

Panasonic®

Combination VCR Operating Instructions

Model No. PV-C2063



Initial Setup and Connection Procedures are on pages 8 and 9.



As an ENERGY STAR® Partner, Matsushita Electric Corporation of America has determined that this product or product model meets the ENERGY STAR® guidelines for energy efficiency.



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 incluida.)

Important Safeguards and Precautions

READ AND RETAIN ALL SAFETY AND OP-ERATING INSTRUCTIONS. HEED ALL WARN-INGS IN THE MANUAL AND ON UNIT

INSTALLATION

1 POWER SOURCE CAUTION

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

2 POWER CORD PLUG

For safety, this unit has a polarized type plug (one wide blade), or a three-wire grounding type plug. Always hold the plug firmly and make sure your hands are dry when plugging in or unplugging the AC power cord. Regularly remove dust, dirt, etc. on the plug. POLARIZED PLUG CAUTION:

The plug fits into outlet one way. If it cannot be fully inserted, try reversing it. If it still will not fit, have an electrician install the proper wall outlet. Do not tamper with the plug.

GROUNDING PLUG CAUTION:

The plug requires a three-hole grounding outlet. If necessary, have an electrician install the proper outlet. Do not tamper with the plug.

3 POWER CORD

To avoid unit malfunction, and to protect against electrical shock, fire or personal injury:

- Keep power cord away from heating appliances and walking traffic. Do not rest heavy objects on, or roll such objects over the power cord.
- Do not tamper with the cord in any way.
- An extension cord should have the same type plug (polarized or grounding) and must be securely connected
- Overloaded wall outlets or extension cords is a fire hazard
- Frayed cords, damaged plugs, and damaged or cracked wire insulation are hazardous and should be replaced by a qualified electrician.

4 DO NOT BLOCK VENTILATION HOLES

Ventilation openings in the cabinet release heat generated during operation. If blocked, heat build-up may result in a fire hazard or heat damage to cassettes.

For your protection:

- a. Never cover ventilation slots while unit is ON, or operate unit while placed on a bed, sofa, rug, or other soft surface.
- b. Avoid built-in installation, such as a book case or rack, unless properly ventilated.

5 AVOID EXTREMELY HOT LOCATIONS OR SUDDEN TEMPERATURE CHANGES

Do not place unit over or near a heater or radiator, in direct sunlight, etc. If unit is suddenly moved from a cold place to a warm place, moisture may condense in unit and on the tape causing damage.

6 TO AVOID PERSONAL INJURY

 Never place unit on support or stand that is not firm, level, and adequately strong.
 The unit could fall causing serious injury to a child or adult and damage to the unit.

 Move any appliance and cart combination with care. Quick stops, excessive force, and uneven surfaces may cause objects to overturn.

Carefully follow all operating instructions.



OUTDOOR ANTENNA INSTALLATION

1 SAFE ANTENNA AND CABLE CONNECTION

An outside antenna or cable system must be properly grounded to provide some protection against built up static charges and voltage. Section 810 of the Stational Electrical Code, ANSI/NFPA 70 (in Canada,

part 1 of the Canadian Electrical Code) provides information regarding 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

Locate an outside antenna system well away from power lines and electric light or power circuits so it will never touch these power sources should it ever fall. When installing antenna, absolutely never touch power lines, circuits or other power sources as this could be fatal.

USING THE UNIT

Before unit is brought out of storage or moved to a new location, refer again to the INSTALLATION section of these safeguards.

- 1 KEEP UNIT WELL AWAY FROM WATER OR MOISTURE, such as vases, sinks, tubs, etc.
- 2 IF EXPOSED TO RAIN, MOISTURE, OR STRONG IMPACT, unplug unit and have it inspected by a qualified service technician before use.

3 ELECTRICAL STORMS

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

4 WHEN UNIT IS PLUGGED IN

- DO NOT OPERATE IF:
- liquid has spilled into unit.
- unit was dropped or otherwise damaged.
- unit emits smoke, malodors, or noises. Immediately unplug unit, and have it inspected by a service
- Immediately unplug unit, and have it inspected by a service technician to avoid potential fire and shock hazards.
- Never drop or push any object through openings in unit. Touching internal parts may cause electric shock or fire hazard
- Keep magnetic objects, such as speakers, away from unit to avoid electrical interference.

5 USING ACCESSORIES

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

6 CLEANING UNIT

Unplug unit. 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 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 PRODUCT YOURSELF

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

2 REPLACEMENT OF PARTS

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

3 SAFETY CHECK AFTER SERVICING

After unit is serviced or repaired, request that a through safety check be done as described in the manufacture's service literature to ensure video unit is in safe operating condition.

Safety Precautions/Mesures de sécurité

Warning: To prevent fire or shock hazard, do not expose this equipment to rain or

moisture.

Caution:

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Avertissement:

Afin de prévenir tout risque d'incendie ou de chocs électriques, ne pas exposer cet appareil à la pluie ou à une humidité excessive.

Attention : Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans

la borne correspondante de la prise et pousser jusqu'au fond.

FCC WARNING: Any unauthorized changes or modifications to this equipment would void the

user's authority to operate.

This video recorder, equipped with the HQ (High Quality) System, is compatible with existing VHS equipment. Only use those tapes with the \hat{WS} 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.







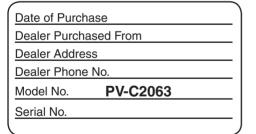
This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.

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.

This product utilizes both a Cathode Ray Tube (CRT) and other components that contain lead. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: http://www.eiae.org.>

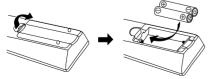
Congratulations

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 below. The serial number is on the tag located on the back of your unit.



Accessories Remote Control LSSQ0381

Loading the Batteries



Battery replacement caution

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

Prevent Accidental Tape Erasure

Prevent recording.

Record
Tab Screwdriver

Break off the tab to

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

To record again.

Cover the hole with cellophane tape.

Unit Information

Head Cleaning

Playing older or damaged tapes may eventually cause video heads to become clogged.

Head Clog Sensor

During playback this screen appears if clogging is detected. To remove screen, press PLAY on the remote or unit.

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

END: PLAY

- Use "dry" type head cleaning cassette only.
 - (Part No. NV-TCL30PT is recommended.)
- Follow cleaning tape directions carefully.
 Excessive use of head cleaning tape can shorten the video head life.

Features for a Quality Picture

Digital Auto Tracking

Continuously analyzes the signal and adjusts for optimum picture quality.

Manual Tracking Control (to reduce picture noise)
Use during Playback and Slow Motion mode to
reduce picture noise. Press the 3 or 6 number key
on the remote control or CH ▲▼ on the unit until
picture clears up. To return to Auto Tracking,
press POWER off, then on again a few seconds
later.

V-Lock Control

In Still mode, the 3 or 6 number key on the remote control or CH $_{\Delta V}$ on the unit operate as a V-lock control to reduce jitter.

Record/Playback Time

Only use tapes with the WHS mark in this unit.

Tape Speed	Type of Video Cassette			
Setting	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	

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 Ch	annels	VHF 2 ~ 13, UHF 14 ~ 69		
CABLE 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 CABLE channel 5A(01) Ultraband 65 ~ 94, 100 ~ 125		
FM Radio				
Band Range		87.5 MHz ~ 108.1 MHz		
General				
Power Source	!	120 V AC, 60 Hz		
Power	Power On	Approx. 110 W		
Consumption	Power Off	Approx. 2.5 W		
Television Sys	stem	EIA Standard NTSC color		
Speaker		2 pieces 1.5 W		
Operating Temperature		5 °C ~ 40 °C (41 °F ~ 104 °F)		
Operating Humidity		10 % ~ 75 %		
Weight		23 Kg (50.6 lbs.)		
Dimensions (W X H X D)		515 mm (20-5/16") X 505 mm (19-7/8") X 474 mm (18-11/16")		

Note

 Designs and specifications are subject to change without notice.

DST (Daylight Saving Time)

Unit auto adjusts clock for DST (Daylight Saving Time.)

■ Spring (First Sunday in April)

DST: ON → Sets clock ahead one hour.

■ Autumn (Last Sunday in October)

DST: OFF → Turns clock back one hour.

- If your area does not observe Daylight Saving Time, select DST: OFF.
- Keep these time changes in mind when programming the unit for timer recordings.

