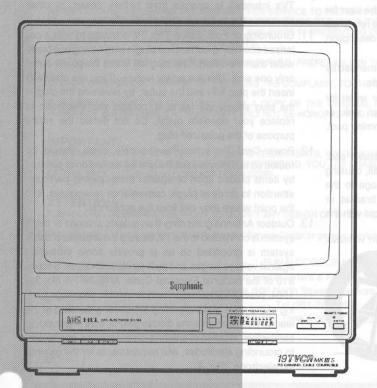
# OWNER'S MANUAL

## Symphonic

19" COLOR TV/VCR COMBINATION

VHS

19TVCR MKIIIS



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Please read before using this equipment

## WARNING:

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



## CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



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



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



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

## "IMPORTANT SAFEGUARDS"

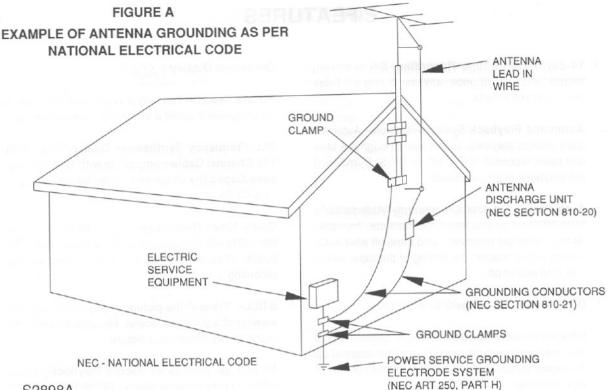
- Read instructions-All the safety and operating instructions should be read before the appliance is operated.
- Retain Instructions-The safety and operating instructions should be retained for future reference.
- Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
- Follow Instructions-All operating and use instructions should be followed.
- Cleaning-Unplug TV 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.
- Water and Moisture-Do not use this TV near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
- 8. Accessories-Do not place this TV on an unstable cart, stand, tripod, bracket, or table. The TV may fall, causing serious injury to someone, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the

TV. Any mounting of the appliance should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING



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



- S2898A
- 14. Lightning-For added protection for this TV receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the TV due to lightning and power-line surges.
- 15. Power Lines-An outside antenna system should not be located in the vicinity of overhead power lines or other electric light of power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- 16. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
- 17. Object and Liquid Entry-Never push objects of any kind into this TV through opening as they may touch dangerous voltage points or shortout parts that could result in a fire or electric shock. Never spill liquid of any kind on the TV.
- 18. Servicing-Do not attempt to service this TV yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 19. Damage Requiring Service-Unplug this TV from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the powersupply cord or plug is damaged or trayed.
- b. If liquid has been spilled, or objects have fallen into the TV.
- c. If the TV has been exposed to rain or water.
- d. If the TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to its normal operation.
- e. If the TV has been dropped or the cabinet has been damaged.
- f. When the TV exhibits a distinct change in performance-this indicates a need for service.
- 20. Replacement Parts-When replacement parts are required, be sure the service technician had used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, injury to persons or other hazards.
- 21. Safety Check-Upon completion of any service or repairs to this TV, ask the service technician to perform routine safety checks to determine that the TV is in proper operating condition.

## **FEATURES**

- \* 14-day, 6-events Timer Recording Set, to turn on, record, and turn off once, anytime during a 14-day period up to 6 events.
- \* Automatic Playback Speed Selection— Automatically selects playback speed even though the tape has been recorded in SP, LP, or EP(SLP) mode, it will playback at proper speed.
- \* Auto Power On and Off system— Automatically turns VCR on as you insert the cassette, then play (Note: safety tab removed), and turns off after autorewind, when reaches beginning of the tape, ejects and shut power off.
- \* DEW Sensor System with Dew Indicator
- \* Infrared Remote Control— You can operate all the tape transport controls, and change the channel up and down volume up and down from the comfort of your armchair.
- \* Input Select Switch— Use the INPUT SELECT switch to control the recorded signals and the AU-DIO/VIDEO out signals.

The effects of the two INPUT SELECT settings are shown in the chart.

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9/1 Ine cabinet has been	UT SELECT	
	o paddoin Head s	

Switch Setting	Video Source	Audio Source		
EXT	VIDEO IN Signal	AUDIO IN Signa		
TUNER	Tuner Channel	Tuner Channel		

- \* On-Screen Display
- Picture Search
   — You may play pre-recorded tape at
   a high speed in either a forward or reverse direction.
- PLL Frequency Synthesizer Quartz Tuner with 155 Channel Cable-compatible with Random Access Capability (A converter may be necessary to view CATV channels.)
- \* Quick Timer Recording— Automatic recording for from 30 to 480 minutes is possible at the push of QTR button. (You don't need any timer adjustment for recording.)
- \* STILL- "Freeze" the picture at any time, for close viewing of a particular scene. Recorded tape in EP mode shows better clear picture.
- \* Three Tape Speeds for Record/Playback— Select SP mode (Standard short play), LP mode (Long play) and EP mode (Super long play) for up to eight hours of recording/playback with a T-160 tape. For best results, we recommend T-60 or T-120 tapes.

