

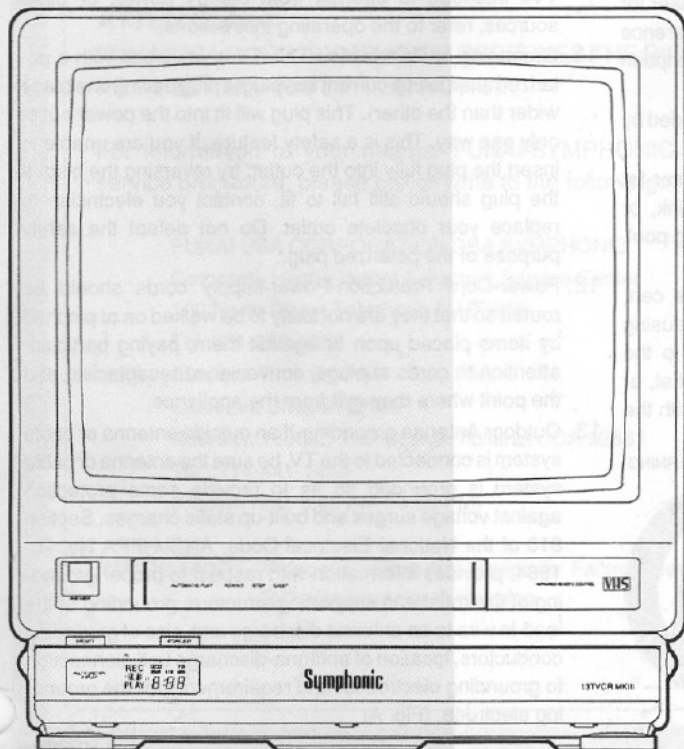
OWNER'S MANUAL

Symphonic

13" COLOR TV/VCR COMBINATION

VHS

13TVCR MKIII



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Please read before
using this equipment

WARNING:

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



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**




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.

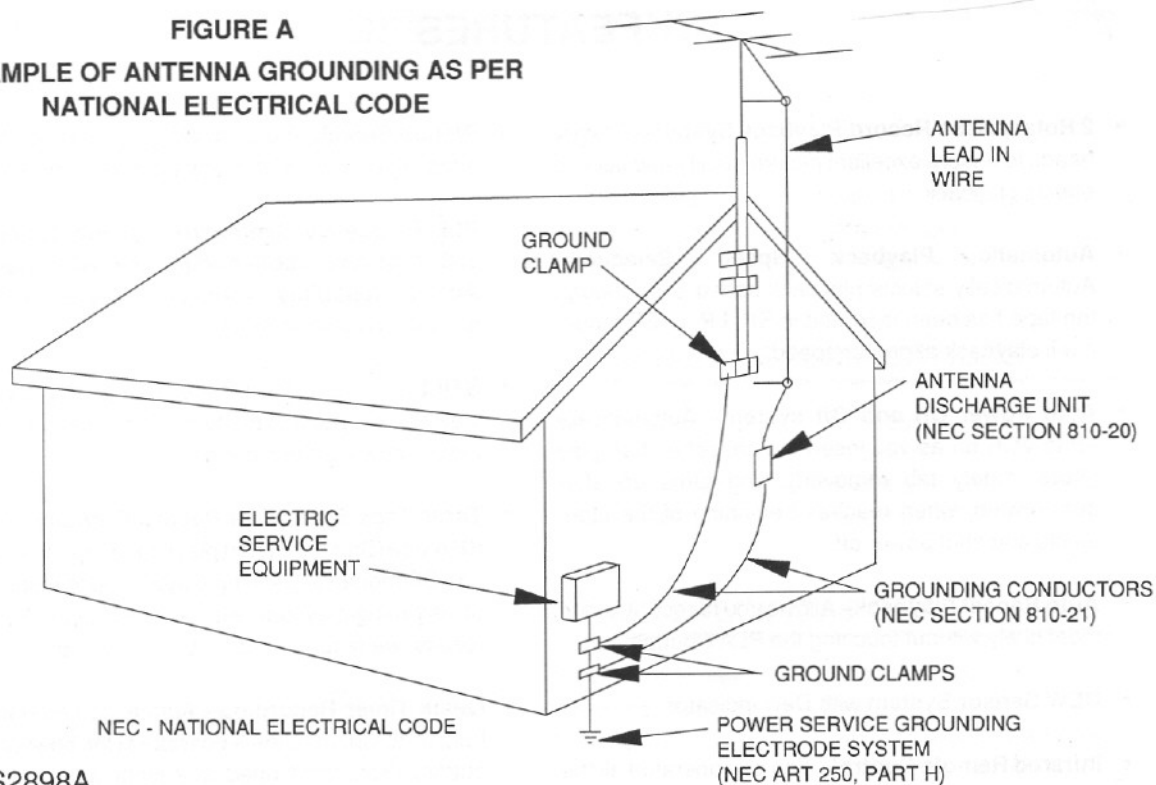
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

"IMPORTANT SAFEGUARDS"

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


PORTABLE CART WARNING
S3126A
9. Ventilation-Slots and openings in the cabinet and the back or bottom are provided for ventilation and to ensure reliable operation of the TV and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the TV on a bed, sofa, rug, or other similar surface. This TV should never be placed near or over a radiator or heat register. This TV should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to .
10. Power Sources-This TV should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For TVs intended to operate from battery power, or other sources, refer to the operating instructions.
11. Grounding or Polarization-This TV is equipped with a polarized alternating-current line plug(a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact you electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
12. Power-Cord Protection-Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Outdoor Antenna grounding-If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. (Fig. A)

FIGURE A
EXAMPLE OF ANTENNA GROUNDING AS PER
NATIONAL ELECTRICAL CODE



NEC - NATIONAL ELECTRICAL CODE

S2898A

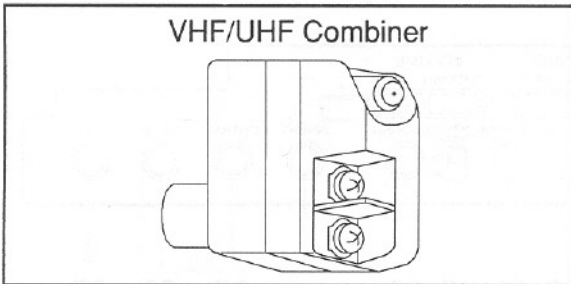
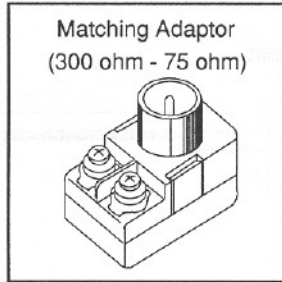
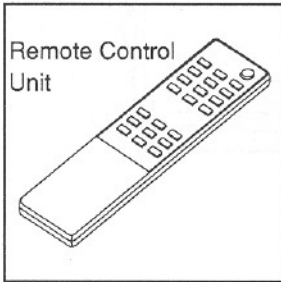
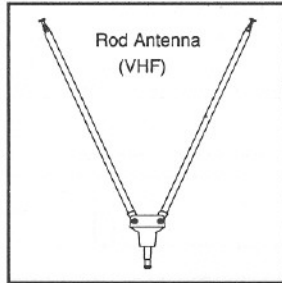
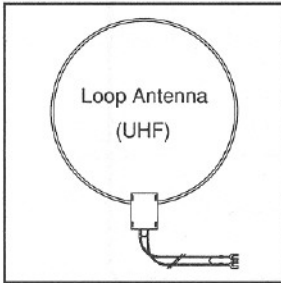
14. Lightning-For added protection for this TV receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV due to lightning and power-line surges.
15.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