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Timer Recording

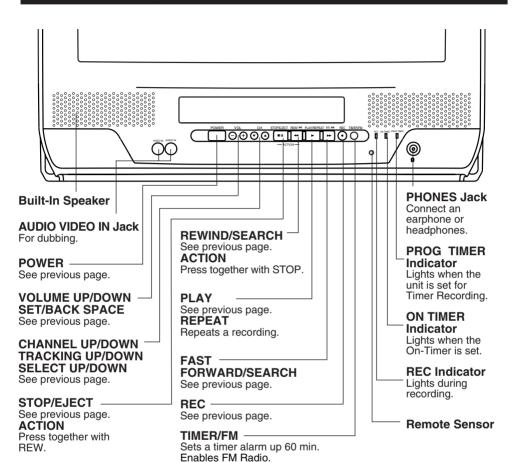
Location of Controls

Remote Control Buttons EJECT COMBO Returns to COMBO mode. Eiects tape. POWER -See below. Turns on or off the unit. DSS/CABLE FM/TV Sets the remote to control some basic DSS or Cable box Receives FM radio signal. functions. **(3)** MUTE -RAPID TUNE Mutes the sound instantly. Displays the last channel you CHANNEL UP/DOWN were watching. Selects a channel. **VOLUME UP/DOWN** SELECT UP/DOWN Adjusts volume. Controls navigation around SÉT/BACK SPACE on-screen menu. Sets a selected menu, or goes back to correct. ACTION $\overline{1}$ 2 3 Displays Main Menu. **PROGRAM** (4) (5) (6) Displays SET PROGRAM NUMBER Kevs screen. You can set Timer (7)(8)(9)Selects a channel directly. Program and On-Timer. (100) (0) 0 ΡΙ ΔΥ TRACKING UP/DOWN PLAY Begins playback. Reduces picture noise during Playback and Slow Motion. REWIND/SEARCH Rewinds tape, and searches ADD/DELETE reverse scene. Adds or deletes a channel. FAST FORWARD/SEARCH PAUSE/SLOW Fast forwards tape, and searches Pauses and slow motion forward scene. and frame advance picture. DISPLAY/ENTER Displays the VCR status and Turns off the unit automatically. clock. In DSS or CABLE mode. it may be necessary after AUDIO channel selection. Selects the desired audio mode. CM SKIP/ZERO SEARCH TAPE POSITION In Stop mode, goes to the counter "0:00:00." In Play mode, Finds out present tape position and amount of tape remaining. skips over 1 to 3 minutes of tape. **NIGHT** Records the program. Color and picture intensity level SEARCH are adjusted during night time Goes directly to the desired use. recording. Locates end point of recording. SPEED -Selects recording speed. COUNTER RESET Resets to "0:00:00" at the Stops recording or playback. desired position.

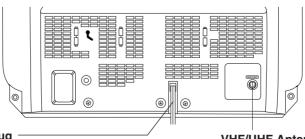
Notes

- When LIGHT is pressed, available buttons in the selected mode light up and the selected mode button (COMBO or DSS/CABLE) flashes for 5 seconds. If no button is pressed, light goes out in 5 seconds to conserve batteries. Also, by holding down a button, you can confirm the selected mode (mode button will flash) in the dark.
- When EJECT is pressed, the tape is ejected from Cassette Compartment.
 If EJECT is pressed during recording, the unit will not respond to the command.

Front View of the Unit and Indicators



Rear View of the Unit



AC Power Plug

When plugged into an AC outlet, the unit consumes 2.5 W of electric power in OFF condition.

VHF/UHF Antenna Input Terminal In from your Antenna or Cable (See page 8).

Connections/Initial Setup (Ready to Play)

Please make all cable or antenna connections before power on.

Connecting

For ANT./Cable

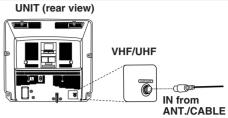
Connect the cable from Antenna/Cable to the VHF/UHF terminal on the unit.

For DSS/Cable Box

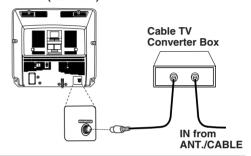
Connect the OUT jack on your cable box to the VHF/UHF terminal on the unit with a RF cable.

WARNING:

Overtightening "Nut type" RF coaxial cables may damage jacks. Finger tighten only.



UNIT (rear view)



Initial Setup (Ready to Play)

Press COMBO on the remote for Combo mode.

- Plug the unit power cord into AC wall outlet.
- **2** Press POWER* on the remote or unit. The unit comes on and auto channel and clock set starts.
- If you use a cable box, turn it on and set it to the Public Broadcasting Service (PBS) channel in your time zone. If you use a DSS receiver, it must be turned off.



AUTO CLOCK SET
PROCEEDING
CANCEL: STOP

3 Settings are made automatically. When setup is done, this screen appears.

2/ 6/2003 THU 12:00PM DST:0N SETTING: CH 10 AUTO CLOCK SET COMPLETED If AUTO CLOCK SET IS INCOMPLETE screen appears, set the clock using MANUAL CLOCK SET procedure on next page.

AUTO CLOCK SET
IS INCOMPLETE

PLEASE SET CLOCK BY
PRESSING ACTION KEY

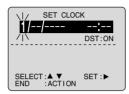
Notes

- Function buttons are inoperative during Initial Setup.
- To remove a cassette during Auto Set, press EJECT twice on the remote or STOP twice on the unit. In this case, settings must be made manually. (See page 10.)
- Depending on conditions, Auto Clock Set may take longer than 30 minutes. If so, press STOP to stop setup and perform settings manually. (See page 10.)

Manual Clock Set

If AUTO CLOCK SET was incomplete, manually set the clock as follows.

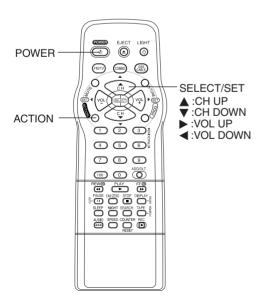
Press ACTION on the remote to display SET CLOCK Menu screen.



Press ▲ ▼ to select the month and press ► to set. In the same manner, select and set the date, year, time, and DST. (Daylight Saving Time)



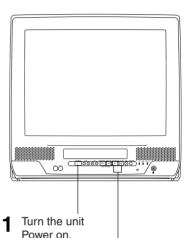
Press ACTION twice to start CLOCK and exit.



Reset all unit Memory Functions

When moving unit to a new location, or if a mistake was made in the Initial Setup section.

• Make sure a tape is not inserted in the unit.



- Press and hold both
 PLAY/REPEAT and FF on the
 unit for more than 5 seconds.
 - The power will shut off.
 - Please ignore "NO CASSETTE" warning.
- **3** Do "Initial Setup" on page 8.

Note to CABLE System Installer

This reminder is provided to call the CABLE (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.

Reset Language, Channels, Clock,

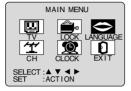
1



Press ACTION* to display MAIN MENU.

Language

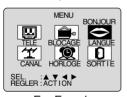
1) Press ▲▼◀▶ to | select language icon.



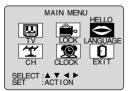
2) Press ACTION repeatedly.



For Spanish



For French

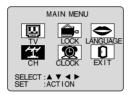


For English

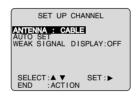
Press ▲▼◀▶
 to select "EXIT".
 Press ACTION
 to exit.

Channels

1) Press ▲▼◀► to select "CH".



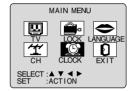
2) Press ACTION.



- 3) Press ▲▼ to select "ANTENNA," then press ► to set your antenna system ("TV" or "CABLE").
- 4) **Press** ▲▼ to select "AUTO SET," then **press** ▶.
- After Channel Auto Set is finished, Clock Auto Set will be performed. (If clock is set manually, Clock Auto Set will not be performed.)

Clock

1) **Press** ▲▼◀▶ to select "CLOCK".



2) Press ACTION.



("TIME ZONE ADJUST" appears only when auto clock is set.)

- 3) Press ▲▼ to select "MANUAL" or "AUTO CLOCK SET" and press ▶.
- For Auto Clock Set, select "AUTO CLOCK SET," then press ▶.



- 4) Press ▲▼ and press ◀► to select and set the month, date, year, time, and DST (Daylight Saving Time).
- 5) **Press ACTION** twice to start the clock and exit this mode.

Time Zone Adjust

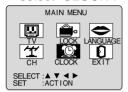
*Important:

If a remote control button does not work when pressed, press the COMBO button on the remote and try the button again.

■ Time Zone Adjust

(Only when Auto Clock is set.)

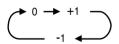
 Press ▲▼◀▶ to select "CLOCK".



2) Press ACTION.

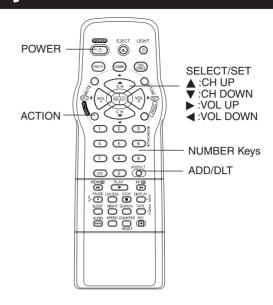


3) Press ▲▼ to select TIME ZONE ADJUST and press ▶ repeatedly to select mode. (See below.)