## PRECAUTIONS MITARES

## SUPPLIED ACCESSORIES







## LOCATION

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

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

## AVOID THE HAZARDS OF ELECTRI-CAL SHOCK AND FIRE

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

## **DEW WARNING/INDICATOR**

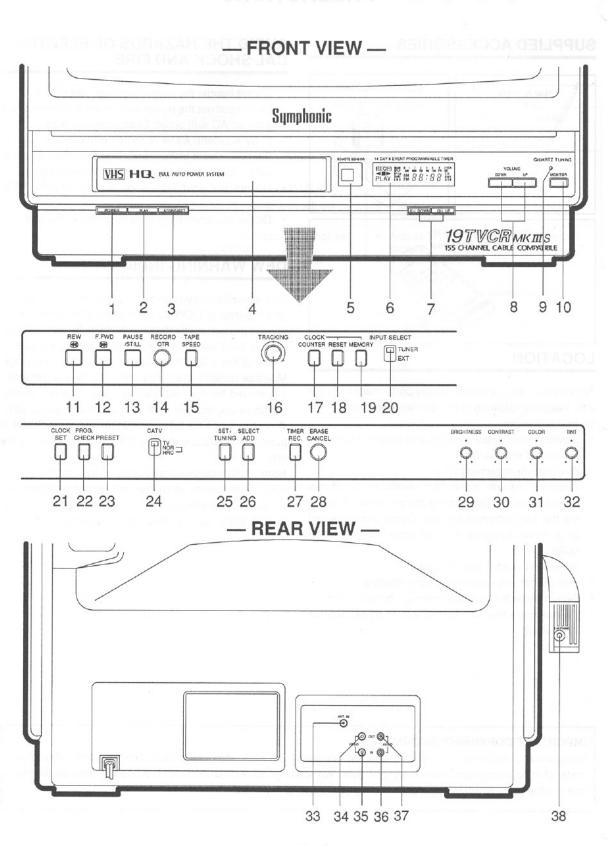
This video cassette recorder is equipped with a sensor which prevents DEW condensation. If excessive moisture is present inside the unit, the [d] letter on the digital display goes on. While the indicator is lit, safety device prevents the unit from operating until moisture is gone. Moisture condensation may occur inside the unit when it is moved from a cold place to a warm place, or after heating a cold room or under conditions of high humidity. Therefore when the [d] letter light is on turn the POWER button off and allow at least 2 hours for the unit to dry out.

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

## IMPORTANT COPYRIGHT INFORMATION

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

## **OPERATING CONTROLS AND FUNCTIONS**



- 1 POWER button- To turn the unit on and off.
- 2 PLAY button- To begin playback of a tape.
- 3 STOP/EJECT button— To stop tape motion and remove the tape from VCR.
- 4 CASSETTE COMPARTMENT
- 5 REMOTE SENSOR— Receives the infrared control signals from the handheld remote control unit.
- 6 DIGITAL DISPLAY
- 7 CHANNEL UP/DOWN button— To select the channel for viewing or recording.
- 8 VOLUME UP/DOWN button— To adjust the volume level.
- 9 MONITOR indicator— is the picture tube on/off indicator.
- 10 MONITOR button— To turn the picture tube on and off
- 11 REW button— To rewind tape, or to view video, in reverse, during play mode at a faster than normal speed. Press play button to return VCR to normal playback speed.
- 12 F.FWD button— To advance tape or to view video, in forward direction, during play mode at a faster than normal speed. Press PLAY button to return VCR to normal playback speed.
- 13 PAUSE/STILL button— To temporarily stop tape during playback or manual recording.
- 14 RECORD/QTR button- To begin manual recording.
- 5 TAPE SPEED switch— To set desired recording speed. (SP/LP/EP)
- 16 TRACKING control— Adjust to minimize video "noise" (lines or dots on screen) during playback.
- 17 CLOCK/COUNTER button— To alternate between clock and counter display modes.

- 18 RESET button- To reset counter to 0000.
- 19 MEMORY button- To set memory-in.
- 20 INPUT SELECT button— To select the signal to be recorded TUNER or EXT.
- 21 CLOCK SET button- To select clock setting mode.
- 22 PROG.CHECK button- To select program number.
- 23 PRESET button— Use to select channel program mode.
- 24 CATV selector switch—Use to select the TV or CATV (NOR/HRC) mode.
- 25 SET (+) /TUNING button- Adjust time, channel, program and tuning.
- 26 SELECT/ADD button—To select timer setting mode. Press to add programmed channel.
- **27 TIMER REC. button** To activate the automatic recording timer.
- 28 ERASE/CANCEL button— To erase memorized channel and cancel Timer Program.
- 29 BRIGHTNESS control- See page 15 for detail.
- 30 CONTRAST control- See page 15 for detail.
- 31 COLOR control- See page 15 for detail.
- 32 TINT control- See page 15 for detail.
- 33 ANT.IN jack-Connect 75-ohm antenna.
- 34 VIDEO OUT jack- Connect to the video in jack of video processor or another VCR.
- 35 VIDEO INPUT jack— Connect to video output jack of your video camera or another VCR.
- 36 AUDIO INPUT jack Connect to audio output jack of a video camera or another VCR.
- **37 AUDIO OUT jack-** Connect to the line in jack of your audio equipment or another VCR.
- **38 EARPHONE jack** To connect earphones (not supplied) for personal listening.

## - DIGITAL DISPLAY -

TIMER INDICATOR CASSETTE-IN INDICATOR PROGRAM NUMBER INDICATORS TIMER INDICATOR STOP/VCR POWER ON CASSET 2ND PROGRAM INDICATOR E-IN INDICA-DAY OF THE WEEK IN-INDICATOR TOR WEEKLY PROGRAM INDICATORPROGR DICATORS 2 3 4 5 6 7 **FUNCTION** I SUN MON TUEWED THU FRI SAT **INDICATORS** CHANNEL CH INDICATOR SPEED INDICATOR TIMER RECORDING AM NUMBER INDICA-CLOCK/TAPE COUNTER DISPLAY TORS START AND END INDICATORFU COUNTER MEMORY INDICATOR NCTION OTR INDICATOR