FEATURES

- * **2 Rotary Head Record/Playback System**— 2 rotary heads to ensure excellent picture quality and special effects playback.
- * **Automatic Playback Speed Selection**— Automatically selects playback speed even though the tape has been recorded in SP, LP, or EP mode, it will playback at proper speed.
- * **Auto Power On and Off system**— Automatically turns VCR on as you insert the cassette, then play (**Note:** safety tab removed), and turns off after auto-rewind, when reaches beginning of the tape, ejects and shut power off.
- * **Auto Repeat Playback**— Allows you to repeat a tape indefinitely without touching the PLAY button.
- * **DEW Sensor System** with Dew Indicator
- * **Infrared Remote Control**— You can operated all the tape transport controls, and change the channel up and down volume up and down from the comfort of your armchair.
- * **Picture Search**— You may play pre-recorded tape at a high speed in either a forward or reverse direction.
- * **PLL Frequency Synthesizer Quartz Tuner with 155 Channel Cable-compatible with Random Access Capability** (A converter may be necessary to view CATV channels.)
- * **STILL**— "Freeze" the picture at any time, for close viewing of a particular scene. Recorded tape in EP mode shows better clear picture.
- * **Three Tape Speeds for Record/Playback**— Select SP mode (Standard short play), LP mode (Long play) and EP 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.
- * **Quick Timer Recording**— Automatic recording for from 30 to 480 minutes is possible at the push of QTR button. (You don't need any timer adjustment for recording.)

PRECAUTIONS

SUPPLIED ACCESSORIES



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, 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.

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

LOCATION

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

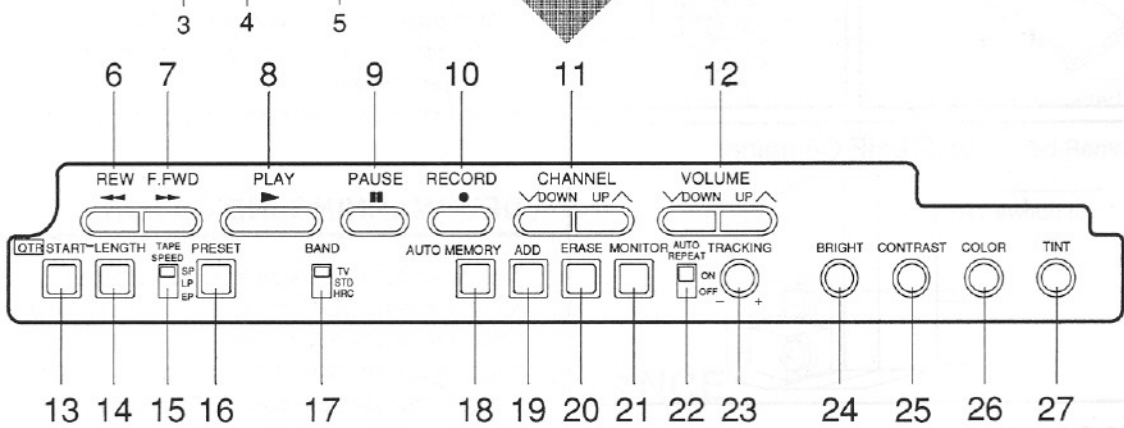
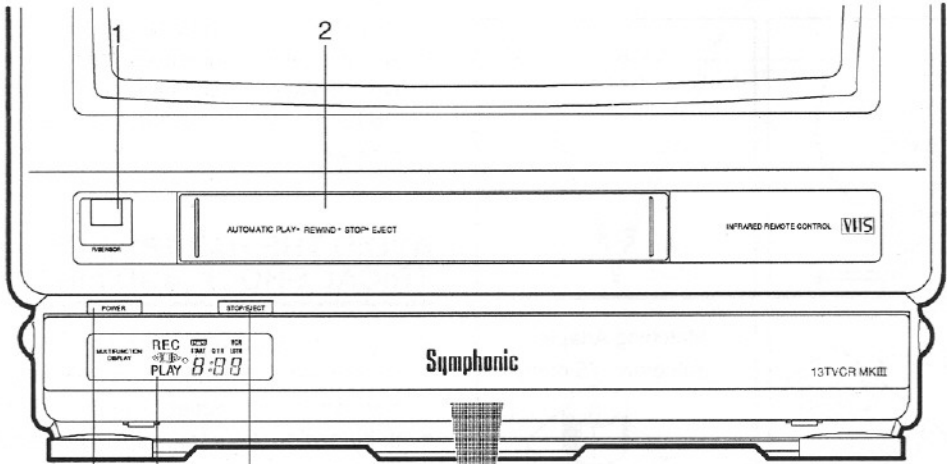
- * Shield it from direct sunlight and keep it away from sources of intense heat.
- * Avoid dusty or humid places.
- * Avoid places with insufficient ventilation for proper heat dissipation. Do not block the ventilation holes at the top and bottom of the unit. Do not place the unit

IMPORTANT COPYRIGHT INFORMATION

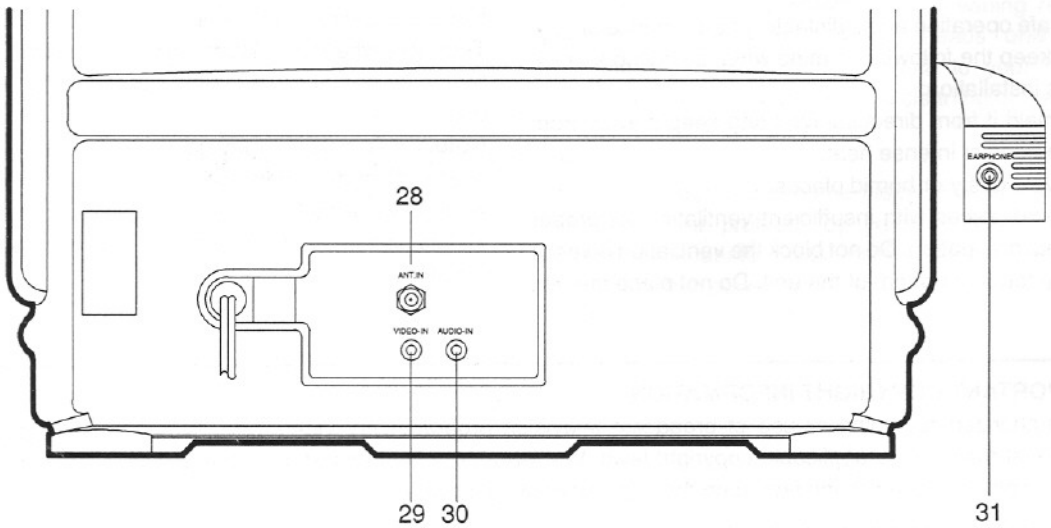
Unauthorized recording or use of broadcast television programming, video tape, film, or other copyrighted material may violate applicable copyright laws. We assume no responsibility for the unauthorized duplication, use or other acts which infringe upon the rights of copyright owners.

