

Video Cassette Recorder

Operating Instructions



Hi-Fi

SLV-E780EE

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Mains lead must only be changed at qualified service shop.

Precautions

Safety

- This unit operates on 220 – 240 V AC, 50 Hz. Check that the unit's operating voltage is identical with your local power supply.
- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- The unit is not disconnected from the mains as long as it is connected to the mains, even if the unit itself has been turned off.
- Unplug the unit from the wall outlet if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

Installing

- Allow adequate air circulation to prevent internal heat buildup.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the unit and cassettes away from equipment with strong magnets, such as microwave ovens or large loudspeakers.
- Do not place heavy objects on the unit.
- If the unit is brought directly from a cold to a warm location, moisture may condense inside the VCR and cause damage to the video head and tape. When you first install the unit, or when you move it from a cold to a warm location, wait for about one hour before operating the unit.

Caution

Television programmes, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws. Also, use of this recorder with cable television transmission may require authorization from the cable television transmitter and/or programme owner.

Compatible colour systems

This VCR is designed to record using the PAL (B/G or D/K) or MESECAM (B/G or D/K) colour system and play back using the PAL (B/G or D/K), MESECAM (B/G or D/K), and NTSC 4.43 colour systems. Recording of video sources based on other colour systems cannot be guaranteed.

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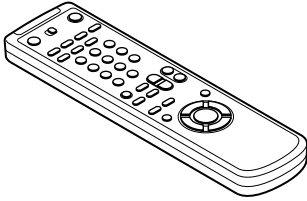
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Step 1

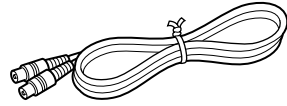
Unpacking

Check that you have received the following items with the VCR:

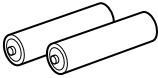
- Remote commander



- Aerial cable



- R6 (size AA) batteries



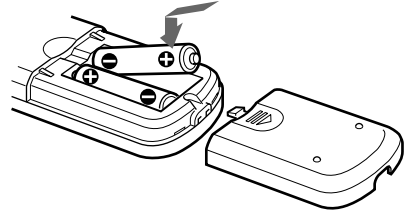
Step 2

Setting up the remote commander

Inserting the batteries

Insert two R6 (size AA) batteries by matching the + and - on the batteries to the diagram inside the battery compartment.

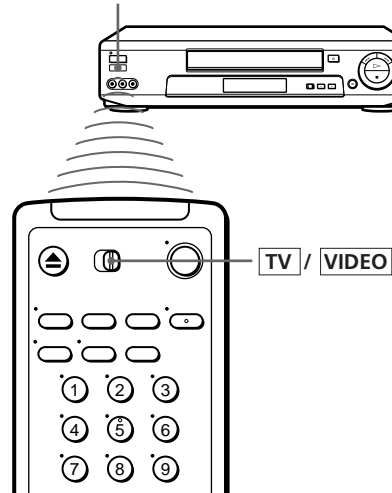
Insert the negative (-) end first, then push in and down until the positive (+) end clicks into position.



Using the remote commander

You can use this remote commander to operate this VCR and a Sony TV. Buttons on the remote commander marked with a dot (•) can be used to operate your Sony TV.

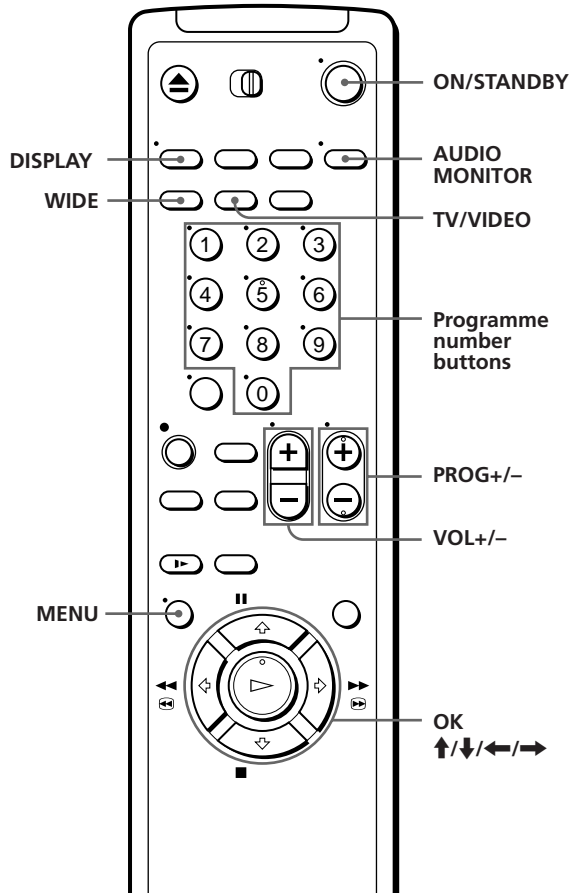
Remote sensor



| To operate | Set TV / VIDEO to |
|------------|--|
| the VCR | VIDEO and point at the remote sensor on the VCR |
| a Sony TV | TV and point at the remote sensor on the TV |

continued

Step 2 : Setting up the remote commander (continued)



TV control buttons

| To | Press |
|--|--------------------------------------|
| Turn the TV into standby or active mode | ON/STANDBY |
| Select an input source of the TV either from aerial in or from line in | TV/VIDEO |
| Select the programme position of the TV | Programme number buttons PROG +/- |
| Adjust the volume of the TV | VOL +/- |

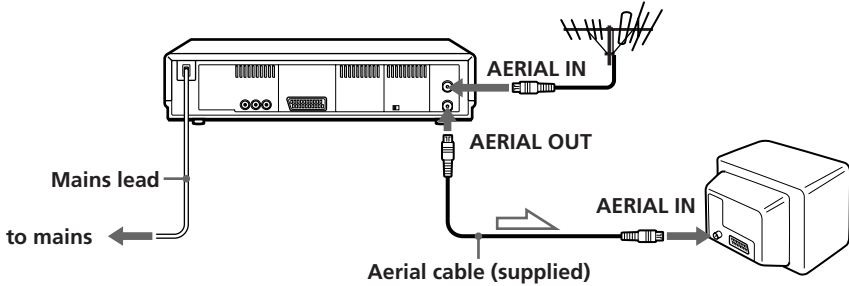
| To | Press |
|---|---------------------|
| Select the sound | AUDIO MONITOR |
| Use FASTEXT | FASTEXT buttons |
| Call up on-screen display | DISPLAY |
| Operate TV menu options | MENU ↑/↓/←/→, OK |
| Switch to/from wide mode of a Sony wide TV. | WIDE |

Notes

- With normal use, the batteries should last about three to six months.
- If you do not use the remote commander for an extended period of time, remove the batteries to avoid possible damage from battery leakage.
- Do not use a new battery with an old one together.
- Do not use different types of batteries together.

Step 3

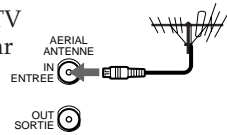
Connecting the VCR



: Signal flow

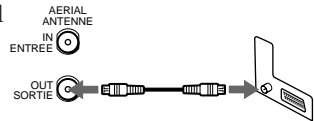
1

Disconnect the aerial cable from your TV and connect it to AERIAL IN on the rear panel of the VCR.



2

Connect AERIAL OUT of the VCR and the aerial input of your TV using the supplied aerial cable.



3

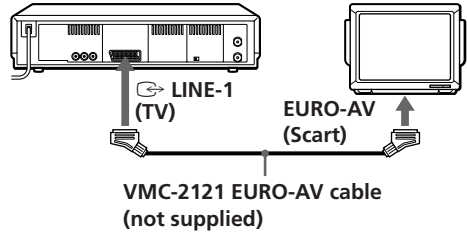
Connect the mains lead to the mains.

Additional connections

This additional connection improves picture and sound quality. Connect the TV as shown below. Whenever you want to watch the VCR picture, press TV/VIDEO to display the VIDEO indicator in the display window.

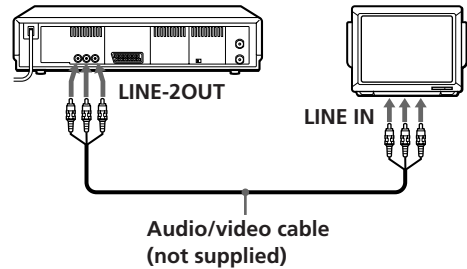
To a TV that has a EURO-AV (Scart) connector

If your TV has a EURO-AV (Scart) connector, connect your TV by using VMC-2121 EURO-AV cable as shown on the right.



To a TV that has LINE IN connector

If your TV has LINE IN connector, connect your TV by using audio/video cable as shown on the right.



