Thank you for choosing

Panasonic
Omnivision VHS

Video Cassette Recorder

MODEL PV-8660
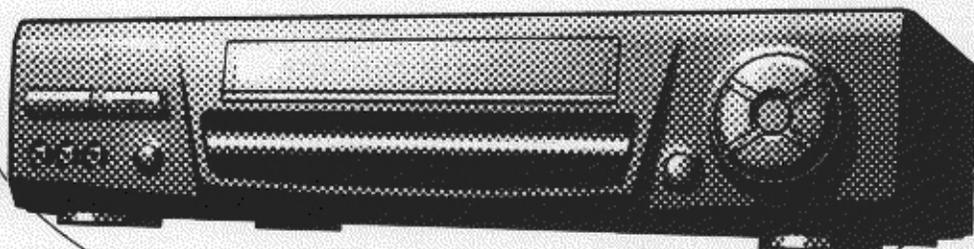
Operating
Instructions

VCR*plus+*

Easy Taping.

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

Please read these instructions carefully before attempting to
connect, operate or adjust this product. Please save this manual.

Spanish Quick Use Guide is included. (Guía para rápida consulta en español está incluida.)

Quick Use Guide is on the back cover.

VQTS3476 (A)

Things You Should Know

Congratulations

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

Date of Purchase _____
Dealer Purchased From _____
Dealer Address _____
Dealer Phone No._____
Model No. _____ PV-8660 _____
Serial No. _____

Safety Precautions

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

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

| CAUTION |
| RISK OF ELECTRIC SHOCK |
| DO NOT OPEN |

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

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

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

Table of Contents

⚠⚠ Important Safeguards and Precautions

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

INSTALLATION

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

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

POLARIZED PLUG CAUTION:

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

GROUNDING PLUG CAUTION:

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

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

4 DO NOT BLOCK VENTILATION HOLES
Ventilation openings in the cabinet release heat
generated during operation. If they are blocked, heat
build-up inside the unit can cause failures that may result
in a fire hazard or heat damage to cassettes.
For protection, follow these rules:
a. Never cover ventilation slots or the unit while in use,
   or operate the unit when placed on a bed, sofa, rug,
   or other soft surface.
b. Avoid built-in installation, such as a book case or
   rack, unless proper ventilation is provided.

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

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

OUTDOOR ANTENNA INSTALLATION

1 SAFE ANTENNA AND CABLE CONNECTION
If an outside antenna or cable system
is connected to the equipment,
be sure the antenna or cable system
is grounded so as to provide some
protection against built up static
charges and voltage surges.
Section 810 of the National
Electrical Code, ANSI/NFPA 70
(in Canada, part 1 of the Canadian
Electrical Code) provides information
with respect to proper grounding of the
mast and supporting structure, grounding
of the lead-in wire to an antenna discharge unit,
size of grounding conductors, location of antenna discharge unit, connection
to grounding electrodes and requirements for the grounding electrode.
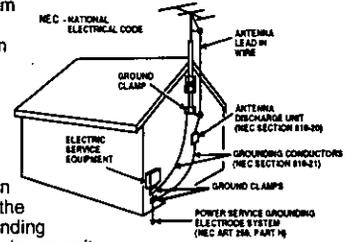
**2 KEEP ANTENNA CLEAR OF HIGH VOLTAGE POWER LINES
   OR CIRCUITS**
An outside antenna system should be located well away from power lines,
electric light or power circuits and where it will never come into contact with
these power sources if it should happen to fall. When installing an outside
antenna, extreme care should be taken to avoid touching power lines,
circuits or other power sources as this could be fatal. Because of the
hazards involved, antenna installation should be left to a professional.

USING THE VIDEO UNIT

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

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

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

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

4 WHEN THE UNIT IS PLUGGED IN
• Never expose the unit to rain or water. DO NOT OPERATE if liquid has
  been spilled into the unit. Immediately unplug the unit, and have it
  inspected by a service technician. Fire and shock hazards can result from
  electrical shorts caused by liquid contact inside.
• Never drop or push any object through openings in the unit. Some internal
  parts carry hazardous voltages and contact can cause electric shock or
  fire hazard.
• Avoid placing the unit directly above or below your TV set as this may
  cause electrical interference. Keep all magnets away from electronic
  equipment.

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

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

SERVICE

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

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

**3 HAVE THE SERVICE TECHNICIAN PERFORM
   A SAFETY CHECK**
After any service or repairs to the unit, request the service technician to
conduct a thorough safety check as described in the manufacture's service
literature to insure that the video unit is in safe operating condition.
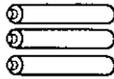
Unpacking Your VCR • Product Features

Unpacking Your VCR

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

Accessories
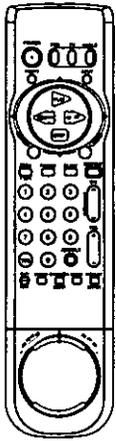
Remote Control
VSQS1588

3 "AAA" Batteries

RF Coaxial Cable
VJAS0196

To order accessories,
call toll free 1-800-211-PANA (7262).

Loading the Batteries

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

2 Install three batteries as indicated inside the Battery Compartment.

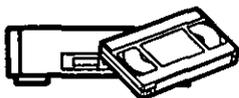**3** Fit the lid's hinge piece into the indent on the case, and snap the lid into place.
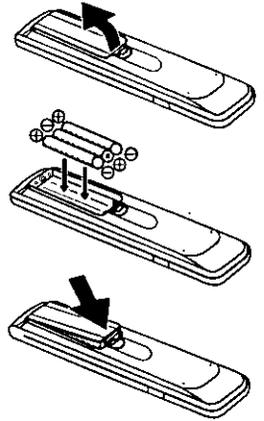
Battery replacement caution
• Do not mix old and new batteries.
• Do not mix alkaline with manganese batteries.

Product Features

VCR and Cassette Information

Erase Protection (Record Tab)

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

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

To record again, cover the hole with cellophane tape.

Maximum Record/Playback Time

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

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

Build-in Head Cleaner

A clean video head helps produce a clear picture. So, we have equipped your VCR with a built-in, non chemical head cleaning system that helps prevent clogging of the video heads. Cleaning is performed each time you load or unload a video cassette.

Note: This feature is preventative only. If your video heads are seriously clogged, consider the use of a chemical nonabrasive head cleaning kit or take your VCR to a Service Center.

Head Cleaning

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

Video Heads Sensor System

If head cleaning becomes necessary, the VCR will display the screen shown to the right while playing back a Video Tape. To exit this screen, push PLAY on the remote control or VCR.

