

Congratulations

on your purchase of one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of enjoyment. Please take time to fill in the information at right. The serial number is on the tag located on the back of your VCR. You'll want to keep this manual handy as your convenient VCR information source.

Safety Precautions

Date of Purchase	
Dealer Purchased From	
Dealer Address	
Dealer Phone No	
Model No	
Serial No	

Warning: To prevent fire or shock hazard, do not expose this equipment to rain or moisture. This video recorder, equipped with the HQ (High Quality) System, is compatible with existing VHS equipment. Only use those tapes with the **VHS** mark. It is recommended that only cassette tapes that have been tested and inspected for use in 2, 4, 6, and 8 hour VCR machines be used.

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.



This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

Table of Contents

Important Safeguards and Precautions	3
Unpacking Your Combination VCR and Features	4

Getting Started

Basic TV Operation

TV Operation (Main Operation, Using the 100 key, Rapid Tune, Audio Mute)	9
Picture Adjustment (Color, Tint, Bright, Picture, Sharpness, Reset)	10
TV Timer Features (On Timer, Sleep Timer) 1	11
Closed Caption System (Main Operation, Caption On Mute) 1	12

Basic VCR Operation

Playback a Tape (Special Effects, Quality Picture Features)	13
Tape Operation (Repeat Play, One Minute Skip, Zero Search, Auto Functions)	14
Record On a Tape (Main Operation, One Touch Record, Input Select)	15

More You Can Do

Timer Recording (Main Operation, Cancel-Clear-Replace Program)	17
Timer Recording Using Unit Buttons	17
Special VCR Features (VCR Lock, Warning Beeper)	18
Copying Your Tapes (Connection, Main Operation)	19

Other Information

Unit and Cassette Information	20
Before Requesting Service (Self-check Items)	
Index of Controls	22. 23
Spanish Quick Use Guide/Guía para rápida consulta	. 24, 25, 26, 27

Important Safeguards and Precautions

INTRODUCTION

Careful attention has been given to this Video product to assure a quality standard devoted to your safety and enjoyment. This quality standard together with your personal responsibility for the safety of yourself and others, will contribute to your enjoyment. This Video product uses electrical energy and requires proper handling at all times.

CAUTION

BEAD AND RETAIN THE SAFETY AND OPERATING INSTRUCTIONS To make full use of the safeguards incorporated in this unit, read and follow this basic guide, adopted in part from Underwriter's Laboratories Standard 1409, Second Edition, before operating this Video product.

FOLLOW THE INSTRUCTIONS AND BE SURE TO HEED ALL WARNINGS on unit and in the manual, for easy maintenance, proper and trouble free operation of this Video product.

INSTALLATION

- 1. **OPERATE FROM A POWER SOURCE INDICATED on this**
- Video product, or in this Manual, Your Electric Utility Service ⚠ Company or Video Products Dealer will be happy to verify the
- power source in your home. THE GROUNDED OR POLARIZED PLUG IS A SAFETY FEATURE 2.
- This Video product may be equipped with either a polarized 2-wire AC line plug or a 3- wire grounding type plug. The two wire polarized plug (having one blade wider than the other) will fit into the power outlet only one way. If it is a three wire

grounding type plug (having a third pin), it will fit into a grounding type outlet. DO NOT DEFEAT THE SAFETY PURPOSE OF THE GROUNDED OR POLARIZED PLUG by tampering with it. If the plug does not fit fully into the socket, try reversing it. If you should still be unable to fully insert the plug into the socket, you may find

- that a proper outlet is needed to meet today's Electrical Standards. An electrician will replace your outlet safely, 3. POWER SUPPLY CORDS SHOULD BE PROTECTED and
- routed so that they are not likely to have anything rest on
- Δ them, roll over them, or be subject to walking traffic or abuse: particularly at plug-ins, convenience receptacles, or cord exit points from the unit. Where an extension is needed, use a grounded or polarized cord.

HAZARDOUS FRAYED CORDS OR DAMAGED PLUGS SHOULD BE REPLACED BY A QUALIFIED SERVICE TECHNICIAN

OVERLOADED WALL OUTLETS AND EXTENSION CORDS PRESENT DANGEROUS RISKS OF FIRE OR ELECTRICAL SHOCK.

- AVOID BLOCKING VENTILATION HOLES 4.
- Your video unit has ventilation openings in its cabinet to A release heat generated during operation. Blocking these openings can cause heat build-up inside the unit, causing failure that may result in a fire hazard or heat damage to cassettes. For protection:
 - a. Never cover the bottom ventilation slots or the unit with soft material, or operate the unit placed on a bed, sofa, rug, or soft accessory.
 - b. Avoid built-in installations, such as a bookcase or rack. unless proper ventilation is provided.
- AVOID EXTREMELY HOT LOCATIONS OR SUDDEN 5

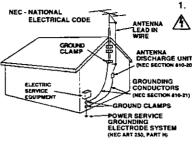
to a warm place, moisture may form on the

CHANGES IN TEMPERATURE such as placing the unit near Δ or over a radiator, in direct sunlight, closed vehicles, or transporting it suddenly between areas of extreme temperature variation. If the unit is suddenly moved from a cold place



- tape and inside the unit. TO AVOID INJURY TO A CHILD, ADULT; OR
- COSTLY DAMAGE:
- A a. Do not place unsecured equipment on a sloping surface or any heavy object or unit. (Use the unit in a horizontal position and do not place
 - anything heavy on it.) b. Support for the unit should be adequately firm, level, and
 - strong. Replace any unstable cart, table or support. 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.
 - c. Carefully follow all operating instructions and use the manufacturer's recommended accessories when operating this unit or connecting it to any other equipment.

OUTSIDE ANTENNA, EQUIPMENT, AND POWERLINE EXPOSURE



1. INSURE SAFE ANTENNA AND CABLE CONNECTIONS If an outside antenna or cable system is connected to the equipment, be sure the DISCHARGE UNIT antenna or cable system is grounded so as to provide some protection against built up static charges and voltage surges. Part 1 of the Canadian Electrical Code, in USA Section 810 of the National Electrical Code, ANSI/NFPA

70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.

ELIMINATE ANTENNA PROXIMITY TO HIGH VOLTAGE POWER 2.

SOURCES, OR CHANCE OF ACCIDENTAL CONTACT BY INSTALLER An outside antenna system should be located where it will never be reached by power lines, electric light or power circuits and where it will never contact these power sources if it falls. Installer should use extreme care to avoid possible fatal contact by touching power lines, circuits or other power sources when installing an outside antenna.

USE

AFTER STORING OR WHEN MOVING THE UNIT, REFER TO THE INSTALLATION SECTION OF THE SAFEGUARDS.

- DO NOT USE THIS VIDEO UNIT NEAR WATER: around bathtubs, 1.
- sinks, laundry, wet basement, swimming pool or any water source. USE ACCESSORIES RECOMMENDED ONLY BY THE
- <u>A</u>^{2.} MANUFACTURER to avoid risk of fire, shock or other hazards.
- 3. UNPLUG ALL EQUIPMENT EXPOSED TO RAIN, MOISTURE, OR STRONG IMPACT AND GET A QUALIFIED INSPECTION Δ
- If your unit has been exposed to rain, water, excessive moisture, or subjected to strong impact, unplug it and have it inspected by a service technician before use.
- 4 UNPLUG UNUSED UNIT, AND ALL EQUIPMENT DURING A STORM
- During a lightning storm, when indoors or outdoors, or before leaving ⚠ unit unused for extended periods of time, disconnect all equipment from power source, antenna and cable system.
- 5. UNPLUG ALL EQUIPMENT BEFORE CLEANING. After unit has
- been unplugged use a dry, clean, chemically untreated cloth. Use no cleaning fluids, aerosols, or forced air that could over-spray, or soak into the unit, and cause electrical shock. Any substance such as wax, adhesive tape, etc. may affect the cabinet surface. Exposure to greasy, humid, or dusty areas may affect internal parts. WHEN PLUGGED-IN: KEEP WATER AWAY; NO FINGERS INSIDE



NOR ANY OBJECTS INSIDE; AND NO MAGNETS OR A ELECTRICAL INTERFERENCE NEARBY.

