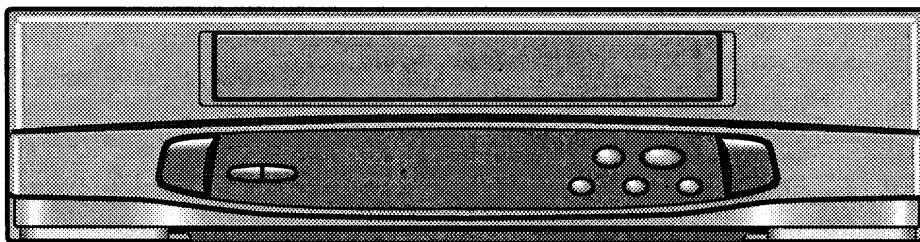


SANYO

INSTRUCTION MANUAL

VHR-795E

Video cassette recorder



VIDEO *Plus+*

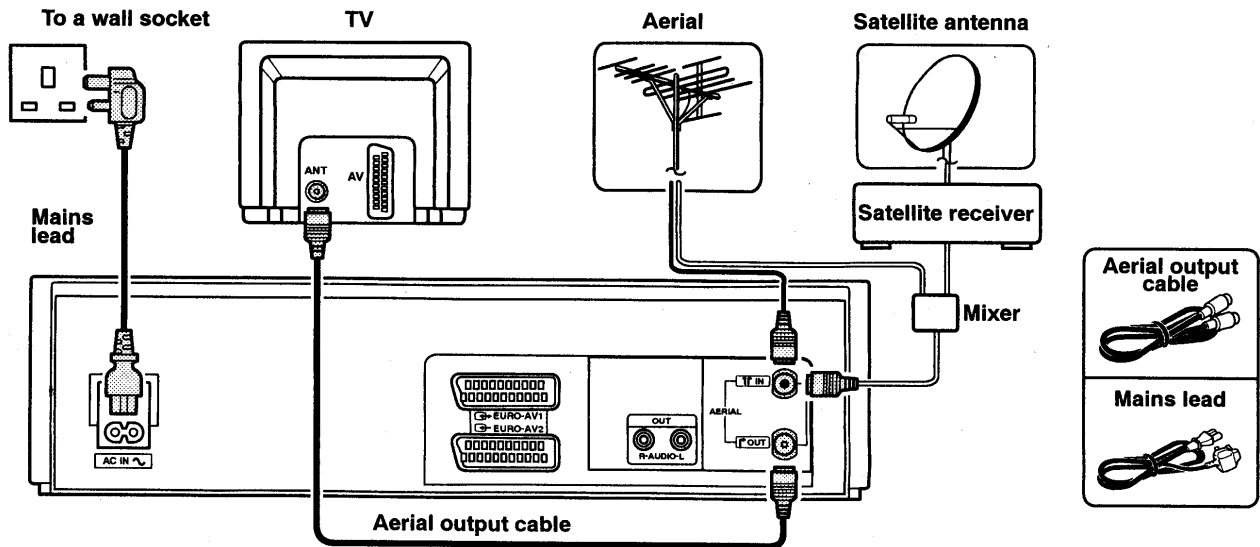
VHS
PAL

EASY SETUP

CONNECTIONS

Aerial/RF connection

Connect as indicated below.



- If a satellite receiver is connected as shown and switched on, select SKY1 and the satellite programme will be stored in programme position "6" (see page 12).

VCR PRESETTING

After all connections have been made, insert the remote control batteries then proceed to "**Adjusting the TV receiver to the video channel**" → "**Tuning and clock setting (AUTO SETUP)**" to preset the VCR.

The settings are entered with the remote control.

Adjusting the TV receiver to the video channel

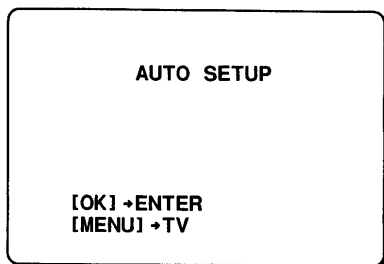
AV connection:

Simply set the TV to the AV mode and the AUTO SETUP screen will appear on your screen.

RF connection:

Select on your TV the designated video channel (on modern TVs it is normally 0, on older ones 8) and adjust the tuning on the TV to UHF channel 36 so that the AUTO SETUP screen is clear.

This is your video channel.



When the AUTO SETUP screen is clear, press the **OK** button.

- Auto tuning will start.

Note:

During the Auto tuning operations, please do not press any of the buttons or controls on the VCR or remote control.

Tuning and clock setting (AUTO SETUP)

- The Auto tuning function will start and the TV stations available in your area will be automatically preset in order.

The following TV stations will be automatically preset to programme position "1" to "6".

Programme position	TV station
"1"	BBC1
"2"	BBC2
"3"	ITV
"4"	C4
"5"	*1
"6"	*2 or *SKY 1

*1 Programme position "5" is reserved for TV station C5 to be available in the near future.

*2 For areas where there is a satellite broadcasting service, the TV station with the lowest frequency will be preset to this programme position number. (Select SKY 1 on the cable box.)

*SKY 1 During AUTO SETUP and when the satellite receiver is connected at RF, ensure the satellite receiver is switched on and SKY 1 selected. The satellite programme will be stored in programme position "6".

Auto clock setting

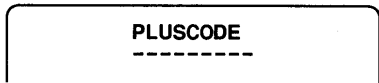
The clock is automatically set from the broadcast signals. When the VCR display shows the clock setting the available TV stations have been preset.

For manual tuning or manual clock setting, please refer to "**MANUAL**" on page 12, 13.

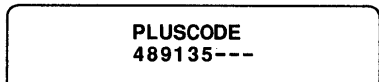
VIDEO PLUS+ TIMER RECORDING PROGRAMMING

On-screen programming

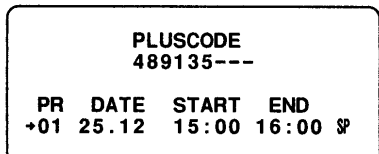
- 1 Press the **VIDEO Plus+** button.



- 2 Using the numeric buttons, enter the PlusCode number for the programme you want to record.



- 3 Press the **OK** button.



□ Changing the end time

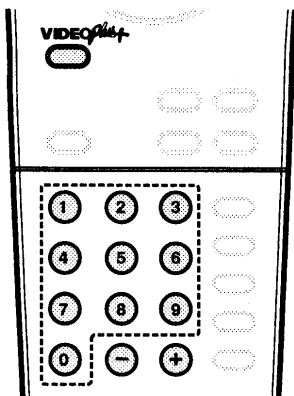
Each press of the (+ or -) button will change the recording end time by units of 10 minutes.

- 4 When all the settings are as desired, press the **OK** button.

- You can programme another recording by repeating steps 2 to 4.

- 5 Press the **POWER** button.

- The timer indicator (⏻) will light on the VCR display and the VCR goes into timer recording stand-by mode.



Programming on the VCR display

- 1 Press the **VIDEO Plus+** button.
 - 9 bars (—) will appear on the display.

- 2 Using the numeric buttons, enter the PlusCode number for the programme you want to record.



- 3 Press the **OK** button.

- The programmed recording programme position number and recording on time are displayed.



□ Changing the off time

Each press of the (- or +) button will change the recording off time by units of 10 minutes.



- 4 When all the settings are as desired, press the **OK** button.

- You can programme another recording by repeating steps 2 to 4.

- 5 Press the **POWER** button.

- The timer indicator (⏻) will light on the VCR display and the VCR goes into timer recording stand-by mode.

CONTENTS

GB

Please read carefully before using the VCR.

Make sure to make these settings before operating the VCR.