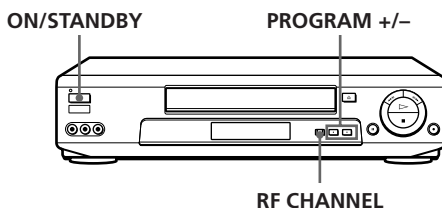
Note

- When you connect the VCR and your TV only with an aerial cable, you have to set RF MODULATOR in the OPTIONS menu to ON (initial setting). If the TV is connected to the LINE-1 (TV) connector, setting RF MODULATOR in the OPTIONS menu to OFF is recommended. In the OFF position, only the signal from the aerial is output through the AERIAL OUT connector (see page 40).


Step 4

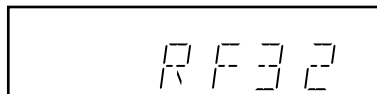
Tuning your TV to the VCR

If you have connected the VCR to your TV using the EURO-AV cable, skip this step.



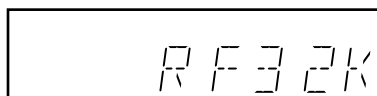
-
- 1**  Press ON/STANDBY to turn on the VCR.

-
- 2**  Press RF CHANNEL on the VCR.
The factory-preset RF channel appears in the display window.
The VCR signal is output through this channel to the TV.



-
- 3** Turn on your TV and select a programme position for the VCR picture.
This programme position will now be referred to as the video channel.

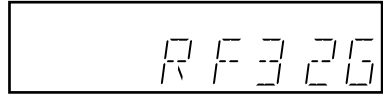
-
- 4**  Press RF CHANNEL.
The TV system appears in the display window.



5



Press PROGRAM +/- (repeatedly) to select the correct TV system. If you watch the system B/G, select "G." If you watch the system D/K, select "K."



6

Tune the TV to the same channel as that shown in the display window so that the picture on the right appears on the TV screen.

Refer to your TV manual for tuning instructions.

If the picture does not appear clearly, see "To obtain a clear picture from the VCR" below.



7



Press RF CHANNEL.

You have now tuned your TV to the VCR. Whenever you want to play a tape, set the TV to the video channel.

To check to see if the TV tuning is correct

Set the TV to the video channel and press PROGRAM +/- on the VCR. If the TV screen changes to a different programme each time you press PROGRAM +/-, the TV tuning is correct.

To obtain a clear picture from the VCR

If the picture does not appear clearly in step 6 above, go to step 7 to finish this procedure once. Then start again from step 2. After pressing RF CHANNEL in step 2, press PROGRAM +/- while the RF channel is displayed, so that another RF channel appears. Then tune the TV to the new RF channel until a clear picture appears.

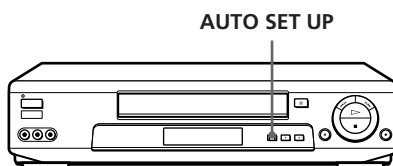
Note

- If you set the wrong TV system, you may have no sound or sound may be distorted.

Step 5

Setting up the VCR with the Auto Set Up function

Before using the VCR for the first time, set up the VCR using the Auto Set Up function. With this function, you can set the TV channels guided by the sequence indicated on the TV screen.

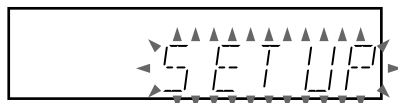


AUTO SET UP



Hold down AUTO SET UP on the VCR for more than three seconds.

The VCR automatically turns on, and the ATP (Auto Tuner Preset) function starts searching for all of the receivable channels and presets them in numerical order (according to the TV system you selected in “Tuning your TV to the VCR”).



After the search is complete, the current time appears in the display window for any stations that transmit a time signal.

To cancel the Auto Set Up function

Press AUTO SET UP.

Tip

- The factory preset language for the on-screen display is English. If you want to change the language to Russian, see page 15.

Note

- Do not cancel the Auto Set Up function during the ATP operations. If you do, repeat the steps above.

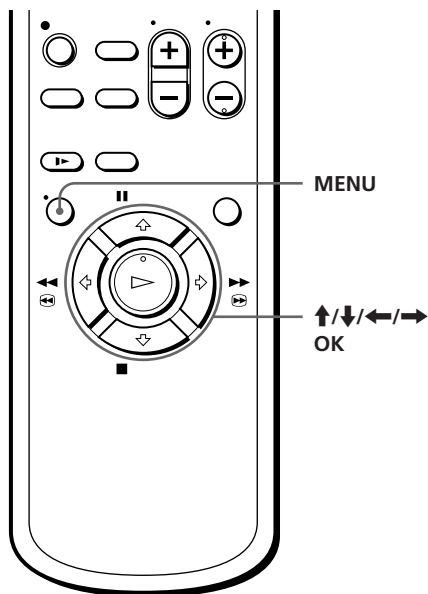
Step 6

Setting the clock

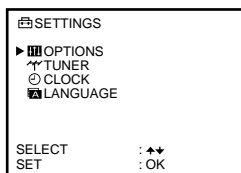
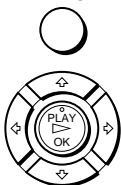
You must set the time and date on the VCR to be able to use the timer recording features properly.

Before you start...

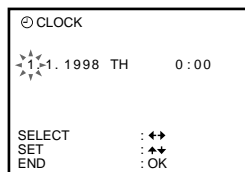
- Turn on the VCR and the TV.
- Set the TV to the video channel.



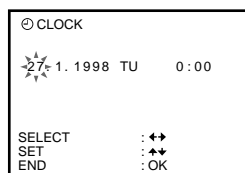
- 1** • MENU
- Press MENU, then press **↑/↓** to select SETTINGS and press OK.



- 2**
- Press **↑/↓** to select CLOCK, then press OK.



- 3**
- Press **↑/↓** to set the date.

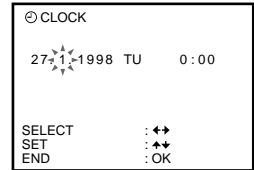


continued

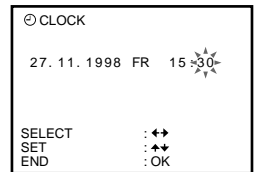
Step 6 : Setting the clock (continued)



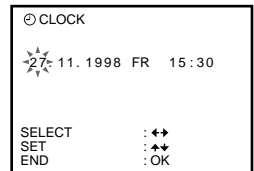
Press → to flash the month and set the month pressing ↑/↓.



Set the year, hour, and minutes in sequence, pressing → to flash the item to be set, and press ↑/↓ to select the digits. The day of the week is set automatically.



Press → to start the clock.



Press OK.

Tip

- To change the digits during setting, press ← to return to the item to be changed, and select the digits pressing ↑/↓.

Note

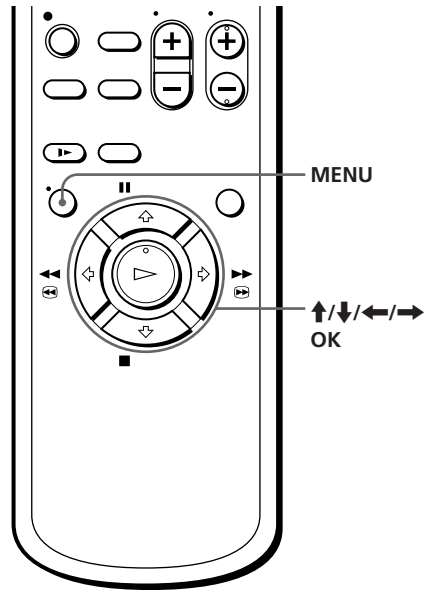
- The menu disappears automatically if you don't proceed for more than a few minutes.

Manual setup — Selecting a language

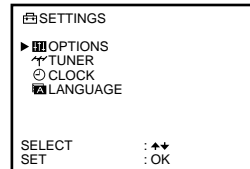
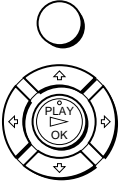
You can change the on-screen display language.

Before you start...

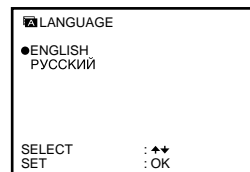
- Turn on the VCR and the TV.
- Set the TV to the video channel.



- 1** • MENU
- Press MENU, then press **↑/↓** to select SETTINGS and press OK.



- 2**
- Press **↑/↓** to select LANGUAGE and press OK.



- 3**
- Press **↑/↓/←/→** to move the dot (●) to the desired language, then press OK.