Press ACTION twice to exit.

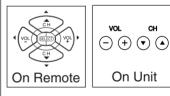


ACTION key on the unit



You can operate the menu screen using unit buttons. To display the menu, press STOP/EJECT and REW together with no tape inserted. To exit the menu, repeat above with or without tape inserted until normal screen appears.

Using ▲▼◀▶ keys



▲: CH UP

▼ : CH DOWN

▶ : VOLUME UP

■: VOLUME DOWN

Whenever the menu or program screen is displayed, CHANNEL UP/DOWN function as ▲▼ and VOLUME UP/DOWN function as ◀▶ only.

Add or Delete a Channel

To add channel: Select channel with number keys and press ADD/DLT.

CHANNEL OB ADDED

To delete channel: Select channel with CH ▲▼ or number keys and press ADD/DLT.



Playback a Tape Record On a Tape

Ready Check List

All connections are made. \sqsupset Your unit is plugged in.

Insert a cassette.

· The unit power comes on automatically.



To prevent tape jam, remove loose or peeling labels from tapes.



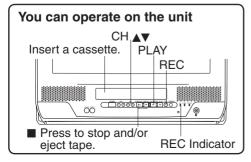
Press PLAY*.

- Playback begins if cassette has no record
- Forward/Reverse scene search
 - → Press FF or REW
 - → Press PLAY to release.
- Still (Freeze) picture
 - → Press PAUSE/SLOW
 - → Press PLAY to release.
- Slow Motion picture
 - → Hold down PAUSE/SLOW in Still mode
- → Press PLAY to release.
- Frame by Frame picture

 → Press PAUSE/SLOW in Still mode
- → Press PLAY to release.

Notes \

- · These features work best in SLP mode.
- · After the unit is in Still or Slow mode for 3 minutes, it will switch to Stop mode automatically to protect the tape and the video head.
- Stop → Press STOP
- Rewind tape → Press REW in Stop
- Fast forward tape → Press FF in Stop
- **Eject tape** → **Press EJECT** on the remote or STOP/EJECT on the unit



Insert a cassette with record tab

• The unit power comes on automatically.

Press CH A vor number keys to select a

• For "LINE" input, see bottom of next page.

Press SPEED to select recording speed (see page 4).

SP = Standard Play

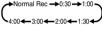
LP = Long Play

SLP = Super Long Play

· Selected speed is displayed.

- Press REC to start recording. To edit out unwanted portions, press
 - PAUSE/SLOW to pause and resume recording.
 - · You cannot view another channel during recording.
- Stop → Press STOP
- One Touch Recording (OTR)

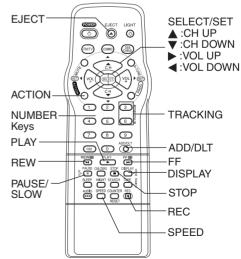
Press REC repeatedly →Normal Rec →0:30 →1:00 to set the recording length (30 min. - 4 hours).



- The unit stops recording at a preset time.
- PROG TIMER indicator lights on the unit.

Notes

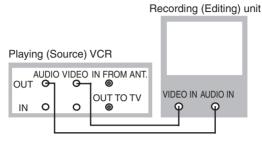
- · After the unit has been in Rec Pause mode for 5 minutes, it will stop automatically to protect the tape and the video head.
- The remaining recording time of an OTR can be displayed by pressing DISPLAY.



Copy Your Tapes (Dubbing)

*Important: If a remote control button does not work when pressed, press the COMBO button on the remote and try the button again.

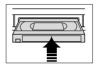
Connections you'll need to make.



Playback (Source)

Insert pre-recorded tape.

Recording (Editing) unit



Insert blank tape with record tab.

 Dubbing tapes protected with Copy Guard will have poor quality results.

Select "LINE" mode.

See "Selecting Input Mode" below.



Press PLAY then **PAUSE** at starting point to put in Standby mode.



Press REC. then PAUSE/SLOW immediately to put in Standby mode.

(Perform operation of steps 4 and 5 on both units at same time.)



Press PLAY to start dubbing.



Press PAUSE/SLOW to start dubbing.

5



Press STOP to stop dubbing.



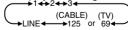
Press STOP to stop dubbing.

Selecting Input Mode

Method 1:

Press CH ▲▼. The display will change as follows.

c Press ▲▼ to select "INPUT SELECT," and then



Method 2:

a Press ACTION for MAIN MENU. b Press ▲▼◀► to select "TV", then press ACTION for SET UP TV screen.

and/or copying of copyrighted

press ▶ to select "TUNER" or "LINE". d Press ACTION twice to exit this mode.

Caution

 Unauthorized exchanging recordings may be copyright infringement.

TV Operation

*Important: If a remote control button does not work when pressed, press the COMBO button on the remote and try the button again.

Press POWER* on the remote or unit.



Use CH ▲▼or number keys to select a channel.



Press VOL + or VOL - to adjust volume.

NIGHT Mode

Color and picture intensity levels are adjusted so the screen is easier on your eyes during night time use.



Press NIGHT to set NIGHT mode.

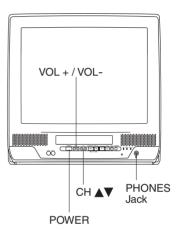
 NIGHT mode may be selected when watching TV or playing a tape.

Press NIGHT to cancel.

- Previous settings are restored.
- NIGHT mode is canceled when power is turned off or power failure occurs.

Ready Check List

☐ All connections are made. ☐ Your unit is plugged in.



■ Using the 100 key

When selecting CABLE channels 100 to 125 with the number keys, first press the 100 key, and then enter the remaining two digits.

■ Rapid Tune

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

Audio Mute

Press MUTE to instantly mute the sound. Press again to restore the previous sound level.

■ Phones

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

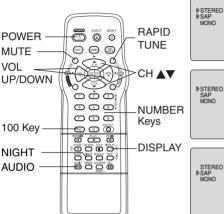
MTS Broadcast/TV Stereo System

Equipped with dbx® -TV Noise Reduction for true MTS reproduction. dbx® -TV Noise Reduction is required for good stereo separation and audio fidelity. dox® is a registered trademark, and is licensed by dox® Technology Licensing.

Receivable Broadcast Types

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

Press DISPLAY to display the broadcast signal being received.





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

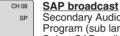
SP ©STEREO ◀ SAP MONO 12.00AM CH 08

MTS Stereo broadcast

STEREO or SAP audio mode.

Multi-channel Television Sound Stereo broadcast. Select STEREO audio mode.

 If stereo broadcast is weak and the display flickers, select MONO audio mode for possibly hetter results



Secondary Audio Program (sub language). Select SAP audio mode for the sub language.



MONO broadcast

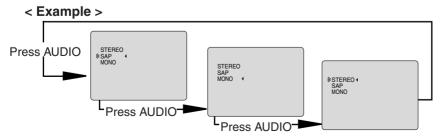
Normal monaural sound broadcast.

Select Audio Mode for TV Viewing

Press AUDIO to select the desired audio mode as described above.

(Arrow shows selection.)

- Each press of AUDIO will change the audio mode as shown below.
- "SAP" is selected with first press of AUDIO.



IMPORTANT NOTE:

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

TV Timer Features

ON-TIMER with Alarm

This unit 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.

Press PROG* to display SET PROGRAM screen.

SET PROGRAM TIMER PROGRAMMING ONTIMER

> SELECT:▲ ▼ · PROG

1) Press ▲▼ to select "ON

SET:▶

- TIMFR". 2) Press ➤ to display ON
- TIMER screen.

ON TAMER 6:--AM CH ---APM:ON SELECT:▲ ▼ END :PROG SET ·

- 1) Press ▲▼ to select desired settings.
- 2) Press ▶ to set the ON-TIMER TIME or ON-TIMER mode.
- Make sure a tape is inserted if Playback mode is selected.
- See "FM Radio" on page 20 for instructions on how to preset FM stations.



 ON-TIMER mode selection order



Press ▲▼ to select ALARM "ON" or "OFF".

When "ON" is selected, an alarm will gradually increase in volume for one minute or until canceled by pressing any button (including VOL + -).

To Make Corrections, use ▲▼ and ◀► to move back and correct.

Press PROG to set ON TIMER. • "ON TIMER SET" is displayed.

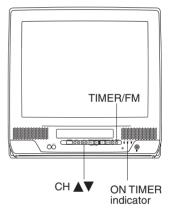
· ON TIMER Indicator lights on the unit.

To Cancel ON-TIMER.

