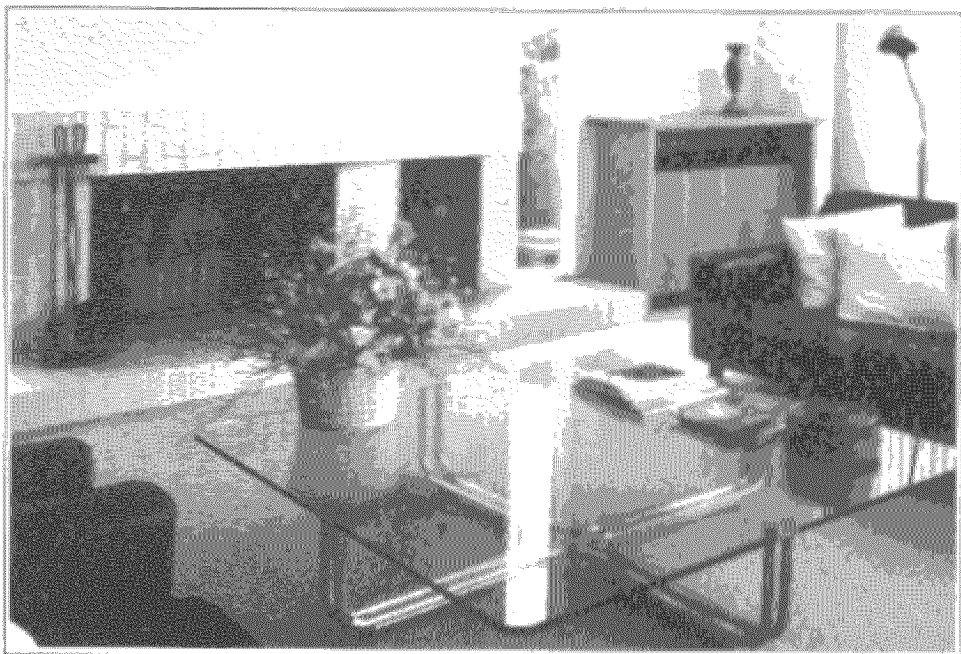


Omnivision **VHS**

# Panasonic

## Combination VCR Operating Instructions

### Model No. PV-C2541



- Initial Setup and Connection Procedures are on pages 8 to 13.
- SELF-DEMO Procedure is on page 4.



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.



VCR Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

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.)

LS9T2358A

For assistance, please call 1-800-211-PANAS (7229) or send email to: [consumer@natsa.panasonic.com](mailto:consumer@natsa.panasonic.com)



# 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.

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.

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



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.

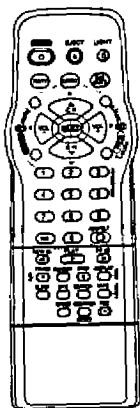
This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

## Congratulations

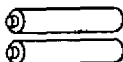
on your purchase of one of the most sophisticated and reliable products on the market today. Used properly, it will bring you and your family years of enjoyment. Please fill in the information below. The serial number is on the tag located on the back of your unit.

Date of Purchase \_\_\_\_\_  
Dealer Purchased From \_\_\_\_\_  
Dealer Address \_\_\_\_\_  
Dealer Phone No. \_\_\_\_\_  
Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_

## Accessories



Remote Control  
LSSQ0277



Batteries  
2 "AA"

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

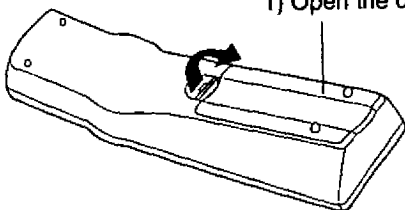
## SELF-DEMO Mode

With Power ON, press **PLAY/REPEAT** on the unit for 7 seconds to deactivate the **SELF-DEMO Mode**.

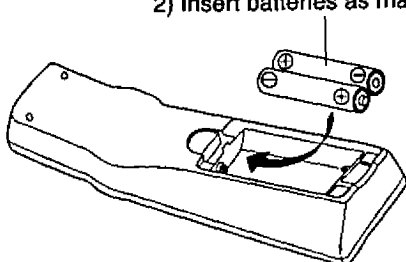
Repeat this to display demo screen.

## Loading the Batteries

1) Open the cover.



2) Insert batteries as marked.



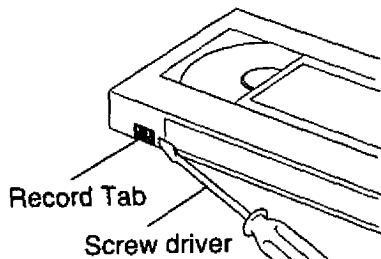
3) Close the cover.

**Battery replacement caution**

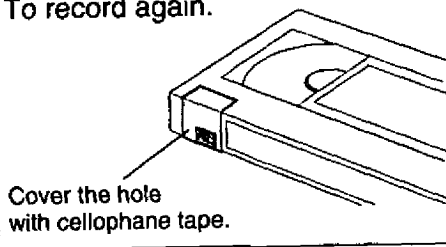
- Do not mix old and new batteries.
- Do not mix alkaline with manganese batteries.

## Prevent Accidental Tape Erasure

Break off the tab to protect.



To record again.



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## Remote Control Buttons

### Light Tower™ Illuminated Remote Control

#### LIGHT button:

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.

#### EJECT button:

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.

**EJECT**  
Page 6

**COMBO**  
Page 26

**POWER**  
Page 8

**LIGHT**  
Page 6

**FM/TV**  
Page 21

**DSS CABLE**  
Page 26

**MUTE**  
Page 16

**RAPID TUNE**  
Page 16

**CHANNEL UP/DOWN** Pg. 16  
**SELECT UP/DOWN** Pg. 13

**VOLUME UP/DOWN** Pg. 16  
**SET/BACKSPACE** Pg. 13

**ACTION**  
Page 12

**PROGRAM** Page 22  
**VCR Plus+** Page 24

**NUMBER KEYS**  
Page 16

**TRACKING UP/DOWN**  
**V-Lock** Page 41

**REWIND/SEARCH**  
Page 14

**ADD/DELETE**  
Page 13

**PAUSE/SLOW**  
Page 14

**PLAY**  
Page 14

**CM/ZERO**  
Page 30

**FAST FORWARD/SEARCH**  
Page 14

**SLEEP**  
Page 19

**ENTER** Page 26  
**DISPLAY** Page 39

**NITE**  
Page 16

**STOP**  
Page 14

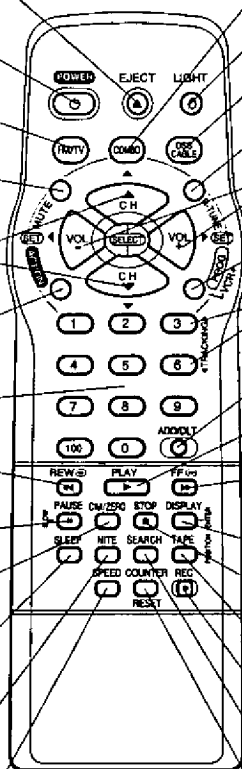
**SPEED**  
Page 14

**TAPE POSITION**  
Page 29

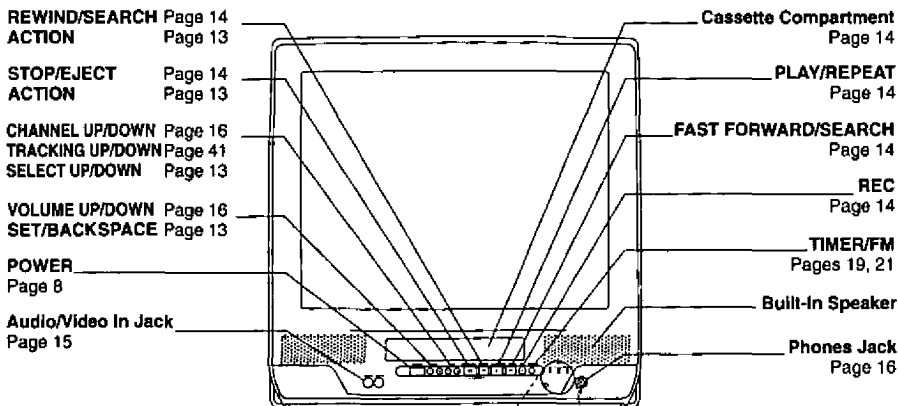
**REC**  
Page 14

**SEARCH**  
Page 28

**COUNTER RESET**  
Page 30



# Front View of the unit and Indicators on the Front Panel



## REC Indicator

Lights during recording. In Rec Pause or OTR Pause mode, the indicator flashes. Page 14

## Remote Sensor

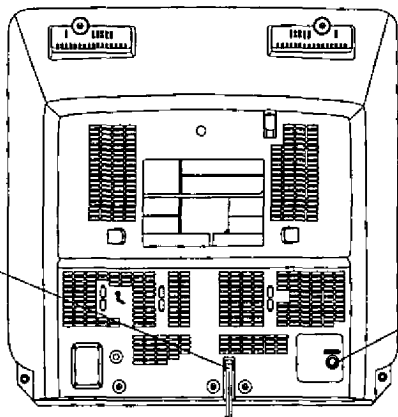
## ON TIMER Indicator

Lights when the On Timer is set. Page 18

## PROG TIMER Indicator

Lights when the unit 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. Page 22

# Rear View of the unit



## AC Power Plug

When plugged into an AC outlet, this unit consumes 4.0 W of electric power in OFF condition.

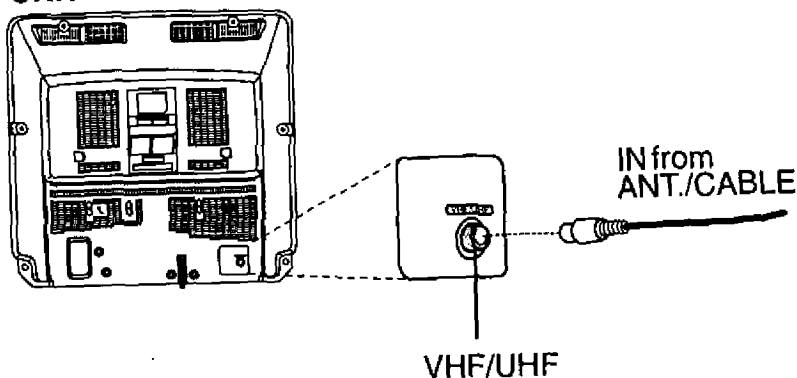
**VHF/UHF Antenna Input Terminal**  
In from your Antenna or Cable. Pages 8, 10

# Initial Setup for ANT./Cable Connection

## How to Connect

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

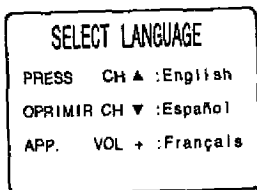
UNIT



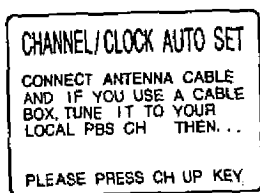
## How to do Initial Setup

Press **COMBO** for Combo mode.

