



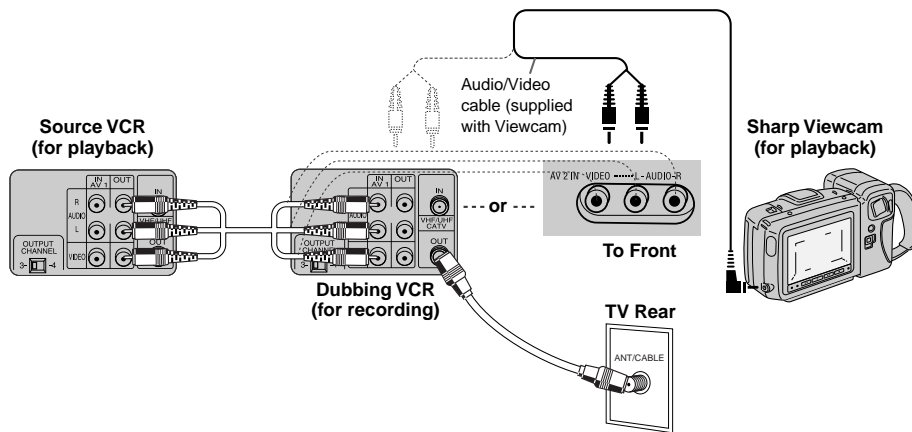
## Tape Dubbing

Your VCR can dub (copy) video material from another video device. It can also output video and audio signals for recording on other video or audio equipment.

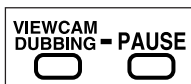
- 1 Switch your VCR to the auxiliary input by pressing **INPUT** on the remote control. **AV 2** lights up on the multi-function display. (You can also use **CHANNEL ▲/▼** on the VCR or **CH ▲/▼** on the remote control.)
- 2 Begin recording on the dubbing VCR and playback on the source VCR simultaneously.

### NOTE

- When using special playback functions (still picture, video search, frame advance, and variable slow motion) during dubbing, a blue screen may appear.  
Set BLUE SCREEN mode on the dubbing VCR (for recording) to OFF. (See **Mode Selection**.)
- To use the TV as a monitor while dubbing, press **TV/VCR** to "VCR" on the dubbing VCR.
- Use an RCA pin-type connection cable (not supplied with VCR, but supplied with VIEWCAM) to connect source VCR to dubbing VCR.
- Refer to the manual of the VCR connected to this unit when dubbing a tape.
- You can also use the front AV jacks. Select **AV 2** (Aux. 2 input) by pressing **INPUT** twice.
- If source VCR is a monaural mode, connect the audio cable to "AUDIO-L" on the front AV jacks of the dubbing VCR.



## Auto VIEWCAM Dubbing



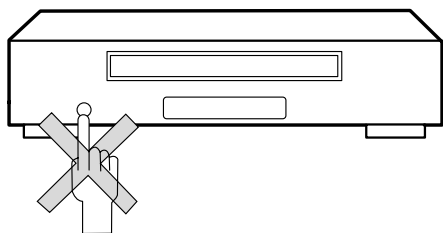
### PROCEDURE

- 1 Connect the AV cable to the front AV jacks on the VCR when the VCR is off. The VCR will automatically turn on and enter the external input mode (AV2).
- 2 When using a Sharp VIEWCAM as the dubbing source, press **VIEWCAM DUBBING** on the remote control. The VIEWCAM will automatically begin playback and the VCR will begin recording.
- 3 To pause dubbing, press **PAUSE** on the remote control. VIEWCAM playback will enter still mode and VCR recording will enter pause mode.
- 4 When you are finished dubbing, press **STOP** on the VCR and VIEWCAM, and remove the cassette.
- 5 To dub another scene from a different part of the VIEWCAM tape, fast forward the VIEWCAM tape to the desired scene and set the VIEWCAM in STILL mode. Then press **VIEWCAM DUBBING** to begin dubbing.

### NOTE

- If the AV cable is connected to the front AV jacks when the VCR is on, the VCR will automatically enter the external input mode (AV2).
- Before using the VIEWCAM DUBBING function, place the VIEWCAM next to the VCR with the VIEWCAM photoreceptor facing in the direction of the infrared transmitter on the VCR remote control.
- A few seconds of video at the beginning of the VIEWCAM tape may be lost when dubbing to the VCR tape.
- To begin dubbing at an exact point on the tape, set the VIEWCAM in STILL mode at the desired scene to be recorded and set the VCR in REC PAUSE at the point on the tape to begin recording, then press **VIEWCAM DUBBING**.

## EZ Set Up (With Auto Clock Setting)



### IMPORTANT (Caution during EZ Set Up):

- Do not press the **POWER** button on the VCR or remote control.
- Do not insert a video cassette into the VCR.

The EZ Set Up function automatically sets the tuner channels and clock when the antenna cable is connected to the rear of the VCR and the power plug is then connected to an AC outlet.

### IMPORTANT:

*When using a cable box:*

- See **Cable TV Connections** and **Cable Box Set-up Function**.
- Leave **POWER** on the cable box turned on.

During Auto Channel Setting



During Auto Clock Setting



EZ Set Up complete



### PROCEDURE

- 1 Make sure that the antenna cable is connected. For connection configuration, refer to **Connecting the VCR**.
  - 2 Connect the VCR power plug to an AC outlet.
  - 3 The tuner channels and clock will automatically be set.
- This VCR can monitor and use time-signals (EDS signals), which are provided by some TV stations, to automatically adjust the VCR clock. This VCR automatically searches EDS signals, but if you are in a hurry to use timer recording or know the channel of the EDS signal carrier in your area, follow the procedure in **Auto Clock Setting** or **Manual Clock Setting**.

### NOTE

- If power is supplied to the VCR before the cable is connected. EZ Set Up will not be able to preset the channels into memory. If this occurs unplug the VCR from the power source and wait a few minutes. Check the cable /antenna connection and supply power to the VCR. EZ Set Up will automatically begin again.
- If the power is turned on during EZ Set Up, the Auto Channel setting will be interrupted and the tuner channels will not be able to be preset.
- Auto Clock Setting may take several minutes.
- If the Auto Clock Setting is not completed within 30 minutes, there may be no channels with EDS signals. In this case, set the clock manually. (See **Manual Clock Setting**.)
- If the antenna signal is weak, the Auto Clock Setting function may not operate.
- During initial channel setting, the channels are set into the AIR channel setting. To watch a cable TV channel, select "CATV" on the CHANNEL PRESET screen. (See **Setting the Channels**.)

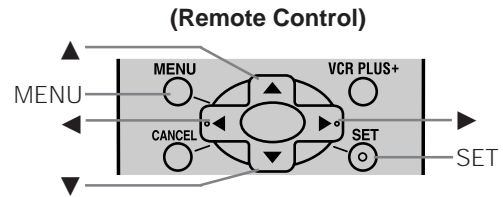



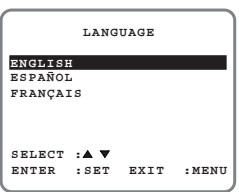

## Setting the Language

When you use the VCR for the first time or the power is interrupted for more than 20 seconds (power failure, etc.), you should set the language to be used for the MENU screen.

### PREPARATION >>>

- Turn on your TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector.**)
- Press **POWER** and then **TV/VCR** to select "VCR". ("VCR" will light on the multi-function display.)



 → 	<b>1</b> Press <b>MENU</b> . LANGUAGE screen will appear.
 → <b>Normal Screen</b>	<b>2</b> Select the language with ▲/▼. <i>Ex.: ENGLISH</i>  <b>3</b> Press <b>SET</b> to enter. The screen returns to normal.

### NOTE

- If you press **MENU** to exit the LANGUAGE screen in Step **3**, the data will not be stored.
- You can also use the ▲ (CHANNEL ▲), ▼ (CHANNEL ▼), ► (FF ►►), ◀ (REW ◀◀), MENU or SET buttons on the VCR to set the On Screen Display (OSD).



## Setting the Clock

### Auto Clock Setting (If you DO know a channel that carries EDS signals)


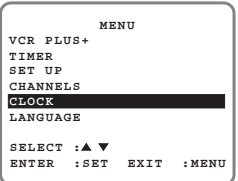


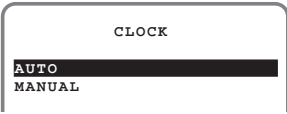


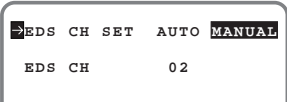

### PREPARATION >>>

- Make sure that the antenna cable is connected and connect the power cord.
- Turn on your TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector.**)
- Press **POWER** and then **TV/VCR** to select "VCR". ("VCR" will light on the multi-function display.)

### IMPORTANT:

When using a cable box:

- See **Cable TV Connections** and **Cable Box Set-up Function.**
- Leave **POWER** on the cable box turned on.

 →  → 	<b>1</b> Press <b>MENU</b> . Select "CLOCK" with ▲/▼ and then press <b>SET</b> .
 →  → 	<b>2</b> Select "AUTO" with ▲/▼ and then press <b>SET</b> .
 →  → 	<b>3</b> Set EDS CH SET mode to "MANUAL" with ◀/▶ and then press ▼.



## Setting the Clock

	<p>④ Select a channel that carries EDS signals with ◀/▶. Ex.: 07</p> <ul style="list-style-type: none"> <li>The number of channels that can be selected depends on the mode setting on the CHANNEL PRESET screen. See <b>NOTE</b>.</li> </ul>
	<p>⑤ Press <b>SET</b> to enter. The screen returns to normal. Press <b>POWER</b> to turn off the VCR. The Auto Clock Setting function will automatically set the clock.</p>

### NOTE

- If the EDS CH SET mode is set to MANUAL mode in Step ③ and a channel that does not carry EDS signal is selected in Step ④, the Auto Clock Setting function will not operate.
- In Step ④, the number of channels that can be selected depends on the mode setting on the CHANNEL PRESET screen. See the table below.

USE CABLE BOX	AIR/CATV	Channels to be selected
NO	AIR	02 ↔ 03 ↔ 04 ..... 68 ↔ 69 ↔ 02
	CATV	01 ↔ 02 ↔ 03 ..... 124 ↔ 125 ↔ 01
YES	—	01 ↔ 02 ↔ 03 ..... 98 ↔ 99 ↔ 01

When using a cable box:

- If you turn off the VCR when the CLOCK mode is set to "AUTO", the cable box will select a broadcasting channel with the EDS signal automatically.
- In Step ①, if you press **MENU** when operating the screen setting for the first time or after a power failure of more than 20 seconds, the LANGUAGE screen will appear.
- If you entered incorrect data during the setting procedure, re-enter the correct data in the following manner:
  - Use ◀/▶ to select the data to be corrected.
  - Set the correct data with ▲/▼.
  - After correcting the data in Step ②, press **SET** to enter.
- If you press **MENU** in Step ⑤, the data will not be stored.
- If a button is not pressed within 3 minutes during the setting procedure, the screen will return to the normal screen.

## Manual Clock Setting

### PREPARATION »»

- Turn on your TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector**.)
- Press **POWER** and then **TV/VCR** to select "VCR". ("VCR" will light on the multi-function display.)

	<p>① Press <b>MENU</b>. Select "CLOCK" with ▲/▼ and then press <b>SET</b>.</p>
	<p>② Select "MANUAL" with ▲/▼ and then press <b>SET</b>.</p>



## Setting the Clock

	<p>③ Select "TIME" with ◀/▶ and set time by holding ▲/▼. Ex.: 10:28 AM</p> <p>④ Select and set "DATE", "YEAR" and "DST" in turn, in the same manner as in Step ③. • See <b>Automatic Daylight Saving–Time (D.S.T.) Adjustment</b>. Ex.: Jul. 4, 1998, DST: ON</p>
<p>SET ⊙ → Normal Screen</p>	<p>⑤ If the data is correct, press <b>SET</b> to enter. The screen returns to normal.</p>

### NOTE

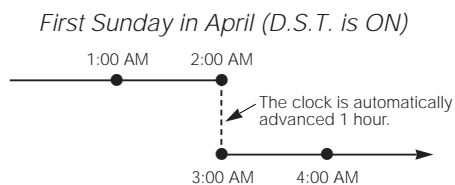
- Press **ENT. /AM/PM (100)** to select AM or PM during time setting.
- Numbered buttons can be used instead of ▲/▼ to set the time and date.
- In Step ①, if you press **MENU** when operating the screen setting for the first time or after the power is interrupted for more than 20 seconds, the LANGUAGE screen will appear.
- If you entered incorrect data during the setting procedure, re-enter the correct data in the following manner:
  - ① Use ◀/▶ to select the data to be corrected.
  - ② Set the correct data with ▲/▼.
  - ③ After correcting the data in Step ②, press **SET** to enter.
- If you press **MENU** to exit the CLOCK screen in Step ⑤, the data will not be stored.
- If a button is not pressed within 3 minutes during the setting procedure, the screen will return to the normal screen.