1 INTRODUCTION	EASY SETUP	1
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OPERATION**VIDEO PLUS+ TIMER RECORDING PROGRAMMING 22**

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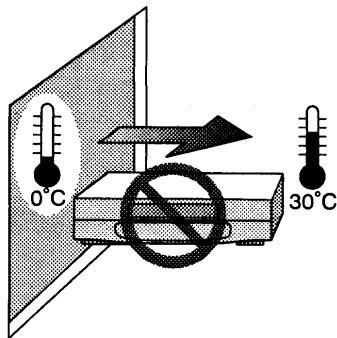
This VCR is based on a VHS-PAL signal system. Only video cassette bearing the **VHS** symbol can be used.

Caution concerning condensation

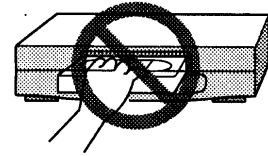
Be careful of condensation

Condensation is the moisture that forms on the outside of a glass when you fill it with cold water. Condensation can also form inside a VCR when it is suddenly moved from a cold place to a warm, humid one, or when a heater has been turned on to quickly heat the room.

Particular care must be taken with your VCR because water particles that form on the video head drum, which is the main VCR mechanism, can cause the video tape to stick to the drum. This prevents proper tape travel and may damage both tape and mechanism.



Do not insert a video cassette if you use this VCR in areas subject to condensation.

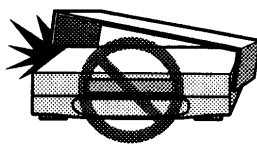


- ❶ Plug the mains lead (supplied) into the **AC IN ~** on the rear of VCR.
- ❷ Insert the plug of this mains lead into a wall socket.
- ❸ Press the **POWER** button.
 - The video head will warm up and the drying of any water particles will be faster.

Wait for 1-1/2 to 2 hours before using the VCR.

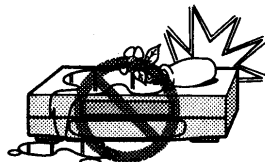
- It takes about 1-1/2 to 2 hours to completely eliminate condensation.

Safety precautions



DANGER:

This VCR contains live parts. Do not remove the cabinet.



WARNING:

To prevent fire or shock hazard, do not expose this product to rain or moisture.



CAUTION:

Do not put your hand or other objects in the cassette loading slot because of the risk of injury or an accident. Be sure to keep small children away from the VCR.

The unauthorized recording of television programmes, video tapes, films and other such material may infringe upon copyright or the rights of third parties.

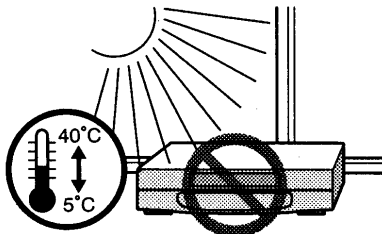
Operating precautions

Note:

If the unit does not operate properly, switch it off, refer to the "TROUBLESHOOTING" or your Sanyo authorized service agent.

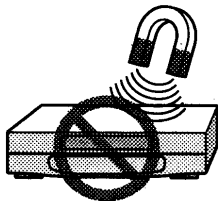


Place the VCR on a flat, stable, level surface. Never subject it to violent shaking or any other shock or impact.



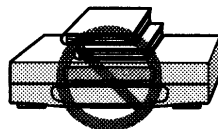
Do not expose the unit to high temperatures. Excessive heat (heat sources such as heaters, ovens, closed car on hot days, etc.) may damage the unit.

Be sure to use this VCR only in a temperature range of 5°C to 40°C (41°F to 105°F) and at less than 80% humidity.

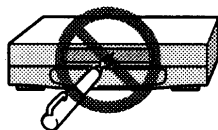


Do not use the unit under the following conditions:

- in locations with high humidity
- in presence of excessive dirt or dust
- in areas subject to strong vibrations
- near strong magnetic fields (e.g. transmitting antennas, motors, fluorescent lights, etc.)



Do not stack anything on top of your VCR, or block the air vents, to prevent damaging or overheating.



Do not place anything, except VHS video cassette tapes, in the unit.

Do not allow rain, steam, dew, salt water, sand, oily smoke, metal objects, etc. entering the unit.



Clean with a dry and soft cloth, or soft cloth slightly moistened with a mild detergent solution.

Do not use any type of solvent, such as alcohol or benzene.

Power on/off

Power is switched on/off by pressing the **POWER** button.

Power off display



Power on display



"Power off" is the condition in which only the time is displayed.

Note:

Disconnect the mains lead from the wall socket if the VCR is not to be used for a long time.

[]: Reference pages are shown in square brackets.

Accessories

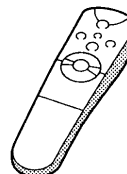
Is everything in the box?



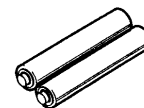
Mains lead [9]



Aerial output cable [9]

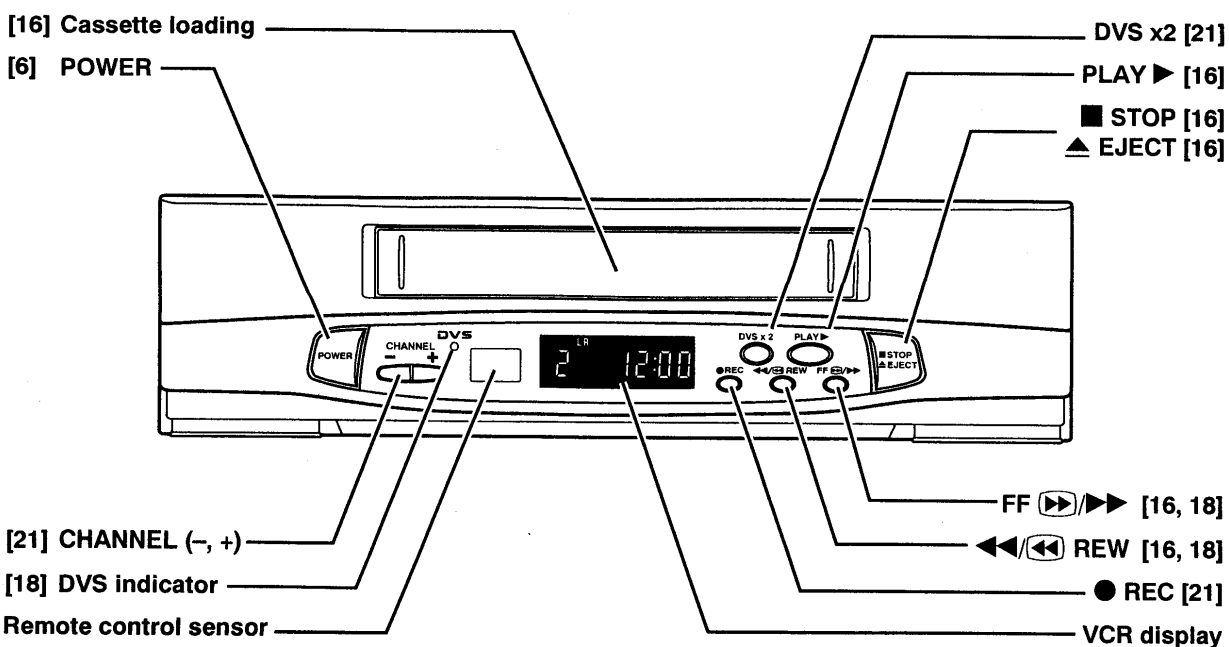


Remote control unit [8]

