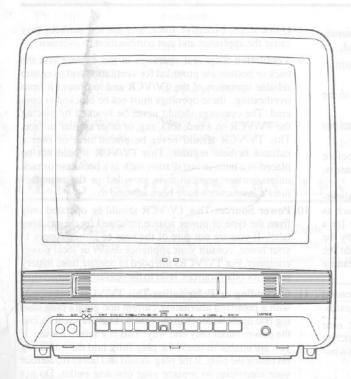
OWNER'S MANUAL

TV/VCR TVCR13EF

Symphonic



IF YOU NEED ADDITIONAL ASSISTANCE FOR SET-UP OR OPERATING AFTER READING OWNER'S MANUAL, PLEASE CALL TOLL FREE 1-800-242-7158 (EASTERN TIME 9:00AM ~ 4:30PM)

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WARNING:

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



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



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



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



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

The important note is located on the rear of the cabinet.

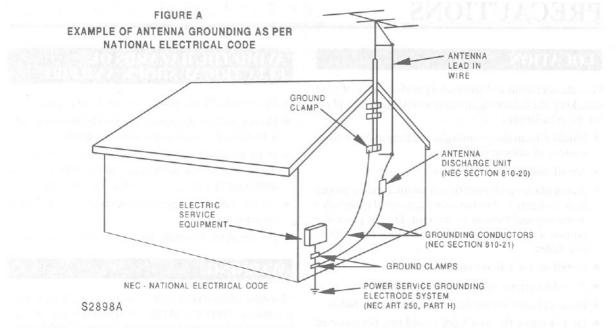
IMPORTANT SAFEGUARDS

- Read instructions-All the safety and operating instructions should be read before the appliance is operated.
- Retain Instructions-The safety and operating instructions should be retained for future reference.
- Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
- Follow Instructions-All operating and use instructions should be followed.
- Cleaning-Unplug TV/VCR 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.
- Attachments-Do not use attachments not recommended by the TV/VCR manufacturer as they may cause hazards.
- Water and Moisture-Do not use this TV/VCR 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.
- Accessories-Do not place this TV/VCR on an unstable cart, stand, tripod, bracket, or table. The TV/VCR 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/VCR. 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



- Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 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/VCR and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the TV/VCR on a bed, sofa, rug, or other similar surface. This TV/VCR should never be placed near or over a radiator or heat register. This TV/VCR 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/VCR 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/VCRs intended to operate from battery power, or other sources, refer to the operating instructions.
- 11. Grounding or Polarization-This TV/VCR 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/VCR, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA No. 70, 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)
- 14. Lightning-For added protection for this TV/VCR 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/VCR 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/VCR 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/VCR.
- 18. Servicing-Do not attempt to service this TV/VCR 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/VCR 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 or frayed.
- If liquid has been spilled, or objects have fallen into the TV/VCR.
- c. If the TV/VCR has been exposed to rain or water.
- d. If the TV/VCR 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/VCR to its normal operation.
- e. If the TV/VCR has been dropped or damaged in any way.
- When the TV/VCR 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 has 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.
- Safety Check-Upon completion of any service or repairs
 to this TV/VCR, ask the service technician to perform
 routine safety checks to determine that the TV/VCR is in
 proper operating condition.
- 22. Heat-This TV/VCR product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

LOCATION

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

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

AVOID THE HAZARDS OF ELECTRICAL SHOCK AND FIRE

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

WARNING

Moisture condensation may occur inside the unit when it is moved from a cold place to a warm place, or after heating a cold room or under conditions of high humidity. If a tape is played in a TV/VCR which has moisture, it may damage the tape and TV/VCR. Therefore when the condensation occurs inside the unit turn the POWER button on and allow at least 2 hours for the unit to dry out.

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

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.

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 | 22. Hent Chis TV (WOR pro- | into this TV/VCR through openings as they may touch |
|----------------------|--|---|
| Dealer Purchase from | heat sources suchedsassed other products (including | dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any |
| Dealer Address | uso o el uso de cintas | kind on the TV/VCR. |
| Dealer Phone No. | | 18. Servicing-Do not attempt to service this TV/VCR your- |
| Model Ivo. | tere la atención de per- | dangerous voltage or other hazards. Refer all servicing to |
| Serial No. | ing. Solamente limpie | qualified service personnel. |

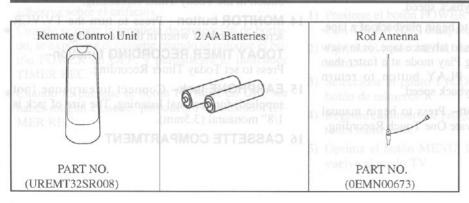
FEATURES

- Rotary 4-head Record/Playback System— Rotary 4-heads to ensure excellent picture quality and special effects playback.
- Auto Power On and Off system—
 Automatically turns the TV/VCR on as you insert the cassette, turns off and ejects after auto-rewind when the beginning of the tape is reached.
- Three Different Record/Playback Speed— Select SP mode (Standard play), LP mode (Long play) and SLP mode (Super long play) for up to eight hours of recording/playback with a T-160 tape.
- On Screen Programming
 — All major operating
 and programming functions appear on your
 TV/VCR screen for operating convenience.
- Bilingual on screen menu display selectable in English or Spanish
- Automatic Playback Speed Selection— Automatically selects the proper playback speed even if you select a different speed.
- 1 Year, 8 Events Timer (including Today, Daily and Weekly Timer Recording)— The built-in timer allows you to record up to 7 programs at different times on different channels up to 1 year in advance. The Today Timer Recording feature uses program number 8. The daily timer will allow recordings to be made of daily broadcasts and the weekly timer will allow recording to be made once a week up to the end of the tape.
- Today Timer Recording— Allows you to easily record one program within 24 hours.
- Visual Search— Allows you to view a video tape at a high speed in either a forward or reverse direction.

- **STILL** "Freeze" the picture at any time, for close viewing of a particular scene.
- 181 Channel Capability PLL Frequency Synthesizer Tuner with Direct station Call— (A CATV Box may be necessary to view scrambled CATV channels.)
- Infrared Remote control unit— Allows you to use most of the controls from a remote location.
- Game Mode— Allows TV/VCR display to be suitable for use with a TV game.
- Rental Play Mode
 Improves playback picture quality of worn tapes, especially rental tapes.
- Auto Repeat Playback— Allows you to repeat a tape indefinitely without using the PLAY button. You can select all feature (that repeat playback from the beginning to the end of the tape) or blank feature (that repeat only recorded part, not blank part).
- OTR (One Touch Recording)— Automatic timed recording from 30 to 480 minutes is possible at the push of OTR button. (Timer adjustments for recording are not required.)
- CCS (Closed Caption System)— You may view specially labeled (cc) TV programs, movies, news, prerecorded tapes, etc. with either a dialogue caption or text display added to the program.
- Time Search— Allows you to set the TV/VCR to advance the tape by entering the desired playback time you want to skip.
- Index Search—Let you index the start of a recording.
- Sleep Timer

 Allows you to turn off the TV/VCR without using the POWER button after a desired time period.

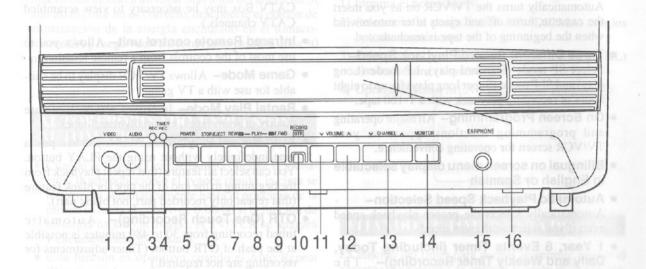
SUPPLIED ACCESSORIES



 If you need to replace these accessories, please refer to the PART NO. under the illustrations and contact the FUNAI parts department for ordering.