## Automatic Daylight Saving–Time (D.S.T.) Adjustment

This VCR is equipped with an internal Automatic Daylight Saving–Time Adjustment function. In spring (first Sunday in April) and autumn (last Sunday in October), the time is adjusted as shown below. This function has been preset to ON at the factory. Set the D.S.T. mode in the clock setting screen.

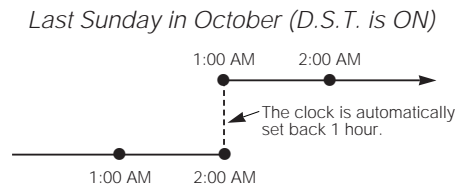
### Spring

Programmed timer recording set within this time frame (2:00 AM to 3:00 AM) will not be carried out.



### Autumn

Because there will be two time frames from 1:00 AM to 2:00 AM, timer programming set between these times will be influenced by the time change.



### NOTE

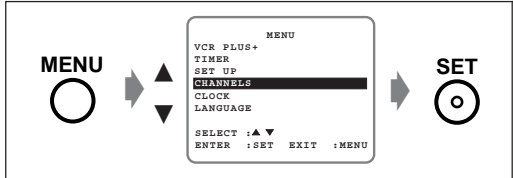
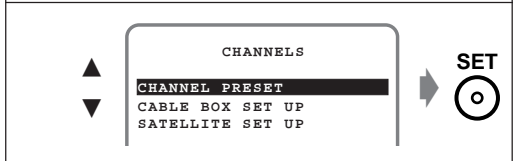
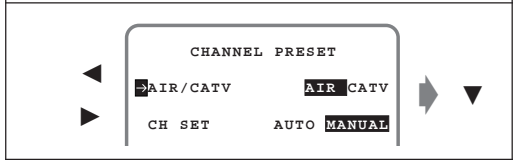

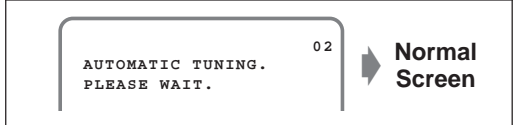
- If the timer recording program is affected by the D.S.T. time change, check your TV listing and find out when it reflects the time change. Some TV listings will indicate the time change in the same manner as is programmed in this VCR, but others do not show the time change until the next morning. In that case, when programming a timer, use the CLOCK screen to set the D.S.T. mode to OFF so the time change will not be carried out.

# Setting the Channels

Your VCR can receive a maximum of 181 channels as shown below by presetting the channels into memory. (VHF: 2 to 13, UHF: 14 to 69, CATV: 1 to 125)

## PREPARATION >>>

- Make sure that the cable (antenna or CATV) is connected to the IN terminal on the rear of the VCR.

	<p>① Press <b>MENU</b>. Select "CHANNELS" with ▲/▼ and then press <b>SET</b>.</p>
	<p>② Select "CHANNEL PRESET" with ▲/▼ and then press <b>SET</b>.</p>
	<p>③ Select "AIR" or "CATV" with ◀/▶ and then press ▼. Ex.: AIR • To watch cable TV after EZ Set Up, select "CATV", press <b>SET</b> and then press <b>MENU</b>.</p>
	<p>④ Set "CH SET" to "AUTO" with ◀/▶ and then press <b>SET</b>.</p>
	<p>⑤ The auto tuning will start. The channel display will count up, and when finished, the screen returns to normal.</p>

## NOTE

- Automatic tuning will not start unless the arrow is at "CH SET-AUTO" position.
- If a button is not pressed within 3 minutes during the setting procedure, the screen will return to normal.
- If the power is interrupted for more than 20 seconds, AIR / CATV selection must be set again.



### Adding Channel Memory/Erasing Channel Memory

Use this function to manually add or erase channels to/from the memory.

<p>① Select the channel to be added with the numbered buttons and the channel to be erased with the <b>CH</b> ▲/▼ or numbered buttons.</p>	
	<p>② Press <b>MENU</b>. Select "CHANNELS" with ▲/▼ and press <b>SET</b>.</p>
	<p>③ Select "CHANNEL PRESET" with ▲/▼ and then press <b>SET</b>.</p>
	<p>④ Select "CH SET" with ▲/▼ and then select "MANUAL" with ◀/▶. Then press <b>SET</b>.</p>
<p>[ADD]</p> <p>[ERASE]</p>	<p>⑤ Select "ADD" if you want to add the channel memory or "ERASE" if you want to erase the channel memory with ◀/▶.</p>
	<p>⑥ Press <b>MENU</b> to return to the normal screen.</p>

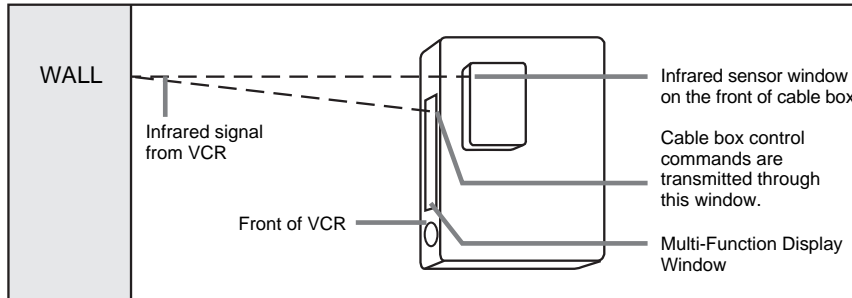
**NOTE**

- If the power is interrupted for more than 20 seconds, the channel memory may be erased. If this happens, reset the channels again and reset AIR/CATV selection.
- If a button is not pressed within 3 minutes during the setting procedure, the screen will return to normal.

# Cable Box Set-up Function

If your VCR is connected to a CATV network requiring a cable box, follow this section. (Connection type **B** or **C**. See **Cable TV Connections**.) This allows you to select the channel you wish to record in Timer-Controlled or VCR PLUS+ programming system mode, by transmitting an infrared signal from the VCR to the cable box.

## Setting Up the Cable Box (Overhead View)



### NOTE

- If the wall or other surface for reflecting the signal is too distant, or if there is signal-absorbing material (curtains, etc.) at the reflecting location, the signal transmitted from the VCR may not reach the cable box.

### PREPARATION >>>

- Turn on your cable box and select channel 02.
- Turn on your TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector**.)
- Press **POWER** and then **TV/VCR** to select "VCR". ("VCR" lights up on the multi-function display.)
- If your cable box is remote-controllable, check the code number corresponding to your cable box brand. The brand name of your cable box can be found on the bottom or back panel.

Brand	Code Number(s)	Brand	Code Number(s)	Brand	Code Number(s)
Archer	:28,29,30,31,49,50	Oak	:19,20	Sylvania	:44
Eagle	:37,38,39,40,41	Panasonic	:22,23	Teknica	:48
GE	:43	Philips	:24,25	Telecaption	:45
General Instrument	:01,02,03,04,05,06,07,08	Pioneer	:16,17,18	Tocom	:36
Hamilin	:26,27	RCA	:22,23	Toshiba	:47
Jerrold	:01,02,03,04,05,06,07,08	Regal	:21	Universal	:46
Macom	:42	Regency	:32	Vid Tek	:51
NSC	:33,34,35	Scientific Atlanta	:09,10,11,12,13	Zenith	:14,15

- There may be some Cable Boxes that cannot be operated with this function.

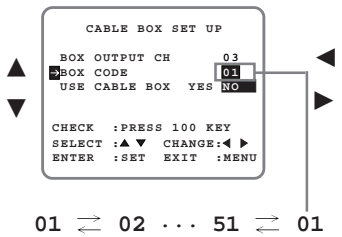
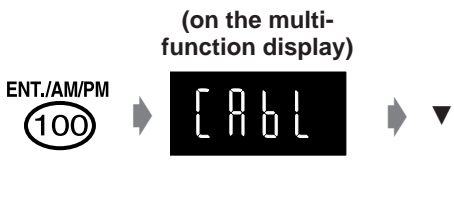
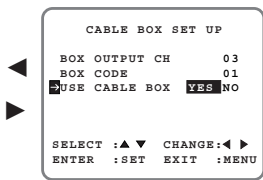

### PROCEDURE

	<p>① Press <b>MENU</b>. Select "CHANNELS" with ▲/▼ and press <b>SET</b>.</p>
	<p>② Select "CABLE BOX SET UP" with ▲/▼ and press <b>SET</b>.</p>
	<p>③ Select "BOX OUTPUT CH" with ◀/▶ (03 ↔ 04 ↔ 02 ↔ 03) and then press ▼.</p>





## Cable Box Set-up Function

	<p>④ Select "BOX CODE" with ▲/▼ and set the code number with ◀/▶. See the code list in <b>PREPARATION</b>.</p>
	<p>⑤ Press <b>100</b> to check if the setting is completed. If the selected code matches the brand of your cable box, the VCR will automatically send a signal to change the channel of your cable box from 02 to 09. "CABL" is displayed on the multi-function display. This indicates that the setting is successful. Press ▼.</p>
	<p>⑥ Set "USE CABLE BOX" to "YES" with ◀/▶.</p>
	<p>⑦ Press <b>SET</b> to enter. The screen returns to normal.</p>

### When using a remote-controllable cable box

- If you found two or more codes for the brand of your cable box in the code list, try each of these codes until the channel of the cable box changes to 09.
- If none of the codes work, try the following:
  1. This VCR emits a high-frequency infrared signal to the cable box. By repositioning your cable box and VCR closer and/or within the line of sight of each other, the signal may successfully travel from the VCR to the cable box. Reposition the cable box and/or VCR and test by setting the code number again.
  2. Another code number may be the correct one for your cable box. Proceed by setting and testing each code (01 through 51) until you find the one that works. Start with the ones listed under the same brand as your cable box.
  3. Even if solutions 1 and 2 do not work, your VCR will still work with the VCR Plus+ system. Set USE CABLE BOX to "NO" in Step ⑥. Since the VCR will not change the cable box channel, keep your cable box power on and the box tuned to the channel you wish to record.
  4. Your local cable company may offer a choice of cable boxes. You should request an alternate brand or model of cable box, and exchange your present one for one compatible with your new VCR.

### Before Timer Recording Starts:

#### Remote-Controllable Cable Box

- Turn **ON** the cable box.

#### Non Remote-Controllable Cable Box

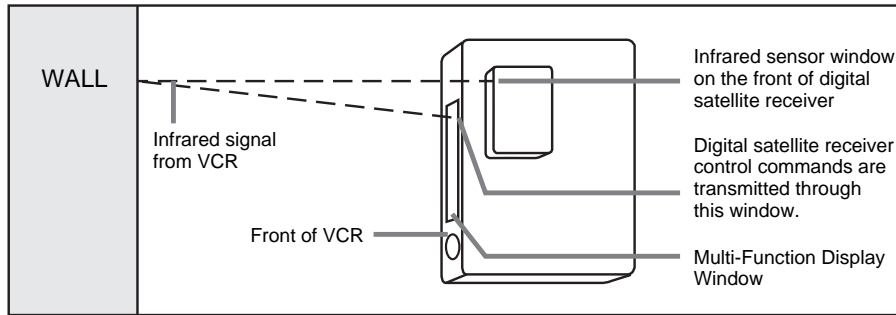
- Turn **ON** the cable box and select the channel you wish to record.



# Digital Satellite Receiver Set-up Function

If your VCR is connected to a digital satellite network requiring a digital satellite receiver, follow this section. This allows you to select the channel you wish to record in Timer-Controlled mode, by transmitting an infrared signal from the VCR to the digital satellite receiver.

## Setting Up the Digital Satellite Receiver (Overhead View)



### NOTE

- If the wall or other surface for reflecting the signal is too distant, or if there is signal-absorbing material (curtains, etc.) at the reflecting location, the signal transmitted from the VCR may not reach the digital satellite receiver.

## Connection

### A Basic Connection

- Use this connection if your TV does not have audio/video jacks.

- 1 Set the CH3 CH4 switch on the rear of the digital satellite receiver to either channel 3 or 4.

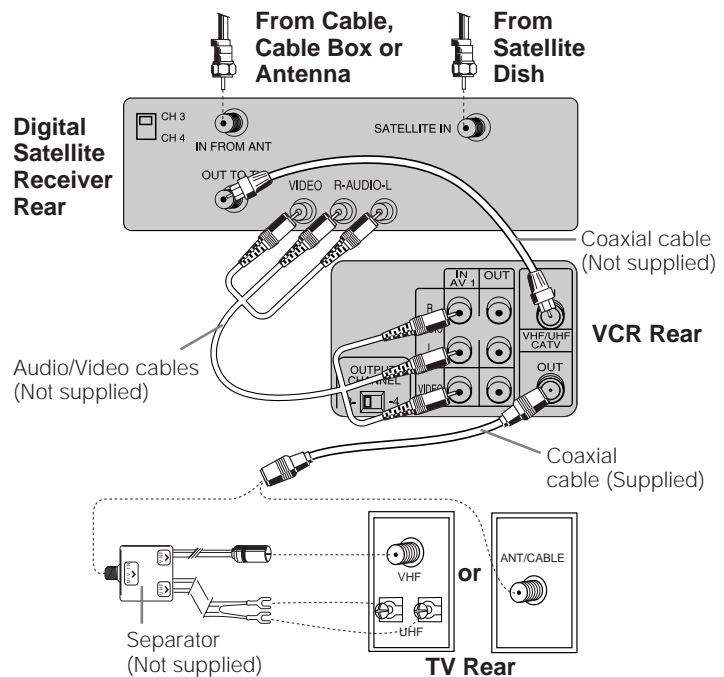
You will tune the VCR to this channel or its auxiliary input (AV 1) to record from the digital satellite receiver.

