

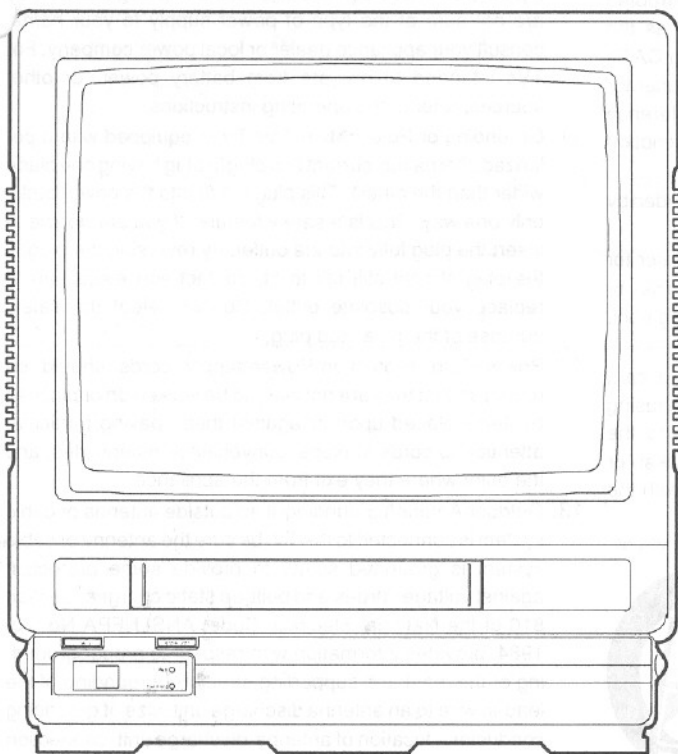
# OWNER'S MANUAL

# 13" COLOR TV/VCR COMBINATION 13TVCR X1

## Symphonic

### TABLE OF CONTENTS

FEATURES.....	4
PRECAUTIONS.....	5
SUPPLIED ACCESSORIES.....	5
AVOID THE HAZARDS OF ELECTRICAL SHOCK AND FIRE.....	5
DEW WARNING/INDICATOR.....	5
OPERATING CONTROLS AND FUNCTIONS.....	6
REMOTE CONTROL OPERATION.....	8
HOW TO USE REMOTE CONTROL.....	8
INSTALLING THE BATTERIES.....	9
ANTENNA CONNECTIONS.....	10
VHF/UHF RECEPTION AREA USING SEPARATE ANTENNAS.....	10
VHF/UHF COMBINED ANTENNA.....	11
CABLE AND PAY TV.....	11
PREPARATION FOR USE.....	12
SETTING THE CLOCK FOR CORRECT TIME.....	12
VIDEO CASSETTE.....	14
CHANNEL MEMORY PROGRAMMING.....	15
TO DELETE, ADD PRESET CHANNEL.....	16
OPERATION.....	17
T.V. OPERATION.....	17
VIEWING AND RECORDING THE SAME PROGRAM.....	18
COUNTER MEMORY BUTTON.....	19
AUTOMATIC TIMER RECORDING.....	20
ONE TOUCH TIMER RECORDING.....	24
SETTING THE SLEEP TIMER.....	25
PLAYBACK.....	25
AUTO REPEAT PLAYBACK.....	26
AUTO REWIND-EJECT.....	26
CUE AND REVIEW (VISUAL SEARCH).....	27
STILL FRAME DURING PLAYBACK.....	27
NOISE CANCELLING.....	27
TRACKING CONTROL.....	27
DEGAUSS.....	27
TROUBLESHOOTING GUIDE.....	28
MAINTENANCE.....	29
VCR HEAD CLEANING.....	29
SERVICING.....	29
SPECIFICATIONS.....	30
CABLE CHANNEL DESIGNATIONS.....	31



VHS

Please read before using this equipment

**WARNING:**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, 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.



THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.



THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

## "IMPORTANT SAFEGUARDS"

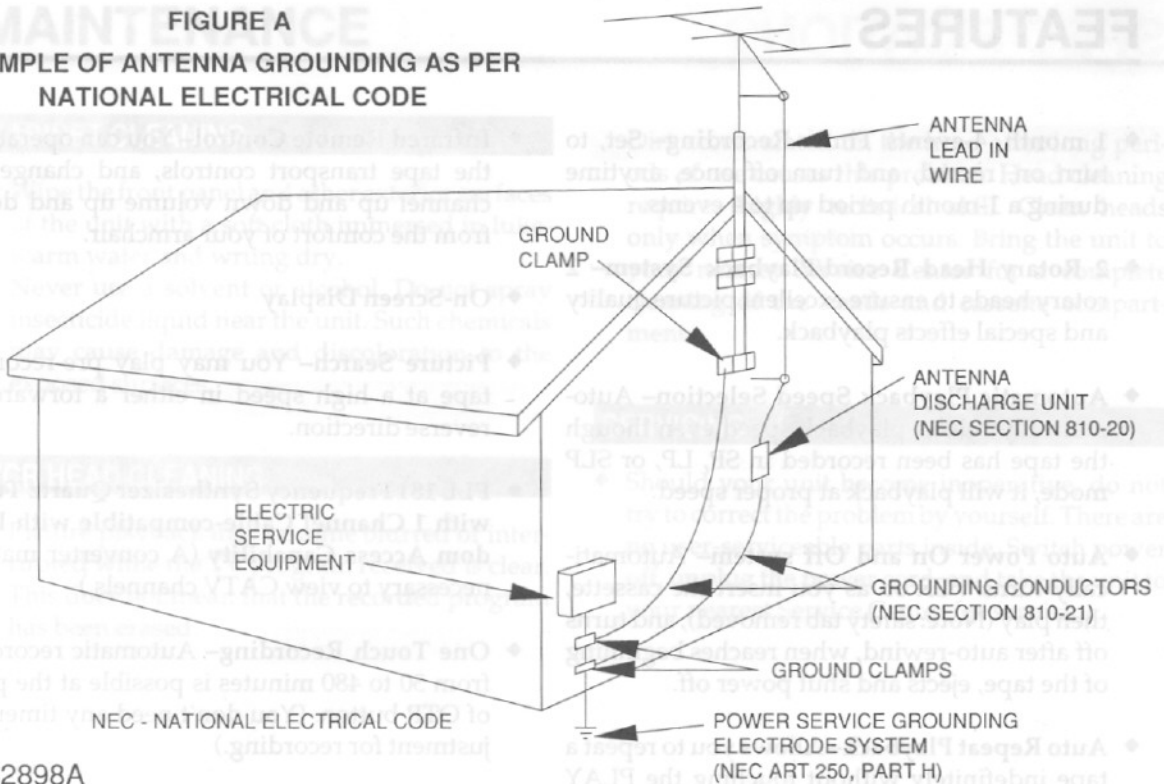
1. Read instructions-All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions-The safety and operating instructions should be retained for future reference.
3. Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions-All operating and use instructions should be followed.
5. Cleaning-Unplug TV 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 appliance in the cleaning description otherwise required in item 5.
6. Attachments-Do not use attachments not recommended by the TV manufacturer as they may cause hazards.
7. Water and Moisture-Do not use this TV 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 TV on an unstable cart, stand, tripod, bracket, or table. The TV may fall, causing serious injury to someone, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the TV. Any mounting of the appliance should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. 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.  
PORTABLE CART WARNING
9. Ventilation-Slots and openings in the cabinet and the back or bottom are provided for ventilation and to ensure reliable operation of the TV and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the TV on a bed, sofa, rug, or other similar surface. This TV should never be placed near or over a radiator or heat register. This TV 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 TV 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 appliance dealer or local power company. For TVs intended to operate from battery power, or other sources, refer to the operating instructions.
11. Grounding or Polarization-This TV 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.
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. Outdoor Antenna grounding-If an outside antenna or cable system is connected to the TV, 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 Electrical Code, ANSI/NFPA No. 70-1984, 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 the grounding electrode. (Fig. A)



S3126A

FIGURE A

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE



NEC - NATIONAL ELECTRICAL CODE

S2898A

14. Lightning-For added protection for this TV receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV due to lightning and power-line surges.
15. Power Lines-An outside antenna system should not be located in the vicinity of overhead power lines or other electric light of 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.
16. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
17. Object and Liquid Entry-Never push objects of any kind into this TV through opening as they may touch dangerous voltage points or shortout parts that could result in a fire or electric shock. Never spill liquid of any kind on the TV.
18. Servicing-Do not attempt to service this TV 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 this TV from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the powersupply cord or plug is damaged or trayed.
  - b. If liquid has been spilled, or objects have fallen into the TV.
  - c. If the TV has been exposed to rain or water.
  - d. If the TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to its normal operation.
- e. If the TV has been dropped or the cabinet has been damaged.
- f. When the TV 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 had used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, injury to persons or other hazards.
21. Safety Check-Upon completion of any service or repairs to this TV, ask the service technician to perform routine safety checks to determine that the TV is in proper operating condition.

# FEATURES

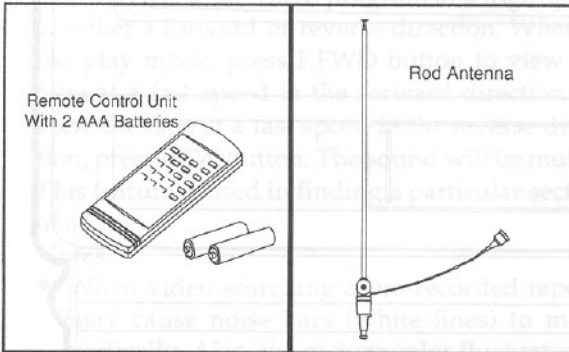
- ◆ **1 month, 4-events Timer Recording**– Set, to turn on, record, and turn off once, anytime during a 1-month period up to 4 events.
- ◆ **2 Rotary Head Record/Playback System**– 2 rotary heads to ensure excellent picture quality and special effects playback.
- ◆ **Automatic Playback Speed Selection**– Automatically selects playback speed even though the tape has been recorded in SP, LP, or SLP mode, it will playback at proper speed.
- ◆ **Auto Power On and Off system**– Automatically turns VCR on as you insert the cassette, then play (Note: safety tab removed), and turns off after auto-rewind, when reaches beginning of the tape, ejects and shut power off.
- ◆ **Auto Repeat Playback**– Allows you to repeat a tape indefinitely without touching the PLAY button.
- ◆ **DEW Sensor System with Dew Indicator**
- ◆ **Infrared Remote Control**– You can operate all the tape transport controls, and change the channel up and down volume up and down from the comfort of your armchair.
- ◆ **On-Screen Display**
- ◆ **Picture Search**– You may play pre-recorded tape at a high speed in either a forward or reverse direction.
- ◆ **PLL 181 Frequency Synthesizer Quartz Tuner with 1 Channel Cable-compatible with Random Access Capability** (A converter may be necessary to view CATV channels.)
- ◆ **One Touch Recording**– Automatic recording from 30 to 480 minutes is possible at the push of OTR button. (You don't need any timer adjustment for recording.)
- ◆ **STILL**– "Freeze" the picture at any time, for close viewing of a particular scene. Recorder's tape in EP mode shows a better clear picture.
- ◆ **Three Tape Speeds for Record/Playback**– Select SP mode (Standard short play), LP mode (Long play) and SLP mode (Super long play) for up to eight hours of recording/playback with a T-160 tape. For best results, we recommend T-60 or T-120 tapes.

The serial number of this product may be found on the back of the unit. No others have the same serial number as yours. You should record the number and other vital information here and retain this book as a permanent record of your purchase to aid identification in case of theft.

Date of Purchase	
Dealer Purchased from	
Dealer Address	
Dealer Phone No.	
Model No.	13TVCR X1
Serial No.	

# PRECAUTIONS

## SUPPLIED ACCESSORIES



## LOCATION

For safe operation and satisfactory performance of your unit, keep the following in mind when selecting a place for its installation:

- ◆ Shield it from direct sunlight and keep it away from sources of intense heat.
- ◆ Avoid dusty or humid places.
- ◆ Avoid places with insufficient ventilation for proper heat dissipation. Do not block the ventilation holes at the top and bottom of the unit. Do not place the unit on a carpet because this will block the ventilation holes.
- ◆ Install unit in a horizontal position.
- ◆ Avoid locations subject to strong vibration.
- ◆ Do not place the unit near strong magnetic fields.
- ◆ Do not move the unit from a cold to a hot place or vice versa.

## AVOID THE HAZARDS OF ELECTRICAL SHOCK AND FIRE

- ◆ Do not handle the power cord with wet hands.
- ◆ Do not pull on the power cord when disconnecting it from an AC wall outlet. Grasp it by the plug.
- ◆ If, by accident, water is spilled on your unit, unplug the power cord immediately and take the unit to an authorized video service center for servicing.
- ◆ Do not put your fingers or objects into the VCR cassette holder.
- ◆ Do not place anything directly on top of the unit.

