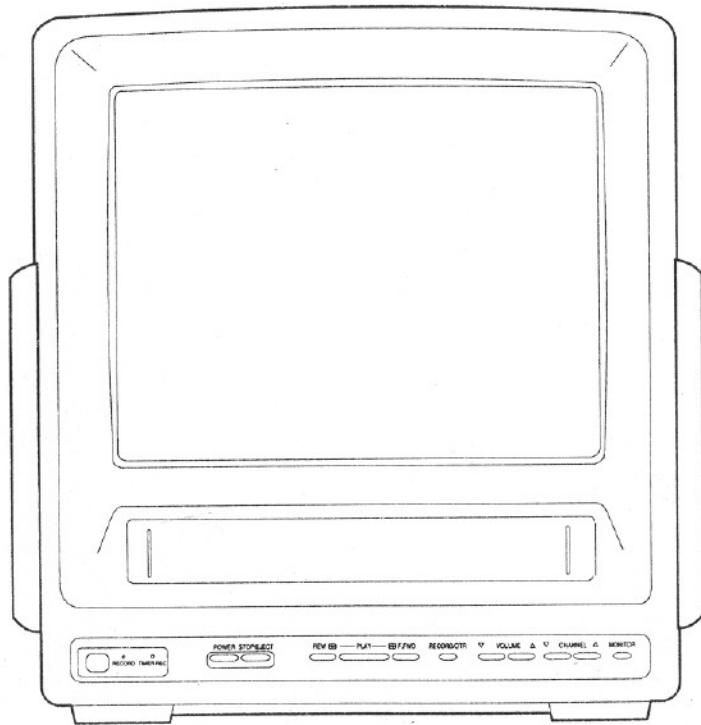


OWNER'S MANUAL

9-INCH COLOR TV/VCR TVCR9D1

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)

TABLE OF CONTENTS

| | |
|---|----|
| PRECAUTIONS..... | 4 |
| SUPPLIED ACCESSORIES..... | 4 |
| FEATURES..... | 5 |
| OPERATING CONTROLS AND FUNCTIONS..... | 6 |
| REMOTE CONTROL OPERATION..... | 8 |
| HOW TO USE REMOTE CONTROL..... | 8 |
| INSTALLING THE BATTERIES..... | 9 |
| ANTENNA CONNECTIONS..... | 10 |
| DIPOLE ANTENNA HOOK UP..... | 10 |
| OUTDOOR VHF/UHF SEPARATE ANTENNA HOOK UP..... | 10 |
| VHF/UHF COMBINED ANTENNA..... | 10 |
| CABLE WITHOUT CONVERTER/DESCRAMBLER BOX..... | 11 |
| CABLE WITH CONVERTER/DESCRAMBLER BOX..... | 11 |
| EXTERNAL INPUT MODE..... | 12 |
| MOBILE CONNECTION..... | 13 |
| SELECTING LANGUAGE (English or Spanish)..... | 14 |
| SETTING THE CLOCK..... | 15 |
| VIDEO CASSETTE..... | 17 |
| TV/CATV CHANNEL PRESETTING..... | 18 |
| TO DELETE OR ADD PRESET CHANNEL..... | 19 |
| T.V. OPERATION..... | 20 |
| VIEWING AND RECORDING THE SAME PROGRAM..... | 21 |
| COUNTER MEMORY..... | 22 |
| AUTOMATIC TIMER RECORDING..... | 23 |
| TODAY TIMER RECORDING..... | 26 |
| CHECKING THE COUNT, CLOCK AND CHANNEL NUMBER..... | 28 |
| OTR (ONE TOUCH RECORDING)..... | 29 |
| SETTING THE SLEEP TIMER..... | 30 |
| PLAYBACK..... | 30 |
| AUTO REPEAT PLAYBACK..... | 31 |
| RENTAL PLAY..... | 31 |
| SPECIAL FEATURES..... | 32 |
| TROUBLESHOOTING GUIDE..... | 34 |
| MAINTENANCE..... | 35 |
| CABINET CLEANING..... | 35 |
| HEAD CLEANING..... | 35 |
| SERVICING..... | 35 |
| SPECIFICATIONS..... | 36 |
| GENERAL SPECIFICATIONS..... | 36 |
| ELECTRICAL SPECIFICATIONS..... | 36 |
| OTHER SPECIFICATIONS..... | 36 |
| CABLE CHANNEL DESIGNATIONS..... | 37 |

VHS

Please read before using this equipment

WARNING:

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



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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



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



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

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

IMPORTANT SAFEGUARDS

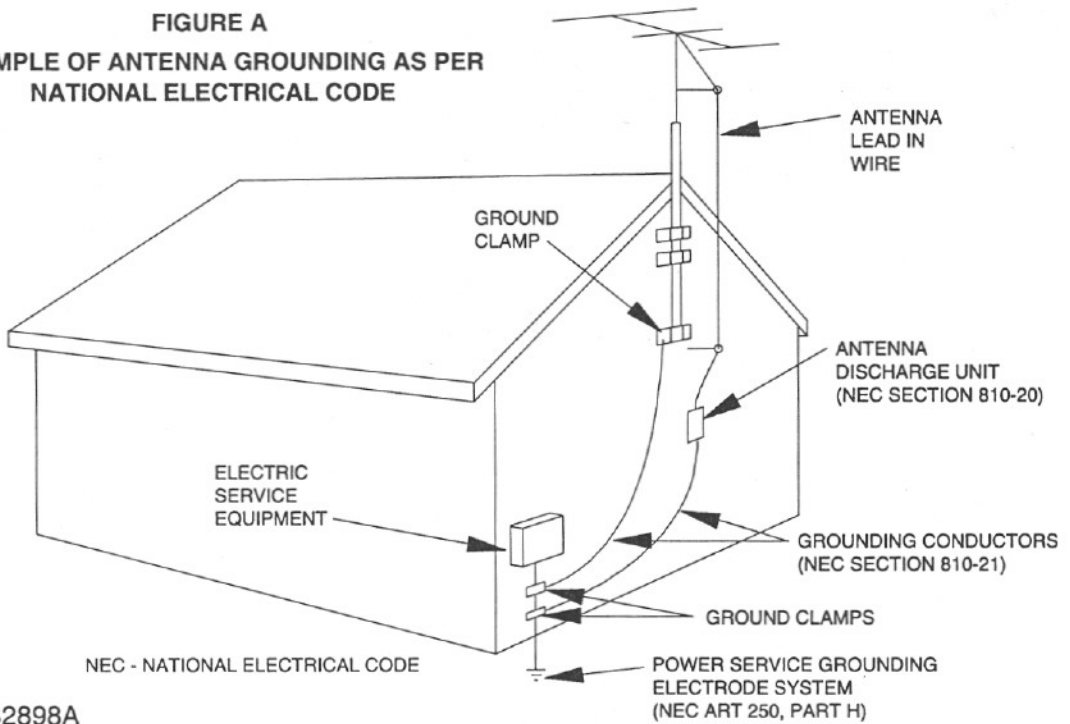
1. Read instructions-All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions-The safety and operating instructions should be retained for future reference.
3. Heed Warnings-All warnings on the appliance and in the operating instructions should 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.
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.

PORTABLE CART WARNING



S3126A

FIGURE A
EXAMPLE OF ANTENNA GROUNDING AS PER
NATIONAL ELECTRICAL CODE



S2898A

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)
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 openings 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 power-supply cord or plug is damaged or frayed.
 - 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 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.
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.

PRECAUTIONS

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.

DEW WARNING/INDICATOR

This TV/VCR is equipped with a sensor which prevents DEW condensation. If excessive moisture is present inside the unit, the "DEW" indicator will appear on the TV/VCR screen. While "DEW" is displayed, a safety device prevents the unit from operating until the moisture is gone. Moisture condensation may occur inside the unit when it is moved from a cold place to a warm place, after heating a cold room or under conditions of high humidity.

Therefore, when the "DEW" indicator appears on the TV/VCR screen, leave the POWER on and allow at least 2 hours for the unit to dry out.



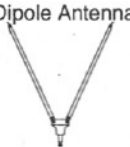
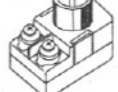


IMPORTANT COPYRIGHT INFORMATION

Unauthorized recording or use of broadcast television programming, video tape, film or other 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.

SUPPLIED ACCESSORIES

NOTES:

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

| | | | | |
|---|--|--|---|--|
| <p>Remote Control Unit</p>  <p>(UREMT32MM001)</p>  <p>2 "AA" Batteries</p> | <p>UHF/VHF Dipole Antenna</p>  <p>(OEMN00723)</p> | <p>Matching Adapter (300ohm-75ohm)</p>  <p>(1813641/1780103/ 1780258)</p> | <p>Car Battery Cord</p>  <p>(WPZ0202GA004)</p> | <p>AC Cord</p>  <p>(WAV0182NW001)</p> |
|---|--|--|---|--|

FEATURES

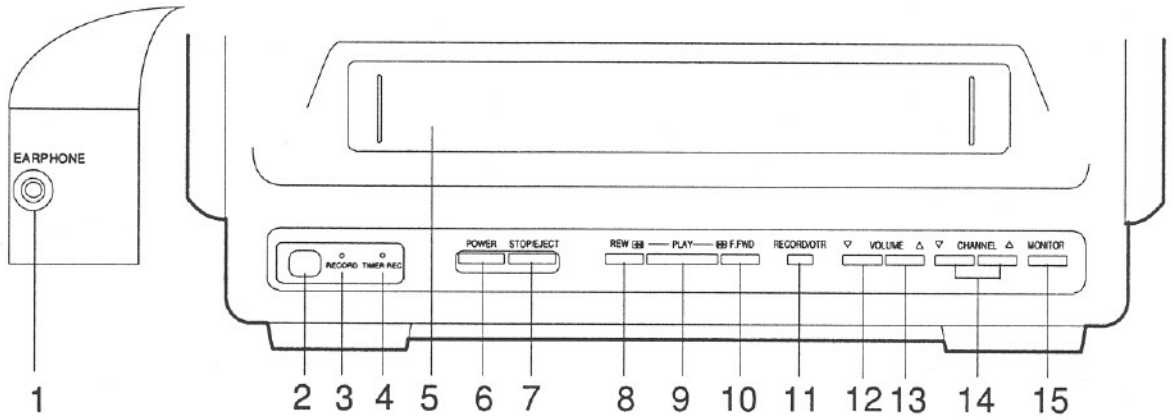
- **Auto Power On and Off system**— Automatically turns the TV/VCR on as you insert the cassette, and turns off after auto-rewind, ejects when the beginning of the tape is reached.
- **Three Different Record/Playback Speed**— Select SP mode (Standard play), LP mode (Long play) and SLP mode (Super long 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.
- **Two-Way Power**— Allows you to power the TV/VCR with standard household AC or your vehicle's battery, using the supplied car-battery cord.
- **Today Timer Rec**— The Today Timer Rec 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 converter unit may be necessary to view scrambled CATV channels.)
- **31 Button Infrared Remote control unit**— Allows you to use most of the controls from a remote location.
- **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.
- **OTR (One Touch Recording)**— Instant timed recording from 30 to 480 minutes is possible at the push of OTR button.

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.