To watch the digital satellite receiver, turn off the VCR.

If you want to watch or record the signal from your antenna, cable, or cable box, make sure the digital satellite receiver is turned off.

- 2 Set the 3 ↔ 4 OUTPUT CHANNEL selector on the rear of the VCR to 3 or 4. (Factory preset: 3) (See **Setting the 3 ↔ 4 Output Channel Selector.**) Tune the TV to this channel and press **TV/VCR** to watch the VCR.

- 3 Connect as shown. Then go to "**After the Connection**".





## B Advanced Connection

- Use this connection if your TV has audio/video jacks and your receiver has one set of audio/video jacks.

**1 Set the CH3 CH4 switch on the rear of digital satellite receiver to either channel 3 or 4.**

You will tune the VCR to this channel to record from the digital satellite receiver.

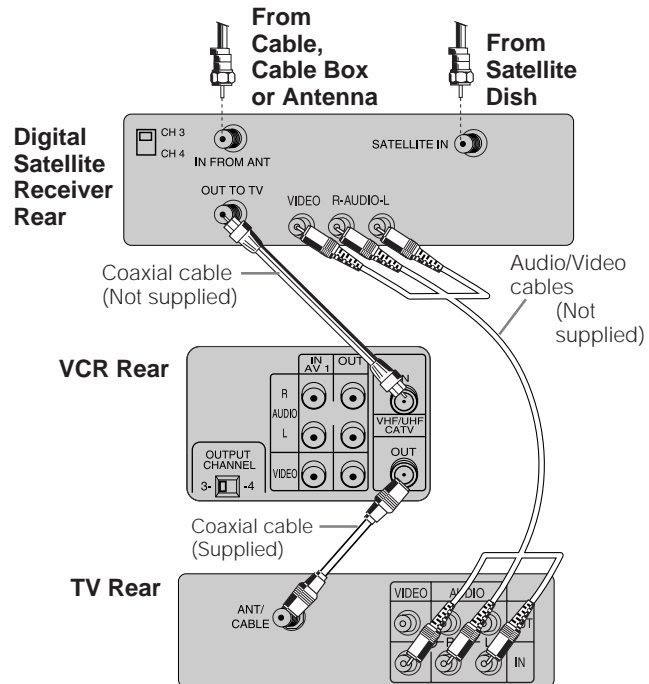
To watch the digital satellite receiver, tune your TV to its video input channel.

If you want to watch or record the signal from your antenna, cable, or cable box, make sure the digital satellite receiver is turned off.

**2 Set the 3 ↔ 4 OUTPUT CHANNEL selector on the rear of the VCR to 3 or 4. (Factory preset: 3) (See **Setting the 3 ↔ 4 Output Channel Selector.**) Tune the TV to this channel and press **TV/VCR** to watch the VCR.**

- 3** Connect as shown. Then go to **"After the Connection"**.

## Digital Satellite Receiver Set-up Function



## C Advanced Connection with a Deluxe Digital Satellite Receiver

- Use this connection if your TV has audio/video jacks and your receiver has two sets of audio/video jacks.

**1 Set the 3 ↔ 4 OUTPUT CHANNEL selector on the rear of the VCR to 3 or 4.**

You will tune the TV to this channel and use **TV/VCR** to watch the VCR.

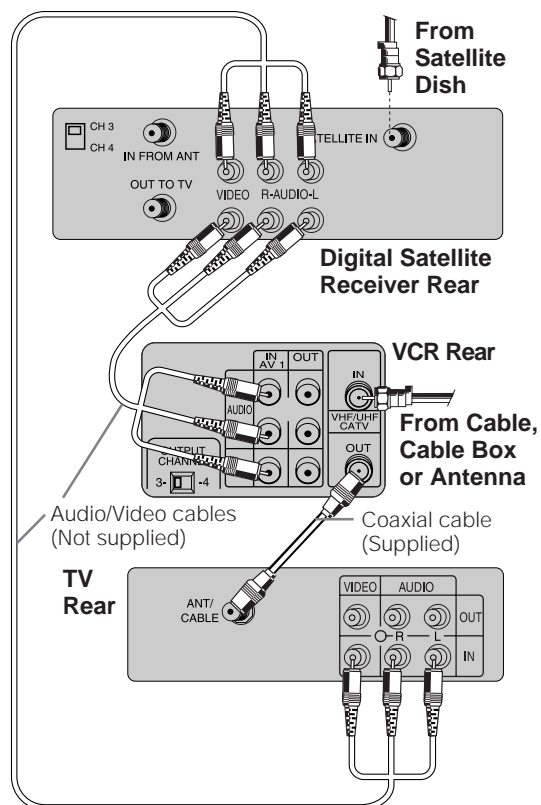
To record from the digital satellite receiver, you will tune the VCR to its auxiliary input (A V D).

To watch the digital satellite receiver, tune your TV to its video input channel.

- 2** Connect as shown. Then go to **"After the Connection"**.

## After the Connection

Plug in the power cords of the VCR, TV and digital satellite receiver. Then, go to **How to Remote-Control the Digital Satellite Receiver.**





## Digital Satellite Receiver Set-up Function

### How to Remote-control the Digital Satellite Receiver

#### PREPARATION >>>

- Turn on your digital satellite receiver and select DSS® mode.
- Turn on your TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector**.)
- Press **POWER** and then **TV/VCR** to select "VCR". ("VCR" lights up on the multi-function display.)
- If your digital satellite receiver is remote-controllable, check the code number corresponding to your digital satellite receiver brand.

The brand name of your digital satellite receiver can be found on the bottom or back panel.

Brand	Code Number(s)
GE	: 01
ProScan	: 01
RCA	: 01
SONY	: 02

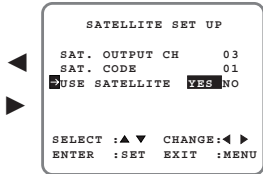

- There may be some digital satellite receiver that cannot be operated with this function.

#### PROCEDURE

	<p>① Press <b>MENU</b>. Select "CHANNELS" with ▲/▼ and press <b>SET</b>.</p>
	<p>② Select "SATELLITE SET UP" with ▲/▼ and press <b>SET</b>.</p>
	<p>③ Select "SAT. OUTPUT CH" with ◀/▶ (03 ↔ 04 ↔ AV1 ↔ 03) and then press ▼.</p>
	<p>④ Select "SAT. CODE" with ▲/▼ and set the code number with ◀/▶. See the code list in <b>PREPARATION</b>.</p>
	<p>⑤ Press <b>100</b> to check if the setting is completed. If the selected code matches the brand of your digital satellite receiver, the VCR will automatically send a signal to change the channel of your digital satellite receiver to 200. "SAT." is displayed on the multi-function display. This indicates that the setting is successful. Press ▼.</p>



## Digital Satellite Receiver Set-up Function

	<p>⑥ Set "USE SATELLITE" to "YES" with ◀▶.</p>
<p><b>SET</b>  <b>Normal Screen</b></p>	<p>⑦ Press <b>SET</b> to enter. The screen returns to normal.</p>

### When using a remote-controllable digital satellite receiver.

• If none of the codes work, try the following:

1. This VCR emits a high-frequency infrared signal to the digital satellite receiver. By repositioning your digital satellite receiver and VCR closer and/or within the line of sight of each other, the signal may successfully travel from the VCR to the digital satellite receiver. Reposition the digital satellite receiver and/or VCR and test by setting the code number again.
2. Another code number may be the correct one for your digital satellite receiver. Proceed by setting and testing each code (01 or 02) until you find the one that works.
3. Even if solutions 1 and 2 do not work, your VCR will still work with VCR Plus+ system. Set "USE SATELLITE" to "NO" in Step ⑥ and see **Non Remote-Controllable Digital Satellite Receiver** below.

### Before Timer Recording Starts:

#### Remote-Controllable Digital Satellite Receiver

1. Select the DSS® mode on the digital satellite receiver.
2. Turn **OFF** the digital satellite receiver.

#### Non Remote-Controllable Digital Satellite Receiver

1. Turn **ON** the digital satellite receiver.
2. Select the DSS® mode and select the channel you wish to record on the digital satellite receiver.
3. Set the timer recording channel to the output channel of the digital satellite receiver (03, 04 or AV (AV1)) on the timer setting screen).

#### NOTE

- You cannot simultaneously set timer recording for a satellite broadcast program and other programs received by conventional VHF-UHF antenna or Cable TV.

\*DSS® is a registered trademark of Directv. inc., a unit of GM Hughes Electronics.

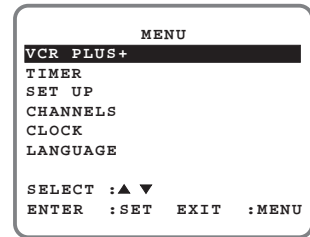
## Menu Screen

MENU screen is a home screen used to select various screen functions.

- 1 Turn on the TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector** on page 10.)
- 2 Press **POWER**, and then **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).
- 3 Press **MENU** to display the MENU screen.

The following 6 items can be set by using the MENU screen.

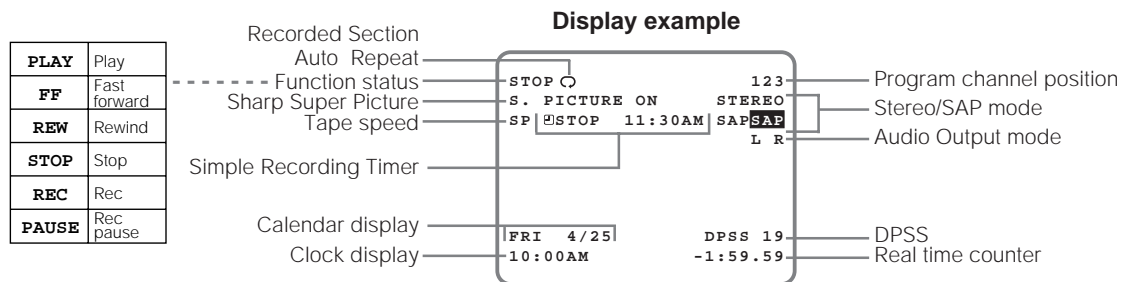
VCR PLUS+ .....	Setting a timer recording using VCR PLUS+ programming system. (See page 33.)
TIMER .....	Setting a timer recording (and checking it). (See page 35.)
SET UP .....	VCR operating conditions are set according to the broadcast reception and tape playback conditions. (See page 25.)
CHANNELS .....	Setting the channels, cable box code and digital satellite receiver code. (See pages 16-23.)
CLOCK .....	Setting the present time. (See pages 13-15.)
LANGUAGE .....	Selection of language to be used for the MENU screen. (See page 13.)



- 4 Press **▲/▼** and then **SET**. The screen changes to the one which you have selected.
- 5 To cancel the MENU screen, press **MENU**.

## OSD (On Screen Display)

To facilitate the operation and check the current VCR mode information, the following OSD (On Screen Display) will appear on the TV screen when using this VCR.



### **NOTE**

- If the clock is not set, the time and date will not be displayed.

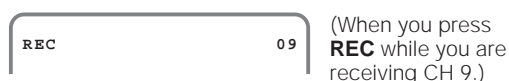
## How to Display Indicators

Each time **ON SCREEN** is pressed, the screen changes as follows:



### AUTO Display

When an operation button, numbered button, or **CH ▲/▼** is pressed, the current function status or the number of the channel will be displayed in the upper section of the TV screen for about 3 seconds.



### **NOTE**

- When the VCR power is turned off, the display mode is retained in memory.
- When you record a video signal output from this VCR on another VCR, press **ON SCREEN** to select Display Off. (If the function status is displayed on the screen, it is also recorded on the tape.)


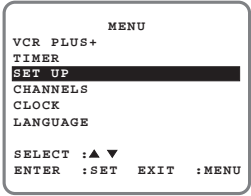
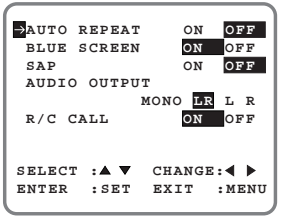
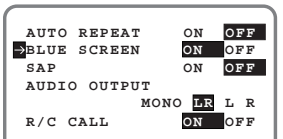
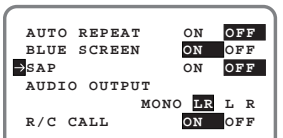
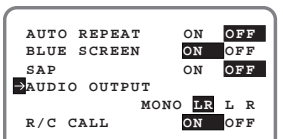
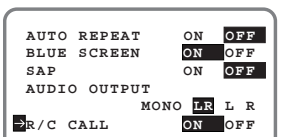




# Mode Selection

You can use the SET UP–selection screen to select the mode for basic features.

