

Symphonic

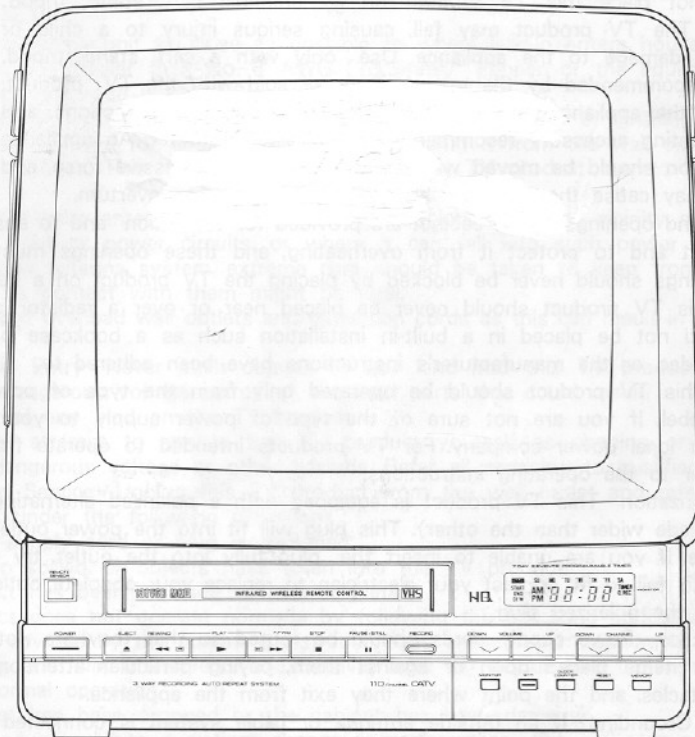
Owner's Manual

COLOR TV/VCR COMBINATION

HQ

VHS

Video cassette recorders bearing the "HQ" mark incorporate VHS high quality technology. Note that there is interchangeability with former VHS video cassette recorder.



MODEL: 13TVCR MK II

WARNING :

TO REDUCE THE RISK OF FIRE 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 THIS UNIT.

“IMPORTANT SAFEGUARD”

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 this TV 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 appliance in the cleaning description otherwise required in item 5.
6. Attachments—Do not use attachments not recommended by the TV product manufacturer as they may cause hazards.
7. Water and Moisture—Do not use this TV 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 TV product on an unstable cart, stand, tripod, bracket, or table. The TV product may fall, causing serious injury to a child or adult, 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 product. 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.
9. Ventilation—Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the TV 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 TV product on a bed, sofa, rug, or other similar surface. This TV product should never be placed near or over a radiator or heat register. This TV 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.
10. Power Sources—This TV 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 appliance dealer or local power company. For TV products intended to operate from battery power, or other sources, refer to the operating instructions.
11. Grounding or Polarization—This TV product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
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 product, 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)

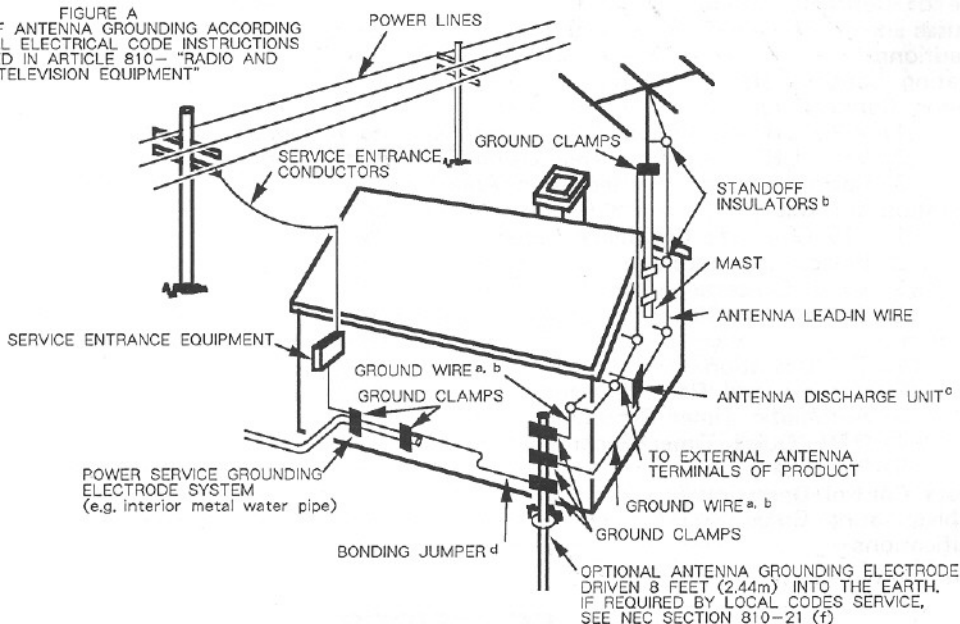
PORTABLE CART WARNING



S3126A

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS

FIGURE A
EXAMPLE OF ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810- "RADIO AND TELEVISION EQUIPMENT"



- a. Use No. 10 AWG (5.3mm²) copper, No. 8 AWG (8.4mm²) aluminum, No. 17 AWG (1.0mm²) copper-clad steel or bronze wire, or larger, as a ground wire.
- b. Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4-6 feet (1.22-1.83m) apart.
- c. Mount antenna discharge unit as close as possible to where lead-in enters house.
- d. Use jumper wire not smaller than No. 6 AWG (13.3mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21 (j).
14. Lightning-For added protection for this TV product receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV product 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 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.
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 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 TV product.
18. Servicing-Do not attempt to service this TV product 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 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 TV product.
 - c. If the TV product has been exposed to rain or water.
 - d. If the TV 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 TV product to its normal operation.
 - e. If the TV product has been dropped or the cabinet has been damaged.
 - f. When the TV product 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 or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
21. Safety Check-Upon completion of any service or repairs to this TV product, ask the service technician to perform safety checks to determine that the TV product is in proper operating condition.

TABLE OF CONTENTS

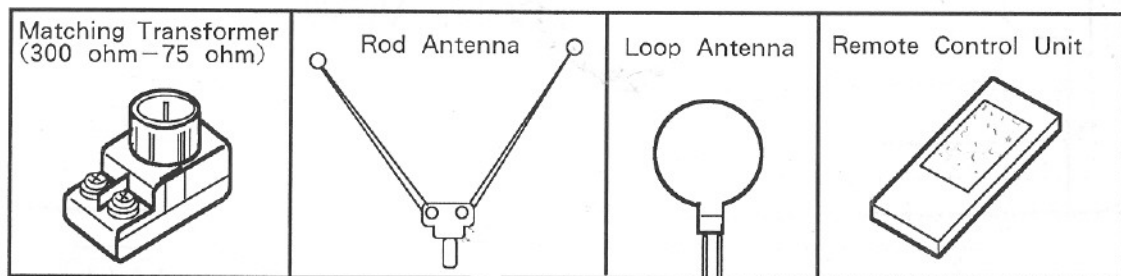
	Page
Safety Instructions	2
Table of Contents	4
Features	4
Precautions	5
Operating Controls and Functions	6
Antenna Connections	8
(1) VHF/UHF Reception Area Using Separate Antennas	8
(2) VHF/UHF Reception Area Using Combined Antennas	9
(3) Cable and Pay TV Reception Area	9
Preparation for Use	10
(1) 110 Channels Capability Tuner	10
(2) Presetting Channels	11
(3) Video Cassette	13
(4) Setting the Clock for Correct Time	14
Operation	16
(1) T.V. Operation	16
(2) Viewing and Recording the Same Program	17
(3) Automatic Timer Recording	20
(4) QTR (Quick Timer Recording)	26
(5) Playback	27
Remote Control Operation	29
Troubleshooting Guide	30
Specifications	31

FEATURES

- * **Auto Power On system**—Automatically turns the unit on as you insert the cassette.
- * **Three Different Record/Playback Speeds**—Select the SP mode (Standard short play), LP mode (Long play) and EP (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.
- * **Automatic Playback Speed Selection of Pre-recorded Tape.** Automatically selects the proper playback speed even if you set speed select knob to different mode.
- * **7-day, 2-event Timer Recording**—Set, to turn on, record, and turn off once, anytime during a 7-day period up to 2 events.
- * **QTR (Quick Timer Recording)** —Automatic recording for 30, 60, 90, 120, 150, 180, 210 or 240 minutes is possible at the push of QTR button.(You don't need any timer adjustment for recording.)
- * **Special Playback.**
 - CUE—View the video program on a tape, in the forward direction, at a fast speed; the audio signal will be muted.
 - REVIEW—View the video program on a tape, in the reverse direction, at a fast speed; the audio signal will be muted.
- * **STILL**—“Freeze” the picture at any time, for close viewing of a particular scene. You will get a wide noise band when playing back with tape recorded in the SP or LP mode.
- * **110 Channel Cable-compatible with 16 Presettable Tuner** (A converter may be necessary to view CATV channels.)
- * **15 Function Infrared Remote Control**—Allows you to use all the tape transport controls and power on/of from a remote location.
- * **Tape Counter with Memory**
- * **Auto-Rewind System**
- * **DEW Protection System** with Dew Indicator

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 [d] letter on the digital display goes on. While the indicator is lit, a 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 [d] letter light is on turn the POWER button off and allow at least 2 hours for the unit to dry out.

