send the model number, serial number, and date of purchase or original installation, with a full explanation of the problem and the service history. We will welcome the opportunity to look into your specific question or problem and to be of assistance in resolving it promptly.

The model and serial numbers of your new VCR are located on the VCR cabinet. For your future convenience and protection, we suggest that you record these numbers here:

Model No. _____

Serial No. _____

Installation Considerations

Before you install your VCR...



Ventilation — Proper ventilation keeps your VCR running cool. Air circulates through perforations in the back and bottom of the cabinet. Do not block these vents or you will shorten the life of your VCR.



Power Source — Your VCR is designed to operate on normal household current, 120 volt 60 Hertz AC. Do not attempt to operate it on DC current.



Power Cord — Your VCR power cord has a polarized plug as required by Underwriters' Laboratories. It has one regular blade and one wide blade and fits only one way into a standard electrical outlet. If the blades will not enter either way, your outlet is very old and non-standard. A new outlet should be installed by a qualified electrician.



Safe Operation — Your VCR is manufactured and tested with your safety in mind. However, unusual stress caused by dropping or mishandling, exposure to flood, fire, rain or moisture, or accidental spilling of liquids into the VCR, can result in potential electrical shock or fire hazards. If this happens, have your VCR checked by a service technician before using it again.

Please read and observe each safety point in the "Safety Tips" section of this operating guide when installing and using your VCR.

- **Plugging in Your VCR** — Be sure to plug your VCR into an "unswitched" AC power source. The "switched" AC outlets found on some video equipment will not continue supplying power to the VCR once the equipment is turned off. If the power to the VCR is interrupted for an extended time, you will have to reset the clock in the VCR.
- Keep the video recorder and video cassette away from strong magnetic fields.
- Use only Zenith approved and recommended accessory units with your Zenith video recorder to avoid potential hazards.
- Save the shipping carton and packing material. They will come in handy if you ever have to ship your video recorder. For maximum protection, re-pack the video recorder as it was originally shipped from the factory.

Moisture condensation is apt to occur under the following conditions:

- When the video recorder is moved from a cold place to a warm place.
- Under extremely humid conditions.

In locations where moisture condensation may occur:

- Keep the power cord plugged into an AC outlet and the POWER switch set to ON. This will help prevent condensation from occurring.
- When condensation has occurred, it will not evaporate quickly once the power is switched on. Wait a few hours for the video recorder to become dry before using the video recorder.

VCR FEATURES CHART

FEATURES	VR4156	VR4256HF
VCR PLUS+ [®] Recording System	X	X
4-Heads (Special Video Effects)	X	X
Full Load/Quick Start	X	X
Auto Head Cleaner	X	X
Audio System	Monaural (No Audio Menu)	MTS Hi-Fi Stereo (Has Audio Menu)
Front and Rear Panel Audio/Video (A/V) Jacks	Monaural	Stereo
Remote Control MBR4256	X	X
Auto/Manual Band Select	X	X
Auto/Manual Channel Search	X	X
Channel Capability (CATV & TV)	181	181
Record Speeds SP/EP	X	X
Playback Speeds SP/LP/EP	X	X
Auto Playback System	X	X
Auto/Manual Digital Tracking	X	X
Instant Recording	X	X
Timer-Controlled Recording	X	X
Auto Tape Speed Adjust	X	X
Forward/Reverse Slow-Motion Video (4-head VCR)	X Variable 1/6 to 1/32	X Variable 1/6 to 1/32
Pause/Still Video	Clear	Clear
Real-Time Tape Counter	X	X
Index Search	X	X
Speed Search	X	X
Jet Search	X	X
English/Spanish/French Menus	X	X
1-Year, 8-Event Timer	X	X
LED Clock Front Panel Display	X	X
Auto Daylight Savings Time	X	X
Auto Clock Set	X	X
Hook-up Cable (VCR to TV)	X	X

1. Model VR4256HF is used for the description, operation, and details provided in this operating guide.

2. VCR design and specifications are subject to change without prior notice.

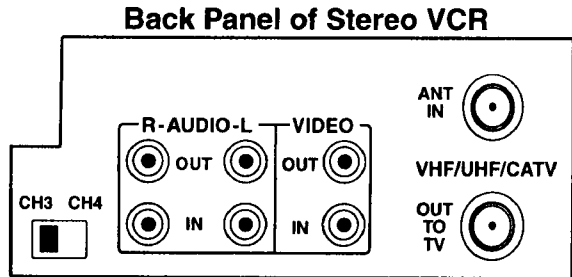
X = Feature is provided N/A = Feature is Not Available

BEFORE YOU OPERATE YOUR VCR

This VCR is "menu" operated. In other words, features and characteristics of the VCR are adjusted by selecting options on "menus" that appear on the TV screen. Therefore, you should carefully review the menus in this operating guide. In particular, see the "VCR Menu Operations" section for information on how to access the menus and select an item on the menu.

1. Make Equipment Connections

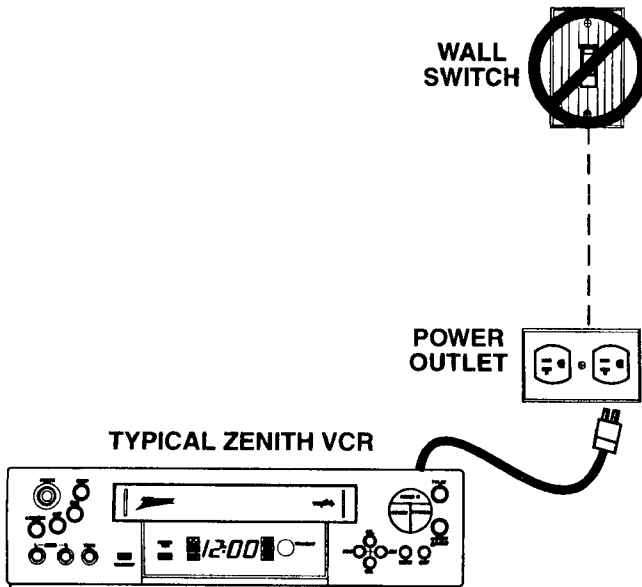
(Required) Typical connections for your VCR are provided in the "Connections for Your VCR" section of this operating guide. Determine your video system needs, then make the connections shown on the applicable diagrams.



2. Connect the Power

(Required) Plug your VCR into an unswitched 120 Vac, 60 Hz household power outlet. Turn on the VCR by pressing the POWER switch on the remote control or on the front panel of the VCR.

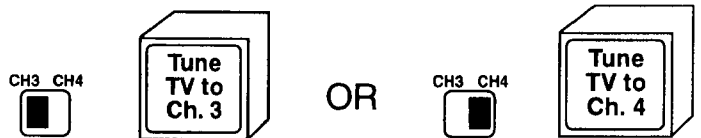
! Do not plug the VCR into a switched power outlet. Otherwise, when the power is switched off, the VCR turns off. You may then have to reset the time and date, and reprogram operational features.



3. Set Position of the CH3/CH4 Switch

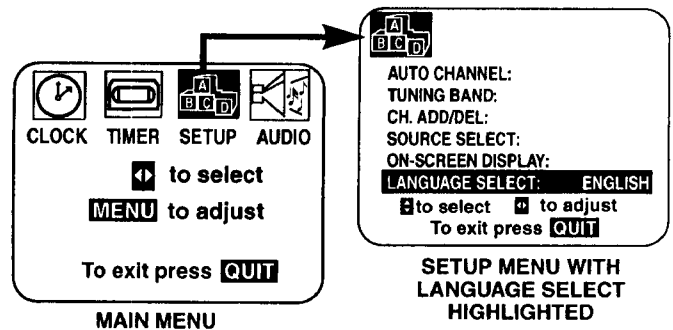
(Required) The CH3/CH4 switch on the back panel of the VCR determines which channel is used by the VCR to send video signals to your TV. The TV must be tuned to the same channel you set with the CH3/CH4 switch to see tape playback and status displays from the VCR. To determine which video channel provides the best picture for your system, try the switch in CH3 position and tune your TV to CH3; then try the switch in CH4 position and turn your TV to CH4.

You may use the VCR menus for a test display. Press TV/VCR on remote repeatedly until **VCR** symbol appears in the front panel display of the VCR. Press MENU on the remote to see the main menu.



4. Select Language for VCR Menus/Displays

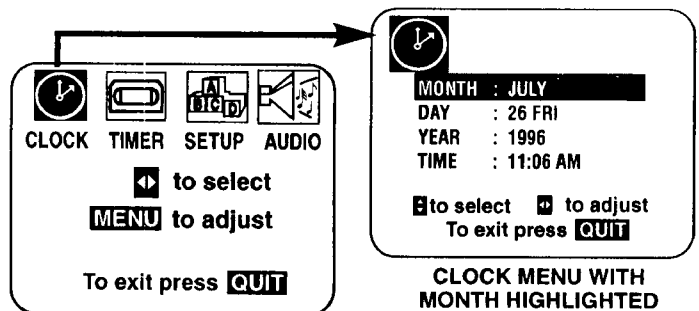
(Optional) Select the language (English, Spanish or French) you want for VCR menus and status displays. See LANGUAGE SELECT option on the SETUP menu for details.



5. Set Date and Time for Clock

(Required) Set the clock in the VCR to the current date and time. See CLOCK Menu for details.

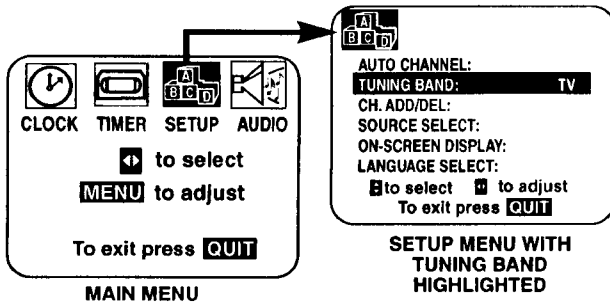
! Clock must be set before you can use any timer-controlled features of the VCR, e.g. TIMER recordings.



BEFORE YOU OPERATE YOUR VCR

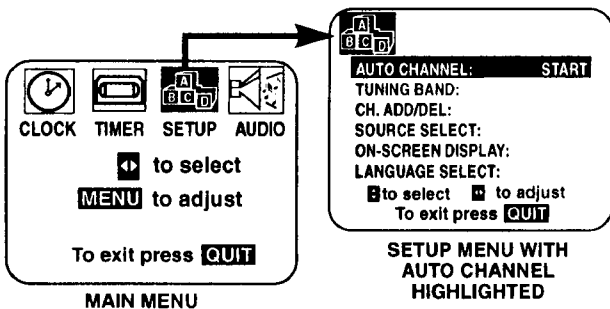
6. Select Tuning Band for VCR

(Optional) Set the tuning band of the VCR for the type of program signal you have connected to the ANT IN jack on the back of the VCR. Choose TV if you have an antenna connected to the VCR. Choose CATV if you have a cable system (with or without a cable box) connected to the VCR. See TUNING BAND option on SETUP menu for details.



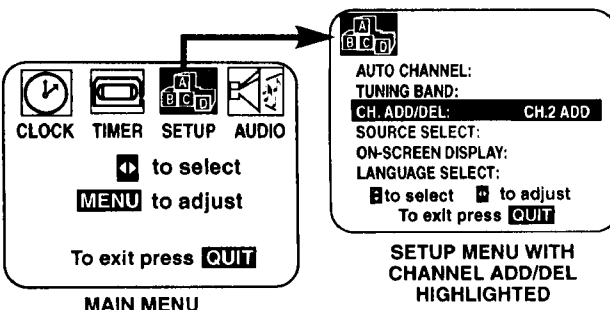
7. Use Auto Channel to Find Channels.

(Required) Use AUTO CHANNEL to find active channels in your broadcast area. AUTO CHANNEL stores the active channels in protected memory for access by using Channel Up/Down. See AUTO CHANNEL option on SETUP menu for details.



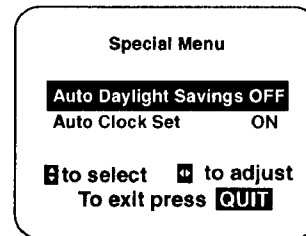
8. Use CH. ADD/DEL to Create Favorite Channels

(Optional) Use CH. ADD/DEL to change the list of active channels found when using AUTO CHANNEL, so you can create you own list of favorite channels. See CH. ADD/DEL option on SETUP menu for details.

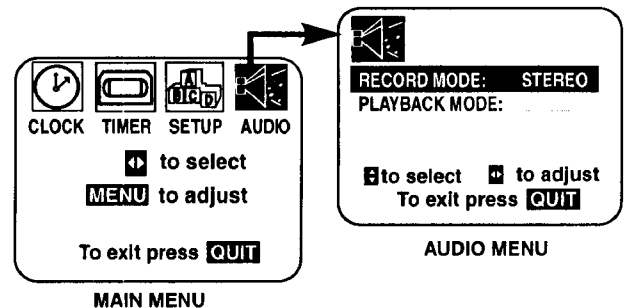


9. Select Other Menu Options

Your VCR adjusts the clock automatically to the current time. As an alternative to Auto Clock Set, you can select ON for the Auto Daylight Savings option on the Special Menu. The clock will be adjusted automatically for Auto Daylight Savings time changes. Refer to the Special Menu for details.

