

Symphonic

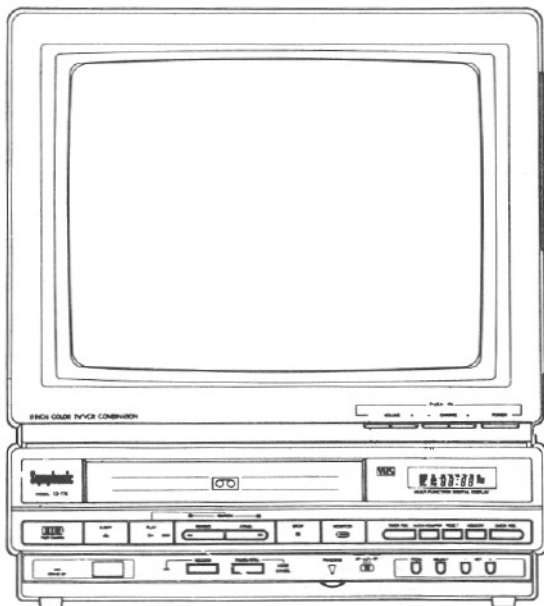
Owner's Manual

13 INCH COLOR TV/VCR COMBINATION

HQ
High Quality

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 13-TR

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	
<p>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</p>		

	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.

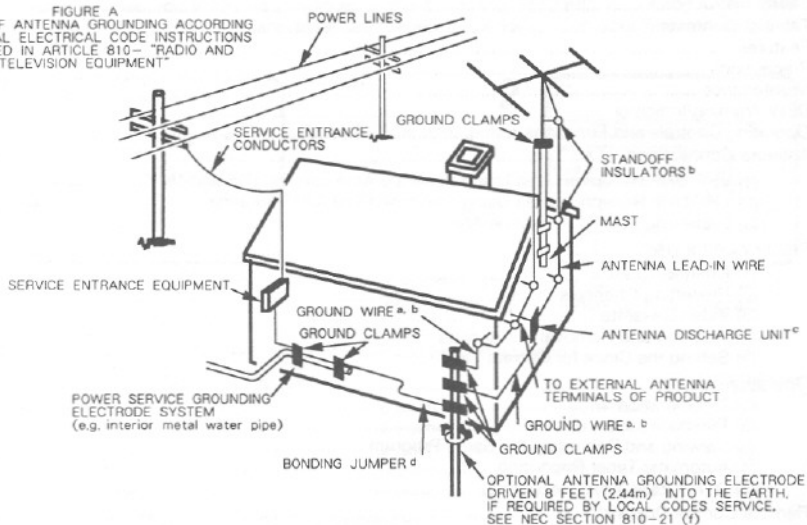
“IMPORTANT SAFEGUARD”

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)



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.

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FEATURES

- * **Three Different Record/Playback Speed.** 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 recommended T-60 or T-120 tapes.
- * **Automatic Playback Speed Selection** of Pre-recorded Tape
Automatically selects the proper playback speeds even if you set speed select knob to different mode.
- * **14-day Timer Recording**
Set, to turn on, record, and turn off once anytime during a 14-day period.
- * **QUICK REC** (Quick Timer Recording)
Automatic recording for 30, 60, 90, 120, 150, 180, 210 or 240 minutes is possible at the push of QUICK REC button. (You don't need any timer adjustment for recording.)
- * **Special Playback**
Cue-View the TV program on a tape, in the forward direction, at a fast speed; the audio signal will be muted.
REVIEW-View the TV 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 wide noise band when playing back with tapes recorded in the SP or LP mode.
- * **110 Channel Cable-compatible with 16 Presetable Tuner.** (A converter may be necessary to view CATV channels.)
- * **14 Function Infrared Remote Control** — Allows you to use all the tape transport controls and power on/off TV/VCR Selection from a remote location.
- * **Tape Counter with Memory**
- * **Auto-Rewind System**
- * **DEW Protection System** with Dew Indicator

The serial number of this product may be found on the back of the VCR. 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. : 13-TR
Serial No. : _____

PRECAUTIONS

Location

For safe operation and satisfactory performance of your VCR section, 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 VCR section. 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 VCR section 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 VCR section 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 section cassette holder.
- Do not place anything directly on top of the VCR section.

Important Copyright Information

Unauthorized recording or use of broadcast television programming video tape film or other copyright laws, Symphonic assumes 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.

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 grounding and, in particular, that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Complies with the limits for a Class B computing device pursuant to Subpart J of Part of FCC Rules.

MAINTENANCE

Cabinet Cleaning

- Wipe the front panel and other exterior surfaces of the VCR section with a clean, soft, dry cloth. Stains 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 VCR section. 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

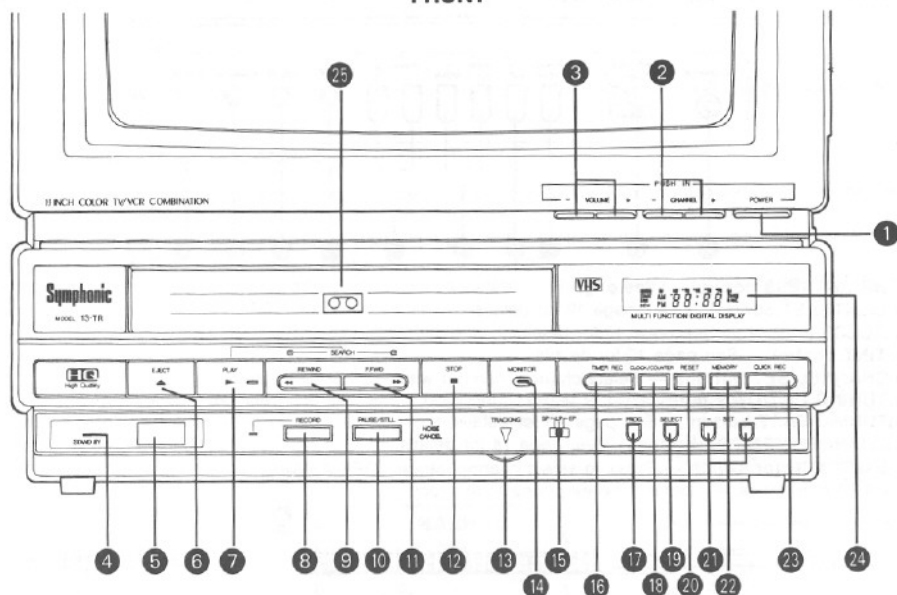
- Should your VCR section become inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Switch power off, unplug the power cord, and take the unit to an authorized video service center for servicing.

DEW WARNING/INDICATOR

VCR section is equipped with a sensor which prevents DEW condensation. If excessive moisture is present inside the unit, the DEW indicator 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 DEW light is on turn the POWER switch on and allow at least 2 hours for the unit to dry out.