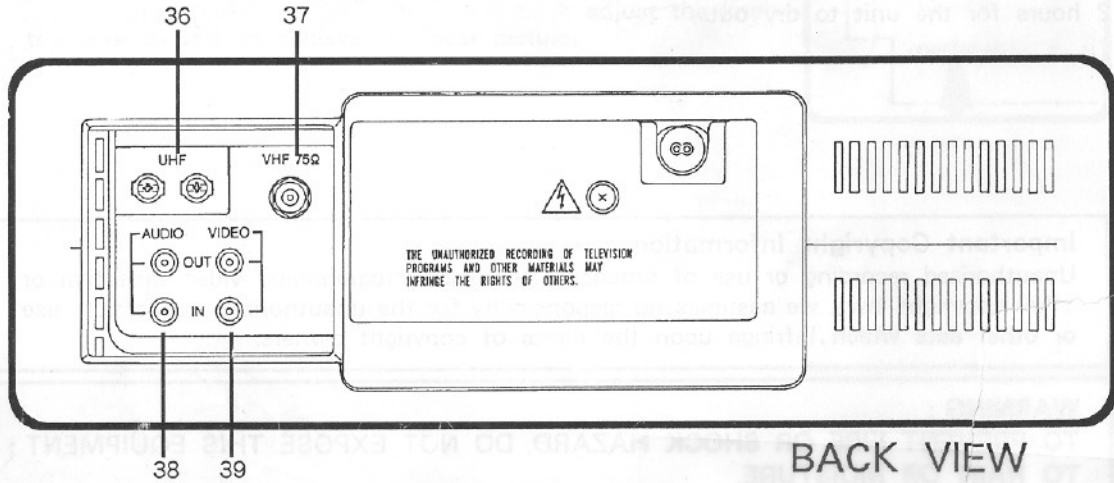
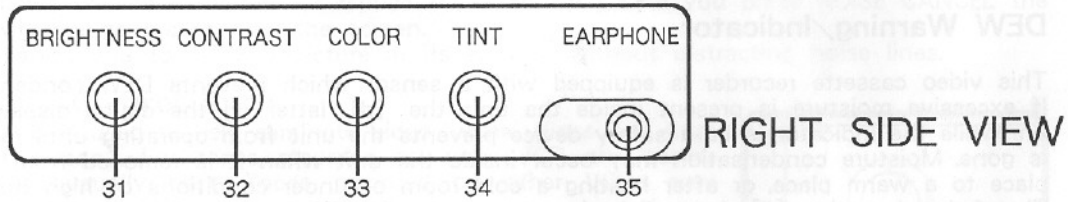
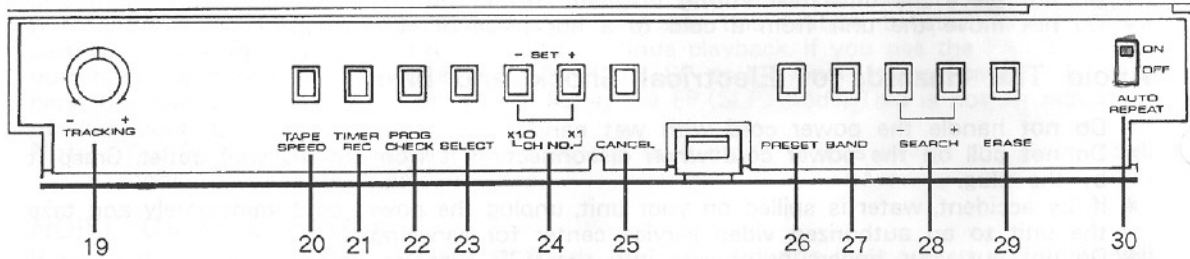
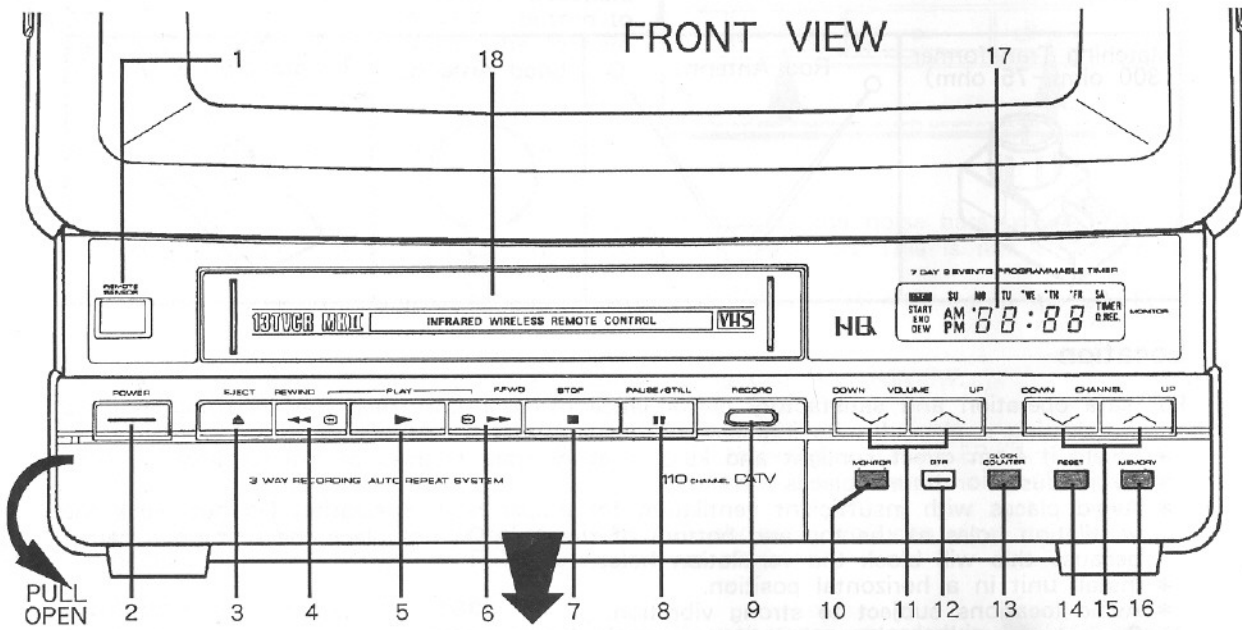
Important Copyright Information

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

WARNING :

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

OPERATING CONTROLS AND FUNCTIONS



- 1 **REMOTE SENSOR** —Receives the infrared control signals from the handheld remote control unit.
- 2 **POWER button** —To turn unit on and off.
- 3 **EJECT button** —Press to remove tape from VCR.
- 4 **REWIND (SEARCH) button** —Press 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.
- 5 **PLAY button** —Press to begin playback of a tape.
- 6 **F. FWD (SEARCH) button** —Press 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.
- 7 **STOP button** —Press to stop tape motion.
- 8 **PAUSE/STILL** —Press to temporarily stop tape during playback or manual recording.
- 9 **RECORD button** —Press to begin manual recording.
- 10 **MONITOR button** —Press to keep quiet monitor screen at timer recording.
- 11 **VOLUME buttons** —Used to adjust the volume level.
- 12 **QTR (Quick Timer Rec)** —Press to activate quick timer recording mode.
- 13 **CLOCK/COUNTER button** —Press to alternate between clock and counter display modes.
- 14 **RESET button** —Press to reset counter to 0000.
- 15 **CHANNEL buttons** —Press to select the channel for viewing or recording.
- 16 **MEMORY button** —Press to set memory-in.
- 17 **DIGITAL DISPLAY**
- 18 **CASSETTE COMPARTMENT**

- 19 **TRACKING control** —Adjust to minimize video 'noise' (lines or dots on screen) during playback.
- 20 **TAPE SPEED button** —Used to set desired recording speed.(SP/LP/EP)
- 21 **TIMER REC button** —Turn on to activate the automatic recording timer.
- 22 **PROG CHECK button** —Press to select program number.
- 23 **SELECT button** —Press to select timer setting mode.
- 24 **SET/CH NO buttons** —Adjust time with "+" or "-" button. Select channel number with X10 or X1 button.
- 25 **CANCEL button** —Press to cancel memorized Timer Program.
- 26 **PRESET button** —Use to select channel program mode.
- 27 **BAND selector button** —Press to select channel range.(V_L/V_H/U)
- 28 **SEARCH button** —Press to search TV channel.
- 29 **ERASE button** —Press to erase programmed channel.
- 30 **AUTO REPEAT switch** —Use to select auto repeat playback mode.

- 31 **BRIGHTNESS control** —See page 16 for detail.
- 32 **CONTRAST control** —See page 16 for detail.
- 33 **COLOR control** —See page 16 for detail.
- 34 **TINT control** —See page 16 for detail.
- 35 **EARPHONE jack** —Connect the earphone to this jack (not supplied). This automatically disconnects the built-in speaker.

- 36 **UHF IN terminals** —Connect a UHF antenna.
- 37 **VHF IN terminal** —Connect VHF antenna here.
- 38 **AUDIO IN/OUT jacks** —Connect to audio jacks of your audio equipment or another VCR.
- 39 **VIDEO IN/OUT jacks** —Connect to video jacks of your video camera or another VCR.

ANTENNA CONNECTIONS

[1] VHF/UHF Reception Area Using Separate Antennas

VHF Antenna Hook Up

The VHF Rabbit Ear (VHF) antenna is detachable. Push the stem of the VHF antenna into the hole for antenna at the back of the set.

Connect the VHF antenna twin lead (flat) wires to the 300/75 ohm matching transformer (supplied). Plug the coupling transformer to the VHF 75 ohm input terminals 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 VHF antenna lead, and connect the lead-in wires from an outdoor antenna to the terminals of the 300 ohm to 75 ohm matching transformer as shown in drawing.