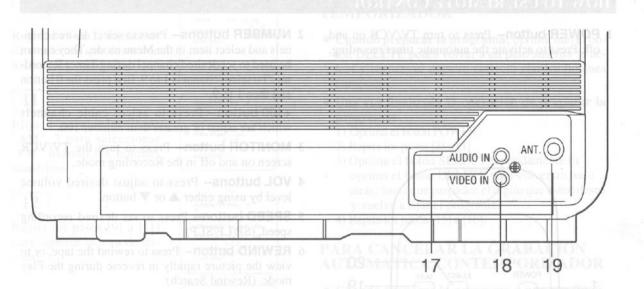
OPERATING CONTROLS AND FUNCTIONS AS

Robert 4-heads to ensure excellent - WIIV TRONT VIEW - and leave ensure of the heads a



- 1 VIDEO IN jack— Connect to video output jack of your video camera or another VCR.
- 2 AUDIO IN jack— Connect to audio output jack of your audio equipment or another VCR.
- 3 REC indicator Lights up when recording.
- 4 TIMER REC indicator— Lights up in the Timer Recording mode.
- 5 POWER button— Press to turn TV/VCR on and off, Press to activate the automatic timer recording.
- **6 STOP/EJECT button** Press to stop tape motion. Press to remove tape from TV/VCR.
- 7 REW button— Press to rewind tape, or to view video in reverse during the Play mode at a faster than normal speed. Press PLAY button to return TV/VCR to normal playback speed.
- 8 PLAY button- Press to begin playback of a tape.
- 9 F.FWD button— Press to advance tape, or to view video in forward during Play mode at a faster than normal speed. Press PLAY button to return TV/VCR to normal playback speed.
- 10 RECORD/OTR button— Press to begin manual recording. Press to activate One Touch Recording.

- 11 **VOLUME** "\" button— Press to decrease the volume level.
 - **CLEAR function** Press to cancel Today Timer Recording.
- 12 VOLUME "A" button— Press to increase the volume level.
 - **SELECT function** Press to select the next step when setting Today Timer Recording.
- 13 **CHANNEL** "\"/"\" buttons— Press to select the channel for viewing or recording.
 - TRACKING +/- function— Press to minimize video 'noise' (lines or dots on screen) during the Play mode.
 - **SET function** Press to adjust time using \vee or \wedge button in the Today Timer Recording.
- 14 MONITOR button— Press to turn the TV/VCR screen on and off when in the Recording mode.
 - TODAY TIMER RECORDING function— Press to set Today Timer Recording.
- 15 **EARPHONE jack** Connect to earphone (not supplied) for personal listening. The size of jack is 1/8" monaural (3.5mm).
- 16 CASSETTE COMPARTMENT



- 17 AUDIO IN jack— Connect to audio output jack of your audio equipment or another VCR.
- 18 VIDEO IN jack Connect to video output jack of your video camera or another VCR.
- 19 ANT. terminal Connect to an antenna or CATV.

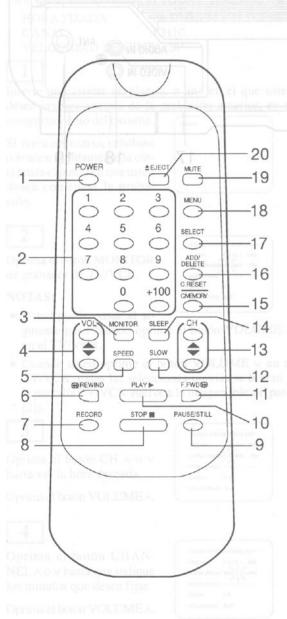
PROGRAMA 1
PROGRAMA 2
PROGRAMA 2
PROGRAMA 2

REMOTE CONTROL OPERATION

You can operate most of functions from the Remote Control (included). The buttons on the Remote Control have the same functions as the corresponding buttons on the unit.

HOW TO USE REMOTE CONTROL

1 **POWER button**— Press to turn TV/VCR on and off. Press to activate the automatic timer recording.



- 2 **NUMBER buttons** Press to select desired channels and select item in the Menu mode. They cannot be used to set desired channel during Timer Recording. To select channels 1 to 9, first press the 0 button and then 1 to 9.
 - +100 button— Press to select cable channels which are equal or greater than number 100.
- 3 MONITOR button- Press to turn the TV/VCR screen on and off in the Recording mode.
- 4 VOL buttons— Press to adjust desired volume level by using either ▲ or ▼ button.
- 5 SPEED button- Press to set desired recording speed. (SP/LP/SLP)
- 6 **REWIND button** Press to rewind the tape, or to view the picture rapidly in reverse during the Play mode. (Rewind Search)
- 7 RECORD button— Press to begin manual recording.
- **8 STOP button** Press to stop the tape motion.
- 9 PAUSE/STILL button— Press to temporarily stop the tape during the Recording mode or to view a still picture during the Play mode.
- 10 PLAY button- Press to playback the tape.
- 11 **F.FWD button** Press to rapidly advance the tape, or to view the picture rapidly in forward during the Play mode. (Forward Search)
- 12 **SLOW button-** Press in playback for slow motion. (See page 19.)
- 13 CH buttons— Press to select desired channel by using either ▲ or ▼ button.

They may also be used to adjust the picture control. (See page 16.)

- **TRACKING function** Press ▲ or ▼ button to minimize video 'noise' (lines or dots on screen) during the Play mode. (See page 30.)
- **14 SLEEP button** Press to activate the sleep timer function. (See page 30.)
- 15 C.MEMORY button— Press to use the Counter Memory mode. (See page 21.)

- 16 ADD/DELETE button— Press to add or delete channel numbers. Press to cancel a timer program. (This function is operative only in the Menu mode.) (See pages 13 and 27.)
 - C.RESET button- Press to reset counter to 0:00:00.
- 17 SELECT button— Press to select setting modes (clock, counter, tape speed, timer programming, channel preset, etc.).
 - **DISPLAY function** Press to display the counter or the current channel number and current time on the TV/VCR screen. (See "CHECKING THE COUNT, CLOCK AND CHANNEL NUMBER" page 15)
- 18 MENU button— Press to display main menu on the TV/VCR screen.
- 19 MUTE button— Press to mute sound. Press it again to resume sound.
- 20 EJECT button— Press to remove tape from the TV/VCR.

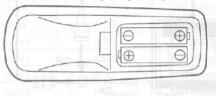
2 nsert 2 "A A" batteries into the batteries in the batteries in the batteries into the

INSTALLING THE BATTERIES

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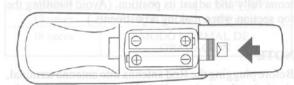
Slide the battery compartment cover by pressing the cover on the remote unit in the direction of the arrow.

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



3

Replace the cover.



check that the pin is not bent. If it is bent, straighten the pin as illustrated, then plug the pin into antenna terminal illustrated, and a latent pin into antenna terminal III pal ADVIVIT ob allating all is no artisoum romit II

NOSAS:

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l'umpo de grabación 30 minutos base

(niq Inpistic) (beneficializa ed of zbeen cuando el botón OTR sea presionado 18 veces, e grabador de video assettes gradar en forma continua

 El tiempo restante de la grabación es mostrado en el la pantalla de TV/VCR.

La grabación se detiene quando llega al conteo 0.000
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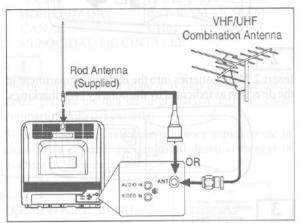
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ANTENNA CONNECTIONS

VHF/UHF COMBINED ANTENNA

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

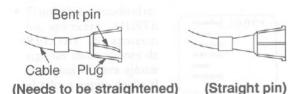
Connect the VHF/UHF Rod Antenna or VHF/UHF Combination Antenna to the ANT. terminal of the TV/VCR as shown in the diagram below.



For the best reception, extend the VHF/UHF Rod Antenna fully and adjust its position. (Avoid handling the top section when making adjustments.)

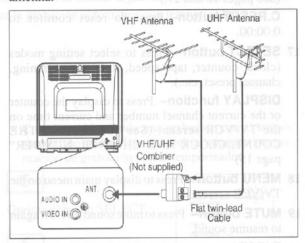
NOTE:

Before plugging the Rod antenna into antenna terminal, check that the pin is not bent. If it is bent, straighten the pin as illustrated, then plug the pin into antenna terminal.