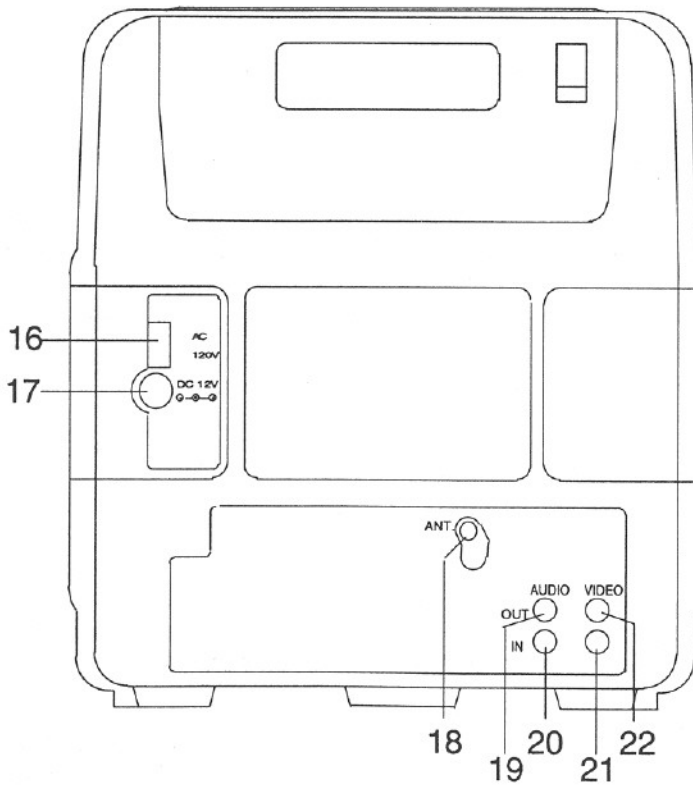
| | |
|----------------------|--|
| Date of Purchase | |
| Dealer Purchase from | |
| Dealer Address | |
| Dealer Phone No. | |
| Model No. | |
| Serial No. | |

OPERATING CONTROLS AND FUNCTIONS

— FRONT VIEW —



— REAR VIEW —



-
- 1 **EARPHONE jack**—For connection to earphone (not supplied) for personal listening.
 - 2 **Remote Sensor**—Receives the infrared control signals from the handheld remote control unit.
 - 3 **RECORD indicator**—Lights when in the Recording mode.
 - 4 **TIMER REC indicator**—Lights when in the Timer Recording mode.
 - 5 **CASSETTE COMPARTMENT**
 - 6 **POWER button**— Press to turn TV/VCR on and off. Press to activate the automatic timer recording.
 - 7 **STOP/EJECT button**— Press to stop tape motion. Press to remove tape from TV/VCR.
 - 8 **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.
 - 9 **PLAY button**— Press to begin playback of a tape.
 - 10 **F.FWD button**— Press to advance tape or to view video in forward direction during the Play mode at a faster than normal speed. Press PLAY button to return TV/VCR to normal playback speed.
 - 11 **RECORD/OTR button**—Press to begin manual recording. Press to activate One Touch Recording.
 - 12 **VOLUME ▽ button**— Press to decrease the volume level.
CLEAR function— Press to cancel Today Timer Recording.
 - 13 **VOLUME △ button**— Press to increase the volume level.
SELECT function— Press to select next step when setting Today Timer Recording.
 - 14 **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.
 - 15 **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.
 - 16 **AC120V jack**— For connection to the AC cord.
 - 17 **DC 12V jack**— For connection to the Car Battery Cord.
 - 18 **ANT. terminal**— For connection to an antenna or CATV.
 - 19 **AUDIO OUT jack**— For connection to the audio in jack of your audio equipment or another VCR.
 - 20 **AUDIO IN jack**— For connection to audio output jack of your audio equipment or another VCR.
 - 21 **VIDEO IN jack**— For connection to video output jack of your video camera or another VCR.
 - 22 **VIDEO OUT jack**— For connection to the video in jack of video processor or another VCR.

REMOTE CONTROL OPERATION

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

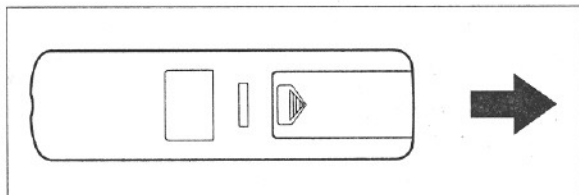
HOW TO USE REMOTE CONTROL

- 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 Time Recording. To select channels 1 to 9, first press the 0 button and then 1 to 9.
- 3 STOP button**—Press to stop the tape motion.
- 4 PLAY button**—Press to playback the tape.
- 5 REW button**—Press to rewind the tape, or to view the picture rapidly in reverse during the Play mode. (Rewind Search)
- 6 F.FWD button**—Press to rapidly advance the tape, or to view the picture rapidly in forward during the Play mode. (Forward Search)
- 7 REC button**—Press to begin manual recording.
- 8 PAUSE/STILL button**—Press to temporarily stop the tape during the Recording mode or to view a still picture during the Play mode.
- 9 MENU button**—Press to display main menu on the TV/VCR screen.
- 10 SELECT button**—Press to select setting modes (clock, counter, tape speed, program, CH preset, etc.) in the Menu mode.
Status function—Press to display the counter or the current channel number and current time on the TV/VCR screen.
- 11 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 page 19 and 25)
- COUNTER RESET button**—Press to reset counter to 0000.
- 12 COUNTER MEMORY button**—Press to use the Counter Memory mode. (See page 22)
- 13 SPEED button**—Press to set desired recording speed. (SP/LP/SLP)
- 14 MONITOR button**—Press to turn the TV/VCR screen on and off when in the Recording mode.
- 15 MUTE button**—Press to mute sound. Press it again to resume sound.
- 16 VOLUME buttons**—Press to adjust desired volume level by using either "▲" or "▼" button.
- 17 CH. buttons**—Press to select desired channel by using either "▲" or "▼" button. They cannot be used during Timer Recording. They may also be used to adjust the picture control. (See page 20)
SET buttons—Press to adjust time using "▲" or "▼" button in the Menu mode.
TRACKING function—Press "▲" or "▼" to adjust to minimize video 'noise' (lines or dots on screen) in the Play mode. (See page 33)
- 18 EJECT button**—Press to remove tape from TV/VCR.
- 19 +100 button**—Press to select cable channels which are equal or greater than number 100.
- 20 SLEEP button**—Press to activate the sleep function. (See page 30)

INSTALLING THE BATTERIES

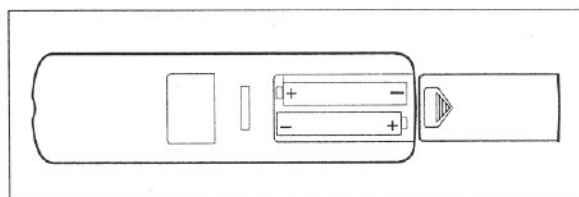
1

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



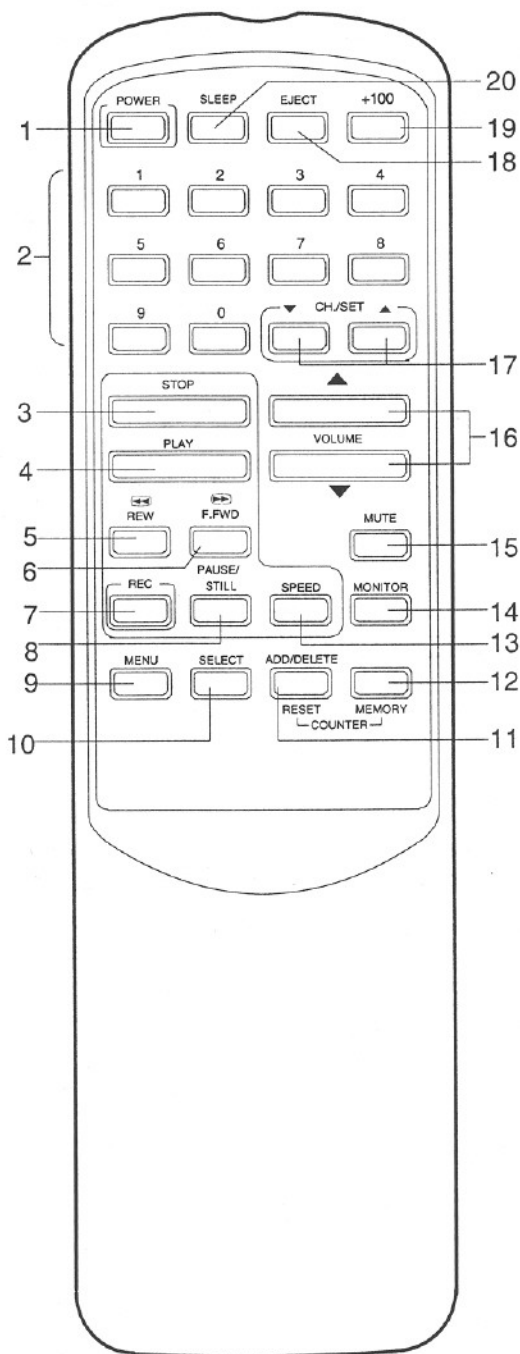
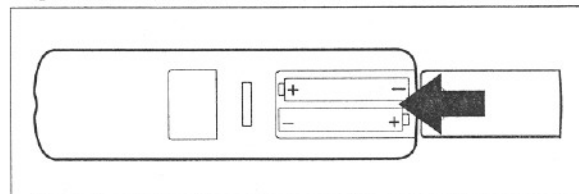
2

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



3

Replace the cover.

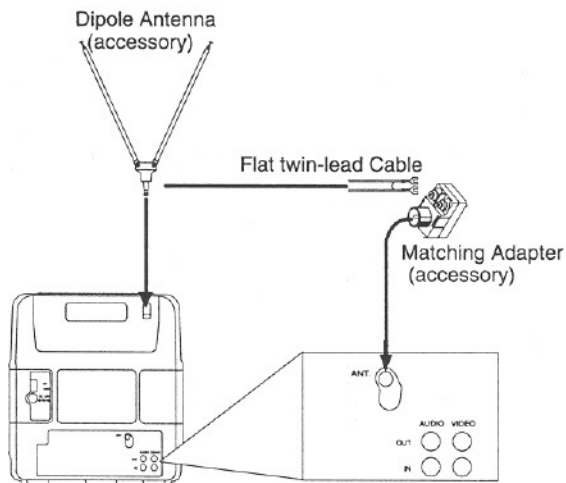


ANTENNA CONNECTIONS

DIPOLE ANTENNA HOOK UP

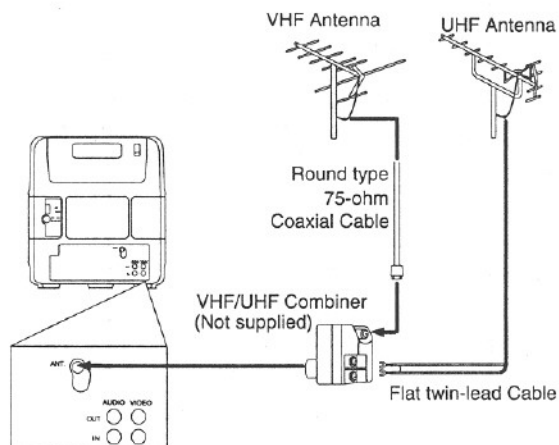
1. Push the stem of the Dipole Antenna (accessory) into the hole for antenna at the back of TV/VCR.
2. Connect the flat twin-lead cable from the Dipole Antenna to the 300/75 ohm Matching Adapter (accessory).
3. Plug the Matching Adapter to ANT terminal of TV/VCR as shown in drawing.

For the best reception, extend the Dipole Antenna and adjust its length and position. (Avoid handling the top section when making adjustments).



OUTDOOR VHF/UHF SEPARATE ANTENNA HOOK UP

1. Connect the 300-ohm flat twin-lead cable from an outdoor UHF antenna to the VHF/UHF Combiner (not supplied).
2. Connect a round type 75 ohm coaxial cable from an outdoor VHF antenna to the VHF/UHF Combiner (not supplied).
3. Plug the VHF/UHF combiner to ANT terminal of TV/VCR as shown in drawing.

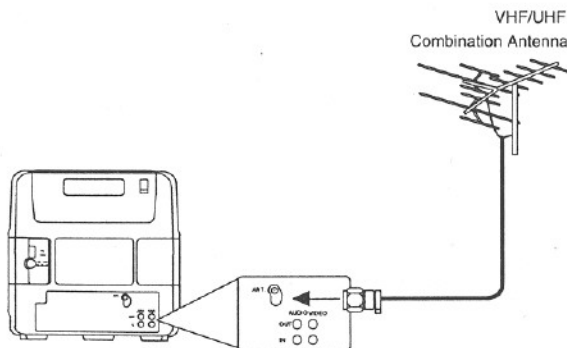


NOTES:

- 1) If it is difficult to get good reception with the indoor antenna, the use of an outdoor antenna is recommended. Before an outdoor antenna is connected to the set, the indoor antenna should be disconnected.
- 2) The optional combiner can be purchased from your local retail electronics store. Consult a salesperson for assistance.