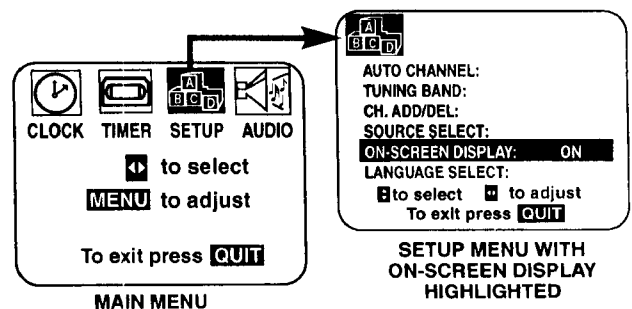


You may select the audio format (STEREO, MONO or 2ND AUDIO) to be used when you record programs, if you have a stereo VCR. We recommend you set this option to STEREO for recording most programs. Refer to the RECORD MODE option on the AUDIO menu for details.



You may select the audio format (HI-FI or NORMAL) to be used when you play a tape, if you have a stereo VCR. We recommend you set this option to HI-FI for playback of most tapes. Refer to the PLAYBACK MODE option on the AUDIO menu for details.

You may prevent the VCR status from being shown on your TV by using the ON-SCREEN DISPLAY option on the SETUP menu. We recommend you keep this option to ON to show the VCR status whenever it is provided by the VCR. Refer to the SETUP menu for details.



SETUP FOR VCR PLUS+[®] RECORDING

Introduction

Before you can record programs by using the VCR Plus+[®] system, you must "tell" this VCR the PlusCode[™] channels that are used in your area. The PlusCode[™] channels must be mapped to the active channels that you found when you used AUTO CHANNEL on the SETUP menu. An example of channel mapping and a blank worksheet are provided for your convenience. Check the TV schedule in your local newspaper for the published PlusCode[™] channels.

To find out which publications in your area carry the PlusCode[™] channels and program numbers, please call 1-800-2584-827.

VCR Plus+ is a registered trademark of Gemstar Development Corp.

PlusCode is a trademark of Gemstar Development Corp.

VCR Plus+[®] system is manufactured under license from Gemstar Development Corp.

VCR Plus+ est une marque déposée de Gemstar Development Corp.

PlusCode est une marque de Gemstar Development Corp.

Le système VCR Plus+ est fabriqué sous licence de Gemstar Development Corp.

Channel Mapping Your VCR

PREPARATION (Already Done)

See "Before You Operate Your VCR" section.

1. Set Date and Time for Clock.
2. Select Tuning Band for VCR.
3. Use Auto Channel to find channels.

PRELIMINARY STEPS

1. Turn on VCR, TV, and cable box (if used).
2. Select TUNER for SOURCE SELECT on SETUP menu.
3. Obtain listing of PlusCode[™] channels.

CHANNEL MAPPING

1. Complete Channel Mapping Worksheet.
2. Press CH MAP on remote and follow all on-screen instructions.

NOTE: This implementation of VCR Plus+[®] does not provide selection of cable channels via a cable box. Specify the cable box output channel (usually 3 or 4) as the channel to be mapped.

Example of Completed Worksheet

Worksheet with Channels Found
Via Auto Channel

Channel found via AutoChannel (TV Ch/Cable Ch)	Network or Station ID	Published PlusCode [™] Channel (VCR+ Ch)
2	CBS	
5	NBC	
7	ABC	
9	WB	
11	PBS	
20	PBS	
23	WFBT	
26	WCII	
32	WFLD	
	WSNS	
50	WPWR	
60	HSN	
66	WGBO	

Published List of PlusCode[™] Channels

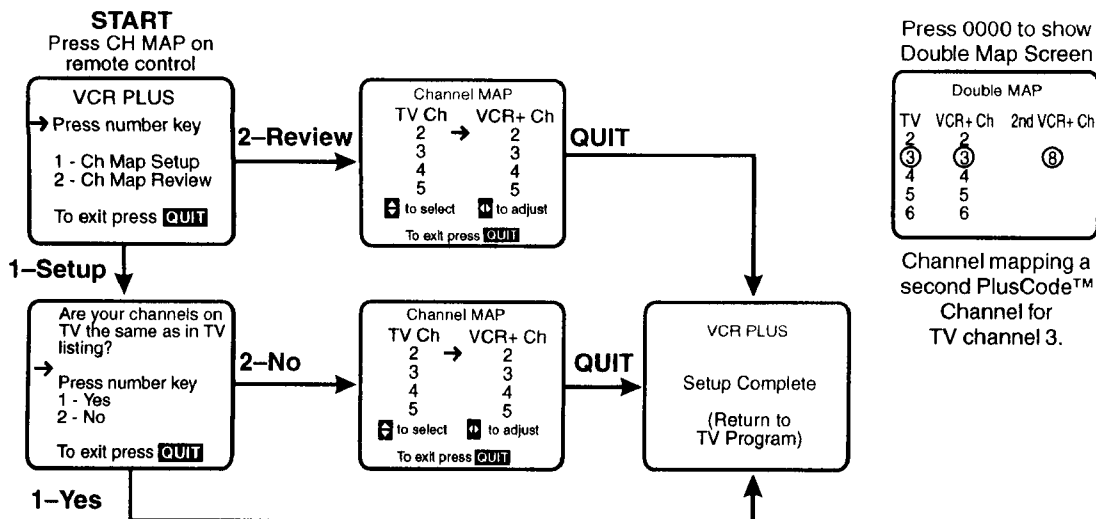
CHANNELS, VCR PLUS+	
	PlusCodes
Ch. 2:	WBRM (CBS) 2
Ch. 5:	WMAQ (NBC) 5
Ch. 7:	WLS (ABC) 7
Ch. 9:	WGN (WB) 9
Ch. 11:	WTTW (PBS) 11 & 19
Ch. 20:	WYCC (PBS) 20
Ch. 26:	WCIU (Ind.) 26
Ch. 32:	WFLD (Fox) 32
Ch. 38:	WCFC (Ind.) 3
Ch. 44:	WSNS (Tel.) 4
Ch. 50:	WPWR (UPN) 50
Ch. 66:	WGBO (Uni.) 66

Completed Worksheet for Channel Mapping

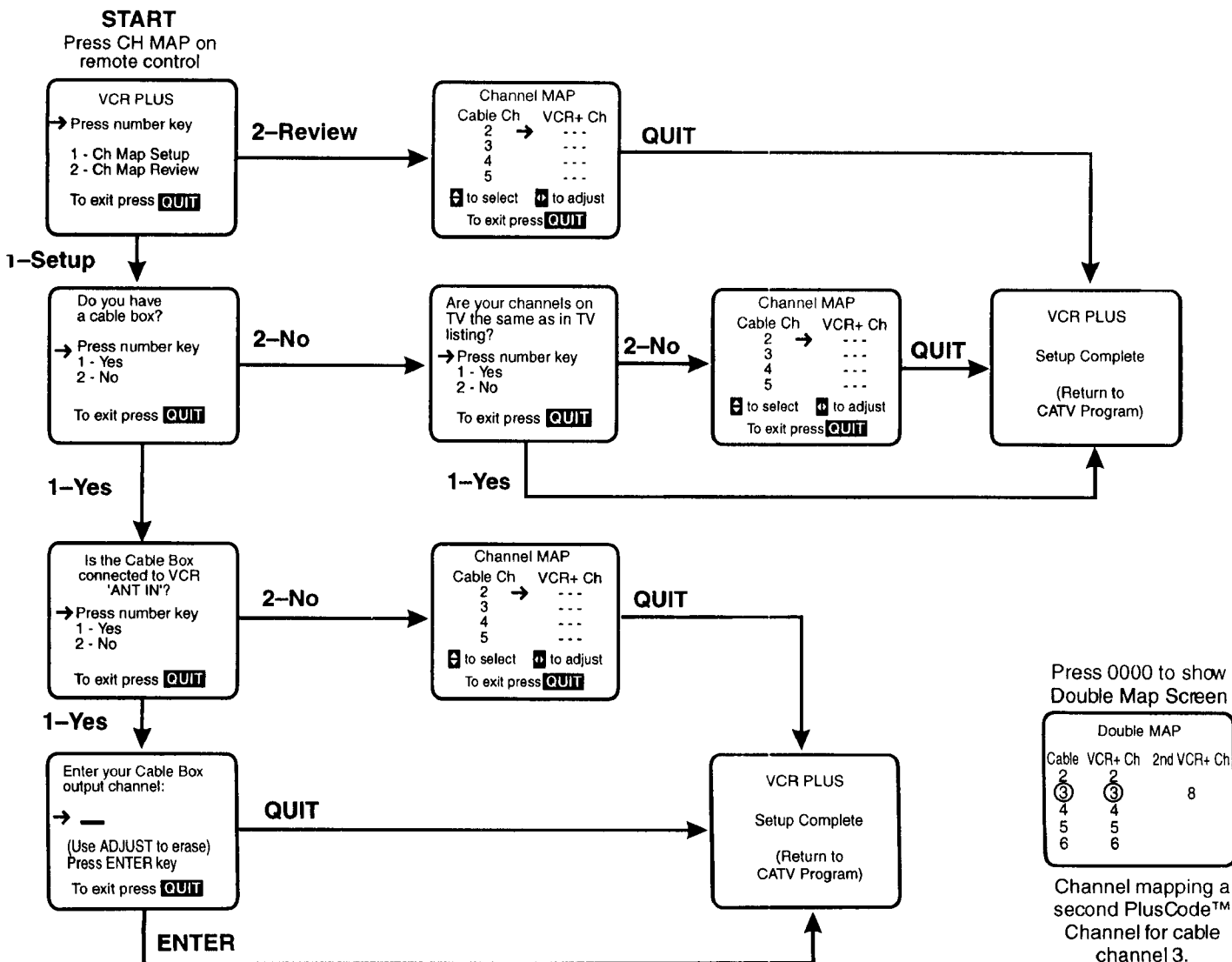
Channel found via AutoChannel (TV Ch/Cable Ch)	Network or Station ID	Published PlusCode [™] Channel (VCR+ Ch)
2	CBS	2
5	NBC	5
7	ABC	7
9	WB	9
11	PBS	11 & 19
20	PBS	20
23	WFBT	--
26	WCII	--
32	WFLD	32
	WSNS	3
50	WPWR	4
60	HSN	--
66	WGBO	66