VHF/UHF SEPARATE ANTENNAS

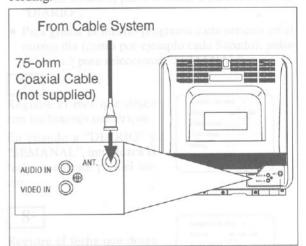
In some areas it will be necessary to use an outdoor antenna.



CABLE WITHOUT CONVERTER/DESCRAMBLER BOX

Use this connection if your cable system connects directly to your TV/VCR without a converter box.

With this connection you, 1) can use your TV/VCR Remote Control to select channels, 2) program one or more unscrambled channels for Automatic Timer Recording.



Note to CATV system installer

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

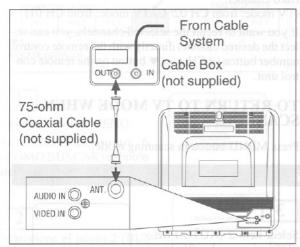
CABLE WITH CONVERTER/DESCRAMBLER BOX

If your cable service supplies you with a converter box you can use the basic connection shown here.

With this connection you can record and view any channel, including scrambled channels. However, channel selection must be made with the converter box. This means that channels cannot be changed using the TV/VCR Remote Control. Unattended recording is limited to one channel at a time.

TO RECORD AND VIEW A SCRAMBLED/UN-SCRAMBLED CHANNEL

- 1. Set the TV/VCR channel selector to the output channel of the Cable Converter Box. (Ex. CH3)
- 2. Select the channel to be recorded or viewed on the Cable Converter Box.

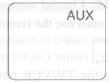


NOTE: When using a cable converter box, you can not record one channel and view.

EXTERNAL INPUT MODE

When using an external input signal (another VCR or camcorder), connect the player's audio/video output

cables to the AUDIO IN, VIDEO IN jacks of your TV/VCR. Then press CHANNEL ▲ or ▼ button or enter "00" with number button so that "AUX" appears on the screen.

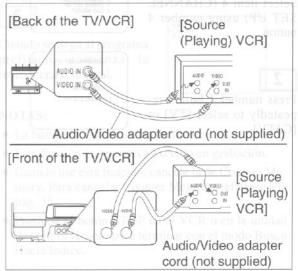


TO COPY A VIDEO CASSETTE (Requires another VCR)

Connect your TV/VCR and a Source (Playing) VCR using the following diagram, using the jacks on the back of the TV/VCR or on the front of the TV/VCR. If you connect to both the front and back jacks, the front jacks has priority.

- 1. Insert a pre-recorded video cassette into the Source (Playing) VCR.
- 2. Insert a blank video cassette, or one you want to record over, into the TV/VCR's cassette compartment.
- 3. Press SPEED button on the remote control to select the desired recording speed (SP, LP or SLP).
- 4. Press CHANNEL ▲ or ▼ button repeatedly so that "AUX" appears on the screen.
- 5. Begin playback of the tape in the Source (Playing)
- 6. Press RECORD button on the TV/VCR.

NOTE: For best results during dubbing, use the TV/VCR's front panel controls whenever possible. The remote control might affect the Source (Playing) VCR's playback operation.



TV/CATV CHANNEL MEMORY PROGRAMMING

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

AUTOMATIC CHANNEL MEMORY

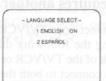
NOTE: Channel memory programming is not needed when using a converter/descrambler box.

You must use the remote control unit for the following steps:

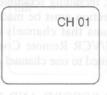
Plug the TV/VCR power cord into a standard AC outlet. Press POWER button to turn on the TV/VCR.



Select item 1 (ENGLISH) or 2 (ESPAÑOL=SPANISH) using number 1 or 2 button.



Press SELECT button on the remote control unit. The tuner scans and memorizes all the active channels in TO RECORD AND VIEW A SCRAMRI .sea ruoy



• The TV/VCR distinguishes between standard TV channels and CATV automatically.

After scanning, the tuner stops on the lowest memorized channel.

(TV mode: from CH 02/ CATV mode: from CH 01)

If you want to recall the selected channels, you can select the desired channel directly with the remote control number button or CH ▲ or ▼ button on the remote control unit.

TO RETURN TO TV MODE WHEN SCANNING

Press MENU button in scanning mode.

TO PRESET CHANNEL MEMORY AGAIN

Press MENU button.

Select item 4 (CHANNEL SET UP) using number 4 button.



Press number 1 button repeatedly to select [TV] or [CATV].



Select item 2 (AUTO PRE-SET) using number 2 button. The tuner scans and memorizes all the active channels in your area.



After scanning, the tuner stops on the lowest memorized channel.

(TV mode: from CH02 / CATV mode: from CH01)

If you want to recall the selected channels, you can select the desired channel directly with the remote control number button or CH ▲ or ▼ button on the remote control unit.

TO RETURN TO TV MODE WHEN SCANNING

Press MENU button in scanning mode.

TO DELETE OR ADD PRESET CHANNEL

To add or delete the desired channels.

Press MENU button.

Select item 4 (CHANNEL SET UP) using number 4 button.

Select item 3 (ADD/DE-LETE CH) using number 3 button.

- CHANNEL SET UP -TVICATV [TV] 2 AUTO PRESET 3 ADD/DELETE CH

Enter the desired channel number using the number button or the CH ▲ or V button.



DELETING PRESET CHANNEL

Press ADD/DELETE button. The channel number changes to light red. The channel is deleted from memory.



- To delete another channel, repeat steps [3] and [4].
- If you press the ADD/DELETE button again, the channel is memorized again.

ADDING PRESET CHANNEL

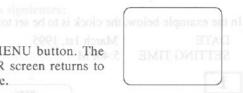
Press ADD/DELETE button. The channel number changes to light blue. The channel is added to memory.



- To add another channel, repeat steps [3] and [4].
- If you press the ADD/DELETE button again, the channel is deleted again.

Added channel is in light blue. Deleted channel is in light red.

Press MENU button. The TV/VCR screen returns to TV mode.



NOTE: To confirm that channel(s) has been deleted or added, press CH ▲ or ▼ button.

SETTING THE CLOCK

Set the clock accurately for proper automatic timer recording.

- You must use the remote control unit for the following steps:
- Power must be turned on.

In the example below, the clock is to be set to:

SETTING TIME

March 1st, 1995

5:40PM

Press MENU button.

Select item 3 (SETTING CLOCK) using number 3 button.

-MENU-TIMER PROGRAMMING

Enter the desired month using number button. (Ex. March - enter 03)



Enter the desired day using number button. (Ex. March 1st - enter 01)



Enter the desired year using number button. (Ex. 1995 - enter 1995)



Enter the desired hour using number button. (Ex. 5:40pm - enter 05)



6

Enter the desired minute using number button. (Ex. 5:40pm - enter 40)



Enter 1 to select "AM" or enter 2 to select "PM" using number button.

(Ex. 5:40pm - enter 2)



Press MENU or SELECT button to start the clock.

Although seconds are not displayed, they begin counting from 00 when you press MENU or SELECT button. Use this feature to synchronize the clock with the correct time.



• This unit has a built in calendar up to the year 2008.

TO CHANGE CLOCK SETTING

If you want to change the clock,

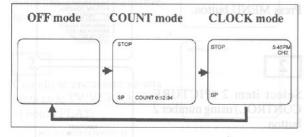
- 1) Follow step [1].
- 2) Select desired digit using SELECT button or channel is added to memory .nottud aTaJad/ddA
- 3) Enter correct numbers using number button.
- 4) Press MENU button to return to TV mode.

CHECKING THE COUNT, CLOCK AND CHANNEL NUMBER

To check the Count, Clock and Channel number on the TV/VCR screen, press SELECT button on the remote control.

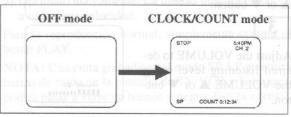
Each time you press SELECT button on the remote control, the TV/VCR screen will change as follows:

When the Closed Caption mode is OFF:



When the Closed Caption mode is ON:

The On Screen Display will disappear after 5 seconds.