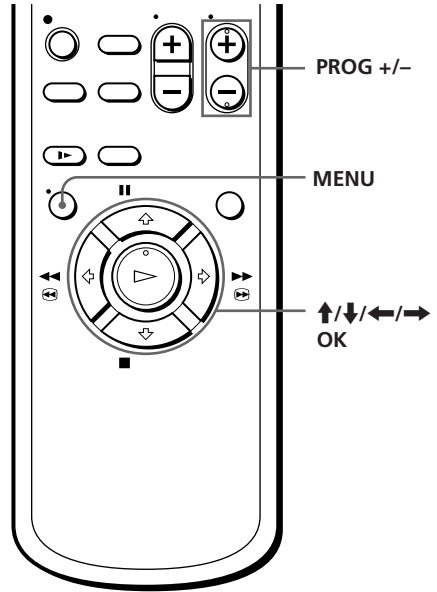


Manual setup — Presetting channels

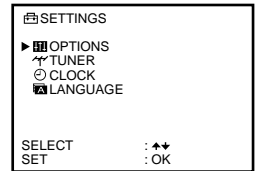
If some channels could not be preset using the Auto Set Up function, you can preset them manually.

Before you start...

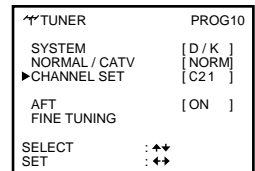
- Turn on the VCR and the TV.
- Set the TV to the video channel.



Press MENU, then press ↑/↓ to select SETTINGS and press OK.

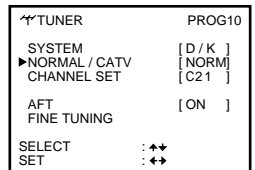


Press ↑/↓ to select TUNER and press OK.



Press ↑/↓/←/→ to move the cursor (▶) to NORMAL/CATV, then select NORM.

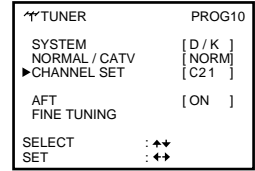
To preset CATV channels, select CATV.



4



Press **↑/↓** to move the cursor (**▶**) to **CHANNEL SET**.

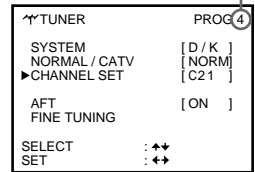


5



Press **PROG +/-** to select the programme position.

Selected programme position



6



Press **←/→** repeatedly until the channel you want is displayed.

The channels appear in the following order:

| B/G TV system | | D/K TV system | |
|---|---------|---|---------|
| Channel number in the CHANNEL SET field | Channel | Channel number in the CHANNEL SET field | Channel |
| 2 | E2 | 2 | R1 |
| 3 | E3 | 5 | R6 |
| 4 | E4 | 6 | R7 |
| 5 | E5 | 12 | R12 |
| 6 | E6 | 13 | R2 |
| 7 | E7 | 14 | R3 |
| 8 | E8 | 15 | R4 |
| 9 | E9 | 16 | R5 |
| 10 | E10 | 17 | R8 |
| 11 | E11 | 18 | R9 |
| 12 | E12 | 19 | R10 |
| 21-69 | E21-E69 | 20 | R11 |
| CATV 1-41 | S1-S41 | 21-69 | R21-R69 |
| CATV 42-46 | S01-S05 | | |

If you know the number of the channel you want, press the programme number buttons. For example, for channel 5, first press "0" and then press "5."

continued

Manual setup — Presetting channels (continued)

7



If the TV sound is distorted or noisy, press **↑/↓/←/→** to move the cursor (**▶**) to **SYSTEM**, then select **B/G** or **D/K** so that you get the better sound.

| | |
|---------------|-----------|
| TUNER | PROG 4 |
| ▶SYSTEM | [D / K] |
| NORMAL / CATV | [NORM] |
| CHANNEL SET | [C21] |
| AFT | [ON] |
| FINE TUNING | |
| SELECT | : ↔ |
| SET | : ↔ |

8

To allocate another channel to another programme position, repeat steps from 5 to 7.

9



Press **OK**.

Disabling unwanted programme positions

After presetting channels, you can disable unused programme positions. The disabled positions will be skipped later when you press the **PROG +/-** buttons.

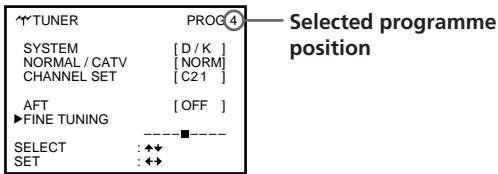
- 1 In step 6 above, press programme number button "0" twice to display the number "00" beside **CHANNEL SET**.
- 2 Press **OK**.

If the picture is not clear

Normally, the Auto Fine Tuning (AFT) function automatically tunes in channels clearly. If, however, the picture is not clear, you may also use the manual tuning function.

- 1 Press PROG +/- or the programme number buttons to select the programme number for which you cannot obtain a clear picture.
- 2 Press MENU, then select SETTINGS and press OK.
- 3 Select TUNER, then press OK.
- 4 Select FINE TUNING.

The fine tuning meter appears.



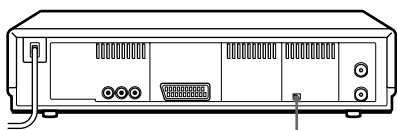
- 5 Press ←/→ to get a clearer picture, then press OK.

Note that the AFT (Auto Fine Tuning) setting switches to OFF.

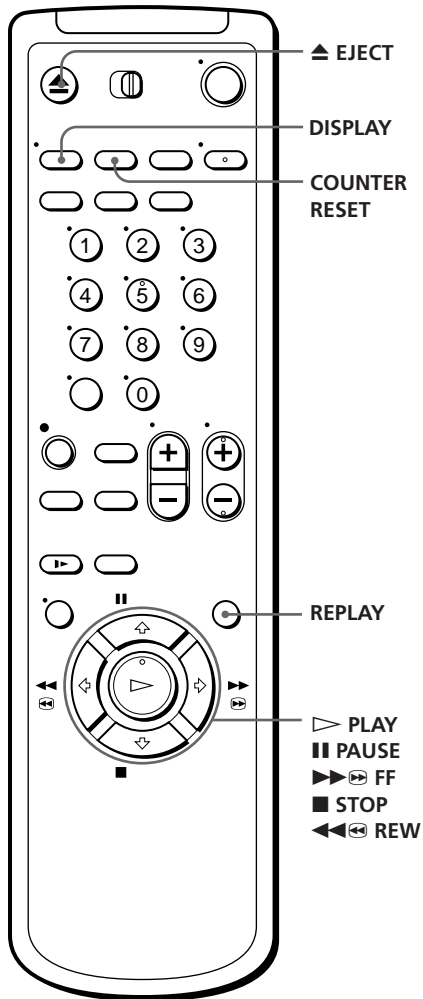
Note

- The menu disappears automatically if you don't proceed for more than a few minutes.

Playing a tape

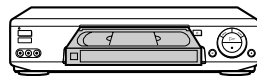


NTSC PB



1 Turn on your TV and set it to the video channel.

2 Insert a tape.
The VCR turns on and starts playing automatically if you insert a tape with its safety tab removed.



3

Press \triangleright PLAY.

When the tape reaches the end, it will rewind automatically.

Additional tasks

| To | Press |
|-------------------------|---|
| Stop play | ■ STOP |
| Pause play | PAUSE |
| Resume play after pause | PAUSE or \triangleright PLAY |
| Fast-forward the tape | $\blacktriangleright\blacktriangleright$ FF during stop |
| Rewind the tape | $\blacktriangleleft\blacktriangleleft$ REW during stop |
| Eject the tape | \blacktriangle EJECT |

To replay a recently watched scene

You can immediately rewind and playback the scene you want to watch again.

During playback, press REPLAY up to four times. The VCR rewinds the tape about 10 seconds on the counter for each press of the button, and restarts playback.

To set the colour system

If the playback picture has no colour, or streaks appear during playback, set the SYSTEM option in the VIDEO OPTIONS menu to conform to the system that the tape was recorded in (see page 40). (Normally set the option to AUTO.)

To play an NTSC-recorded tape

Set NTSC PB at the rear of the VCR according to the colour system of your TV.

| When your TV is | Set NTSC PB to |
|-----------------|----------------|
| PAL only | ON PAL TV |
| PAL and NTSC | NTSC 4.43 |

continued

Playing a tape (continued)

To use the time counter

At the point on the tape that you want to find later, press COUNTER RESET. The counter in the display window resets to "0:00:00." Search for the point afterwards by referring to the counter.

