



**REMOTE CONTROL
VHS HQ VIDEO
CASSETTE RECORDER
WITH CENTER LOAD
MECHANISM AND
ON SCREEN
PROGRAMMING**

As an **ENERGYSTAR**® Partner, EMERSON has determined that this product meets the **ENERGYSTAR**® guidelines for energy efficiency.

IMPORTANT

Call toll free 1-800-210-2281 for exciting information and special discounts on Extended Service Plans.

OWNER'S MANUAL

EV477

Please visit our web site at www.emersonradio.com

IMPORTANT SAFEGUARDS



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.

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

1. READ INSTRUCTIONS

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

2. RETAIN INSTRUCTIONS

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

3. HEED WARNINGS

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

4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

5. CLEANING

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

6. ATTACHMENTS

Do not use attachments not recommended by the unit's manufacturer as they may cause hazards.

7. WATER AND MOISTURE

Do not use this unit near water—for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

8. ACCESSORIES

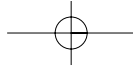
Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury and serious damage to the unit. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer.

PORTABLE CART WARNING
(symbol provided by RETAC)



8A.

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



IMPORTANT SAFEGUARDS (CONTINUED)

9. VENTILATION

Slots and openings in the cabinet and in the back or bottom are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug, or other similar surface. This unit should never be placed near or over a radiator or heat source. This unit 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.

10. POWER SOURCES

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

11. GROUNDING OR POLARIZATION

This unit 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. If your unit is equipped with a 3-wire grounding-type plug, having a third (grounding) pin, this plug will only fit into a grounding-type power outlet. This too is a safety feature. Do not defeat the safety purpose of the grounding-type plug.

12. 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 appliance.

13. LIGHTNING

To protect your unit from 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 unit due to lightning and power-line surges.

14. 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.

15. OVERLOADING

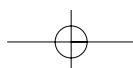
Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

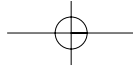
16. OBJECT AND LIQUID ENTRY

Do not push objects through any openings in this unit as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

17. OUTDOOR ANTENNA GROUNDING

If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electric Code, ANSI/NEPA 70, provides information with respect 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 grounding electrode.





IMPORTANT SAFEGUARDS (CONTINUED)

18. SERVICING

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

19. DAMAGE REQUIRING SERVICE

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

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

20. REPLACEMENT PARTS

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

21. SAFETY CHECK

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

22. WALL OR CEILING MOUNTING

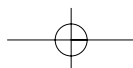
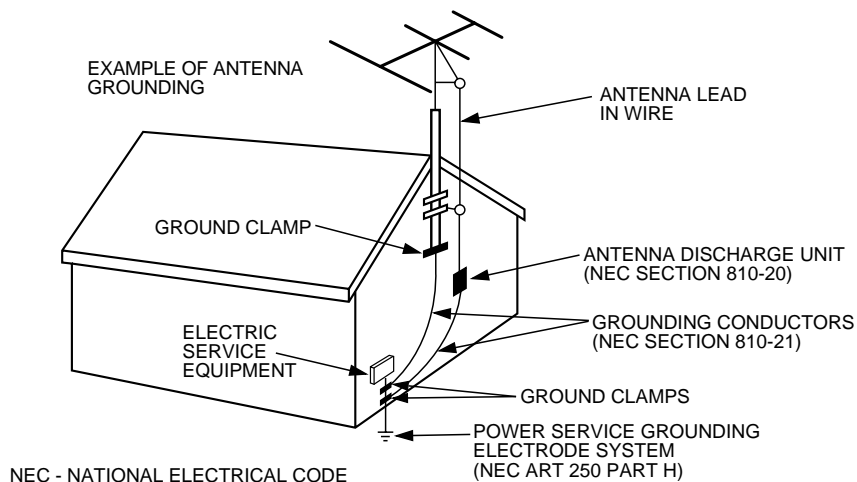
The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

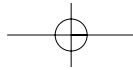
23. HEAT

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

24. NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV 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 cable entry as practical.





FEATURES

High Quality Picture Technology - This "HQ" video cassette recorder incorporates VHS High Quality technology. A built-in detail enhancer is used to boost the recorded signal and provide maximum picture quality during playback. It is compatible with other VHS video cassette recorders.

Frequency Synthesized Tuning - Quartz locked direct access tuner automatically locks in each channel for perfect reception.

Full Load Tape Transport - Permits rapid access between modes.

8 Event/1 Year Programmable Timer with One time/Daily/Weekdays/Weekly Capability - The built-in timer allows automatic recording of up to 8 TV programs within 1 year. It is also possible to record a program which is broadcast at the same time everyday or every week.

Wireless Infrared Remote Control - The wireless infrared remote control allows operating the various functions from the comfort of your favorite viewing position.

181 Channel Capability - Receives standard VHF and UHF broadcast channels and up to 125 cable channels. The actual number of channels received depends upon channel reception in your area or your cable system.

One-Touch Timer Recording (OTR) - Simply by pressing the REC/OTR button, the VCR can be programmed for up to 4 hours of recording with an immediate start.

Automatic Power On - When loading a cassette tape, this VCR will automatically turn on.

Automatic Playback - When loading a cassette tape without the erase prevention tab, this VCR will automatically turn on and play back the cassette tape at the correct speed.

Automatic Rewind - This VCR will automatically rewind the tape when the tape has ended (except Record).

Digital Auto Tracking - Automatically adjusts tracking during playback for the best possible picture.

Picture Search - Plays back forward or backward 5 times to 7 times normal speed in SP mode and 15 times to 21 times in EP mode.

2 Speed Record/ 3 Speed Playback - Records two tape speeds (SP, EP) / Play at three tape speed (SP, EP and LP)

Linear Time Tape Counter with Memory - The counter displays the elapsed time in hours, minutes and seconds and can be used to locate programs. The memory can be used to return the tape to a preselected position (0:00:00).

Simple On-Screen Remote Control Programming - Timer recording can be programmed and confirmed on the TV screen by using the remote control.

On-Screen 3-Language Display - You can select one of 3 languages: English, Spanish or French for on-screen programming.

VHS Index Search System (VISS®) - The Index Search Function automatically records index marks on the tape whenever a recording is initiated. The target position can be located simply by engaging REW Search or FAST FORWARD Search.

Variable Speed Slow Motion - This VCR provides variable speed slow motion which offers steady, noise free playback at 1/5 to 1/30 normal speed.

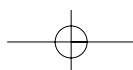


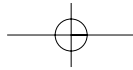
TABLE OF CONTENTS

Congratulations on your choice of this Emerson VCR. You have selected a high-quality, precision engineered instrument designed to give you years of video enjoyment.

To get the best performance from your new VCR, it is important that you carefully read and follow the operating instructions in this manual in the sequence in which they are presented.

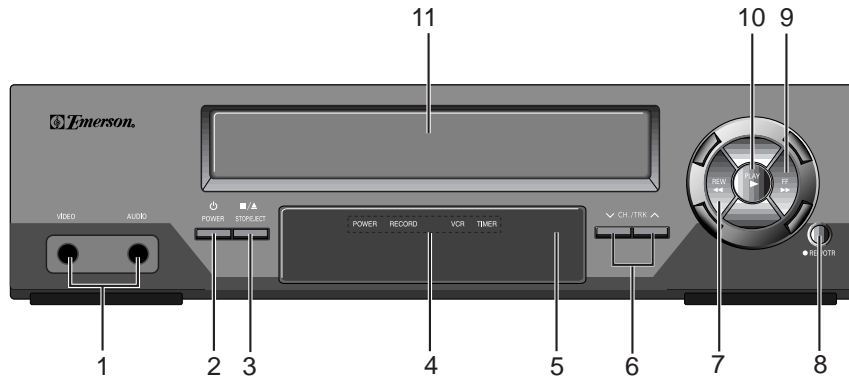
Should you experience a problem, please follow the "Troubleshooting Guide" on pages 42~43.

Important Safeguards.....	1	One Touch Timer Recording (OTR)	28
Features.....	4	On-Screen Timer Programming	29
Table of Contents.....	5	Selecting the ON-Screen Display Language	34
Location of Controls	6	Setting up the VCR.....	35
Remote Control	8	VHS Index Search System (VISS)	36
Connections.....	10	Go-To Search.....	37
VCR to Cable System Connection.....	12	Duplicating a Video Tape	38
Video Cassette.....	16	Speaking The Language: A Glossary of Terms	40
Basic Playback	18	Troubleshooting Guide	41
Special Operations	19	Video Head Cleaning.....	43
Menu Operation.....	21	Specifications	44
Setting the Clock.....	22		
Setting TV Channels.....	24		
Recording TV Programs.....	26		



LOCATION OF CONTROLS

FRONT OF VCR

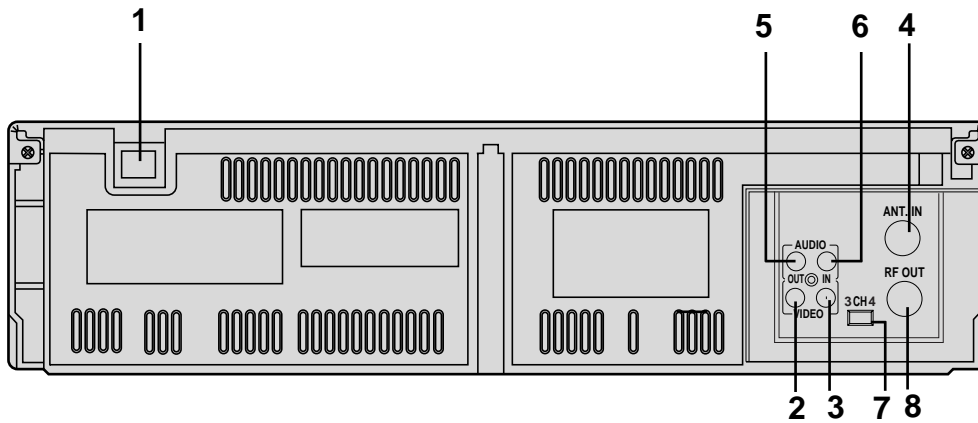


- | | |
|--|---|
| <ul style="list-style-type: none"> 1 FRONT AV JACK 2 POWER KEY 3 STOP/EJECT KEY 4 DISPLAY PANEL 5 REMOTE SENSOR 6 CH /TRACKING KEY | <ul style="list-style-type: none"> 7 REWIND/REVIEW KEY 8 RECORD/OTR KEY 9 FAST FORWARD/CUE KEY 10 PLAY/PAUSE KEY 11 CASSETTE COMPARTMENT |
|--|---|

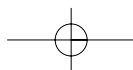
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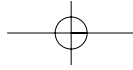
- To use the Front AV jack, check the 'Video2' is displayed on the TV screen by pressing the INPUT key, after connecting the Front AV jack to Camcorder or another VCR.

