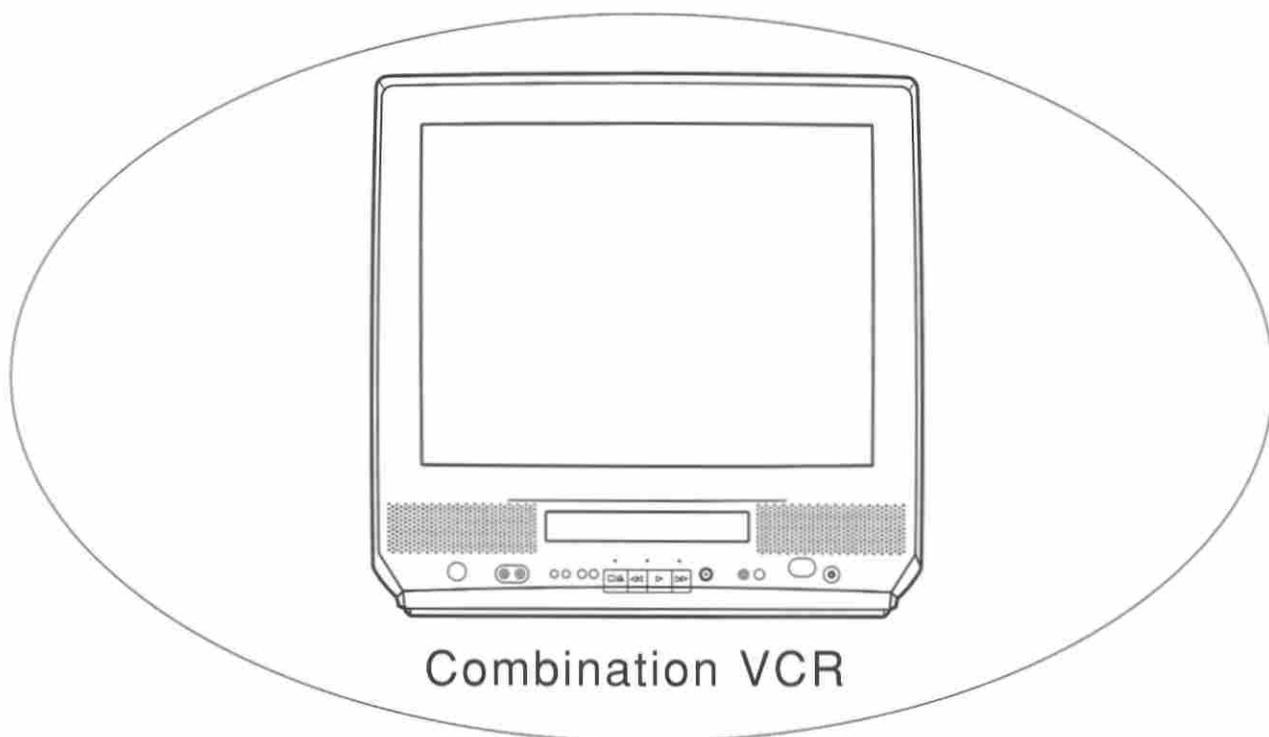


Thank you for choosing

Panasonic Omnivision **VHS**



Combination VCR

MODEL PV-M2057



Operating Instructions

Please read these instructions carefully before attempting to connect, operate or adjust this product. Please save this manual.
Spanish Quick Use Guide is included.
Guía para rápida consulta en español está incluido.

P2 ~ P27
Getting Started

P28 ~ P32
Basic TV Operation

P33 ~ P35
Basic VCR Operation

P36 ~ P40
More you Can Do

P41 ~ Back Cover
Other Information

Things You Should Know

Congratulations

on your purchase of one of the most sophisticated and reliable products on the market today. Used properly, it will bring you and your family years of enjoyment. Please fill in the information at right. The serial number is on the tag located on the back of your Combination VCR.

Date of Purchase _____
Dealer Purchased From _____
Dealer Address _____
Dealer Phone No. _____
Model No. **PV-M2057** _____
Serial No. _____

Safety Precautions

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.

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Basic VCR Operation

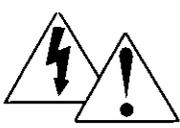
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Warranty	Back Cover



Important Safeguards and Precautions

FOR YOUR SAFETY, READ AND RETAIN ALL SAFETY AND OPERATING INSTRUCTIONS. HEED ALL WARNINGS IN THE MANUAL AND ON THE UNIT

INSTALLATION

1 POWER SOURCE CAUTION

Operate only from a power source indicated on the unit or in this manual. If necessary, have your Electric Utility Service Company or Video Products Dealer verify the power source in your home.

2 POLARIZED OR GROUNDING PLUG

As a safety feature, this Video product comes with either a polarized power cord plug (one blade is wider than the other), or a three-wire grounding type plug.

POLARIZED PLUG CAUTION:

This plug will only fit into an outlet one way. If you cannot fully insert the plug, try reversing it. If it still will not fit, have an electrician install the proper wall outlet. Do not defeat the safety feature by tampering with the plug.

GROUNDING PLUG CAUTION:

This plug will only fit into a three-hole grounding outlet. If necessary, have an electrician install the proper outlet. Do not defeat the safety feature by tampering with the plug.

3 POWER CORD

Make sure power cords are routed so that they are not likely to have anything rest on them, roll over them, or be in the way of walking traffic. If an extension cord is used, make sure it also has either a polarized or grounded plug and that the cords can be securely connected. Frayed cords, damaged plugs, and damaged or cracked wire insulation are hazardous and should be replaced by a qualified service technician. Overloaded outlets and extension cords are fire hazards and should be avoided.

4 DO NOT BLOCK VENTILATION HOLES

Ventilation openings in the cabinet release heat generated during operation. If they are blocked, heat build-up inside the unit can cause failures that may result in a fire hazard or heat damage to cassettes. For protection follow these rules:

- Never cover ventilation slots or the unit while in use, or operate the unit when placed on a bed, sofa, rug, or other soft surface.
- Avoid built-in installation, such as a book case or rack, unless proper ventilation is provided.

5 AVOID EXTREMELY HOT LOCATIONS OR SUDDEN TEMPERATURE CHANGES

Do not place the unit over or near any kind of heater or regulator, in direct sunlight, inside a closed vehicle, etc.. Do not move the unit suddenly between areas of extreme temperature variation. If the unit is suddenly moved from a cold place to a warm place, moisture may condense in the unit and on the tape.

6 TO AVOID PERSONAL INJURY

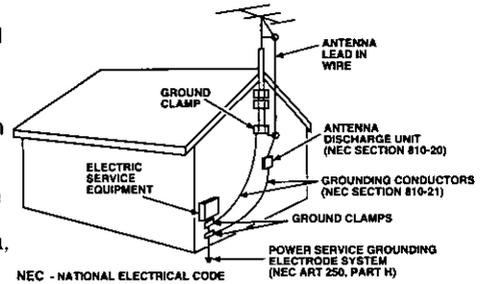
- Do not place unsecured equipment on a sloping surface.
- Do not place this unit on any support that is not firm, level and adequately strong. The unit could fall causing serious injury to child or adult and damage to the unit.
- An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- Carefully follow all operating instructions and use the manufacturer's recommended accessories when operating this unit or connecting it to any other equipment.



OUTDOOR ANTENNA INSTALLATION

1 SAFE ANTENNA AND CABLE CONNECTION

If an outside antenna or cable system is connected to the equipment, be sure the antenna or cable system is grounded so as to provide some protection against built up static charges and voltage surges. Section 810 of the National Electrical Code, ANSI/NFPA 70 (in Canada, part 1 of the Canadian Electrical Code) 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.



2 KEEP ANTENNA CLEAR OF HIGH VOLTAGE POWER LINES OR CIRCUITS

An outside antenna system should be located well away from power lines, electric light or power circuits and where it will never come into contact with these power sources if it should happen to fall. When installing an outside antenna, extreme care should be taken to avoid touching power lines, circuits or other power sources as this could be fatal. Because of the hazards involved, antenna installation should be left to a professional.

USING THE VIDEO UNIT

If the unit has been in storage or moved to a new location, refer first to the INSTALLATION section of these safeguards.

1 KEEP THIS VIDEO UNIT AWAY FROM WATER OR MOISTURE OF ANY KIND.

2 IF EQUIPMENT IS EXPOSED TO RAIN, MOISTURE, OR STRONG IMPACT, unplug the unit and have it inspected by a qualified service technician before use.

3 DURING AN ELECTRICAL STORM

During a lightning storm, whether indoors or outdoors, or before leaving the unit unused for extended periods of time, disconnect all equipment from the power source as well as the antenna and cable system.

4 WHEN THE UNIT IS PLUGGED IN

- Never expose the unit to rain or water. DO NOT OPERATE if liquid has been spilled into the unit. 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.
- Never drop or push any object through openings in the unit. Some internal parts carry hazardous voltages and contact can cause electric shock or fire hazard.
- Avoid placing the unit directly above or below your TV set as this may cause electrical interference. Keep all magnets away from electronic equipment.

5 USING ACCESSORIES

Use only accessories recommended by the manufacturer to avoid risk of fire, shock, or other hazards.

6 CLEANING THE UNIT

Unplug the unit. Then, use a clean, dry, chemically untreated cloth to gently remove dust or debris. DO NOT USE cleaning fluids, aerosols, or forced air that could over-spray, or seep into the unit and cause electrical shock. Any substance such as wax, adhesive tape, etc. may mar the cabinet surface. Exposure to greasy, humid, or dusty areas may adversely affect internal parts.

SERVICE

1 DO NOT SERVICE THIS PRODUCT YOURSELF

If, after carefully following the detailed operating instructions, this Video product does not operate properly, do not attempt to open or remove covers, or make any adjustments not described in the manual. Unplug the unit and contact a qualified service technician.

2 IF REPLACEMENT PARTS ARE REQUIRED

Make sure the service technician uses only parts specified by the manufacturer, or those having the same safety characteristics as the original parts. The use of unauthorized substitutes may result in fire, electric shock, or other hazards.

3 HAVE THE SERVICE TECHNICIAN PERFORM A SAFETY CHECK

After any service or repairs to the unit, request the service technician to conduct a thorough safety check as described in the manufacturer's service literature to insure that the video unit is in safe operating condition.

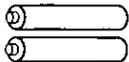
Unpacking Your Combination VCR • Product Features

Unpacking Your Combination VCR

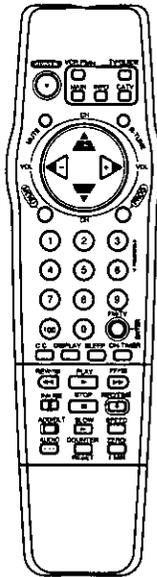
The accessories shown below are provided to help you use or set up your Combination VCR.

Accessories

Remote Control
VSQS1484

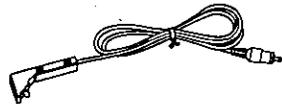


2 "AA" Batteries



Optional Accessory

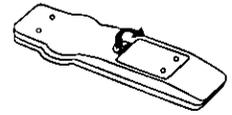
Cable Box Controller
PV-GP57



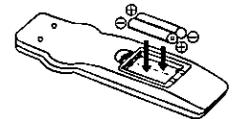
To order accessories,
call toll free 1-800-332-5368.

Load the batteries

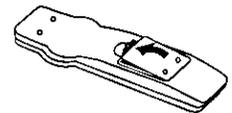
1 Push in and up on the latch with your thumb nail and lift off the lid.



2 Install two batteries as indicated inside the Battery Compartment.



3 Fit the lid's hinge piece into the indent on the case, and snap the lid into place.



Battery replacement caution

- Do not mix old and new batteries.
- Do not mix alkaline with manganese batteries.

Product Features

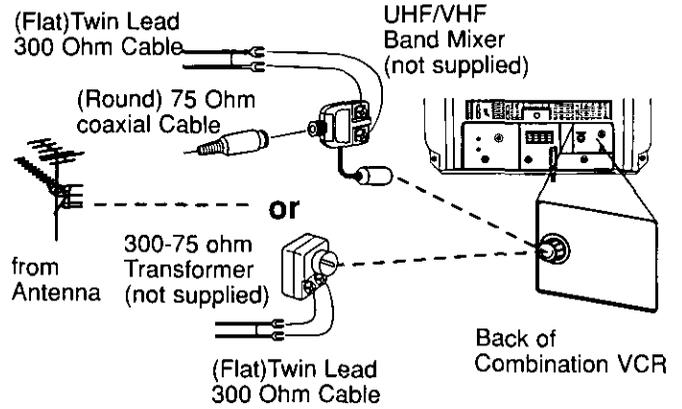
Alarm Timer	30
All Channel Auto Set/181-CH TV/CATV Tuner	8
Auto Clock Set	8,9
Auto Daylight Saving Time	41
Auto Operation Functions (Auto Shut Off, Auto Playback, Rewind, Tape Eject, Power Off)	34
Auto Repeat Function	34
Cable Box Universal Remote Control Feature	40
Closed Caption System	31
Easy-to-Read English/Spanish/French On-Screen Displays	8~15, 36, 37
FM Radio	32
Front-mounted A/V In Terminals	12, 37
Game Mode	28
MTS Broadcast System	38
One Minute Skip	34
One Month, 8 Program Auto Timer Recording	36, 37
One Touch Recording (OTR)	35
PanaBlack™ Picture Tube	33
Quick Play Mechanism	42
Rapid Tune	28
Special Effects Playback	33
Special VCR Features (VCR Lock, Warning Beeper)	39
GUIDE Plus+ Recording	24, 25
Zero Search	34



Antenna or 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).



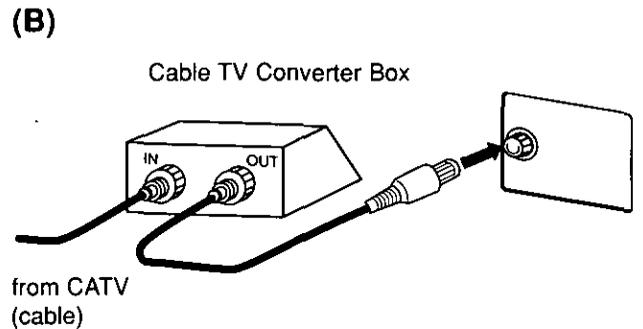
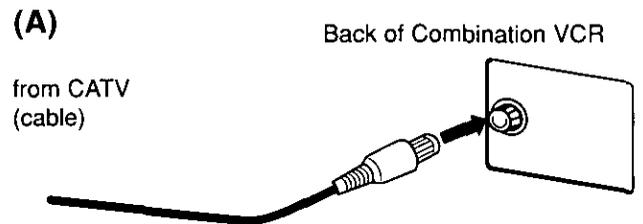
Cable Connections

(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. Scrambled channels may not be viewed or recorded with this connection.

(B) With a Converter/Descrambler Box

With this connection, you may record and view any channel including scrambled channels. Please note, however that channel selection must be made at the cable company converter box. 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 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.

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

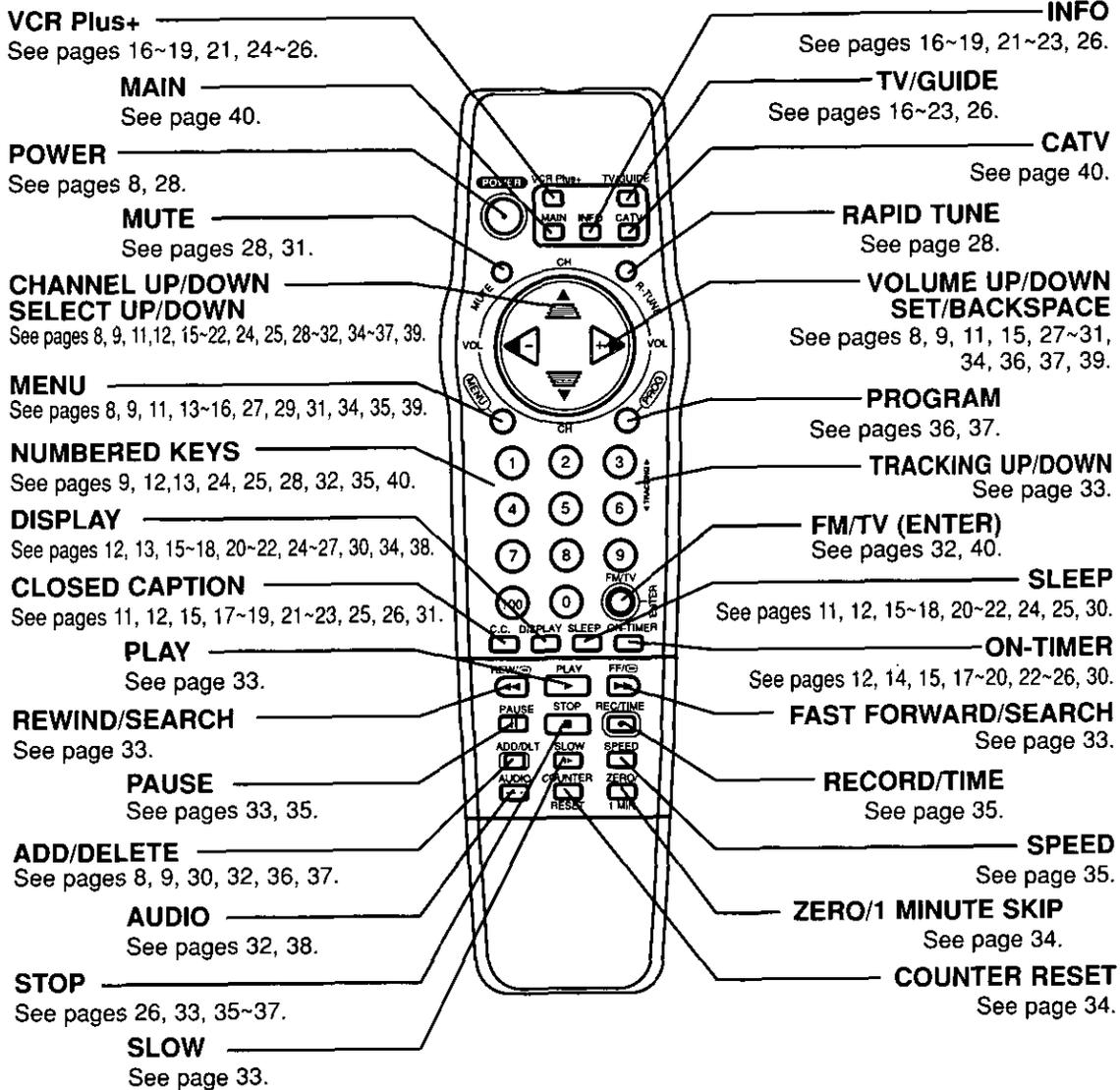
Note to CATV System Installer

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.

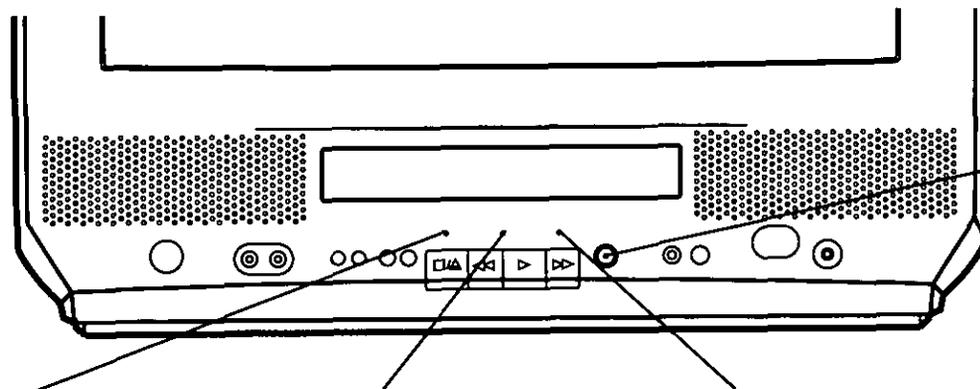


Location of Controls

Remote Control Buttons



Indicators on the Front Panel



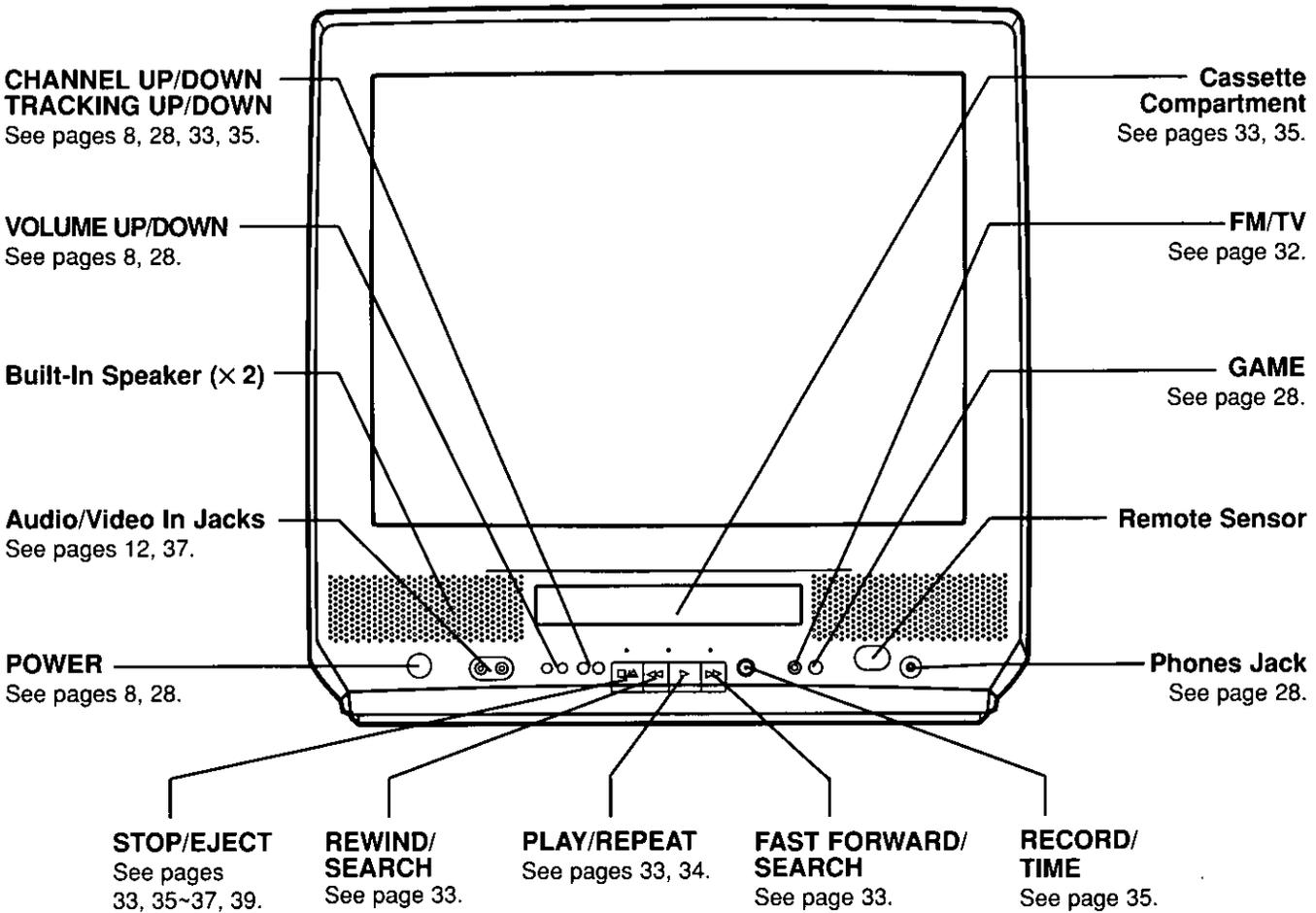
RECORD Indicator
Lights during recording. In Rec Pause or OTR Pause mode, the indicator flashes. See page 35.