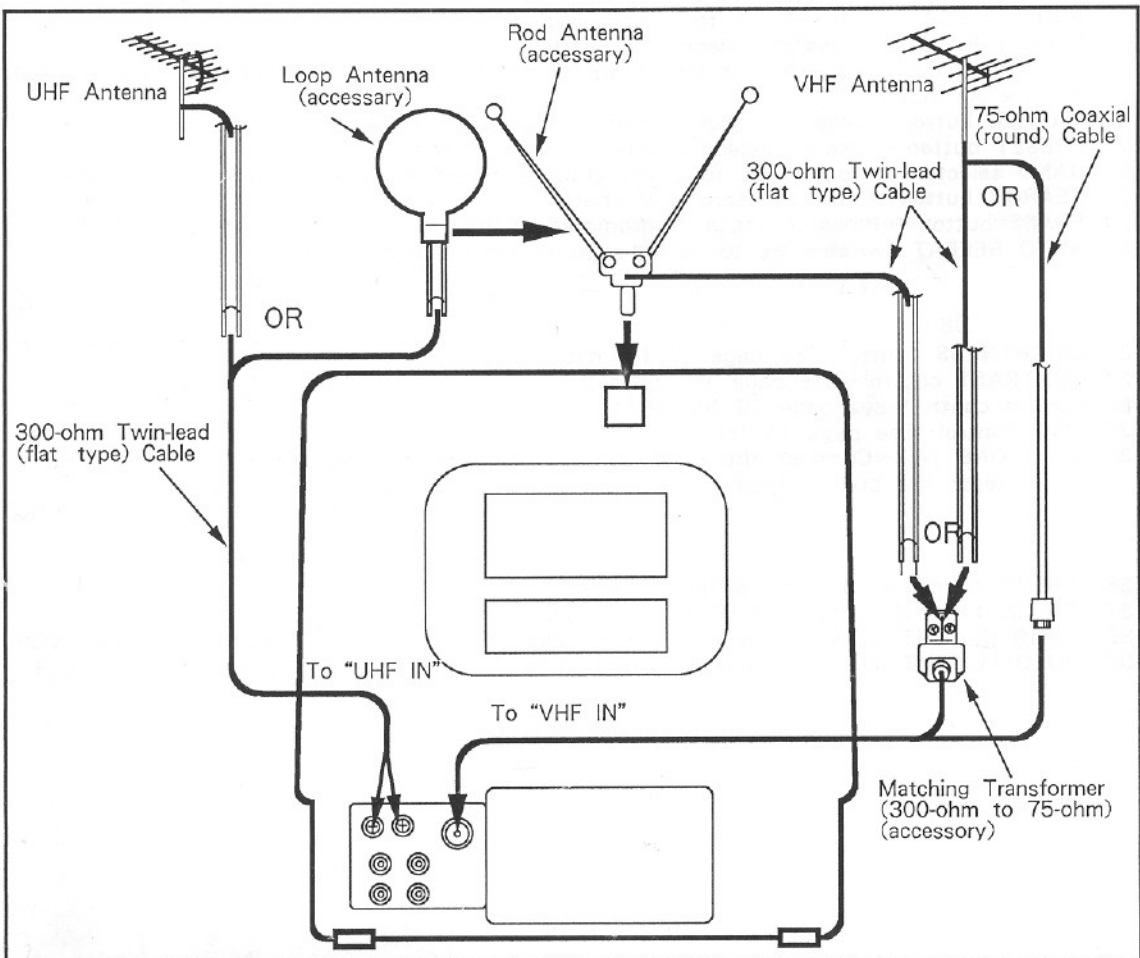
If you already have a round type 75 ohm coaxial cable coming from your outdoor antenna, connect it directly to the VHF 75 ohm terminal as shown in drawing.

UHF Antenna Hook Up

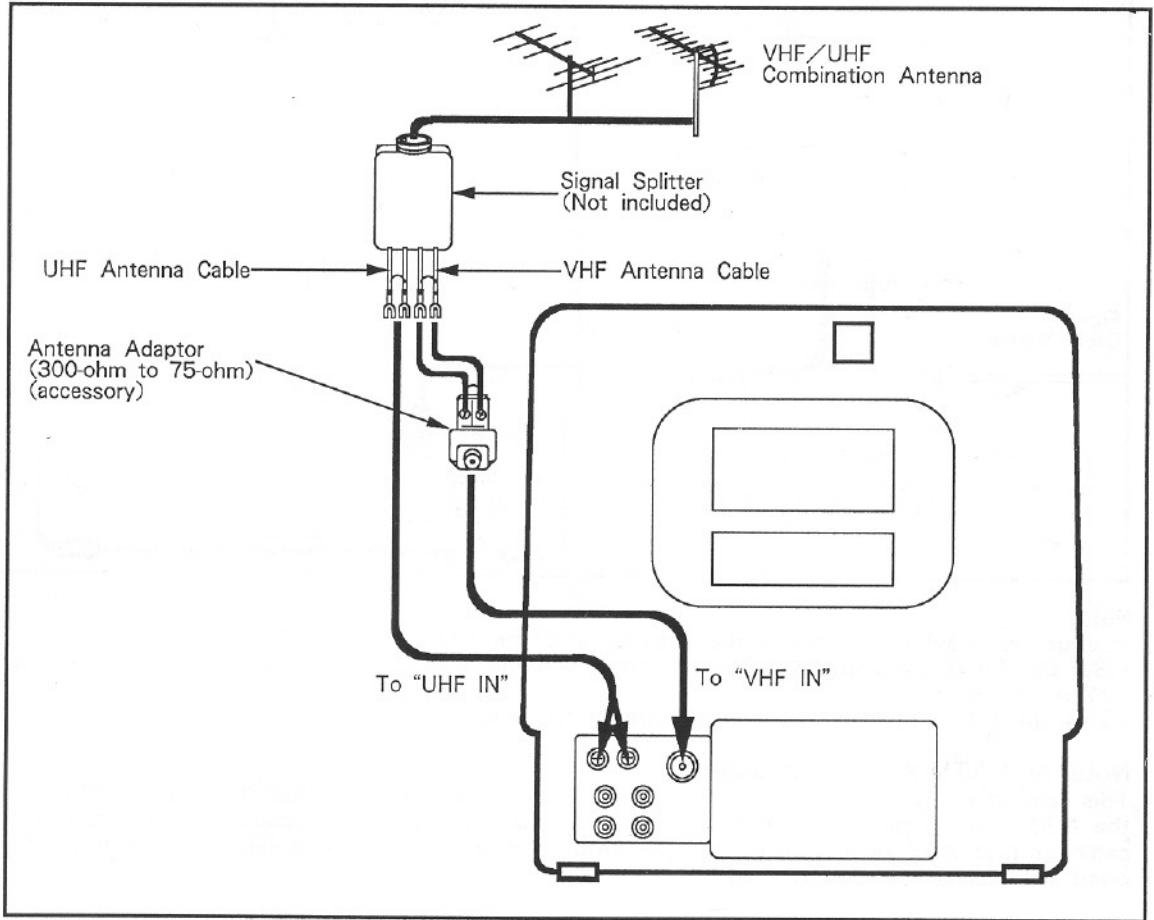
A wire loop antenna is provided for UHF reception. Attach UHF loop by snapping onto leg of VHF rabbit ear antenna and connect the ends of this loop antenna to the UHF antenna terminals as shown in drawing.

The loop antenna can be adjusted in any direction or angle to get the best UHF reception.

NOTE : If it is difficult to get good reception with the indoor antenna, using an outdoor antenna is recommended. Before an outdoor antenna is connected to the set, the indoor antenna should be disconnected.

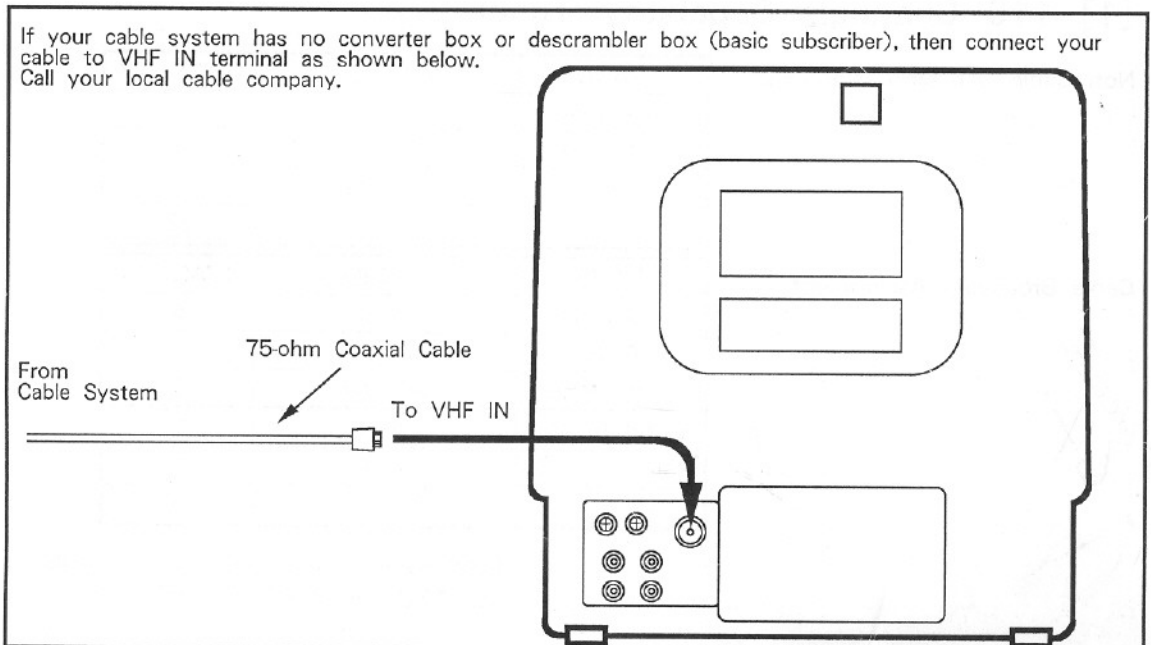


[2] VHF/UHF Reception Area Using Combined Antenna

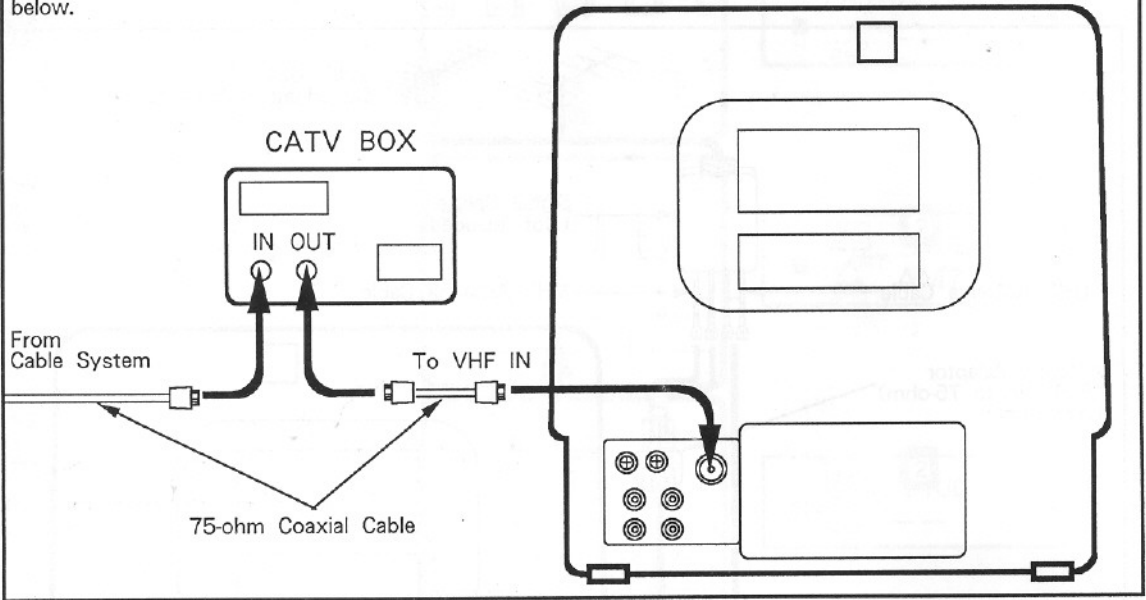


[3] CABLE and PAY TV Reception Area (Basic)

If your cable system has no converter box or descrambler box (basic subscriber), then connect your cable to VHF IN terminal as shown below. Call your local cable company.



