



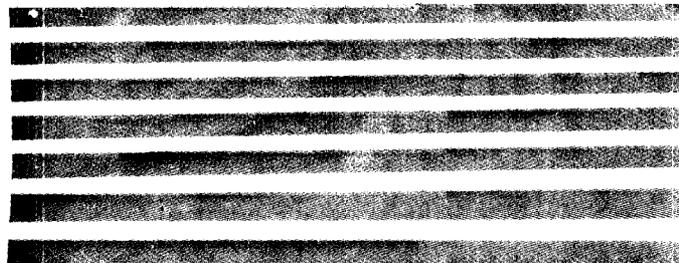
GoldStar

VCR OWNER'S MANUAL



Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.

R-E21M



WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



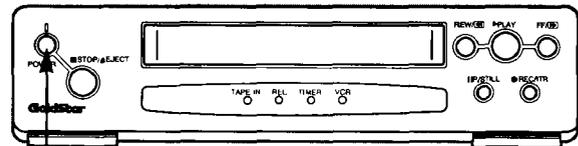
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL.

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 product.

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.

DEW (MOISTURE CONDENSATION)

If you pour cold liquid into a glass, water vapor in the air will condense on the surface of the glass. This is moisture condensation. Moisture condensation on the head drum, one of the most crucial parts of the unit, will cause damage to the tape. When the unit is exposed to a rapid temperature change from cold to warm, some condensation will occur. Under this condition connect the power cord to the AC line, press POWER ON/OFF button on and allow at least two hours for the unit to dry out.



"POWER" ON/OFF button

"Cable reception is only available to customers subscribing to cable service. Cable-compatible models will tune in most nonscrambled cable channels without the need for an external converter box. Scrambled Pay-TV services may require an additional descrambling box. Check with your local cable company for compatibility and any additional requirements."

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modifications is made.

Note: Depending on your antenna system, you will need a different type of Combiner (Mixer) and Separator (Splitter). You can purchase them at electronics store. For further details, ask your nearest service center.

Congratulations on buying the **VHS** Video Cassette Recorder (VCR). For your convenience, please read these simple instructions before operating your VCR.

- NOTES:**
- * This Video Cassette Recorder is compatible with any video cassette bearing the **VHS** mark.
 - * **VHS** is designed to expand your opportunities for in-home TV viewing and not for any usage which might violate the copyright laws.
 - *  The Video Cassette Recorder (VCR) with this marking incorporates **VHS** high-quality picture technology and is compatible with any Video Cassette Recorders bearing the **VHS** mark.

Check to make sure you have the following accessories before disposing of the packing material.

1. 75-ohm Coaxial Cable with Antenna Adaptor (75/300-ohm)
2. Remote Control

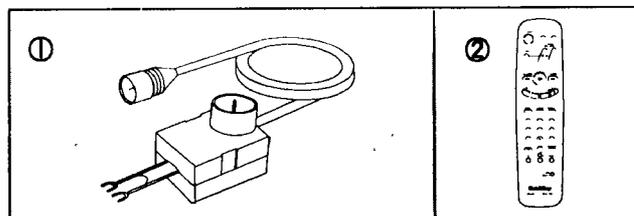


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IMPORTANT SAFETY INSTRUCTIONS

1. **Read Instructions**-All the safety and operating instructions should be read before the product is operated.
2. **Retain Instructions**-The safety and operating instructions should be retained for future reference.
3. **Heed Warnings**-All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instructions**-All operating and use instructions should be followed.
5. **Cleaning**-Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
Exception: A product that is meant for uninterrupted service and that for some specific reason, such as the possibility of the loss of an authorization code for a CATV converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging the product in the cleaning description otherwise required in item 5.
6. **Attachments**-Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. **Water and Moisture**-Do not use this product near water- for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
8. **Accessories**-Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

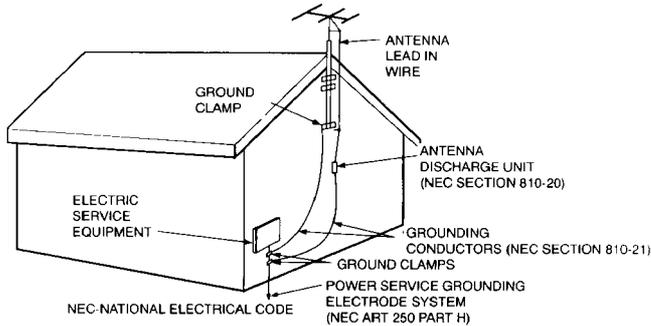


S3125A

10. **Ventilation**-Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
11. **Power Sources**-This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
12. **Grounding or Polarization**-This product may be 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.
Alternate Warnings-This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
13. **Power-Cord Protection**-Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

14. **Protective Attachment Plug**-The product is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
15. **Outdoor Antenna Grounding**-If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code ANSI/NFPA 70, provides information with regard to proper grounding of the mast or supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 131.1.

FIGURE 131.1
EXAMPLE OF ANTENNA GROUNDING AS PER
NATIONAL ELECTRICAL CODE ANSI/NFPA 70



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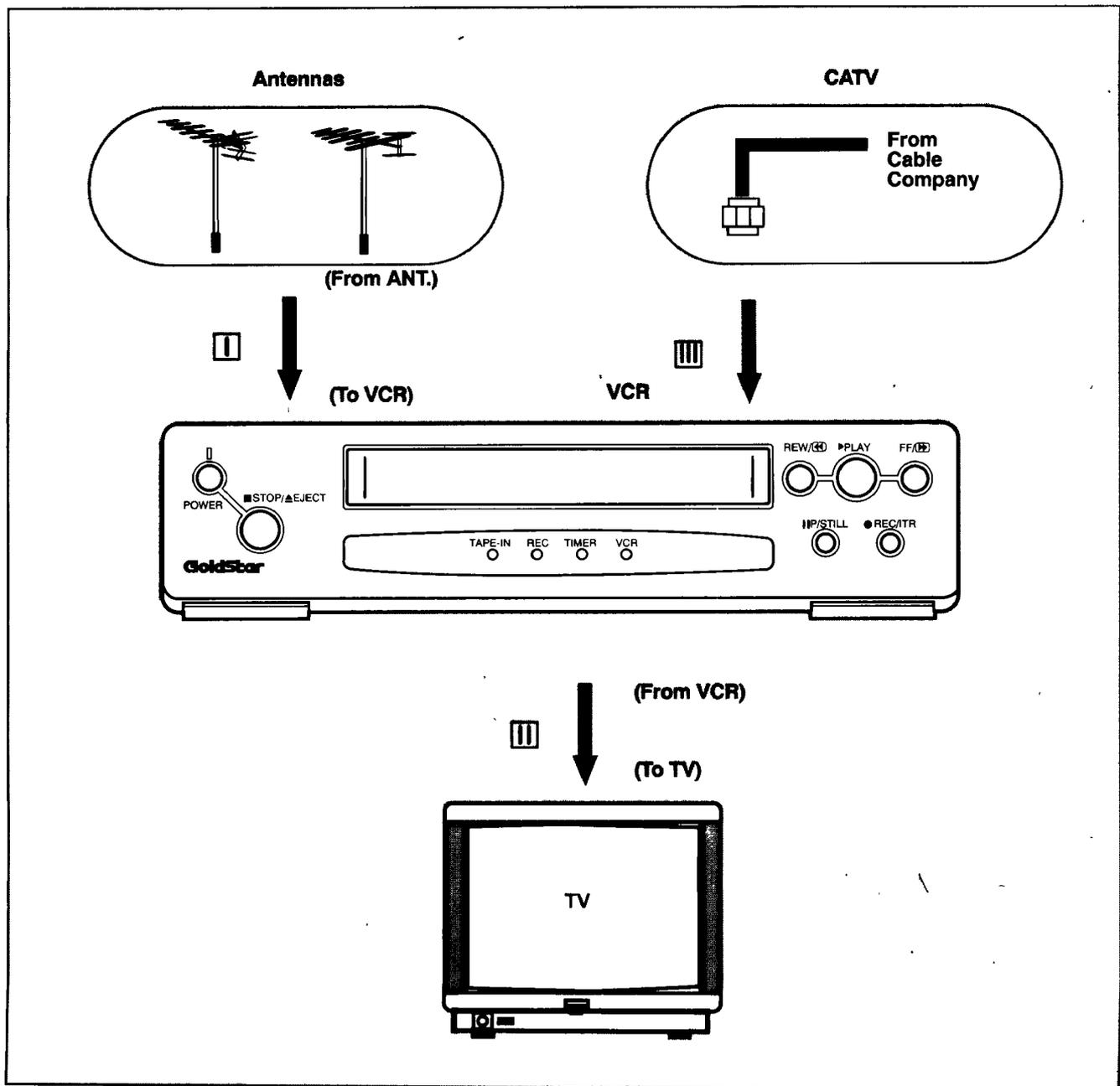
16. **Lightning**-For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
17. **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.
18. **Overloading**-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
19. **Object and Liquid Entry**-Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
20. **Servicing**-Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
21. **Damage Requiring Service**-Unplug this product 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 product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e. If the product has been dropped or the cabinet has been damaged.
 - f. When the product exhibits a distinct change in performance-this indicates a need for service.
22. **Replacement Parts**-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
23. **Safety Check**-Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
24. **Wall or Ceiling Mounting**-The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
25. **Heat**-The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

INSTALLATION

Placing your VCR on the top of or under the TV receiver may result in interference appearing on the TV screen when the VCR is on. If this occurs, move the VCR to a position alongside the TV receiver.

WIRING DIAGRAM

To use your VCR connect it with your TV receiver and antenna system as illustrated below.



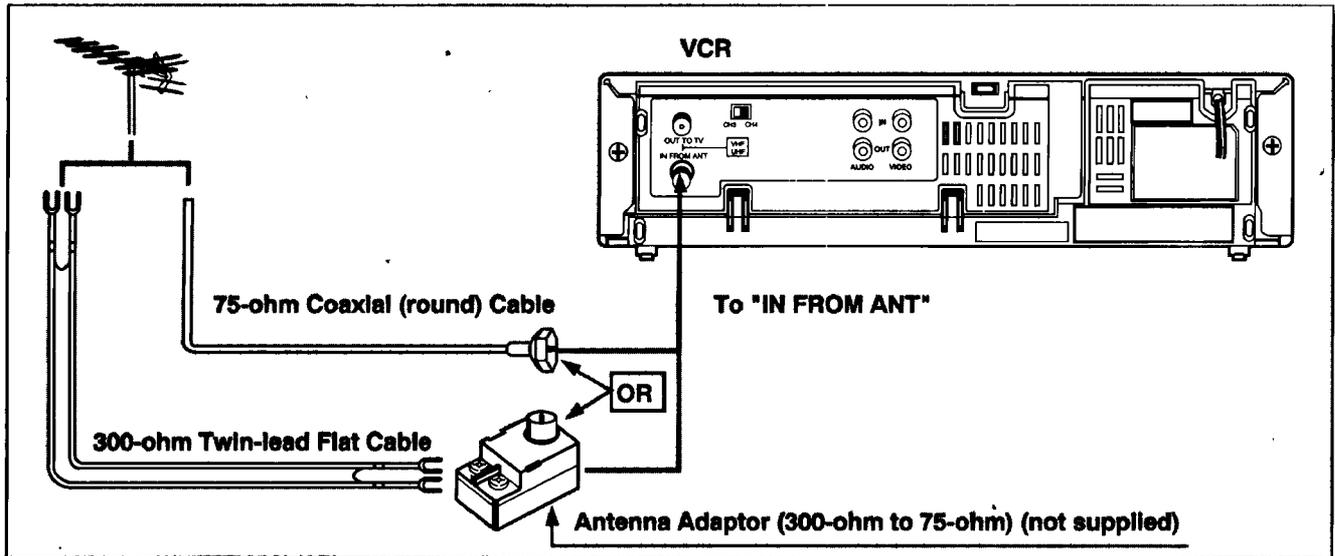
□ : See "ANTENNA/VCR CONNECTIONS" on page 6.

▣ : See "VCR/TV CONNECTIONS" on page 7.

▣ : See "CABLE ANTENNA (CATV) CONNECTIONS" on page 8.

ANTENNA/VCR CONNECTIONS

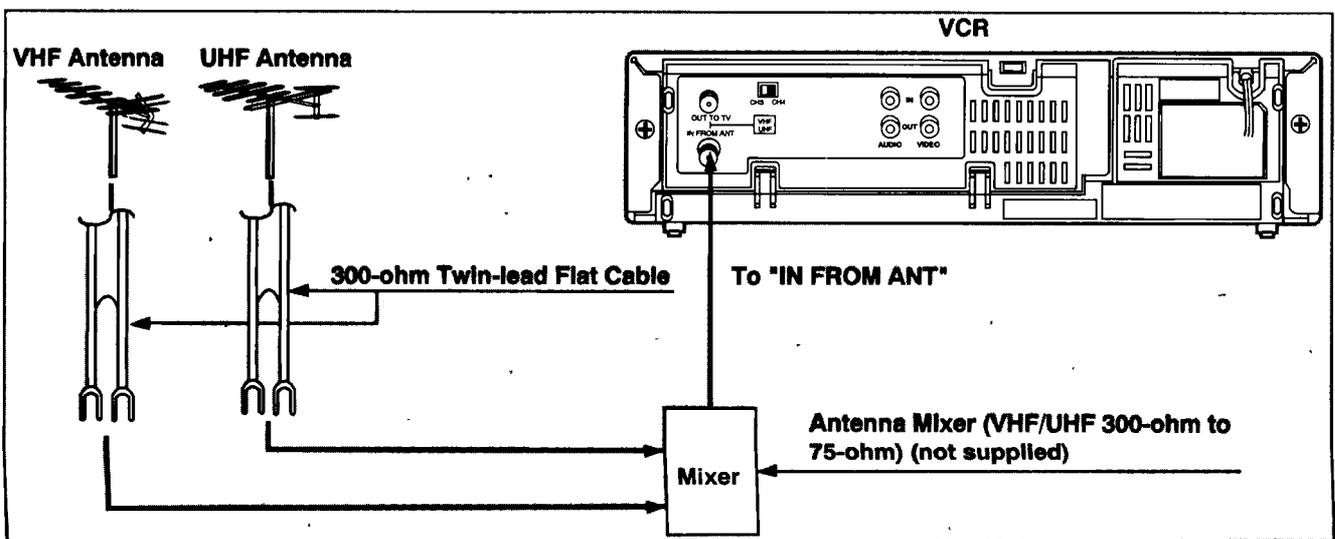
ANTENNAS WITH ONE LEAD (Combined VHF-UHF)



1. Disconnect the antenna leads from the rear of the TV receiver.
2. Identify the type of cable from your antenna. If it is a round cable as illustrated, it is a 75-ohm coaxial antenna cable. This cable will connect directly to the connector marked "IN FROM ANT" on your VCR.

If your antenna lead wire is a flat type antenna cable, connect it to the Antenna Adaptor (300-ohm to 75-ohm) (not supplied) and slip the Adaptor onto the "IN FROM ANT" terminal. The Adaptor does not screw onto the VCR, it just slips over the connector.