- 1 Press **POWER\*** on the remote or unit.
- 2 When the unit is turned on the first time, **SELECT LANGUAGE** screen appears.



- 3 Press **CH ▲** to select English.  
OR  
Press **CH ▼** to select Spanish (Español).  
OR  
Press **VOL +** to select French (Français).  
**CHANNEL/CLOCK AUTO SET** screen appears.



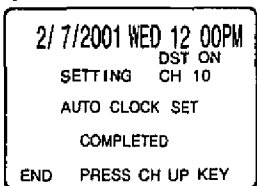
- If wrong language is set, complete "Reset all unit Memory Functions" steps page 9.

### WARNING:

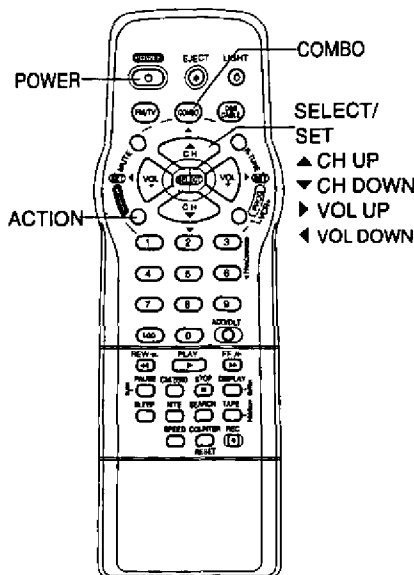
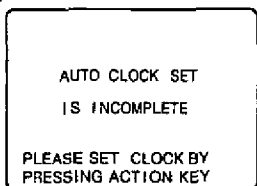
When using "Nut type" RF coaxial cables, tighten with fingers only. Overtightening may damage terminals.



**4** Press **CH ▲** Key to start **CHANNEL / CLOCK AUTO SET** operation. Settings are performed automatically. If the setup is completed, the following screen is displayed.



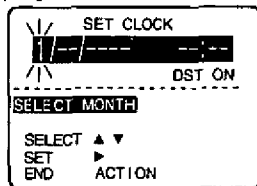
If **AUTO CLOCK SET IS INCOMPLETE** screen appears, set the clock using **MANUAL CLOCK SET** procedure as below.



## MANUAL CLOCK SET

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

**1** Press **ACTION** Key on the Remote to display **SET CLOCK** Menu screen.



**2** 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).

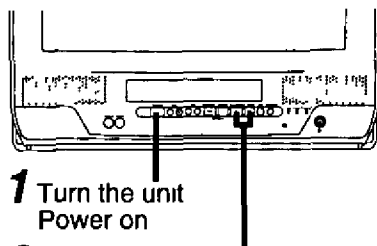


**3** Press **ACTION** Key twice to start **CLOCK** and exit.

## 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.



- 1 Turn the unit Power on.
- 2 Press and hold both **PLAY** and **FF** on the unit for more than 5 seconds.
  - The power will shut off.
  - Please ignore "NO CASSETTE" warning.

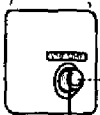
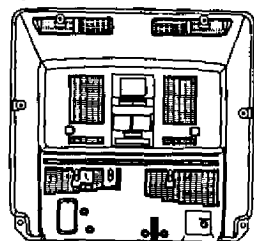
**3** Do "Initial Setup" on page 8.

# Initial Setup for DSS / Cable box Connection

## How to Connect

- Connect the OUT Jack on your cable box to the VHF/UHF terminal on unit with an RF cable.

UNIT



VHF/UHF

Cable TV  
Converter Box



IN from  
ANT./CABLE

### 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.

## How to do Initial Setup

Press COMBO for Combo mode.

- 1 Press POWER\* on the remote or unit.
- 2 When the unit is turned on the first time, SELECT LANGUAGE screen appears.

SELECT LANGUAGE

PRESS CH ▲ :English

OPRIMIR CH ▼ :Español

APP. VOL + :Français

- 3 Press CH ▲ to select English.  
OR  
Press CH ▼ to select Spanish (Español).  
OR  
Press VOL + to select French (Français).  
CHANNEL/CLOCK AUTO SET screen appears.

CHANNEL/CLOCK AUTO SET

CONNECT ANTENNA CABLE  
AND IF YOU USE A CABLE  
BOX, TUNE IT TO YOUR  
LOCAL PBS CH THEN...

PLEASE PRESS CH UP KEY

- Turn on your cable box and set it to PBS(Public Broadcast Station) channel in your time zone. If you use DSS receiver, it must be turned off.

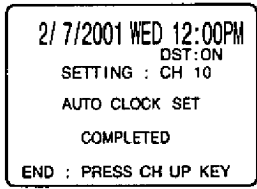
### WARNING:

When using "Nut type" RF coaxial cables, tighten with fingers only. Overtightening may damage terminals.

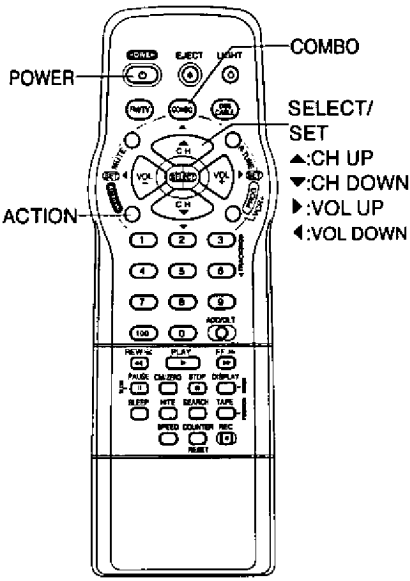
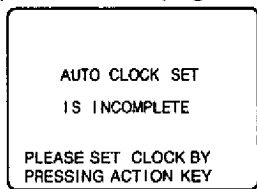
- If wrong language is set, complete "Reset all unit Memory Functions" steps page 9.

Important: If a channel is set with the wrong channel number, press the COMBO button on the remote and try the button again.

**4** Press **CH ▲** Key to start CHANNEL / CLOCK AUTO SET operation. Settings are performed automatically. If the setup is completed, the following screen is displayed.

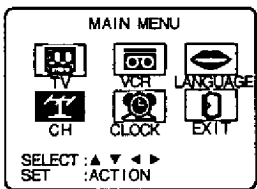


If **AUTO CLOCK SET IS INCOMPLETE** screen appears, set the clock using **MANUAL CLOCK SET** procedure on page 9.

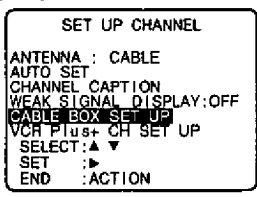


## Cable Box Setup

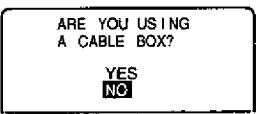
- 1) Press **ACTION**.
- 2) Press **▲▼◀▶** to select "CH."



3) Press **ACTION**.

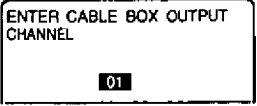


4) Press **▲▼** to select **CABLE BOX SET UP** and press **▶**.



5) Press **▲▼** to select "YES" or "NO" and press **▶**.

- If you select...
  - "YES" → Step 6).
  - "NO" → Press **ACTION** three times to exit.

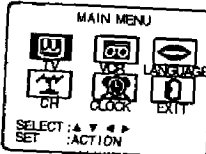


6) Press **▲▼** to select the same channel as your cable box or DSS receiver output channel, then press **▶**.

- If necessary, refer to your cable box manual.
- If you are using Audio/Video jack connection for your cable box, select and set "VIDEO OUT" as the output channel.

7) Press **ACTION** three times to exit.

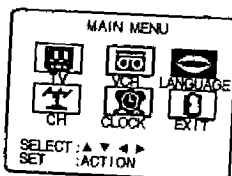
1



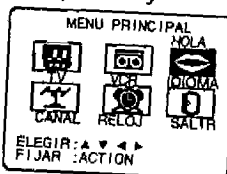
Press **ACTION\***  
to display **MAIN MENU**.

## 2 Language

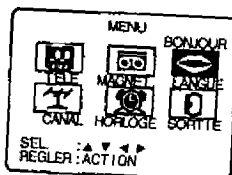
- 1) Press **▲▼◀▶** to select language icon.



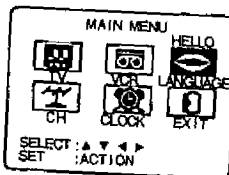
- 2) Press **ACTION** repeatedly.



For Spanish



For French

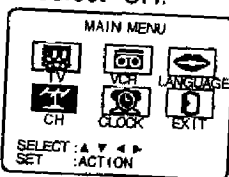


For English

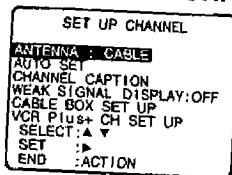
- 3) Press **▲▼◀▶** to select "EXIT."  
Press **ACTION** to exit.

## Channels

- 1) Press **▲▼◀▶** to select "CH."



- 2) Press **ACTION**.



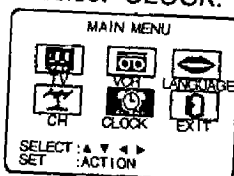
- 3) Press **▲▼** to select "ANTENNA," then press **▶** to set your antenna system ("TV" or "CABLE").

- 4) Press **▲▼** to select "AUTO SET," then press **▶**.

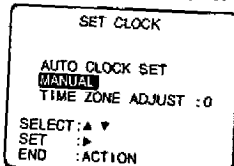
- After Channel Auto Set is finished, Clock Auto Set will be performed.

## Clock

- 1) Press **▲▼◀▶** to select "CLOCK."



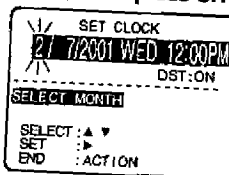
- 2) Press **ACTION**.



("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 **CH ▲**.



- 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.

12

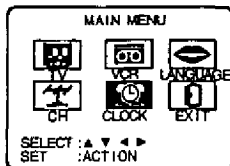
# Time Zone Adjust

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

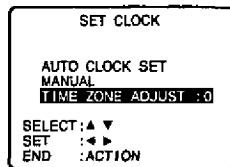
## Time Zone Adjust

(Only when Auto Clock is set.)

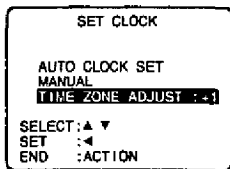
- 1) Press **▲▼◀▶** to select "CLOCK."



- 2) Press **ACTION**.

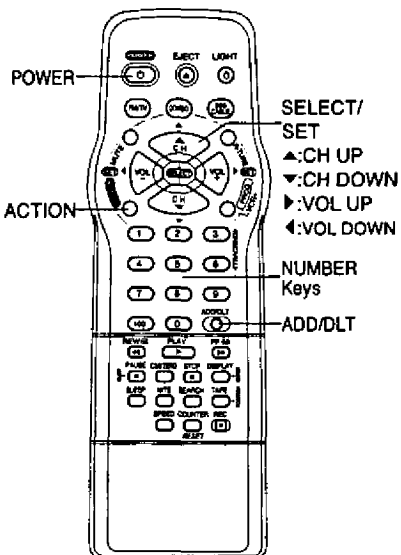


- 3) Press **▲▼** to select **TIME ZONE ADJUST** and press **◀** or **▶** to subtract or add hour(s) as necessary.