ON TIMER Indicator
Lights when the On Timer is set. See page 30.

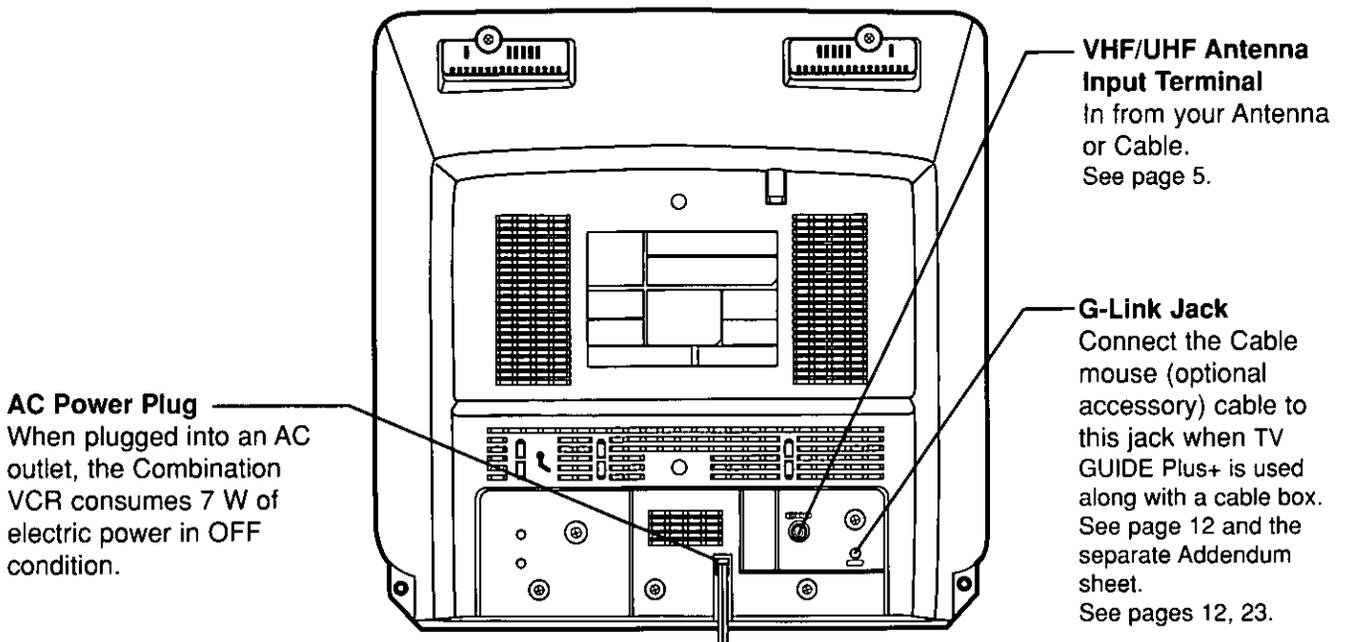
REPEAT Indicator
Lights when "REPEAT PLAY: ON" is selected and playback is in progress. See page 34.

PROGRAM TIMER Indicator
Lights when the Combination VCR is set for Timer Recording. It flashes when a Timer Recording has been set with no tape inserted, the clock is not set, or the tape is in motion. See pages 24, 25, 35~37.

Front View of the Combination VCR



Rear View of the Combination VCR

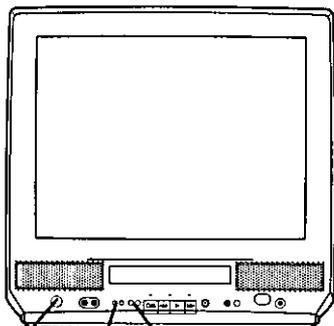




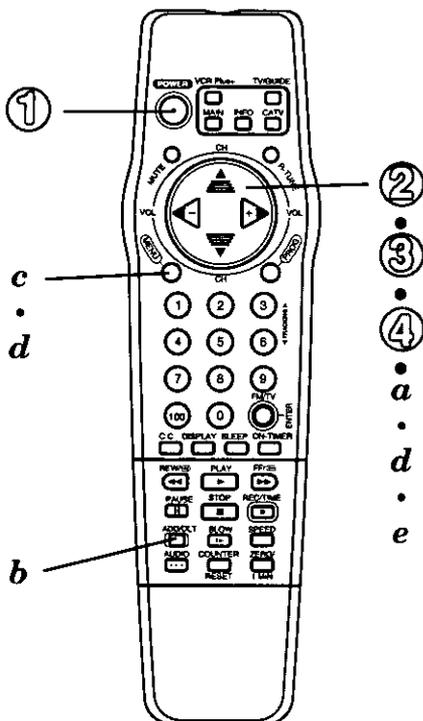
One Time Setup

✓ Check list before you begin.

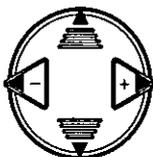
- Your Combination VCR is connected to an Antenna, or Cable system (see page 5).



① ② ② ③ ④



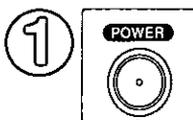
Using the keys



Whenever a menu or program screen is displayed, CHANNEL UP/DOWN and VOLUME UP/DOWN on the remote control function as  only. For VOLUME UP/DOWN functions, use the buttons on the Combination VCR.

To Set Language, Channels, and Clock

When the Combination VCR power is first turned on, the Select language and Channel/Clock Auto Set screens appear automatically.



1 Push POWER to turn the Combination VCR on.



or

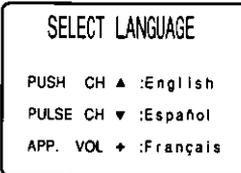


or



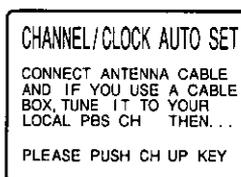
2 Push ,  or  for on-screen displays in English, Spanish or French.

- If you choose the wrong language, please see the "Reset all Combination VCR Memory Functions" section on page 41.
- If you use a cable box, the cable box must be left on for auto channel set.



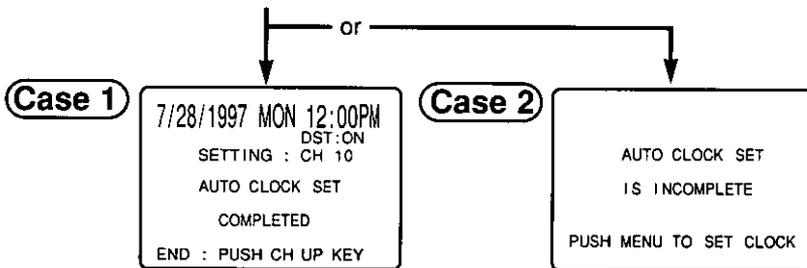
3 Important: If you use a cable box, turn it on and select the PBS station in your time zone.

Push  to start Channel Auto Set and Clock Auto Set.



These on-screen displays will appear in sequence.

- CH AUTO SET PROCEEDING
- CH AUTO SET COMPLETED
- AUTO CLOCK SET PROCEEDING



4 Case 1 Confirm that displayed time is correct, and then push  to exit.

If the displayed time and D.S.T. are incorrect

In the rare event that you live within broadcast range of two PBS stations in two different time zones, the Combination VCR may recognize the wrong PBS station. To correct this situation, do the following:

- Make a note of the SETTING: CH number shown on-screen and push  to exit.
- Delete the setting channel from the Combination VCR channel memory. (See the Add or Delete a Channel section on the next page.)
- Push MENU to display the menu.
- Push , , ,  to select "CLOCK," and then push MENU to display the SET CLOCK screen.
 - If you use a cable box and have multiple PBS stations, tune the cable box to a different PBS station and try auto clock set again using the menu.
- Push ,  to select "AUTO SET," and then push  to set and to  start Auto Clock set.

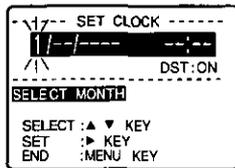


- Auto clock set will be performed when the Combination VCR is turned off the first time each day. If you use a cable box and you want auto clock set to be performed, the cable box must be left on and tuned to the PBS channel at the time the Combination VCR power is turned off.
- If for any reason the time is changed manually, automatic time correction will not occur.

Case 2 If AUTO CLOCK SET IS INCOMPLETE appears, please set the clock manually.

a. Push MENU to display the SET CLOCK screen.

b. Push ▲ ▼ to select and ► to enter the month, date, year, time, and D.S.T. (Daylight Saving Time).



To Make Corrections,

push ◀ ▶ repeatedly to move back or forward to the desired item.

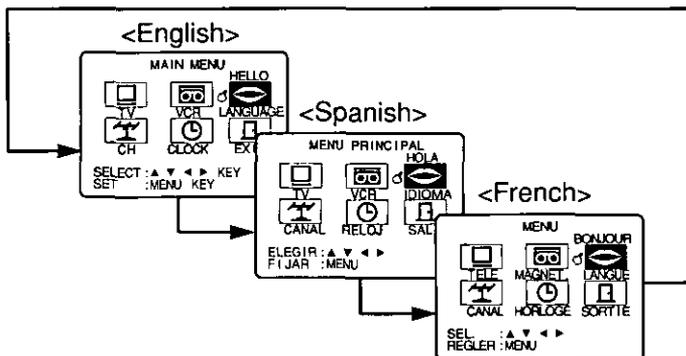
c. Push MENU to start the clock. Then, push ▲ ▼ ◀ ▶ to select "EXIT." Now, push MENU to exit the MAIN MENU.

• "DST:ON" automatically adjusts for daylight saving time. (See page 41.)

To Change or Re-enter One Time Setup Items

To Change the OSD Language

- 1 Push MENU to display the MAIN MENU.
- 2 Push ▲ ▼ ◀ ▶ to select the language selection icon.
- 3 Push MENU repeatedly to change the language as shown.

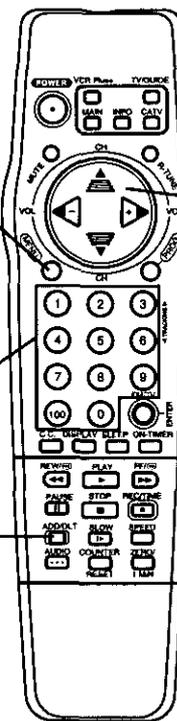
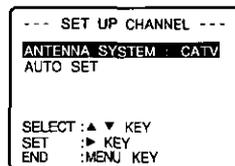
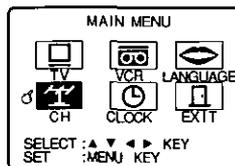


4 Push ▲ ▼ ◀ ▶ to select "EXIT," and then push MENU to exit the MAIN MENU.

To Replace Channels in Memory

In case, you have cable installed, etc.

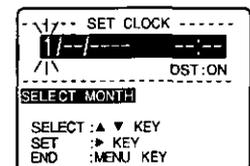
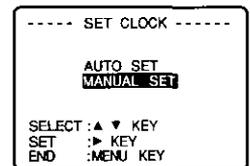
- 1 Push MENU to display the MAIN MENU.
- 2 Push ▲ ▼ ◀ ▶ to select "CH," and then push MENU to display the SET UP CHANNEL screen.
- 3 Push ▲ ▼ repeatedly to select ANTENNA SYSTEM, and then push ► to select your antenna system (TV or CATV).
- 4 Push ▲ ▼ to select AUTO SET, and then push ► to start.
 - To exit this mode, push MENU. Then, push ▲ ▼ ◀ ▶ to select "EXIT." Now, push MENU to exit the MAIN MENU.



To Set or Reset the Clock

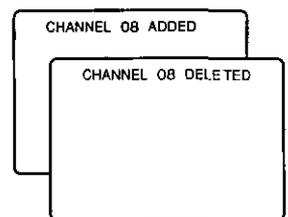
In case the clock is wrong, or a power failure occurred.

- 1 Push MENU to display the MAIN MENU.
- 2 Push ▲ ▼ ◀ ▶ to select "CLOCK." Then, push MENU to display the SET CLOCK screen.
- 3 Push ▲ ▼ to select "MANUAL SET," and then ► to display the SET CLOCK screen.
- 4 Please do steps b and c at the top of this page.



To Add or Delete a Channel

- 1 Select a channel using the NUMBERED keys to add or the CH ▲ ▼ to delete.
- 2 Push the ADD/HLT to add or delete the channel.
 - To select a channel once it's deleted, use the NUMBERED keys.



NOTES

- 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.



GUIDE Plus+ Setup

The TV GUIDE Plus+ system allows you to browse through program line-up for each channel you receive in a variety of methods (see below). When properly setup, broadcast data, which includes the program title, description (if available), PlusCode, etc., is downloaded into your Combination VCR each day through a Provider (Host) channel. Because the PlusCode is included in the broadcast data, recording the programs listed in the line-ups is easier than ever using TV GUIDE Plus+ and VCR Plus+ recording (page 24~26).

NOTE:

When using this feature with a cable box, an optional Cable Box Controller should be used. If the optional Cable Box Controller is not used, the TV GUIDE Plus+ section should be skipped.

TV GUIDE Plus+ Setup (page 11~15)

(Must be completed before the TV GUIDE Plus+ feature can be used.)

To enable your Combination VCR to receive daily updated TV GUIDE Plus+ data, it is necessary to do the TV GUIDE Plus+ setup.

You will be entering your Zip or Postal code, and how your Combination VCR receives broadcasts (e.g. via a cable box, etc.). The Combination VCR then searches for the TV GUIDE Plus+ data Provider (Host) channel in your area so that the program and other information can be downloaded on a daily basis.

Daily Program GUIDE (page 16)

You can view program information, such as title, description (if available), PlusCode, etc., for the current broadcast of each channel you receive.

NEXT Mode (page 17)

Use this mode to browse through the program line-up of each channel you receive up to midnight of the following day.

SCAN Mode (page 18)

Use this mode if you want to view program information of any channel for a specific time up to midnight of the following day.

SORT Mode (page 19)

This mode allows you look up programs by category (e.g. movies, sports, etc.) for up to 8 days away.

TV GUIDE Plus+ and VCR Plus+ Programming (pages 24~26)

You can program the Combination VCR to record up to 14 programs quickly and easily using the PlusCode provided in the program data.

FEATURE Mode (pages 20, 21)

In the future, depending on your area, you may be able to subscribe to on-line information services to receive such information as news, weather, traffic conditions, etc..

INFO Center (pages 22, 23)

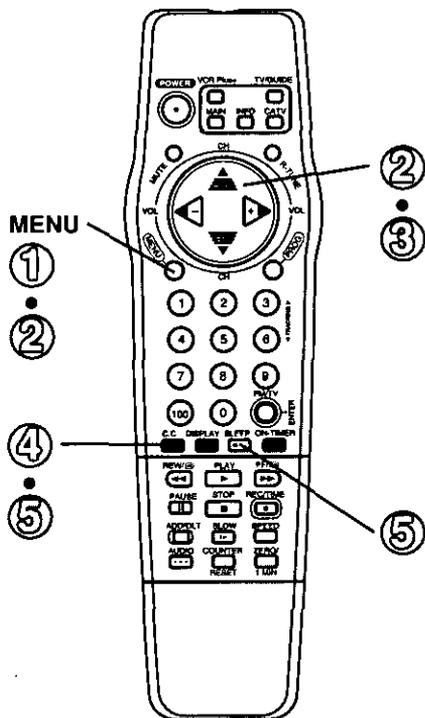
Broadcasters may provide additional information about selected programs. This information is stored in temporary memory. You may view the information now, or store it in memory for later access.

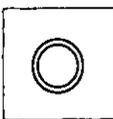


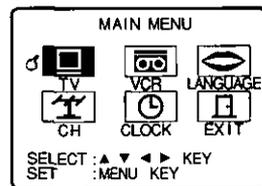
- Once the TV GUIDE Plus+ feature is setup, the normal VCR programming functions (using the PROG button on the remote control) become inoperable. This is normal.

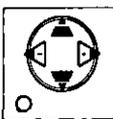
✓ Check list before you begin.

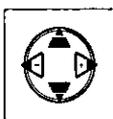
- All connections are made (see page 5.)
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.
- Depending on your cable box brand, TV GUIDE Plus+ may not be available.

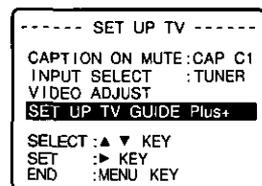


①  Push MENU to display the MAIN MENU.

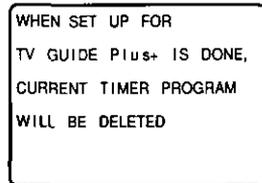


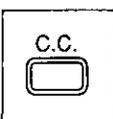
②  Push **▲ ▼ ◀ ▶** to select "TV", and then push MENU to display the SET UP TV screen.

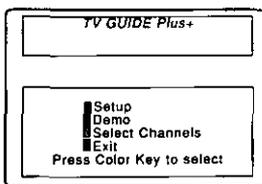
③  Push **▲ ▼** to select "SET UP TV GUIDE Plus+," and then push **▶** to display the TV GUIDE Plus+ screen.



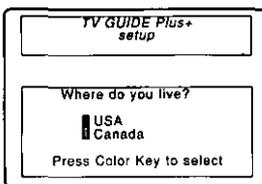
- The caution at right appears for a few seconds before the TV GUIDE Plus+ screen is displayed. If there are any timer recordings in memory, they will be erased when TV GUIDE Plus+ setup is completed. If this is unacceptable, push MENU to exit the setup mode.



④  Push the blue key to display the "TV GUIDE Plus+ SET UP" screen and enter the setup mode.



⑤  Push the blue key <U.S.A.> or the yellow key <Canada> to select the country in which you reside.

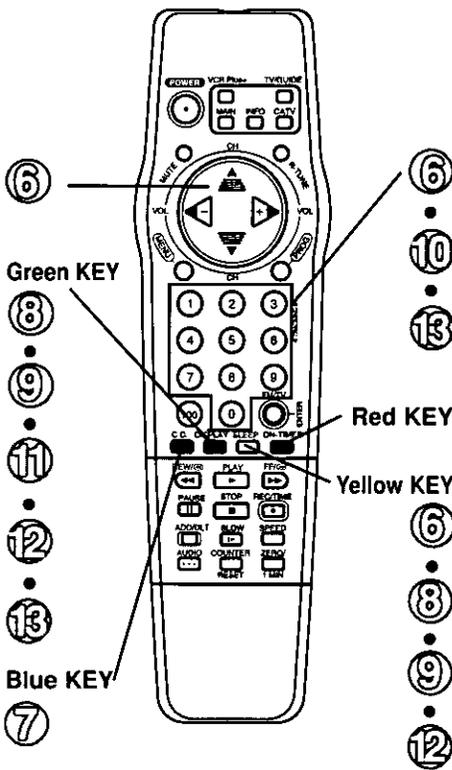


or

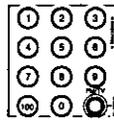

VCR Plus+, C³, PlusCode and GUIDE Plus+ are trademarks of Gemstar Development Corporation. TV GUIDE is a trademark of TV GUIDE Financial, Inc. The VCR Plus+ and TV GUIDE Plus+ systems are manufactured under license from Gemstar Development Corporation and VCR Index Systems B.V., respectively.

Continued on the next page.

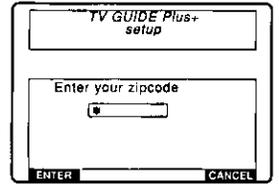
Continued from page 11.



6 Enter your Zip Code or postal code.



In the U.S.A.:, push **NUMBERED** keys (0~9) to enter your Zip Code.



To make corrections, push the red key repeatedly to delete the Zip Code number. Then, enter the correct number.