## DEW WARNING/INDICATOR

This video cassette recorder is equipped with a sensor which prevents DEW condensation. If excessive moisture is present inside the unit, the DEW letter on screen goes on. While the indicator is lit, safety device prevents the unit from operating until moisture is gone. Moisture condensation may occur inside the unit when it is removed from a cold place to a warm place, or after heating a cold room or under conditions of high humidity. Therefore when the DEW letter light is on turn the POWER button off and allow at least 2 hours for the unit to dry out.

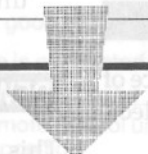
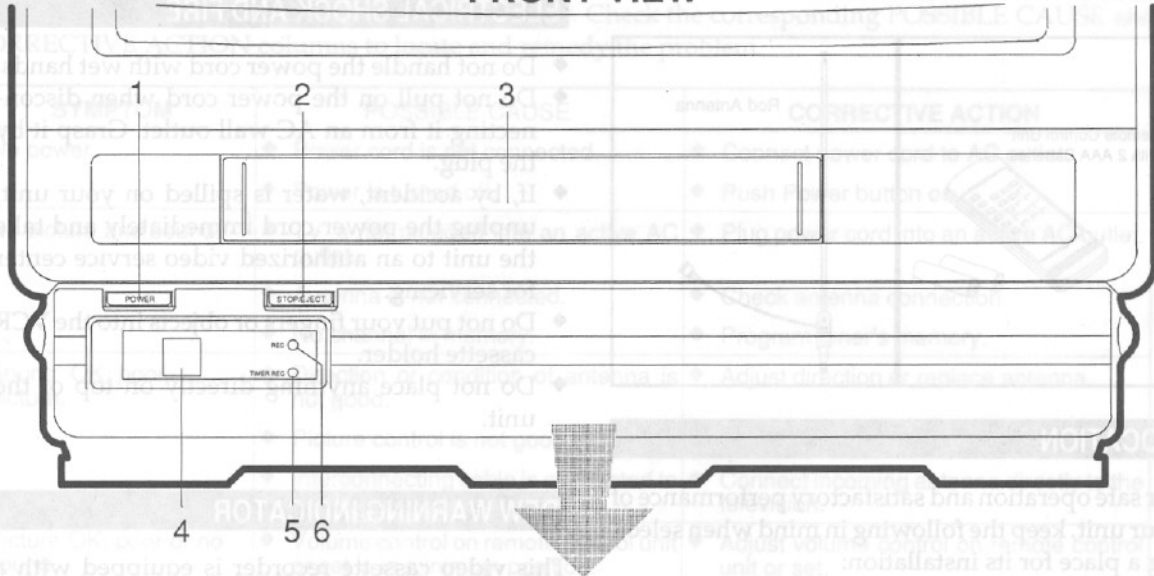
**Note:** DEW indicator may not go on for first 15 minutes even if moisture condensation may occur inside the unit when room temperature or humidity changes suddenly. In this case, do not insert the cassette for first 30 minutes.

## IMPORTANT COPYRIGHT INFORMATION

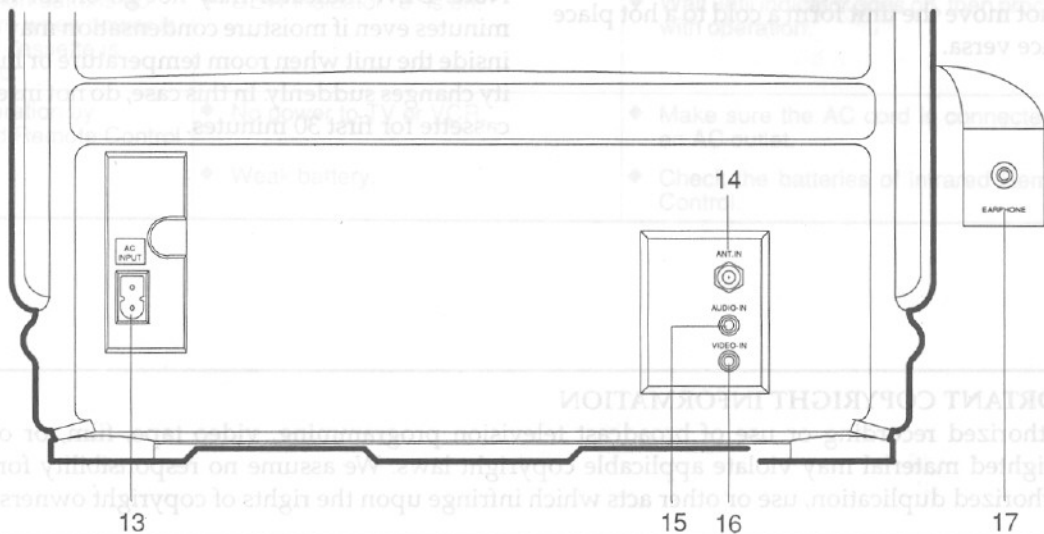
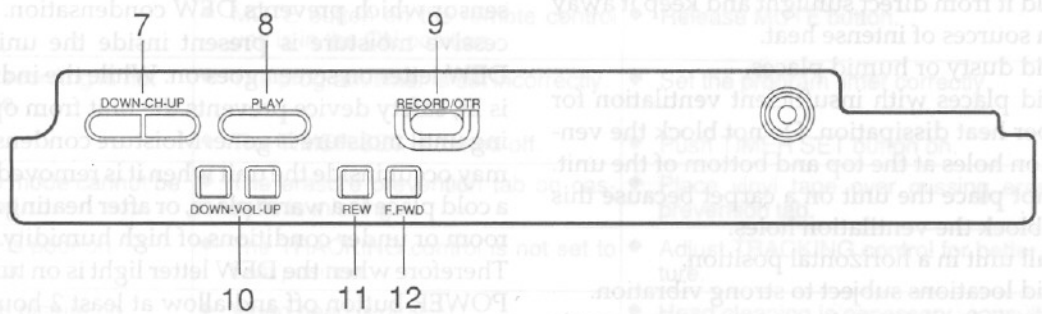
Unauthorized recording or use of broadcast television programming, video tape, film, or other copyrighted material may violate applicable copyright laws. We assume no responsibility for the unauthorized duplication, use or other acts which infringe upon the rights of copyright owners.

# OPERATING CONTROLS AND FUNCTIONS

— FRONT VIEW —



— REAR VIEW —



- 1 **POWER button**— To turn the unit on and off.
- 2 **STOP/EJECT button**— To stop tape motion and remove the tape from VCR.
- 3 **CASSETTE COMPARTMENT**
- 4 **REMOTE SENSOR**— Receives the infrared control signals from the handheld remote control unit.
- 5 **TIMER REC indicator**— Lights when in the Timer Recording mode.
- 6 **REC indicator**— Lights when in the Recording mode.
- 7 **CHANNEL UP/DOWN button**— To select the channel for viewing or recording.
- 8 **PLAY button**— To begin playback of a tape.
- 9 **RECORD/OTR button**— Press to begin manual recording and activate one touch timer recording mode.
- 10 **VOLUME UP/DOWN button**— To adjust the volume level.

- 11 **REW button**— To rewind tape, or to view video, in reverse, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- 12 **F.FWD button**— To advance tape faster than normal or to view video, in forward direction, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- 13 **AC INPUT**— Connect the AC cord.
- 14 **ANT.IN jack**— Connect 75-ohm antenna.
- 15 **AUDIO INPUT jack**— Connect to audio output jack of a video camera or another VCR.
- 16 **VIDEO INPUT jack**— Connect to video output jack of your video camera or another VCR.
- 17 **EARPHONE jack**— To connect earphones (not supplied) for personal listening.



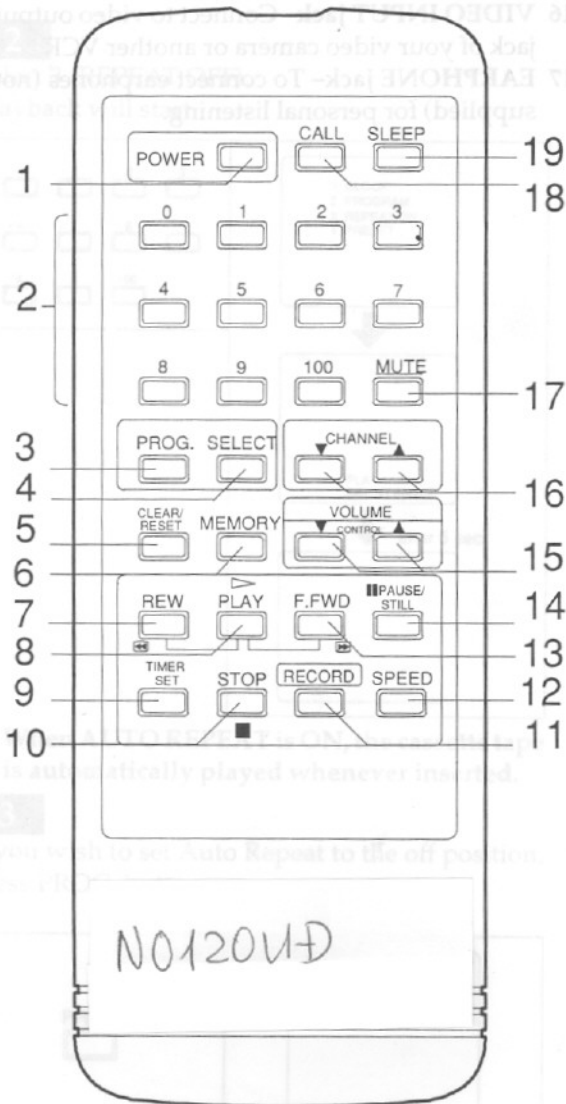
# REMOTE CONTROL OPERATION

You can operate all of tape transport functions and TV control functions from the Remote Control (included). The buttons on the Remote Control have the same functions as the corresponding buttons on the unit.

## HOW TO USE REMOTE CONTROL

**1 POWER button**— To turn power, monitor on and off.

U R E M T 3 1 M 5 0 0 4



**2 NUMERICAL KEYS**— To select desired channels. They cannot be used to set desired channel during Timer Recording. If you want to select channel among 1 to 9, first 0 Key and then push desired Key among 1 to 9.

**3 PROG. button**— To set CLOCK, TIMER RECORD PROGRAM, REPEAT MODE, and PRE-SETTING OF THE CHANNELS.

**4 SELECT button**— To select setting mode.

**5 CLEAR/RESET button**— To reset counter to 0000. And channel memory delete.

**6 MEMORY button**— To set counter memory-in. And channel memory add.

**7 REW button**— To rewind tape, or to view video in reverse during play mode at a faster than normal speed. Press PLAY button to return normal playback speed.

**8 PLAY button**— To playback the tape.

**9 TIMER SET button**— To activate the automatic recording timer.

**10 STOP button**— To stop the tape.

**11 RECORD button**— Allows you to record continuously.

**12 SPEED button**— To set desired recording speed. (SP/LP/SLP)

**13 F.FWD button**— To advance tape faster than normal or to view video in forward direction during play mode at a faster than normal speed. Press PLAY button to return normal playback speed.

**14 PAUSE/STILL button**— To stop the tape temporarily during playback or recording. To view a still picture during playback.

**15 VOLUME buttons**— To adjust desired volume level by pressing either "▲" or "▼" button. They may also be used to adjust the picture control.

**16 CHANNEL buttons**— To select desired channel number by pressing either "▲" or "▼" button. They may also be used for adjusting tracking control when tape is in play. They can not be used during TIMER RECORDING.

**17 MUTE button**— To mute sound. Press again to resume sound.

**18 CALL button**— To call channel display, counter number, and the current time on the screen.

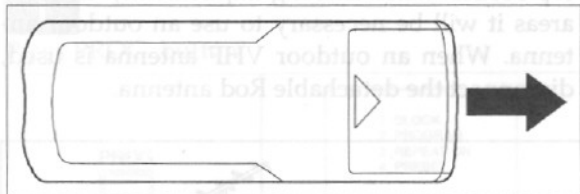
**19 SLEEP button**— To activate the sleep function.



## INSTALLING THE BATTERIES

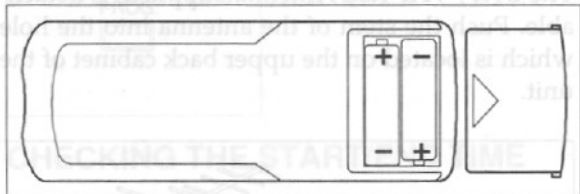
**1**

Slide the battery compartment cover on the remote unit in the direction of the arrow.