SETUP FOR VCR PLUS+[®] RECORDING

On-Screen Instructions for TV Tuning Band

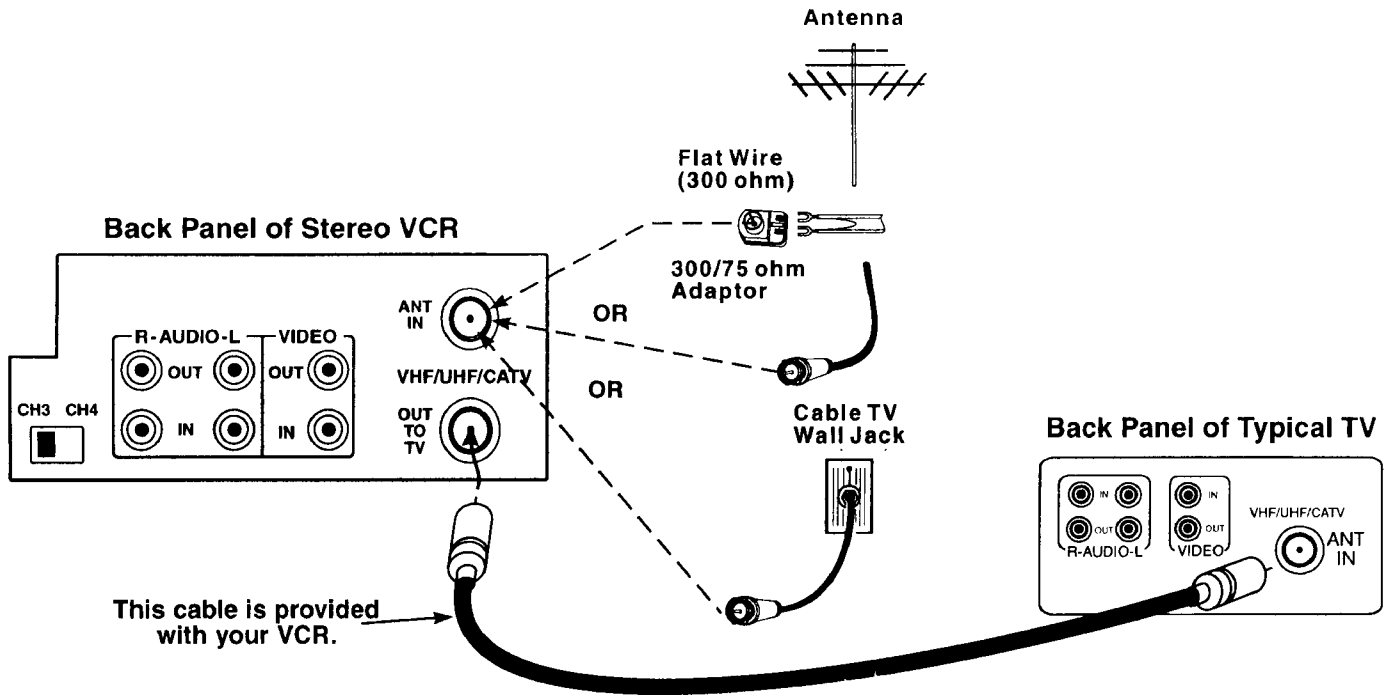


On-Screen Instructions for CATV Tuning Band



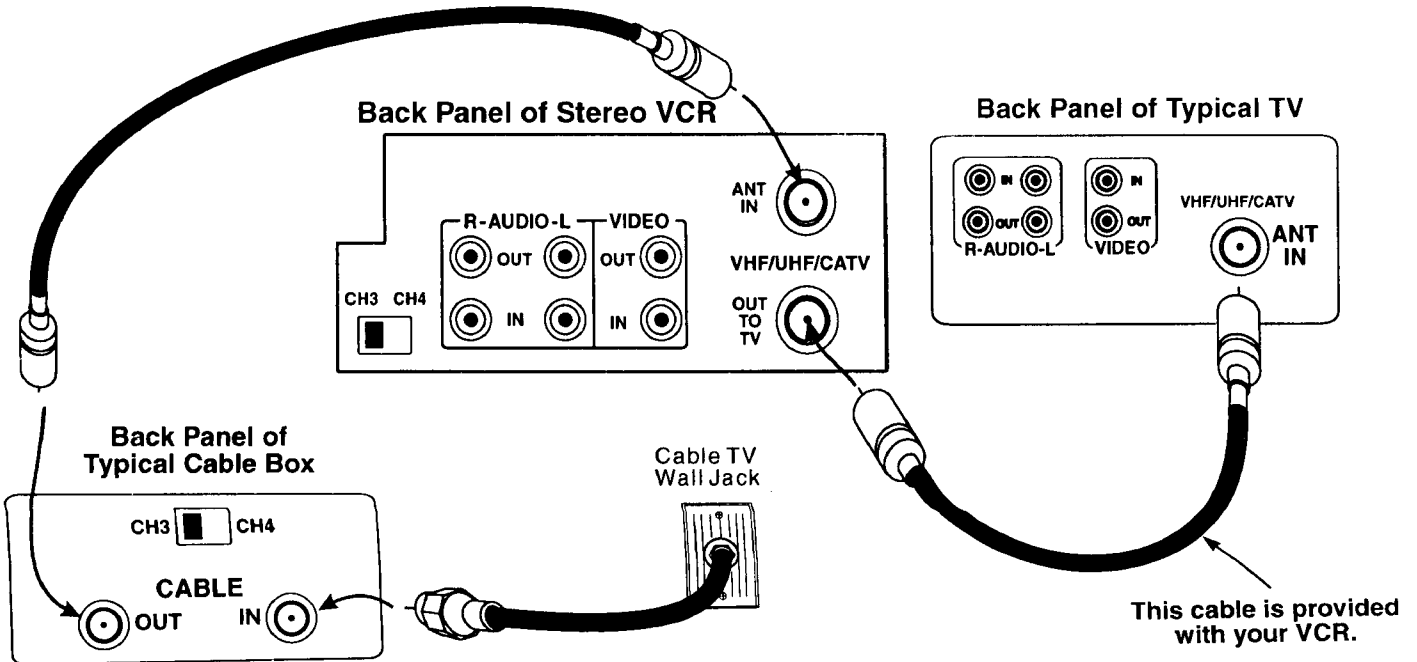
CONNECTIONS FOR YOUR VCR

(Required) Connections Without a Cable Box



**TURN OFF POWER OR UNPLUG VCR
BEFORE MAKING ANY CONNECTIONS**

(Required) Connections With a Cable Box

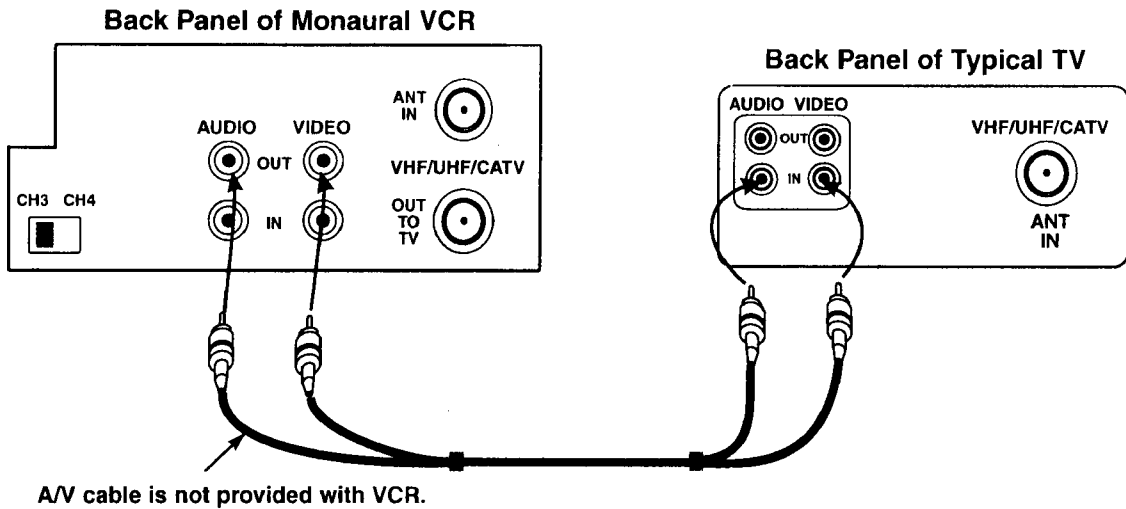
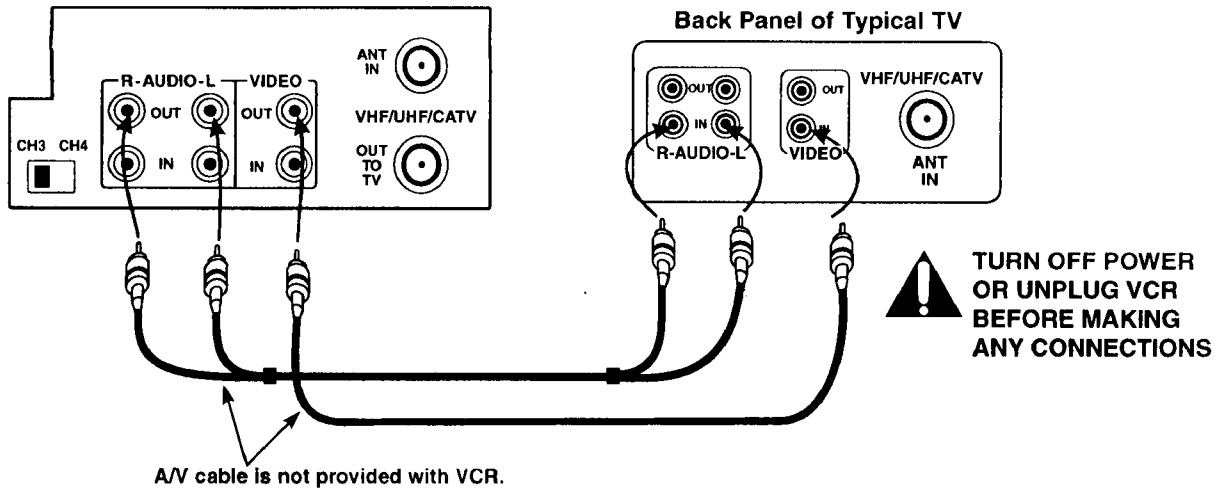


**TURN OFF POWER OR UNPLUG VCR
BEFORE MAKING ANY CONNECTIONS**

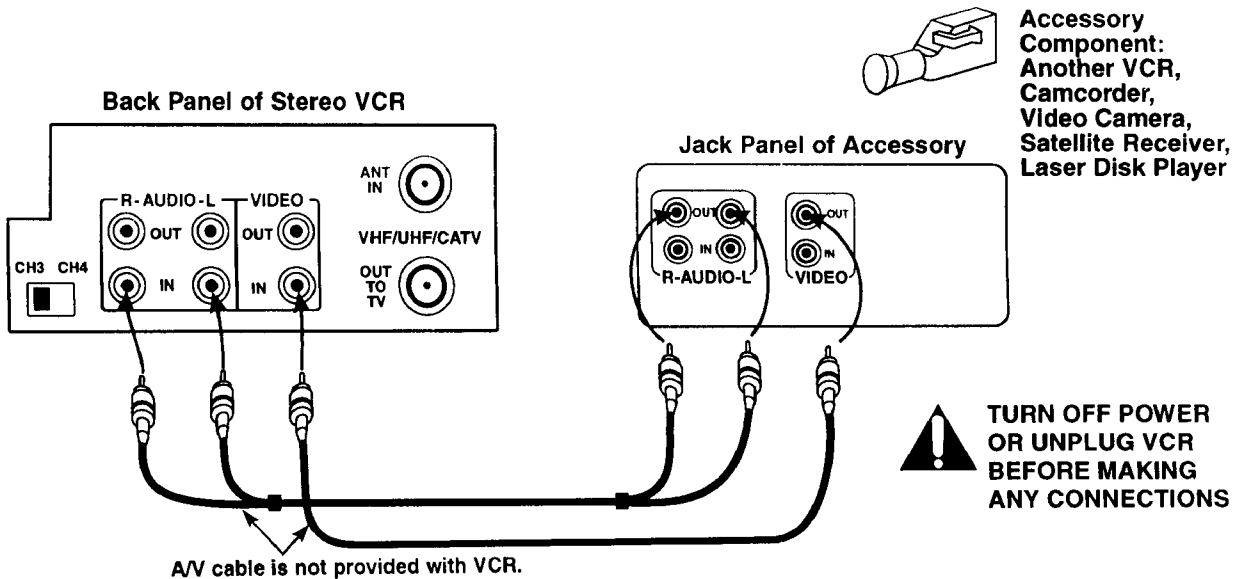
CONNECTIONS FOR YOUR VCR

(Optional) Audio/Video (A/V) Connections to TV

Use A/V connections for improved picture performance.



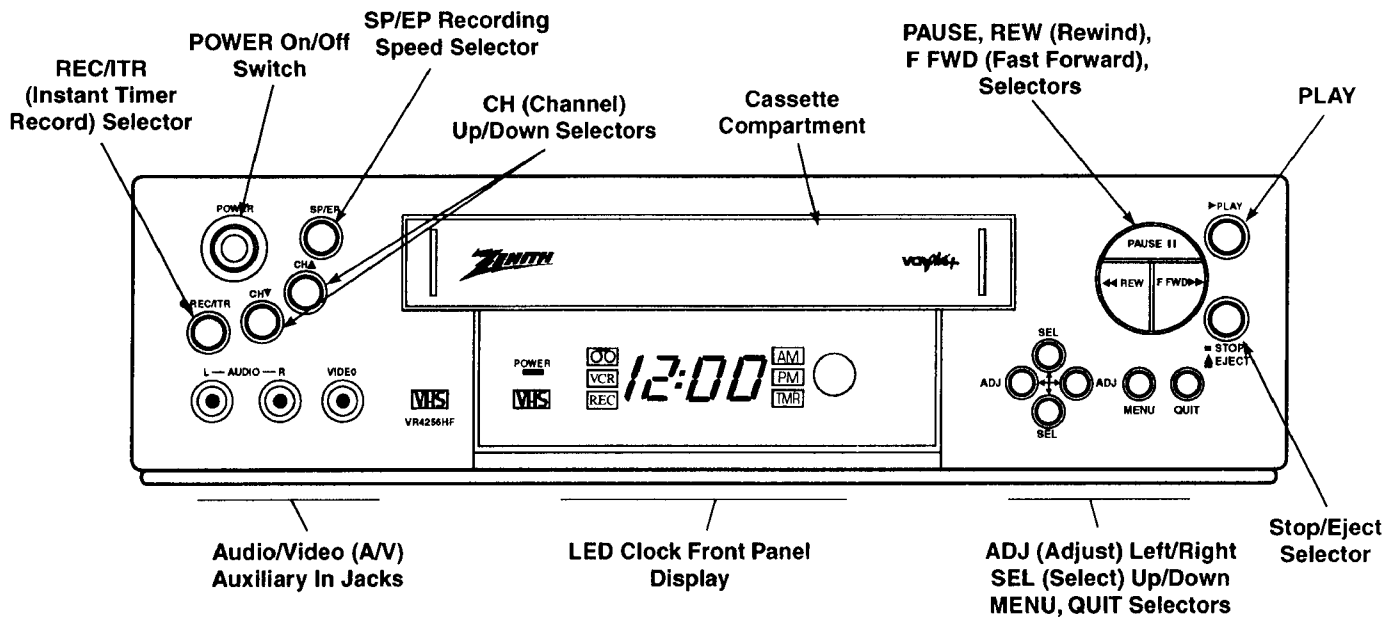
(Optional) Accessory Audio/Video (A/V) Connections to VCR



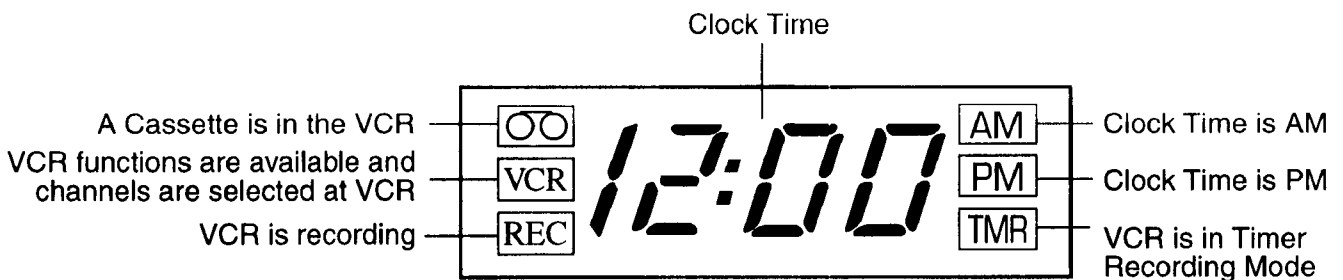
FRONT PANEL CONTROLS AND DISPLAYS

Items on the Front Panel

Basic VCR operations can be done by using the items on the front panel. Basic and advanced VCR operations can be done by using the remote control.