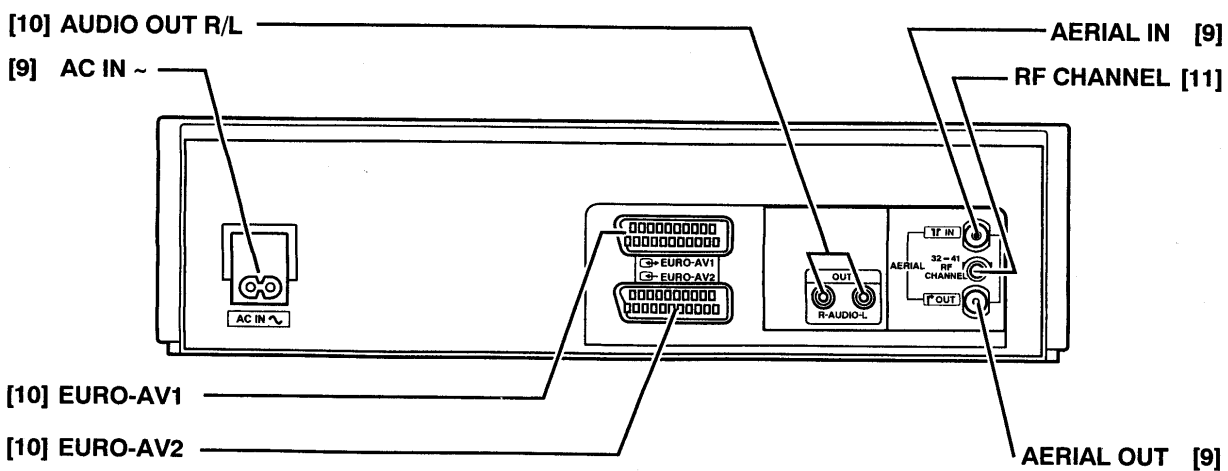


2 "AA (IEC R6)" size, 1.5-volt batteries [8]