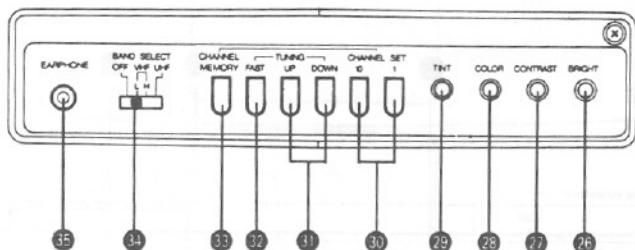
OPERATING CONTROLS AND FUNCTIONS

FRONT



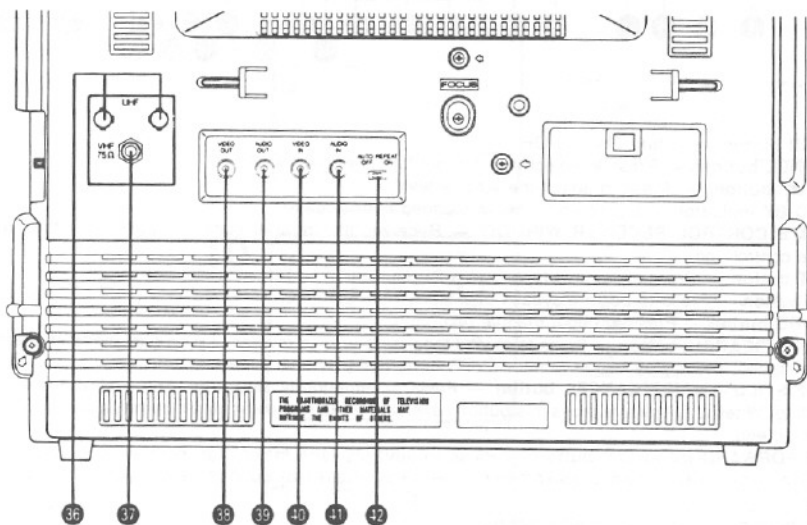
- POWER button** — To turn ON and OFF.
- CHANNEL buttons** — Press to select the channel for viewing or recording.
- VOLUME buttons** — Press to adjust the volume level.
- STAND BY indicator** — Lights when unit is plugged in and ready to function.
- REMOTE CONTROL RECEIVER WINDOW** — Receives the infrared control signals from the handheld remote control unit.
- EJECT button** — Press to remove tape from VCR section.
- PLAY button** — Press to begin playback of a tape.
- RECORD button** — Press to begin manual recording.
- REWIND (SEARCH) button** — Press to rewind tape, or to view in reverse, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- PAUSE/STILL — NOISE CANCEL button** — Press to temporarily stop tape during playback or manual recording. When a still picture press this button several times to reduce or eliminate noise bars (interference) on the screen.
- FAST FORWARD (SEARCH) button** — Press to advance tape faster than normal or to view in forward direction, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- STOP button** — Press to stop tape motion.
- TRACKING control** — Adjust to minimize video 'noise' (lines or dots on screen) during playback.
- MONITOR indicator** — Lights when monitor screen is activated.
- TAPE SPEED button** — Used to set desired recording speed. (SP/LP/EP)
- TIMER REC button** — Turn on to activate the automatic recording timer.
- PROGRAM button** — Press to select program number.
- CLOCK/COUNTER button** — Press to alternate between clock and counter display modes.
- SELECT button** — Press to select timer setting mode.
- RESET button** — Press to reset counter to 0000.
- SET buttons** — Adjust time with "+" or "-" button.
- MEMORY button** — Press to set memory-in.
- QUICK REC button** — Press to control quick timer recording mode.
- DIGITAL DISPLAY**
- CASSETTE COMPARTMENT**

SIDE



- 26 BRIGHTNESS control — See page 19 for details.
- 27 CONTRAST control — See page 19 for details.
- 28 COLOR control — See page 19 for details.
- 29 TINT control — See page 19 for details.
- 30 CHANNEL SET buttons — Select channel number with "10" or "1" button.
- 31 TUNING UP/DOWN buttons
- 32 TUNING FAST button — See page 13 for details.
- 33 CHANNEL MEMORY button — See page 14 for details.
- 34 BAND selector switch — Press to select channel range. (OFF/VL/VH/U)
- 35 EARPHONE jack — Connect the earphone to this jack.

REAR



- 36 UHF IN terminals — Connect a UHF antenna.
- 37 VHF IN terminal — Connect VHF antenna here.
- 38 VIDEO OUTPUT jack — Connect to the video in jack of video processor or a VCR.
- 39 AUDIO OUTPUT jack — Connect to the line in jack for your audio equipment or a VCR.
- 40 VIDEO INPUT jack — Connect to video output jack of your video camera or a VCR.
- 41 AUDIO INPUT jack — Connect to audio output jack of a video camera or a VCR.
- 42 AUTO REPEAT switch — Allows for repetitious viewing without manual restart.

ANTENNA CONNECTIONS

Signals for your Double Video will come from three basic sources: VHF channels 2-13, UHF channels 14-83, and Cable channels. You may connect your unit one, two, or all three of these sources, depending on your needs and what is available in your viewing area.

For some of the most common types of connections, see the drawings on the following pages.

(1) VHF/UHF Reception Area Using Separate Antennas for VHF and UHF

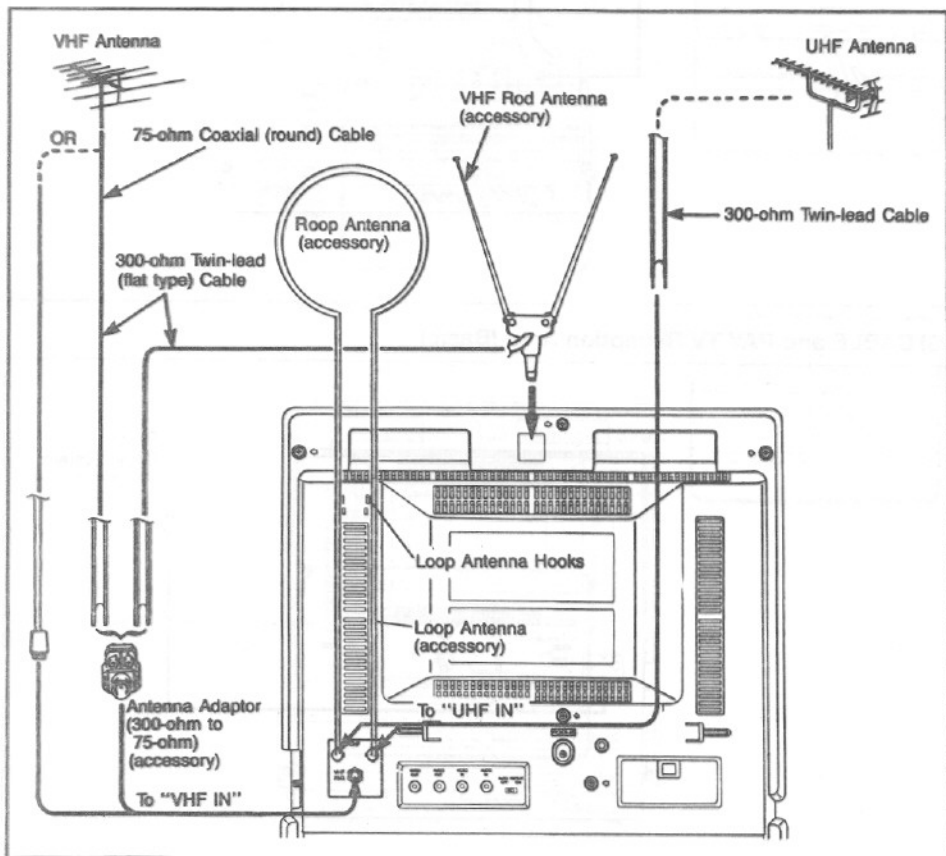
VHF Antenna Hook Up

The 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 coupling transformer (supplied). Plug the coupling transformer to the VHF 75 ohm input terminals as shown in drawing. This antenna is designed to perform as well as any indoor antenna and will provide an excellent picture in most areas. 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 coupling 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.