OPERATING CONTROLS AND FUNCTIONS

— FRONT VIEW —

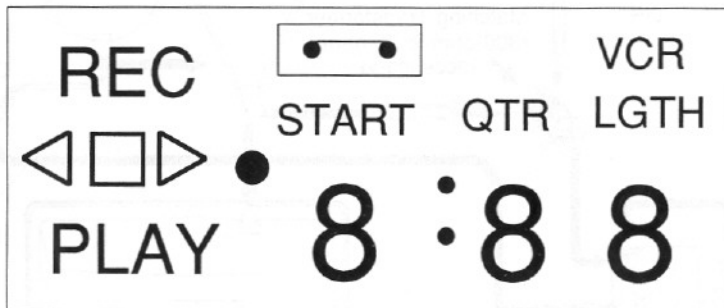


— REAR VIEW —



- 1 **REMOTE SENSOR**— Receives the infrared control signals from the handheld remote control unit.
- 2 **CASSETTE COMPARTMENT**
- 3 **POWER button**— To turn the unit on and off.
- 4 **DIGITAL DISPLAY**
- 5 **STOP/EJECT button**— To stop tape motion and remove the tape from VCR.
- 6 **REW button**— To rewind tape, or to view video, in reverse, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- 7 **F.FWD button**— To advance tape faster than normal or to view video, in forward direction, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- 8 **PLAY button**— To begin playback of a tape.
- 9 **PAUSE button**— To temporarily stop tape during playback or manual recording.
- 10 **RECORD button**— To begin manual recording.
- 11 **CHANNEL UP/DOWN button**— To select the channel for viewing or recording.
- 12 **VOLUME UP/DOWN button**— To adjust the volume level.
- 13 **QTR START button**— To set QTR (quick timer recording) start time.
- 14 **QTR LENGTH button**— To set QTR(quick timer recording) length.
- 15 **TAPE SPEED switch**— To set desired recording speed. (SP/LP/EP)
- 16 **PRESET button**— To select VCR channel memory mode.
- 17 **BAND selector switch** — To select TV or CATV(STD/HRC) mode.
- 18 **AUTO MEMORY button**— To preset the tuner memories automatically.
- 19 **ADD button**— To add programmed channel.
- 20 **ERASE button**— To erase programmed channel.
- 21 **MONITOR button**— To turn the monitor screen on and off when in the recording mode.
- 22 **AUTO REPEAT switch**— To select auto repeat playback mode.
- 23 **TRACKING control**— Adjust to minimize video "noise" (lines or dots on screen) during playback.
- 24 **BRIGHTNESS control**— See page 13 for detail.
- 25 **CONTRAST control**— See page 13 for detail.
- 26 **COLOR control**— See page 13 for detail.
- 27 **TINT control**— See page 13 for detail.
- 28 **ANT.IN jack**— Connect 75-ohm antenna.
- 29 **VIDEO INPUT jack**— Connect to video output jack of your video camera or another VCR.
- 30 **AUDIO INPUT jack**— Connect to audio output jack of a video camera or another VCR.
- 31 **EARPHONE jack**— To connect earphones (not supplied) for personal listening.

— DIGITAL DISPLAY —



ANTENNA CONNECTIONS

VHF/UHF RECEPTION AREA USING SEPARATE ANTENNAS

VHF ANTENNA HOOK UP

The VHF Rod Antenna (supplied) is detachable. Push the stem of the VHF antenna into the hole for antenna at the back of the set.

Connect the Rod antenna twin lead (flat) wires to the 300/75 ohm matching transformer (supplied). Plug the Matching Transformer to the VHF input terminal of VHF/UHF Combiner. Plug the VHF/UHF combiner (supplied) to ANT.IN terminal of TV as shown in drawing.

For the best reception, extend the rod antenna and adjust its length and position. (Avoid handling the top section when making adjustments). In some areas it will be necessary to use an outdoor antenna. When an outdoor VHF antenna is used, disconnect the detachable Rod antenna twin lead, and connect the lead-in wires from an outdoor antenna to the terminals of the 300/75 ohm matching transformer as shown in drawing.

If you already have a round type 75 ohm coaxial cable coming from your outdoor antenna, connect to the VHF input terminal of VHF/UHF Combiner then plug the VHF/UHF Combiner to ANT.IN terminal of TV as shown in drawing.

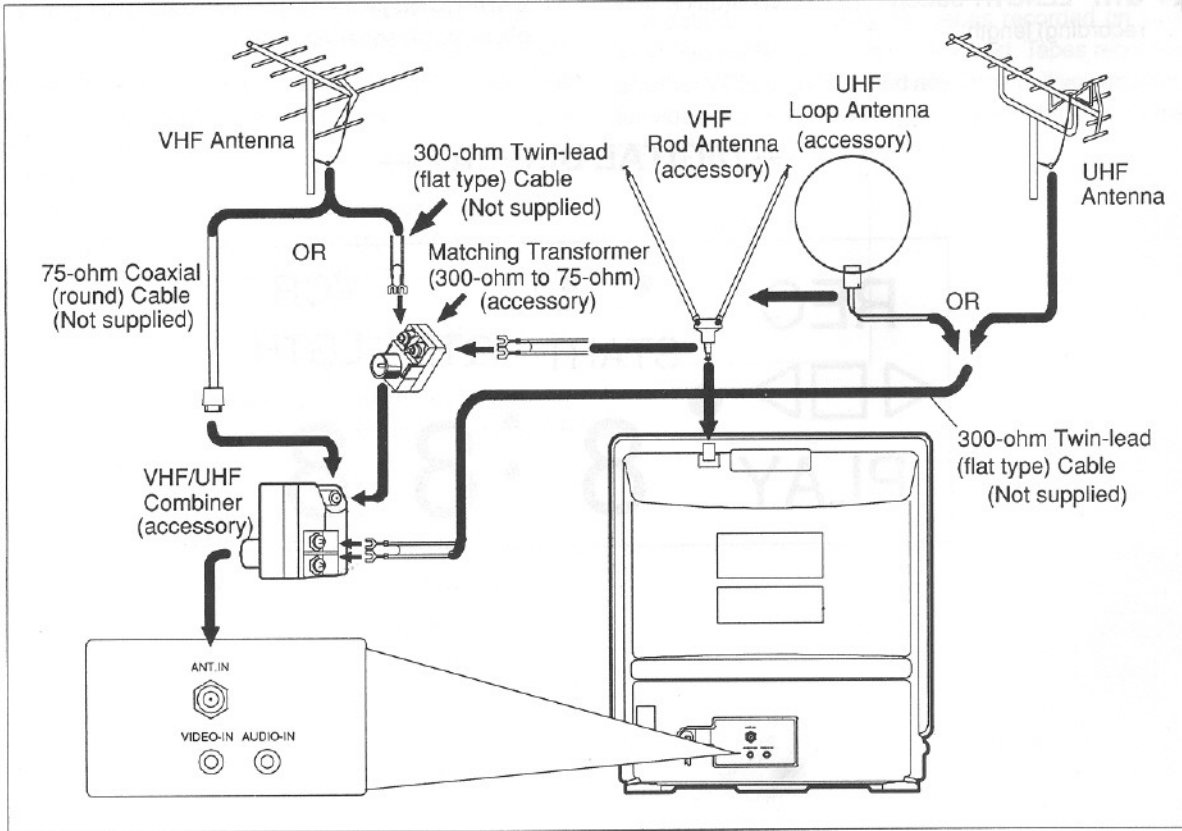
UHF ANTENNA HOOK UP

A loop antenna is provided for UHF reception. Attach loop antenna by snapping onto leg of VHF Rod Antenna and connect the ends of this loop antenna to the VHF/UHF Combiner as shown in drawing.

Plug the VHF/UHF Combiner to ANT.IN terminal of TV as shown drawing.