Repeat steps 1 and 2. Then, press ADD/DLT to clear the time in step 3. Now, press PROG to end. "ON TIMER END" briefly appears on-screen.

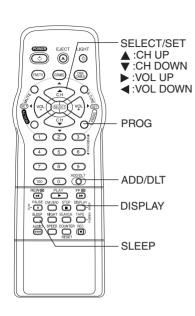
Ready Check List

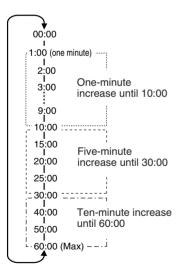
☐ The clock is set to the correct time.



Note

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





Note

 While timer function is in progress, you can change channels on the unit with CH AV while "CANCEL/SET" screen is not displayed.

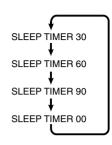
Sleep Timer

This unit can be set for auto power off.

Press SLEEP repeatedly to set SLEEP TIMER.

 Pressing DISPLAY with sleep timer set displays remaining time.

Press SLEEP repeatedly until "SLEEP TIMER 00" appears to cancel.



Instant Alarm

You can set a timer alarm up to 60 min. Useful when you are cooking, etc.

Press TIMER/FM on the unit to display the instant alarm CANCEL/SET screen.



Press CH ▲▼ on the unit with CANCEL/SET screen displayed to set alarm. (Time changes in the order shown left.)

 Pressing TIMER/FM repeatedly on the unit will change display as follows.



To cancel, press TIMER/FM then press ADD/DLT on the remote while CANCEL/SET screen is displayed.

To increase timer in progress, repeat step 2. Time will be rounded up to next 1, 5, or 10 minute interval. (See chart left.)

<Example>

- If current time remaining is 12:15, countdown will restart from 15:00.
- If current time remaining is 9:15, countdown will restart from 10:00.

Alarm will sound at 0:00. Press any button to stop.

 The volume of the alarm gradually increases for one minute and then continues to beep until any button is pressed.

Closed Caption System

Closed Caption is ...

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.

Closed Caption Mode Feature

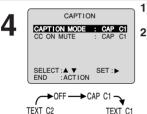
Press ACTION* to display MAIN MENU.



- 1) Press ▲▼◀▶ to select "TV".
- Press ACTION to display SET UP TV screen.
- SET UP TV

 CAPTION
 INPUT SELECT : TUNER VIDEO ADJUST FM ANTENNA : EXT REMOTE WARNING: ON

 SELECT: A V SET: END : ACTION
- Press ▲▼ to select "CAPTION".
- 2) Press ► to display CAPTION screen.



- Press ▲▼ to select CAPTION MODE.
- Press ➤ repeatedly to select mode. (See left.)

Closed Caption Mode Selections

Caption Mode: CAP C1 or C2
A narration of selected
TV programs is displayed.
Check TV program listings for CC
(Closed Caption) broadcasts.

Caption Mode: TEXT C1 or C2 The lower half of the screen will be blocked out. When the TV station broadcasts information, such as program listings, it will appear in this space.

Caption Mode: OFF Closed Caption / Text narration will not be displayed.

NOTES:

- 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.
- While recording of one station and watching another is being done, Captioning will not be displayed.

Press ACTION three times to return to the normal screen.

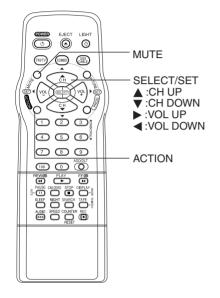
CAP C2 ◆

Recording and Playing Back a Closed Caption/Text Program

Record: Record normally.

Closed Caption/ Text signal, if present, is recorded automatically.

Playback: Start playback. Do above steps to select desired caption mode.



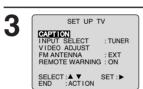
Caption On Mute Feature

Closed Caption narration, if available, is displayed when MUTE button is pressed for silence.

Press ACTION to display MAIN MENU.



- 1) Press ▲▼◀► to select "TV".
- Press ACTION to display SET UP TV screen.



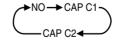
- Press ▲▼ to select "CAPTION".
- 2) Press ➤ to display CAPTION screen.



- Press ▲▼ to select CAPTION MODE.
- 2) Press ▶ repeatedly to select "OFF".



- Press ▲▼ to select CC ON MUTE.
- 2) Press ➤ repeatedly to select desired mode.
 Each press of ➤ will change
- the display as shown left.
 The caption may be broadcast over CAP C1 or C2.



- **Press ACTION** three times to return to the normal screen.
- **7** Press MUTE to mute the sound and display closed captioning.
 - To cancel, press MUTE again.

FM Radio is ...

This unit 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 16) to wake up to your favorite radio station.

FM Radio Setup

Press FM/TV* on the remote or press TIMER/FM twice on the unit to display FM radio mode.

12:00PM FM 1 87.5MHz

Press a number key (1~9) to select the FM number.

1) Press CH ▲▼

to select the desired radio

station. (Each

T12:00PM

FM 1 87.7MHz

MEMORY:PRESS ADD/DLT KEY

press changes frequency 200 kHz.)
2) Press ADD/DLT to set the radio

station.

12:00PM FM 1 87.7MHz MEMORIZED

Hold down CH ▲ or ▼ for a few seconds, then release to quickly scan for FM stations in your area.

To cancel, press
 CH ▲ or ▼ while
 in search mode.

To Make Corrections, select station with a number key, then do step 3 again.

To exit FM mode, press FM/TV on the remote or TIMER/FM twice on the unit.

Notes

- FM radio cannot be recorded on a Video cassette.
- You may get better reception by repositioning the unit.
- You cannot select FM Radio mode during playback or record, or while a blue back screen (PROG, ACTION, MENU) is displayed.
- Once stations are set, the selected station and current time are displayed when FM Radio mode is entered.
 To remove time, press DISPLAY. If DISPLAY is pressed again, the unit status screen appears.

FM ANTENNA Setup

Make sure FM tuning is done correctly (see FM Radio Setup).

Press ACTION to display MAIN MENU.



- 1) Press ▲▼◀▶
 to select "TV".
- 2) Press ACTION to display SET UP TV screen.



select FM ANTENNA. 2) Press ▶ to

1) Press ▲▼ to

- select "INT
 (INTERNAL)"
 or "EXT
 (EXTERNAL)"
 whichever
 sounds the
 best.
- For cable TV users → "INT"
- For antenna users → "EXT"

Press ACTION twice to end setup.

How to use the FM radio

Press FM/TV on the remote or press TIMER/FM twice on the unit to display FM radio mode.



Press a Number key (1~9) to select a preset FM number (see "FM Radio Setup").

To cancel, press FM/TV on the remote or TIMER/FM twice on the unit.

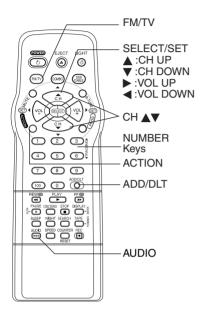
To select Audio Mode for FM Radio



Press AUDIO repeatedly to select "STEREO" or "MONO" in FM Radio mode.

Picture Adjustment

Press ACTION to display MAIN MENU.

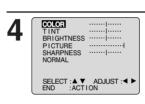




- 1) Press ▲▼◀► to select "TV".
- Press ACTION to display SET UP TV screen.



- Press ▲▼ to select VIDEO ADJUST.
- 2) Press ► to display screen.



- Press ▲▼ to select an adjustment item. (See below left.)
- 2) Press ◀ ▶ to adjust.



To Reset Picture Controls,

press ▲▼ and ► to select and set "NORMAL". All controls return to their factory settings.

Press ACTION three times to exit.

Picture Adjustment

- COLOR Control Adjust color intensity.
- TINT Control
 Adjust for natural flesh tones.
- BRIGHTNESS Control Adjust picture brightness.
- PICTURE Control

 Adjust picture intensity by adjusting both contrast and color level in the proper balance.
- SHARPNESS Control Adjust picture sharpness.

Timer Recording

You can set up to 8 programs to be recorded while you are away.

Press PROG* to display SET PROGRAM screen.



- Press ▲▼ to select TIMER PROGRAMMING.
- 2) Press ► to display screen.
- If a program is already in memory, press ▲▼, and ▶ to select an unused program number.



Press ▲▼ to select and ▶ or ◀ to set the

recording DATE.

- 1~31 = One timeDAILY = MON~FRI
- WEEKLY SUN~SAT
 = Same time once a week



Repeat step 3 to set:

- · Start time, Stop time
- · Channel (or LINE for outside source)
- Speed (SP, LP, SLP)



Press PROG to end the program.