## **ANTENNA CONNECTIONS**

## VHF/UHF RECEPTION AREA USING SEPARATE ANTENNAS

## VHF ANTENNA HOOK UP

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

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

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

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

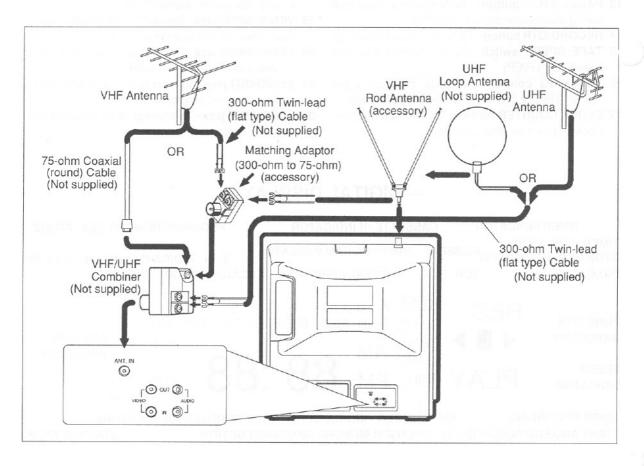
## UHF ANTENNA HOOK UP

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

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

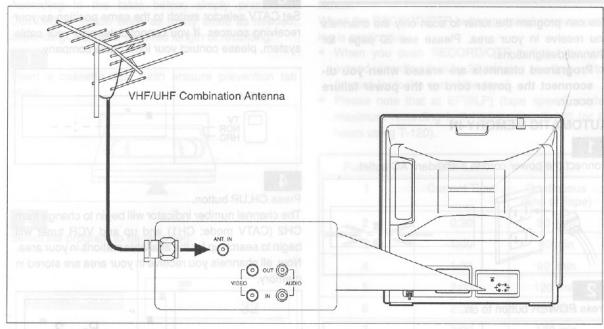
The loop antenna can be adjusted in any direction or angle to get the best UHF reception.

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

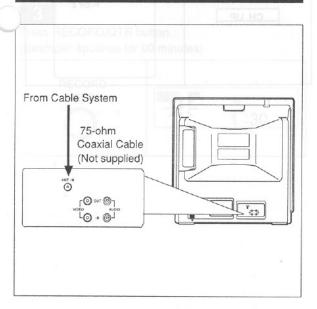


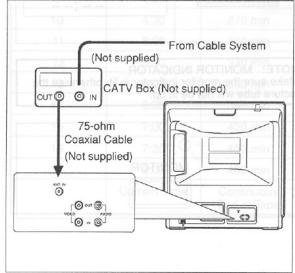
## VHF/UHF COMBINED ANTENNA

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



## CABLE AND PAY TV





## Note to CATV (Cable TV) system installer:

This reminder is provided to call the CATV (Cable TV) system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

## PREPARATION FOR USE

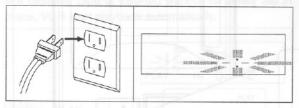
## CHANNEL MEMORY PROGRAMMING

You can program the tuner to scan only the channels you receive in your area. Please see 30 page for channel designations.

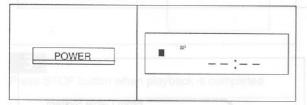
\* Programed channels are erased when you disconnect the power cord or the power failure occur.

## AUTOMATIC MEMORY-IN

Connect the power cord to a standard AC outlet.

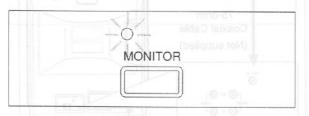


Press POWER button to on.

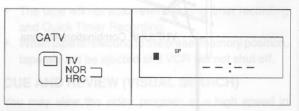


NOTE: MONITOR INDICATOR

Make sure the monitor indicator is lit, otherwise the picture tube will not be lit up.

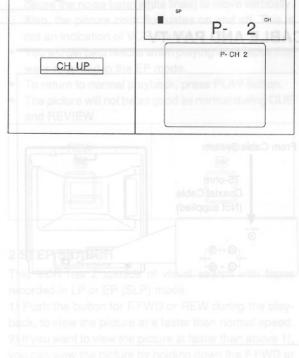


Set CATV selector switch to the same position as your receiving sources. If you cannot determine your cable system, please contact your local cable company.



Press CH.UP button.

The channel number indicator will begin to change from CH2 (CATV mode: CH1) and up and VCR tuner will begin to search up for the available stations in your area. Now, all channels you receive in your area are stored in memory.

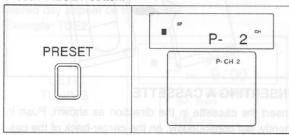


## MANUAL MEMORY-IN

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

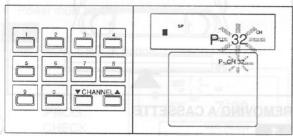


Press PRESET button.



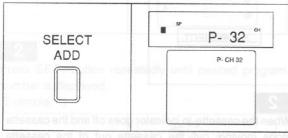
## 2

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



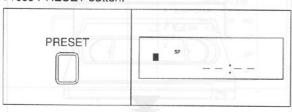
## 3

Press ADD button.



## 4

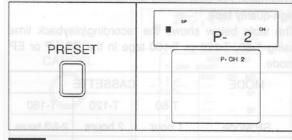
Press PRESET button.



## To ERASE PRESET CHANNELS

## 1

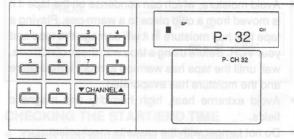
Press PRESET button.



## 2

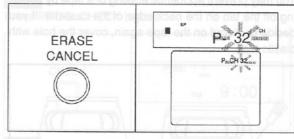
Select the desired channel number with remote control NUMERICAL keys. You must precede one-digit channel numbers with a zero (02, 03, 04 and so on).

(Example: Channel 32)



## 3

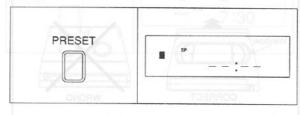
Press ERASE/CANCEL button. Channel indicator will flash.