If your cable system has a converter box or scrambler box, then connect your cable to unit as shown below.



Notes :

- If your cable system is connected with a converter box or descrambler box,
 - Set the TV to the same channel as output channel of a converter box or descrambler box. (2ch, 3ch or 4ch)
 - Use the CATV box to select the channel you want to watch or record.

Note to CATV system installer :

This reminder is provided to call the CATV system installer's attention to Article 820-22 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

[1] 110 Channels Capability Tuner

Non Cable Off Air Assignments

BAND	CHANNELS	QUANTITY
VHF Low	2~6	5
VHF High	7~13	7
UHF	14~83	70
TOTAL		82

Cable Broadcast Assignment

BAND	CHANNELS	QUANTITY
VHF Low	2~6	5
VHF High	7~13	7
Low Band	A5~A1	5
Mid Band	A~I	9
Super Band	J~W	14
TOTAL		40

Total system capability 110 channels
*VHF channels counted once

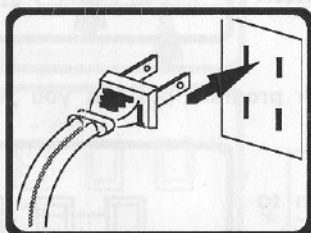
[2] Presetting Channels

This tuner is capable of receiving VHF/UHF channels (82) and up to 28 cable channels, total 110 channels. (Note: The tuner does not unscramble premium cable channels).

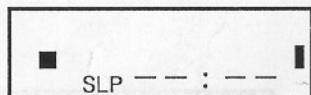
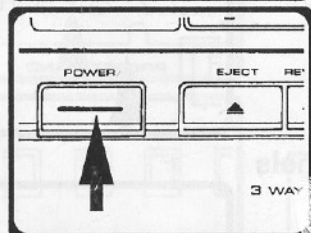
Channel displays (position numbers) 2 through 13 have been preset to VHF channels 2 through 13 of American Standard Broadcasting Frequency at our factory. Once the other 4 channels have been preset by owner then any of the 16 preset channels may be selected by pressing the CHANNEL buttons (UP or DOWN). To preset a channel or to change a preset channel, follow the procedure below.

Presetting channels will not be necessary, if you are connected to CATV system with CATV box. (Use the CATV box to select the channel you want to watch or record.)

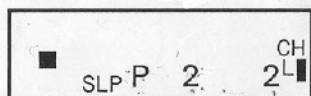
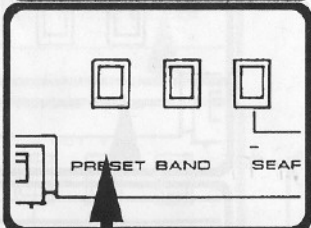
- Connect the power cord to a standard AC outlet.



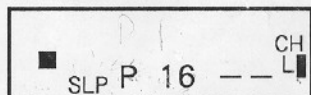
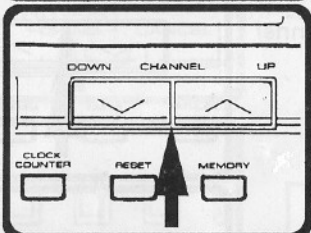
- 1 Press POWER button to on. The ■ appears on the display.



- 2 Set PRESET button to on.

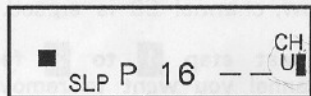
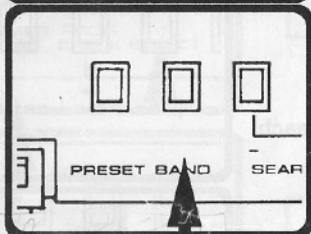


- 3 Select desired position number with CHANNEL button. (UP or DOWN) (Example: Position P-16)



- 4 Press BAND selector button to set the channel range to correspond to the channel you are programing. (Example: Band U)

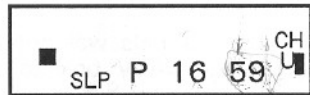
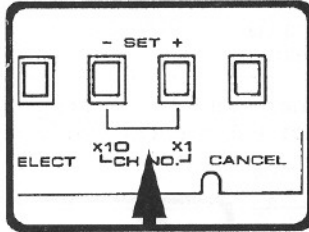
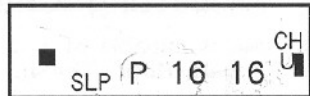
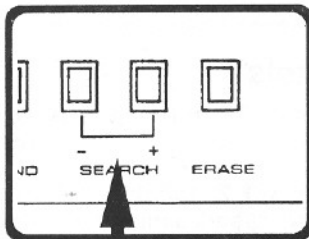
Note: When you are selecting the next station in the same band, skip to next step.



Band	Channel Range
VL	2~6, A-5~A-2 (cable)
VH	A-1, A~I (cable), 7~13, J~W (cable)
U	14~83

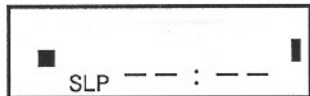
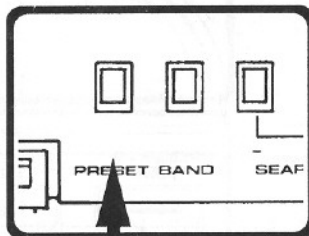
5 Press SEARCH button (“+” or “-”). The “P” indicator will begin to flash and tuner will begin to search up (or down) for the first receivable station within the band you selected. When the tuner finds a station it will stop searching and the picture from that station will appear on screen. If this is not the station you want, press SEARCH button again until your desired station appears on screen.

6 Selected desired channel number with CH NO button (“X10” and “X1”). (Example : Channel 59)



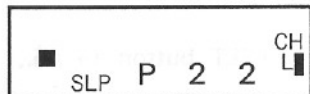
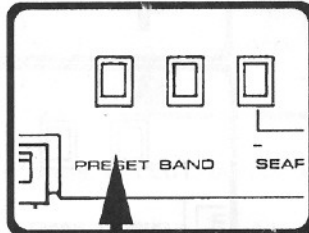
Repeat step **3** to **6** for each program position you want to tune to a TV station.

7 Press PRESET button to return to original mode.

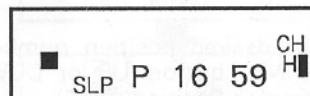
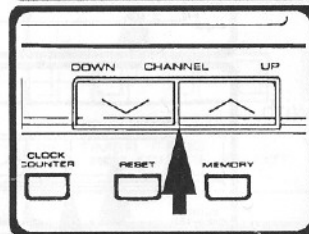


To ERASE preset channels

1 Set PRESET button to on.

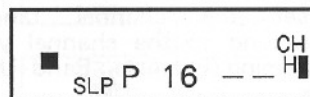
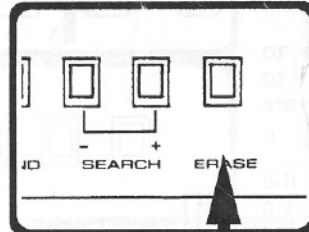


2 Press either of the CHANNEL UP or DOWN until the desired channel number is displayed.

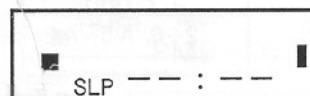
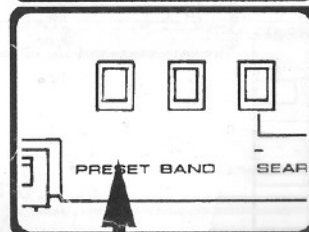


3 Press ERASE button. Now, channel 59 is erased.

Repeat step **1** to **3** for each channel you want to remove.



4 Set PRESET button to off.



[3] 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 EP (SLP) mode.

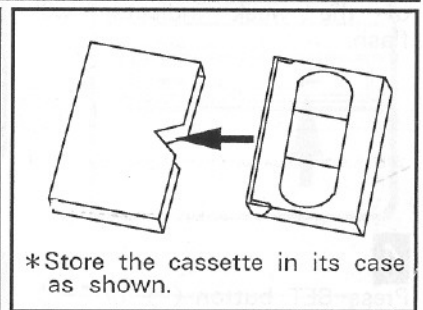
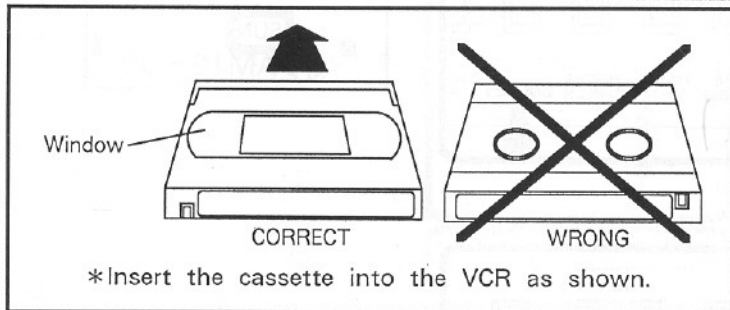
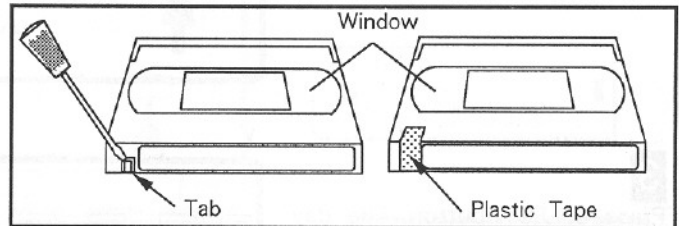
Cassette Mode	T-60	T-120	T-160
SP Mode	1 hour	2 hours	2-2/3 hours
LP Mode	2 hours	4 hours	5-1/3 hours
EP (SLP) Mode	3 hours	6 hours	8 hours

When handling video tapes, take the following precautions.

- * Avoid moisture—Moisture 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 moisture, 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

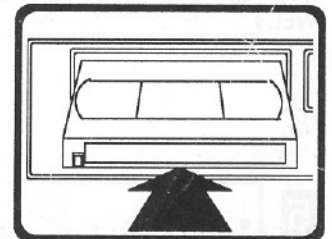
You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with plastic tape.