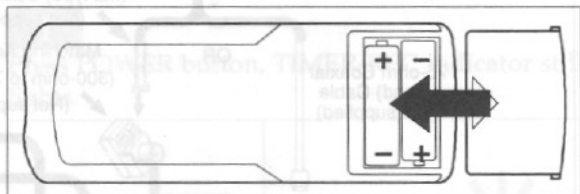
**2**

Insert 2 "AAA" penlight batteries into the battery compartment in the direction as indicated by the polarity (+/-) markings.



**3**

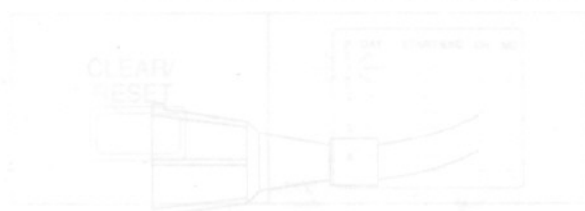
Replace the cover



Select the desired program by using the CH+ and CH- buttons (up/down) or the numeric keypad.



If the antenna pin is bent, it is bent straighten the pin as illustrated. Then plug the pin into antenna terminal.



(Straight pin)

Note: Before plugging the telescopic monopole antenna into antenna terminal, check that the pin is not bent. If the antenna pin is bent, it is bent straighten the pin as illustrated. Then plug the pin into antenna terminal. If the antenna pin is bent, it is bent straighten the pin as illustrated. Then plug the pin into antenna terminal.

Press PROC button. Then turn the TVCR power off.



(Needs to be straightened)

# ANTENNA CONNECTIONS

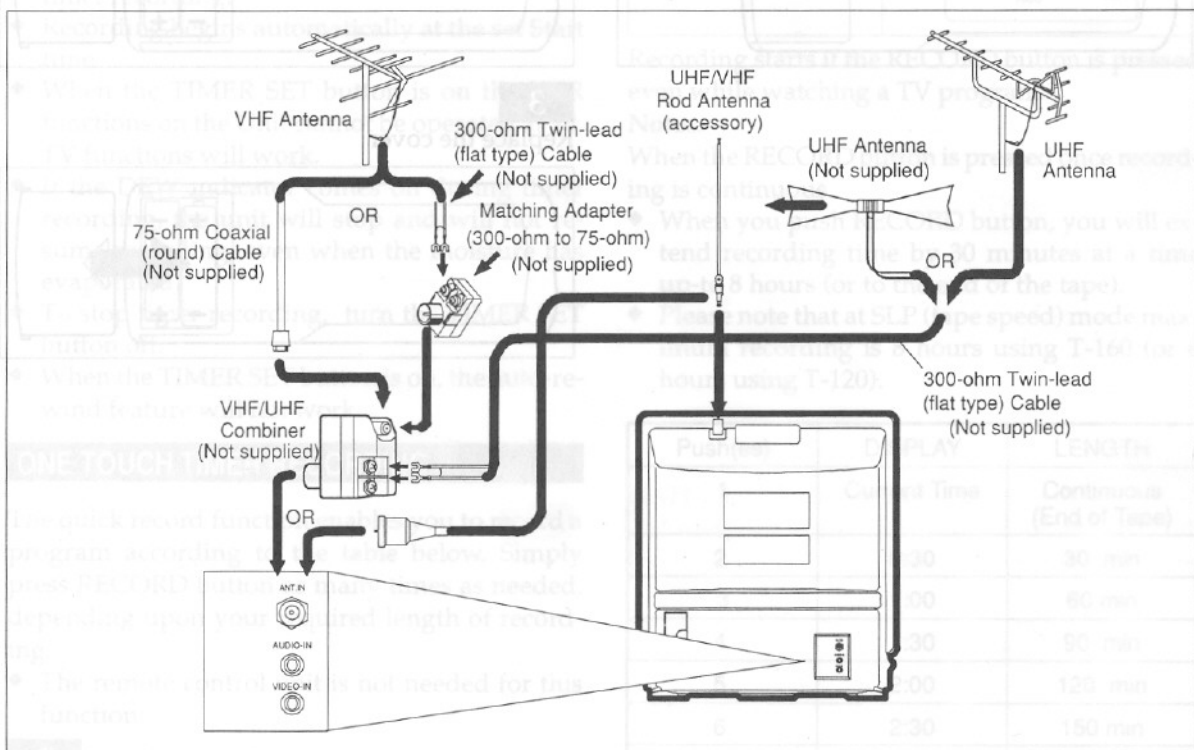
## UHF/VHF RECEPTION AREA USING SEPARATE ANTENNAS

### UHF/VHF ANTENNA HOOK UP

The UHF/VHF Rod Antenna (supplied) is detachable. Push the stem of the antenna into the hole which is located on the upper back cabinet of the unit.

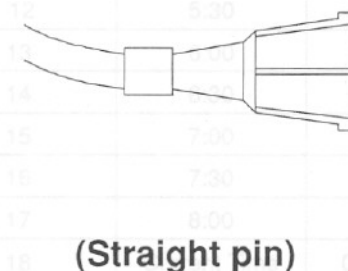
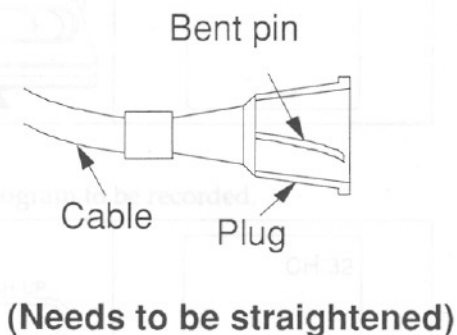
Connect the Rod antenna to ANT.IN terminal of TV as shown in drawing.

For the best reception, extend the rod antenna and adjust its length and position. (Avoid handling the top section when making adjustments). In some areas it will be necessary to use an outdoor antenna. When an outdoor VHF antenna is used, disconnect the detachable Rod antenna.



**Note :**  
Before plugging the telescopic monopole antenna into antenna terminal, check that the pin is not

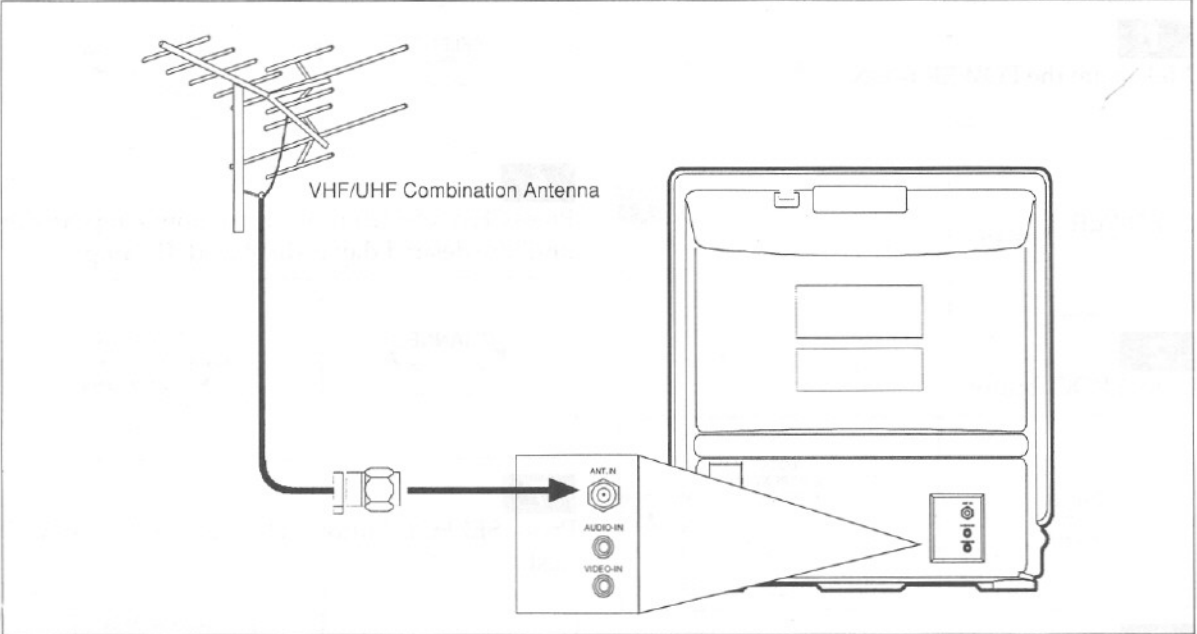
bent. If it is bent, straighten the pin as illustrated, then plug the pin into antenna terminal.



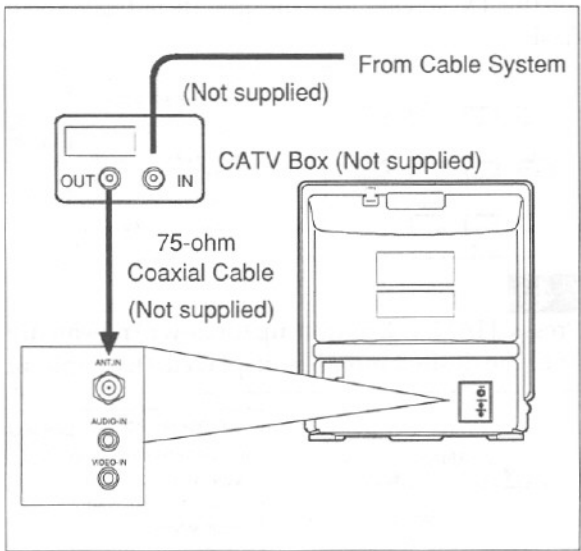
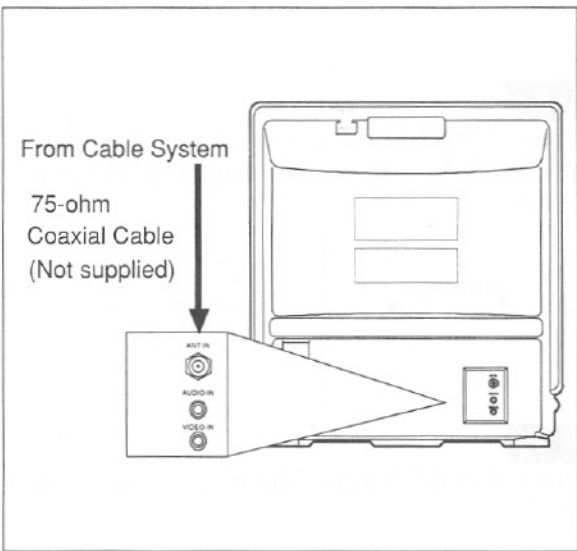
INSTALLING THE CORRECT ANTENNA/CABLE CONNECTION

**VHF/UHF COMBINED ANTENNA**

A VHF UHF 75 ohm combination antenna can be connected to ANT.IN terminal.



**CABLE AND PAY TV**



**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.

# PREPARATION FOR USE

## SETTING THE CLOCK FOR CORRECT TIME

◆ You must use the remote control unit.  
In the example below, the clock is to be set to Monday at 5:40PM.

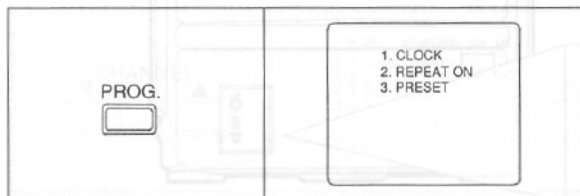
**1**

Make sure the POWER is ON.



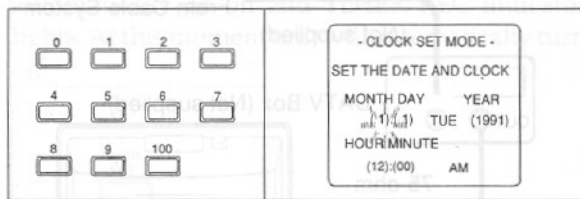
**2**

Press PROG. button.



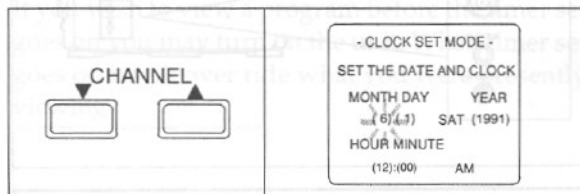
**3**

Select 1 (CLOCK). "CLOCK SET MODE" appears on the TV screen, and the month indicator will flash.



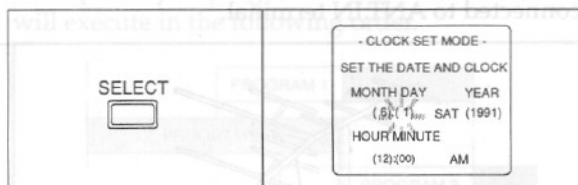
**4**

Press CHANNEL button, up (or down) repeatedly until the desired month is displayed. (Example: 6)



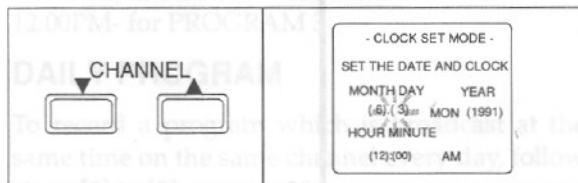
**5**

Press SELECT button. The day indicator will flash.