REAR OF VCR



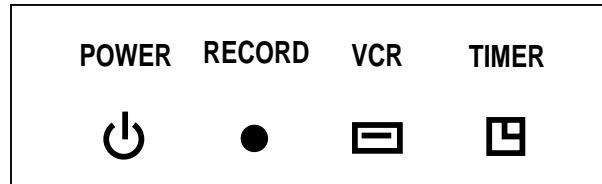
- | | |
|---|--|
| <ul style="list-style-type: none"> 1 AC POWER CORD 2 VIDEO OUT JACK 3 VIDEO IN JACK 4 ANTENNA INPUT | <ul style="list-style-type: none"> 5 AUDIO OUT JACK 6 AUDIO IN JACK 7 CHANNEL SELECTION SWITCH 8 RF OUTPUT |
|---|--|





LOCATION OF CONTROLS (CONTINUED)

DISPLAY PANEL



1 POWER

Indicates that the VCR Power is on.

2 RECORD

Indicates that the VCR is recording a program.

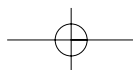
3 VCR

Indicates that the VCR is in VCR mode when lit.
When not lit, the VCR is in TV mode.

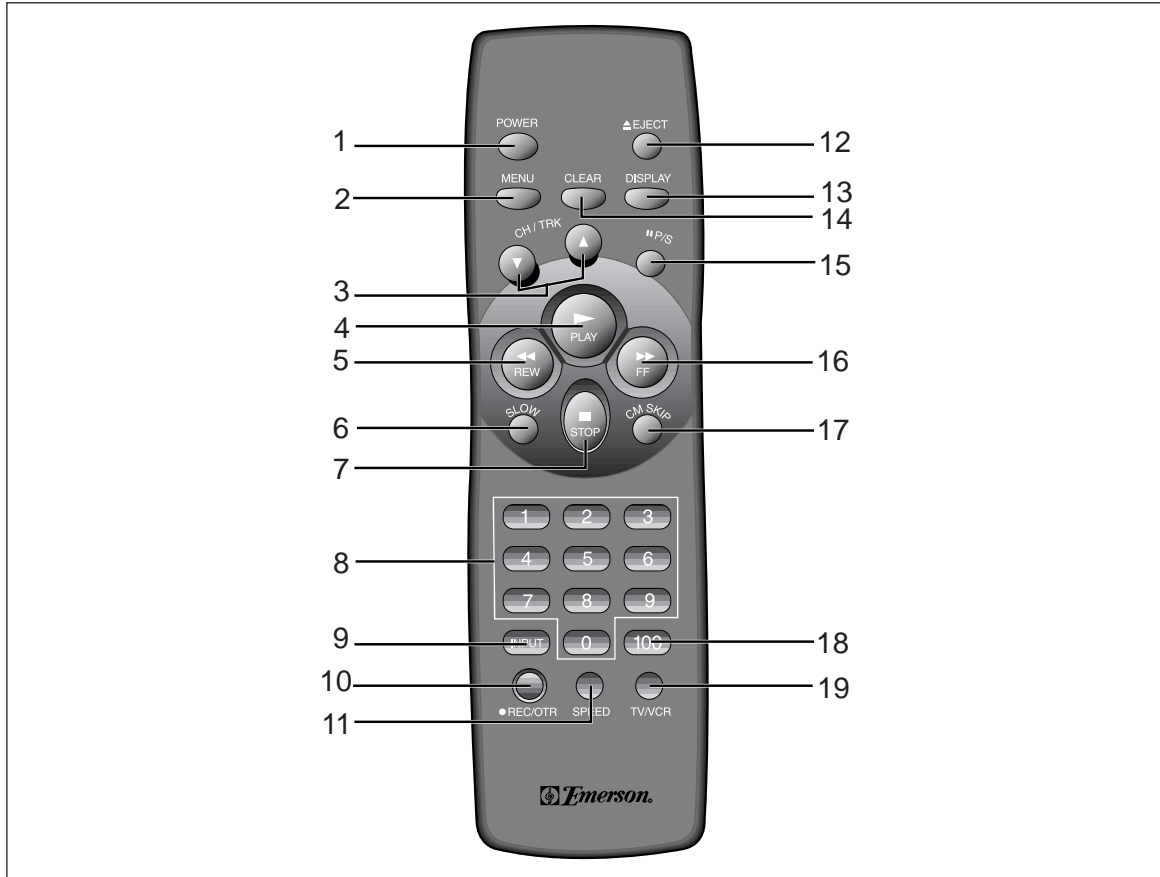
4 TIMER

Indicates that a timer recording has been programmed.

*When the power indicator is blinking on the display panel, the VCR is in the child lock mode.

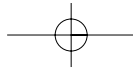


REMOTE CONTROL



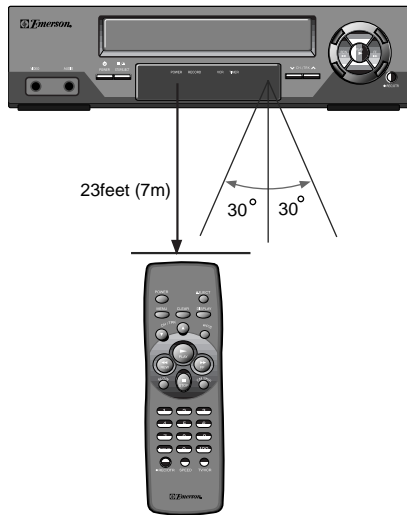
- **INPUT KEY:** Press to select between the VCR tuner or the unit connected to the AUDIO/VIDEO IN jack (Auxiliary).

- | | |
|---------------------|-------------------------|
| 1 POWER KEY | 11 SPEED KEY |
| 2 MENU KEY | 12 EJECT KEY |
| 3 CH/TRACKING KEYS | 13 DISPLAY KEY |
| 4 PLAYBACK KEY | 14 CLEAR KEY |
| 5 REWIND/REVIEW KEY | 15 PAUSE/STILL KEY |
| 6 SLOW KEY | 16 FAST FORWARD/CUE KEY |
| 7 STOP KEY | 17 CM. SKIP KEY |
| 8 NUMBER KEYS | 18 100 KEY |
| 9 INPUT KEY | 19 TV/VCR KEY |
| 10 RECORD/OTR KEY | |



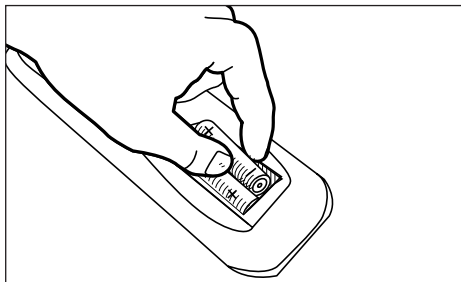
REMOTE CONTROL (CONTINUED)

HOW TO USE THE REMOTE CONTROL



1. Any object between the remote control and VCR will block the path of the beam when it is being used.
Dark walls, direct sunshine or very bright (incandescent) light will reduce the remote sensitivity.
 2. Hold the remote control within an angle range of about 30° from either side of the remote sensor as shown below.
 3. When the remote control is vertical to the remote sensor, it will work within about 23 feet (7m) from the VCR.
 4. Point the front of the remote control directly at the front of the VCR.
- * Function keys do not work when pressing several keys at the same time.

HOW TO INSTALL BATTERIES

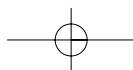


1. Remove the cover on the reverse side of the remote control.
2. Install two batteries ("AAA" size) into the remote control following the polarity diagram as shown at the left.
3. Replace the battery cover.

BATTERY PRECAUTIONS

Follow these precautions when using batteries in this device:

1. Use only the size and type of batteries specified.
2. Be sure to follow the correct polarity when installing the batteries as indicated in the battery compartment. Reversed batteries may cause damage to the device.
3. Do not mix different types of batteries together (s. g. Alkaline and Carbon zinc) or old batteries with fresh ones.
4. If the device is not used for a long period of time, remove the batteries to prevent damage or injury from possible battery leakage.
5. Do not try to recharge batteries not intended to be recharged; they can overheat and rupture. (Follow battery manufacturer's directions.)



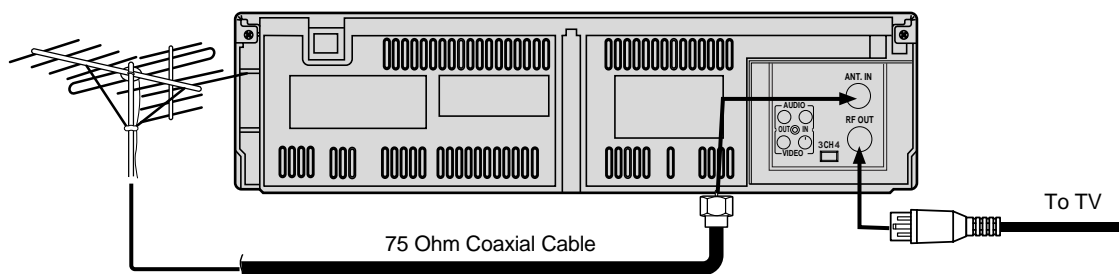
CONNECTIONS

If using an antenna, follow the instructions on pages 10 and 11. If you are a cable TV (CATV) subscriber, skip ahead to page 12 for proper connections.

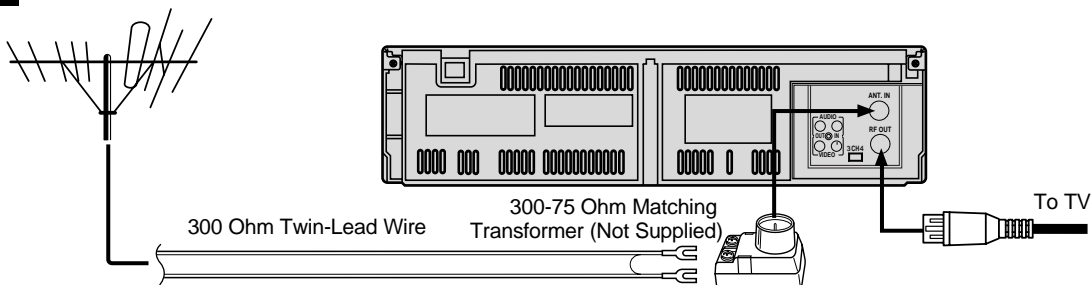
Antenna to VCR connection; The VCR must be connected "between" the antenna and the TV. First, remove the antenna from the TV and connect it to the VCR. Then connect the VCR to the TV. Below are 3 common methods of connecting an antenna system to a VCR. Find the type of antenna system you are using and follow the connection diagram. After you have connected the antenna to the VCR, connect the VCR to the TV as described on the next page.

This VCR has a single 75 ohm antenna input for connection to an antenna (VHF/UHF) or cable (CATV) system. If you have separate VHF and UHF antennas (number 3 below), use a mixer to connect the antennas to the VCR.