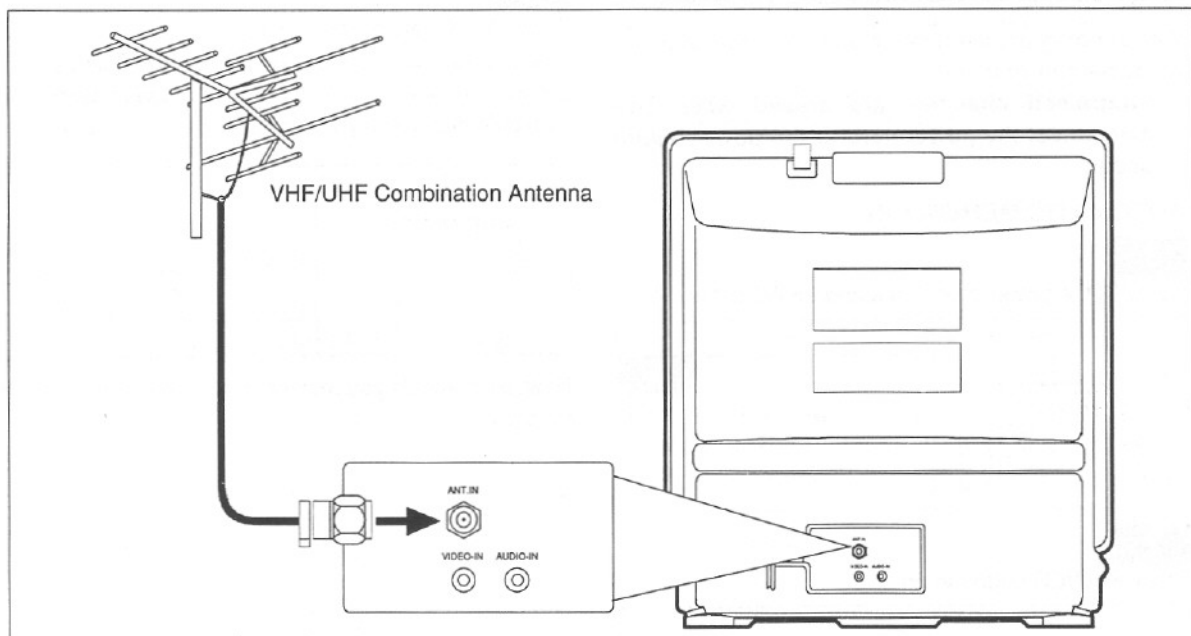
The loop antenna can be adjusted in any direction or angle to get the best UHF reception.

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.

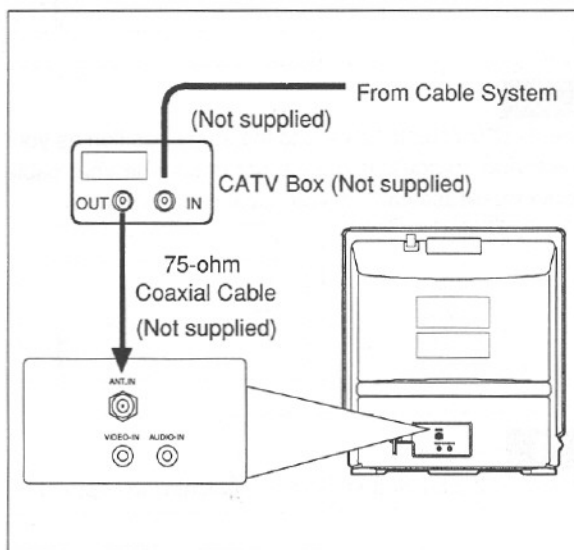
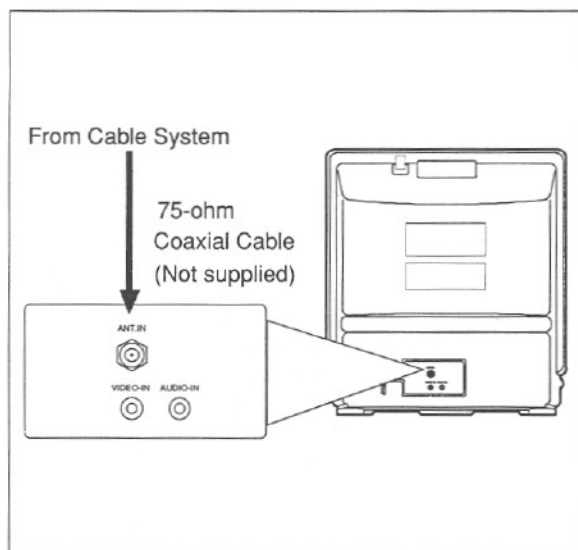


VHF/UHF COMBINED ANTENNA

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



CABLE AND PAY TV



Note to CATV system installer:

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

CHANNEL MEMORY PROGRAMMING

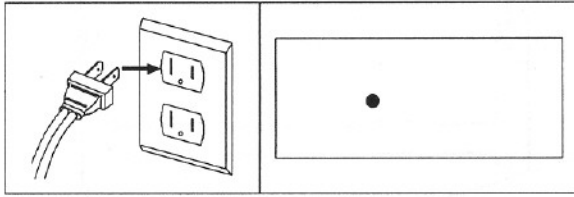
You can program the tuner to scan only the channels you receive in your area.

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

AUTOMATIC MEMORY-IN

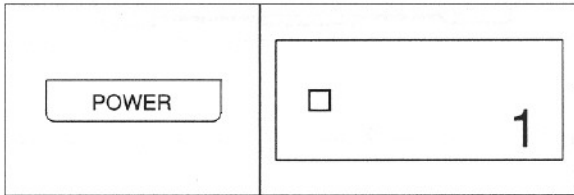
1

Connect the power cord to a standard AC outlet.



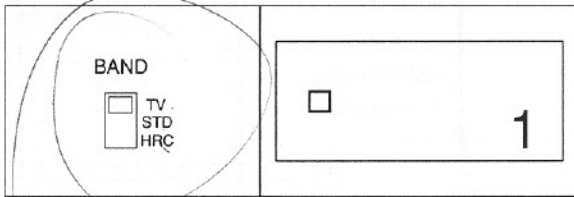
2

Press POWER button to on.



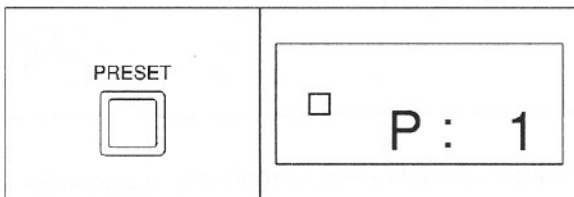
3

Set BAND selector switch to the same position as your receiving sources. If you cannot determine your cable system, please contact your local cable company.



4

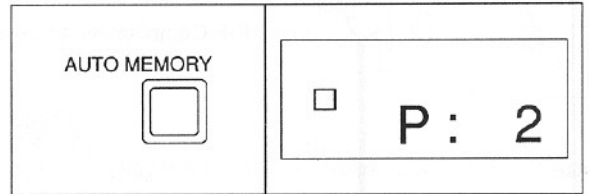
Press PRESET button. The "P" indicator will appear.



5

Press AUTO MEMORY button.

The channel number indicator will begin to change from 2 and up and VCR tuner will begin to search up for the available stations in your area.



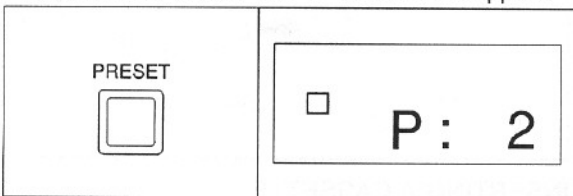
Now, all channels you receive in your area are stored in memory.

MANUAL MEMORY-IN

* To add desired channels into the memory, follow these steps.

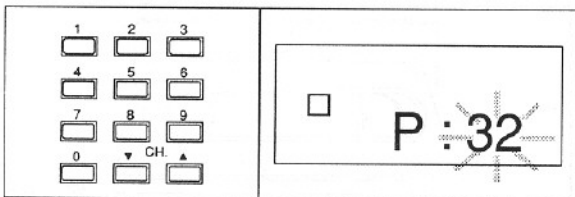
1

Press PRESET button. The "P" indicator will appear.