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

END:PLAY KEY
```

- **Use "dry" type head cleaning cassette* only.**
- Be sure to follow the cleaning tape instructions carefully. Excessive use of a cleaning cassette can shorten head life.
- If using a head cleaning cassette does not solve the problem, contact your nearest Factory Service Center or authorized Service Center. (See page 36.)

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

Reset all VCR Memory Functions

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

1) Turn VCR Power on.
2) Press and hold both PLAY and CHANNEL ▲ on the VCR for more than 5 seconds.
   - The power will shut off.
3) Perform the One Time VCR Setup section on page 12.

D.S.T. (Daylight Saving Time)

Your VCR can be set to automatically adjust the clock for Daylight Saving Time. (Page 13.)

Spring (First Sunday in April)
When set to DST:ON, the VCR will automatically set the clock ahead one hour.

Autumn (Last Sunday in October)
When set to DST:ON, the VCR will automatically set the 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 VCR for timer recordings.

Specifications

Power Source:	120V AC, 60 Hz
Power Consumption:	Approx. 23 watts (Power on) Approx. 3.7 watts (Power off)
Video Signal:	EIA Standard NTSC color
Video Recording System:	4 rotary heads helical scanning system
Audio Track:	1 track (Normal) 2 channel (Hi-Fi Audio Sound)
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
Operating Temperature:	41°F~104°F (5°C~40°C)
Operating Humidity:	10%~75%
Weight:	7.7 lbs. (3.5 kg)
Dimensions:	16-15/16" (W) x 3-7/8" (H) x 11-13/16" (D) 430 (W) x 98 (H) x 300 (D) mm

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

Basic Connection

INDOOR
ANTENNA

or

OUTDOOR
ANTENNA
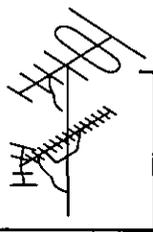
or

Cable TV
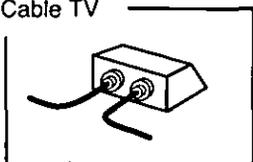
1 **Disconnect the antenna or cable** from your TV and connect it to the VCR (IN FROM ANT.)

(TV)

(VCR)

Antenna Cable

IN FROM ANT.

VHF/UHF

OUT TO TV

VHF/UHF

3 **Set the Output Channel** of your VCR to channel 3 or 4 (whichever is not being transmitted on by a Local TV broadcast).
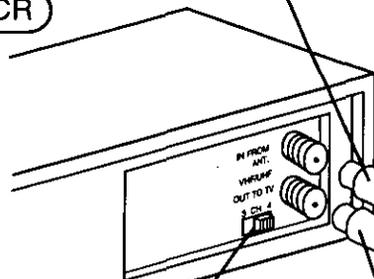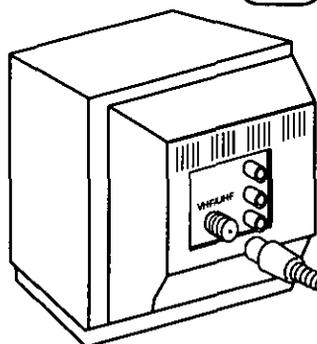
RF Coaxial Cable
(VCR-TV Connection Cable) (supplied)

2 **Connect the VCR to your TV** with the RF Coaxial Cable (OUT TO TV).

WARNING

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

Between Antenna and VCR

Case 1: Twin Lead Cable Only

To VCR Terminal

(Flat) Twin Lead 300 Ohm Cable

300-75 ohm Transformer (not supplied)
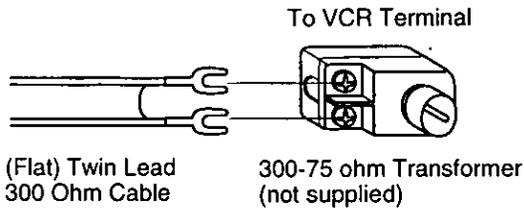
Case 2: Twin Lead & Coaxial Cables

UHF/VHF Band Mixer (not supplied)

(Round) 75 Ohm coaxial Cable

To VCR Terminal
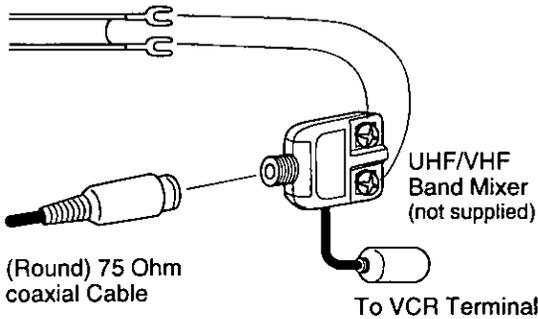
Case 3: Two Twin Lead Cables

UHF/VHF Band Mixer (not supplied)

300-75 ohm Transformer (not supplied)

To VCR Terminal
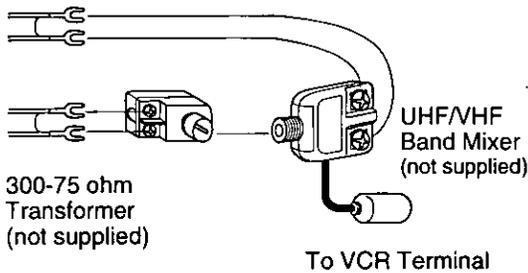
• If your TV has both post and plug-type VHF terminals, the post connection is recommended to minimize signal loss.

Between VCR and TV

Case 1: Screw & Plug Type Terminal

UHF/VHF Band Separator (not supplied)

TV

VHF

UHF

RF Coaxial Cable

Case 2: Screw Type Terminal

TV

75-300 ohm Transformer (not supplied)

VHF

or

UHF
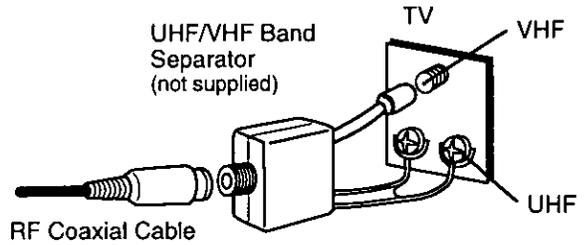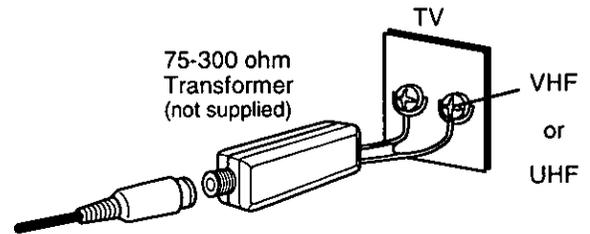
Case 3: Double Screw Type Terminal

TV

UHF/VHF Band Separator (not supplied)

VHF

UHF
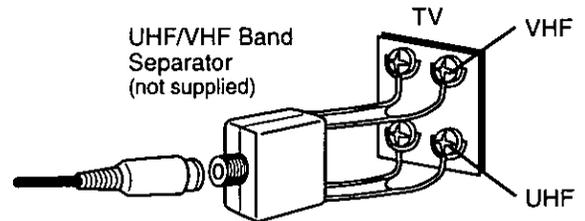
Case 4: Complex TV Terminal

TERMINALS ON BACK OF TV SET

TV

Split out

ANT1

ANT2
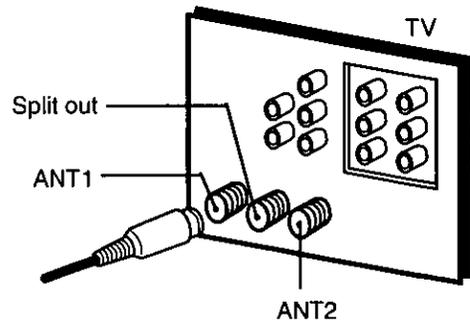
• Connect to one of the ANT terminals and select the same antenna number on the TV.

7

Other Connections

CABLE Connections

All connections on these pages are made with 75 Ohm coaxial cables.

Without a Converter/Descrambler Box

You can:

1) Use your VCR Remote Control to select channels.

2) Program one or more unscrambled channels for unattended recording.

You cannot:
— record or view scrambled channels with this connection.
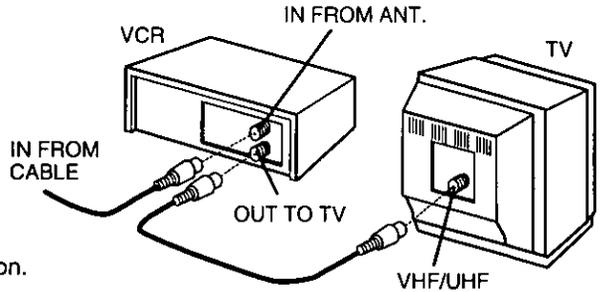
With a (CABLE to VCR) Converter/Descrambler Box

You can:

1) Record and view any channel including scrambled channels; channel selection must be made at the Cable TV Converter Box.

2) Program one channel for unattended recording.

You cannot:
— select channels from VCR or TV.
— watch one station while recording another.
— place channels in memory (pg.12) other than the Cable box output channel.
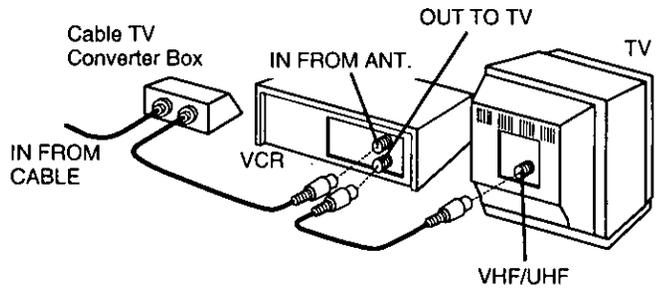
With a (VCR to TV) Converter/Descrambler Box

You can:

1) Use your VCR Remote Control to select channels.

2) Program unattended recordings of more than one unscrambled channel.

You cannot:
— record scrambled channels with this connection.
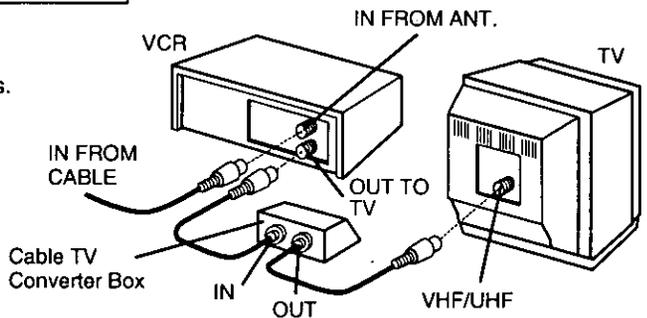
With Two Converter/Descrambler Boxes

If you want to record and view a combination of scrambled and unscrambled channels, you will need additional equipment. This connection requires two converter boxes, an A/B switch, and a 2-way splitter as shown here.

8
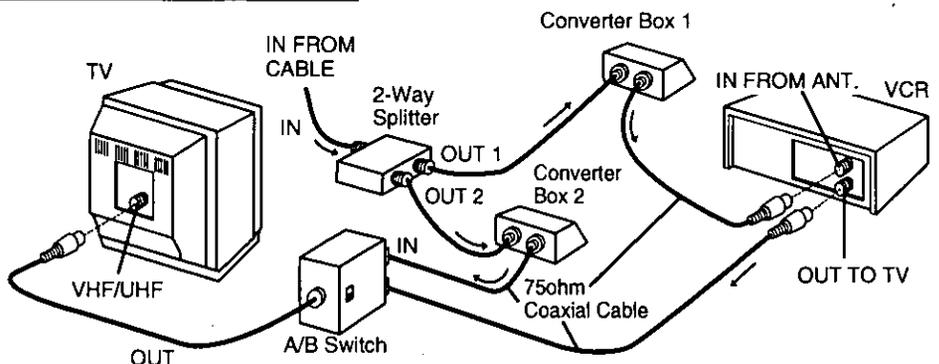
With a DSS Receiver

You can:

1) Record and view any channel including scrambled channels; channel selection must be made at the DSS Receiver.

2) Program one channel for unattended recording.

NOTE: The DSS receiver must be turned off to view programs from a cable box or antenna. See the DSS manual for details.

IN FROM CABLE or Antenna
IN FROM Satellite Dish
OUT TO TV
TV
DSS Receiver
IN FROM ANT.
VCR
VHF/UHF
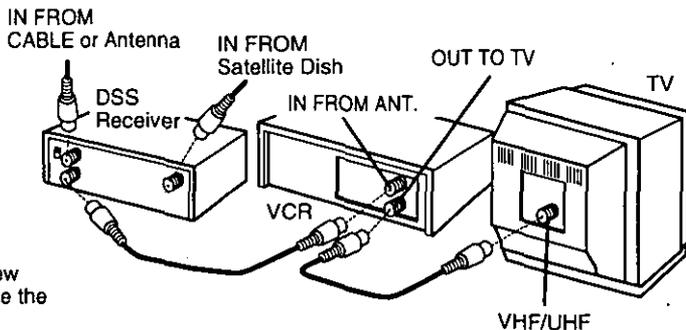
**DSS® is a registered trademark of DIRECTV, INC., a unit of GM Hughed Electronics.

Audio/Video Connections

If your TV has AUDIO IN and VIDEO IN terminals, you can connect your VCR to them to receive a higher quality picture and sound. If your TV is not stereo, you can connect a stereo amplifier to the VCR to enjoy stereo sound.

Audio/Video Connections

TV
AUDIO IN
R
VHF/UHF
L
VIDEO IN
VCR
VIDEO OUT
IN FROM ANT
OUT TO TV
AUDIO OUT
R L
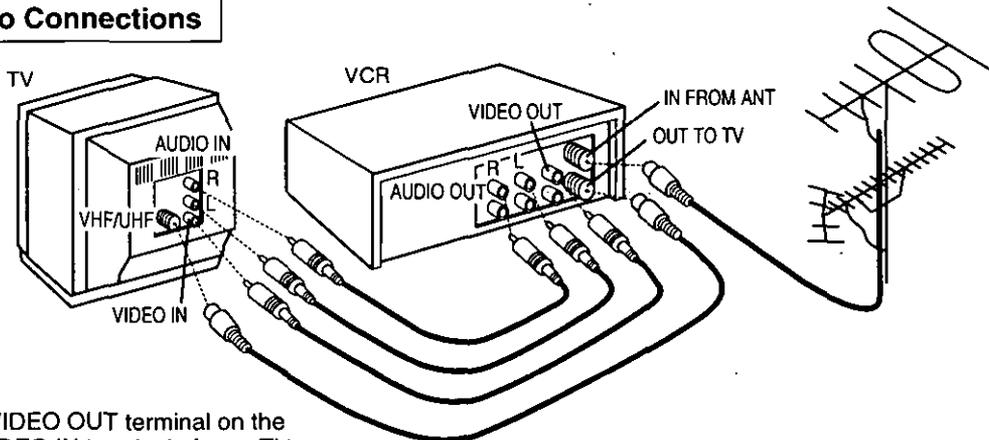
1 Connect the VIDEO OUT terminal on the VCR to the VIDEO IN terminal of your TV.

2 Connect the "L" and "R" AUDIO OUT terminals on the VCR to the "L" and "R" AUDIO IN terminals of your TV.

3 Set the VIDEO/TV selector of your TV (Monitor/Receiver) to "VIDEO."

NOTE: To use your TV as a VCR monitor, set the VIDEO/TV selector on the TV (Monitor/Receiver) to "VIDEO."
Use the L Audio In jack for proper sound reproduction when connecting to a monaural TV.

Stereo Amplifier Connections

When you connect your VCR to a Stereo Component System, you can view the picture from the VCR while enjoying stereo from your audio system.

Connect the "L" and "R" AUDIO OUT terminals on the VCR to the "L" and "R" AUDIO IN terminals of your stereo.

VCR
Stereo Amplifier
AUDIO OUT
R L
AUDIO IN
R L
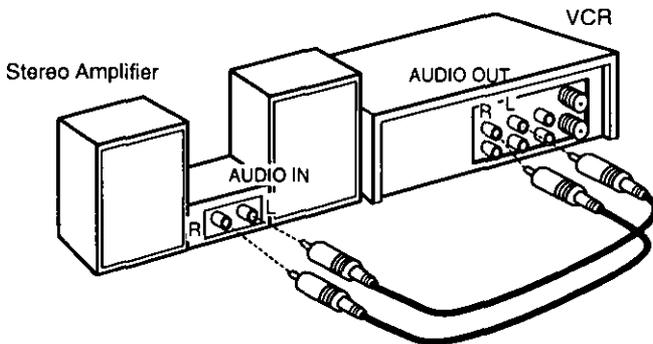
Note to CABLE system installer:

This reminder is provided to call the CABLE system installer's attention to Article 820-40 of the NEC in USA (and to the Canadian Electrical Code in Canada) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Location of Controls

Remote Control Buttons

VCR
See pages 32, 33.

POWER
See pages 12, 18, 19, 31, 32.

VCR/TV
See pages 12, 17, 33.

PLAY
See pages 15, 25, 33.

SELECT UP
See pages 12~14, 18~25, 29~31.

REWIND/ SEARCH
See pages 15, 24, 25, 33.

SET/BACKSPACE
See pages 12, 13, 18~20, 30, 31.

ACTION
See pages 12~14, 20~23, 29, 30.

ZERO SEARCH/1 MINUTE SKIP
See pages 23, 33.

PAUSE
See pages 15, 16, 34.

NUMBERED KEYS
See pages 13, 16, 24, 31~33.

SAP/ Hi-Fi
See pages 27, 33.

SPEED
See pages 16, 33.

COUNTER RESET
See pages 23, 33.

INDEX
See pages 24, 25.

TV
See pages 32, 33.

CABLE
See pages 32, 33.

INPUT
See pages 17, 34.

FAST FORWARD/SEARCH
See pages 15, 24, 25, 33.

SET
See pages 12~14, 18~25, 29~31.

STOP
See pages 15, 16, 19.

SELECT DOWN
See pages 12~14, 18~25, 29~31.

PROGRAM
See pages 18, 19, 31.

RECORD/TIME
See pages 16, 33.

SLOW
See pages 15, 33.

CHANNEL UP/DOWN
(TRACKING UP/DOWN)
See pages 12, 13, 15~17, 27, 33.

VOLUME UP/DOWN
See page 33.

DISPLAY/ENTER
See pages 14, 16, 23, 26, 32, 33.

ADD/DELETE
See pages 13, 19, 20, 30, 31.

SHUTTLE Ring
See page 23.

Front View of the VCR

POWER
See pages
12, 18, 19, 31, 33.

CHANNEL UP/DOWN
TRACKING/V-LOCK
See pages 12, 13, 15~17, 33.

Cassette Compartment
See pages 16, 17, 34.

REWIND/SEARCH
See pages 15, 19, 24, 25.

PLAY
See pages
15, 19, 25, 33, 34.

VIDEO Input
Connecter
See page 34.

FAST FORWARD/
SEARCH
See pages
15, 19, 24, 25, 33.

AUDIO Input
Connecter (L/R)
See page 34.

Multi Function Display
See pages 11, 15~19, 31.

VCR/TV Selector
See pages 12, 17, 34.

REMOTE
SENSOR

RECORD/TIME
See pages
16, 19, 22, 34.

STOP/EJECT
See pages
15, 16, 19, 25, 33, 34.

Multi Function Display

Cassette-In Indicator
Lights when a tape is in the VCR.

SPEED Display
Displays the recording speed.

Power Indicator
Lights when power is on.

Hi-Fi Indicator
Lights when Hi-Fi audio is monitored or played back.

REC(ord) Indicator
Lights during recording.

Timer Indicator
Lights when the VCR is set for a Timer Recording, or when a length is set for a normal recording.
The Timer Indicator flashes when a Timer Recording is set, but a tape has not been inserted into the VCR.

SAP Indicator
Lights when the station you are tuned to is broadcasting SAP.

STEREO Indicator
Lights when the station you are tuned to is broadcasting stereo.
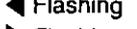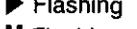
VCR Indicator
Lights when the VCR/TV selector is set to VCR.

Clock/Status/Channel Display
Displays the current time.
Briefly displays VCR status when a function button is pressed.
Briefly displays the channel number, or "L1" or "L2" when a channel or line input is selected.
Displays the tape counter during tape operation.

Function Indicator
Shows what the VCR is doing.

REC and ▶	Record
REC and ‖	Record-pause
▶	Playback
	Slow motion or Frame advance
‖	Play-pause
◀ Flashing	Rewind or Rewind search
▶ Flashing	Fast forward or Forward search
‖ Flashing	Cassette ejecting

Display showing: SLP ⊙⊙ REC TIMER SAP STEREO, Hi-Fi, VCR, -8:88:88 AM PM

Getting Started

Rear View of the VCR

AC Power Plug
While plugged into an AC outlet, the VCR consumes 3.7 W of electrical power in OFF condition.

Audio Output Connector (L/R)
See pages 9, 26, 34.

Video Output Connector
See pages 9, 26, 34.

VHF/UHF Antenna Input Terminal
See pages 6~9, 26, 28.

VHF/UHF Antenna Output Terminal
See pages 6~9, 26, 28, 34.

Audio Input Connector (L/R)
See pages 28, 34.

Video Input Connector
See pages 28, 34.

Channel 3/4 Switch
See pages 6, 12.

11

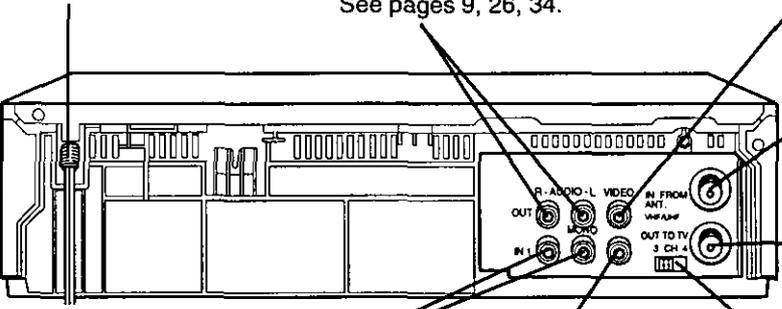# One Time VCR Setup

*Important: If the remote control POWER, ACTION, PROG, CH▲/▼, INDEX or ADD/DLT button does not work when pressed, press the VCR button on the remote and try the button again.

When the VCR is turned on for the first time, it automatically enters the setup mode.
Setup includes the following:
- Choose the language for on-screen menus and messages.
- Tell the VCR how your equipment is hookup (pages 6~9) so the VCR can correctly place channels into memory.
- Get the VCR ready for clock set.

Back of VCR
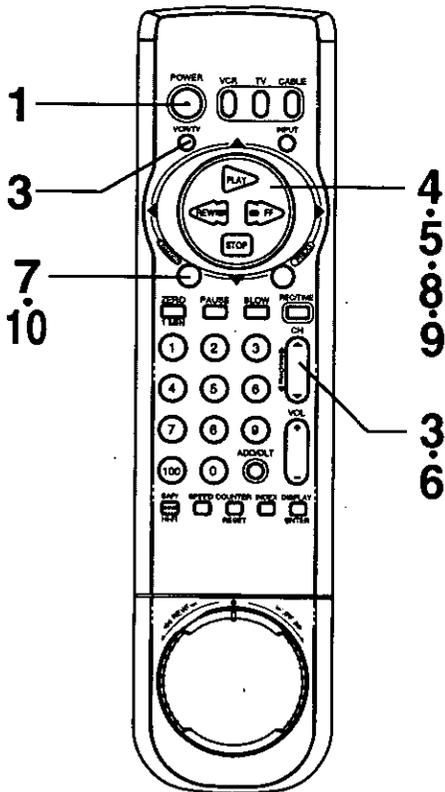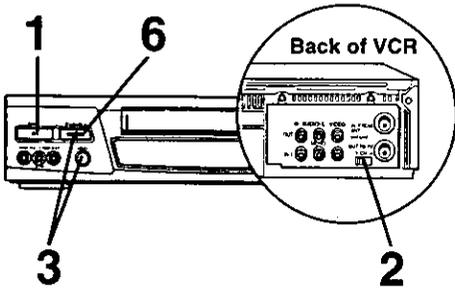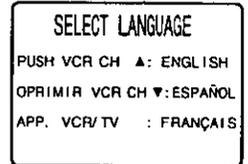
To Set the Language, Channels and Clock

1 Turn TV and VCR on.*

2 Tune TV to VCR output channel (the same one you set on the back of the VCR: CH3 or CH4).

3 Press CH ▲ for English on-screen displays.

Or, **press CH ▼** for Spanish on-screen displays.

Or, **press VCR/TV** for French on-screen displays.

```
SELECT LANGUAGE

PUSH VCR CH ▲: ENGLISH
OPRIMIR VCR CH ▼:ESPAÑOL
APP. VCR/TV  : FRANÇAIS
```

- You can also set the language using the buttons on the VCR.
- **If wrong language is set,** see the "Reset all VCR Memory Functions" section on page 5.
- The VCR should be connected to an antenna or cable box (page 6~9).

4 Press ▲▼ to select your hookup, **and then press ►** to set.

```
SELECT HOOKUP
CABLE/DSS BOX▶VCR▶TV
VCR▶CABLE/DSS BOX▶TV
VCR▶TV



SELECT:▲ ▼ KEY
SET  :► KEY
END  :ACTION KEY
```

- If you selected "CABLE/DSS BOX ► VCR ► TV," continue with step 5. If not, go to step 6.
- If you are using the CABLE/DSS.BOX ► VCR ► TV connection method, only the cable box output channel will be placed in memory.
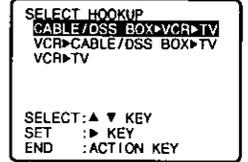
5 Press ▲▼ to select your cable box or DSS receiver output channel number, **and then press ►** to enter.

```
SELECT HOOKUP
CABLE/DSS BOX▶VCR▶TV

CABLE/DSS BOX OUTPUT CH
          CH 01
SELECT:▲ ▼ KEY
SET  :◄ ► KEY
END  :ACTION KEY
```

- If necessary, refer to your cable box manual.
- If you are using Audio/Video jack connections to your cable box, select and set "VIDEO OUT" as the output channel.
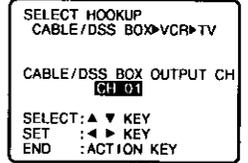
6 Press CH ▲ to start Channel Auto Set.
- "PLEASE SET CLOCK BY PUSHING ACTION KEY" appears.

7 Press ACTION to display the SET CLOCK screen.

```
--\|/-- SET CLOCK ------
1/--/----      --:--
/|\             DST:ON
-----------------------
SELECT MONTH
SELECT:▲ ▼ KEY
SET  :► KEY
END  :ACTION KEY
```
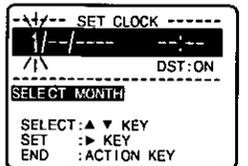
8 Press ▲▼ to select the MONTH, **and then press ►** to enter.
- Make each entry within 5 minutes, or the VCR exits the Set Clock screen.

9 Press ▲▼ and ◄► to select and set remaining items at right.
- Pressing ◄ will move back to an item for correction.

Remaining Items to be set:
- Date   • Year
- Time
- DST. (Daylight Saving Time see page 5.)

10 Press ACTION twice to start the clock and exit this mode.

```
------ SET CLOCK ------
1/ 4/2000 TUE 12:00PM
              DST:ON
-----------------------
SET COMPLETED

SET  :◄ ► KEY
START :ACTION KEY
```

Using ▲▼◄► keys

When a menu screen is displayed, the PLAY, STOP, REWIND, and FF buttons on the remote control function as ▲▼◄► only. Use the buttons on the VCR for play, stop, rewind, and fast forward functions. When a program screen is displayed, the REC, FF, REW, and PLAY buttons on the remote control and the VCR function as ▲▼◄► only. (See Timer Recording Using VCR Buttons on page 19.)

ACTION

SELECT/SET
(▲▼◀▶) keys

CHANNEL UP

NUMBERED
keys

ADD/DELETE

100 key

To Change On-Screen Display Language

1 Press ACTION to display the menu.

2 Press ▲▼ to select the language.
English: LANGUAGE
Spanish: IDIOMA
French: LANGUE

```
-------- MENU --------
   SET UP VCR
   SET UP FEATURE
   SET CLOCK
   SET UP CHANNEL
   IDIOMA/LANGUE ENGLISH
SELECT:▲ ▼ KEY
SET    :▶ KEY
END    :ACTION KEY
```

3 Press ▶ repeatedly to change the language.