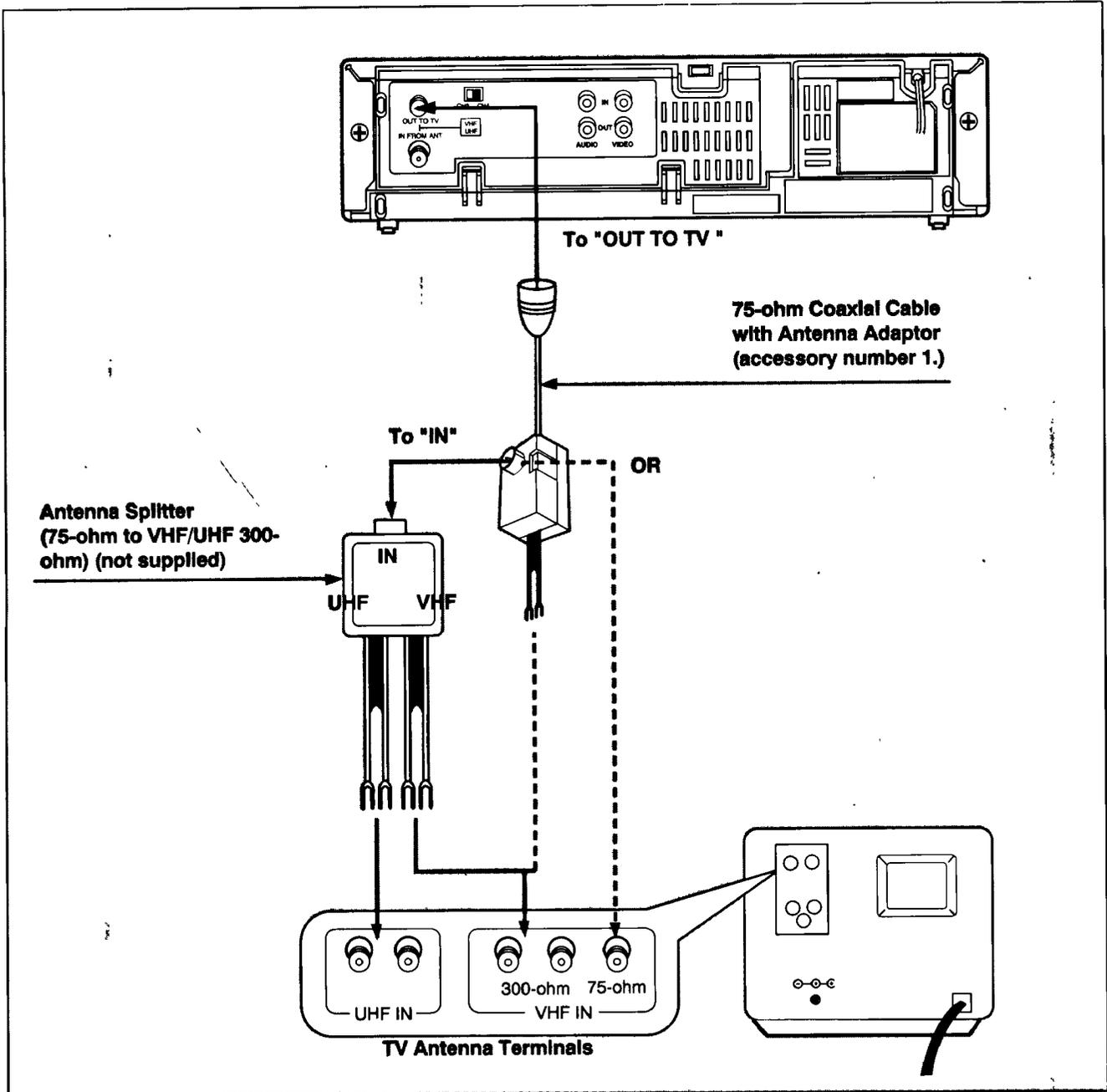
ANTENNA WITH SEPARATE VHF-UHF LEADS



1. Disconnect the UHF/VHF twin leads on your television.
2. Locate Antenna Mixer(VHF/UHF 300-ohm to 75-ohm) (not supplied).
3. Connect the VHF Twin-lead Cable to the "VHF" terminals on the Antenna Mixer.

4. Connect the UHF Twin-lead Cable to the "UHF" terminals on the Antenna Mixer.
5. Slip the Antenna Mixer onto the "IN FROM ANT" terminal.

VCR/TV CONNECTIONS

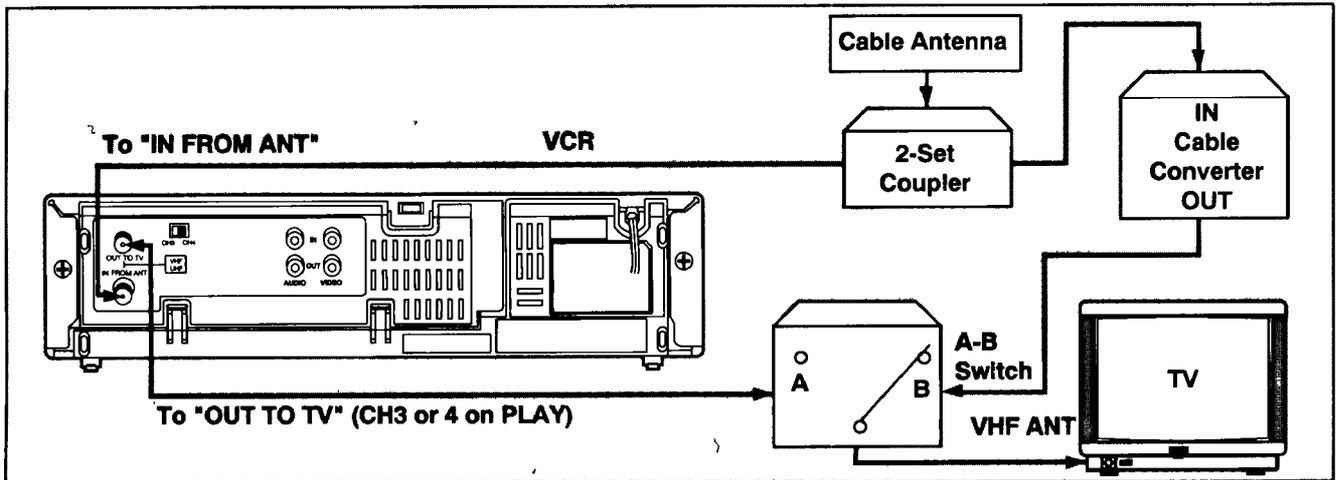


1. Connect the 75-ohm Coaxial Cable with Antenna adaptor (accessory number 1) to "OUT TO TV" on the VCR. Connect the other end to the Antenna Splitter (75-ohm to VHF/UHF 300-ohm) (not supplied) or 75-ohm antenna input on back of TV, as illustrated above.
2. Connect the wires marked "UHF" on the Splitter to the UHF terminals on the rear of your television.
3. Connect the wires marked "VHF" on the Splitter to the VHF terminals on the rear of your television.

CABLE ANTENNA (CATV) CONNECTIONS

"Note to CATV system installer: This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical".

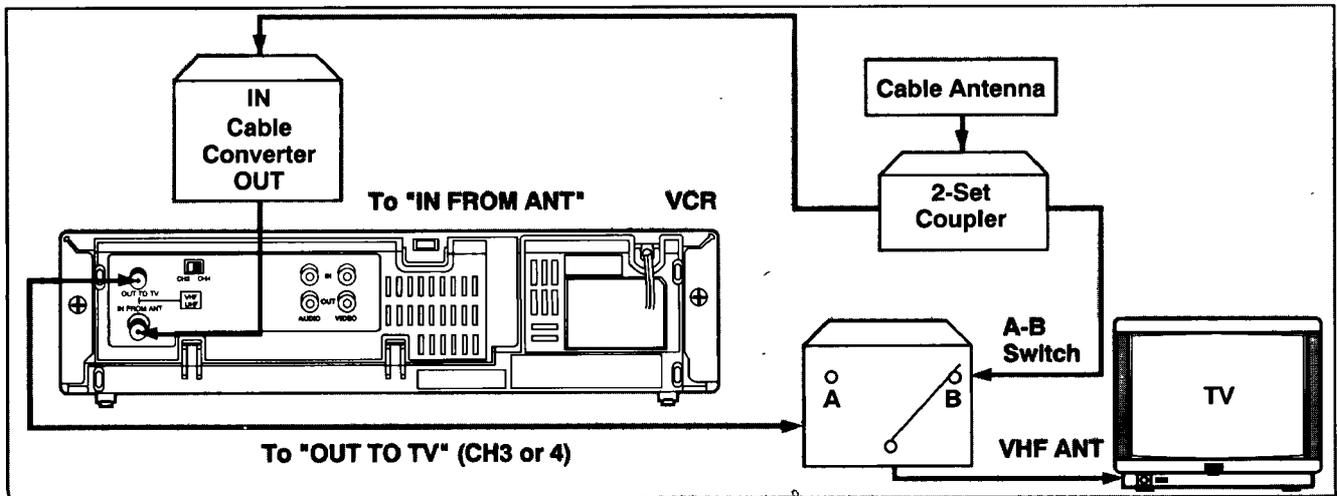
Diagram No. 1



This hook-up permits the recording of cable channels except for scrambled channels. At the same time, you may watch any cable channel selected by the cable converter (with A-B Switch in B position).

To watch the playback picture from the VCR, set the A-B Switch to the A position.

Diagram No. 2

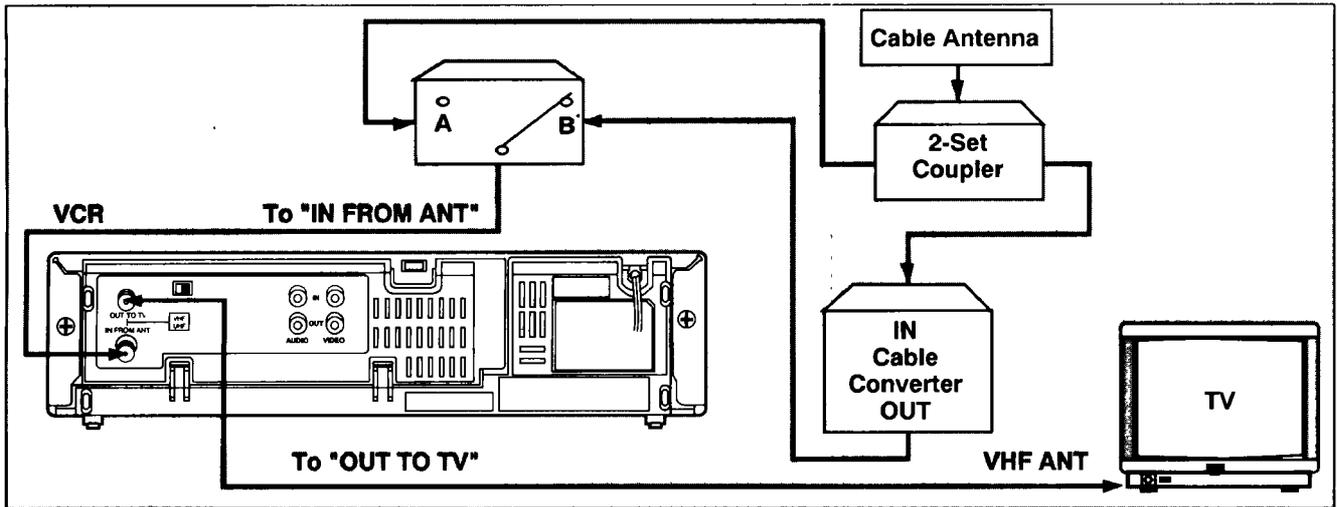


This hook-up permits the recording of any channel (including scrambled premium channels). At the same time, you may view any channel except those that are scrambled. To view scrambled channels, put the A-B Switch in the A position. (In this position, you cannot watch one channel and record another.) To use this hook-up, you should have a cable compatible television receiver.

NOTES:

1. The 2-Set Coupler and the A-B Switch are not supplied and should be purchased locally. The cable converter is normally supplied by the cable company.
2. There are other possible connections than shown here. Their use depends upon the type of cable system you have and on the type of equipment you wish to connect. Please consult with your local Sears Store or Service Department.

Diagram No. 3



Use A position of A-B switch for watching and /or recording channels that do not require a cable converter box.

Use B position of A-B switch for watching and/or recording channels that require a cable converter box.

ON SCREEN DISPLAY

Set TV to channel 3 or 4 to match OUTPUT CHANNEL SET on back of VCR.

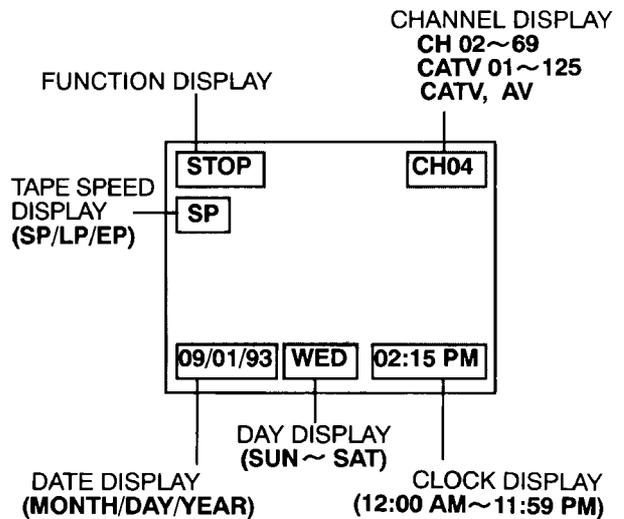
ON SCREEN FUNCTION DISPLAYS

Function of the "DISPLAY" button is, when pressed, to display the current time on the TV screen, along with the operation mode, the tape counter, the counter memory and channel number. The on screen overlays will appear momentarily as a clear indication that a main function or a channel has been changed with the remote control or at the VCR.

Whenever a function button (Stop, FF, etc.) is pressed, or when you change channels, a 4 second OSD appears. The function name and the channel number (if tuned) are displayed as a overlay for 2 seconds.

NOTE: The on-screen display will not be recorded.

Pressing "DISPLAY" button changes the TV screen in the following sequence.



Press once



Press twice



Press three times

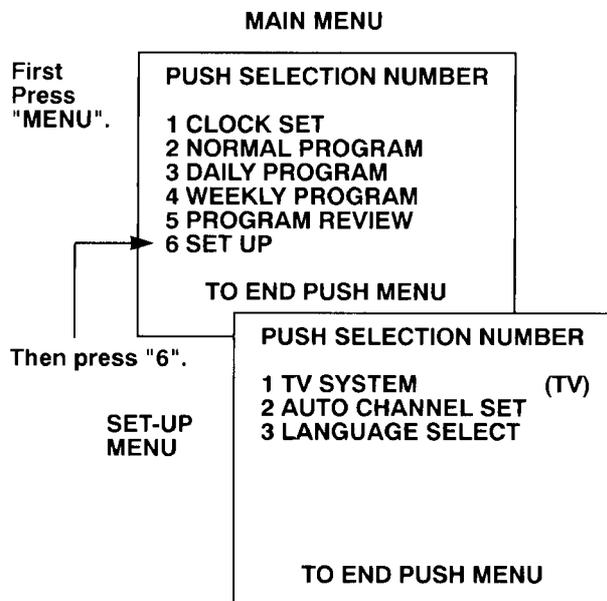
ON SCREEN MENU FEATURES

You only need to press the MENU button on the remote control. Each number button is indicated next to the feature displayed on the OSD menu. When you select a feature turn to the section in this manual and read the full description accompanying the instruction there.

SET UP MENU DISPLAY

Your VCR allows remote control adjustment of several additional feature options. You can use the SET UP menus to select the functions that best fit your personal needs.

- To display this menu, press MENU then press "6" on the remote control.



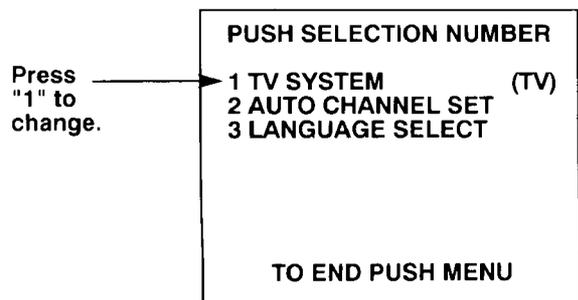
TV SYSTEM DISPLAY

The TV SYSTEM feature is used for manually setting the video recorder tuner to match your antenna system.

Broadcast band (TV): Select TV if your antenna system provides only UHF and VHF channels.

Regular cable band (CATV): Select CATV if your antenna system is a cable TV line with or without a cable converter/decoder box. Check with your cable supplier to determine your type of system.

- To set the TV SYSTEM to TV or CATV, press "1" on the remote control in the SET UP menu display.



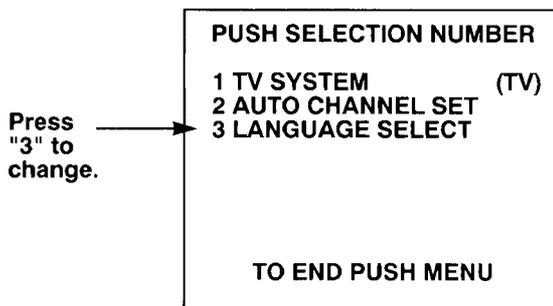
AUTO CHANNEL SET DISPLAY

See the "CHANNEL PRESETTING". (Described on page 11.)

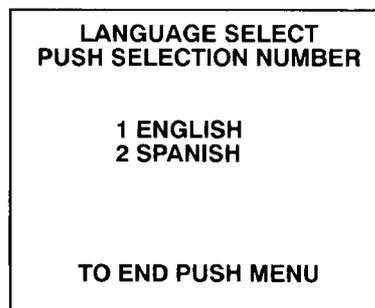
LANGUAGE SELECT DISPLAY

The on screen programming of this VCR can be displayed in either English or Spanish.

- Press "3" when the SET UP menu is displayed.