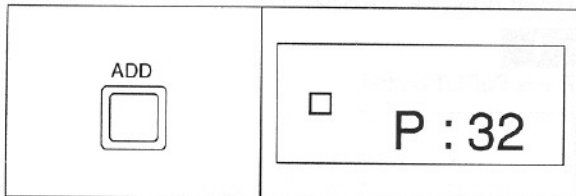
2

Select the desired channel number with remote control NUMERICAL keys. You must precede one-digit channel numbers with a zero (02, 03, 04 and so on). The channel indicator will flash.



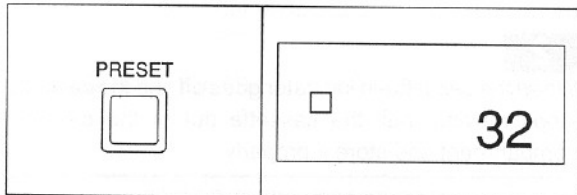
3

Press ADD button.



4

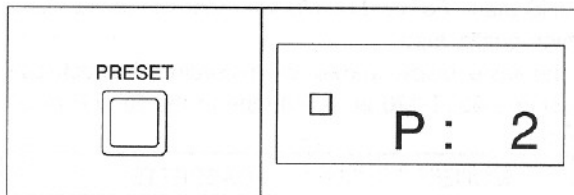
Press PRESET button to return to original mode.



To ERASE PRESET CHANNELS

1

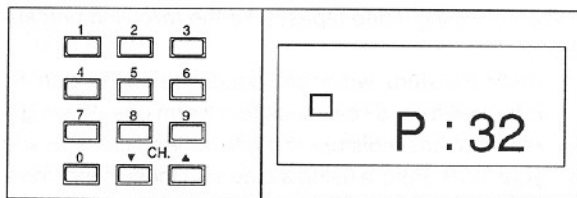
Press PRESET button.



2

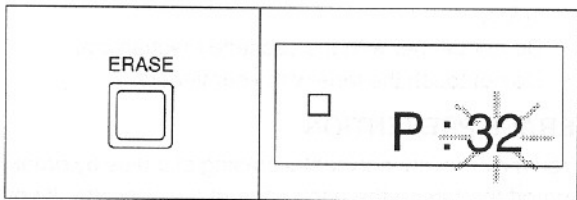
Select the desired channel number with remote control NUMERICAL keys. You must precede one-digit channel numbers with a zero (02, 03, 04 and so on).

(Example: Channel 32)



3

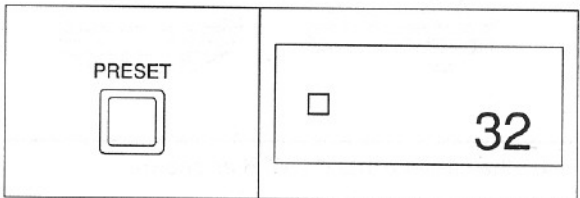
Press ERASE button. Channel indicator will flash.



4

Press PRESET button. The channel indicator will stop flashing. Press channel UP or DOWN button to erase the channel number. Now, channel 32 is erased.

Repeat steps [1] to [4] for each program you want to erase.



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 mode.

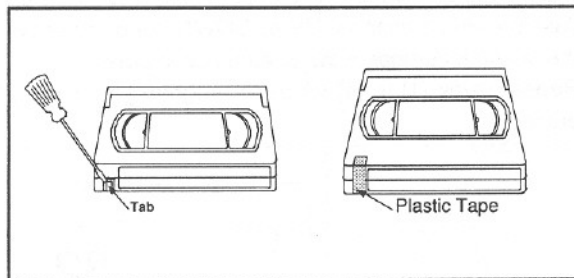
MODE	CASSETTE		
	T-60	T-120	T-160
SP Mode	1 hour	2 hours	2-2/3 hours
LP Mode	2 hours	4 hours	5-1/3 hours
EP(SLP) Mode	3 hours	6 hours	8 hours

When handling video tapes, take the following precautions

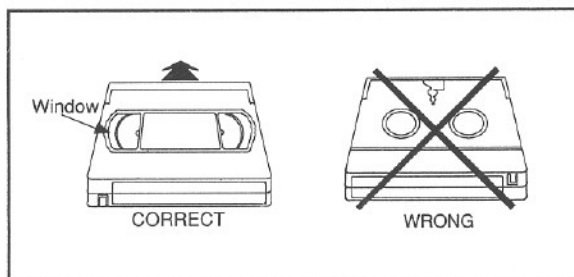
- * Avoid moisture, which can condense on the tape if it is moved from a cold place to a warm one. Playing a tape that has moisture in it will damage the tape and your VCR. Before using a tape with these conditions, wait until the tape has warmed to room temperature and the moisture has evaporated.
-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

ERASE PREVENTION

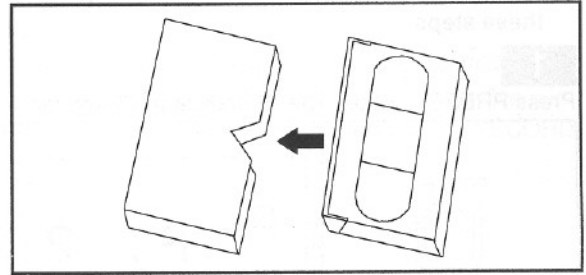
You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with plastic tape.



Insert the cassette into the VCR as shown.



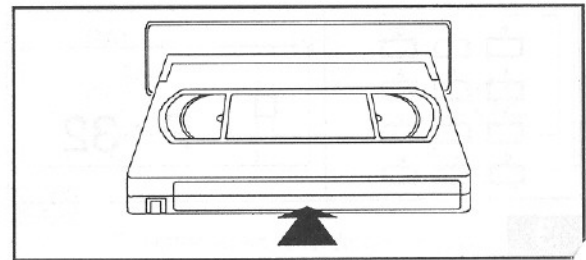
Store the cassette in its case as shown.



INSERTING A CASSETTE

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

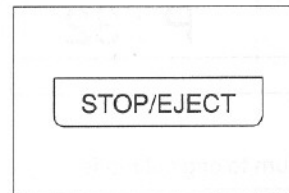
VCR is automatically turned on, and cassette-in indicator will light when the cassette is properly inserted.



REMOVING A CASSETTE

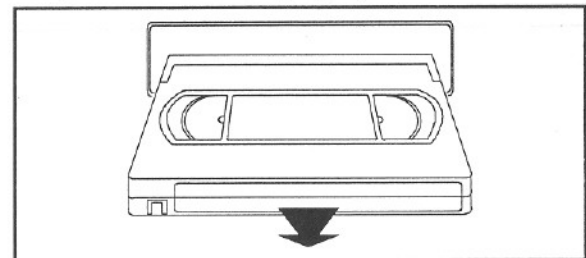
1

Press EJECT button.



2

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

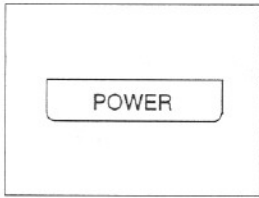


OPERATION

T.V. OPERATION

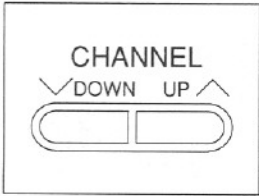
1

Push POWER button to ON.



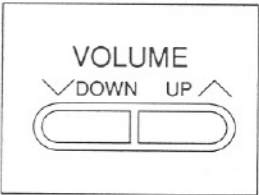
2

Select the desired channel.