LED Clock Front Panel Display



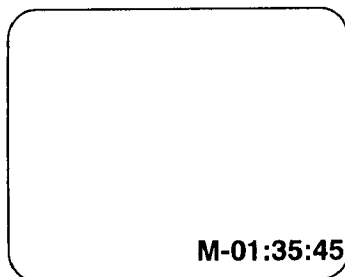
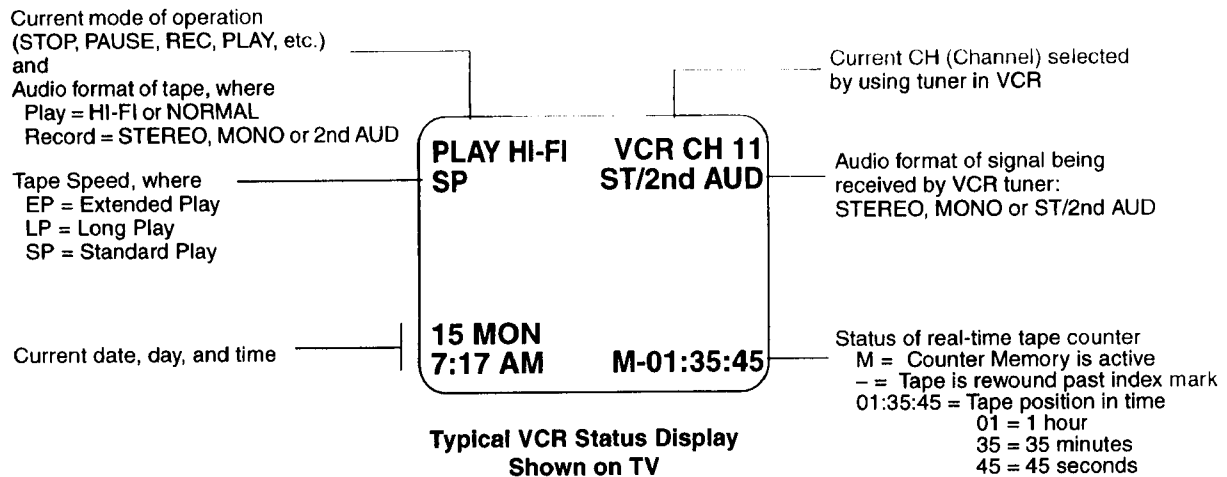
Information appears in the Front Panel Display depending on the VCR function being used. For example, when you press SP/EP, the message SP or EP appears in the display to indicate the current tape speed. As you change channels, the channel numbers are shown. The current time is shown, even while the VCR is turned off.

Messages shown include the following:

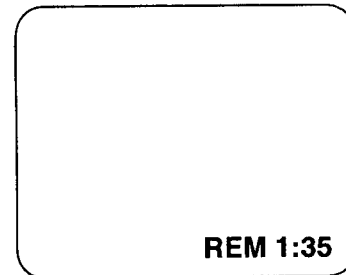
- AU — Auxiliary A/V input channel is selected for viewing equipment connected to Audio/Video jacks on front or rear of the VCR.
- EP — Extended Play speed is selected.
- ERR — Error: Take VCR to an authorized repair center.
- LP — Long Play speed is being used.
- SP — Standard Play speed is selected.
- — Clock is not set.

FRONT PANEL CONTROLS AND DISPLAYS

VCR Status Displays



**Display Showing
Tape Counter Position**



**Display Showing
Tape Time Remaining**

VCR Status Display Operation

The VCR Status Display appears on the TV when a VCR function starts, like changing a channel or selecting a different VCR mode. For example, pressing STOP while the VCR is in PLAY mode shows STOP in the display. You can press ENTER on the remote control any time to see the Status Display.

NOTE: If the VCR Status Display does not appear on the TV screen, check the status of the ON-SCREEN DISPLAY option on the SETUP menu. Select ON Status to see the display. Refer to the "VCR Menu Operations" section for details.

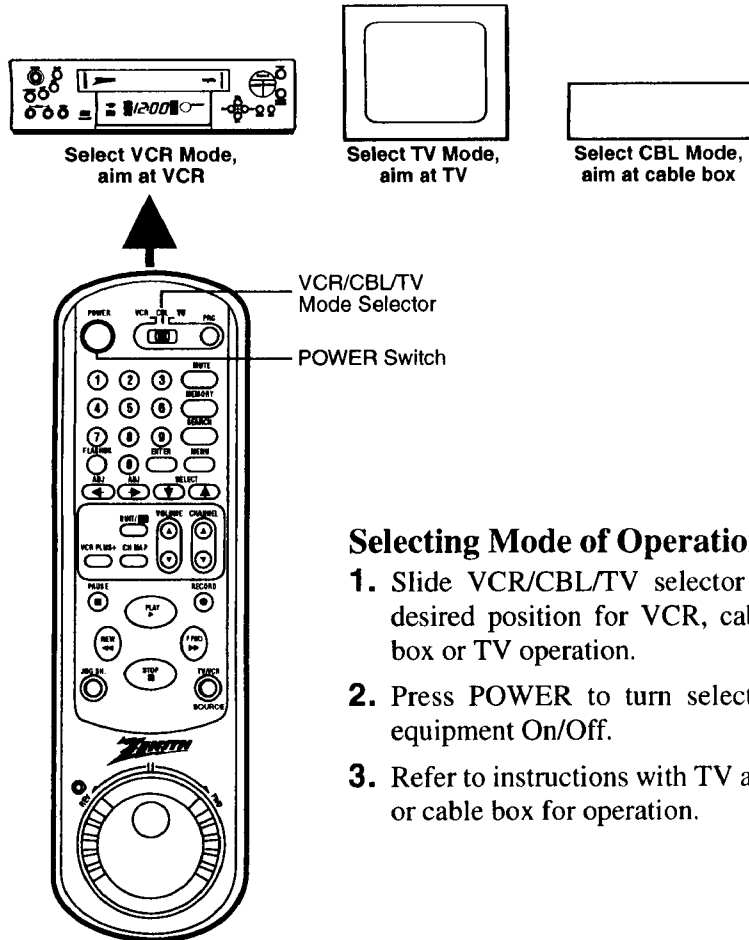
VCR Status Display Options

When the Status Display is shown, you can press ENTER repeatedly to see abbreviated displays, as follows:

1. Press ENTER to see Status Display.
2. Press ENTER a second time to show only the tape counter position.
3. Press ENTER a third time to show only the tape time remaining.
4. Press ENTER repeatedly until all displays are removed.

REMOTE CONTROL MBR4256

Remote Control Operation



Selecting Mode of Operation

1. Slide VCR/CBL/TV selector to desired position for VCR, cable box or TV operation.
2. Press POWER to turn selected equipment On/Off.
3. Refer to instructions with TV and or cable box for operation.

Remote Control Key

ADJ (ADJUST Left/Right) — Use to change status of menu options. Adjusts tape playback tracking while in VCR mode.

CH MAP — Use to begin VCR Plus+® setup.

CHANNEL (Up/Down) — Use to change favorite channels. Also use to select AUX A/V input channel.

ENTER — Use for programming menu options and to see VCR status display.

F FWD (Fast Forward) — Use to advance tape rapidly.

FLASHBK (Flashback) — Use during tape playback to pause tape and to return to previous VCR channel.

JOG SH (Shuttle) — Use to enable jog shuttle operation for special video effects during playback.

MEMORY — Use to zero Real-Time tape counter or return tape to M 0:00:00 position.

MENU — Press to see menus and available items. Accesses Zenith TV menus while in the TV mode.

MODE — Use to select operational mode of remote.

MUTE — Press to turn off TV sound. Press again to restore TV sound.

Numbered keys — Use to choose channels and enter programming information.

PAUSE — Use to pause tape temporarily during playback or record.

PLAY — Use to begin tape playback.

POWER — Turns VCR On and Off. Concurrently turns VCR Timer Off and On, if programmed.

PRG (Program) — Use to program remote with brand codes for your brand of TV and/or cable box.

QUIT/CC — Use to exit menu system. Selects closed caption for some TVs while in TV mode.

RECORD — Use to access record feature.

REV II FWD (Reverse/Still/Forward) — Rotate Shuttle Ring for variable-speed playback. Move Jog Wheel for frame-by-frame playback.

REW (Rewind) — Use to rewind tape.

SEARCH — Use to access recording start locations.

SELECT (Up/Down) — Use to choose on-screen menu options.

STOP — Use to cancel playback or record modes.

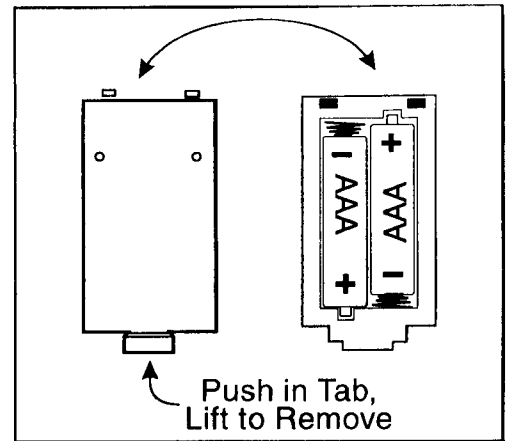
TV/VCR SOURCE — Use to switch source of TV picture between TV channel and VCR channel selection. VCR functions are available for use in VCR mode.

VCR/CBL/TV — Use to select operational mode of remote.

VCR PLUS — Use to access VCR Plus+® recording.

VOLUME — Use to change volume of TV.

Installing Batteries



Batteries are provided with this remote, but they must be installed. Match positive (+) and negative (-) battery ends with markings shown in battery compartment.

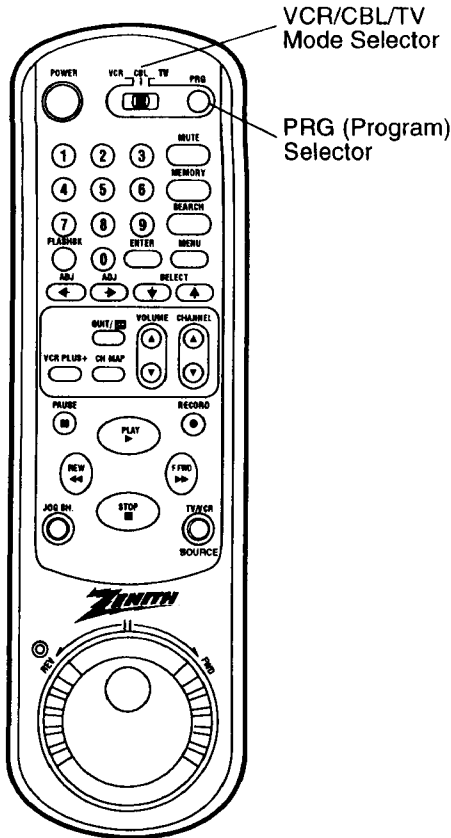
After installing batteries, the remote control resets to the following Zenith brand codes:

TV = 100, CABLE = 300

NOTE: All VCR operations and menu options can be accessed by using the remote control.

REMOTE CONTROL MBR4256

Programming Your Remote



This multi-brand remote control operates the common features of most, but not all, models and brands of IR (infrared) controlled TVs and cable converters. Some functions of your particular equipment may not be controlled by this remote. In such cases, use the original remote control for your equipment.

If you are using Zenith products, the remote is programmed for the most commonly used codes. For other brands — or if your remote fails to control your Zenith product — you will have to program the remote.

Follow these steps for each product:

1. Locate the three-digit code for your brand and type of equipment in the code tables provided.
2. Slide VCR/CBL/TV to select desired TV or cable box mode of operation.
3. Press and hold PRG while inputting the brand code for your equipment.
4. Key in the three-digit brand code and then release PRG. If your equipment does not work, repeat steps 3 and 4, or try a different brand code.
5. Write the code that operates your equipment below.