To Enter More Programs, press ▲▼ to select and ► to set a blank program number, and then repeat step 3.

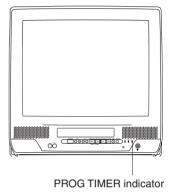
Press PROG twice to exit this mode.

 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.

PROG TIMER indicator lights on the unit.

Ready Check List

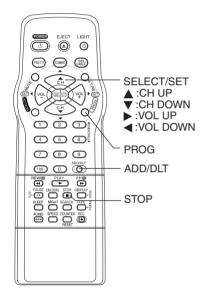
- ☐ All connections are made. ☐ Your unit is plugged in.
- ☐ The clock is set to correct time.
- The tape is long enough.
- ☐ The record tab is in place.



Cancel a Timer Recording: (Recording is in progress)

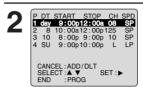
Hold down STOP for a few seconds to cancel the Timer Recording.

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



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

Repeat steps 1 and 2 on page 22.



Press ▲▼ to select the desired program.

To Replace program...



- Press ► to display.
- Press ▲▼ to select and press ◀ or ► to set new program contents.
- 3) Press PROG.

To Clear program...



Press ADD/DLT.

4

Press PROG twice to exit this mode.

Notes

- 2 minutes before Timer recording is performed, "PLEASE PREPARE FOR TIMER REC" appears and/or the PROG TIMER Indicator flashes. Be sure a cassette with record tab is loaded and the unit 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 12), 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 continued.
- If "INCOMPLETE" appears after all items have been set, check all entries and make necessary corrections.

Tape Operation

Search System is ...

Each time a recording is made, an invisible index mark is placed on the tape. When timer recordings are made, program index and information are also included. These index marks can be used to access or scan recordings.

Index Search

Go directly to the desired recording.

1

INDEX SEARCH ENTER INDEX NUMBER:1 USING 1-9 KEYS

FORWARD SEARCH:FF REVERSE SEARCH:REW EXIT:SEARCH Press SEARCH* in Playback or Stop mode to display INDEX SEARCH screen, and then press number keys to select the recording number.

 To calculate number, see below.

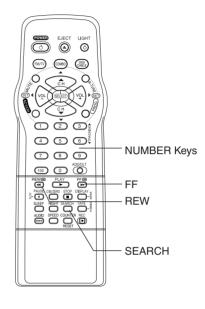
Press FF or REW to start search.

2

INDEX SEARCH

FORWARD SEARCH:FF REVERSE SEARCH:REW Play begins at search end.
To search forward or back 1 index, press FF or REW while screen left in displayed (10 sec.).

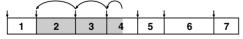
To cancel, press PLAY.



■ To calculate the Index Number

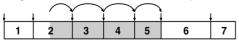
Example 1:

To go to rec. 2 from rec. 4, enter 3 and press REW.



Example 2:

To go to rec. 6 from rec. 2, enter 4 and press FF.

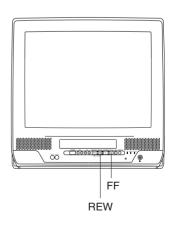


NOTE:

indicates start points of each recording.

Notes

- Make each entry within 10 seconds, or the Index Search mode will be canceled.
- If Index Search is started very close to an index mark, that index mark may not be counted in the search.



Auto Operation Functions

Auto Shut Off

No broadcast signal in TV (Only when Weak Signal Display is set to OFF), blank tape is Played for 5 minutes

- → Power turns off
- This feature is canceled if any button is pressed during above mode.

Auto Playback

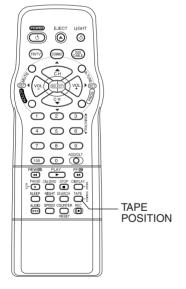
Insert a tape in Power off mode

- → Power turns on
- Playback begins if tape has no record tab.

■ Auto Rewind

Tape reaches its end

- → Rewind → Stop
- Playback Auto Eject (Repeat Play is "OFF") Tape with no record tab reaches its end Rewind → Stop → Eject



Tape Position Display

To find out present tape position.

Tape position is displayed for VHS-C Cassettes type, tapes under 30 minutes, and some other tapes, but the position is not correct.

Press TAPE POSITION to detect current tape position.



- "DETECTING TAPE POSITION" only appears the first time a cassette is inserted and it takes several seconds for correct indication to appear.
- The present tape position indication is displayed.
- **Press TAPE POSITION** (or wait 5 seconds) to return to the normal screen.

Tape Operation (continued)

*Important: If a remote control button does not work when pressed, press the COMBO button on the remote and try the button again.

Zero Search

To quickly return to a specific tape counter location.

Press COUNTER RESET* during playback to display the Counter.

0:00:00

Press COUNTER RESET at the desired position to reset to "0:00:00."

Continue playback, rewind, or fast forward.

4 Press STOP.



Press CM/ZERO in stop mode to start ZERO SEARCH.

• Unit goes into FF or REW mode and stops at the last point the Counter was set to 0:00:00.

Repeat Play

Set to see a recording over and over.



In PLAY mode, press PLAY/REPEAT on the unit to turn "ON."



Repeat above to turn "OFF."

Note

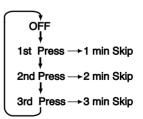
 Playback repeats when tape end is reached or unrecorded portion over 30 seconds is detected.

Commercial Skip

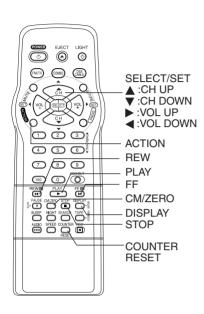
By pressing the CM/ZERO button in Playback mode you can skip over 1 to 3 minutes of recorded tape in just a few seconds.

Press CM/ZERO repeatedly to select skip time in Play mode.

No indication appears.



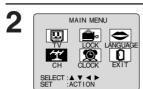
Special VCR Features



Weak Signal Display ON/OFF

When "ON" is selected, the picture is displayed even when a broadcast signal is weak or non-existent.

Press ACTION to display MAIN MENU.



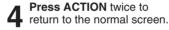
- 1) Press ▲▼◀▶ to select "CH."
- 2) Press ACTION to display SET UP CHANNEL screen.

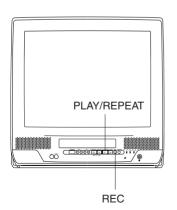


- Press ▲▼ to select WEAK SIGNAL DISPLAY .
- 2) Press ► to set "ON" or "OFF."

Notes

- "ON" = Picture is displayed regardless of signal condition, and may not always be clearly visible
- "OFF" = Screen turns solid blue when signal is absent or weak.
- If unit is connected to equipment which has blue back feature, selecting "ON" will have no effect on the other equipment.





VCR Lock

All operations are prohibited except Timer recording and tape eject. Useful for families with small children.



In stop mode, **hold down REC** on the unit without a cassette inserted for 7 seconds to turn "ON." Please ignore NO CASSETTE warning.

Repeat above with or without cassette to turn "OFF."

 VCR Lock is canceled automatically after about 24 hours if clock is set.

Special VCR Features (continued)

*Important: If a remote control button does not work when pressed, press the COMBO button on the remote and try the button again.

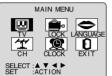
Remote Warning ON/OFF

When Universal Remote Control (page 32) is used, and this feature is set to "ON," a warning appears whenever an invalid key is pressed in DSS or Cable mode.

1

Press ACTION* to display MAIN MENU.

2

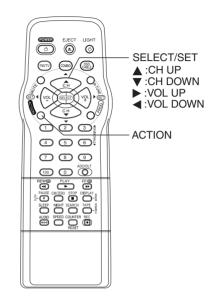


- Press ▲▼◀► to select "TV."
- Press ACTION to display SET UP TV screen.
- SET UP TV

 CAPTION
 INPUT SELECT : TUNER
 VIDEO ADJUST
 FM ANTENNA : EXT
 REMOTEWARNING: ON

 SELECT: V SET: END : ACTION
- 1) Press ▲▼ to select REMOTE WARNING.
- 2) Press ► to set "ON" or "OFF."
- "REMOTE WARNING: OFF"
 - → Remote warning will not appear even if invalid key is pressed.

4 Press ACTION twice to return to the normal screen.



V-Chip Control Feature

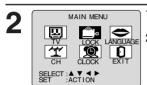
Process of V-Chip Control Feature

Enter Code → Setup → Blocking

Enter Secret Code

A 4-digit code must be entered to view a blocked program or change rating settings.

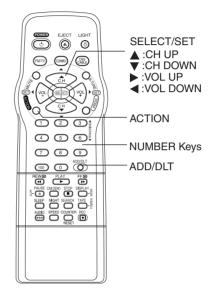
Press ACTION to display MAIN MENU.