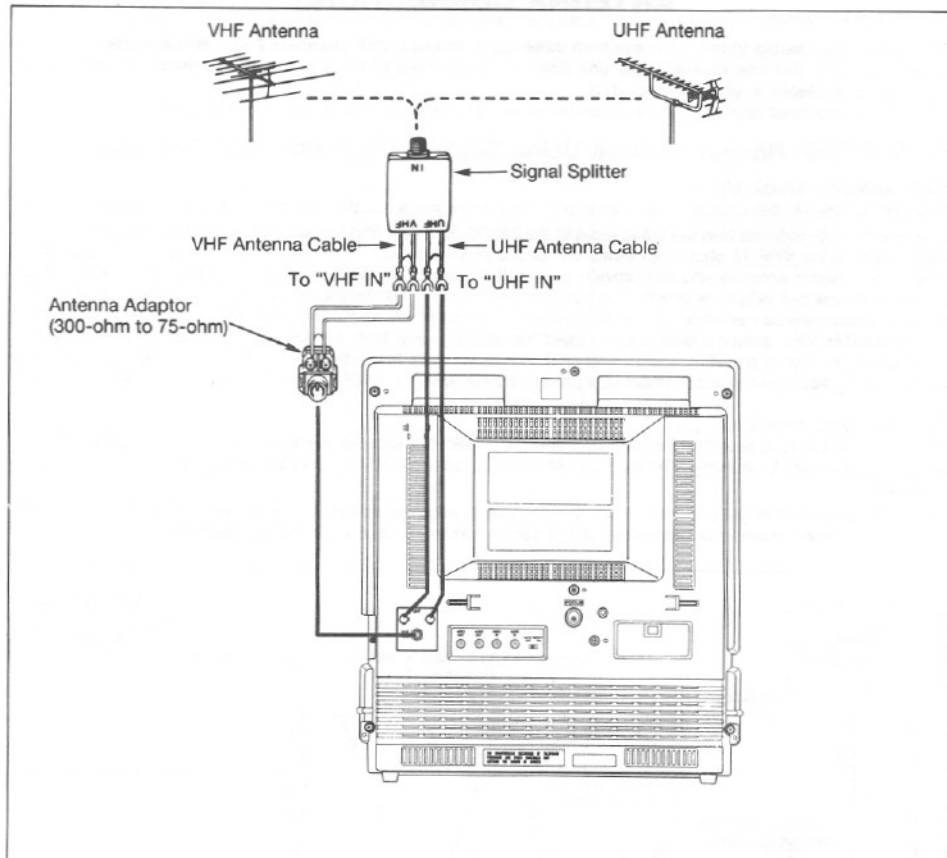
UHF Antenna Hook UP

A wire loop antenna is provided for UHF reception. 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.

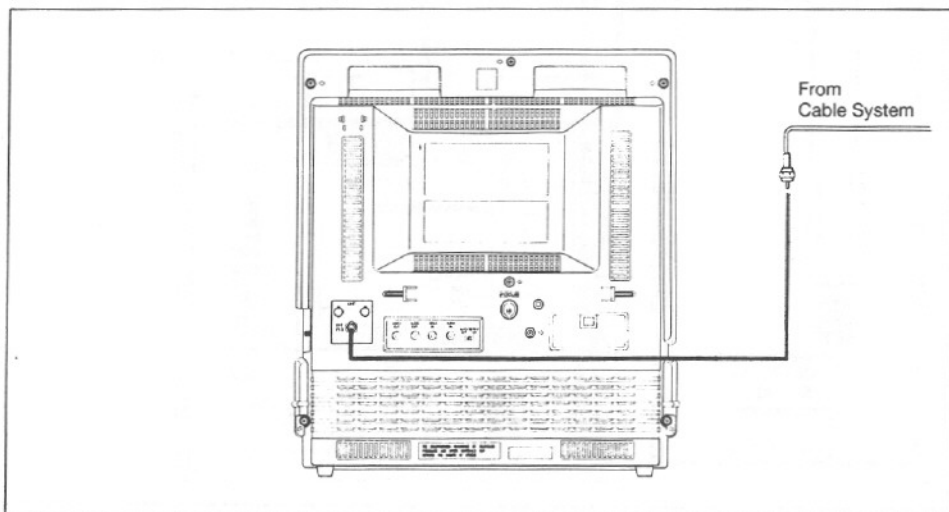
NOTE: If it is difficult to get good reception with the indoor antenna, using an outdoor antenna is recommended. Before an outdoor antenna is connected to the set, the indoor antenna should be disconnected.

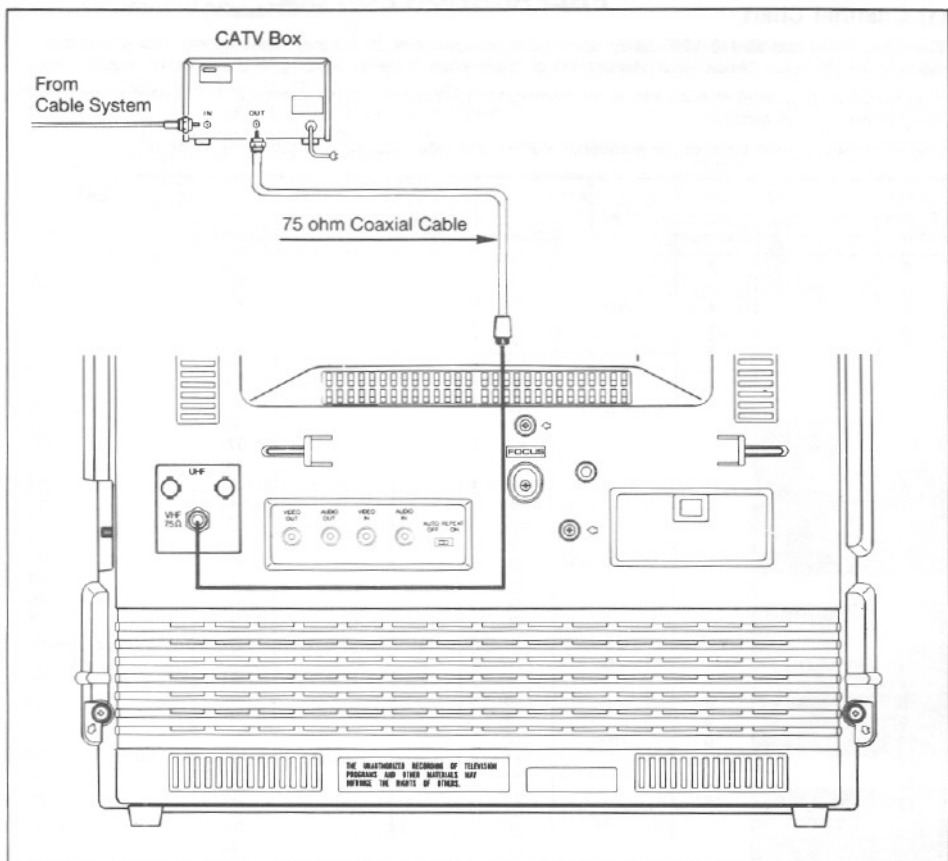


(2) VHF/UHF Reception Area Using Combined VHF/UHF Antenna



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





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) Channel Chart

The table below lists all 110 VHF, UHF, and cable stations that this tuner can receive. Not all stations are available in all areas. Check local newspapers or cable companies for a listing of the stations in your area.

You can program up to 16 stations into tuner memory for quick recall. (VHF stations 2 thru 13 have already been programmed at our factory).