TV _____, CATV _____

TV Codes by Brand	
TV Brand Name	Codes
Admiral	151, 152, 110, 144
Citizen	156, 157, 158, 160, 161, 162
Curtis Mathes	115, 130, 113, 118, 144, 151
Daewoo	145, 146, 147, 148, 149, 150
Daytron	130, 115
Emerson	110, 111, 115, 131, 140, 143
Fisher	116, 125
Funai	153, 154
General Electric	102, 118, 127, 128, 144, 151
Goldstar	115, 122, 130, 131, 133, 146
Hitachi	119, 131, 132
JC Penney	102, 115, 124, 130, 133
JVC	109, 141
KTV	115, 130, 131, 138
LXI	104, 116, 123, 124, 125, 131
Magnavox	100, 101, 106, 107, 109, 115, 121, 122, 130, 131, 133
MGAMitsubishi	103, 115, 130
Montgomery Wards	115, 129, 131, 103, 113, 121
NEC	115, 130
Panasonic	104, 122, 127, 128, 133, 163
Philco	115, 121, 122, 131, 130, 150
Philips	121, 122
Pioneer	134
Proscan	118, 144, 151
Quasar	127, 128
Radio Shack	110, 111, 129
RCA	118, 144, 151
Realistic	110, 111, 129

TV Codes by Brand	
TV Brand Name	Codes
Samsung	104, 115, 130, 131
Sanyo	116, 125
Scott	115, 130
Sears	104, 116, 123, 124, 125, 131
Sharp	112, 129, 131, 139
Sony	105
Sylvania	106, 107, 115, 121, 122, 130, 133
Symphonic	153, 154
Toshiba	104, 123, 124
Wards	102, 113, 114, 115, 121, 130, 131
XR1000	155
Zenith	100, 101

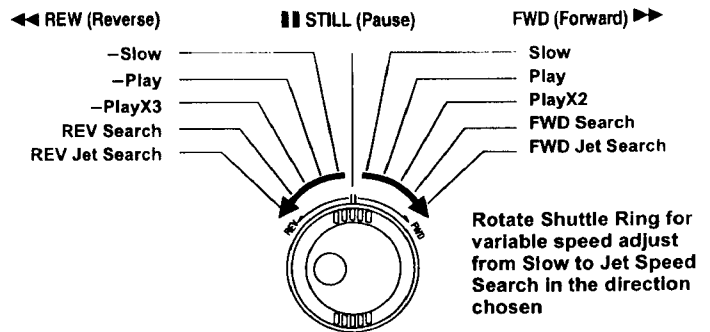
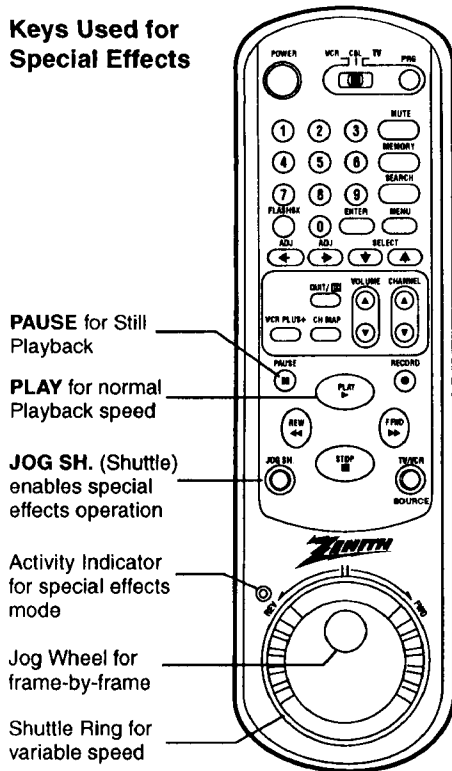
Cable Converter Codes by Brand	
Cable Decoder Brand Name	Codes
Archer	336
Cableview	336
Citizen	336
Curtis Mathes	317
Eagle	306, 307, 310
GE	353
Gemini	302, 328, 333
General Instrument	327, 328
Gobrand	336
Hamlin	314, 330, 331
Jerrold	323, 324, 325, 326, 329
Kate Vision	334

Cable Converter Codes by Brand	
Cable Decoder Brand Name	Codes
Macom	311, 312, 342
Magnavox	307, 310, 337, 338
NSC	332, 334
OAK	301, 321, 322
Panasonic	313, 320
Paragon	300
Philips	306, 307, 308, 309, 310
Pioneer	318, 319
Pluser	336
RCA	318
Regal	310
Regency	304
Samsung	334
Scientific Atlanta	317, 347, 335
Simarx	318, 327
Sprucer	318, 320, 327
Standard Components	334
Stargate	318, 327, 328
Television	336
Texscan	303
Tocom	315, 316
Uniden	348
Unika	336
Universal	351, 352
Vid Tech	339
Video Way	349
Viewstar	306, 307, 310
Zenith	300, 305, 311

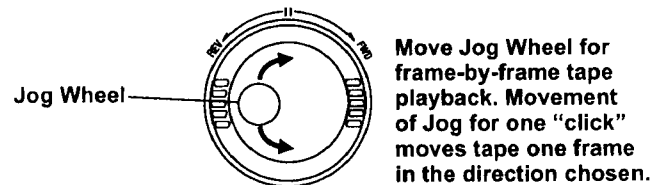
REMOTE CONTROL MBR4256

Playback Jog-Shuttle Operation (For Special Video Effects)

Keys Used for Special Effects



Operation of Shuttle Ring



Operation of Jog Wheel

Shuttle Ring Operation

1. Press PAUSE for playback STILL mode.
2. Press and hold JOG SH. for special video effects.
3. Rotate shuttle ring toward FWD to advance the tape, or toward REV to reverse the tape. How far you rotate and hold the shuttle ring determines the speed at which the tape moves.
4. Release the shuttle ring to return to STILL mode.
5. Release JOG SH. to exit special video effects.
6. Press PLAY to return to normal playback speed.

NOTES:

1. Shuttle ring may also be operated while in PLAY mode instead of in STILL mode. In that case, you will return to PLAY mode at normal playback speed when the Shuttle Ring is released.
2. Some of the speeds given in the pictorial above are not indicated in the VCR Status Display shown on the TV.
3. Some video "noise" may be present in REV (Reverse) mode.
4. Tapes recorded at SP (Standard Play) speed have better quality special effects than tapes recorded at EP (Extended Play) speed.
5. You can push the JOG SH. momentarily to get a few seconds of operation with special video effects, if continuous operation is not needed.

Jog Wheel Operation

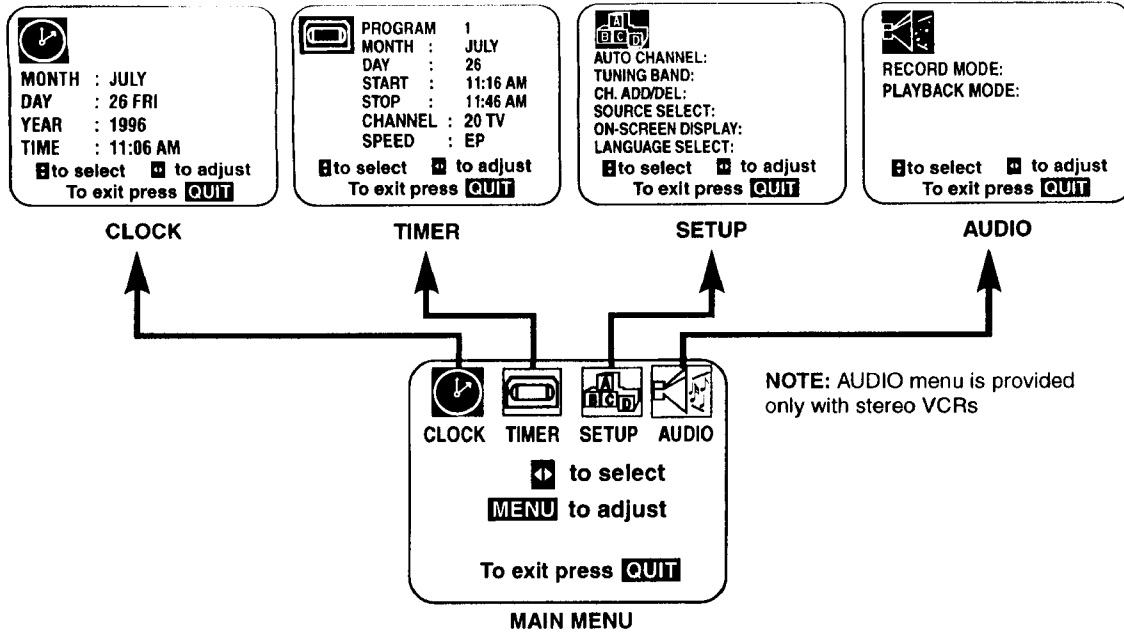
1. Press PAUSE for playback STILL mode.
2. Press and hold JOG SH. for special video effects.
3. Move jog wheel with finger toward FWD to advance tape frame-by-frame, or toward REV to reverse tape frame-by-frame. Movement of the jog wheel one "click" moves the tape by one frame. How "fast" you move the jog wheel determines how fast the frame-by-frame movement occurs.
4. Release JOG SH. to exit special video effects.
5. Press PLAY to return to normal playback speed.

NOTES:

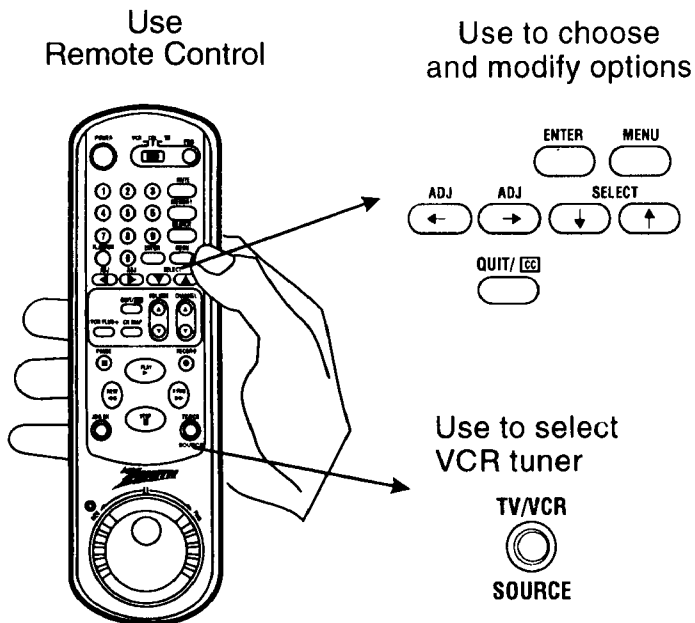
1. Jog wheel cannot be used for special video effects while the VCR is in play mode.
2. Tapes recorded at SP (Standard Play) speed have better quality special effects than tapes recorded at EP (Extended Play) speed.
3. You can push the JOG SH. momentarily to get a few seconds of operation with special video effects, if continuous operation is not needed.

VCR MENU OPERATIONS

Available Menus



Basic Menu Operation

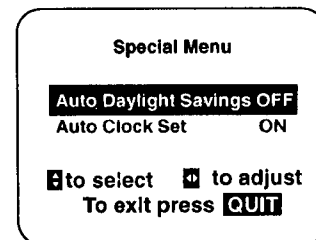


NOTE: Menu operations are done with the VCR and TV turned on, and the TV tuned to the VCR video output channel (3 or 4). Also, the VCR must be in the VCR tuner mode of operation. Press TV/VCR repeatedly until **VCR** symbol appears in the VCR front panel.

How to Access Menus

1. Press MENU to see main menu.
2. Press ADJ Left/Right repeatedly to select desired sub menu to be used.
3. Press MENU to see options on selected sub menu.
4. Press SELECT Up/Down to choose desired option to be changed.
5. Press ADJ Left/Right repeatedly to change status of option to desired value.
6. Press CC/QUIT to exit menu, or wait a few minutes and the VCR returns to normal operation.

Special Menu



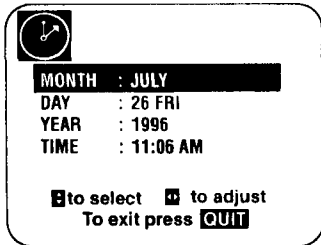
How to Access Special Menu

1. Press MENU to see main menu.
2. Press 4567 to Access Special Menu.
3. Press SELECT Up/Down to choose desired option. Only one of these two options can be set to ON status at the same time (mutually exclusive). Press ADJ Left/Right to choose ON/OFF.
4. Press CC/QUIT to exit menu system.

VCR MENU OPERATIONS

Clock Menu

The Clock Menu is used to set the clock in the VCR to the current date and time.



TYPICAL CLOCK MENU WITH DATE AND TIME SETTINGS



The clock must be set before you can record by using the TIMER menu.



You may have to reset the CLOCK if a power outage lasts for more than 15 minutes.

How to Set Clock

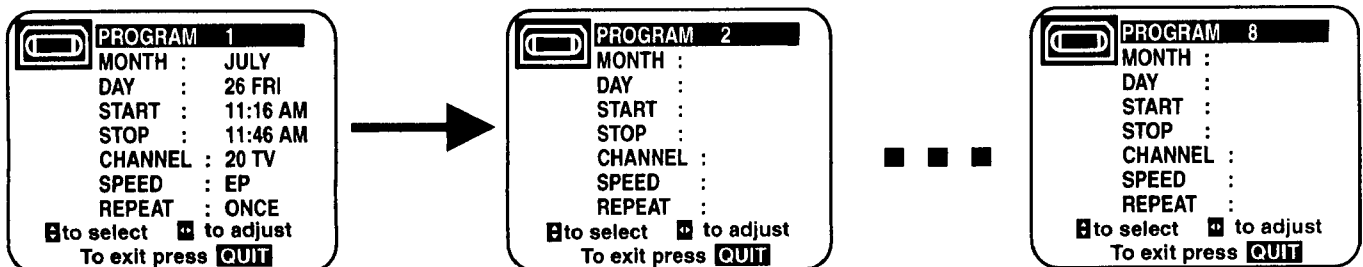
1. Choose the CLOCK menu as described in "How to Access Menus."
2. Press SELECT Up/Down arrows and ADJ Left/Right arrows to choose and specify current month, day, and year.
For example: use SELECT Up/Down arrows to choose MONTH position, and use ADJ Left/Right arrows to choose current month, (JANUARY, FEBRUARY, MARCH etc.)
3. Press SELECT Up/Down arrows to choose TIME position. Use numbered keys or press ADJ Left/Right to set current time and AM or PM as appropriate.
4. Press CC/QUIT to exit the menu system.

NOTE: This VCR can adjust the clock automatically for the current time, or for Daylight Savings Time. See "Special Menu" for details.