```
-------- MENU --------
   SET UP VCR
   SET UP FEATURE      -------- MENU --------
   SET CLOCK        PREPARAR VCR
   SET UP CHANNEL   FIJACION DE FUNC   -------- MENU --------
   IDIOMA/LANGUE E  FIJAR RELOJ     REGLAGE MAGNETOSCOPE
SELECT:▲ ▼ KEY      FIJAR CANAL     REGLAGE MAGNETO SUPPLEM
SET    :▶ KEY       LANGUE/LANGUAGE REGLAGE HORLOGE
END    :ACTION KEY  ELEGIR:▲ ▼      REGLAGE CANAL
                    FIJAR :▶         LANGUAGE/IDIOMA FRANÇAIS
                    TERMINAR:ACTION SEL.   :▲ ▼
                                    REGLER:▶
                                    FIN    :ACTION
```
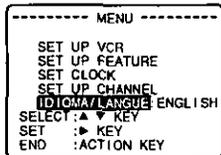
4 Press ACTION to exit this mode.

When Using the 100 key

When selecting CABLE channels 100 to 125 with the NUMBERED keys, first press the 100 key and then enter the remaining two digits.
For example, to select channel 125:
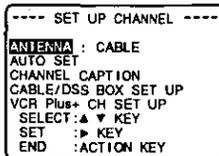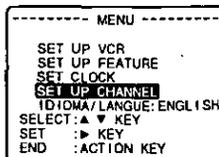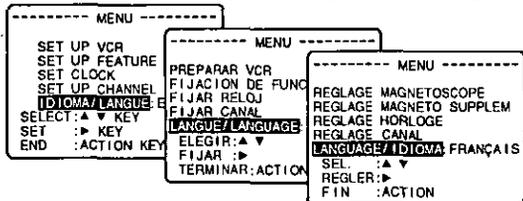Press NUMBERED keys 100, then 2, then 5.

To Replace Channels in Memory
In case you have cable installed, etc.

1 Press ACTION to display the menu.

```
-------- MENU --------
   SET UP VCR
   SET UP FEATURE
   SET CLOCK
   SET UP CHANNEL
   IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET    :▶ KEY
END    :ACTION KEY
```

2 Press ▲▼ to select "SET UP CHANNEL," and then press ▶ to display the "SET UP CHANNEL" screen.

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

```
---- SET UP CHANNEL ----
   ANTENNA  : CABLE
   AUTO SET
   CHANNEL CAPTION
   CABLE/DSS BOX SET UP
   VCR Plus+ CH SET UP
   SELECT:▲ ▼ KEY
   SET   :▶ KEY
   END   :ACTION KEY
```

4 Press ▲▼ to select "AUTO SET," and then press ▶ to display the "CHANNEL AUTO SET" screen.
• If you use a cable box, it must be left on for auto channel set.

5 Press CH ▲ to start Channel Auto Set.
• To exit this mode, press ACTION twice.

To Set or Reset the Clock
In case the clock is wrong, or a power failure occurred.

1 Press ACTION to display the menu.

```
-------- MENU --------
   SET UP VCR
   SET UP FEATURE
   SET CLOCK
   SET UP CHANNEL
   IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET    :▶ KEY
END    :ACTION KEY
```

2 Press ▲▼ to select "SET CLOCK," and then press ▶ to display the SET CLOCK screen.

3 Press ▲▼ and ◀▶ to select and set the date, time, and DST. (Daylight Saving Time).

4 Press ACTION twice to start the clock and exit this mode.

```
------ SET CLOCK ------
   1/ 4/2000 TUE 12:00PM
                DST:ON
   SELECT HOUR
   SELECT:▲ ▼ KEY
   SET   :◀ ▶ KEY
   END   :ACTION KEY
```

To Add or Delete a Channel

1 Select a channel using the NUMBERED keys to add or CH ▲/ ▼ to delete.

```
   CHANNEL 08 ADDED
```

2 Press ADD/DLT to add or delete the channel.
• To select a channel once it's deleted, use the NUMBERED keys on the remote control.

```
   CHANNEL 08 DELETED
```

Getting Started
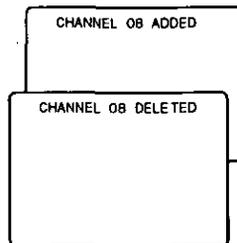
(NOTES) • This VCR will accurately maintain its calendar up to Dec. 31, 2096, 11:59PM.
• Normal TV or Cable channels are automatically selected and placed in memory depending on how your VCR is hooked up.
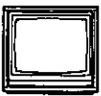
*Important: If the remote control POWER, ACTION, PROG, CH▲/▼, INDEX or ADD/DLT button does not work when pressed, press the VCR button on the remote and try the button again.

Function & Channel Display
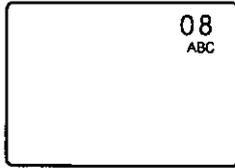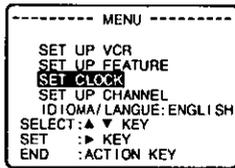
When a function button is pressed, e.g. PLAY, or you change channels, a 4 second display appears first in large and then small characters. (Some Station names may also appear if Channel Caption is set. See page 20.)

```
                    08
                    ABC
```
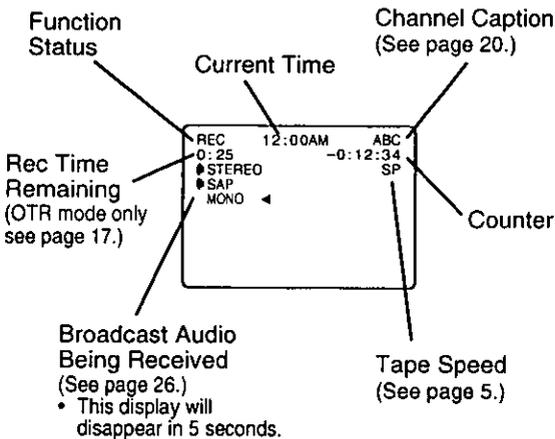
Menu Screen

1 Press ACTION* to display the menu.

2 Press ▲▼ and ▶ to make your selection.

```
-------- MENU --------
  SET UP VCR
  SET UP FEATURE
  SET CLOCK
  SET UP CHANNEL
    IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET   :▶ KEY
END   :ACTION KEY
```

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

VCR Status & Clock Display

Press DISPLAY to display or remove the overlay shown below.

Function Status

Current Time

Channel Caption (See page 20.)

```
REC   12:00AM     ABC
0:25           -0:12:34
STEREO             SP
SAP
MONO  ◀
```

Rec Time Remaining (OTR mode only see page 17.)

Counter

Broadcast Audio Being Received (See page 26.)
• This display will disappear in 5 seconds.

Tape Speed (See page 5.)

Blank Tape/ No Video Signal Indication

Whenever a blank section of a tape comes up in Play mode, or when the selected channel has no broadcast signal with the Blue Back ON/OFF Feature (page 21) set to ON, the TV screen will turn solid blue.
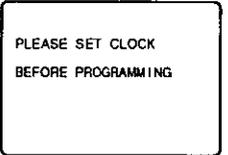
Warning and Instruction Displays

These displays will alert you of a missed operation or provide further instructions.
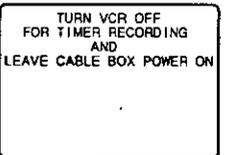
If no active channels are found for CHANNEL MEMORY... (See page 12.)

```
NO CH FOUND
PLEASE CHECK ANTENNA
CABLE CONNECTION THEN
PUSH VCR CH UP KEY AGAIN
```
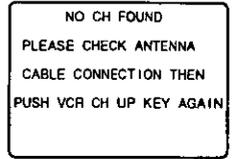
If you attempt to set or review a Timer Recording and the Clock is not set... (See page 18.)

```
PLEASE SET CLOCK
BEFORE PROGRAMMING
```

After a Timer Program has been set... (See page 18.)

```
TURN VCR OFF
FOR TIMER RECORDING
AND
LEAVE CABLE BOX POWER ON
```

If you press REC on the remote control or VCR, and a cassette is inserted with no record tab... (See page 16.)

```
CHECK CASSETTE
RECORD TAB
```
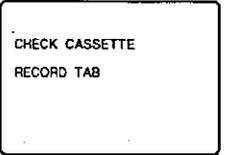
If you press PLAY, FF, REW, or REC on the remote control or VCR without a cassette inserted... (See pages 15, 16)

```
NO CASSETTE
PLEASE INSERT A CASSETTE
```
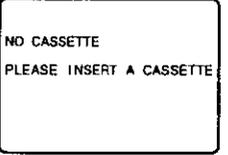
If you press POWER or STOP during a Timer Recording... (visible in VCR mode only) (See page 19.)

```
TO CANCEL TIMER REC
PUSH POWER THEN STOP KEY
```
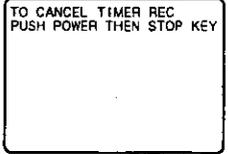
If head cleaning becomes necessary while playing back a tape... (See page 5.)

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

END:PLAY KEY
```
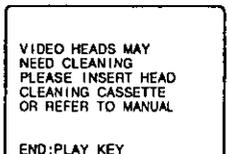
If you press a function button other than STOP/EJECT or POWER on the VCR, or STOP or EJECT or POWER on the remote control while the VCR is in VCR Lock mode... (See page 22.)
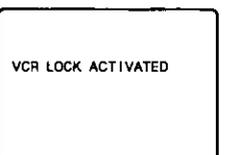
```
VCR LOCK ACTIVATED
```

14

Playback a Tape

PLAY

☑ Check list before you begin.

☐ All connections are made.
(See pages 6~9.)
☐ TV and VCR are plugged in.
☐ TV is turned on and set to the VCR channel (CH 3 or 4).

TRACKING/ **1** FF/REW **2**
V-LOCK Search

Multi Function Display **3·4**

2
PLAY

FF/REW
Search

3

PAUSE

TRACKING/
V-LOCK

SLOW

Caution:

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

1 Insert a cassette.
- VCR power comes on automatically.
- "VCR" lights in the Multi Function Display.

2 Press PLAY on the remote or VCR to start playback.
- Playback begins automatically if cassette has no record tab.

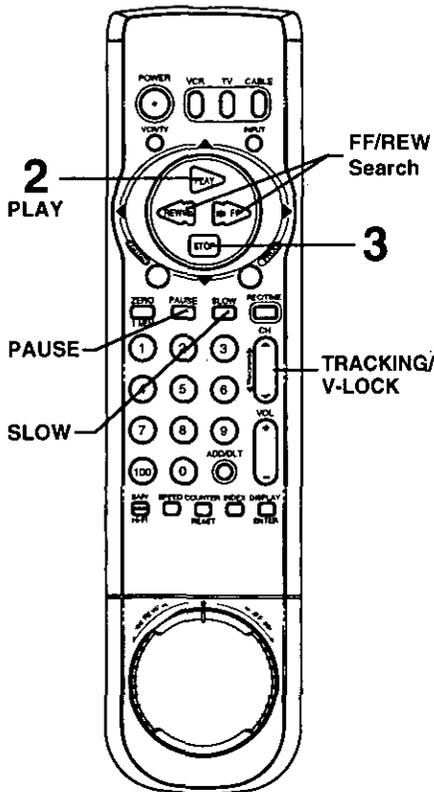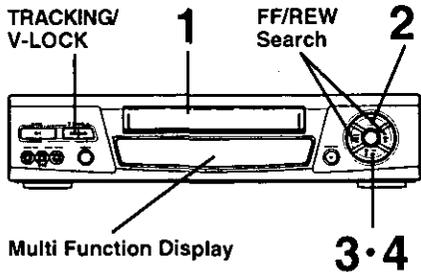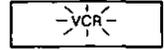## 3 Press STOP on the remote or VCR to stop playback.
- To rewind the tape, press REW.

4 Press EJECT on the VCR to eject the cassette.
- You may eject a cassette with power on or off.

To Find a Particular Scene During Playback

Press REW or FF during playback to search for a scene.
- Search speed for SP mode tapes is 7 times and SLP mode tapes is 21 times the normal speed.
- Some noise bars will appear during search.

Special Effects During Playback
These features work best in SP or SLP mode. The sound will be muted.

Slow Motion Playback
Press SLOW to start slow motion playback during playback.
Press PLAY or SLOW to release.

Still (Freeze) Frame Picture
Press PAUSE to freeze and release the picture.
- To reduce picture noise, first press SLOW. Then, use CH (TRACKING) ▲/▼ to clear up the picture. Now, press PAUSE.

Frame by Frame Advance
In Still mode, hold down SLOW to advance the still picture one frame at a time. Press PAUSE to release.

Features for a Quality Picture

Digital Auto Picture
This feature automatically controls the video output signal for less noise depending on the tape condition.

Digital Auto Tracking
This feature 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 CH (TRACKING) ▲/▼ during playback until the picture clears up. To return to Auto Tracking mode, press POWER off and then on again.

V-Lock Control (to reduce picture jitter)
In Still mode, CH (TRACKING) ▲/▼ operate as a V-Lock control. Press ▲/▼ until the picture is stabilized.
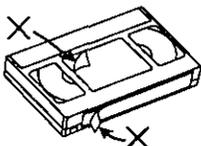
NOTE
- After the VCR is in Still or Slow mode for 3 minutes, it will switch to the Stop mode automatically to protect the tape and the video head.

Basic Operation

15

Record On a Tape

☑ Check list before you begin.

- ☐ All connections are made.
  (See pages 6~9.)
- ☐ VCR is plugged in.
- ☐ TV is turned on and set to the VCR
  channel (CH 3 or 4).

Multi Function Display

PAUSE

2

3

CHANNEL
Up/Down

DISPLAY

---

1 Insert a cassette with record tab.

- VCR power comes on automatically.

---
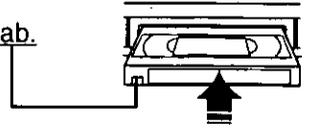
2 Press CH ▲/▼* or NUMBERED keys to select a channel.

- Or, press CHANNEL ▲/▼ on the VCR.
- Holding down CH ▲/▼ will increase the channel search speed.
- To record from an outside source, press CH ▲/▼ or INPUT to select "LINE" (see page 17).

CH 08
ABC

---
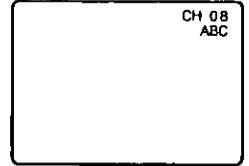
3 Press SPEED to change the recording speed.
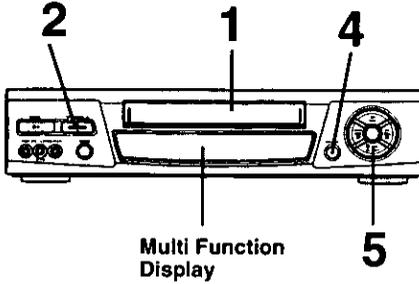
- SP = Standard Play ,
  LP = Long Play
  SLP = Super Long Play
  (See page 5.)

SP

---
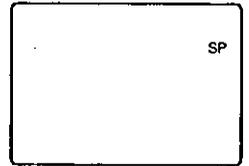
4 Press REC/TIME on the remote control or VCR to start recording.

- To edit out unwanted portions, press PAUSE to pause the recording in progress.
  To release, press PAUSE again.
  (After the VCR has been in Pause mode for 5 minutes, it will stop automatically to protect the tape and video head.)

One Touch Timer Recording (OTR)

The VCR starts recording and turns itself off at a preset time.

In step 4, **press REC/TIME** repeatedly to set the length of the recording. Each press will change the stop time as shown.

Normal Rec → 0:30 → 1:00
4:00 ← 3:00 ← 2:00 ← 1:30
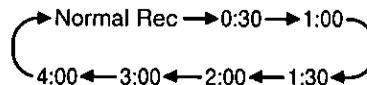
- "TIMER" lights in the Multi Function Display.
- The remaining recording time can be displayed by pressing DISPLAY in OTR mode.

---

5 Press STOP to stop recording.

- Or, press STOP/EJECT on the VCR.

CHANNEL
Up/Down

VCR/TV   Multi Function
          Display

VCR/TV   INPUT

                          CHANNEL
                          Up/Down
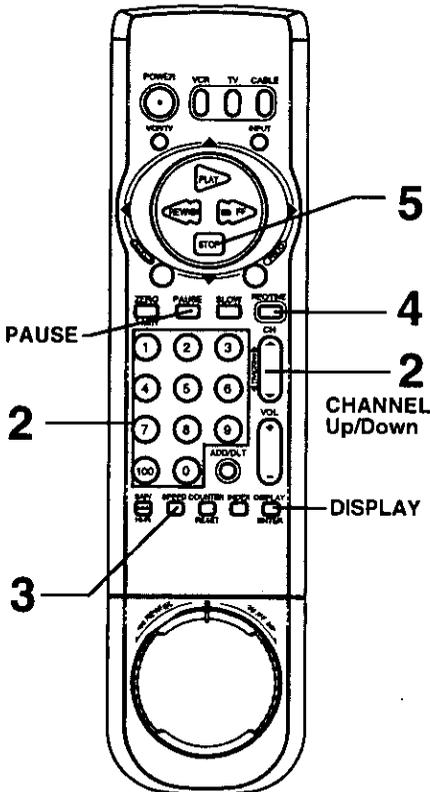
Selecting the Input Mode

Press INPUT.
The display will change in the order below.