- a. Never operate the unit if liquid has been spilled into it. Immediately
- unplug the unit, and have it inspected by a service technician. Fire and shock hazards can result from electrical shorts caused by liquid contact inside.
- b. Caution the children about dropping or pushing objects into the unit. Some parts inside carry hazardous voltages and contact can cause electric shock. Objects dropped in electrical equipment can cause fire hazards.
- c. Separate the unit from any interference causing appliances. Placing the unit directly above or below your TV set may cause electrical interference. Keep all magnets away from electronic equipment.

SERVICE

1.



DO NOT ATTEMPT TO SERVICE THIS PRODUCT YOURSELF. If this Video product does not operate as described, when the detailed Operating Instructions are followed, do not attempt to open or remove covers, or make any adjustments not described in the manual. Attempting to service this unit yourself may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel. CHECK ON REPLACEMENT PARTS REQUIRED. Be sure the

2. A

Δ

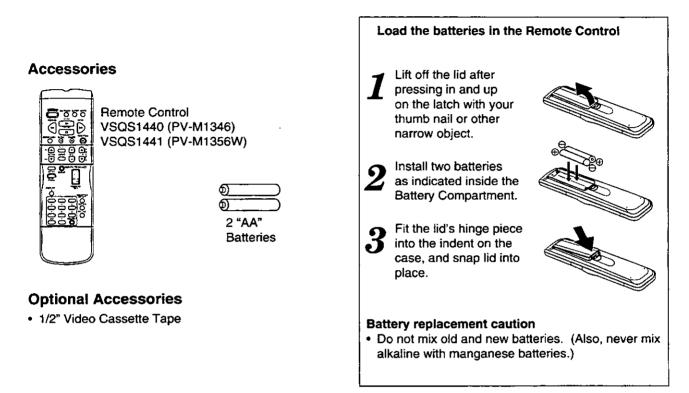
service technician has used replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized substitutes may result in fire, electric shock or other hazards 3.

HAVE TECHNICIAN PERFORM SAFETY CHECK described in the manufacture's service literature, after any service or repairs. to determine that the Video unit is in safe operating order.

Unpacking Your Combination VCR and Features

Unpacking Your Combination VCR

The accessories shown below are provided to help you use or set up your Combination VCR. Optional accessories are also listed.



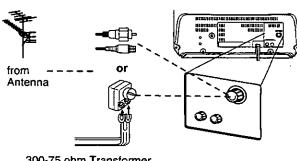
Product Features

All Channel Auto Set /181-CH TV/CATV Tuner	6
Auto Clock Set	
Auto Daylight Saving Time	
Auto Operation Functions (Auto Playback, Rewind, Tape Eject, Power Off)	
Auto Repeat Function	14
Closed Caption System	12
Easy-to-Read On Screen Displays	6, 7, 16, 17
One Minute Skip	14
One Month, 8 Program Auto Timer Recording	
One Touch Recording (OTR)	15
Program Director Remote Control	16, 17
Quick Play Mechanism	
Rapid Tune	
Special Effects Playback	
Special VCR Features (VCR Lock, Warning Beeper)	
Zero Search	14

Basic and Cable Connections

Outdoor Antenna Connection

Unhook the antenna from your previous TV or VCR and connect it to the back of the Combination VCR as shown in the diagram. If your antenna system has separate UHF and VHF lead-ins, you need a UHF/VHF Band Mixer (not supplied).



300-75 ohm Transformer (not supplied)

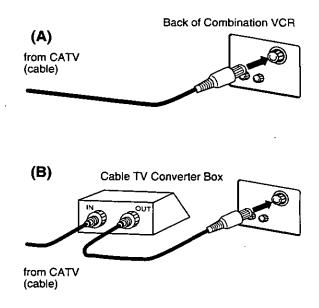
Cable Connections

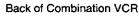
(A) Without a Converter/Descrambler Box With this connection, you can: use your Combination VCR remote control to select channels for viewing and select unscrambled channels for timer recording. <u>Scrambled</u> <u>channels may not be viewed or recorded with</u> <u>this connection.</u>

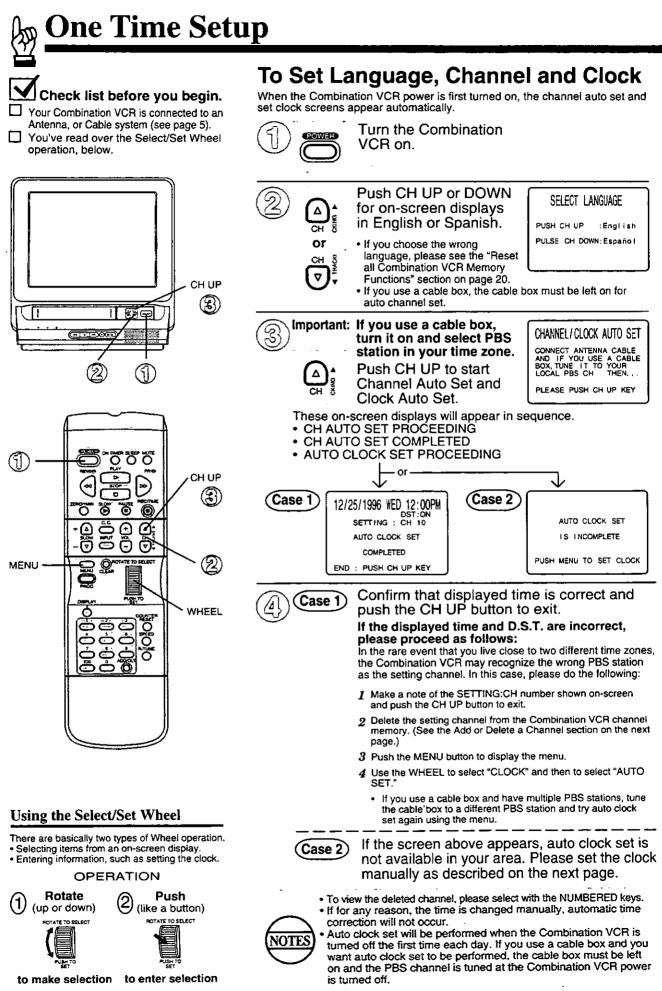
(B) With a Converter/Descrambler Box With this connection, you may record and view any channel including scrambled channels. Please note, however that <u>channel selection</u> <u>must be made at the cable company converter</u> <u>box</u>. Timer recording is limited to one channel at a time, and you can only view the channel you are recording.

To Watch and Record Scrambled/ Unscrambled Channels

Set the Combination VCR channel selector to the output channel of the cable converter box (e.g. CH3). Now, select channels to be viewed or recorded at the cable converter box.



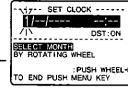




6

)

Manual Clock Set Push MENU to display the set



 "DST:ON" automatically adjusts for daylight saving time. (See page 20.)

D.S.T. (Daylight Saving Time).

To Make Corrections,

MENI

push the WHEEL or CLEAR button repeatedly to move back or forward to the desired item.

clock screen.

the WHEEL to

Rotate and push

select and enter

the month, date,

vear. time, and



Push MENU twice to start the clock and exit this mode.

To Change or Re-enter One Time Setup Items

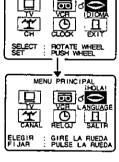
To Change the OSD Language

- I Push the MENU button to display the menu.
- 2 Rotate the Wheel to select the language selection icon. "IDIOMA" is Spanish for "language."
- 3 Push the Wheel to change the language.
- 4 Push the MENU button to exit this mode. · To return the normal screen, select "EXIT".

To Replace Channels in Memory

Example, if you have cable installed, etc.