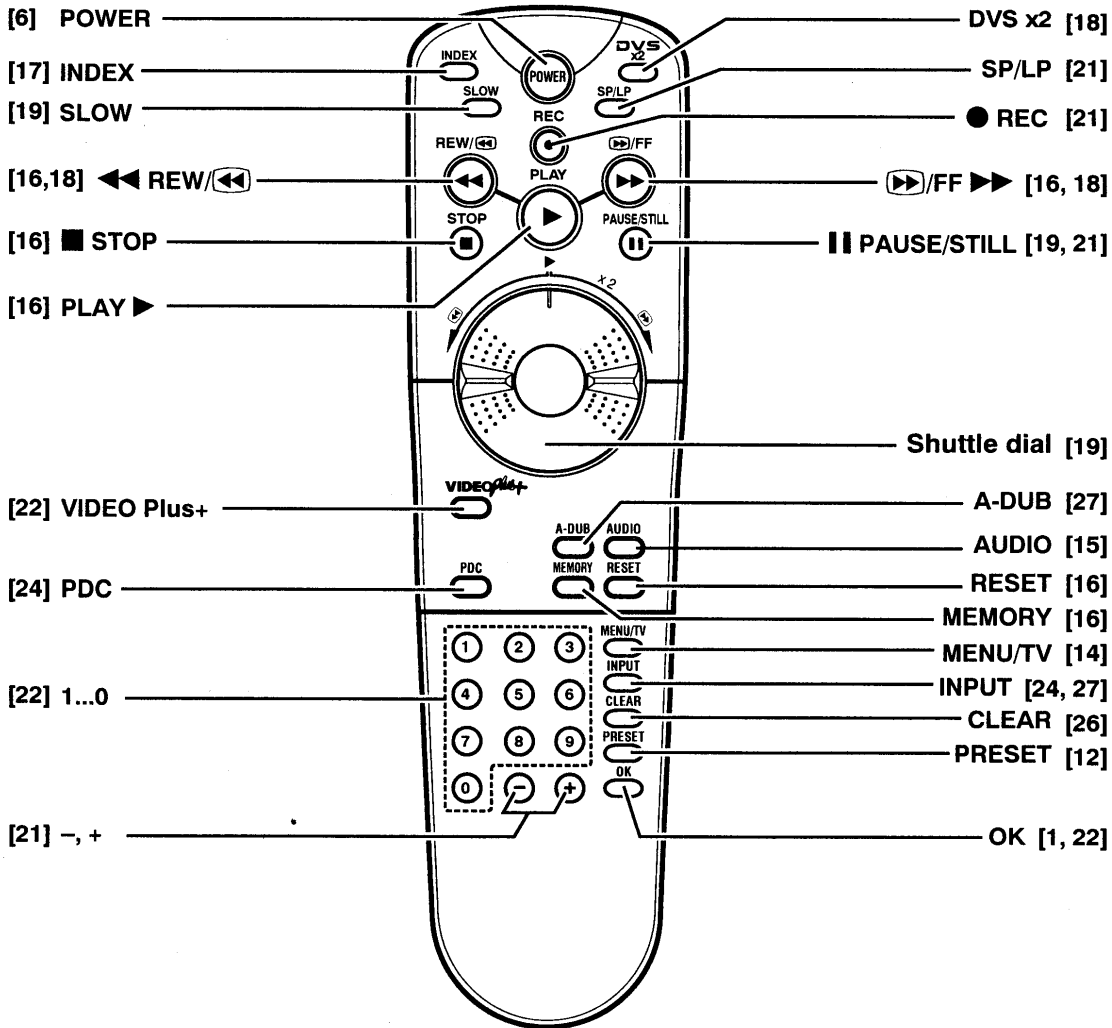
Front panel



Rear panel

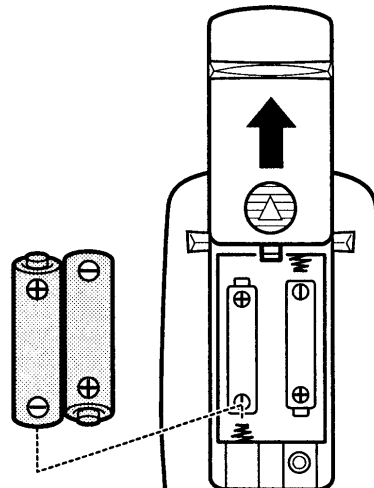


Remote control



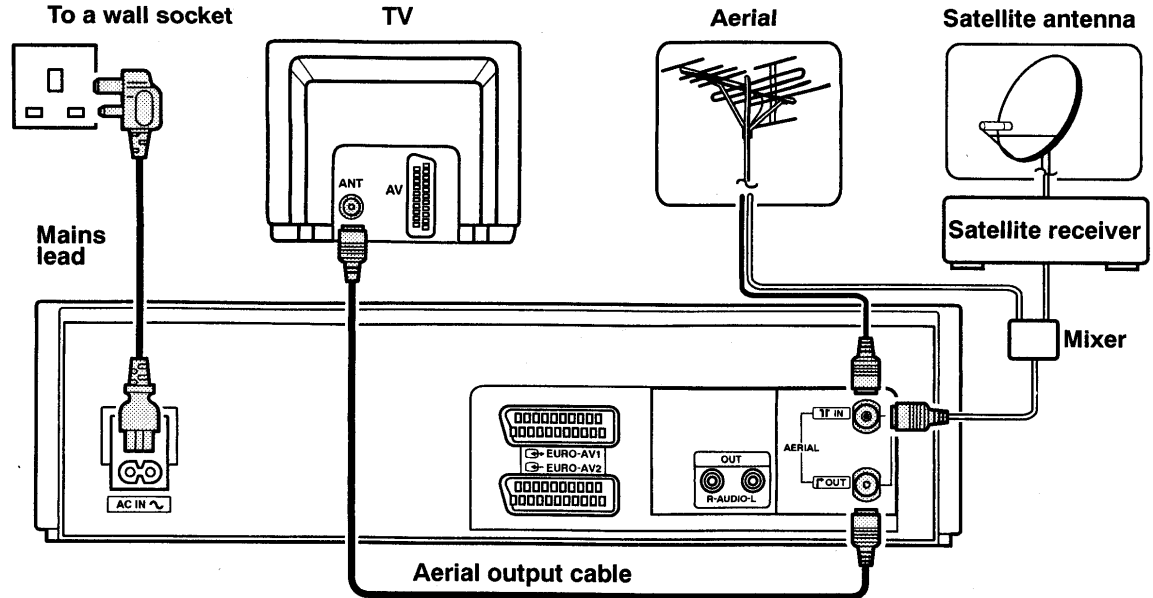
Remote control batteries insertion

- 1 Slide open the lid.
 - 2 Insert 2 "AA (IEC R6)" 1.5 volt batteries (supplied) according to the ⊕ and ⊖ signs.
 - 3 Replace the lid.
- Operate the remote control unit within a range of approx. 30° from the front of the VCR.
 - Operate the unit within approx. 6m (20 ft.) from the front of the VCR.
 - The battery life under normal operating conditions is about six months. If the batteries become weak, the operating distance will decrease; when this occurs, replace the batteries.
 - If the remote control unit is not to be used for a long period of time, remove the batteries.

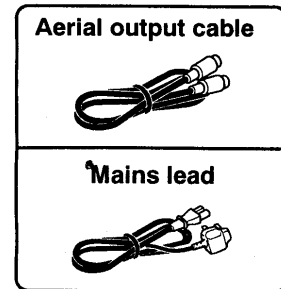


Aerial/RF connection

Connect as indicated below.



- Stereo sound can only be enjoyed when the VCR is connected to a stereo monitor/TV or stereo audio system using an AV or Hi-Fi connection. When the VCR is connected to a TV using an RF connection, the sound will be monaural.
- If a satellite receiver is connected as shown and switched on, select SKY1 and the satellite programme will be stored in programme position "6" (see page 12).



IMPORTANT

If the plug supplied with this appliance is not suitable for the socket outlets in your home, it should be cut off and the correct type fitted.

Disposal of plug

If the non rewirable plug is to be cut off, the removed plug should be disposed of carefully as there is a shock hazard should the plug be inserted into a live socket.

Replacing the fuse

The detachable fuse cover must be replaced after changing the fuse. Only a 3A fuse should be used, it should comply with BS1362, and should carry the ASTA mark.

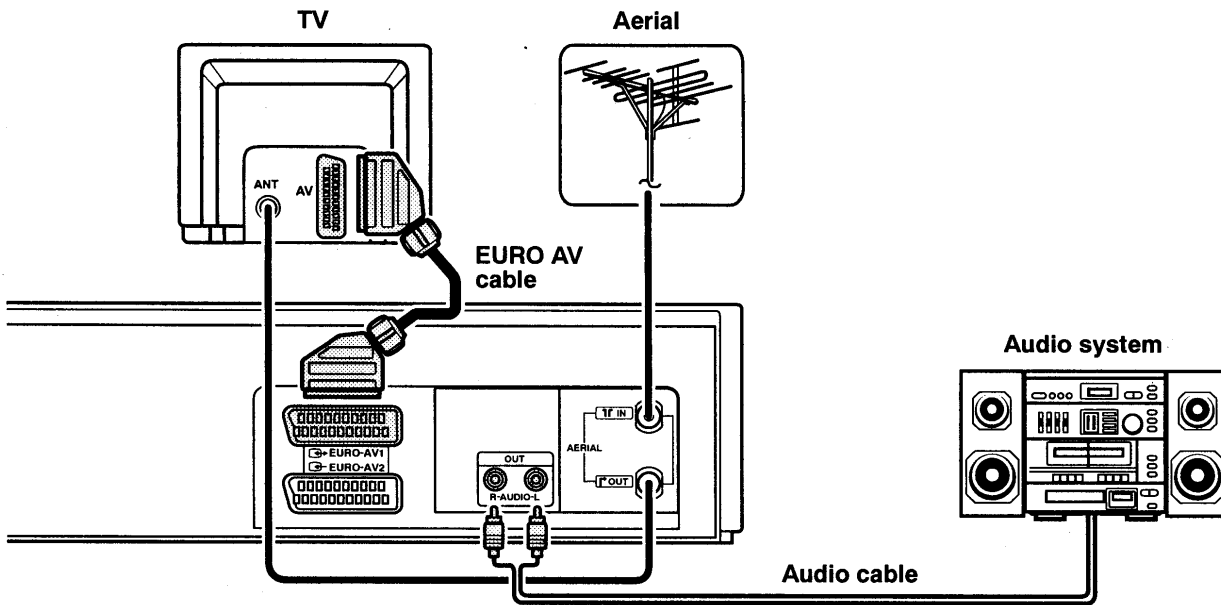
Mains lead connections

The wires in the mains lead are coloured according to the following code:



If the colours of the wires in the mains lead of this apparatus do not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured blue must be connected to the terminal which is marked with the letter **N** or coloured blue or black.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter **L** or coloured brown or red.
- Do not connect either wire to the **Earth** terminal.



AV connection

If your TV receiver has an AV terminal, the following AV connections are also possible. The EURO AV cable is sold separately.

- Connect the **EURO-AV1** terminal on the VCR to the AV terminal on the TV receiver.

Note:

Be sure to use a full wired EURO AV cable (SCART lead).

- The advantage of this connection is a higher quality of picture and sound during playback.
- If connections are made to an AV control compatible TV, the TV's input can be controlled at the VCR. This means that when the VCR **PLAY ►** button is pressed, the TV input is switched automatically so that the TV functions as a video monitor.
- Some TV receivers have to be switched manually to the EURO AV mode.

EURO-AV2 terminal

The **EURO-AV2** terminal is used for signal input only. It is used to connect a satellite receiver or when recording from an external video source.

Hi-Fi audio connection

- To listen to the sound from the VCR over an audio system, connect the **AUDIO OUT R/L** terminals to the input terminals on the audio system. The audio cable is sold separately.
- For more details, please refer to your audio system instruction manual.

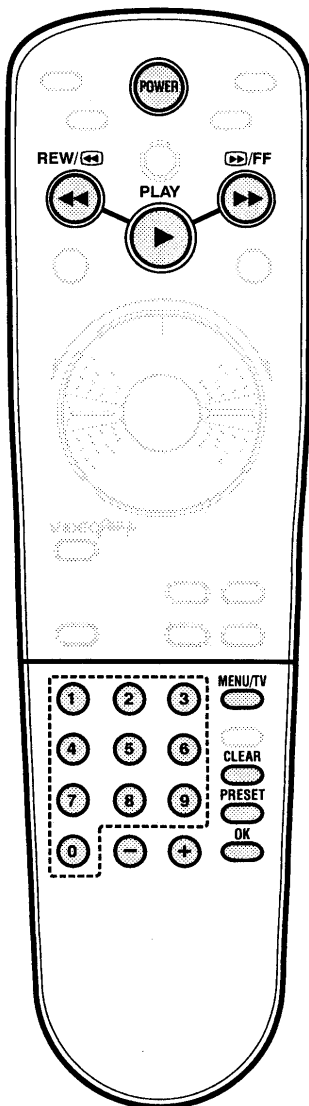
After all connections have been made, insert the remote control batteries then proceed to "**Adjusting the TV receiver to the video channel**" → "**Tuning and clock setting (AUTO SETUP)**" to preset the VCR.

The settings are entered with the remote control.

The buttons that can be used with each menu are displayed at the bottom of the screen.

Before starting

- Turn on the TV.
- Press the **POWER** button.