VHF/UHF COMBINED ANTENNA

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

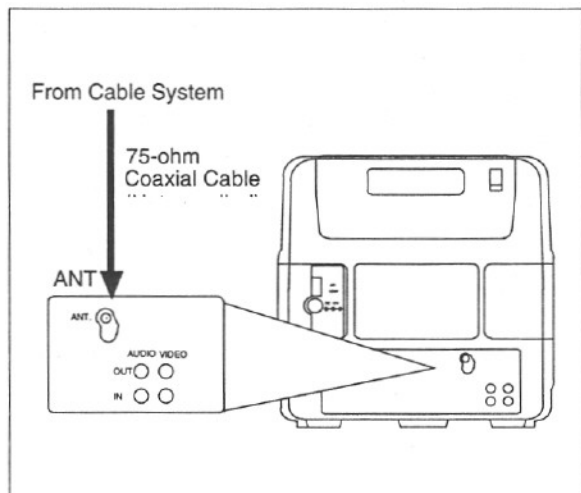


CABLE WITHOUT CONVERTER/DESCRAMBLER BOX

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

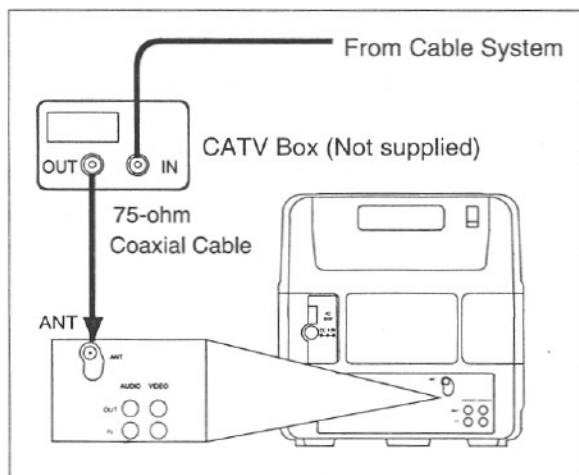
With this connection you, 1) can use your TV/VCR Remote Control to select channels,

2) program one or more unscrambled channels for unattended recording.



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 at the cable company 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

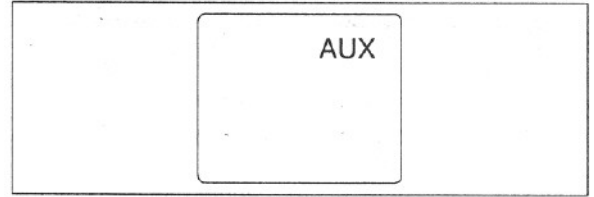
1. Set the TV/VCR channel selector to the output channel of the Cable Converter Box. (Ex. CH3)
2. Select the channel to be recorded or viewed on the Cable Converter Box.

Note 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.

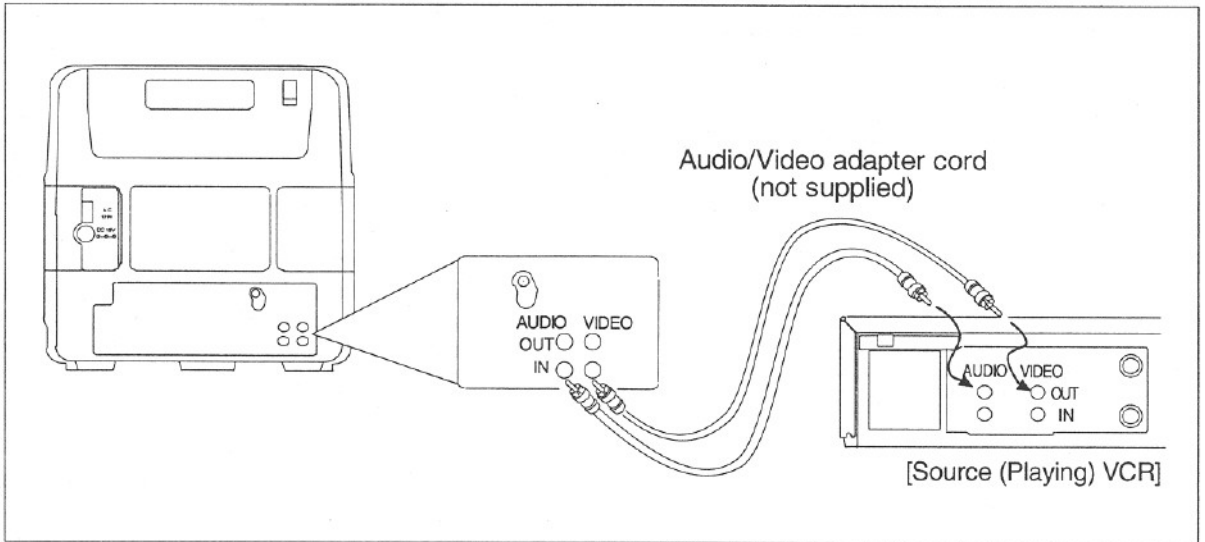
EXTERNAL INPUT MODE

When using an external input signal, connect the player's audio/video output cables to the AUDIO IN, VIDEO IN jacks of your TV/VCR. Then press CH. ▲ 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:



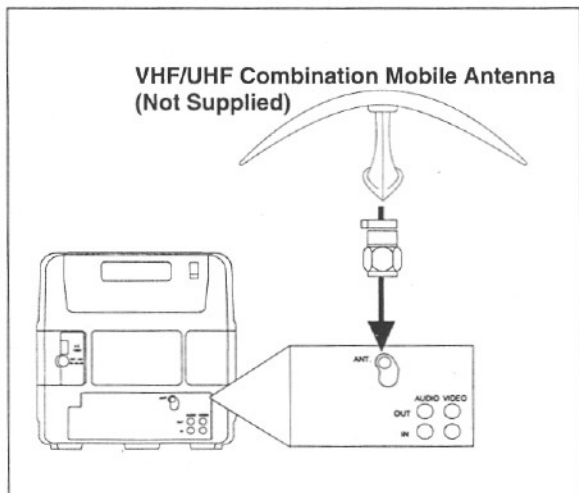
1. Insert a pre-recorded video cassette into the Source (Playing) VCR.
2. Insert a blank video cassette, or one you want to record over, into the TV/VCR's cassette compartment.
3. Press SPEED button on the TV/VCR to select the desired recording speed (**SP**, **LP** or **SLP**).
4. Press CH. ▲ or ▼ button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

MOBILE CONNECTION

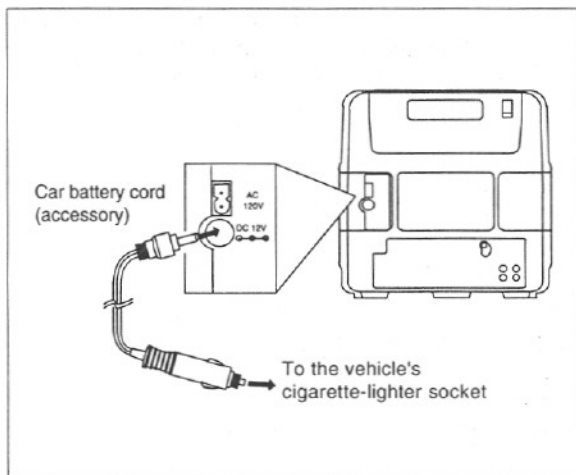
ANTENNA CONNECTION

The supplied indoor antenna is adequate when your vehicle is stationary. For best reception on the road, use a high-quality VHF/UHF mobile TV antenna.



CAR BATTERY CORD CONNECTION

Attach the car battery cord to the DC12V connector on the back of the TV/VCR. Then, connect the other end to your vehicle's cigarette-lighter socket.



NOTES:

- Be sure your vehicle has a 12-volt, negative-ground electrical system.
- Be sure you use only the supplied car battery cord. Using another cord could damage the TV/VCR.
- Be sure the socket is free of ashes and other debris.
- Be sure to push the car battery cord's plug completely into the cigarette-lighter socket.
- Always unplug the car battery from the cigarette-lighter socket before you unplug it from the TV/VCR.
- You must disconnect the car battery cord from the TV/VCR before you can use AC power.
- Be sure to replace fuse with only same type, 5A, 250V.

WARNING:

Driver should never watch the TV/VCR while operating vehicle.

CAUTION:

If you use the TV/VCR with the vehicle's engine off, recharge the vehicle's battery after about every 4 hours of use to prevent it from running down. After you finish using the TV/VCR be sure you unplug the car-battery cord from the cigarette-lighter socket.

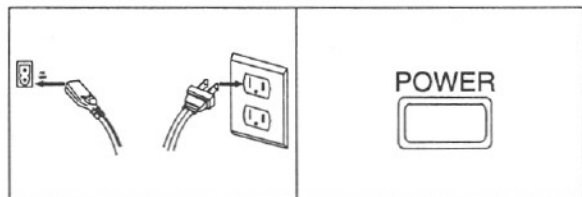
SELECTING LANGUAGE (English or Spanish)

You may select the display on the TV/VCR screen to be either English or Spanish.

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

1

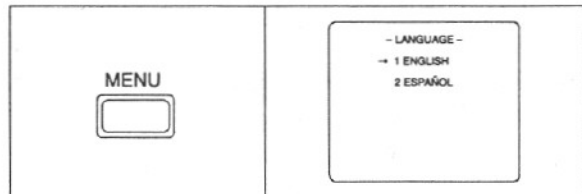
Attach the smaller end of the supplied AC cord to the AC 120V connector on the back of the TV/VCR. Then, plug the other end into a standard AC outlet. Press POWER button to turn on the TV/VCR.



Note: You must disconnect the car battery cord from the TV/VCR before you can use AC power.

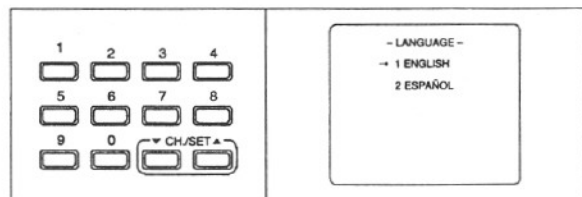
2

Press MENU button on the remote control.



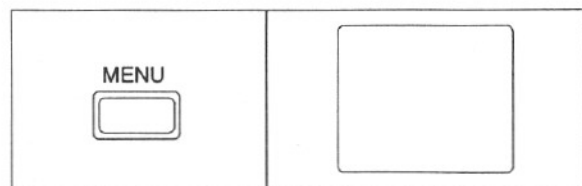
3

Select 1(ENGLISH) or 2(ESPAÑOL=SPANISH) using number button or CH./SET "▲" or "▼" button.



4

Press MENU button to return to TV mode.

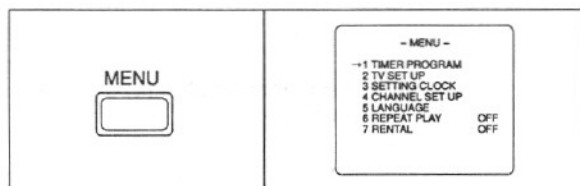


TO CHANGE THE LANGUAGE

If you want change the language on the display, follow the steps below:

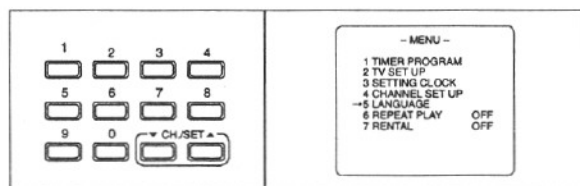
1

Press MENU button on the remote control.



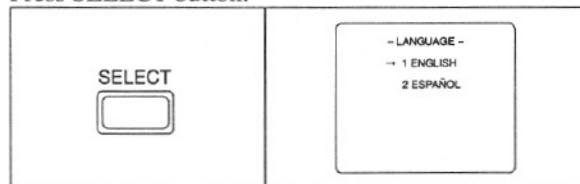
2

Select item 5(LANGUAGE) using number button or CH./SET "▲" or "▼" button.



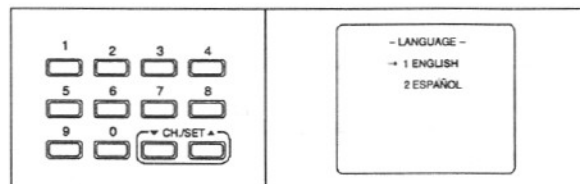
3

Press SELECT button.