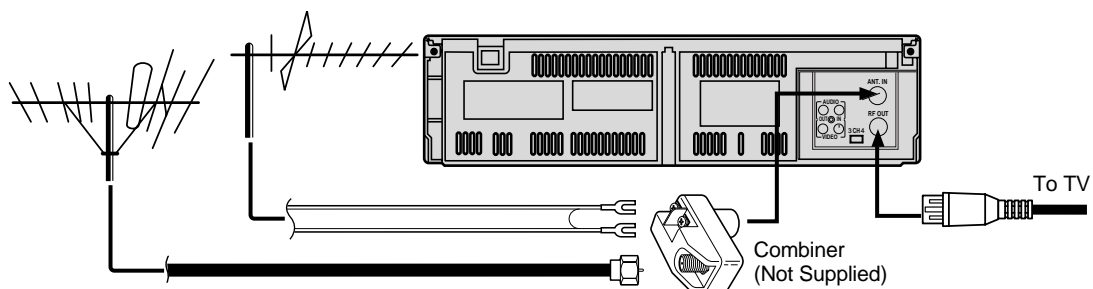
1 Combination VHF/UHF Antenna with 75 ohm coaxial cable



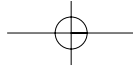
2 Combination VHF/UHF Antenna with 300 ohm twin-lead (Flat) wire



3 Separate VHF and UHF Antennas



IF USING A VHF OR UHF ANTENNA, SET THE TV/CATV MENU OPTION TO THE "TV" POSITION.



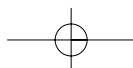
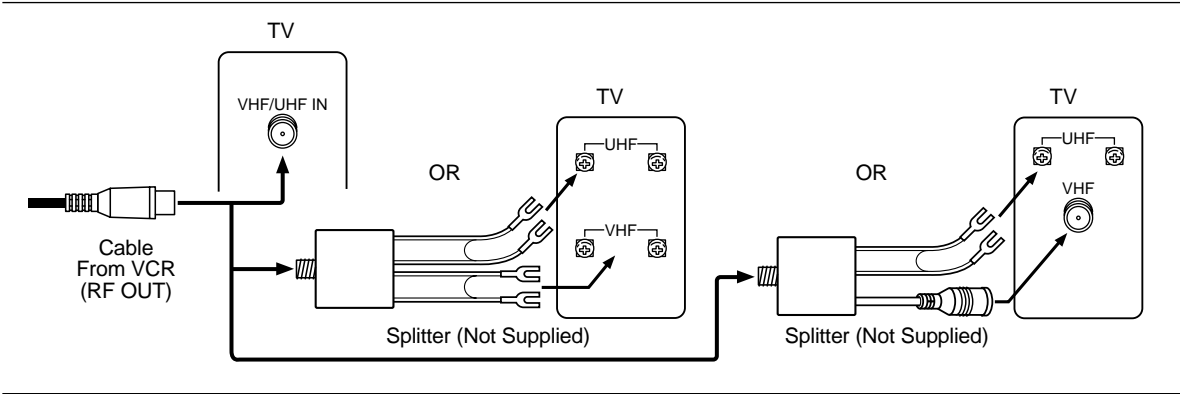
CONNECTIONS (CONTINUED)

VCR TO TV CONNECTION

After you have connected the antenna to the VCR, you must connect the VCR to the TV. Find the type of TV you are using and follow the connection diagram.

NOTE:

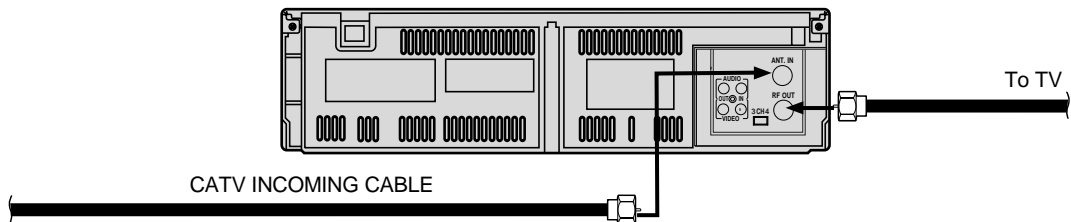
- A clear picture will not be obtained by the VCR unless the antenna signal is good, connect the antenna to the VCR properly.
- For the best quality recording, an indoor antenna or a telescopic antenna is not recommended, the use of an outdoor type antenna is required.
- If you are not sure about the connection, please refer to qualified service personnel.



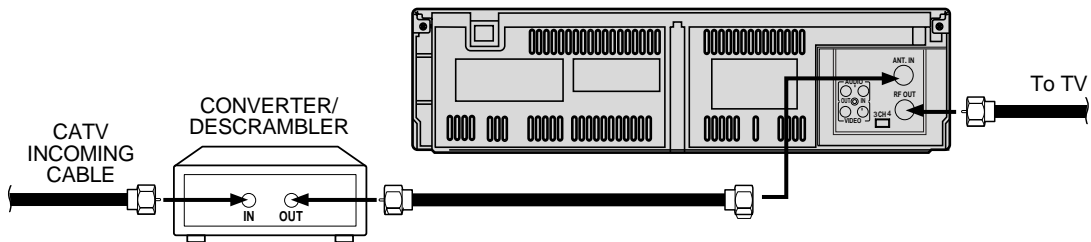
VCR TO CABLE SYSTEM CONNECTION

Many cable companies offer services permitting reception of extra channels including pay or subscription channels. This VCR has an extended tuning range and can be tuned to most cable channels without using a cable company supplied converter box, except for those channels which are intentionally scrambled. If you subscribe to a special channel which is scrambled, you must have a descrambler box for proper reception. This VCR cannot receive scrambled programs since it does not contain a descrambler. In order to receive scrambled programs your existing descrambler must be used. Descrambler boxes are available from cable companies. Consult your local cable company for more information concerning connection to their descrambler equipment. There are many ways to connect the VCR to a cable system. Below are six common methods of connection.

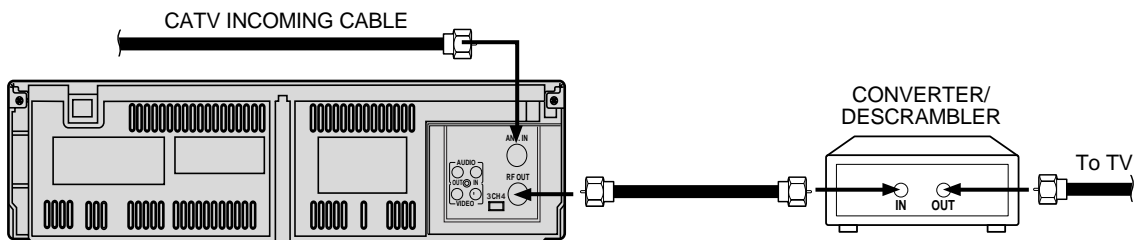
1 Combination VHF/UHF Antenna with 75 ohm coaxial cable

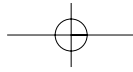


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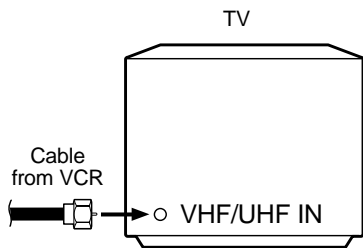


3



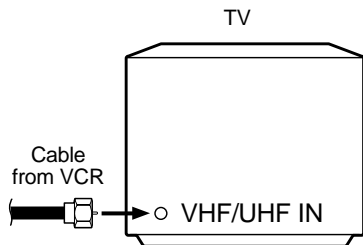


VCR TO CABLE SYSTEM CONNECTION (CONTINUED)



ALLOWS:

- * Recording of nonscrambled channels.
- * Use of the programmable timer.
- * Recording of one channel while watching another. (Set the VCR to the TV mode by pressing the TV/VCR key)



ALLOWS:

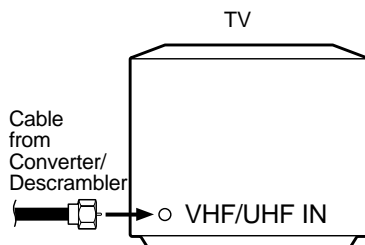
- * Recording of channels through the converter/descrambler box (scrambled and unscrambled).
- * Using the programmable timer to record only the channel selected at the converter/descrambler box.

PREVENTS:

- * Recording one channel while watching another.
- * Using the VCR tuner to select channels.

NOTE:

To record from converter/descrambler, VCR tuner must be tuned to the converter output channel, usually channel 3 or 4.



ALLOWS:

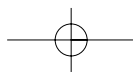
- * Recording of unscrambled channels.
- * Using the programmable timer.
- * Recording an unscrambled channel while watching any channel selected at the converter/descrambler box. (Set the VCR to the TV mode by pressing the TV/VCR key)

PREVENTS:

- * Recording scrambled channels.

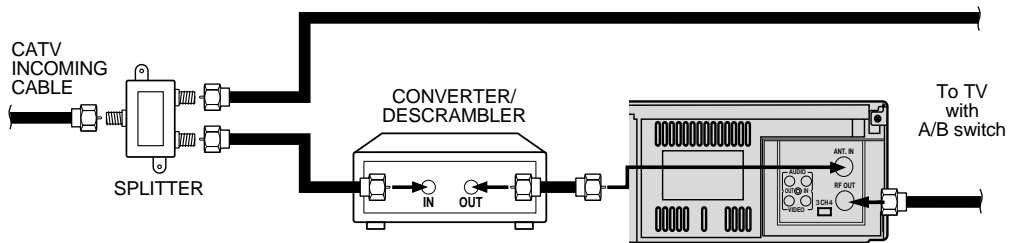
NOTE:

If you are playing a tape or using the tuner built into the VCR, the converter must be set to the video channel output of the VCR (either 3 or 4).