Adjusting the TV receiver to the video channel

AV connection:

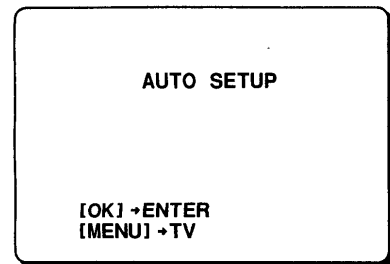
Simply set the TV to the AV mode and the AUTO SETUP screen will appear on your screen.

RF connection:

Select on your TV the designated video channel (on modern TVs it is normally 0, on older ones 8) and adjust the tuning on the TV to UHF channel 36 so that the AUTO SETUP screen is clear.

This is your video channel.

- To view a tape playback or to watch a TV broadcast tuned on the VCR tuner, set the TV to the video channel.



When the AUTO SETUP screen is clear, press the **OK** button.

- Auto tuning will start.

Notes:

- If you want to recall the AUTO SETUP screen after you have pressed the **MENU/TV** button simply press the (+ or -) buttons on the VCR for 2 or more seconds.
- If you have already tuned in your VCR simply press the **MENU/TV** button.
- During the Auto tuning operations, please do not press any of the buttons or controls on the VCR or remote control.

Go to next page.

If in your area, UHF channel 36 is used by a TV station, follow the steps below.

- 1** Tune the TV receiver to an available UHF channel between channel 32 and 41 (a UHF channel not used by a TV station).
- 2** Using a small screwdriver, slowly turn the video channel adjustment screw "**RF CHANNEL**" on the back of the VCR, to the right for higher channel than 36 and to the left for lower channel than 36.

Adjust the tuning on the TV, if necessary, so that the AUTO SETUP screen is clear.

This is your video channel.

Tuning and clock setting

“AUTO” (AUTO SETUP)

The “Tuning” and “Clock setting” operations are done automatically

This VCR has a built-in tuner capable of tuning up to 44 TV stations. Each TV station broadcasting channel is memorized by the VCR as a programme position number (1 to 44).

- The Auto tuning function will start and the TV stations available in your area will be automatically preset in order.
The following TV stations will be automatically preset to programme position “1” to “6”.

Programme position	TV station
“1”	BBC1
“2”	BBC2
“3”	ITV
“4”	C4
“5”	*1
“6”	*2 or *SKY 1

*1 Programme position “5” is reserved for TV station C5 to be available in the near future.

*2 For areas where there is a satellite broadcasting service, the TV station with the lowest frequency will be preset to this programme position number. (Select SKY 1 on the cable box.)

*SKY 1 During AUTO SETUP and when the satellite receiver is connected at RF, ensure the satellite receiver is switched on and SKY 1 selected. The satellite programme will be stored in programme position “6”.

Auto clock setting

The clock is automatically set from the broadcast signals. When the VCR display shows the clock setting the available TV stations have been preset.

Once a week (every Sunday at 3 a.m.), the VCR will automatically set the clock according the signals sent by the broadcasting stations, therefore, any other setting such as summer/standard time is unnecessary.

If the power to the VCR has failed or has been disconnected for more than 1 hour, the clock will automatically be reset when the power is restored. (If the broadcasting stations are not transmitting at that time, the clock will be reset as soon as broadcasting resumes.)

Notes:

- The skip function will be automatically set for all position numbers where no TV station has been preset.
- AUTO SETUP is not possible if the VCR is set to AV input mode.
- If the RF signal is very weak or multipath (ghosting) problems are present, auto clock setting may not be implemented. In these circumstances, manually set the clock.
- When all TV stations have been preset, the function will stop and the broadcast from BBC1, preset to programme position “1” will appear on your TV screen.

“MANUAL”

Manual tuning

This tuning mode can be used to modify the settings entered by the “AUTO” (AUTO SETUP), or to manually preset the TV stations to particular programme position numbers.

Example: To preset BBC 1 to programme position “1”.

- 1 Press the **PRESET** button.
- 2 Using the (+ or -) button, select the desired programme position number (e.g. “01”).



- 3 Press the **PLAY ►** button.
 - The broadcast with the next higher frequency is searched and tuned. The search will stop when a broadcast is found.
- If the search stops on a broadcast other than the one desired, press the **PLAY ►** button again until the broadcast from the desired TV station (e.g. BBC 1) appears on the TV screen.

Fine tuning

When the desired TV station appears on the TV screen, if the tuning is not optimum, it can be improved by manual fine tuning.

- Press the **FF ►►** or **◄◄ REW** button to obtain the best possible picture and sound.
- 4 Press the **OK** button when the desired TV station (e.g. BBC 1) appears on the TV screen.
 - BBC 1 has been preset to position number “01”.
At that time position number will change from “01” to “02”.
- Repeat steps 2 to 4 to preset another TV station to another programme position number.
- 5 When finished, press the **PRESET** button.

Manual sorting

The steps below will let you easily change the programme position number assigned to TV stations.

Example: To change ITV from programme position "3" to programme position "1".

Programme position	TV station
"1" → "3"	BBC1
"2"	BBC2
"3" → "1"	ITV
"4"	C4
"5"	1
"6"	SKY 1

- 1 Press the **PRESET** button.
- 2 Using the (+ or -) button select the desired TV station (e. g. ITV).



- 3 Using the numeric buttons, enter the target programme position number (e.g. "01").



- 4 Press the **OK** button.

Note:

When a desired TV station is preset to a position number using this method, it will be interchanged with the TV station already programmed to that position number (if any).

- Repeat steps 2 to 4 to change another TV station programme position number.

- 5 When finished, press the **PRESET** button.

Skip function

If only programme position numbers 1 to 30 have been preset, set the skip function for programme position numbers 31 to 44, so that only the preset TV station will appear when pressing the (+ or -) button.

Example: To skip the programme position number "31".

- 1 Press the **PRESET** button.
- 2 Using the (+ or -) button, select the programme position number to skip (e.g. "31").



- 3 Press the **CLEAR** button.
 - The "S" indicator will light.



Note:

To cancel the skip function, press the **CLEAR** button again to erase the "S" indicator.

- 4 Press the **OK** button.
 - Repeat steps 2 to 4 for every programme position number to skip.
- 5 When finished, press the **PRESET** button.