## 4

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

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



## VIDEO CASSETTE NO TERRAP BRANE OT

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

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

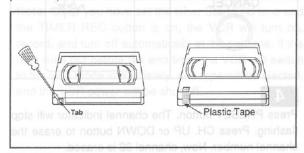
MODE		CASSETTE	
	T-60	T-120	T-160
SP Mode	1 hour	2 hours	2-2/3 hours
LP Mode	2 hours	4 hours	5-1/3 hours
EP(SLP) Mode	3 hours	6 hours	8 hours

When handling video tapes, take the following precautions

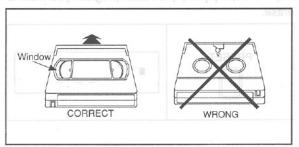
- \* Avoid moisture, which can condense on the tape if it is moved from a cold place to a warm one. Playing a tape that has moisture in it will damage the tape and your VCR. Before using a tape with these conditions, wait until the tape has warmed to room temperature and the moisture has evaporated.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

## **ERASE PREVENTION**

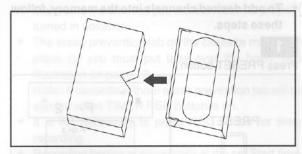
You may prevent accidental erasing of a tape by breaking off the tab on the back edge of the cassette. If you decide to record on the tape again, cover the hole with plastic tape.



Insert the cassette into the VCR as shown.



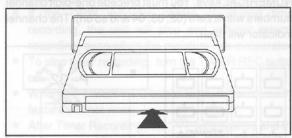
Store the cassette in its case as shown.



## **INSERTING A CASSETTE**

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

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



## **REMOVING A CASSETTE**

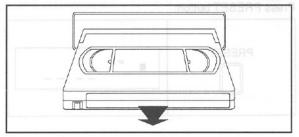
1

Press EJECT button.



2

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

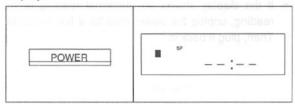


## SETTING THE CLOCK FOR COR-

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

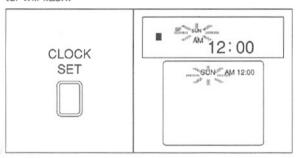
1

Make sure the POWER is ON. The ■ appears on the display.



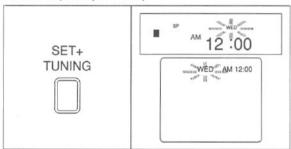
2

Press CLOCK SET button. The day of the week indicator will flash.



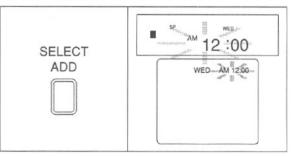
3

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



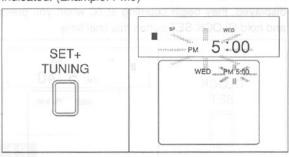
4

Press SELECT button. The hours indicator will flash.



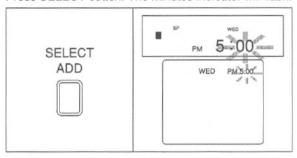
5

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



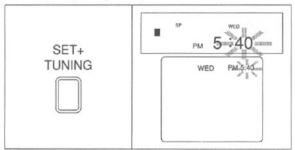
6

Press SELECT button. The minutes indicator will flash.

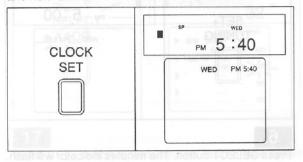


7

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



Press and hold CLOCK SET button for at least one second to start the clock. Although seconds are not displayed, they begin counting at 00 when you press and hold CLOCK SET button this final time.



## Notes:

 When unplugging the AC-cord or power failure "- - : - - " flashes on the display.



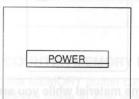
\* If the display shows an abnormal reading or no Then, plug it back in.

## OPERATION TO MICHOS SHOWS IN

## T.V. OPERATION

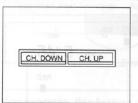


Push POWER button to ON.



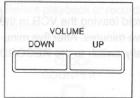
2

Select the desired channel.



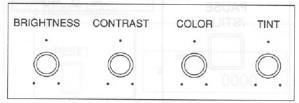
3

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



4

Adjust picture controls for a natural looking image (located at inside of the control door).



## TINT (HUE)

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

### COLOR

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

## CONTRAST

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

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

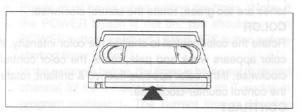
## **BRIGHTNESS**

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

## VIEWING AND RECORDING THE SAME PROGRAM

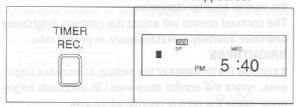


Insert a cassetee with erasure prevention tab intact. The unit will turn on automatically.\*



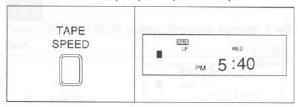
2

When TIMER indicator is displayed, press TIMER REC button so that TIMER indicator is disappeared.



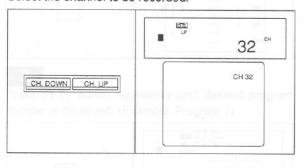
3

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



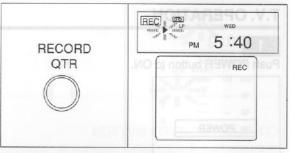
4

Select the channel to be recorded.



5

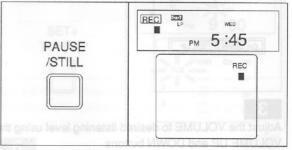
Press RECORD button.



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

6

Press PAUSE button.

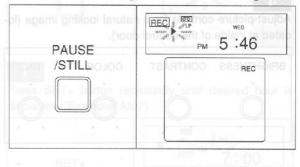


## Note:

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

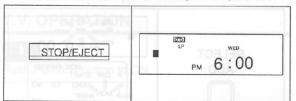
7

Press PAUSE button again to resume recording.