Channel ────── LINE1
Number
────────── LINE2

or
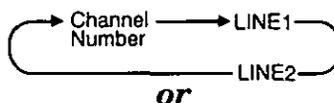
Press CH ▲/▼.
The display will change in the order below.

1 ─ 2 ─ 3
(CABLE) (TV)
LINE2 ← LINE1 ← 125 or 69
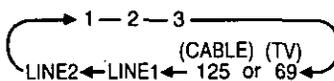
• LINE1: For rear audio/video connection.
• LINE2: For front audio/video connection.

• When LINE is selected, "L1" or "L2" is displayed in the Multi Function Display for about 4 seconds.

Record One Program While Watching Another

1 Press VCR/TV while recording is in progress to turn off the VCR indicator in the Multi Function Display.

2 Use the TV channel controls to select a program. The VCR will continue to record your program while you watch any channel you choose.

• To switch back and forth between the recording and viewing channel, press VCR/TV.

Selecting Channels at the VCR

1 Turn your TV and VCR on.

• VCR Indicator lights on the Multi Function Display. If indicator doesn't light, press VCR/TV to turn it on.

2 Use CH ▲/▼ on the remote control or VCR to select channels.

• To switch back to TV channel selection, press VCR/TV to turn VCR indicator off, or simply turn the VCR power off.
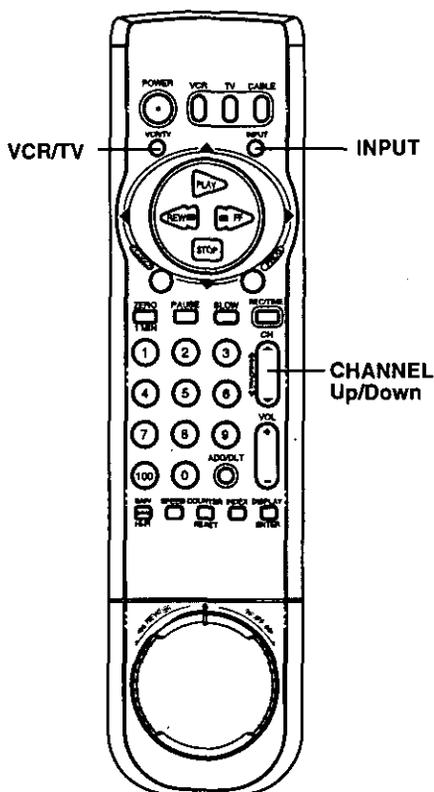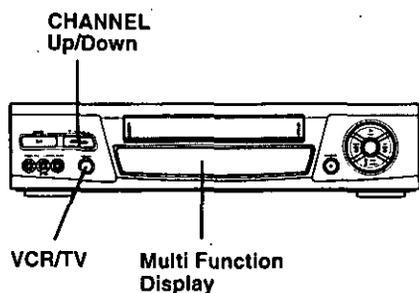
Timer Recording

You can set up the VCR to record a one time, daily, or weekly program while you are away or otherwise occupied. Up to 8 programs can be stored in memory.

✓ Check list before you begin.

☐ All connections are made.
(See pages 6~9.)
☐ TV and VCR are plugged in and turned on.
☐ VCR/TV selector is set to "VCR."
☐ Clock is set to correct time.
☐ Record tab in place. (See page 5.)

7 Multi Function Display

1 Press PROG* to display the "SET PROGRAM" screen.

```
----- SET PROGRAM -----

VCR Plus+ PROGRAM
TIMER PROGRAM

SELECT:▲ ▼ KEY
SET    : ► KEY
END    : PROG KEY
```

2 Press ▲▼ to select "TIMER PROGRAM," and then press ►
to display the program screen.
• If a program is already in memory, press ▲▼ and ► to select an unused program number.

```
DATE / START  STOP   CH
7 FRI --:--  --:--
TODAY\
CATEGORY:N/A        SLP

SELECT START DATE
SELECT:▲ ▼ KEY
SET    : ► KEY
END    : PROG KEY
```

3 Press ▲▼ and ► to select and set one of the following:
• 1~31 =One time recording
• DAILY =Same time MON~FRI
• WEEKLY (SUN~SAT) =Same time once a week

Example

Today's Date — 7

8—9········31— 1 — 2······6

SELECT▲ / ▼ Selection Order   DAILY

WEEKLY ......WEEKLY __ WEEKLY
(SAT)   (MON)   (SUN)

4 Press ▲▼ and ◄►
to select and set each
of the remaining
items at right.

Remaining Items to be set:
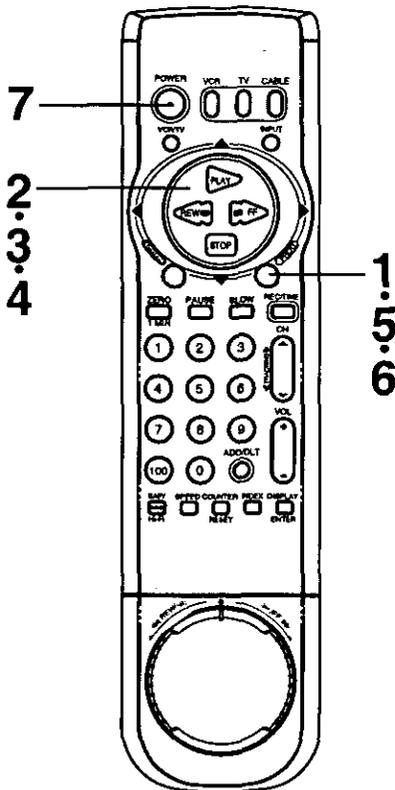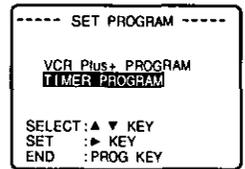• START time   • STOP time
• CH(annel) number, or LINE for outside source recording
• Category (N/A [not applicable], SPORTS, MOVIE, COMEDY, MUSIC, DRAMA)
• Speed (SP, LP, SLP)

To Make Corrections
Repeatedly press ► to move the cursor to the right, or ◄ to move to the left to the incorrect entry and make the correction.

5 Press PROG to end the program.
• This screen appears for confirmation.

```
P DT START  STOP  CH SPD
1 DAY  9:00A 12:00A 08  SP
2  -- --:-- --:--  --  --
3  -- --:-- --:--  --  --
4  -- --:-- --:--  --  --

CANCEL:ADD/DLT KEY
SELECT 1-8:▲ ▼ KEY
ENTER  : ► KEY
END    : PROG KEY
```
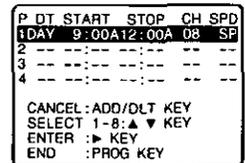
To Enter More Programs
Press ▲▼ and ► to select and set a blank program number, and then repeat steps 3 and 4.

6 Press PROG to exit this mode.

7 Press POWER off to set the timer.
• **When recording programs via a cable box, make sure the cable box is left ON and tuned to the desired channel.**

```
- TIMER -
```
Multi Function Display

Important notes when using a DSS receiver
• When recording programs via a DSS receiver, the DSS receiver must be left on.
• When recording programs via an antenna or cable, the DSS receiver must be turned off.

NOTES
• A cassette with no record tab is ejected and "TIMER" flashes when the power is turned off to set the timer.
• 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 16), the timer recording will not be performed.
• If there is a power interruption of more than one minute, the recording will not be performed or continue.

POWER

Multi Function Display   STOP

POWER

SELECT/SET
(▲▼◄►)
keys

STOP

PROG

ADD/
DELETE
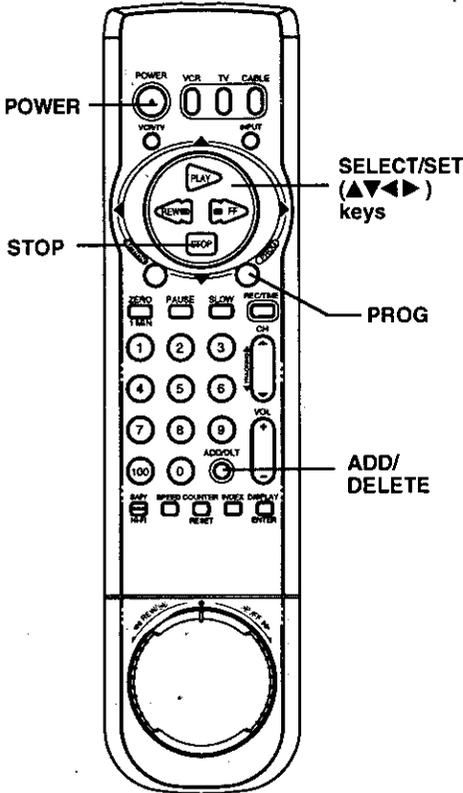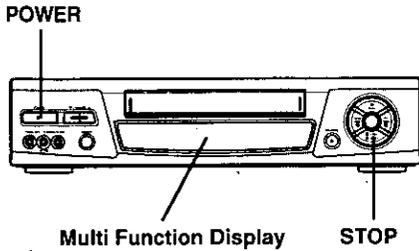
Cancel a Timer Recording:
(Recording is in progress)

Press POWER and then STOP within 10 seconds to cancel the timer recording.

• The TIMER indicator goes out in the Multi Function Display.

Replace Program Contents:
(Recording is not in progress)
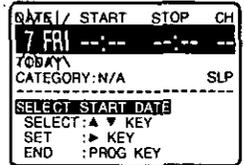
1 Press PROG to display the "SET PROGRAM" screen.

2 Press ▲▼ to select "TIMER PROGRAM," and then press ► to display all currently set programs.

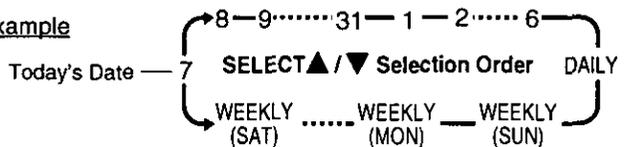3 Press ▲▼ and ► to select and set a program number. (See page 18.)

4 Press ▲▼ and ◄► to select and set replacement timer information.

5 Press PROG twice to exit this mode.

```
----- SET PROGRAM -----

VCR Plus+ PROGRAM
TIMER PROGRAM

P DT START  STOP  CH SPD
1 -- --:-- --:-- -- --
2  8 10:00P12:00P125   SP
3 10  8:00P 9:00P 10   SP
4 SU  9:00P10:00P  L   LP

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

```
DATE / START  STOP  CH
8 SAT 10:00P12:00P 125
TODAY             ABC
CATEGORY:SPORTS    SP
------------------------
SELECT START DATE
SELECT:▲ ▼ KEY
SET   :◄ ► KEY
END   :PROG KEY
```

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

1 Press PROG to display the "SET PROGRAM" screen.

2 Press ▲▼ to select "TIMER PROGRAM," and then press ► to display all currently set programs.

3 Press ▲▼ to select a program number.

4 Press ADD/DLT if you want to clear the program.

5 Press PROG to exit this mode.

```
----- SET PROGRAM -----

VCR Plus+ PROGRAM
TIMER PROGRAM

P DT START  STOP  CH SPD
1 DAY  9:00A12:00A 08  SP
2  8 10:00P12:00P125   SP
3 10  8:00P 9:00P 10   SP
4 SU  9:00P10:00P  L   LP

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

```
P DT START  STOP  CH SPD
1 -- --:-- --:-- -- --
2  8 10:00P12:00P125   SP
3 10  8:00P 9:00P 10   SP
4 SU  9:00P10:00P  L   LP

SELECT 1-8:▲ ▼ KEY
ENTER  :► KEY
END    :PROG KEY
```
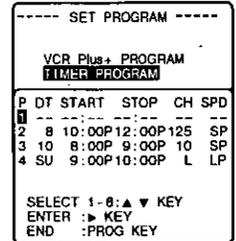
◄ SET ►
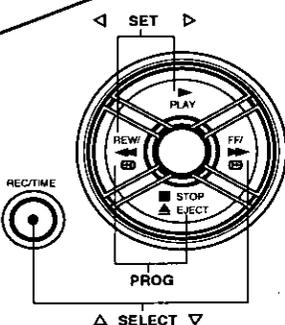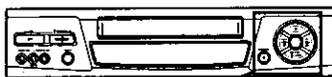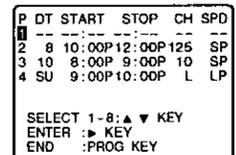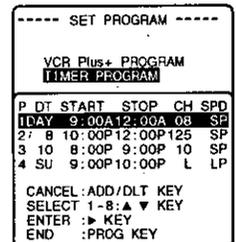
A SELECT ∇

Timer Recording Using VCR Buttons
(Make sure a cassette tape is not inserted in the VCR.)

1 Hold down STOP/EJECT and press REW to enter the Program mode.

2 Press FF or REC/TIME repeatedly or hold down to make selections.

3 Press PLAY to set the item and move on.
   • To make corrections, repeatedly press PLAY to move the cursor to the right, or REW to move to the left to the incorrect entry and make the correction.

4 Press STOP/EJECT and REW together to display program contents after all items have been entered.
   • You cannot clear programs with the VCR buttons.

5 Hold down STOP/EJECT and press REW, (release REW first, and then release STOP/EJECT) to exit this mode.

6 Insert a cassette with record tab and press POWER off to set the timer.

Basic Operation

19

*Important: If the remote control POWER, ACTION, PROG, CHA/▼, INDEX or ADD/DLT button does not work when pressed, press the VCR button on the remote and try the button again.

Channel Caption

You can set channel names, i.e. ABC, CBS, so that when selected, the channel name and number appear on-screen for easy identification. You can go with preset names (up to 24), or manually create your own (up to 10).

Note: You will need a list of channels received in your area and the channel numbers you receive them on.

ADD/
DELETE

Preset Caption

1 Press ACTION* to display the menu.

2 Press ▲▼ to select "SET UP CHANNEL," and then press ▶ to display the "SET UP CHANNEL" screen.
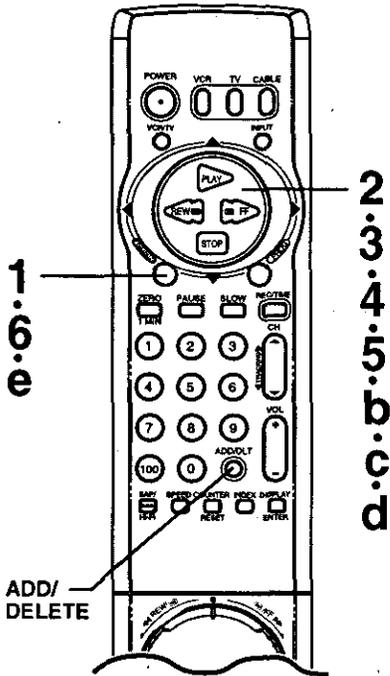
3 Press ▲▼ to select "CHANNEL CAPTION," **and then press ▶** to display the "CHANNEL CAPTION" screen.

4 Press ▲▼ to select "PRESET CAPTION," **and then press ▶** to display the "PRESET CAPTION" screen.

- You can set up to twenty-four channel captions. If you want to set a station name other than these, go to the "Manual Caption" section below.

5 Press ▶ to move the shaded area to the right side.

Then, press ▲▼ to change the memorized channel number to match the caption.

Next, press ◀ to set the memorized channel number.
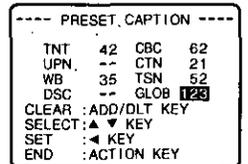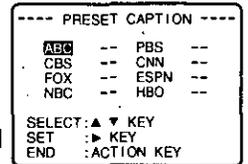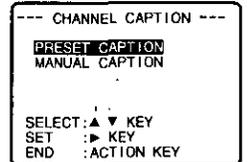
Now, press ▲▼ to continue.

Repeat step 5 until the Caption List is complete.

To Make Corrections
Press ▲▼ and ▶ to select the memorized channel number.
Then, press ▲▼ to change, or ADD/DLT to delete the channel number.