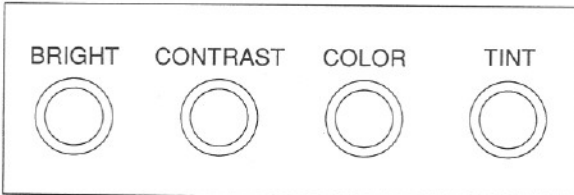
3

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



4

Adjust picture controls for a natural looking image (located at inside of control 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

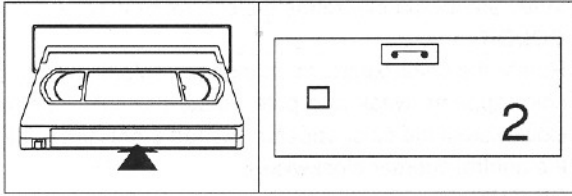
Correct brightness and contrast settings are important to obtain a natural image. To increase the contrast, rotate the control clockwise. To decrease contrast, rotate the control counter-clockwise.

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

VIEWING AND RECORDING THE SAME PROGRAM

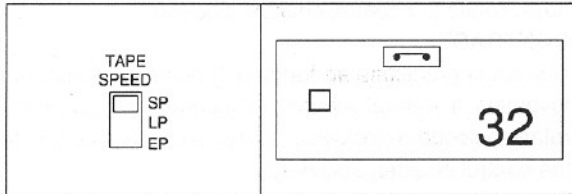
1

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



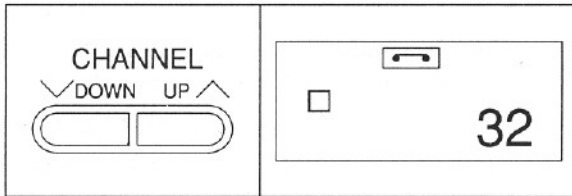
2

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



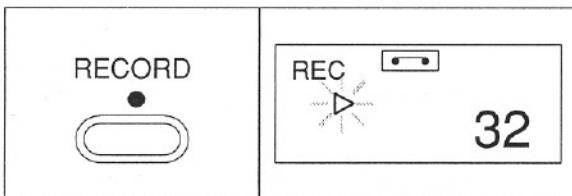
3

Select the channel to be recorded.



4

Press RECORD button.



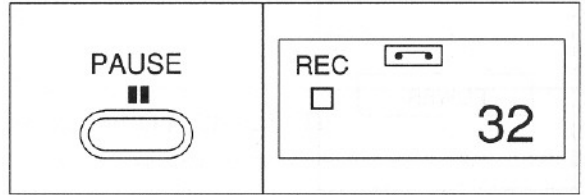
If you want to edit out some material while you are recording.

5

Press PAUSE button.

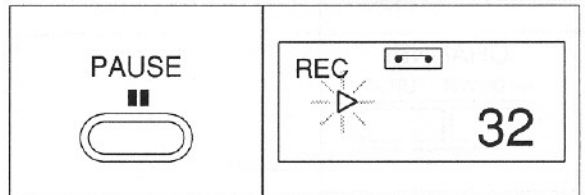
Note:

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 RECORD mode.



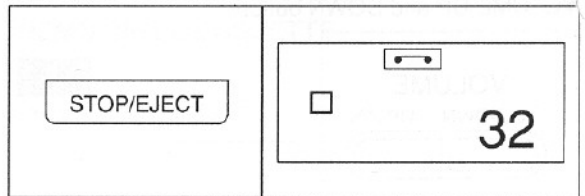
6

Press PAUSE button again to resume recording.



7

Press STOP button when recording is completed.



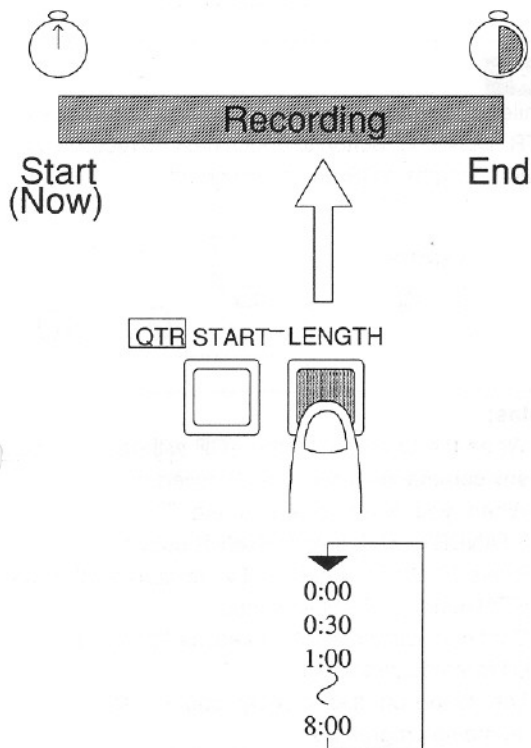
FOR BETTER UNDERSTANDING THE QTR

QUICK TIMER RECORDING

Note: You may set the VCR to record and stop one event the receiving channel.

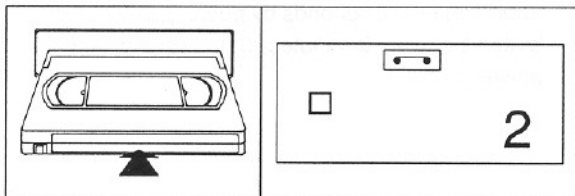
INSTANT QTR

This is a very easy and convenient way immediately start recording a TV Program you happen to be watching.



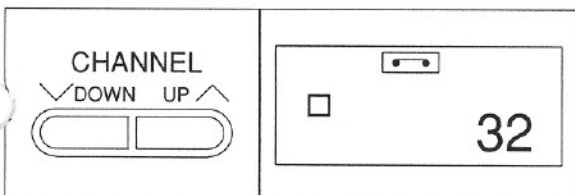
1

Insert a cassette tape (with erasure prevention tab intact). The VCR will turn on automatically.



2

Select the TV program to be recorded.

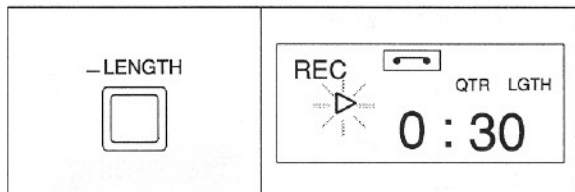


3

Press QTR "LENGTH" button twice.
(This will give you 30 minutes of recording time)

NOTES:

- * To stop the QTR operation, press STOP button.
- * No need to press START button.



4

Each time you push QTR "LENGTH" button you will extend recording time by 30 minutes at a time up-to 8 hours (or to the end of the tape).