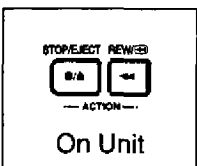


- 4) Press **ACTION** twice to exit.

- **TIME ZONE ADJUST** returns to "0" if clock is set manually.

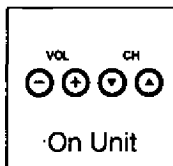
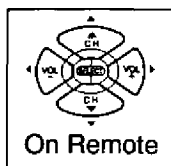


### ACTION key on the unit



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/HLT**.

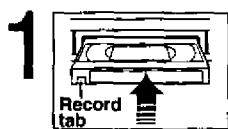


To delete channel: Select channel with **CH ▲▼** or number keys and press **ADD/HLT**.



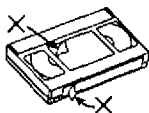
## ✓ Ready Check List

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



### 1 Insert a cassette.

- The unit power comes on automatically.



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

## 2 Press PLAY.

- Playback begins if cassette has no record tab.

### ■ Forward/Reverse scene search

- Press FF or REW
- Press again or 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 SP or 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.

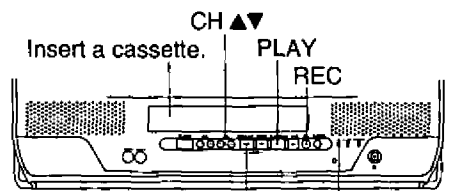
### ■ Stop → Press STOP

### ■ Rewind tape → Press REW in Stop mode

### ■ Fast forward tape → Press FF in Stop mode

### ■ Eject tape → Press EJECT on the remote or STOP/EJECT on the unit

### You can operate on the unit



- Press to stop and/or eject tape.

## 1 Insert a cassette with record tab.

- The unit power comes on automatically.

## 2 Press CH ▲▼\* or number keys to Select Channel.

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

## 3 Press SPEED to select recording speed (see page 41).

- SP = Standard Play
- LP = Long Play
- SLP = Super Long Play

- Selected speed is displayed.

## 4 Press REC to start recording.

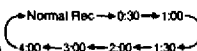
- To edit out unwanted portions, press PAUSE/SLOW to pause and resume recording.
- You cannot view another channel during recording.

### ■ Stop → Press STOP

### ■ One Touch Recording (OTR)

#### Press REC repeatedly

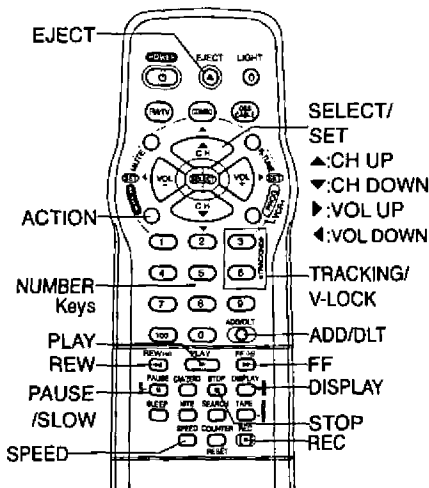
to set the recording length (30 min - 4 hours.)



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

### Notes

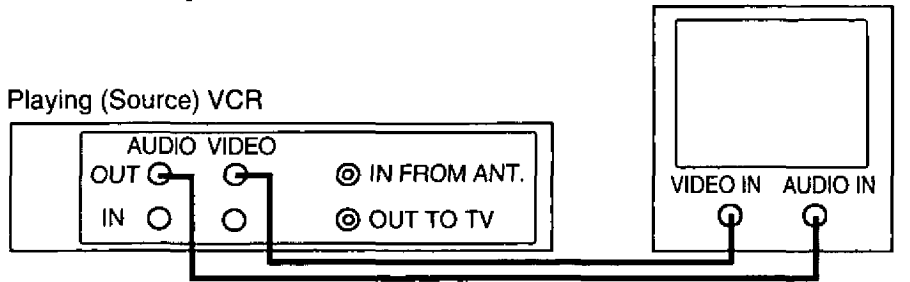
- After the unit has been in Rec Pause mode for 5 minutes, it will stop automatically to protect the tape and the video head.
- The remaining recording time of an OTR can be displayed by pressing DISPLAY.



# 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.




Basic Operation

### Playback (Source)

### Recording (Editing) unit

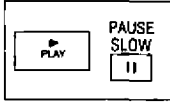
**1**  **Insert pre-recorded tape.**

 **Insert blank tape with record tab.**

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

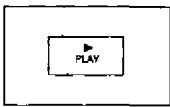
**2** \_\_\_\_\_

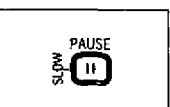
**Select "LINE" mode.**  
See "Selecting Input Mode" below.

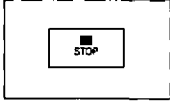
**3**  **Press PLAY then PAUSE at starting point to put in Standby mode.**


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

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

**4**  **Press PLAY to start dubbing.**

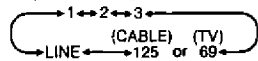
 **Press PAUSE/SLOW to start dubbing.**

**5**  **Press STOP to stop dubbing.**

 **Press STOP to stop dubbing.**

### Selecting Input Mode

**Method 1:**  
Press CH ▲▼. The display will change as follows.



- Method 2:**
- Press **ACTION** for MAIN MENU.
  - Press **▲▼◀▶** to select "TV", then press **ACTION** for SET UP TV screen.
  - Press **▲▼** to select "INPUT SELECT," and then press **▶** to select "TUNER" or "LINE."
  - Press **ACTION** twice to exit this mode.

**Caution**

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

# TV Operation

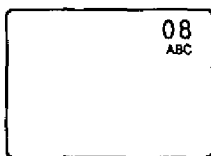
Important: If a remote control button does not work when pressed, press the COMBO button on the remote and try the button again.

**1** Press **POWER\*** on the remote or unit.

## Ready Check List

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

**2**

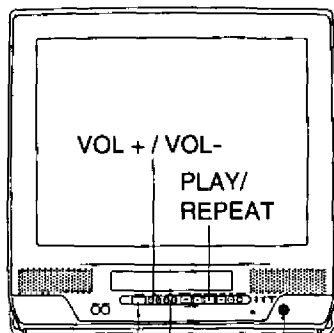


Use **CH ▲▼** or **number keys** to select a channel.

**3**



Press **VOL +** or **VOL -** to adjust volume.



CH ▲▼ PHONES Jack  
POWER

## NIGHT (NITE) Mode

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

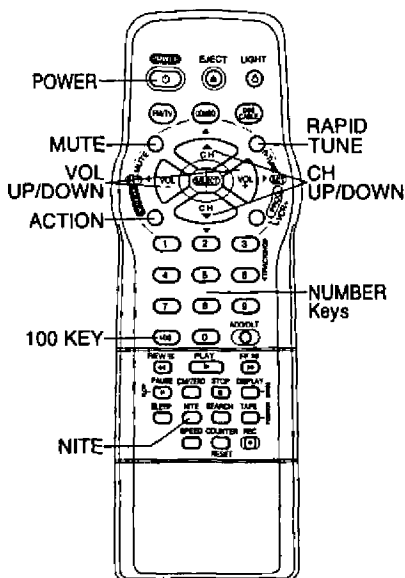
NIGHT

Press **NITE** to set NIGHT mode.

- NIGHT mode may be selected when watching TV, playing a tape, or while in FM mode.

Press **NITE** to cancel.

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



## ■ 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.



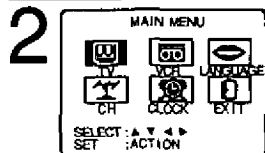
# Closed Caption Mode Feature

## Closed Caption is ...

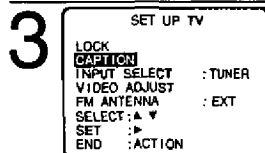
This multi-use system not only allows the hearing impaired to enjoy selected programs, but also makes useful information from TV stations available to everyone.

## Closed Caption Mode Feature

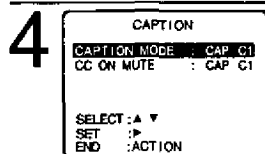
**1** Press **ACTION** to display MAIN MENU.



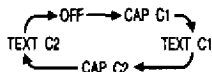
**1)** Press **▲▼◀▶** to select "TV."  
**2)** Press **ACTION** to display SET UP TV screen.



**1)** Press **▲▼** to select "CAPTION".  
**2)** Press **▶** to display CAPTION screen.



**1)** Press **▲▼** to select CAPTION MODE.  
**2)** Press **▶** repeatedly to select mode. (See left.)



**5** Press **ACTION** three times to return to the normal screen.

## 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.

## 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.

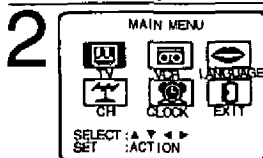
**NOTE** : The closed caption or text signal may be broadcast over C1, C2, or both.

Also, text contents can vary so you may wish to try different settings.

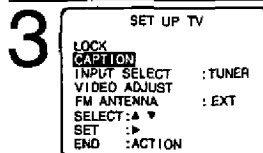
## Caption On Mute Feature

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

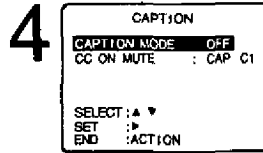
**1** Press **ACTION** to display MAIN MENU.



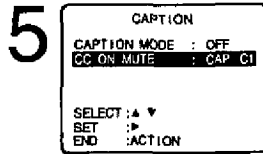
**1)** Press **▲▼◀▶** to select "TV."  
**2)** Press **ACTION** to display SET UP TV screen.



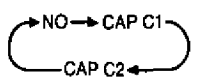
**1)** Press **▲▼** to select "CAPTION".  
**2)** Press **▶** to display CAPTION screen.



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



**1)** 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.

**6** 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.

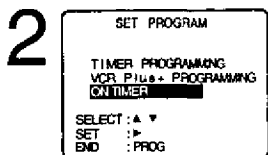
# TV Timer Features

## ON-TIMER with Alarm

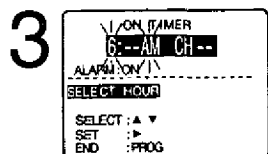
This unit can be set to automatically power on in one of 3 modes (TV, Playback, or FM radio.)

You can also combine the On-Timer with a one minute alarm that gradually increases in volume.

- 1** Press **PROG/VCR+\*** button to display SET PROGRAM screen.

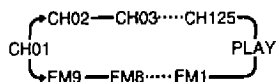


- 1) Press **▲▼** to select "ON TIMER."  
2) Press **►** to display ON TIMER screen.

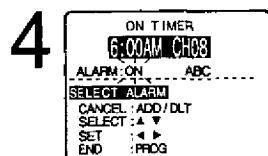


- 1) Press **▲▼** to select desired settings.  
2) Press **►** to set the ON-TIMER TIME or ON-TIMER mode.