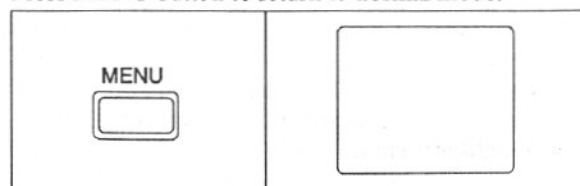
4

Select 1(ENGLISH) or 2(ESPAÑOL=SPANISH) using number button or CH./SET "▲" or "▼" button.



5

Press MENU button to return to normal mode.



SETTING THE CLOCK

Set the clock accurately for proper automatic timer recording.

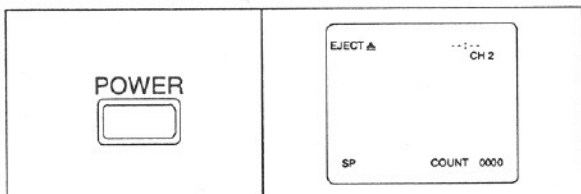
In the example below, the clock is to be set to:

DATE March 1st, 1994
SETTING TIME 5:40PM

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

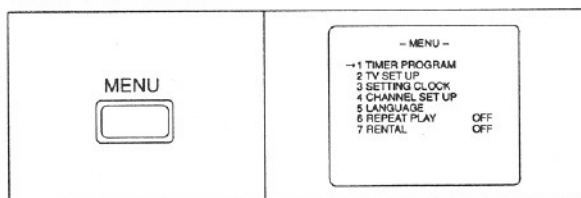
1

Press POWER button to turn on the TV/VCR.



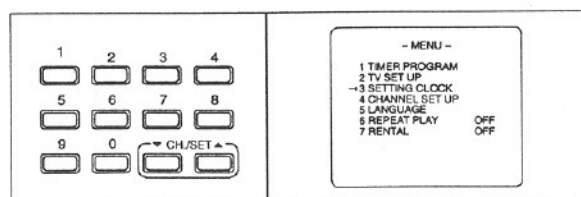
2

Press MENU button. The main menu display appears on the TV/VCR screen.



3

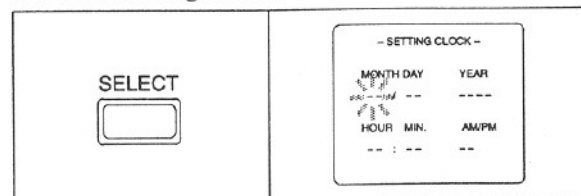
Select item 3 (SETTING CLOCK) using number button or the CH./SET "▲" or "▼" button.



4

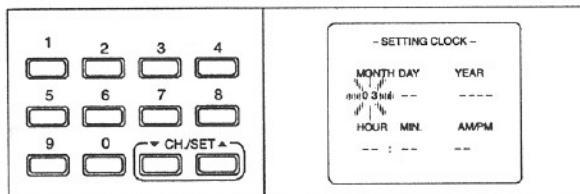
Press SELECT button.

"SETTING CLOCK" appears on the TV/VCR screen. The MONTH digits flash.



5

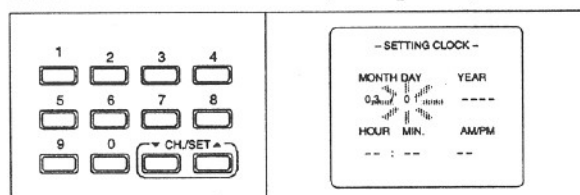
Enter the desired month using number button or the CH./SET "▲" or "▼" button. (Example: 03)



- After 1 second the DAY digits flash.

6

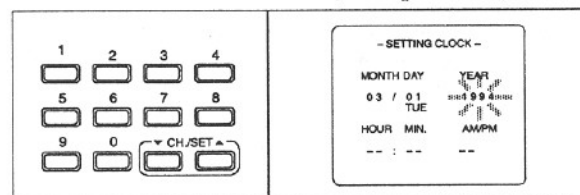
Enter the desired day using number button or the CH./SET "▲" or "▼" button. (Example: 01)



- After 1 second the YEAR digits flash.

7

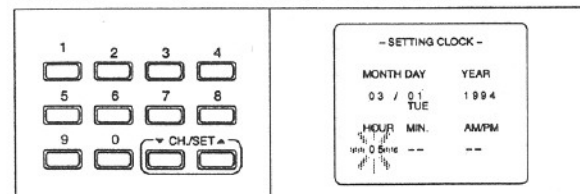
Enter the desired year using number button or the CH./SET "▲" or "▼" button. (Example: 1994)



- After 1 second the HOUR digits flash.

8

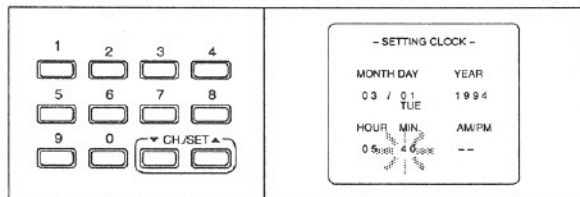
Enter the desired hour using number button or the CH./SET "▲" or "▼" button. (Example: 05)



- After 1 second the MIN. digits flash.

9

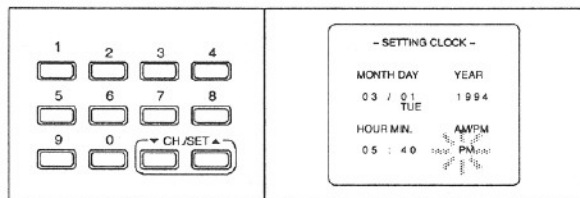
Enter the desired minute using number button or the CH./SET "▲" or "▼" button. (Example: 40)



- After 1 second the AM/PM digits flash.

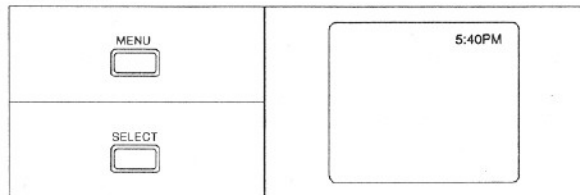
10

Enter 1 to select AM or enter 2 to select PM using number button or the CH./SET "▲" or "▼" button. (Example: 2→PM)

**11**

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 steps [2] to [4], page 15.
- 2) Select desired digit using SELECT button or ADD/DELETE button.
- 3) Enter correct numbers using number button or CH./SET "▲" or "▼" button.
- 4) Press MENU or SELECT button to return to TV mode.

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.

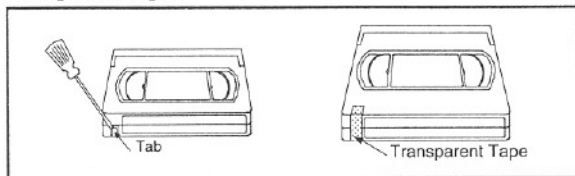
| MODE | CASSETTE | | |
|----------|----------|---------|-------------|
| | T-60 | T-120 | T-160 |
| SP Mode | 1 hour | 2 hours | 2-2/3 hours |
| LP Mode | 2 hours | 4 hours | 5-1/3 hours |
| SLP Mode | 3 hours | 6 hours | 8 hours |

When handling video tapes, take the following precautions:

- Avoid moisture, which can condense on the tape if it is moved from a cold place to a warm 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

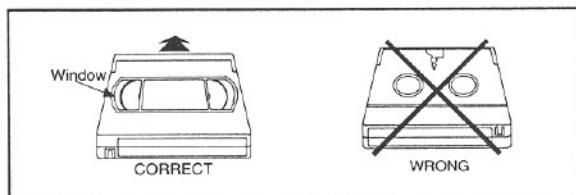
You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with transparent tape.



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.

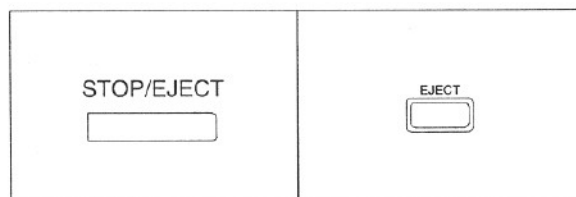
The TV/VCR will automatically turn on when the cassette is properly inserted.



REMOVING A CASSETTE

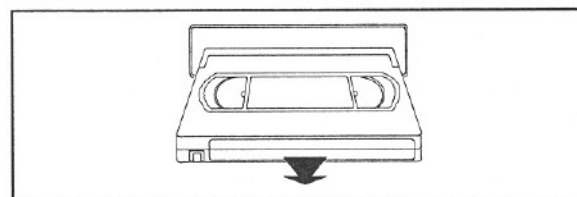
1

Press EJECT button on the TV/VCR or on the remote control unit.

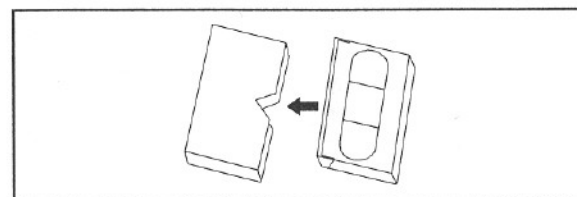


2

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



Store the cassette in its case as shown.



TV/CATV CHANNEL PRESETTING

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

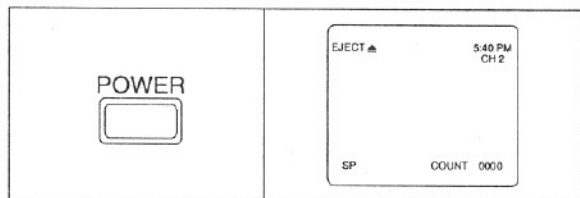
AUTOMATIC CHANNEL MEMORY

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

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

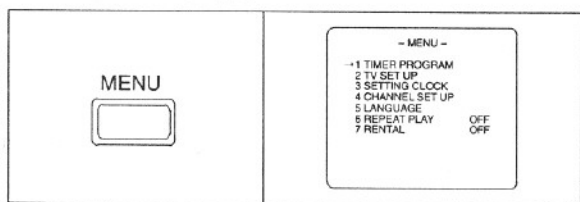
1

Press POWER button to turn on the unit.



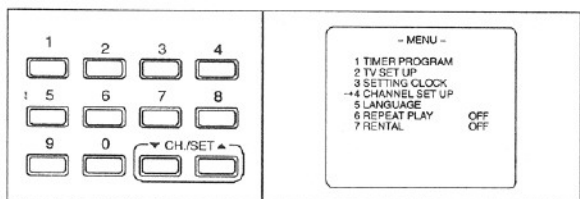
2

Press MENU button. The main menu display appears on the TV/VCR screen.



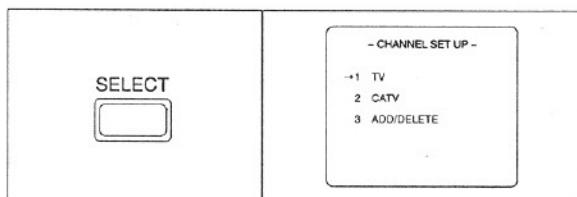
3

Select item 4 (CHANNEL SET UP) using number button or the CH./SET "▲" or "▼" button.



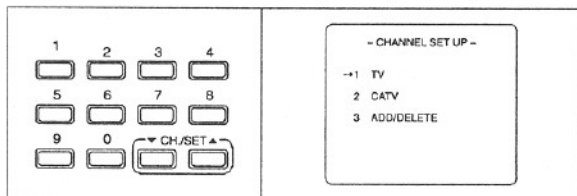
4

Press SELECT button.



5

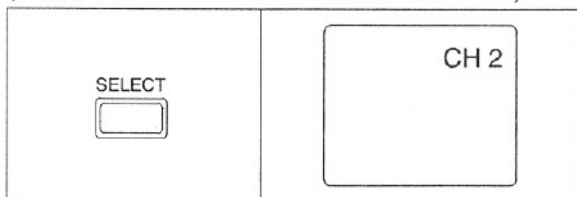
Select 1 (TV) or 2 (CATV) using number button or CH./SET "▲" or "▼" button (Example: TV)



6

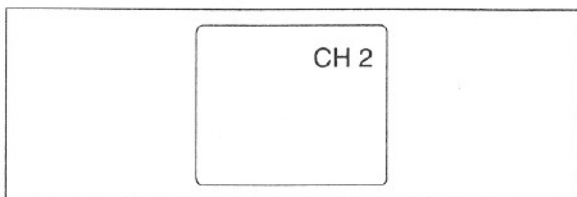
Press SELECT button. The tuner scans and memorizes all the active channels in your area.