ON-SCREEN MENUS AND BASIC CONTROL

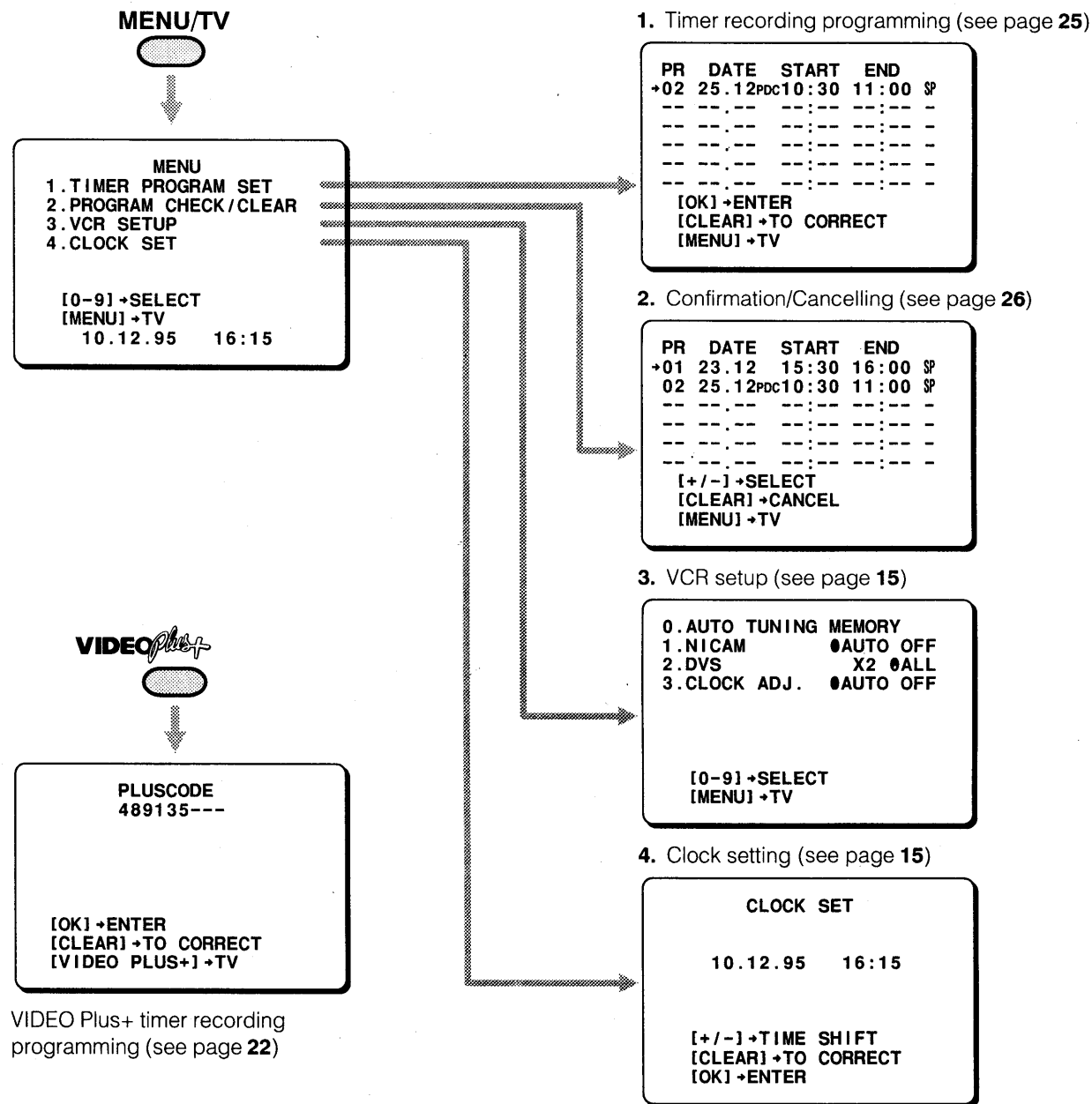
The VCR can easily be programmed by using the menus displayed on-screen.

The menus are controlled from the remote control.

The buttons that can be used with each menu are displayed at the bottom of the screen.

If you memorize the basic operations, each setting can easily be made by following the steps of the concerned menu.

- If a wrong sub-menu has been selected, press the **MENU/TV** button twice to return to the main menu, and start again.



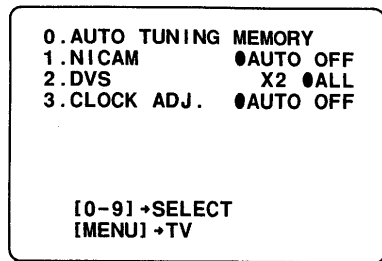
Changing the settings

VCR setup

Using the VCR SETUP menu, set the recording and playback systems.

- ① Press the **MENU/TV** button.
- ② Press the numeric **3** button.
- ③ Press the numeric **0 – 3** button for the desired mode.

Each subsequent press of the same numeric button will set the system as indicated by "●" to the left of the selection.



0. AUTO TUNING MEMORY

- When the numeric **0** button is pressed the Auto tuning will start.

1. NICAM

AUTO: To record NICAM broadcasts and bilingual broadcasts.

OFF: To record the normal sound (FM mono).

2. DVS

X2: The sound will be heard only during double speed playback.

ALL: The sound will be heard during the forward search, reverse search or still picture modes.

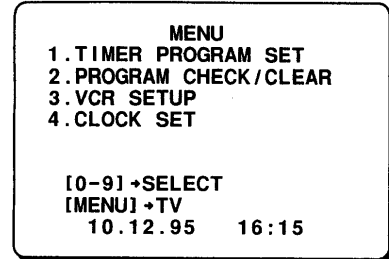
3. CLOCK ADJ.

AUTO: The clock is automatically adjusted every Sunday at 3 a.m.

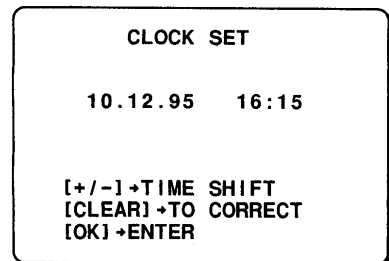
OFF: The clock is not automatically adjusted.

Clock setting

- ① Press the **MENU/TV** button.



- ② Press the numeric **4** button.



- ③ Using the **CLEAR** button, delete the wrong numbers, then enter the correct setting.

Summer/Standard time setting

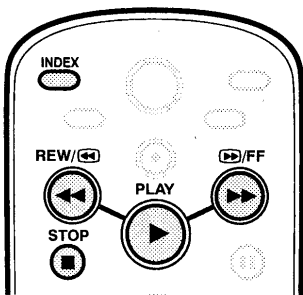
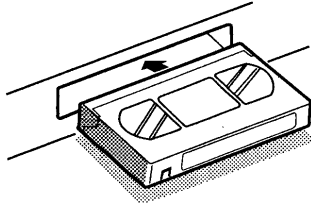
For time shifting adjustment, simply press the (+ or -) button.

A press on the (+ or -) button will advance or retard the clock by 1 hour.

- ④ When the date and time have been entered, press the **OK** button.
 - Seconds will start counting from "00" as the **OK** button is pressed.
 - The normal TV broadcast screen will return.

Before starting

- Turn on the TV, then set it to the preset video channel or AV mode.
- Insert a recorded video cassette.
 - The cassette-in (●●) indicator will light.



Normal playback

- 1 Press the **PLAY ▶** button.
- 2 To stop the playback, press the **STOP** button.
 - To rewind the tape, press the **◀REW** button.
 - To advance (fast-forward) the tape, press the **FF▶▶** button.
 - To eject the video cassette, press the **▲EJECT** button on the VCR.

Auto power on

The power is automatically switched on as a cassette is inserted while the power to the VCR is turned off.

Auto play

The VCR will play back a tape automatically when a video cassette is inserted whose erasure-prevention tab has been removed.

Auto eject

When a video cassette without an erasure-prevention tab is played to the end of the tape, the tape will be automatically rewound and then the cassette will be ejected.

Power off eject

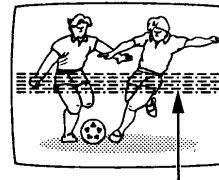
The video cassette will be ejected when the **▲EJECT** button is pressed, even if the power to the VCR is turned off.

Tracking adjustment

If the playback picture shows interference, manually adjust it with the (– or +) button, to minimize the noise.

Note:

Depending on the cassette tape, you may find that some noise interference cannot be completely corrected using the tracking controls.



Noise interference

Counter memory

This convenient feature for finding the beginning of a specific recording etc., is made possible by the "**Linear Time Counter**" that indicates the tape run time in hours, minutes and seconds.

- Whenever you load a cassette tape, the counter is reset to "**0:00:00**".
 - When rewinding further back from position "**0:00:00**", the counter shows figures beginning with "–".
- 1 Press the **RESET** then the **MEMORY** button before starting recording or playback.
 - The zero point of the counter is now memorized and the memory indicator "**M**" will illuminate.