• ON-TIMER mode selection order



- Make sure a tape is inserted if Playback mode is selected.  
• See "FM Radio" on page 21 for instructions on how to preset FM stations.



- 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 + -).

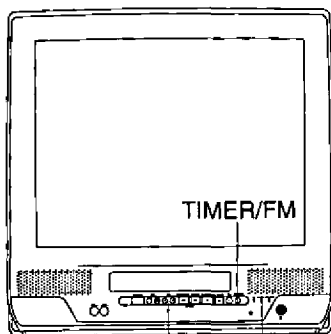
To Make Corrections, use **▲▼** and **◀▶** to move back and correct.

- 5** Press **PROG/VCR+\*** button to set ON TIMER.  
• "ON TIMER SET" is displayed.  
• ON TIMER Indicator lights on the unit.

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

- Ready Check List

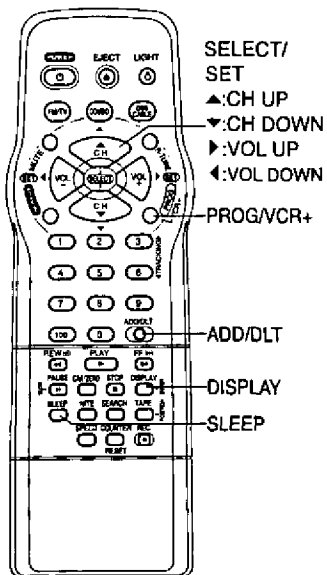
The clock is set to correct time.



CH **▲▼** ON TIMER Indicator

### 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.



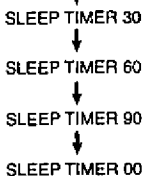
## SLEEP TIMER

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.

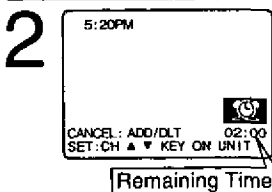
Press **SLEEP** repeatedly until "SLEEP TIMER 00" appears to cancel.



## INSTANT ALARM

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

**1** 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.

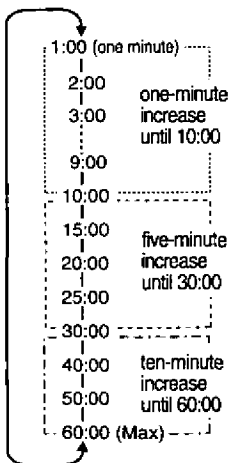


To cancel, press **TIMER/FM** then press **ADD/HLT** on the remote while CANCEL/SET screen is displayed.

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.



### Note

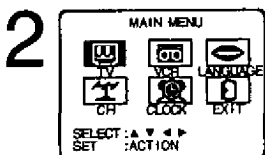
While timer function is in progress, you can change channels on the unit with **CH ▲▼** while "CANCEL/SET" screen is not displayed.

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

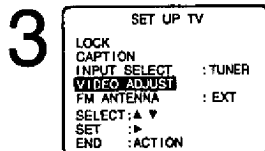
- The volume of the alarm gradually increases for one minute and then continues to beep until any button is pressed.

# 5 Picture Adjustment

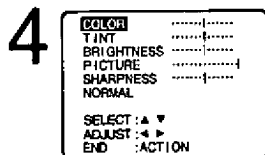
**1** Press **ACTION\*** to display **MAIN MENU**.



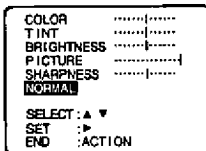
- 1) Press **▲▼◀▶** to select "TV."
- 2) Press **ACTION** to display **SET UP TV** screen.



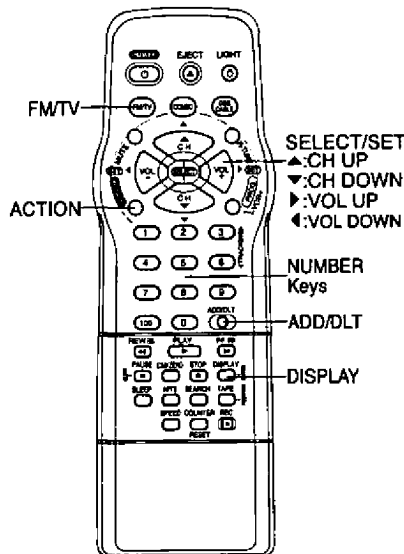
- 1) Press **▲▼** to select **VIDEO ADJUST**.
- 2) Press **▶** to display screen.



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



**To Reset Picture Controls.**  
Press **▲▼** and **▶** to select and set "NORMAL."  
All controls return to their factory settings.



**5** 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.

# FM Radio

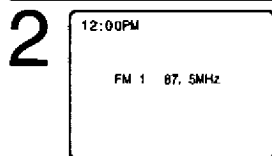
Important: If a remote button does not work when pressed, press the COMBO button on the remote and try the button again.

## FM Radio is ...

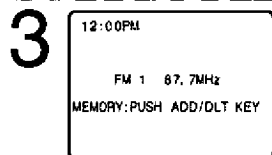
This unit has an FM radio with built-in antenna, 9 station preset, and a band range of 87.5 ~ 108.1 MHz. You can even set the On-Timer (page 18) to wake up to your favorite radio station.

## FM Radio Setup

- 1 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 the FM number.



- 1) Press **CH ▲▼** to select the desired radio station. (Each press changes frequency 200 KHz.)

- 2) Press **ADD/HLT** to set the radio station.

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.

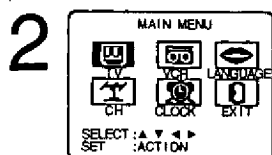
To Make Corrections, select station with a number key, then do step 3 again.

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

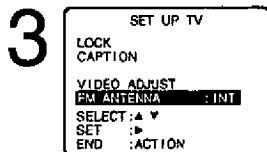
## FM ANTENNA Setup

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

- 1 Press **ACTION** to display MAIN MENU.



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



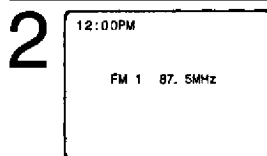
- For cable TV users → "INT"
- For antenna users → "EXT"

- 1) Press **▲▼** to select **FM ANTENNA**.
- 2) Press **▶** to select "INT" (INTERNAL) or "EXT" (EXTERNAL) whichever sounds the best.

- 4 Press **ACTION** twice to end setup.

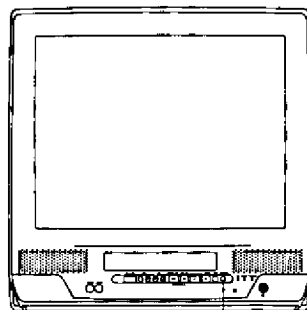
## Using FM Radio

- 1 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 steps 2 and 3 on this page).

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



TIMER/FM

### Notes

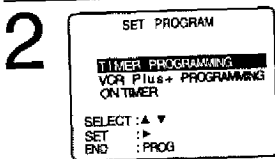
- FM radio cannot be recorded on a Video cassette.
- You may get better reception by repositioning the unit.
- You cannot select FM Radio mode during playback or record, or while a blue back screen (PROG/VCR+, ACTION, MENU) is displayed.
- Once stations are set, the selected station and current time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

TV Operation

# Timer Recording

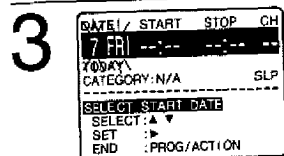
You can set up to 8 programs to be recorded while you are away.

**1** Press **PROG/VCR+** button to display SET PROGRAM screen.



1) Press **▲▼** to select **TIMER PROGRAMMING**.  
2) Press **▶** to display screen.

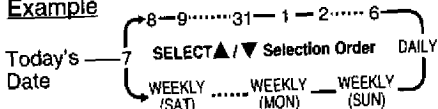
• If a program is already in memory, press **▲▼**, and **▶** to select an unused program number.



Press **▲▼** to select and **▶** or **◀** to set the recording DATE.

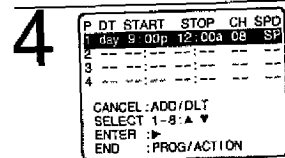
- 1~31 = One time
- DAILY = MON~FRI
- WEEKLY SUN~SAT = Same time once a week

## Example



## Repeat step 3 to set:

- start time, stop time
- Channel (or LINE for outside source)
- Category [N/A (not applicable), SPORTS, MOVIE, COMEDY, MUSIC, DRAMA]
- Speed (SP, LP, SLP)



Press **PROG/VCR+** button (or **ACTION**) to end the program.

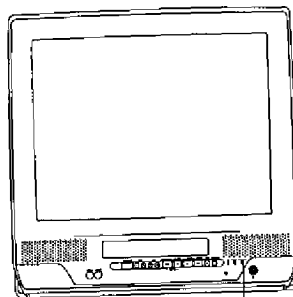
To Enter More Programs Press **▲▼** to select and **▶** to set a blank program number, and then repeat step 3.

**5** Press **PROG/VCR+** button twice (or **ACTION**) 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

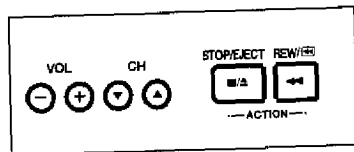
- All connections are made.
- Your unit is plugged in.
- The clock is set to correct time.
- The tape is long enough.
- The record tab is in place.



PROG TIMER Indicator

## Timer Recording Using unit Buttons

You can set a Timer Recording using **ACTION** key on the unit. (See page 13.)



- 1 Press **STOP/EJECT** and **REW** together without a tape inserted to display **MAIN MENU**.
- 2 Press **▲▼** + **-** to select "VCR" and **STOP/EJECT** and **REW** together to display **SET UP VCR** screen.
- 3 Press **▲▼** to select "TIMER PROGRAM" and **+** to display the **TIMER PROGRAM** screen.
- 4 Repeat main steps 3 ~ 5.

### 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)

**1** Repeat steps 1 and 2 on page 22.

**2**

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

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

Press ▲▼ to select the desired program.

**3** To Replace program...

DATE	START	STOP	CH
8 SAT	9:00P	12:00A	08
TODAY			ABC
CATEGORY: MOVIE			SP

SELECT: START DATE  
SELECT: ▲▼  
SET: ◀▶  
END: :PROG/ACTION

- Press ► to display.
- Press ▲▼ to select and press ◀ or ▶ to set new program contents.
- Press **PROG/VCR+** button (or **ACTION**).

To Clear program...

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

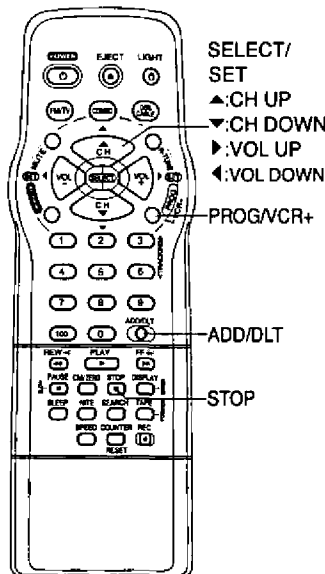
SELECT 1-8: ▲▼  
ENTER: ►  
END: :PROG/ACTION

Press **ADD/DLT**.