- Press ▲▼◀▶ to select "LOCK."
- Press ACTION to display screen.



- Press NUMBER keys to enter your secret code.
- 2) Enter same code again for confirmation.
- Step 2) not necessary when changing rating or secret code
- Take care that you are not observed entering the secret code



V-Chip Control Feature is...

PROGRAMS Ratings.

This unit has a built-in V-Chip Control which allows you to block unwanted TV usage based on US MOVIES and US TV

To Make Corrections

Press ◀ repeatedly to move the cursor. Press number keys to make the correction.

LOCK
CONFIRM 4-DIGIT CODE

CHANGE CODE: ADD/DLT
CONTINUE: >

FND : ACTION

Press ▶ to display US Ratings menu (see page 30).
Or

Press ACTION twice to exit.

Changing your secret code

You will need your current code. Do steps 1~3.
 In step 4, press ADD/DLT to clear current code.
 Repeat steps 3 and 4 to enter new code.

Notes

- DO NOT forget your secret code.
- Once ratings are set, restricted tapes or programs cannot be accessed unless the secret code is entered.

V-Chip Control Feature (continued)

If LOCK menu is not displayed, do "Enter Secret Code" steps on page 29.

Setup US MOVIES Ratings



- Press ▲▼*
 to select US
 MOVIES.
- 2) Press ▶ to set "ON" or "OFF."
- "ON" →V-Chip Control is activated.
- "OFF" →V-Chip Control is deactivated.

Note

 "NEXT PAGE" displays CANADIAN V-Chip setting menu. Not necessary except when viewing Canadian tapes or broadcasts.

2



- Press ▲▼ to select CHANGE SETTINGS.
- Press ► to display screen.

3



- Press ▲▼ to select VIEW NR PROGRAMS?.
- 2) Press ► to set "YES" or "NO."

NR (Not Rated) PROGRAMS

Some movies, such as old movies or foreign movies usually have no ratings.

4



Press ▲▼ to select and ▶to set ratings to be blocked. (See ratings chart next page.)

Press ACTION to redisplay LOCK menu and continue with US TV PROGRAMS Ratings Setup (this page). Or, press ACTION three times to exit. **Process of V-Chip Control Feature**

Enter Code → Setup → Blocking

Setup US TV PROGRAMS Ratings

1



- Press ▲▼ to select US TV PROGRAMS.
- 2) Press ➤ to set "ON" or "OFF."
- "ON" →V-Chip Control is activated.
- "OFF" →V-Chip Control is deactivated.

Note

 "NEXT PAGE" displays CANADIAN V-Chip setting menu. Not necessary except when viewing Canadian tapes or broadcasts.

2



- Press ▲▼ to select CHANGE SETTINGS.
- Press ► to display screen.

VIEW NR PROGRAMS? : YES
TU-Y
TV-Y7
TV-Y7
TV-PG
TV-PG
TV-PG
TV-14
V
S
L
CONTAINS NO PATTING
SELECT V
SET

ACTION

- 1) Press ▲▼ to select VIEW NR PROGRAMS?.
- 2) Press ► to set "YES" or "NO."

NR (Not Rated) PROGRAMS

Some TV shows, such as news, sports, weather, bulletins, emergency information usually have no ratings.

4



Press ▲▼ to select and ▶to set ratings to be blocked. (See ratings charts

next page.)

• Ratings highlighted in Green will be blocked. Ratings in white letters will not be blocked.

Note

 You may select from standard TV ratings (chart 1), or customize to a specific content rating (chart 2).

Press ACTION three times to exit this mode.

Process of V-Chip Control Feature

Enter Code → Setup → Blocking

Blocking Message

<When V-Chip Control is activated>



 If a program or movie exceeds the ratings you have set, a message will appear on a black background and sound is muted.

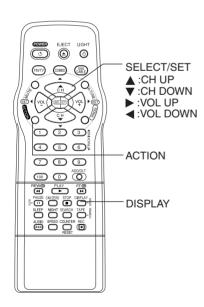
To View a Blocked Program / Movie [Temporarily Deactivate V-Chip Control]

Enter your secret code (ACCESS CODE) in the Blocking Message screen.

 V-Chip Control is reactivated when power is turned off or power failure occurs.

[Deactivate V-Chip Control]

Enter your secret code (steps 1-3 page 29). Then, set US MOVIES and/or US TV PROGRAMS to "OFF" using ▲▼ and ▶ keys. (Ratings set on page 30 is retained and will be in effect when V-Chip Control is activated again.)



US MOVIES RATINGS

GENERAL AUDIENCE: G All ages admitted. PG PARENTAL GUIDANCE: Some material may not be suitable for children. PG-13 PARENTS CAUTIONED: Some material may be inappropriate for children under 13. R RESTRICTED: Children under 17 must be accompanied by a parent or adult. OVER AGE 17 ONLY: NC-17 No one 17 and under admitted. X ADULTS ONLY:

US TV PROGRAMS RATINGS:Chart 1

FOR ALL CHILDREN:

	Content specifically geared to young viewers ages 2-6.
TV-Y7	FOR AGE 7 AND OLDER:
	May contain mild physical or comedic
	violence which may frighten children
TV-G	under 7. GENERAL AUDIENCE:
1 V-G	Contains little or no violence, strong
	language, or sexual dialogue or
	situations.
TV-PG	PARENTAL GUIDANCE:
	May contain infrequent coarse
	language, limited violence, some
	suggestive sexual dialogue and situations.
TV-14	PARENTS CAUTIONED:
	May contain sophisticated themes,
	sexual situations, strong language, and
	more intense violence.
TV-MA	MATURE AUDIENCE:
	May contain mature themes, profane
	language, graphic violence, and sexual situations.

US TV PROGRAMS RATINGS: Chart 2

FV	Fantasy Violence
V	Violence
S	Sexual Situations
L	Adult Language
D	Sexually Suggestive Dialogue

Cable Box Universal Remote Control Feature

Universal Remote Control is...

The Remote Control may be set up to control some basic DSS or Cable box functions.

The Universal Remote Control Setup

Find your DSS box or Cable box Brand Code Number from one of the charts on the next page.

2 Setup remote. Hold down DSS CABLE and press number keys to enter code.

• For code 100 or greater, first press 100 key, then the remaining digits. E.g. for 102, press 100, then press 0, and then press 2.

Confirm code entry. **Press POWER** to turn selected unit ON or OFF.

• See below for controllable functions in each mode.

Notes

- Please repeat the Universal Remote Control Setup after replacing remote control batteries.
- The remote control will not operate all DSS receivers or Cable Boxes made by the manufactures listed. If you get no results, your particular brand cannot be controlled.

Using the Universal Remote Control

Once the remote control has been properly set up, you can select COMBO, DSS or CABLE mode depending on which functions you wish to control. (See below.)

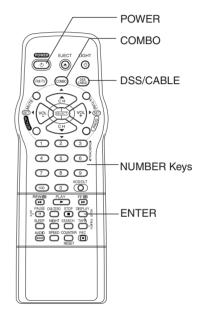
Press COMBO or DSS CABLE on the remote control to select the desired mode. (See below for buttons available in each mode.)

Set to COMBO:

· All TV and VCR functions.

Set to DSS CABLE:

- Basic VCR functions, e.g. PLAY, REC, etc.
- CABLE/DSS functions, e.g. POWER, ENTER, number keys (except 100 key), CH UP/DOWN.