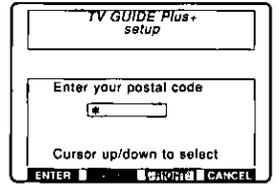
or



and



In Canada: push **▲ ▼** to select and the **yellow key** to enter your postal code.

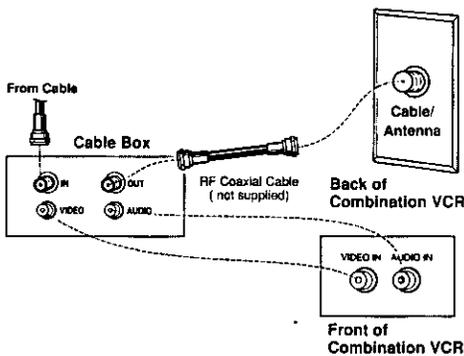


To make corrections, repeatedly push the yellow or green key to move the cursor to the right or left to the incorrect entry, and then make the correction. Or, you may push the red key repeatedly to delete the postal code number. Then, enter the correct number.

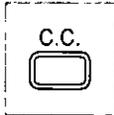
Choose your Connection Type in step 9.

Connection Type A

<CABLE BOX → COMBINATION VCR>



7



Push the blue key to set your Zip Code or postal code.

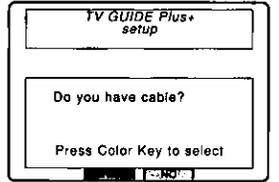
8



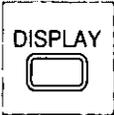
or



Push the green key for Yes, or the yellow key for No. **Select YES** if you use a cable connection. **Select No** if you do not use a cable connection. Then, go to step 14.



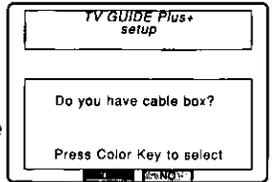
9



or



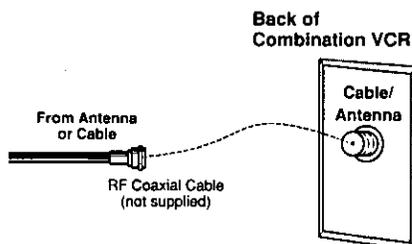
Push the green key for Yes or the yellow key for No. **Select YES** if all channels are received via the cable box (connection A shown left). Turn on your cable box and tune it to a channel other than 09. Then, go to step 10.



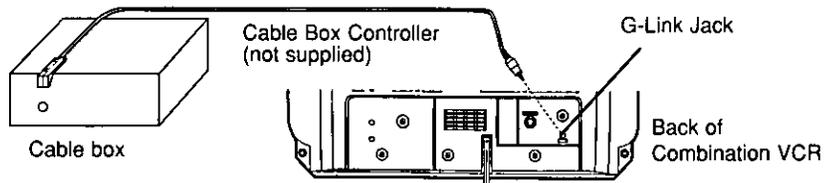
Select No if you use an antenna/ cable (connection B shown left). Then, go to step 14.

Connection Type B

<CABLE or ANTENNA → COMBINATION VCR>



NOTE: If you selected YES, you will need to connect a Cable Box Controller (sold separately). See the Addendum sheet.



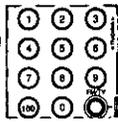
Continued on the next page.

Choose your Cable Box Brand Code Number and enter it in step 10.

Cable Box Code Numbers

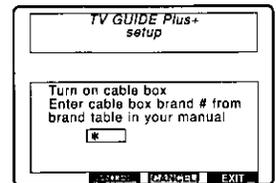
Archer	14
Cable Cinema	31
Cabletenna	31
Cableview	31
Century	27
Citizen	29
Curtis	04
Diamond	31
Eagle	09
Eastern	13
GC Electrics	26
Gemini	15
General Electric	19
General Instruments	01
Gerrard	27
Hamlin	06, 13
Hitachi	16
Jasco	15
Jerrold	01
Macom	16
Magnavox	11
Matsushita	07
Movietime	17
NEC	22
Novavision	04
NSC	22
Oak Sigma	05
Oak	05
Panasonic	07
Philips	10
Pioneer	02
Pulsar	24
Quest	02
RCA	07
Realistic	27
Recoton	27
Regal	06
Regency	13
Rembrandt	26
S.L. Marx	23
Samsung	23
Scientific Atlanta	04
Sheritech	12
Signal	11
Sprucer	07
Standard Components	17
Stargate	24
Sylvania	08
Teknika	20
Teletext	21
Televue	22
Texscan	08
Tocom	18
Toshiba	30
Unika	26
Universal	25
Videoway	03
Vidtek	28
Viewstar	09
Zenith	03

10



Push NUMBERED keys (0~9) to enter your two digit cable box brand number from the list shown left.

For example, for 7, push 0, and then push 7.

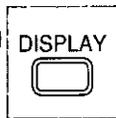


To make corrections,

push the yellow key repeatedly to delete the cable box brand number. Then, enter the correct number.

- If you do not use a cable box, push the red key and return to step 9.

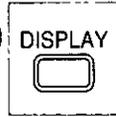
11



Push the green key to set the brand number.

The Combination VCR will run a test to determine if your cable box brand is compatible. If it is, it automatically switches the cable box channel to 09.

12

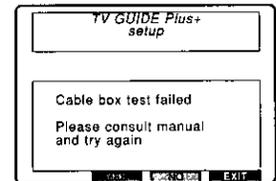
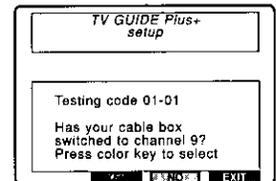


Confirm that the cable box channel switched to 09. Then, push the green key to select YES and go to step 13.

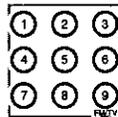
If the cable box channel did not switch to 09, push the yellow key to select NO. The Combination VCR will try the test again. If "Cable box test failed" appears, push the red key and repeat steps 10~12.

If the test is still unsuccessful, TV GUIDE Plus+ is not available with the cable box you are using. Push MENU three times to return to the normal screen.

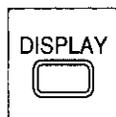
Example only



13

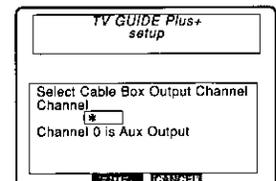


and



Push NUMBERED keys (0~7) to select the cable box output channel, and then push the green key to set.

- The Cable box output channel is the channel you tune your TV to in order to watch cable stations.

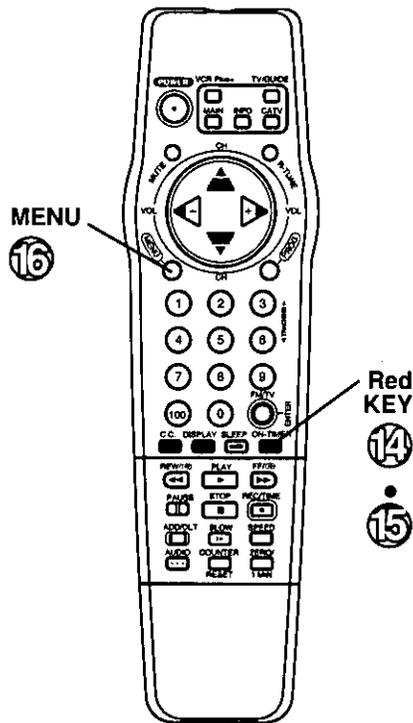


To make corrections,

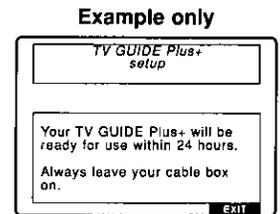
push the yellow key to delete the output channel. Then, enter the correct number.

Continued on the next page.

Continued from page 13.

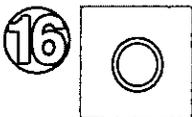
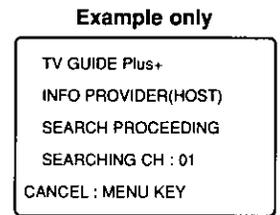
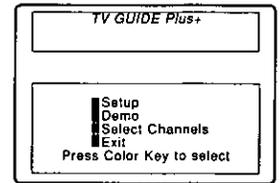


Push the red key to end TV GUIDE Plus+ setup. The screen in step 4 will be displayed.



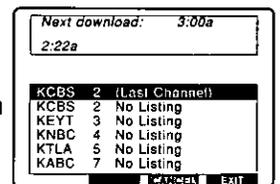
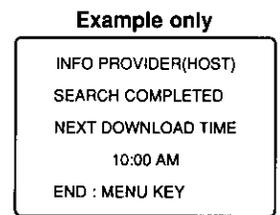
Push the red key to exit the setup mode and start the Information Provider (Host) channel search.

- The Combination VCR may be turned off during Host channel search.
- If you wish to do the Host channel search at a later time, push MENU three times to exit. (All TV GUIDE Plus+ setup information is retained in memory.) Then, when you are ready, repeat steps 1~4. In step 4, push the red key to start the Host channel search.



When the Host channel is found, the screen at right is displayed which includes the next TV GUIDE Plus+ data download time. Push MENU three times to end TV GUIDE setup and return to the normal screen. Be sure to turn the Combination VCR off in time for the next download time.

- If downloading could not be performed, "NO LISTING" screen at right will appear when you turn the Combination VCR on again. Turn the Combination VCR off in time for the next download time.



NOTES

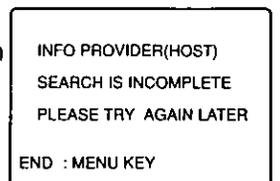
- Push MENU three times to cancel and return to the normal screen during TV GUIDE Plus+ setup.

- TV GUIDE Plus+ setup is not complete until the Host channel search is performed.
- If you change antenna systems, the TV GUIDE Plus+ setup must be done again.
- When TV GUIDE Plus+ setup is complete, a timer recording can only be set by doing the GUIDE Plus+ Programming steps on pages 24, 25. Timer recording programming on page 36 is no longer possible.
- TV GUIDE Plus+ data, including clock set information, is downloaded 4 times each day while the Combination VCR is turned off.

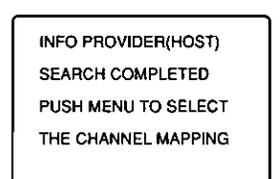
NOTE: One of the on-screen displays 16a or 16b may appear. Push MENU and follow the instructions in the on-screen display to either exit or perform another function.



If the Host channel is not found, the screen at right appears. Push MENU three times, and then exit the MAIN MENU. Repeat steps 1~4. In step 4, push the red key to start the Host channel search at a later time.

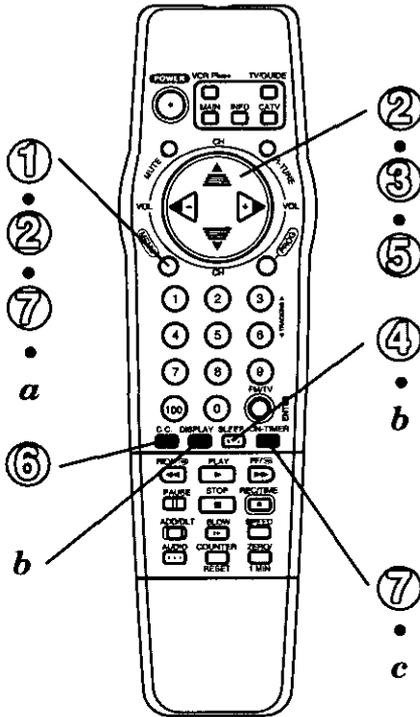


If more than one channel number is assigned to one broadcast station, the screen at right appears. Push MENU and go to the Channel Map Selection section on page 15.



✓ Check list before you begin.

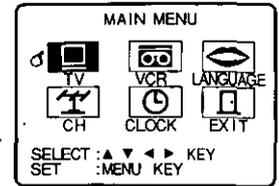
- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.

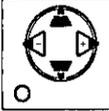


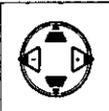
Select Channels

You can decide for which broadcast stations TV GUIDE Plus+ data is received by disabling or enabling a station on the TV GUIDE Plus+ Station List.

- ①  Push MENU to display the MAIN MENU.

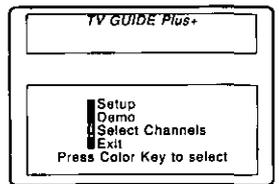


- ②  Push ▲ ▼ ◀ ▶ to select "TV," and then push MENU to display the SET UP TV screen.

- ③  Push ▲ ▼ to select "SET UP TV GUIDE Plus+," and then push ▶ to display the TV GUIDE Plus+ screen.

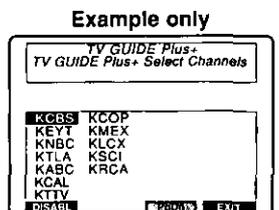


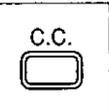
- ④  Push the yellow key to select "Select Channels."
- The station call letters currently on the TV GUIDE Plus+ Station List are in black, and those that are not are in yellow characters.



- ⑤  Push ▲ ▼ to select the desired broadcast station.

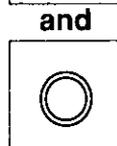
- If more than one page exists, push the green key to page up, or the yellow key to page down.



- ⑥  Push the blue key to ENABLE or DISABLE a broadcast station.

- Station call letters turn yellow when disabled, or black when enabled.
- Repeat these steps anytime to enable or disable station.
- TV GUIDE Plus+ data will not be received for disabled station.

- ⑦  Push the red key to exit the Select Channel mode, and then push MENU three times to return to the normal screen.

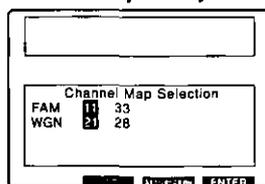


Channel Mapping

After Host channel search is complete, if more than one channel number is assigned to one broadcast station, you need to choose which channel number you receive the station on.

- a. If "INFO PROVIDER (HOST) SEARCH COMPLETED PUSH MENU TO SELECT THE CHANNEL MAPPING"

Example only



appears in step 16 on page 14, push MENU to exit this mode and display the channel mapping screen.

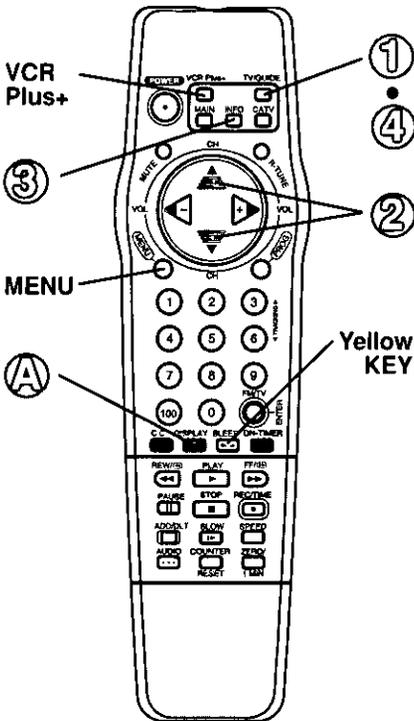
- b. Push the green key to move the cursor to the left, or the yellow key to move it to the right to select the channel number you receive.
- c. Push the red key to enter the channel. The next download time will appear on-screen.
- d. Turn the Combination VCR off in time for the next download time.

NOTE

- Push MENU three times to cancel and return to the normal screen during Select Channels.

✓ Check list before you begin.

- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.

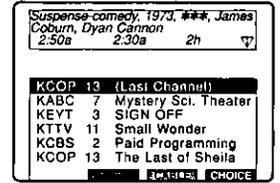


Daily Program Guide

You can view a program line-up for each station you receive, more information about a particular program, and the program PlusCode which is used for VCR Plus+ programming. (See page 25.)

① Push TV/GUIDE to display the TV GUIDE Plus+ main mode screen.

- If you are using a cable box, you may push the yellow key to select TV GUIDE mode, or CABLE mode.



Push the yellow key

Event Start Time — Length of program

Title — cc : Closed Caption

Actual Time — News — 2:50a — 2:30a — 2h — cc — [Stereo icon] — [Additional Introduction icon]

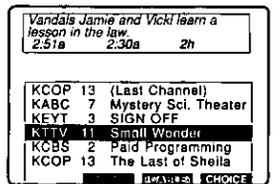
Channel —

Station Name — KCOP 13 (Last Channel) — Title

Channel Name — KCOP 13 News

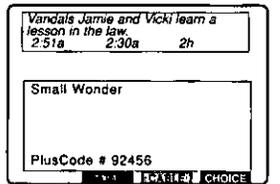
Channel List — KABC 7 Mystery Sci. Theater
KEYT 3 SIGN OFF
KTTV 11 Small Wonder
KCBS 2 Paid Programming
KCOP 13 The Last of Sheila

② Push ▲ ▼ to select a channel.

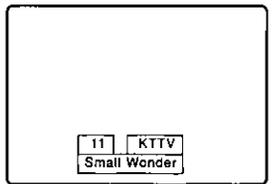


③ Push INFO to display more information (if available) and the PlusCode number. To return to TV GUIDE Plus+ main mode screen, push INFO again.

- Or, push VCR Plus+ to set up a GUIDE Plus+ recording.



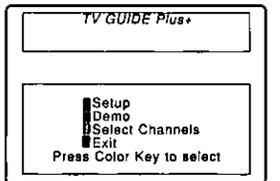
④ Push TV/GUIDE to exit. A Program Status screen will appear for 5 seconds, followed by the normal screen.



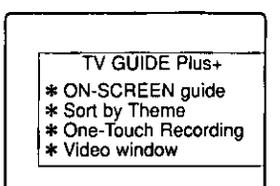
Demonstration

You can display a brief TV GUIDE Plus+ demonstration which may help to better understand TV GUIDE Plus+ feature.

A Do steps 1~4 on page 14, and then push the green key to start the TV GUIDE Plus+ demonstration.

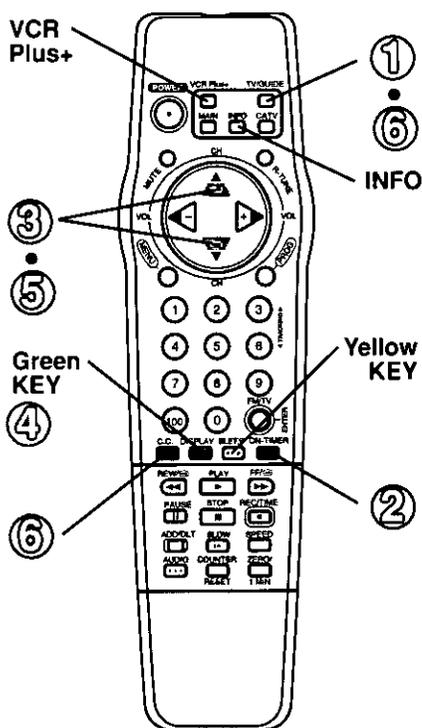


B The TV GUIDE Plus+ SET UP screen will automatically appear when the demonstration is finished. To exit the demonstration before it is finished, push MENU.



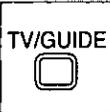
Check list before you begin.

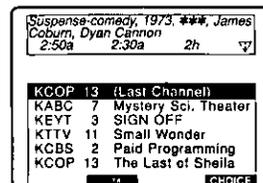
- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.



Next Mode

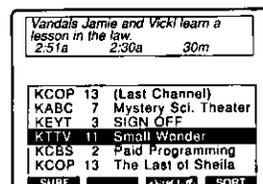
You can view a program line-up of the currently selected channel up to midnight of the following day.

1  Push TV/GUIDE to display the TV GUIDE PLUS+ main mode screen.



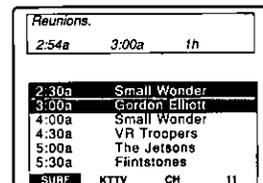
2  Push the red key to display the Choice mode screen.

3  Push ▲ ▼ to select a channel.

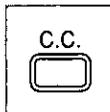


4  Push the green key to display the program line-up.

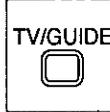
5  Push ▲ ▼ to select the program you are interested in. More information (if available) is displayed at the top of the screen.



- Programs which start the following day are indicated with a "*" mark.
- Push INFO to display the PlusCode and detailed information (if available), or push VCR Plus+ for GUIDE Plus+ programming.

6  Push the blue key to return to the TV GUIDE Plus+ main mode screen, or push TV/GUIDE to return to the normal screen.

or



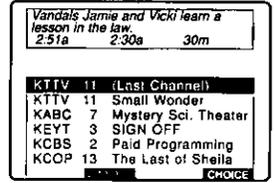
Check list before you begin.

- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.

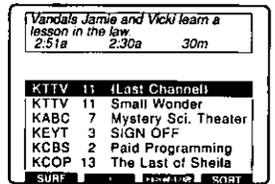
Scan Mode

This feature allows you to display a program line-up for each broadcast station by broadcast time.

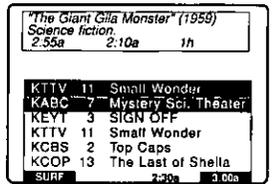
① Push TV/GUIDE to display the TV GUIDE Plus+ main mode screen.



② Push the red key to display the Choice mode screen.



③ Push the yellow key to display the Scan mode screen.

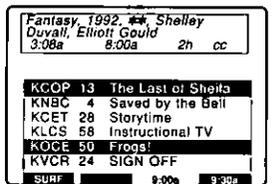


④ Repeatedly push the red key to go forward, or the green key to go back in 30 minutes intervals until the desired time is displayed.

or

DISPLAY

- Programs can be displayed up to midnight of the following day.
- Programs which start the following day are indicated with a "*" mark.