Use this chart to keep track of the additional stations that you program into the tuner memory:

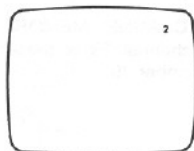
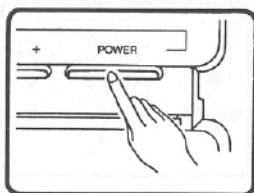
Your Preset No.	TV		CATV		Your Preset No.	TV		CATV	
		Channel		Channel			Channel		Channel
2	VHF	2	VHF	2	UHF	29	UHF	29	
3		3		3		30		30	
4		4		4		31		31	
5		5		5		32		32	
6		6		6		33		33	
						34		34	
				A-5		35		35	
				A-4		36		36	
				A-3		37		37	
				A-2		38		38	
				A-1		39		39	
				A		40		40	
				B		41		41	
			C	42	41				
			D	43	43				
			E	44	44				
			F	45	45				
			G	46	46				
			H	47	47				
			I						
7	VHF	7	VHF	7	UHF	48	UHF	48	
8		8		8		49		49	
9		9		9		50		50	
10		10		10		51		51	
11		11		11		52		52	
12		12		12		53		53	
13	13	13	54	54					
			J	55		55			
			K	56		56			
			L	57		57			
			M	58		58			
			N	59		59			
			O	60		60			
			P	61	61				
			Q	62	62				
			R	63	63				
			S	64	64				
			T	65	65				
			U	66	66				
			V	67	67				
			W	68	68				
	UHF	14	UHF	14	69	69			
		15		15	70	70			
		16		16	71	71			
		17		17	72	72			
		18		18	73	73			
		19		19	74	74			
		20		20	75	75			
		21		21	76	76			
		22		22	77	77			
		23		23	78	78			
		24		24	79	79			
	25	25	80	80					
	26	26	81	81					
	27	27	82	82					
	28	28	83	83					

(2) Presetting Channels

This unit has a built-in electronic tuner that is capable of receiving 110 television channels. Channel displays (position numbers) 2 through 13 have been preset to VHF channels 2 through 13 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.

Preparation

- Press POWER Switch to on.
Previous received channel number is displayed on screen. (Example: 2)

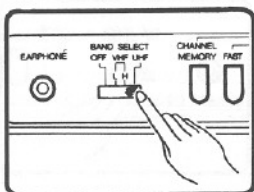


Adjustment

1

Select BAND SELECT switch to set the channel range to correspond to the channel you are programming. (Example: Band U)

Position number is displayed and channel number is flash on screen.

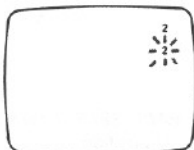
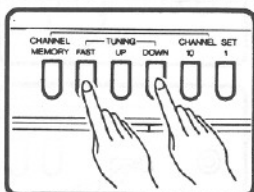


Band	Channel Range
V _L	2-6, A5-A2 (cable)
V _H	A1, A-1 (cable), 7-13, J-W (cable)
U	14-83

2

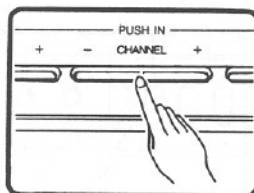
Press TUNING DOWN button and FAST button together to set starting point (lowest frequency) of selected channel range. Channel number keeps flashing very quickly before reaching the starting point.

Note: When you are selecting the next station in the same channel range, skip to next step 3.



3

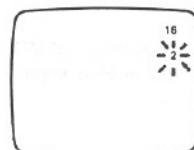
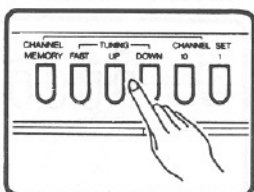
Select desired position number with CHANNEL button. ("+" or "-") (Example: Channel 16)



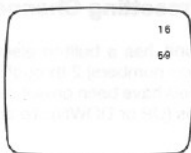
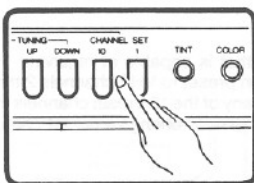
4

Press TUNING UP button until the TV program you want appears on screen. If you press FAST button together tuning works faster.

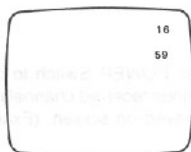
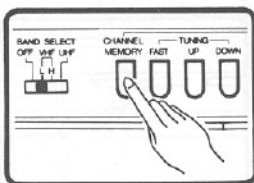
Note: Channel must be precisely tuned to avoid picture roll.



5
 Select desired channel number with CHANNEL SET button. ("10" and "1")
 (Example: Channel 59)
 If the programmed channel has a FCC assigned channel number it is best to use that number. However you may use any number you like.

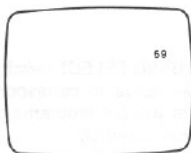
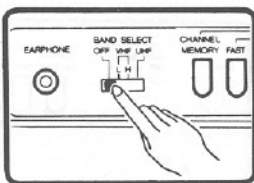


6
 Press CHANNEL MEMORY button.
 Now, channel 59 is preset in position number 16.



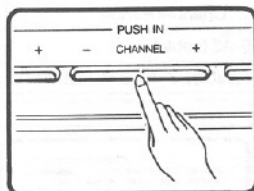
Repeat step **1** to **6** for each program position you want to tune to a TV station.

7
 Select BAND SELECT switch to OFF.

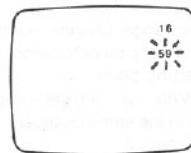
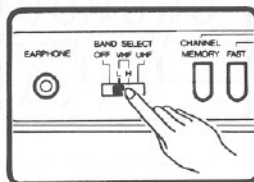


To ERASE preset channels

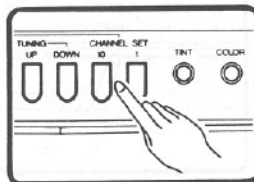
1
 Select desired channel number with CHANNEL button. ("+" or "-")
 (Example: Channel 59)



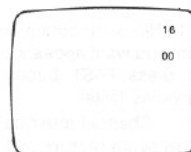
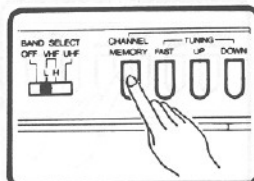
2
 Select BAND SELECT switch to either V_L, V_H, U position.



3
 Set the channel number to 00 with CHANNEL SET button. ("10" and "1")

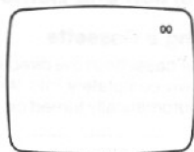
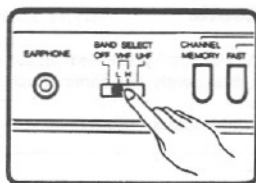


4
 Press CHANNEL MEMORY button.
 Now channel 59 is erased.



5

Select BAND SELECT switch to OFF.

Repeat step **1** to **5** for each channel you want to erase a TV station.

(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.

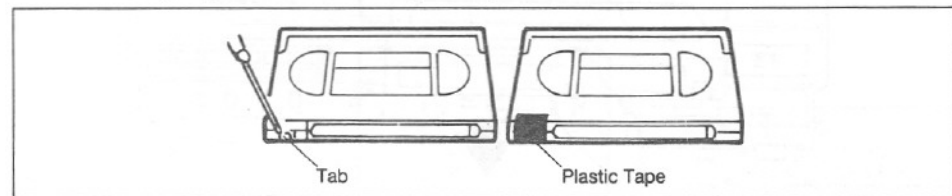
Cassette Mode	T-60	T-120	T-160
SP Mode	1 hour (60 minutes)	2 hours (120 minutes)	2-2/3 hours (160 minutes)
LP Mode	2 hours (120 minutes)	4 hours (240 minutes)	5-1/3 hours (320 minutes)
EP(SLP) Mode	3 hours (180 minutes)	6 hours (360 minutes)	8 hours (480 minutes)

When handling video tapes, take the following precautions

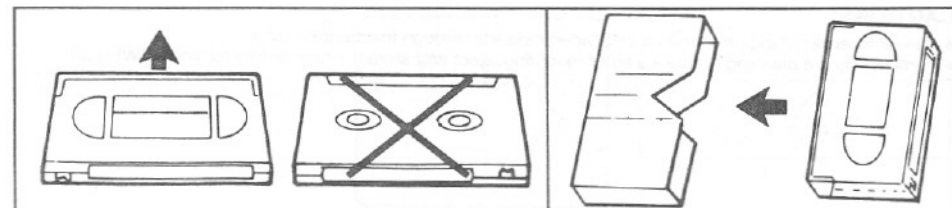
- Avoid moisture — Moisture can condense on the tape if it is moved from a cold place to a warm one. Playing a tape that has moisture in it will damage the tape and your VCR section. So, before using a tape under these conditions, wait until the tape has warmed to room temperature and the moisture has 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 section as shown below.
- Store the cassette in its case as shown.