This is true even if MUTE button is pressed, or PAUSE/STILL button is pressed while recording. However, the On Screen Display will appear for 5 seconds when SELECT button is pressed.

best, but if you need to make, any further adjusted ments, use the following chart as a guide.

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I contain to decrease the following contained to decrease to increase to increase to metasterious and to decrease to increase to increase and to decrease to increase and to decrease to increase and to decrease to increase and to provide the following to the following the following

TV OPERATION

Press POWER button to turn on the TV/VCR.

2

CH 06

Select the desired channel using number button or CH

▲ or ▼ button.

3

Adjust the VOLUME to desired listening level using the VOLUME ▲ or ▼ but-

GAME MODE

This function enables you to adjust the TV/VCR display making it suitable for use with a TV GAME.

 You must use the remote control unit for the following steps:

1

ton.

Press MENU button.

Select item 7 (USER'S SET UP) using number 7 button.

- M E N U
1 TIMER PROGRAMMING
2 PICTURE CONTROL
3 SETTING CLOCK
4 CHANNEL SET UP
5 LANGUAGE SELECT
7 ISER'S SET UP
8 COD SELECT

HILLIAMORE

2

Press number 1 button to select (GAME MODE [ON]).



3

Press MENU button to return to TV mode.

TO CANCEL THE GAME MODE

 Repeat step [1]. Then, step [2] to select [OFF]. Press MENU button to return to TV mode.

OR

 Set the PICTURE CONTROL. The GAME MODE will then automatically be turned [OFF].

PICTURE CONTROL

Adjust picture controls for a natural looking image.

 You must use the remote control unit for the following steps:

1

Press MENU button.

- M E N U
1 TIMER PROGRAMMING
2 PICTURE CONTROL
3 SETTING GLOCK
CONTROL
5 SETTING GLOCK
CONTROL
5 SETTING GLOCK
7 USER'S SET UP
8 OCD SELECT

2

Select item 2 (PICTURE CONTROL) using number 2 button.



3

Press SELECT button repeatedly until desired control is displayed.

Each time you press SELECT button, CONTRAST, BRIGHT, COLOR, TINT and SHARP-NESS will appear on the screen in sequence.

4

Adjust the picture control using CH ▲ or ▼ button.

 Your TV/VCR's picture controls — CONTRAST, BRIGHT, COLOR, TINT and SHARPNESS are preset to the factory specification. This is usually best, but if you need to make any further adjustments, use the following chart as a guide.

| | СН ▼ | CH ▲ | | |
|-----------|---------------------------|---------------------------|--|--|
| CONTRAST | to decrease contrast | to increase contrast | | |
| BRIGHT | to decrease brightness | to increase brightness | | |
| COLOR | to pale | to brilliant | | |
| TINT | to purple | to green | | |
| SHARPNESS | to soft | to clear | | |

NOTE: When setting the PICTURE CONTROL, the GAME MODE will be automatically set to [OFF].

CLOSED CAPTION SYSTEM

You may view specially labeled (cc) TV programs, movies, news, prerecorded tapes, etc. with either a dialogue caption or text display added to the program.

Caption Mode

You may watch dramas, movies and news etc. while captioning the dialogues and the contents of news if you want by choosing the caption mode.

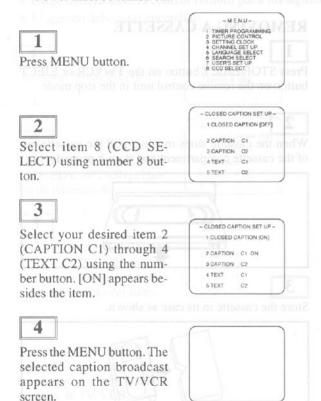
Text Mode

You may watch full screen text information if you want by choosing the text mode.

C1/C2

You may get these captions or text information by selecting either C1 or C2. C2, when used, will usually be for a second language.

- You must use the remote control unit for the following steps:
- Power must be turned on.



NOTE:

Not all programs are broadcast with closed captions. Your television is designed to provide error free closed captions from high quality antenna, cable and VCR signals. Conversely, poor quality signals are likely to result in caption errors or no captions at all. Common signal conditions which may cause captions errors are listed below;

- a) Automobile ignition noise.
- b) Electric motor brush noise.
- c) Weak snowy picture.
- d) Multiplex signal reception displaying picture ghosts or airplane flutter.
- e) Playback of poorly recorded or worn VCR tapes.
- f) If your TV/VCR displays a black box on the screen, this means that your TV/VCR is set to TEXT mode. To clear screen, select CAPTION C1, C2 or CLOSED CAPTION [OFF].

When the Closed Caption mode is ON:

The On Screen Display will disappear after 5 seconds.

 This is true even if MUTE button is pressed, or PAUSE/STILL button is pressed while recording. However, On Screen Display will appear for 5 seconds when SELECT button is pressed.

TO CANCEL THE CLOSED CAPTION SYSTEM

Repeat steps [1] and [2]. Then, step [3], select item 1 (CLOSED CAPTION [OFF]) using number 1 button.

VIDEO CASSETTE

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

• Do not use poor quality or damaged tapes.

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

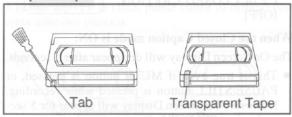
| MODE | | CASSETTI | 3 | |
|----------|---------|----------|-------------|--|
| | T-60 | T-120 | T-160 | |
| SP Mode | l hour | 2 hours | 2-2/3 hours | |
| LP Mode | 2 hours | 4 hours | 5-1/3 hours | |
| SLP Mode | 3 hours | 6 hours | 8 hours | |

When handling video tapes, take the following precautions:

- Avoid moisture, which can condense on the tape if
 it is moved from a cold place to a warm place. Playing a tape that has moisture in it will damage the tape
 and your TV/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

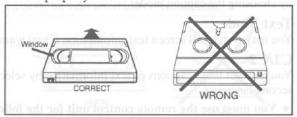
You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with transparent tape.



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 TV/VCR.

The TV/VCR will automatically turn on when the cassette is properly inserted.



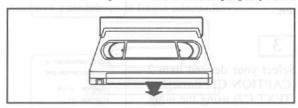
REMOVING A CASSETTE

1

Press STOP/EJECT button on the TV/VCR or EJECT button on the remote control unit in the stop mode.

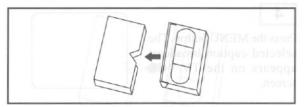
2

When the cassette stops moving, pull the cassette out of the cassette compartment and store it properly.



3

Store the cassette in its case as shown.



PLAYBACK

Power must be turned on. 1 Insert a cassette into the cassette compartment. NOTE: If the erase-protec-Playback. tion tab has been removed, the TV/VCR will start playback automatically. PLAY TENT STOR Before playback. If playback does not begin You must use the automatically, press PLAY button. sette tape is in the TV/VC

Press STOP button when playback is completed.



VISUAL SEARCH (SP/LP/SLP MODE)

You may view a video tape at a high speed in either a forward or reverse direction. This feature is useful in finding or skipping over a particular scene on a tape.

Forward Direction:

When in the Play mode, press F.FWD button to view the tape at a fast speed in the forward direction. The sound will be muted.

Reverse Direction: and another UMEM Resignation

To view the tape at a fast speed in the reverse direction, press REWIND button. The sound will be muted.

Press PLAY button to return to normal playback.

NOTE: The picture will not be as good as in normal playback during Visual Search. A samue show too

SUPER HIGH SPEED SEARCH (LP/SLP MODE)

For Visual Search in super high speed:

- 1) Press either F.FWD or REWIND button while the Before playback, followed and sinus in the Play mode.
- 2) Release button. 3) Depress it again. The unit will now search in super high speed.

Press PLAY button to return to normal playback.

NOTE: Tapes recorded in the SP or LP mode will display a noise bar on the TV/VCR screen and the picture may revert to Black and White. This is normal.