- 1 Push the MENU button to display the menu.
- 2 Rotate and push the Wheel to select and set "CH" from the menu, and then push to select your antenna system (TV or CATV).
- 3 Rotate and push the Wheel to select AUTO SET.
 - To exit this mode, push the MENU button twice.



MAIN MENU

ίοο

-- SET UP CHANNEL ---

ANTENNA SYSTEM : CATV

POTATE WHEEL

ROTATE WHEEL

PUSH WHEEL PUSH MENU KEY

SELECT

SELECT

SET

:

MAIN MENU

To Set or Reset the Clock

In case the clock is wrong, or a power failure occurred.

්රී්ර් õ

6

Õ

Õ

CH UP/ DOWN

WHEEL

ADD/ DELETE

(1)

Õ õ

> A

Ē

ñ

₢

₩ÂN Ø

CLEAR

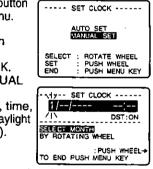
MENU

Į

6

NUMBERED keys

- 1 Push the MENU button to display the menu.
- $2\,$ Rotate and push the Wheel to: (A) Select CLOCK.
- (B) Select MANUAL SET.
 - (C) Set the date, time, and D.S.T.(Daylight Saving Time).



3 Push the MENU button twice to start the clock and exit this mode.

To Add or Delete a Channel

1 Push the CH UP/DOWN button or the NUMBERED keys to select a channel to add or delete.

The NUMBERED keys select all channels regardless of whether they have a signal or not. The CH UP/DOWN button selects only those channels which are in the Combination VCR's channel memory.

- 2 Push the ADD/DLT button to add or delete the channel.
 - To select a deleted channel, use the NUMBERED keys.

÷ • •





This Combination VCR will accurately maintain its calendar up to Dec. 31, 2089, 11:59PM. Normal TV or Cable channels are automatically selected and placed in memory depending on how your Combination VCR is hooked up.



08

WNET

Channel & Function Display

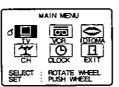
Whenever the channel is changed, the Channel number will appear for a few seconds on-screen. (Some station names may also appear.)

When a function button is pushed (PLAY, FF, etc.) the Combination VCR mode will be displayed.

• When a recording is started, both REC and the channel will appear together.

Menu Screen

1 Push the MENU button to display the menu.

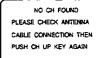


- 2 Rotate and push the wheel to make your selection (see page 6).
 - To get the most from each feature, it is recommended that you read the Operation Manual before attempting any operation.

Warning and Instruction Displays

These displays will alert you to a missed operation or provide further instructions.

If no active channels are found for CHANNEL MEMORY...



If a Timer Program was not completed before exiting the Program mode...

PROGRAM IS INCOMPLETE

If you push the REC button on the remote control or the REC and PLAY buttons on the Combination VCR, and a cassette is inserted with no record tab...

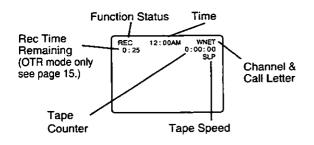
CHECK CASSETTE RECORD TAB

If you push the STOP button during a Timer Recording...

TO CANCEL TIMER REC HOLD DOWN STOP KEY FOR APPROX 3 SEC

VCR Status & Clock Display

Push the DISPLAY button to display and remove the overlay shown below.



Blank Tape and will be Blue Screen

If a blank section of tape is encountered in the Play mode or the channel you select has no broadcast, the TV screen will change to a solid blue field. The screen will remain blue until a recorded signal is again detected or an active channel is selected. If you push the PLAY, FF, REW, or REC button on the remote control or if you push the REC and PLAY buttons, the FF, PLAY, or REW button on the Combination VCR without a cassette inserted...

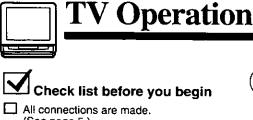


If you attempt to set or review a Timer Recording or set the On Timer and the Clock is not set...

PLEASE SET CLOCK BEFORE PROGRAMMING

Two minutes before a Timer Recording is about to begin...



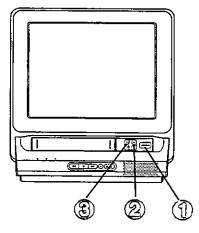


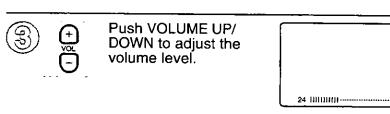


Select a channel using CHANNEL UP/DOWN or NUMBERED keys.

Push POWER to turn the Combination VCR on.

(See page 5.) Your Combination VCR is plugged in.





Using the 100 key

When selecting CATV channels 100 to 125 with the NUMBERED keys, first push the 100 key and then enter the remaining two digits. For example, for channel 125: Push the NUMBERED keys 100-2-5.

Rapid Tune

Push the R-TUNE button to display the last channel you were watching.

Previous Preset channel channel CH08-►CH10

 When selecting channels with the CH UP/DOWN button, the channels must be displayed for at least 4 seconds in order for the Combination VCR to recognize them as a new selection.

Audio Mute

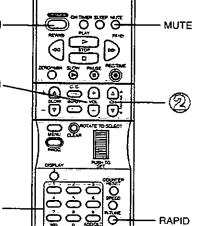
Push the MUTE button to instantly mute the sound. Push again, to restore the previous sound level.

FCC WARNING: Any unauthorized changes or modifications to this equipment would void the user's authority to operate.

Note to CATV System Installer

This reminder is provided to call the CATV (Cable TV) System Installers 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.





1

 (\mathbf{f})

2

100 key

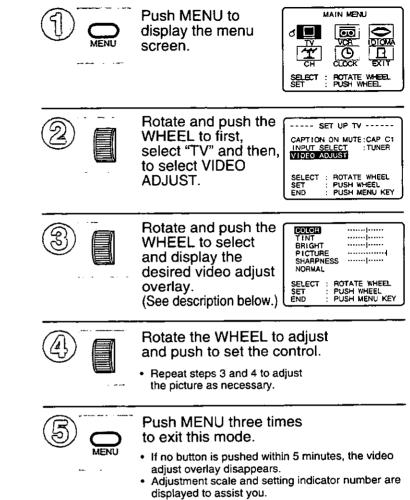
TUNE



Check list before you begin

Your Combination VCR is plugged in.

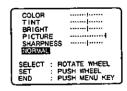
All connections are made. (see page 5.)



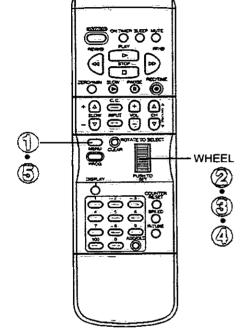
To Reset Picture Controls to the Factory Setting

at the same time and in the proper balance.

Rotate and push the WHEEL to select and set NORMAL. All controls return to factory settings.