QTR LENGTH TABLE

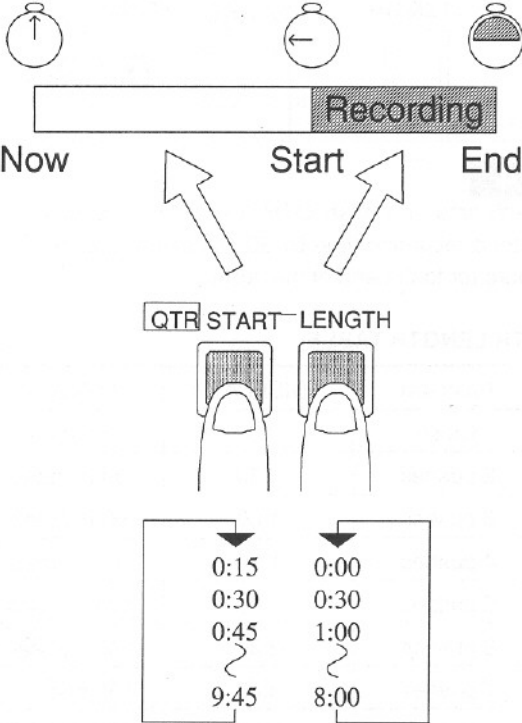
Push(es)	DISPLAY	LENGTH
1 push	0:00	0 minute
2 pushes	0:30	30 minutes
3 pushes	1:00	60 minutes
4 pushes	1:30	90 minutes
5 pushes	2:00	120 minutes
6 pushes	2:30	150 minutes
7 pushes	3:00	180 minutes
8 pushes	3:30	210 minutes
9 pushes	4:00	240 minutes
10 pushes	4:30	270 minutes
11 pushes	5:00	300 minutes
12 pushes	5:30	330 minutes
13 pushes	6:00	360 minutes
14 pushes	6:30	390 minutes
15 pushes	7:00	420 minutes
16 pushes	7:30	450 minutes
17 pushes	8:00	480 minutes
18 pushes	0:00	0 minutes

STAND-BY QTR

This STAND-BY QTR enables you to select a starting time at every 15 minutes of every hour within the next 9 hour 45 minutes and length of recording up-to 8 hours (or to the end of the tape).

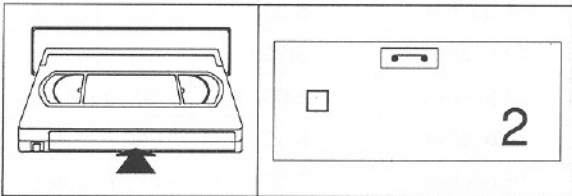
Note: Before doing this procedure please read instruction carefully.

* After doing step [3] you have only 5 seconds to do step [4] or the step [3] will be canceled. In this case, repeat step [3] again.



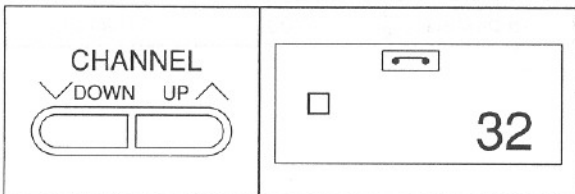
1

Insert a cassette tape (with erasure prevention tab intact). The VCR will turn on automatically.



2

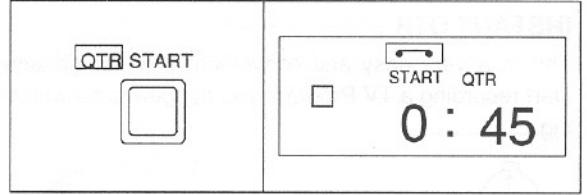
Select the TV program to be recorded.



3

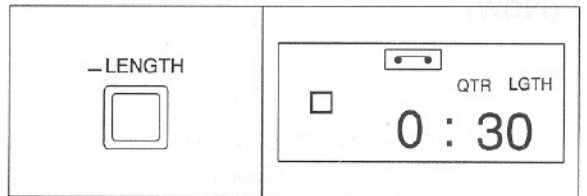
Press QTR "START" button to select starting time. Every time you push the starting time it will advance by 15 minutes.

Example: QTR will start after 45 minutes by pressing QTR START button.



4

While display indicates your desired starting time, Press QTR "LENGTH" button to obtain desired recording time period (length). VCR power will go off.



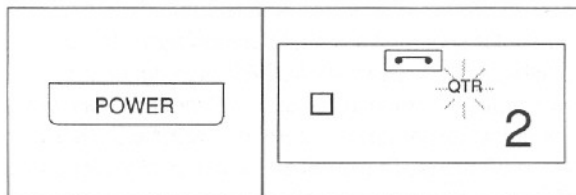
Notes:

- * When the QTR is ON, the VCR will not respond to any commands (only cancel procedure).
- * When you want to watch the TV after set the STANDBY QTR, press POWER button to TV on.
- * Press POWER button to TV off before start time, STANDBY QTR will execute.
- * Continue watch the TV exceed start time, STANDBY QTR will be cancelled.
- * The timer on this display counts down as the recording progresses.
- * Each time you push QTR "LENGTH" button you will extend recording time by 30 minutes at a time up-to 8 hours (or to the end of the tape).
- * While QTR is operated, recording will stop in approximately 8 seconds by pushing QTR LENGTH button 18 times- 0 minutes- 0:00 reading. And then, power is off.

TO CANCEL QTR

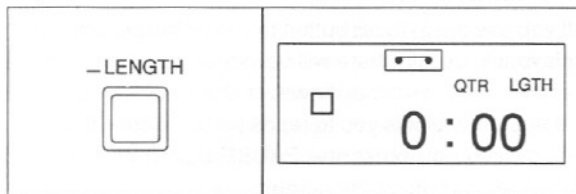
1

Press POWER button. QTR indicator will flash.



2

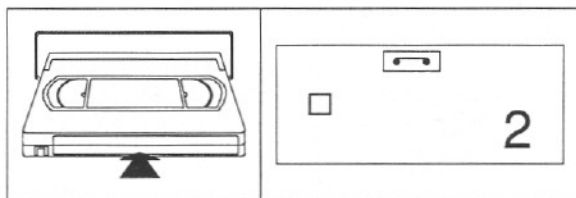
Press QTR LENGTH button until 0:00 appears on the LCD display. After 8 seconds, the channel indicator is displayed. Now QTR is cancelled.



PLAYBACK

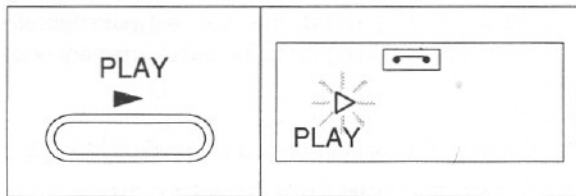
1

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



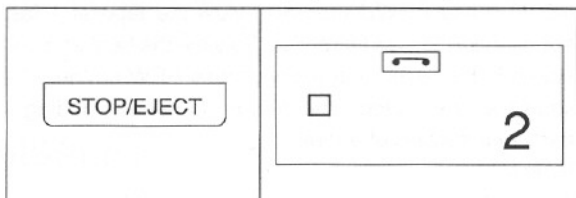
2

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



3

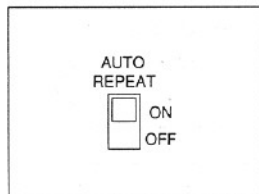
Press STOP button when playback is completed.



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.



AUTO REWIND

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).

Note:

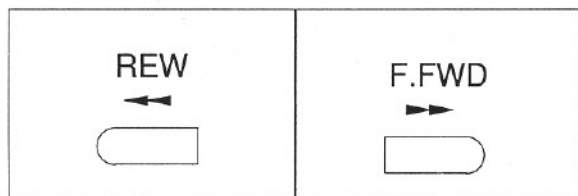
- * The tape will not auto-rewind during QUICK REC.

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 mode.
- * To return to normal playback, press PLAY button.
- * The picture will not be as good as normal during CUE and REVIEW.



STILL FRAME DURING PLAYBACK

If you press PAUSE button during playback with tapes recorded in EP mode, the picture will "freeze" on the screen. You may use this feature to study details of a particular scene. Press PLAY button again to continue playback. If you use the PAUSE button during playback with tapes recorded in the SP or LP mode, it may cause the noise bars to appear more than with tapes recorded in the EP 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.

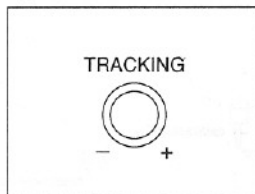
NOISE CANCELLING

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

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

TRACKING CONTROL 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.