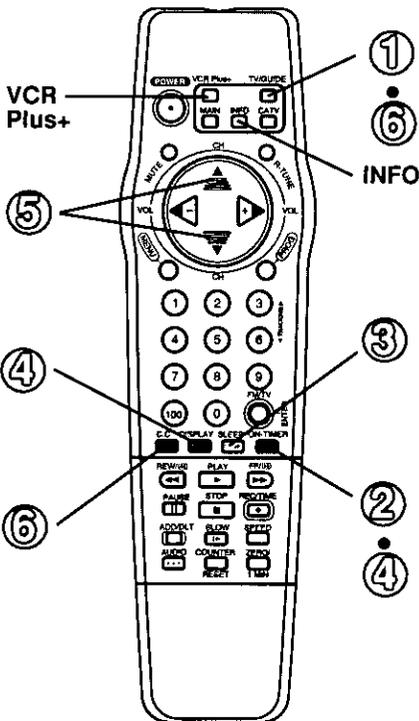
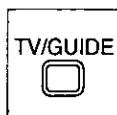
⑤ Push to select the program you are interested in.

- Push INFO to display the PlusCode and detailed information (if available), or push VCR Plus+ for GUIDE Plus+ programming.

⑥ Push the blue key to return to the Choice mode screen, or

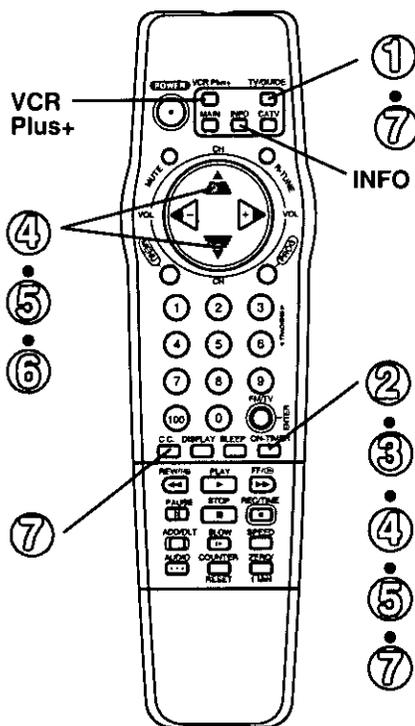
or

Push the TV/GUIDE key to return to the normal screen.



✓ Check list before you begin.

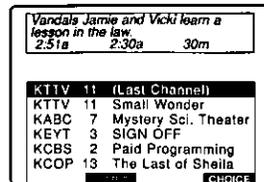
- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.



Sort Mode

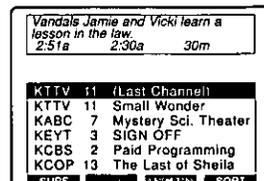
You can display a program line-up by category, such as movies, sports, etc., for up to about 8 days.

① Push TV/GUIDE to display the TV GUIDE Plus+ main mode screen.

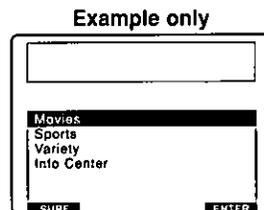


② Push the red key to display the Choice mode screen.

③ Push the red key to display the Sort mode screen.

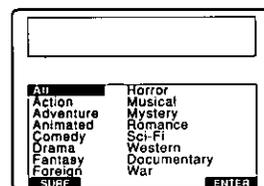


④ and Push ▲ ▼ to select the desired category, and then push the red key to display the sub-categories.

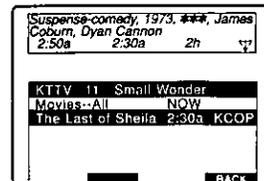


⑤ and Push ▲ ▼ to select the desired sub-category, and then push the red key to display the program line-up for the selected category.

- "Searching in Progress Please wait" will appear.



⑥ Push ▲ ▼ to select the program you are interested in. You can view more information (if available) on the top of the screen.

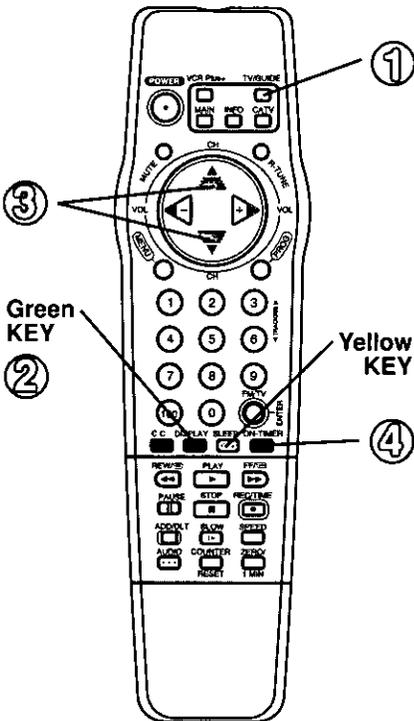


- Push INFO to display the PlusCode and detailed information (if available), or push VCR Plus+ for GUIDE Plus+ programming.

⑦ or or Push the blue key to return to the Choice mode, or the red key to return to the Sort mode, or TV/GUIDE to return to the normal screen.

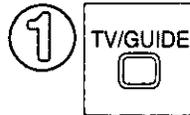
✓ Check list before you begin.

- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.

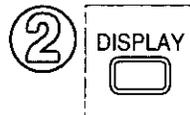
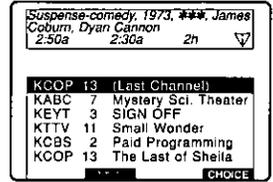


Feature Mode

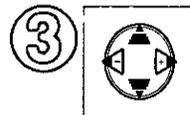
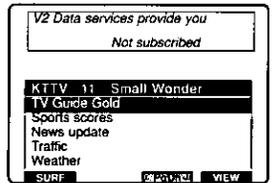
In the future you may be able to display various types of information, such as a weather report, traffic conditions, sports scores, etc., by subscribing to an on-line information service. Typically, the new service will become effective the day after you subscribe. An asterisk in front of the service title means it has already subscribed to. An expiration date of a newly subscribed service may also appear.



Push TV/Guide to display the TV GUIDE Plus+ main mode screen. If the FEATURE choice is displayed at the bottom of the screen, Subscription Service is available in your area. Go to step 2. If it is not, Subscription Service is not yet available in your area. Go to step 7.

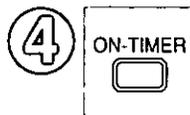


Push the green key to display a menu of the information services selection.



Push to select the desired information.

- If more than one page exists, push the green key to page up or the yellow key to page down.
- Subscription Services which have already been subscribed to are marked with a "*" mark.



Push the red key to view the information.

Case 1 If you are not subscribed to the service, you will see the Promotion Screen. Go to the next page.

Case 2 If you are already subscribed to the service, you will see the Data Index Screen. Go to the next page.

Case 1 Promotion Screen

5a



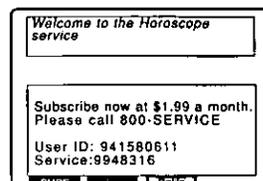
If the Promotion Screen has multiple pages, push the yellow key to see more information.



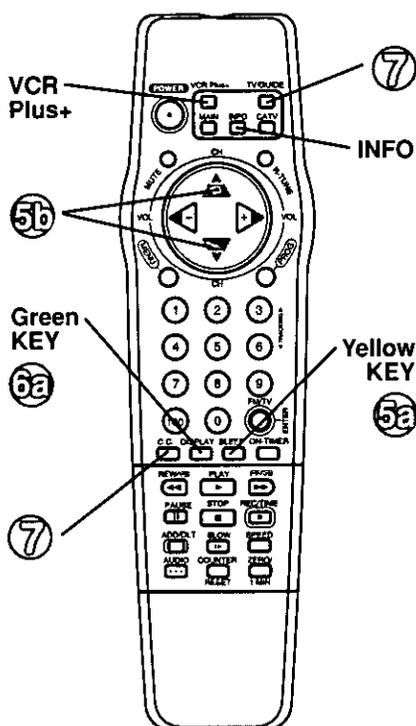
6a



If the FREE choice is displayed, push the green key to try the service free of charge for a limited time.



- The presence of the FREE button is controlled by the promoter.

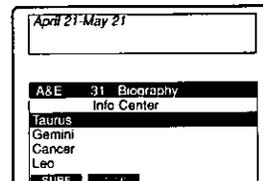


Case 2 View Subscription Data

5b



Push ▲ ▼ to highlight an item.



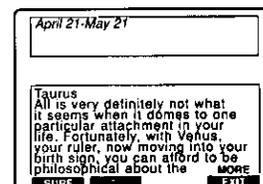
6b

Hereafter, the following options are available.

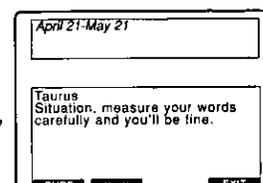
- You may enter the Promotion Screen by pushing the green button.
- Note:** In this case, the promotion screen gives you the information you need to extend or cancel your subscription.
- You may view the Data Display by pushing the INFO button.

If there is more than one page of data, "MORE" appears. You may advance to the next page by pressing ▼.

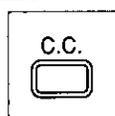
If the data is organized into an index page, you can select a page by pushing the NUMBERED keys.



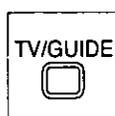
- To return to the Data Index Screen, push INFO.



7



or

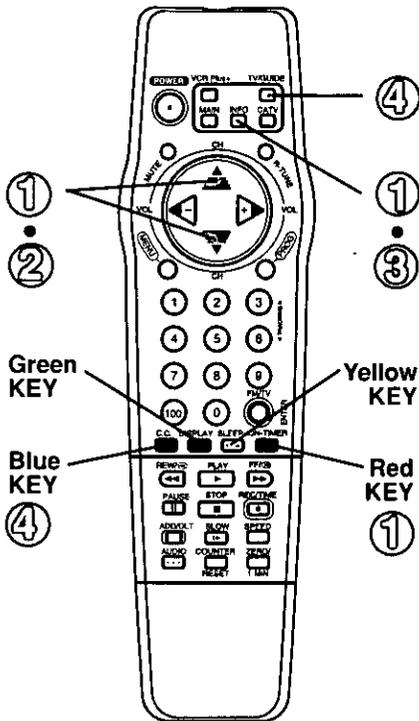


Push the blue key to return to the TV GUIDE Plus+ main mode screen, or push TV/GUIDE to return to the normal screen.

- Except in step 1, you can return to the TV GUIDE main mode screen anytime by pushing the blue key.

✓ Check list before you begin.

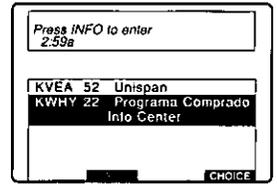
- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.



Info (Information) Center

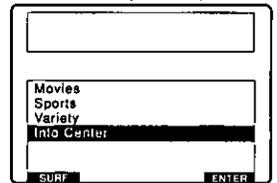
The Info Center is a limited information storage area in which the broadcaster may provide additional information about selected programs. As storage capacity is reached, the oldest information is deleted automatically to make room for the new. If you want to view the information at a later time, you can use the Store feature. You can also delete old information manually to increase the storage capacity.

1 In the TV GUIDE Plus+ main mode screen, or Choice mode screen, push to scroll down to the end of the program list to "Info Center." Then, push INFO to display the Info Center screen.



OR

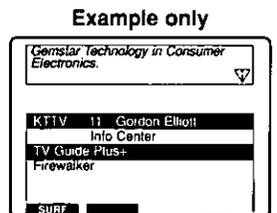
Example only



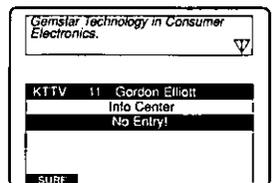
OR

and In the Sort mode, push to scroll down to the end of the Category screen to "Info Center." Then, push the red key to display the Info Center screen.

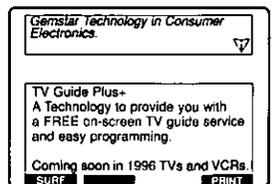
2 Push to select the program you are interested in. The information is displayed at the top of the screen.



- When "No Entry!" is displayed, push the blue key to return to the Choice mode screen.



3 Push INFO repeatedly to display or remove any additional information.



4 or Push the blue key to return to the Choice mode screen, or push TV/GUIDE to return to the normal screen.

To Store the information:

If the information displayed in step 2 has not been stored, the STORE option will appear at the bottom of the screen. Push the green key to store the information.

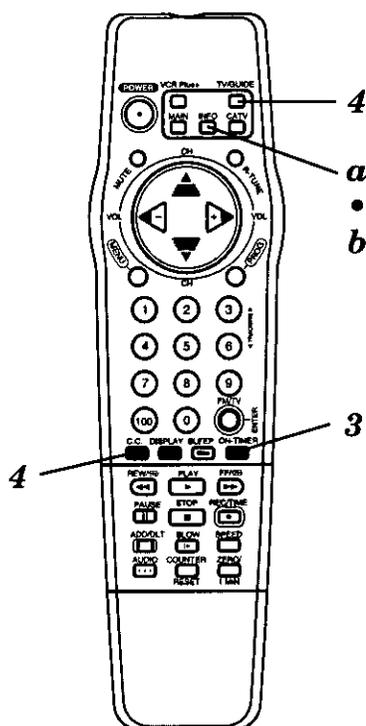
To Delete the information:

If the information of the program selected in step 2 has already been stored, the DELETE option will appear at the bottom of the screen. Push the yellow key to delete.

- When a program is recorded containing Info Center information, the information is also recorded on the tape. Repeat these steps during to display the information.

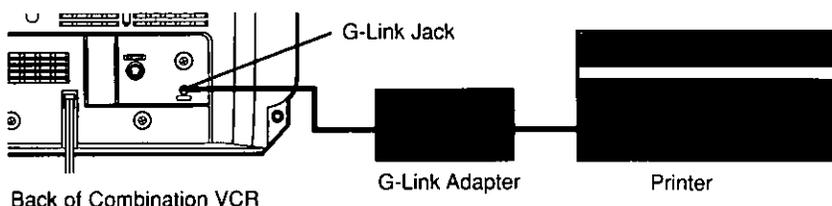
✓ Check list before you begin.

- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.



To Print Out Info (Information) Center Data

- You need a G-Link Adapter and a printer for this function. Also, in order to make the proper connections, you will first need to disconnect the Cable Box Controller (see page 12) from the G-Link jack on the Combination VCR.



1. Make connections as shown above.
2. Make sure all components are turned ON.
3. Push the red key in step 3 on the previous page to start printing the information.
4. Push the blue key to return to the Choice mode, or push TV/GUIDE to return to the normal screen when printing is finished.



- The G-Link Adapter will be available at a future date.
- When you are finished printing, be sure to reconnect the Cable Box Controller for proper TV GUIDE Plus+ operation.

Displaying Program Related Information (PRI)

Some programs are broadcast with additional program related information, such as player statistics during a sports program, etc.. Follow the steps below to retrieve the information.

- a. Push INFO to display any available information related to the program you are watching.
 - When a program with PRI data is recorded, push INFO during playback to display the information.
 - The PRI will have priority and Closed Caption text will not appear while the PRI is displayed.
- b. Push INFO again, to remove the information from the screen.

Auto Pop-Up PRI (Program Related Information)

Stations may sometimes broadcast program related information which will automatically appear on your screen while you are watching TV. The AUTO POP-UP PRI will then time out.

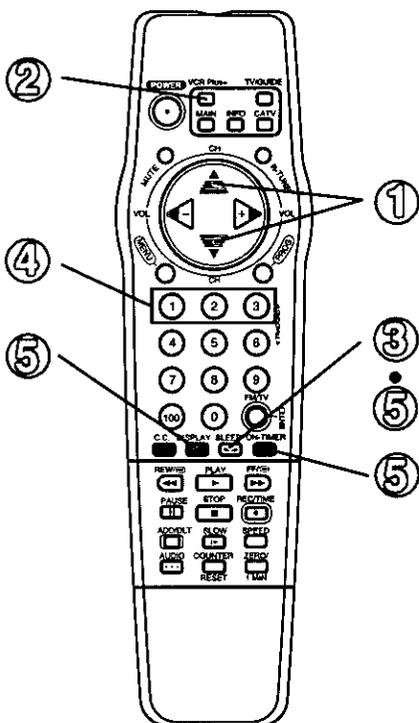
- Push INFO, or wait for the PRI to time out to remove the information from the screen.
- When a program is recorded containing Auto Pop-Up PRI, this information is also recorded on the tape.
- The PRI will have priority and Closed Caption text will not appear while the Auto Pop-Up PRI is displayed.

TV GUIDE Plus+ & VCR Plus+ Recording

GUIDE Plus+ recording allows you to set up a timer recording quickly and easily for any program displayed in the TV GUIDE Plus+ system. When the program you want to record is not listed in any of the TV GUIDE Plus+ modes, you can use VCR Plus+ recording. If the start time for a GUIDE Plus+ or VCR Plus+ Recording comes up while you are pushing the REC button to start a normal or One Touch recording (page 35), the GUIDE Plus+ or VCR Plus+ recording will not be performed. To cancel a normal or One Touch recording, push the STOP button.

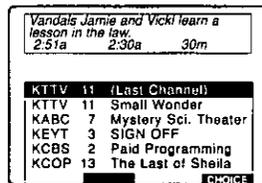
✓ Check list before you begin.

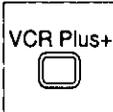
- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.

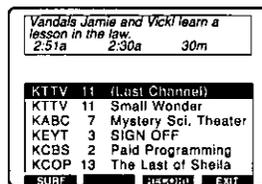


GUIDE Plus+ Recording

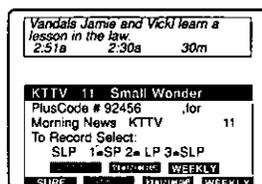
①  Using ▲▼, select the desired program in one of these TV GUIDE Plus+ mode screens: TV GUIDE Plus+ main, Choice, Next, Scan, or Sort.



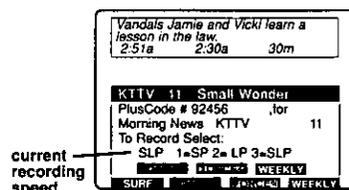
②  Push VCR Plus+ to display the REVIEW and RECORD choices.

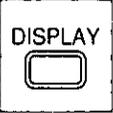


③  Push the yellow key to display the record screen.

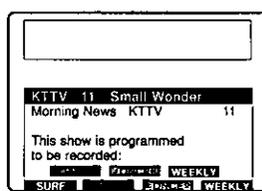


④ Push the 1, 2, or 3 NUMBERED key to select the desired recording speed.



⑤  Push the green key for daily (Mon.~Fri.), the yellow key for once, or the red key for weekly to set the recording frequency. This confirmation screen is displayed for a few seconds after which the selected mode screen in step 1 reappears.

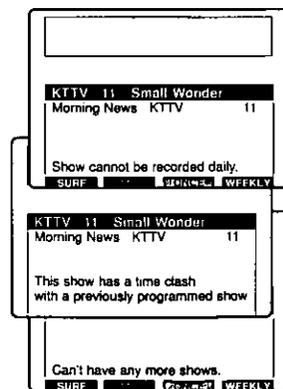
• The PROGRAM TIMER indicator lights on the front panel.



GUIDE Plus+ Recording Note:

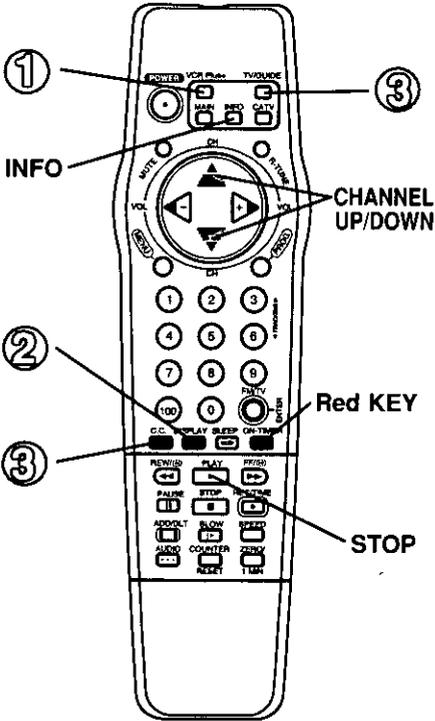
If one of the following warning screens appears, push the blue key and repeat steps 1~5, or VCR Plus+ to return to the normal screen.

- The program type selected in step 5 is not correct. A daily recording must be broadcast Mon~ Fri only.
- The recording time of the program you just selected overlaps with a program already in memory.
- There are already 14 programs stored in memory.

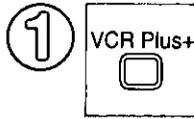


✓ Check list before you begin.

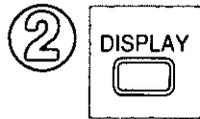
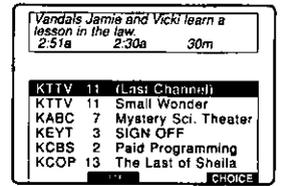
- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- TV GUIDE Plus+ setup is completed (see pages 11~14).
- Your Cable box is ON if used.
- TV GUIDE Plus+ mode is terminated if...
 - power is turned off or power failure occurs.
 - Play or Rec mode is entered.
 - entries are not made within 5 minutes.



Review or Delete a Program in Memory

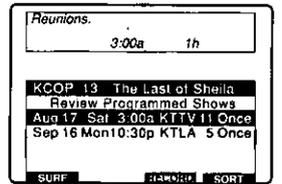
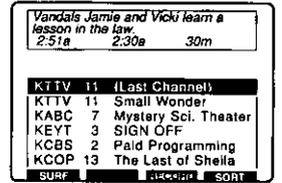


In the TV GUIDE Plus+ main, Choice, Next, Scan, or Sort mode screen, push VCR Plus+ to display the REVIEW and RECORD choices.



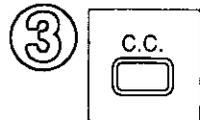
Push the green key to display all programs currently in memory.