## PREPARATION >>>

- Turn on the TV and select the video channel. Press **POWER** and then **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).

 	<ol style="list-style-type: none"> <li>1 Press <b>MENU</b>.</li> <li>2 Select "SET UP" with ▲/▼ and then press <b>SET</b>.</li> </ol>
	<ol style="list-style-type: none"> <li>3 Set AUTO REPEAT mode to ON or OFF with ◀/▶. Then press ▼. (See <b>Recorded Section Auto Repeat</b>.)</li> </ol>
	<ol style="list-style-type: none"> <li>4 Set BLUE SCREEN mode to ON or OFF with ◀/▶. Then press ▼. (See <b>Blue Screen Noise Elimination</b>.)</li> </ol>
	<ol style="list-style-type: none"> <li>5 Set SAP (Separate Audio Program) mode to ON or OFF with ◀/▶. Then press ▼. (See <b>Recording MTS (Multi-channel TV sound) Broadcasts</b>.)</li> </ol>
	<ol style="list-style-type: none"> <li>6 Set AUDIO OUTPUT mode to MONO, LR, L or R with ◀/▶. (See <b>Audio Output Mode</b>.)</li> </ol>
	<ol style="list-style-type: none"> <li>7 Set R/C CALL to ON or OFF with ◀/▶. (See <b>Remote Pager</b>.)</li> </ol>
 	<ol style="list-style-type: none"> <li>8 Press <b>SET</b> to enter. The screen returns to normal.</li> </ol>

## NOTE

- If you press **MENU** to exit the mode selection screen in Step 8, the data will not be stored. Be sure to press **SET** to store the data.
- SAP is used for bilingual broadcasting. Check your local broadcast station or cable company.

# Playback

## Inserting a Video Cassette

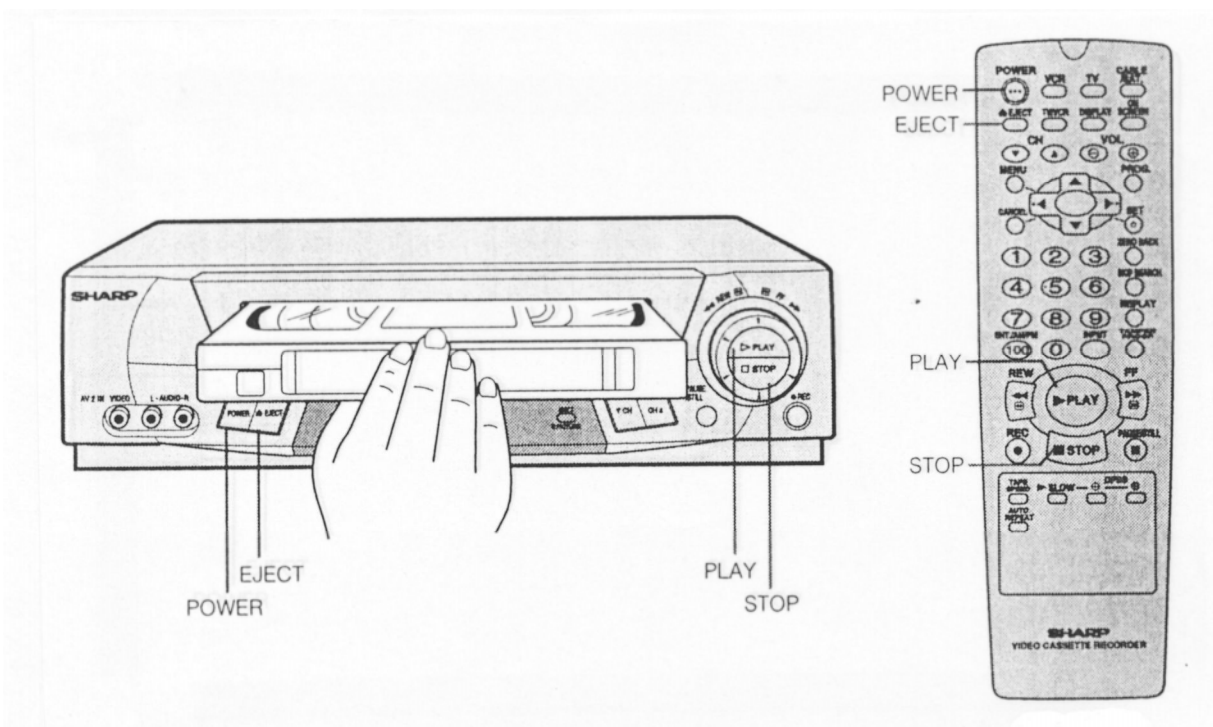
Gently insert the video cassette into the cassette compartment. The VCR turns on automatically and "00" appears on the multi-function display. If the cassette is inserted incorrectly, the loading system will not function. Do not force the cassette into the VCR.

To remove the cassette, press **EJECT** during stop mode.

## Playback

### PREPARATION >>>

- Turn on the TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector**.)



### PROCEDURE

- 1 Press **POWER** to turn on the VCR.
- 2 Insert a cassette.
- 3 Press **PLAY**. (The automatic tracking control system engages and "PLAY" flashes on the TV screen for a few seconds.)
- 4 To stop playback, press **STOP**. (If the tape reaches its end, the VCR will automatically rewind the tape to the beginning, eject the cassette, and turn off the power.)

### NOTE

- If noise should remain on the TV screen after tracking adjustment has been completed by the Automatic Tracking Control System, use the manual tracking mode.
- Press **CH ▲/▼** during playback mode to change to manual tracking mode. Adjust the tracking using **CH ▲/▼** until the noise is minimized or eliminated.
- For tapes recorded in EP on another VCR that still have vertical jitter even after manual adjustment, hold down **PLAY** for about 2 seconds. (On screen display may be blurred.) Ejecting the tape or turning off the power will return playback to its normal mode.

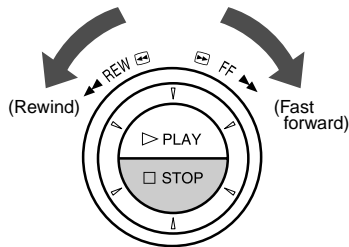




## Built-in Shuttle Control System

The shuttle system lets you control all the basic playback functions using just the shuttle ring.

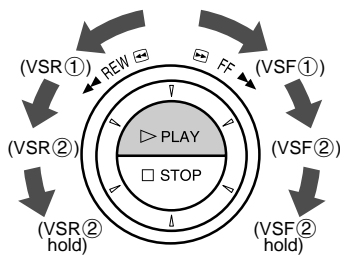
### Fast Forward and Rewind (During STOP Mode)



- 1 Turn the ring either to the right or the left and release it. (The shuttle ring will return to center.)
- 2 Press **STOP** to halt fast forward or rewind.

Basic Operations

### Video Search (During PLAY [or STILL] Mode)



- Turn the ring to the left or the right to enter VSF (Video Search Forward), or VSR (Video Search Rewind) mode. Select from two speeds by turning the ring. Release the ring (the shuttle ring returns to center) to return to playback.
- Turning the ring all the way to the left or right holds the VCR in VSF (Video Search Forward), or VSR (Video Search Rewind) mode. Press **PLAY** to return to normal playback.

#### TAPE SPEED

	VSF①/VSR①	VSF②/VSR②
SP/LP	×3	×5
EP	×5	×15

#### NOTE

- The shuttle ring does not rotate 360°.

### TURBOWIND (360 × Rewind Speed) to Fast Forward and Rewind

- 1 When the VCR is in stop mode, press **FF** or **REW** to fast forward or rewind the cassette. (The picture cannot be viewed in this mode.)
- 2 Press **STOP** to halt fast forward or rewind.

#### NOTE

- The FF and REW speeds may be slower for cassette tapes other than T-60, T-90, or T-120.
- After rewinding the T-120 cassette tape for about 60 seconds, you can fast forward the cassette tape.

### Video Search

Use the following procedure to quickly find the section you want, while viewing the picture.

- 1 During playback, press **FF** for forward video search, or **REW** for reverse video search. There are 2 search speeds in each direction. The VCR switches between them each time the button is pressed.
- 2 Press **PLAY** to resume normal playback.



## Slow Motion Playback (only with the remote control)

- 1 Press **SLOW** during playback.
- 2 Press **SLOW** ⊕/⊖ (to the right of SLOW) to vary the slow motion playback speed between  $\frac{1}{5}$  and  $\frac{1}{30}$  of the normal playback speed.  
If noise bars appear on the screen, use **CH** ▲/▼.
- 3 Press **PLAY** to resume normal playback.

## Still Picture and Frame Advance

- 1 Press **PAUSE/STILL** during playback. This will freeze the picture on your TV.
- 2 If the picture vibrates vertically during still mode, use **CH** ▲/▼ to adjust for minimum distortion. If noise bars appear on the screen during still mode, set your VCR to the slow mode and press **CH** ▲/▼ to make the noise disappear. Then press **PAUSE/ STILL** again.
- 3 Press **PAUSE/STILL** during still mode for frame advance.
- 4 Press **PLAY** again to resume normal playback.

### NOTE

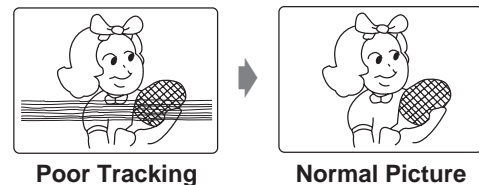
- Sound is muted during still picture, video search, frame advance, and variable slow motion.
- The picture quality in still picture, video search, frame advance, and variable slow motion is best with tapes recorded in SP or EP mode.

## Automatic Tracking Control System

This function automatically adjusts the tracking to match the recorded tape. Auto tracking engages in the following cases:

- When you insert the cassette and begin playback.
- When you press **CH** ▲/▼ at the same time.
- When the VCR has been playing back an unrecorded section of tape, and then reaches a recorded tape segment.

When auto tracking engages, "PLAY" on the TV screen flashes for a few seconds.



### NOTE

- When a poorly recorded tape is played back or the VCR is near an electrical or magnetic field, auto tracking may not operate normally. In this event, manually adjust the tracking with **CH** ▲/▼ to make any noise disappear.

## Blue Screen Noise Elimination

Set the BLUE SCREEN mode to ON on the SET UP-selection screen. (See **Mode Selection**.) This function eliminates monitor noise and mutes sound during playback of unrecorded portions of a tape, and when receiving a non-broadcasting channel. Blue Screen will also appear if the VCR is set to the Auxiliary mode but no video signal is fed to the VCR. (The BLUE SCREEN mode is set to ON at the factory.)

### NOTE

- Blue Screen does not function during still picture, variable slow motion and video search.
- Blue Screen may not function properly if the broadcast signal is too strong or too weak.
- Blue Screen does not function during playback of a tape with noise recorded.
- If the antenna signal is weak while recording a TV program, or if the input signal is weak while tape dubbing, the monitor screen may turn blue since the unit may not recognize whether or not a proper signal is being received. In this event, set the BLUE SCREEN mode to OFF.



### Quick Start with Full Loading Mechanism

Your VCR has a standby function (Full Loading Mechanism) to allow immediate recording and playback. After pressing **REC** or **PLAY**, it takes about 2 seconds until recording or playback is engaged when in the standby mode.

### Full Automatic Playback

The Full Automatic Playback lets you enjoy playback with ease. When you insert a cassette with the erasure protection tab removed, your VCR automatically turns on the power and plays back the tape. When the tape reaches its end, the VCR automatically rewinds the tape, ejects it and turns off the power.

**NOTE**

- If the erasure protection hole is covered, press **PLAY** after the power turns on automatically.

### Automatic Head Cleaning System

When the tape is inserted, or ejected, this system automatically cleans the drum and heads with a special roller before recording or playback begins, protecting the heads and drum from dirt and preserving beautiful sound and picture quality.

### Audio Output Mode

Your VCR has 3 channels for audio recording (2 on the Hi-Fi track and 1 on the linear track). You can select the audio output channels in playback mode on the SET UP-selection screen. The following shows which audio channels will be heard when a stereo Hi-Fi video cassette is played back while a stereo system is properly connected to the VCR. (See **Mode Selection**.)

**Hi-Fi L + R mode: LR**

Normally, select Hi-Fi **L + R** mode on the SET UP-selection screen: both the left (L) and right (R) audio channels will be taken from the Hi-Fi audio track.

Normally you will not have to change to another mode.

(See **Recording MTS (Multi-channel TV Sound) Broadcasts**.)

**Hi-Fi L mode: L**

The left channel of the Hi-Fi audio track will be played back through both speakers.

**Hi-Fi R mode: R**

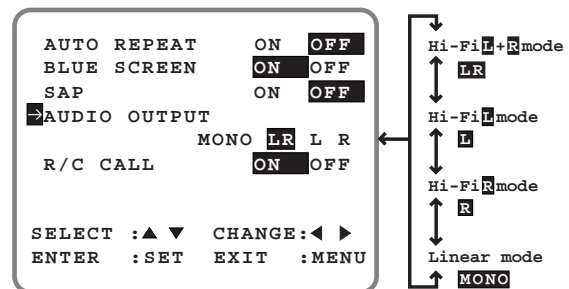
The right channel of the Hi-Fi audio track will be played back through both speakers.