DSS Brar	nd Code Nun	nbers			
Toshiba	92	Magnavox/Uniden 2	95	Sony	98, 105
Hitachi/Hughes	93	Panasonic	96		
Magnavox/Uniden 1	94	RCA	97		
Cable Bo	x Brand Coc	le Numbers	S		
Archer	05, 06, 01, 44, 63, 91, 126	Movietime	32, 39, 42, 44, 126, 38, 40	Sheritech	27
Cabletenna	01, 44, 63, 91, 126	NEC	38, 40, 32	Signal	26, 112
Cableview	63, 44, 42, 30, 52, 04, 124, 126	NOVAVISION	08, 09, 61, 53, 87	SL Marx	32, 40, 42, 06, 43, 44, 52, 63, 126
Century	51, 44, 59, 75, 126	NSC	38, 40, 32	Sprucer	16, 17, 97, 109
Citizen	63, 44, 42, 30, 52, 04, 124, 126	Oak	46, 11, 129	Standard Components	32, 39, 42, 44, 126
Curtis	08, 09, 61, 53, 87	Oak Sigma	46, 11, 129	Stargate	32, 40, 63, 44, 42, 30, 52, 04, 06, 124, 126
Diamond	01, 44, 63, 91, 126	Panasonic	16, 17, 97, 109	Sylvania	19
Drake	67	Philips	07, 13, 20, 23, 24, 50, 128, 129	Teknika	74
Eagle	13, 22, 58, 62, 20, 40, 26, 107	Pioneer	05, 06	Telecaption	77, 127
Eastern	28, 130	Pulsar	63, 44, 42, 30, 52, 04, 124, 126	Teleview	32, 40, 42, 06
GC Brand	63, 44, 42, 30, 52, 04,124, 126	Quest	05, 06	Texscan	18, 19
Gemini	04, 124	Radio Shack	51, 44, 59, 75, 126	Tocom	33, 34, 01, 42, 66, 91
General Electric	57,01	RCA	16, 17, 97, 109	Toshiba	36
General Instruments	01, 02, 03, 04, 34, 55, 83, 106, 65, 67, 68, 115, 117, 118, 124, 91	Realistic	51, 44, 59, 75, 126	Uniden Satellite	65
Hamlin	14, 15, 28, 41, 102, 103, 104, 108, 130	Recoton	51, 44, 59, 75, 126	Unika	01, 44, 63, 91, 126
Hitachi	31	Regal	14, 15, 28, 41, 102, 103, 104, 108, 130	Universal	42, 43, 44, 52, 63, 126
Jasco	04, 124	Regency	28, 130	Videoway	07, 23, 50, 129
Jerrold	01, 02, 03, 04, 34, 55, 83,106, 65, 67, 68, 115, 117, 118, 124, 91	Rembrandt	01, 32, 39, 42, 44, 63, 126	Vid Tech	64
Macom	31	Salora	68	Vidtek	64
Magnavox	26, 112	Samsung	05, 32, 40, 42, 06	Viewstar	13, 22, 58, 62, 20, 40, 26, 107
Matsushita	16, 17, 97, 109	Scientific Atlanta	08, 09, 61, 53, 87	Zenith	07, 23, 50, 129

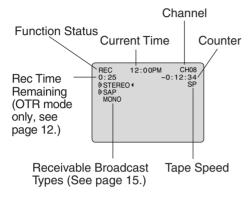
Notes

- In DSS or CABLE mode, it may be necessary to press ENTER after pressing number keys for channel selection.
- In DSS or CABLE mode, POWER, CH Up/Down, NUMBER Keys, ACTION, PROG, DISPLAY/ENTER, SEARCH, R-TUNE, FM/TV, or ADD/DLT are not available. Press COMBO to use these functions.
- Depending on your DSS receiver or Cable box brand, some of the functions listed may not be remote controllable.
- Some DSS receiver or Cable box brands require you to turn on the power manually.
- Due to changes in infra-red commands used by manufacturers, some brands have several codes. If your unit
 does not respond to the first code, please try the next one.

On-Screen Display (OSD)

VCR Status & Clock Display

Press DISPLAY to display or remove the overlay.



Blue Screen Display

Whenever a blank section of a tape comes up in Play mode, or when the selected channel has no broadcast signal with the Weak Signal Display set to "OFF" (see page 27), the screen will turn solid blue.

Channel & Function Display

When a function button is pressed (PLAY, FF, etc.) or you change channels, the unit mode or channel number will be displayed.



Warning and Instruction Displays

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

OSD	CAUTION	Page
PLEASE SET CLOCK BY PRESSING ACTION KEY	If you attempt to set or review a Timer Recording, or set the On-Timer and the Clock is not set	8 - 11
CHECK CASSETTE RECORD TAB	If you press REC, and a cassette is inserted with no record tab	3, 12
TO CANCEL TIMER REC HOLD DOWN STOP KEY FOR APPROX 3 SEC	If you press STOP during a Timer Recording	23
NO CASSETTE	If you press PLAY, FF, REW, or REC without a cassette inserted	12
PLEASE PREPARE FOR TIMER REC	If the unit is not in Stop mode or a cassette with record tab is not inserted two minutes before a Timer Recording is about to begin	22 - 23
VIDEO HEADS MAY NEED CLEANING PLEASE INSERT HEAD CLEANING CASSETTE OR REFER TO MANUAL END: PLAY	If head cleaning becomes necessary while playing back a tape	4
VCR LOCK ACTIVATED	If you press a function button other than STOP/EJECT or POWER while the unit is in VCR Lock mode	27

Before Requesting Service

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

Power	CORRECTION
No power	Completely insert Power Plug into an AC outlet. Set POWER button to ON.
Monitor	CORRECTION
No picture or sound	Make sure your antenna system (TV or CABLE), is correctly set. (P.8) Completely insert Power Plug into an AC outlet. Set POWER button to ON.
Poor picture with normal sound	 Adjust BRIGHTNESS, SHARPNESS, and PICTURE controls in the SET UP TV menu. (P.21)
Poor sound with normal picture	Adjust VOLUME control. (P.14)
Poor TV reception	Adjust SHARPNESS and PICTURE controls in the SET UP TV menu. (P.21)
No color or poor color	Adjust TINT and COLOR controls in the SET UP TV menu. (P.21)
Ghost (multiple) images	Install a directional antenna.
TV programs cannot be watched	Make sure the selected channel is in unit's memory. (P.10, 11)
Channel cannot be selected	Only the channel being recorded can be viewed on this unit.
VCR	CORRECTION
TV program cannot be recorded	 Make sure your antenna system (TV or CABLE), is correctly set. (P.8) Make sure cassette record tab is intact. (P.3)
Timer recording cannot be performed	 Check that clock is set to current time and date. Make sure DSS/CABLE box (if used) is left on and tuned to channel to be recorded. Set recording Start/Stop times correctly. (P.22-23) 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 after power is restored.
No playback picture, or the playback picture is noisy or contains streaks	Adjust TRACKING control in either direction. (P.4) Try Head Cleaning. (P.4)
VCR cannot be controlled	 Make sure VCR LOCK is set to off. (P.27) Make sure unit is not in a Timer Record operation.
Remote Control	CORRECTION
Unit cannot be controlled	 Aim remote at remote sensor on unit (P.7) so that signal is unobstructed. Inspect the remote batteries. (P.3) Make sure VCR LOCK is set to off. (P.27) Exposing unit remote sensor to direct fluorescent or outdoor light may cause signal interference.
ACTION, PROG and FM/TV buttons cannot be selected	Check remote batteries.
Miscellaneous	CORRECTION
Video cassette cannot be inserted	Insert the cassette window side up; record tab facing you.
Video cassette cannot be removed	Completely insert Power Plug into an AC outlet.
Tape cannot be ejected or inserted	Try ejecting or inserting the tape again after turning POWER off, then back on.
Video cassette ejects when a recording is started, or the power is turned off for timer recording	Make sure cassette record tab is intact. (P.3)
In Stop mode, the VCR motor (CYLINDER) continues to rotate	 To enable Quick Play mechanism, the VCR cylinder will rotate for about 3 minutes. This reduces response time from Stop to Play mode and from Play to Rewind Search mode.
VCR cannot be controlled	Make sure VCR LOCK is set to off. (P.27)

If you cannot resolve the problem, please call the Customer Satisfaction Center for product assistance at 1-800-211-PANA(7262).

To locate an authorized servicenter call toll free 1-800-211-PANA(7262) or send e-mail to : consumerproducts@panasonic.com.

Limited 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 Infantería, Km. 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic/Quasar Video Products Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product	Parts	Labor	Service	Contact Number
Camcorder	One (1) Year (except CCD Image Sensor) CCD Image Sensor - 6 (Six) Months	Ninety (90) Days Ninety (90) Days	Carry-In or Mail-In	1-800-211-PANA(7262)
DVD/VCR Deck, A/V Mixer	One (1) Year	Ninety (90) Days	Carry-In or Mail-In	1-800-211-PANA(7262)
TV/VCR, TV/DVD, TV/DVD/VCR Combination	One (1) Year (except CRT) CRT - Two (2) Years	Ninety (90) Days Ninety (90) Days	Carry-In: 21" CRT and Smaller In-Home or Carry-In: 22" CRT and Larger	1-800-211-PANA(7262)
TV/HDR Combination	One (1) Year (except CRT) CRT - Two (2) Years	Ninety (90) Days Ninety (90) Days	In-Home or Carry-In	1-888-843-9788
Rechargeable Batteries (in exchange for defective item)	Ten (10) Days	Not Applicable	Carry-In or Mail-In	1-800-211-PANA(7262)
Tape (in exchange for defective item)	Five (5) Days	Not Applicable	Carry-In or Mail-In	1-800-211-PANA(7262)
Memory Cards (in exchange for defective item)	Ninety (90) Days	Not Applicable	Carry-In or Mail-In	1-800-211-PANA(7262)

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product or arrange for in-home service, as applicable, during the warranty period.