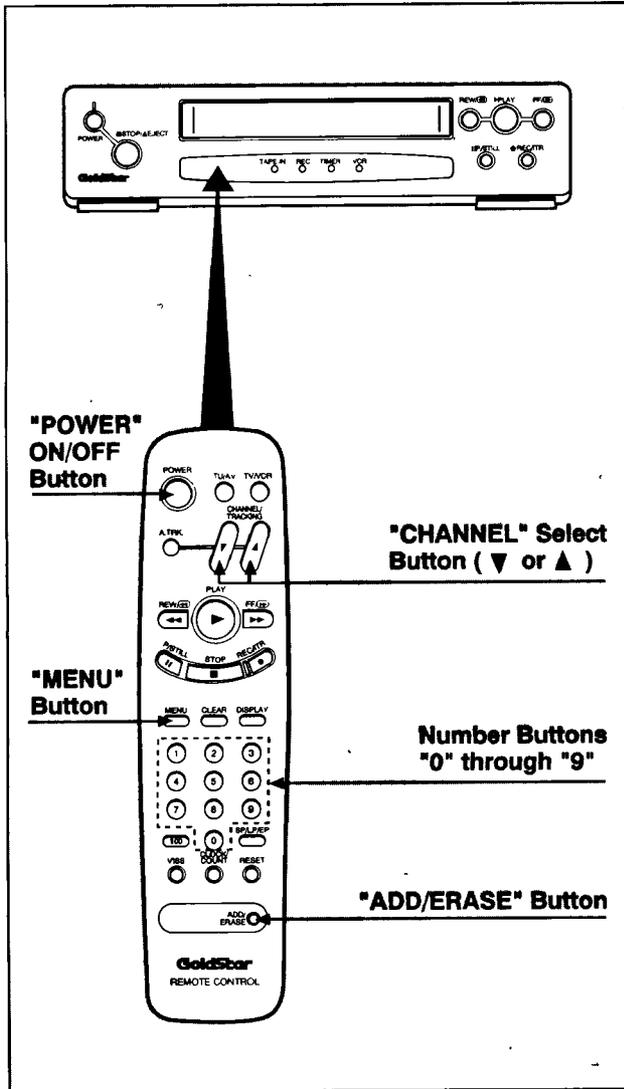


- Press "1" for ENGLISH or "2" for SPANISH.



CHANNEL PRESETTING (By using the Remote Control)

This VCR is equipped with a frequency synthesized tuner capable of receiving up to 181 channels (VHF channels 2~13, UHF channels 14~69 and CATV channels 1~125), but channel presetting is required as described below after "ANTENNA/VCR CONNECTIONS" and "VCR/TV CONNECTIONS" are made as described on pages 6 and 7.



AUTO CHANNEL SETTING

The automatic programming feature makes it easy and convenient to program the TV station into the tuner's memory.

Automatic programming is usually a one-time procedure, but you will need to repeat it if you move to a location that has different channels, or if the power is interrupted.

- Turn on the power of both VCR and TV.
- Be sure that the TV is set to the video channel (channel 3 or 4).
- Aim the remote control at the receiver on the front panel of the VCR.

ON THE REMOTE CONTROL

1. Press the MENU button until the "MENU", as illustrated, appears on the TV screen.

PUSH SELECTION NUMBER

1 CLOCK SET
2 NORMAL PROGRAM
3 DAILY PROGRAM
4 WEEKLY PROGRAM
5 PROGRAM REVIEW
6 SET UP

TO END PUSH MENU

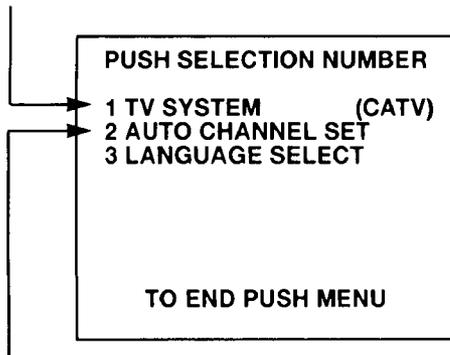
2. Press "6" button to select the SET UP menu. The SET UP menu will appear.

PUSH SELECTION NUMBER

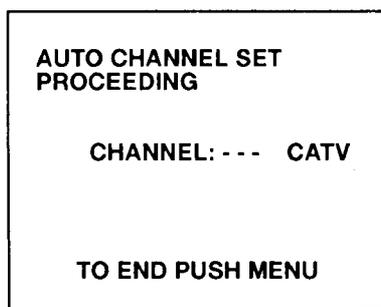
1 TV SYSTEM (TV)
2 AUTO CHANNEL SET
3 LANGUAGE SELECT

TO END PUSH MENU

- Press "1" button to select "TV" or "CATV". If your VCR is connected to a home antenna system, select "TV", select "CATV" when your VCR is connected to a cable antenna. Switching is performed between "TV" and "CATV" on the TV screen every time "1" button is pressed.



- Press "2" button for channel setting. The tuner will automatically cycle through all available channels in the area and place them in the tuner's memory. After auto-presetting is completed, the lowest active channel number stays on.



- Press the MENU button to return to the TV screen.

NOTE: To check the presetting, first set the TV to the VCR channel and press "CHANNEL" select button (UP or DOWN) to cycle to VCR tuner through all the channels you have stored in memory.

TO ADD OR ERASE CHANNELS FROM CHANNEL MEMORY

This feature allows you to manually add or remove channels from the channel scan. To do so, please refer to the procedure below:

TO ERASE A CHANNEL(S)

- Turn the TV and tune to channel 3 or 4.
- Press the POWER ON/OFF button to turn the VCR on. The "VCR" indicator will light on the display panel of the VCR.
- Press "CHANNEL" select button (▲ or ▼) for an unwanted channel.
- Press the ADD/ERASE button for eliminating the channel, and the channel display flashes on the TV screen.
- Repeat steps 3 and 4 until all unwanted channels have been eliminated.

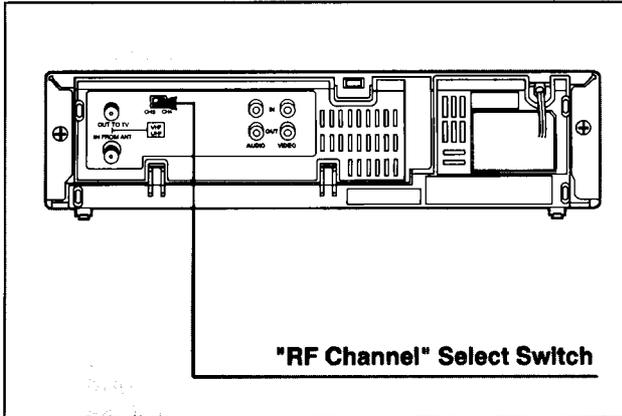
NOTE: This VCR is equipped with AFT (Automatic Fine Tuning). But it does not have an ON/OFF switch.

TO ADD A CHANNEL(S)

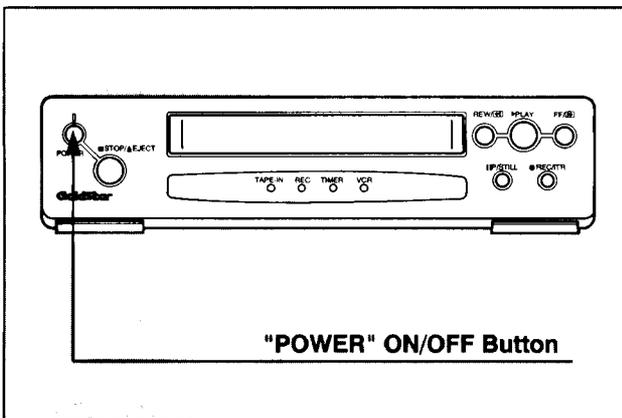
- Press channel select buttons to select the desired channel (by using the "0" through "9" and "100" button).
- Press "ADD/ERASE" button to store the channel, and the channel display flashing will stop.
- Repeat steps 6 and 7 for other desired channels in your area.
Now both standard TV channels and CATV channels has been preset.

SET YOUR TELEVISION TO THE VCR CHANNEL

1. Set your TV to Channel 3 unless Channel 3 is one of the TV stations in your area. If Channel 3 is used in your area, set your TV to Channel 4. The RF Channel Select Switch is located on the Rear Control Panel. Slide the switch of CH3 or CH4 to match the channel selector on your TV. This is the VCR channel on your television set. Your television receiver must be tuned to this channel any time a video cassette is played back on the VCR.



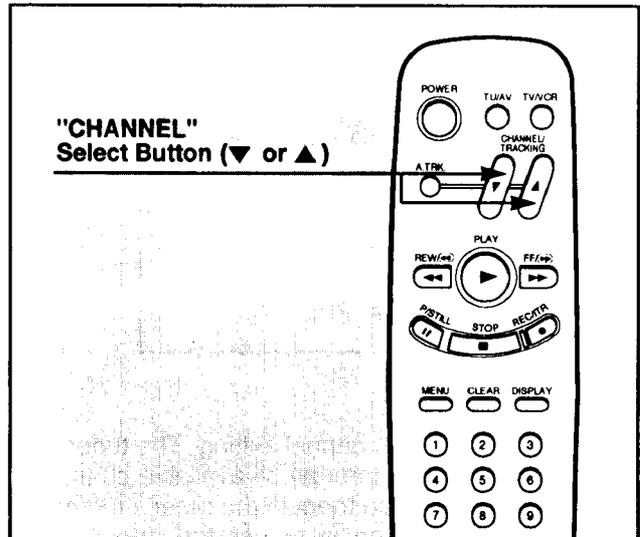
2. Plug the VCR power cord into a 120V electrical outlet and press "POWER" ON/OFF button on, and the "POWER" and "VCR" lights will come on. (See "Clock Setting" Instructions on page 21.)
NOTE: When the power is turned on, the "VCR/TV" selector is switched to the VCR mode automatically.



3. Select an active TV channel by pressing the Channel Select button (▼ or ▲) on the remote control aiming at the front panel of the VCR. The picture from that channel should now be displayed on your television.

NOTES:

- If the range is short, try new batteries.
- An object between the VCR and remote control may block the invisible light beam and operation will not be possible.



4. Fine tune the television for best picture.

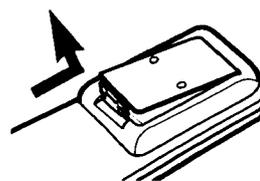
NOTE: If both Channel 3 and Channel 4 are in use in your area, select the one which does not interfere with the playback picture.

SPECIAL NOTE:

Certain television receivers with "ELECTRONIC TUNERS" may require special procedures to tune Channel 3 or 4. These receivers may not tune to the VCR channel (3 or 4) because there isn't an active TV station on these channels.

In these cases, press VCR "POWER" ON/OFF button on. Make sure that the "VCR" indicator in the display panel is on. If the indicator is off, press "VCR/TV" selector on the remote control to turn the "VCR" indicator on. Tune VCR tuner to an active channel. The television receiver will now tune into the VCR channel (Channel 3 or 4). For more detailed instructions, consult your TV owners manual.

HOW TO INSTALL THE BATTERIES IN THE REMOTE CONTROL



NOTES:

1. Be sure to install two "AAA" size batteries (not supplied) before use.
2. Be aware of the polarity

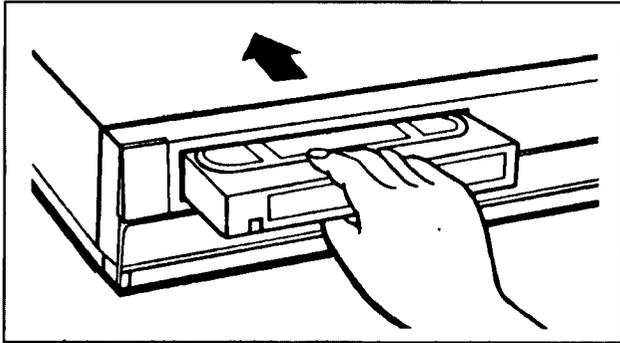
(Remove the protect compartment cover completely.)

MAKING A SAMPLE RECORDING

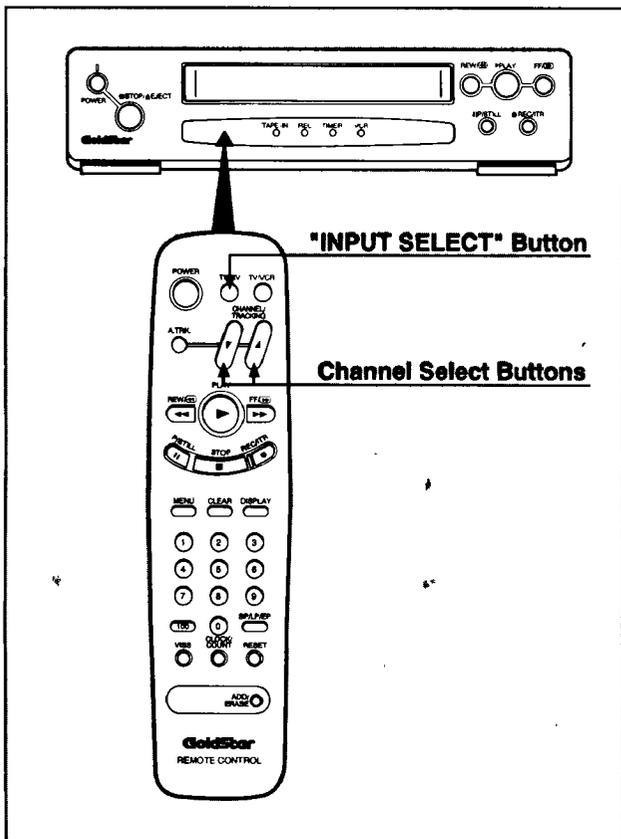
1. Insert the Cassette so the transparent window is up and the arrow toward the Cassette Loading Door until the VCR mechanism starts to pull the cassette into the opening.

NOTES:

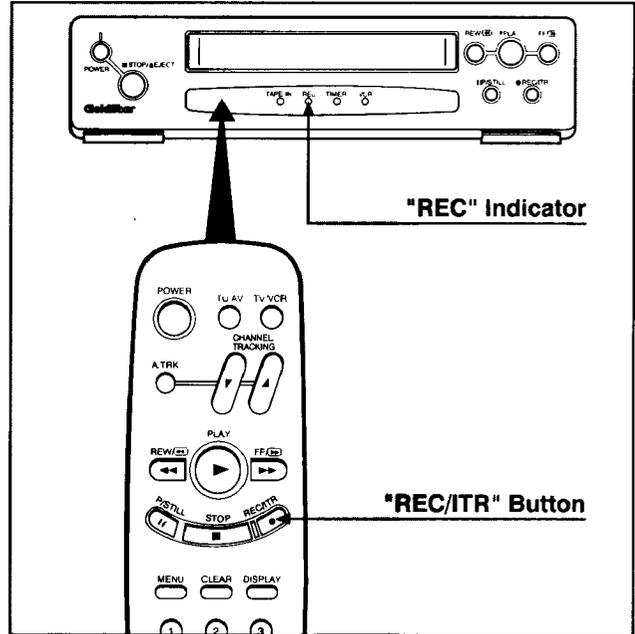
1. When the cassette is loaded, the power is turned on automatically.
2. Be sure to check that the erase prevention tab is not missing. If it is removed, the VCR goes into playback mode automatically.



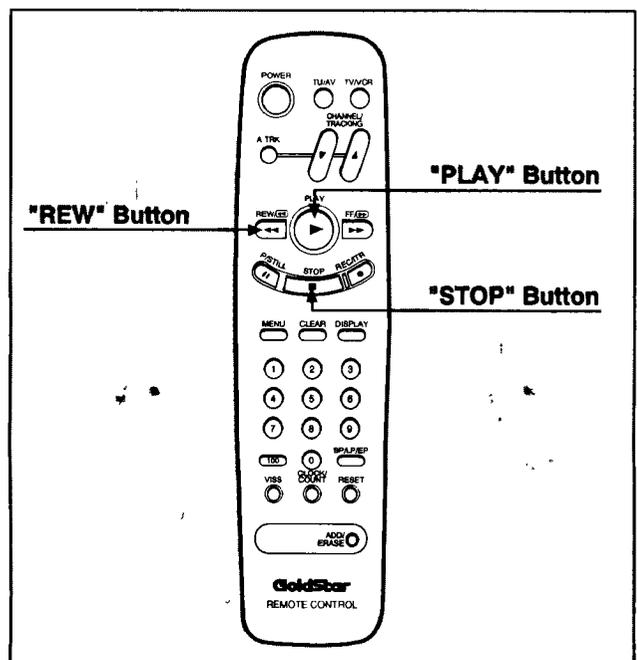
2. Turn on TV and tune to the VCR Channel (Channel 3 or 4).
3. Press "INPUT SELECT" button on the remote control so as to select Channel Number Display.
4. Press Channel Select button (▼ or ▲) on the remote control to select the channel to be recorded.



5. Now, press "REC/ITR" button once, on the VCR or on the remote control. The "REC" indicator will light on the VCR display panel and you are now recording the program you see on your TV screen.



6. Record for a few minutes. Press "STOP" button on the VCR or on the remote control and then "REW" button. The tape will be rewound to the beginning.
7. Press "PLAY" button on the VCR or remote control. The program you just recorded will be shown.
8. After playing, press "STOP" button on the VCR or on the remote control.



IDENTIFICATION AND OPERATION OF CONTROLS

Now that you have experienced the simple operation of your VCR, let's get familiar with the complete operation of your VCR and all its capabilities.