**Linear mode: MONO**

The audio signal recorded on the linear audio track will be played back through both speakers.

**NOTE**

- When video cassettes recorded on a non-Hi-Fi VCR are played back or the Hi-Fi audio output level is poor, the audio signal recorded on the linear audio track will automatically be played back regardless of the audio output mode.



# Recording a TV Program

## PREPARATION ►►

- Turn on the TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector**.)
- Press **POWER** and then **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).
- If necessary, set "SAP" on the SET UP-selection screen. (See **Mode Selection**.)

## PROCEDURE

- 1 Insert the cassette, with the erasure protection tab covered. (See **Cassette Erase Protection** below.)
- 2 Press **TAPE SPEED** on the remote control to set the recording speed (SP or EP). (See **Recording Speeds** below.)  
SP or EP will appear on the display.
- 3 Select the desired channel with **CH ▲/▼** or the numbered buttons on the remote control.
- 4 Press **REC**. (If the erasure protection tab has been removed, the cassette will be ejected.)
- 5 To stop recording, press **STOP**.

\* To pause recording during the REC mode, press **PAUSE/STILL** on the remote control. To resume recording, press **PAUSE/STILL** or **REC**. (Pause disengages automatically after about 5 minutes to avoid damage to the tape and the VCR, and stop mode is engaged.)

## NOTE

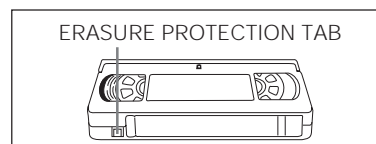
- It is not necessary to set the clock to use this recording operation.
- "PAUSE" will flash on the TV screen if **PAUSE/STILL** is pressed in stop mode. Press **STOP** to disengage the pause mode or press **REC** to enter the record standby mode.
- The VCR can record a TV program even with the TV turned off.

## To Watch Another TV Program While Recording

After steps 1 to 4 have been completed, press **TV/VCR** to select "TV" (the "VCR" indicator will disappear), then select the program you wish to view using the TV tuner.  
At the end of the tape, your VCR will automatically stop recording, rewind the tape, eject it and turn off the power.

## Cassette Erase Protection

A **VHS** cassette has a removable tab to prevent accidental erasure of recorded material. Removing the tab prevents recording. To record on a video cassette with the tab removed, place adhesive tape over the tab opening.



## Recording Speeds

This VCR lets you select a recording speed (SP or EP). SP provides a better picture, although the recording time is shorter. Select the tape speed that best suits your needs.

## NOTE

- This VCR can play back tapes recorded in LP (Long Play) mode.

MODE \ CASSETTE	SP (Standard Play)	EP (Extended Play)
T-60	1 hr.	3 hrs.
T-120	2 hrs.	6 hrs.
T-160	2 hrs. & 40 min.	8 hrs.



## Recording Hi-Fi Stereo Sound

Your VCR records AUDIO signals on two types of audio tracks.

### Hi-Fi:

Using specialized rotary heads, audio signals are recorded on the video track in FM format. Multi-sound broadcasts (Stereo or SAP [Separate Audio Program]) are recorded on two channels.

### Linear:

All audio signals are recorded in mono on the linear audio track.

#### NOTE

- Video cassettes recorded on a non-Hi-Fi VCR can also be played back. However, if the audio signals are recorded on two linear channels, stereo programs will be played back in monaural and SAP (Separate Audio Program) will be played back with both the MAIN and SAP audio mixed together.
- Video cassettes recorded on this VCR can be played back on a non-Hi-Fi VCR. However, only the linear track will be played back.

## Recording MTS (Multi-channel TV Sound) Broadcasts

Your VCR can record stereo or SAP (Separate Audio Program) broadcasts, where available.

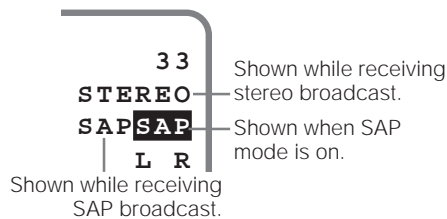
If the broadcast is in stereo, the VCR automatically records the stereo sound in dynamic Hi-Fi. If the broadcast is in SAP, you can record both the MAIN and the SAP sound by using the SET UP–selection screen to set the SAP mode to ON. If the broadcast is in stereo/SAP, you can record either the SAP sound by using the SET UP–selection screen to set the SAP mode to ON, or stereo sound by setting the SAP mode to OFF. (See **Mode Selection**.)

### MTS/SAP RECORDING

\* The monitor output listed in the table shows that the audio output mode is in the Hi-Fi **L** + **R** mode.

Broadcast Received	SAP Mode Position	*Monitor Output		Recording		
		L-Speaker	R-Speaker	Hi-Fi L-CH	Hi-Fi R-CH	Linear Track
Stereo	OFF	L	R	L	R	L R
	ON	L	R	L	R	L R
SAP	OFF	MAIN	MAIN	MAIN	MAIN	MAIN
	ON	MAIN	SAP	MAIN	SAP	SAP
Stereo/SAP	OFF	L	R	L	R	L R
	ON	L R	SAP	L R	SAP	SAP

#### On the TV screen



## Monitor Output When Receiving a SAP Broadcast

When receiving a SAP broadcast, if the SAP position is set to ON, change the audio output mode to select Monitor Output (MAIN or SAP) with the SET UP–selection screen. (See **Mode Selection**.)

### When enjoying a TV program with MAIN sound:

Select **L** on the SET UP–selection screen. (See **Audio Output Mode**.)

### When enjoying a TV program with SAP sound:

Select **R** or **MONO** on the SET UP–selection screen. (See **Audio Output Mode**.)

## Simple Recording Timer

The Simple Recording Timer (SRT) enables you to set the recording stop time. The SRT can be set on the TV screen by using the remote control.



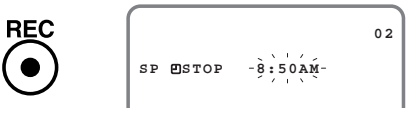
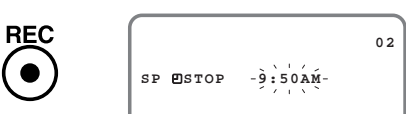
**The SRT cannot be set if the clock has not been set. Make sure the clock is set before setting the SRT.**

### PREPARATION >>>

- Turn on the TV and select the video channel. (See **Setting the 3 ↔ 4 Output Channel Selector**.)
- Insert a cassette with the erasure protection tab opening covered. Power will turn on automatically.
- Press **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).
- If necessary, set "SAP" on the SET UP-selection screen. (See **Mode Selection**.)

### PROCEDURE

**Example:** Recording a TV program in the SP mode. The program is on Channel 2, ending at 9:50 AM. The present time is 8:43 AM.

	<p>❶ Select the desired channel with the numbered buttons or <b>CH ▲/▼</b>. Ex.: Channel → 02</p>
	<p>❷ Set the recording speed (SP or EP) with <b>TAPE SPEED</b> on the remote control. Ex.: SP</p>
	<p>❸ Press <b>REC</b> to enter the recording mode. Then, press <b>REC</b> again to enter the simple recording timer mode. The recording stop time is displayed. Ex.: 8:50 AM</p>
	<p>❹ Each press of <b>REC</b> increases the stop time by 10 minutes. Ex.: 9:50 AM</p>
<p>❺ When the stop time comes, recording is finished, and the power turns off.</p>	

## Changing the Contents of the Simple Recording Timer

- ❶ Press **REC**. The stop time flashes on the TV screen.
- ❷ Change the stop time as desired using **REC**.

## Cancelling the Simple Recording Timer

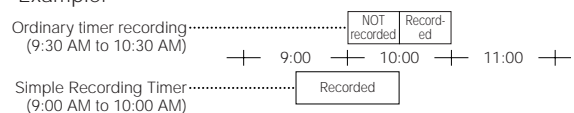
- ❶ Press **STOP**.

### NOTE

• **The Simple Recording Timer has priority over other recordings.**

- Ordinary timer programs will not be recorded when portions of the time setting of the simple recording timer and of the time setting of the ordinary timer recording overlap.

Example:





# Timer Recording with VCR Plus+ System

## \*The VCR Plus+ Programming System

The VCR Plus+ Programming System allows you to program your VCR for timer recording simply by inputting the PlusCode Programming number.

The PlusCode numbers are listed in most newspaper, TV Guide®, and local cable TV listings. Simply by inputting this PlusCode number, you can program your VCR for timer recording, eliminating the need to input program start time, stop time, channel, date, and other information necessary for timer recording.


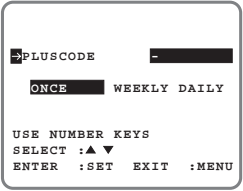

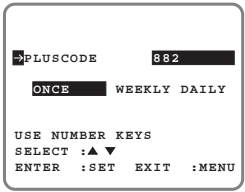

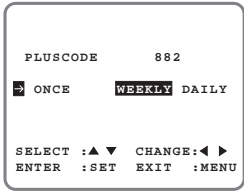

### NOTE

- If PlusCode numbers are not published in the listings for your area, they are sure to be introduced in the near future, so please contact your local newspaper or cable TV station for further details.
- \*VCR Plus+ C<sup>3</sup> and PlusCode are trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

## Procedure for Setting a Timer with the VCR Plus+ System

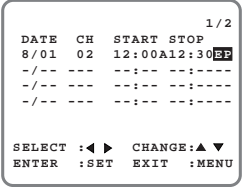
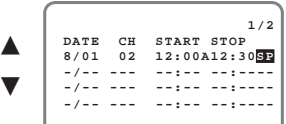

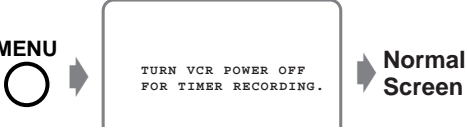

### PREPARATION >>>

- Before using the VCR Plus+ programming system, read the **Cable Box Set-up Function** section.
- Turn on the TV and select the video channel.
- Insert a cassette with the erasure protection tab opening covered. Power will turn on automatically.
- Press **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).
- Check that the clock is displaying the correct time.
- If necessary, set "SAP" on the SET UP-selection screen. (See **Mode Selection**.)

 	<p><b>1</b> Press <b>VCR PLUS+</b>. The VCR PLUS+ system setting screen will appear.</p>
 	<p><b>2</b> Enter the PlusCode number shown in your TV listings with the numbered buttons. <i>Ex.: PlusCode number is 882</i></p> <ul style="list-style-type: none"> <li>• If you make a mistake in entering the numbers, press <b>CANCEL</b> to erase the PlusCode numbers one by one, then re-enter the correct PlusCode numbers.</li> </ul>
<p>[ONCE] <b>SET</b>  → <b>Step 4</b> [WEEKLY/DAILY]</p>  	<p><b>3</b> If you want to record only once, press <b>SET</b> and go to Step <b>4</b>. Otherwise, press ▼ and select "WEEKLY" or "DAILY" with ◀/▶. Then press <b>SET</b> to enter.</p> <ul style="list-style-type: none"> <li>• ONCE: To record only once.</li> <li>• WEEKLY: To record every week at the same time.</li> <li>• DAILY: To record everyday at the same time.</li> </ul>



## Timer Recording with VCR Plus+ System

	<p>4 The timer program information is shown on the TV screen. Check the contents.</p> <ul style="list-style-type: none"> <li>If the channel displayed is incorrect, select the CH position with ◀/▶ and correct it with ▲/▼.</li> <li>When recording a program on a channel for the first time, you must enter the correct channel number on the screen, otherwise the PlusCode number will not be successfully decoded.</li> </ul>
	<p>5 Select the tape speed with ▲/▼ if necessary. Ex.: SP</p>
	<p>6 Press <b>SET</b>. To program additional timer settings, repeat Steps 2 to 6.</p>
	<p>7 Press <b>MENU</b>. The display shown to the left appears on the screen for 5 seconds, then the normal screen returns.</p>
	<p>8 Press <b>POWER</b> to enter the timer standby mode. Be sure that "TIMER" is lit up on the multi-function display.</p>

### NOTE

- If you select "DAILY" in Step 3, the VCR will record the program Monday–Sunday at the same time. If you want to record Monday–Friday or Monday–Saturday, select "DATE" with ◀/▶ and change it to "MO-FR" or "MO-SA" with ▲/▼ in Step 4.
- In Step 4, input the channel number you want to record. Once the preset channel has been input, you will not need to set the preset channel for that station again.
- In Step 3, if the VCR cannot decode the PlusCode number, or if the combination of PlusCode number and Program mode does not exist, then "ERROR" will appear as shown below. To correct, press **CANCEL** and re-enter the PlusCode number.

### Reasons for Error Message

1: PlusCode number entered is invalid.