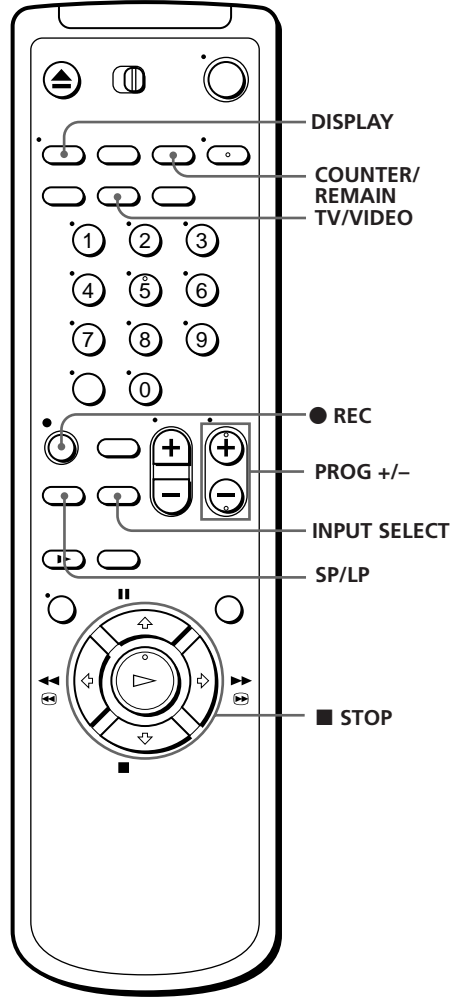


To display the counter on the TV screen, press DISPLAY.

Notes

- The counter resets to "0:00:00" whenever a tape is reinserted.
- The counter stops counting when it comes to a portion with no recording.
- The time counter does not appear on the TV screen when using an NTSC-recorded tape.
- Depending on your TV, the following may occur while playing an NTSC-recorded tape:
 - The picture becomes black and white.
 - The picture shakes.
 - No picture appears on the TV screen.
 - Black streaks appear horizontally on the TV screen.
 - The colour density increases or decreases.
- If you play back a tape in LP or EP mode with NTSC system, the sound is heard in monaural.
- While setting the menu on the TV screen, you cannot use **↑/↓/←/→** for tape operation.


Recording TV programmes

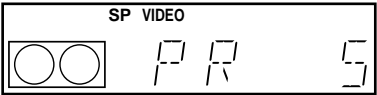



- 1** Turn on your TV and set it to the video channel.
To record from a decoder, turn it on.
- 2** Insert a tape with its safety tab in place.


continued


Recording TV programmes (continued)


3  Press INPUT SELECT until a programme position number appears in the display window.




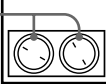
4  Press PROG +/- to select the programme position you want to record.




5  Press SP/LP to select the tape speed, SP or LP.
LP (Long Play) provides recording time twice as long as SP, however, SP (Standard Play) produces better picture and audio quality.



6  Press ● REC to start recording.
The recording indicator lights up red in the display window.


Recording indicator 

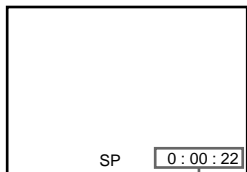


To stop recording

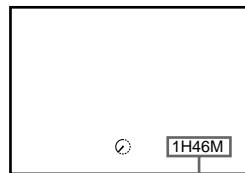
Press ■ STOP.

To check the remaining time

Press DISPLAY. With the display on, press COUNTER/REMAIN to check the remaining time. Each time you press COUNTER/REMAIN, the time counter and the remaining time appear alternately. The remaining time with the  indicator also appears in the display window.



Time counter



Remaining time

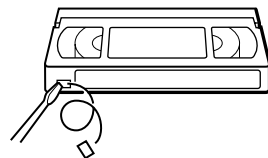
To correctly check the remaining time of the tape, set TAPE SELECT in the TAPE OPTIONS menu according to the tape type you use (see page 39).

To watch another TV programme while recording

- 1 Press TV/VIDEO on the remote commander to turn off the VIDEO indicator in the display window.
- 2 Select another programme position on the TV.

To save a recording

To prevent accidental erasure, break off the safety tab as illustrated. To record on a tape again, cover the tab hole with adhesive tape.



Safety tab

continued

Recording TV programmes (continued)

Tips

- To select a programme position, you can use the programme number buttons on the remote commander. For two-digit numbers, press the --- (ten's digit) button followed by the programme number buttons.
- You can select a video source from the LINE-1 (TV) or LINE 2 IN VIDEO/AUDIO L/R jacks using INPUT SELECT.
- The display appears on the TV screen indicating information about the tape, but the information won't be recorded on the tape.
- If you don't want to watch TV while recording, you can turn off the TV. When using a decoder, make sure to leave it on.

Notes

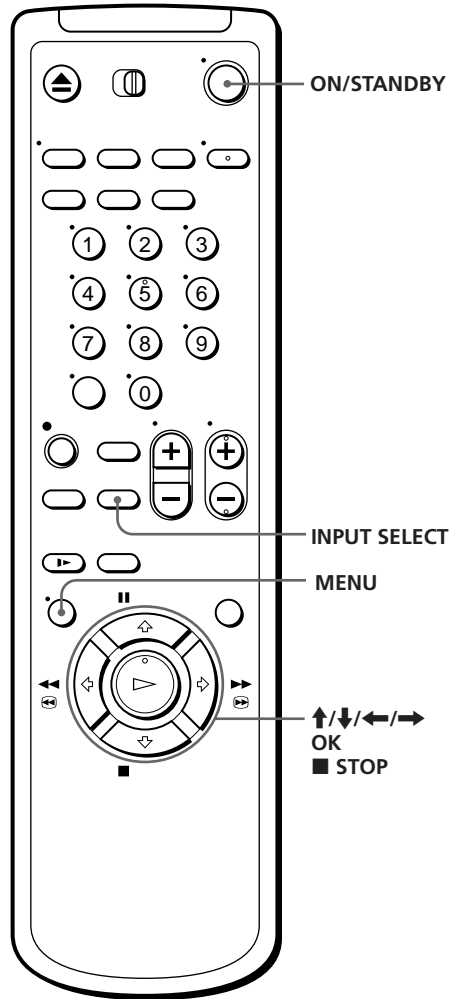
- The display does not appear during still (pause) mode or slow-motion playback.
- The display will not appear while playing an NTSC-recorded tape.
- If a tape has portions recorded in both PAL and NTSC systems, the time counter reading will not be correct. This discrepancy is due to the difference between the counting cycles of the two video systems.
- When you insert a tape with a non-standard commercially available tape, the remaining time may not be correct.
- The remaining time doesn't work for an NTSC-recorded tape. “-H- -M” appears in the display window.
- The remaining time is intended for rough measurement only.
- About 30 seconds after the tape begins playback, the tape remaining time will be displayed.

Recording TV programmes using the timer

You can preset up to eight programmes at a time.

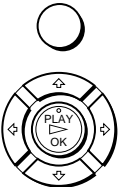
Before you start...

- Check that the VCR clock is set to the correct time.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- To record from a decoder, turn it on.
- Turn on your TV and set it to the video channel.

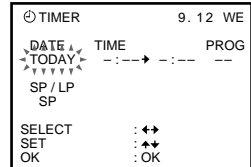


1

• MENU



Press MENU and select TIMER, then press OK.



continued

Recording TV programmes using the timer (continued)

2

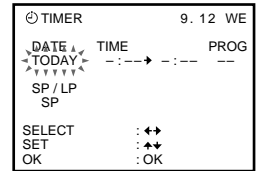


Set the date, programme position, start and stop times, and tape speed:

1 Press **→** to flash each item in turn.

2 Press **↑/↓** to set each item.

To correct a setting, press **←** to return to that setting and reset.



- To record the same programme every day or the same day every week, see "Daily/weekly recording" on page 29.
- To record from a decoder or other source connected to the LINE-1 (TV) or LINE 2 IN VIDEO/AUDIO L/R jacks, press INPUT SELECT to display "L1" or "L2" in the "PROG" position.



3



Press OK to complete the setting.

4

• ON/
STANDBY



Press ON/STANDBY to turn off the VCR.

The **⏻** indicator appears in the display window and the VCR stands by for recording.

To record from a decoder or other source, leave the connected equipment switched on.

To stop recording

To stop the VCR while recording, press **■** STOP on the VCR.

Daily/weekly recording

In step 2 above, press **↓** to select the recording pattern. Each time you press **↓**, the indication changes as shown below. Press **↑** to change the indication in reverse order.

TODAY → **SU-SA (Sunday to Saturday)** → **MO-SA (Monday to Saturday)** → **MO-FR (Monday to Friday)** → **SA (every Saturday)** → **MO (every Monday)** → **SU (every Sunday)** → **1 month later** → **(dates count down)**
→**TODAY**

To record satellite broadcasts

If you connect the satellite tuner and the VCR, you can record satellite programmes.