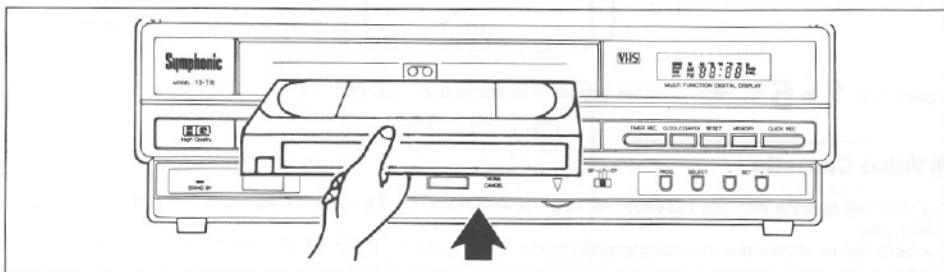


(4) Insertion and Removal of Cassette

Inserting a Cassette

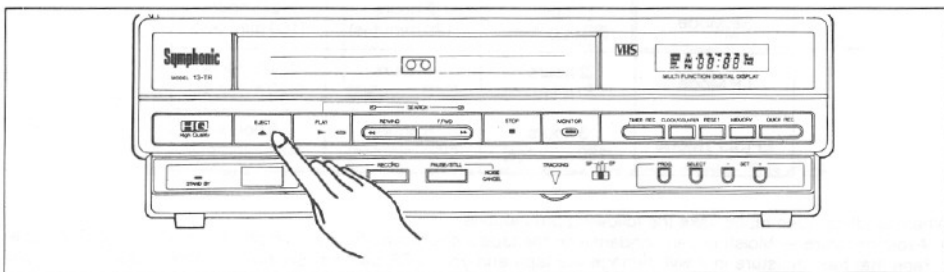
Insert the cassette in the direction shown. Push in gently, but continuously, on the center-back of the cassette until it is drawn completely into the VCR section.

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

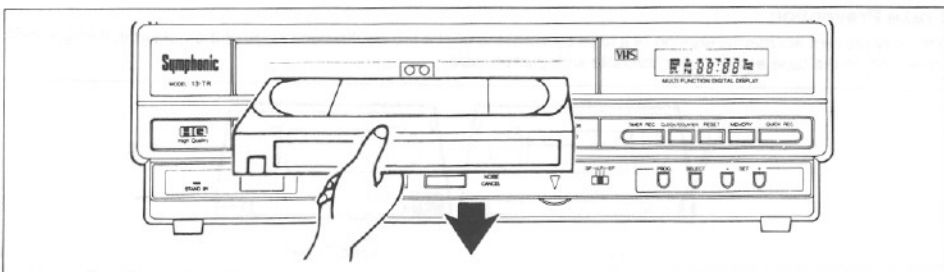


Removing a Cassette

- 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.



CAUTIONS:

- Never insert anything other than a VHS video cassette through the cassette door.
- Unless you are planning to make a timer recording, eject and store the tape before turning POWER off.

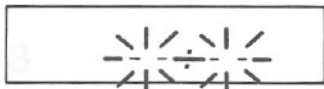
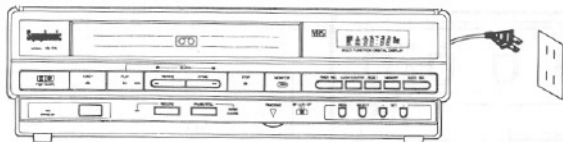
(5) Setting the Clock for Correct Time

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

SETTING THE CLOCK

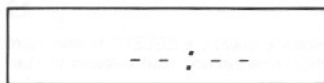
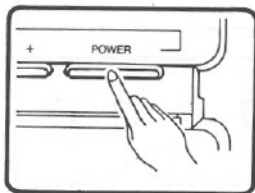
1

Connect the power cord to a standard AC outlet.



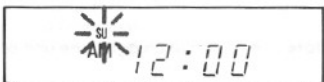
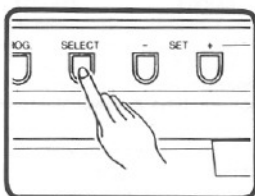
2

Press POWER button to power on.



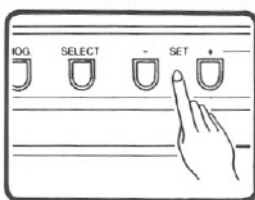
3

Press SELECT button.



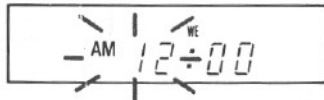
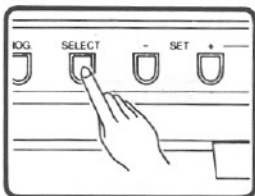
4

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



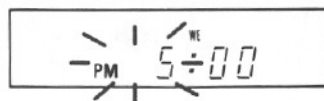
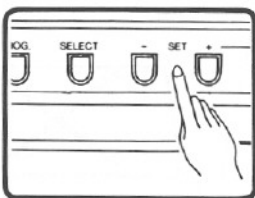
5

Press SELECT button.



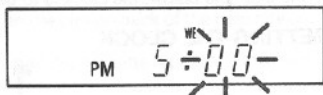
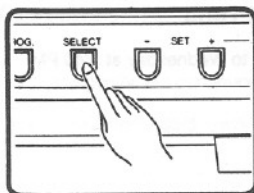
6

Press SET button ("+" or "-") repeatedly until the correct hours is indicated. (Example: PM 5)



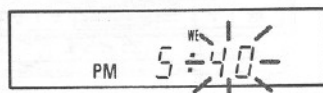
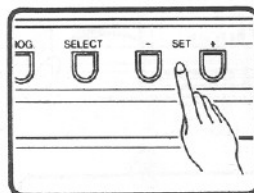
Press SELECT button.

7



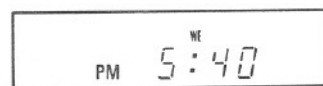
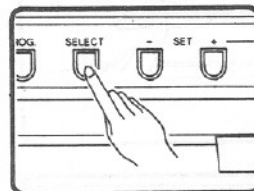
Press SET button ("+" or "-") repeatedly until the correct minutes is indicated. (Example: 40)

8



Holding down the SELECT button more than one second and release to start the clock.

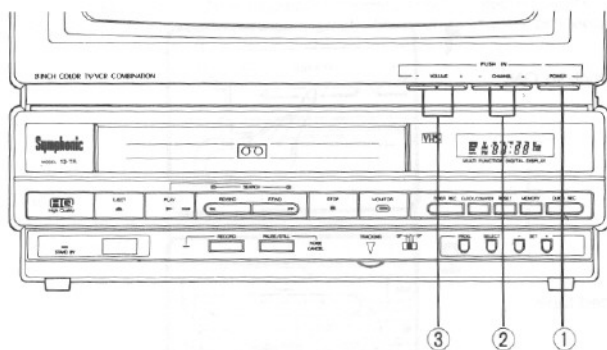
9



Note: • When unplugging the unit or when you have a power failure, the clock display ① is displayed.