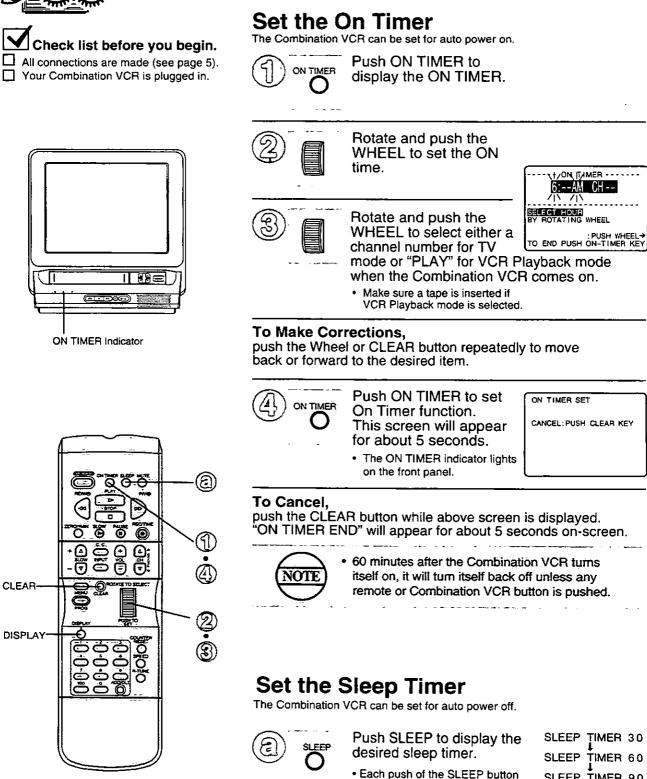


Picture Adjust 32 SHARPNESS 32 BAIGHT TINT 63 PICTURE ¢ 32 COLOR (C) + - (B) ADJUST : ROTATE WHEEL SET : PUSH WHEEL ADJUST : SET : ROTATE WHEEL PUSH WHEEL ROTATE WHEEL ROTATE WHEEL ADJUST : ROTATE WHEEL SET : PUSH WHEEL ADJUST SET ADJUST : SET : : SHARPNESS PICTURE Control BRIGHT Control **TINT Control COLOR Control** To adjust the intensity of To adjust the brightness Control To adjust for the most To adjust the intensity To adjust the sharpness the picture by adjusting of the picture. natural fleshtones. of the colors. contrast and color level of the picture.





TV Timer Features



SLEEP TIMER 90 SLEEP TIMER 00

will change the overlay at right:

 If you push the DISPLAY button with the SLEEP TIMER set, the remaining time will

appear on-screen.

"SLEEP TIMER 00" appears.

push the SLEEP button repeatedly until

To Cancel,

TIMER 60

SLEEP TIMER 12

CC Closed Caption System

Check list before you begin

All connections are made. (See page 5.)

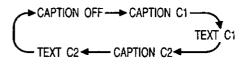
Your Combination VCR is plugged in.

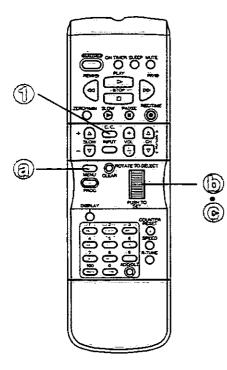
This system not only allows the hearing impaired to enjoy selected programs, but also makes valuable information from your TV stations available to you.



Push to select the desired caption mode (see below). Selected mode is displayed as an overlay on the screen.

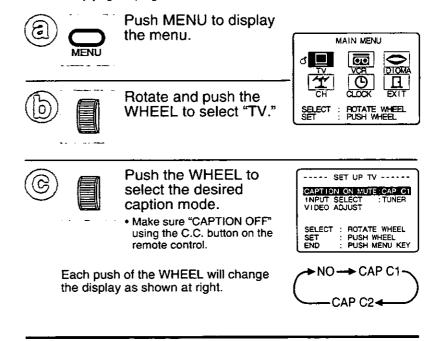
Each push of the CC button will change the caption mode as follows:





Caption On Mute Feature

This feature allows you to turn off the sound and, at the same time, display the closed caption narration. Perfect for when you need silence, but would like to continue enjoying the program.



Recording and Play Back a Closed Caption/Text Program

Record: Your Combination VCR will automatically record the Closed Caption/Text signal. Just follow normal recording operation.

Playback: To display the Closed Caption narration or Text during playback, simply follow the steps listed above right.

Closed Caption Modes to Choose From

Caption Mode: CAP C1 or C2

A narration of selected TV programs will be displayed on the screen. Check your TV program listings for CC (Closed Captioned) broadcasts.

Caption Mode: TEXT C1 or C2

The lower half of the screen will be blocked out. When the TV station broadcasts text, such as program listings, special information, etc., it will appear in this space.

Caption Mode: OFF

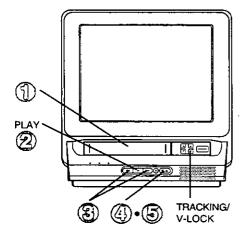
Narration will not appear on the screen even if a closed caption or text broadcast is received.

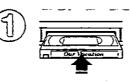
 The closed caption or text signal may be broadcast over C1, C2, or both. Also, text contents can vary so you may wish to try different settings.

Playback a Tape

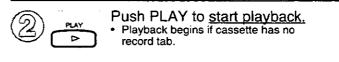
Check list before you begin

- (See page 5.)
- Your Combination VCR is plugged in.

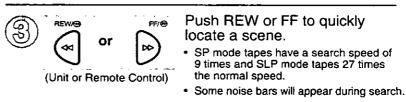




Insert a cassette. • Combination VCR power comes on automatically.



(Unit or Remote Control)





Push STOP to stop playback.

(Unit or Remote Control)



Special Effects During Playback

These features work best in SP or SLP mode. The sound will be muted. (After the Combination VCR is in the Still or Slow mode for 3 minutes, it will go into the Stop mode automatically to protect the tape and video head.)

Slow Motion Playback

Push SLOW to start and then, push SLOW \blacktriangle/V to vary the tape speed. To release the Slow mode, push PLAY or SLOW.

Still (Freeze) Frame Picture

Push PAUSE to freeze and release the picture.

Frame by Frame Advance

While in Still mode, push repeatedly or hold down the SLOW button to advance the still picture one frame at a time. Push PAUSE or PLAY to release.

Feature for a Quality picture

Digital Auto Tracking

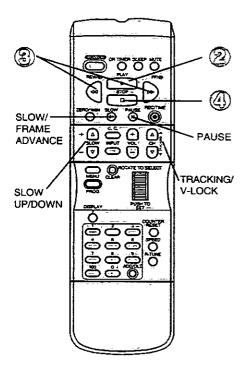
This feature continuously analyzes the signal and adjusts for optimum picture quality.

Manual Tracking Control

Use during Playback and Slow Motion mode to reduce picture noise. Push the CH (TRACKING) \blacktriangle / \checkmark buttons until the picture clears up. To return to Auto Tracking, eject and re-insert the tape.

V-Lock Control

In Still mode the CH (TRACKING) \blacktriangle/ \forall buttons operate as a V-Lock control to reduce jitter. Push \blacktriangle/ \forall until the picture is stabilized.



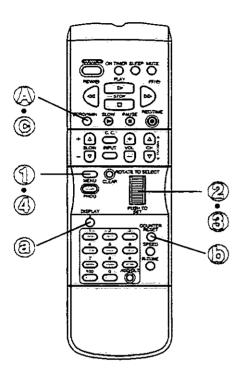
Caution:

Please inspect your cassette tape for any loose or peeling labels as it may become jammed in your unit.



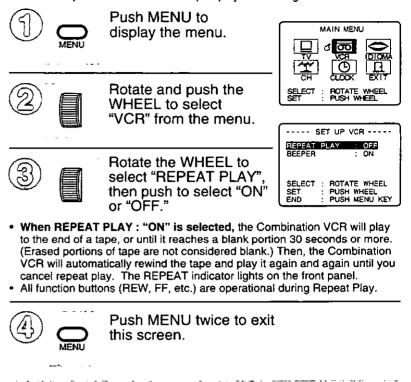


Your Combination VCR is equipped with several time saving features as well as convenient automatic functions which make tape operation easier than ever.



Repeat Play

You can set your Combination VCR up to play a recording over and over.



Auto Operation Functions

Auto Playback

When a tape is inserted, the power comes on (Auto). If the record tab* is removed, playback begins (Auto).

Auto Rewind

After a tape reaches its end during playback or fast forward, the Combination VCR will rewind and go into Stop mode.

Playback Auto Eject

After a tape without a record tab* is played to its end, the Combination VCR will rewind and then eject the tape.

Rec Auto Eject

After a tape reaches its end during normal recording, the Combination VCR will rewind and then eject the tape.

Memory Rewind Off

When the POWER button is pushed during rewind, rewind will be completed even though the Combination VCR turns off.

Eject Cassette

A cassette may be ejected with power on or off.