- 1** Turn on the satellite tuner.
- 2** On the satellite tuner, select the satellite programme for which you wish to make a timer setting.
- 3** Keep the satellite tuner turned on until the VCR finishes recording the satellite programme for which you have made a timer setting.

To use the VCR after setting the timer

To use the VCR before a timer recording begins, just press ON/STANDBY. The **⊖** indicator turns off and the VCR switches on. Remember to press ON/STANDBY to reset the VCR after using the VCR.

You can also do the following tasks while the VCR is recording:

- Reset the counter.
- Display tape information on the TV screen.
- Check the timer settings.
- Watch another TV programme.


continued

Recording TV programmes using the timer (continued)

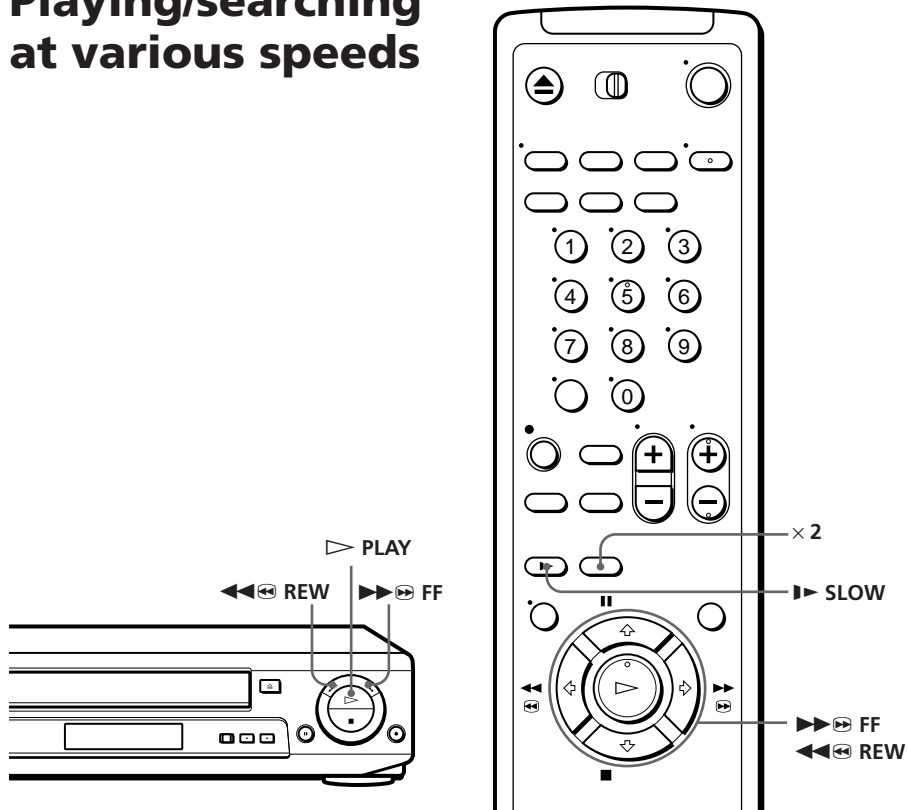
Tips

- To set the programme position, you can also use the PROG +/- or programme number buttons.
- To set the tape speed, you can also use the SP/LP button.
- When you are recording a programme in the SP mode and the remaining tape becomes shorter than the recording time, the tape speed is automatically changed to the LP mode. Note that some interference will appear on the picture at the point the tape speed is changed. If you want to keep the same tape speed, set AUTO TAPE SPEED to OFF in the TAPE OPTIONS menu (page 39).

Note

- The  indicator flashes in the display window when you press ON/STANDBY with no tape inserted.

Playing/searching at various speeds



| Playback options | Operation |
|--|--|
| View the picture during fast-forward or rewind | During fast-forward, press and hold ►►► FF. During rewind, press and hold ◀◀◀ REW. |
| Play at high speed | <ul style="list-style-type: none"> • During playback, press ►►► FF or ◀◀◀ REW. • During playback, press and hold ►►► FF or ◀◀◀ REW. When you release the button, resume normal playback. |
| Play at twice the normal speed | During playback, press × 2. |
| Play in slow motion | During playback, press ► SLOW. |
| Play frame by frame | During pause, press ►►► FF or ◀◀◀ REW. Press and hold ►►► FF or ◀◀◀ REW to play one frame each second. |
| Rewind and start play | During stop, press ► PLAY on the VCR while holding ◀◀◀ REW down on the VCR. |

continued

Playing/searching at various speeds (continued)

To resume normal playback

Press ▷ PLAY.

Tip

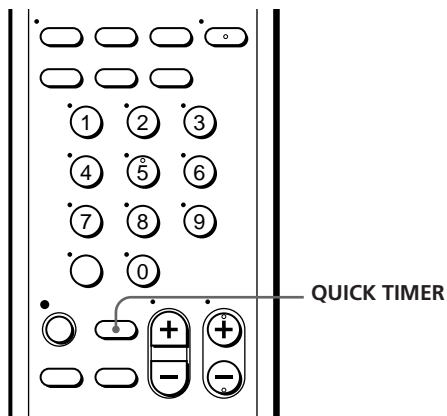
- Adjust the picture using TRACKING +/- if:
 - Streaks appear while playing in slow motion.
 - Bands appear at the top or bottom while pausing.
 - The picture shakes while pausing.
- To set tracking to the centre position, press both buttons (+/-) at the same time.

Notes

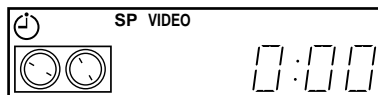
- The playback sound is muted during the operations in the above table.
- In the LP mode, noise may appear or there may be no colour.
- If the playback mode mark doesn't appear on the TV screen, press DISPLAY.

Recording TV programmes using the quick timer

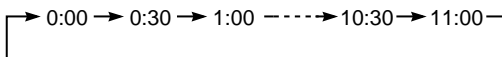
After starting recording in the normal way, you can have the VCR stop recording automatically after a specified duration.



- 1 While recording, press QUICK TIMER once.
The ⌚ indicator appears in the display window.



- 2 Press QUICK TIMER repeatedly to set the duration.
Each press advances the time in increments of 30 minutes.



The duration decreases minute by minute to 0:00, then the VCR stops recording and turns off automatically.

To extend the duration

Press QUICK TIMER repeatedly to set to the new duration.

To stop recording

To stop the VCR while recording, press ■ STOP.

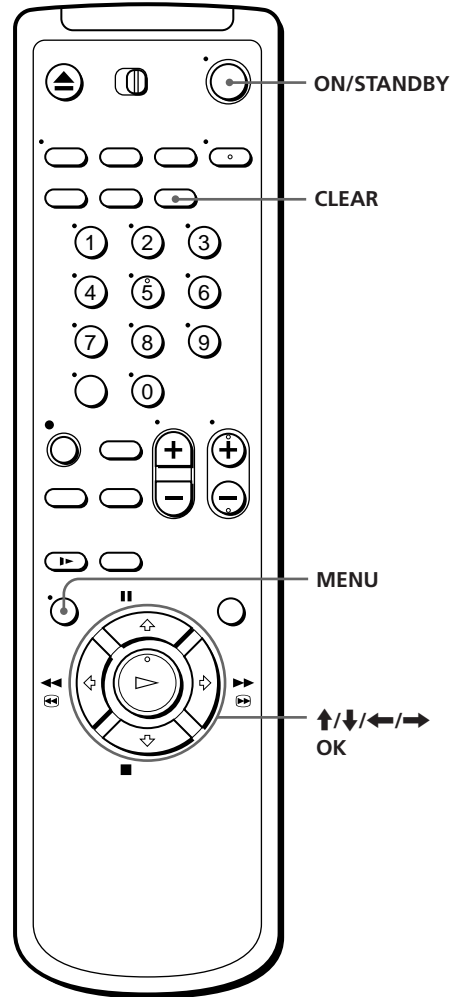
Using the quick timer during stop mode

You can set the quick timer and start recording during stop mode by pressing QUICK TIMER. To set the programme position, you can use the PROG +/- or INPUT SELECT buttons. Press QUICK TIMER repeatedly to set the recording duration. The recording will start automatically.

Checking/ changing/ cancelling timer settings

Before you start...

- Turn on your TV and set it to the video channel.



- 1 Press ON/STANDBY to turn on the VCR.
- 2 Press MENU and select LIST, then press OK:
 - If you want to change or cancel a setting, go on to the next step.
 - If you do not need to change or cancel the settings, press OK, then turn off the VCR to return to recording standby.

| ⊙LIST | DATE | TIME | PROG | 9-12 | WE |
|-------|-------|-----------|------|------|-----|
| ▶ | 9-12 | 1900+2000 | 35 | LP | REC |
| | 28-12 | 0930+1000 | 6 | SP | REC |
| | 17-12 | 0500+0530 | 44 | LP | |
| | MO-FR | 0000+0100 | L1 | LP | REC |
| | MO-SA | 2300+0000 | L2 | SP | |
| | SU-SA | 1212+2000 | 27 | LP | REC |
| | -- | ---- | -- | -- | -- |

- 3** Press **↑/↓** to select the setting you want to change or cancel, then press **OK**.