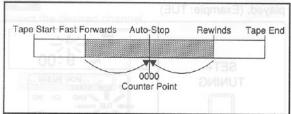
8

Press STOP button when recording is completed.



## COUNTER MEMORY BUTTON

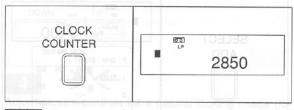
The MEMORY button can be used during rewind and F.FWD mode to stop tape as tape rewinds to counter display of approx. 0000.



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

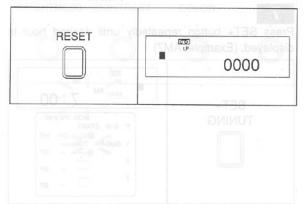
1

Before playback or recording press CLOCK/COUNTER button.



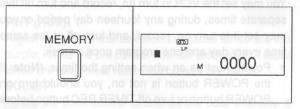
2

Press RESET button.



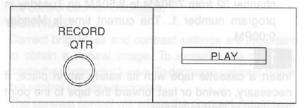
3

Press MEMORY button.



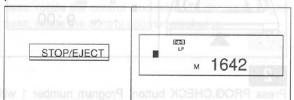
4

Press RECORD or PLAY button.



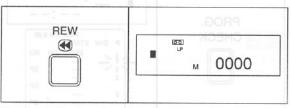
5

Press STOP button when recording or playback is completed.



6

Press REW. button.



The tape will stop when the counter reaches to approx. 0000.

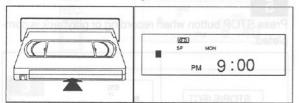
## **AUTOMATIC TIMER RECORDING**

You may set the VCR to turn on, record and turn off five separate times, during any fourteen day period or you may set it to turn on, record, and turn off at the same time every day and one program once a week.

- \* Power must be on when setting the timer. (Note: If the POWER button is not on, you should turn on POWER button or turn off TIMER REC button before starting timer setting.)
- \* In the example below, the timer is being set to record channel 32 from 7:30AM to 8:50AM on Tuesday in program number 1. The current time is Monday 9:00PM.

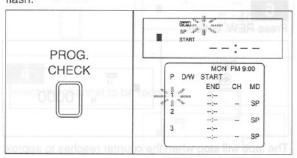


Insert a cassette tape with its safety tab in place, if necessary, rewind or fast forward the tape to the point you want to start recording.



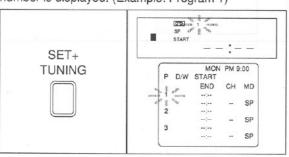
2

Press PROG.CHECK button. Program number 1 will flash.



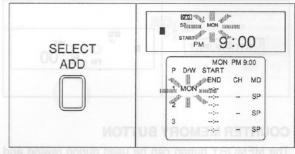
3

Press SET+ button repeatedly until desired program number is displayed. (Example: Program 1)



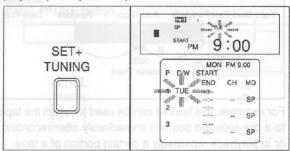
4

Press SELECT button. The day indicator will flash.



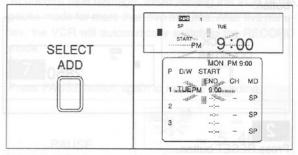
5

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



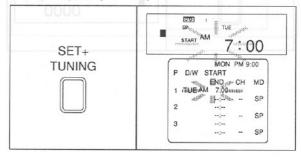
6

Press SELECT button. The hours indicator will flash.



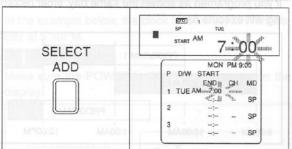
7

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



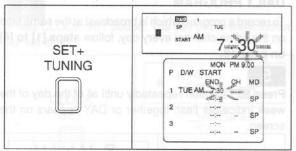
8

Press SELECT button. The minutes indicator will flash.



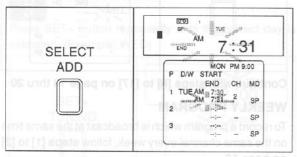
9

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



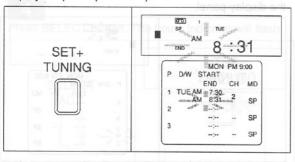
10

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



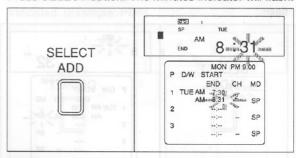
11

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



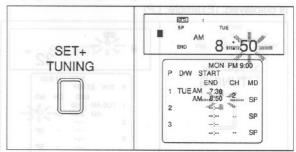
12

Press SELECT button. The minutes indicator will flash.



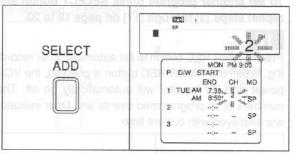
13

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



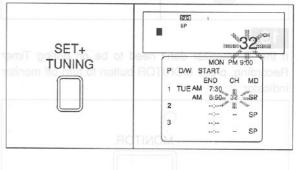
14

Press SELECT button. The channel indicator will flash.



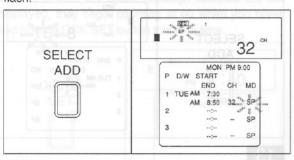
15

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



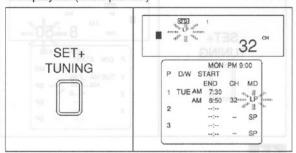
16

Press SELECT button. The tape speed indicator will flash



17

Press SET+ button repeatedly until desired tape speed is displayed. (Example: LP)

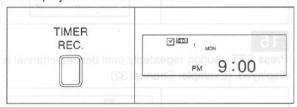


Now the program 1 is completed.