- Push ▲ ▼ to scroll up and down the program list.
- When the ▽ indication is displayed, you can push the INFO button to display about a highlighted program.
- Pushing the red key will redisplay the selected mode screen in step 1.

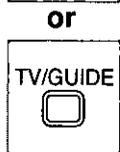


To Delete a program from memory,

push ▲ ▼ to select the desired program, and then push the yellow key.



Push the blue key to return to the Choice mode, or push TV/GUIDE to return to the normal screen.



Cancel the GUIDE Plus+ or VCR Plus+ Recording: (Recording is in progress)

Hold down STOP for a few seconds to cancel the GUIDE Plus+ or VCR Plus+ Recording.

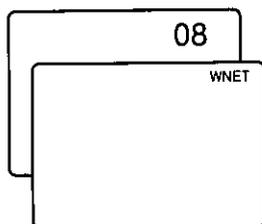
- Any future daily or weekly recordings will be performed as programmed.



On-Screen Displays (OSD)

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.)

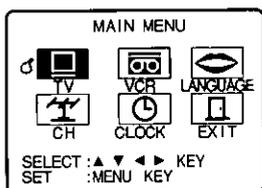


When a function button is pushed (PLAY, FF, etc.), the Combination VCR mode will be displayed.

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

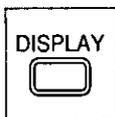
Menu Screen

- 1 Push MENU to display the MAIN MENU.
- 2 Push ▲▼◀▶ and MENU to make your selection (see page 8).

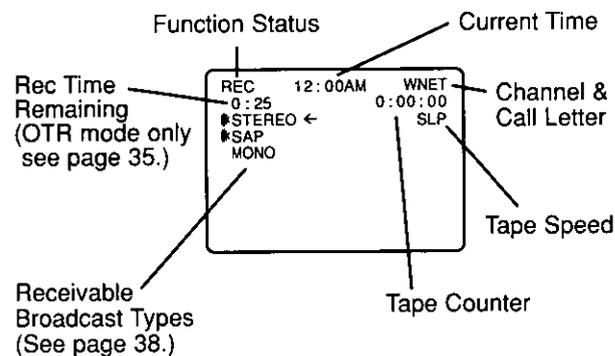


- To get the most from each feature, please read the Operation Manual before attempting any operation.

VCR Status & Clock Display



Push DISPLAY to display and remove the overlay shown below.



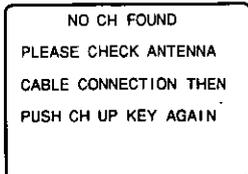
Blank Tape/ No Video Signal Indication

When a blank section of tape comes up in Play mode, or the selected channel has no broadcast signal, the TV screen will turn a solid blue.

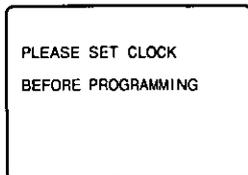
Warning and Instruction Displays

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

If no active channels are found for CHANNEL MEMORY... (see page 5.)



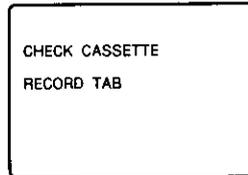
If you attempt to set or review a Timer Recording or set the on-timer and the Clock is not set... (see pages 8, 9.)



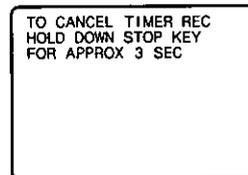
If a Timer Program was not completed before exiting the Program mode... (see pages 36, 37.)



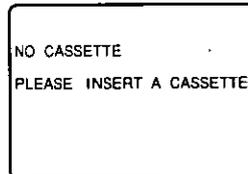
If you push REC on the remote control or the Combination VCR, and a cassette is inserted with no record tab... (see page 41.)



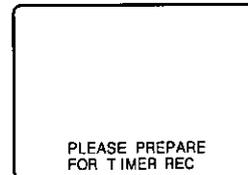
If you push STOP during a Timer Recording... (see page 37.)



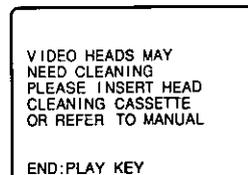
If you push PLAY, FF, REW, or REC on the remote control or the Combination VCR without a cassette inserted... (see pages 33~35.)



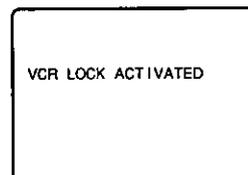
If the Combination VCR is not in Stop mode or a cassette with record tab is not inserted two minutes before a Timer Recording is about to begin... (see pages 36, 37.)



If head cleaning becomes necessary while playing back a tape... (see page 41.)



If you push a function button other than STOP/EJECT or POWER while the Combination VCR is in VCR Lock mode... (See page 39.)

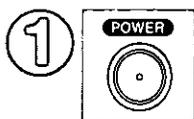
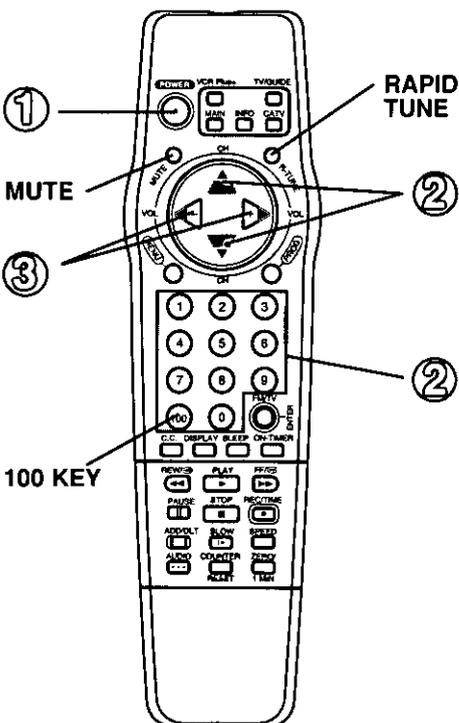
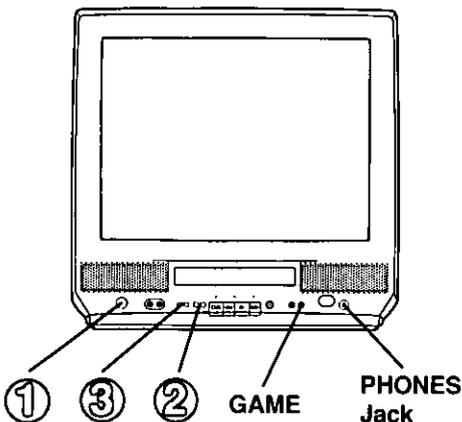




TV Operation

✓ Check list before you begin.

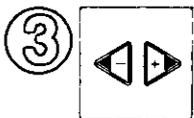
- All connections are made (see page 5).
- Your Combination VCR is plugged in.



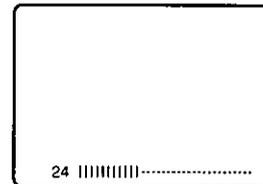
Push POWER to turn the Combination VCR on.



Select a channel using ▲ ▼ or the NUMBERED keys.



Push VOL ◀ ▶ to adjust the volume level.



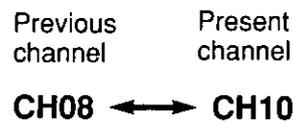
Using the 100 key

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 NUMBERED keys 100-2-5.

Rapid Tune

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

- When selecting channels with CH ▲ ▼, 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 MUTE to instantly mute the sound. Push again, to restore the previous sound level.

Phones

Connect an earphone (not supplied) or headphones (not supplied) to the Phones Jack.

Game Mode Feature

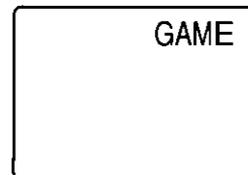
This feature adjusts the color and picture intensity levels so the screen is easier on the eyes when video games are played.

- This Combination VCR contains no video game software.



Push GAME on the Combination VCR to select "ON".

- "GAME" is displayed for 4 seconds.



To Cancel the Game Mode, push GAME again.

- The previous color and picture settings will be restored.



- This feature is not available when tape playback is in progress.
- Game mode is turned off when one of the following functions is performed:

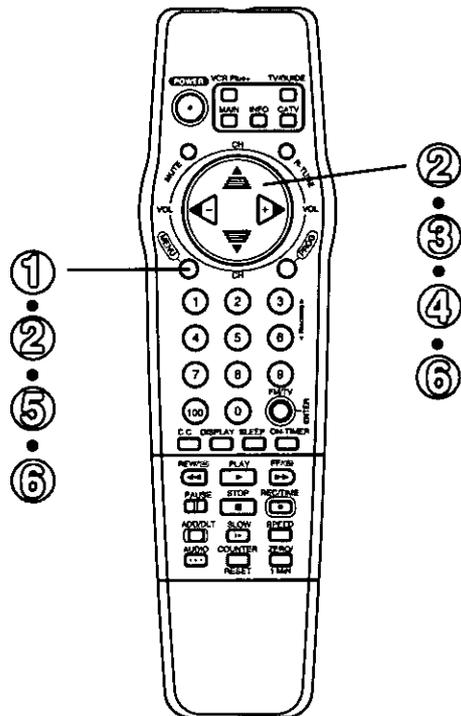
- | | |
|---------------------------|------------------------|
| • Power is turned Off | • Play mode is entered |
| • Channel is changed | • Power failure occurs |
| • Input signal is changed | • FM mode is selected |



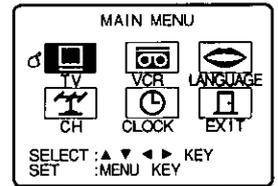
Picture Adjustment

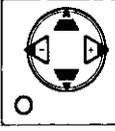
Check list before you begin.

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

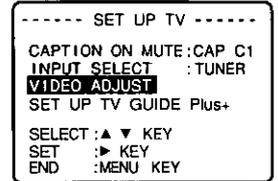


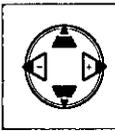
①  Push MENU to display the MAIN MENU.

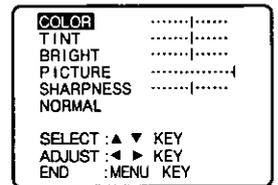


②  Push ▲ ▼ ◀ ▶ to select "TV," and then push MENU to display the SET UP TV screen.

③  Push ▲ ▼ to select "VIDEO ADJUST," and then push ▶ to display the VIDEO ADJUST screen.



④  Push ▲ ▼ repeatedly to select the desired adjust item, and then push ◀ ▶ to adjust. (See description below.)



Picture Adjustment

COLOR Control

To adjust the intensity of the color.

TINT Control

To adjust for the most natural fleshtones.

BRIGHT Control

To adjust the brightness of the picture.

PICTURE Control

To adjust the intensity of the picture by adjusting contrast and color level at the same time and in the proper balance.

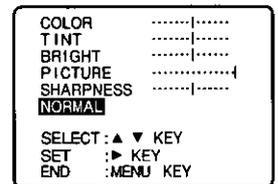
SHARPNESS Control

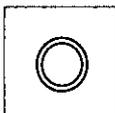
To adjust the sharpness of the picture.

To Reset Picture Controls to the Factory Setting

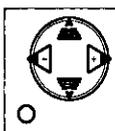
Push ▲ ▼ and ▶ to select and set NORMAL.

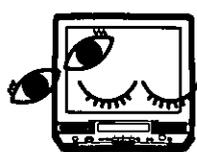
All controls return to their factory settings.



⑤  Push MENU twice to exit the VIDEO ADJUST mode.

- If no button is pushed within 5 minutes, the video adjust overlay disappears.

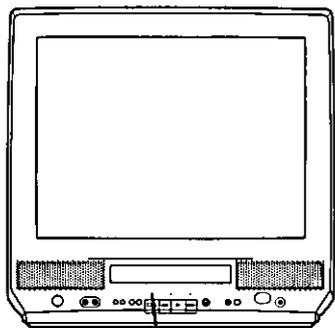
⑥  Push ▲ ▼ ◀ ▶ to select "EXIT," and then push MENU to exit the MAIN MENU.



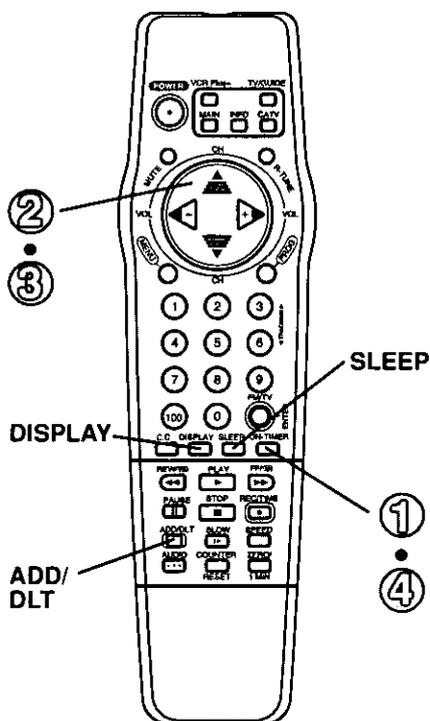
TV Timer Features

✓ Check list before you begin.

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



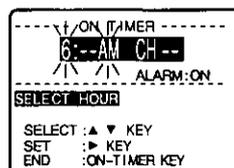
ON-TIMER Indicator



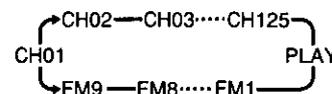
On-Timer with Alarm Feature

The Combination VCR can be set to automatically power on in one of 3 modes (TV, Playback, or FM radio). You can also combine the On-Timer with a one minute alarm that gradually increases in volume.

1 Push ON-TIMER to display the ON TIMER screen.

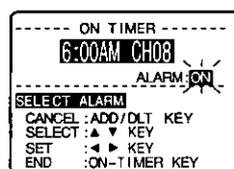


2 Push ▲ ▼ to select and ▶ to fix the On-Timer time and also to choose the On-Timer mode (TV, PLAY, or FM radio). See the ▲ ▼ selection order shown at right.



- Make sure a tape is inserted if VCR Playback mode is selected.
- See "FM Radio Feature" on page 32 for instructions on how to preset FM stations.

3 Push ▲ ▼ to select alarm "ON" or "OFF".



When "ON" is selected, an alarm will gradually increase in volume for one minute or until cancelled by pushing any button on the remote or Combination VCR (including Volume UP/DOWN). When the alarm sound stops, the sound of the mode you selected will ensue.

To Make Corrections, use ▲ ▼ and ◀ ▶ to move back and correct as necessary.

4 Push ON-TIMER to set the On Timer. This screen will appear for about 5 seconds.



- The ON-TIMER indicator lights on the front panel.

To cancel, push ON-TIMER to redisplay the screen in step 3. Then, push ADD/DLT to clear the time ("6" is flashing). Now, push ON-Timer to end. "ON-TIMER END" appears on-screen for a few seconds.



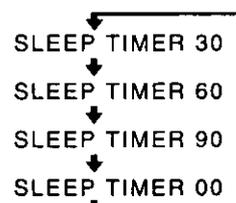
If no button on the remote or Combination VCR (including a button used to turn off the alarm) is pushed within 60 minutes after the Combination VCR turns itself on, it will turn itself back off.

Set the Sleep Timer

The Combination VCR can be set for auto power off.

Repeatedly push SLEEP to set the sleep timer.

- Each push will change the time in the order shown at right.



- If you push DISPLAY with the SLEEP TIMER set, the remaining time will appear on-screen.

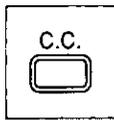
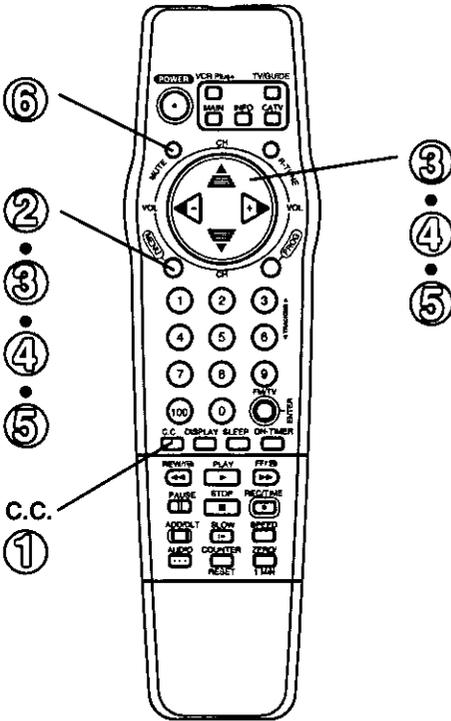
To Cancel, push SLEEP repeatedly until "SLEEP TIMER 00" appears.

CC Closed Caption System

This multi-use system not only allows the hearing impaired to enjoy selected programs, but also makes useful information from TV stations available to everyone.

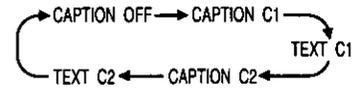
✓ Check list before you begin.

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



Push C.C. repeatedly to select the desired Caption Mode (see "Caption Mode description" below).

- Selected mode is displayed on screen.
- Each push of C.C. will change the Caption Mode as shown at right:



Closed Caption Modes to Choose From

Caption Mode: CAPTION C1 or C2

A narration of selected TV programs will be displayed on the screen. Check your TV program listings for C.C. (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

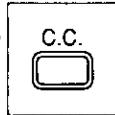
Narration will not appear on the screen even if a closed caption or text broadcast is received.

- 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.

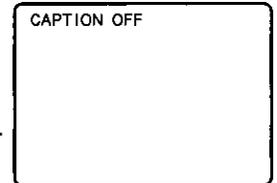
Caption On Mute Feature

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

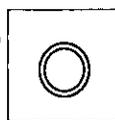
1



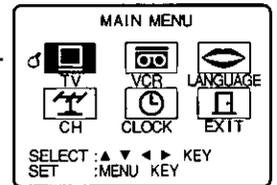
Push C.C. until CAPTION OFF is displayed on screen.



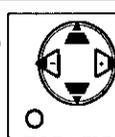
2



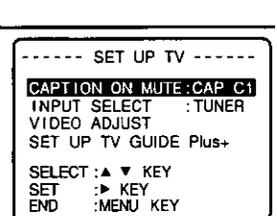
Push MENU to display the MAIN MENU.



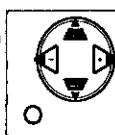
3



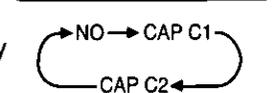
Push to select "TV," and then push MENU to display the SET UP TV screen.



4

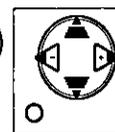


Push repeatedly to select the desired caption on mute mode, and then push MENU to exit the SET UP TV screen.



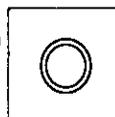
- Each push of will change the display as shown at right.

5



Push to select "EXIT," and then push MENU to exit the MAIN MENU.

6



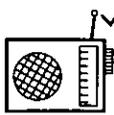
Push MUTE to mute the sound. The closed caption narration (if available) is displayed on the screen.

- Push MUTE again to resume normal sound and picture.

Recording and Playing Back a Closed Caption/Text Program

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

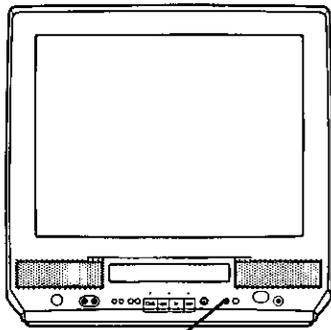
Playback: To display the Closed Caption narration or Text during playback, simply push C.C. until the desired Caption Mode is displayed.



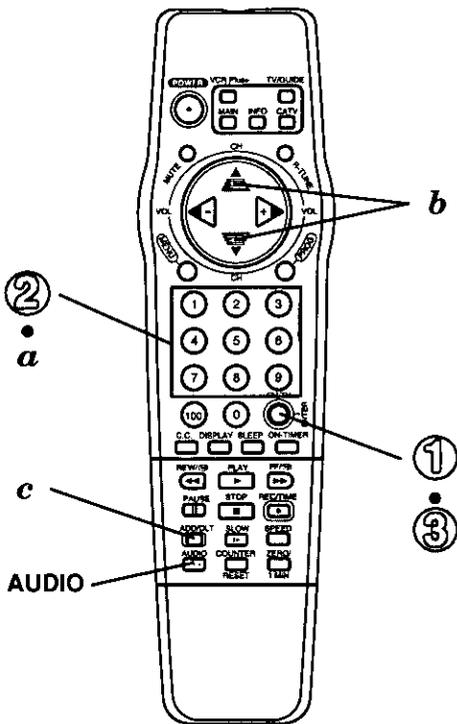
FM Radio

Check list before you begin.

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



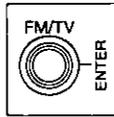
1 • 3



FM Radio Feature

The Combination VCR has an FM radio with built-in antenna, 9 station preset, and a band range of 87.5~108.1 MHz. You can even set the On-Timer (page 30) to wake up to your favorite music station.

1



Push FM/TV on the remote control or Combination VCR to select FM Radio mode.



- This screen changes to a black screen after 10 seconds.

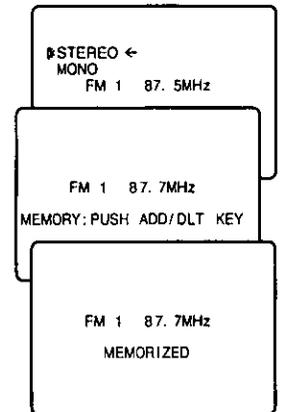
To Preset Stations

a In FM Radio mode, push a NUMBERED key (1~9).

b Push ▲ ▼ to select the desired radio station. (Each push changes the frequency by 200 KHz.)

c Push ADD/DLT to memorize the desired station.

- To preset other stations, repeat steps **a~c**.