**4** Press **PROG/VCR+** button twice (or **ACTION**) 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 14), 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.



## VCR Plus+ System is...

This feature allows you to set most items of a Timer Recording by simply entering a special code number (PlusCode programming number) found in TV GUIDE and selected newspaper TV listings.

### Initial Setup...

In order to do Timer Programming using VCR Plus+, the initial Setup (Clock and Channels) on page 8 to 11 must be done.

### Channel Setup...

Since PlusCode numbers assigned to channels (found in TV Guide and selected newspapers) may differ from channels in your viewing area, you'll need to enter your local TV channel number for each corresponding Guide Channel. Once Channel Setup is done, the correct local channel will be selected when PlusCode numbers are used to program this unit.

## Channel Setup Preparations

To complete step 4 right, make a local channel list (see example below).

You will need the following:

- A normal TV and/or Cable station line up and the channel numbers you receive them on.
- A list of Guide (VCR Plus+) channel numbers for stations you receive (see TV Guide and selected newspapers.)

1 Make a 3-column chart.

In the left column, write all station names you receive.

2 In the middle column, write each station's Guide (VCR Plus+) number (see TV Guide, etc.).

3 In the right column, write the channel number your TV receives the station on.

### < EXAMPLE ONLY >

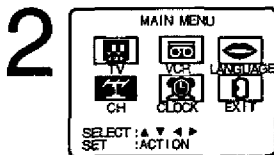
Broadcast or Cable Station Name	Assigned Guide (VCR Plus+) Channel no.	Channel no. your TV receives the station on
HBO	33	15
Nickelodeon	38	20
CBS	34	04
FOX	11	

## VCR Plus+ Channel Setup

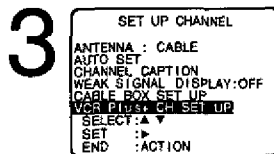
[For DSS / Cable Box connection only.]

At first, do Channel Setup Preparations left.

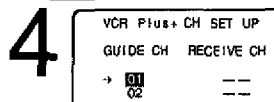
1 Press **ACTION**\* to display MAIN MENU.



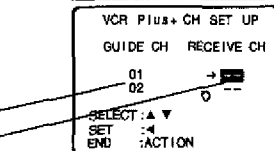
- 1) Press **▲▼◀▶** to select "CH."
- 2) Press **ACTION** to display SET UP CHANNEL screen.



- 1) Press **▲▼** to select VCR Plus+ CH SET UP.
- 2) Press **▶** to display screen.



- 1) Press **▲▼** to scroll up/down the GUIDE CH column.
- 2) Press **▶** to move cursor to right column.
- 3) Press **▲▼** to change the CABLE CH number.
- 4) Press **◀** to set VCR Plus+ channels.



### To Make Corrections

Press **▲▼** and **▶** to move to error, then **▲▼** to change, or **ADD/DEL** to erase number.

- Repeat step 4 until list is complete.

5 Press **ACTION** three times to end the setup.



## Ready Check List

- The clock is set to correct time.
- VCR Plus+ System Setup is complete. (See page 24.)

### Use normal Timer Recording steps if:

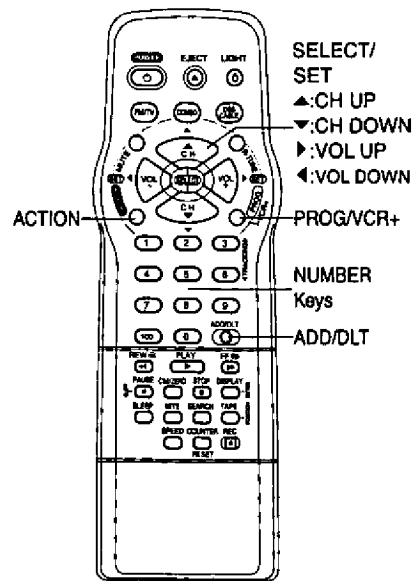
- a program PlusCode programming number is not listed.
- program, such as a sporting event, may run over scheduled stop time.

### See page 23 to:

- cancel a timer recording in progress.
- replace program contents.
- review or clear program contents once set.

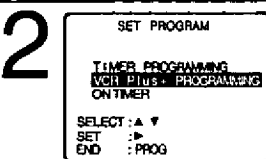
### Notes

- You can obtain unlisted PlusCode programming numbers by calling 1-900-454-7587. Call costs approximately \$0.95 per minute.
- Avoid overlapping program times.
- 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.
- Timer programs memory capacity is 8. To add more programs, please first clear other programs. (See page 23.)
- Make each entry within 5 minutes or the unit will leave this mode.
- Once local channels have been programmed, they will stay in memory, even in the case of a power failure.

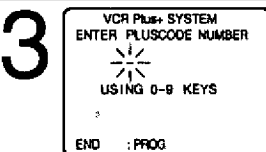


## VCR Plus+ System Programming

**1** Press **PROG/VCR+** button to display SET PROGRAM screen.



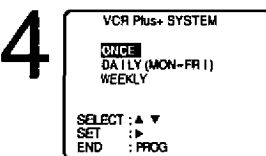
- 1) Press ▲▼ to select **VCR Plus+ PROGRAMMING**.
- 2) Press ► to display screen.



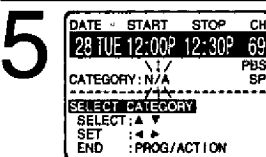
- 1) Press number keys to enter PlusCode programming number.
- 2) Press **PROG/VCR+** button when finished.

### To Make Corrections

Press ◀ repeatedly to delete the PlusCode programming number.



- 1) Press ▲▼ to select and ► to set **Record Frequency**.



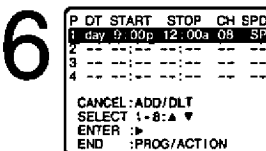
- 1) Press ▲▼ to select and ► to set **Category and Record speed**.

### Selections:

- Categories → N/A (not applicable), SPORTS, MOVIE, COMEDY, MUSIC, or DRAMA
- Speed → SP, LP, or SLP

### To Make Corrections

Press ◀► to move the cursor and ▲▼ to make the correction.



- 1) Press **PROG/VCR+** button (or **ACTION**.) to end programming.

**7** Press **PROG/VCR+** button twice (or **ACTION**) to exit this mode.

- **PROG TIMER** indicator lights on the unit.



## DSS Brand Code Numbers

Toshiba .....	92	Magnavox/Uniden 2 .....	95	Sony .....	98, 105
Hitachi/Hughes .....	93	Panasonic .....	96		
Magnavox/Uniden 1 .....	94	RCA .....	97		

## Cable Box Brand Code Numbers

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

### 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/VCR+, DISPLAY, SEARCH, R-TUNE, FM/TV, or ADD/HLT 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.

## 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  
NEXT :SEARCH  
EXIT :STOP

**Press SEARCH\* in Playback or Stop mode to display INDEX SEARCH screen.**

**2**

INDEX SEARCH 3

INDEX SEARCH

**Press number keys to select the recording number.**

- To calculate number, see below.

**3**

INDEX SEARCH

FORWARD SEARCH:FF  
REVERSE SEARCH:REW

**Press FF or REW to start search.**

- Play begins at search end. To search forward or back 1 index, press FF or REW while screen left in displayed (10 seconds).

### 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.

## Program End Search

Locates end point of recording for continuity.

**1**

**Press SEARCH twice in Playback or Stop mode to display PROGRAM END SEARCH screen.**

**2**

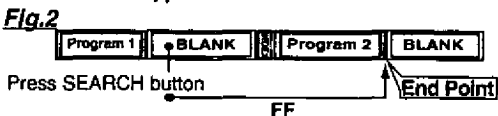
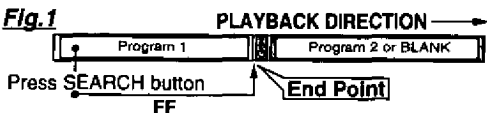
PROGRAM END SEARCH

SEARCH START:FF

EXIT :SEARCH

**Press FF to start search.**

Example of Program End Search operation.

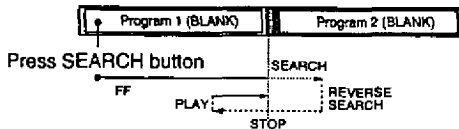


**Fig.3** If search exceeds a few seconds in BLANK area. Press SEARCH button



### Upon locating end point...

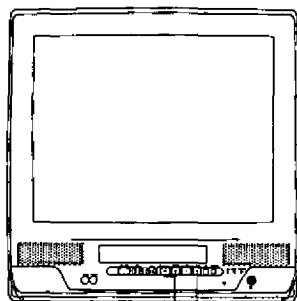
The unit searches slightly past end point, reverse searches, and plays the last few seconds of the program, then stops.



### Notes

- If Program End Search is started very close to an index mark, that mark may be skipped over.
- To cancel, press PLAY or STOP.

## Auto Operation Functions



REW FF

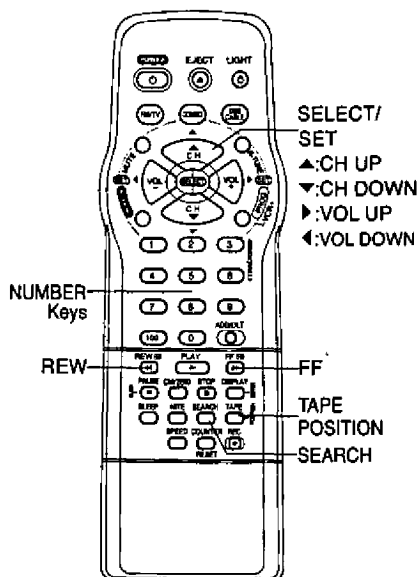
- **Auto Shut Off**  
No broadcast signal in TV, blank tape is Played for 5 minutes  
→ Power turns off
  - This feature is canceled if any button is pressed during above mode.
- **Auto Playback**  
Insert a tape in Power off mode  
→ Power turns on  
• Playback begins if tape has no record tab.
- **Auto 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 and amount of tape remaining.

**Tape position cannot be detected for C-Cassettes, tapes under 30 minutes, and some other tapes.**

- 1 Press **TAPE POSITION** to detect current tape position.



**DETECTING TAPE POSITION**

↓

- "DETECTING TAPE POSITION" is displayed only when a cassette is first inserted and it takes several seconds for correct tape position to appear.

**SLP**  
**R 120 MIN**

**REW** **END**

- The present tape position indication and amount of tape remaining (according to tape speed) is displayed.
- Tape remaining time display may not be precise.

- 2 Press **TAPE POSITION** (or wait 5 seconds) to return to normal screen.

### Note

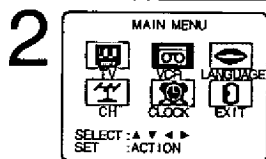
- This function cannot display exact amount of tape remaining for tapes 30 minutes or less, or for tapes over 120 minutes in length.