To set another program press SELECT button and repeat steps [3] through [17] on page 18 to 20.

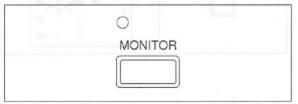
18

Press TIMER REC button to set automatic timer recording. When the TIMER REC button is pressed, the VCR power and TV monitor will automatically go off. The numbers of all programmed events and timer indicator are displayed with current time.



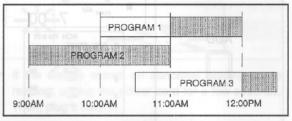
19

If the TV monitor don't need to be on during Timer Recording, press MONITOR button to turn off monitor indicator.



**Example:** When programs overlap, the earliest time set program has priority.

If you programed as shown the same day, timer recording will execute as,



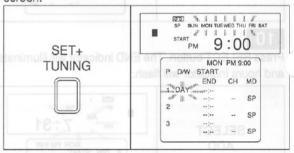
9:00AM-11:00AM for PROGRAM 2 11:00AM-12:00PM for PROGRAM 1 12:00PM- for PROGRAM 3

## DAILY PROGRAM

To record a program which is broadcast at the same time on the same channel every day, follow steps [1] to [4] on page 18.

5

Press SET+ button repeatedly until all of the day of the week indicators flash together or DAY appears on the screen.



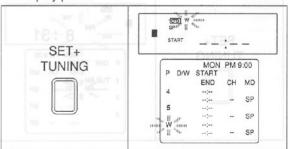
Continue with steps [6] to [17] on page 18 thru 20.

## WEEKLY PROGRAM

To record a program which is broadcast at the same time on the same channel every week, follow steps [1] to [2] on page 18.

3

Press SET+ button repeatedly until "W" is illuminated in the display panel.



Continue with steps [4] to [17] on page 18 to 20.

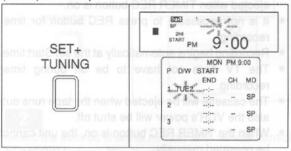
## 2ND WEEK MORETMIN SMIGROOSER REMIT

To record a program more than a week in advance, follow steps [1] to [4] on page 18.

5

Press SET+ button repeatedly until "2nd" indicator and desired day appear on the display.

(Example: TUE2)



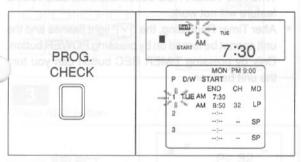
Continue with steps [6] to [17] on page 18 to 20.

## TO CANCEL A PRE-PROGRAM

\* Power must be ON.



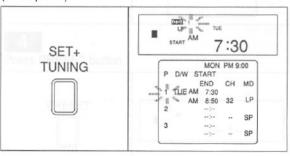
Press PROG. CHECK button.



2

Press SET+ button repeatedly until desired program number is displayed.

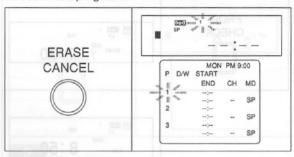
(Example: 1)



3

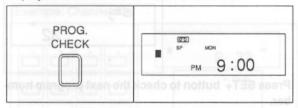
Press CANCEL button.

The selected program will be erased.



4

Press PROG. CHECK button to return current time display.



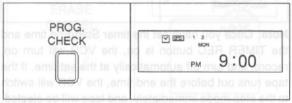
## CHECKING THE START/END TIME

\* TIMER REC button must be On position.

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

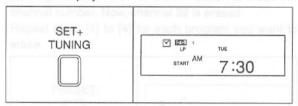
1

Press PROG. CHECK button.



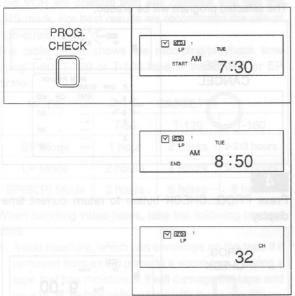
2

Press SET+ button repeatedly until desired program number is displayed.



3

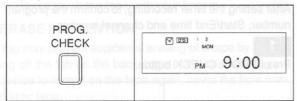
Press SELECT button.



Press SET+ button to check the next program number.



Press PROG. CHECK button to return current time display.



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

## TIMER RECORDING HINTS

- \* Make sure the channel you want to record is properly turned in advance.
- \* The erase prevention tab on the cassette must be in place (or you must put tape over the hole). See illustration on page 12.

**Note:** A cassette without erase prevention tab will be ejected when TIMER REC button is on.

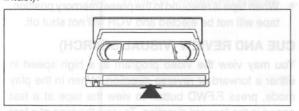
- \* It is not necessary to press REC button for timer recording.
- \* Recording begins automatically at the set Start time.
- \* The TV does not have to be on during timer recording.
- \* The cassette will be ejected when the tape runs out, also the VCR's power will be shut off.
- \* When the TIMER REC button is on, the unit cannot be operated manually.
- \* If the DEW indicator comes on during timer recording, the unit will stop and will not resume recording, even when the moisture has evaporated.
- \* To stop timer recording, turn the TIMER REC button off.
- \* When the TIMER REC button is on, the auto-rewind feature will not work.
- \* After Timer Recording, the "\sum " light flashes and the unit cannot be turned on by pressing POWER button.
  Only by pressing TIMER REC button can you turn the unit back on.

## QUICK TIMER RECORDING

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

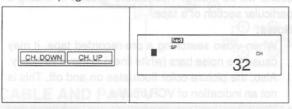


Insert a cassette tape (with erasure prevention tab intact).



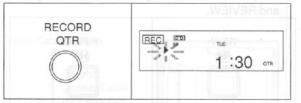
2

Select the program to be recorded.