Inserting a Cassette

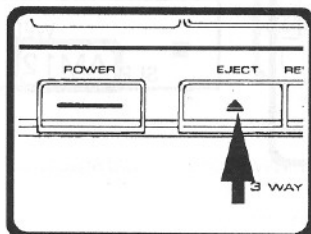
Insert the cassette in the direction shown. Push in gently, but continuously, on the center-back of the cassette until it is drawn completely into the VCR.

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

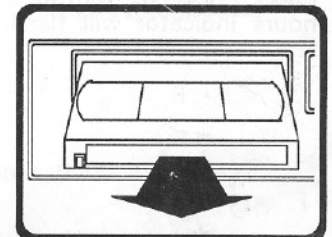


Removing a Cassette

1
Press
EJECT.



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

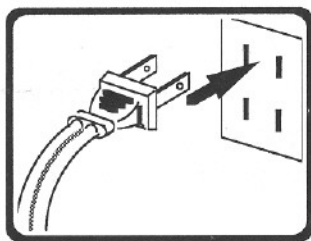


[4] Setting the Clock for Correct Time

In the example below, the clock is to be set to Wednesday at 5:40PM.

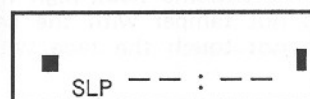
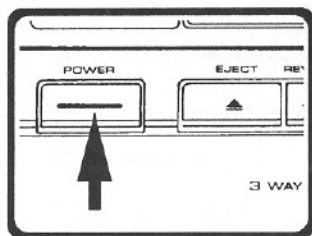
1

Connect the power cord to a standard AC outlet.



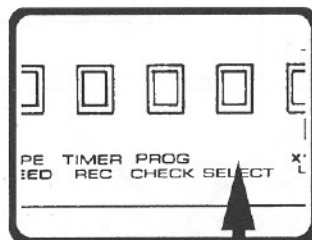
2

Press POWER button to on.



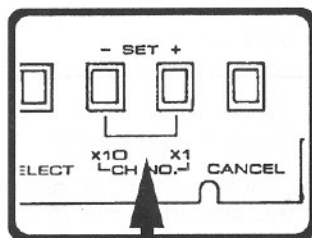
3

Press SELECT button. The day of the week indicator will flash.



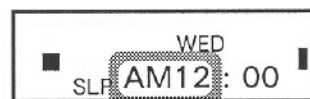
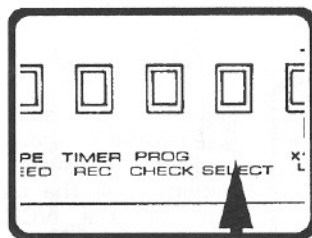
4

Press SET button (“+” or “-”) repeatedly until the correct day is indicated. (Example : WED)



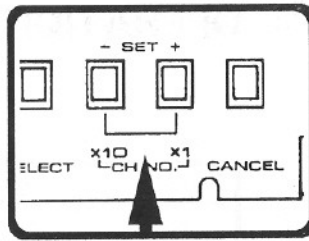
5

Press SELECT button. The hours indicator will flash.

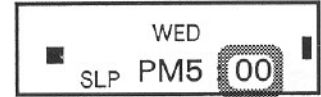
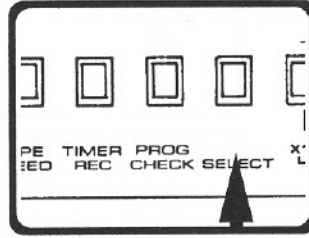


6

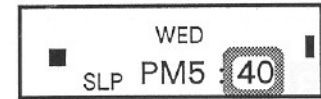
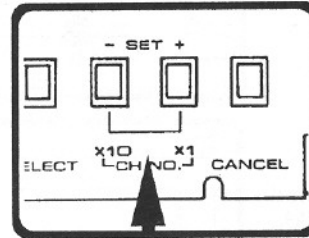
Press SET button (“+” or “-”) repeatedly until the correct hour is indicated. (Example : PM5)

**7**

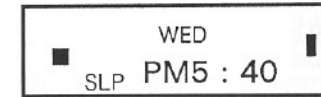
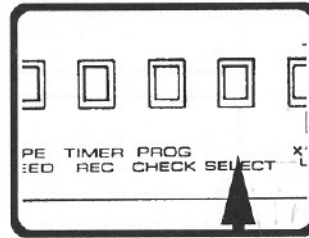
Press SELECT button. The minutes indicator will flash.

**8**

Press SET button (“+” or “-”) repeatedly until the correct minute is indicated. (Example : 40)

**9**

Press SELECT button to start the clock. Seconds are not displayed, they begin counting at 00 when you press SELECT button this final time. Use this feature to set the clock as accurately as possible.



Note :

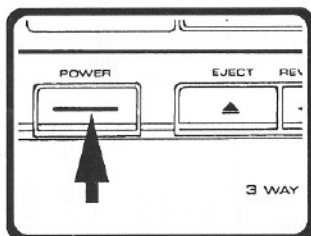
- * When unplugging the unit or when you have a power failure, the clock display **1** is displayed.
- * If the display shows an abnormal reading or no reading, unplug the power cord for a few seconds. Then, plug it back in.

OPERATION

[1] T.V. Operation

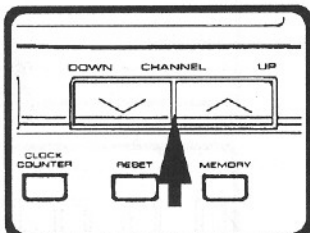
1

Push POWER button to ON.



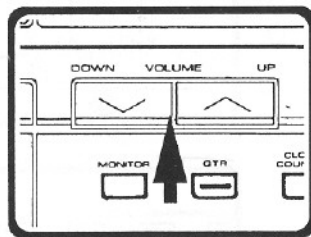
2

Select the desired channel.



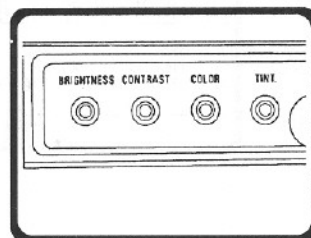
3

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



4

Adjust picture controls for a natural looking image (located inside side door).



TINT (HUE)

Adjust the tint control as follows: If facial tones are too green, rotate the tint control counter-clockwise. If facial tones are too purple, rotate the control clockwise.

COLOR

Rotate the color control to change the color intensity. If color appears weak and pale, rotate the color control clockwise. If the color appears flushed & brilliant, rotate the control counter-clockwise.

BRIGHT

It controls the brilliance of the picture, to increase brightness, rotate the control clockwise. To decrease brightness, rotate the control counter-clockwise.

CONTRAST

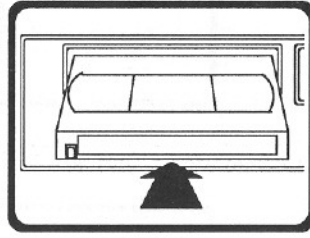
Correct brightness and contrast settings are important to obtain a natural image. To increase the contrast, rotate the control clockwise. To decrease contrast, rotate the control counter-clockwise.

The contrast control adjust the contrast, brightness and color intensity simultaneously, in proper ratio.

[2] Viewing and Recording the Same Program

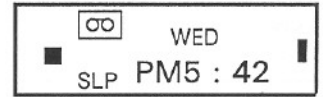
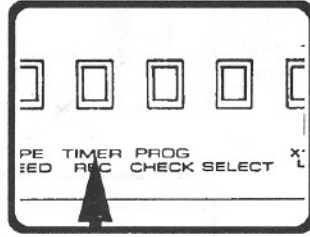
1

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



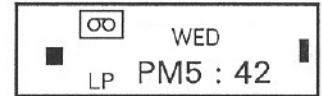
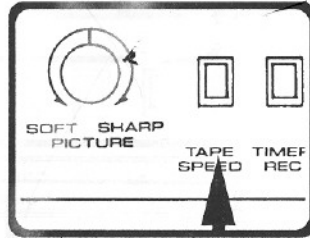
2

Ensure TIMER REC button is off.
When TIMER REC is set to on,
"TIMER" is displayed.



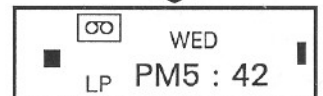
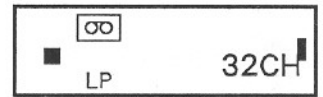
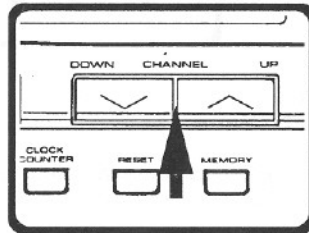
3

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



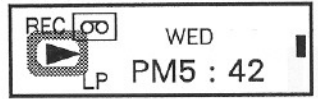
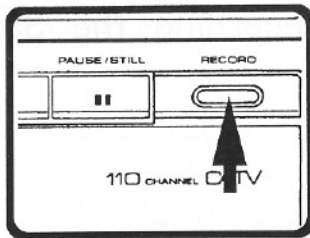
4

Select the program to be recorded.



5

Press RECORD button.

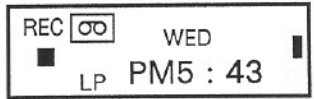
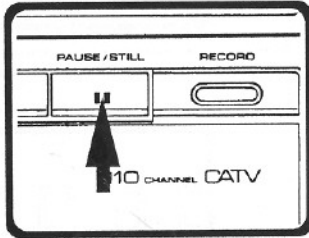


If you want to edit out some material while you are recording,

6

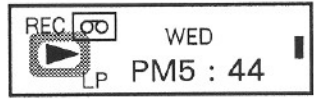
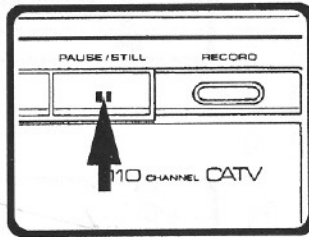
Press PAUSE/STILL button.

Note: To prevent tape damage, avoid leaving the VCR in the pause mode for more than five minutes. After five minutes, the VCR will automatically switch to the rec mode.