2: Channel number is invalid.

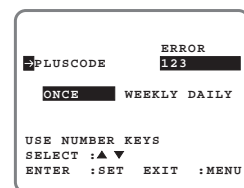
(Used in cases when, even though the VCR TV mode on the CHANNEL PRESET screen is set to AIR, the decoded channel number is greater than 69.)

3: PlusCode number entered for a program that has already been shown.

You can also enter the VCR Plus+ system setting screen by selecting "VCR PLUS+" on MENU screen.

If you press **VCR PLUS+** or select "VCR PLUS+" on MENU screen when the VCR clock has not been set, the CLOCK screen will initially appear.

If you press **VCR PLUS+** when operating MENU screen for the first time or after a power failure of more than 20 seconds, the LANGUAGE screen will initially appear.



## Checking/Cancelling the VCR Plus+ Programs System

Use the method described in **Confirming/Cancelling Timer Programs** to confirm or cancel program data.





# Timer Recording (without VCR Plus+ System)


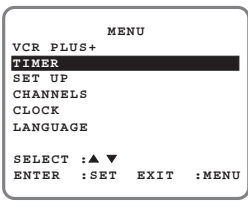
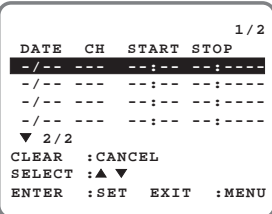
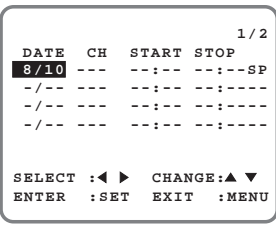
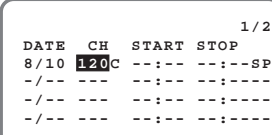
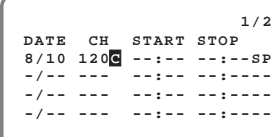
## PREPARATION >>>

• Before using the Timer Recording, read the **Cable Box Set-up Function** and **Digital Satellite Set-up Function** sections.

- Turn on the TV and select the video channel.
- Insert a cassette with the erasure protection tab opening covered. Power will turn on automatically.
- Press **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).
- Check that the clock is displaying the correct time.
- If necessary, set "SAP" on the SET UP-selection screen. (See **Mode Selection**.)

## PROCEDURE >

**Example:** Recording a TV program in the SP mode: the TV program is on channel 120 (CATV) starting at 9:05 PM and stopping at 10:35 PM on August 10th. The present time is 6:35 PM on August 10th.

 	<p>① Press <b>MENU</b>.</p> <p>② Select "TIMER" with ▲/▼ and then press <b>SET</b>.</p>
	<p>③ Press <b>SET</b>.</p>
	<p>④ Select the desired month/day (DATE) with ▲/▼ and then press ►. The cursor will move to the next column.  <i>Ex.: August 10th</i></p> <ul style="list-style-type: none"> <li>• If you want to record every day or week at the same time, hold ▼ when you select the date.</li> </ul> <p><b>When pressing:</b> The recording date changes in this sequence:</p> <ul style="list-style-type: none"> <li>▼ 8/10→MO-FR→MO-SA→DAILY→SAT→SUN→8/9→8/8→ (next year)</li> <li>▲ 8/10 → 8/11 → 8/12 → 8/8 → 8/9 → SUN → SAT → (present) (tomorrow) (next year)</li> </ul>
	<p>⑤ Select the desired channel with ▲/▼ and then press ►.  <i>Ex.: Channel 120 (CATV)</i></p>
	<ul style="list-style-type: none"> <li>• If you receive both cable TV and satellite broadcasts, you will need to specify for channels 100 to 125 whether it is a cable or satellite channel. After selecting the channel, select "C" for a cable channel or "S" for a satellite channel with ▲/▼ and then press ►.  <i>Ex.: C</i></li> </ul>



## Timer Recording (without VCR Plus+ System)

	<p>⑥ Set the recording start time (hour digits and minute digits) with ▲/▼ and then press ►. Ex.: 9:05 PM</p>
	<p>⑦ Set the recording stop time with ▲/▼ and then press ►. Ex.: 10:35 PM</p>
	<p>⑧ Select the tape speed with ▲/▼. Ex.: SP</p>
	<p>⑨ Press <b>SET</b>. • To program the additional timer settings, press <b>SET</b> and repeat steps ③–⑨.</p>
	<p>⑩ Press <b>MENU</b> to finish settings. The display shown to the left appears on the screen for 5 seconds, after which the normal screen returns.</p>
	<p>⑪ Press <b>POWER</b> to enter the timer standby mode. Be sure that "TIMER" is lit up on the multi-function display.</p>

### NOTE

- If the power is interrupted for more than 20 seconds (power failure, etc.) during timer recording, the Auto Clock Setting will reset the time after the power is returned (the timer indicator on the multi-function display will flash.) but the timer settings will be cancelled.
- Press **ENT. /AM/PM (100)** to select AM or PM during start time setting.
- Numbered buttons can be used instead of ▲/▼ to set the data.
- If the cassette ends before recording all the programs, the VCR will stop, eject the cassette, and turn the power off automatically.
- In Step ⑪, if **POWER** is pressed with no cassette inserted, the **TIMER** indicator flashes for 5 seconds indicating that timer recording is not possible.
- In Step ⑪, if the inserted cassette is without the erasure protection tab, **TIMER** indicator flashes and the cassette is ejected.
- To stop timer recording, press **STOP**.
- If a button is not pressed within 3 minutes during the setting procedure, the screen will return to the normal screen.
- There are two timer setting screens (1/2, 2/2).



## Timer Recording (without VCR Plus+ System)

### Confirming Timer Programs

You can see on the Timer setting screen a list of all timer programs that are already set.

#### PREPARATION >>>

- Turn on the TV and select the video channel.
- Press **POWER** and then **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).

	<ol style="list-style-type: none"> <li>1 Press <b>MENU</b>.</li> <li>2 Select "TIMER" with ▲/▼ and then press <b>SET</b>.</li> </ol>
	<ol style="list-style-type: none"> <li>3 TIMER screen will appear. <ul style="list-style-type: none"> <li>• Check the information displayed.</li> <li>• If you want to correct the data, select the data to be changed with ▲/▼ and then press <b>SET</b>. Correct the data as desired using ▲/▼/◀/▶. Then press <b>SET</b>. See 2/2 screen also.</li> </ul> </li> </ol>
	<ol style="list-style-type: none"> <li>4 Pressing <b>MENU</b> will clear the screen. The display shown to the left appears for 5 seconds, after which the normal screen returns. <ul style="list-style-type: none"> <li>• After checking or correcting the program contents, press <b>POWER</b> to enter the Timer Standby mode.</li> </ul> </li> </ol>

### Cancelling Timer Programs

Perform the following procedure to cancel timer programs that have already been set.

#### PREPARATION >>>

- Turn on the TV and select the video channel.
- Press **POWER** and then **TV/VCR** to select "VCR" ("VCR" will light on the multi-function display).

<ol style="list-style-type: none"> <li>1 Follow the same procedure in <b>Confirming Timer Programs</b> ① ② above.</li> </ol>	
	<ol style="list-style-type: none"> <li>2 TIMER screen will appear. <ul style="list-style-type: none"> <li>• Select the program you wish to cancel with ▲/▼.</li> </ul> </li> </ol>
	<ol style="list-style-type: none"> <li>3 Double-check that it is the program you wish to cancel, and press <b>CANCEL</b>. It will be cleared on the screen.</li> </ol>
	<ol style="list-style-type: none"> <li>4 Pressing <b>MENU</b> will clear the screen. The display shown to the left appears for 5 seconds, after which the normal screen returns. <ul style="list-style-type: none"> <li>• If there are still some programs set, press <b>POWER</b> to enter the Timer Standby mode.</li> <li>• If you press <b>MENU</b> when all of the timer programs are cancelled, the screen will return to normal.</li> </ul> </li> </ol>

## Remote Pager

This function is handy for finding the remote control if it is misplaced. Press **REMOTE PAGER** on the VCR, and the remote control will beep to reveal its location.



### PROCEDURE

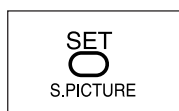
- 1 Turn OFF the power on the VCR.
- 2 Press **REMOTE PAGER** on the VCR.  
The remote control will soon begin beeping for about 20 seconds, or until a button on the remote control is pressed.

### NOTE

- If you do not wish to use the Remote Pager function, set the R/C CALL mode to OFF on the SET UP selection screen. (The R/C CALL mode is preset to ON at the factory.) (See **Mode Selection**.)
- The Remote Pager function operates on radio waves. The effective range of radio waves sent from the VCR is a radius of 7 meters (in a straight unobstructed line), however, this may vary depending on the surrounding environment.
- The remote control may not beep in the following situations.
  - When the remote control is in a different room from the VCR.
  - When the remote control is placed on a metal surface.
  - When the remote control is obstructed by a large object (i.e. wall, furniture).
- After **REMOTE PAGER** is pressed, it may take up to five seconds before the remote control beeps.

## Sharp Super Picture

This function creates clearer picture quality only during playback.



Press **S. PICTURE** on the VCR. "S.PICTURE ON (or OFF)" will appear on the TV screen for a few seconds. Each time the button is pressed, the mode switches between ON and OFF. (The Sharp Super Picture is preset to ON at the factory.)

S. PICTURE ON

### ON:

Normally leave the mode set to ON. This high picture quality function will create a clearer image during playback.

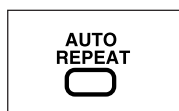
### OFF:

Set to OFF when playing back a tape on the VCR while editing or when strong noise appears on the screen.

### NOTE

- This function only operates during playback. It will not operate when recording or watching a TV program with the VCR tuner.
- The ON/OFF status of the Sharp Super Picture can be checked when **ON SCREEN** is pressed to display OSD.
- This function can not be set to ON/OFF with the MENU screen displayed. First close the MENU screen before operating this function.
- When the VCR power is turned off, the Sharp Super Picture setting is retained in memory.
- If power is interrupted for more than 20 seconds (power failure, etc.), the setting will return to ON.


## Recorded Section Auto Repeat




With this feature, if the recorded portion has finished and non-recorded portion has continued for 15 seconds, the tape will automatically stop, rewind to the beginning and repeat playback.

PLAY 

### PROCEDURE

- 1 Press **AUTO REPEAT** on the remote control. The "
- 2 When a non-recorded portion has continued for 15 seconds after the recorded portion has finished, the tape will stop and begin rewinding.
- 3 The tape will rewind to the beginning and repeat playback.
- 4 To turn off the Recorded Section Auto Repeat function, press **AUTO REPEAT** once more.

### NOTE

- You can also set the Recorded Section Auto Repeat mode by selecting "ON" on the SET-UP-selection screen. (The AUTO REPEAT mode is preset to OFF at the factory.)
- The ON/OFF status of the Recorded Section Auto Repeat can be checked when **ON SCREEN** is pressed to display OSD. (The "
- If the Recorded Section Auto Repeat is on and the tape is rewound to the beginning with rewind or reverse video search, the tape will automatically start playback.

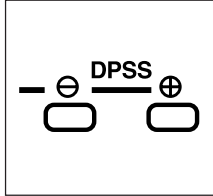
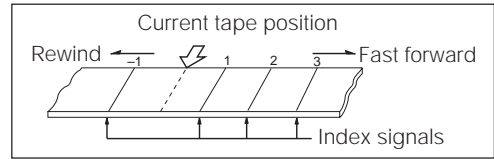


# DPSS (Digital Program Search System)

You can quickly locate a desired section of the tape with this feature.

### Index Signal

An index signal is automatically recorded on the tape at the start of ordinary recording, simple recording timer and timer recording.



### PROCEDURE

- 1 Insert a tape containing index signals.
- 2 Select the index number of the desired program with **DPSS**  $\ominus/\oplus$  on the remote control.
  - With each press of the button, the number changes. One of 19 programs can be selected in either direction (one of up to 38 programs).
  - (Ex.: DPSS 3=Third program after the current one.)

### On the TV screen



- 3 Search starts immediately when you press **DPSS**  $\ominus/\oplus$ . (When a signal is located, the displayed number decreases.)
- 4 When the selected section is found, playback begins automatically.

### NOTE

- DPSS may not work if recordings are too close (within 3 minutes of each other).
- Press **PLAY** or **STOP** to cancel DPSS.
- If the tape reaches its end or beginning before locating the desired point, DPSS is cancelled.
- DPSS may not function for damaged or worn tapes.
- DPSS cannot be used with tapes that contain no index signals.
- The starting point of a program may vary slightly.
- DPSS does not operate during the slow, record, timer stand-by, and timer recording modes, or when there is no cassette loaded.
- Index signals for DPSS cannot be entered manually.

Special Functions



## Skip Search



With this feature, you can set a forward video search time to approx. 30, 60, 90 or 120 seconds of recorded material. After searching, normal playback will resume automatically.

- Press **SKIP SEARCH** on the remote control during playback (ex. during commercials).