6 Press ACTION four times to exit this mode and return to the normal screen.

```
-------- MENU --------
SET UP VCR
SET UP FEATURE
SET CLOCK
SET UP CHANNEL
IDIOMA/LANGUE:ENGLISH
```

```
---- SET UP CHANNEL ----
ANTENNA : CABLE
AUTO SET
CHANNEL CAPTION
CABLE/DSS BOX SET UP
VCR Plus+ CH SET UP
  SELECT:▲ ▼ KEY
  SET   :▶ KEY
  END   :ACTION KEY
```

```
--- CHANNEL CAPTION ---
PRESET CAPTION
MANUAL CAPTION

  SELECT:▲ ▼ KEY
  SET   :▶ KEY
  END   :ACTION KEY
```

```
---- PRESET CAPTION ----
ABC  --  PBS  --
CBS  --  CNN  --
FOX  --  ESPN --
NBC  --  HBO  --
  SELECT:▲ ▼ KEY
  SET   :▶ KEY
  END   :ACTION KEY
```

```
---- PRESET CAPTION ----
TNT  42  CBC  62
UPN  --  CTN  21
WB   35  TSN  52
DSC  --  GLOB 123
CLEAR :ADD/DLT KEY
SELECT:▲ ▼ KEY
SET   :◀ KEY
END   :ACTION KEY
```

Manual Caption

a Follow steps 1~3 in the above section.

b In step 4, press ▲▼ to select "MANUAL CAPTION," **and then press ▶** to display the "MANUAL CAPTION" screen.

```
--- CHANNEL CAPTION ---
PRESET CAPTION
MANUAL CAPTION

  SELECT:▲ ▼ KEY
  SET   :▶ KEY
  END   :ACTION KEY
```
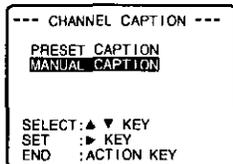
c Press ▲▼ to select "CH NUMBER," **and then press ▶** to move the shaded area to the right.

```
---- MANUAL CAPTION ----
CH NUMBER    CAPTION
  02          ----
  SELECT:▲ ▼ KEY
  SET   :▶ KEY
  END   :ACTION KEY
```
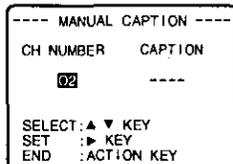
- Channels already set in the "Preset Caption" section and channels deleted from Channel Memory are not displayed.
- You can set a total of ten channel captions with up to four characters each.

d Press ▲▼ to select, **and then press ▶** to enter each character of the caption.

- Characters will change in the following order.

→A→B→C·····→Z→BLANK→—→&→
└────────9←·····2←1←0←/←!←┘
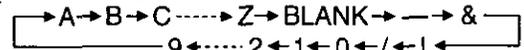
Now, press ◀ repeatedly to move the cursor back to CH NUMBER.
Repeat steps "c" and "d" as desired.

```
---- MANUAL CAPTION ----
CH NUMBER    CAPTION
  02          A---
CLEAR :ADD/DLT KEY
SELECT:▲ ▼ KEY
SET   :◀ ▶ KEY
END   :ACTION KEY
```

To Make Corrections, repeatedly press ▶ to move the cursor to the right, or ◀ to move to the left to the incorrect entry and make the correction.
To Clear the Caption, press ADD/DLT.
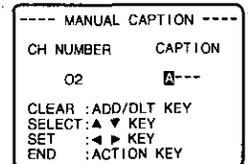
e Press ACTION four times to exit this mode and return to the normal screen.

Time Stamp Feature

For about the first 10 seconds of each recording, the VCR automatically writes the following program data on the tape: Date, Start time, Scheduled stop time (for Timer Rec. only), Channel No. and Category (for Timer Rec. only). Then, if playback is started at the starting point of the recording, this information will be displayed about 7 seconds after playback begins for a few seconds.

```
--------- MENU ---------
  SET UP VCR
  SET UP FEATURE
  SET CLOCK
  SET UP CHANNEL
  IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET    :► KEY
END    :ACTION KEY
```

1 **Press ACTION to display the menu.**

2 **Press ▲▼ to select "SET UP FEATURE," and then press ► to** display the "SET UP FEATURE" screen.

```
---- SET UP FEATURE ----
  TIME STAMP  : OFF


SET    :► KEY
END    :ACTION KEY
```
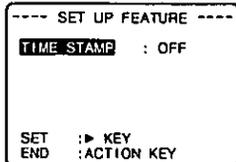
3 **Press ► to select "ON" or "OFF."**

• When "OFF" is selected, the program data is written on the tape, but will not be displayed for the first 7 seconds of playback.

4 **Press ACTION twice to exit.**

<Time Stamp Example>

Normal/
One Touch Recording

```
12/28/1998 MON
12:00PM
CH 08 ABC
```

Timer Recording

```
12/28/1998 MON
12:00PM - 1:00PM
CH 08 ABC  SPORTS
```

When Clock is not set...

```
--/--/----
--:--
CH 08 ABC
```

• If the tape speed is changed immediately after recording begins, the display may be incorrect.
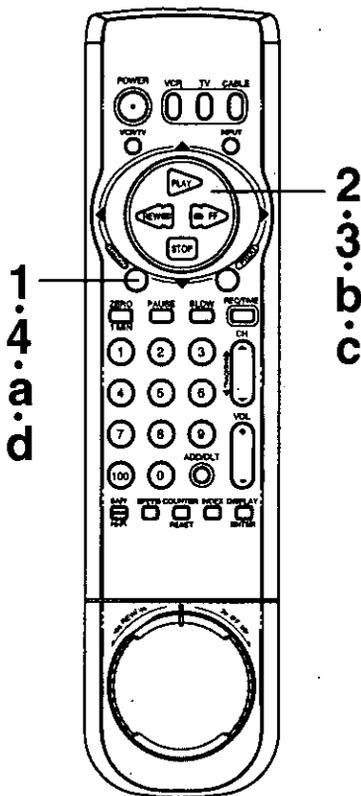
Blue Back ON/OFF Feature

You may choose whether or not you want the VCR to display a solid blue screen when the broadcast signal is very weak or nonexistent.
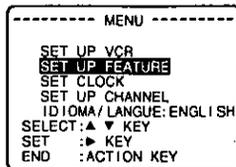
```
--------- MENU ---------
  SET UP VCR
  SET UP FEATURE
  SET CLOCK
  SET UP CHANNEL
  IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET    :► KEY
END    :ACTION KEY
```

a **Press ACTION to display the menu.**

b **Press ▲▼ to select "SET UP VCR," and then press ► to** display the "SET UP VCR" screen.

```
------ SET UP VCR ------
REPEAT PLAY        : OFF
BEEPER             : ON
NOISY CH BLUE BACK : ON

SELECT:▲ ▼ KEY
SET    :► KEY
END    :ACTION KEY
```
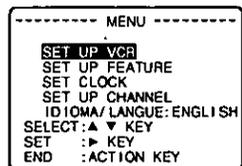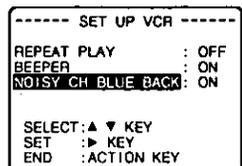
c **Press ▲▼ to select "NOISY CH BLUE BACK," and then press ►** to select "ON" or "OFF."

• When "ON" is selected, a solid blue screen appears whenever the signal is weak or nonexistent. When "OFF" is selected, the picture is displayed regardless of the signal condition.

• The picture can not always be seen clearly when "OFF" is selected.

d **Press ACTION twice to exit.**

⊖ NOTE • When the VCR is connected to a Combination VCR which has a Blue Back feature, even if the VCR Blue Back is set to "OFF" on the VCR, the screen will go to a blue background.

More You Can Do

Special VCR Features (continued)

☑️ **Check list before you begin.**

☐ All connections are made.
(See pages 6~9.)
☐ VCR is plugged in.
☐ TV is turned on and set to the VCR
channel (CH 3 or 4).

REC/TIME

Auto Operation Functions

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

Auto Rewind
When a tape reaches its end during playback, fast forward or manual record, the VCR will rewind and go into Stop mode.

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

Memory Rewind Off
When the POWER button is pressed during rewind, the VCR will turn off after rewind is complete.

* For record tab information, see page 5.

*Important: If the remote control POWER, ACTION, PROG, CH▲/▼, INDEX or ADD/DLT button does not work when pressed, press the VCR button on the remote and try the button again.
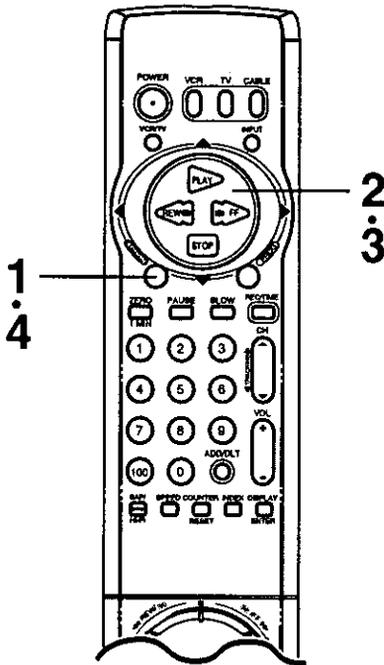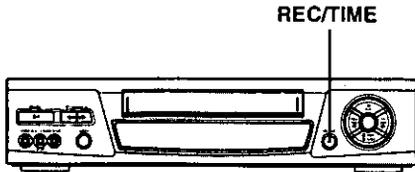
VCR Lock Feature

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

Hold down REC/TIME on the VCR without a cassette inserted **for 7 seconds** during Power On mode.
• "NO CASSETTE PLEASE INSERT A CASSETTE" is displayed when REC/TIME is pressed. Please disregard this warning and continue to hold down REC/TIME for 7 seconds.

> VCR LOCK ACTIVATED
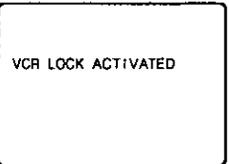
To Cancel the VCR Lock feature,
with or without a cassette inserted, hold down REC/TIME on the VCR for 7 seconds again while in Stop mode.

> VCR LOCK OFF
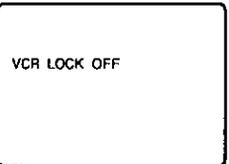
• VCR Lock mode is cancelled automatically after about 24 hours as long as the clock is set.

Warning Beeper Feature

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

1 Press ACTION* to display the menu.

```
--------- MENU ---------
SET UP VCR
SET UP FEATURE
SET CLOCK
SET UP CHANNEL
IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET   :▶ KEY
END   :ACTION KEY
```
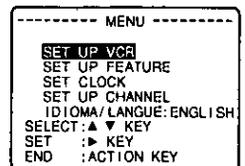
2 Press ▲▼ to select "SET UP VCR," **and then press ▶** to display the "SET UP VCR" screen.

3 Press ▲▼ to select "BEEPER," **and then press ▶** to select "ON" or "OFF."

```
------ SET UP VCR ------
REPEAT PLAY        : OFF
BEEPER             : ON
NOISY CH BLUE BACK : ON

SELECT:▲ ▼ KEY
SET   :▶ KEY
END   :ACTION KEY
```
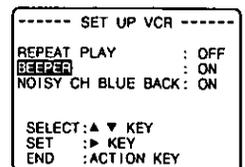
4 Press ACTION twice to exit this screen.

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

Repeat Play

The VCR will play your recording over and over.

1 Press ACTION to display the menu.

```
--------- MENU ---------
SET UP VCR
SET UP FEATURE
SET CLOCK
SET UP CHANNEL
  IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET    :► KEY
END    :ACTION KEY
```

2 Press ▲▼ to select "SET UP VCR," and then press ► to display the "SET UP VCR" screen.

3 Press ▲▼ to select "REPEAT PLAY," and then press ► to select "ON" or "OFF."

```
------ SET UP VCR ------
REPEAT PLAY         : OFF
BEEPER              : ON
NOISY CH BLUE BACK: ON

SELECT:▲ ▼ KEY
SET    :► KEY
END    :ACTION KEY
```

- When "ON" is selected, the VCR plays the tape to its end or until a blank portion of over 30 seconds is detected (erased portions are not considered blank). The tape is then rewound and played again and again until Repeat Play is turned off.

4 Press ACTION twice to return to the normal screen.

Shuttle Variable Speed Search

The SHUTTLE Ring allows you to smoothly control the tape speed during special effects playback in both forward or reverse.

A Turn SHUTTLE Ring on the remote control <u>while in Play or Still mode</u> to place the forward or reverse search.

- The more you turn the Ring, the faster the search speed will be.

B Press a function button such as: PLAY, STOP, etc. on the VCR or remote control to release the Shuttle mode.

- The VCR performs the function of the button pressed.

(NOTES)
- When the SHUTTLE Ring is turned more than half in Stop mode, normal Fast Forward or Rewind will begin.
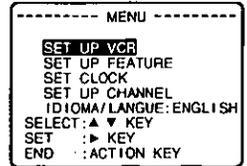- Some noise bars are normal during Shuttle operation.
- After 3 minutes in Still or Slow, the VCR will go into Stop mode.
- When the SHUTTLE Ring is released, the VCR goes into Still mode.

One Minute Skip

The VCR rapidly skips over one minute of tape.

Press ZERO/1 MIN in Play mode.

- The VCR will go into FF search mode and skip over 60 seconds of recorded time. Normal playback will then resume.

Zero Search

To quickly return to a specific tape location.

a Press DISPLAY to display the Time Counter overlay during playback.

```
STOP   12:00AM      ABC
                 0:00:30
♦STEREO             SP
♦SAP
  MONO  ◄
```

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

c Continue playback, rewind, or fast forward.

```
STOP   12:00AM      ABC
                 0:00:00
♦STEREO             SP
♦SAP
  MONO  ◄
```

d Press ZERO/1MIN in Stop mode when you want to return to "0:00:00."

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

More You Can Do

Tape Operation (continued)

VHS Index Search System

Each time you start a recording, an invisible index mark is placed on the tape. When timer recordings are made, program index and program information (see "Time Stamp Feature" on page 21) are also included. You can then use these index marks to access or scan your recordings.

REWIND   FAST FORWARD
4   4

2

3

REWIND
4

FAST
FORWARD
4

1
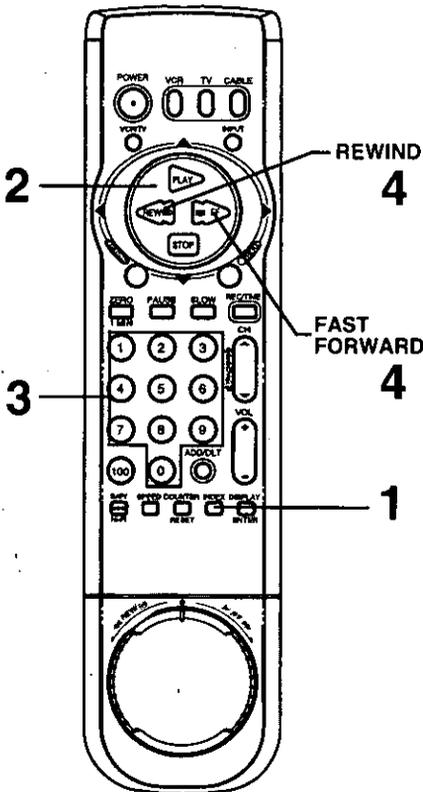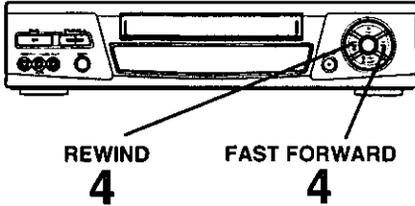
Direct Access
(For normal and/or timer recordings)

This feature allows you to go directly to the recording you want from anywhere on the tape by entering the appropriate index number.

1 Press INDEX* to display the "SELECT SEARCH MODE" screen.

- This screen appears only if there are timer recordings on the Program Index list. If this screen does not appear, go to step 3.

```
SELECT SEARCH MODE

INDEX SEARCH
PROGRAM INDEX SEARCH

SELECT :▲ ▼ KEY
SET    :▶ KEY
END    : INDEX KEY
```
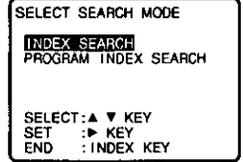
2 Press ▲▼ to select "INDEX SEARCH," and then press ▶ to display the "INDEX" screen.

```
INDEX
```
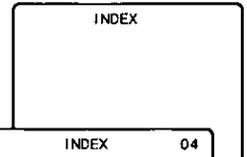
3 Press a NUMBERED key to select the desired recording.

- To calculate the number, see below.

```
INDEX        04
```
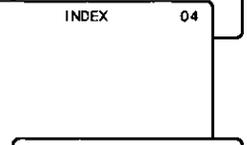
4 Press REW or FF to start a reverse or forward search.

- When the designated location is reached, the VCR goes into Playback mode.

```
INDEX SEARCH 04
```

To calculate the Index Number

Count forward or backward each recording starting point, including the recording you want to see, from wherever you are on the tape.

Example 1:
If you are watching recording 4 and you want to watch recording 2, count the start points to number 2. The total is 3. Enter 3 in step "3" and press REW.

1	2	3	4	5	6	7
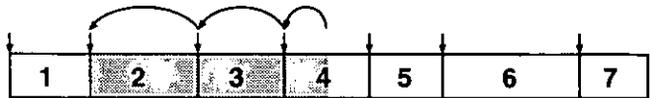
Example 2:
If you are watching recording 2 and you want to watch recording 6, count the start points to number 6. The total is 4. Enter 4 in step "3" and press FF.

1	2	3	4	5	6	7

NOTE: ↓ indicates start points of each recording.

NOTES
- Make each entry within 10 seconds, or the Index Search mode will be canceled.
- Index marks will be placed for Timer recordings as well.
- If any of the VHS Index Search System are initiated extremely close to an index mark, the index mark may not be counted in the search.
- In the Program Index Search mode, this VCR can memorize a total of 8 programs in order of recording. If you memorize more than 8 programs, the first program will be deleted and the new program will be listed.

Important for Program Index Search:
Timer recordings must be recorded back to back in order for them to be placed on the Program Index list. If a timer recording is followed by a function, such as REW or PLAY, the data is lost.

Program Index Search
(For timer recordings only)

This feature allows you to choose a timer recorded program from a Program Index list and then start a search for that program.
Once the tape is ejected or normal recording is started, all program Index data are deleted.