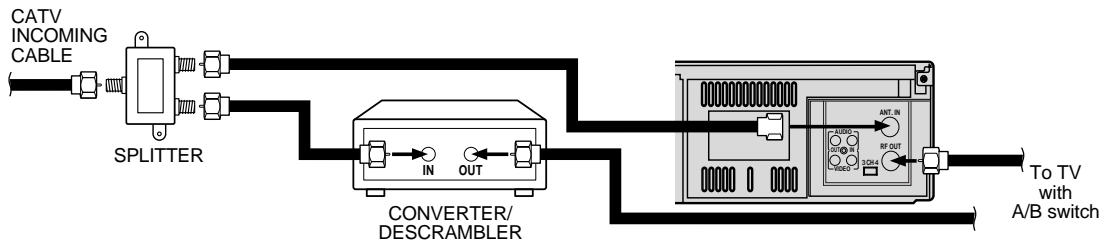


VCR TO CABLE SYSTEM CONNECTION (CONTINUED)

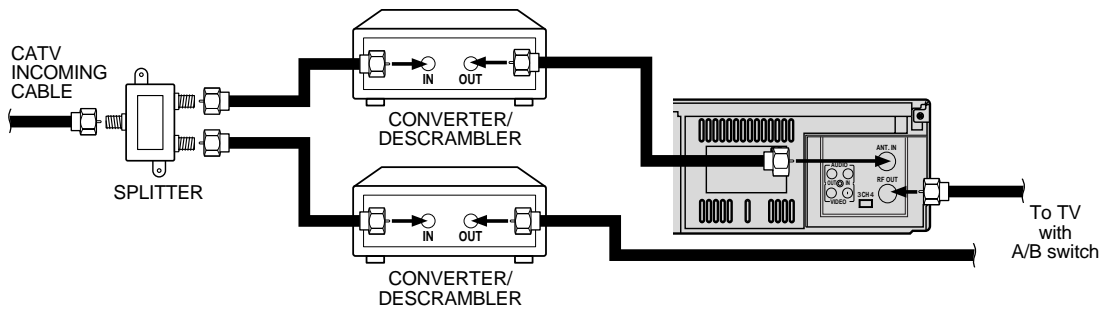
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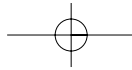


5

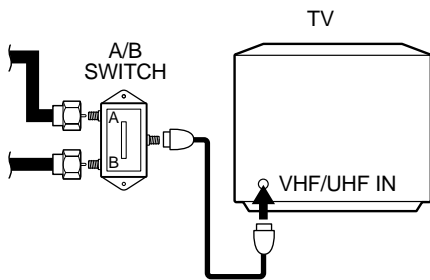


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VCR TO CABLE SYSTEM CONNECTION (CONTINUED)



ALLOWS:

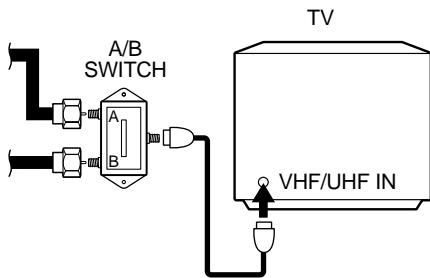
- * Recording of all channels through the converter/descrambler box.
- * Recording of one channel while watching another. (Set the A/B switch to A position)
- * Using the programmable timer to record only the channel selected at the converter/descrambler box.

PREVENTS:

- * Watching scrambled channels while recording another channel.
- * Using the VCR tuner to select channels.

NOTE:

To record from converter/descrambler, VCR tuner must be tuned to the converter/descrambler output channels, usually channel 3 or 4.

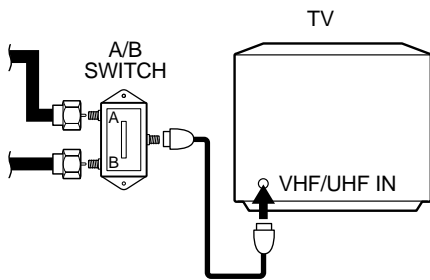


ALLOWS:

- * Recording of nonscrambled channels.
- * Recording of one channel while watching another.
- * Watching premium channels through the converter/descrambler box while recording nonscrambled channels. (Set the A/B switch to B position)
- * Using the programmable timer.

PREVENTS:

- * Recording scrambled channels.



ALLOWS:

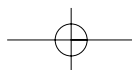
- * Recording of all channels through the converter/descrambler box.
- * Recording a scrambled or unscrambled channel while watching another (scrambled or unscrambled) channel. (Set the A/B switch to B position)
- * Using the programmable timer to record only the channel selected at the converter/descrambler box.

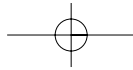
PREVENTS:

- * Using the VCR tuner to select channels.

NOTE:

To record from converter/descrambler, VCR tuner must be tuned to the converter/descrambler output channels, usually channel 3 or 4.





VIDEO CASSETTE

LOADING

Push the cassette into the cassette compartment gently with label up.

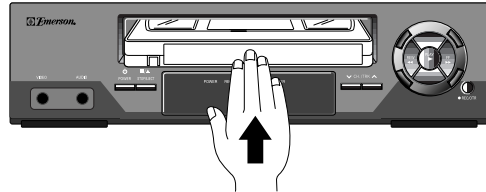
AUTOMATIC POWER ON

The VCR will turn on automatically.

AUTOMATIC PLAY

When loading a tape without the erase prevention tab intact, playback will start immediately.

An inverted video cassette cannot be inserted.



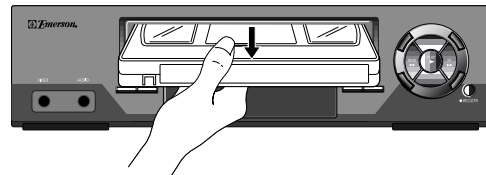
UNLOADING

Press the STOP/EJECT key on the VCR twice.

The first press will stop the tape and the second press will eject the tape.

Press the EJECT key on the remote control.

Pull the cassette out gently.



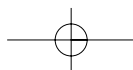
* When you press the STOP/EJECT key even if the power is off, the cassette will be ejected.

NOTES:

- An inverted cassette cannot be inserted.
- Be sure to insert the cassette firmly into the slot, otherwise, it will be automatically ejected.
- The automatic loading mechanism will operate only when the cassette is inserted correctly.
- When the unit is not plugged into a power outlet, do not insert cassette.

CAUTION:

- Do not attempt to pull out the cassette once automatic loading has started.
- Do not insert fingers or any foreign object beyond the door flaps of the cassette loading slot as this could lead to injury or damage to the mechanism.
- Do not allow children to insert any foreign objects into VCR.



VIDEO CASSETTE (CONTINUED)

TYPES OF VIDEO CASSETTE

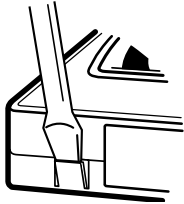
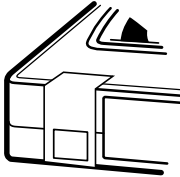
Use type with the **VHS** mark in this unit.

Recording/Playback Time of Video Tape

Type	SP Mode (Standard Play)	EP Mode (Extended Play)
T-60	1 hour	3 hours
T-90	1 hour 30 min.	4 hours 30 min.
T-120	2 hours	6 hours
T-160	2 hours 40 min.	8 hours

TO PREVENT ACCIDENTAL ERASURE

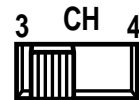
Video cassettes are equipped with a safety tab to prevent accidental erasure. When the tab is removed, recording can not be performed. If you wish to record on a cassette whose tab has already been removed, use adhesive tape to block the hole.

<ul style="list-style-type: none"> To prevent accidental erasure  <ul style="list-style-type: none"> After recording, break off the safety tab with a screwdriver if you don't want to record over the tape. 	<ul style="list-style-type: none"> To record again  <ul style="list-style-type: none"> Cover the hole with cellophane tape.
---	--

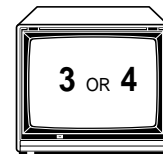
SETTING THE VIDEO CHANNEL

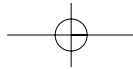
When viewing a video cassette or a channel selected on the VCR, the picture and sound are sent to the TV through an unused channel (either 3 or 4). The 3/4 channel selector switch on the VCR must be set to the same channel as the TV set.

- Set the 3/4 channel selector switch on the rear of the unit to the vacant channel in your area (3 or 4).



- Set the TV's channel to correspond with the channel selected on the VCR's 3/4 channel selector switch.





BASIC PLAYBACK

PREPARATION

Set the CH 3/CH 4 switch on the rear of the VCR to either CH 3 or 4, and then tune your TV to the same.

LOADING

Upon inserting a prerecorded cassette, the power will turn on automatically even if the power is off.

PLAY

Press the PLAY key, and playback will start. When loading a tape without the erase prevention tab intact, playback will start immediately. The tape is rewound automatically to the beginning after playing to the end of tape.



STOP

Press the STOP key. The tape will stop but remain fully loaded and ready to play.



FAST FORWARD

Press the FF key in the STOP mode. The tape advances at high speed without picture and sound.



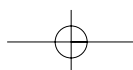
REWIND

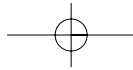
Press the REW key in the STOP mode. The tape is rewound at high speed without picture and sound.



EJECT

Press the EJECT key on the remote control or press the STOP/EJECT key twice on the front panel. The tape will eject from the compartment.





SPECIAL OPERATIONS

TO VISUALLY SEARCH FORWARD (CUE)

Press the FF key once in the PLAYBACK mode.
Then, the tape advances rapidly with the picture.
If you re-press the FF key, the tape advances more rapidly with the picture.
Press the PLAY key to resume playback. No sound will be heard during Cue.



TO VISUALLY SEARCH BACKWARD (REVIEW)

Press the REW key once in the PLAYBACK mode.
Then, the tape is rewound rapidly with picture. If you re-press the REW key,
the tape rewinds more rapidly with picture.
Press the PLAY key to resume playback. No sound will be heard during Review.



TO WATCH STILL PICTURE

Press the P/S key during playback to pause the tape. If this key is pressed again,
it lets you view one frame with each press of the key.

- V-HOLD: Press the CH/TRK ▲ or ▼ key to eliminate picture shakiness in the STILL mode.



TO WATCH SLOW MOTION PLAYBACK

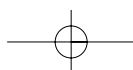
You can view a tape during Play-Pause using slow motion.
• Press SLOW or P/S key and then press FF/REW key.
• Press FF/REW to speed up or down slow motion playback.
The VCR switches automatically from slow motion playback to stop after a few minutes.
To reduce the noise bars, press the CH/TRK ▲ or ▼ key.

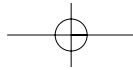
DIGITAL TRACKING CONTROLS

When a tape is played, the Digital Auto Tracking System automatically adjusts the tracking to obtain the best possible picture.

If noise bars appear during playback, adjust the tracking manually.

- Press the CH/TRK ▲ or ▼ key to obtain the best possible picture.





SPECIAL OPERATIONS (CONTINUED)

CLEAR

Press the CLEAR key to reset the time counter to 0:00:00 anywhere on a tape so that you can easily locate a tape segment. The CLEAR key can only be used when counter display is showing on the TV screen.



DISPLAY (O.S.D)

Press the DISPLAY key to display the tape counter, clock and status mode on the TV screen.
And, by pressing the DISPLAY key before disappearing the OSD from the screen, only the tape counter will remain on the screen.



CHILD LOCK

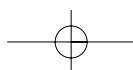
To disable to usage of the VCR, or to protect your timer recordings, you can lock the VCR so that the keys on the VCR or remote won't work.

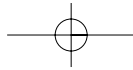
- To lock: Press and hold POWER on the remote for approximately six seconds.
- To release: Press and hold POWER on the remote for approximately six seconds.

CM. SKIP

This is useful for skipping commercials or program segments.

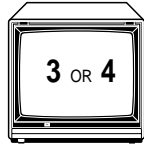
- Press CM.SKIP key once during playback to advance the tape approximately 30 seconds.
- Each press of the CM .SKIP key adds an additional 30 seconds up to 5 minutes.