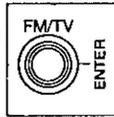


2



Push a NUMBERED key (1~9) to select a preset station (see steps **a**, **b**, and **c** above).

3

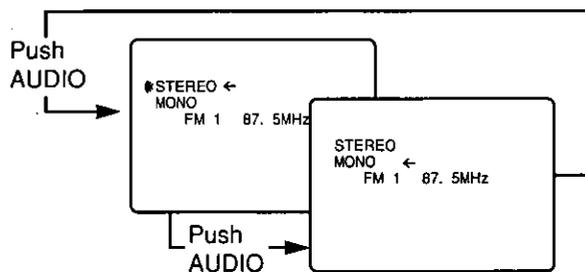


Push FM/TV on the remote control or Combination VCR again to exit the FM Radio mode.

To Select Audio Mode for FM Radio

Push AUDIO in FM Radio mode to select "STEREO" or "MONO." An arrow points to the current mode.

< Example >

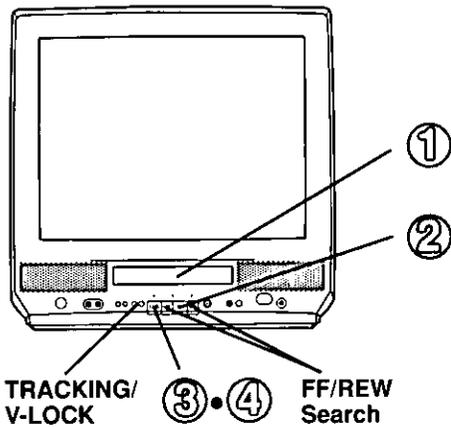


- You can not record FM radio stations onto a Video cassette tape.
- You may get improved FM reception for some stations by repositioning the Combination VCR.
- You can not select the FM Radio mode during playback or record, or while a blue back screen (MENU, PROGRAM, ON-TIMER, and GUIDE Plus+) is displayed.

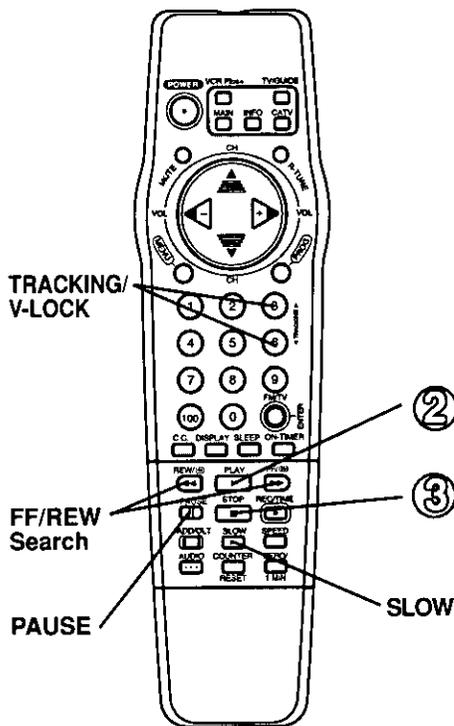
▶ Playback a Tape

✓ Check list before you begin.

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



TRACKING/
V-LOCK ③ • ④ FF/REW
Search



TRACKING/
V-LOCK

FF/REW
Search

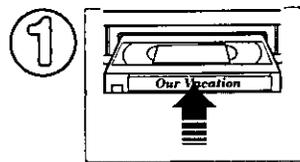
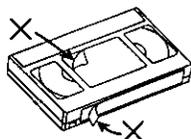
PAUSE

②

③

SLOW

Caution:
Please inspect your cassette tapes and remove any loose or peeling labels to prevent them from becoming jammed in your unit.



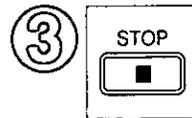
① Insert a cassette.

- Combination VCR power comes on automatically.



② Push **PLAY** on the remote control or Combination VCR to start playback.

- Playback begins automatically if cassette has no record tab (see page 34).



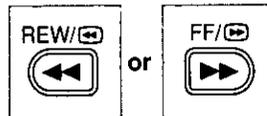
③ Push **STOP** on the remote control or Combination VCR to stop playback.



④ Push **STOP/EJECT** on the Combination VCR to eject the cassette.

- You may eject a cassette with power on or off.

To Find a Particular Scene During Playback



Push **REW** or **FF** on the remote control or Combination VCR to quickly locate a scene.

- SP mode tapes have a search speed of 9 times and SLP mode 27 times the normal speed.
- Some noise bars will appear during search.

Special Effects During Playback

These features work best in SP or SLP mode. The sound will be muted.

Slow Motion Playback

Push **SLOW** to start slow motion playback. Push **PLAY** or **SLOW** to release.

Still (Freeze) Frame Picture

Push **PAUSE** to freeze and release the picture.

- To reduce picture noise, first push **SLOW**. Next, use the 3 or 6 **NUMBERED** key on the remote control or **CH UP/DOWN** on the Combination VCR to clear up the picture, and then push **PAUSE**.

Frame by Frame Advance

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

(After the Combination VCR is in Still or Slow mode for 3 minutes, it will switch to the Stop mode automatically to protect the tape and the video head.)

Features 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 3 or 6 **NUMBERED** key on the remote control or **CH UP/DOWN** on the Combination VCR until the picture clears up. To return to Auto Tracking, push **POWER** off and then on again.

V-Lock Control

In Still mode, the 3 or 6 **NUMBERED** key on the remote control or **CH UP/DOWN** on the Combination VCR operate as a V-Lock control to reduce jitter. Push one of these keys until the picture is stabilized.

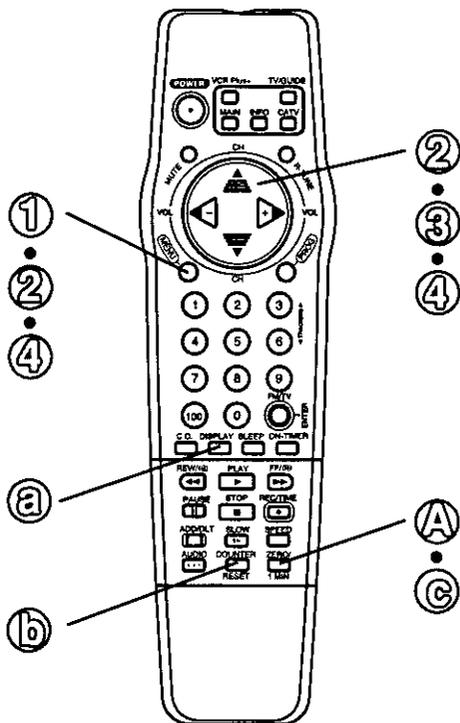
PanaBlack™ Picture Tube

This Combination VCR uses a PanaBlack™ picture tube for better color reproduction and picture contrast.



Tape Operation

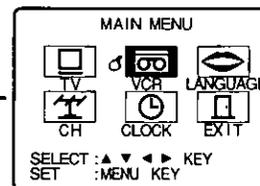
Your Combination VCR is equipped with several time saving features as well as convenient automatic functions which make tape operation easier than ever.



Repeat Play

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

① Push MENU to display the MAIN MENU.



② Push to select "VCR," and then push MENU to display the SET UP VCR screen.

③ Push repeatedly to select "ON" or "OFF."



- When REPEAT PLAY : ON is selected (the REPEAT indicator lights on the front panel), the Combination VCR will playback the tape to its end, or until a blank portion of 30 seconds or more is reached. (Erased portions of tape are not considered blank.) The tape is then automatically rewound and played again. This operation is repeated until you cancel Repeat Play.
- All function buttons (REW, FF, etc.) are operational during Repeat Play.

④ Push MENU to exit the SET UP VCR screen. Then, push to select "EXIT." Now, push MENU to exit the MAIN MENU.

NOTE You may also turn the repeat play feature on and off at the Combination VCR. During playback, push PLAY once or twice until the REPEAT indicator lights up (ON), or goes out (OFF).

Auto Operation Functions

Auto Shut Off

In TV or Game mode, when a broadcast signal is not received for 5 minutes, the Combination VCR will automatically power off (except when LINE INPUT is selected).

In Playback mode, when a Video signal is not detected for 5 minutes, the Combination VCR will automatically power off and the tape will be rewound.

- This feature is deactivated when any button on the unit or remote control is pushed even if there is no signal present.

Auto Playback

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

Auto Rewind

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

Playback Auto Eject (Repeat Play is "OFF.") When a tape without a record tab* is played to its end, the Combination VCR will rewind and then eject the tape.

Memory Rewind Off

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

*For record tab information, see page 41.

One Minute Skip

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

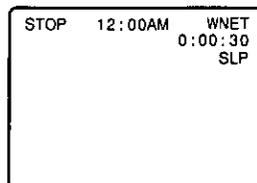
A Push ZERO/1MIN in Play mode.

- The Combination VCR will go into FF search mode and skip over 60 seconds of recorded time. Then, normal playback will resume.

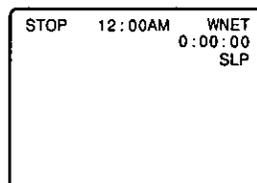
Zero Search

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

a Push DISPLAY to display the Time Counter overlay.



b Push COUNTER RESET where desired to reset the Time Counter to 0:00:00.



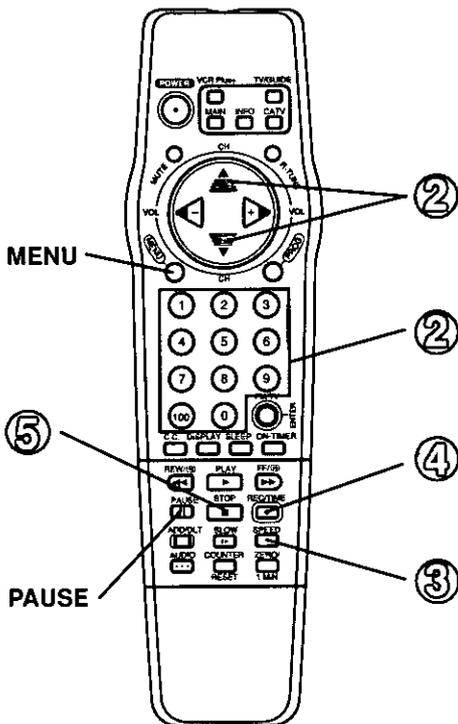
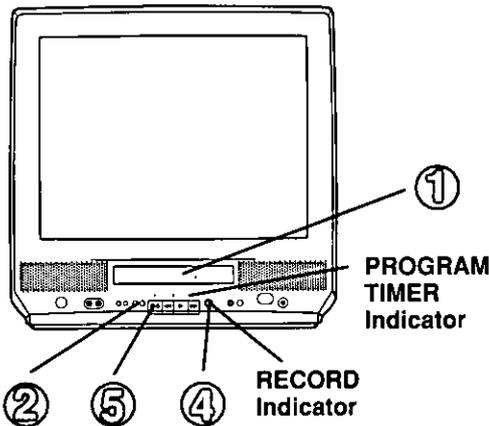
c Push ZERO/1MIN in Stop mode.

- The Combination VCR will go into FF or REW mode and stop at the last point the Time Counter was set to 0:00:00.

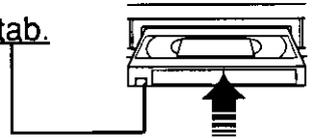
Record On a Tape

✓ Check list before you begin.

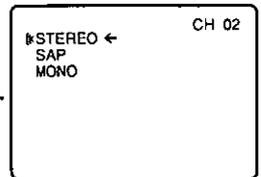
- All connections are made (see page 5).
- Your Combination VCR is plugged in.



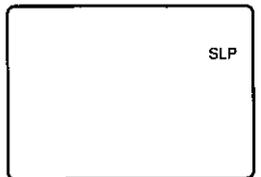
- ① Insert a cassette with record tab.
- The Combination VCR power comes on automatically.



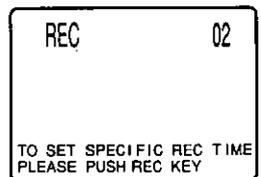
- ② Push ▲ ▼ or NUMBERED keys on the remote control to select a channel.
- Or, push CH UP/DOWN on the Combination VCR.
 - To record from an outside source, push ▲ ▼ to select LINE input (see bottom of the page).



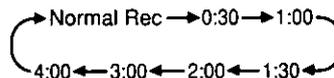
- ③ Push SPEED repeatedly until the desired tape speed is displayed (see page 41).
- SP = Standard Play
LP = Long Play
SLP = Super Long Play



- ④ Push REC/TIME on the remote control to start recording.
- Or, push REC/TIME on the Combination VCR.
 - To edit out unwanted portions, push PAUSE to pause the recording in progress. To release, push PAUSE again.



One Touch Timer Recording (OTR)
The Combination VCR stops recording at a preset time. In step 4, push REC/TIME repeatedly to set the length of the recording. Each push will change the time as shown.



- The PROGRAM TIMER indicator lights on the front panel.

- ⑤ Push STOP on the remote control to stop recording.
- Or, push STOP/EJECT on the Combination VCR.

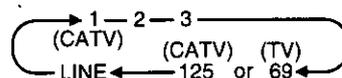
NOTES

- While it is possible to change the tape speed when you are recording, there will be some distortion on the tape where the change occurred.
- The remaining recording time of an OTR can be displayed by pushing DISPLAY.
- After the Combination VCR has been in Rec Pause mode for 5 minutes, it will stop automatically to protect the tape and video head.

Selecting the Input Mode

You can select the Input Mode in either of the following ways.

- Push ▲ ▼. The display will change in the order below.



- a. Push MENU to display the menu.
- b. Push ▲ ▼ ◀ ▶ to select "TV," and then push MENU to display the SET UP TV screen.
- c. Push ▲ ▼ to select "INPUT SELECT," and then push ▶ repeatedly to select "TUNER" or "LINE."

Basic VCR Operation

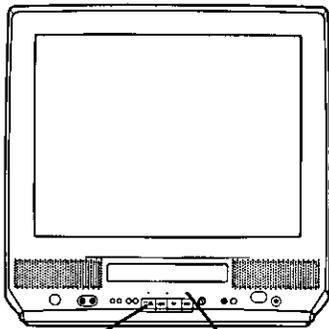


Timer Recording

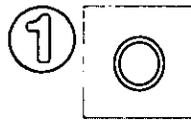
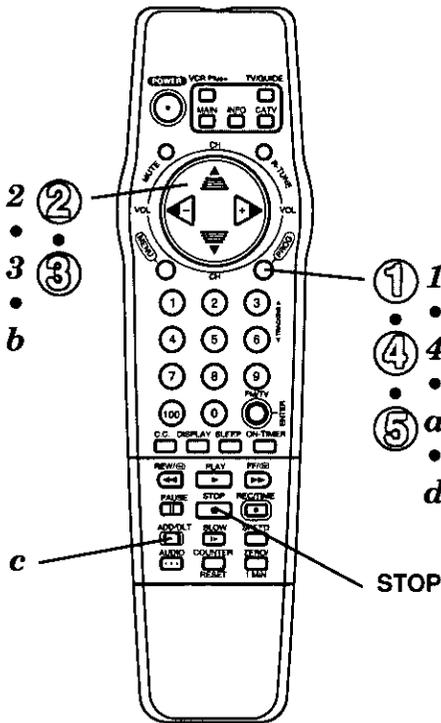
Your Combination VCR can be set up to do a recording while you are away or otherwise occupied. Up to 8 programs can be placed in memory. You can choose to record one time, daily, or weekly.

✓ Check list before you begin.

- All connections are made (see page 5).
- Your Combination VCR is plugged in.
- The clock is set.
- The tape is long enough.
- The record tab is in place.
- TV GUIDE Plus+ is not activated/setup.



STOP/EJECT PROGRAM TIMER Indicator



Push PROG to display the program screen.

- When the TV GUIDE Plus+ feature is setup, the Timer Recording function as indicated below will not operate. In order for the Timer Recording function to operate, the TV GUIDE Plus+ must be de-activated by re-setting all Combination VCR memory functions (see page 41.)

DATE	START	STOP	CH
7 FRI	--:--	--:--	--
fobAY SLP			
SELECT START DATE			
SELECT : ▲ ▼ KEY			
SET : ► KEY			
END : ►► KEY			

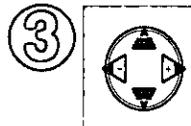
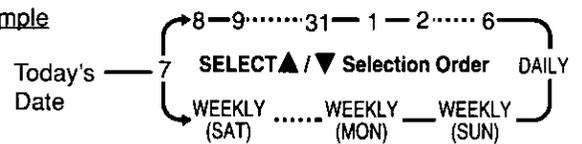
- If a program is already in memory, push ▲ ▼ repeatedly, and then ► to select an unused program number.



Push ▲ ▼ and ► to select and set one of the following:

- 1~31 = One time recording
- DAILY = Same time MON ~ FRI
- WEEKLY = Same time once a week

Example



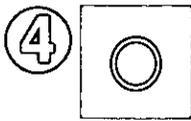
Push ▲ ▼ and ◀ ▶ to select and set each of the remaining items at right.

Remaining Items:

- START time
- STOP time
- CH(annel) number, or LINE for outside source recording
- Speed (SP, LP, SLP)

To Make Corrections

Repeatedly push ▶ or ◀ to move the cursor to the right or left, and then make the correction.



Push PROG to end the program.

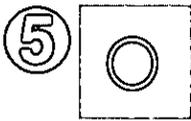
- This screen appears for confirmation.

P	DT	START	STOP	CH	SPD
1	day	9:00a	12:00a	08	SP
2	--	--:--	--:--	--	--
3	--	--:--	--:--	--	--
4	--	--:--	--:--	--	--

CANCEL: ADD/DLT KEY
SELECT 1-8: ▲ ▼ KEY
ENTER : ► KEY
END : ►► KEY

To Enter More Programs

Push ▲ ▼ and ► to select and set a blank program number, and then repeat steps 2 and 4.



Push PROG to exit this mode and return to the normal screen.

- The PROGRAM TIMER indicator lights on the front panel.
- If you're using a cable box, make sure that it is tuned to the desired channel and the power is left on for timer recording.

Two minutes before the Timer Recording starts, "TIMER REC WILL START SOON" will appear on-screen.



- Timer Recording will not function if TV GUIDE Plus+ is setup.
- 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 35), 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 "INCOMPLETE" appears after all items have been set, check all entries and make necessary corrections.

Cancel a Timer Recording: (Recording is in progress)

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

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

Replace Program Contents: (Recording is not in progress)

- 1 Push PROG to display all currently set programs on-screen.

P	DT	START	STOP	CH	SPD
1	---	---	---	---	---
2	8	10:00p	12:00p	125	SLP
3	10	8:00p	9:00p	10	SP
4	SU	9:00p	10:00p	L	SLP

SELECT 1-8: ▲ ▼ KEY
ENTER : ► KEY
END : PROG KEY

- 2 Push ▲ ▼ repeatedly to select the desired program, and then push ► to display the settings. (See page 36.)

- 3 Push ▲ ▼ repeatedly to select, and then push ► to enter replacement information.

DATE	START	STOP	CH
8 SAT	10:00P	11:00P	125
---	---	---	---
---	---	---	---
---	---	---	---

SELECT START DATE
SELECT : ▲ ▼ KEY
SET : ◀ ▶ KEY
END : PROG KEY

- 4 Push PROG twice to exit this mode and return to the normal TV screen.

Review or Clear Program Contents: (Recording is not in progress)

- a. Push PROG to display all currently set programs on-screen.

P	DT	START	STOP	CH	SPD
1	day	9:00a	12:00a	08	SP
2	8	10:00p	12:00p	125	SLP
3	10	8:00p	9:00p	10	SP
4	SU	9:00p	10:00p	L	SLP

CANCEL: ADD/DLT KEY
SELECT 1-8: ▲ ▼ KEY
ENTER : ► KEY
END : PROG KEY

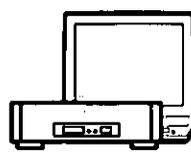
- b. Push ▲ ▼ repeatedly to select the desired program number.

- c. Push the ADD/DLT to clear the program.

P	DT	START	STOP	CH	SPD
1	---	---	---	---	---
2	8	10:00p	12:00p	125	SLP
3	10	8:00p	9:00p	10	SP
4	SU	9:00p	10:00p	L	SLP

SELECT 1-8: ▲ ▼ KEY
ENTER : ► KEY
END : PROG KEY

- d. Push PROG to exit this mode and return to the normal TV screen.

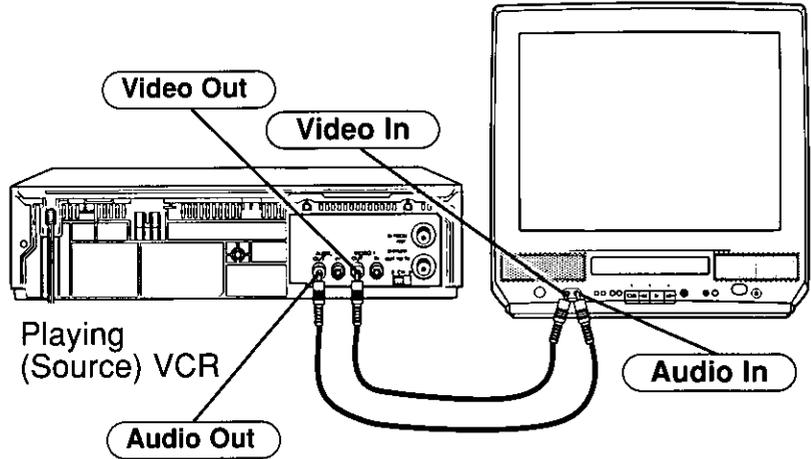


Copying Your Tapes (Dubbing)

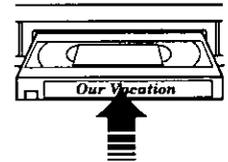
Connections you'll need to make.