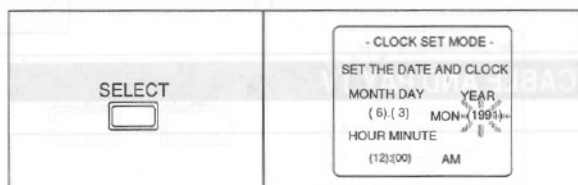
**6**

Press CHANNEL button, up (or down) repeatedly until the desired day is displayed. (Example: 3)



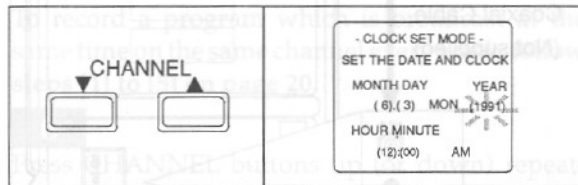
**7**

Press SELECT button. The year indicator will flash.



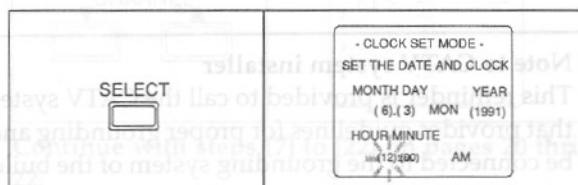
**8**

Press CHANNEL button, up (or down) repeatedly until the desired year is displayed. (Example: 1991)



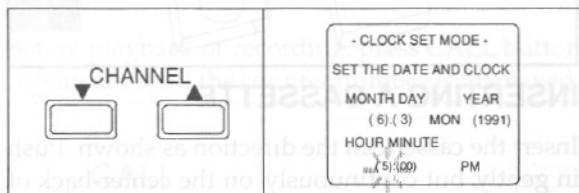
**9**

Press SELECT button. The hours indicator will flash.



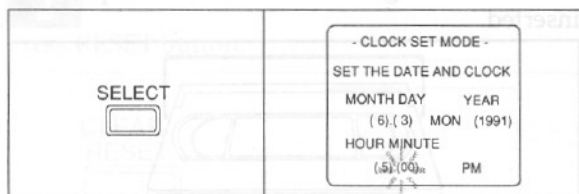
**10**

Press CHANNEL button up (or down) repeatedly until the desired hour is displayed. Make sure time of day "AM" or "PM" is correct, if not continue pressing the channel up. (Example: 5PM)



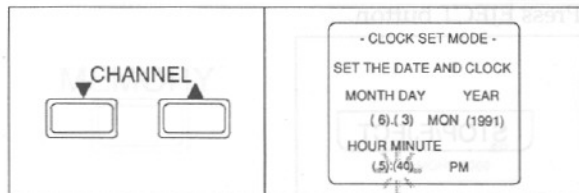
**11**

Press SELECT button. The minutes indicator will flash.



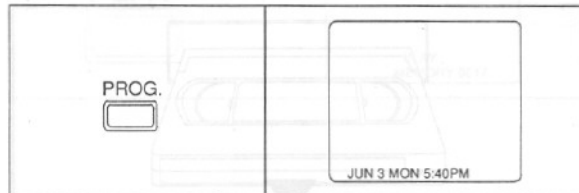
**12**

Press CHANNEL button, up (or down) repeatedly until the desired minutes are displayed. (Example: 40)



**13**

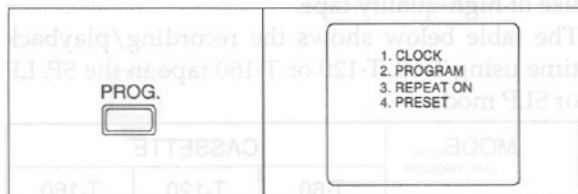
Press PROG. button, selected date and clock is displayed. Now, the clock time will start, although the seconds are not displayed, then begin counting at ": 00" when you press PROG. button.



## CHANGING DATE OR CLOCK

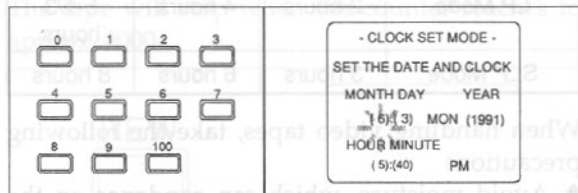
**1**

Press PROG. button.



**2**

Select 1 (CLOCK).



Continue on page 12 step number [4].

one. Playing a tape that has moisture in it will damage the tape and your VCR. Before using a tape with these conditions, wait until the tape has warmed to room temperature and the moisture has evaporated.

- ◆ Avoid extreme heat, high humidity and magnetic fields.
- ◆ Do not tamper with the cassette mechanism.
- ◆ Do not touch the tape with your fingers.

## ERASE PREVENTION

You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with plastic tape.



Insert the cassette into the VCR as shown.



## VIDEO CASSETTE

This VCR will operate with any cassette that has the VHS mark. For best results we recommend the use of high-quality tape.

The table below shows the recording/playback time using T-60, T-120 or T-160 tape in the SP, LP or SLP mode.

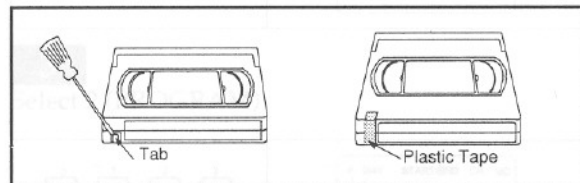
MODE	CASSETTE		
	T-60	T-120	T-160
SP Mode	1 hour	2 hours	2-2/3 hours
LP Mode	2 hours	4 hours	5-1/3 hours
SLP Mode	3 hours	6 hours	8 hours

When handling video tapes, take the following precautions

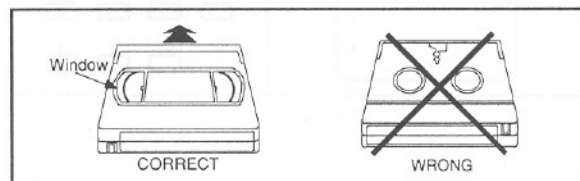
- ◆ Avoid moisture, which can condense on the tape if it is moved from a cold place to a warm one. Playing a tape that has moisture in it will damage the tape and your VCR. Before using a tape with these conditions, wait until the tape has warmed to room temperature and the moisture has evaporated.
- ◆ Avoid extreme heat, high humidity and magnetic fields.
- ◆ Do not tamper with the cassette mechanism.
- ◆ Do not touch the tape with your fingers.

## ERASE PREVENTION

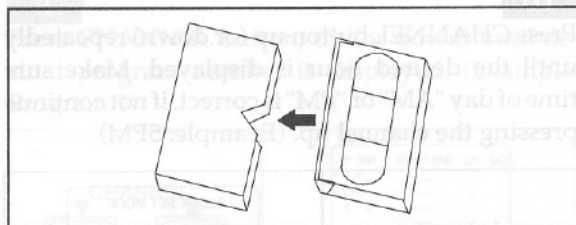
You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with plastic tape.



Insert the cassette into the VCR as shown.



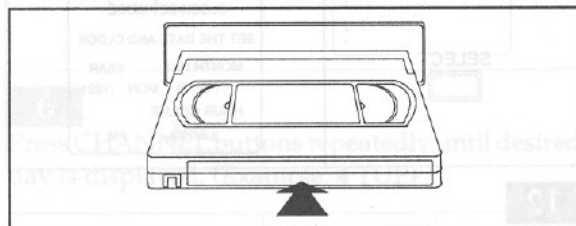
Store the cassette in its case as shown.



## INSERTING A CASSETTE

Insert the cassette in the direction as shown. Push in gently, but continuously, on the center-back of the cassette until it is drawn completely into the VCR.

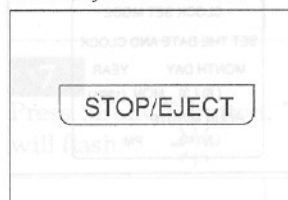
VCR is automatically turned on, and cassette-in indicator will light when the cassette is properly inserted.



## REMOVING A CASSETTE

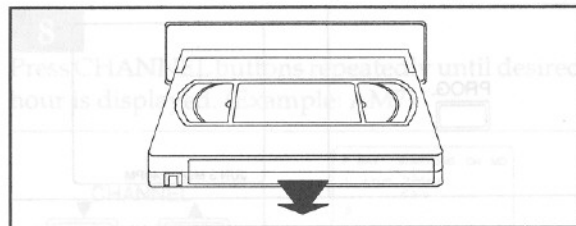
**1**

Press EJECT button.



**2**

When the cassette-in indicator goes off and the cassette stops moving, pull the cassette out of the cassette compartment and store it properly.



## CHANNEL MEMORY PROGRAMMING

You can program the tuner to scan only the channels you receive in your area.

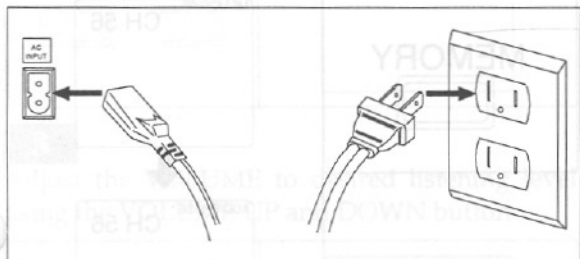
- ◆ Programed channels are erased when you disconnect the power cord or the power failure occur.

## AUTOMATIC MEMORY-IN

- ◆ You must use the remote control unit.

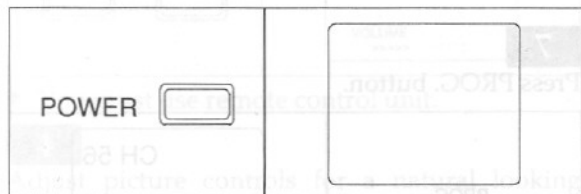
**1**

Attach the smaller end of the supplied AC cord to the AC 120V connector on the back of the TV/VCR. Then, plug the other end into a standard AC outlet.



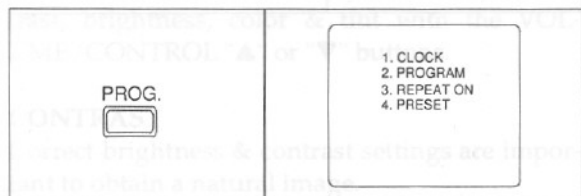
**2**

Press POWER button to on.



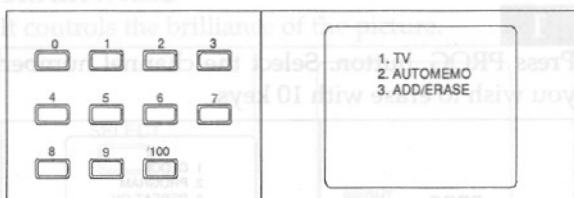
**3**

Press PROG. button.



**4**

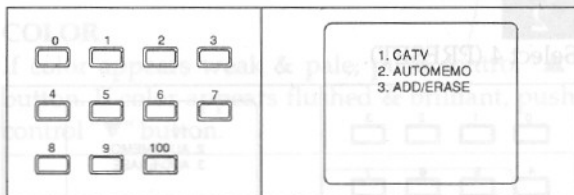
Select 4 (PRESET).



**Note:** If you do not have CATV proceed to step [6].

**5**

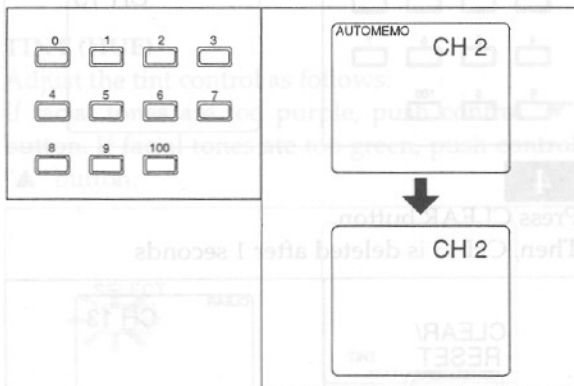
Select 1 (TV).



**6**

Select 2 (AUTO MEMO).

The display scans through the channels and all active channels are automatically stored. Then, The lowest CH memorized appears on the screen.

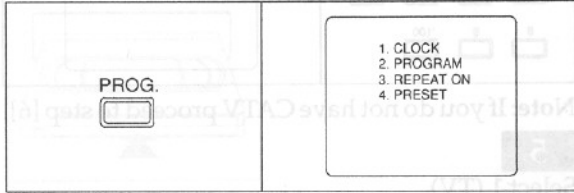


## TO DELETE, ADD PRESET CHANNEL

◆ You must use the remote control unit.