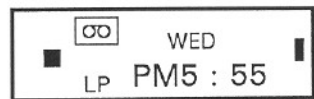
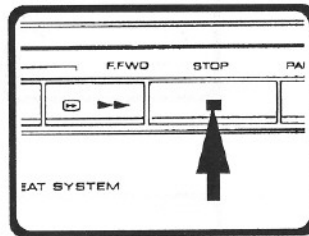
7

Press PAUSE/STILL button again to resume recording.



8

Press STOP button when recording is completed.



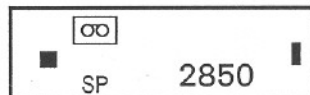
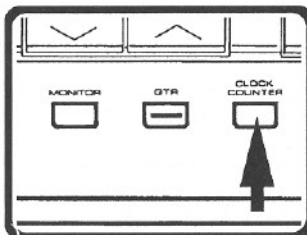
MEMORY BUTTON

The MEMORY button can be used, during rewind, to automatically stop the tape when the counter reaches a preset approx. 0000 reading.

For example, this feature can be used to return the tape to a pre-selected position immediately after recording, or to repeatedly playback a certain portion of a tape.

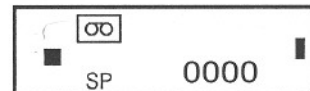
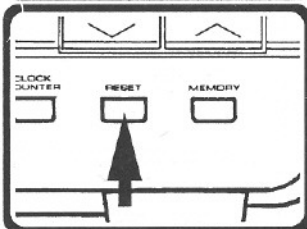
1

Before playback or recording press CLOCK/COUNTER button.



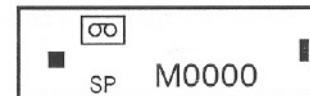
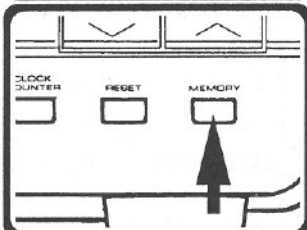
2

Press RESET button.



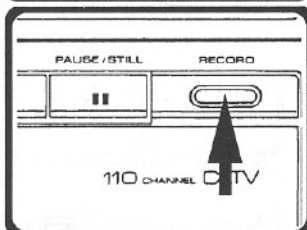
3

Press MEMORY button.

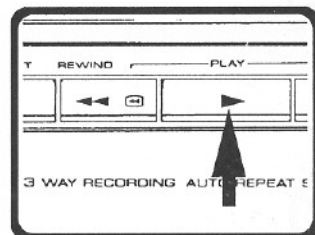


4

Press RECORD or PLAY button.

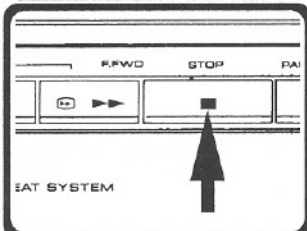


Or



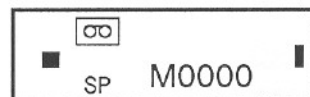
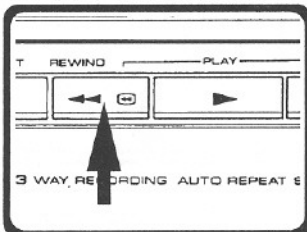
5

Press STOP button when recording or playback is completed.



6

Press REWIND button.



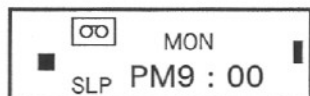
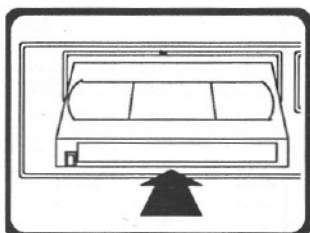
The tape will automatically stop when the counter returns to approx. 0000.

[3] Automatic Timer Recording

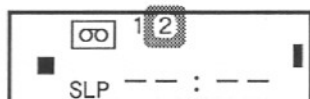
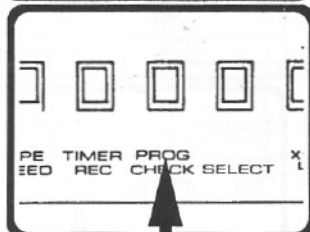
You may set the VCR to turn on, record and turn off two separate times, during any seven day period.

- * 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 REC 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 2. The current time is Monday 9:00PM.

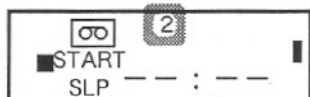
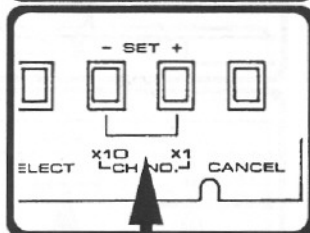
1 Insert a cassette tape with its safety tab in place, if necessary, rewind or fast forward the tape to the point at which you want recording to begin.



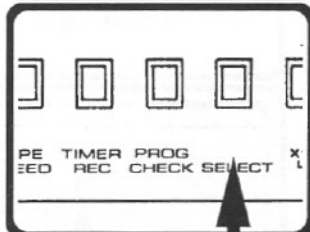
2 Press PROG button. Occupied program numbers are lit. (Example: 1) Unoccupied program numbers will flash. (Example: 2)



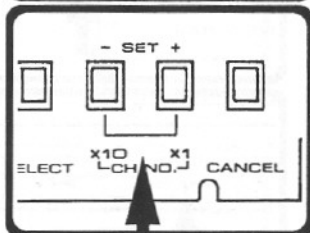
3 Press SET button ("+" or "-") repeatedly until desired program number is displayed. (Example: 2)



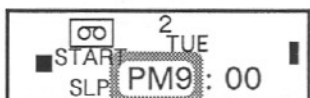
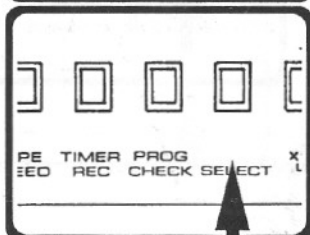
4 Press SELECT button. The day indicator will flash.



5 Press SET button ("+" or "-") repeatedly until desired day is displayed. (Example: TUE)

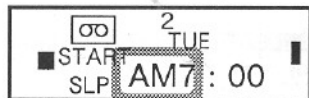
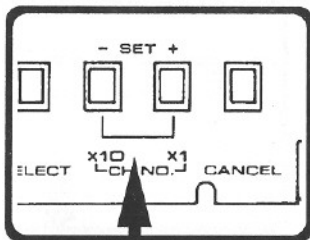


6 Press SELECT button. The hours indicator will flash.



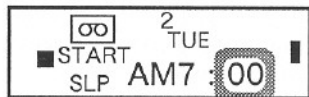
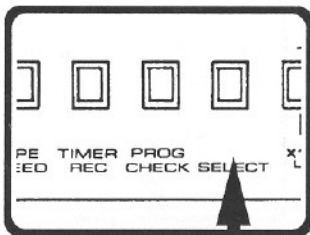
7

Press SET button (“+” or “-”) repeatedly until desired hour is displayed. (Example : AM7)



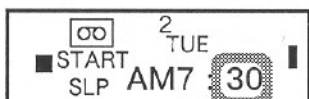
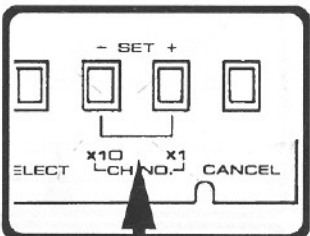
8

Press SELECT button. The minutes indicator will flash.



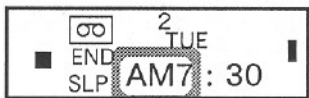
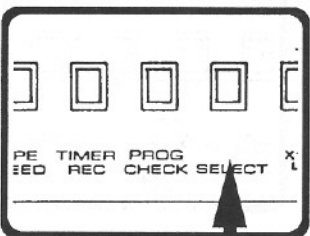
9

Press SET button (“+” or “-”) repeatedly until desired minute is displayed. (Example : 30)



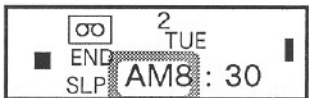
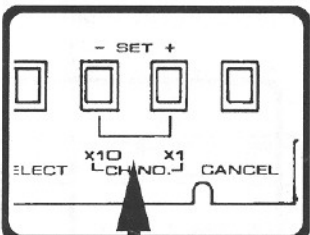
10

Press SELECT button. The END indicator will illuminate and hours indicator will flash.



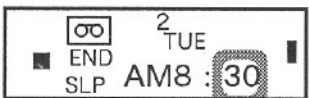
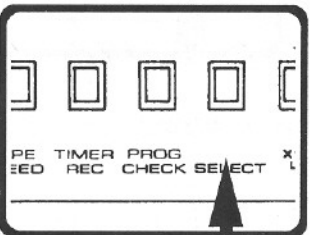
11

Press SET button (“+” or “-”) repeatedly until desired hour is displayed. (Example : AM 8)



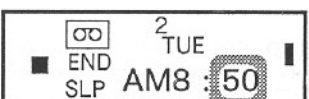
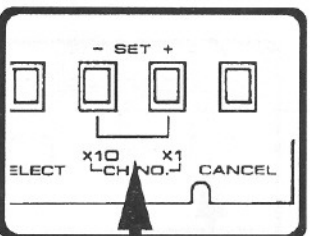
12

Press SELECT button. The minutes indicator will flash.



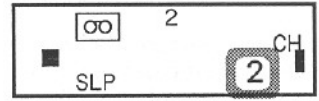
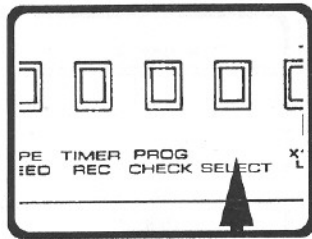
13

Press SET button (“+” or “-”) repeatedly until desired minute is displayed. (Example : 50)



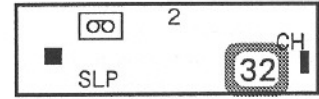
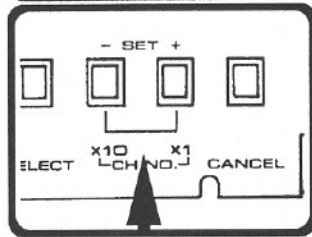
14

Press SELECT button. The channel indicator will flash.