# Tape Operation (continued)

## Repeat Play

Set to see a recording over and over.

**1** Press **ACTION\*** to display MAIN MENU.



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



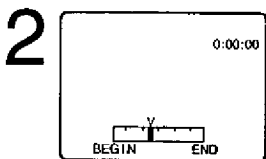
**1)** Press **▲▼** to select "REPEAT PLAY."  
**2)** Press **▶** to set REPEAT PLAY "ON" or "OFF."

**4** Press **ACTION** twice to end setup.

## Zero Search

To quickly return to a specific tape counter location.

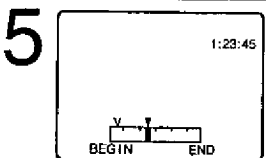
**1** Press **DISPLAY** during playback to display the Counter.



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

**3** Continue playback, rewind, or fast forward.

**4** Press **STOP**.



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

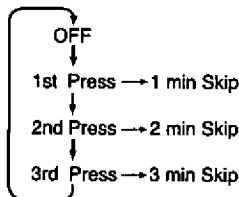
- **▼** : Present position mark
- **V** : Zero position mark
- Unit goes into FF or REW mode and stops at the last point the Counter was set to 0:00:00.

## 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.

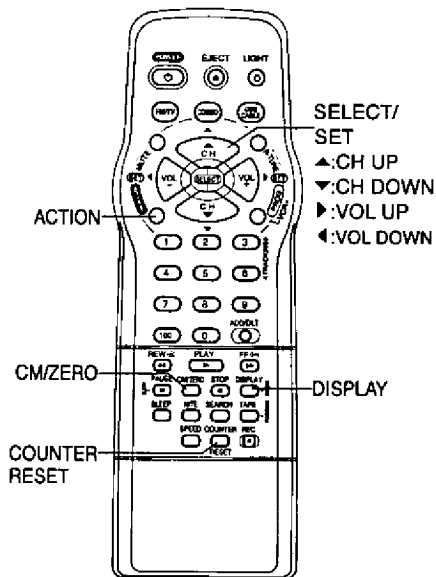
**1** Press **CM/ZERO** repeatedly to select skip time in Playback mode.

- No indication appears.



## Repeat Play Notes

- Playback repeats when tape end is reached or unrecorded portion over 30 seconds is detected.
- During playback, you may also press **PLAY/REPEAT** repeatedly on the unit to select REPEAT "ON" or "OFF."



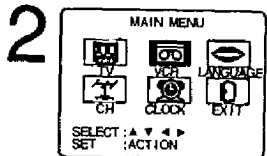
## Zero Search Note

- If a blank portion exists on the tape, and depending on the position of the **V** mark, the **V** mark display may be out of position.

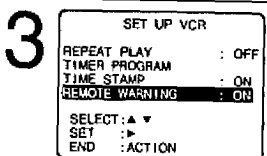
## Remote Warning ON/OFF

When Universal Remote Control (page 26) 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.



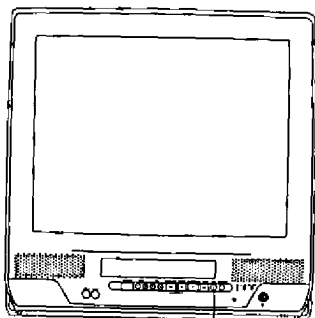
1) Press ▲▼◀▶ to select "VCR."  
2) Press ACTION to display SET UP VCR screen.



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 normal screen.

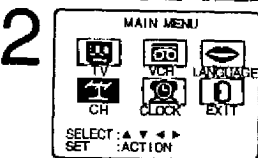


REC

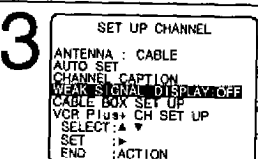
## Weak Signal Display ON/OFF

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

**1 Press ACTION**  
to display MAIN MENU.



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



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

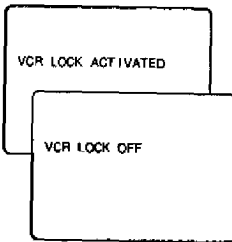
### Notes

- "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.

**4 Press ACTION twice**  
to return to the normal screen.

## VCR Lock

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



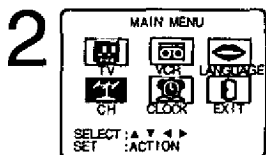
In stop mode, hold down REC on the unit without a cassette inserted for 7 seconds to turn "ON." Please ignore "NO CASSETTE" warning.

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

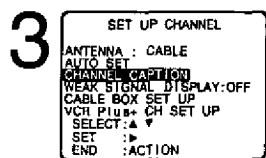
- VCR Lock is canceled automatically after about 24 hours if clock is set.

## Preset Caption

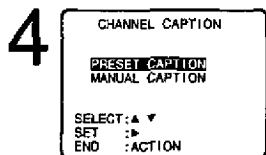
- 1** Press **ACTION\*** to display MAIN MENU.



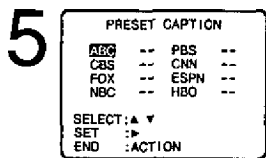
- 1) Press **▲▼◀▶** to select "CH."
- 2) Press **ACTION** to display SET UP CHANNEL screen.



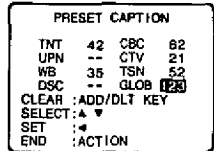
- 1) Press **▲▼** to select CHANNEL CAPTION.
- 2) Press **▶** to display screen.



- 1) Press **▲▼** to select PRESET CAPTION.
  - 2) Press **▶** to display screen.
- To create your own captions, go to "Manual Caption" on page 33.



- 1) Press **▲▼** to select a station.
  - 2) Press **▶** to move cursor to the right.
  - 3) Press **▲▼** to select channel number.
  - 4) Press **◀** to set preset captions.
- Repeat step 5 until the Caption List is complete.



### To Make Corrections

Press **▲▼**, then **▶** to select channel number.  
Press **▲▼** to change, or **ADD/HLT** to delete.

- 6** Press **ACTION** four times to end setup.

**Channel Caption is ...**  
Station names, e.g. ABC, TNN, etc. are set so they will appear when a channel is selected. Choose 24 preset names (Preset Caption), or make up to 10 names of your own (Manual Caption).

### Ready Check List

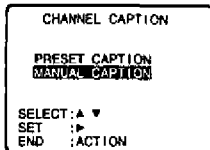
- You need a list of stations and the channel numbers you receive them on.



## Manual Caption

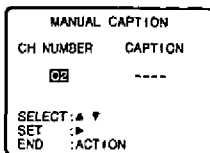
### 1 Do "Preset Caption" steps 1~3 (page 32).

## 2



- 1) Press ▲▼ to select **MANUAL CAPTION**.
- 2) Press ► to display screen.

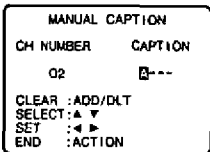
## 3



- 1) Press ▲▼ to select **CH NUMBER**.
- 2) Press ► to move cursor to the right.

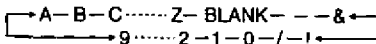
- Channels already set and channels deleted from Channel Memory are not displayed.
- You can set a total of ten channel captions with up to four characters each.

## 4



- 1) Press ▲▼ to select and ► to enter your caption.

- Characters change in the following order.

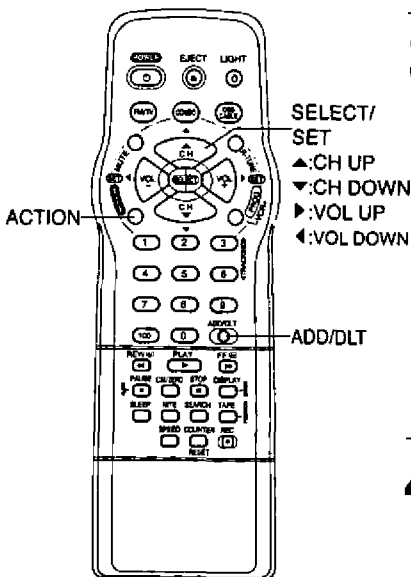


- Press ◀ repeatedly to move the cursor to "CH NUMBER." Repeat steps 3 and 4 as desired.

### To Make Corrections

Press ▲▼, then ► to select channel number. Press ▲▼ to change, or ADD/DLT to delete.

### 5 Press ACTION four times to end setup.



## Time Stamp Feature

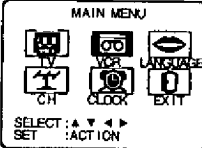
### Ready Check List

- The clock is set to correct time.
- The record tab is in place.

This unit writes program data (see example below) for about the first 10 seconds of every recording. The information is then displayed about 10 seconds after playback begins.

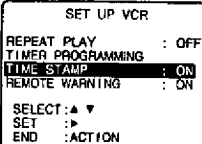
**1** Press **ACTION\*** to display MAIN MENU.

**2**



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

**3**



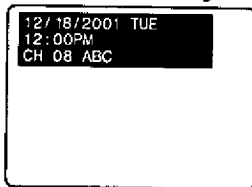
1) Press **▲▼** to select TIME STAMP.  
2) Press **▶** to set "ON" or "OFF."

- When "OFF" is selected, the program data is written on the tape, but will not be displayed.

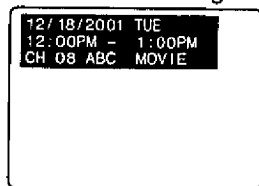
**4** Press **ACTION** twice to return to normal screen.

### <Time Stamp Example >

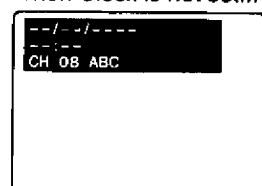
Normal/ One Touch Recording



Timer Recording

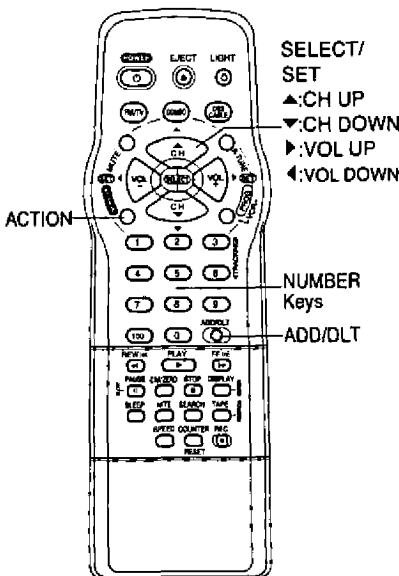


When Clock is not set...



## Process of V-Chip Control Feature

Enter Code → Setup → Blocking



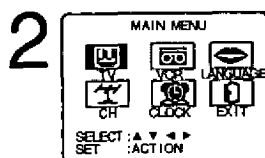
## V-Chip Control Feature is...

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

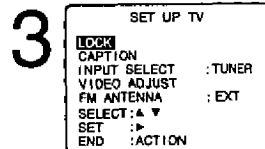
## Enter Secret Code

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

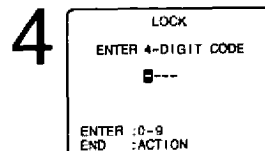
**1** Press **ACTION** to display MAIN MENU.