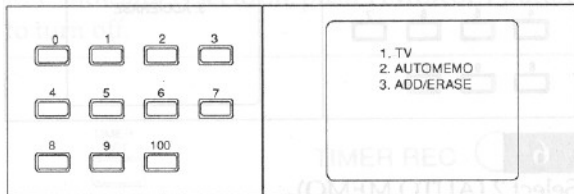
**1**

Press PROG. button. Select the channel number you wish to erase with 10 keys.



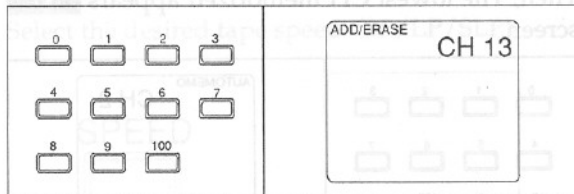
**2**

Select 4 (PRESET).



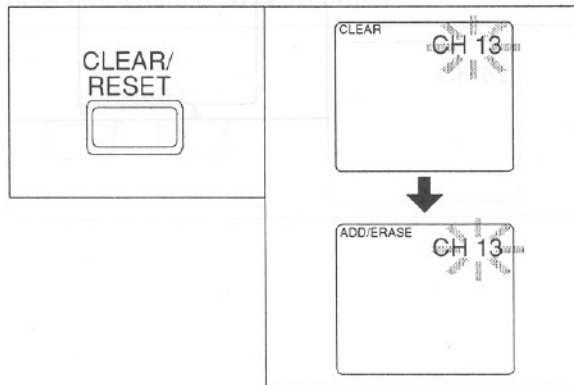
**3**

Select 3 (ADD/ERASE).



**4**

Press CLEAR button.  
Then, CH 13 is deleted after 1 seconds

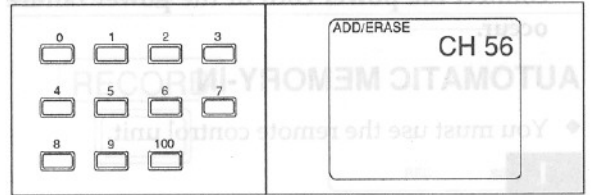


**Note:** If you do not need to add a channel proceed to step [7].

**5**

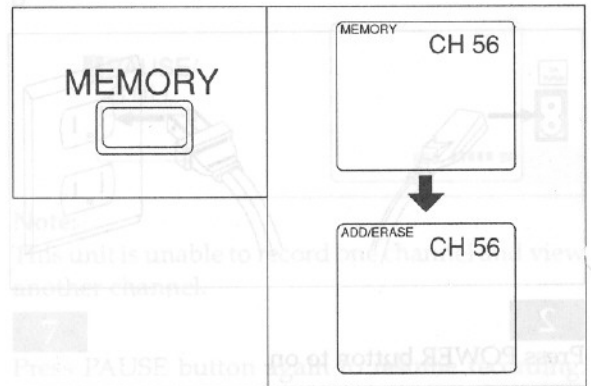
Select the channel number you want to add with 10 keys.

(Example: Channel 56)



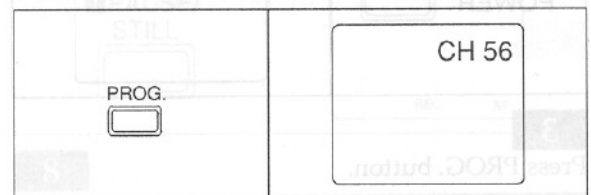
**6**

Press MEMORY button.  
Then, CH 56 is preset after 1 seconds.



**7**

Press PROG. button.



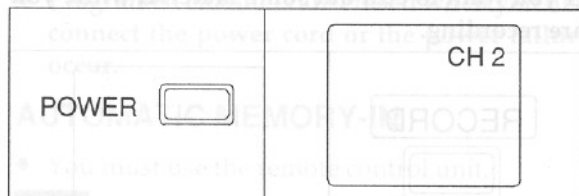


# OPERATION

## T.V. OPERATION

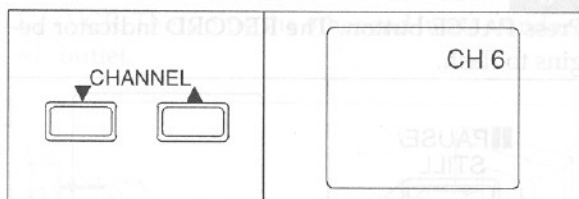
1

Push POWER button to ON.



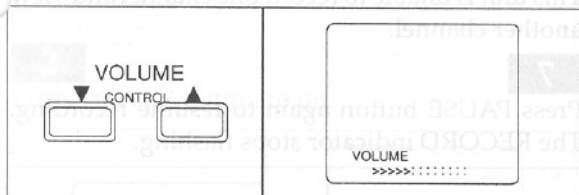
2

Select the desired channel.



3

Adjust the VOLUME to desired listening level using the VOLUME UP and DOWN buttons



◆ You must use remote control unit.

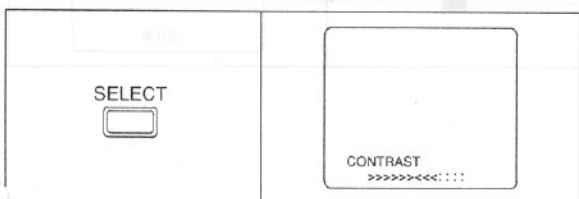
4

Adjust picture controls for a natural looking image.

Press SELECT button. Now you can adjust contrast, brightness, color & tint with the VOLUME/CONTROL "▲" or "▼" buttons.

### CONTRAST

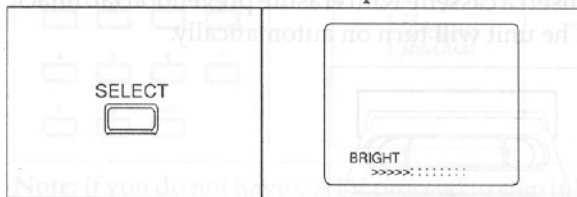
Correct brightness & contrast settings are important to obtain a natural image.



Press SELECT button.

### BRIGHTNESS

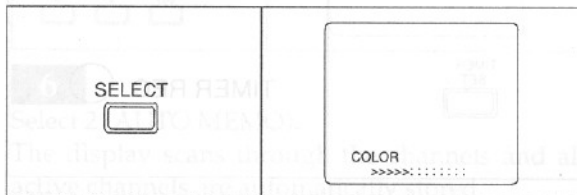
It controls the brilliance of the picture.



Press SELECT button.

### COLOR

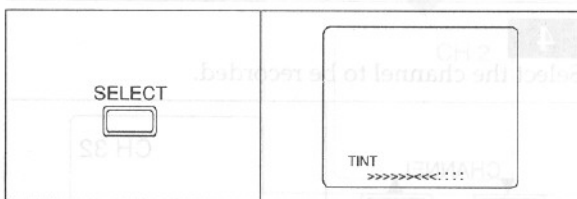
If color appears weak & pale, push control "▲" button. If color appears flushed & brilliant, push control "▼" button.



Press SELECT button.

### TINT (HUE)

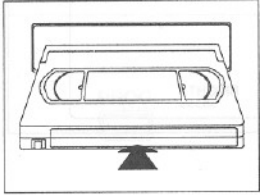
Adjust the tint control as follows:  
If facial tones are too purple, push control "▼" button. If facial tones are too green, push control "▲" button.



## VIEWING AND RECORDING THE SAME PROGRAM

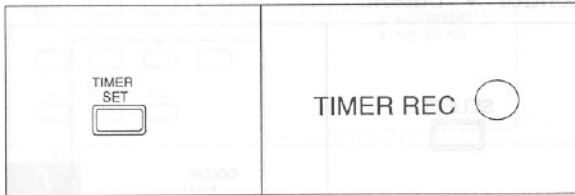
**1**

Insert a cassette with erasure prevention tab intact. The unit will turn on automatically.



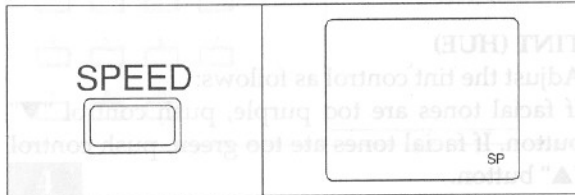
**2**

Ensure TIMER REC indicator is off. When TIMER REC indicator is set to on, push TIMER SET button to turn off.



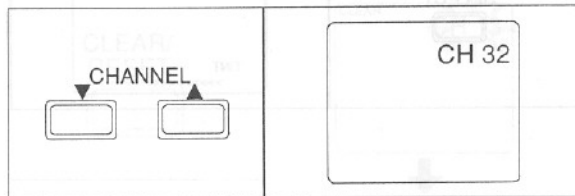
**3**

Select the desired tape speed. (SP/LP/SLP)



**4**

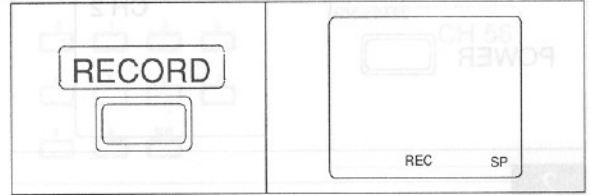
Select the channel to be recorded.



**5**

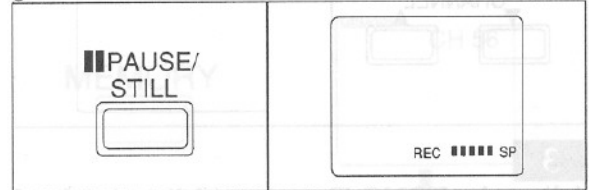
Press RECORD button. The RECORD indicator will light.

**If you want to edit out some material while you are recording.**



**6**

Press PAUSE button. The RECORD indicator begins to flash.

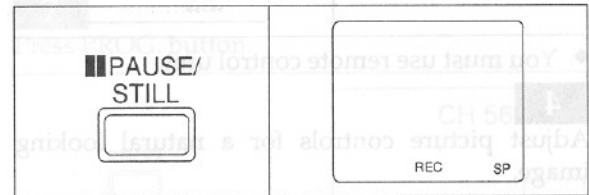


**Note:**

This unit is unable to record one channel and view another channel.

**7**

Press PAUSE button again to resume recording. The RECORD indicator stops flashing.



**8**

Press STOP button when recording is completed. The RECORD indicator will go off.



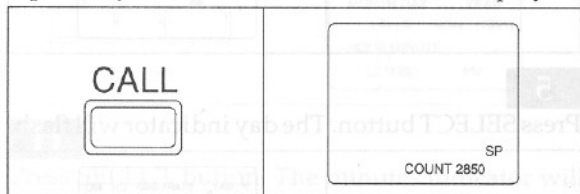
## COUNTER MEMORY BUTTON

The MEMORY button can be used during REWIND or F.FWD mode, to stop tape as tape approaches counter display of approx. 0000.

- ◆ You must use remote control unit.

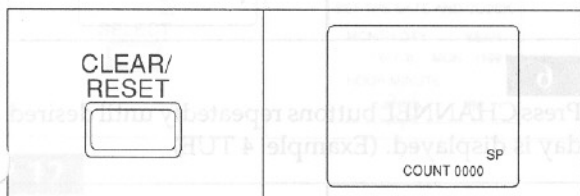
**1**

Before playback or recording, press CALL button repeatedly until the counter number is displayed.



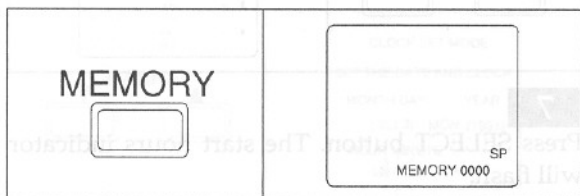
**2**

Press RESET button.



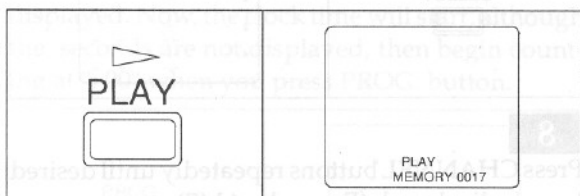
**3**

Press MEMORY button.



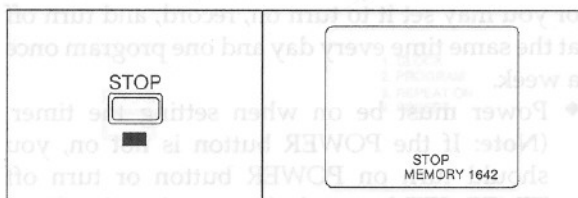
**4**

Press REC or PLAY button.