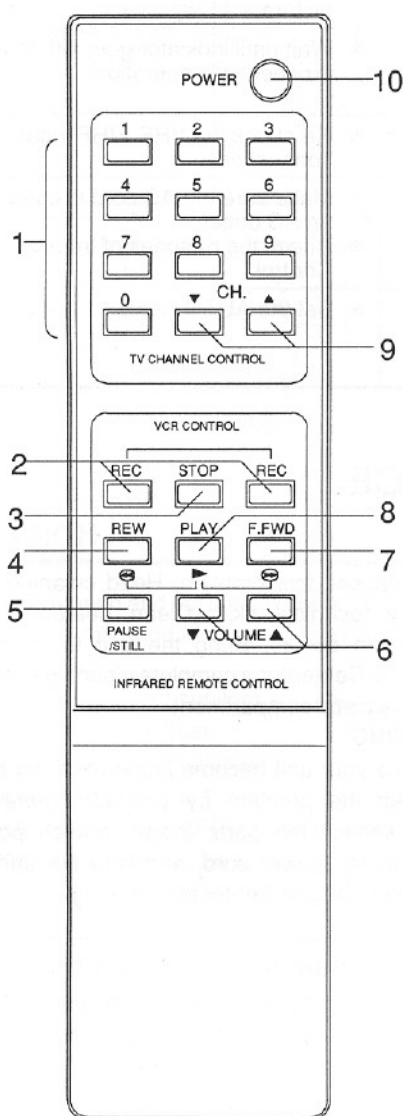


REMOTE CONTROL OPERATION

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 REMOTE CONTROL

1 NUMERICAL keys—To select desired channels. They cannot be used to set desired channel during Timer Recording. If you want to select channel from 1 to 9, first push 0 key and then push your desired channel number (e.g. for channel 4 press 0,4 not 4).

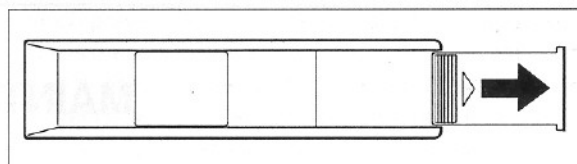


- 2 REC buttons**—To begin recording, push both 2 buttons (1 is a safety button) at the same time.
- 3 STOP button**—To stop the tape.
- 4 REW button**—To rewind the tape. To view the picture rapidly in reverse, during the playback mode.
- 5 PAUSE/STILL button**—To stop the tape temporarily during playback or recording. To view a still picture during playback. To reduce noise bars on still picture. May require depressing several times.
- 6 VOLUME buttons**—To adjust desired volume level by pressing either "▲" or "▼" button.
- 7 F.FWD button**—To move the tape forward rapidly. To view the picture rapidly forward during the playback mode.
- 8 PLAY button**—To playback the tape.
- 9 CHANNEL buttons**—To select desired channels by pressing either "▲" or "▼" button. They cannot be used during Timer Recording.
- 10 POWER button**—To turn unit on and off.

INSTALLING THE BATTERIES

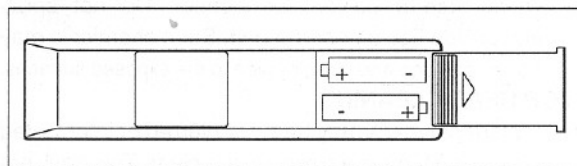
1

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



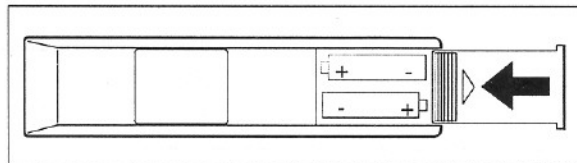
2

Insert 2 "AA" 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.	* Connect power cord to AC outlet. * Set the power 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.
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.
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.	* No power to TV or VCR. * Weak battery.	* Make sure the AC cord is connected to an AC outlet. * Check the batteries of Infrared Remote Control.
Operation buttons do 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 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.

VCR HEAD CLEANING

- * Picture playback may become blurred or interrupted while the TV program received is clear. This does not mean that the recorded program has been erased. Dirt accumulated on the head after long periods of

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

SERVICING

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

SPECIFICATIONS

GENERAL SPECIFICATIONS

CRT: 13 inch in-line gun,
90 deflection tube

Television system: NTSC-M

Recording system: Rotary two-head
helical scan system

Tape width: 1/2 inch

Tape speed

SP :33.40mm/sec.

LP :16.67mm/sec.

EP (SLP) :11.12mm/sec.

Tuner channel

TV VHF Low :#2~#6

TV VHF High :#7~#13

TV UHF :#14~#69

CATV

Terminals:

Antenna input VHF/UHF 75 ohms unbalanced

Video input RCA connector

Audio input RCA connector

ELECTRICAL SPECIFICATIONS

Video input level: 0.5~2.0V_{p-p}

Audio input level: -15dBs

Video S/N ratio: More than 46dB

Audio S/N ratio: More than 43dB

OTHER SPECIFICATIONS

Power requirement: AC 120V/60Hz

Power consumption: 85W

Dimensions: 362(W) x 366(D) x 399(H) mm
14-1/4"(W) x 14-1/2"(D) x
15-3/4"(H)

Weight: 13.5 kg
29.7 lbs

* Design and specifications are subject to change without notice.

SELECTED CHANNEL INDICATION	CHANNEL BAND DESIGNATIONS	CATV CHANNEL RECEIVED FROM CABLE
2~13	BROADCAST VHF	2~13
14~36	CATV MID/SUPER BANDS	A~W
37~64	CATV HYPER BAND	W+1~W+29
95~99	CATV LOW BAND	A-5~A-1
65~94	ULTRA BAND	W+30~W+58
1	SPECIAL CATV CHANNEL	5A(between 4 and 5)

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

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

FUNAI USA CORPORATION d/b/a SYMPHONIC LIMITED WARRANTY

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

DURATION:

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

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

LIMITS AND EXCLUSIONS:

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

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

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

THIS WARRANTY DOES NOT COVER PACKING MATERIALS, ANY ACCESSORIES, ANY COSMETIC PARTS, COMPLETE ASSEMBLY PARTS.

FUNAI USA CORP./SYMPHONIC AND ITS REPRESENTATIVES OR AGENTS SHALL IN NO EVENT BE LIABLE FOR ANY GENERAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR OCCASIONED BY THE USE OF OR THE INABILITY TO USE THIS PRODUCT. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND OF ALL OTHER LIABILITIES ON THE PART OF FUNAI/SYMPHONIC, ALL OTHER WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED BY FUNAI/SYMPHONIC AND ITS REPRESENTATIVES IN THE UNITED STATES.

ALL WARRANTY SERVICE MUST BE PERFORMED BY A FUNAI/SYMPHONIC AUTHORIZED SERVICE CENTER. THIS WARRANTY IS VALID WHEN THE UNIT IS CARRIED-IN TO FUNAI/SYMPHONIC AUTHORIZED SERVICE FACILITY.

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

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

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

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

IMPORTANT:

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

ATTENTION:

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

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

FUNAI USA CORPORATION DBA SYMPHONIC
Corporate Headquarters & Factory Service Center
100 North Street Teterboro, NJ 07608
Tel :201-288-2666
(Eastern Time 9:00 AM - 4:30 PM)
California Division Office
Address: 1800 E. Walnut Ave. Fullerton, CA 92681
Tel :714-441-1410
(Pacific Time 8:00 AM - 3:00 PM)

IMPORTANT: When you return for service to Factory Service Center, please call for Repair Return Authorization prior to shipping.