* For record tab information, see page 20. 14

One Minute Skip

With this feature, you can skip over commercials recorded on a tape.



NOTE

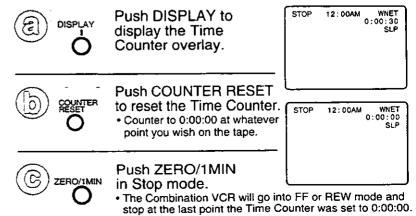
Push ZERO/1MIN in Play mode. · The Combination VCR will go into FF search mode and skip over 60 seconds of recorded time. Then, normal playback will resume.

You may also turn the repeat play feature on and off at the Combination VCR by pushing the PLAY button once or

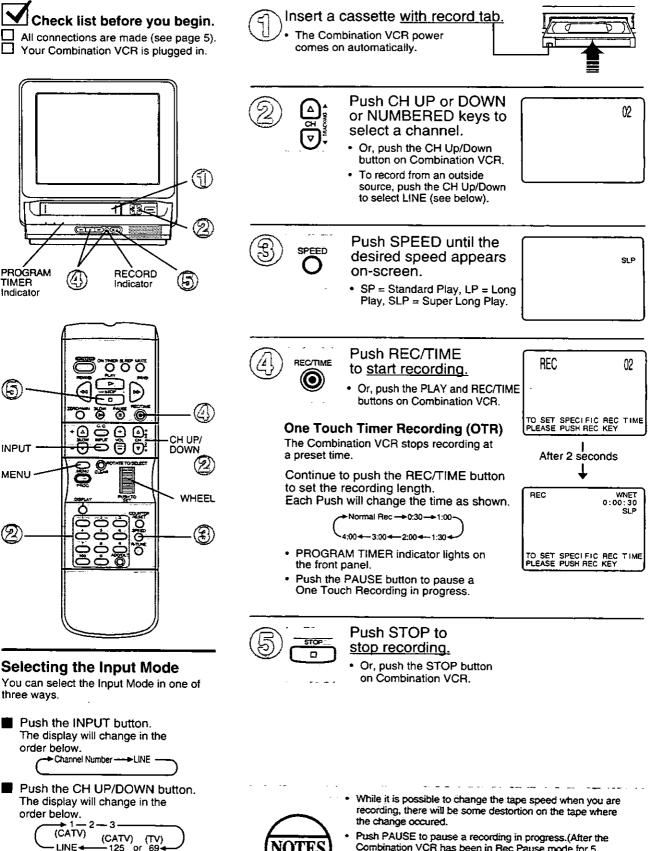
twice until the repeat indicator lights up (ON), goes out (OFF).

Zero Search

You can reset the Time Counter to zero and then return to that point.







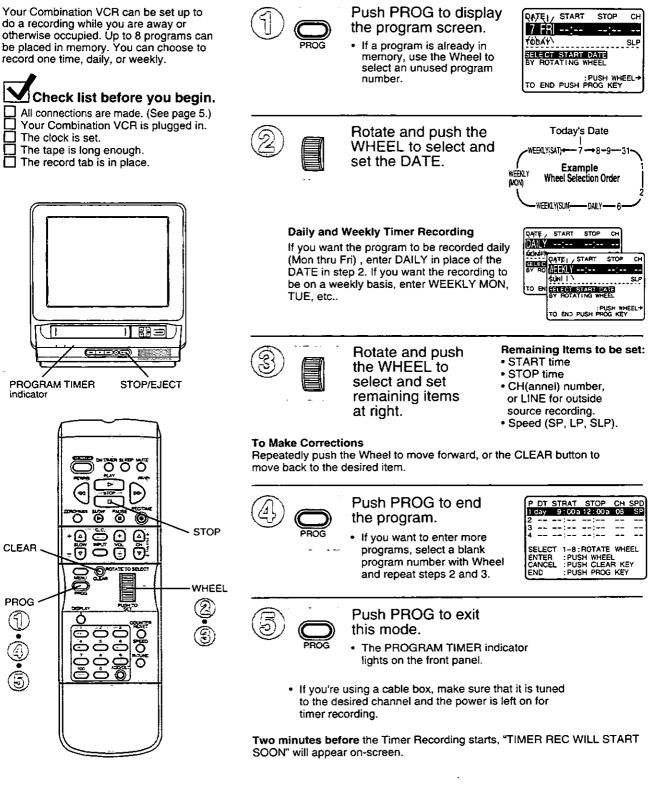
OTE

Push the MENU button to display the menu. Then, use the WHEEL key to select "TV" and then "INPUT SELECT." Finally choose "TUNER" or "LINE."

minutes, it will stop automatically to protect the tape and video head.) The recording time remaining will appear when the DISPLAY button is pushed during OTR mode.

Combination VCR has been in Rec Pause mode for 5







- If "PLEASE PREPARE FOR TIMER REC" appears and/or the PROGRAM TIMER indicator flashes, check that a cassette with record tab is loaded and the Combination VCR is in Stop mode.
- If the start times of two programs overlap, the lower numbered program will have priority.
- If the start time for a timer recording comes up during a normal recording or One Touch Recording (page 15), the timer recording will not be performed.
- If there is a power interruption of more than one minute, the recording may not be performed or continue.
- If "PROGRAM IS INCOMPLETE" appears on-screen in step 4, check all entries and make necessary corrections .

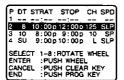
Cancel a Timer Recording: Recording <u>is</u> in progress

Hold down the STOP button for a few seconds to cancel the Timer Recording.

 Any future daily or weekly recordings will be performed as programmed.

Replace Program Contents: Recording <u>is not</u> in progress

 Push the PROG button to display all currently set programs.



•

•

•

•

•

•

.

•

•

•

•

•

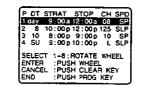
•

•

- 2 Rotate and push the Wheel to select and enter the desired timer recording. (See page 16.)
- QAJEL START STOP CH 8 SAT 10:00P 12:00P 125 /1\/1\ SLP SEEECT START DATE BY ROTATING WHEEL 4PUSH CLEAR : PUSH WHEEL→ TO END PUSH PROG KEY
- 3 Rotate and push the Wheel to select and enter replacement information.
- 4 Push the PROG button to exit this mode and return to the normal TV screen.

Review or Clear Program Contents: Recording <u>is not</u> in progress

 Push the PROG button to display all currently set programs.



P DT STRAT STOP CH SPD

SELECT 1-8:ROTATE WHEEL ENTER : PUSH WHEEL

6 10 SU

END

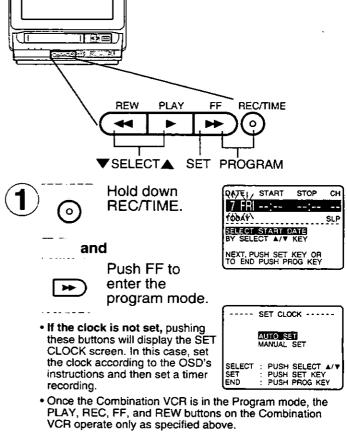
10:00 p 12:00 p 125 SLP 8:00 p 9:00 p 10 SP 9:00 p 10:00 p L SLP

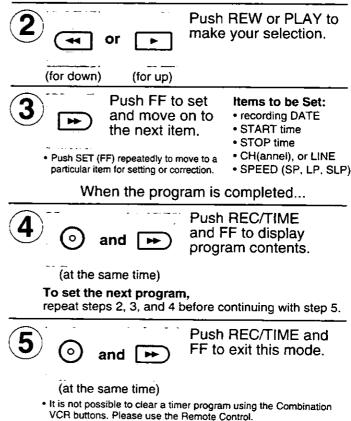
PUSH PROG KEY

- 2 Rotate the Wheel to select the desired program number.
- 3 Push the CLEAR button to clear the program.
- **4** Push the PROG button to exit this mode and return to the normal TV screen.



A timer recording can be set up using the buttons on the Combination VCR. If necessary, the clock can also be set.