1 Press **INDEX** to display the "SELECT SEARCH MODE" screen.

2 Press ▲▼ to select "PROGRAM INDEX SEARCH," **and then press ▶** to display the "PROGRAM INDEX" screen.

3 Press ▲▼ to select the desired recorded program, **and then press ▶** to start the forward or rewind search.

- When the designated program is reached, the VCR automatically goes into Playback mode.

```
SELECT SEARCH MODE

INDEX SEARCH
PROGRAM INDEX SEARCH
```

```
      PROGRAM INDEX
DATE   START CATEGORY   CH
12/28 10:00A SPORTS ABCD
 1/ 4 12:30P MOVIE     NBC
 1/ 4  8:00P COMEDY    CBC
 1/ 7  3:00P MUSIC     NBC

SELECT:▲ ▼ KEY
SEARCH:▶ KEY
END    : INDEX KEY
```

```
FF
```

```
PROGRAM INDEX SEARCH
```


STOP/EJECT **d**

REWIND **c**   FAST FORWARD **c**

REWIND **c**

FAST FORWARD **c**

2
3
b

1
a

d
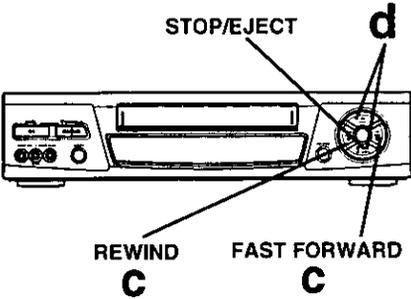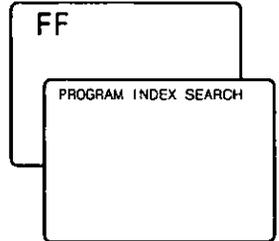
Index Scan
(For normal and/or timer recordings)

This feature allows you to scan (forward or reverse) each recording for 10 seconds in Playback mode.

a Press **INDEX** to display the "SELECT SEARCH MODE" screen.

- This screen appears only if there are timer recordings on the Program Index list. If this screen does not appear, go to step c.
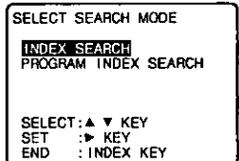
b Press ▲▼ to select "INDEX SEARCH," **and then press ▶** to display the "INDEX" screen.

c Press **REW** or **FF** to begin the scan.

- As each index mark is reached, a short playback will be performed after which FF or REW resumes.

d Press **PLAY** to cancel the scan and begin playback.

- You may also press STOP to stop the tape.

```
SELECT SEARCH MODE

INDEX SEARCH
PROGRAM INDEX SEARCH

SELECT:▲ ▼ KEY
SET   :▶ KEY
END   : INDEX KEY
```

```
        INDEX
```

```
FF
```

```
AUTO INDEX SEARCH
```

Start here

† Indexed Point
✦ Play (for about 10 seconds)
— Fast Forward or Rewind
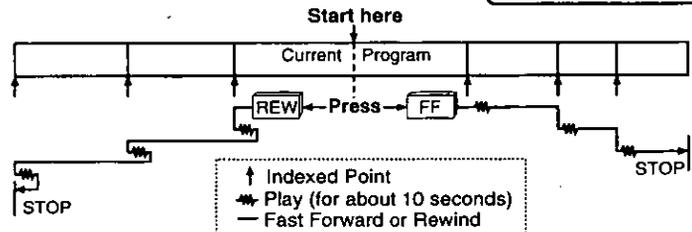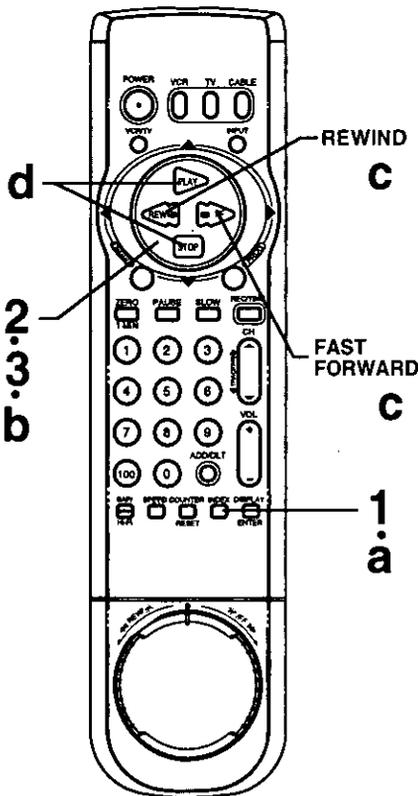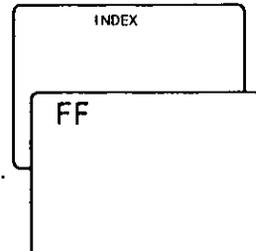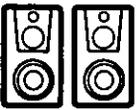
MTS Broadcast/ VHS Hi-Fi Stereo System

✓ Check list before you begin.

☐ The VCR is connected to a stereo TV, or a mono TV and an external stereo amp or receiver with speakers.
☐ The VCR and other components are plugged in and turned on.

Connections to Make

In from Antenna

Audio Out (L/R)

Video Out

Mono TV

and

Stereo TV

Stereo AMP or Receiver

or
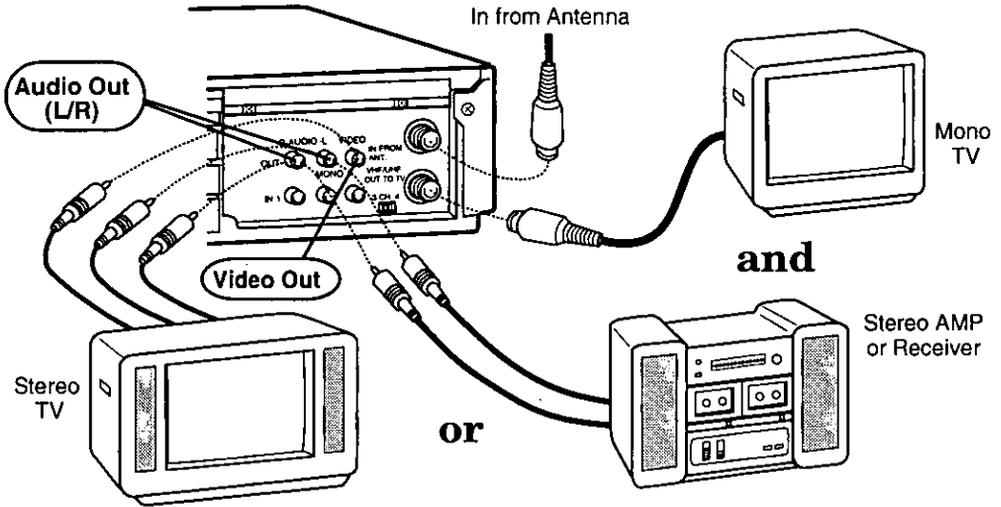
When recording, you may monitor in stereo, by connecting the VCR to either a stereo TV, or a mono sound TV with an external stereo amp and speakers.
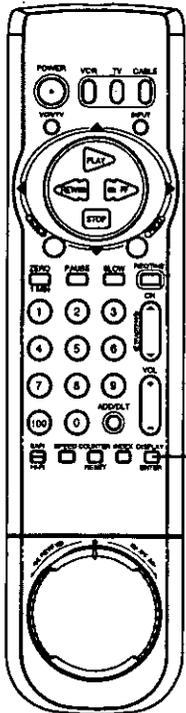
—DISPLAY

Receivable Broadcast Types

The following are possible audio broadcast types and on-screen displays.

The signal being received is indicated with an "《" mark while the selected audio mode is indicated with an arrow.

Press DISPLAY to display the broadcast signal currently being received.

MTS Stereo and SAP broadcast

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

```
STOP    12:00AM      ABC
                   0:00:00
♪STEREO◀           SP
♪SAP
  MONO
```
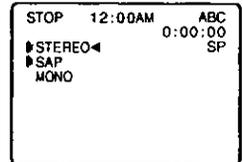
MTS Stereo broadcast

Multi-channel Television Sound Stereo broadcast. Select STEREO audio mode.
- If a stereo broadcast is weak and the display flickers, you may want to select the MONO audio mode for better results.

```
STOP    12:00AM,     ABC
                   0:00:00
♪STEREO◀           SP
  SAP
  MONO
```
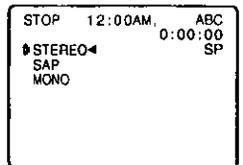
SAP broadcast

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

```
STOP    12:00AM      ABC
                   0:00:00
  STEREO           SP
♪SAP    ◀
  MONO
```
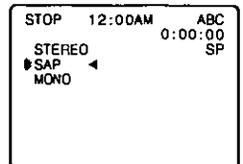
MONO broadcast

Normal monaural sound broadcast.
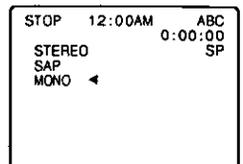
```
STOP    12:00AM      ABC
                   0:00:00
  STEREO           SP
  SAP
  MONO  ◀
```

26

With the proper audio mode setting, your VCR can:

1) record and playback an MTS stereo broadcast (main language) in stereo Hi-Fi.
2) record and playback a monaural broadcast (main language) or Secondary Audio Program (sub language) on the Hi-Fi tracks for better quality monaural sound.
3) playback non Hi-Fi tapes in monaural.

• When recording, the selected broadcast sound is always recorded on the left and right Hi-Fi tracks as well as the normal monaural track. This means your tapes can be played back on Hi-Fi as well as non-Hi-Fi VCRs.

Audio Mode for Recording

1 **Press SAP/Hi-Fi repeatedly**
(each press within 5 seconds) to select the desired audio mode (STEREO, SAP, or MONO).

• Please refer to the "Receivable Broadcast Types" section on page 26.

> ▶STEREO ◀
> ▶SAP ◀
> MONO

• The arrow indicates your selection.

2 **Do a recording.**
See the "Record On a Tape" section on page 16.
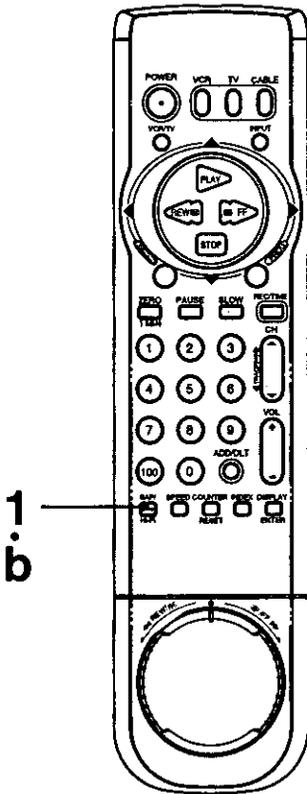
Audio Mode for Playback

a **Playback the tape.**
See the "Playback a Tape" section on page 15.

b **Press SAP/Hi-Fi repeatedly**
(each press within 5 seconds) to select the desired audio mode (HIFI or NORMAL).

• Select "HIFI" to listen to your stereo recordings with stereo sound, or "NORMAL" for monaural sound.

> HIFI ◀
> NORMAL

• The arrow indicates your selection.

1
.
b

NOTES
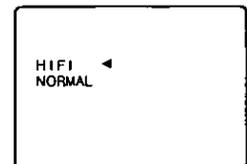
• When purchasing or renting prerecorded tapes, remember that only those recorded in Hi-Fi stereo will play back with true stereo sound. Standard stereo tapes will play back with monaural sound.
• In order to listen to Hi-Fi stereo playback, the VCR AUDIO (L/R) jacks must be connected to a stereo TV or an external stereo amp and speakers. (See page 26.)
• When adjusting the tracking during playback, the Hi-Fi audio sound may revert to normal audio sound. This is normal.
• There may be a difference in audio level between Hi-Fi and normal audio playback.

VCR Plus+ Setup

Easy Taping.

VCR Plus+ programming allows you to set most items of a timer recording by simply entering a special code (PlusCode) found in *TV GUIDE* magazine as well as the TV listings in selected newspapers. In order for your VCR to do a VCR Plus+ recording, or a timer recording of cable stations, some setup is required.

At first, choose your Connection Type.
(Then, follow the instructions under the diagram.)

Connection Type A

<CABLE BOX → VCR → TV>
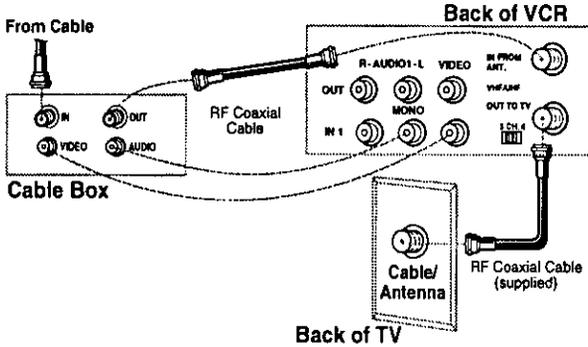
Or, <ANT/CABLE BOX → DSS BOX → VCR → TV>
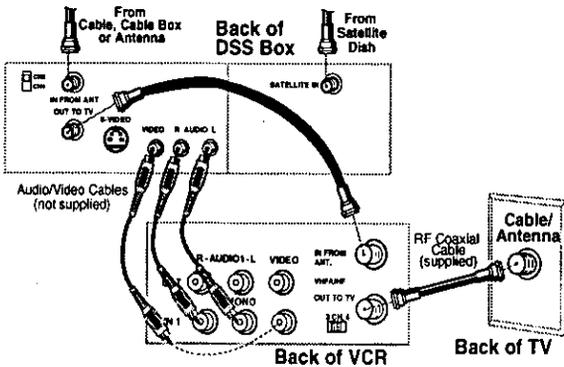
If your system connection looks like one of the diagrams above, do the following.

1. Complete "Cable Box Setup" on page 29.
2. Skip page 30 and go directly to page 31 for VCR Plus+ Programming.

Connection Type B

<VCR → TV>

Or, <VCR → CABLE BOX → TV>

This connection allows viewing (not recording) of scrambled channels.
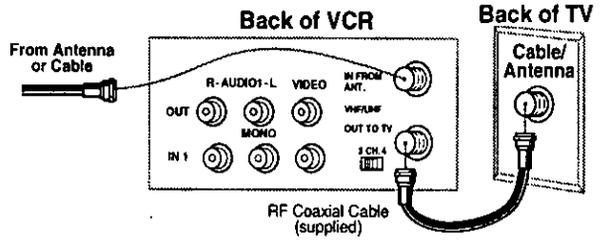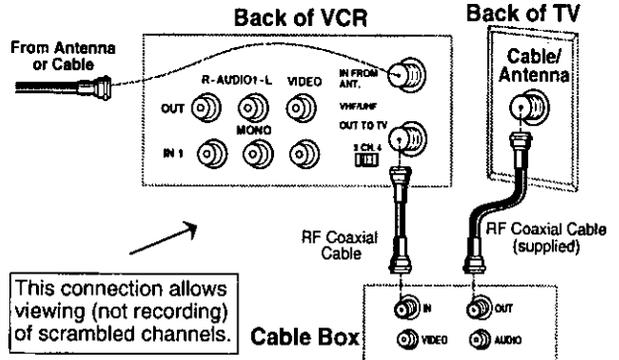
If your system connection looks like one of the diagrams above, do the following.

1. Skip "Cable Box Setup" on page 29 and turn to page 30.
2. Complete "VCR Plus+ Channel Setup" on page 30.
3. Turn to page 31 for VCR Plus+ Programming.

*Important: If the remote control POWER, ACTION, PROG, CH▲/▼, INDEX or ADD/DLT button does not work when pressed, press the VCR button on the remote and try the button again.

If you are using a cable box and it is connected to your VCR in one of the ways shown in Connection Type A on page 28, you will need to complete the Cable Box Setup steps below.

Cable Box Setup

Complete this page only if Type A connection method (pg.28) is used.

1 Press ACTION* to display the menu.

```
--------- MENU ---------
SET UP VCR
SET UP FEATURE
SET CLOCK
SET UP CHANNEL
IDIOMA/LANGUE:ENGLISH
SELECT:▲ ▼ KEY
SET  :► KEY
END  :ACTION KEY
```

2 Press ▲▼ to select "SET UP CHANNEL," **and then press** ► to display the "SET UP CHANNEL" screen.

3 Press ▲▼ to select "CABLE/DSS BOX SET UP," **and then press** ► to display the "SELECT HOOKUP" screen.

```
---- SET UP CHANNEL ----
ANTENNA : CABLE
AUTO SET
CHANNEL CAPTION
CABLE/DSS BOX SET UP
VCR Plus+ CH SET UP
SELECT:▲ ▼ KEY
SET  :► KEY
END  :ACTION KEY
```

4 Press ▲▼ to select your hookup, **and then press** ► to set.

- If you selected CABLE/DSS BOX► VCR►TV, continue with step 5.
  If not, press ACTION three times and turn to page 30.

```
SELECT HOOKUP
CABLE/DSS BOX►VCR►TV
VCR►CABLE/DSS BOX►TV
VCR►TV

SELECT:▲ ▼ KEY
SET  :► KEY
END  :ACTION KEY
```

5 Press ▲▼ to select your cable box or DSS receiver output channel number, **and then press** ► to enter.

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

```
SELECT HOOKUP
CABLE/DSS BOX►VCR►TV

CABLE/DSS BOX OUTPUT CH
CH 01

SELECT:▲ ▼ KEY
SET  :◄ ► KEY
END  :ACTION KEY
```

6 Press ACTION twice to end the setup and return to the normal screen.

Go directly to "VCR Plus+ Programming" on page 31.