**5**

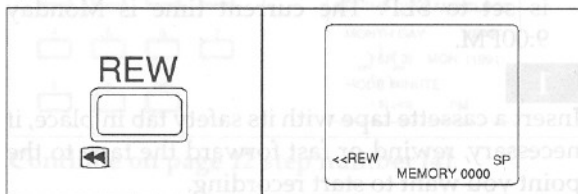
Press STOP button when recording or playback is completed.



**6**

Press REW button.

The tape will stop when the counter reaches to approx. 0000.



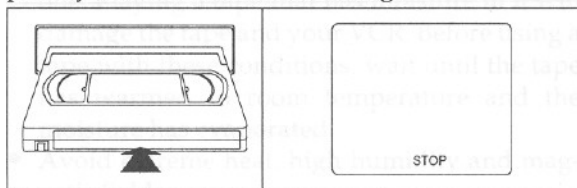
## AUTOMATIC TIMER RECORDING

You may set the TVCR to turn on, record and turn off four separate times, during any 1 month period or you may set it to turn on, record, and turn off at the same time every day and one program once a week.

- ◆ Power must be on when setting the timer. (Note: If the POWER button is not on, you should turn on POWER button or turn off TIMER SET button before starting timer setting.)
- ◆ In the example below, the timer is being set to record channel 32 from 7:30AM to 8:50AM on Tuesday in program number 1. The tape speed is set to SLP. The current time is Monday 9:00PM.

**1**

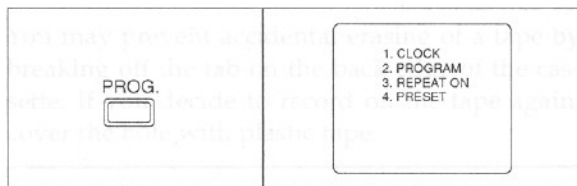
Insert a cassette tape with its safety tab in place, if necessary, rewind or fast forward the tape to the point you want to start recording.



- ◆ You must use the remote control.

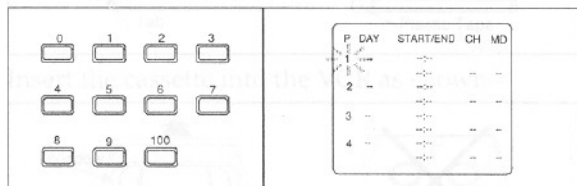
**2**

Press PROG. button.



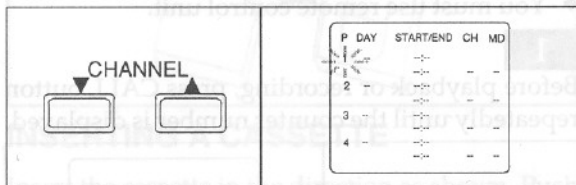
**3**

Select 2 (PROGRAM).



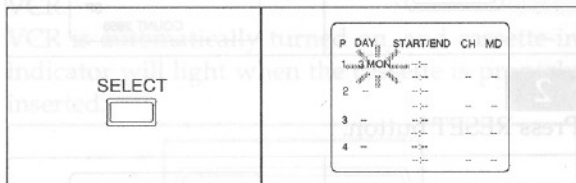
**4**

Press CHANNEL button, up (or down) until desired program number is displayed. (Example: Program 1)



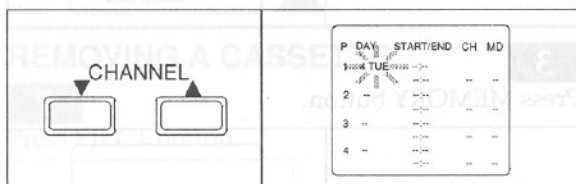
**5**

Press SELECT button. The day indicator will flash.



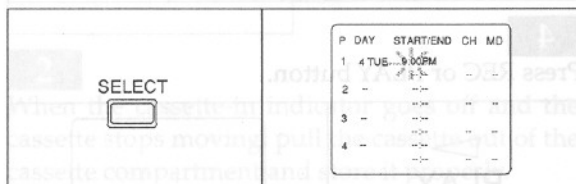
**6**

Press CHANNEL buttons repeatedly until desired day is displayed. (Example: 4 TUE)



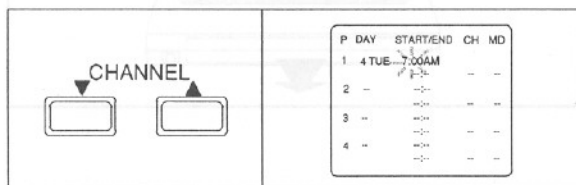
**7**

Press SELECT button. The start hours indicator will flash.



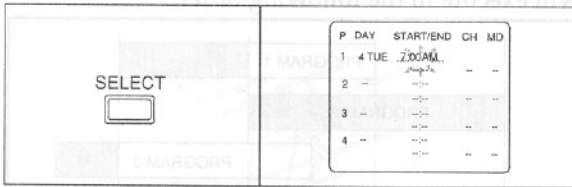
**8**

Press CHANNEL buttons repeatedly until desired hour is displayed. (Example: AM7)

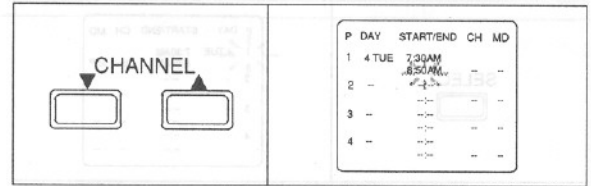


**9**

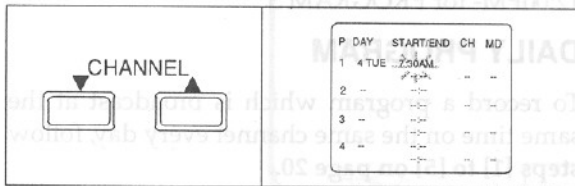
Press SELECT button. The start minutes indicator will flash.

**14**

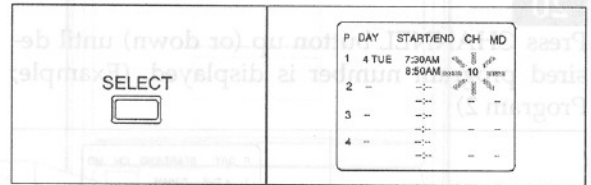
Press CHANNEL buttons repeatedly until desired minutes are displayed. (Example: 50)

**10**

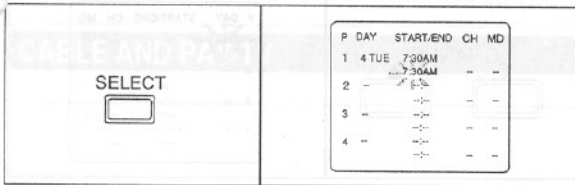
Press CHANNEL buttons, repeatedly until desired minutes are displayed. (Example: 30)

**15**

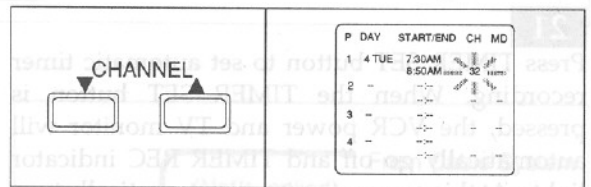
Press SELECT button. The channel indicator will flash.

**11**

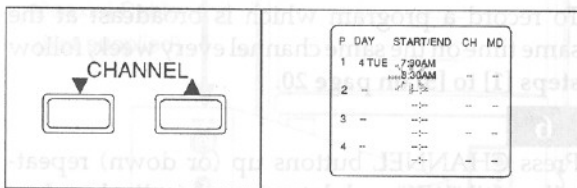
Press SELECT buttons. The end hours indicator will flash.

**16**

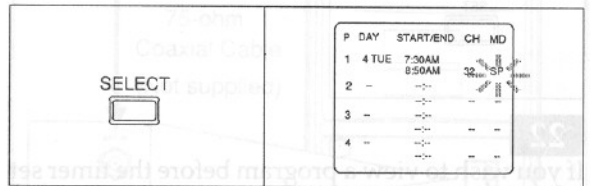
Press CHANNEL buttons repeatedly until desired channel is displayed. (Example: Channel 32)

**12**

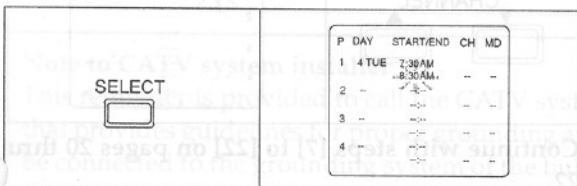
Press CHANNEL buttons repeatedly until desired hour is displayed. (Example: AM 8)

**17**

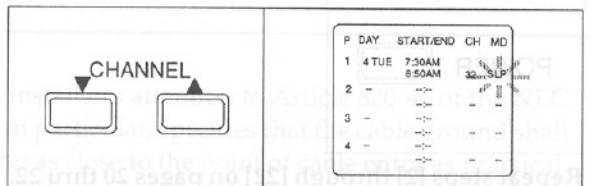
Press SELECT button. The tape speed indicator will flash.

**13**

Press SELECT button. The end minutes indicator will flash.

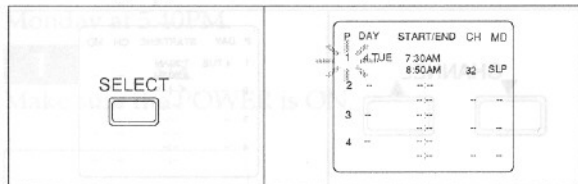
**18**

Press CHANNEL buttons repeatedly until desired tape speed is displayed. (Example: SLP)



## 19

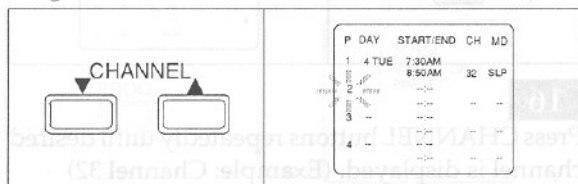
Press **SELECT** button, the program #1 will flash. Now the program set 1 is completed.



**Note:** If you do not wish to enter another program for AUTOMATIC TIMER RECORDING proceed to step 21.

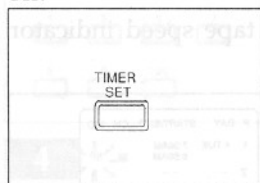
## 20

Press **CHANNEL** button up (or down) until desired program number is displayed. (Example; Program 2)



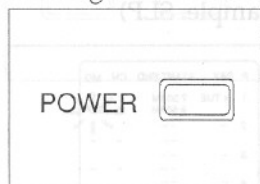
## 21

Press **TIMER SET** button to set automatic timer recording. When the **TIMER SET** button is pressed, the VCR power and TV monitor will automatically go off and **TIMER REC** indicator lights. At this moment unit will automatically turn off.



## 22

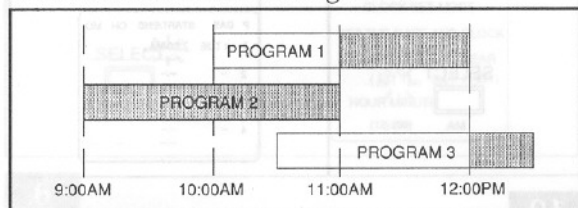
If you wish to view a program before the timer set goes on you may turn on the unit. When timer set goes on it will over ride what you were presently viewing.



Repeat steps [2] through [22] on pages 20 thru 22.

**Note:** When programs overlap, the earliest time set program has priority.

**Example:** If you programmed as illustrated, they will execute in the following order:



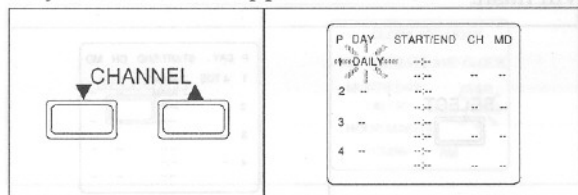
9:00AM-11:00AM for PROGRAM 2  
11:00AM-12:00PM for PROGRAM 1  
12:00PM- for PROGRAM 3

## DAILY PROGRAM

To record a program which is broadcast at the same time on the same channel every day, follow steps [1] to [5] on page 20.

## 6

Press **CHANNEL** buttons up (or down) repeatedly until "DAILY" appears on the screen.



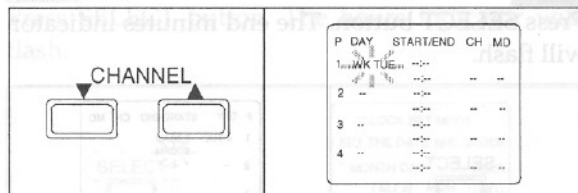
Continue with steps [7] to [22] on pages 20 thru 22.

## WEEKLY PROGRAM

To record a program which is broadcast at the same time on the same channel every week, follow steps [1] to [5] on page 20.

## 6

Press **CHANNEL** buttons up (or down) repeatedly until "WK" and date of week is displayed on the screen.