17

SPECIAL Special VCR Features



Check list before you begin

☐ All connections are made (see page 5).
 ☐ Your Combination VCR is plugged in.

STOP/EJECT

VCR Lock Feature

When activated, this feature prohibits all operations except for timer recording, and tape eject. This is useful to prevent misoperation and protect your Combination VCR from curious children.



Hold down STOP/EJECT on the Combination VCR for 7 seconds during Stop, or Power OFF mode.

To Cancel the VCR Lock feature,

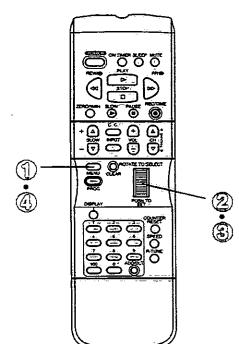


Hold down STOP/EJECT on the Combination VCR for 7 seconds again during Stop, or Power OFF mode.

VCR LOCK ACTIVATED

VCR LOCK OFF

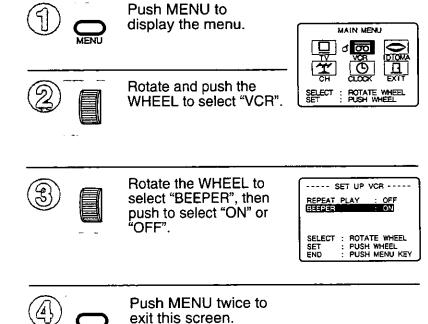
- VCR Lock mode is cancelled automatically after 24 hours when the clock is set.
- This feature cannot be activated or canceled when a timer or one touch recording is in progress.



Warning Beeper Feature

MENU

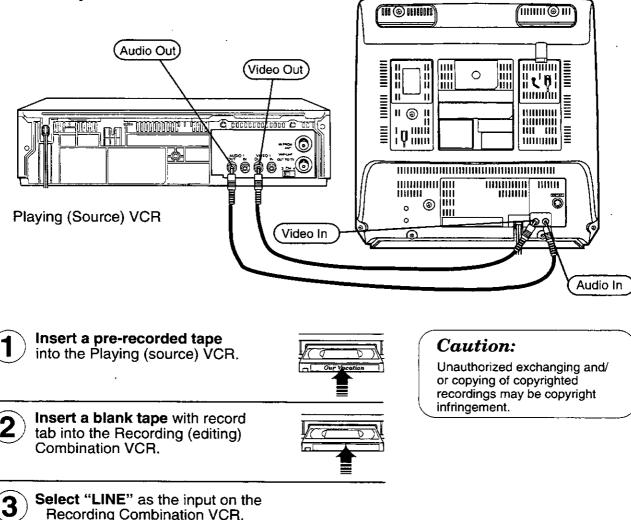
When you select BEEPER ON as described below, a short warning will sound each time an invalid entry or operation is made and a timer program is set.



Copying Your Tapes (Dubbing)

Connections you'll need to make.

Recording (Editing) Combination VCR



Push REC and PLAY at the same time on the recording Combination VCR. Then, push PAUSE on the remote immediately.

If you are using this Combination VCR as the Recording unit, see "Selecting the Input

Push PLAY on the playing VCR.

Then, **push PAUSE** when the tape reaches the point you want

Mode" section on page 15.

to start copying.

4

5

Push PAUSE on both units (at the same time), to begin copying.

Edit Out Unwanted Parts of the original recording by using the PAUSE button (on the Recording unit) while copying is in progress.



Then, push STOP on both units to stop copying.

⁶



Erase Protection (Record Tab)

Cassettes have a record tab to ensure that recordings are not accidentally erased.

To prevent accidental erasure, break off the tab with a screwdriver.

To record again, cover the hole with cellophane tape.



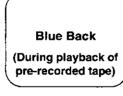
Maximum Record/Playback Time

Only use tapes with the VHS mark in this unit.

Tape Speed	Type of Video Cassette		
Position	T60	T120	T160
SP (Standard Play)	1 Hour	2 Hours	2 Hours 40 Minutes
LP (Long Play)	2 Hours	4 Hours	5 Hours 20 Minutes
SLP (Super Long Play)	3 Hours	6 Hours	8 Hours

Cleaning Care for Video Heads





Clogged Video Head Picture Blue Back Screen

Clogged Video Heads

While your Combination VCR will not normally require head cleaning, however the heads may become clogged when playing an old or damaged tape. If the image on your screen resembles the illustration on the left or the screen becomes solid blue when playing back a recorded signal on the tape, the heads probably require cleaning.

Cleaning the Heads

It is recommended that head cleaning be performed by a qualified service technician. Please contact your nearest Panasonic Service Center. An alternate solution is to obtain a head cleaning cassette. Be sure to follow the cleaning instructions carefully. Excessive use of a cleaning cassette could shorten head life. Use this cassette only when symptoms occur.

Reset all Combination VCR Memory Functions

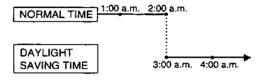
This operation is convenient when moving the Combination VCR to a new location, or if a mistake was made in the One Time Setup section. Make sure a tape is not inserted in the Combination VCR.

- 1) Push the POWER button to turn the Combination VCR on.
- Push and hold both the PLAY and REWIND buttons on the Combination VCR for more than 5 seconds.
 The power will shut off.
- 3) Perform the One Time Setup section on page 6.

D.S.T. (Daylight Saving Time)

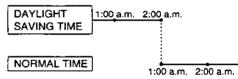
Spring:

First Sunday in April (DAYLIGHT SAVING TIME:AUTO) Automatically adds one hour and adjusts the clock.



Autumn:

Last Sunday in October (DAYLIGHT SAVING TIME: AUTO) Automatically turns back one hour and adjusts the clock.



Product Specifications

Display

Display	
Picture Tube:	13 inch measured diagonal 90° deflection Picture Tube
VCR	
Video Recordino System	n: 4 rotary heads helical
······································	scanning system
Audio Track:	1 track
Tuner:	
	VHF 2~13, UHF 14~69
CATV Channels:	Midband A through I (14~22)
	Superband J through W (23~36)
	Hyperband AA~EEE (37~64)
	Lowband A-5~A-1 (95~99)
	Special CATV channel 5A (01)
	Ultraband 65~94, 100~125
General	
Power Source:	120V AC, 60 Hz
Power Consumption:	Approx. 69 watts (Power on)
i onei eeneenpiien	Approx. 6 watts (Power off)
Television System:	EIA Standard NTSC color
Speaker:	1 piece
Operating Temperature	
Operating Humidity:	10%~75%
Weight:	28 lbs. (12.7 Kg)
Dimensions:	14-13/16" (W) X 15-7/8" (H)
	X 17" (D)
	376(W) X 403(H) X 432(D) mm

Note: Designs and specifications are subject to change without notice.

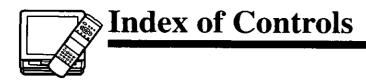
20

Before Requesting Service

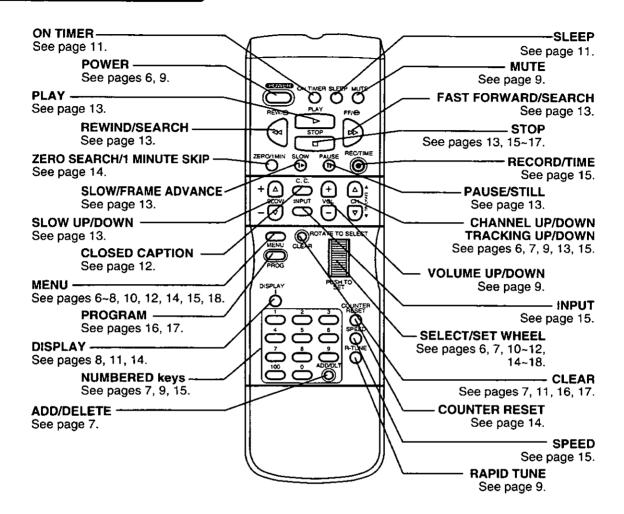


Check the following points once again if you are having some trouble with your Combination VCR.