STILL PICTURE DURING PLAYBACK

If you press PAUSE/STILL button during the Play mode, the picture will "freeze" on the TV/VCR screen. You may use this feature to study details of a particular

Press PLAY button to continue playback.

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

SLOW MOTION

scene.

Press SLOW button to reduce the playback speed. The VCR mutes the sound during slow motion.

Press PLAY button to return to normal playback.

RENTAL PLAY

This function enables you to improve the picture quality when playing back worn cassettes such as those rented from a video shop.

- Before playback, follow steps below.
- · You must use the remote control unit for the following steps: On live unit will be a separate of the lower steps.
- Power must be turned on.
- Make sure that a cassette tape is in the TV/VCR.



Press MENU button.

Select item 7 (USER'S SET UP) using number 7 button.

UKE DURING PLAYBA'CK



Press number 2 button to select (RENTAL [ON]).

 Once you select the Rental Play mode, it stays in effect even after you turn off the TV/VCR.



First press MENU button, then press PLAY button to start the Rental play.

TO EXIT THE RENTAL PLAY MODE

Repeat steps [1]. Then, [2] but select [OFF]. Press MENU button to return to TV mode.

AUTO REPEAT PLAYBACK

The TV/VCR has an auto repeat function that allows you to repeat a tape indefinitely without using the PLAY button. There are two selections for Auto Repeat NOTE: If the erase-protestasjugis soset Playback.

ALL REPEAT: repeat playback from the beginning to the end of the tape.

BLANK REPEAT: repeat playback from the beginning to the blank part, which is not recorded anything for more than 10 seconds.

- Before playback, follow steps below.
- You must use the remote control unit for the following steps:
- · Power must be turned on.
- Make sure that a cassette tape is in the TV/VCR.



Press MENU button.

Select item 7 (USER'S SET UP) using number 7 button.



Press number 3 button repeatedly to select [ALL] or [BLANK]. [ALL] or [BLANK] appears besides the "REPEAT PLAY".

 Once you select the Repeat Play mode, it stays in effect even after you turn off the TV/VCR.



First press MENU button, then press PLAY button to start the Repeat Play. "REPEAT PLAY ▶" appears.

• If the rental play function is set ON, the "RENTAL PLAY ▶" display has priority.

Press PLAX burton to return to normal playbac! STON

- 1) All buttons except POWER and STOP buttons do not work during Auto Repeat Playback. Always set the Auto Repeat Playback function to [OFF] when not in use.
- 2) If the Counter Memory (See page 21) is activated, the tape will automatically stop when the count returns to approx. 0:00:00 during Auto Rewind.

TO EXIT THE REPEAT PLAY MODE

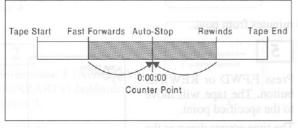
Press STOP button to stop playback. And repeat steps [1], then follow step [2] but select [OFF]. Press MENU button to return to TV mode.

COUNTER MEMORY

The Counter Memory can be used during rewind or fast forward to automatically stop the tape when the count reaches a preset memory position of approx. 0:00:00 reading.

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

- You must use the remote control unit for the following steps: " Alandor and and and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " Alandor and an alandor of the following steps: " A
- · Power must be turned on.
- Make sure that a cassette tape is in the TV/VCR.



1

If the count is displayed on the TV/VCR screen, skip step [1].

If the count is not displayed, press C.MEMORY button so that the counter appears on the TV/VCR screen.

COUNT 0:12:34

2

Press C. RESET button. The count resets to 0:00:00.

3

Press C. MEMORY button.
"MEMORY" appears on the screen.



4

Press RECORD or PLAY button.

5

Press STOP button when recording or playback is completed.



6

Press SELECT button so that the counter appears.

7

Press REWIND button.

The tape will automatically stop when the count returns to approx. 0:00:00.

STOP STOP MEMORY 0-12-34



TO CANCEL THE COUNTER MEMORY

1

Press C.MEMORY button so that the "MEMORY" appears on the TV/VCR screen.

2

Press C. MEMORY button so that "COUNT" appears on the TV/VCR screen.

Deat steps [3] and [4] correct the minu humber button.

TIME SEARCH

The Time Search function makes it possible to quickly advance the tape from any position by entering the exact desired amount of playback time of the part that you want to skip. and it provides a loadysted yillotte ago of

- You must use the remote control unit for the following steps: I then lorence stomer and say the say that the remote control unit for the following steps:
- · Power must be turned on.
- Make sure that a cassette tape is in the TV/VCR.

In the example below, search the position after 2 hours 53 minutes from now.

Press MENU button.

Select item 6 (SEARCH SE-LECT) using number 6 button.

-MENU-AED DOOGDAMMING

Select item 1 (TIME SEARCH) using number 1 button. The hour digit flashes.

- SEARCH SELECT -1 TIME SEARCH 2 INDEX SEARCH

Enter the desired hour with number button.



Enter the desired minutes with number button.



- To correct the hour, press DELETE button and repeat steps [3] and [4].
- To correct the minute, enter correct numbers using number button.
- To cancel the Time search function, press MENU button.

Press F.FWD or REWIND button. The tape will move to the specified point.

The time counts down as the searching progresses. When

0:00 is reached, the tape will start playback automat-

TIME SEARCH

NOTES: Cara seleccionar Indulud YROMEM. D 22510

ically.

- Time search can be set up to 9:59.
- This function is not operative in recording mode.
- Counter Memory function is not operative in this mode.
- This function is not operative when a casette tape is not inserted in the TV/VCR.

TO FINISH THE TIME SEARCH

Press STOP button on the TV/VCR or remote control unit. This will delete the selected time.

INDEX SEARCH

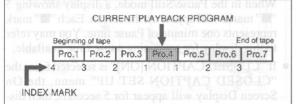
This feature provides a method of indexing the starting point so that it can be easily returned to in either fast forward or rewind mode.

- The index mark will be made automatically when the RECORD button is pressed. It will also be marked at the starting point of Timer recording and OTR.
- The index mark is not recorded if the PAUSE/STILL button is pressed and released during recording.
- The time gap between making the index marks on the tape should be greater than 1 minute for SP recording, 2
 minutes for LP recording and 3 minutes for SLP recording.
- Index marks cannot be made if the erase-protection tab on the cassette has been removed.

NOTES:

- You must use the remote control unit for the following steps:
- Power must be turned on.
- Make sure that a cassette tape is in the TV/VCR.

Example: You are watching fourth program (program number 4) and want to fast forward to seventh program (program number 7). You must skip three programs.



1

Press MENU button.

Select item 6 (SEARCH SE-LECT) using number 6 button. - M E N U
1 TIMER PROGRAMMING
2 PICTURE CONTROL
3 SETTING CLOCK
4 CHANNEL SET UP
5 LANGUAGE SELECT
7 USER'S SET UP
8 COD SELECT
9 COD SELECT

2

Select item 2 (INDEX SEARCH) using number 2 button.



3

Press the number button corresponding to the number of program that you want to skip. (Example: To skip three programs, press number button 03.)



 To correct the Index number, press DELETE button and re-enter the correct number. 4

Press REWIND or F.FWD button. The TV/VCR begins rewinding or fast forwarding then goes into the Play mode at the beginning of desired program.



NOTE: Every time an index signal is skipped, the number in the program indicator decreases by one.

5

When the preset program is reached, normal playback will start.

NOTES:

- Index search can be set up to 20.
- This function is not operative in recording mode.
- Counter Memory function is not operative in this mode.
- Press STOP button on the TV/VCR or remote control to end the Index Search.

VIEWING AND RECORDING THE SAME PROGRAM

You can only watch the same TV program that is being recorded.

NOTE: You may not have good results when you record a TV game software etc.

110

partment.

Insert a blank cassette, or one that you want to record over, into the cassette com-

If necessary, rewind or fast forward the tape to the point you want to start recording.



2

Make sure the TIMER REC. indicator is off. If it lights up, press POWER button to turn on the TV/VCR.

3

Press SPEED button on the remote control repeatedly until the desired recording speed is displayed (SP/LP/SLP).