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

More You Can Do
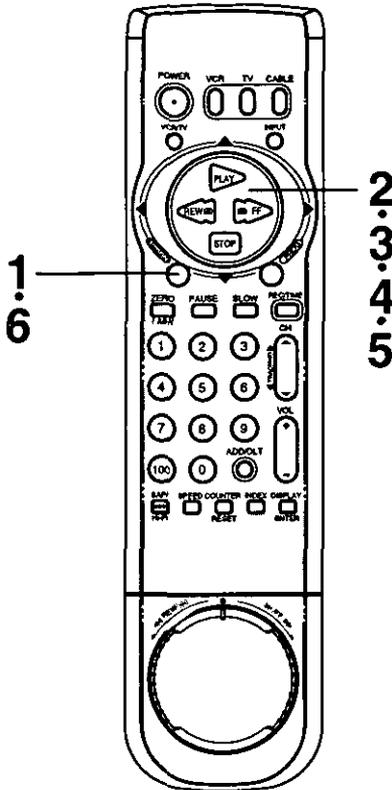
VCR Plus+ Setup (continued)

*Important: If the remote control POWER, ACTION, PROG, CH▲/▼, INDEX or ADD/DLT button does not work when pressed, press the VCR button on the remote and try the button again.

In order for the VCR to read the VCR Plus+ code, some set up is required. A Guide (VCR Plus+) channel number is assigned to each local broadcast and cable station. Because this number sometimes differs from the channel your TV receives the station on, it is necessary to program the VCR with local channel information.

ADD/
DELETE

Channel Setup Preparations

NOTE: Complete the steps on this page if your cable box can be controlled with the VCR, or your VCR hook-up resembles "B" on page 28.

Prepare a list like the example below.
This list will help you smoothly enter the information needed in step "4" at right.

You will need the following to complete the list:

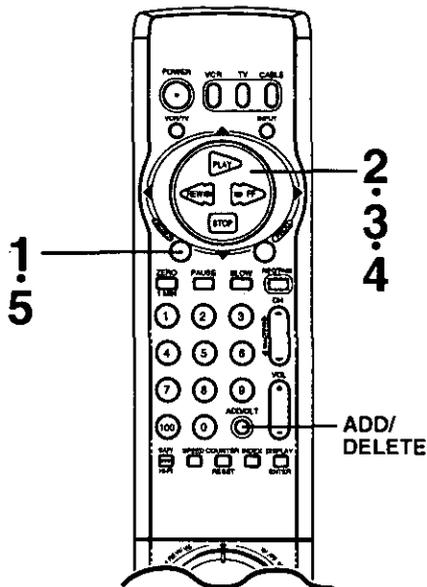■ A line up of normal and/or cable stations you receive along with the channel numbers your TV receives them on. A cable channel line-up chart is supplied by your cable company.

■ A list of Guide (VCR Plus+) channel numbers assigned to the stations you receive. This list is available in *TV Guide* and the TV listings found in selected newspapers.

1 Make a chart with 3 columns like the example below. In the left column, fill in the name or call letters of the stations you receive.

2 In the middle column, fill in each station's assigned Guide (VCR Plus+) number found in TV Guide, newspapers, etc.

3 In the right column, fill in the channel number that your TV receives the station on from your channel line-up.

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	04	04
FOX	11	

VCR Plus+ Channel Setup
Complete this page only if Type B connection method (pg.28) is used.

• **Before you begin, complete the Channel Setup Preparations below left.**

Important Note:
If your VCR connection type changes from type A to B, repeat steps 1~4 of page 29 and select VCR ▶ CABLE/DSS BOX ▶ TV or VCR ▶ TV before proceeding with these steps.

1 Press ACTION* to display the menu.
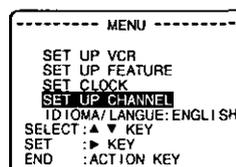
```
-------- MENU --------
SET UP VCR
SET UP FEATURE
SET CLOCK
SET UP CHANNEL
IDIOMA/LANGUE: ENGLISH
SELECT:▲ ▼ KEY
SET    :▶ KEY
END    :ACTION KEY
```

2 Press ▲▼ to select "SET UP CHANNEL," **and then press** ▶ to display the "SET UP CHANNEL" screen.

3 Press ▲▼ to select "VCR Plus+ CH SET UP," **and then press** ▶ to display the "VCR Plus+ CH SET UP" screen.

```
---- SET UP CHANNEL ----
ANTENNA : CABLE
AUTO SET
CHANNEL CAPTION
CABLE/DSS BOX SET UP
VCR Plus+ CH SET UP
SELECT:▲ ▼ KEY
SET    :▶ KEY
END    :ACTION KEY
```
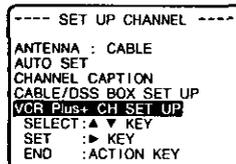
IMPORTANT NOTE:
For step "4," use the list you prepared. You may leave lines blank if you don't receive that station, or if the GUIDE CH number and the CABLE (or TV) CH numbers are the same.

4 Press ▶ to move the shaded area to the right side.

```
VCR Plus+ CH SET UP

GUIDE CH   CABLE CH

▶ 01         --
  02         --

SELECT:▲ ▼ KEY
SET    :▶ KEY
END    :ACTION KEY
```
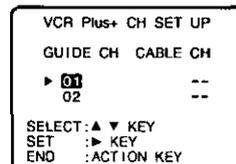
Then, press ▲▼ to change CABLE or TV CH number.

Next, press ◄ to set the number.

Now, press ▲▼ to continue.

Repeat this operation until the list is complete.

```
VCR Plus+ CH SET UP

GUIDE CH   CABLE CH

▶ 01         ▓▓
  02         --

SELECT:▲ ▼ KEY
SET    :◄ KEY
END    :ACTION KEY
```
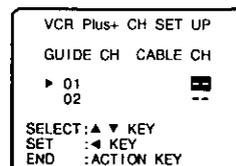
To Enter More Programs
Press ▲▼ and ▶ to select the incorrect CABLE or TV CH number. Then, press ▲▼ to change, or ADD/DLT to delete the channel.

5 Press ACTION three times to exit the VCR Plus+ CH SET UP mode.

• Make each entry within 5 minutes or the VCR will leave this mode.
• Once local channels have been programmed, they will stay in memory, even in the case of a power failure.

30

Easy Taping.

☑ **Check list before you begin.**

☐ The clock is set.
☐ VCR Plus+ Setup is complete (see pages 28~30).

Multi Function Display

9

ADD/
DELETE

Use normal Timer Recording steps if:

• the PlusCode for a program is not listed.
• you anticipate the program, such as a sporting event, to run over the scheduled stop time.

See page 19 to:

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

Important notes when using a DSS receiver

• When recording programs via a DSS receiver, the DSS receiver must be left on.
• When recording programs via an antenna or cable, the DSS receiver must be turned off.

---

1 Press **PROG** to display the "SET PROGRAM" screen.

```
----- SET PROGRAM -----

VCR Plus+ PROGRAM
TIMER PROGRAM

VCR Plus+

ENTER PLUSCODE NUMBER
\!/
---
/!\
USING 0-9 KEYS

END    :PROG KEY
```

---

2 Press ▲▼ to select "VCR Plus+ PROGRAM," and then press ▶ to display the "VCR Plus+" screen.

---

3 Press the **NUMBERED keys** to enter the PlusCode number.

• Refer to your local TV listings.
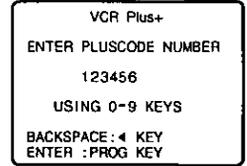
To Make Corrections
Press ◀ repeatedly to delete the PlusCode number. Then, enter the correct number.

```
VCR Plus+

ENTER PLUSCODE NUMBER

123456

USING 0-9 KEYS

BACKSPACE:◀ KEY
ENTER :PROG KEY
```

---

4 Press **PROG** to lock in your program.

---

5 Press the **1, 2 or 3 key** to select the program type.

---
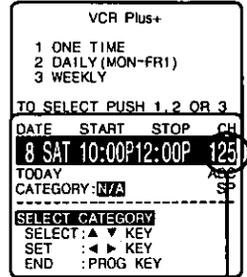
6 Press ▲▼ and ▶ to select and set each of the remaining items as follows.

Remaining Items
• Category (N/A [not applicable], SPORTS, MOVIE, COMEDY, MUSIC, DRAMA)
• Speed (SP, LP, SLP)

To Make Corrections
Repeatedly press ▶ to move the cursor to the right, or ◀ to move to the left to the incorrect entry and make the correction.

```
VCR Plus+

1 ONE TIME
2 DAILY(MON-FRI)
3 WEEKLY

TO SELECT PUSH 1, 2 OR 3
DATE  START STOP  CH
8 SAT 10:00P12:00P 125
TODAY
CATEGORY:N/A        SP
-------------------
SELECT CATEGORY
SELECT:▲ ▼ KEY
SET   :◀ ▶ KEY
END   :PROG KEY
```

• If you use connection type "A" on page 28, the channel shown in this on-screen display will always be the cable box output channel number.

---

7 Press **PROG** if contents are acceptable.

To cancel program contents:
Press ADD/DELETE.

```
P DT START  STOP  CH SPD
1DAY  9:00A12:00A 08  SP
2  8 10:00P12:00P125  SP
3 -- --:-- --:-- -- --
4 -- --:-- --:-- -- --

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

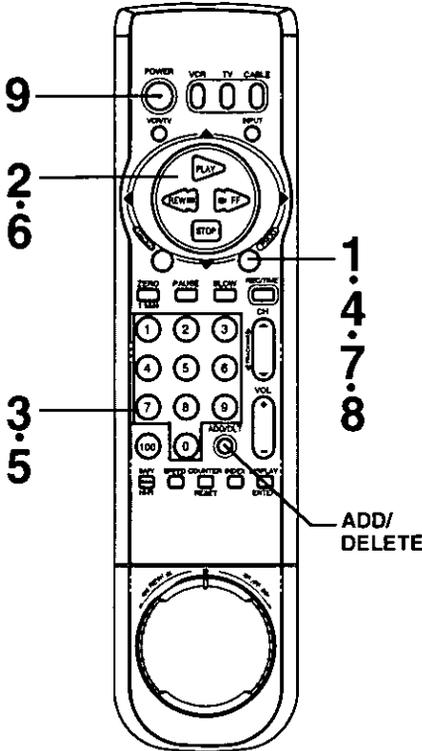
8 Press **PROG** to complete the program.

• 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.

```
TURN VCR OFF
FOR TIMER RECORDING
AND
LEAVE CABLE BOX POWER ON
```

• This display may differ depending on your cable box hook-up.

---

9 Press **POWER** off to set the timer.