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



- 1) Press ▲▼ to select **LOCK**.
- 2) Press ▶ to display screen.



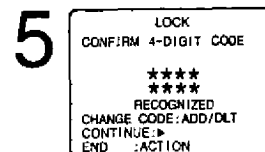
- 1) Press number keys to enter your secret code.
- 2) Enter same code again for confirmation.

**To Make Corrections**  
Press ◀ repeatedly to move the cursor.  
Press number keys to make the correction.

- Step 2) not necessary when changing rating or secret code.
- Take care that you are not observed entering the secret code.

## Changing your secret code

- You will need your current code.
- Do steps 1 ~ 4. In step 5, press **ADD/HLT** to clear current code. Repeat steps 4 and 5 to enter new code.



Press ▶ to display US Ratings menu (see page 36).  
Or  
Press **ACTION** three times to exit.

## Notes

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

If LOCK menu is not displayed, do "Enter Secret Code" steps on page 35.

## Setup US MOVIES Ratings

- 1**
- ```

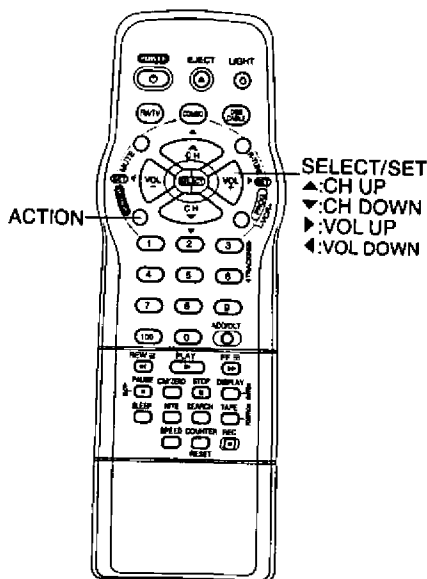
LOCK
US MOVIES :OFF
CHANGE SETTINGS
US TV PROGRAMS :OFF
CHANGE SETTINGS
NEXT PAGE
SELECT: ▲ ▼
SET :>
END :ACTION
    
```
- 1) Press ▲▼\* to select US MOVIES.
  - 2) Press ► to set "ON" or "OFF."
- "ON" → V-Chip Control is activated.
  - "OFF" → V-Chip Control is deactivated.

### Note

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

## Process of V-Chip Control Feature

Enter Code → Setup → Blocking



- 2**
- ```

LOCK
US MOVIES :OFF
CHANGE SETTINGS
US TV PROGRAMS :OFF
CHANGE SETTINGS
NEXT PAGE
SELECT: ▲ ▼
SET :>
END :ACTION
    
```
- 1) Press ▲▼ to select CHANGE SETTINGS.
  - 2) Press ► to display screen.

- 3**
- ```

VIEW NR PROGRAMS? : YES
G UNLOCKED
PG
PG-13
R
NC-17
X
CONTAINS NO RATING
SELECT: ▲ ▼ SET: ►
END :ACTION
    
```
- 1) 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**
- ```

VIEW NR PROGRAMS? : YES
G UNLOCKED
PG
PG-13
R
NC-17
X
GENERAL AUDIENCE
SELECT: ▲ ▼ SET: ►
END :ACTION
    
```
- Press ▲▼ to select and ► to set ratings to be blocked.  
(See ratings chart right.)

- 5** Press ACTION to redisplay LOCK menu and continue with US TV PROGRAMS Ratings Setup (next page). Or, press ACTION four times to exit.

## US MOVIES RATINGS

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

If **LOCK** menu is not displayed, do "Enter Secret Code" steps on page 35.

## Setup US TV PROGRAMS Ratings

**1**

LOCK

US MOVIES :OFF  
CHANGE SETTINGS

US TV PROGRAMS :OFF  
CHANGE SETTINGS

NEXT PAGE

SELECT: ▲ ▼  
SET : ►  
END : ACTION

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**

LOCK

US MOVIES :OFF  
CHANGE SETTINGS

US TV PROGRAMS :OFF  
CHANGE SETTINGS

NEXT PAGE

SELECT: ▲ ▼  
SET : ►  
END : ACTION

1) Press ▲▼ to select **CHANGE SETTINGS**.

2) Press ► to display screen.

**3**

VIEW NR PROGRAMS? : YES  
TV-Y UNLOCKED

TV-Y7 FV

TV-G V S L D

TV-PG V S L D

TV-14 V S L D

TV-MA V S L D

CONTAINS NO RATING

SELECT: ▲ ▼ SET: ►  
END : 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**

VIEW NR PROGRAMS? : YES  
TV-Y UNLOCKED

TV-Y7 FV

TV-G V S L D

TV-PG V S L D

TV-14 V S L D

TV-MA V S L D

FOR ALL CHILDREN

SELECT: ▲ ▼ SET: ►  
END : ACTION

Press ▲▼ to select and ► to set ratings to be blocked.  
(See ratings charts right.)

**Note**

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

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

**5** Press **ACTION** four times to exit this mode.

## US TV PROGRAMS RATINGS: Chart 1

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

## US TV PROGRAMS RATINGS: Chart 2

<b>FV</b>	Fantasy Violence
<b>V</b>	Violence
<b>S</b>	Sexual Situations
<b>L</b>	Adult Language
<b>D</b>	Sexually Suggestive Dialogue

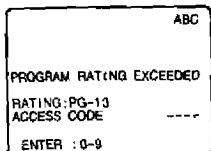
# V-Chip Control Feature (continued)

## 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

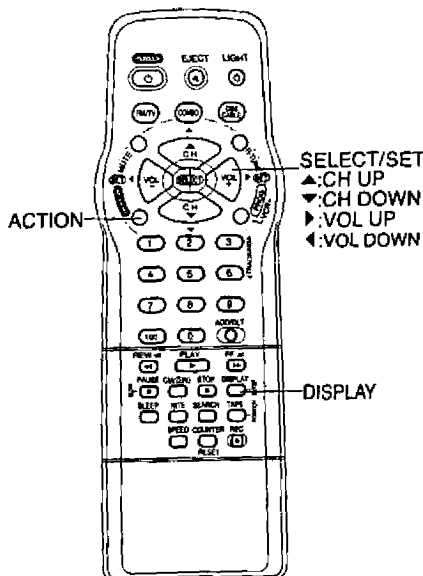
### [Temporarily Deactivate V-Chip Control]

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]

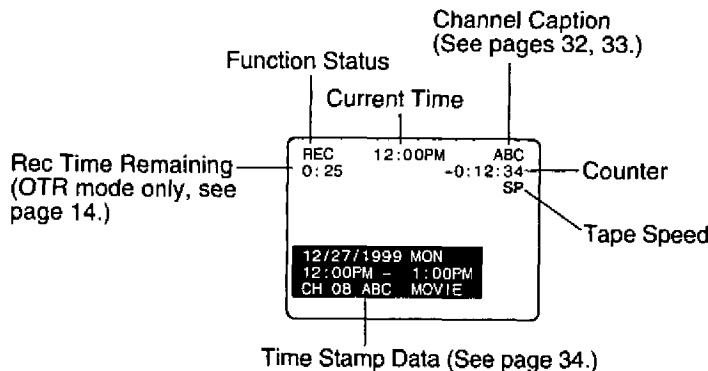
Enter your secret code (steps 1-4 page 35). Then, set US MOVIES and/or US TV PROGRAMS to "OFF" using ▲▼\* and ► keys. (Ratings set on pages 36, 37 are retained and will be in effect when V-Chip Control is activated again.)



## VCR Status & Clock Display

Press **DISPLAY**

to display or remove the overlay.

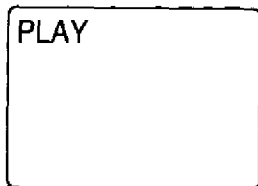
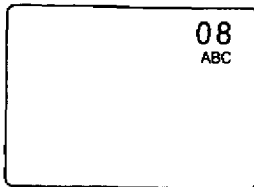


## Blue Screen Display

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 31), 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. (Some station names may also appear if Channel Caption is set. See pages 32, 33.)



These displays will alert you to a missed op

OSD	Caution	Page
NO CH FOUND PLEASE CHECK ANTENNA CABLE CONNECTION THEN PUSH CH UP KEY AGAIN	• If no active channels are found for CHANNEL MEMORY...	8 - 11
PLEASE SET CLOCK BEFORE PROGRAMMING	• If you attempt to set or review a Timer Recording, or set the On-Timer and the Clock is not set...	8 - 13
CHECK CASSETTE RECORD TAB	• If you press REC, and a cassette is inserted with no record tab...	4, 14
TO CANCEL TIMER REC HOLD DOWN STOP KEY FOR APPROX 3 SEC	• If you press STOP during a Timer Recording...	23
NO CASSETTE PLEASE INSERT A CASSETTE	• If you press PLAY, FF, REW, or REC without a cassette inserted...	14
REMOTE CONTROL IS SET TO DSS/CABLE MODE USE COMBO : COMBO KEY	• If you press POWER, ACTION, or PROG on the remote while in DSS or CABLE mode...	26, 27
VIDEO HEADS MAY NEED CLEANING PLEASE INSERT HEAD CLEANING CASSETTE OR REFER TO MANUAL END: PLAY KEY	• If head cleaning becomes necessary while playing back a tape...	41
VCR LOCK ACTIVATED	• If you press a function button other than STOP/EJECT or POWER while the unit is in VCR Lock mode...	31



# Unit Information

important. If a remote control is used, press the button on the remote and try the button again.

## 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.

- 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.
- If head clog symptoms persist, contact your nearest Factory Service Center or authorized Service Center. (See Page 43.)

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

END:PLAY KEY

## 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 : ON → 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.

## 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

## Specifications

### Display

Picture Tube: 25 inch measured diagonal 110° deflection Picture Tube

### VCR

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

### Audio Track:

### Tuner

Broadcast Channels: 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 ~ 108.1 MHz

### General

Power Source: 120 V AC, 60 Hz

Power Consumption: Approx. 130 watts (Power on)

Approx. 4.0 watts (Power off)

Television System: EIA Standard NTSC color

Speaker: 1 piece

Operating Temperature: 5°C ~ 40°C (41°F ~ 104°F)

Operating Humidity: 10% ~ 75%

Weight: 31 Kg (68.2 lbs.)

Dimensions: 634 (W) X 590 (H) X

464 (D) mm

24-15/16" (W) X 23-1/4" (H)

X 18-1/4" (D)

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

## 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 the 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 ▲▼\* on the unit operate as a V-Lock control to reduce jitter.