If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In, Mail-in or In-Home Service

For Carry-In, Mail-In or In-Home Service (as applicable) in the United States call toll free contact number listed above or visit Panasonic Web Site: http://www.panasonic.com

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

In-Home service, if applicable, requires clear, complete and easy access to the product by the authorized servicer and does not include removal or re-installation of an installed product. It is possible that certain in-home repairs will not be completed in-home, but will require that the product, or parts of the product, be removed for shop diagnosis and/or repair and then returned.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage, nor does it cover markings or retained images on the picture tube resulting from viewing fixed images (including, among other things, letterbox pictures on standard 4:3 screen TV's, or non-expanded standard 4:3 pictures on wide screen TV's, or onscreen data in a stationary and fixed location). The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the servicer, loss of media or images, data or other memory or recorded content. The items listed are not exclusive, but are for illustration only.)

ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY. ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

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 exclusions 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 warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE (INCLUDING COST OF AN IN-HOME SERVICE CALL, WHERE APPLICABLE) WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Customer Services Directory

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:
1-800-211-PANA (7262), Monday-Friday 9 am-9 pm; Saturday-Sunday 9 am-7 pm, EST. or send e-mail: consumerproducts@panasonic.com
For hearing or speech impaired TTY users, TTY: 1-877-833-8855

Web Site: http://www.panasonic.com You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)
For hearing or speech impaired TTY users, TTY: 1-866-605-1277
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032
(Monday-Friday 6 am-5 pm; Saturday 6 am-10:30 am, PST)
(Visa, MasterCard, Discover Card, American Express, Check)

Service in Puerto Rico Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/ Factory Servicenter:

> Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Phone (787)750-4300 Fax (787)768-2910

> > As of August 2002

Spanish Quick Use Guide/Guía para rápida consulta

Connexiones/Configuracion Inicial

Conecte por favor todas las conexiones del cable o de la antena antes de turing potencia.

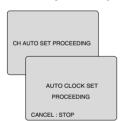
Conectando

Para Ant./Cable
Conecte Ant./Cable a la entrada de antena de la
TV (VHF/UHF).

Para Sistema Digital de Satelite (DSS)/
Convertidor de cable
Conecte la salida del convertidor de cable la
"VHF/UHF" con el RF cable.

Realizando Configuracion Inicial

Presione COMBO para mode del combo. Tape el cable electrico de la unidad en el enchufe de pared de la CA. POWER de la prensa en el telecontrol o la unidad. La unidad se adelanta y comienzo auto del canal y del reloj.



Si usa convertidor de cable, enciendala y seleccione el Servicio Publico de Canales de Television (PBS) en su horario de uso o tiempo de su zona. Si utiliza receptor DSS este debe de estar apagado.

2/6/2003 THU 12:00 PM DST: ON SETTING: CH 10 AUTO CLOCK SET COMPLETED Selecciones se realizaran automaticamente cuando la configuracion termine, la pantalla siguiente aparecera.

AUTO CLOCK SET
IS INCOMPLETE
PLEASE SET CLOCK BY
PRESSING ACTION KEY

Si "AUTO CLOCK SET IS INCOMPLETE" aparece en pantalla, coloque el tiempo usando el procedimiento manual (MANUAL CLOCK SET), vealo enseguida.

Nota

- Los botones de funciones son inoperantes durante la Configuración inicial.
- Para retirar un cassette durante el Ajuste automático, pulse EJECT dos veces en el control remoto o STOP dos veces en el VCR. En este caso, los ajustes se deben realizar manualmente. (Vea la p.10 de Libro de operaciones avanzadas).
- Dependiendo de las condiciones, puede que el Ajuste automático del reloj tarde más de 30 minutos. En ese caso, pulse STOP para detener la configuración y realice los ajustes manualmente. (Vea la p.10 de Libro de operaciones avanzadas).

Ajuste Manual del Reloj

Si el ajuste automático del reloj no se ha completado, ajuste el reloj manualmente de la siguiente manera:

- Presione la tecla ACTION en el control remoto para visualizar la pantalla del menú RELOJ.
- Presione ▲▼ para seleccionar el mes y ► para ajustar. De la misma forma, seleccione y ajuste la fecha, año, hora y DST (Hora de Verano).
- Presione dos veces la tecla ACTION para poner el RELOJ en marcha y salir.

Ajustar de nuevo el reloj

Presione ACTION para exhiba el menú.

MENU PRINCIPAL

TY
BLOQUED
DIOMA
CANAL RELOJ
SALIR

ELEGIR: A V I

Presione

▲▼◀▶
para
seleccionar
"RELOJ," y
luego
presione
ACTION.

FIJAR RELOJ

FIJACION AUTOMATICA
MANUAL
AJUSTE ZONA HORA : 0

ELEGIRIA V FIJAR :>
TERMINAR: ACTION

Presione

▲▼ para
seleccionar
"MANUAL"
y luego
presione ▶.



Presione

▲▼ y ◀▶
para
seleccionar
y ajustar la
hora y la
fecha.

Presione ACTION dos veces para <u>que el reloj comience a funcionar</u> y salir desde este modo.

Operaciones básicas para la reproducción

- Inserte un casete.
 - El videograbador combinado se enciende automáticamente.
- Presione PLAY.
- La reproducción comienza automá ticamente si el casete no tiene la lengueta para prevención de grabación.
- Para encontrar una escena en particular Búsqueda hacia adelante → Presione FF Búsqueda hacia atrás → Presione REW
- Para ver una imagen fija (congelada) → Presione PAUSE/SLOW
- Para ver en cámara lenta → Mantenga pulsado el botón PAUSE/SLOW en el modo de imagen
- Para ver imágenes cuadro a cuadro → Presione PAŬSE/SLOW en el modo de imagen
- Para parar → Presione STOP
- Para rebobinar la cinta → Presione REW
- Para hacer avanzar la cinta rápidamente → Presione FF
- Para expulsar la cinta → Presione EJECT en el control remoto o STOP/EJECT en el videograbador combinado

Operaciones básicas para la grabación

- Inserte un casete con la lengüeta para prevención de grabado.
 - · El videograbador combinado se enciende automáticamente.
- Seleccione el canal. Presione CH ▲▼ o las teclas numé ricas correspondiente.
- Seleccione la velocidad de grabación. Presione SPEED.

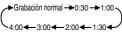
SP = reproducción normal LP = reproducción larga

SLP = reproducción super larga

- La velocidad seleccionada debe aparecer en la pantalla.
- Comience la grabación.
 - Presione REC.
 - · Para editar partes no deseadas de una grabaci ón, presione PAUSE/SLOW para hacer una pausa durante la grabación.
 - No podrá ver otro canal durante la grabación.
 - Para parar → Presione STOP.
 - El videograbador combinado deja de grabar a una hora prefijada.

(Grabación de un toque) Presione REC repetidamente para ajustar la hora de grabación (30 min

- 4 horas.)



Grabación con temporizador

Exhiba FIJAR PROGRAMACION. Presione PROG.

FIJAR PROGRAMACION TEMPORIZADOR ENCENDIDO AUTOMATICO ELEGIR: ★ ▼ FIJAR : ► TERMINAR: PROG

Exhiba TEMPORIZADOR.

- Presione ▲▼ para seleccionar.
- 2) Presione ▶ para exhibir
- Si ya existe un programa en la memoria, presione A ▼ y ▶ para seleccionar un número de programa sin usar.



Ajuste la fecha de grabación.

- 1) Presione ▲▼ para seleccionar.
- 2) Presione ▶ o ◀ para ajustar.
- 1 31 = Grabación única
- DIARIO = a la misma hora de lunes a viernes
- SEMANAL = a la misma hora una vez a la semana



Repita el paso 3 para ajustar:

hora de comienzo, hora de parada, canal (o LINEA para una fuente exterior), velocidad (SP, LP, SLP)

P FE INIC PARADA CA VEL 1 DI 9:00p 12:00a 08 SP CANCELAR: ADD/DLT ELEGIR: ▲ ▼ FIJAR: ► TERMINAR: PROG

Termine el programa.

Presione PROG.

Para introducir más programas. presione ▲▼ y ▶ para seleccionar y ajustar el número de programa en blanco, y luego repita los pasos 3 y 4.

Salga de este modo.

Presione PROG dos veces.

- Si está usando un decodificador de TV cable, asegúrese que se encuentra en el canal deseado y que la alimentación queda conectada para grabar con temporizador.
- El indicador PROG TIMER se enciende en el videograbador combinado.

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