(TV mode: from CH2 / CATV mode: from CH1)



7

After scanning, the tuner stops on the lowest memorized channel. (Example: CH2)

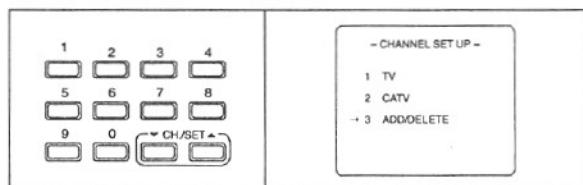


TO DELETE OR ADD PRESET CHANNEL

To add or delete the desired channels. Follow steps [1] to [4] on page 18, then step [5] below.

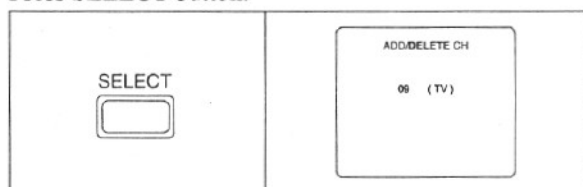
5

Select item 3 (ADD/DELETE) using number button or CH./SET "▲" or "▼" button.



6

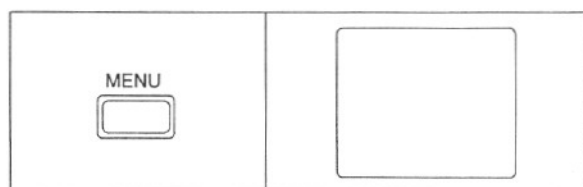
Press SELECT button.



FOLLOW STEPS [7a~8a] OR [7b~8b] TO ADD OR DELETE THE CHANNEL. THEN GO TO STEP [9].

9

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



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

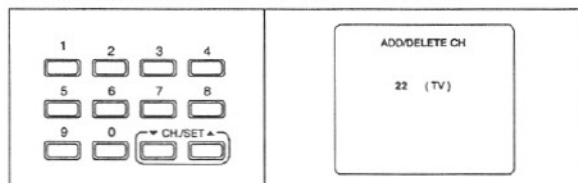
NOTE:

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

DELETING PRESET CHANNEL

7a

Enter the desired channel number using the number button or the CH./SET "▲" or "▼" button.

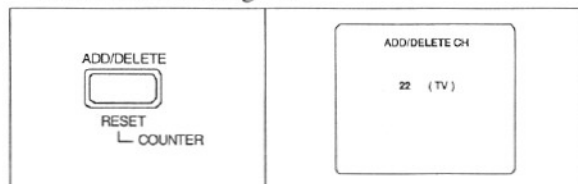


8a

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

NOTES:

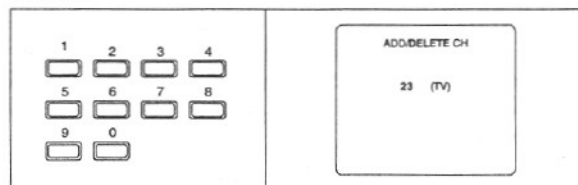
- To delete another channel, repeat step [7a] to [8a].
- If you press ADD/DELETE button again, the channel is memorized again.



ADDING PRESET CHANNEL

7b

Select the desired channel number using the number buttons.

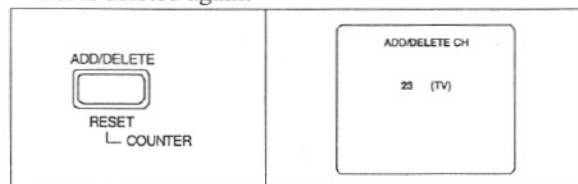


8b

Press ADD/DELETE button. The channel number changes to light blue. The channel is added to the TV/VCR.

NOTES:

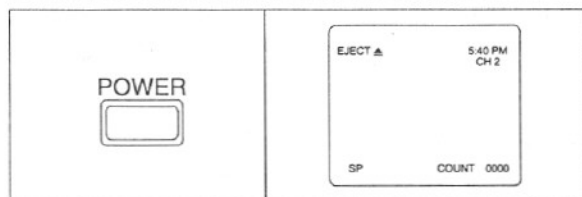
- To add another channel, repeat step [7b] to [8b].
- If you press ADD/DELETE button again, the channel is deleted again.



T.V. OPERATION

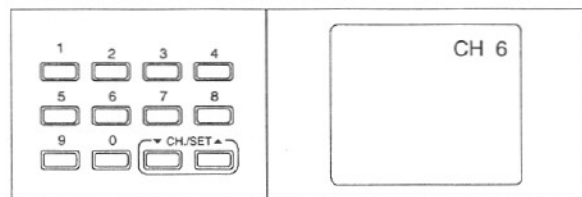
1

Press POWER button to turn on the TV/VCR.



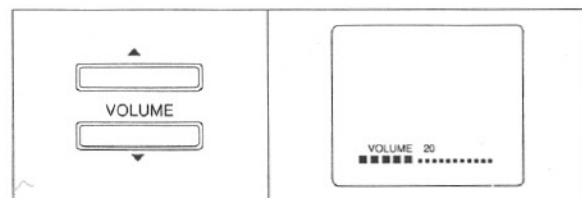
2

Select the desired channel using number button or CH./SET "▲" or "▼" button.



3

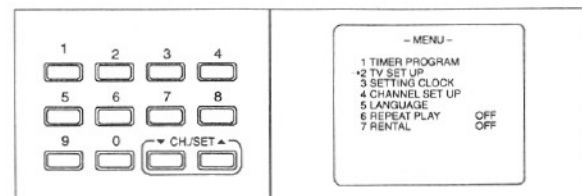
Adjust the VOLUME to desired listening level using the VOLUME "▲" or "▼" button.



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

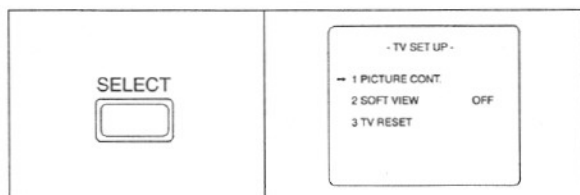
4

Adjust picture controls for a natural looking image. Press MENU button. Select item 2 (TV SET UP) using number button or CH./SET "▲" or "▼" button.



5

Press SELECT button. Select item 1 (PICTURE CONT.) using number button or CH./SET "▲" or "▼" button.



6

Press SELECT button repeatedly until desired control is displayed.

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

7

Adjust picture control using CH./SET "▲" or "▼" button.

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

| | CH./SET ▼ | CH./SET ▲ |
|-----------|------------------------|------------------------|
| 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 |

To set the picture controls to the **SOFT VIEW** position, select item 2 (SOFT VIEW) at step [5]. And press SELECT button repeatedly to select [ON]. This function enables you to adjust picture control to the most suitable position for use with TV GAME.

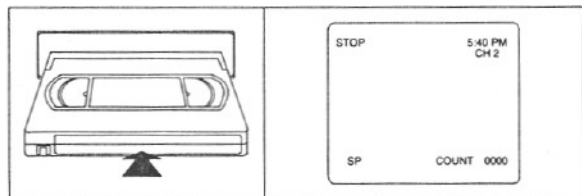
TO RESET THE PICTURE CONTROLS TO THE DEFAULT POSITION, SELECT ITEM 3(TV RESET) AT STEP [5].

VIEWING AND RECORDING THE SAME PROGRAM

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

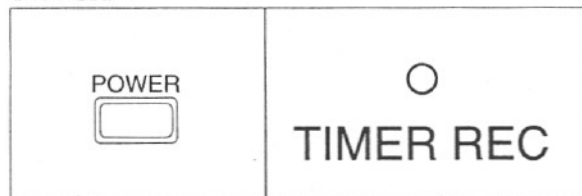
1

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



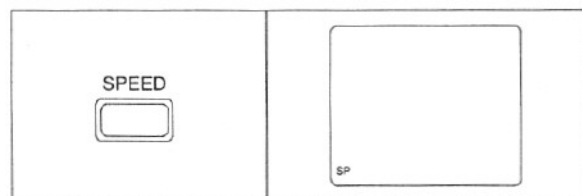
2

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



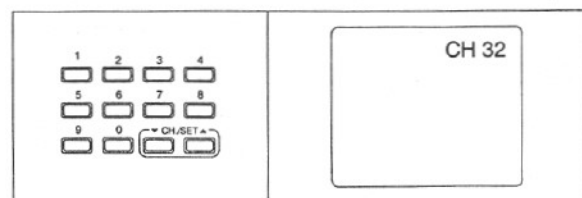
3

Press SPEED button on the remote control repeatedly to select the desired tape speed (SP/LP/SLP). (Example : SP)



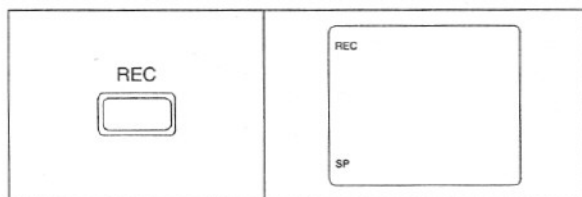
4

Select the program to be recorded by using the number button or the CH./SET "▲" or "▼" button.



5

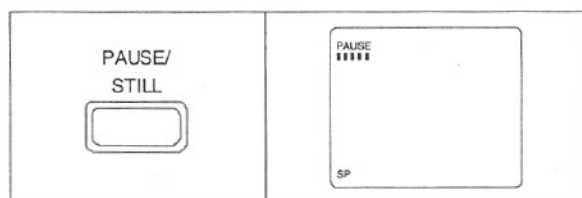
Press REC button.



To skip some material while you are recording:

6

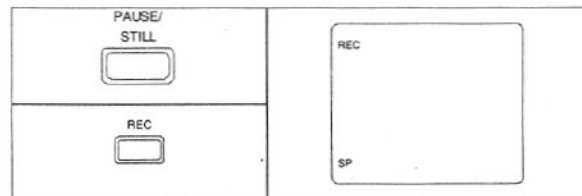
Press PAUSE/STILL button on the remote control to temporarily stop recording.



- If you do not press PAUSE/STILL button again within five minutes, TV/VCR will automatically return to the Recording mode. When in the Pause/Still mode, the screen 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.

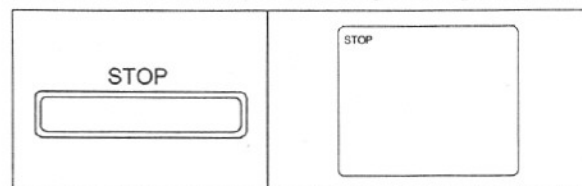
7

Press PAUSE/STILL button or REC button to resume recording.



8

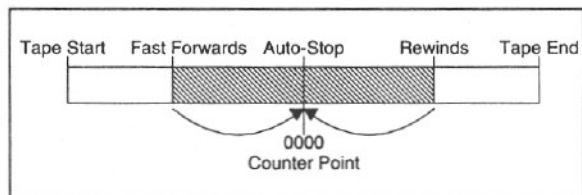
Press STOP button when recording is completed.



COUNTER MEMORY

The Memory can be used during rewind or fast forward to automatically stop the tape when the count reaches a preset approx. 0000 reading.

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

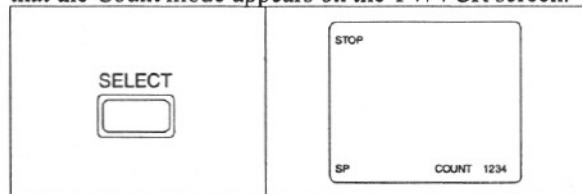


- You must use the remote control unit for the following steps:

1

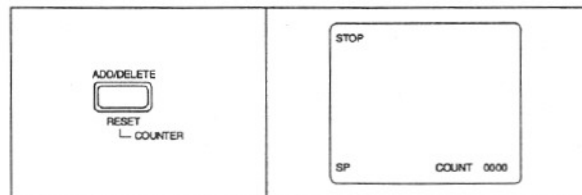
If the count is displayed on the TV/VCR screen, skip step [1].

If the count is not displayed, press SELECT button so that the Count mode appears on the TV/VCR screen.



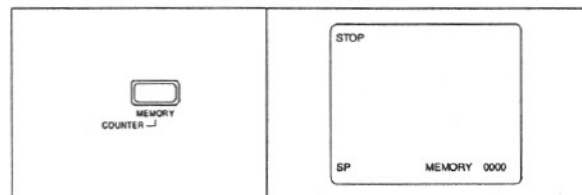
2

Press COUNTER RESET button. The count resets to 0000.