- 2 Press the **◀REW** button at the end of the recording, or playback.
 - The tape will be rewound automatically to the memorized position and then stop.
- If you play back a blank tape or a blank portion of tape, the counter will not operate.

Index search

This VCR will go automatically to the beginning of a recording and start playback.

An index signal is automatically placed at the beginning of each recording made on this VCR. This index can be used to search for the recording you wish to watch.

Index signals are not recorded after a recording pause.

Note:

Make sure that indexes are at least five minutes apart from each other.

- 1 Press the **INDEX** button while in the stop or playback mode.



- To cancel the index search mode, press the **INDEX** button again.

- 2 Press the **FF** or **REW** button (e.g. **FF**).
 - The search function will start.



- To stop the search function, press the **STOP** button.

Endless play

This function will play back a tape to the end, rewind it then replay it again, and again until you stop it.

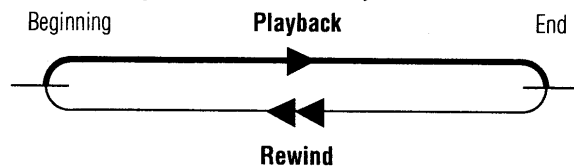
Notes:

- During endless play, please do not press **FF**, **REW** or **PAUSE/STILL** button because the endless play will be cancelled.
- This function can only be activated using the controls on the VCR itself. It cannot be activated from the remote control.

- 1 In the stop or playback mode, first press the **PLAY** button then while holding it down press the **REW** button.
 - The tape is rewound to the beginning and then playback will start.
- If the counter memory function is used in combination with endless play, the VCR will play back the tape to the counter reading "**M 0:00:00**" then start again from the beginning.
- 2 To cancel the endless play, press the **STOP** button.

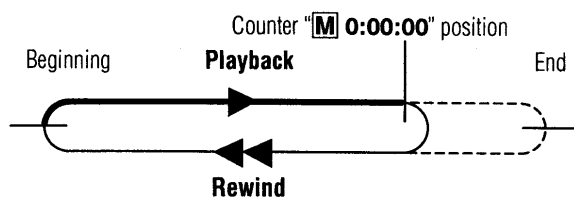
Example 1:

Without using the counter memory.



Example 2:

Using the counter memory, the "**M**" indicator on.



Using the DVS function you can enjoy listening to the sound while using the variable playback modes.

About the DVS sound

- The DVS function will only playback the sound from certain sections of the recording on the tape and therefore the whole sound cannot be heard.

The sound is played back as indicated below:

- The sound corresponding to frames A, C and E is heard.
- The sound corresponding to frames B and D will not be heard.

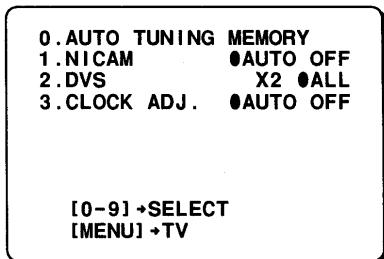
Normal audio track



- When using the DVS function, the mono sound only is heard.
- During review playback the sound may not be heard properly.

DVS sound selection

- 1 Press the **MENU/TV** button.
- 2 Press the numeric **3** button.



- 3 Press the numeric **2** button to select the desired mode as indicated by "●".
 - X2:** The sound will be heard only during double speed playback.
 - ALL:** The sound will be heard during the forward search, reverse search or still picture modes.

Variable playback modes

Double speed playback

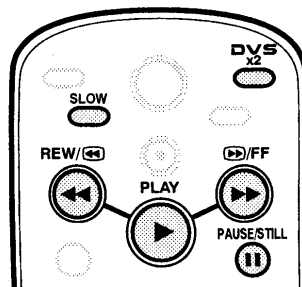
When viewing the recording of a sports event, a car race or any long recording, you can use this function to view it at double speed playback in half the normal time.

Forward search, Reverse search

To look for a certain scene or section of the recording while looking at the image and listening to the sound.

Still picture

The sound from the about 3 seconds preceding the still picture is heard repeatedly.



Double speed playback

- 1 Press the **DVS x2** button during normal playback operation.
 - The picture can be viewed at twice the normal playback speed but the sound will be understandable.
 - During double speed playback, the **DVS** indicator (yellow) will light.
- 2 Press the **PLAY ►** button to resume normal playback.

Forward search

- 1 Press the **FF ►►** button during playback or fast-forward operation.
 - The picture can be viewed and the sound heard if the DVS sound is set to "**ALL**", while the tape is advanced at a fast speed.
- 2 Press the **PLAY ►** button to resume normal playback, or the **FF ►►** button to resume fast-forward operation.

Reverse search

- 1 Press the **◀◀REW** button during playback or rewind operation.
 - The picture can be viewed and the sound heard if the DVS sound is set to "**ALL**", while the tape is rewound at a fast speed.
- 2 Press the **PLAY ►** button to resume normal playback, or the **◀◀REW** button to resume rewind operation.

Still picture

- 1 Press the **II PAUSE/STILL** button during normal playback.
 - A still picture can be viewed and the repeated sound heard if the DVS sound is set to "ALL", and if the tape has been played back for 5 seconds or more.
- 2 Press the **PLAY ►** button to resume normal playback.
 - When switching from slow motion to still picture mode, the sound will not be heard.

Frame advance

- 1 Press the **II PAUSE/STILL** button during still playback to advance the picture frame by frame.
- 2 Press the **PLAY ►** button to resume normal playback.

Slow motion

- 1 Press the **SLOW** button during normal playback or during still picture.
 - The tape speed can be set 1/5 or 1/30 of normal speed by pressing the **SLOW** button.
- 2 Press the **PLAY ►** button to resume normal playback.

Notes:

- When in double speed playback you cannot use the shuttle dial to access other DVS functions such as forward or reverse search.
- During variable playback modes the picture may contain some noise or vibration that cannot be corrected. This is not a malfunction.
- If still picture or slow motion playback is continued for about five minutes, the VCR will automatically change to stop mode in order to prevent the tape from being damaged.
- This VCR will not guarantee the variable playback modes picture quality of tapes recorded in LP mode.

Shuttle dial operation

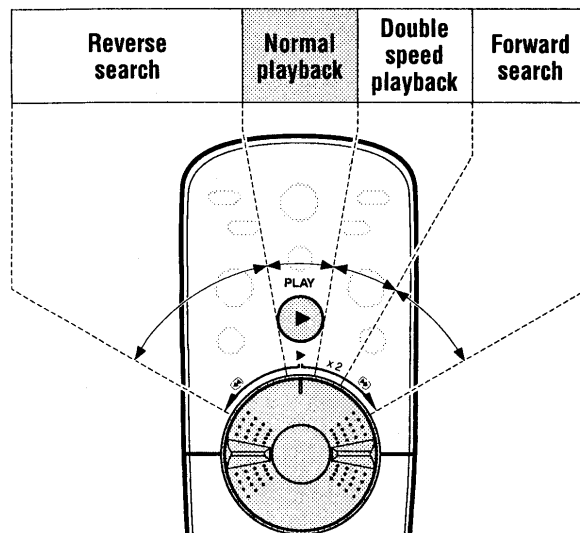
By simply turning the shuttle dial, you can easily select the search direction and speed.

When you get to where you want to start viewing the tape, just release the shuttle dial to resume playback or still picture (see below).

- You can use the shuttle dial during **normal playback** or **still picture** modes.