REAR

"VHF/UHF OUTPUT"

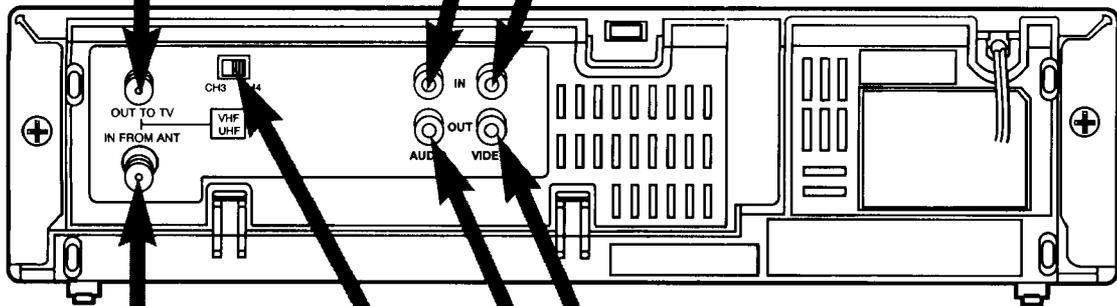
75-ohm round Cable Connector connects to this output. Opposite end of cable connects to the television through the Antenna Splitter (not supplied).

AUDIO IN

When this "AUDIO IN" jack, receive audio signals from a Video Camera or another VCR, the "INPUT SELECT" button must be in the "A/V" position. If you select A/V, "AV" indicator appears on the screen.

"VIDEO IN"

For connection from another VCR, video camera or other video equipment.



"VHF/UHF INPUT"

Lead wire from antenna connects to this 75-ohm input

"VIDEO OUT"

Permits video connection of your unit to a monitor or another VCR.

"AUDIO OUT"

The audio that is supplied to the television is also available at this jack. It can be connected to an external amplifier.

RF CHANNEL SELECT SWITCH

Slide the switch to "CH3" or "CH4" to match the channel selector on your TV. This is the VCR channel on your television set.

FRONT

"POWER" ON/OFF BUTTON

Press to turn the power on. The indicator will illuminate. To turn the unit off, press the button again. If a timer reservation has been made when the power is switched OFF, the VCR will go into a timer recording standby status. (The "TIMER" indicators will go ON.)

CASSETTE LOADING DOOR

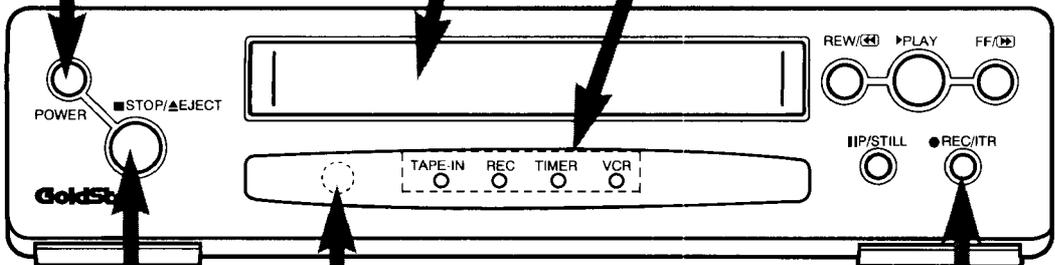
When a cassette is inserted, loading will be completed automatically and Tape-In indicator will light.

NOTES:

1. Power is turned on automatically when the cassette is loaded.
2. When a cassette with erase prevention tab removed is inserted, playback will start automatically. ("AUTO PLAYBACK FUNCTION")

CAUTION: Do not put your finger or other objects behind the Cassette Door because of the risk of injury. Particulary, keep small children away from the unit.

INDICATORS OF VCR DISPLAY



REMOTE CONTROL RECEIVER

This sensor window receives the signals from the wireless remote control.

STOP/EJECT BUTTON

If this button is pressed, while the set is operating the running of tape stops and all operating modes are cancelled (except for timer recording). Press this button to eject a cassette in the stop mode.

NOTE: Power may be on or off when removing the cassette.

"REC/ITR" BUTTON

Press the REC/ITR button once to start recording. The "REC" indicator will light on the VCR display. This button is also the ITR (Instant Timer Record) button.

**"REW" REWIND/
"VISUAL SEARCH" REVERSE SEARCH**

Press "REW" button during Stop or Fast forward mode and fast rewinding starts.

"REW" indication appears on the screen.

Press the button during playback of tape. The tape is played back in the rewind direction approximately 15 times faster than the normal speed (EP recorded tape), 9 times faster than the normal speed (LP recorded tape) or 5 times faster than the normal speed (SP recorded tape) to confirm the recorded contents.

Press "PLAY" button to return to normal playback mode or press "STOP" button to stop tape movement. Sound is muted during "VISUAL SEARCH" mode.

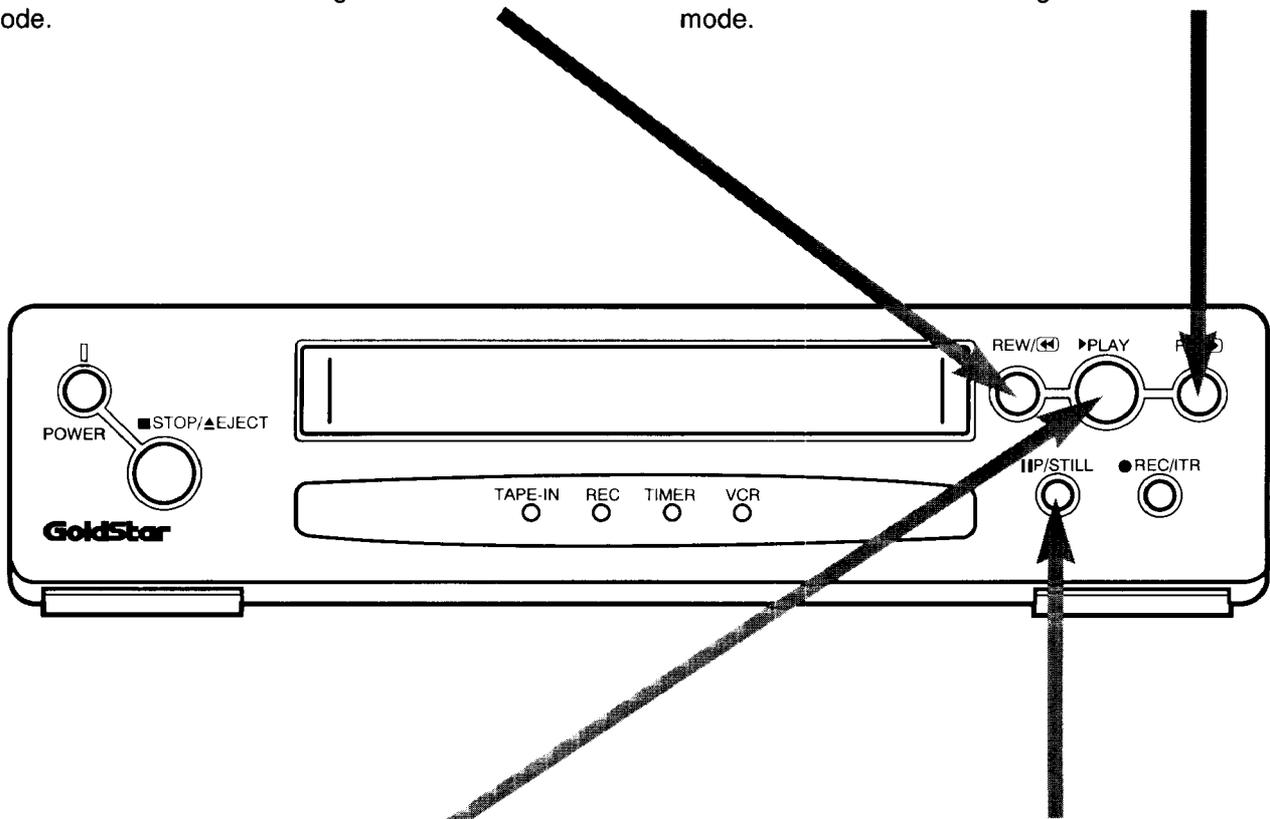
**"FF" FAST FORWARD/
"VISUAL SEARCH" FORWARD SEARCH**

Press "FF" button during Stop or Rewind mode, and fast forwarding starts.

"FF" indication appears on the screen.

Press the button during playback of tape. The tape is played back in the forward direction approximately 15 times faster than the normal speed (EP recorded tape), 9 times faster than the normal speed (LP recorded tape) or 5 times faster than the normal speed (SP recorded tape) to confirm the recorded content.

Press "PLAY" button to return to normal playback mode or press "STOP" button to stop tape movement. Sound is muted during "VISUAL SEARCH" mode.



"PLAY" BUTTON

Press the "PLAY" button. The "PLAY" indication appears on the screen and playback starts. Be sure the TV set's channel selector is tuned to Channel 3 or 4 depending on the VCR RF Channel Select Switch setting of VCR. Press "STOP" button to stop tape movement.

"PAUSE/STILL" BUTTON

Used in the record or play mode to stop the tape movement. Press it to cut out station breaks or unwanted program material. The "RECP" appears on the screen during the RECORD/PAUSE mode. The REC indicator will flash on the VCR display. Press this button again to resume recording. Pressing this button during the PLAY mode will cause the tape to stop and "FREEZE". The picture will not appear.

NOTE: After 5 minutes of continuous "PAUSE" (record mode) or "STILL" in the play mode, the VCR will go into the STOP mode.

REMOTE CONTROL

The remote control is used for most of the operations and features of the VCR. Before proceeding, install batteries into the remote and get familiar with the buttons on the remote.

SIGNAL TRANSMISSION WINDOW

Transmits an invisible light beam from the Remote Control to the VCR.

"POWER" ON/OFF BUTTON

Press to turn VCR on. Press again to turn VCR off.

TRACKING/CHANNEL SELECT BUTTONS

- **"AUTO" TRACKING:** When playback is started, the auto tracking function operates and adjusts tracking automatically so the picture is optimized. "AUTO TRK" flashes on the TV screen for several seconds.
- **MANUAL "TRACKING"/ "CHANNEL" SELECT ("▼" and "▲") BUTTONS**
"TRACKING": If noise appears on the screen during playback, press "▼" or "▲" button until the noise on the screen is reduced or eliminated.
"CHANNEL": You can scan up or down through all the memorized channels using the Channel Select button (▼ or ▲).

NOTES:

- Tracking is automatically reset to normal when a tape is inserted or the power cord is unplugged.
- Auto tracking may not operate correctly when the tape is scratched or the recorded condition is poor.
In this case, press the TRACKING control button (▼ or ▲) to adjust tracking.
- If the AUTO TRACKING button is pressed after operating the TRACKING control button (▼ or ▲), auto tracking operates again.

NORMAL OPERATION BUTTONS

These buttons (except for "STOP" button) function same as the buttons on the front of your VCR.

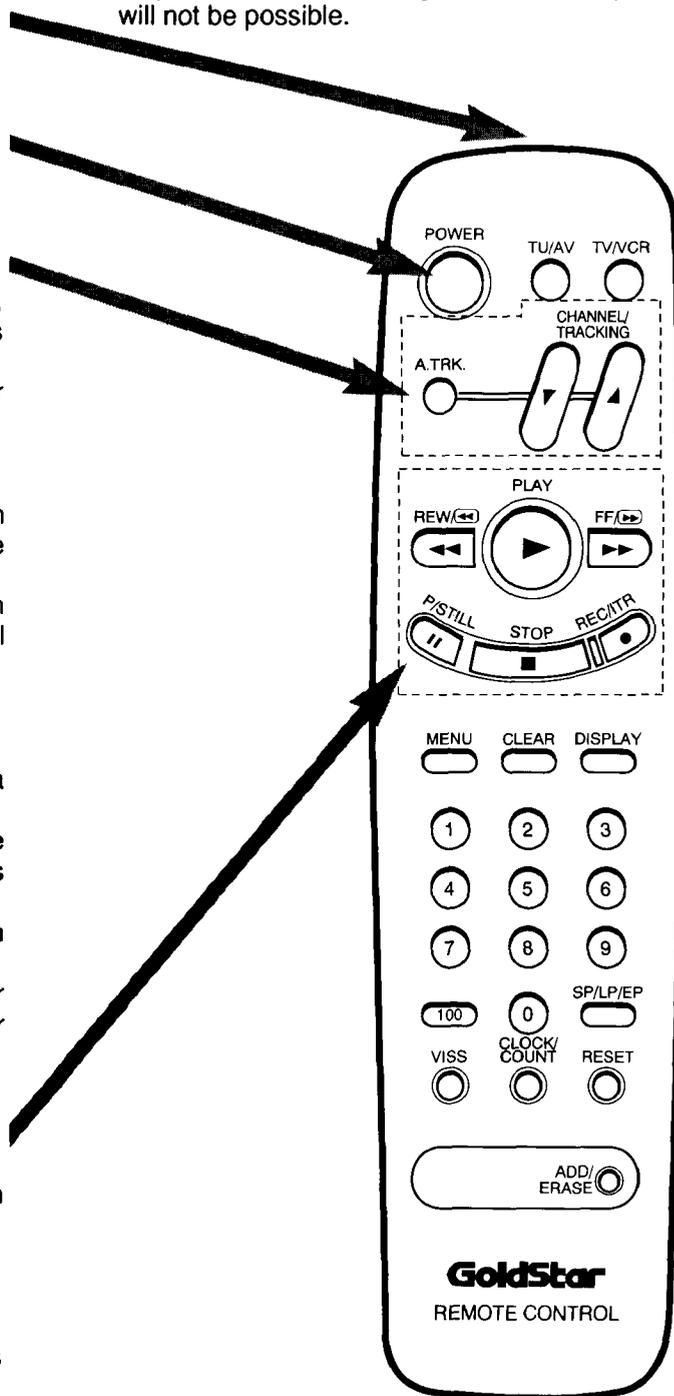
● "STOP" BUTTON

If this button is pressed while the set is operating, the running of tape stops and all operating modes are cancelled.

Aim the remote control at the receiver on the front panel of the VCR.

NOTES:

1. If the range is short, try new batteries.
2. An object between the VCR and remote control may block the invisible light beam and operation will not be possible.



OSD (On Screen Display) FUNCTION BUTTONS

MENU BUTTON

Used to enter the On-Screen Programming mode.

CLEAR BUTTON

Used to go backward and correct the programmed information.

DISPLAY BUTTON

Press to display the VCR operation mode, tape counter, channel number, date and clock. Press this button once again to remove the on-screen display. Press this button twice to remove the clock display (the display switches by pressing the "CLOCK/COUNT" button when tape is inserted).

NUMBER BUTTONS "0" THROUGH "9"

Select any channel by pressing two buttons. (Press "0" and then "8" for channel 8.) The number buttons are also used for setting the On Screen Programming.

"100" BUTTON

Use to select TV channels with number 100 or above. Press "100", "2" and "3" in this order to select channel 123.

Press "100", "0" and "5" for channel 105.

VISS BUTTON

Use to enter the VISS function mode.

CLOCK/COUNT BUTTON

To switch the display between the counter memory and clock modes.

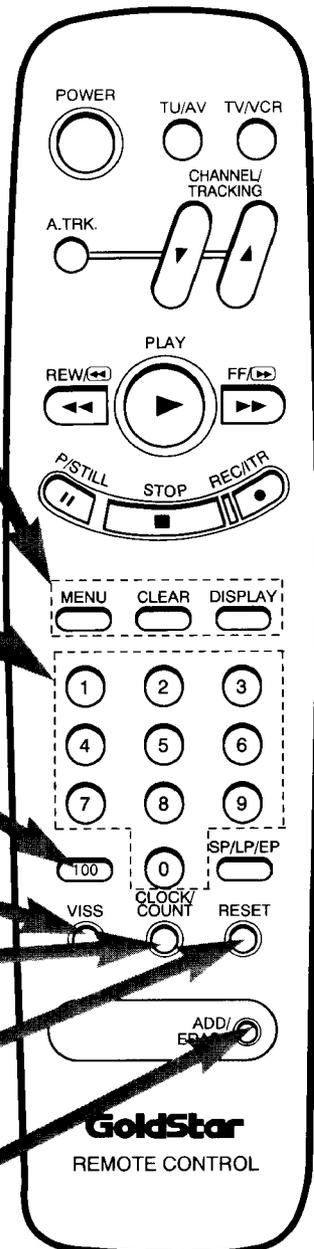
NOTE: To "CLOCK/COUNT" button does not work when the tape is not inserted.

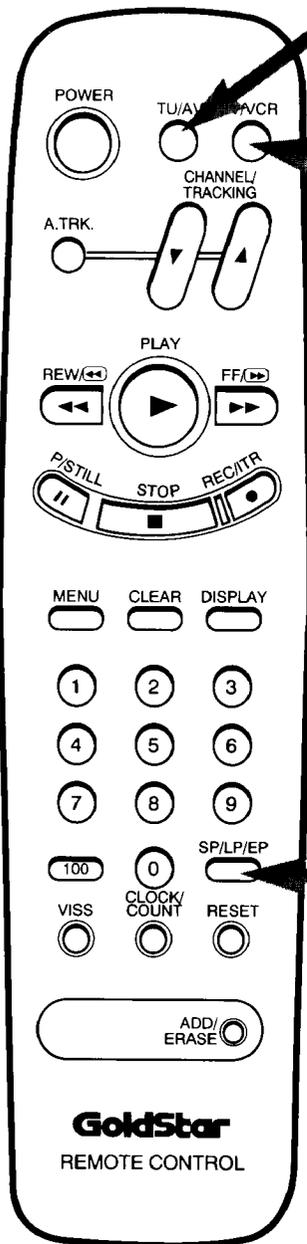
COUNTER "RESET" BUTTON

The readout of the tape counter will return to "0:00:00" when this button is pressed.