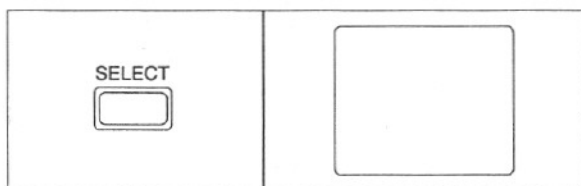
3

Press COUNTER MEMORY button.



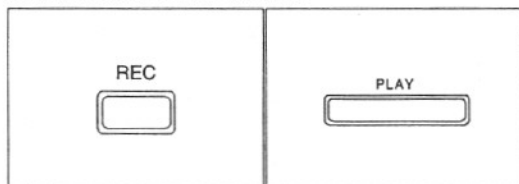
4

Press SELECT button repeatedly until the TV/VCR screen returns to TV mode.



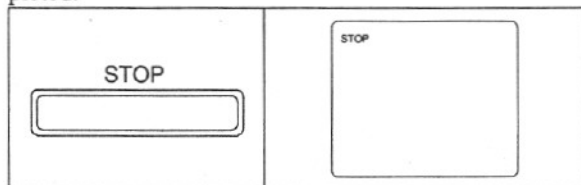
5

Press REC or PLAY button.



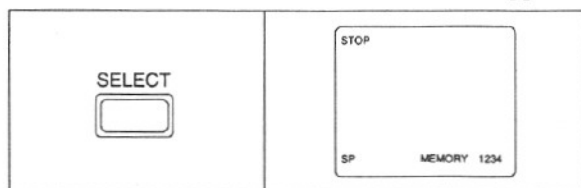
6

Press STOP button when recording or playback is completed.



7

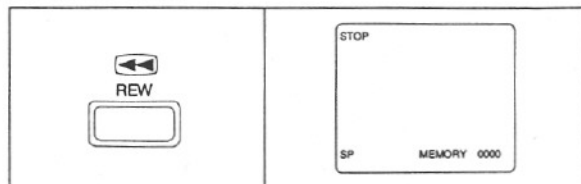
Press SELECT button so that the Count mode appears.



8

Press REW button.

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



AUTOMATIC TIMER RECORDING

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

SETTING THE TIMER PROGRAMS

Be sure the clock is set to the correct time and date before setting the timer.

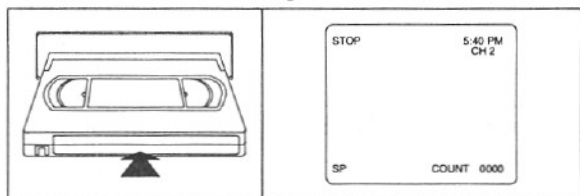
In the example below, the timer is being set to record:

DATE MAY 6th Friday, 1994
 SETTING TIME from 7:30AM to 8:50AM
 CHANNEL CH.61
 TAPE SPEED LP

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

1

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

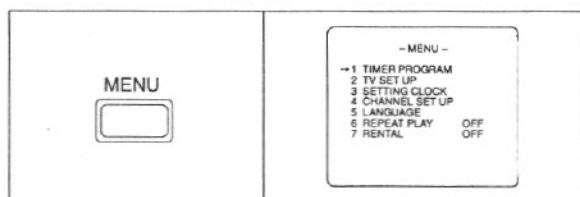


- If necessary, rewind or fast forward the tape to the point you want to start recording.

2

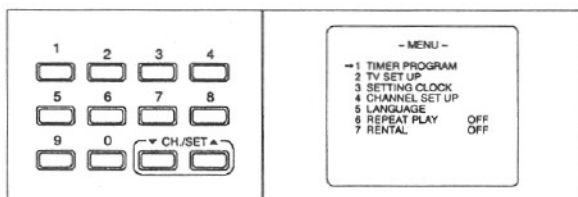
Press MENU button.

The main menu display appears on the TV/VCR screen.



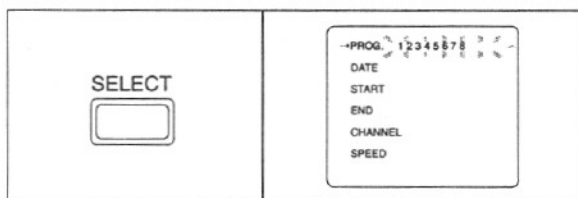
3

Select item 1 (TIMER PROGRAM) using number button or CH./SET "▲" or "▼" button.



4

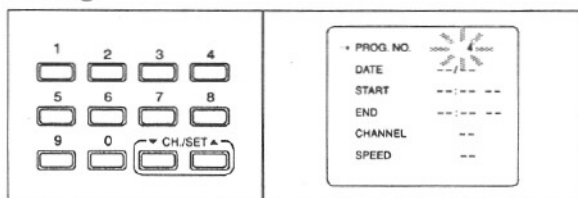
Press SELECT button. The program numbers which are not set will flash.



5

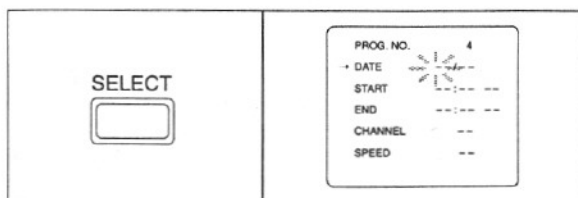
Enter your desired program number using number button or CH./SET "▲" or "▼" button. (Example: 4).

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



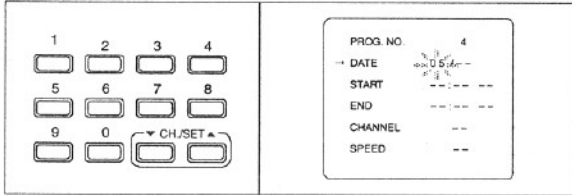
6

Press SELECT button. The MONTH digits flash.



7

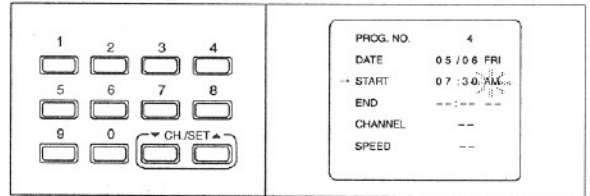
Enter your desired MONTH using number button or CH./SET "▲" or "▼" button. (Example:05).



- After 1 second the day digits flash.

11

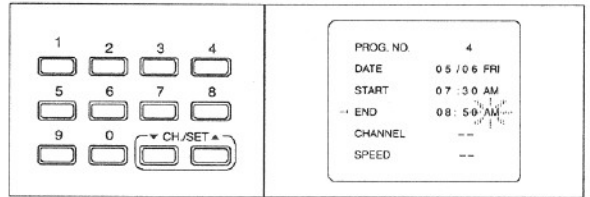
Enter 1 to select AM or enter 2 to select PM using number button or CH./SET "▲" or "▼" button. (Example: 1→AM)



- After 1 second the end time hour digits flash.

12

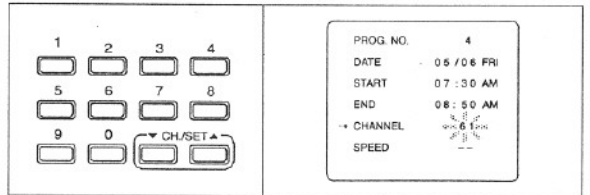
Repeat steps [9]-[11] to set the end time. (Example: 08:50AM)



- After 1 second the channel digits flash.

13

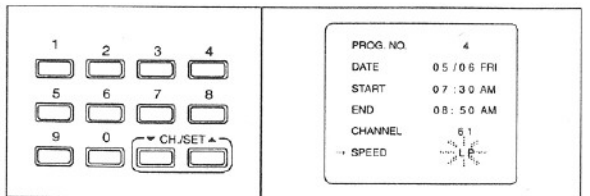
Enter your desired CHANNEL using number button or CH./SET "▲" or "▼" button. (Example: 61)



- After 1 second the tape speed digits flash.

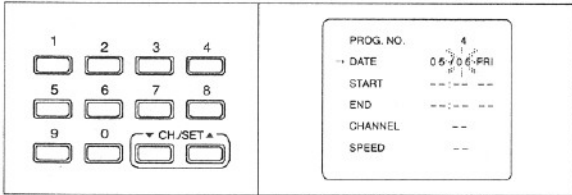
14

Select your desired recording speed. Enter 1 to select SP, enter 2 to select LP or enter 3 to select SLP using number button or CH./SET "▲" or "▼" button. (Example: 2→LP)

**8**

Enter your desired DAY using number button or CH./SET "▲" or "▼" button. (Example:06)

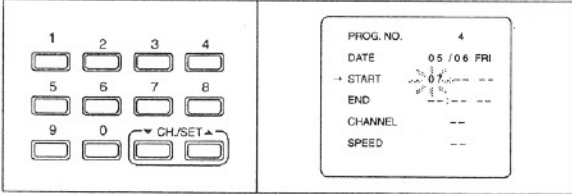
The day of the week changes automatically.



- After 1 second the start time hour digits flash.

9

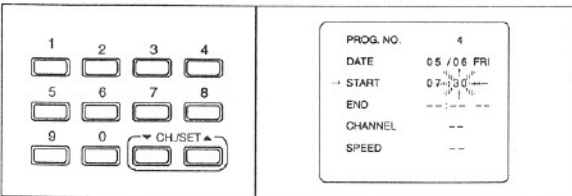
Enter your desired HOUR using number button or CH./SET "▲" or "▼" button. (Example:07)



- After 1 second the start time minute digits flash.

10

Enter your desired MINUTE using number button or CH./SET "▲" or "▼" button. (Example:30)

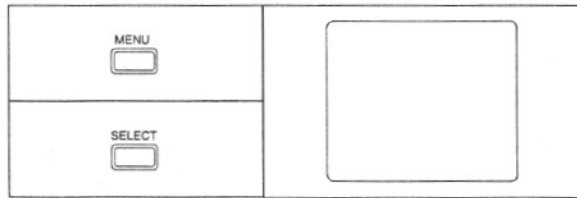


- After 1 second the AM/PM indicator flashes.

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].

**16**

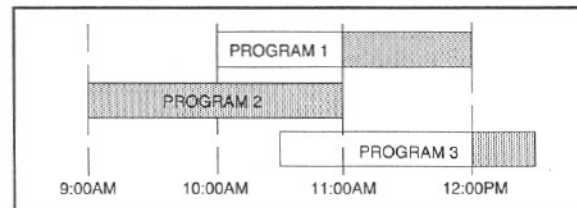
Press POWER button on the TV/VCR or on the remote control unit. The TIMER REC indicator lights up.



While 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.

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



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

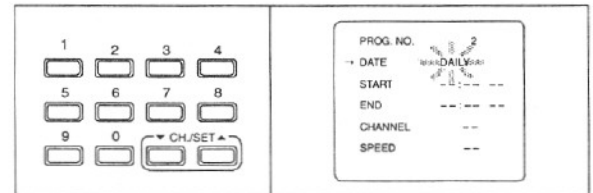
9:00AM - 11:00AM for PROGRAM 2
 11:00AM - 12:00PM for PROGRAM 1
 12:00PM - for PROGRAM 3

DAILY PROGRAM (MONDAY ~ SUNDAY)

To record a program at the same time on the same channel every day, follow steps [1] to [6] on page 23 then continue with step [7a] below.

7a

Press CH./SET "▲" or "▼" repeatedly or enter "00" using number button. "DAILY" appears on the TV/VCR screen.



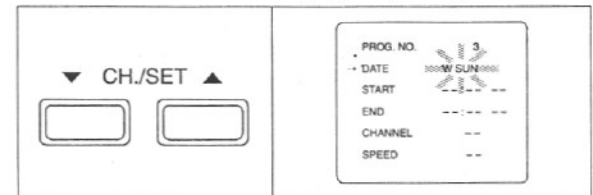
After 1 second, continue with step [9] on page 24 onwards.

WEEKLY PROGRAM

To record a program at the same time on the same channel every week, follow steps [1] to [6] on page 23 then step [7b] below.

7b

Press CH./SET "▲" or "▼" button repeatedly until desired date of the week is displayed. (Example: W SUN)



After 1 second, continue with step [9] on page 24 onwards.