MENU OPERATION

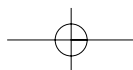
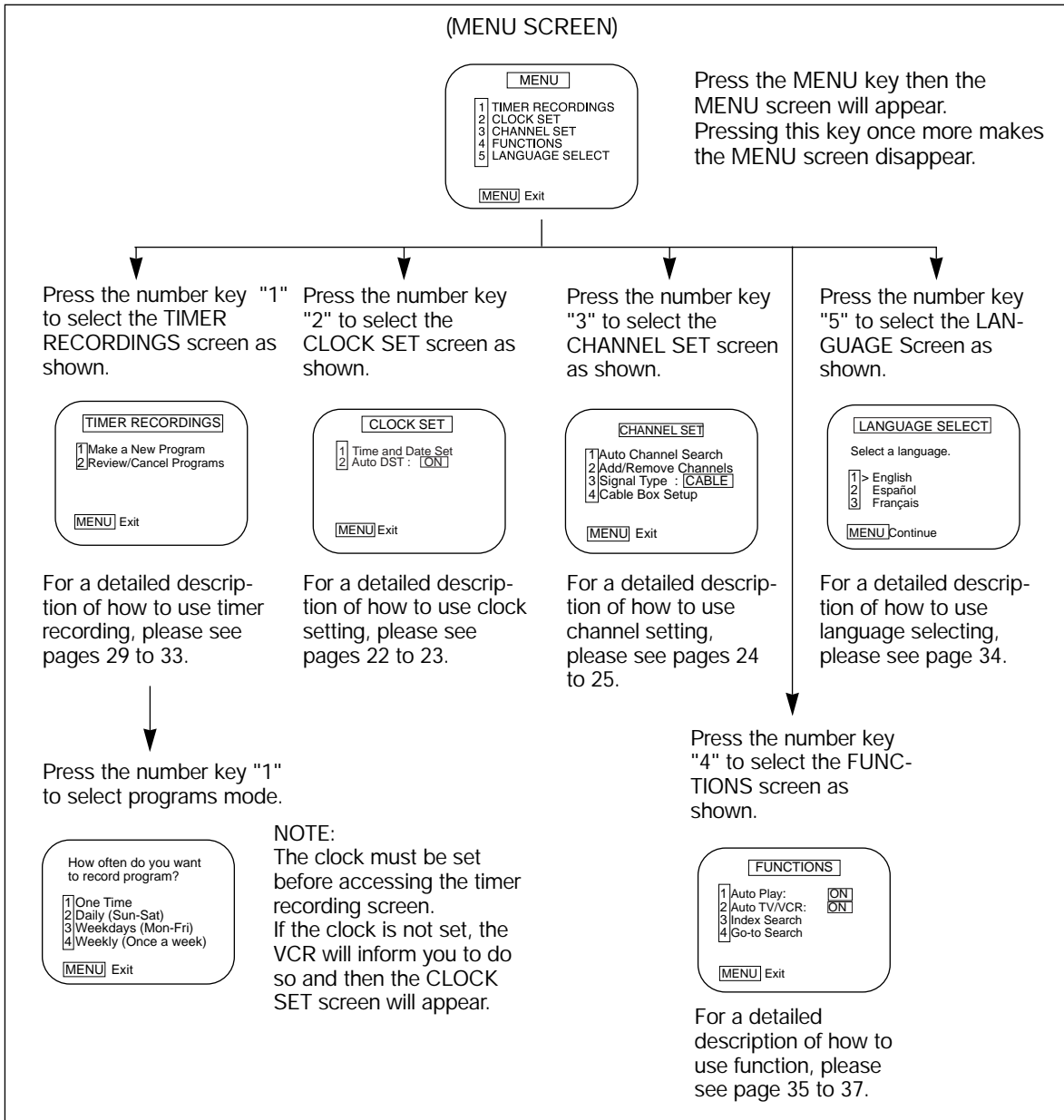
Turn on the TV and VCR.
 Set the VCR to VCR mode by pressing the TV/VCR key on the remote control until the VCR indicator lights up the display panel.
 Set the TV to CH3 or 4.



MENU



TV/VCR



SETTING THE CLOCK

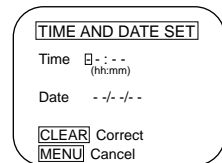
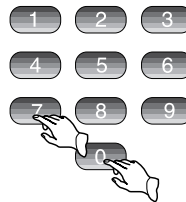
This clock is based on a 12-hour digital display. The clock not only serves as a digital display of your current local time, but is essential to the successful operation of the VCR's Programmable Recording used for unattended recording. Therefore it is very important that the clock be set accurately. When the VCR and TV are turned on for the first time or if a power failure occurred, --:-- will appear on the display panel.

- Set the VCR to VCR mode by pressing the TV/VCR key on the remote control so the VCR indicator lights upon the display panel.
- Set the TV to CH 3 or 4.

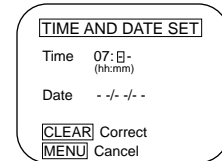
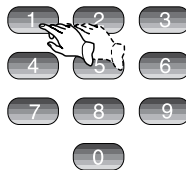
EXAMPLE: Setting the clock to the imaginary current date and time: 07:11 July 10, 2000

- 1 First press the MENU key then press the No. key 2 to enter into the CLOCK SET mode. Press the No. key 1 in the CLOCK SET mode to enter into the "TIME AND DATE SET" mode.

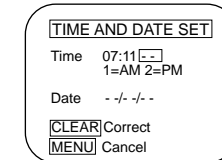
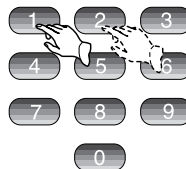
- 2 Next set the hour by using the number keys. Press "0" & "7" for "07".



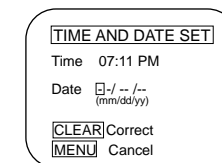
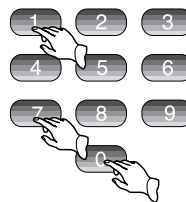
- 3 Set the minutes using the number keys. Press "1" & "1" for 11.



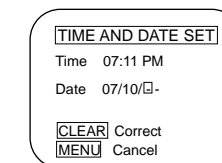
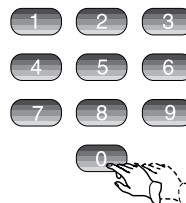
- 4 Select AM by using the number key. Press 1 for selecting AM, 2 for selecting PM.

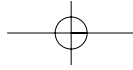


- 5 Set the Month & Date using the number keys. Press "0" & "7" for "7" (July) and "1" & "0" for "10" (Monday).



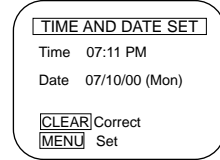
- 6 Select the Year using the number keys. Press "0" & "0" for "00". The VCR will automatically select the correct day of the week according to the date that is selected.





SETTING THE CLOCK (CONTINUED)

- 7** Press the MENU key to save the selections you have made.



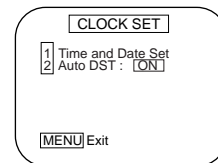
NOTE:

There is no need to set day of the week because it is automatically set according to the DATE. You can correct preset contents by pressing CLEAR key on the remote control. Clock setting is possible when the TIMER indicator is on the display panel (Timer Standby mode). First check to see that the TIMER indicator on the display panel is not lit. "--:--" (initial condition of display) also means that there has been a power failure or disconnection of the power plug. Readjusting the time according to the above steps restores the normal condition of the clock display.

SET DAYLIGHT-SAVING TIME

Press the number key 2 in the CLOCK SET mode to select 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.



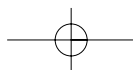
NOTE:

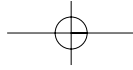
Spring Forward ; Fall backward

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 on hour), remember to include the extra hour for timer-recording falling 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.

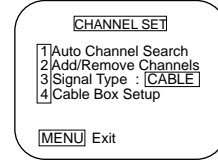




SETTING TV CHANNELS

PREPARATION

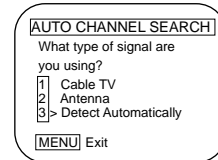
- Turn on the TV and VCR and set the TV to 3CH or 4CH.
- Set the VCR to VCR mode by pressing the TV/VCR key on the remote control so the VCR indicator appears on the display panel.
- Press the MENU key then the MENU screen will appear.
- Press the number key 3.
- CHANNEL SET screen will appear.



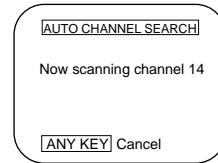
AUTO CHANNEL SEARCH

- 1 Press the number key 1 in the CHANNEL SET screen to select AUTO CHANNEL SEARCH mode.

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



- 2 Press the number key 3 to detect the channel automatically and the scanning channel number appears on the TV screen.

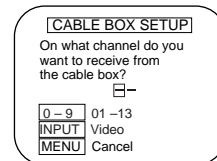


- 3 Wait until the channel numbers stop changing. This takes about one or two minutes. The TV will then tune to the lowest channel found. Pressing the CH/TRK ▲ or ▼ key will select only the active channels.

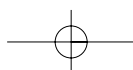
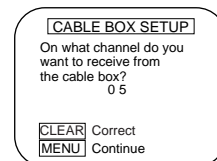
- 4 After finishing the channel search process, the first channel appears automatically. Press the CH/TRK ▲ or ▼ key to check the memorized channels. (The memorized channels are selected in order.)

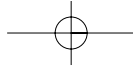
TO SET THE CABLE BOX

- 1 Press the number key 3 in the MENU mode to select the CHANNEL SET mode.
Press the number key 4 to process the Cable Box setup.



- 2 Press the number key or input key which matches to the output of the Cable Box to connect between Cable Box and VCR.
Press CLEAR key on the remote to correct setup status.
Press MENU key to exit the menu system.
When you make a timer recording, the preset channel number will be displayed automatically.



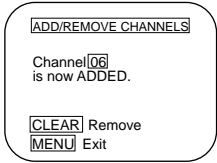


SETTING TV CHANNELS (CONTINUED)

TO DELETE A CHANNEL

To memorize additional channels not set by the AUTO CHANNEL SEARCH function and to remove unnecessary channels.

- 1 Press the number key 3 in the MENU mode to select the CHANNEL SET mode and press the number key 2 to select the Add/Remove Channels.
Use 0-9 to enter the channel you want to remove.

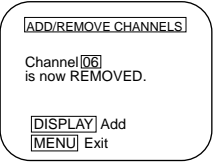


- 2 Press CLEAR key to erase the channel.
Press MENU key three times to exit from the menus.

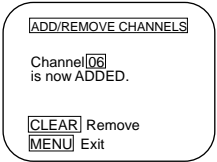


TO ADD A CHANNEL

- 1 Press the number key 3 in the MENU mode to select the CHANNEL SET mode and press the number key 2 to select the Add/Remove Channels.
Use 0-9 to enter the channel you want to add.

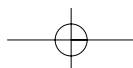
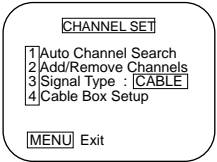


- 2 Press DISPLAY key to add the channel.
Press MENU key three times to exit from the menus.