ADD/ERASE BUTTON

Used to add or erase a selected channel memory.





INPUT SELECT BUTTON (TU/AV)

TUNER: (TU)

To record signals coming from the built-in tuner (Video and Audio).

AUDIO/VIDEO: (AV)

To record signals coming from the VIDEO IN and AUDIO IN terminals.

NOTE: This VCR can be used as an Audio deck when Input Select button is in AV position.

"VCR/TV" SELECTOR

Selects the program for viewing on your TV. The "VCR" position (the "VCR" indicator is on) supplies a signal to your TV on Channel 3 or 4 depending on the RF Channel Select Switch setting. With the PLAY button pressed, the recorded tape program is supplied to the TV. With the RECORD mode on the VCR, the TV will display the program as it is being recorded. The TV position (the "VCR" indicator is off) is used for regular TV operation when the VCR is not being used.

This position also allows you to record one channel while viewing another.

NOTES:

- When the power is turned on, the VCR/TV selector is switched to the VCR mode automatically.
- The VCR/TV selector is switched to the VCR mode when "PLAY" button is pressed.

"TAPE SPEED" BUTTON

Changes tape speed in the recording mode. Record and playback time is as follows:

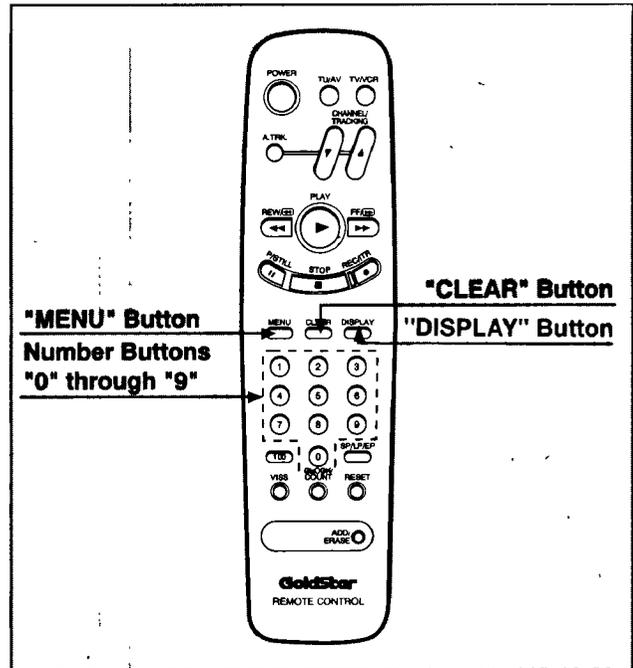
"TAPE SPEED" Indicator	Video Cassette		
	T-60	T-120	T-160
SP	60 min.	120 min.	160 min.
LP	120 min.	240 min.	320 min.
EP	180 min.	360 min.	480 min.

In the playback mode, tape speed is automatically selected to match the recording speed.

CLOCK SETTING (By using the Remote Control)

Things to know before starting

- The clock uses the 12-hour system. (Be sure to set AM and PM correctly.)
- When the VCR and TV are turned on for the first time, the clock will read "-- : -- : --". If the clock display disappears, press the DISPLAY button to recall it.
- The buttons for setting the clock are on the remote control.
- While you are setting the clock, the "Menu display" on the TV screen will prompt you through the procedures.
- If you have entered a wrong number by mistake, press "CLEAR" button several times to erase the wrong number. Then re-enter a correct number.
- If you input an illogical time or date (13th month for example), "?" will appear on the TV screen. (It will not enter the memory.)



- 1 Turn on the power of both VCR and TV.
- 2 Be sure that the TV is set to the VCR Output Channel (channel 3 or 4).
- 3 Aim the remote control at the sensor on the front panel of the VCR.
- 4 Press "MENU" button on the remote control. The "MENU", as illustrated, will appear on the TV screen.

NOTE: If direct VIDEO/AUDIO connection is made between the VCR and the TV, set the TV's source selector to VIDEO.

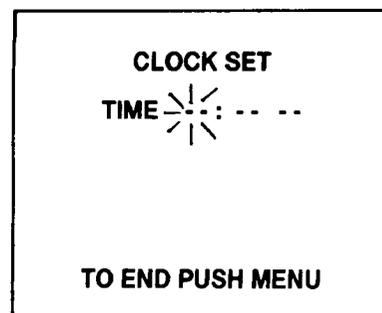
PUSH SELECTION NUMBER

- 1 CLOCK SET
- 2 NORMAL PROGRAM
- 3 DAILY PROGRAM
- 4 WEEKLY PROGRAM
- 5 PROGRAM REVIEW
- 6 SET UP

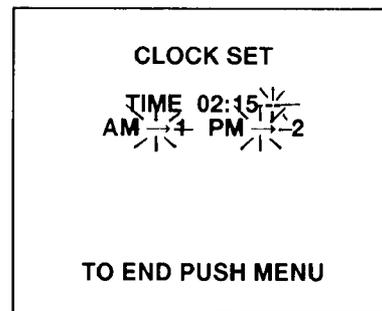
TO END PUSH MENU

Main MENU (English)

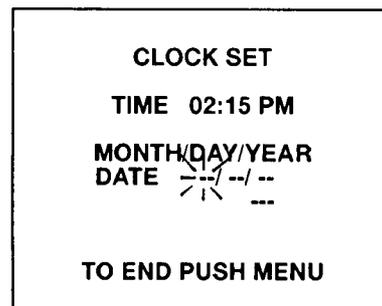
- 5 Press "1" button to set clock. The display prompts you to set the hour.



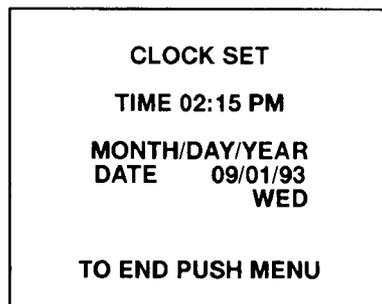
- 6 Set the hour by pressing two number buttons on the remote control and two more for the minute (for example, 0 2 15 for 2:15). The display prompts you to select AM or PM.



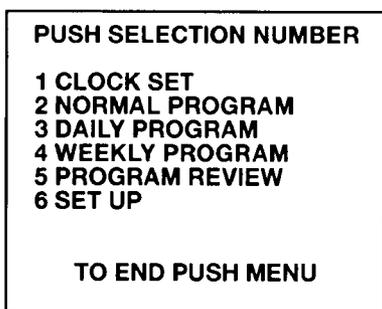
- 7 Press "1" for AM or "2" for PM (for example, 2 for PM). The display flashes and prompts you to set the date.



- 8 Set the date by pressing six digits in order of month, day and year (for example 09 01 93 for September 1, 1993). The day of the week will appear when you have entered all six digits for the date.
- NOTE:** Always press "0" before single-digit months and days.
- The VCR will not accept illogical time or date entries (13th month for example).
 - Now the display on the screen will show the correct time.



- 9 Press "MENU" button. The display resumes the "original menu".



- 10 Press "MENU" button once again to return to the TV screen. To display the date and time, press the DISPLAY button.

CLOCK SETTING NOTES:

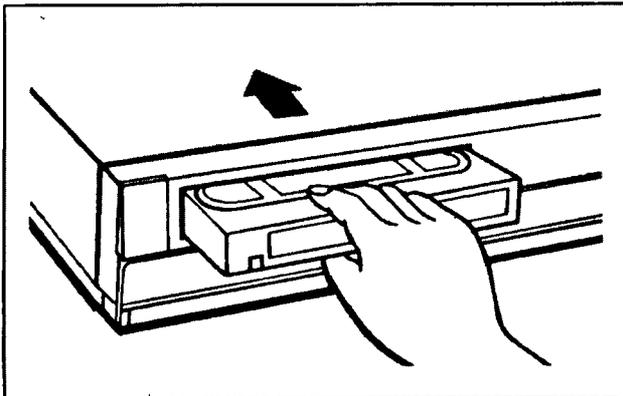
1. The clock must be set to the correct time before programming the timer for unattended recording.
2. When moving the VCR, if the power cord is reconnected within a few seconds (about 3 seconds), there is no need to reset the clock.
3. If a power failure lasts more than a few seconds, or if the power cord is disconnected for longer than a few seconds, the clock needs to be reset.

RECORDING WHILE YOU ARE AWAY

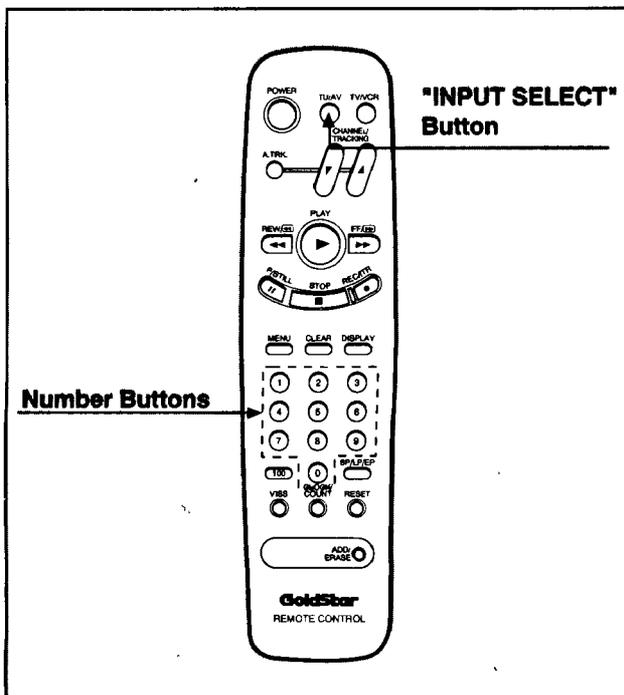
Be sure that the clock is set to the correct time.
(Refer to "CLOCK SETTING" on page 21.)

1. Insert the cassette.

NOTE: Before starting check that the erase prevention tab is not missing. If it is removed, recording will not start.



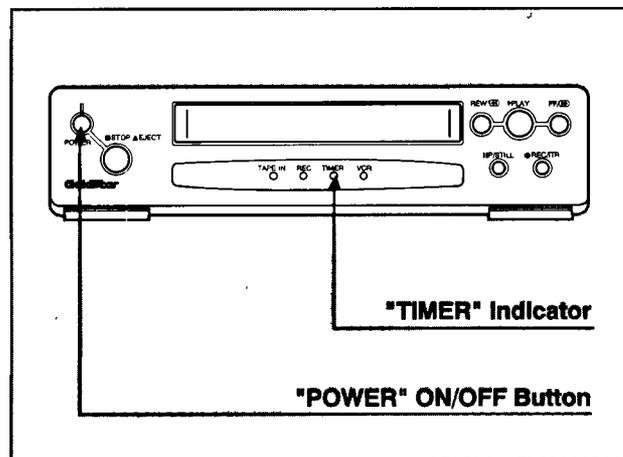
2. Set the program timer for the;
 - Menu program Number
 - Program Mode
 - Input Select
 - Channel
 - Tape Speed
 - Record-starting time
 - Record-stopping time
 - Date (on which to recording is to be made)
 (Refer to "PROGRAM TIMER SETTING" on pages 24 through 28.)



3. Press "POWER" ON/OFF button to OFF. The TIMER indicator will appear on the VCR display.

NOTES:

1. If the erase prevention tab is removed, the cassette is ejected automatically and the "TAPE-IN" indicator will flash. Stick a piece of cellophane tape over the erase prevention hole on the cassette to enable recording.
2. The "TAPE-IN" indicator will flash if a cassette is not inserted.



4. The recording will start and the "TIMER" and the "REC" indicators will light at the time you have programmed.

NOTES:

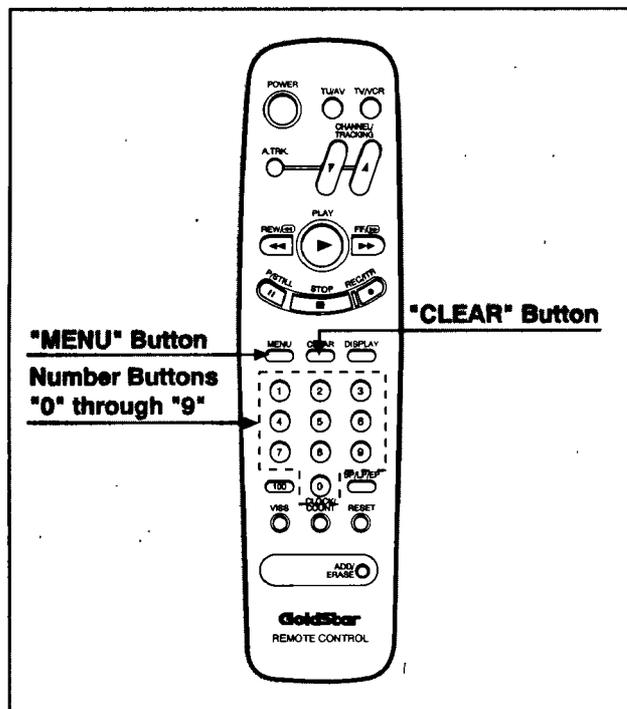
1. When the TIMER indicator is on, your VCR can not be operated manually (except POWER button).
2. If the tape runs out (if the end of the tape is reached) during timer recording, the mode will change automatically to STOP, REWIND and EJECT in this order. At that point, power will cease to be supplied to prevent the recorded tape from being overlapped.
3. If the "TIMER" indicator goes off it indicates that there has been a power interruption and the Time and Programming need to be reset.
4. To stop the VCR during Timer Recording, press "POWER" ON/OFF button OFF.

PROGRAM TIMER SETTING (You must use the Remote Control)

This VCR can be programmed to record up to 8 programs within a period of 1 year. For unattended recording, the timer needs to know the channels to be recorded and the times to start and to end.

Things to know before starting

- If you try to set the program timer before setting the clock, "CLOCK SET" mode appears on the TV screen. Set the time and date before proceeding.
- The buttons for programming the timer are on the remote control.
- While you are programming the timer, the "Menu display" on the TV screen will prompt you through the procedures.
- The display contents will be switched to the TV screen automatically if it is left on without further steps for about 3 minutes.
- Make sure batteries are installed in the remote control.
- Make sure a tape is in the VCR.
- You can correct an error in the program, any time before the last step by pressing "CLEAR" button repeatedly until the digit to be corrected flashes and then by entering the corrections.



- 1 Turn on the power of both VCR and TV.
- 2 Be sure that the TV is set to the VCR Output Channel (Channel 3 or 4).
- 3 Aim the remote control at the receiver on the front panel of the VCR.
- 4 Press "MENU" button on the remote control. The "MENU", as illustrated, will appear on the TV screen.

PUSH SELECTION NUMBER

- 1 CLOCK SET
- 2 NORMAL PROGRAM
- 3 DAILY PROGRAM
- 4 WEEKLY PROGRAM
- 5 PROGRAM REVIEW
- 6 SET UP

TO END PUSH MENU

- 5 Make sure that the TV system (TV or CATV) to the desired position in the SET UP mode feature.

PUSH SELECTION NUMBER

- 1 TV SYSTEM (TV)
- 2 AUTO CHANNEL SET
- 3 LANGUAGE SELECT

TO END PUSH MENU

- 6 Press MENU to return to first screen as shown.
Press "2" to enter a NORMAL program, "3" to enter a DAILY program, or "4" to enter a WEEKLY program.

Normal event ... for recording up to 8 programs on a single day or over the days within a period of 1 year.

Weekly event ... for recording up to 8 programs on a certain day of every week.

Daily event ... for recording up to 8 programs at the same time(s) Monday through Friday.

NOTE: Any one of these program modes or any combination thereof (up to 8 programs in total) may be selected.
A typical example of a "NORMAL" program is demonstrated below.

NOTE: The lowest available program number will be selected automatically.

PUSH SELECTION NUMBER

- 1 CLOCK SET
- 2 NORMAL PROGRAM
- 3 DAILY PROGRAM
- 4 WEEKLY PROGRAM
- 5 PROGRAM REVIEW
- 6 SET UP

TO END PUSH MENU

- 7 The display will prompt you to select "TUNER" mode or "A/V" mode. (example program No. 1)

NORMAL PROGRAM
PROGRAM 1
SELECT SOURCE INPUT
TUNER → 1 AV → 2

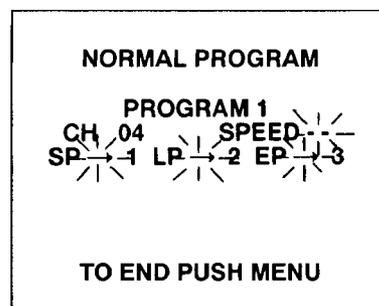
TO END PUSH MENU

- 8 Press "1" for TUNER mode or "2" for A/V mode.
The display will prompt you select a channel number. If you want to select the channel in CATV, set the TV system (CATV or TV) in the SET UP mode feature and then set the channel number.