- Use this same connection for your video camera, laser disc player, video games, etc.

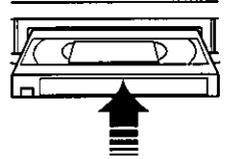
Recording(Editing)
Combination VCR



- 1 Insert a pre-recorded tape into the Playing (source) VCR.



- 2 Insert a blank tape with record tab into the Recording (editing) Combination VCR.



- 3 Select "LINE" as the input on the Combination VCR.

- See "Selecting the Input Mode" section on page 35.

- 4 Push PLAY on the VCR. Then, push PAUSE when the tape reaches the point at which you want to start copying.

- 5 Push REC on the Combination VCR, and then immediately push PAUSE on the Combination VCR remote control.

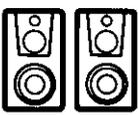
- 6 Push PAUSE on both units at the same time to begin copying.

You can edit out unwanted parts of the original recording by using PAUSE (on the Recording unit) while copying is in progress.

- 7 Push STOP on both units to stop copying.

Caution:

Unauthorized exchanging and/or copying of copyrighted recordings may be copyright infringement.



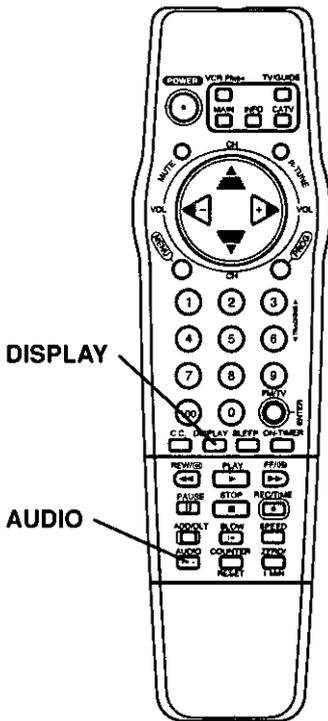
MTS Broadcast/TV Stereo System

✓ Check list before you begin.

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

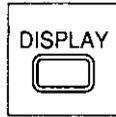
IMPORTANT NOTE:

This stereo system is designed for TV viewing only. Recording and playback will always be in monaural.



Receivable Broadcast Types

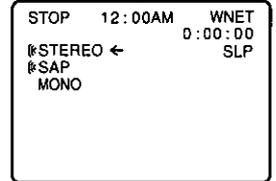
The following are possible broadcast types with their accompanying on-screen displays. The signal being received is indicated with an "Ⓛ" mark while the selected audio mode is indicated with an arrow. To change the audio mode for these broadcasts, follow the "Select Audio Mode for TV Viewing" section (below).



Push DISPLAY to display the broadcast signal currently being received and the selected audio mode.

MTS Stereo and SAP broadcast

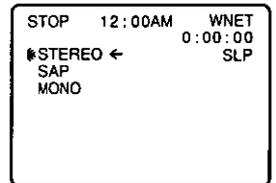
Multi-channel Television Sound Stereo (main language) and Secondary Audio Program (sub language) broadcasts are being received simultaneously. Select the STEREO or SAP audio mode as desired.



MTS Stereo broadcast

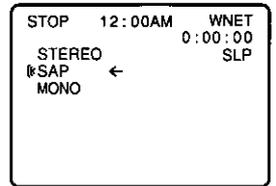
Multi-channel Television Sound Stereo broadcast is being received. Select the STEREO audio mode.

- If a stereo broadcast is weak and the display flickers, you may want to select the MONO audio mode for better results.



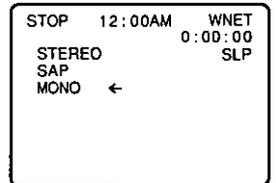
SAP broadcast

Secondary Audio Program (sub language) broadcast is being received. Select SAP audio mode for the sub language.



MONO broadcast

Normal monaural sound broadcast is being received.



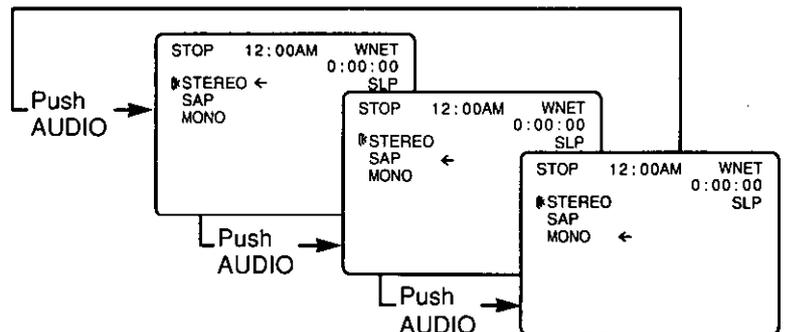
Select Audio Mode for TV Viewing



Push AUDIO to select the desired audio mode as described above. (Arrow shows selection.)

- Each push of AUDIO will change the audio mode as shown below.

< Example >

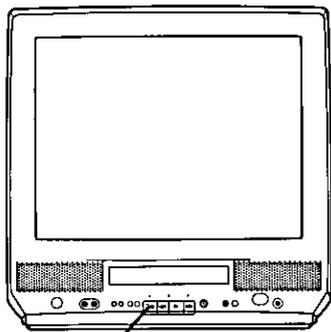


SPECIAL

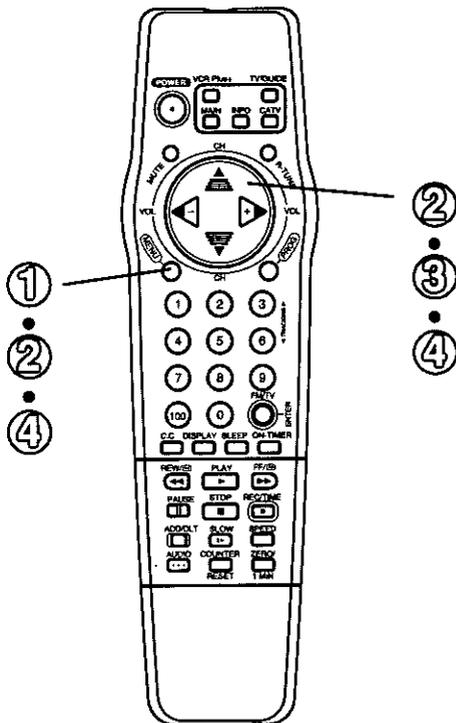
Special VCR Features

✓ Check list before you begin.

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



STOP/EJECT

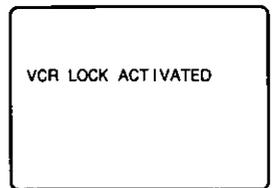


VCR Lock Feature

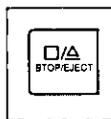
When activated, this feature prohibits all operations except for timer recording and tape eject. This feature is used to keep children from operating the Combination VCR.



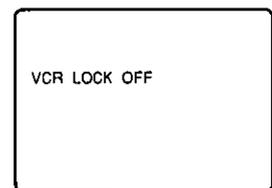
Hold down STOP/EJECT on the Combination VCR for 7 seconds during Stop or Power OFF mode.



To Cancel the VCR Lock feature,



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

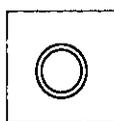


- VCR Lock mode is cancelled automatically after 24 hours as long as the clock is set.
- This feature cannot be activated or cancelled when a timer or one touch recording is in progress.

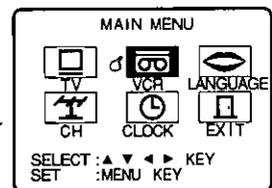
Warning Beeper Feature

When you select BEEPER ON, a short warning will sound each time an invalid entry or incomplete operation is made.

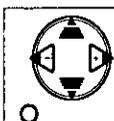
1



Push MENU to display the MAIN MENU.

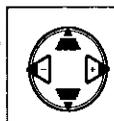


2

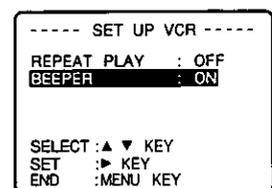


Push ▲ ▼ ◀ ▶ to select "VCR," and then push MENU to display the SET UP VCR screen.

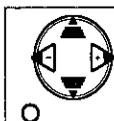
3



Push ▲ ▼ to select "BEEPER," and then push ▶ to select "ON" or "OFF."



4



Push MENU to end, and then push ▲ ▼ ◀ ▶ to select "EXIT." Now, push MENU to exit the MAIN MENU.

More you Can Do

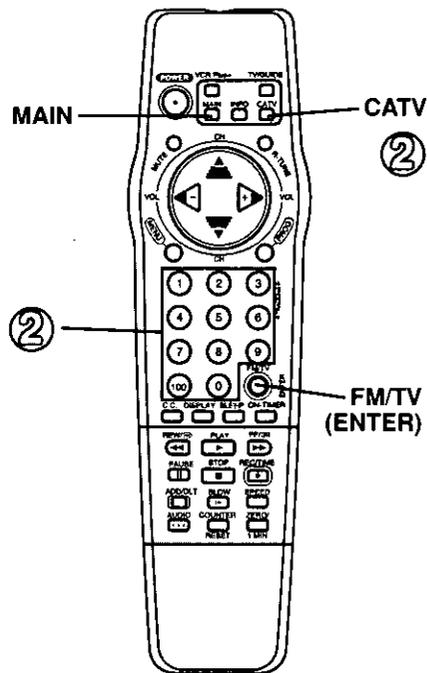


Cable Box Universal Remote Control Operation

The Remote Control may be set up to control some of the functions on your Cable Box.

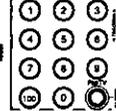
Cable Box Code Numbers

Archer	01, 29, 44, 88, 91
Cableview	04, 30, 42, 44, 52, 63, 85, 88
Citizen	04, 30, 42, 44, 52, 63, 85, 88
Curtis	08, 09, 56, 61, 87, 90
Diamond	01, 29, 44, 88, 91
Drake	37, 67, 71
Eagle	13, 20, 22, 26, 40, 58, 62, 98
Eastern	28
GC Brand	04, 30, 42, 44, 52, 63, 85, 88
Gemini	04, 85
General Electric	57
General Instruments	
.... 01, 02, 03, 04, 34, 55, 83, 85, 91, 93, 95	
Hamlin	14, 15, 28, 41, 97, 100, 102
Jerrold	
.... 01, 02, 03, 04, 34, 55, 83, 85, 91, 93, 95	
Macom	31, 79
Magnavox	25, 26
Matsushita	16, 17, 101
Movietime	29, 32, 38, 39, 40, 42, 44, 88
NSC	32, 38, 40
Oak	10, 11, 46, 99
Panasonic	16, 17, 101
Philips	13, 20, 23, 24, 96
Pioneer	05, 06, 78
Pulsar	04, 30, 42, 44, 52, 63, 85, 88
Radio Shack	44
RCA	16, 17, 101
Realistic	44, 51, 88
Regal	14, 41
Regency	28
Rembran	29, 32, 39, 42, 44, 88
Salora	68, 72
Samsung	32, 40, 42, 78, 94
Scientific Atlanta	08, 09, 56, 61, 87, 90
Sheritech	27
SL Marx	32, 40, 42, 78, 94
Sprucer	16, 17, 101
Stargate	
...04, 30, 32, 40, 42, 44, 52, 63, 78, 85, 88, 94	
Sylvania	19
Teknika	74
Telecaption	77, 92
Televue	32, 40, 42, 78, 94
Texscan	18, 19
Tocom	01, 33, 34, 42, 48, 49, 91
Toshiba	36
Uniden Satellite	65, 69
Unika	01, 29, 44, 88, 91
Universal	42, 43, 44, 52, 63, 88
Viewstar	13, 20, 22, 26, 40, 58, 62, 98
Videoway	07, 23, 50
Vid Tech	64
Vidter	64
Zenith	07, 23, 50



Universal Remote Control Setup

① Find your cable box brand code number from the chart at left.

②  and  While holding down CATV, use the NUMBERED keys to enter your cable box brand code number.

For code numbers 100 or greater, first push the 100 key, and then enter the remaining digit. E.g., for 102, push 100, then push 2.

③ Try each of the functions listed under **Set to CATV:** at the bottom of the page.

- Due to changes in infra-red commands used by some manufactures, some Cable Box brands are listed more than once. If your Cable Box does not respond to the first code, please try entering the next code.

Using the Universal Remote Control

Once the remote control has been properly setup, you can select MAIN, or CATV mode depending on which functions you wish to control. (See below.)

 or  Push MAIN or CATV on the remote control to select the desired mode. (See below for a list of controllable functions for each mode.)

Set to MAIN:

- All TV and VCR functions

Set to CATV:

- Cable box Power
- Basic VCR functions, e.g. PLAY, REC, etc.
- Numbered keys
- Channel Up/Down
- FM/TV (ENTER)

NOTES:

- In CATV mode, it maybe necessary to push FM/TV (ENTER) after pushing the NUMBERED keys for channel selection.
- In CATV mode, ADD/DLT, MENU, PROG, ON-TIMER, R-TUNE and FM/TV are not available. Push MAIN to use these functions.
- Depending on your cable box brand, some of the functions listed may not be remote controllable.



The remote control is designed to control the brands listed. However, it will not operate all Cable Boxes made by these manufactures. If you get no results, your particular product brand cannot be controlled by this remote.



Unit and Cassette Information

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

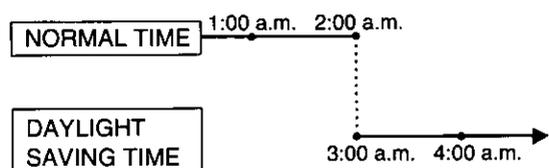
Only use tapes with the **VHS** mark in this unit.

Tape Speed Setting	Type of Video Cassette		
	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

D.S.T. (Daylight Saving Time)

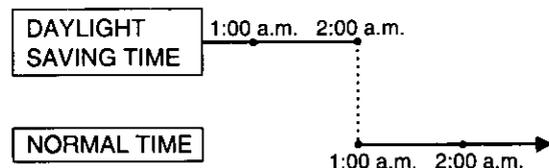
Spring (First Sunday in April)

When the Combination VCR is set to DST:ON, the clock is automatically advanced an hour.



Autumn (Last Sunday in October)

When the Combination VCR is set to DST:ON, the clock is automatically turned back one hour.



SELF-DEMO MODE

In Power ON condition, hold down PLAY/REPEAT or VOLUME UP/DOWN on the Combination VCR, with no tape inserted, for 5 seconds. The demo screen appears.

To cancel: Repeat the above operation. The demo screen disappears.

Reset all Combination VCR Memory Functions

Use 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 POWER to turn the Combination VCR on.
 - 2) Hold down both the PLAY and REW buttons on the Combination VCR for more than 5 seconds.
 - The power will shut off.
 - 3) Turn the power back on and perform the One Time Setup section on page 8.

Head Cleaning

Your Combination VCR will not normally require head cleaning, however the heads may become clogged when playing an old or damaged tape.

Head Clog Sensor

If head cleaning becomes necessary, the Combination VCR will display the screen at right during playback of a recorded signal. To exit this screen, push PLAY on the remote control or Combination VCR.

VIDEO HEADS MAY NEED CLEANING
PLEASE INSERT HEAD CLEANING CASSETTE OR REFER TO MANUAL

END:PLAY KEY

- Use "dry" type head cleaning cassette* only.
- Be sure to follow the cleaning cassette instructions carefully. Excessive use of a cleaning cassette can shorten head life.
- If using a head cleaning cassette does not solve the problem, contact your nearest Factory Service Center or authorized Service Center. (See page 43.)

*Cleaning cassette part No. NV-TCL30PT is recommended.

Product Specifications

Display

Picture Tube: 20 inch measured diagonal 90° deflection Picture Tube

VCR

Video Recording System: 4 rotary heads helical scanning system
Audio Track: 1 track

Tuner:

Broadcast Channels: 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

FM Radio

Band range: 87.5~108.1 MHz

General

Power Source: 120V AC, 60 Hz
Power Consumption: Approx. 110 watts (Power on)
Approx. 7 watts (Power off)
Television System: EIA Standard NTSC color
Speaker: 2 pieces
Operating Temperature: 41°F~104°F (5°C~40°C)
Operating Humidity: 10%~75%
Weight: 51.7 lbs. (23.5 Kg)
Dimensions: 20-3/10" (W) X 19-4/5" (H) X 19-1/10" (D)
515 (W) X 503 (H) X 484 (D) mm

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



Before Requesting Service

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

Power	Correction
No power...	<ul style="list-style-type: none"> • Completely insert the Power Plug into an AC wall outlet. • Set the POWER button to ON.
Monitor	Correction
No picture or sound...	<ul style="list-style-type: none"> • Make sure your antenna or cable system is connected to the Combination VCR. (P. 5) • Check that the power plug is completely plugged into an AC outlet. • Check that the POWER button is set to on.
Poor picture with normal sound...	<ul style="list-style-type: none"> • Adjust the BRIGHT, SHARPNESS, and PICTURE controls in the SET UP TV menu. (P. 29)
Poor sound with normal picture...	<ul style="list-style-type: none"> • Adjust the VOLUME control. (P. 28)
Poor TV reception...	<ul style="list-style-type: none"> • Adjust the SHARPNESS and PICTURE controls in the SET UP TV menu. (P. 29)
No color or poor color...	<ul style="list-style-type: none"> • Adjust the TINT and COLOR controls in the SET UP TV menu. (P. 29)
Ghost (multiple) images...	<ul style="list-style-type: none"> • Install a directional antenna.
TV programs cannot be watched...	<ul style="list-style-type: none"> • Make sure that the channel being received is in the Combination VCR's memory. (P. 8)
VCR	Correction
TV program cannot be recorded...	<ul style="list-style-type: none"> • Make sure your antenna or cable system is connected to the Combination VCR. (P. 5) • Make sure that the record tab is intact on the cassette. (P. 41)
Stereo or SAP broadcasts cannot be recorded...	<ul style="list-style-type: none"> • This unit is not designed for stereo/SAP broadcast recording.
Timer recording cannot be performed...	<ul style="list-style-type: none"> • Set the recording Start/Stop time correctly. (P. 36-37) • Timer recording may not be performed or continued if a power interruption of more than 1 minute occurs before or during a Timer Recording, even if power resumes thereafter.
No playback picture, or the playback picture is noisy or contains streaks...	<ul style="list-style-type: none"> • Adjust the TRACKING control in either direction. (P. 33)
VCR cannot be controlled...	<ul style="list-style-type: none"> • Make sure that VCR LOCK is set to off. (P. 39)
Remote Control	Correction
Combination VCR cannot be remote controlled...	<ul style="list-style-type: none"> • Aim the Remote Control directly at the remote sensor on the Combination VCR. (P. 7) • Avoid all obstacles which may interfere with the signal path. • Inspect the remote batteries for possible replacement. (P. 4) • Make sure that VCR LOCK is set to off. (P. 39) • Exposing the Combination VCR remote sensor to direct fluorescent or outdoor light may cause signal interference.
The MENU, PROG, ON-TIMER and FM/TV cannot be used...	<ul style="list-style-type: none"> • Push the MAIN button to select MAIN mode. (P. 40)
Miscellaneous	Correction
Video cassette cannot be inserted...	<ul style="list-style-type: none"> • Insert cassette with window side up and the record tab facing you.
Video cassette cannot be removed...	<ul style="list-style-type: none"> • Check that the power plug is completely plugged into an AC outlet.
Eject does not function or insertion cannot be done...	<ul style="list-style-type: none"> • Turn the POWER off and then on, and try ejecting or inserting the tape again.
Video cassette ejects when a recording is started, or the power is turned off for timer recording...	<ul style="list-style-type: none"> • Make sure the record tab is intact on the cassette. (P. 41)
In stop mode, the VCR motor (CYLINDER) continues to rotate...	<ul style="list-style-type: none"> • To enable the quick play mechanism, the VCR cylinder will rotate for about 5 minutes. This reduces response time from Stop to Play mode and from Play to Rewind Search mode.
VCR cannot be controlled...	<ul style="list-style-type: none"> • Make sure that VCR LOCK is set to off. (P. 39)

If you cannot resolve your problem, please call the Customer Satisfaction Center for product assistance at 201-348-9090.

To locate an authorized servicenter call toll free 1-800-545-2672.

Service Center List

PRODUCT INFORMATION • OPERATION ASSISTANCE • LITERATURE REQUESTS • DEALER LOCATIONS

Customer Service Center 2F-3, One Panasonic Way, Secaucus, NJ 07094 (Headquarters)
201-348-9090 (9:00am-8:00pm Monday-Friday, EST)

ACCESSORY PURCHASES

Panasonic Services Company 20421 84th Avenue South Kent, WA 98032
(6 am to 6 pm Monday-Friday ; 6 am to 10:30 am Saturday ; PST)
(Visa, Mastercard, Discover card, American Express, Check)

AUTHORIZED SERVICENTERS • PARTS DISTRIBUTOR LOCATIONS

To locate an independent authorized servicer or parts distributor in your area,
within the USA dial toll free 1-800-545-2672, 24 hours a day, 7 days a week.