Number of Times Pressed	1 Time	2 Times	3 Times	4 Times
Video Search Time	Approx. 30 sec.	Approx. 60 sec.	Approx. 90 sec.	Approx. 120 sec.



## Instant Replay



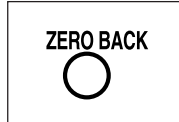
With this feature, you can set a reverse video search time to approx. 20, 40, 60, or 80 seconds of recorded material. After searching, normal playback will resume automatically.

- Press **REPLAY** on the remote control during playback.

Number of Times Pressed	1 Time	2 Times	3 Times	4 Times
Video Search Time	Approx. 20 sec.	Approx. 40 sec.	Approx. 60 sec.	Approx. 80 sec.

## Auto Zero Back

This function automatically forwards or rewinds the cassette to the "0:00.00" point. Use this function to return to a recording start point.



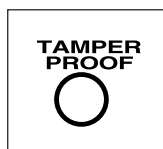
### PROCEDURE

- 1 Reset the counter to "0:00.00" with **CANCEL** before recording.
- 2 Press **REC** to start recording.
- 3 After recording the desired program, press **STOP** to stop recording.
- 4 Press **ZERO BACK** to return to the recording start point (0:00.00).

### NOTE

- During auto zero back, if the VCR rewinds (or fast forwards) the tape all the way without finding the "0:00.00" point, it will stop at the beginning (or end) of the tape.
- The counter start point "0:00.00" may differ slightly from the starting point on the tape.
- This function is not operable during recording, recording pause, simple recording timer or timer recording.

## Tamper Proof



With this feature, you can lock all VCR modes to prevent accidental change. This function works even when the VCR power is off, thus preventing children from operating the VCR or viewing select programs while you are away from home.

### Tamper Proof

- 1 Press **TAMPER PROOF** on the remote control for about 2 seconds. "Ⓞ" flashes and "⏮---" lights on the multi-function display.
- 2 Press **TAMPER PROOF** again. "Ⓞ" remains lit on the multi-function display confirming that Tamper Proof has been activated.
- 3 Now regardless of what other operating buttons are touched, the VCR will continue to operate in the present mode.  
(If Tamper Proof is activated during playback, once the tape reaches its end, the VCR automatically rewinds the tape, ejects it, and turns the power off.)

### Disengaging Tamper Proof

- Press **TAMPER PROOF** for about 2 seconds. "Ⓞ" starts flashing and then disappears. Now, Tamper Proof is disengaged.

### Advanced Tamper Proof

- 1 Press **TAMPER PROOF** on the remote control for about 2 seconds. "Ⓞ" flashes and "⏮---" lights on the multi-function display.
- 2 Input the personal code number (4 digit code) with the numbered buttons. The personal code number you have input is displayed on the multi-function display.
- 3 Press **TAMPER PROOF** again. "Ⓞ" remains lit on the multi-function display confirming that Tamper Proof has been activated.
- 4 Now regardless of what other operating buttons are touched, the VCR will continue to operate in the present mode.  
(If Tamper Proof is activated during playback, once the tape reaches its end, the VCR automatically rewinds the tape, ejects it, and turns the power off.)

### Disengaging Advanced Tamper Proof

- 1 Press **TAMPER PROOF** for about 2 seconds. "Ⓞ" flashes and "⏮---" lights on the multi-function display.
- 2 Input the personal code number (4 digit code) you used to activate Advanced Tamper Proof with the numbered buttons. The personal code number you have input is displayed on the multi-function display.
- 3 Press **TAMPER PROOF** again. "Ⓞ" disappears. Now, Tamper Proof is disengaged. If the code number is wrong, "⏮---" is displayed on the multi-function display. Retry to input the right code number. Press **TAMPER PROOF** again.

### NOTE

- If power is interrupted for more than 20 seconds (power failure, etc.), Tamper Proof may disengage.
- If, while Tamper Proof is on, you attempt to change modes by pressing another button, the "Ⓞ" indicator will flash on the multi-function display.



## Specifications

Format: VHS NTSC Standard  
Video Recording System: Rotary Two-Head Helical Scanning  
Number of Video Heads: 4  
Video Signal Standard: NTSC Color System  
Audio Recording System: 1 Stationary Head for Linear Audio  
2 Rotary Heads for Hi-Fi stereo  
Tape Width: 12.7 mm (1/2 inch)  
Tape Speed: (SP) 33.35 mm/sec (1.31 i.p.s.)  
(LP) 16.67 mm/sec (0.66 i.p.s.) (playback only)  
(EP) 11.12 mm/sec (0.44 i.p.s.)  
Maximum Recording Time: (SP) 160 min (T-160)  
(EP) 480 min (T-160)  
Channel Coverage: VHF 2–13  
UHF 14–69  
CATV 1–125  
Antenna Input: 75 Ohm  
Video Input: 0.5 to 2.0 Vp-p, 75 Ohm unbalanced  
Video Output: 1.0 Vp-p, 75 Ohm unbalanced  
Audio Input: –8 dBs, 47 kOhm unbalanced (0 dBs = 0.775 Vrms)  
Audio Output: –8 dBs, 1 kOhm unbalanced (0 dBs = 0.775 Vrms)  
Hi-Fi Audio: *Dynamic Range*: 90 dB  
*Frequency Response*: 20 Hz–20 kHz  
Memory Backup: 20 seconds  
Operating Temperature: 5°C to 40°C (41°F to 104°F)  
Storage Temperature: –20°C to 60°C (–4°F to 140°F)  
Power Source: 120 V AC, 60 Hz  
Power Consumption: 20 W  
Dimensions: 360 (W) × 92 (H) × 256 (D) mm  
(14-3/16" × 3-5/8" × 10-5/64")  
Weight: 2.7 kg (6.0 lbs)

### NOTE

- Specifications are subject to change without notice.



# Pre-Service Call Checklist

Check this list before calling for service.

Problem	Possible Cause/Solutions
• NO OPERATION WHEN ANY BUTTON IS PRESSED.	• MAKE SURE THAT THE "TAMPER PROOF" MODE IS NOT ENGAGED. • If you forget the personal code number you have input with Advanced Tamper Proof, input "0000" (four zeros) to disengage it.
• No power. (Nothing on the multi-function display.)	• Make sure the power cord is plugged in. • Check the outlet, fuse or circuit breaker.
• VCR does not receive CATV channels.	• Use the CHANNEL PRESET screen to change from AIR mode to CATV. (See <b>Setting the Channels.</b> )
• VCR does not operate.	• Turn on the power. • Press <b>EJECT</b> several times. • Safety device in VCR is functioning. Unplug VCR and plug it in again after a few minutes.
• VCR does not record.	• Cassette erasure protection tab is removed. Use a different cassette or place adhesive tape over the tab opening. • Check for a cassette loaded in the unit.
• No color or poor TV picture during normal viewing.	• Make sure the "TV" has been selected by pressing <b>TV/VCR</b> . • Make sure all cables are connected properly.
• No tape movement.	• Make sure the VCR is not in PAUSE/STILL mode. • Make sure the tape has not reached the end or beginning.
• No picture appears during playback.	• Make sure the TV is set to the same channel as the VCR's 3 ↔ 4 OUTPUT CHANNEL selector. • Check all connecting cables.
• Cassette cannot be loaded.	• Make sure there is no other cassette inside. • Make sure the cassette is properly positioned and reinsert. • Make sure the "TAMPER PROOF" mode is not engaged.
• Timer recording does not work.	• Power failure may have occurred. • If the clock display is blinking, set the clock and try again.
• Noise appears on the screen when the automatic tracking control system is operating.	• Adjust the tracking manually by pressing <b>CH ▲/▼</b> . • In some cases, with a worn or damaged tape, noise cannot be eliminated completely.
• Cannot record a signal through the rear external input jack.	• The VCR may not be set to external input mode. Press <b>INPUT</b> to set the VCR to external input mode. (See <b>Tape Dubbing.</b> )
• Picture or sound is not stable during playback.	• Keep your VCR away from electrical and magnetic appliances. Be sure to position your VCR at least <b>8"</b> away from your TV or video monitor.
• Stereo TV puts out monaural sound only, even when cassettes recorded in Hi-Fi stereo are played back.	• Use RCA pin type connection cables (not the supplied coaxial cable) to connect the TV to the VCR, and set the TV to external video input mode. • Adjust the tracking, or try another Hi-Fi stereo cassette.
• Cassettes recorded in stereo mode are not played back in stereo.	• Make sure the sound was recorded in Hi-Fi stereo. (Any stereo signals recorded on the linear track will not be played back in stereo.)

**This unit is equipped with a microprocessor. Its performance could be adversely affected by external electrical noise or interference. If this should happen, unplug the VCR and plug it in again after a few minutes and reset EZ Set Up for AIR/CATV operation.**



## Service Information

For the location of the nearest Sharp Authorized Service Center, or to obtain product literature, accessories, supplies or customer assistance, please call 1-800-BE SHARP (1-800-237-4277).



# Cable TV Connections

Your VCR is capable of receiving the following non-scrambled channels.

- Scrambled channels can be received with the cable box supplied by your cable TV company.

## PREPARATION >>>

Set the 3 ↔ 4 OUTPUT CHANNEL selector on the rear of the VCR to 3 or 4. (Factory preset: 3)

Tune the TV to this channel and press the TV/VCR button to watch the VCR.

## First check your TV/CATV system

### Step ① Does your CATV operator require use of cable box?

• YES → Go to Step ②

• NO → Go to **A**

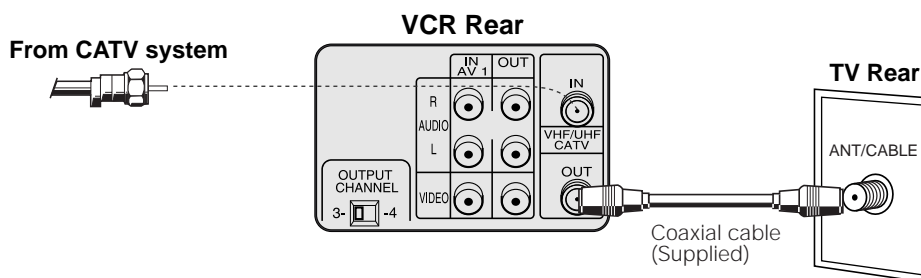
### Step ② Does your CATV system have some or all channels scrambled?

• YES → Go to **B** or **C**

• NO → Go to **B**

## **A** Connection without a cable box

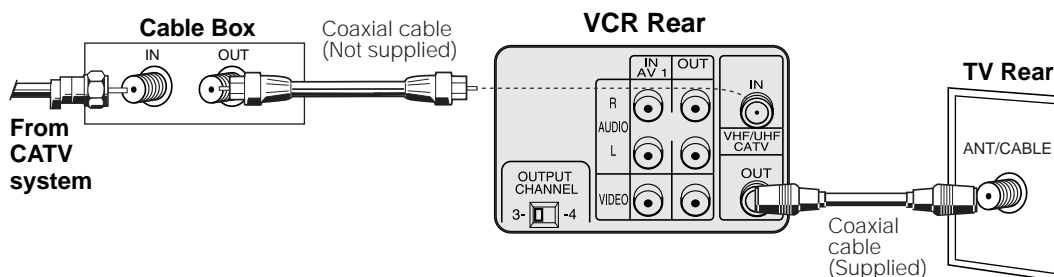
- Connect as shown. Then go to "After the Connection".



## **B** Connection with cable box

- Connect as shown. With this connection, it is possible to record descrambled CATV signals. Then go to "After the Connection".

- If your cable box is remote-controllable, see **Cable Box Set-up Function**.



## NOTE

- If the cable box is turned off, it will not output any signals, thus making it impossible to record or view a program from the CATV system.
- In the case of the above connections, it is not possible to change channels using the VCR remote control. Only the cable box can be used to change channels.
- Only one channel at a time can be programmed for recording programs with the timer. It is not possible to watch a TV program different from the one being recorded.
- Depending on which terminals the TV has, a separate combiner (mixer) or separator (splitter) may be necessary.



## Cable TV Connections

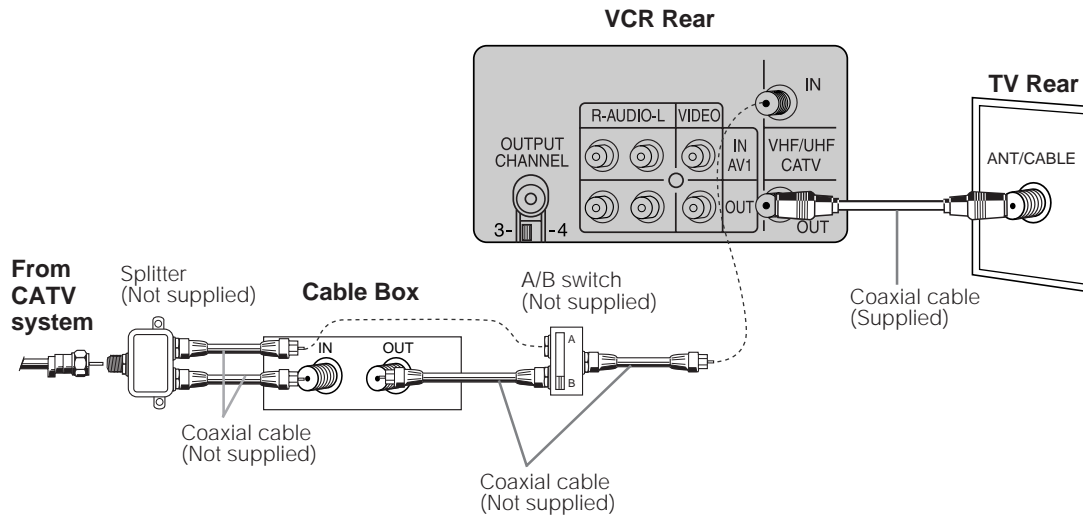
### Connection with cable box, A/B switch and splitter

If the cable box is needed only for some of the channels of your CATV operator, connect the cable box to your VCR as shown below. This type of connection requires a cable box set-up. For more details, see **Cable Box Set-up Function**.