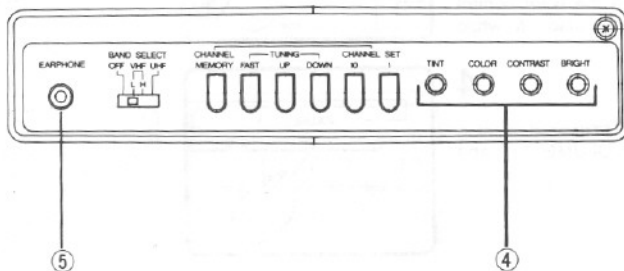
OPERATION

(1) T.V. Operation



- ① Push POWER button to ON. Monitor indicator lights.
- ② Select the desired channel, using CHANNEL buttons.
- 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).
- ⑤ For private listening, connect a earphone, to earphone jack. This automatically disconnects the built-in speaker.

NOTE: This is a monaural earphone jack. If a stereo headphone is connected to this jack, sound will only be heard from one of the speakers, not both. This is normal, it does not indicate a defect in the unit or in your headphones.



TINT (HUE)

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

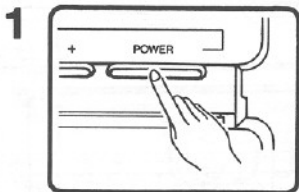
Correct brightness and contrast settings are important to obtain a natural image. To increase the contrast, rotate the control clockwise (↻). To decrease contrast, rotate the control counter-clockwise (↺).

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

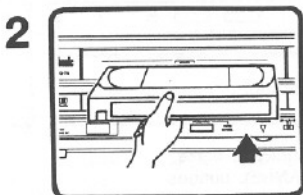
(2) Playback

The tape speed is automatically selected.

1 Press POWER switch to ON.



2 Insert a pre-recorded tape.

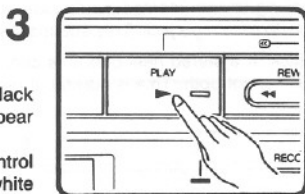


3 Press PLAY.

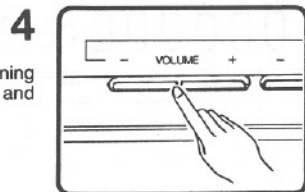
Note:

During playback of tapes with black and white programs, color may appear on the TV screen.

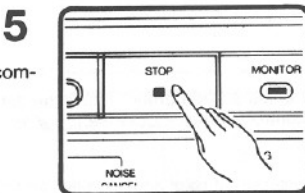
If this occurs, turn the color control down while viewing black & white tapes.



4 Adjust the VOLUME to desired listening level using the VOLUME "+" and "-" buttons.



5 Press STOP when playback is completed.

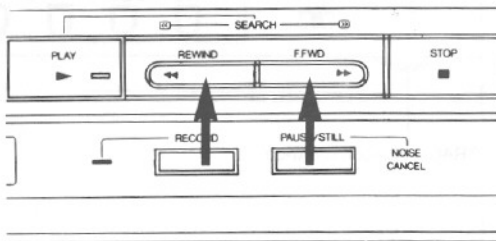


CUE and REVIEW (Visual Search)

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 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 Rewind. The sound will be muted.

This feature is used in finding a particular section of a tape.

- NOTE:**
- You will get best results when playing back tapes that were recorded in the EP (SLP) mode. To return to normal playback, press PLAY.
 - The picture will not be as good as normal during CUE and REVIEW.



When video searching a prerecorded tape in "SP" mode, it may cause the noise bars (white lines) to move vertically and cover most of the screen. Also, the picture color fluctuates on and off. This is not an indication of VCR trouble.



When video searching a prerecorded tape in "LP" mode, it may cause the noise bars (white lines) to move vertically and cover about 1/3 of the screen. Also, the picture color fluctuates on and off. This is not an indication of VCR trouble.



When video searching a prerecorded tape in "EP" (SLP) mode, it may cause 3 or 5 thin noise bars to appear and move vertically. This is not an indication of VCR trouble.



2 Step Search

This VCR section 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

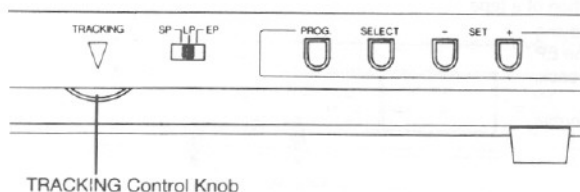
If you press PAUSE/STILL during playback with tapes recorded in EP (SLP) mode, the picture will "freeze" on the screen. You may use this feature to study details of a particular scene. Press PLAY again to continue playback. If you use the PAUSE/STILL button during playback with tapes recorded in the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



Auto Repeat Playback

This unit has an auto repeat 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 (located on back of the unit)

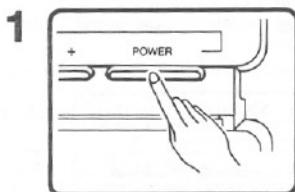
Playback will begin automatically. When the tape ends, it will rewind to the beginning and playback will begin again. This cycle will be repeated indefinitely.

To stop auto repeat playback simply set the AUTO REPEAT switch to OFF. Playback will stop immediately. To resume normal playback, press the Play Button once more.

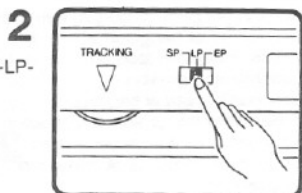
- NOTE:** (A) Fast Forward, Rewind, Stop, Record and Pause/Still Controls do not work during auto repeat playback.
(B) Always set the Auto Repeat Switch 'OFF' when not in use.

(3) Viewing and Recording the Same Program

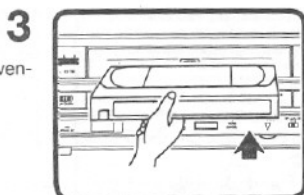
Press POWER switch to ON.



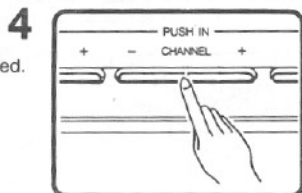
Select the desired tape speed (SP-LP-EP).



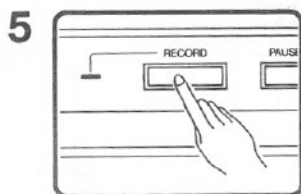
Insert a cassette with erasure prevention tab intact.



Select the program to be recorded.



Press RECORD.

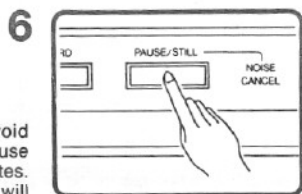


If you want to edit out some material while you are recording,

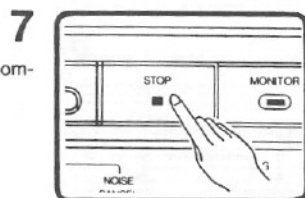
Press PAUSE/STILL button.

Note:

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



Press STOP when recording is completed.



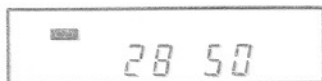
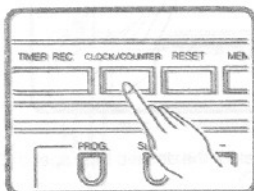
MEMORY Button

The MEMORY button can be used, during rewind, to automatically stop the tape when the counter reaches a pre-set 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 play back a certain portion of a tape.

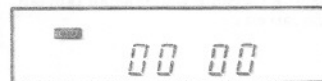
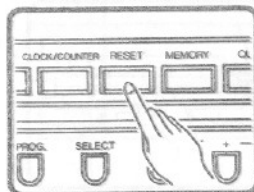
1

Before playback or recording press CLOCK/COUNTER button.



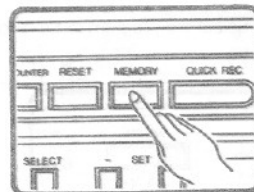
2

Press RESET.