The selected setting appears in the **TIMER** menu.

| | | |
|---------|-------------|------|
| Ⓢ TIMER | 9. 12 WE | |
| DATE | TIME | PROG |
| TODAY | 19:00→20:00 | 35 |
| SP / LP | | |
| LP | | |
| SELECT | : ↔ | |
| SET | : ↑↓ | |
| OK | : OK | |

- 4** To change the setting, press **←/→** to flash the item you want to change, and press **↑/↓** to reset it.

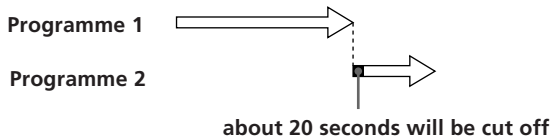
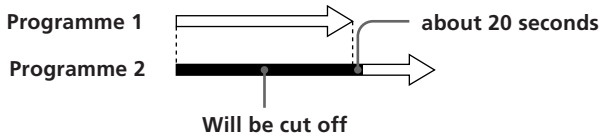
To cancel the setting, press **CLEAR**.

- 5** Press **OK**.

If any settings remain, turn off the VCR to return to recording standby.

When the timer settings overlap

The programme that starts first has priority and the second programme starts recording only after the first programme has finished. If the programmes start at the same time, the programme listed first in the menu has priority.



Selecting stereo and bilingual programmes

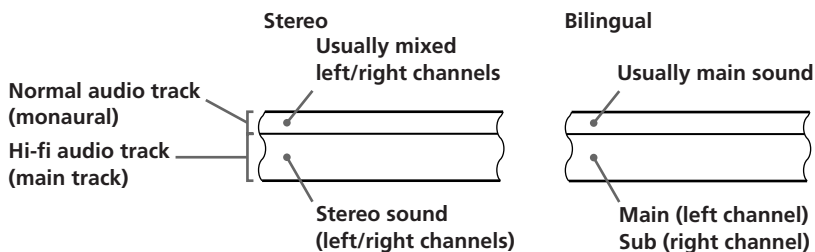
Selecting the sound during playback

Press AUDIO MONITOR to select the sound you want.

| To listen to | On-screen display | Display window |
|---|-------------------|----------------|
| Stereo/main and sub (left and right channels) | STEREO | STEREO |
| Left channel/main | L | STEREO |
| Right channel/sub | R | STEREO |
| Standard sound | No indicator | No indicator |

How sound is recorded on a video tape

The VCR records sound onto two separate tracks. Hi-fi audio is recorded onto the main track along with the picture. Monaural sound is recorded onto the normal audio track along the edge of the tape.





Notes

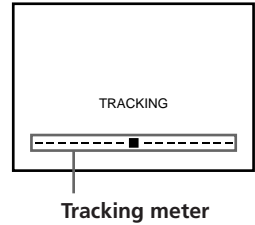
- To listen to playback sounds in stereo, you must use the EURO-AV or AUDIO OUT connections.
- When you play a tape recorded in monaural, the sound is heard in monaural regardless of the AUDIO MONITOR setting.
- If the AUDIO MONITOR button does not function, check that AUDIO MIX in the OPTIONS menu is set to OFF (see page 40).

Adjusting the picture

Adjusting the tracking

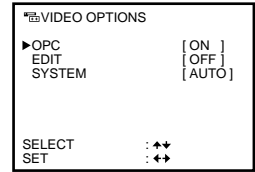
Although the VCR automatically adjusts the tracking when playing a tape (the  indicator flashes in the display window, then goes off), distortion may occur if the tape was recorded in poor condition. In this case, manually adjust the tracking.

During playback, press TRACKING +/- on the VCR to display the tracking meter. The distortion should disappear as you press one of the two buttons (the  indicator lights up). To resume automatic tracking adjustments, eject the tape and reinsert it.



About Optimum Picture Control (OPC)

Optimum Picture Control (OPC) automatically improves recording and playback quality by adjusting the VCR to the condition of the video heads and tape. To maintain better picture quality, we recommend that you set OPC to ON in the VIDEO OPTIONS menu (with the OPC indicator in the display window lit). For details, see page 40.



OPC playback

The OPC function automatically works on all types of tapes, including rental tapes and tapes that were not recorded with OPC.

OPC recording

Whenever you insert a tape and start recording for the first time, the VCR adjusts to the tape using the OPC function (the OPC indicator flashes rapidly). This adjustment is retained until the tape is ejected.

To deactivate the OPC

Set OPC to OFF in the VIDEO OPTIONS menu. The OPC indicator in the display window goes off.

continued

Adjusting the picture (continued)

Tip

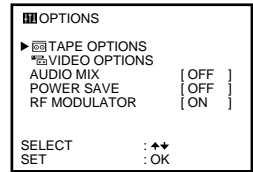
- To set tracking to the centre position, press the TRACKING + and – buttons at the same time.

Notes

- You can adjust the tracking for the NTSC-recorded tape but the tracking meter won't be displayed.
- With the Auto Tape Speed function on, the OPC function will work only in SP mode. If the tape speed automatically switches from SP to LP, the OPC function turns off. If, however, the entire programme is recorded in LP mode, the OPC function will work.
- There is a delay of a few seconds before the VCR actually starts recording while the VCR analyses the tape. To avoid the delay, first set the VCR to recording pause (the OPC indicator flashes slowly) and press ● REC to have the VCR analyse the tape (the OPC indicator flashes rapidly). After the OPC indicator stops flashing, press ■ PAUSE to start recording immediately. If you want to start recording quickly without using the OPC function, first set the VCR to recording pause (the OPC indicator flashes slowly) and press ■ PAUSE to start recording.

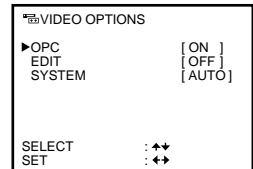
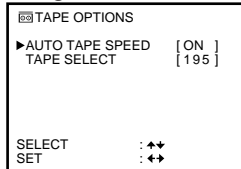
Changing menu options

- 1 Press MENU, then select SETTINGS.
- 2 Select OPTIONS.



- 3 Press \uparrow/\downarrow to select the option you want to change:

- To change the TAPE OPTIONS or VIDEO OPTIONS
 - 1 Press OK after selecting TAPE OPTIONS or VIDEO OPTIONS.



- 2 Press \uparrow/\downarrow to select the option, then press \leftarrow/\rightarrow to change the setting.
- To change the other options
Press \leftarrow/\rightarrow to change the setting.

- 4 Press OK to return to the original screen.

Menu choices

Initial settings are indicated in bold print.

TAPE OPTIONS menu choices

| Menu option | Set this option to |
|-----------------|---|
| AUTO TAPE SPEED | <ul style="list-style-type: none"> • ON to change the timer recording tape speed automatically to the LP mode when the remaining tape becomes shorter than the recording time. • OFF to keep the set tape speed. |
| TAPE SELECT | <ul style="list-style-type: none"> • 300 to use an E-300 type tape. • 240 to use an E-240 type tape. • 195 to use an E-195 or shorter type tape. |

continued

Changing menu options (continued)

VIDEO OPTIONS menu choices

| Menu option | Set this option to |
|-------------|--|
| OPC | <ul style="list-style-type: none">• ON to switch on the OPC (Optimum Picture Control) function and improve picture quality.• OFF to switch off OPC. |
| EDIT | <ul style="list-style-type: none">• ON to minimise picture deterioration when editing.• OFF to turn off EDIT. |
| SYSTEM | <ul style="list-style-type: none">• AUTO to set the colour system automatically.• PAL to play back a tape recorded in the PAL colour system.• MESECAM to play back a tape recorded in the MESECAM colour system. <p>For details, see page 21.</p> |