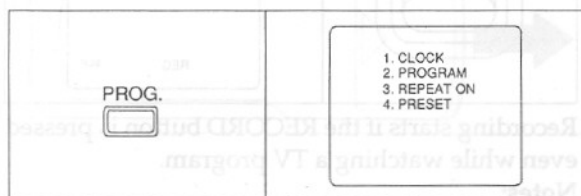
Continue with steps [7] to [22] on pages 20 thru 22.

## TO CANCEL A PRE-PROGRAM

◆ Timer Recording Mode is off.  
Please use buttons on the remote control unit for following steps.

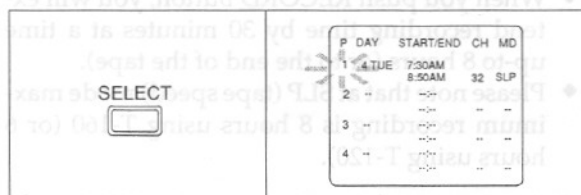
**1**

Press PROG. button.



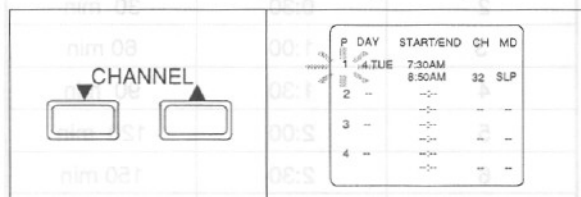
**2**

SELECT 2 (PROGRAM).



**3**

Select the desired program number with CHANNEL up (or down) keys. (Example: Program 1)



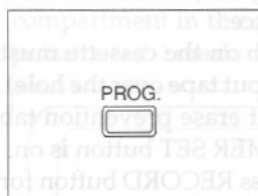
**4**

Press CLEAR button.  
The selected program is erased.



**5**

Press PROG. button.

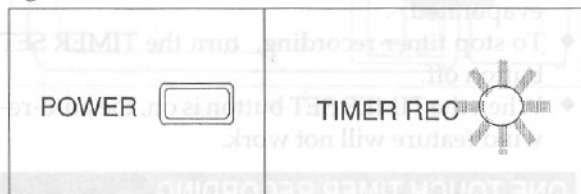


## CHECKING THE START/END TIME

After setting the timer recording, to confirm the program number, Start/End time, and channel number.

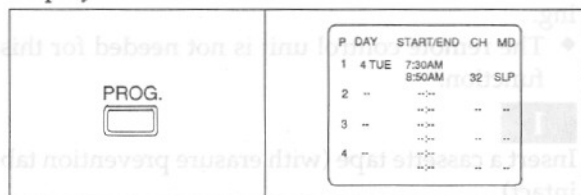
**1**

Press POWER button, TIMER-REC indicator still lights.



**2**

Press PROG. button on the remote control unit.  
The information for all programs appears on the display.



**Note:**

If the tape runs out before the end time, the TVCR will switch to the stop mode immediately, and tape will be ejected, and the TVCR power will shut off.

**3**

Press PROG. button.

Then turn unit off with POWER button.



## TIMER RECORDING HINTS

- ◆ Make sure the channel you want to record is properly tuned in advance.
- ◆ The erase prevention tab on the cassette must be in place (or you must put tape over the hole). **Note:** A cassette without erase prevention tab will be ejected when TIMER SET button is on.
- ◆ It is not necessary to press RECORD button for timer recording.
- ◆ Recording begins automatically at the set Start time.
- ◆ When the TIMER SET button is on the VCR functions on the Unit cannot be operated at all. TV functions will work.
- ◆ If the DEW indicator comes on during timer recording, the unit will stop and will not resume recording, even when the moisture has evaporated.
- ◆ To stop timer recording, turn the TIMER SET button off.
- ◆ When the TIMER SET button is on, the auto-rewind feature will not work.

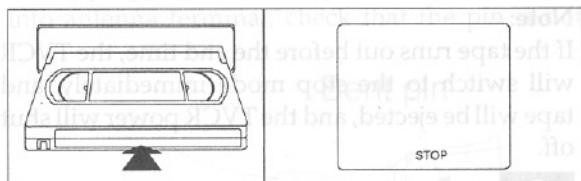
## ONE TOUCH TIMER RECORDING

The quick record function enables you to record a program according to the table below. Simply press RECORD button as many times as needed, depending upon your required length of recording.

- ◆ The remote control unit is not needed for this function.

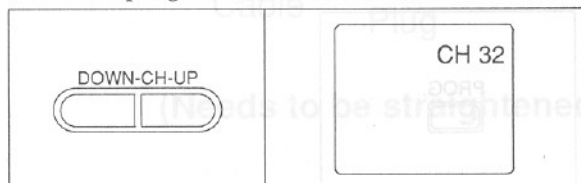
**1**

Insert a cassette tape (with erasure prevention tab intact).



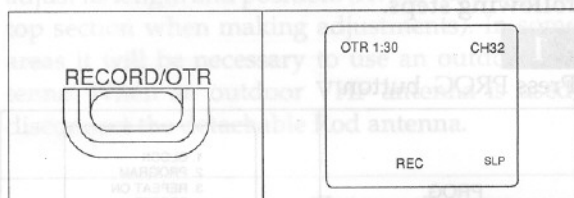
**2**

Select the program to be recorded.



**3**

Press RECORD/OTR button  
(Example: 4 pushes for 90 minutes)



Recording starts if the RECORD button is pressed even while watching a TV program.

### Notes:

When the RECORD button is pressed once recording is continuous.

- ◆ When you push RECORD button, you will extend recording time by 30 minutes at a time up-to 8 hours (or to the end of the tape).
- ◆ Please note that at SLP (tape speed) mode maximum recording is 8 hours using T-160 (or 6 hours using T-120).

Push(es)	DISPLAY	LENGTH
1	Current Time	Continuous (End of Tape)
2	0:30	30 min
3	1:00	60 min
4	1:30	90 min
5	2:00	120 min
6	2:30	150 min
7	3:00	180 min
8	3:30	210 min
9	4:00	240 min
10	4:30	270 min
11	5:00	300 min
12	5:30	330 min
13	6:00	360 min
14	6:30	390 min
15	7:00	420 min
16	7:30	450 min
17	8:00	480 min
18	Current Time	Continuous (End of Tape)

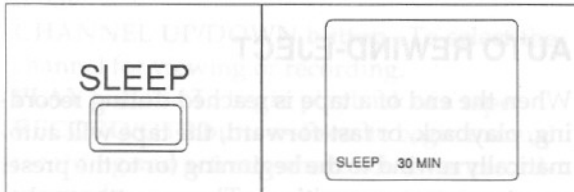


## SETTING THE SLEEP TIMER

The sleep timer function enables you to shut off the power without pressing POWER button after a desired period.

**1**

Press SLEEP button on the remote control unit. The shut off time can be determined by the number of times you press the button. (The sleep timer will be displayed on the screen



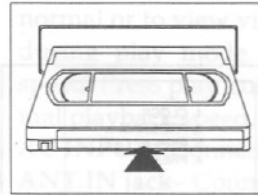
when you press the SLEEP button on remote control unit.)

	SLEEPTIME	DISPLAY
1 push	30 minute	30 MIN
2 pushes	60 minutes	60 MIN
3 pushes	90 minutes	90 MIN
4 pushes	120 minutes	120 MIN
5 pushes	0 minutes	0 MIN

## PLAYBACK

**1**

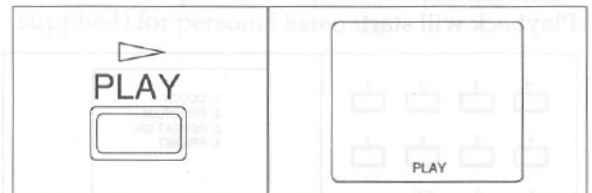
When a pre-recorded tape is inserted, the TVCR will turn on automatically.



**2**

Press PLAY button.

If a cassette tape is inserted without its safety tab in place, TVCR start playback automatically.



**3**

Press STOP button when playback is completed.



**Note:** When playback a pre-recorded tape with COPYGUARD, On-Screen Display may not display normal position or display nothing. This is not an indication of the trouble.

◆ When AUTO REPEAT is ON, the cassette tape is automatically played whenever inserted.

**3**

If you wish to set Auto Repeat to the off position, Press PROG. button.

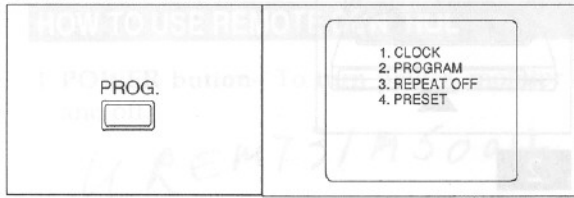


## AUTO REPEAT PLAYBACK

This unit has an auto repeat playback function that allows you to repeat a tape indefinitely without having to continue to push the PLAY button.

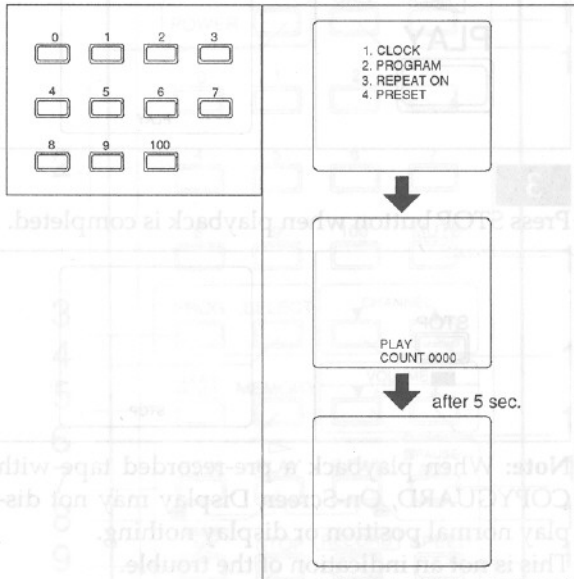
**1**

Press PROG. button.



**2**

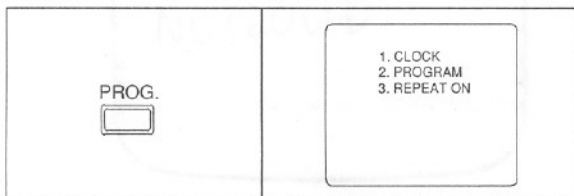
Select 3 (REPEAT OFF).  
Playback will start.



◆ When AUTO REPEAT is ON, the cassette tape is automatically played whenever inserted.

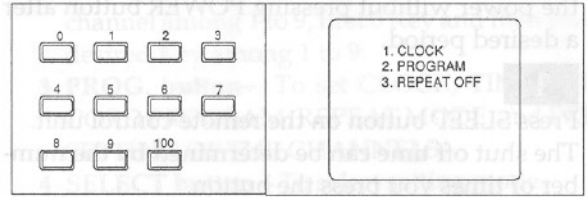
**3**

If you wish to set Auto Repeat to the off position, Press PROG. button.



**4**

Select 3 (REPEAT ON) and it will go to Repeat off.



## AUTO REWIND-EJECT

When the end of a tape is reached during recording, playback, or fast-forward, the tape will automatically rewind to the beginning (or to the preset counter memory position). The cassette mechanism will disengage after rewinding and the tape will be ejected and the TVCR will shut itself off.

**Notes:**

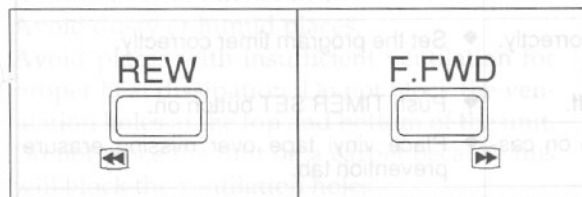
- ◆ The tape will not auto-rewind during timer recording and One Touch Timer Recording.
- ◆ When tape is rewound to the preset memory position, tape will not be ejected and TVCR will not shut off.

## CUE AND REVIEW (VISUAL SEARCH)

You may view the video program at a high speed in either a forward or reverse direction. When in the play mode, press F.FWD button to view the tape at a fast speed in the forward direction. To view the tape at a fast speed in the reverse direction, press REW button. The sound will be muted. This feature is used in finding a particular section of a tape.

### Notes:

- ◆ When video searching a pre-recorded tape, it may cause noise bars (white lines) to move vertically. Also, the picture color fluctuates on and off. This is not an indication of trouble.
- ◆ You will get best results when playing back tapes that were recorded in the SLP mode.
- ◆ To return to normal playback, press PLAY button.
- ◆ The picture will not be as good as normal during CUE and REVIEW.