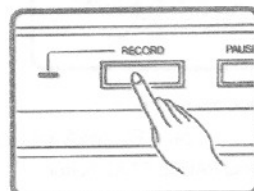
3

Press MEMORY.

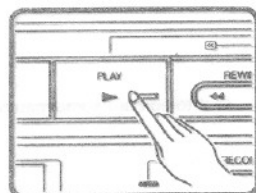


4

Press RECORD or PLAY.

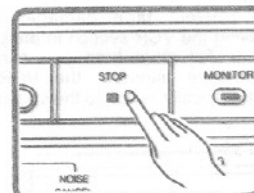


Or



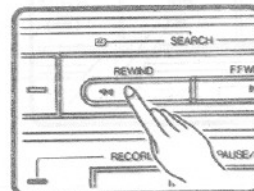
5

Press STOP when recording or playback is completed.



6

Press REWIND.



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

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 section 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 section will not shut off.

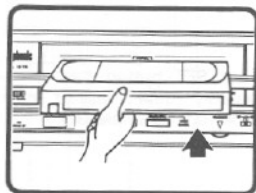
(4) Automatic Timer Recording

You may set the VCR section to turn on, record, and turn off, during any fourteen day period or you may set it to turn on, record, and turn off at the same time every day.

- Power must be on when setting the timer. (Note: If the POWER switch is not on, you should turn on POWER switch or turn off TIMER REC switch before starting timer setting.)
- In the example, below the timer is being set to record channel 5 from 7:30 AM to 8:50 AM on Tuesday. The current time is Monday PM 9:00.

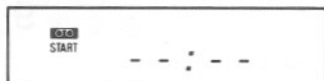
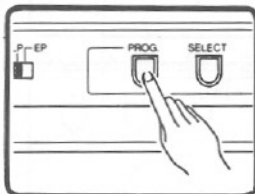
Insert a cassette tape with its safety tab in place, if necessary, rewind or fast forward the tape to the point at which you want recording to begin.

1



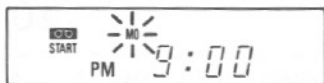
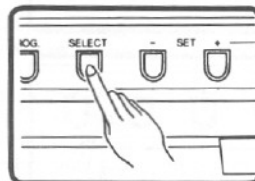
Press "PROG." button.

2



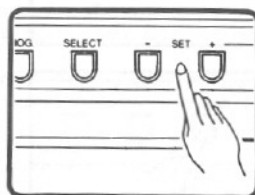
Press SELECT button.

3



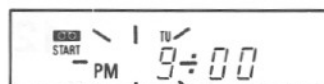
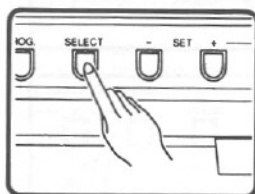
Press SET button ("+" or "-") repeatedly until desired day is displayed. (Example: TUE)

4

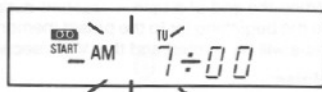
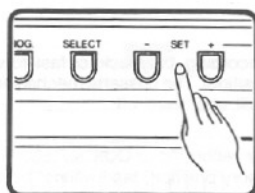


Press SELECT button.

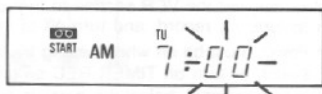
5



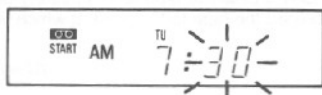
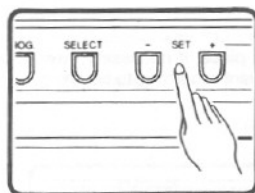
6
Press SET button (“+” or “-”) repeatedly until desired hour is displayed.
(Example: AM 7)



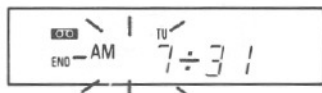
Press SELECT button.



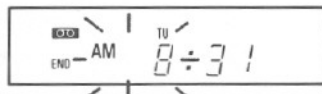
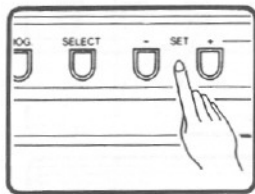
8
Press SET button (“+” or “-”) repeatedly until desired minute is displayed. (Example: 30)



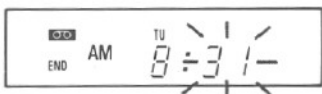
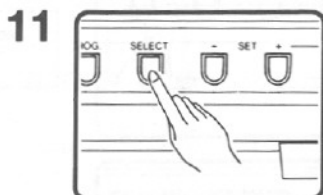
Press SELECT button.



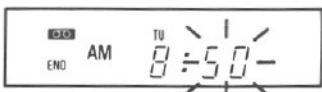
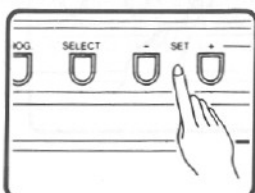
10
Press SET button (“+” or “-”) repeatedly until desired hour is displayed. (Example: AM 8)



Press SELECT button.

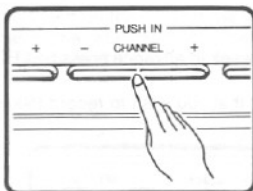


12
Press SET button (“+” or “-”) repeatedly until desired minutes are displayed. (Example: 50)

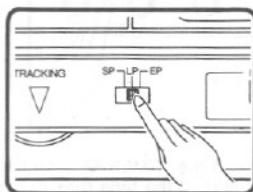


13

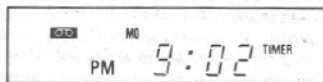
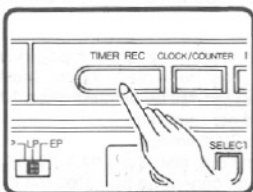
Select the channel you wish to record using CHANNEL buttons.

**14**

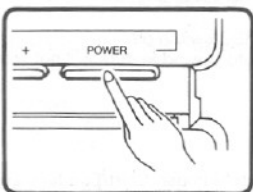
Set the TAPE SPEED switch to the speed you wish to record.

**15**

Press "TIMER REC" button to set automatic timer recording.

**16**

If you do not want the screen to turn ON during timer recording, push the OPERATE button to turn the Monitor indicator OFF.



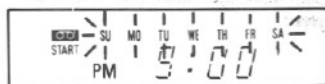
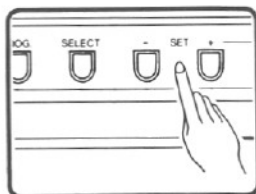
Daily Program

To record a program at the same time every day.

Press SET button repeatedly until all of the day indicators are lit following steps **1** through **3** on page 25.

4

Press SET button.



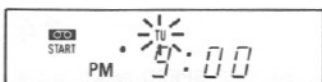
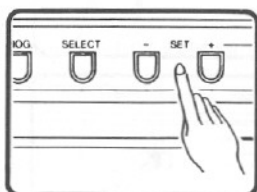
2nd week

If you wish to record a program more than a week in advance press SELECT SET button until "2nd week" indicator (•) lights.

At this time select the day during 2nd week that you wish to record following steps **1** through **3** on page 25.

4

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



Note:

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

Timer Recording Hints

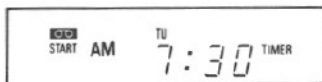
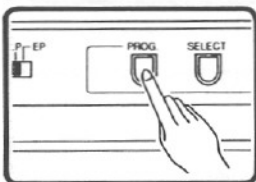
- Make sure the channel you want to record is properly tuned in advance.
- The erase prevention tab on the cassette must be in place (or you must put tape over the hole).
- **Note:** A cassette without erase prevention tab will be ejected when TIMER REC switch is on.
- It is not necessary to press RECORD for timer recording.
- Recording begins automatically at the set Start time.
- The cassette will be ejected if the tape runs out, also the unit's power will be shut off.
- When the TIMER REC switch 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 switch off.
- When the TIMER REC switch is on, the auto-rewind feature will not work.