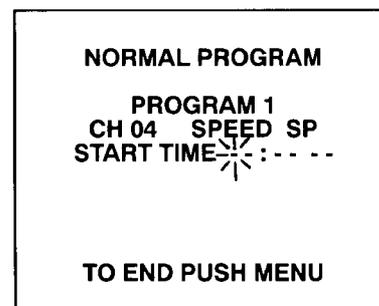
NORMAL PROGRAM
PROGRAM 1
CH

TO END PUSH MENU

- 9 Press two digits for the channel to be recorded (for example, "0" "4" for channel 4). The display will prompt you to select a recording speed.

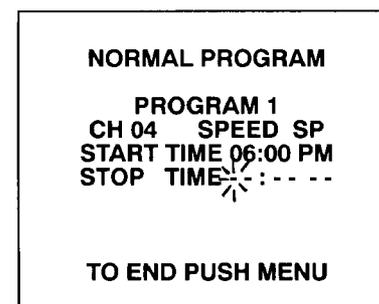


- 10 Press a digit from "1" to "3" on the remote control to select the recording speed you want program ("1" for SP, "2" for LP, "3" for EP mode). (for example, "1" for SP). The display will then prompt you to enter the recording start time.



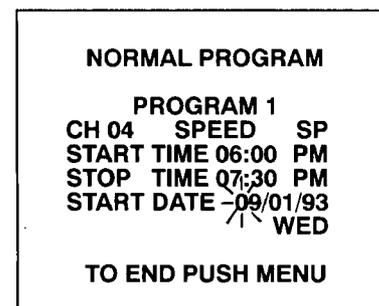
- 11 Press five digits, two for the hour and two more for the minute and one more for AM or PM (for example, "0" "6" "0" "0" "2" for 6:00 PM). Press "1" for AM or "2" for PM. The display will prompt you to select the stop time.

NOTE: Always press "0" before a single digit hour and minute.



- 12 Press five digits, two for the hour and two more for the minute and one more for AM or PM (for example, "0" "7" "3" "0" "2" for 7:30 PM).

NOTE: The present month, day and year for the DATE (for example, 090193 for September 1, to change it at step 13).



-
- 13 Press four digits, two for the start month and two more for the start date, (for example, "0" "9" "0" "2" to begin recording on September 2). The year and day of the week are displayed automatically.

```
NORMAL PROGRAM

PROGRAM 1
CH 04  SPEED  SP
START TIME 06:00 PM
STOP TIME 07:30 PM
START DATE 09/02/93
              THU

TO END PUSH MENU
```

NOTES:

- To change an incorrect entry, or an undesired entry, proceed as follows;
1. Press "CLEAR" button repeatedly until the digit to be changed flashes.
 2. Enter the correct number.

-
- 14 Press "MENU" to enter your program and return to the menu display.

If the program preset time is past, the "PAST TIME PROGRAMMED" message will blink on the screen. Return to the incorrect program and reprogram it with the correct time.

```
NORMAL PROGRAM

PROGRAM 1
CH 04  SPEED  SP
START TIME 01:00 PM
STOP TIME 01:30 PM
START DATE 09/01/93
          WED/
--PAST TIME PROGRAMMED--
          /
TO END PUSH MENU \
```

-
- 15 Press "MENU" again to return to the main menu display. Additional program may be entered by repeating steps 5 ~ 13. If you are finished programming and you want to set the VCR to record the programs you have entered, a) make sure you have inserted a tape in the machine, and b) press the POWER button to OFF ("TIMER" indicator will light.). The VCR is now set to record the preset programs.

CHECKING THE TIMER PROGRAM

Program can be checked whenever the VCR is tuned on.

1. Press "MENU" on the remote control to display the menu.
2. Press "5" to review the program. (Program Review). The program review menu will appear on the TV screen.
3. Press "5" again if you want to review the next program information.
4. When you are finished, press "MENU" again.

```
NORMAL PROGRAM

PROGRAM 1
CH 04  SPEED  SP
START TIME 06:00 PM
STOP TIME 07:30 PM
START DATE 09/02/93
              THU
TO CONTINUE PUSH NO.5
TO ERASE PUSH CLEAR
TO END PUSH MENU
```

ERASING A TIMER PROGRAM

1. Press "MENU" button on the remote control to display the menu.
2. Press "5" to erase a program. (Program Review).
3. Press "5" again if you want to review the next program information.
4. Press "CLEAR" button when the program information you want to erase is displayed.
5. When you are finished, press "MENU" button again.

NORMAL PROGRAM

PROGRAM 1

CH 04 SPEED SP

START TIME 06:00 PM

STOP TIME 07:30 PM

START DATE 09/02/93

THU

TO CONTINUE PUSH NO.5

TO ERASE PUSH CLEAR

TO END PUSH MENU

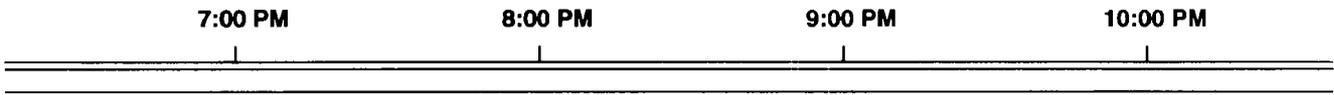
NOTE: When there is no program in the VCR, if you press "5" to review or to erase in the menu mode, the display will be shown (EMPTY) for 3 seconds.

— EMPTY —

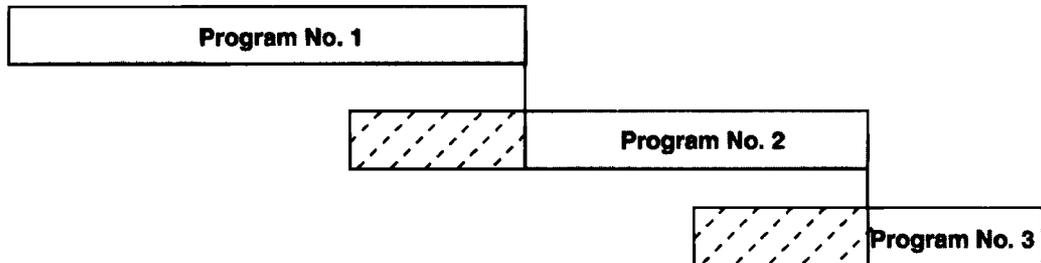
TO END PUSH MENU

PROGRAM PRIORITY

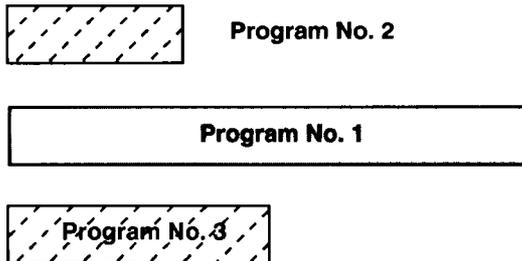
When there is an overlap of the program timer settings..



Case 1



Case 2



Chooses lowest numbered program.

INSTANT TIMER RECORDING (ITR)

Instant Timer Recording allows you to make simplified timer recording without using the program timer.

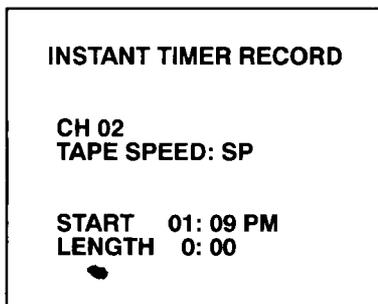
■ FOR ITR RECORDING

1. Be sure that the clock is set to the correct time.
(Refer to "CLOCK SETTING".)
2. Insert the cassette (one with the erase prevention tab intact) into the cassette loading door.
3. Press "INPUT SELECT" button so as to select Channel Number Display.
4. Press "CHANNEL" Select Buttons to select the channel to be recorded.
5. Press "TAPE SPEED" button to select the desired speed.

■ STARTING ITR NOW

To start recording immediately and to set the recording length (in 30-minute increments).

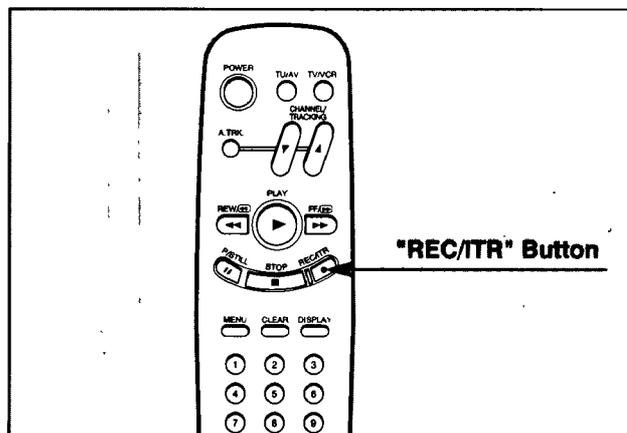
1. First perform Steps 1 through 5 of "FOR ITR RECORDING".
2. After recording has started, press REC/ITR button once again to indicate the recording time on the screen.



For each press, the time changes as in the chart below.

EXAMPLE: CURRENT TIME 01:09 PM

REC/ ITR Button	LENGTH display (ITR STOP TIME)
1 press	0:00
2 presses	0:30
3 presses	1:00
17 presses	8:00
18 presses	8:30
19 presses	9:00
20 presses	0:00



RECALLING THE ITR SETTING

Press the REC/ITR button, and the recalled ITR setting will be displayed on the screen. The recalled ITR setting will automatically return to the current position in 5 seconds.

NOTE: To recall the recording time, press the REC/ITR button only once. If you press this button twice or more, the recording time will be changed.

TO CANCEL THE ITR SETTING

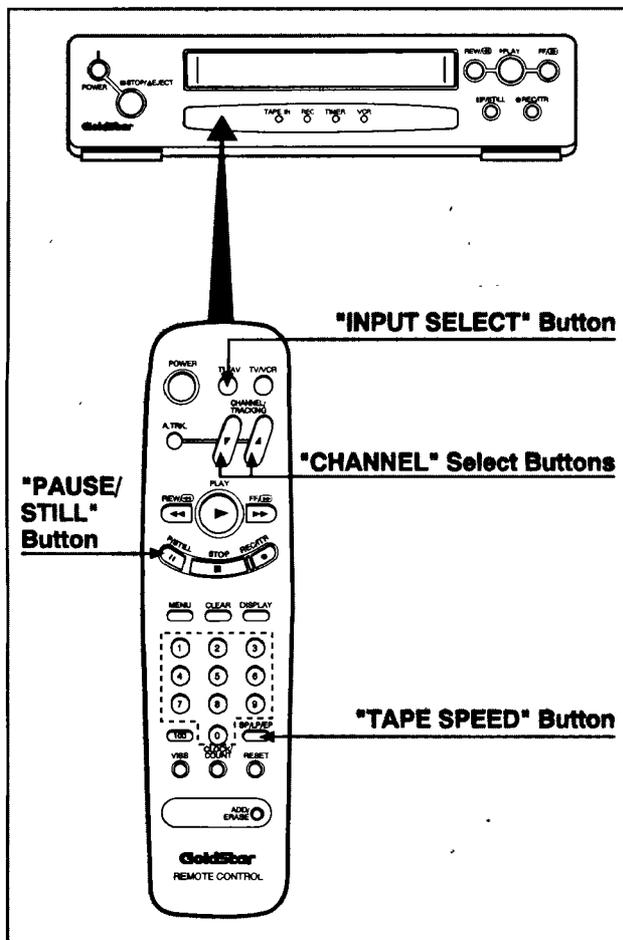
1. Press the "POWER" ON/OFF button or STOP button to stop the VCR during ITR operation.

NOTES:

- The "TIMER" and "REC" indicators will light on the VCR display during Instant Timer Recording.
- The recording time can be extended any time during "ITR" by pressing "REC/ITR" button. Press "REC/ITR" button to reset the length of recording in 30 minute increments for up to 9 hours and then to "END" (the recording will continue until the end of the tape).
- To change the "ITR" program, the previous information must be cleared first.
- If "ITR" and the program timer recording overlap, the former will override the latter.
- During Instant Timer Recording, you can not change the Channel of the VCR. If you want to view another channel, press the VCR/TV button to TV mode, and then select the channel to be viewed with the TV's channel selector.

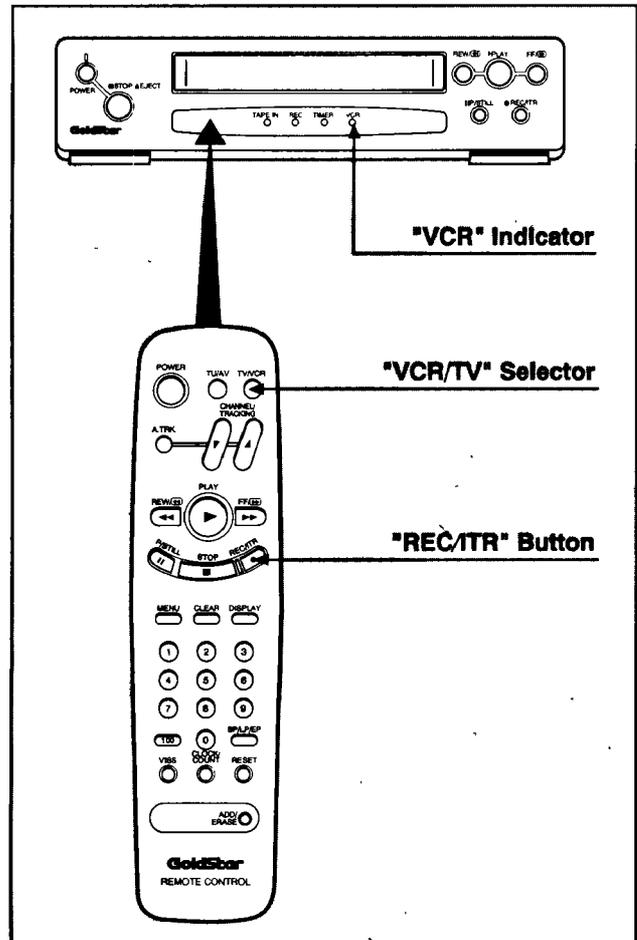
RECORDING ONE PROGRAM WHILE VIEWING ANOTHER

1. Insert the cassette (one with erase prevention tab intact) into cassette loading door .
2. Press "TAPE SPEED" button to select the desired speed.
3. Press "INPUT SELECT" button so as to select Channel Number Display.
4. Press Channel Select Button (▲ or ▼) to select channel to be recorded and set the television to Channel 3 or 4 depending on which channel is selected on the RF CHANNEL Select Switch on the rear of the VCR.
5. Check to make sure that the reception is acceptable.



6. Press the REC/ITR button once.
You are now recording the program you see on the TV screen.
7. To continue to record this program while you watch something else, simply press "VCR/TV" selector to turn "VCR" indication off. Set the channel selector on the television to the program you want to watch.

8. If you want to periodically check what you are recording, simply set the channel selector on the television to the VCR channel (3 or 4) and press "VCR/TV" selector to turn "VCR " indicator on.



EDITING A RECORDING

1. Press "PLAY" button and watch the program until the exact point is reached where you want the new recording to start.
2. Press "PAUSE/STILL" button.
3. Press the REC/ITR button once on the VCR or on the remote control. The program material to be recorded will appear on the television.
4. When you wish to start recording, press "PAUSE/STILL" button again. The new program material will directly follow the previously recorded material. This feature is especially helpful during camera use so each segment of the recording becomes a continuous program.

VHS INDEX SEARCH SYSTEM (VISS)

The VHS INDEX SEARCH SYSTEM enables you to locate the beginning of any recording made on this VCR.

Whenever a recording is begun, an invisible INDEX mark is recorded on the tape. This feature makes use of VISS signals to search out a specified tape segment and begin playback automatically.

■ MARKING VISS SIGNALS

Automatic marking during recording...

A VISS signal is automatically marked on the tape when a recording or a timer recording starts. The "V.MARK" indicator is displayed on the screen while a VISS signal is being marked.

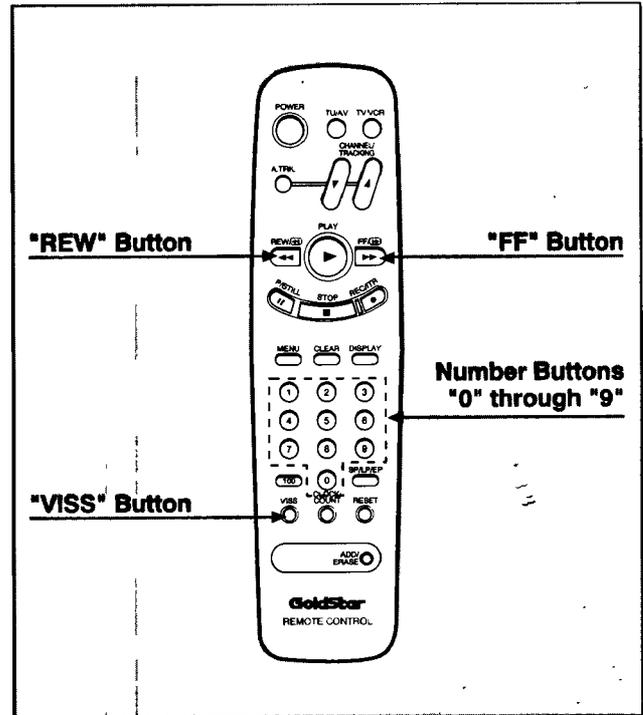
NOTES:

- The VISS signals cannot be marked on cassettes whose erase prevention tab has been broken off.
- The VISS signals cannot be marked on an unrecorded portion of the tape.
- The VISS may not function on damaged or worn tapes.