## SUPER HIGH SPEED SEARCH (LP/SLP MODE)

To Visual Search in super high speed press either fast forward or rewind button while the unit is in the play mode. Release button, then depress again and hold. The unit will now search in super high speed. For normal playback simply press PLAY.

**Note:** Tape recorded in the LP mode will display a noise bar on the screen and the picture may revert to Black and White. This is normal.

## STILL FRAME DURING PLAYBACK

If you press PAUSE button during playback with tapes recorded in SLP mode, the picture will "freeze" on the screen. You may use this feature to study details of a particular scene. Press PLAY button again to continue playback. If you use the

PAUSE button during playback with tapes recorded in the SP or LP mode, it may cause noise bars to appear more than with tapes recorded in the SLP mode. This is not an indication of trouble.

**Note:** The TVCR will automatically switch to the Stop mode, if it is left in the PAUSE/STILL mode for more than five minutes.

## NOISE CANCELLING

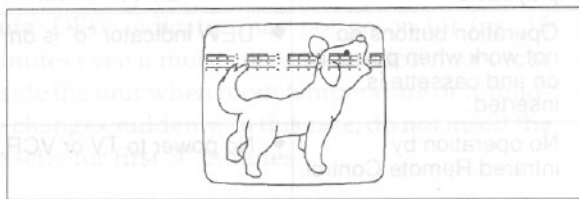
If you use the PAUSE button to freeze the picture during playback, usually there will be video "noise" lines on the screen. This is normal, however, this unit has a special feature that allows you to reposition or reduce the lines. Each time you press the PAUSE button the lines will change position on the screen.

This enables you to see the picture in its entirety without distracting noise lines.

## TRACKING CONTROL

When noise bars appears during playback, adjust the channel UP/DOWN buttons on the TVCR, remote control to achieve the best picture, with channel "▲" or "▼" button.

**Note:** For tapes recorded on your TVCR, the center setting is usually best. Tapes recorded on other VCR's may required adjustment. If you encounter video "noise" during playback adjust to achieve the best picture.



## DEGAUSS

Magnetism from nearby appliances might affect the color of the TV picture. If this happens, move the TV/VCR away from the appliance. If the color is still not correct, disconnect power cord from AC outlet then reconnect it after 30 minutes over.

# TROUBLESHOOTING GUIDE

If you have followed the instructions contained in this manual and have difficulty in operating your unit, locate the SYMPTOM in the left column below. Check the corresponding POSSIBLE CAUSE and CORRECTIVE ACTION columns to locate and remedy the problem.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
No power.	<ul style="list-style-type: none"> <li>◆ Power cord is not connected.</li> <li>◆ Power is turned off.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Connect power cord to AC outlet.</li> <li>◆ Push Power button on.</li> </ul>
No picture and sound.	<ul style="list-style-type: none"> <li>◆ TV is not plugged into an active AC outlet.</li> <li>◆ Antenna is not connected.</li> <li>◆ No channel in memory.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Plug power cord into an active AC outlet.</li> <li>◆ Check antenna connection.</li> <li>◆ Program tuner's memory.</li> </ul>
Sound OK; poor picture.	<ul style="list-style-type: none"> <li>◆ Direction or condition of antenna is not good.</li> <li>◆ Picture control is not good.</li> <li>◆ Interconnecting cable is connected to another source.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Adjust direction or replace antenna.</li> <li>◆ Adjust picture controls.</li> <li>◆ Connect incoming antenna directly to the television.</li> </ul>
Picture OK; poor or no sound.	<ul style="list-style-type: none"> <li>◆ Volume control on remote control unit or set is in minimum position.</li> <li>◆ MUTE button on the remote control unit is in the ON position.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Adjust volume control on remote control unit or set.</li> <li>◆ Release MUTE button.</li> </ul>
Timer recording is not possible.	<ul style="list-style-type: none"> <li>◆ The program timer is set incorrectly.</li> <li>◆ The TIMER SET is turned off.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Set the program timer correctly.</li> <li>◆ Push TIMER SET button on.</li> </ul>
Record mode cannot be engaged.	<ul style="list-style-type: none"> <li>◆ The erasure prevention tab on cassette is missing.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Place vinyl tape over missing erasure prevention tab.</li> </ul>
Picture is poor on playback.	<ul style="list-style-type: none"> <li>◆ The TRACKING control is not set to best position.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Adjust TRACKING control for better picture.</li> </ul>
Noise in picture on playback.	<ul style="list-style-type: none"> <li>◆ Video head is dirty.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Head cleaning is necessary, consult the nearest dealer.</li> </ul>
Operation buttons do not work when power is on and cassette is inserted.	<ul style="list-style-type: none"> <li>◆ DEW indicator "d" is on.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Wait until indicator goes off, then proceed with operation.</li> </ul>
No operation by infrared Remote Control.	<ul style="list-style-type: none"> <li>◆ No power to TV or VCR.</li> <li>◆ Weak battery.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Make sure the AC cord is connected to an AC outlet.</li> <li>◆ Check the batteries of infrared Remote Control.</li> </ul>

# MAINTENANCE

## NATIONAL ELECTRICAL CODE

### CABINET CLEANING

- ◆ Wipe the front panel and other exterior surfaces of the unit with a soft cloth immersed in luke-warm water and wrung dry.
- ◆ Never use a solvent or alcohol. Do not spray insecticide liquid near the unit. Such chemicals may cause damage and discoloration to the exposed surfaces.

### VCR HEAD CLEANING

- ◆ Picture playback may become blurred or interrupted while the TV program received is clear. This does not mean that the recorded program has been erased.

Dirt accumulated on the head after long periods of use causes this problem. Head cleaning requires highly technical skill. Clean heads only when symptom occurs. Bring the unit to your nearest Service Center for a complete cleaning of the heads and cassette compartment.

### SERVICING

- ◆ Should your unit become inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Switch power off, unplug the power cord, and take the unit to your nearest Service Center for servicing.

# SPECIFICATIONS

MAINTENANCE

## GENERAL SPECIFICATIONS

CRT:	13 inch in-line gun, 90 deflection tube
Television system:	NTSC-M
Recording system:	Rotary two-head helical scan system
Tape width:	1/2 inch
Tape speed	
SP	:33.40mm/sec.
LP	:16.67mm/sec.
SLP	:11.12mm/sec.
Tuner channel	
TV VHF Low	:#2~#6
TV VHF High	:#7~#13
TV UHF	:#14~#69
CATV	
VHF	:5A
MID band	:A5~A1, A~I
SUPER band	:J~W
HYPER band	:W+1~W+84

## Terminals:

Antenna input	VHF/UHF 75 ohm s unbalanced
Video input	RCA connector
Audio input	RCA connector

## ELECTRICAL SPECIFICATIONS

Video input level:	0.5~2.0V <sub>p-p</sub>
Audio input level:	-15dBs
Video S/N ratio:	More than 46dB
Audio S/N ratio:	More than 43dB

## OTHER SPECIFICATIONS

Power requirement:	AC 120V/60Hz
Power consumption:	85W
Dimensions:	362(W) x 366(D) x 399(H) mm
Weight:	12.7 kg 28.0 lbs

- ◆ Design and specifications are subject to change without notice.

# CABLE CHANNEL DESIGNATIONS

This model is capable of receiving 181 cable channels. The channels are displayed as 1 thru 125. Cable companies often designate the other channels with letters or letter-number combinations. Please check with your local cable company.

The following is a chart of common cable channel designations.

CATV Channel	5A	2	3	4	5	6	7	8	9	10	11	12	13	A	B
VCR Display	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CATV Channel	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
VCR Display	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
CATV Channel	R	S	T	U	V	W	W+1	W+2	W+3	W+4	W+5	W+6	W+7	W+8	W+9
VCR Display	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
CATV Channel	W+10	W+11	W+12	W+13	W+14	W+15	W+16	W+17	W+18	W+19	W+20	W+21	W+22	W+23	W+24
VCR Display	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CATV Channel	W+25	W+26	W+27	W+28	W+29	W+30	W+31	W+32	W+33	W+34	W+35	W+36	W+37	W+38	W+39
VCR Display	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
CATV Channel	W+40	W+41	W+42	W+43	W+44	W+45	W+46	W+47	W+48	W+49	W+50	W+51	W+52	W+53	W+54
VCR Display	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
CATV Channel	W+55	W+56	W+57	W+58	A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61	W+62	W+63	W+64
VCR Display	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
CATV Channel	W+65	W+66	W+67	W+68	W+69	W+70	W+71	W+72	W+73	W+74	W+75	W+76	W+77	W+78	W+79
VCR Display	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CATV Channel	W+80	W+81	W+82	W+83	W+84										
VCR Display	121	122	123	124	125										

## FUNAI CORPORATION LIMITED WARRANTY

FUNAI CORP. will repair this product, free of charge in the USA in the event of defect in materials or workmanship as follows:

### DURATION:

**PARTS:** FUNAI CORP. will provide parts to replace defective parts without charge for one (1) year from the date of original retail purchase. Two (2) years for Picture Tube. Certain parts are excluded from this warranty.

**LABOR:** FUNAI CORP. will provide the labor without charge for a period of ninety (90) days from the date of original retail purchase.

### LIMITS AND EXCLUSIONS:

This warranty is extended only to the original retail purchaser. A purchase receipt or other proof of original retail purchase will be required together with the product to obtain service under this warranty.

This warranty shall not be extended to any other person or transferee.

This warranty is void and of no effect if any serial numbers on FUNAI/SYMPHONIC product are altered, replaced, defaced or missing. This FUNAI CORPORATION Limited warranty does not apply to any FUNAI/SYMPHONIC product not purchased and used in the United States.

This warranty only covers failures due to defects in material or workmanship which occurs during normal use. It does not cover damage which occurs in shipment, or failures which are caused by repairs, alterations or product not supplied by FUNAI CORP., or damage which results from accident, misuse, abuse, mishandling, misapplication, alteration, faulty installation, improper maintenance, commercial use such as hotel, rental or office use of this product or damage which results from fire, flood, lightning or other acts of God.

THIS WARRANTY DOES NOT COVER PACKING MATERIALS, ANY ACCESSORIES (EXCEPT REMOTE CONTROL), ANY COSMETIC PARTS, COMPLETE ASSEMBLY PARTS, DEMO OR FLOOR MODELS.

FUNAI CORP. AND ITS REPRESENTATIVES OR AGENTS SHALL IN NO EVENT BE LIABLE FOR ANY GENERAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR OCCASIONED BY THE USE OF OR THE INABILITY TO USE THIS PRODUCT. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND OF ALL OTHER LIABILITIES ON THE PART OF FUNAI, ALL OTHER WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED BY FUNAI AND ITS REPRESENTATIVES IN THE UNITED STATES. ALL WARRANTY INSPECTIONS AND REPAIRS MUST BE PERFORMED BY FUNAI AUTHORIZED SERVICE CENTER. THIS WARRANTY IS VALID WHEN THE UNIT IS CARRIED-IN TO FUNAI AUTHORIZED SERVICE FACILITY.

WHEN YOU ARE RETURNING THE PRODUCT FOR SERVICE TO FACTORY SERVICE CENTER, PLEASE CONTACT THE FUNAI SERVICE DEPARTMENT TO RECEIVE M.R.A. (MERCHANDISE RETURN AUTHORIZATION) NUMBER PRIOR TO SHIPPING. ANY POSTAGE, INSURANCE AND SHIPPING COST, INCURRED IN PRESENTING OR SENDING YOUR FUNAI/SYMPHONIC PRODUCT FOR SERVICE ARE SHIPPER'S RESPONSIBILITY.

CAREFULLY PACK WITH PROPER PACKING MATERIALS, PREFERABLY IN THE ORIGINAL CARTON.

ATTACH WRITTEN DOCUMENTATION DETAILING THE COMPLAINT, TO THE OUTSIDE OR INSIDE OF THE CARTON.

THE PRODUCT MUST BE ACCOMPANIED BY A COPY OF THE ORIGINAL RETAIL PURCHASE RECEIPT. IF NO PROOF OF PURCHASE IS ATTACHED, THE WARRANTY WILL NOT BE HONORED AND REPAIRS COSTS WILL BE CHARGED.

### IMPORTANT:

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE, IF, AT ANY TIME DURING THE WARRANTY PERIOD, YOU ARE UNABLE TO OBTAIN SATISFACTION WITH THE REPAIR OF THIS PRODUCT, PLEASE CONTACT FUNAI CORP.

### ATTENTION:

FUNAI CORP. RESERVES THE RIGHT TO MODIFY ANY DESIGN OF THIS PRODUCT WITHOUT PRIOR NOTICE.

For information of your nearest FUNAI Authorized Service Center or general service procedure, please call or write to the following:

FUNAI CORPORATION  
Corporate Headquarters & Factory Service Center  
Address :100 North Street Teterboro, NJ 07608  
Tel :201-288-2666  
(Eastern Time 9:00 AM - 4:30 PM)