Checking the START/END time.

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

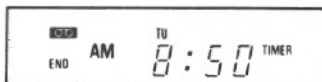
1

Press "PROG" button to displayed start time.



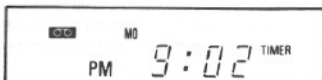
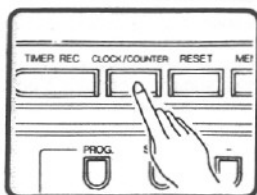
2

About 4 seconds later, end time is displayed.



3

About 1 minute later, display will return to current time or press "CLOCK/COUNTER" button to return to current time manually.

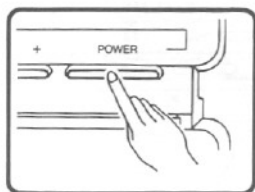


(5) QUICK REC (Quick Timer Recording)

TO PREPARE FOR QUICK RECORDING TIMER

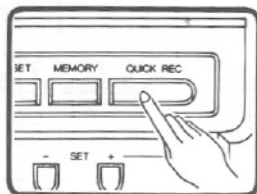
The quick record function enables you to record a program without pressing RECORD. According to the table below, simply press QUICK REC button as many times as needed, depending upon your required length of recording.

1



Press POWER switch to on.

2



Press QUICK REC button.

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

The recording length can be determined by the number of times you press the button.

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

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

Notes:

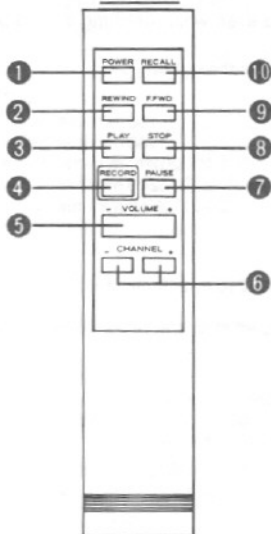
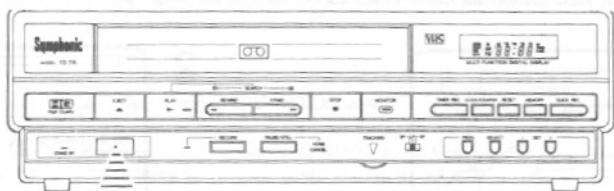
- The recording time length can be set only to 30, 60, 90, 120, 150, 180, 210 or 240 minutes.
- To stop the QTR operation, press STOP button.
- When QTR is pushed 10 times — 0 minutes — 0:00 reading. Recording will stop in approximately 10 seconds.

The recording length time counts down as the recording is started.

Recording stops when 0:00 is reached.

REMOTE CONTROL OPERATION

You can operate all of your VCR section tape transport functions from the Remote Control (included). The buttons on the Remote Control have the same functions as the corresponding buttons on the VCR section.



How to use the Remote Control

- 1 POWER BUTTON** — To turn on and off.
- 2 REWIND button** To rewind the tape. To view the picture rapidly in reverse, during the playback mode.
- 3 PLAY button** — To playback the tape.
- 4 RECORD button** — Press to begin recording.
- 5 VOLUME Button** — To adjust desired volume level by pressing either "+" or "-" button.
- 6 CHANNEL buttons**— To select desired channels by pressing either "+" or "-" button. They cannot be used during Timer Recording.
- 7 PAUSE/STILL 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.
- 8 STOP button** — To stop the tape.
- 9 F.FWD button** — To move the tape forward rapidly. To view the picture rapidly in forward during the playback mode.
- 10 RECALL button** — Press to call previous received channel.

Installing The Batteries

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



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



- Replace the cover.



TROUBLESHOOTING GUIDE

If you have followed the instructions contained in this manual and have difficulty in operating your Double Video 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"> • Power cord is not connected. • Power switch is set to off. • TIMER REC switch is on. 	<ul style="list-style-type: none"> • Connect power cord to AC outlet. • Set the power switch to on. • Set TIMER REC switch to off.
Timer recording is not possible.	<ul style="list-style-type: none"> • The program timer is set incorrectly. • The TIMER REC switch set to off. 	<ul style="list-style-type: none"> • Set the program timer correctly. • Set TIMER REC switch to on.
Rec mode cannot be engaged.	<ul style="list-style-type: none"> • The record safety tab on cassette is missing. 	<ul style="list-style-type: none"> • Place vinyl tape over missing safety tab.
Picture is poor on playback.	<ul style="list-style-type: none"> • The TRACKING control is not set best position. 	<ul style="list-style-type: none"> • Adjust TRACKING control for best picture.
Noise in picture on playback.	<ul style="list-style-type: none"> • Video head is dirty. 	<ul style="list-style-type: none"> • Head cleaning is necessary, consult the nearest dealer.
No picture on playback.	<ul style="list-style-type: none"> • Power switch is set to off. 	<ul style="list-style-type: none"> • Set the POWER switch to on.
Playback picture is partially noisy.	<ul style="list-style-type: none"> • The TRACKING control is not set to best position. 	<ul style="list-style-type: none"> • Adjust TRACKING control for better picture.
Operation buttons do not work when POWER is on and cassette is inserted.	<ul style="list-style-type: none"> • DEW indicator is on. 	<ul style="list-style-type: none"> • Wait until indicator goes off, then proceed with operation.
TV program cannot be recorded.	<ul style="list-style-type: none"> • Audio/Video input, is connected. 	<ul style="list-style-type: none"> • Disconnect Audio/Video input.
On-the-air TV programs cannot be seen.	<ul style="list-style-type: none"> • Connections are not correctly made. 	<ul style="list-style-type: none"> • Re-check the VHF, UHF input connections.
No operation by Infrared Remote Control.	<ul style="list-style-type: none"> • Weak battery. 	<ul style="list-style-type: none"> • Make sure the AC cord is connected to an AC outlet. • Check the batteries of Infrared Remote Control.

SPECIFICATIONS

General Specifications

Television system:	NTSC, U.S. TV standard
Picture tube	13" diagonally measured
Recording system:	Rotary two-head helical scan system
Tape width:	1/2 inch.
Tape speed	
SP:	1.31"/sec. (33.35 mm/s)
LP:	0.65"/sec. (16.67 mm/s)
EP:	0.43"/sec. (11.12 mm/s)
Tuner channel:	
VHF:	#2 — #13, Cable channels A ₅ -A ₁₁ , A-W
UHF:	#14 — #83
Timer indication:	AM/PM 12-hour system
Terminals	
Antenna input:	VHF: F type, UHF: Grip × 2
Video input/output:	RCA connector × 2
Audio input/output:	RCA connector × 2

Electrical Specifications

Video output level:	1 Vp-p
Video output impedance:	75 Ω
Audio output level:	-9 dBV
Video Input level:	0.5-2.0 Vp-p
Audio input level:	-10 dBV
Video S/N ratio	
SP:	More than 46 dB
Audio S/N ratio	
SP:	More than 40 dB

Other Specifications

Power requirement:	120 V, 60 Hz
Power consumption:	95 Watts
Dimensions:	370(W) × 410(H) × 365(D) mm
Weight:	16 Kg (Approx.)

Because its products are subject to continuous improvement, Symphonic reserves right to modify product designs and specifications without notice and without incurring any obligation.

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.

Western Office

1825 SOUTH ACACIA AVE.
Compton, California 90220

Eastern Office

100 NORTH STREET
TETERBORO, NEW JERSEY 07608