SIGNAL TYPE SELECTION

- Press the Direct Access key 3 in the MENU mode to select the CHANNEL SET mode.
- CABLE or ANTENNA indication will be changed by pressing the Direct Access key 3 in the CHANNEL SET mode.



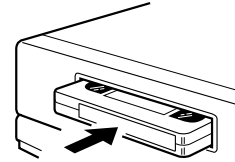
RECORDING TV PROGRAMS

TO WATCH & RECORD THE SAME CHANNEL

PREPARATION

First, turn on the TV and set it to your VCR channel.

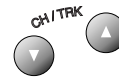
- 1** Load a cassette into VCR, making sure that the safety tab is intact. The power will turn on automatically.



- 2** The VCR indicator automatically appears on the Display Panel when the VCR is turned on. If it does not, press the TV/VCR key to display it.



- 3** Press the number keys or the CH/TRK ▲ or ▼ key to select the channel you want to watch and record.



- 4** Select the speed at which you want to record – SP or EP – by using the Speed key.



- 5** Press the REC/OTR key and the recording will start. The REC indicator appears on the Display Panel.

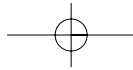


TO PAUSE

Press the P/S key to pause the recording if you want to avoid unwanted material. Press REC/OTR key to continue recording.

NOTE:

That the Pause function will be released after 5 minutes to prevent damage to the tape or the VCR and the STOP mode will be entered automatically.



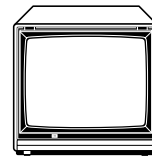
RECORDING TV PROGRAMS (CONTINUED)

TO WATCH ONE CHANNEL AND RECORD ANOTHER

- 1 Follow the procedure all the way through the recording TV programs.
Make sure you have the VCR connected properly as shown on pages 10 to 15.
Set VCR to the TV mode by pressing the TV/VCR key so that VCR indicator disappears.



- 2 Then select the TV channel you want to watch by using TV channel selector on the TV receiver.



TO STOP RECORDING

Press the STOP key to STOP the recording.

NOTE:

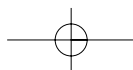
Since the VCR has its own TV tuner, it is not necessary to turn on the TV in order to make a recording. Turning on the TV merely allows confirmation of proper channel settings on your VCR.

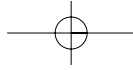
TO RECORD A CABLE PROGRAM

PREPARATION

First, turn on the TV and set it to your VCR channel.

- 1 Load a cassette into VCR, making sure that the safety tab is intact.
The power will turn on automatically.
- 2 Select the CHANNEL SET mode from the MENU screen and select the CABLE mode by pressing the number key 3.
- 3 Press the number keys or the CH/TRK ▲ or ▼ key to select the channel you want to watch and record.
- 4 Also select the speed at which you want to record – SP or EP – by using the Speed key.
- 5 Press the REC/OTR key and the recording will start.
The REC indicator appears on the Display Panel.





ONE TOUCH TIMER RECORDING (OTR)

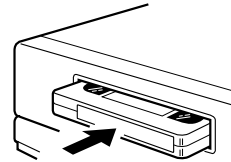
OTR is simply a convenient way of making a timer recording without using the Programmable Timer. When OTR is completed the VCR automatically enters the POWER OFF mode.

BEFORE SETTING OTR MAKE SURE THAT

- The clock has been correctly set to the present time.
- The cassette tape has a safety tab.
- The tape is long enough to record the program.

OPERATION

- 1** Simply insert a cassette tape, then press the number keys to select the channel you wish to record.



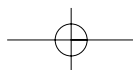
- 2** Press the REC/OTR key once to begin recording.

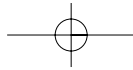


- 3** Subsequent presses of the REC/OTR key will increase the recording time by 30 minutes up to 4 hours and then cycle back as shown below.

Press	Once	Twice	3 times	4 times	5 times	6 times	7 times	8 times
Recording time	Normal REC	0:30	1:00	1:30	2:00	3:00	4:00	Normal REC

To stop a Recording in progress, press and hold the STOP key approximately 5 seconds.





ON-SCREEN TIMER PROGRAMMING

The Programmable Timer Recording function allows you to record up to 8 different programs as long as one year in advance. Once you have set the time for timer programming, VCR will record automatically at the time you have preset.

There are four program modes:

- One time** : Record a program on any day you choose within one year (One Time Recording of a single program)
Daily : Record a program from Sunday to Saturday at the same time (Daily Recording).
Weekdays : Record a program from Monday to Friday at the same time as you have preset (Weekdays Recording).
Weekly : Record a program at same time once a week (Weekly Recording).

Before setting your VCR to record a program in advance make sure that the following has been checked:

- The VCR is set to the VCR mode. Press the TV/VCR key and ensure that the VCR indicator appears on the Display Panel.
- The clock is set to the correct current time.
- The safety tab is not missing from the cassette.
- The tape is long enough to record the desired program.

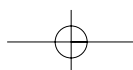
EXAMPLE

For the purpose of this example we wish to record from 04:30 AM to 05:30 AM and the program we wish to record is on TV Channel 6.

NOTE:

If the Programming mode is selected when current time has not been set on the Clock, "Be sure to set the clock first" will appear on screen and CLOCK SET screen will appear.


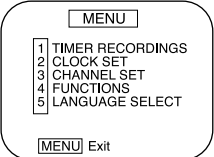
Preset contents can be corrected by using CLEAR key on the remote control.
The cursor box will move to previous step.

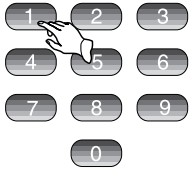
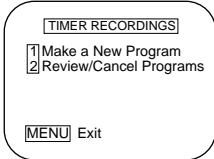


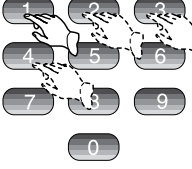
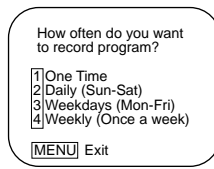
ON-SCREEN TIMER PROGRAMMING (CONTINUED)

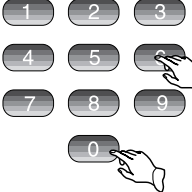
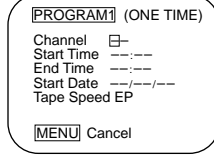
OPERATION (SINGLE PROGRAMMING)

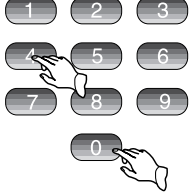
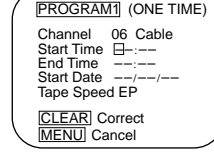
- 1** Press the MENU key on the remote control. The Menu screen appears. Press the number key 1 to enter the Timer Recording mode.

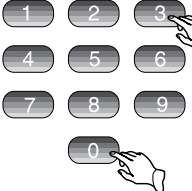
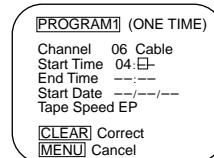


- 2** To select "Make a New Program" mode, press the number key 1.

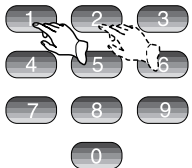
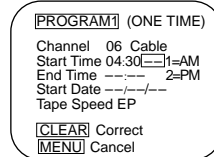


- 3** To select the desired programming type press the number key 1, 2, 3 or 4. In this example, select number 1 for one time programming. NOTE: Daily, Weekdays and Weekly programming process are same as one time's.



- 4** Press the number keys to select the desired Channel (06). While the VCR is in the CABLE mode, if a channel over 100 is desired, press 100's key and then the next 2 digits in order.



- 5** Press the number keys on the remote control to set the Hour (04).

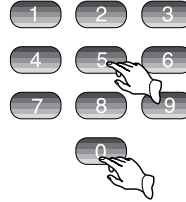


- 6** Press the number keys to set the Minute (30).



- 7** Press the number keys to select the AM or PM (1 or 2).

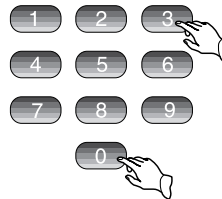
ON-SCREEN TIMER PROGRAMMING (CONTINUED)

8 Press the number keys to set the Hour (05).



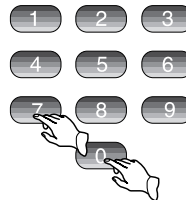
[PROGRAM1] (ONE TIME)
 Channel 06 Cable
 Start Time 04:30 AM
 End Time □:--
 Start Date --/--
 Tape Speed EP
[CLEAR] Correct
[MENU] Cancel

9 Press the number keys to set the Minute (30). AM/PM and the current date/year will be selected automatically.



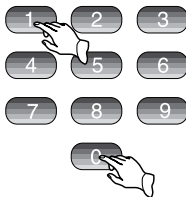
[PROGRAM1] (ONE TIME)
 Channel 06 Cable
 Start Time 04:30 AM
 End Time 05:--
 Start Date --/--
 Tape Speed EP
[CLEAR] Correct
[MENU] Cancel

10 Press the number keys to set the Month (07).



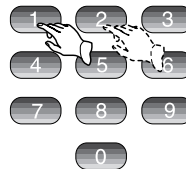
[PROGRAM1] (ONE TIME)
 Channel 06 Cable
 Start Time 04:30 AM
 End Time 05:30 AM
 Start Date 07/--
 Tape Speed EP
[CLEAR] Correct
[MENU] Cancel

11 Press the number keys to set the Day (10) and then Year (00) will be set automatically.



[PROGRAM1] (ONE TIME)
 Channel 06 Cable
 Start Time 04:30 AM
 End Time 05:30 AM
 Start Date 07/10/--
 Tape Speed EP
[CLEAR] Correct
[MENU] Cancel

12 Press the number key 1 or 2 key to select the recording speed SP or EP.



[PROGRAM1] (ONE TIME)
 Channel 06 Cable
 Start Time 04:30 AM
 End Time 05:30 AM
 Start Date 07/10/00 Mon
 Tape Speed **[EP]**
 1=SP 2=EP
[CLEAR] Correct
[MENU] Save

13 For additional programming, repeat steps 1 through 12. Press the Menu key and the following screen will appear.



PROGRAM 1 has been saved
 For program recording,
 insert a cassette and
 turn the VCR off before
 the program start time.
[MENU] Continue

14 Press the POWER key and the Power will turn off and the Timer indicator will light on the Display Panel.



ON-SCREEN TIMER PROGRAMMING (CONTINUED)

CHECKING TIMER PROGRAMS

- 1 Press the MENU key and select Timer Recording mode. Press the number key 2 for Review/Cancel Programs and the program screen will appear.

[PROGRAM1] (ONE TIME)
Channel 06 Cable
Start Time 04:30AM
End Time 05:30AM
Start Date 07/10/00 Mon
Tape Speed EP
[CLEAR] Cancel
[MENU] For next program

- 2 If no programs have been programmed, the following screen will appear.