OPTIONS menu choices

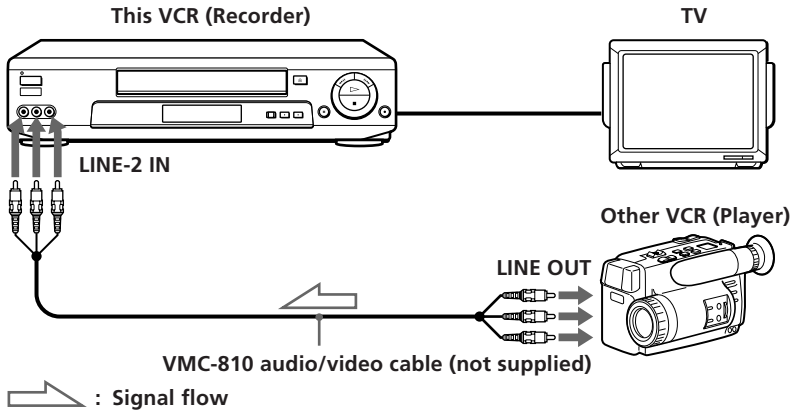
| Menu option | Set this option to |
|--------------|--|
| AUDIO MIX | <ul style="list-style-type: none">• ON to listen to the hi-fi and normal audio tracks at the same time. The AUDIO MONITOR button will not function.• OFF to listen to the hi-fi and normal audio tracks separately. Select the sound using the AUDIO MONITOR button. <p>For details, see page 36.</p> |
| POWER SAVE | <ul style="list-style-type: none">• ON to turn off the indicators in the display window to conserve the VCR power.• OFF to turn on the indicators in the display window while the VCR is standing by. |
| RF MODULATOR | <ul style="list-style-type: none">• ON if you connect the VCR to your TV using only the aerial cable.• OFF when you connect the VCR to your TV using the EURO-AV cable. |

Notes

- When you set a timer recording, the indicators in the display window remain on, even though POWER SAVE is set to ON.
- With the EDIT option ON, the OPC function does not work.

Editing with another VCR

How to connect to record on this VCR

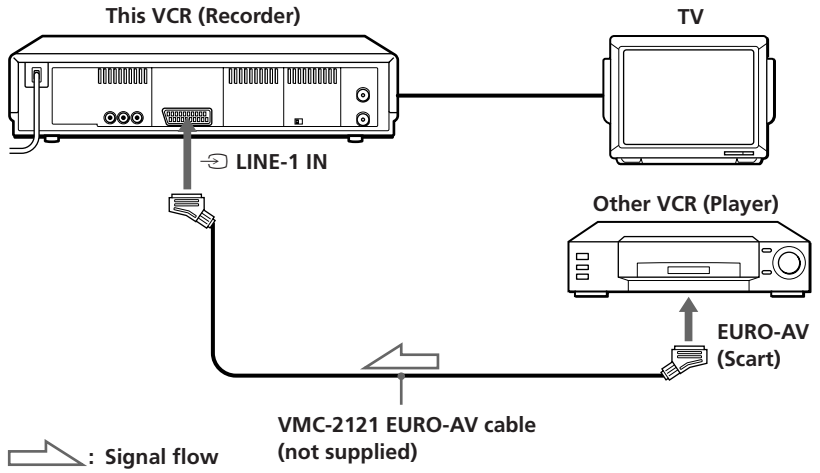


Notes

- Make sure you connect the plugs to jacks of the same colour.
- If the other VCR is a monaural type, leave the red plugs unconnected.
- If you connected this VCR to both the LINE IN and LINE OUT jacks of the other VCR, select the input correctly to prevent a humming noise.

continued

Editing with another VCR (continued)



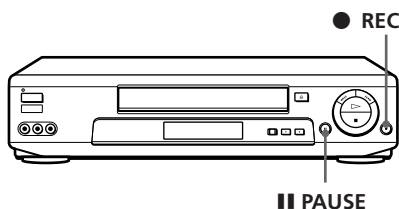
Note

- If the other VCR doesn't have a EURO-AV (Scart) connector, use the VMC-2106 cable instead and connect the cable to the line out jacks of the other VCR.

Operation (when recording on this VCR)

Before you start editing

- Turn on your TV and set it to the video channel.
- Press INPUT SELECT to display “L2” (“L1”) in the display window.
- Press SP/LP to select the tape speed, SP or LP.
- On this VCR, set EDIT in the VIDEO OPTIONS menu to ON. If the other VCR has a similar function, turn it on also.



- 1** Insert a source tape with its safety tab removed into the other (playback) VCR. Search for the point to start playback and set it to playback pause.
- 2** Insert a tape with its safety tab in place into this (recording) VCR. Search for the point to start recording and press ■ PAUSE.
- 3** Press ● REC on this VCR to set it to recording pause.
- 4** To start editing, press the ■ PAUSE buttons on both VCRs at the same time.

To stop editing

Press the ■ STOP buttons on both VCRs.

Tips

- To edit more precisely, press the ■ PAUSE buttons on the VCRs to release pause.
- To cut out unwanted scenes while editing, press ■ PAUSE on this VCR when an unwanted scene begins. When it ends, press ■ PAUSE again to resume recording (Assemble Editing).

Note





- If you start editing following the procedure above, the VCR won't start recording with the OPC function. To record a tape with the OPC function, press ● REC again during recording pause in step 3 so the VCR analyses the tape. Then, when you start editing in step 4, press ■ PAUSE after the OPC indicator stops flashing. If you press ■ PAUSE before the OPC indicator stops flashing, the OPC function is cancelled.

Troubleshooting

If you have any questions or problems not covered below, please consult your nearest Sony service facility.

| | Symptom | Remedy |
|----------|---|--|
| Power | The ON/STANDBY switch does not function. | <ul style="list-style-type: none"> • Connect the mains lead to the mains securely. |
| | The power is turned on but the VCR does not operate. | <ul style="list-style-type: none"> • Moisture condensation occurs. Turn the power off, unplug the mains lead and leave the VCR to dry for over one hour. |
| Clock | The clock has stopped and “--:--” lights in the display window. | <ul style="list-style-type: none"> • The clock stops if the VCR is disconnected from the mains for more than one hour. Reset the clock (and timer). |
| | The playback picture does not appear on the TV screen. | <ul style="list-style-type: none"> • Make sure the TV is set to the video channel. If you are using a monitor, set it to video input. • If the VCR is connected to the TV only with the aerial cable, make sure that RF MODULATOR in the OPTIONS menu is set to ON. |
| Playback | The picture is not clear. | <ul style="list-style-type: none"> • Adjust the tracking with the TRACKING +/- buttons. • The video heads are dirty (see below). Clean the video heads using the Sony T-25CLD, E-25CLDR, or T-25CLW video head cleaning cassette. If these cleaning cassettes are not available in your area, have the heads cleaned at your nearest Sony service facility (a standard service charge will be required). Do not use a commercially available liquid type cleaning cassette other than Sony’s, as it may damage the video heads. • The video heads may have to be replaced. Consult your local Sony service facility for more information. |
| | The picture rolls vertically during picture search. | <ul style="list-style-type: none"> • Adjust the vertical hold control on the TV or monitor. |
| | The picture has no sound. | <ul style="list-style-type: none"> • The tape is defective. Use a new tape. |
| | The sound is unstable or has an echo. | <ul style="list-style-type: none"> • When you play a tape with the same sound recorded on both the hi-fi and normal sound tracks, make sure AUDIO MIX in the OPTIONS menu is set to OFF. |

Symptoms caused by contaminated video heads

| | | | |
|---|---|---|---|
| <p>• Normal picture</p> | <p>• Rough picture</p> | <p>• Unclear picture</p> | <p>• No picture (or black & white screen appears)</p> |
|  |  |  |  |
| <p>initial contamination</p> | | | <p>terminal</p> |

| | Symptom | Remedy |
|------------------------|--|---|
| Recording | No TV programme appears on the TV screen. | <ul style="list-style-type: none"> • Make sure the TV is set to the video channel. If you are using a monitor, set it to video input. • If the VCR is connected to the TV using only the aerial cable, make sure that RF MODULATOR in the OPTIONS menu is set to ON. |
| | TV reception is poor. | <ul style="list-style-type: none"> • Adjust the TV aerial. • Make sure the TV system is correctly set for your TV. • Make sure SYSTEM (B/G or D/K) in the TUNER PRESET menu is set to the system in your area. |
| | The tape starts playing as soon as it is inserted. | <ul style="list-style-type: none"> • The safety tab has been removed. To record on this tape, cover the tab hole. |
| | The tape is ejected when you press ● REC. | <ul style="list-style-type: none"> • Check that the safety tab has not been removed. |
| | Nothing happens when you press ● REC. | <ul style="list-style-type: none"> • Make sure the tape is not at its end. • Select the correct source with the INPUT SELECT button. Select a programme position when recording TV programmes; select "L1" or "L2" when recording from other equipment. |
| Timer recording | The timer does not operate. | <ul style="list-style-type: none"> • Check that the clock is set. • Make sure a tape has been inserted. • Check that the safety tab has not been removed. • Make sure the tape is not at its end. • Make sure a programme has been set for timer recording. • Make sure your timer settings have not already passed the current time. • Check that the decoder is turned on. • Check that the satellite tuner is turned on. • The clock stops if the VCR is disconnected from the mains for more than one hour. Reset the clock and timer. |

continued

Troubleshooting (continued)

| | Symptom | Remedy |
|--------|---|---|
| Others | A tape cannot be inserted. | <ul style="list-style-type: none">• Check that a tape isn't already in the tape compartment. |
| | The remote commander does not function. | <ul style="list-style-type: none">• Make sure you are pointing the remote commander at the remote sensor on the VCR.• Replace all the batteries in the remote commander with new ones if they are weak.• Make sure the TV/VIDEO remote control switch is set correctly. |
| | The tracking indicator does not appear on the screen. | <ul style="list-style-type: none">• The recording condition of the tape is very poor and tracking cannot be adjusted.• The tracking mater does not appear when playing back an NTSC-recorded tape. |
| | The VCR needs to be cleaned. | <ul style="list-style-type: none">• Clean the cabinet, panel and controls with a dry, soft cloth, or a soft cloth slightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzine. |