- Connect as shown. Then go to "After the Connection".

#### NOTE

- This connection allows you to watch a channel that does not require the cable box, while recording from a different channel. Note, however, that you cannot view other broadcast TV channels while recording a CATV program through the cable box.



### Using the A/B switch

- 1 Set the A/B switch to the 'A' position in the following situations.

Set USE CABLE BOX to "NO" on the CABLE BOX SET UP screen. (See **Cable Box Set-up Function**.)

  - a) To record and watch an unscrambled TV program (without the signal passing through the cable box).
  - b) To watch an unscrambled TV program when the VCR is recording another program.
  - c) To watch an unscrambled TV program when the VCR is turned off.
- 2 Set the A/B switch to position B in the following situations:

When the A/B switch is set to B, the cable box requires a set-up to receive the remote control codes sent from your VCR, which control the cable box channel. For details on the cable box set-up, see **Cable Box Set-up Function**.

Set USE CABLE BOX to "YES" on the CABLE BOX SET UP screen.

  - a) To record and watch a scrambled or unscrambled TV program through the cable box.
  - b) To watch a scrambled or unscrambled TV program through the cable box when the VCR is turned off.
    - If the power on the cable box is turned off, it will not output any signals, thus making it impossible to record or view a program from the CATV system.

#### NOTE

- If you turn off the cable box, you cannot record or view a CATV program.
- If you have questions regarding any connection procedure, please contact your cable company.

### After the Connection

Plug in the power cords of the VCR, TV and cable box. Then go to the **SETTING UP** section.



# Guía de operación rápida en español

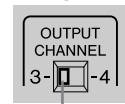
Esta es una breve guía de operación rápida preparada para ayudarle a utilizar las funciones básicas de su videograbadora. Después de prender su videograbadora a la antena apropiada, televisor o caja de televisión por cable, utilícela siguiendo las explicaciones dadas a continuación.

Para ver en la pantalla de su televisor lo que su videograbadora está reproduciendo o grabando, ajuste el selector 3 ↔ 4 OUTPUT CHANNEL y el canal de TV siguiendo el método descrito a continuación.

## Ajuste del selector 3 ↔ 4 Output Channel

El selector 3 ↔ 4 OUTPUT CHANNEL de la parte trasera de su videograbadora cambia la salida de la videograbadora a las señales estándar de emisión de TV. Su televisor y su videograbadora deben estar ajustados al mismo canal (por ejemplo, el televisor en el canal 3 y el selector OUTPUT CHANNEL de la videograbadora en el canal 3).

### Parte trasera de su videograbadora



Selector 3 ↔ 4 OUTPUT CHANNEL

## Preparación del EZ

### IMPORTANTE (Precaución durante EZ Set Up):

- No pulse el botón POWER de la videograbadora ni del control remoto.
- No inserte un videocasete en la videograbadora.

La función de EZ Set Up ajusta automáticamente el canal del sintonizador y el reloj cuando el cable de la antena está conectado al panel trasero de la videograbadora y la clavija de alimentación se conecta luego a una toma de CA.

### IMPORTANTE

Cuando se utilice un sintonizador de TV por cable:

- Consulte Conexiones de TV por cable.
- Deje conectada la alimentación del sintonizador de TV por cable.

Durante el ajuste automático de canales



Puesta en hora automático del reloj



EZ Set Up completo



- 1 Asegúrese de que el cable de la antena esté conectado. Para conocer la configuración de la conexión, consulte Conexión del vídeo.
- 2 Conecte la clavija del cable de alimentación del video a una toma de CA.
- 3 El canal del sintonizador y el reloj se ajustarán automáticamente.
  - Esta videograbadora puede monitorear y utilizar señales de tiempo (señales EDS), proporcionadas por algunas emisoras de TV, para ajustar automáticamente el reloj de la videograbadora. Esta videograbadora busca automáticamente las señales EDS, pero si usted tiene prisa para utilizar la grabación con temporizador o conocer el canal de la portadora de señal EDS en su área, siga el procedimiento de **Ajuste automático del reloj** o **Ajuste manual del reloj**.

Español

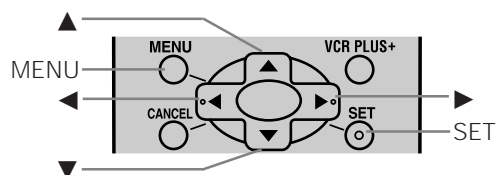
### NOTAS

- Si se suministra alimentación a la videograbadora antes de conectar el cable EZ Set Up no podrá preajustar canales en la memoria. Si ocurre esto, desenchufe la videograbadora de la toma de corriente y espere unos pocos minutos. Compruebe la conexión del cable/antena y suministre alimentación a la videograbadora. EZ Set Up empezará de nuevo automáticamente.
- Si se conecta la alimentación durante EZ Set Up, el ajuste automático de los canales se interrumpirá y los canales del sintonizador no podrán ser preajustados.
- El ajuste automático del reloj puede tardar varios minutos.
- Si el ajuste automático del reloj no se completa antes de 30 minutos, puede que no haya canales con señales EDS. En este caso, ajuste el reloj manualmente. (Consulte **Ajuste manual del reloj**.)
- Si la señal de la antena es débil, la función del ajuste automático del reloj no funcionará.
- Durante el ajuste inicial de los canales, éstos se ajustarán en el canal AIR. Para ver un canal de TV por cable, seleccione "CATV" en la pantalla PREAJ. CANAL. (Consulte **Ajuste de canales**.)

## Ajuste de idioma

Cuando utilice la videograbadora por primera vez, o después de producirse un fallo en la alimentación de más de 20 segundos, tendrá que ajustar el idioma que vaya a utilizar en la pantalla de visualización.

- 1 Conecte la alimentación de su televisor y seleccione el canal de video. (Consulte **Ajuste del selector 3 ↔ 4 Output Channel**.)
- 2 Pulse **POWER** y luego **TV/VCR** para seleccionar "VCR". ("VCR" se encenderá en el visualizador multifuncional.)





## Guía de operación rápida en español

EN LA PANTALLA DEL TELEVISOR	OPERACION
	<b>3</b> Pulse <b>MENU</b> .
	<b>4</b> Seleccione el idioma con los botones ▲/▼ y pulse <b>SET</b> . La pantalla volverá al modo normal. Ejemplo: <i>ESPAÑOL</i>

### Ajuste del reloj

Deberá poner en hora el reloj si desea utilizar las funciones del temporizador. De otra forma, este ajuste no será necesario. Cuando la videograbadora se enchufe por primera vez a una toma de corriente, el reloj del visualizador multifuncional (---) parpadeará. Lo mismo ocurrirá si la alimentación se interrumpe durante más de 20 segundos (fallo en la alimentación, etc.).

- Conecte la alimentación de su televisor y seleccione el canal de video. (Consulte **Ajuste del selector 3 ↔ 4 Output Channel**.)
- Pulse **POWER** y luego **TV/VCR** para seleccionar "VCR". ("VCR" se encenderá en el visualizador multifuncional.)

EN LA PANTALLA DEL TELEVISOR	OPERACION
	<b>3</b> Pulse <b>MENU</b> . Seleccione el ítem "RELOJ" con los botones ▲/▼ y pulse <b>SET</b> .
	<b>4</b> Siga las instrucciones mostradas en la pantalla e introduzca los datos del calendario y del reloj utilizando los botones ▲/▼/◀/▶ del control remoto.
	<b>5</b> Si los datos introducidos son correctos, pulse <b>SET</b> del control remoto para volver a la pantalla normal, y luego el reloj empezará a funcionar.

### NOTAS

- En el paso **3**, si pulsa **MENU** cuando opere la pantalla de visualización por primera vez, o después de producirse un fallo en la alimentación de más de 20 segundos, la pantalla del idioma aparecerá.
- Si no se pulsa un botón antes de que pasen 3 minutos durante el procedimiento de ajuste, la pantalla volverá a la pantalla normal.

### Reproducción

- Conecte la alimentación de su televisor y seleccione el canal de video. (Consulte **Ajuste del selector 3 ↔ 4 Output Channel**.)
- Pulse **POWER** para conectar la alimentación de la videograbadora.
- Insertando un casete, pulse **PLAY**.
- Para parar la reproducción, pulse **STOP**.

### Grabación de un programa de TV

- Conecte la alimentación de su televisor y seleccione el canal de video. (Consulte **Ajuste del selector 3 ↔ 4 Output Channel**.)
- Pulse **POWER** y luego **TV/VCR** para seleccionar "VCR". ("VCR" se encenderá en el visualizador multifuncional.)
- Inserte el casete con lengüeta de protección contra borrado intacta.
- Pulse **TAPE SPEED** del control remoto para ajustar la velocidad de grabación (SP o EP).
- Seleccione el canal deseado con **CH ▲** o **▼**, o con los botones numéricos del control remoto.
- Pulse **REC**.



### Para ver un programa de TV mientras se graba otro

- 1 Siga los pasos 1 a 6 de arriba.
- 2 Pulse **TV/VCR** para seleccionar "TV" (el indicador "VCR" se apagará).
- 3 Sintonice el canal de TV deseado.

### Ajuste de la grabación con temporizador

- 1 Conecte la alimentación de su televisor y seleccione el canal de vídeo.
- 2 Inserte un casete con la abertura de la lengüeta de protección contra borrado tapada. La alimentación se conectará automáticamente.
- 3 Pulse **TV/VCR** para seleccionar "VCR". ("VCR" se encenderá en el visualizador multifuncional.)
- 4 Compruebe si el reloj muestra la hora correcta.

EN LA PANTALLA DEL TELEVISOR	OPERACION
	<p>5 Pulse <b>MENU</b> del control remoto.</p> <p>6 Seleccione el modo de ajuste TEMP con los botones ▲/▼ y pulse <b>SET</b>.</p>
	<p>7 Pulse <b>SET</b>.</p>
	<p>8 Siga las instrucciones mostradas en la pantalla e introduzca los datos utilizando los botones ▲/▼/◀/▶ del control remoto.</p>
	<p>9 Pulse <b>SET</b> del control remoto. Todos los datos introducidos aparecerán en la pantalla del televisor.</p>
<p>10 Pulse <b>MENU</b> para terminar de hacer los ajustes.</p>	
<p>11 Pulse <b>POWER</b> para entrar en el modo de espera del temporizador. Asegurese de que "TIMER" esté encendido en el visualizador multifuncional.</p>	

### Ajuste del temporizador de grabación sencilla

- 1 Conecte la alimentación de su televisor y seleccione el canal de vídeo.
- 2 Inserte un casete con la abertura de la lengüeta de protección contra borrado tapada. La alimentación se conectará automáticamente.
- 3 Pulse **TV/VCR** para seleccionar "VCR". ("VCR" se encenderá en el visualizador multifuncional.)
- 4 Seleccione el canal deseado con los botones numéricos o con **CH** ▲ o ▼.
- 5 Ajuste la velocidad de grabación (SP o EP) con **TAPE SPEED** del control remoto.
- 6 Pulse **REC** para entrar en el modo de grabación.
- 7 Luego, pulse **REC** para entrar en el modo de grabación sencilla con temporizador. La hora de parada de grabación se visualiza.
- 8 Cada vez que pulsa **REC**, la hora de parada aumenta en 10 minutos. Si fuese necesario, pulse **CH** ▲ o ▼ para cambiar el ajuste de los minutos.
- 9 Cuando llegue la hora de parada, la grabación terminará y la alimentación se desconectará.

# LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

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**Warranty Period for this Product:** 90 days Parts and Labor. The warranty period continues for a total of one year from the date of purchase for parts.

**Additional Items Excluded from Warranty Coverage:** Non-Rechargeable Batteries.

**Where to Obtain Service:** For location of the nearest Sharp Authorized Service, or to obtain product literature, accessories, supplies or customer assistance, please call 1-800-BE SHARP.

**What to Do to Obtain Service:** Ship or carry in your Product to an Authorized Service Dealer or Station. Be sure to have Proof of Purchase available; if you ship the Product, be sure it is packaged carefully.

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