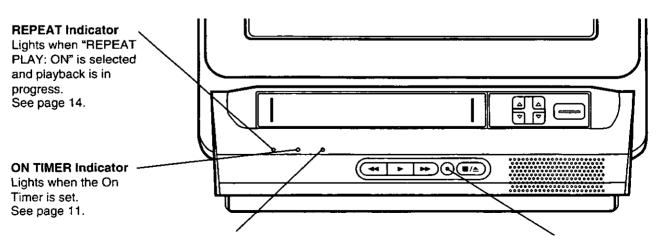
Power	Correction
No power	 Check that the Power Plug is completely inserted to an AC outlet. Check that the POWER button is set to on.
Monitor	Correction
No picture or sound	 Make sure your antenna or cable system is connected to the Combination VCR. (P.5) Check that the power plug is completely connected to an AC outlet.
Poor picture with normal sound	 Check that the POWER button is set to on. Adjust the BRIGHT, SHARPNESS, and PICTURE controls in the SET UP TV menu. (P.10)
Poor sound with normal picture Poor TV reception	 Adjust the VOLUME control. (P.9) Adjust the SHARPNESS and PICTURE controls in the SET UP TV menu. (P.10)
No color or poor color	• Adjust the TINT and COLOR controls in the SET UP TV menu. (P.10)
Ghosts (Multiple images) TV programs can't be watched	 Install a directional antenna. Make sure that the channel being received is in the Combination VCRs memory. (P.6)
VCR	Correction
TV program can't be recorded	 Make sure your antenna or cable system is connected to the Combination VCR. (P.5)
	• Make sure that the record tab on the back of the cassette is still intact. (P.20)
Timer recording can't be performed	 Set the recording start/stop time correctly. (P.16-17) Timer recording may not be performed or continued if a power interruption of more than 1 minute occurs before or during Timer Recording, even if power resumes thereafter.
There's no playback picture or the playback picture is noisy or contains streaks	Adjust the TRACKING control slowly in either direction. (P.13)
VCR can't be controlled	Make sure that VCR LOCK is set to off. (P.18)
Remote Control	Correction
Combination VCR can't be remote controlled	 Aim the Remote Control directly at the remote sensor on the Combination VCR. (Refer to Control Reference Guide.) Avoid all obstacles which may interfere with the signal path. Inspect or replace the batteries. (P.4) Make sure that VCR LOCK is set to off. (P.18)´ Exposing the Combination VCR remote sensor to direct fluorescent or outdoor light may cause signal interference.
Miscellaneous	Correction
Video cassette can't be inserted	 Insert the cassette with the window side up and the record tab facing you.
Video cassette can't be removed	 Check that the power plug is completely connected to an AC outlet.
Eject does not function or insertion cannot be done	Turn the POWER off and then on, and try ejecting or inserting the tape again.
Video cassette ejects when the REC and PLAY buttons are pushed or when the two minutes before the Timer Recording starts	 Make sure the record tab on the back of the cassette is still intact. (P.20)
In the stop mode, the motor (CYLINDER) continues to rotate	 To enable the quick play mechanism, the cylinder will rotate for about 5 minutes.
VCR can't be controlled	 The quick play mechanism reduces response time from Stop to Play mode and from Play to Rewind search mode. Make sure that VCR LOCK is set to off. (P.18)



Remote Control Button



Indicators on the Front Panel



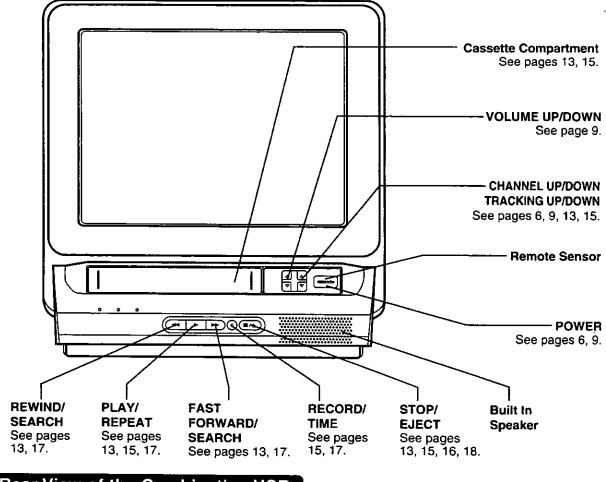
PROGRAM TIMER Indicator

Lights when the Combination VCR is set for Timer Recording. It flashes when a Timer Recording has been set, but a tape has not been inserted, the clock is not set, or the tape is in motion. See pages 15, 16.

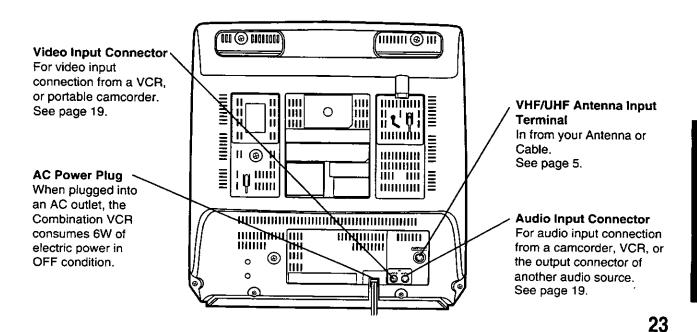
RECORD Indicator

Lights during recording. In Rec Pause or OTR Pause mode, the indicator flashes. See page 15.

Front View of the Comnination VCR



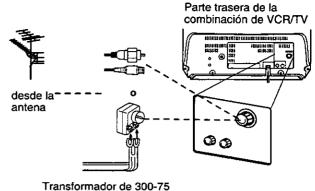
Rear View of the Combination VCR

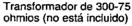


Spanish Quick Use Guide/Guía para rápida consulta

Conixión de la antena externa

Desenganche la antena del televisor o registrador de video que tuviera anteriormente y conéctela a la parte trasera del Registrador de Video de Cobinación, como se muestra en el diagrama. Si el sistema de su antena tiene conductores UHF y VHF separados, usted necesita un Mezclador de Banda UHF/VHF (no viene con el equipo).





Conexiones de TV por cable

(A) Sin la caja convertidora/ decodificadora

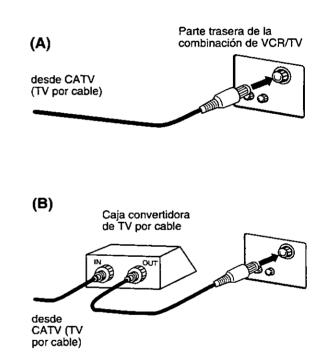
Con esta conexión usted podrá utilizar su control remoto del Registrador de combinación de VCR/TV para seleccionar los canales que desee ver y seleccionar canales no codificados para su grabación programada. Esta conexión no permite ver ni grabar canales codificados.

(B) Con una caja convertidora/ decodificadora

Con esta conexión, usted podrá grabar y ver cualquier canal, incluyendo los canales codificados. observe, sin embargo, que la <u>selección de canales se debe efectuar en la</u> <u>caja convertidora de TV por cable que</u> <u>suministra esta empresa.</u> La grabación programada está limitada a un canal cada vez, y sólo se podrá ver el canal que esté grabando.