### PanaBlack™ Picture Tube

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

# Before Requesting Service

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

Power	Correction
No power...	<ul style="list-style-type: none"><li>• Completely insert Power Plug into an AC outlet.</li><li>• Set POWER button to ON.</li></ul>
Monitor	Correction
No picture or sound...	<ul style="list-style-type: none"><li>• Make sure your antenna system (TV or CABLE), is correctly set. (P. 8-11)</li><li>• Completely insert Power Plug into an AC outlet.</li><li>• Set POWER button to ON.</li></ul>
Poor picture with normal sound...	<ul style="list-style-type: none"><li>• Adjust BRIGHTNESS, SHARPNESS, and PICTURE controls in the SET UP TV menu. (P. 20)</li></ul>
Poor sound with normal picture...	<ul style="list-style-type: none"><li>• Adjust VOLUME control. (P. 16)</li></ul>
Poor TV reception...	<ul style="list-style-type: none"><li>• Adjust SHARPNESS and PICTURE controls in the SET UP TV menu. (P. 20)</li></ul>
No color or poor color...	<ul style="list-style-type: none"><li>• Adjust TINT and COLOR controls in the SET UP TV menu. (P. 20)</li></ul>
Ghost (multiple) images...	<ul style="list-style-type: none"><li>• Install a directional antenna.</li></ul>
TV programs cannot be watched...	<ul style="list-style-type: none"><li>• Make sure the selected channel is in unit's memory. (P. 12, 13)</li></ul>
Channel cannot be selected...	<ul style="list-style-type: none"><li>• Only the channel being recorded can be viewed on this unit.</li></ul>
VCR	Correction
TV program cannot be recorded...	<ul style="list-style-type: none"><li>• Make sure your antenna system (TV or CABLE), is correctly set. (P. 8-11)</li><li>• Make sure cassette record tab is intact. (P.4)</li></ul>
Timer recording cannot be performed...	<ul style="list-style-type: none"><li>• Check that clock is set to current time and date.</li><li>• Make sure DSS/CABLE box (if used) is left on and tuned to channel to be recorded.</li><li>• Set recording Start/Stop times correctly. (P. 22-23)</li><li>• 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.</li></ul>
No playback picture, or the playback picture is noisy or contains streaks... VCR cannot be controlled...	<ul style="list-style-type: none"><li>• Adjust TRACKING control in either direction. (P. 41)</li><li>• Try Head Cleaning. (P. 41)</li><li>• Make sure VCR LOCK is set to off. (P. 31)</li><li>• Make sure unit is not in a Timer Record operation.</li></ul>
Remote Control	Correction
Unit cannot be controlled...	<ul style="list-style-type: none"><li>• Aim remote at remote sensor on unit (P. 7) so that signal is unobstructed.</li><li>• Inspect the remote batteries. (P. 4)</li><li>• Make sure VCR LOCK is set to off. (P. 31)</li><li>• Exposing unit remote sensor to direct fluorescent or outdoor light may cause signal interference.</li></ul>
ACTION, PROG/VCR+ and FW TV buttons cannot be selected...	<ul style="list-style-type: none"><li>• Press COMBO button for COMBO mode. (P. 26)</li><li>• Check remote batteries.</li></ul>
Miscellaneous	Correction
Video cassette cannot be inserted...	<ul style="list-style-type: none"><li>• Insert the cassette window side up; record tab facing you.</li></ul>
Video cassette cannot be removed...	<ul style="list-style-type: none"><li>• Completely insert Power Plug into an AC outlet.</li></ul>
Tape cannot be ejected or inserted...	<ul style="list-style-type: none"><li>• Try ejecting or inserting the tape again after turning POWER off, then back on.</li></ul>
Video cassette ejects when a recording is started, or the power is turned off for timer recording...	<ul style="list-style-type: none"><li>• Make sure video cassette record tab is intact. (P. 4)</li></ul>
In Stop mode, the VCR motor (CYLINDER) continues to rotate...	<ul style="list-style-type: none"><li>• 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.</li></ul>
VCR cannot be controlled...	<ul style="list-style-type: none"><li>• Make sure VCR LOCK is set to off. (P. 31)</li></ul>

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

To locate an authorized servicenter call toll free 1-800-211-PANA(7262)

or send e-mail to : [consumerproducts@panasonic.com](mailto:consumerproducts@panasonic.com).

# Service Center List

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 to : [consumerproducts@panasonic.com](mailto:consumerproducts@panasonic.com)

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

## Accessory Purchases:

1-800-332-5368 (Customer Orders Only)  
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032  
(6 am to 5 pm Monday - Friday; 6 am to 10:30 am Saturday; PST)  
(Visa, MasterCard, Discover Card, American Express, Check)

## Factory Servicenters Locations

### CALIFORNIA

6550 Katella Avenue  
Cypress, CA 90630

800 Dubuque Avenue  
S. San Francisco,  
CA 94080

3878 Ruffin Road  
Suite A  
San Diego, CA 92123

### COLORADO

1640 South Abilene  
Street Suite D  
Aurora, CO 80012

### FLORIDA

3700 North 29th  
Avenue Suite 102  
Hollywood, FL 33020

### GEORGIA

8655 Roswell Road  
Suite 100  
Atlanta, GA 30350

### ILLINOIS

9060 Golf Road  
Niles, IL 60714

1703 North Randall  
Road Elgin, IL 60123  
(Pick-up / Drop-off  
only)

### MARYLAND

62 Mountain Road  
Glen Burnie,  
MD 21061

### MASSACHUSETTS

60 Glacier Drive  
Suite G  
Westwood,  
MA 02090

### MINNESOTA

7850-12th Avenue  
South Airport  
Business Center  
Bloomington,  
MN 55425

### OHIO

2236 Waycross Road  
Civic Center Plaza  
Forest Park, OH  
45240

### PENNSYLVANIA

2221 Cabot Blvd  
West Suite B  
Langhorne, PA 19047

### TEXAS

13615 Welch Road  
Suite 101  
Farmers Branch,  
TX 75244

### WASHINGTON

20425-84th Avenue  
South Kent,  
WA 98032

### HAWAII

99-859 Iwaiwa Street  
Aiea, Hawaii 96701  
Phone  
(808) 488-1996  
Fax  
(808) 486-4369

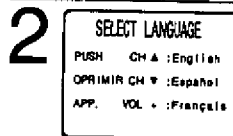
## Service in Puerto Rico

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

As of January 2000

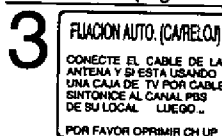
## Como realizar la Configuración Inicial

- 1** Presione **POWER** en el control remoto o en la unidad.



Cuando encienda el VCR por primera vez, aparecerá la pantalla **SELECT LANGUAGE**.

- Si ajusta el idioma incorrecto, realice los pasos de la página 9 "Reajuste de todas las Funciones de Memoria de la unidad".
- Active la caja de cables y ajústela al canal PBS en su huso horario. Si usted utiliza receptor DSS, este debe estar apagado.



Presione **CH ▲** para seleccionar Inglés (English).

Presione **CH ▼** para seleccionar Español.

Presione **VOL +** para seleccionar Francés (Français). Aparecerá la pantalla **CHANNEL / CLOCK AUTO SET**.



Presione la tecla **CH ▲** para iniciar el funcionamiento de **CHANNEL / CLOCK AUTO SET**. El ajuste del **CHANNEL / CLOCK** se lleva a cabo automáticamente, si la configuración se ha terminado, se visualiza la pantalla siguiente.

Si aparece la pantalla "**FIJACION AUTOMATICA DEL RELOJ INCOMPLETO**", ajuste el reloj utilizando los procedimientos de "**AJUSTE MANUAL DEL RELOJ**" mostrados en la página 9.

FIJACION AUTOMATICA DEL RELOJ ES INCOMPLETO  
OPRIMIR ACTION PARA FIJAR EL RELOJ

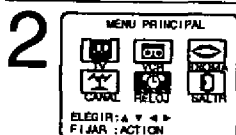
## Ajuste Manual del Reloj

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

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

## Ajustar de nuevo el reloj

- 1** Presione **ACTION** para exhiba el menú.



Presione **▲▼◀▶** para seleccionar "**RELOJ**". Presione **ACTION**.



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



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

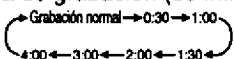
- 5** Presione **ACTION** dos veces para que el reloj comience a funcionar y salir desde este modo.

## Operaciones básicas para la reproducción

- 1 Inserte un casete.**
  - El videograbador combinado se enciende automáticamente.
- 2 Presione PLAY.**
  - La reproducción comienza automáticamente si el casete no tiene la lengüeta 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 fija
  - Para ver imágenes cuadro a cuadro → Presione PAUSE/SLOW en el modo de imagen fija
  - 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

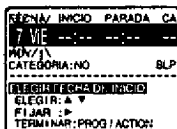
## Operaciones básicas para la grabación

- 1 Inserte un casete con la lengüeta para prevención de grabado.**
  - El videograbador combinado se enciende automáticamente.
- 2 Seleccione el canal.** Presione CH ▲▼ o las teclas numéricas correspondiente.
- 3 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.
- 4 Comience la grabación.** Presione REC.
  - Para editar partes no deseadas de una grabación, 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.)



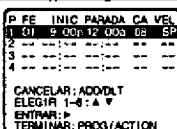
## Grabación con temporizador

- 1 Exhiba FIJAR PROGRAMACION.** Presione PROG/VCR+.
- 2 Exhiba TEMPORIZADOR.**
  - Presione ▲▼ para seleccionar.
  - Presione ► para exhibir.
  - Si ya existe un programa en la memoria, presione ▲▼ y ► para seleccionar un número de programa sin usar.
- 3 Ajuste la fecha de grabación.**
  - Presione ▲▼ para seleccionar.
  - Presione ► o ◀ para ajustar.
  - 1 - 31 = Grabación única
  - DIARIO = a la misma hora de lunes a viernes
  - SEMANTAL = 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), categoría [N/O (no aplicable), DEPORTE, CINE, COMEDIA, MUSICA, DRAMA], velocidad (SP, LP, SLP)

- 4 Termine el programa.** Presione PROG/VCR+ (o ACTION.) Para introducir más programas, presione ▲▼ y ► para seleccionar y ajustar el número de programa en blanco, y luego repita los pasos 3 y 4.



- 5 Salga de este modo.** Presione PROG/VCR+ dos veces (o ACTION.)
  - 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.

## 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):

PRODUCT	PARTS	LABOR	SERVICE	CONTACT NUMBER
CAMCORDER	ONE (1) YEAR, EXCEPT CCD IMAGE SENSOR	NINETY (90) DAYS	Carry-In or Mail In	1-800-211-PANA(7262)
	CCD IMAGE SENSOR -SIX (6) MONTHS	NINETY (90) DAYS		
VCR	ONE (1) YEAR	NINETY (90) DAYS	Carry-In or Mail In	1-800-211-PANA(7262)
A/V MIXER	ONE (1) YEAR	NINETY (90) DAYS	Carry-In or Mail In	1-800-211-PANA(7262)
MONITOR- VCR Combination	ONE (1) YEAR, EXCEPT CRT	NINETY (90) DAYS	Carry-In: 21" CRT and Smaller In-home or carry-in: 22" CRT and Larger	1-800-211-PANA(7262)
	CRT - TWO (2) YEARS	CRT - NINETY (90) DAYS		

**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 contact number listed above, 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 RECORDING MEDIA) 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 Consumer Affairs Department 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 8/8/2000

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