PRODUCT REPAIRS

Factory Servicers

CALIFORNIA

6550 Katella Avenue
Cypress, CA 90630
Phone (714) 373-7426
Fax (714) 894-8534

800 Dubuque Avenue
S. San Francisco, CA 94080
Phone (415) 871-6373
Fax (415) 871-6840

20201 Sherman Way
Suite 102
Canoga Park, CA 91306
Phone (818) 709-1775
Fax (818) 709-2165

3878 Ruffin Road
Suite A
San Diego, CA 92123
Phone (619) 560-9200
Fax (619) 560-1831

COLORADO

1640 South Abilene Suite D
Aurora, CO 80012
Phone (303) 752-2024
Fax (303) 752-0610

FLORIDA

3700 North 29th Avenue
Suite 102
Hollywood, FL 33020
Phone (954) 925-2880
Fax (954) 925-5224

GEORGIA

8655 Roswell Road
Suite 100
Atlanta, GA 30350
Phone (770) 518-6301
Fax (770) 518-6306

HAWAII

99-859 Iwaiwa Street
Aiea, Hawaii 96701
Phone (808) 488-4369
Fax (808) 486-4369

ILLINOIS

1703 North Randall Road *
Elgin, IL 60123
"12:30 to 4:30, Mon-Fri"
Phone (847) 468-5464
Fax (847) 468-5465

9060 Golf Road
Niles, IL 60714
Phone (847) 608-1010
Fax (847) 299-1710

MARYLAND

62 Mountain Road
Glen Burnie, MD 21061
Phone (800) 973-4071
Fax (410) 760-3779

MASSACHUSETTS

60 Glacier Drive, Suite G
Westwood, MA 02090
Phone (617) 329-4280
Fax (617) 329-0586

MICHIGAN

37048 Van Dyke Avenue
Sterling Heights, MI 48312
Phone (810) 939-2060
Fax (810) 939-2638

* pick-up/drop-off only

MINNESOTA

7850-12th Avenue South
Airport Business Center
Bloomington, MN 55425
Phone (612) 854-8624
Fax (612) 854-2089

OHIO

2236 Waycross Road
Cincinnati, OH 45240
Phone (513) 851-4180
Fax (513) 851-8443

PENNSYLVANIA

2221 Cabot Boulevard West
Suite B
Langhorne, Pa 19047
Phone (215) 741-0661
Fax (215) 741-0521

Chartiers Valley Shopping
Center
1025 Washington Pike
Bridgeville, PA 15017
Phone (412) 257-4522
Fax (412) 257-4650

TENNESSEE

919-8th Avenue South
Nashville, TN 37203
Phone (615) 244-4434
Fax (615) 244-6713

TEXAS

7482 Harwin Drive
Houston, TX 77036
Phone (713) 781-1528
Fax (713) 781-0643

13615 Welch Road
Suite 101
Farmers Branch, TX 75244
Phone (972) 385-1975
Fax (972) 960-7626

WASHINGTON

20425-84th Avenue South
Kent, WA 98032
Phone (206) 872-7922
Fax (206) 872-0918

Service in Puerto Rico

Matsushita Electric
of Puerto Rico, Inc.
Panasonic Sales Company/
Factory Servicer
Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985
Phone (787) 750-4300
Fax (787) 768-2910

REPAIR INQUIRIES

Regional Customer Care Department

EAST (PCE)

2221 Cabot Boulevard West
Suite A
Langhorne, PA 19047
Phone (215) 741-0676
Fax (215) 750-6492

Covers:
CT, DE, ME, MD, MA, NH, NJ,
NY, PA, RI, VT, VA, DC, WV

EAST (PCE)

1225 Northbrook Parkway
Suite 2-390
Suwanee, GA 30174
Phone (770) 338-6860
Fax (770) 338-6548

Covers:
AL, FL, GA, MS, NC, SC, TN

CENTRAL (PCC)

1707 North Randall Road
Elgin, IL 60123
Phone (847) 468-5530
Fax (847) 468-5528

Covers:
AR, IL, IN, IA, KS, KY, LA,
MI, MN, MO, NE, ND, OK,
SD, TX, WI, OH

WEST (PCW)

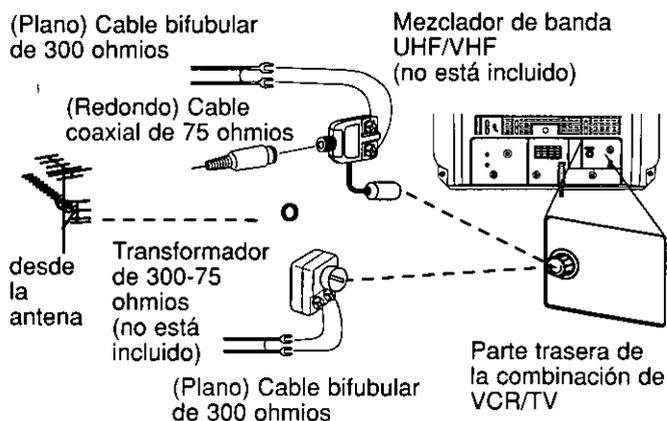
6550 Katella Avenue
Cypress, CA 90630
Phone (714) 373-7440
Fax (714) 373-7447

Covers:
AK, AZ, CA, CO, ID, MT, NV,
NM, OR, UT, WA, WY, HI

As of April '97

Conexión de la antena externa

Desenganche la antena del televisor o de la videograbadora que tuviera anteriormente y conéctela a la parte trasera del registrador Combinación de VCR/TV, 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).



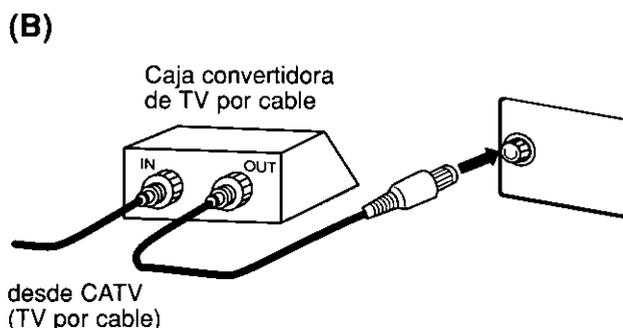
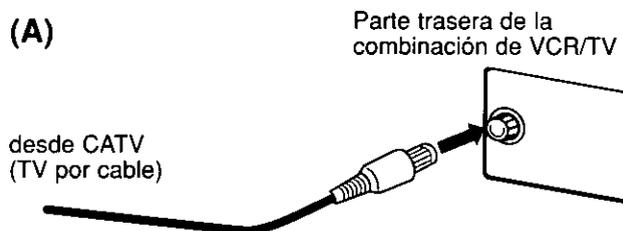
Conexiones de TV por cable

(A) Sin la caja convertidora/decodificadora

Con esta conexión usted podrá utilizar su control remoto de la combinación de VCR/TV para seleccionar los canales que desea 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. Sin embargo, la selección de canales se debe efectuar en la caja convertidora de TV por cable que suministra esta empresa. 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 canal codificado/no codificado

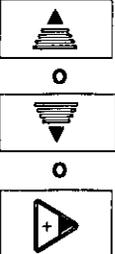
Sintonice el canal del Registrador de la combinación de VCR/TV en el canal de salida de la caja convertidora de televisión por cable (por ejemplo el canal 3).

Después, seleccione en la caja convertidora de TV por cable el canal que se quiera 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 reloj.

1  Oprimir POWER para encender el aparato.

2  Oprimir ▲, ▼ o ► para la exhibición de la pantalla en inglés, español o francés.

SELECT LANGUAGE

PUSH CH ▲ :English

PULSE CH ▼ :Español

APP. VOL + :Français

3  **Importante: si está usando una caja de TV por cable, encienda la caja y sintonice al canal PBS de su zona.**

FIJACION AUTO. (CA/RELOJ)

CONECTE EL CABLE DE LA ANTENA Y SI ESTA USANDO UNA CAJA DE TV POR CABLE SINTONICE AL CANAL PBS DE SU LOCAL LUEGO...

POR FAVOR OPRIMIR CH UP

Oprimir ▲ para iniciar la fijación de los canales y el reloj.

Las siguientes informaciones aparecerán seguidamente:

- AUTOPROGRAMACION EN PROCESO
- AUTOPROGRAMACION COMPLETO
- FIJACION AUTOMATICA DEL RELOJ EN PROCESO

Caso 1

7/28/1997 LUN 12:00PM
HORA VERANIEGA: ACT
CANAL FIJADO : CA 10

FIJACION AUTOMATICA
COMPLETO

TERMINAR : PULSE CH UP

Caso 2

FIJACION AUTOMATICA DEL
RELOJ ES INCOMPLETO

PULSE MENU
PARA FIJAR EL RELOJ

4 **Caso 1** Comprobar si la hora está fijada para terminar la fijación.

Si la hora y la hora veraniega es incorrecta, 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:

- Tome nota del canal que está fijado en la pantalla y salga desde este modo oprimiendo el botón ▲.
- Anule este canal desde los canales memorizados en la combinación de VCR/TV.
- Oprima el botón MENU para que aparezca la pantalla del MENU.
- Oprima ▲ ▼ ◀ ▶ para elegir "RELOJ" y luego oprima MENU para que aparezca la pantalla de FIJACION DEL RELOJ.
 - 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 usando el menú.
- Oprimir ▲ ▼ para elegir "FIJACION AUTOMATICA", luego oprimir ► para fijar y oprimir ▲ para iniciar.

- 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 reloj, la caja de TV por cable debe permanecer encendido y sintonizado el canal PBS cuando se apaga la combinación de VCR/TV.

Caso 2 Si aparece FIJACION AUTOMATICA DEL RELOJ ES INCOMPLETO, por favor fije el reloj manualmente.

- Oprimir MENU para que aparezca la pantalla de la fijación del reloj.
- Oprimir ▲ ▼ para elegir y oprimir ► para fijar el mes, la fecha, el año, la hora y la hora veraniega.

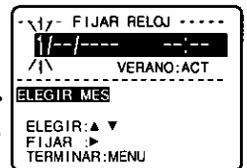
Para hacer correcciones,

- Oprimir ◀ ▶ repetidamente para retroceder o avanzar hasta el paso que desea corregir.
- Oprimir MENU para iniciar a funcionar el reloj. Luego oprimir ▲ ▼ ◀ ▶ para elegir "SALIR" y oprimir MENU para salir de la pantalla del MENU PRINCIPAL.

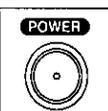
Para fijar o fijar de nuevo el reloj

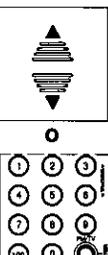
En caso de que el reloj es incorrecto o ha ocurrido un corte eléctrico.

- Oprima MENU para que parezca el MENU PRINCIPAL.
- Oprima ▲ ▼ ◀ ▶ para elegir "RELOJ". Luego, oprima MENU para que aparezca la pantalla de la FIJACION DEL RELOJ.
- Oprima ▲ ▼ para elegir "FIJACION MANUAL", y luego ► para que aparezca la pantalla de la FIJACION DEL RELOJ.
- Por favor continúe con los pasos b y c de la instrucción anterior (Caso 2).



Operaciones para ver la TV

1  Oprimir POWER para encender la combinación de VCR/TV.

2  Elegir el canal usando ▲ ▼ o usando la teclas numéricas.

3  Oprimir ◀ ▶ para ajustar el nivel del volumen.



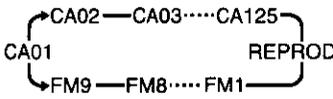
Encendedor automático con alarma

La combinación de VCR/TV se puede fijar para que se encienda automáticamente en uno de los tres modos (TV, reproducción o radio FM). Ud. también puede combinar con un alarma despertador de un minuto.

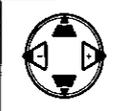
1  Oprimir ON TIMER para que aparezca la pantalla del encendedor automático.



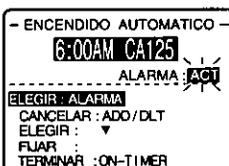
2  Oprimir   para elegir y oprimir  para fijar la hora del encendedor automático y luego para elegir el modo (TV, reproducción o radio FM).
Vea el orden para elegir a la derecha.

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

3  Oprimir   para elegir la fijación del alarma.

Si ha elegido "ACT", sonará un alarma por un minuto o hasta cancelar oprimiendo cualquiera de las teclas del control remoto. Cuando se apaga el alarma, sonará el sonido del modo que ha elegido.



Para hacer correcciones, use   y   para retroceder o avanzar como se necesita.

4  Oprimir 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.

Para cancelar, oprima ON-TIMER para que aparezca de nuevo la pantalla del paso 3. Luego, oprima ADD/HLT para anular la hora ("6" destellará). Ahora, oprima ON-TIMER para terminar. "ENCENDIDO AUTOMATICO ANULADO" aparecerá unos segundos en la pantalla.

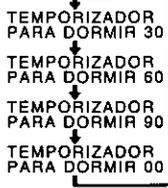
60 minutos luego de que la combinación de VCR/TV se ha encendido automáticamente, éste se apagará por sí mismo si no se ha oprimido ningún botón del control remoto o del aparato.

Fijación del temporizador para dormir

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

SLEEP  Oprimir SLEEP para que aparezca el tiempo de la fijación.

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



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

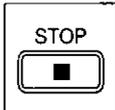
Operaciones básicas para la reproducción

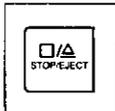
1 Introducir una cinta.

- La combinación de VCR/TV se enciende automáticamente.

2  Oprimir PLAY en el control remote o combinación de VCR/TV para comenzar a reproducir.

- Si la cinta no tiene la lengüeta para evitar el borrado, la combinación de VCR/TV comienza a reproducir automáticamente.

3  Oprimir STOP en el control remote o combinación de VCR/TV para parar la reproducción.

4  Oprimir STOP/EJECT en la combinación de VCR/TV para expulsar la cinta.

- Usted puede expulsar la cinta cuando el aparato está encendido o apagado.

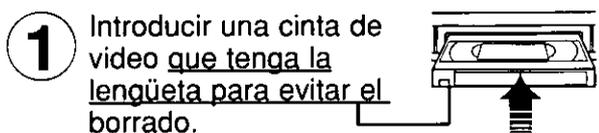
Para buscar una escena durante la reproducción

 Oprimir REW o FF durante la reproducción para buscar una escena.

- La velocidad de búsqueda es a 9 veces más rápida que la velocidad normal para el modo SP y 27 veces más rápida para el modo SLP.

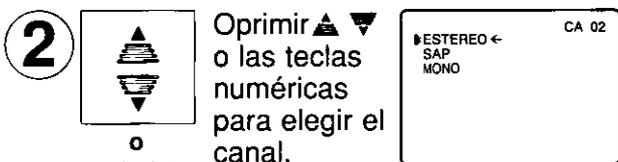


Operaciones básicas para la grabación



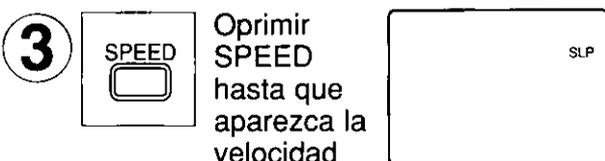
1 Introducir una cinta de video que tenga la lengüeta para evitar el borrado.

- la combinación de VCR/TV se enciende automáticamente.



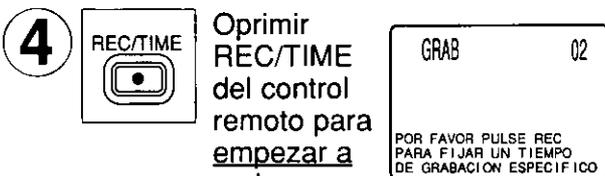
Oprimir ▲ ▼ o las teclas numéricas para elegir el canal.

- U oprimir ▲ ▼ de la combinación de VCR/TV.
- Para grabar desde una fuente externa, oprimir ▲ ▼ y elija LINEA.



Oprimir SPEED hasta que aparezca la velocidad deseada.

- SP = reproducción normal
- LP = reproducción larga
- SLP = reproducción super larga



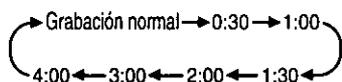
Oprimir REC/TIME del control remoto para empezar a grabar.

- U oprimir REC/TIME de la combinación de VCR/TV.
- Oprimir PAUSE para hacer una pausa en la grabación de un toque.

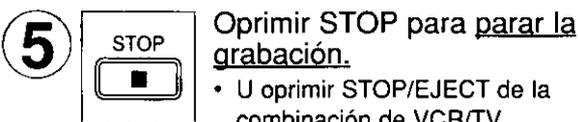
Grabación de un toque (OTR)

La combinación de VCR/TV se puede fijar para parar la grabación a una hora fijada anteriormente.

En el paso 4, oprimir repetidamente REC/TIME para fijar el tiempo de grabación.



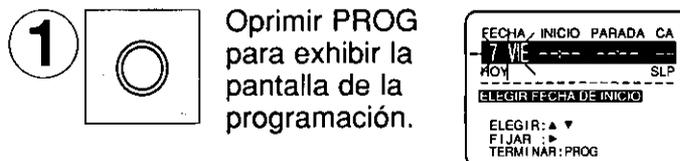
- La luz indicador de la grabación programada (TIMER) se enciende en el panel delantero.



Oprimir STOP para parar la grabación.

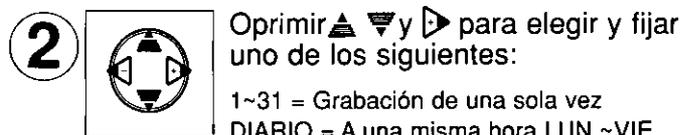
- U oprimir STOP/EJECT de la combinación de VCR/TV.

Grabación con temporizador



Oprimir PROG para exhibir la pantalla de la programación.

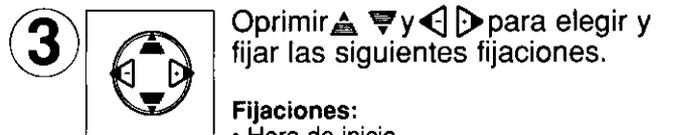
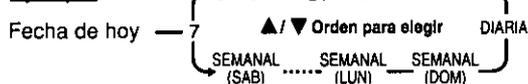
- Si ya existe una programación memorizada, oprima ▲ ▼ y ▶ para elegir un número sin programación.



Oprimir ▲ ▼ y ▶ para elegir y fijar uno de los siguientes:

- 1~31 = Grabación de una sola vez
- DIARIO = A una misma hora LUN ~VIE
- SEMANTAL = Una vez a la semana a una misma hora

Ejemplo



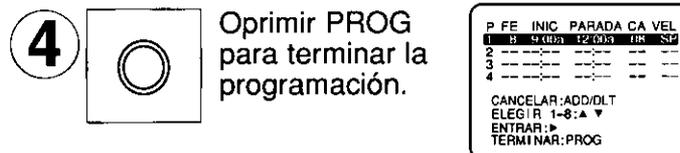
Oprimir ▲ ▼ y ◀ ▶ para elegir y fijar las siguientes fijaciones.

Fijaciones:

- Hora de inicio
- Hora de parada
- Canal o LINEA para una fuente externa
- Velocidad de la cinta (SP, LP, SLP)

Para hacer correcciones

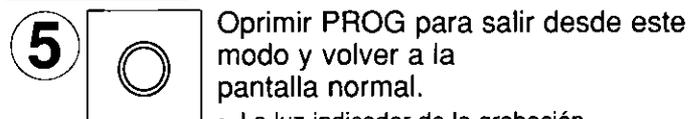
Oprimir ▶ sucesivamente para avanzar u ◀ para retroceder hasta el paso que desea corregir.



Oprimir PROG para terminar la programación.

Para hacer más programaciones

Oprimir ▲ ▼ y ▶ para elegir y fijar un número de programa en blanco y luego repita los pasos 2 y 4.



Oprimir PROG para salir desde este modo y volver a la pantalla normal.

- La luz indicador de la grabación programada (TIMER) se enciende en el panel delantero.
- Si ud. está usando una caja de TV por cable, asegúrese de que esté sintonizado el canal deseado y que esté encendido para la grabación con temporizador.

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

Warranty

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

Panasonic Sales Company,
Division of Matsushita Electric of Puerto Rico, Inc.
AVE. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic Video Products Limited Warranty

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the Warrantor") will repair this product with new or refurbished parts, free of charge, in the USA or Puerto Rico, in the event of a defect in materials or workmanship as follows (all time periods commence from the date of the original purchase):

<u>PRODUCT</u>	<u>PARTS</u>	<u>LABOR</u>
CAMCORDER	ONE (1) YEAR, EXCEPT CCD IMAGE SENSOR CCD IMAGE SENSOR - SIX (6) MONTHS	NINETY (90) DAYS NINETY (90) DAYS
VCR	ONE (1) YEAR	NINETY (90) DAYS
A/V MIXER	ONE (1) YEAR	NINETY (90) DAYS
MONITOR-VCR	ONE (1) YEAR, EXCEPT CRT CRT - TWO (2) YEARS	NINETY (90) DAYS CRT - NINETY (90) DAYS CUSTOMER PAYS ALL LABOR CHARGES AFTER 90 DAYS

Monitor-VCR In-home or carry-in Service: 19" (diagonal) CRT / LCD and Larger
Monitor-VCR Carry-in Service: 18" (diagonal) CRT / LCD and smaller

Batteries (if included) - New rechargeable batteries in exchange for defective rechargeable batteries for ten (10) days. Non-rechargeable batteries are not warranted.

Tape (if included) - New video cassette tape in exchange for a defective video cassette tape for five (5) days.

In-home, carry-in or mail-in service, as applicable, in the USA can be obtained during the warranty period by contacting a Panasonic Services Company (PASC) Factory Servicenter listed in the Service Directory. Or call toll free 1-800-545-2672, to locate an authorized PASC Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the Panasonic Sales Company telephone number listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of the date of the original purchase is required before warranty service is rendered.

This warranty only covers failures due to defects in materials and workmanship which occur during normal use and does not cover normal maintenance, including, but not limited to, video and audio head cleaning. The warranty does not cover damage which occurs in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a PASC Factory Servicenter or a PASC authorized Servicenter, or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES) RESULTING FROM THE USE OF THIS PRODUCTS, OR ARISING OUT OF ANY BREACH OF THE WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Customer Satisfaction Center at the Panasonic Consumer Electronics Company address above.

SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY THE WARRANTOR, IN ITS SOLE DISCRETION, ARE NOT COVERED. COSTS OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.

warvid 2/11/97

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