3

Press RECORD/QTR button (Example: 4pushes for 90 minutes)



Recording stars if the RECORD/QTR button is pressed even while watching a TV program.

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

## Notes:

When the RECORD/QTR button pressed once recording is continuous.

- \* When you push RECORD/QTR button, you will extend recording time by 30 minutes at a time up-to 8 hours (or to the end of the tape).
- \* Please note that at EP(SLP) (tape speed) mode maximum recording is 8 hours using T-160 (or 6 hours using T-120).

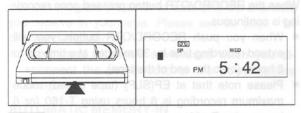
Push(es)	DISPLAY	LENGTH
1 N	Current Time	Continuous (End of Tape)
2	0:30	30 min '
3	1:00	60 min
4	1:30	90 min
5	2:00	120 min
6	2:30	150 min
7	3:00	180 min
8	3:30	210 min
9	4:00	240 min
10 Igmos	4:30	270 min
11	5:00	300 min
12	5:30	330 min
13	6:00	360 min
14	6:30	390 min
15	7:00	420 min
16	7:30	450 min
17	8:00	480 min
18	Current Time	Continuous (End of Tape)

## PLAYBACK



Insert a pre-recorded tape.

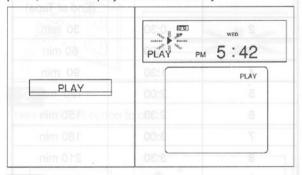
The VCR will turn on automatically.



2

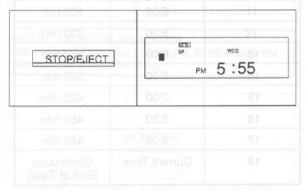
Press PLAY button.

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



3

Press STOP button when playback is completed.



## AUTO REWIND-EJECT

When the end of a tape is reached during recording, playback, or fast-forward, the tape will automatically rewind to the beginning (or to the preset counter memory position). The cassette mechanism will disengage after rewinding and the tape will be ejected and the VCR will shut itself off.

## Notes:

- \* The tape will not auto-rewind during timer recording and Quick Timer Recording.
- \* When tape is rewound to the preset memory position, tape will not be ejected and VCR will not shut off.

## **CUE AND REVIEW (VISUAL SEARCH)**

You may view the video program at a high speed in either a forward or reverse direction. When in the play mode, press F.FWD button to view the tape at a fast speed in the forward direction. To view the tape at a fast speed in the reverse direction, press REW button. The sound will be muted. This feature is used in finding a particular section of a tape.

## Notes:

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



## 2 STEP SEARCH

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

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

## STILL FRAME DURING PLAYBACK

If you press PAUSE button during playback with tapes recorded in EP mode, the picture will "freeze" on the screen. You may use this feature to study details of a particular scene. Press PLAY button again to continue playback. If you use the PAUSE button during playback with tapes recorded in the SP or LP mode, it may cause the noise bars to appear more than with tapes recorded in the EP mode. This is not an indication of VCR trouble.

The VCR will automatically switch to the Stop mode, if it is left in the PAUSE/STILL mode for more than five minutes.

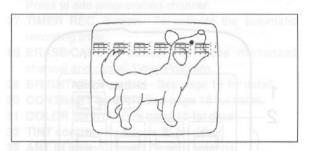
## **NOISE CANCELLING**

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

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

## TRACKING CONTROL KNOB

When the noise appears during playback, adjust the TRACKING control to achieve the best picture.





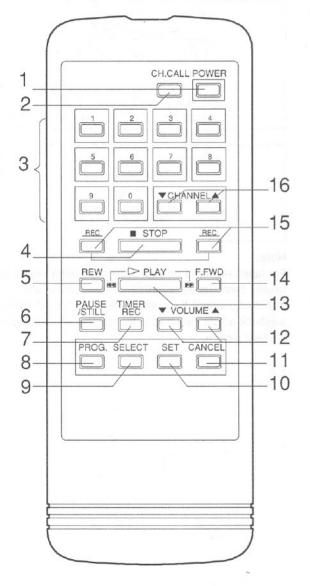
## Note:

For tapes recorded on your VCR, the center setting is usually best. Tapes recorded on other VCRs may required adjustment. If you encounter video "noise" during playback adjust the knob to the right or left to achieve the best picture.

## REMOTE CONTROL OPERATION

You can operate all of tape transport functions and TV control functions from the Remote Control (included). The buttons on the Remote Control have the same functions as the corresponding buttons on the unit.

## HOW TO USE REMOTE CONTROL

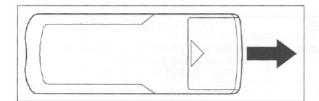


- 1 POWER button- To turn power on and off.
- 2 CH. CALL button- To call channel display.
- 3 NUMERICAL KEYS— To select desired channels. They cannot be used to set desired channel during Timer Recording. If you want to select channel among 1 to 9, first 0 Key and then push desired Key among 1 to 9.
- 4 STOP button- To stop the tape.
- 5 REW button— To rewind tape, or to view video in reverse during play mode at a faster than normal speed. Press PLAY button to return VCR to normal playback speed.
- 6 PAUSE / STILL button— To stop the tape temporarily during playback or recording. To view a still picture during playback.
- 7 TIMER REC button To activate the automatic recording timer.
- 8 PROG. button— To select timer rec program number
- 9 SELECT button- To select adjusting mode.
- 10 SET button- To select setting mode.
- 11 CANCEL button— To cancel memorized Timer Program.
- 12 VOLUME buttons—To adjust desired volume leve' by pressing either "▲" or "▼" button.
- 13 PLAY button- To playback the tape.
- 14 F.FWD button— Press to advance tape faster than normal or to view video in forward direction during play mode at a faster than normal speed. Press PLAY button to return VCR to normal playback speed.
- **15 REC buttons** To begin recording, push both 2 buttons (1 is a safety button) together.
- 16 CHANNEL button— To select desired channel by pressing either "▲" or "▼" button. They cannot be used during Timer Recording.