No programs have been entered.
[MENU] Continue

CANCELLING AND REVIEWING TIMER PROGRAMS

- 1 Select the Timer Recordings mode in the MENU mode and press the number key 2 to review programs.

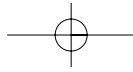
2

[TIMER RECORDINGS]
1] Make a New Program
2] Review/Cancel Programs
[MENU] Exit

- 2 Press the MENU key to cycle through the programs. When the program contents to be erased is displayed, press the CLEAR key to cancel it. To stop a Recording in progress, press and hold the Stop key approximately 5 seconds.



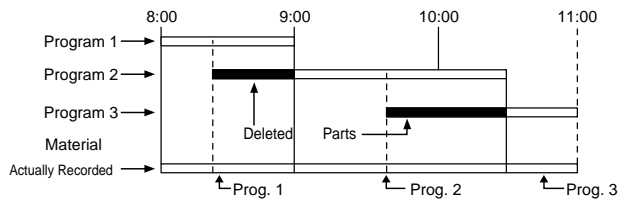
[PROGRAM1] (ONE TIME)
Channel 06 Cable
Start Time 04:30AM
End Time 05:30AM
Start Date 07/10/00 Mon
Tape Speed EP
[CLEAR] Cancel
[MENU] For next program



ON-SCREEN TIMER PROGRAMMING (CONTINUED)

OVERLAPPING TIMER RECORDINGS

When setting the Programmable Timer care should be taken to prevent the times from overlapping. If one preset time starts before a program that is being recorded has finished, the recording of the first program will be continued. After the first recording, the recording of the second program will be started. The diagram below illustrates this point.



TIMER PROGRAMMING ERROR INDICATOR

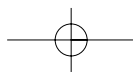
When the loaded cassette does not have a safety tab in place in the Timer Stand-by mode, the "⏻" will appear on the display panel and then a cassette without a safety tab will be ejected automatically.

The TIMER indicator "⏻" only disappears when you press the POWER key during the timer recording process.

NOTE:

When the "⏻" indicator is displayed in the timer Stand-by mode, the VCR cannot be operated manually as no keys will operate in the Timer Stand-by mode.

To release the Timer Stand-by mode, press the Power key and use the VCR as usual. Pressing Power key again will return the VCR to Timer.



SELECTING THE ON-SCREEN DISPLAY LANGUAGE

- You can select the language which is more convenient for you by pressing the key No. in the LANGUAGE SELECT screen of MENU mode.

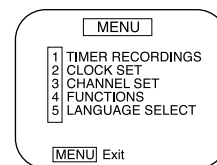
English, Spanish or French can be selected by the user.

PREPARATION

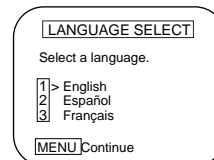
Turn on the TV and VCR.
Set the VCR to the VCR mode by pressing the TV/VCR key on the remote control if the VCR indicator does not appear on the display panel.
Set the TV to VCR channel.

LANGUAGE SELECTION

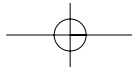
- 1 Press the MENU key then the MENU screen will appear.



- 2 Press the number key 5 to select LANGUAGE mode.



- 3 Press the number key 1, 2 or 3 and then the Menu key to select the desired language.
The LANGUAGE menu disappears and the OSD will display with the selected language.

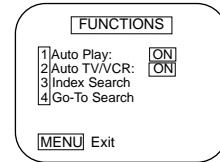


SETTING UP THE VCR

AUTO PLAY

This feature allows the VCR to automatically start playing when you insert a tape with the safety tab removed. Press 1 to switch between ON or OFF.

- Select ON if you want a tape with its safety tab removed to start playing automatically when the tape is inserted.
- Select OFF if you do not want a tape with its safety tab removed to start playing automatically.

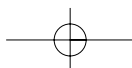
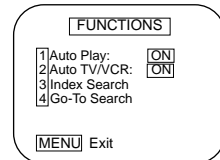


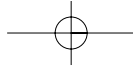
AUTO TV/VCR

This feature controls whether the TV/VCR switch changes automatically to the VCR mode when the VCR is turned on. Press 2 to switch between ON and OFF.

- Select ON if you want the VCR to switch to the VCR mode when the VCR is turned on or a cassette is inserted. This only applies if you connect the ANT. IN and RF OUT jacks of your VCR and TV and watch your VCR on channel 3 or 4 of your TV.
- Select OFF if you want the VCR to remain in the TV mode.

This is useful if you watch your VCR on the TV's video input and you don't want your antenna/cable signal interrupted by the VCR.





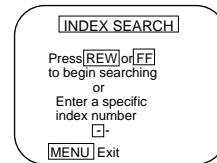
VHS INDEX SEARCH SYSTEM (VISS®)

The VHS INDEX SEARCH SYSTEM (VISS®) enables you to locate the beginning of any recording made on the VCR.

Whenever a recording has begun, an invisible INDEX mark is recorded on the tape.

This mark can be easily located by using the Fast Forward and Rewind keys as described in the following section.

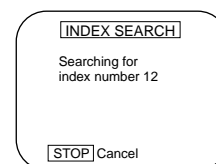
- 1** Select the Functions mode in the MENU mode and press the number key 3 to select the Index Search mode.



- 2** If you want to search through a certain number of index marks, press two number keys to enter the number of marks you want to search. Press the CLEAR key on the remote to correct an entry.



- 3** Press the FF key to search forward or the REW key 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. Press STOP to stop index searching.



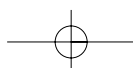
AUTOMATIC RECORDING OF THE INDEX MARK

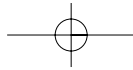
Press the REC/OTR key, an index mark will be recorded.

An index mark will also be recorded at the beginning of timer recordings and OTR.

Some index marks that may be missed by the VCR:

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

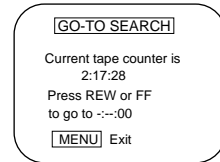




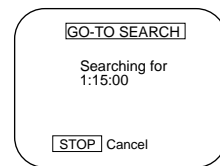
GO -TO SEARCH

You can mark a segment of the video cassette with the tape counter that will help you easily locate the segment later.

- 1 Select the Functions mode in the MENU mode and press the number key 4 to select the Go-To search mode.



- 2 The tape counter is displayed on the screen. Input the tape counter you want to go and press REW or FF key, the VCR will search for the time counter you want.



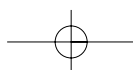
TAPE COUNTER

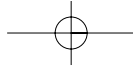
- 1 Use PLAY, REW or FF key to reach the point on the tape that you would like to mark as 0:00:00.

- 2 Press DISPLAY key to display the tape counter on the screen.



- 3 Press CLEAR key to reset the tape counter to 0:00:00.

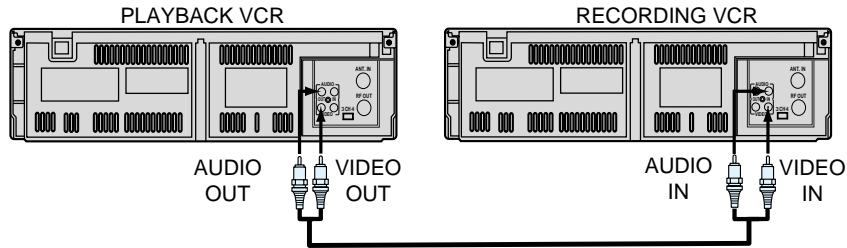




DUPLICATING A VIDEO TAPE

If you connect the VCR to another VCR or camcorder, you can duplicate a previously recorded cassette. Make all connections before turning on the power. Be sure to press the INPUT key on the recording VCR.

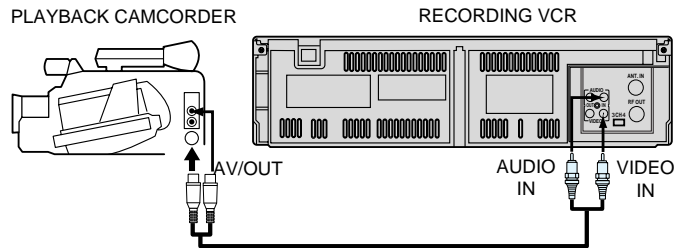
CONNECTION TO ANOTHER VCR



AUDIO/VIDEO cord (Not Supplied)

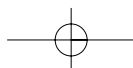
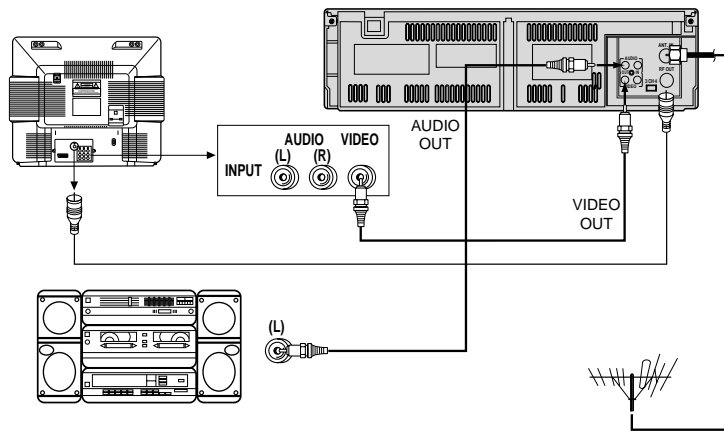
CONNECTION TO A CAMCORDER

For duplicating a previously recorded tape from a camcorder, follow the camcorder manufacturer's instructions. A typical dubbing hookup is shown below. Be sure to press the INPUT key.



AUDIO/VIDEO cord (Not Supplied)

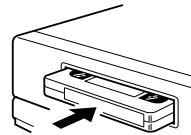
CONNECTION TO A AUDIO SYSTEM



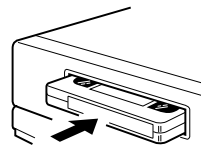
DUPLICATING A VIDEO TAPE (CONTINUED)

OPERATION

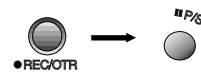
- 1** Load a blank cassette with the safety tab intact into the recording VCR.
Press the INPUT key.



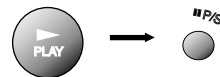
- 2** Load a previously recorded cassette into the playback VCR or camcorder.



- 3** Press the REC/OTR key on the recording VCR, then press the P/S key.



- 4** Press the PLAY key on the playback VCR or camcorder, then press the P/S key.



- 5** Press the PLAY key on the playback VCR and the REC/OTR key on the Recording VCR simultaneously to begin the duplicating process.

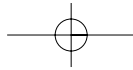


(Recording VCR)

(Playback VCR)

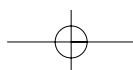
NOTES:

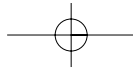
- **WHEN THE RECORDING VCR IS EV477, YOU MUST PRESS THE INPUT KEY ON THE REMOTE CONTROL TO SELECT LINE INPUT BEFORE PRESSING THE RECORDING KEY.**
- It is recommended that the tape speed be set to the SP mode on the recording VCR for best results.
- Unauthorized recording of copyrighted television programs, films, video tapes and other materials may infringe on the rights of copyright owners and be contrary to copyright laws.