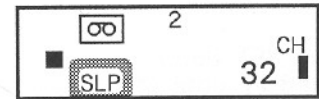
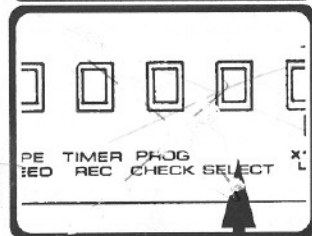
15

Press SET button ("+" or "-") repeatedly until desired channel is displayed. (Example : Channel 32)



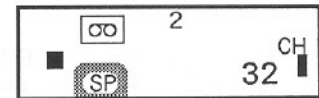
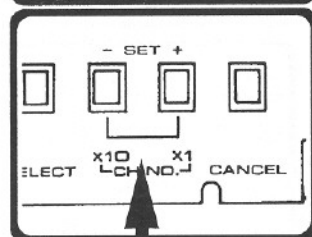
16

Press SELECT button. The tape speed indicator will flash.



17

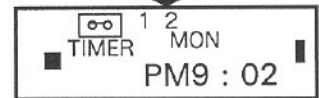
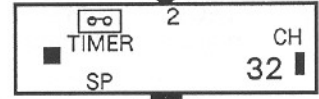
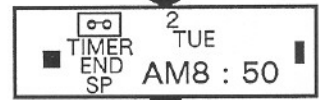
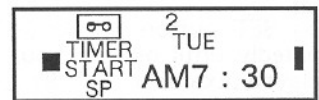
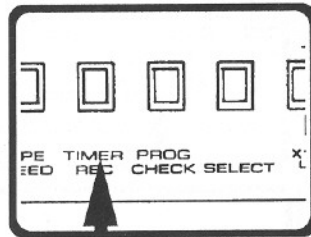
Press SET button ("+" or "-") repeatedly until desired tape speed is displayed. (Example : SP)



If you want to set another program press SELECT button and repeat steps 3 thru 17.

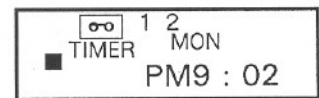
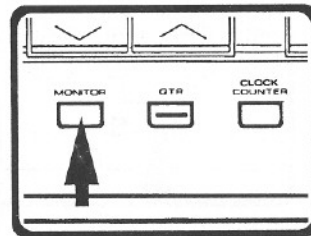
18

Press TIMER REC button to set automatic timer recording. The start and end times of the timer program that is set to activate first are displayed. Then, the numbers of all programmed events are displayed with current time.

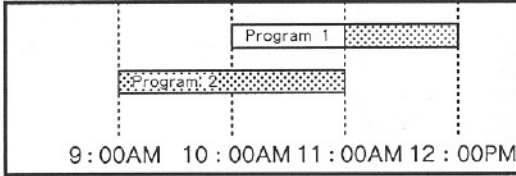


19

If you do not want the screen to turn on during timer recording, press MONITOR button to turn the monitor indicator off.



Example : When the programs overlap, the earlier program has priority.



If you programmed as illustration, timer recording execute as,

9:00AM-11:00AM for Program 2

11:00AM-12:00PM for Program 1

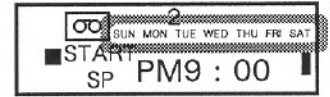
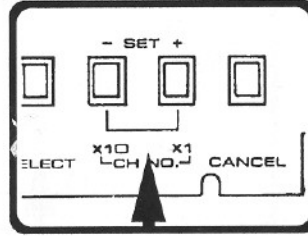
Daily Program

To record a program which is broadcast at the same time on the same channel every day, follow steps **1** to **4** on page 20.

5

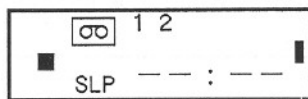
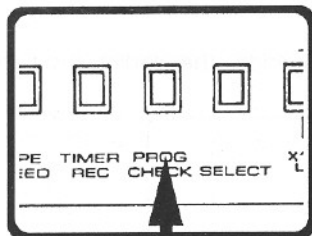
Press SET button repeatedly until all of the day indicators flash together.

Continue with step **6** onwards.

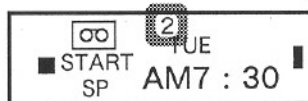
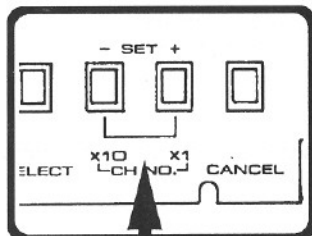


To Cancel a Pre-program

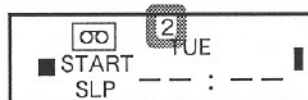
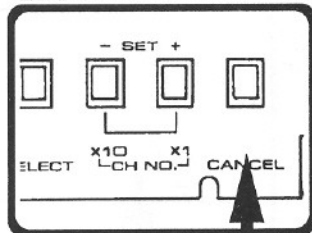
- 1 Press PROG button.
*Power must be ON.



- 2 Press SET button (+ or -) repeatedly until desired program number is displayed.
(Example : 2)



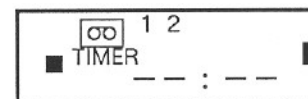
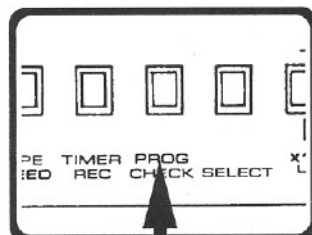
- 3 Press CANCEL button.
The selected program will be erased.



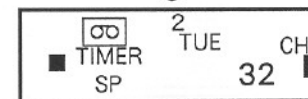
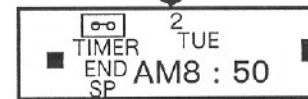
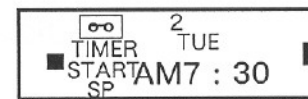
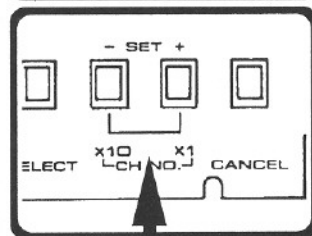
Checking the START/END time.

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

- 1 Press PROG button.
Occupied program numbers are lit. (Example : 1,2)
Unoccupied program numbers will flash.



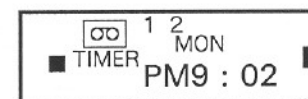
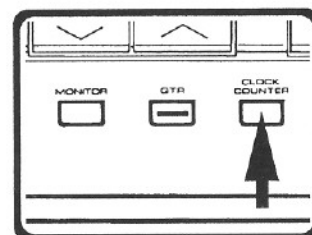
- 2 Press SET button ("+" or "-") repeatedly until desired program number is displayed.



Repeat step 2 for next program number.



- 3 Press CLOCK/COUNTER button to return current time display.



Note :

Once you have set the timer Start/End time and the TIMER REC button is on, the VCR will turn on, record, and turn off automatically at the set time. If the tape runs out before the end time, the VCR will switch to the stop mode immediately, and tape will be ejected, and the VCR power will be shut off.

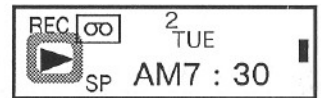
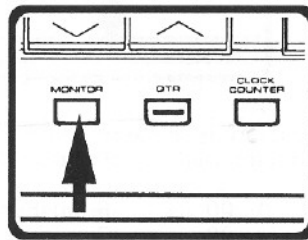
Timer Recording Hints

- * 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 REC button is on.
- * It is not necessary to press RECORD button for timer recording.
- * Recording begins automatically at the set Start time.
- * The cassette will be ejected if the tape runs out.
- * When the TIMER REC button is on, the unit cannot be operated manually.
- * 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 REC button off.
- * When the TIMER REC button is on, the auto-rewind feature will not work.

Monitoring During Timer Recording

1

Press MONITOR button to on.



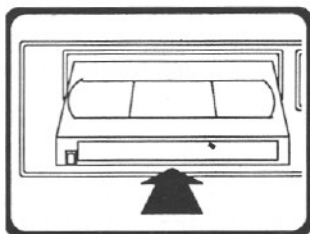
The VCR will continue recording until the pre-set end time is reached or the tape runs out.

[4] QTR (Quick Timer Recording)

The quick record function enables you to record a program without pressing RECORD button. By following the table below, simply press QTR button as many times as needed, depending upon your required length of recording time.

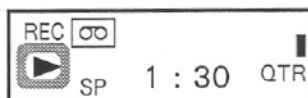
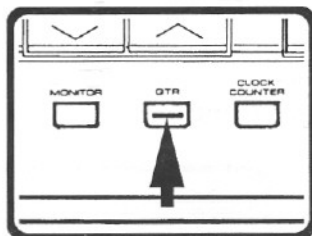
1

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



2

Press QTR button.



Recording starts if the QTR button is pressed even while watching a TV program. The recording length can be determined by the number of times you press the button.

1 push	0 minute	0 : 00	6 pushes	150 minutes	2 : 30
2 pushes	30 minutes	0 : 30	7 pushes	180 minutes	3 : 00
3 pushes	60 minutes	1 : 00	8 pushes	210 minutes	3 : 30
4 pushes	90 minutes	1 : 30	9 pushes	240 minutes	4 : 00
5 pushes	120 minutes	2 : 00	10 pushes	0 minute	0 : 00

* The timer on this display counts down as the recording progresses.

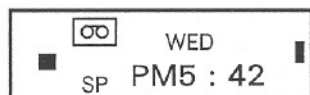
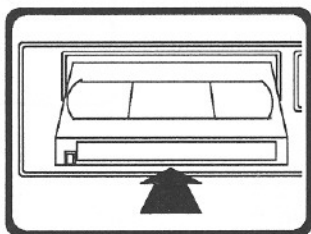
Notes :

- * The recording time length can be set only to 30, 60, 90, 120, 150, 180, 210 or 240 minutes.
- * To stop the QTR operation, press STOP button.
- * When QTR button is pushed 10 times—0 minutes—0 : 00 reading. Recording will stop in approximately 8 seconds.
- * The recording length time counts down as the recording is started.
- * Recording stops when 0 : 00 is reached.

[5] Playback

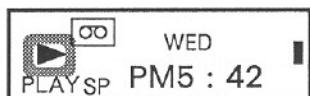
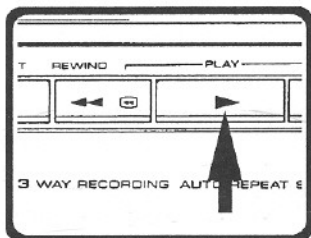
1

Insert a pre-recorded tape. The VCR will turn on



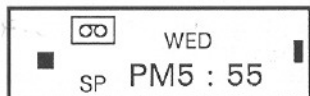
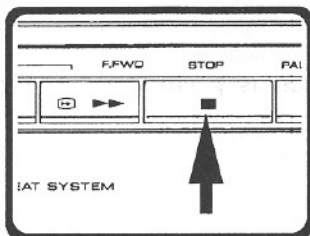
2

Press PLAY button. If inserted a cassette tape without its safety tab in place, VCR start playback automatically.