Timer Menu

The timer menu is used to tell the VCR when to record a program automatically on the day and at the time you specify.

You can specify eight different events to be recorded in a one-year period.



Selected Mode (Timer)

Month of Recording

Day of Recording

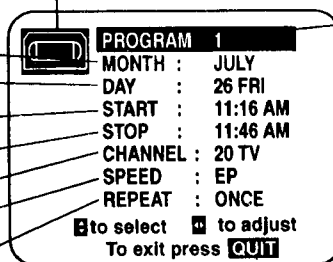
Start Time of Recording

Stop Time of Recording

Channel of Recording

Speed of Recording

Frequency of Recording



Recording Program Number

When highlighted, press ADJUST ◀▶ to choose next program (Program 2).

REPEAT OPTIONS

- ONCE — Records only one time
- WEEKLY — Records one time each week
- DAILY — Records on time each day, Monday thru Friday

How to Use Timer

1. Choose TIMER menu as described in "How to Access Menus."
2. Press SELECT Up/Down and ADJ Left/Right to program the timer.
3. Press CC/QUIT to exit menu system.

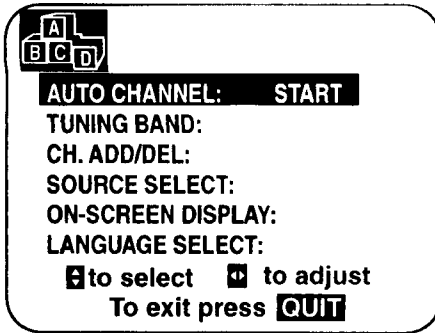
NOTE: [TMR] appears in front panel when the VCR is placed in the TIMER mode by pressing POWER to turn the VCR off.



While VCR is operating in TMR (timer) mode, it cannot be operated manually. If needed, press POWER to release VCR from Timer mode.

VCR MENU OPERATIONS

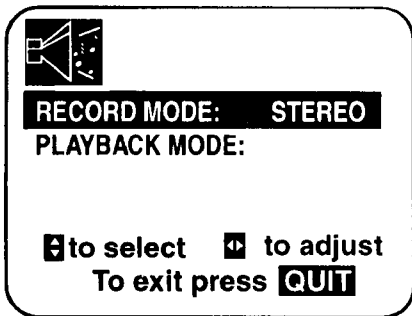
Setup Menu



The Setup Menu is used to customize the operation of the VCR for your particular system and needs. Choose **SETUP** Menu as described in "How to Access Menus."

AUTO CHANNEL	Finds all active channels and stores them in the memory of the VCR for access by Channel Up/Down. Press ADJ Left/Right to begin search.
TUNING BAND	Designates the type of equipment (TV or CATV) that is connected to the ANT IN jack on the VCR. Choose TV if you have an antenna connected to the VCR. Choose CATV if you have a cable system (with or without a cable box) connected directly to the VCR.
CH. ADD/DEL	Edits the channels found previously when using AUTO CHANNEL . Use numbered buttons followed by the ENTER key to select the channel to be edited (e.g., to ADD channel 3, press 3 then the ENTER key). Press ADJ Left/Right to ADD or DEL (Delete) channels to create your own list of favorite channels.
SOURCE SELECT	Selects the equipment (TUNER or AUX) that is to be used as the source of the program to be watched or recorded. Choose TUNER if you want to use the channel TUNER in the VCR to select the desired program. Choose AUX if you want to see the program from accessory equipment, such as a camcorder, connected to the Audio/Video (A/V) IN jacks on the VCR.
ON-SCREEN DISPLAY	Selects whether or not you see VCR menus and Status Displays on the TV.
LANGUAGE SELECT	Selects the language (English, Español or Français) used to show VCR menus and Status Displays on the TV.

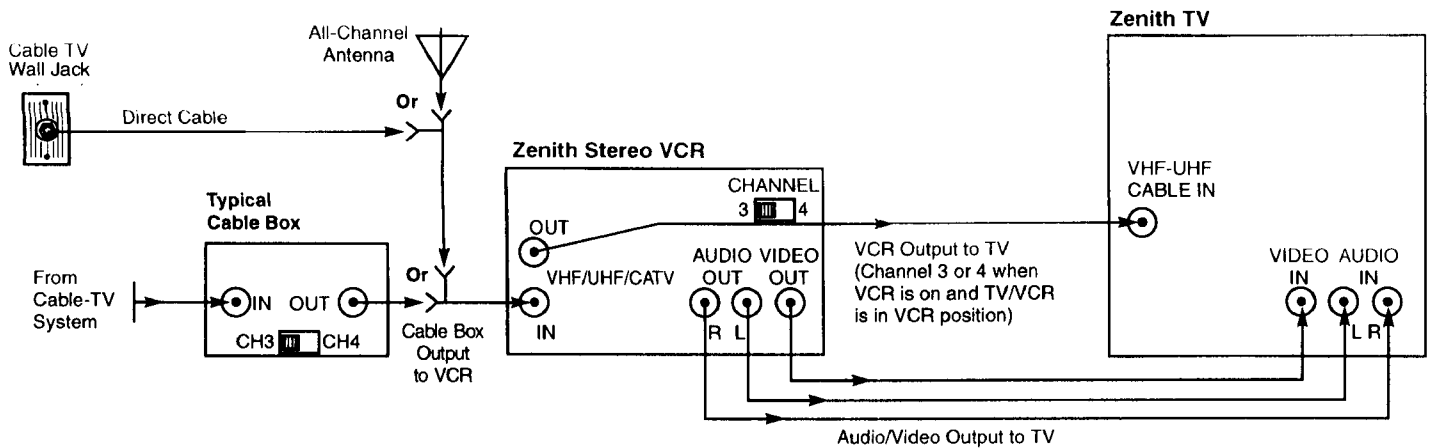
Audio Menu



The Audio Menu is provided only with stereo VCRs. It is used to specify the type of sound format to be used when recording or playing a tape. Choose **AUDIO** Menu as described in "How to Access Menus."

RECORD MODE	Selects the audio format (STEREO , MONO or 2ND AUDIO) to be used when recording a program. STEREO records sound from the left and right audio channels/tracks in stereophonic format. MONO (Monaural) records sound in monaural format even if the program is in stereo. 2ND AUDIO records the Second Audio Program (SAP) channel/track, if present, in addition to the stereo audio channels/tracks. SAP usually contains audio in another language.
PLAYBACK MODE	Selects the audio format (HI-FI or NORMAL) to be used during tape playback. HI-FI (High Fidelity) provides stereo sound, if present on the tape, to the Left and Right AUDIO output jacks on the back of the VCR. NORMAL provides monaural sound regardless of the audio format present on the tape.

WATCHING TV THROUGH VCR



Block Diagram of Typical Video System

VCR is Turned Off

1. Turn TV on.
2. Select channel to be watched at TV. If you have a cable box, select the cable box output channel (usually 3 or 4) at the TV. Cable box channels are selected at the cable box.

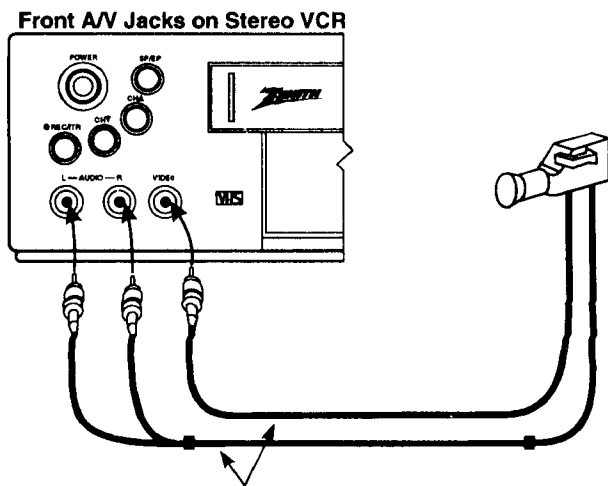
VCR Is Turned On and You Want to Select Channels at TV

1. Turn TV and VCR on.
2. Place VCR in TV mode by pressing TV/VCR switch on remote control repeatedly until the **VCR** symbol disappears from the VCR front panel.
3. Select channel to be watched at TV. If you have a cable box, select the cable output channel (usually 3 or 4) at the TV. Cable box channels are selected at the cable box.

VCR Is Turned On and You Want to Select Channels at VCR

1. Turn TV and VCR on.
2. Place VCR in VCR mode by pressing TV/VCR switch on remote control repeatedly until the **VCR** symbol appears in the VCR front panel.
3. Select the VCR output channel (3 or 4) at the TV. If you have connected your VCR to the A/V input jacks on the TV, you should select the A/V source at the TV for improved picture performance.
4. Select channel to be watched at VCR. If you have a cable box, select the cable box output channel (usually 3 or 4) at the VCR. Cable box channels are selected at the cable box.

Camcorder Is Connected to VCR



A/V cable is not provided with VCR.



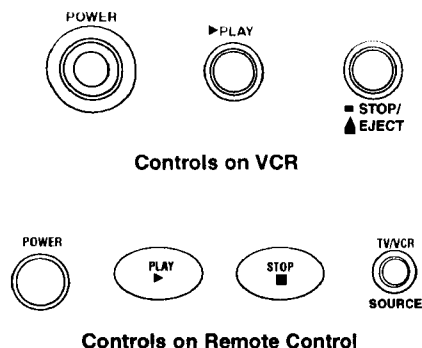
TURN OFF POWER OR UNPLUG VCR BEFORE MAKING ANY CONNECTIONS

Select AUX Channel on VCR for Viewing

1. Turn TV and VCR on.
2. Place VCR in VCR mode by pressing TV/VCR switch on remote control repeatedly until the **VCR** symbol appears in the VCR front panel.
3. Select the VCR output channel (3 or 4) at the TV. If you have connected your VCR to the A/V input jacks on the TV, you should select the A/V source at the TV for improved picture performance.
4. Select AUX channel at VCR by using Channel Up/Down to select the next channel after the highest or lowest channel programmed in the VCR.

NOTE: Equipment connected to the front Audio/Video (A/V) jacks on the VCR has operational priority over equipment connected to the rear A/V jacks.

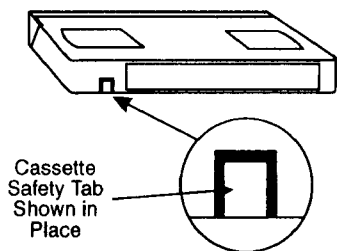
PLAYING TAPES



VHS Cassette Playback/Record Times			
Cassette Length	SP (Standard Play)	LP (Long Play)	EP (Extended Play)
T-30	30 Minutes	1 Hour	1 Hour, 30 Minutes
T-60	1 Hour	2 Hours	3 Hours
T-120	2 Hours	4 Hours	6 Hours
T-160	2 Hours, 40 Minutes	5 Hours, 20 Minutes	8 Hours

Automatic Playback (No Safety Tab)

1. Tape playback begins automatically, if the safety tab is removed from the cassette case. Simply insert the prerecorded VHS cassette into the VCR. Power turns on and playback begins automatically.
2. Select the VCR output channel (CH3/CH4) at the TV. Or, select the AUX (Auxiliary) source at TV to see picture if you are using the A/V jacks.



NOTE: Your VCR sets the playback speed automatically to the speed used to record the tape. This VCR records only in SP and EP speeds.

Manual Playback (Has Safety Tab)

1. Press POWER to turn VCR on.
2. Insert a prerecorded VHS cassette into the VCR.
3. Press PLAY to begin playback.
4. Select the VCR output channel (CH3/CH4) at the TV. Or select AUX (auxiliary) source at TV to see picture if you are using the A/V jacks.

Unloading the Cassette from the VCR

1. Press STOP if the tape is playing.
2. Press and hold STOP/EJECT at the VCR until the cassette is ejected from the VCR.

Auto/Manual Tracking Adjustment

Your VCR adjusts tracking automatically when you play a tape. If the tape was recorded on a different VCR, streaks (video noise) may appear. While the tape is playing, press ADJ (Left/Right) to adjust the tracking manually.

Real-Time Tape Counter

Press ENTER two times to keep the real-time tape counter display on the TV screen. Press ENTER repeatedly to remove all displays. The counter resets to 0:00:00 when you insert a cassette or when a tape is rewound to its beginning.

Pause/Forward/Reverse Slow-Motion Video

(While in Play mode) Press PAUSE, for still video. Press PAUSE again, and follow on-screen instructions for Forward or Reverse slow motion. Selected direction is used until you press PLAY to resume normal tape playing.

Tape Rewind and Fast Forward

(While in Stop mode) Press and release REWIND or F FWD, as desired. Press STOP when tape reaches desired location.

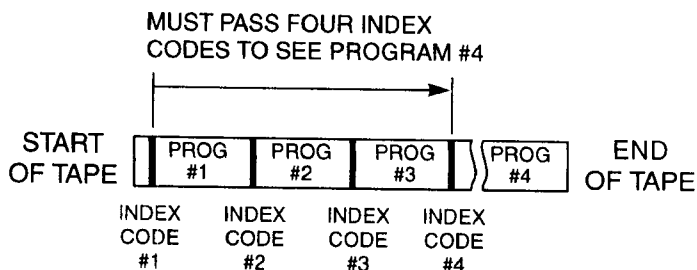
Reverse/Forward Search and Jet Search

(While in Play mode) Press and release REWIND or F FWD, as desired. Press and hold REWIND or F FWD for Jet Search. Press PLAY to resume normal tape playing.