SPEAKING THE LANGUAGE: A GLOSSARY OF TERMS

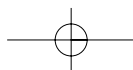
- AFT** Automatic fine tuning, a circuit that automatically adjusts TV reception to optimum condition.
- CATV** Cable television.
- Freeze Frame** (or still picture) A feature of this VCR that allows you to stop the motion of the tape completely so that you can watch a single scene as if it were a still picture.
- VISS** VHS Index Search System. A feature of this VCR that automatically records an index each time recording begins. It helps you locate a particular segment of the tape quickly and easily.
- Index Search** A feature of this VCR that records an invisible index number on the tape each time recording starts, thus making it easy to locate a particular program or segment on a tape containing a number of segments recorded over a period of time.
- SP** Standard play, the recording speed to use when best picture quality is of prime importance (and when total recording time is not). (T120=2 hours)
- EP** Extended play, the slowest recording speed on this videocassette recorder. Designed to store the maximum amount of program material on a single video cassette. (T120=6 hours)
- OSD** On-screen display of information pertinent to VCR recording or playback. Text designed to guide you through a function of the VCR or tell you what's happening appears on the TV screen.
- OTR** One-touch recording, a feature that allows you to record the program you're watching by pressing the REC/OTR key. Each press of the key increases the recording time by 30 minutes up to four hours.
- PAUSE** Pause/Still-frame control. To stop tape motion temporarily during recording (to eliminate a commercial in a TV program, for example) or to freeze a video frame during playback, use this key.
- RF** Radio frequency, the composite audio/video signal supplied to a TV receiver (or other video component) by an antenna or cable system.
- Safety Tab** The plastic tab at the rear of a videocassette that prevents accidental erasure of a recording when it is removed. A missing tab may be replaced by plastic or adhesive tape when you desire to re-use a cassette from which the tab has been removed.

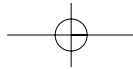




TROUBLESHOOTING GUIDE

Problem	Check & Adjustments
POWER	
The Multi-function display is blank. Although the power is on, the VCR does not operate.	Is the unit plugged into a power outlet? Is there a cassette in the VCR?
VCR OPERATION (RECORD MODE)	
Tape is not recorded on. Timer recording failed.	Is the safety tab on the cassette intact? Did you set the times correctly? Did you insert a blank cassette in the VCR? Is the safety tab on the cassette intact? Is the power on?
VCR OPERATION (PLAYBACK MODE)	
Picture quality during playback is poor. Picture does not appear in the PLAYBACK mode.	Adjust the picture quality by pressing the CH/TRK ▲, ▼ keys. The head may be dirty. Use a head-cleaning tape. Are the TV and VCR both adjusted for the same channel (Channel 3 or 4)? Are the connectors between the TV and the VCR correct? Is the VCR indicator lit on the Multi-function display?
REMOTE CONTROL	
Remote control doesn't work.	Do the batteries need replacing? Make sure that you are using the remote control within the operational range—no more than 30° either side of the remote sensor center and no more than 23 feet from the VCR. Make sure there is no obstruction between the remote control and the VCR.





TROUBLESHOOTING GUIDE (CONTINUED)

Problem	Check & Adjustments
TIMER	
Clock does not work.	Is the unit receiving power? If the unit has been without power for some period of time, it will need to be adjusted again.
GENERAL	
Tape won't go in the cassette compartment.	Is there another tape already in the VCR? Are you loading the tape correctly, i.e., with the label side up?
Operation keys don't work.	The REW/REV key does not work at the very beginning of a tape and the FF/CUE, PLAY or REC/OTR key does not work at the end of a tape.
Emergency indicator '⏻' is appearing	Press POWER to disappear the indicator appeared. If the emergency indicator continues to appear, contact a service technician.
Some buzz is heard when the VCR stops operating.	When the VCR is turned on and a cassette is loaded, some buzz can be heard in the STOP mode because motor is operating for stand-by to another mode. This is normal condition.
Tape doesn't rewind all the way to end.	In order to avoid tape damage or breakage, this model stops near the end of the tape and slowly finishes rewinding the rest of the way in rewind mode. Do not prematurely eject tape.

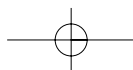
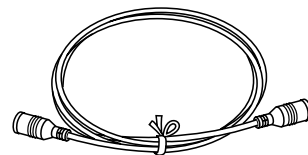
ACCESSORIES

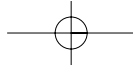
Carefully remove the VCR from the carton. Check to see that the VCR has not been damaged. The following accessories are included.

1. Wireless remote control
NOTE: Requires 2 "AAA" batteries



2. Coaxial cable for connecting the VCR to your TV's VHF terminal.





VIDEO HEAD CLEANING

VIDEO HEAD CLOGGING

The video heads are the means by which the VCR reads pictures from the tape during playback. In the unlikely event that the heads become dirty enough to be clogged, no picture will be played back. This can easily be determined if, during playback of a known good tape, there is good sound, but no picture (picture is extremely snowy). If this is the case, have the video cassette recorder checked by qualified service personnel.



Good Picture



Snowy Picture

VIDEO HEAD CLEANING

If the heads require cleaning, use an Emerson or equivalent high quality chemical non-abrasive (wet) head cleaning tape or have them cleaned professionally. If playing a head cleaning tape in the VCR once does not improve the picture, play it several times before requesting service.

- DO NOT ATTEMPT TO CLEAN THE VIDEO HEADS OR SERVICE THE UNIT BY REMOVING THE TOP COVER.
- Video heads may eventually wear out and should be replaced when they fail to produce clear pictures.
- To help prevent video head clogging, use only good quality VHS tapes. Discard worn out tapes.

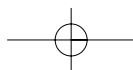


TO FIND THE LOCATION AND
PHONE NUMBER OF YOUR
NEAREST SERVICE CENTER PERMITTED TO PER-
FORM WARRANTY SERVICE...

CALL TOLL FREE: 1-888-508-2627

FOR ADDITIONAL SET-UP OR OPERATING ASSISTANCE.
PLEASE CALL: 1-888-508-2627

FOR CUSTOMER SERVICE, PLEASE WRITE TO:
EMERSON RADIO CORP.
CONSUMER AFFAIRS DEPT.
9 ENTIN ROAD,
PARSIPPANY, NJ 07054-0430



SPECIFICATIONS

SYSTEM

Video signal
Channel coverage

VHF output signal

VIDEO

Input: Video line in

Output: Video line out

Signal to noise ratio
Horizontal resolution

AUDIO

Input: Audio line in

Output: Audio line out

Frequency response
Signal to noise ratio
Audio distortion

TAPE TRANSPORT

Tape width
Tape speed

Maximum recording time
REW. FF. time

GENERAL

Power requirements
Power consumption

DIMENSIONS

Set size (WxHxD)
Carton size (WxHxD)
Weight (Net)
(Gross)

VHS

NTSC color
VHF Channel 2-13
UHF Channel 14-69
CATV Channels A1-A5, A8, A-W, W+1-W+84
Channel 3 or 4 (selectable)

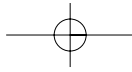
Phono-type connector 1.0V (p-p)
75 ohms unbalanced, sync. negative
Phono-type connector 1.0V (p-p)
75 ohms unbalanced, sync. negative
More than 43dB (SP)
220 lines

Phono-type connector more than 47K ohms
-8.8 dBm, unbalanced
Phono-type connector less than 1.5K ohms
-5.8 dBm (More than 47K ohms load), unbalanced
100Hz-10KHz (SP)
More than 42dB
Less than 4% (SP)

12.65mm (1/2")
SP: 33.35 mm/sec
EP: 11.12 mm/sec
480 min, with T-160 tape (EP)
Approx 3 min (T-120)

AC120V 60Hz only
17W (under 4W in stand-by mode)

14.2 x 3.6 x 9.4 inches
17.52 x 6.11 x 12.21 inches
6.4 lbs
8.48 lbs

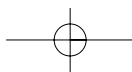


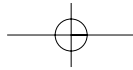
EMERSON RADIO CORP.




For future reference use the space provided for recording the
serial number of your new product .
The serial number label is located on the rear panel.

EMERSON
PART NO.: O/M EV477

PRINTED IN KOREA






Emerson

limited



VIDEO CASSETTE RECORDER

WARRANTY REPAIRS

Emerson Radio Corp. warrants this product to be free from manufacturing defects in original material, including original parts, and workmanship under normal use and conditions for a period of one (1) year from the date of purchase, and if the unit was used in the United States including Puerto Rico, Caribbean Islands and Virgin Islands. Should service be necessary under this warranty, Emerson will provide the following at Emerson ASC(Authorized Service Center)s to perform repairs. To locate the nearest Emerson ASC(Authorized Service Center), please call the toll-free number : 1-888-508-2627.

PARTS	LABOR
1 year	90 days

NOTE1: The warranty is void when the product is:

- (a) Damaged through negligence, misuse, abuse, or accident.
- (b) Used in a commercial application or rentals.
- (c) Modified or repaired by anyone other than Emerson ASC technician.
- (d) Damaged because it is improperly connected to or from the equipment of other manufacturers.

NOTE2: The warranty does not cover

- (a) Damage to equipment not properly connected to this Emerson product.
- (b) Ordinary adjustment to the product which can be performed by customer as outlined in the owner's manual.
- (c) Signal reception problems caused by external antenna, cable or satellite system.
- (d) Products not purchased in the United States.
- (e) Damage to product if used outside of the United States

This warranty is non-transferable and applies only to the original purchaser and does not extend to subsequent owners of the product. Any applicable implied warranties, including the warranty of merchantability, are limited in duration to a period of the expressed warranty as provided herein beginning with the date of original purchase at retail and no warranties, whether expressed or implied, shall apply to the product thereafter. Emerson makes no warranty as to the fitness of the product for any particular purpose or use.

The extent of Emerson Radio Corp.'s liability under this limited warranty is the repair or replacement provided above and, in no event, shall Emerson Radio Corp. Liability exceed the purchase price paid by the purchaser of the product. Under no circumstances shall Emerson Radio Corp. Be liable for any loss, direct, indirect, incidental, special, or consequential damage arising out of or in connection with the use of this Emerson product.

This warranty is valid only with in the United States including Puerto Rico, Caribbean Islands and Virgin Islands. This warranty gives you specific legal rights. However, you may have other rights which may vary or exclusion of consequential damage, therefore these restrictions may not apply to you.

OVER THE COUNTER EXCHANGE

Over the counter exchange for units that are initially defective is described as when the dealer opens the unit and finds that it is inoperative or customer opens a new unit and finds that it is inoperative. This unit may be returned to the manufacturer by dealer for exchange. Under no circumstances, will the customer be permitted to return the initially defective unit directly to the factory. Exchange must be directly with dealer.