■ PLAYING BACK THE BEGINNING OF EACH PROGRAM IN SEQUENCE- VISS SCAN

1. Insert a cassette tape that has VISS signals marked.
2. Press the VISS button once, while a tape is playing. The "VISS - -" indicator will appear on the TV screen.
3. Press either the FF or REW button, VISS will start.
The indicator appears simultaneously during scanning. The tape will be rewound or rapidly advanced to the next signal marked.
The tape will be played back for approximately 5 seconds, and then rewind or rapidly advanced to the next VISS signal.
Every time a VISS signal is detected and playback begins, the displayed VISS scan number appears. ("V.SCAN 00")
4. At the desired program, press the VISS button.
Normal playback of that program will begin.

NOTE: The cassette tape will proceed to the end and automatically rewind if a segment is not selected for play, and eject the tape.



■ LOCATING THE DESIRED PROGRAM -VISS SEARCH

You can locate the desired program and play it back automatically by designating the number of its VISS signal. Up to the 99th VISS signal from the present position on the tape can be located.

1. Press the VISS button once during playback.
2. Press the numbered buttons (0~9) which corresponds to the number of VISS codes to be passed on the way to the VISS destination from the present tape location (up to 99 codes can be detected on an individual tape).
3. Press either the FF or REW button briefly. The "V.SEARCH 00" appears on the screen.
When the desired VISS signal recorded section is found, playback begins automatically.

VISUAL SEARCH (F-SEARCH AND R-SEARCH)

When you press "FF(▶▶)" (Forward SEARCH) or "REW(◀◀)" (Reverse SEARCH) button during playback, the tape will be played back at a speed about 15 times faster than the normal playback speed (EP recorded tape), 9 times faster than the normal playback speed (LP recorded tape), or 5 times faster than the normal playback speed (SP recorded tape), and you can easily locate a certain spot on the tape.
- PICTURE SEARCH.

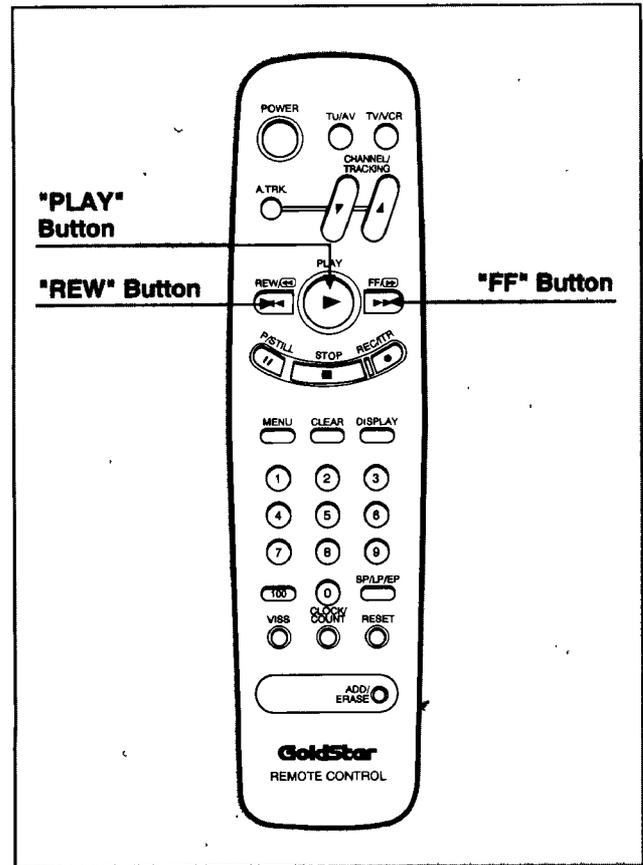
NOTE:

- During playback, press either search button (FF or REW) to begin visual search.

When you have reached the desired point on the tape, press "PLAY" button again so that the unit enters the normal playback mode. Otherwise, speed search continues for about 3 minutes, after which time the PLAY mode is resumed.

While you hold down "FF" or "REW" button during the picture search mode, the picture will be viewed at 9 times faster than the normal playback speed (SP recorded tape), at a speed about 17 times faster than the normal playback speed (LP recorded tape) or at 27 times faster than the normal playback speed (EP recorded tape). - RAPID PICTURE SEARCH.

When you have reached the desired point of the tape, release the REW or FF button so that the VCR enters the normal playback mode.



PICTURE SEARCH



SP Recording (× 5)



EP recording (× 15)



LP recording (× 9)

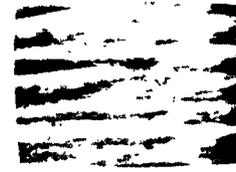
RAPID PICTURE SEARCH



SP Recording (× 9)



EP recording (× 27)



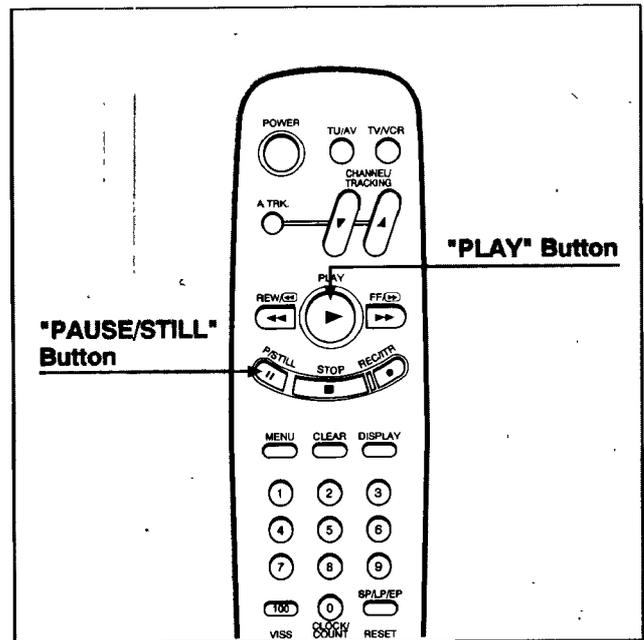
LP recording (× 17)

PAUSE/STILL

When "PAUSE/STILL" button is pressed during recording. "RECP" will appear and the VCR will stop recording. This feature can be used for eliminating unwanted station breaks or program material while recording a TV program or when using a camera from one scene to another. To start again press "PAUSE/STILL" button, and "P" indication will go off and the VCR will continue recording. When "PAUSE/STILL" button is pressed during playback, a still picture can be seen. To start again press "PLAY" button and the VCR will continue playback.

NOTES:

1. The "REC" indicator will flash on the display panel of the VCR in the record/ pause mode.
2. The tape recorded at LP mode will contain more noise and flagging than the tape recorded at SP or EP mode.
3. When the PAUSE (STILL) mode continues for more than about 5 minutes, the VCR will automatically change to stop mode to protect the tape.

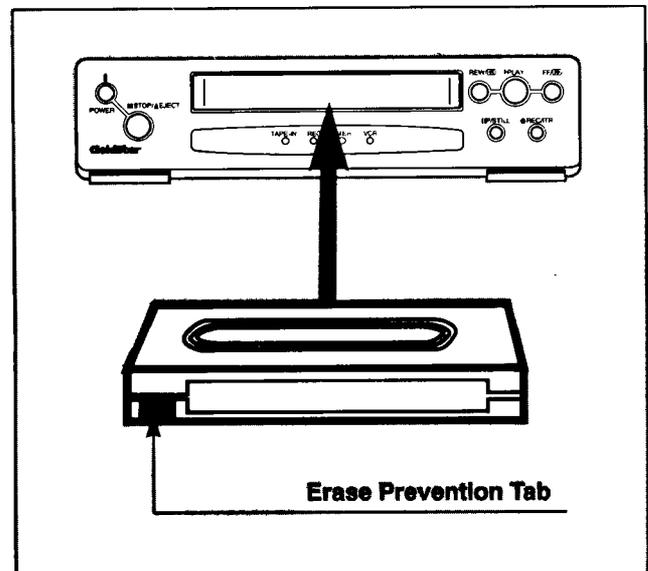


AUTO PLAYBACK FUNCTION

When a cassette with erase prevention tab removed is inserted, playback will start automatically. This automatic function eliminates the need for pressing "PLAY" button.

1. Inserting a cassette into the Cassette Loading Slot automatically switches on the VCR's power. (Auto Power-on)
2. The VCR starts playback automatically. (Auto Playback)
3. At the end of the tape, the tape automatically rewinds to the beginning. (Auto Rewind)
4. The cassette is ejected automatically when the tape has finished rewinding. (Auto Eject)
5. Auto power off.

NOTE: The cassette can be ejected when the EJECT button is pressed, even if the VCR's power is OFF. (Auto Power-off-eject)



USING THE COUNTER MEMORY FEATURE

The tape counter on this VCR indicates the tape travel time in hours, minutes, and seconds during recording and playback.

The memory feature allows you to return to a specific spot on the cassette after recording or playing.

The memory works with the Counter to return to a particular spot on the cassette. The memory is designed to stop when the counter reaches "0:00:00" during rewind (REW).

This feature is especially helpful when editing a recording.

1. Press "CLOCK/COUNT" button repeatedly for counter memory mode. The indicator "M" appears.
2. Press "DISPLAY" button twice for counter display on the screen if necessary.
3. Start playing or recording a tape.
4. At the point you want to start, press "RESET" button to reset the counter to "M0:00:00".
5. Continue to play or record.
6. Press "STOP" button.
7. Press "REW" button. The tape will be rewound to the preselected point approximately at "M0:00:00".

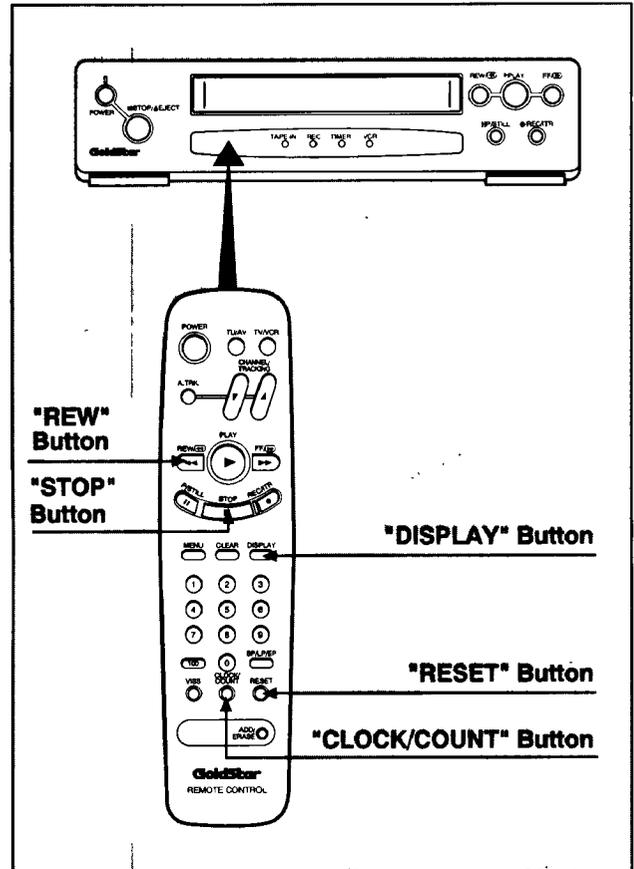
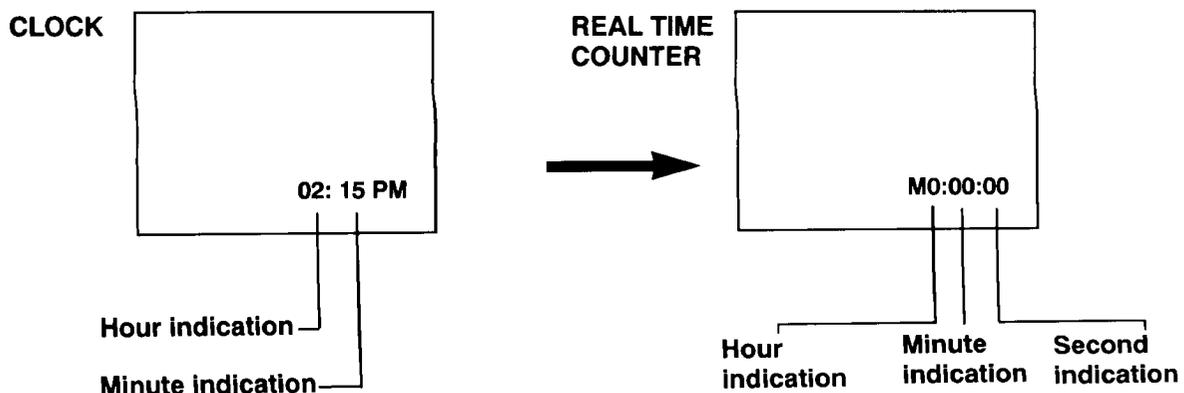
NOTES:

1. The linear time counter does not operate for non-recorded portions.
2. The tape counter will be automatically reset "0:00:00" when the tape is loaded.
3. If a tape is rewound beyond "0:00:00", the counter will show a negative indication.
4. The tape starts moving from "0:00:00" and counter indicates amount elapsed time.

REAL TIME COUNTER

The real time counter can be calculated by pressing "CLOCK/COUNT" button.

Each time the "CLOCK/COUNT" button is pressed, the display switches as follows.



AUTO-REWIND

In the record, playback or fast forward mode the VCR automatically rewinds the tape at the end of tape. The VCR will stop at the beginning of the tape.

AUTO MEMORY POWER SHUT-OFF

During rewind, press "POWER" button once:

Rewind complete → Auto Power off.

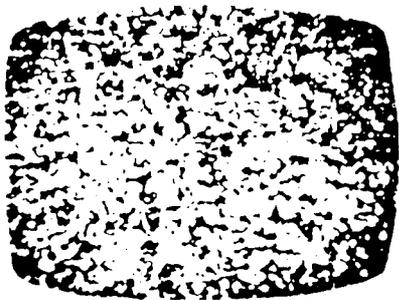
Press "POWER" button again to release "AUTO MEMORY POWER SHUT-OFF" function.

If the cassette has reached the end and goes into auto-rewind, the power will also off and eject the tape.

PLAYBACK WITH TV EQUIPPED WITH VIR

If your television receiver is equipped with VIR, it may be necessary to turn the VIR OFF when playing back the video tape. Otherwise the color may be too bright, too faint or even change.

VIDEO HEAD CLEANING



- Picture playback may become blurred or interrupted even though the TV program received is clear. This does not mean that the recorded program has been erased.
- Dirt accumulation on the head after long periods of use can cause these problems.
- If high quality video tapes are used in this VCR, the video heads should not normally require cleaning; however it is possible that the heads may become clogged when playing an old or damaged tape. If the image on your screen resembles the picture on the left, while playing back a tape, the heads may require cleaning.
- To clean the heads, obtain a head cleaning tape from your local video dealer. Be sure to follow the instructions that come with the cleaning tape, as excessive use can shorten head life.

OPERATING HINTS....

- After you have finished using the VCR, rewind, eject and remove the cassette. Place the cassette in its protective sleeve to protect it from dust. It is not necessary to rewind the cassette before removing it, but if you do, it will be ready to play or record the next time you use it.
- Be sure the VCR "CHANNEL" selector is on the correct channel you wish to record. The channel that is being recorded can always be checked by setting the television on the VCR channel (3 or 4) and setting the "VCR/TV" selector to "VCR".
- Always reset the "COUNTER" to "0:00:00" when you start using a cassette. Make a note on the cassette what number the "COUNTER" reads when the recording is finished if less than the full program material at the end of the first recording. Any other locations on the tape can be noted on the cassette label also, if desired so you can quickly locate them later.