## INSTALLING THE BATTERIES

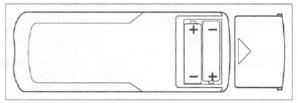


Slide the battery compartment cover on the remote unit in the direction of the arrow.



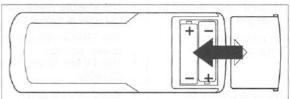
2

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



3

Replace the cover.



## TROUBLESHOOTING GUIDE

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

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION			
No power.	Power cord is not connected.     Power is turned off.     TIMER REC. is on.	* Connect power cord to AC outlet.     * Push Power button on.     * Push TIMER REC. button off.			
Timer recording is not possible.	* The program timer is set incorrectly.     * The TIMER REC is turned off.	* Set the program timer correctly.      * Push TIMER REC. button on.			
Record mode cannot be engaged.	* The erasure prevention tab on cassette is missing.	* Place vinyl tape over missing erasure prevention tab.			
Picture is poor on playback.	* The TRACKING control is not set to best position.     * The TV fine tuning is not set correctly.	* Adjust TRACKING control for better picture.     * Fine tune your TV.			
Noise in picture on playback.	* Video head is dirty.	* Head cleaning is necessary, consult the nearest dealer.			
No picture on playback.	Was the INPUT SELECT switch set to TUNER during the Record mode.      MONITOR button is turned off.	* Set INPUT SELECT switch to     TUNER position during RECORD.      * Push MONITOR button on.			
Playback picture is partially noisy.	* The TRACKING control is not set correctly properly.	* Adjust TRACKING control for better picture.			
Operation buttons do not work when power is on and cassette is inserted.	* DEW indicator "d" is on.	* Wait until indicator goes off, then proceed with operation.			
TV program cannot be recorded.	* The INPUT SELECT switch is set to EXT.	* Set INPUT SELECT switch to TUNER.			
On-the-air TV programs cannot be seen.	* Connections are not correctly made.     * MONITOR button is turned off.     * The INPUT SELECT switch is set to EXT.	Re-check the ANT IN or OUT connections.     Push MONITOR button on.     Set INPUT SELECT switch to TUNER.			
No operation by infrared Remote Control.	* Weak battery.	* Make sure the AC cord is connected to an AC outlet.     * Check the batteries of infrared Remot Control.			

## **MAINTENANCE**

## CABINET CLEANING

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

## VCR HEAD CLEANING

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

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

## SERVICING

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

## SPECIFICATIONS

## GENERAL SPECIFICATIONS

CRT:

19 inch in-line gun. 90 deflection tube

Television system:

NTSC-M

Recording system:

Rotary two-head

helical scan system

Tape width:

1/2 inch

Tape speed:

SP IP

33.40mm/sec. 16.67mm/sec.

EP (SLP)

11.12mm/sec.

Tuner channel

TV VHF Low TV VHF High TV UHF

#2~#6 #7~#13 #14~#69

CATV VHF Low CATV VHF High 5A. A~I. A-5~A-1 J~W, W+1~W+11

CATV UHF Timer indication: W+12~W+28, W+29~W+58 AM/PM 12-hour system

Terminals:

Antenna input

VHF/UHF 75 ohms unbalanced

Video input/output Audio input/output RCA connector x 2 RCA connector x 2

## **ELECTRICAL SPECIFICATIONS**

Video output level:

 $1V_{p-p}$ 

Video output impedance:  $75\Omega$ 

Audio output level: Video input level:

-6dBv

Audio input level:

0.5~2.0Vp-p -10dBs

## OTHER SPECIFICATIONS

Power requirement:

AC 120V/60Hz

Power consumption:

110W

Dimensions:

482(W) x 502(D) x 476(H) mm

18-7/8"(W) x 19-3/4"(D) x

18-11/16"(H)

Weight:

26 kg 57.7 lbs

Accessories:

Remote control handset

2 "AAA" Batteries Owners Manual Matching Adapter

VHF Rabbit ear Antenna

Designs and specifications are subject to change without notice.

## CABLE CHANNEL DESIGNATIONS

This model is capable of receiving 99 cable channels. The channels are displayed as 1~99.

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	Α	В
VCR Display	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CATV Channel	С	D	Е	F	G	Н		J	K	L L	М	N	0	Р	Q
VCR Display	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
CATV Channel	R	S	Т	U	٧	W	W+1	W+2	W+3	W+4	W+5	W+6	W+7	W+8	W+9
VCR 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
VCR 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
VCR 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
VCR 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	9000	408	1	iq ue i	igm o	buA
VCR Display	91	92	93	94	95	96	97	98	99						

Date of Purchase	8
Dealer Purchased from	
Dealer Address	
Dealer Phone No.	
Model No.	19TVCR MKIIIS
Serial No.	

## FUNAL 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 FUNAI/SYMPHONIC product are altered, replaced, defaced or missing. This FUNAI CORPORATION Limited warranty does not apply to any FUNAI/SYMPHONIC product not purchased and used in the United States.

This warranty only covers failures due to defects in material or workmanship which occurs during normal use. It does not cover damage which occurs in shipment, or failures which are caused by repairs, alterations or product not supplied by FUNAI 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 FACTORY SERVICE CENTER, PLEASE CONTACT THE FUNAL 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 FUNAL/SYMPHONIC PRODUCT FOR SERVICE ARE SHIPPER'S RESPONSIBILITY.

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

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

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

## IMPORTANT:

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

## ATTENTION:

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

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

FUNAI CORPORATION
Corporate Headquarters & Factory Service Center
Address :100 North Street Teterboro, NJ 07608
Tel :201-288-2666

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