TO CORRECT OR DELETE A PROGRAM

- Press DELETE button to go back one step during steps [6]~[14].
- If you finished setting program, press SELECT button repeatedly (or press DELETE button to go back one step) until your desired digit flashes. Reset program during steps [6]~[14].

You may cancel the entire program by using DELETE button at step [5].

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.

- Power must be on to set Today Timer.
- Clock must be set to the correct time before setting the timer.
- Today Timer Recording is memorized to program number 8.

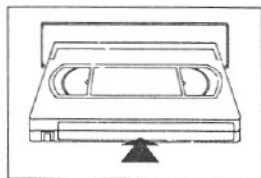
In the example below, the Today Timer is being set to record:

SETTING TIME from 10:00PM to 11:00PM
 CHANNEL CH10
 TAPE SPEED SP
 Current time is 8:00PM.

NOTE: This function is not operative using the remote control.

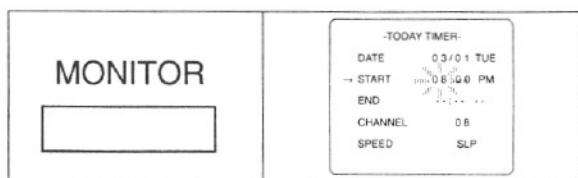
1

Insert a cassette with erase-prevention tab intact. If necessary, rewind or fast forward the tape to the point at which you want to begin recording.



2

Press MONITOR button on the TV/VCR.

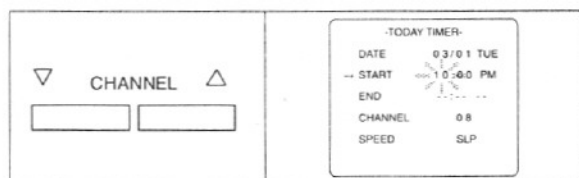


NOTE:

- 1) Button selections for steps [2]~[10] should be done within 2 seconds, otherwise input mode will forward to next mode.
- 2) You may forward to next step when you press VOLUME "▲" button within 2 second after your selections.
- 3) When you press VOLUME "▼" button, all selections will be erased and TV/VCR screen will return to initial display (step [2]).

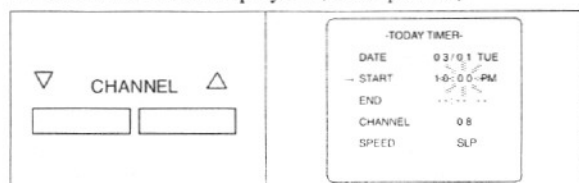
3

Press CHANNEL "▲" or "▼" button until your desired start time hour is displayed. (Example: 10)



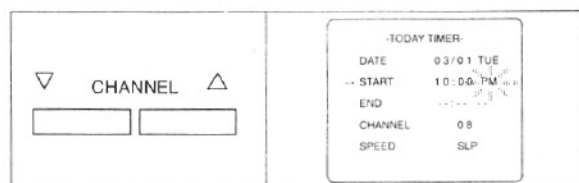
4

Press CHANNEL "▲" or "▼" button until your desired start time minute is displayed. (Example: 00)



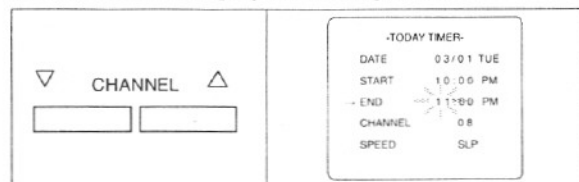
5

Press CHANNEL "▲" or "▼" button until AM or PM is displayed. (Example: PM)



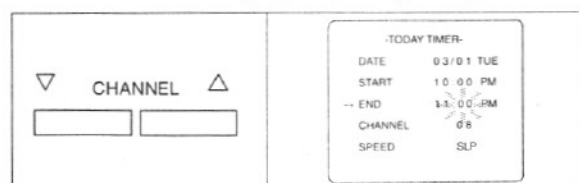
6

Press CHANNEL "▲" or "▼" button until your desired end time hour is displayed. (Example: 11)



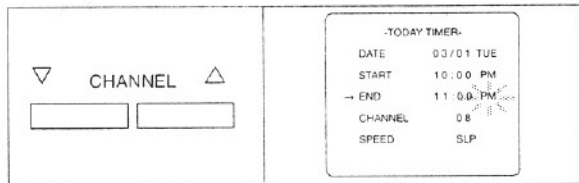
7

Press CHANNEL "▲" or "▼" button until your desired end time minute is displayed. (Example: 00)

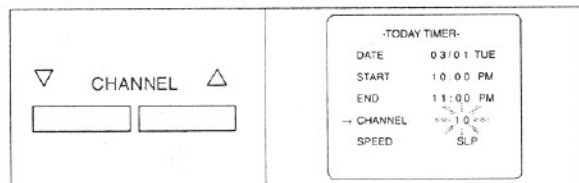


8

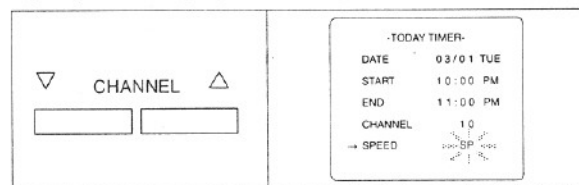
Press CHANNEL "▲" or "▼" button until AM or PM is displayed. (Example: PM)

**9**

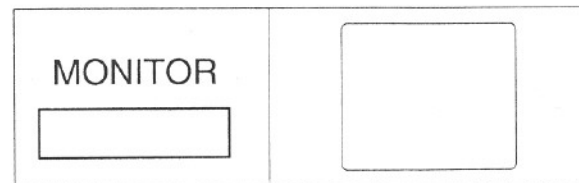
Press CHANNEL "▲" or "▼" button until your desired channel number is displayed. (Example: 10)

**10**

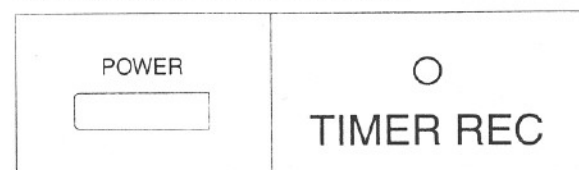
Press CHANNEL "▲" or "▼" button until your desired tape speed is displayed. (Example: SP)

**11**

Press MONITOR button.

**12**

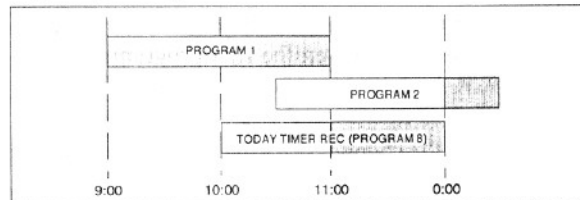
Press POWER button to set Today Timer Recording. The TIMER REC indicator lights up.



While 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.

When the programs overlap, Today Timer Recording has priority.



If you program as per the illustration the timer recording would be carried out as follows.

| | |
|--------------|---------------------------------------|
| 9:00 - 11:00 | for PROGRAM 1 |
| 11:00 - 0:00 | for Today Timer Recording (PROGRAM 8) |
| 0:00 - | for PROGRAM 2 |

TO CANCEL A TODAY TIMER RECORDING WHILE IN PROGRESS

Press STOP/EJECT button on the TV/VCR. The program will be canceled and the TV/VCR screen returns to TV mode.



CHECKING THE START/END TIME

To check the start/end time and channel number, follow steps 1) ~ 5) below.

- 1) Press MENU button on the remote control.
- 2) Select item 1(TIMER PROGRAM) using number button or CH./SET "▲" or "▼" button.
- 3) Press SELECT button.
- 4) Select program number 8 using number button or CH./SET "▲" or "▼" button. "TODAY TIMER" appears on the TV/VCR screen.
- 5) Press MENU button. The TV/VCR screen returns to TV mode.

HINTS ON AUTOMATIC TIMER RECORDING

- If there a power failure or the TV/VCR is unplugged for more than 3 seconds, the clock and timer settings will be lost. At this time, TV/VCR screen will automatically return to the Clock Set mode when you choose the Program Set mode.
 - If two timer programs overlap, the one that starts first has priority. When the first program ends, the TV/VCR switches to record the remainder of the second program.
 - Make sure the channel you want to record is properly set in advance.
 - The erase-prevention tab on the cassette must be in place (or you must put tape over the hole).
NOTE: A cassette without erase-prevention tab will be ejected when in the Timer Record mode.
 - It is not necessary to press REC button for timer recording.
 - Recording begins automatically at the set of the Start time.
 - If you are recording using the Automatic Timer mode, you may not operate the unit manually, but, you may still stop the recording by using STOP/EJECT button on the TV/VCR.
- Note:** STOP button on the remote control unit will not function in this mode.
- 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.
 - If a tape is not inserted or the erasure protection tab is removed, the TIMER REC indicator flashes and automatic timer recording cannot occur. Press POWER button to stop the flashing. Then, insert a tape with the erase-protection tab intact.

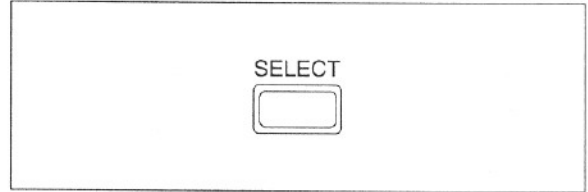
CHECKING TIMER PROGRAMS

To check a timer program that is to be recorded while the TV/VCR is in the Timer Record mode:

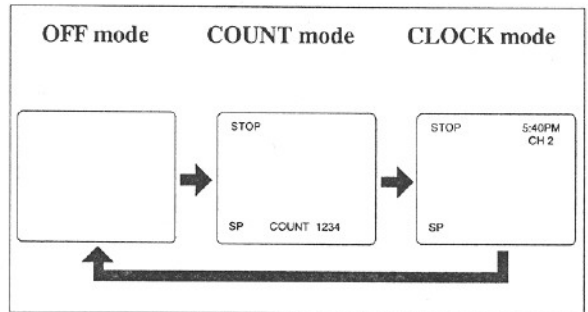
- 1) Press POWER button so that TIMER REC indicator goes off.
- 2) Follow instructions in steps [2] to [5] on page 23. Information which was set for programming will now appear.

CHECKING THE COUNT, CLOCK AND CHANNEL NUMBER

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



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



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

OTR (ONE TOUCH RECORDING)

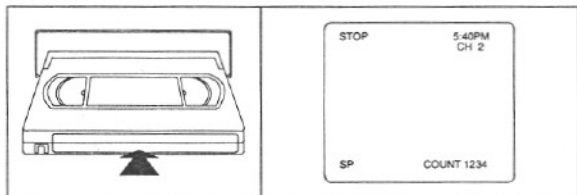
The One Touch Recording function enables you to record a program simply by using OTR button on the TV/VCR.

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.

1

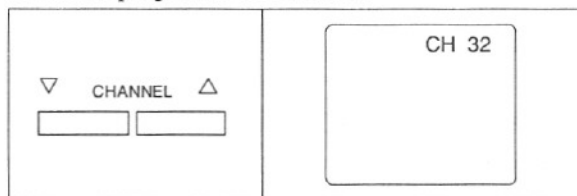
Insert a cassette with erase-prevention tab intact.

The unit will turn on automatically.



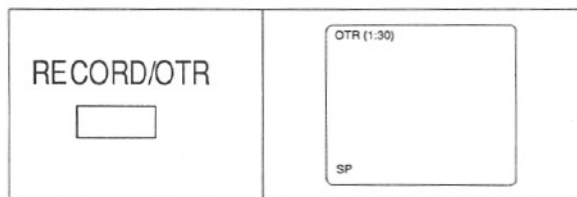
2

Select the program to be recorded.



3

Press RECORD/OTR button on the TV/VCR.



(Example: 4 pushes for 90 minutes)

Recording starts immediately when the RECORD/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 | 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 | NORMAL REC MODE | |

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

NOTES:

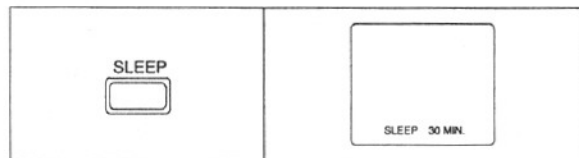
- When you press OTR button, you will extend recording time by 30 minutes at a time up to 8-hours (or to the end of the tape).
- To stop the OTR operation, press STOP button.
- When OTR button is pushed 18 times the TV/VCR will record continuously until the end of the tape.
- The recording length time 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 at the beginning, is 8 hours using T-160 (or 6 hours using T-120).