3

Press STOP button when playback is completed.

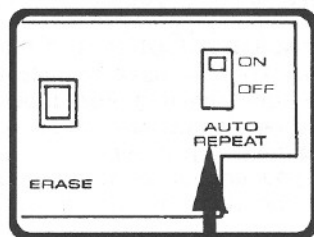


Auto Repeat Playback

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.

To start auto repeat playback, simply set the AUTO REPEAT switch to on.

NOTE : WHEN THIS REPEAT SWITCH IS ON, YOU HAVE NO CONTROL OF ANY FUNCTION.



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 memory position). The cassette mechanism will disengage after rewinding and the tape will be ejected and the VCR will shut itself off.

Notes :

- * The tape will not auto-rewind during timer recording or QUICK REC.
- * When tape is rewound to the preset memory position, tape will not be ejected and VCR will not shut off.

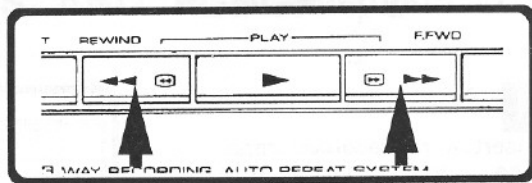
CUE and REVIEW (Visual Search)

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



2 Step Search

This VCR has 2 speeds of visual search with tapes recorded in LP or EP (SLP) mode.

- 1) Push the button for F.FWD or REW during the playback, to view the picture at a faster than normal speed.
- 2) If you want to view the picture at faster than above 1), you can view the picture by holding down the F.FWD or REW button during playback.

Still Frame During Playback

If you press PAUSE/STILL button during playback with tapes recorded in EP (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/STILL button during playback with tapes recorded in the SP or LP mode, it may cause the noise bars to appear more than with tapes recorded in the EP (SLP) mode. This is not an indication of VCR trouble.

Note : The VCR will automatically switch to the Stop mode, if it is left in the Pause/Still mode for more than five minutes.

NOISE CANCEL Button

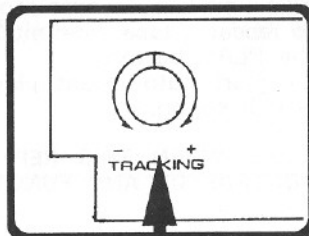
If you use the PAUSE/STILL button to freeze the picture during playback, usually there will be video "noise" lines on the screen. This is normal, however, this VCR has a special feature that allows you to reposition or reduce the lines. Each time you press NOISE CANCEL the lines will change position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

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

Tracking Control Knob

This knob is used to help eliminate video "noise" (lines and dots on the screen). For tapes recorded on your VCR, the center setting is usually best. Tapes recorded on other VCRs may require adjustment.

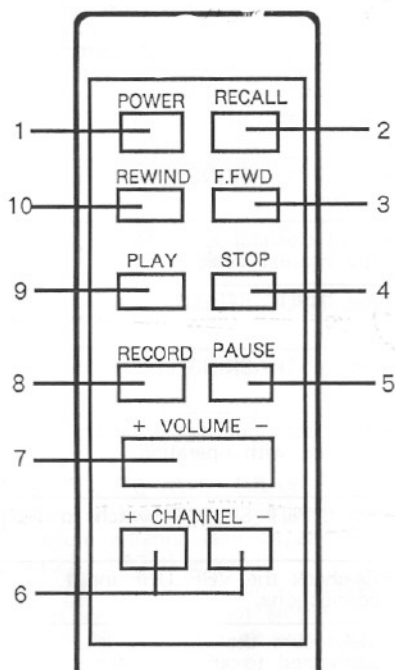
If you encounter video "noise" during playback adjust the knob to the right or left to achieve the best picture.



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 the Remote Control



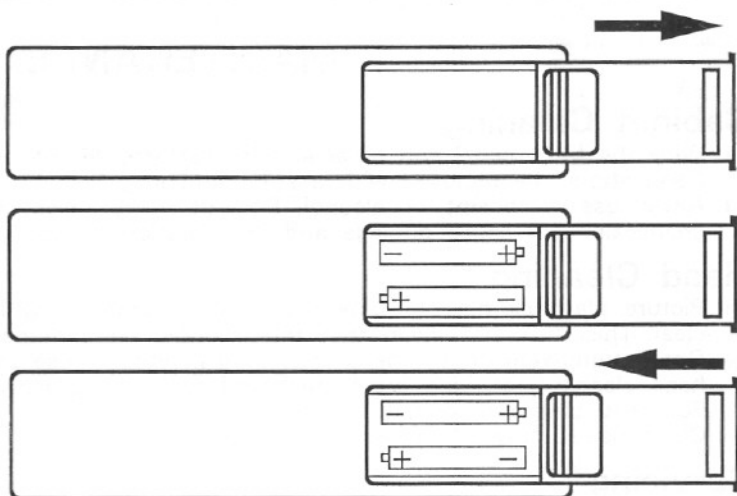
- 1 POWER button**—To turn unit on and off.
- 2 RECALL button**—Press to call previous received channel number on digital display.
- 3 F. FWD button**—To move the tape forward rapidly. To view the picture rapidly forward during the playback mode.
- 4 STOP button**—To stop the tape.
- 5 PAUSE/STILL-NOISE CANCEL button**—To stop the tape temporarily during playback or recording. To view a still picture during playback. To eliminate noise bars on still picture. May require depressing several times.
- 6 CHANNEL buttons**—To select desired channels by pressing either "+" or "-" button. They cannot be used during Timer Recording.
- 7 VOLUME button**—To adjust desired volume level by pressing either "+" or "-" button.
- 8 RECORD button**—To begin recording.
- 9 PLAY button**—To playback the tape.
- 10 REWIND button**—To rewind the tape. To view the picture rapidly in reverse, during the playback mode.

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.



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.	*Power cord is not connected. *Power button is set to off. *TIMER REC button is on.	*Connect power cord to AC outlet. *Set the power button to on. *Set TIMER REC button to off.
Timer recording is not possible.	*The program timer is set incorrectly. *The TIMER REC button set to off.	*Set the program timer correctly. *Set TIMER REC button to on.
Rec mode cannot be engaged.	*The record safety tab on cassette is missing.	*Place vinyl tape over missing safety tab.
Picture is poor on playback.	*The TRACKING control is not set to best position.	*Adjust TRACKING control for better picture.
Noise in picture on playback.	*Video head is dirty.	*Head cleaning is necessary, consult the nearest dealer.
No picture on playback.	*The INPUT SELECT switch is set to A/V.	*Set INPUT SELECT switch to TUN.
Playback picture is partially noisy.	*The TRACKING control is not set to center position.	*Adjust TRACKING control for better picture.
Operation buttons do not work when power is on and cassette is inserted.	*DEW indicator is on.	*Wait until indicator goes off, then proceed with operation.
TV program cannot be recorded.	*The INPUT SELECT switch is set to A/V.	*Set INPUT SELECT switch to TUN.
On-the-air TV programs cannot be seen.	*Connections are not correctly made.	*Re-check the VHF, UHF input connections.
No operation by Infrared Remote Control.	*Weak battery.	*Make sure the AC cord is connected to an AC outlet. *Check the batteries of Infrared Remote Control.
Operation buttons does not work when playing back the tape.	*The AUTO REPEAT switch is set to on.	*Set the AUTO REPEAT switch to off.

MAINTENANCE

Cabinet Cleaning

- * Wipe the front panel and other exterior surfaces of the unit with a clean, soft, dry cloth. Stain should be removed with a soft cloth immersed in lukewarm 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.

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. In this case, head cleaning requiring highly technical care is necessary. For head cleaning, consult the nearest dealer. Clean heads only when problems occur.

Servicing

- * Should your unit become inoperative, do not try correct the problem by yourself. There are no user-serviceable parts inside. Switch power off, unplug the power cord, and take the unit to an authorized video service center for servicing.

SPECIFICATIONS

General Specifications

Television system	: NTSC, TV standard
Picture tube	: 13" diag.
Recording system	: Rotary two-head helical scan system
Tape width	: 1/2 inch
Tape speed	
SP	: 1.31" /sec.(33.35mm/s)
LP	: 0.65" /sec.(16.67mm/s)
EP	: 0.43" /sec.(11.12mm/s)
Tuner channel	
VHF	: #2~#13, Cable channel A ₀ ~A ₁ , A~W
UHF	: #14~#83
Timer indication	: AM/PM 12-hour system
Terminals	
Antenna input	: VHF : F type, UHF : Grip x 2
Video input/output	: RCA connector x 2
Audio input/output	: RCA connector x 2

Electrical Specifications

Video output level	: 1V _{p-p}
Video output impedance	: 75 Ω
Audio output level	: -6dBV
Video input level	: 0.5~2.0V _{p-p}
Audio input level	: -10dBv
Video S/N ratio	
SP	: More than 42dB
Audio S/N ratio	
SP	: More than 40dB

Other Specifications

Power requirement	: 120V, 60Hz
Power consumption	: 85 Watts
Dimensions	: 384 (W) x 405 (H) x 372 (D) mm
Weight	: 16Kg (Approx.)

* Design and specifications are subject to change without notice.

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 Purchases from	
Dealer Address	
Dealer Phone No.	
Model No.	13TVCR MK II
Serial No.	

WARRANTY: Refer to warranty card concerning warranty.

SYMPHONIC SERVICE PROCEDURE

IN THE CONTINENTAL UNITED STATES . . .

Should your unit require service, CALL



for the nearest Symphonic Authorized Service Station.

Please present your bill of sale to the Authorized Service Station when applying for warranty service. If service is not available in your local area, you are to contact Symphonic Service Centers listed below for further information, or carefully pack the product (preferably in the original carton) and ship the product prepaid and insured to A Symphonic Service Center.

SYMPHONIC CORP.

100 NORTH STREET
TETERBORO, NEW JERSEY 07608
(800) 242-7158

Printed in Singapore
B8002

★★★★★