```
- TIMER -
```

Multi Function Display

NOTES

• You can obtain unlisted PlusCode numbers by calling 1 - 900 - 454 - 7587. Call costs approximately $.95 per minute.
• VCR PlusCodes can not be used to program the VCR to record DSS channels.
• Avoid overlapping program times.
• An on-screen display will indicate if an invalid PlusCode number has been entered or when all timer programs are full.

More You Can Do
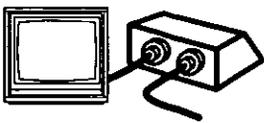
Multi-Brand Control Feature

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

TV Brand Code Numbers

Panasonic 01, 02	Sylvania 05	JVC 11
Quasar 01, 02	Sharp 06, 07	Hitachi 12
RCA 03	Sony 08	Mitsubishi 07, 13
GE 03	Toshiba 09	Samsung 14
Zenith 04	Sanyo 10	Gold Star 15, 16, 17
Magnavox 05	Fisher 10	

Cable Box Brand Code Numbers

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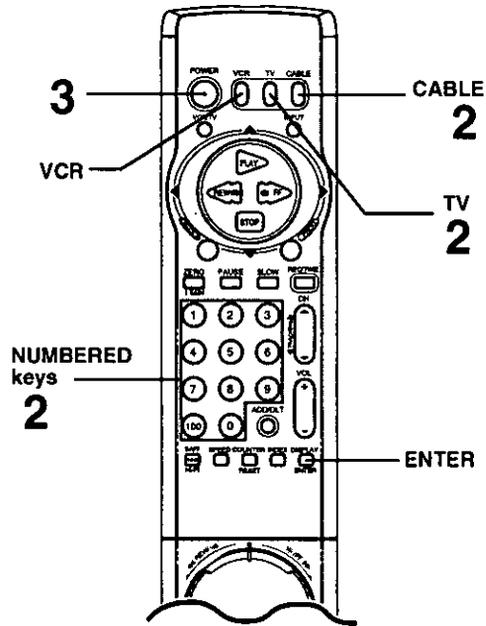
Multi-Brand Control Setup

1 **Find your TV or Cable Box Brand Code Number** from one of the charts on this page.

2 **Hold down TV or CABLE. Use the NUMBERED keys** to enter your TV or Cable Box Brand code number.

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

3 To confirm that the correct code was entered, **press POWER** to turn your TV or Cable Box On/Off.

4 **Try each of the functions listed on page 33.**

- Due to changes in infra-red commands used by some manufacturers, more than one code may be listed for some TV or Cable Box brands. If your TV or Cable Box does not respond to the first code, please try entering the next code.

NOTES
- Please repeat the TV/Cable Box Set Up procedure when you replace the remote's batteries.
- The remote control is designed to control the brands listed. However, **it will not operate all TVs or Cable Boxes made by these manufacturers.** If you get no results, your particular product brand cannot be controlled by this remote control.

Using the Multi-Brand Control

Once the remote control has been properly set up, you can select VCR, TV or CABLE mode depending on which functions you wish to control.

Press VCR or TV or CABLE on the remote control to select the desired mode.
(See below for the controllable functions of each mode.)

<u>NOTE:</u>
In TV or CABLE mode, it may be necessary to press ENTER after pressing NUMBERED keys for channel selection.

VCR Mode

In VCR mode, the following buttons are available.

<u>VCR</u>
All function buttons.

<u>TV</u>
VOL UP/DOWN

TV Mode

In TV mode, the following buttons are available.

<u>TV</u>
POWER, INPUT, NUMBERED keys, ENTER, CH UP/DOWN, VOL UP/DOWN

<u>VCR</u>
VCR/TV, PLAY, STOP, FF, REW, PAUSE, SLOW, REC, SPEED, COUNTER RESET, ZERO/1 MIN, SAP/Hi-Fi

CABLE Mode

In CABLE mode, the following buttons are available.
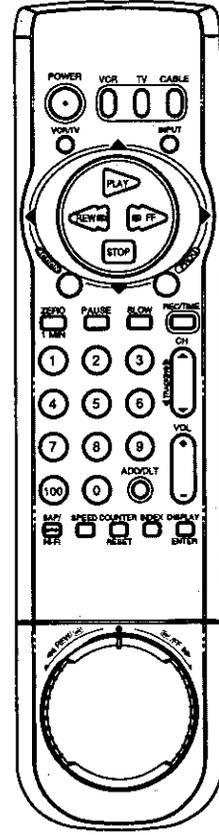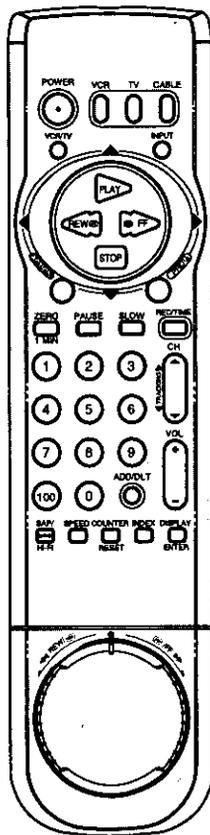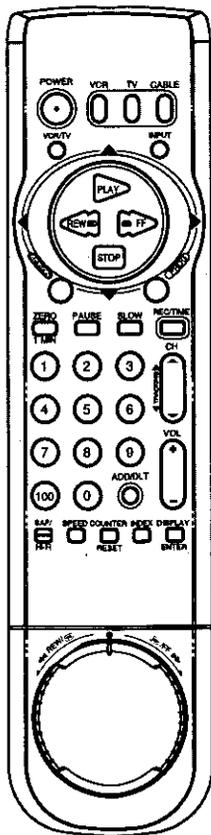
<u>CABLE</u>
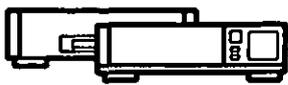POWER, NUMBERED keys, ENTER, CH UP/DOWN

<u>TV</u>
VOL UP/DOWN

<u>VCR</u>
VCR/TV, PLAY, STOP, FF, REW, PAUSE, SLOW, REC, SPEED, COUNTER RESET, ZERO/1 MIN, SAP/Hi-Fi

(NOTES)
- Some TV and Cable Box brands require you to turn on the power manually.
- Not all functions listed may be controlled by this remote control.

Connections you'll need to make. (Choose front or rear connection.)

• When connecting to a normal VCR, use the L Audio In jack for proper sound reproduction.

Playing (Source) VCR   Recording (Editing) VCR   TV for Monitoring
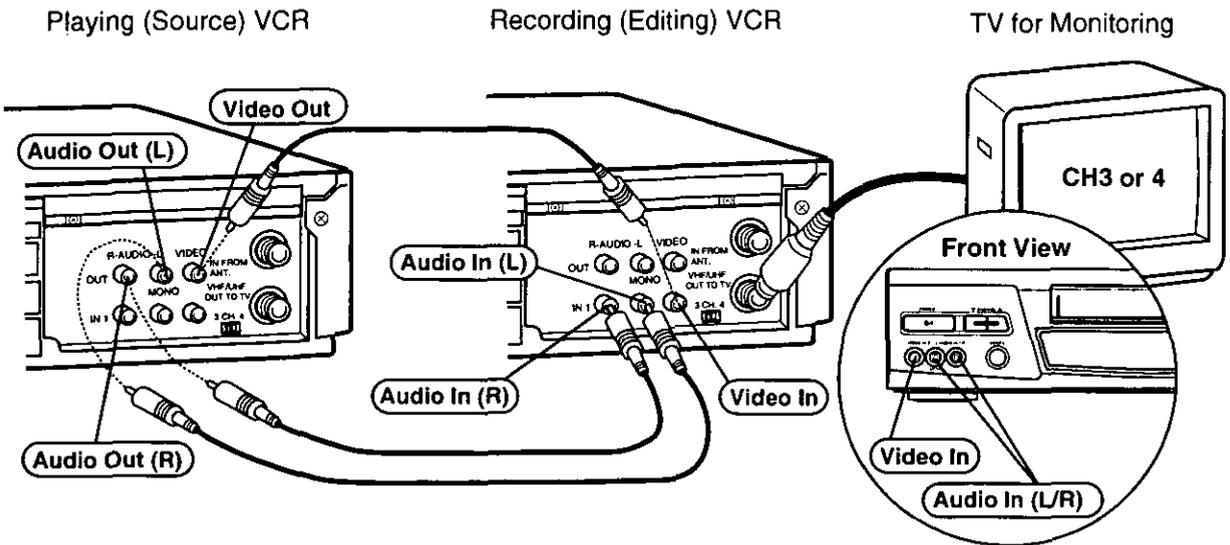
1 Insert a pre-recorded tape into the Playing (Source) VCR.
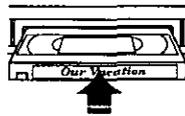
2 Insert a blank tape with record tab into the Recording (Editing) VCR.
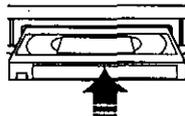
3 Select "LINE" Input mode on the Recording (Editing) VCR. (See "Selecting the Input Mode" on page 17.)

4 Press PLAY on the Playing VCR. Press PAUSE at the desired starting point.

5 Press REC on the Recording VCR, and then press PAUSE immediately thereafter.

6 Press PAUSE on both VCRs at the same time, to begin copying.

To Edit Out Unwanted Parts
Press PAUSE on the recording VCR while copying is in progress. Press PAUSE again to resume copying.

7 Press STOP on both VCRs to stop copying.

To Monitor Dubbing on Your TV

1 Turn your TV on and tune to the Recording VCR channel (CH3 or CH4).

2 Set the VCR/TV Selector on the Recording VCR to "VCR."

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

Before Requesting Service

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

Power	Correction
No power...	• Completely insert the Power Plug into an AC outlet. • Set the POWER button to ON.

Recording & Playback	Correction
TV program cannot be recorded...	• Check connections between VCR, external antenna, and your TV. • Make sure your antenna system (CABLE or TV) is correctly set. (To Replace Channels in Memory [P.13]) • Make sure that the record tab is intact on the cassette. (P.5)
Timer recording cannot be performed...	• Set the recording start/stop times correctly. (P.18) • Make sure that the POWER button is set to OFF. (P.18) • 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.
There is no playback picture, or the playback picture is noisy or contains streaks...	• Select channel 3 or 4 on the TV to match the Channel 3/4 switch located on the rear panel of the VCR. (P.6) • Set the VCR/TV selector to "VCR." • Check that channel 3 or 4 of the TV is properly tuned in. • Adjust the TRACKING control in either direction. (P.15)
Special effects playback, picture may contain some vertical jitter when using a TV with an Automatic Vertical Hold Control...	• Set the TV's Vertical Hold Control to "MANUAL" and then adjust it.
VCR cannot be controlled...	• Make sure that VCR LOCK is set to off. (P.22)

Remote Control	Correction
VCR cannot be remote controlled...	• Aim the Remote Control directly at the remote sensor on the VCR. (P.10) • Avoid all obstacles which may interfere with the signal path. • Inspect the remote batteries for possible replacement. (P.4) • Make sure that VCR LOCK is set to off. (P.22) • Exposing the VCR remote sensor to direct fluorescent or outdoor light may cause signal interference.
ACTION and PROG buttons cannot be used...	• Press the VCR button to select VCR mode. (P.33)

Miscellaneous	Correction
Programs cannot be viewed on TV...	• Set the VCR/TV selector to "TV." (P.17)
Video cassette cannot be inserted...	• Insert the cassette with window side up; record tab facing you.
Video cassette cannot be removed...	• Completely insert the Power Plug into an AC wall outlet.
Video cassette ejects when a recording is started or the power is turned off for timer recording...	• Make sure the record tab is intact on the cassette. (P.5)
In Stop mode, the motor (CYLINDER) continues to rotate...	• To enable the quick play mechanism, the cylinder will rotate for about 5 minutes. This reduces response time from Stop to Play mode from Play to Rewind Search mode.
The top of the playback picture waves back and forth excessively...	• Because the VCR playback signal is not as stable as an off-the-air TV signal, the top of your TV screen may be bent or unstable during playback. Slowly turn the horizontal hold control on your TV to correct the wavy picture. If your TV does not have a horizontal hold control or adjusting the control does not help, please contact your local TV service center.

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

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

Service Center List

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:

800-211-PANA (7262), Monday-Friday 9am-9pm Saturday-Sunday 9am-7pm, EST.

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

Factory Servicenters Locations

CALIFORNIA
6550 Katella Avenue
Cypress, CA 90630

800 Dubuque Avenue
S. San Francisco,
CA 94080

20201 Sherman Way
Suite 102
Canoga Park, CA 91306

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

9060 Golf Road
Niles, IL 60714

MARYLAND
62 Mountain Road
Glen Burnie, MD 21061

MASSACHUSETTS
60 Glacier Drive
Suite G
Westwood, MA 02090

MICHIGAN
37048 Van Dyke Avenue
Sterling Heights, MI 48312

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

Chartiers Valley
Shopping Center
1025 Washington Pike
Bridgeville, PA 15017

TENNESSEE
919-8th Avenue South
Nashville, TN 37203

TEXAS
7482 Harwin Drive
Houston, TX 77036

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 Servicenter:

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

Accessory Purchases:

Customer Orders Only 800-211-PANA (7262)

Warranty

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

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

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

Monitor-VCR In-home or carry-in Service: 22" (diagonal) CRT / LCD and Larger
Monitor-VCR Carry-in Service: 21" (diagonal) CRT / LCD and smaller

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

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

In-home, carry-in or mail-in service, as applicable, in the USA can be obtained during the warranty period by contacting a Panasonic Services Company (PASC) Factory Servicenter listed in the Service Directory. Or call toll free 1-800-211-PANA (7262), 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 requires 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 products not supplied by the warrantor, or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a PASC Factory Servicenter or a PASC authorized Servicenter, or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS
There are no express warranties except as listed above.
THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES) RESULTING FROM THE USE OF THIS PRODUCTS, OR ARISING OUT OF ANY BREACH OF THE WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

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

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

SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY THE WARRANTOR, IN ITS SOLE DISCRETION, ARE NOT COVERED. COSTS OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.
warvid 10/20/97

Other Information

Spanish Quick Use Guide/Guía para rápida consulta

Para fijar el idioma , canal y reloj

1 Encienda el televisor y la videograbadora.

2 Sintonice el televisor al canal de salida de la videograbadora (el mismo canal que ha fijado en la parte trasera de la videograbadora; canal 3 o 4).
- Si esta usando los terminales de audio/video para su conexión, fije el televisor al modo de entrada de video.

3 Oprimir CH ▲ para elegir el idioma de la pantalla en inglés.

O, oprimir CH ▼ para elegir el idioma de la pantalla en español.

O, oprimir VCR/TV para elegir el idioma de la pantalla en francés.

SELECT LANGUAGE
PUSH VCR CH ▲ : ENGLISH
OPRIMIR VCR CH ▼ : ESPAÑOL
APP. VCR/TV : FRANÇAIS

- Ud. podrá fijar también usando los mismos botones que están ubicados en la videograbadora.
- La videograbadora debe conectarse a una antena o caja de TV por cable.

4 Oprimir ▲▼ para elegir, y luego oprimir ► para fijar su conexión.

ELEGIR LA CONEXION
CABLE/DSS►VCR►TV
VCR►CABLE/DSS►TV
VCR►TV
ELEGIR:▲ ▼
FIJAR :►
TERMINAR:ACTION

- Si ud. ha elegido CABLE/DSS ► VCR ► TV, continue al paso 5. Si no, siga al paso 6.

5 Oprimir ▲▼ para elegir el canal de salida de la caja de TV por cable o el receptor DSS, y luego oprimir ► para fijar.

ELEGIR LA CONEXION
CABLE/DSS►VCR►TV
SALIDA DEL CABLE/DSS
CA 01
ELEGIR:▲ ▼
FIJAR :◄ ►
TERMINAR:ACTION

- Si es necesario, consulte su manual de la caja de TV por cable.
- Si ud. está usando los terminales de audio/video para la conexión de la caja de TV por cable, elija y fije a "SALIDA DE VIDEO" para el canal de salida.
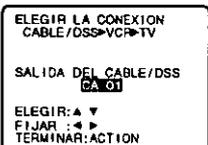
6 Oprimir CH ▲ para iniciar la fijación automática de los canales.
- "POR FAVOR FIJE RELOJ CON LA TECLA ACTION" aparece.

7 Oprimir ACTION para que aparezca la pantalla de fijación del reloj.

─ ─/─ ─ FIJAR RELOJ ─ ─ ─ ─ ─
1/ ─ ─/─ ─ ─ ─ ─:─ ─
/│\ VERANO:ACT
ELEGIR MES
ELEGIR:▲ ▼
FIJAR :►
TERMINAR:ACTION

- Introduzca los datos en 5 minutos o la videograbadora saldrá de la pantalla de la fijación del reloj.

8 Oprimir ▲▼ para elegir el mes, y luego oprimir ► para fijar el mes.

9 Oprimir ▲▼ y ◄ ► para elegir y fijar las fijaciones restantes que están a la derecha.

Fijaciones:
- Fecha •Año
- Hora
- Verano (Hora veraniega)

10 Oprimir ACTION dos veces para iniciar a funcionar el reloj y salir desde este modo.

─ ─ ─ ─ ─FIJAR RELOJ─ ─ ─ ─ ─
1/ 4/2000 MAR 12:00PM
VERANO:ACT
FIJACION ES COMPLETO
FIJAR :◄ ►
INICIAR:ACTION

## Para fijar o fijar de nuevo el reloj

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

1 Oprimir ACTION para que aparezca la pantalla del menú.

2 Oprimir ▲▼ para elegir "FIJAR RELOJ" y luego oprimir ► para que aparezca la pantalla de "FIJAR RELOJ."

─ ─ ─ ─ ─ ─ MENU ─ ─ ─ ─ ─ ─
PREPARAR VCR
FIJACION DE FUNCIONES
FIJAR RELOJ
FIJAR CANAL
LANGUE/LANGUAGE:ESPANOL
ELEGIR:▲ ▼
FIJAR :►
TERMINAR:ACTION

3 Oprimir ▲▼ y ◄ ► para elegir y fijar la hora y la fecha.

─ ─ ─ ─ ─FIJAR RELOJ─ ─ ─ ─ ─
1/ 4/2000 MAR 12:00PM
VERANO:ACT
ELEGIR HORA
ELEGIR:▲ ▼
FIJAR :◄ ►
TERMINAR:ACTION

4 Oprimir ACTION dos veces para iniciar a funcionar el reloj y salir desde este modo.

Operaciones básicas para la reproducción

1 Introducir una cinta
- Esta indicación aparece en la pantalla multifuncional.

─VCR─

2 Oprimir PLAY en el control remoto o en la videograbadora para comenzar a reproducir.

3 Oprimir STOP en el control remoto o en la videograbadora para parar la reproducción.

**4** Oprimir EJECT en la videograbadora para expulsar la cinta.
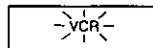
Para buscar una escena en particular durante la reproducción

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

- La velocidad de búsqueda es a 7 veces más rápida que la velocidad normal para el modo SP y 21 veces más rápida para el mode SLP.
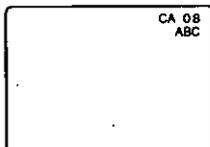
Operaciones básicas para la grabación

1 Introducir una cinta <u>con la lengüeta.</u>
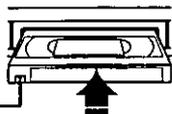
2 Oprimir CH ▲/▼ o las teclas numéricas para elegir un canal.

- Para grabar desde una fuente externa, oprimir CH ▲/▼ o INPUT para elegir "LINEA1" or " LINEA2."

```
                            CA 08
                            ABC
```

3 Oprimir SPEED para cambiar la velocidad de la cinta.

- SP = Reproducción estándar, LP = Larga duración, SLP = Superlarga duración.

```
                            SP
```

4 Oprimir REC/TIME en el control remoto o videograbadora para <u>empezar a grabar.</u>

- **Oprimir PAUSE para hacer una pausa en la grabación en progreso.**

Grabación de un toque (OTR)

La videograbadora termina la grabación a una hora programada.

En el paso 4, oprimir repetídamente REC/TIME para fijar el tiempo de grabación. Cada presión cambiará la hora de parada como demuestra al siguiente.

Grabación normal→0:30→1:00
4:00◄─3:00◄─2:00◄─1:30◄
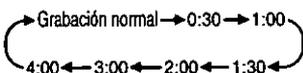
5 Oprimir STOP para <u>parar la grabación.</u>

Programación fácil para la grabación con temporizador

1 Oprimir PROG para que aparezca la pantalla "FIJAR PROGRAMACION."

```
-- FIJAR PROGRAMACION --
   VCR Plus+
   TEMPORIZADOR
ELEGIR:▲ ▼
FIJAR :►
TERMINAR:PROG
```
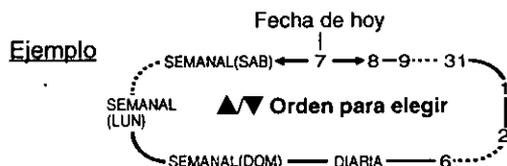
2 Oprimir ▲▼ para elegir "TEMPORIZADOR" y luego oprimir ► para exhibir la pantalla de la programación.
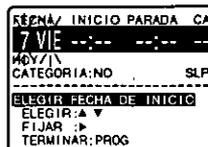
- Si ya existe una programación memorizada, oprimir ▲▼ y ► para elegir un número sin programación.

```
FECHA/ INICIO PARADA  CA
7 VIE --:-- --:-- --
HOY/|\
CATEGORIA:NO         SLP
ELEGIR FECHA DE INICIO
ELEGIR:▲ ▼
FIJAR :►
TERMINAR:PROG
```

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

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

Fecha de hoy

Ejemplo

SEMANAL(SAB)◄─ 7 ─►8─9···· 31

SEMANAL (LUN)   ▲/▼ Orden para elegir

SEMANAL(DOM) ──── DIARIA ──── 6····

4 Oprimir ▲▼ y ◄► para elegir y fijar las siguientes fijaciones.

Fijaciones:
- Hora de inicio • Hora de parada
- Canal o LINEA para una fuente externa .
- Categoria (NO, DEPORTE, CINE, COMEDIA, MUSICA, DRAMA)
- Velocidad de la cinta (SP, LP, SLP).

Para hacer correcciones
Oprimir ► sucesivamente para avanzar u ◄ para retroceder hasta el paso que desea corregir.

5 Oprimir PROG para terminar la programación.

```
P FE  INIC PARADA CA VEL
1 25  9:00A12:00A 08  SP
2 -- --:-- --:-- -- --
3 -- --:-- --:-- -- --
4 -- --:-- --:-- -- --
CANCELAR:ADD/DLT
ELEGIR 1-8:▲ ▼
ENTRAR:►
TERMINAR:PROG
```

Para hacer más programaciones
Oprimir ▲▼ y ► para elegir y fijar un número de programación en blanco y luego repita los pasos 3 y 4.

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

7 Oprimir POWER y apague el aparato para la grabación con temporizador.

```
-TIMER-
```
Pantalla multifuncional

- Si la fuente de la grabación es una caja de TV por cable, asegúrese de que la caja de TV por cable esté encendido y esté sintonizado al canal que desea grabar.

Quick Use Guide

This guide should only be used once you are familiar with the operations inside this manual.
If you have any problems or need more information, please refer to the page listed.

Clock Reset (page 13)

Display the menu | Select "SET CLOCK" | Set the clock | Start the clock & exit this mode

Playback a Tape (page 15)

Turn TV on
Select VCR
Channel 3/4

Insert a tape

At VCR

Start playback / Stop playback / Eject tape

Make a Recording (page 16)

Turn TV on
Select VCR
Channel 3/4

Insert a tape with Record Tab

Select channel / Select speed / Start recording / Stop recording

SPEED SP LP SLP

Set a Timer Recording (page 18)

Display the program screen | Select "TIMER PROGRAM" | Enter timer information

Once to finish the program, twice to exit this mode | Turn VCR off to set the timer

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P