4

Select the channel to be recorded by using the number button or the CH ▲ or ▼ button.



5

Press RECORD button. Recording indicator lights up.



To skip some material while you are recording:



Press PAUSE/STILL button on the remote control to temporarily stop recording. Recording indicator light blinks.



NOTES:

 If the TV/VCR is left in the Pause/Still mode for more than 5 minutes while Recording, it will automatically switch to the Stop mode.

When in the Pause/Still mode, a display showing 5 "marks will appear on the screen. Each "mark represents one minute of Pause time. You may refer to this display for remaining pause time available.

 If "CLOSED CAPTION [ON]" is selected from the "CLOSED CAPTION SET UP" menu, the On Screen Display will appear for 5 seconds, then disappear.

If you want to check the remaining pause time available using the On Screen Display, press SELECT button. The On Screen Display will appear for 5 seconds.

7

Press PAUSE/STILL or RE-CORD button to resume recording.



8

Press STOP button when recording is completed.

OTR (ONE TOUCH RECORDING)

The One Touch Recording function enables you to record a program simply by using the OTR button on the

According to the table, simply press OTR button as many times as needed to set the desired recording length. The channel number to be recorded and recording length will be shown on the TV/VCR screen.

• This function is not operative using the remote control.

Insert a blank cassette, or one that you want to record over, into the cassette com-

partment.

If necessary, rewind or fast forward the tape to the point you want to start recording.



Select the channel to be recorded.



Press RECORD/OTR button on the TV/VCR several times.

Recording starts immediately when the RE-CORD/OTR button is pressed, even if you are watching a TV program.



| Push(es) | DISPLAY | LENGTH |
|-----------|------------------|--|
| 1 push | NORMAL | REC MODE |
| 2 pushes | 0:30 | 30 minutes |
| 3 pushes | MA081:00 | REC MODE 30 minutes 60 minutes 90 minutes 120 minute 150 minute 210 minute 240 minute 240 minute 300 minute 300 minute 340 minute 420 minute 420 minute 420 minute 450 minute |
| 4 pushes | 1:30 | 90 minutes |
| 5 pushes | 2:00 A | 120 minutes |
| 6 pushes | 2:30 | 150 minutes |
| 7 pushes | cite, 000:8 that | 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 AW 19 | 480 minutes |
| 18 pushes | NORMAL | REC MODE |

The timer on the TV/VCR screen counts down as the recording progresses.

NOTES:

- Each time you press OTR button, you will extend the recording time by 30 minutes at a time up to 8-hours (or to the end of the tape).
- When OTR button is pressed 18 times, the TV/VCR will record continuously until the end of the tape.
- The recording length time remaining will be displayed on the TV/VCR screen as the recording is started.
- Recording stops when 0:00 is reached.
- Please note that in the SLP mode maximum recording time, assuming the tape is started of the beginning, is 8 hours using T-160 (or 6 hours using When a Timer Recording is being carrie, (021-T cannot set or change any programming of I imer Re-

TO STOP THE OTR OPERATION

Press STOP button on the TV/VCR or remote control.



AUTOMATIC TIMER RECORDING TO SOLVE

You may set the TV/VCR to record while you are away. You can set seven events to record on a specific day, daily or weekly within a 1 year period.

- You must use the remote control unit for the following steps: ad ATO assign yields add an income.
- Be sure the clock is set to the correct time and date before setting the timer.
- Power must be turn on to set automatic timer recording.

In the example below, the timer is being set to record:

PROGRAM NUMBER 4

MAY 6th, 1995

SETTING TIME from 7:30AM to 8:50AM

CH61 CHANNEL TAPE SPEED LP

Insert a blank cassette, or one that you want to record over, into the cassette compartment.

If necessary, rewind or fast forward the tape to the point you want to start recording.

Press MENU button.

Select item 1 (TIMER PRO-GRAMMING) using number 1 button.

-MENU-

The program number which is not set up flashes.

- When Timer Recording has already been filled, "PROG. 12345678" appears. If so, press MENU button to return the TV mode.
- · When you did not set the "SETTING clock. CLOCK" appears. If so, follow page 14 to set the clock and repeat from step [2].

PROG. 12345678 ... DATE START TIME END TIME CHANNEL TAPE SPEED

PROGRAM NUMBERS 4

START TIME --:-- --END TIME --:--

TAPE SPEED --

CHANNEL --- DOVE

DATE

128

Enter your desired program number using number button.

• The program number 8

is used for setting Today Timer Recording only. You cannot select number 8 in the procedure of Automatic Timer Recording.

· When a Timer Recording is being carried out, you cannot set or change any programming of Timer Recording.

Press SELECT button.

PROGRAM NUMBER 4 8 DATE -/- 400- - 1000 ONCE-1 DAILY-2 WEEKEY-3 END TIME --:-- --CHANNEL --TAPE SPEED --

Enter 1 to select "ONCE". enter 2 to select "DAILY" or enter 3 to select "WEEKLY" using number button.

DATE COO -- CONCE START TIME END TIME --:-- --CHANNEL --TAPE SPEED --

- To record the program once, press number 1 button to select "ONCE".
- To record the same program every day from Sunday through Saturday (such as soap operas and other daily serials), press number 2 button to select
- To record the same program every week on the same day (such as every Saturday), press number 3 button to select "WEEKLY".

Enter your desired month using number button. Regarding to "DAILY" and "WEEKLY", enter the date you want to start it.

START TIME -END TIME --:-- --CHANNEL TAPE SPEED --

Enter your desired day using number button.

The day of the week changes automatically.

PROGRAM NUMBER 4 0.5/06 SAT DATE START TIME END TIME --CHANNEL --TAPE SPEED --

PROGRAM NUMBER 4

DATE 091 -- "ONCE

Enter your desired hour using number button.

DATE 05/06 SAT START TIME 0 700 END TIME --:-CHANNEL TAPE SPEED --

10

Enter your desired minute using number button.

PROGRAM NUMBER 4 DATE 05/06 SA START TIME 07:3000-- 0000 END TIME --: TAPE SPEED --

11

Enter 1 to select "AM" or enter 2 to select "PM" using number button.

PROGRAM NUMBER 4 DATE 05/06 SAT START TIME 07:30 AM END TIME CHANNEL TAPE SPEED --

12

Repeat steps [9]-[11] to set the end time.

PROGRAM NUMBER 4 DATE 05/06 SAT START TIME 07:30 AM END TIME 08:50 AM CHANNEL SALE TAPE SPEED --

13

Enter your desired channel using number button.

PROGRAM NUMBER 4 DATE 05/06 SAT START TIME 07:30 AM END TIME 08:50 AM TAPE SPEED SR LP=2 SLP=3

14

Enter 1 to select "SP", enter 2 to select "LP" or enter 3 to select "SLP" using number button.

PROGRAM NUMBER 4 05/06 SAT STARTTIME 07:30 AM END TIME 08:50 AM CHANNEL TAPE SPEED LP-1

MOA

15

Press MENU or SELECT button on the remote control unit. Program 4 is now completed.

To set another program, repeat steps [2] to [15].

TV/VCR: It is easy for you to record today's T. 161 Press POWER button to set automatic timer recording. The TIMER REC indicator lights up.

• If power is not turned off and you continue watching TV, "TIMER REC STANDBY" starts flashing on the TV/VCR screen 2 minutes before the programmed start time.

You must turn off the TV/VCR to activate automatic timer recording.

TO CORRECT A PROGRAM

- While setting a program; press DELETE button to go back one step, and enter correct numbers using number button.
- After setting a program;
 - 1) Press POWER button.
 - 2) Repeat steps [2] [4].
 - 3) Press SELECT button repeatedly (or press DELETE button to go back one step) until your desired digit flashes and make changes.
 - 4) Repeat steps [15] and [16].

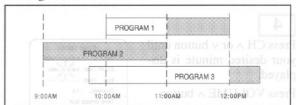
TO CANCEL AN AUTOMATIC TIMER RECORDING

- While setting or after setting a program; press POWER button and repeat steps [2] ~ [4] and press DELETE button, and to the next steel new to warm up of
- While recording is in progress; press MONITOR button, then press STOP/ EJECT button on the TV/VCR. If you press POWER button to turn off before the end time, timer recording will continued. Repeat steps [2] ~ [4] and press DELETE button.