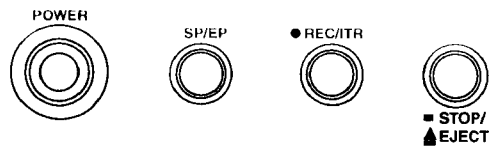
Index Search

An index code is inserted on the tape at the start of each recording. You can use the index codes to search and rapidly locate the segment of the tape you want to see. Index search can only be used on tapes recorded on this VCR.

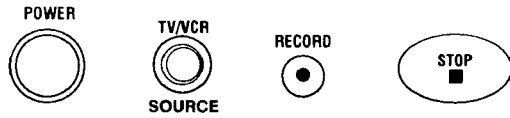
Rewind the tape to the beginning and press SEARCH. Input the number of index codes from the beginning of the tape that will get you to your playback start location, and then press F FWD. The VCR advances the tape to that location and begins playback. Or, during playback, press STOP and then press SEARCH. Input the number of index codes that need to be passed to reach your desired playback start location, and press F FWD or REWIND, as appropriate.



INSTANT RECORDING



Controls on VCR



Controls on Remote Control

Recording What You Are Watching On TV

Instant Recording is a method of attended recording where you record until the end-of-tape is reached or you press STOP to stop recording.

1. Turn TV and VCR on.
2. Place VCR in VCR mode by pressing TV/VCR on remote control repeatedly until the **VCR** symbol appears in the VCR front panel.
3. Select the VCR output channel (3 or 4) at the TV. If you have connected your VCR to the A/V input jacks on the TV, you should select the A/V source at the TV for improved picture performance.
4. Select the channel to be watched and recorded at the VCR. If you have a cable box, select the cable box output channel (usually 3 or 4) at the VCR. Cable box channels are selected at the cable box.
5. Insert a VHS cassette tape into the VCR.
6. Press SP/EP to select recording speed, if desired. Recording speed is always SP, unless EP is selected.
7. Press and hold RECORD or REC/ITR until recording begins. **REC** appears in the VCR front panel. Recording continues until the end-of-tape is reached, or until you press STOP to stop recording.

Recording By Using Preset Time Periods

Instant Timer Recording (ITR) is a method of attended recording where you record for a specific preset time period, instead of recording until the end-of-tape is reached. For example, you may want to record a program for only 30 minutes because that is when the program ends.

1. Perform steps 1 through 7 above for Instant Recording.
2. Press RECORD or REC/ITR repeatedly to select a preset recording time period. Each subsequent press of RECORD or REC/ITR increases the recording time by 30 minutes until a maximum of 4 hours is reached.

Preset Time Periods For ITR Recording

Presses of RECORD or REC/ITR	Display Provided	Preset Time For Recording
1 (Press/Hold)	Current Time	Until end-of-tape
2	0:30	30 minutes
3	1:00	1 hour
4	1:30	1 hour and 30 minutes
5	2:00	2 hours
⋮	⋮	⋮
9	4:00	4 hours
10	0:00	VCR turns off

NOTE: Preset recording time counts down until the recording time is over.

Options Which Can Be Used While Recording

Instant Recording (until end-of-tape)	Instant Timer Recording (Preset Recording Times)
PAUSE — Momentarily pauses recording. Press PAUSE again to resume recording.	STOP or STOP/EJECT — Stops and exits recording mode.
REWIND or REW — Rewinds tape until STOP or STOP/EJECT is pressed or tape is rewound fully.	REWIND or REW — Rewinds tape until STOP or STOP/EJECT is pressed or tape is rewound fully.
STOP or STOP/EJECT — Stops and exits recording mode.	

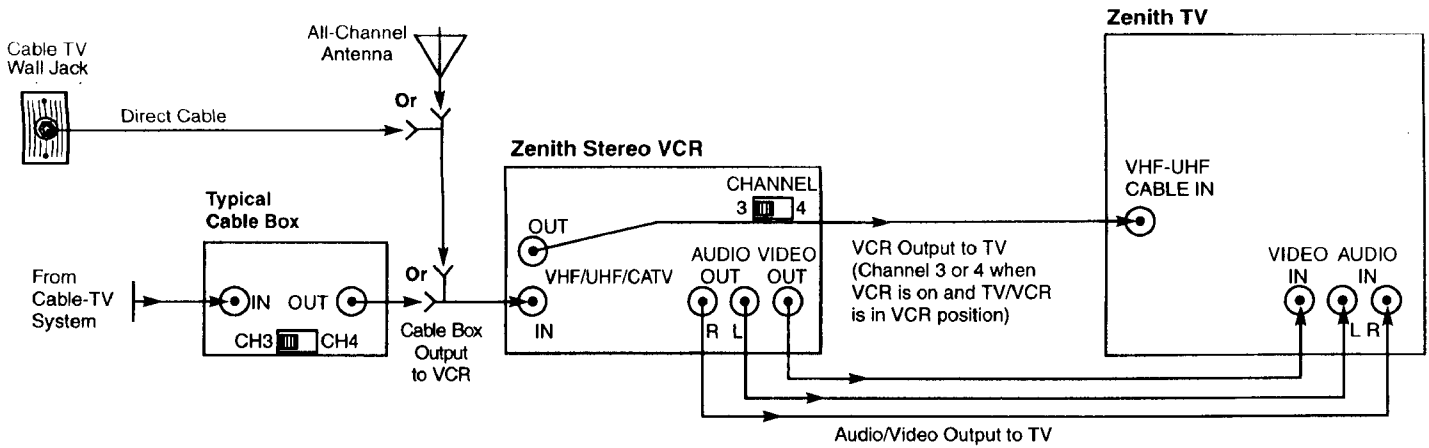
Recording One Program While Watching Another Program

The program you record is selected using the channel selector in the VCR and the program you watch is selected using the channel selector in the TV. If you have a cable box connected to your VCR, you cannot record one program and watch another program.

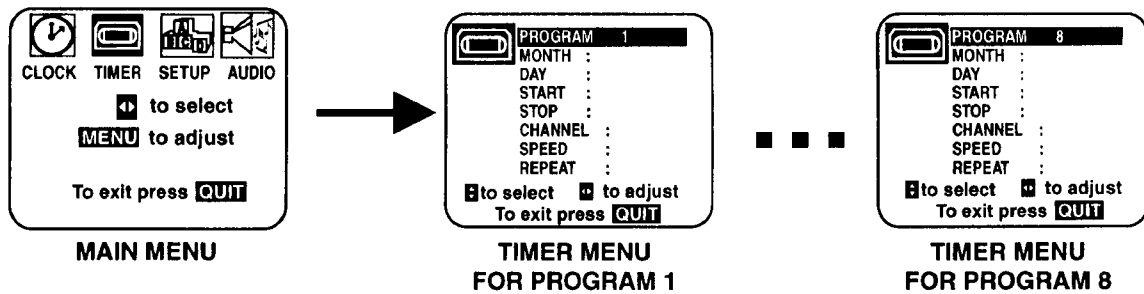
1. Perform steps 1 through 7 above for Instant Recording.
2. Place VCR in TV mode by pressing TV/VCR on remote to turn off **VCR** symbol in the VCR front panel.
3. Select program to be watched using the channel selector in the TV.

NOTE: To return to the program you are recording, select the VCR video channel (3 or 4) at the TV and place the VCR in the VCR mode by pressing TV/VCR on remote to show **VCR** symbol in VCR front panel.

TIMER-CONTROLLED RECORDING



Block Diagram of Typical Video System



Recording While You Are Away

Timer-controlled recording is a method of unattended recording available for you to use. It allows you to record a program on the day and at the time you specify. The program may be recorded only once, or it can be recorded on a daily or weekly basis. Eight different events can be programmed into the TIMER for recording, as long as no event overlaps other events in the same time period.

1. Turn TV and VCR on.
2. Place VCR in VCR mode by pressing TV/VCR switch on remote control repeatedly until the **VCR** symbol appears in the VCR front panel.
3. Select the VCR output channel (3 or 4) at the TV.
4. Insert a VHS cassette tape into the VCR.
5. Program events to be recorded in the TIMER by following the procedure given in the TIMER MENU section of this operating guide. If you have a cable box, select the cable box output channel (usually 3 or 4) as the channel to be recorded. Keep your cable box turned on when using the TIMER to record programs.

6. Enable the TIMER by pressing the POWER switch to turn off the VCR. **TMR** appears in the VCR front panel to indicate the VCR is in the TIMER mode of recording.

VCR Operation with Timer Turned Off or On

VCR POWER	TIMER STATUS	VCR OPERATION
On	Off	Disables timer-controlled recording if an event is programmed in the TIMER. All other VCR operations can be used as desired.
Off	On	Enables timer-controlled recording if an event is programmed in the TIMER. VCR cannot be operated manually while the TIMER is enabled. The assumption here is that you want to record at a later time if you have programmed the TIMER.

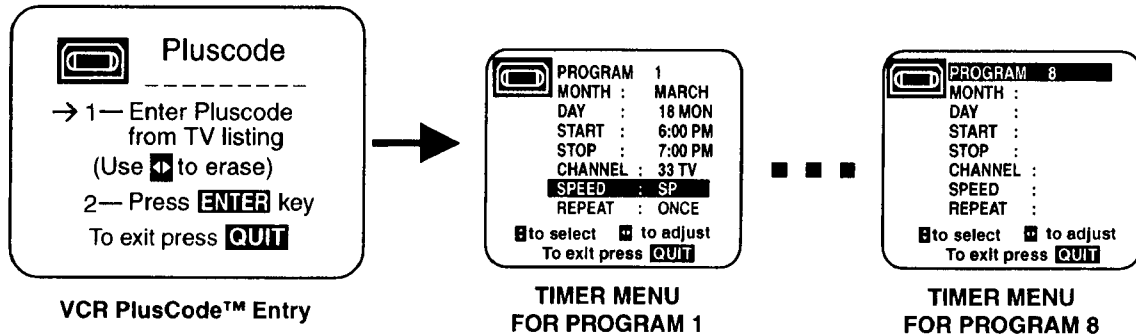
VCR PLUS+[®] RECORDING

MIDNIGHT

12:00 **9** In the Heat of the Night
Lana's inherited home plays an important part in a mob-related real estate scam (Part 2 of 2) (CC) (60 mins.) 52228
11 Tonight (R) 23624
26 Lauren Hutton and ... Gabrielle Reece. (30 mins.) 989402
32 I Love Lucy "Drafted" Lucy and Ethel think their husbands have been drafted. (30 mins.) 529044

	12:00	12:30	1:00	1:30
9	In the Heat of the Night Lake Winahatchie (Part 2 of 2) 52228	Paid Pro-gramming 44808	Paid Pro-gramming 51686	
11	Tonight 73624	Charlie Rose 16112		Fat Man In France 79082
26	L. Hutton 989402	Paid Prog 273353	Paid Prog 147599	Paid Prog 886976
32	Love Lucy 529044	Love Lucy 813995	Paid Prog 770841	Paid Prog 426518

Example TV Schedule Showing VCR Plus+[®] PlusCode[™] Program Numbers



Recording With PlusCode[™] Program Numbers

VCR Plus+[®] is a method of recording that does the taping for you automatically. Simply enter the PlusCode[™] program number for your favorite program from the TV listing, and your VCR does the rest. It turns on automatically at the proper time, selects the channel to be recorded, and starts recording. You can have the program recorded only once, or it can be recorded on a daily or weekly basis. Eight different programs can be entered in the VCR Plus+[®] recording system, as long as no program overlaps other programs in the same time period.

1. Turn TV and VCR on.
2. Place VCR in VCR mode by pressing TV/VCR switch on remote control repeatedly until the **VCR** symbol appears in the VCR front panel.
3. Select the VCR output channel (3 or 4) at the TV.
4. Insert a VHS cassette tape into the VCR.
5. Program events to be recorded in the VCR PLUS+[®] system by following the procedure shown when you press VCR PLUS on the remote control. If you have a cable box, select the cable box output channel (usually 3 or 4) as the channel to be recorded. Keep your cable box turned on when using the VCR Plus+[®] system to record programs.

6. Enable the VCR Plus+[®] timer by pressing the POWER switch to turn off the VCR. **TMR** appears in the VCR front panel to indicate the VCR is in the VCR Plus+[®] timer mode of recording.

VCR Operation with Timer Turned Off or On

VCR POWER	TIMER STATUS	VCR OPERATION
On	Off	Disables timer-controlled recording if an event is programmed in the TIMER. All other VCR operations can be used as desired.
Off	On	Enables timer-controlled recording if an event is programmed in the TIMER. VCR cannot be operated manually while the TIMER is enabled. The assumption here is that you want to record at a later time if you have programmed the TIMER.

SERVICE INFORMATION

Before Calling for Service

Please refer to the following Problem/Resolution Chart before calling for service. As a prelude to solving any VCR problem, turn on TV and VCR. Select appropriate input for the TV to receive the video signal from the VCR. Most likely you will use the Antenna In connection to the TV, and select channel 3 or 4 at the TV. Place the VCR in the VCR mode by pressing TV/VCR on the remote repeatedly until [VCR] symbol appears in the VCR front panel. If you have a cable box, turn on the cable box and select the cable box output channel (usually 3 or 4) at the VCR.