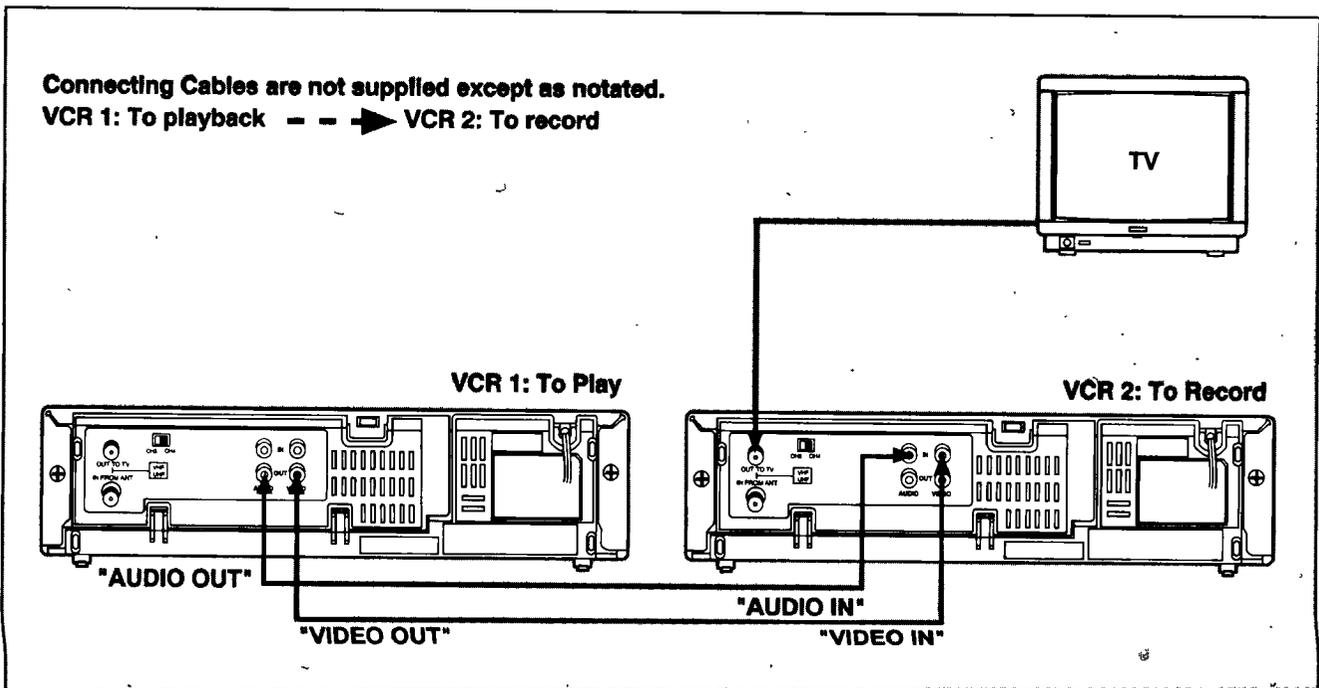
- Do not attempt to hook up more than one television set to the VCR for either recording or playback.
- **ERASE PREVENTION TAB**
If you wish to save a recording and prevent accidental erasure, remove the erase prevention tab from the cassette. This will prevent recording on the cassette. Later, if you wish to record, stick two layers of cellophane tape over the opening.



VCR TO VCR DUBBING

If you wish to exchange or copy some of your friend's favorite home recordings, the following instructions can be used to connect on VCR to another for this purposed.

CONNECTIONS



1. Connect VIDEO OUT/AUDIO OUT of VCR 1 to VIDEO IN/AUDIO IN of VCR 2.
2. Set Input Select Button of VCR 2 to AV mode.
3. Play the tape on VCR 1 and record it on VCR 2.

NOTE:

If you connect the "VHF/UHF OUTPUT" connector of VCR 2 to the "TV ANT" connector, as illustrated, and press the "VCR/TV" selector to turn the "VCR" indicator on, the picture being dubbed by VCR 2 can be monitored.

TROUBLESHOOTING

Your Video Cassette Recorder is a highly sophisticated instrument. It has been carefully checked and adjusted at the factory under the most rigid quality control and inspection systems. However, should problems develop, check the following points and take necessary corrective measures.

INSERTING OR REMOVING THE CASSETTE

Symptom	Check Point & Correction
Cassette cannot be inserted into Cassette Compartment.	<ul style="list-style-type: none"> ● Load cassette in direction indicated by arrow on cassette. ● A cassette is already in the VCR. ● Press "POWER" ON/OFF button to "OFF" and then to "ON" again, and then insert the cassette again.

RECORDING TV PROGRAM OFF THE AIR

Symptom	Check Point & Correction
No picture appears on television screen.	<ul style="list-style-type: none"> ● Press "VCR/TV" selector to turn the "VCR" indicator on. ● Set the television to the same channel selected on the RF Channel Select Switch. (Channel 3 or 4).
A picture appears on television screen but is not clear.	<ul style="list-style-type: none"> ● Adjust the Tuning Control on television to obtain best picture.
The VCR will not go into the recording mode, even when the "REC/ITR" on the VCR or on the remote control are pressed.	<ul style="list-style-type: none"> ● The cassette has had the erase prevention tab removed. Stick a piece of cellophane tape over erase prevention tab hole or select a different cassette.

PLAYBACK OF PRE-RECORDED CASSETTE

Symptom	Check Point & Correction
No picture appears on television screen when "PLAY" button is pressed.	<ul style="list-style-type: none"> ● Set the television to the VCR channel (3 or 4) depending upon the selected channel on the RF Channel Select Switch. ● Try different cassette tape.
No picture, but audio is clear.	<ul style="list-style-type: none"> ● Take VCR to Sears Service Center for service.
Interference on playback picture.	<ul style="list-style-type: none"> ● Adjust fine tuning knob on television set to obtain best picture. ● Adjust "TRACKING" control button (▼ or ▲). ● Take VCR to Sears Service Center for service.
Picture bends at top of screen.	<ul style="list-style-type: none"> ● TV receiver is of older type. It needs to be modified to work properly with VCR. ● Tape is damaged. Try another cassette.
Color is too bright, too faint or changes.	<ul style="list-style-type: none"> ● TV set has VIR circuit. Turn it off during playback.

CLOCK

Symptom	Check Point & Correction
" Clock displays "- : - : - : - : " on the screen.	● Reset time according to instructions. Power has been interrupted.
VCR does not start at preset record starting time.	● Set up recording time according to instructions. ● Be sure the "AM-PM" display is correct. ● Press "POWER" ON/OFF button off.
VCR does not start at preset record starting time. The tape is ejected in the timer mode.	● The cassette has had the erase prevention tab removed. Stick a piece of cellophane tape over the erase prevention tab hole or select a different cassette.
" TAPE- IN " indication flashes.	● Insert a cassette.
"POWER" indication flashes.	● Unplug the VCR, after a few seconds, put the plug in again.

REMOTE CONTROL OPERATION

Symptom	Check Point & Correction
The VCR cannot be remotely controlled or the remote control has short range.	● Weak or dead batteries.

ROUTINE MAINTENANCE

Your VCR is a highly sophisticated electro/mechanical device. It is normal for it to require routine cleaning and maintenance after approximately 1,000 hours of use. The exact schedule will depend on the condition in which it is used.

The necessity of maintenance will generally be indicated by a slight degeneration in picture or sound quality.

Because of the delicate nature of VCR, it is recommended that you take the VCR to a Sears Service Center to have it cleaned and restored to "like new" operation.

SEARS SERVICE

Your Sears Video Cassette Recorder has added value when you consider that Sears has service units nationwide staffed with Sears trained technicians...professional technicians specifically trained on Sears home entertainment products; having the parts, tools and equipment to insure that we meet our pledge to you... "We Service What We Sell".

HOW TO ORDER REPAIR PARTS

Now that you have purchased your Video Cassette Recorder, should a need ever exist for repair parts or service, simply contact any Sears Service Center or Sears, Roebuck and Co. store. Be sure to provide all pertinent facts when you call or visit. When ordering parts by mail, selling prices will be furnished on request, or parts will be shipped at current selling prices and you will be billed accordingly.

The Model Number will be found on the rear of cabinet. Always mention the Model Number when requesting service or repair parts for your Video Cassette Recorder.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. NAME of ITEM...Sears Video Cassette Recorder
2. MODEL NUMBER
3. PART DESCRIPTION

SPECIFICATIONS

Video input	1Vp-p, 75 ohms unbalanced
Video output	1Vp-p, 75 ohms unbalanced
Audio input	0.308 Vrms
Audio output	0.308 Vrms
Tape speed	33.35 mm/sec (SP), 16.67 mm/sec (LP), 11.12 mm/sec (EP)
Fast forward/Rewind time	Less than 6 minutes with T-160 cassette
Power requirements	120V AC, 60 Hz
Power consumption	29W
Dimensions	360(W) × 88(H) × 335(D) mm
Weight	Approx. 4.2 kg

FEATURES

- DA Two Head System
- 181 Channel Frequency Synthesizer Tuner
- 8-Program /1 year Programmability
- On screen program review
- On screen display of function
- High Quality (HQ) picture enhancement system for improved image sharpness and detail
- Instant Timer Recording (ITR)
- Auto power and playback functions
- Record/play/visual search in 3 speeds (SP, LP, EP)
- Rapid picture search
- Freeze function in 3 speeds
- Quick start play
- VHS Index Search System (VISS)
- Real time counter
- Auto power shut-off

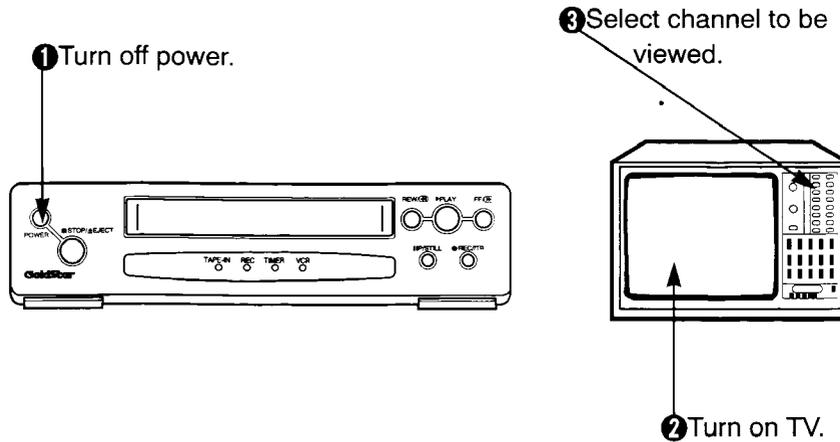


OPERATING INSTRUCTIONS

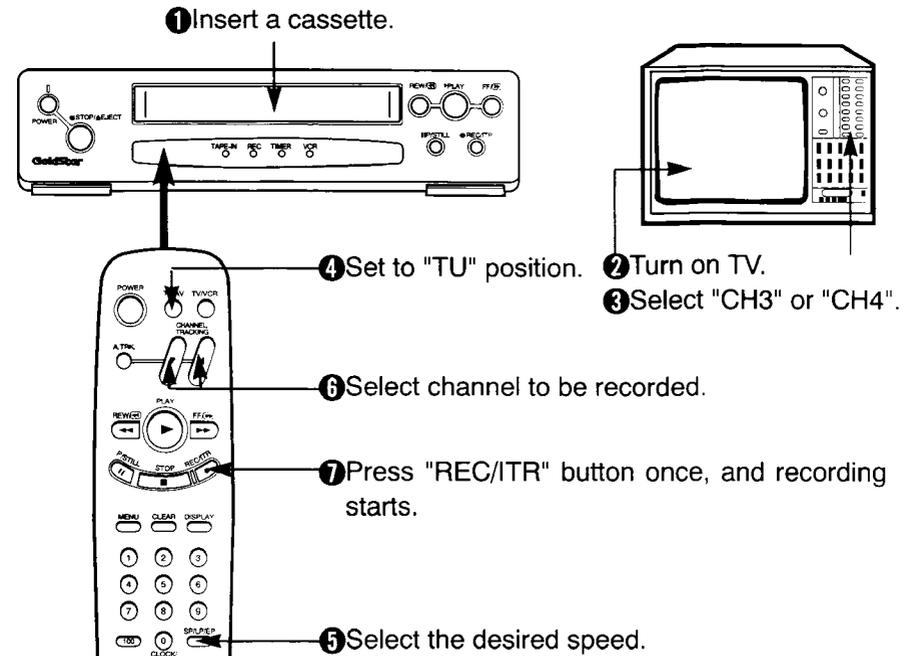
MODEL: R-E21M

These are simplified instructions for recording and playback with the VHS Video Cassette Recorder. It is recommended that you first thoroughly read the instructions in the owners manual before referring to this sheet. This may be kept handy by placing it near the VCR.

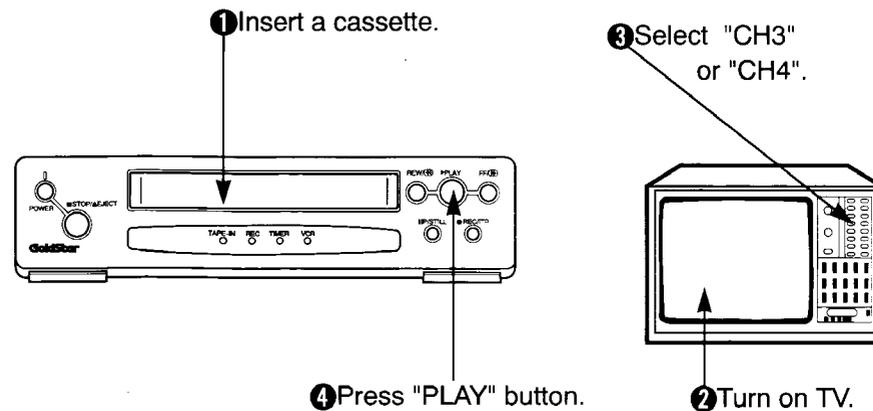
1. Normal TV Viewing



3. Viewing and Recording the Same TV Program

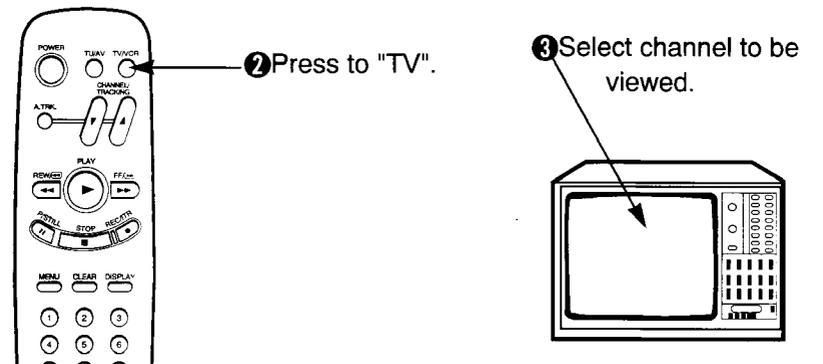


2. Playback



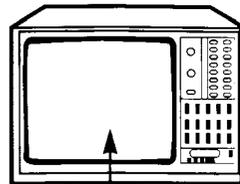
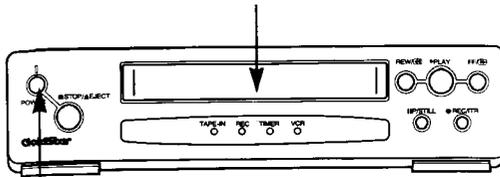
4. Recording One Program While Viewing Another

1 First perform Steps (1) through (7) of the above "Viewing and Recording the Same TV Program".



5. Recording while you are away (Timer Recording)

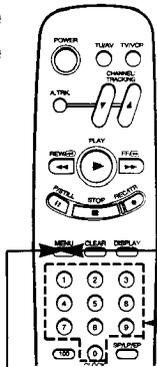
1 Insert a cassette.



2 Turn on TV and select "CH3" or "CH4".

6 Turn off power.

Recording will start automatically at the time you have selected.



3 Press "MENU" button.

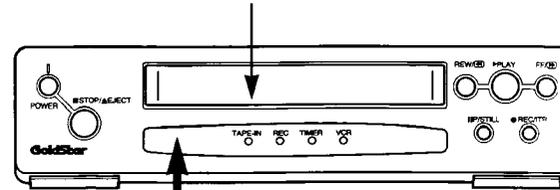
4 Use these buttons to Program timer.

5 Press "MENU" button once again.

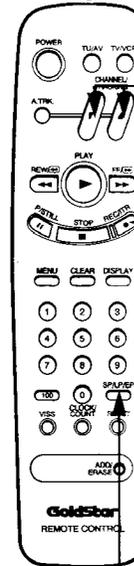
1. Select program mode. ("2" Normal program, "3" Daily program, "4" Weekly program...)
2. Input select ("1" Tuner, "2" A/V.)
3. Select channel.
4. Select recording speed ("1" SP, "2" LP, "3" EP.)
5. Select starting time.
6. Select stopping time.
7. Select starting date.

6. Instant Timer Recording (ITR)

1 Insert a cassette.



2 Select the channel to be recorded.



4 After recording is started, press "REC/ITR" button for recording length, which is selected as the button is pressed.

3 Select the desired speed.

REC/ITR button	LENGTH display (ITR STOP TIME)
1 press	0:00
2 presses	0:30
3 presses	1:00
:	:
18 presses	8:30
19 presses	9:00
20 presses	0:00

NOTE: To cancel the ITR, press the POWER ON/OFF button or STOP button.

WARRANTY

For 90 days from the date of purchase, Sears will repair any defect in material or workmanship in this video cassette recorder, free of charge. For one year from the date of purchase, Sears will supply, at no charge, replacement for defective parts.

The above warranty coverage applies only to video cassette recorders which are used for private household purposes.

TO OBTAIN WARRANTY SERVICE, SIMPLY RETURN THE VIDEO CASSETTE RECORDER TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.

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

Sears, Roebuck and Co.
D/817WA, Hoffman Estates, IL 60179

™