Specifications

System

Channel coverage

VHS E2-E12, R1-R12

UHF E21-E69, R21-R69

CATV S1-S41, S01-S05

RF output signal

UHF channels 21 to 69

Aerial out

75-ohm asymmetrical aerial socket

Inputs and outputs

↳ LINE-1 (TV)

21-pin

Video input: pin 20

Audio input: pins 2 and 6

Video output: pin 19

Audio output: pins 1 and 3

LINE-2 IN

VIDEO IN, phono jack (1)

Input signal: 1 Vp-p, 75 ohms,

unbalanced, sync negative

AUDIO IN, phone jack (2)

Input level: 327 mVrms

Input impedance: more than 47 kilohms

LINE-2 OUT

AUDIO OUT, Phono jack (2)

Rated output level: 327 mVrms

Load impedance: 47 kilohms

Output impedance: less than 10 kilohms

VIDEO OUT, Phono jack (1)

Rated output level: 327 mVrms

Load impedance: 47 kilohms

Output impedance: less than 10 kilohms

General

Power requirements

220 – 240 V AC, 50 Hz

Power consumption

23 W

Operating temperature

5°C to 40°C

Storage temperature

-20°C to 60°C

Dimensions

Approx. 430 × 100 × 314 mm (w/h/d)

including projecting parts and controls

Mass

Approx. 4.6 kg

Supplied accessories

Remote commander (1)

R6 (size AA) batteries (2)

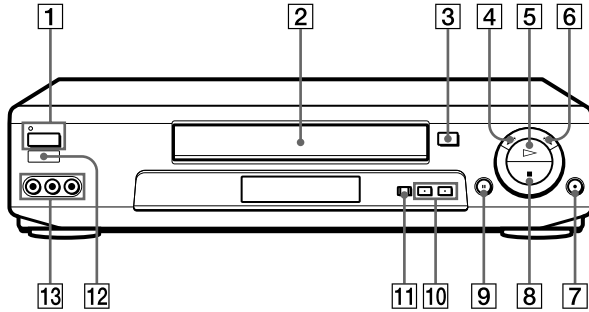
Aerial cable (1)

Design and specifications are subject to change without notice.

Index to parts and controls

Refer to the pages indicated in parentheses () for details.


Front panel



1 ON/STANDBY switch/indicator (10)

2 Tape compartment

3  EJECT button (21)

4  REW (rewind) button (31)

5  PLAY button (31)

6  FF (fast-forward) button (31)

7  REC (record) button (43)

8  STOP button (43)

9  PAUSE button (43)

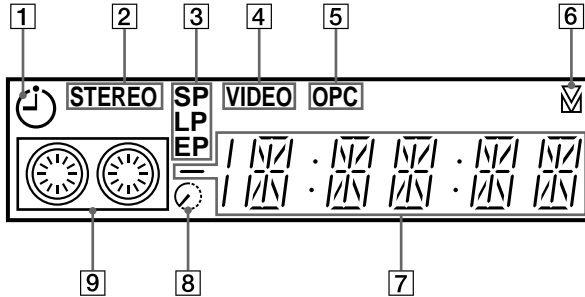
10 PROGRAM/TRACKING +/- buttons (11, 32, 38)

11 AUTO SET UP/ RF (Radio Frequency) CHANNEL button (10, 12)

12 Remote sensor (5)

13 LINE 2 IN VIDEO/AUDIO L/R jacks (41)

Display window

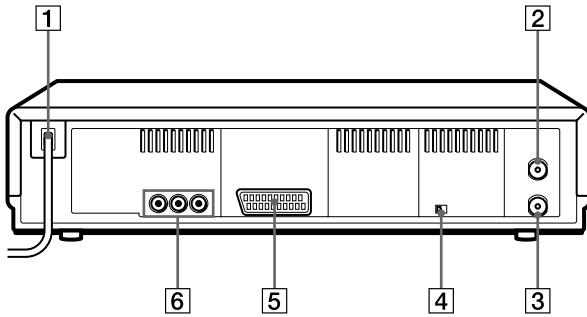


- | | |
|--|---|
| 1 Timer indicator (28) | 6 Tracking indicator (37) |
| 2 STEREO indicator (36) | 7 Time counter/clock/line/ programme position indicator (22, 24, 43) |
| 3 Tape speed indicators (24) | 8 Remaining time indicator (25) |
| 4 VIDEO indicator (9, 25) | 9 Tape/recording indicator (22, 24) |
| 5 OPC (Optimum Picture Control) indicator (37) | |

continued

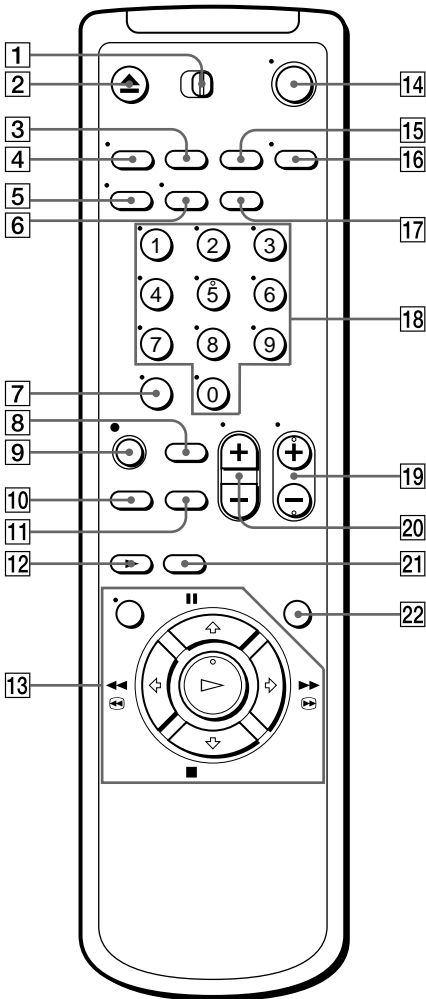
Index to parts and controls (continued)

Rear panel



- | | |
|---|--|
| 1 Mains lead (8) | 4 NTSC PB (playback) switch (21) |
| 2 AERIAL IN ANTENNE ENTREE connector (8) | 5 ↻ LINE-1 (TV) ↻ LIGNE-1 (TV) connector (9) |
| 3 AERIAL OUT ANTENNE SORTIE connector (8) | 6 LINE-2 OUT VIDEO/AUDIO L/R jacks (9) |

Remote commander



- 1 **TV** / **VIDEO** remote control switch (5)
- 2 **▲** EJECT button (21)
- 3 **COUNTER RESET** button (22)
- 4 **DISPLAY** button (25)
- 5 **WIDE** button (7)
- 6 **TV/VIDEO** button (9, 25)
- 7 **-/-** (ten's digit) button (26)
- 8 **QUICK TIMER** button (33)
- 9 **●** REC (record) button (24)
- 10 **SP** (Standard Play)/**LP** (Long Play) button (24)
- 11 **INPUT SELECT** button (24, 28)
- 12 **▶▶** SLOW button (31)
- 13 **Tape/menu operation buttons** (13, 21, 31, 34, 39)
 - MENU** button
 - ||** PAUSE/**▲** button
 - STOP/**▼** button
 - ◀◀** REW (rewind)/**◀** button
 - ▶▶** FF (fast-forward)/**▶** button
 - ▷** PLAY/OK button
- 14 **ON/STANDBY** switch (6, 28)
- 15 **COUNTER/REMAIN** button (25)
- 16 **AUDIO MONITOR** button (36)
- 17 **CLEAR** button (35)
- 18 **Programme number buttons** (6, 26)
- 19 **PROG** (programme) **+/-** buttons (6, 17, 24)
- 20 **VOL** (volume) **+/-** buttons (for TV) (6)
- 21 **x 2** button (31)
- 22 **REPLAY** button (21)

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