Operating Problems		
Observed Condition	Possible Cause	Probable Solution
No power to the VCR.	Power cord is not connected.	Connect power cord.
Remote control does not function.	Batteries are weak.	Replace with new batteries.
	You are too far away from the VCR.	Move closer to the VCR.
No picture appears on TV screen from any VCR function.	Source for TV is not selected properly.	Set INPUT source on TV to Audio/Video In, or tune TV to Channel 3 or 4, as appropriate.
	TV/VCR mode for VCR is set to TV.	Press TV/VCR on remote repeatedly to choose VCR mode. [VCR] symbol appears in VCR front panel.
VCR features do not function. VCR does not respond to remote control functions or buttons on VCR.	VCR is locked up.	Disconnect VCR power cord for five (5) minutes. Reset clock and other features as necessary.
Auto Clock does not work with cable box.	Cable box is not tuned to local Public Broadcast System (PBS).	Keep cable box ON and tuned to local PBS station when VCR is OFF.

Channel Tuning Problems		
Some channels are skipped over when using Channel Up/Down.	Those channels were deleted with the CH. ADD/DEL option.	Use CH. ADD/DEL to restore channels. See SETUP menu for details.
Picture and sound are weak or missing.	Antenna or cables are loose.	Tighten connections or replace cable.
	Wrong TUNING BAND option is being used.	Try all TUNING BAND options. See SETUP menu for details.

Playing Tapes (Playback) Problems		
Tape will not rewind or fast forward.	Tape is fully rewound or is at its end.	No action available.
Mechanical sound is audible during playback.	Note: This is normal operating sound from internal mechanisms.	No action available.
Tape playback does not appear on TV screen.	Source for TV is not selected properly.	Set Input source on TV to Audio/Video In, or tune TV to Channel 3 or 4, as appropriate.
	TV/VCR mode for VCR set to TV.	Press TV/VCR repeatedly to choose VCR mode. [VCR] symbol appears in VCR front panel.
Video "Noise" (horizontal streaks) appear during normal tape playing.	Tape is a rental or was recorded on another VCR.	Use ADJ (Left or Right) for manual tracking adjustment while tape is playing.
	Tape heads are dirty.	Clean Video heads.
VCR Status Display "flickers" when using STILL video during tape playback.	Tape tracking needs to be adjusted while in slow-motion playback.	From STILL video mode, enable slow-motion playback. Use ADJUST (Left or Right) to adjust tracking for best picture. Return to PLAY mode, then press PAUSE or P/STILL for STILL video.

SERVICE INFORMATION

Recording Problems		
Camcorder image is not shown.	Camcorder is off.	Turn camcorder on and operate properly.
Camcorder image via A/V input to VCR is not shown on TV screen.	VCR SOURCE SELECT is set to TUNER.	Use Channel Up/Down to select AUX A/V input channel.
Timer recording is not possible.	Clock in VCR is not set to correct time.	Set clock to correct time. See CLOCK menu.
	VCR is on which disables timer.	Turn VCR off to enable timer. TMR appears in the VCR front panel.
	Timer has been programmed incorrectly.	Reprogram Timer. See TIMER menu.
	TMR indicator does not appear after programming timer.	Reprogram Timer and turn VCR off to enable timer.
TMR indicator appears after VCR is turned off.	VCR is in Timer Recording mode.	This is normal indication that the VCR is in TIMER mode. If needed, disable TIMER by turning VCR on.

VCR Plus+ [®] Recording Problems		
VCR records program on different channel than channel specified.	Channel Mapping is wrong or was not done.	Channel Map the VCR for your area. See "Setup for VCR Plus+ [®] Recording" section.
Recorded wrong channel or no channel with cable box.	Cable box is not tuned to channel you wanted to record.	Tune cable box to channel you want to record. Keep cable box turned on.
	Cable box is not turned on.	Turn on cable box and keep it on.
	VCR is not tuned to cable box output channel (usually 3 or 4).	Tune VCR to cable box output channel. Call cable company for channel number if necessary.

Stereo Audio Record and/or Playback Problems		
Stereo is not present from VCR output.	TV is not Stereo compatible.	No action is possible.
	Program is not in stereo format.	No action is possible.
	VCR A/V Out jacks are not connected to TV A/V In jacks.	Make A/V connections. Stereo is available only via A/V output from VCR.
	VCR Audio/Video Out is not selected for viewing at the TV.	Select AUX or A/V source as TV input.
	VCR AUDIO RECORD mode is set to 2nd AUDIO or MONAURAL.	Set VCR AUDIO RECORD mode to Stereo. See AUDIO menu.

Automatic Video Head Cleaning

The VCR automatically cleans the heads as it is used. However, after long periods of use, the video heads may become clogged with accumulated dirt, causing distortion. When this occurs, use a do-it-yourself **wet-head** cleaning cassette available from your Zenith dealer.

Caution: Do not use a dry-head cleaning system. It may seriously damage the VCR and cassettes used in the VCR. Visual signs such as snow, streaking in picture, and horizontal pulling of picture indicate the need for professional video head cleaning. See your Zenith approved service center for cleaning.

Cabinet Cleaning

The outside surfaces of the VCR may be cleaned with a soft lint-free cloth as required. Use care not to scratch the VCR during cleaning.

Recommended Accessories For Your VCR

Great Replacement Remote



Broken or Lost Remote Control?

For an **exact replacement remote control** for your new Zenith VCR, see your local Zenith dealer or order direct by calling **1-800-255-6790**. To assure the correct remote for your new Zenith, please have your VCR's model number ready when you call!

Only \$39.95

Videotape Rewinder



Eliminate wear and tear on your equipment

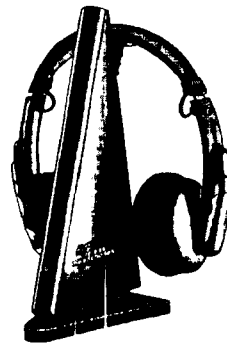
Prolong the life of your expensive VCR or camcorder with this one way videotape rewinder:

- Load up a second video while the first rewinds.
- Helps eliminate costly repair work.
- Works with full size camcorders too!
- Easy to use.

ALG1140
One Way Video Rewinder

Only \$12.95

Wireless Headphones



Complete Cordless Stereo Headphones

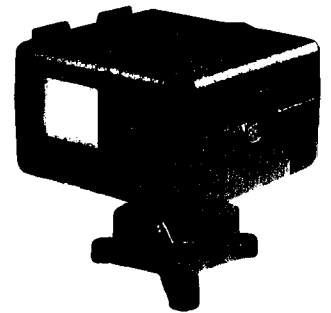
Relax and enjoy your favorite music or TV programs without disturbing others:

- Operates with any TV, VCR or Stereo System.
- Works up to 50 feet.
- Separate left and right volume controls.
- Great for the hard of hearing.

ALG2032
Wireless Headphone System

Only \$69.95

Video Transfer System



Don't let your memories fade away!

Preserve the joy of weddings, graduations and birthdays for years to come:

- Copies photos, slides and home movies onto any videotape easily.
- Works with all film projectors and camcorders.
- Built-in lens prefocuses for sharper results.

ALG1344
Video Transfer System

Only \$49.95

Photocopy Page and Detach Here

To order these fine accessories, please complete this order form and return a photocopy with your payment to:

Accessory Offers
Zenith Video Tech Corporation
1000 Milwaukee Avenue
Glenview, Illinois 60025-2493

Or Call 1-800-255-6790

Check or Money Order
(Made Payable to Zenith Video Tech Corp.)



Account # _____

Expiration Date _____ Signature _____

IMPORTANT: PLEASE BE SURE TO COMPLETE THE INFORMATION BELOW

TV Model Number (from Sticker on back of unit) TV Serial Number (from Sticker on back of unit) Month / Day / Year (Approx. date of purchase)

PLEASE ALLOW 2-3 WEEKS FOR DELIVERY

Item Number	Description	Quantity	Price per Item	Total Price
Sales Tax: Please add your state sales tax if you live in one of the following states.			Sub Total	
CA 7.75%, GA 6%, IL 8.75%, KS 4.9%, KY 6%, ME 6%, NJ 6%, PA 6%, RI 7%, TX 7.75%, VA 4.5%, WA 8.2%			State Sales Tax	
			Shipping and Handling	\$4.50
			Total Amount of Order	

(Note: Orders can only be sent to customers within the United States.)

Ship To: _____

Name _____

Address _____

Apt# _____ City _____

State _____ Zip/Postal Code _____

Telephone (_____) _____

REPLACEMENT PRODUCT REGISTRATION CARD

You could win a full refund on your new Zenith product.

Look for the Product Registration Card on your new video product.

Each month a drawing is held by Zenith from the completed Product Registration Cards received during the preceding month. Zenith will reimburse the winner for the full purchase price of the product purchased.

In order to participate, simply complete and return the Product Registration Card at once, even if you choose not to complete the information and interests portion of the questionnaire.

Product Card lost or misplaced?

The Product Registration Card furnished with your video product is pre-printed with its Model and Serial numbers. Please fill out the card and mail it at your earliest convenience. It is imperative that Zenith know how to reach you promptly if we discover a safety problem that would affect you. If the original card has been lost or misplaced, you may use the replacement card provided below. Either card will qualify you for the free drawing, but you are limited to only one entry in the drawing. Complete the card, place it in an envelope and mail it to:

Zenith Electronics Corporation
P. O. Box 173262
Denver, CO 80217-3262

Use the replacement Product Registration Card only if the original card has been misplaced or lost.

The odds of winning the free drawing described above, depend on the number of participants. Free drawing offer is void in Canada and other places where restricted or prohibited by law. Offer is void for Hotel/Motel and Institutional models. Rental models are not eligible.

PHOTOCOPY AND CUT ALONG DASHED LINE

Zenith Product Registration Card										H5Y01-01					
① Please Print Clearly or Type						② Area Code Telephone									
1. <input type="checkbox"/> Mr.		2. <input type="checkbox"/> Mrs.		3. <input type="checkbox"/> Ms.		4. <input type="checkbox"/> Miss						-			
First Name						Initial		Last Name							
Street										Apt. No.					
City															
State		Zip Code				③ Date of Purchase									
						-				Mo.		Day		Yr.	
MODEL NUMBER															
Copy Numbers Here From Label on Set															
SERIAL NUMBER															

← Please record the model number and serial number from the sticker on the back of your set.

AVISO PARA NUESTROS CLIENTES DE HABLA HISPANA

Zenith publica muchos de sus manuales de instrucciones en idioma español. Si le interesa pedir la versión en español de este manual, llene el formulario provisto a continuación, fotocópielo y envíelo a la dirección indicada.

No todos los manuales de instrucciones están disponibles en español. Sin embargo, podemos proporcionarle el manual que corresponde a un modelo similar a este, en el cual se describen casi todas las características del producto que usted utiliza.

El manual en español es gratis.

Instrucciones:

1. Llene el formulario proporcionado a continuación con la información solicitada.
2. Haga una fotocopia del formulario de pedido y envíela a:

**Service Literature Department
Zenith Video Tech Corporation
1000 Milwaukee Avenue
Glenview, IL 60025-2493**

Fotocopie la página y corte la línea punteado

Formulario de pedido de su manual de instrucciones

(Este formulario de pedido es solo válido para el producto descrito en este manual)

**206-3123
Y, K-TOOL**

Número de modelo _____ (lo encontrará en la parte posterior del aparato)

Nombre _____

Dirección _____ Apartamento _____

Ciudad _____ Estado _____ Código postal _____

País (si afuera de E.E.U.U.) _____

YOUR ZENITH VCR WARRANTY

VIDEO CASSETTE RECORDER OR PLAYER

Welcome into the Zenith family! We believe that you will be pleased with your new Zenith video product. Please read this Warranty carefully. It is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state within the U.S.A.

Zenith's Responsibility

Service Labor — During a period of 90 days from effective warranty date, Zenith will pay for service labor by a U.S. or Canadian Zenith authorized service center when needed as a result of manufacturing defects.

Parts — New or remanufactured replacements for factory-defective parts will be supplied by a U.S. or Canadian Zenith authorized service center for one year from effective warranty date. Such replacement parts are warranted for the remaining portion of the original warranty period.

Not Covered — This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls in the home, installation or repair of home antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of Zenith. Any alteration of the product after manufacture voids this warranty in its entirety.

NOTE: Before you ask for Warranty service, check the Operating Guide section entitled, "SERVICE INFORMATION." It may be possible to avoid a service call.

Owner's Responsibility

Effective Warranty Date — Warranty begins on the date of original consumer installation. For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide — Read your operating guide carefully so that you will understand the operation of your video product and how to adjust the customer controls.

Carry-In Service — The video product must be taken to a U.S. or Canadian Zenith authorized service center for warranty service and must be picked up by the owner.

TV Set Performance — It is the owner's responsibility to maintain the TV receiver with which the video product is used, and the associated antenna system, in proper operating condition.

Important: Product Registration — Please fill out and mail your Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service — For warranty service information, contact your Zenith dealer preferably, or any U.S. or Canadian Zenith authorized service center. Parts and service labor that are Zenith's responsibility (see above) will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, write:

Zenith Electronics Corporation
Customer Service Department
1000 Milwaukee Avenue
Glenview, Illinois 60025-2493
Telephone: (847) 391-8752
Mon-Fri, 8:00 a.m. - 4:30 p.m. Central Time

ADDITIONAL ZENITH PROTECTION PLAN AVAILABLE

Zenith offers you the opportunity to obtain additional long-term protection against failure of your new VCR. Our VCR Protection Plan enables you to avoid any unexpected repair expenses and keep your VCR in top condition. It guarantees you genuine Zenith replacement parts and service from a Zenith authorized service center.

Be sure to send in the **Product Registration Card**. We will send you an application for the Protection Plan near the expiration of the manufacturer's warranty. For additional information, call (847) 391-8757.