WHEN THE PROGRAMS OVERLAP

The earlier program has priority.

If you programmed as per the illustration the timer recording would be carried out as follows:



9:00AM - 11:00AM 11:00AM - 12:00PM 12:00PM -

for PROGRAM 2 for PROGRAM 1 for PROGRAM 3

TODAY TIMER RECORDING

You may set the TV/VCR to record one program within 24 hours by simply pressing MONITOR button on the TV/VCR. It is easy for you to record today's TV program.

- TODAY TIMER RECORDING can not be programmed by the remote control. This function can only be programmed from the TV/VCR.
- Power must be on to program Today Timer Recording.
- Clock must be set to the correct time before setting the timer.
- Today Timer Recording is memorized to program number 8.

In the example below, the Today Timer Recording is being set to record. (Current time is 8:00PM):

SETTING TIME

from 10:00PM to 11:00PM

CHANNEL

CH10

TAPE SPEED

SP



Insert a blank cassette, or one that you want to record

over, into the cassette compartment.

If necessary, rewind or fast forward the tape to the point you want to start recording.



2

Press MONITOR button on the TV/VCR.



NOTES:

- You may forward to the next step by pressing VOL-UME
 button on the TV/VCR.
- When you press VOLUME "\" button on the TV/VCR, all selections will be erased and the TV/VCR screen will return to the initial display (step [2]).

3

Press CH \(\) or \(\) button until your desired hour is displayed.

Press VOLUME \(\text{button.} \)

4

Press CH \(\) or \(\) button until your desired minute is displayed.

Press VOLUME ^ button.



5

Press $CH \land or \lor button until AM or PM is displayed.$

Press VOLUME ^ button.



6

Repeat steps [3] - [5] to set the end time.

-TODAY TIMER DATE 03/01 WED
START TIME 10:00 PM
END TIME 11:00 PM
CHANNEL 08
TAPE SPEED SLP

7

Press CH \(\) or \(\) button until your desired channel number is displayed.

Press VOLUME A button.

- TODAY TIMER DATE 03/01 WED
START TIME 10:00 PM
END TIME 13:00 PM
CHANNEL 0001 0 0000
TAPE SPEED SEP

8

Press CH \(\sigma \) or \(\sigma \) button until your desired tape speed is displayed.

-TODAY TIMERDATE 0.3/01 WED
START TIME 10:00 PM
END TIME 11:00 PM
CHANNEL 19
TAPE SPEED 3

9

Press MONITOR button.

10

Press POWER button to set Today Timer Recording. The TIMER REC indicator lights up.

 If power is not turned off and you continue watching TV, "TIMER REC STANDBY" starts flashing on the TV/VCR screen 2 minutes before the programmed start time.

You must turn off the TV/VCR to activate Today Timer Recording.

TO CORRECT A PROGRAM

- While setting a program; Press VOLUME "\" button on the TV/VCR to go back one step, and enter corrected digit.
- After setting a program;
- 1) Press POWER button.
 - 2) Press MONITOR button.
- 3) Press VOLUME ∧ button until desired digit
 - 4) Press CH ∧ or ∨ button to make desired change.
 - 5) Repeat steps [9] and [10].

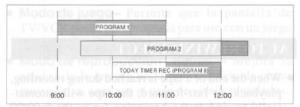
TO CANCEL A TODAY TIMER RECORDING

- While setting or after setting a program; 1) press POWER button. 2) press MONITOR button, then, press VOLUME ">" button.
- While recording is in progress; 1) press MONI-TOR button. 2) press STOP/ EJECT button on the TV/VCR. If you press POWER button to turn off before the end time, timer recording will continued.

WHEN THE PROGRAMS OVERLAP

Today Timer Recording has priority. However, if another program has been activated before the start of the Today Timer Recording, the Today Timer Recording will begin after the other program has finished.

If you programmed as per the illustration the timer recording would be carried out as follows:



9:00PM - 11:00PM 11:00PM - 12:00AM

12:00AM -

for PROGRAM 1 for PROGRAM 8 (Today Timer Recording) for PROGRAM 2

HINTS ON AUTOMATIC TIMER RECORDING AND TODAY TIMER RECORDING

- Make sure the channel you want to record is properly set in advance.
- It is not necessary to press RECORD button for timer recording.
- Recording begins automatically at the set of the Start time
- If you are recording using a Timer mode, you may not operate the unit manually.
- The erase-prevention tab on the cassette must be in place (or you must put tape over the hole).
- If the erasure protection tab is removed, the cassette will be ejected when the POWER button is pressed to off, and the TIMER REC indicator flashes.
- If the POWER button is pressed to off with no cassette loaded, the TIMER REC indicator flashes.
- If the TIMER REC indicator flashes, insert a tape with the erase-prevention tab intact. The TIMER REC indicator will illuminate.
- If the tape runs out before the end time, the TV/VCR will switch to the Stop mode immediately, and the tape will be ejected.

TO CHECK THE START/END TIME

- 1) Press POWER button so that the TIMER REC indicator goes off.
- 2) Press MENU button on the remote control.
- 3) Select item 1 (TIMER PROGRAMMING) using number 1 button.
- Enter your desired program number using number button. The details of selected program appears on the TV/VCR screen.
- Press MENU button. The TV/VCR screen returns to the TV mode.



DEGAUSSING

Magnetism from nearby appliances might affect the color of the TV picture.

If this happens, move this unit away from the appliance. If the color is still not correct, disconnect power cord from AC outlet then reconnect it after 30 minutes.

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 0:00:00 count reading if the memory function is activated), power off and tape ejects.
- This function is operative when Auto Repeat is set to the [OFF] position.
- The tape will not auto-rewind during timer recording or One Touch Recording.
- When the tape is rewound to the preset memory position or the REW button is pressed during Auto Rewind, the tape will not eject and TV/VCR will not turn off.

TRACKING ADJUSTMENT

- Tracking adjustment will be set automatically (Digital Tracking function) when you start playback.
- When playing pre-recorded tapes or tapes recorded on units other than your own, noise lines (black and white streaks) may appear on the playback picture. If this occurs, adjust the tracking control by pressing CH \(\times \tim



TO CHANGE THE LANGUAGE

You can change the language of the on screen display. Follow the steps below:

- 1) Press MENU button on the remote control.
- Select item 5 (LANGUAGE SELECT) using number button.
- 3) Select item 1 (ENGLISH) or 2 (ESPAÑOL= SPAN-ISH) using number button.
- 4) Press MENU button to return to TV mode.



SETTING THE SLEEP TIMER

The sleep timer function enables you to turn off the TV/VCR without using the POWER button after a desired time period.

Press SLEEP button on the remote control repeatedly until desired SLEEP time is displayed



| BRD buttole for | SLEEP TIME | DISPLAY | | | |
|-----------------|-------------|------------|--|--|--|
| 1 push | 0 minute | 0 MINUTE | | | |
| 2 pushes | 30 minutes | 30 MINUTE | | | |
| 3 pushes | 60 minutes | 60 MINUTE | | | |
| 4 pushes | 90 minutes | 90 MINUTE | | | |
| 5 pushes | 120 minutes | 120 MINUTE | | | |
| 6 pushes | 0 minute | 0 MINUTE | | | |

TO CANCEL THE SLEEP TIMER

The turn off time can be determined by the number of times you press the SLEEP button. Press SLEEP button on the remote control repeatedly until "SLEEP 0 MIN-UTE" is displayed.