SETTING THE SLEEP TIMER

The sleep timer function enables you to turn off the TV/VCR without using the POWER button after a desired period. **You must use the remote control unit for the following steps:**

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

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

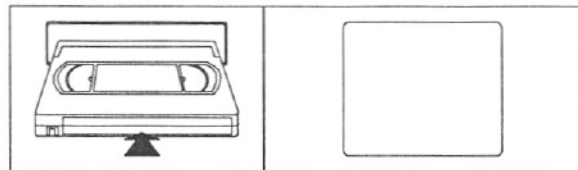


| | SLEEP TIME | DISPLAY |
|----------|-------------|----------|
| 1 push | 0 minute | 0 MIN. |
| 2 pushes | 30 minutes | 30 MIN. |
| 3 pushes | 60 minutes | 60 MIN. |
| 4 pushes | 90 minutes | 90 MIN. |
| 5 pushes | 120 minutes | 120 MIN. |
| 6 pushes | 0 minute | 0 MIN. |

PLAYBACK

1

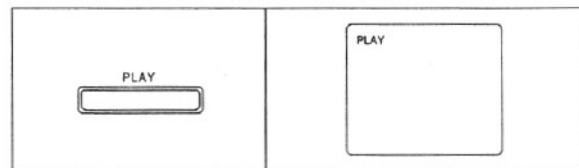
When a tape is inserted, the unit will turn on automatically.



NOTE: If the erase-protection tab has been removed, the TV/VCR will start playback automatically.

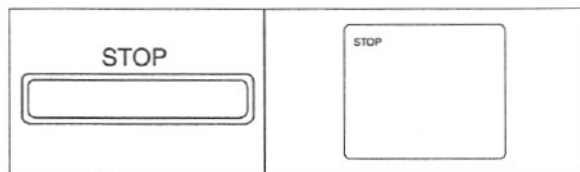
2

If playback does not begin automatically, press PLAY button.



3

Press STOP button when playback is completed.

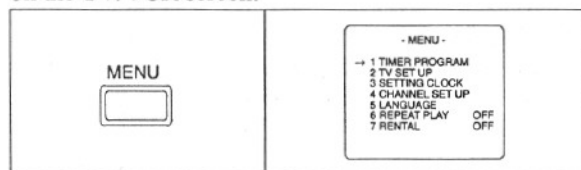


AUTO REPEAT PLAYBACK

The TV/VCR has an auto repeat function that allows you to repeat a tape indefinitely without using the PLAY button. **Before playback, follow steps below. You must use the remote control unit for the following steps:**

1

Press MENU button. The main menu display appears on the TV/VCR screen.



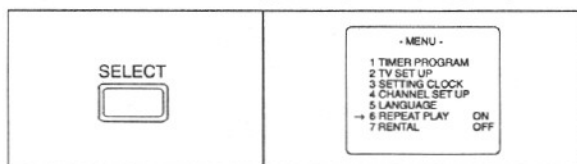
2

Select item 6 (REPEAT PLAY) using number buttons or CH./SET "▲" or "▼" button.



3

Press SELECT button repeatedly to select [ON].



- If the tape is inserted, repeat playback will start automatically. "REPEAT PLAY ►" appears.

4

If the tape is not inserted, press MENU button to return to TV mode and begin playback.

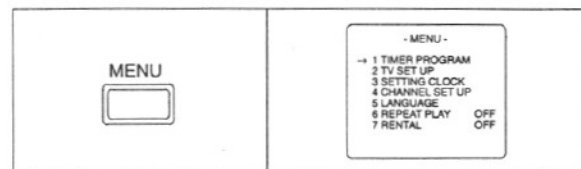
- Once you select the Repeat Play mode, it stays in effect even after you turn off the TV/VCR.
- If the Counter Memory is activated, auto repeat will not function.
- To exit the Repeat Play mode, repeat steps [1] and [2]. Then, follow step [3], but select [OFF] instead of [ON] for normal playback.
- If the Rental Play function is set ON, the "RENTAL PLAY ►" display has priority.

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:**

1

Press MENU button on the remote control unit.



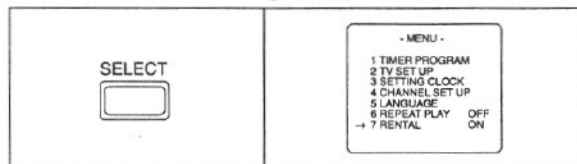
2

Select item 7 (RENTAL) using number button or CH./SET "▲" or "▼" button.



3

Press SELECT button repeatedly to select [ON].



4

Press MENU button.

- Once you select the Rental Play mode, it stays in effect even after you turn off the TV/VCR.
- To exit the Rental Play mode, repeat steps [1] to [2]. Then, follow step [3], but select [OFF] for normal playback.

SPECIAL FEATURES

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:

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

When you wish to view the tape in normal speed, simply press PLAY button.

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

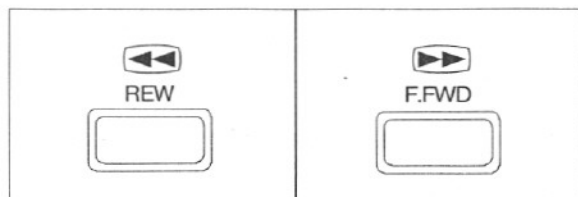
SUPER HIGH SPEED SEARCH (LP/SLP MODE)

For Visual Search in super high speed:

- 1) Press either F.FWD or REW button while the unit is in the Play mode.
- 2) Release button.
- 3) Depress it again. The unit will now search in super high speed.

For normal playback simply press PLAY button.

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



STILL FRAME 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 scene. (Tapes only recorded in SLP mode will show a clear picture.)

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.

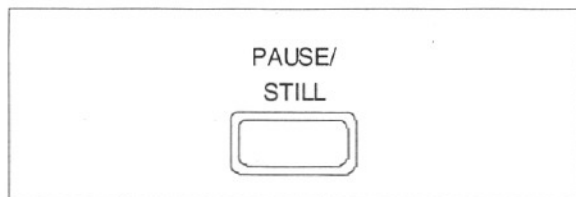
NOISE CANCELLING

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

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

If the tape was originally recorded in the SP or LP mode, the still picture will, in addition to the "noise bars", be black and white.

THIS IS NOT A FAULT OF THE MACHINE BUT MERELY A BY-PRODUCT OF THE TECHNOLOGY INVOLVED IN PRODUCING A TV/VCR WITH THE LP 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 0000 counter reading if the memory function is activated), eject, and the TV/VCR turns off.

NOTES:

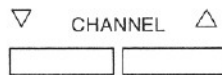
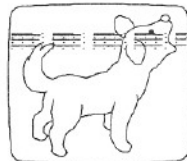
- 1) This function is operative when Auto Repeat is set to the [OFF] position.
- 2) The tape will not auto-rewind during timer recording or One Touch Recording.
- 3) When the tape is rewound to the preset memory position, the tape will not eject and TV/VCR will not turn off.

TRACKING ADJUSTMENT

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 CHANNEL "▲" or "▼" button until the streaks disappear.

To return tracking to the center position:

Press both CHANNEL "▲" and "▼" buttons at the same time. (This function is operative only by using the buttons on TV/VCR.)



TV/VCR

Remote control

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. | <ul style="list-style-type: none">● AC Power cord is not connected.● DC battery car cord is not connected while TV/VCR is installed in vehicle.● Fuse in car battery cord is blown.● POWER button is set to OFF. | <ul style="list-style-type: none">● Connect AC power cord to AC outlet.● Connect battery cord to vehicle's cigarette lighter socket and to 12V DC jack on back of TV/VCR.● Replace with 5A, 250V fuse.● Set the POWER button to ON. |
| No picture and sound. | <ul style="list-style-type: none">● TV/VCR is not plugged into an active AC outlet.● Antenna is not connected.● No channel in memory. | <ul style="list-style-type: none">● Plug power cord into an active AC outlet.● Check antenna connection.● Program tuner's memory. |
| No picture or poor picture on TV/VCR. | <ul style="list-style-type: none">● Direction or condition of antenna is not adequate.● Picture control is not adequate. | <ul style="list-style-type: none">● Adjust direction or replace antenna.● Adjust picture controls. |
| No sound or poor sound. | <ul style="list-style-type: none">● Volume control on remote control unit or main unit is in minimum position.● MUTE button on the remote control unit is in the ON position. | <ul style="list-style-type: none">● Adjust volume control on remote control unit or set.● Press MUTE button. |
| Timer recording is not possible. | <ul style="list-style-type: none">● The timer recording is set incorrectly.● The timer recording is not set to ON.● Clock is not set correctly. | <ul style="list-style-type: none">● Set the timer recording correctly.● Set the timer recording to ON.● Follow directions for setting clock. |
| Cannot go into record mode. | <ul style="list-style-type: none">● The erase-prevention tab on cassette is missing. | <ul style="list-style-type: none">● Place transparent tape over missing erase-prevention tab. |
| Playback picture is partially noisy. | <ul style="list-style-type: none">● The TRACKING control is not set correctly. | <ul style="list-style-type: none">● Adjust TRACKING control for better picture. |
| Noise in picture on playback. | <ul style="list-style-type: none">● Video heads are dirty. | <ul style="list-style-type: none">● Head cleaning is necessary, consult the nearest Funai Service Center. |
| No operation by infrared Remote Control. | <ul style="list-style-type: none">● No power to TV/VCR.● Weak batteries. | <ul style="list-style-type: none">● Make sure the AC cord is connected to an AC outlet.● Check the batteries in infrared Remote Control. |

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 Authorized 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 Authorized Service Center for servicing.

SPECIFICATIONS

GENERAL SPECIFICATIONS

| | |
|---------------------|--|
| CRT | : 9 inch in-line gun, 90° deflection tube |
| Television system | : NTSC-M |
| Recording system | : Rotary two-head helical scan system |
| Tape width | : 1/2 inch (12.65mm) |
| Tape speed | |
| SP | : 1-5/16" (33.35mm)/sec. |
| LP | : 21/32" (16.67mm)/sec. |
| SLP | : 7/16" (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 |
| Audio/Video input | RCA connector × 2 |
| Audio /Video output | RCA connector × 2 |

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 DC12V |
| Power consumption | : 75W (AC cord) 60W (DC cord) |
| Dimensions | : H : 12-1/4" (312mm) W : 11 15/16" (288mm) D : 12-7/8" (327mm) |
| Weight | : 20.9 lbs (9.5 kg) |
| Accessories | : Remote Control 2 "AA" Batteries Dipole Antenna Matching Adaptor Car Battery Cord AC Cord Owner's Manual |

- Design and specifications are subject to change without notice.

CABLE CHANNEL DESIGNATIONS

This model is capable of receiving 125 cable channels. The channels are displayed as 1 ~ 125. Cable companies often designate the other channels with letters or letter-number combinations. Please check with your local cable company. The following is a chart of common cable channel designations.

| | | | | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CATV Channel | 5A | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | A | B |
| TV Display | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| CATV Channel | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
| TV Display | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| CATV Channel | R | S | T | U | V | W | W+1 | W+2 | W+3 | W+4 | W+5 | W+6 | W+7 | W+8 | W+9 |
| TV Display | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| CATV Channel | W+10 | W+11 | W+12 | W+13 | W+14 | W+15 | W+16 | W+17 | W+18 | W+19 | W+20 | W+21 | W+22 | W+23 | W+24 |
| 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 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.

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

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

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

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

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

IMPORTANT
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FUNAI CORP. R

For information c

LIMITED WARRANTY RECONDITIONED PRODUCT

This unit has been reconditioned to meet FUNAI/SYMPHONIC'S original specifications or electronic performance, and its performance is warranted as specified herein. This warranty does not apply to the cosmetic appearance.

FUNAI CORPORATION

New Jersey Corporate Headquarters & Factory Service Center
100 North Street
Teterboro, N.J. 07608

Phone 201-288-2666 (Eastern Time 9:00AM - 4:30PM)

Important: When you return for service to FUNAI FACTORY SERVICE CENTER, please call for RETURN authorization prior to shipping.

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