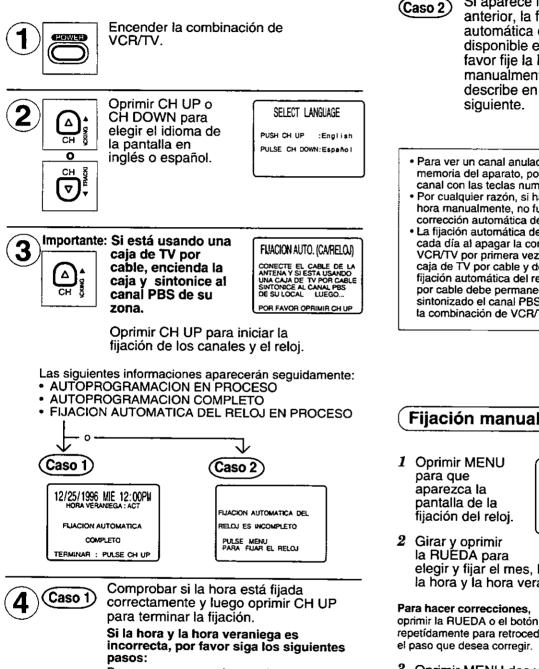
Para ver y grabar un canales codificado/no codificado

Coloque el selector de canal del Registrador de combinación de VCR/TV en el canal de salida de la caja convertidora de televisión por cable (por ejemple el canal 3). Después, seleccione en la caja convertidora de TV por cable los cnales que se quieran ver o grabar.



Para fijar el idioma, canal y reloj

Al encender la combinación de VCR/TV por primera vez, aparecerán las pantallas para fijar automáticamente los canales y el reloi.



Raras veces, en caso de que ud. vive cerca de dos zonas con hora diferente, el aparato puede elegir un canal PBS con diferente hora de su zona. En este caso, haga los siguientes pasos:

- 1 Tome nota del canal que está fijado en la pantalla y salga desde este modo oprimiendo el botón CH UP.
- 2 Anule este canal desde los canales memorizados en la combinación de VCR/TV.
- Oprima el botón MENU para que aparezca la pantalla 3 del MENU.
- 4 Use la RUEDA para elegir "CLOCK" y luego para elegir "AUTO SET".

· Si ud. esta usando una caja de TV por cable y tiene muchos canales PBS, sintonice la caja de TV por cable a un canal PBS diferente e intente la fijación automática otravez



Si aparece la pantalla anterior, la fijación automática del reloj no es disponible en su zona. Por favor fije la hora del reloj manualmente como describe en la pagina

- Para ver un canal anulado desde la memoria del aparato, por favor elija el canal con las teclas numéricas.
- Por cualquier razón, si ha cambiado la hora manualmente, no funcionará la corrección automática de la hora.
- · La fijación automática del reloj efectuará cada día al apagar la combinación de VCR/TV por primera vez. Si ud. usa una caja de TV por cable y desea efectuar la fijación automática del reloi, la caja de TV por cable debe permanecer encendido y sintonizado el canal PBS cuando se apaga la combinación de VCR/TV.

Fijación manual del reloj



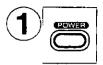
elegir y fijar el mes, la fecha, el año, la hora y la hora veraniega.

oprimir la RUEDA o el botón CLEAR repetidamente para retroceder o avanzar hasta

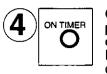
Oprimir MENU dos veces para iniciar 3 a funcionar el reloj y salir desde este modo.

Spanish Quick Use Guide/Guía para rápida consulta

Operaciones para ver la TV



Oprimir POWER para encender la combinación de VCR/TV.



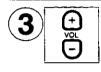
Oprimir el botón ON TIMER para fijar la función del encendedor automático. Esta pantalla aparecerá cerca de 5 segundos.

 El indicador de ON TIMER (encendedor automático) se encenderá en el panel delantero.

ENCENDIDO AUTOMATICO FLIADO ANULAR : PULSE CLEAR



Elegir el canal usando CHANNEL UP/DOWN o usando la teclas numéricas.



Oprimir VOLUME UP/ DOWN para ajustar el nivel del volumen.

	<u> </u>
ſ	
1	
24	[]]]][]]]]]
<u>ب</u>	

Fijación del encendedor automático

La combinación de VCR/TV se puede fijar para que se encienda automáticamente a una hora programada.



Oprimir ON TIMER para que aparezca la pantalla del encendedor automático.

Girar y oprimir la RUEDA para fijar la hora.

CONTROLOGY AUTOMATICO
 CONTROLOGY AUTOMATICO
 CONTROLOGY
 CONTROLOGY
 CONTROLOGY
 CONTROLOGY
 CONTROLOGY
 CONTROLOGY
 CONTROLOGY
 CONTROLOGY

Para fijar el modo de TV

o reproducción del encendedor automático, gire y oprima la RUEDA para elegir un canal para el modo de TV o para elegir "PLAY" para el modo de reproducción.

 Asegúrese de que una cinta de video esté introducido en la combinación de VCR/TV, si ha elegido la reproducción de la videograbadora.

Para hacer correcciones

Oprimir la RUEDA o el botón CLEAR repetidamente para retroceder o avanzar hasta el paso que desea corregir.

Para cancelar,

oprimir el botón CLEAR cuando está mostrado la pantalla anterior. "ENCENDIDO AUTOMATICO ANULADO" aparecerá en la pantalla cerca de 5 segundos.

 60 minutos luego de que la combinación de VCR/TV se ha encendido automáticamente, éste se apagará por sí mismo si no se ha oprimido ningún botón del control remoto o del aparato.

Fijación del temporizador para dormir

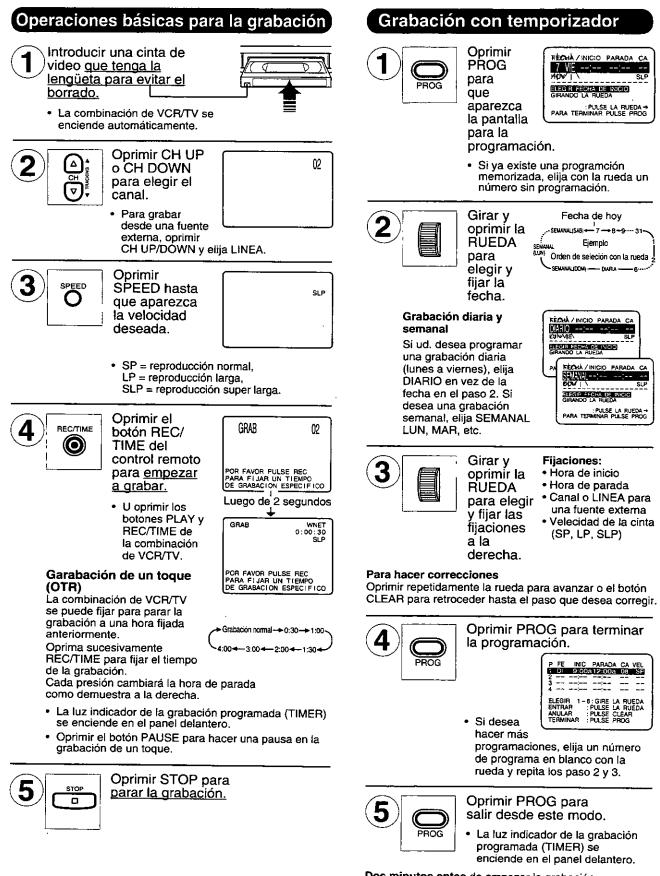
La combinación de VCR/TV se puede fijar para que se apague automáticamente.

- Oprimir SLEEP para que aparezca el tiempo de fijación.
 - Si ud. oprime el botón DISPLAY con el temporizador para dormir fijado, aparecerá en la pantalla el tiempo que sobra para apagarse.

TEMPORIZADOR PARA DOMIR 30 TEMPORIZADOR PARA DOMIR 60 TEMPORIZADOR PARA DOMIR 90 TEMPORIZADOR PARA DOMIR 00



Para cancelar, oprimir SLEEP sucesivamente hasta que aparezca "TEMPORIZADOR PARA DORMIR 00".



Dos minutos antes de empezar la grabación, "GRABACION PROGRAMADA INICIARA ENSEGUIDA" aparecerá en la pantalla.

Matsushita Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way Secaucus. New Jersey 07094

Printed in U.S.A. VQTS3192(A) Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc. ("PSC") Ave. 65 de Infanteria. Km. 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985