TROUBLESHOOTING GUIDE

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

| SYMPTOM | POSSIBLE CAUSE | CORRECTIVE ACTION | | | | |
|---|---|--|--|--|--|--|
| No power. significance control of the state | AC Power cord is not connected.POWER button is set to OFF. | Connect AC power cord to AC outlet. Set the POWER button to ON. | | | | |
| No picture and sound. | TV/VCR is not plugged into an active AC outlet. | Plug power cord into an active AC outlet. | | | | |
| | Antenna is not connected. | Check antenna connection. | | | | |
| | No channel in memory. | Program tuner's memory. | | | | |
| No picture or poor picture on TV/VCR. | Direction or condition of antenna is not adequate. | Adjust direction or replace antenna. | | | | |
| abes neose norvantemila copying process. | Picture control is not adequate. | Adjust picture controls. | | | | |
| No sound or poor sound. | Volume control on remote control unit or main unit is in minimum position. | Adjust volume control on remote control unit or set. | | | | |
| , el lugar por donde sale de 3. Conexión a tierra de la : | MUTE button on the remote control unit is in the ON position. | Press MUTE button. | | | | |
| Timer recording is not possible. | • The timer recording is set incorrectly. | Set the timer recording correctly. | | | | |
| tados a tierra, a fin de proj | • The timer recording is not set to ON. | Set the timer recording to ON. | | | | |
| Cannot go into Record mode. | • The erase-prevention tab on cassette is missing. | Place transparent tape over missing erase- prevention tab. | | | | |
| Playback picture is partially noisy. | The TRACKING control is not set correctly. | Adjust TRACKING control for better picture. | | | | |
| Noise in picture on playback. | Video heads are dirty. | Head cleaning is necessary, consult the nearest Funai Service Center. | | | | |
| No operation by infrared Remote Control. | No power to TV/VCR. | Make sure the AC cord is connected to an AC outlet, | | | | |
| | Weak batteries. | Check the batteries in infrared Remote Control. | | | | |

EN **** 5B28

| CLOSED CAPTION PROBLEM | POSSIBLE REMEDY |
|--|--|
| My TV/VCR is showing captions that are misspelled. | You are watching a live broadcast and spelling errors made by the closed captioning production company may pass through uncorrected. A prerecorded program will not show any misspelled words because of the normal time available for editing the captions. |
| My TV/VCR will not show the text in its entirety or there is a delay of what is being said. | Captions that are delayed a few seconds behind the actual dialogue are common for live broadcasts. Most captioning production companies can display a dialogue to a maximum of 220 words per minute. If a dialogue exceeds that rate, selective editing is used to insure that the captions remain up-to-date with the current TV/VCR screen dialogue. |
| My captions are scrambled with white boxes on the TV/VCR screen. | Interference caused by building, power lines, thunderstorms, etc. may cause scrambled or incomplete captions to appear. |
| My program guide listed a TV show as being closed captioned but none of the captions were displayed. | Broadcasters may at times use a time compression process to speed up the actual program so that additional advertising time can be given. Since the decoder cannot read the compressed information, captions will be lost. |
| My prerecorded video tape does not show any captions. The tape box mentions it being closed captioned. | The video tape was either an illegal copy or the tape duplicating company accidentally left out the captioning signals during the copying process. |
| My TV screen shows a black box on certain channels. | You are in the TEXT mode. Select CAPTION mode or CLOSED CAPTION [OFF]. |

MAINTENANCE

CABINET CLEANING

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

HEAD CLEANING

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

Dirt accumulated on the video heads after long periods of tape playback, or the usage of rental or worn tapes can cause this problem. In this case, video head cleaning requires highly technical attention, therefore consult the nearest Funai Service Center. Clean heads only when problems occur.

SERVICING

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

SPECIFICATIONS

GENERAL SPECIFICATIONS

CRT: 13 inch in-line gun,

90° deflection tube

1/2 inch borred

Television system: NTSC-M

Closed caption system: \$15.119/FCC Video Heads: Rotary 4-head

Tape width:

Tape speed

SP: 33.40mm/sec. LP: 16.67mm/sec. SLP: 11.12mm/sec.

Tuner channel

TV VHF Low: #2~#6 TV VHF High: #7~#13 TV UHF: #14~#69

CATV

VHF: 5A

MID band: A5~A1, A~I SUPER band: J~W

HYPER band: W+1~W+84

Terminals

Antenna input: VHF/UHF 75 ohms

unbalanced

Video input: RCA connector \times 2

Audio input : Earphone :

RCA connector × 2 1/8" monaural (3.5 mm)

ELECTRICAL SPECIFICATIONS

Video input level:

0.5~2.0V_{p-p}

Audio input level : Video S/N ratio : -15dBs More than 46dB

Audio S/N ratio:

More than 43dB

OTHER SPECIFICATIONS

Power requirement:

AC 120V/60Hz

Power consumption: 70W

Dimensions: H:1

H: 15-3/4" (400mm) W: 14-15/16" (379mm)

D: 14-3/4" (375mm)

Weight:

26.4 lbs (12.5 kg)

Accessories:

Remote Control 2 "AA" Batteries

Rod Antenna Owner's Manual

 Designs and specifications are subject to change without notice and without our legal obligation.

CABLE CHANNEL DESIGNATIONS

If you subscribe to cable TV, the channels are displayed as 1-125. Cable companies often designate channels with letters or letter-number combinations. Please check with your local cable company. The following is a chart of common cable channel designations.

| CATV Channel | 5A | 2 | 4-3 CI | 40 | J 5 U | 6 | 7 | 8 | 9 | 10 | MOTTAT | 12 | 13 | A | В |
|---------------------|-------|------|--------|------|-------|------|---------|------|------|------|--------|------|------|------|------|
| TV Display | e 150 | 2 | 3 | 4 | 5 | 6 | AMIZINA | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| CATV Channel | С | D | E | OFF | G | H | EPARS | JA | K | L | M | N | 0 | P | Q |
| TV Display | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| CATV Channel | R | S | To | U | V | W | W+1 | W+2 | W+3 | W+4 | W+5 | W+6 | W+7 | W+8 | W+9 |
| TV Display | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | H 41/1 | 42 | 43 | 44 | 45 |
| CATV Channel | W+10 | W+11 | W+12 | W+13 | W+14 | W+15 | W+16 | W+17 | W+18 | W+19 | W+20 | W+21 | W+22 | W+23 | W+24 |
| TV Display | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| CATV Channel | W+25 | W+26 | W+27 | W+28 | W+29 | W+30 | W+31 | W+32 | W+33 | W+34 | W+35 | W+36 | W+37 | W+38 | W+39 |
| TV Display | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 |
| CATV Channel | W+40 | W+41 | W+42 | W+43 | W+44 | W+45 | W+46 | W+47 | W+48 | W+49 | W+50 | W+51 | W+52 | W+53 | W+54 |
| TV Display | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| CATV Channel | W+55 | W+56 | W+57 | W+58 | A-5 | A-4 | A-3 | A-2 | A-1 | W+59 | W+60 | W+61 | W+62 | W+63 | W+64 |
| TV Display | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 |
| CATV Channel | W+65 | W+66 | W+67 | W+68 | W+69 | W+70 | W+71 | W+72 | W+73 | W+74 | W+75 | W+76 | W+77 | W+78 | W+79 |
| TV Display | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| CATV Channel | W+80 | W+81 | W+82 | W+83 | W+84 | | | | | | | | | | |
| TV Display | 121 | 122 | 123 | 124 | 125 | | | | | | | | | | |

FUNAI CORPORATION LIMITED WARRANTY

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

DURATION:

PARTS: FUNAI CORP, will provide parts to replace defective parts without charge for one (1) year from the date

of original retail purchase. Two (2) years for Picture Tube. Certain parts are excluded from this warranty.

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

original retail purchase.

LIMITS AND EXCLUSIONS:

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

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

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

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

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

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

ALL WARRANTY INSPECTIONS AND REPAIRS MUST BE PERFORMED BY FUNAL AUTHORIZED SERVICE CENTER. THIS WARRANTY IS VALID WHEN THE UNIT IS CARRIED-IN TO FUNAL AUTHORIZED SERVICE FACILITY.

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

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

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

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

IMPORTANT:

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

ATTENTION:

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

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

FUNAI CORPORATION

Factory Service Center

100 North Street; Teterboro, NJ 07608

Tel: 1-800-242-7158

(Eastern Time 9:00 AM - 4:30 PM / Monday - Friday)