Using the shuttle dial from normal playback mode

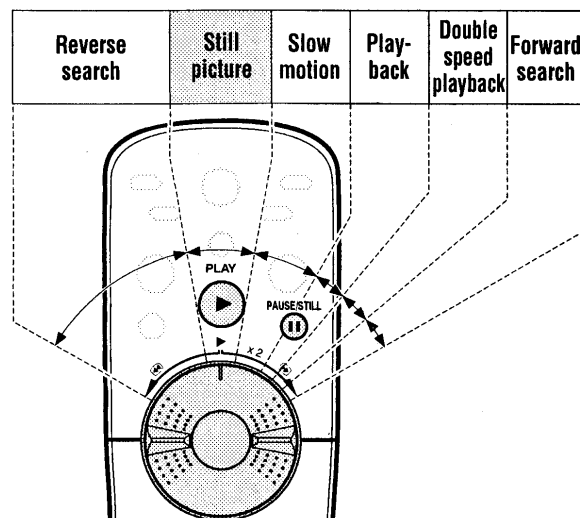
- 1 Simply turn the shuttle dial to obtain the desired mode as indicated by the illustration.



- 2 Normal playback will resume when you release the shuttle dial.

Using the shuttle dial from still picture mode

- 1 Simply turn the shuttle dial to obtain the desired mode as indicated by the illustration.
- When using the shuttle dial for slow motion playback, only the 1/5 of normal speed is available.



- 2 Still picture will resume when you release the shuttle dial.

Correcting noise interference during variable playback modes

If noise interference (bars) appears during double speed playback

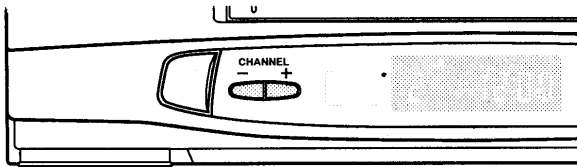
- Use the (- or +) button, to correct.

If noise interference (bars) appears during still picture, frame advance or slow motion modes

- From still picture or frame advance go into slow motion mode, then use the (- or +) button, to correct. You can then resume still picture or frame advance mode.

If the still picture moves up and down

- Use the (- or +) button, to correct.
- When noise interference is corrected using the (- or +) button, the settings will be effective until the cassette tape is unloaded. Once the cassette tape is unloaded, the VCR is reset and the next time the VCR is used you may need to do the corrections again.



Note:

To satellite receiver users

If you record a programme with a bilingual sound track and do not preselect which sound track to record, the VCR will record both sound tracks. If you then try to use the DVS function with that recording, you will hear sampled sound from both sound tracks.

To avoid this, please select the sound track you want to record on the satellite receiver before you set the VCR timer.

(Please refer to your satellite receiver manual for sound track selection.)

Hi-Fi stereo/bilingual programmes sound selection

The sound of Hi-Fi stereo or bilingual programmes can be selected in order to listen to the desired sound.

- Using the **AUDIO** button, select the desired sound to listen.

Stereo programmes

When a stereo broadcast is received, the stereo indicator "**ST**" illuminates on the VCR display.



VCR display	Selected sound
"LR"	Left and Right tracks
"L "	Left track
" R"	Right track
No indicator	Monaural

Bilingual programmes

When a bilingual broadcast is received, the bilingual indicator "**BIL**" illuminates on the VCR display.



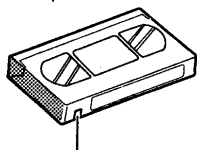
VCR display	Selected sound
"LR"	Main and Sub
"L "	Main
" R"	Sub
No indicator	Main

Note:

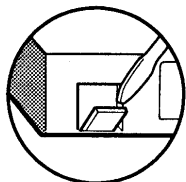
When playing back a tape not recorded on a Hi-Fi VCR the "L" and "R" indicators go off.

Stereo programmes and bilingual programmes cannot be recorded on the monaural audio track. They are only recorded on the Hi-Fi stereo audio tracks.

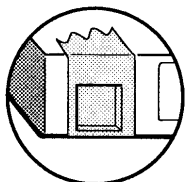
BASIC OPERATION



Erasure-prevention tab



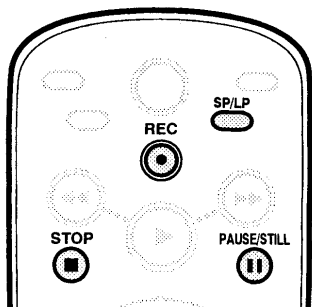
To prevent accidental erasure, remove the tab after recording.



To record again, cover the hole with vinyl tape.

Before starting

- Turn on the TV then set it to the preset video channel or AV mode.
- Insert a video cassette with erasure-prevention tab.



Example: Position number "2"

- 1 Press the numeric buttons, or the (+ or -) button, to select the TV station to be recorded.
 - To select the tape speed, press the **SP/LP** button.
 - SP:** Standard Play mode (Best image and sound quality. No display indicates SP mode.)
 - LP:** Long Play mode (Twice the SP mode recording/playback duration.)
- 2 Press the **REC** buttons.
 - The "REC" indicator will light, and recording starts.



- 3 To stop the recording, press the **STOP** button.

Mis-erasure prevention eject

The cassette will automatically be ejected if recording is attempted on a video cassette without an erasure-prevention tab.

Auto rewind

The VCR automatically rewinds the tape when it reaches the end. This function does not operate with timer recording or Quick Start Recording.

If you wish to avoid recording unwanted material

- 1 During recording, press the **PAUSE/STILL** button.
 - The TV picture and sound will not be recorded.
- 2 Press the **PAUSE/STILL** button or **REC** buttons.
 - The recording will resume.

Note:

If the record pause mode continues for about five minutes, the VCR will automatically go into the stop mode in order to prevent damage to the tape.

Quick Start Recording timer

Timer recording is simple.

You can start a recording and then programme when the VCR is automatically recording and turn its power off.

Note:

Be sure that the set date and time are correct.

- 1 Press the **REC** buttons twice.



- 2 Within 10 seconds, set the recording end time by using **REC** and (+ or -) buttons.
 - (**REC**) : units of 30 minutes
 - (+, -) : units of 1 minute
 - The timer indicator (□) will light after the recording end time is set.



- To stop the recording at any time, press the **STOP** button.

Checking/Changing

When the **REC** buttons are pressed during Quick Start Recording, the recording end time will blink for 10 seconds.

The recording end time can be changed by pressing **REC** and (+ or -) buttons during this 10-second period.

Recording one programme while watching another

- 1 Start recording the desired TV station programme selected on the VCR.
- 2 Select on the TV receiver the TV station you want to watch.

VIDEO PLUS+ TIMER RECORDING PROGRAMMING

This VCR has a built-in VIDEO Plus+ system. Programming timer recordings is now as simple as entering a PlusCode number (1 to 9 digits) listed next to each programme in your local TV guide or newspaper TV programme listing.

There are two ways of programming VIDEO Plus+ timer recordings.

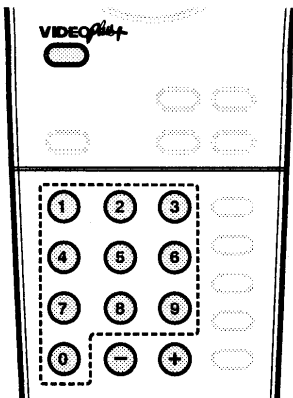
One is using the on-screen display and the other one is using the VCR display.

- You can set up to 6 programmes to be recorded upon a period of up to 1 year.

On-screen programming

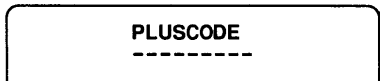
Before starting

- Turn on the TV then set it to the preset video channel or AV mode.
- Insert a video cassette with erasure-prevention tab.
- Be sure that the set date and time are correct.



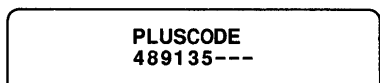
1 Press the **VIDEO Plus+** button.

- If 6 timer recordings have already been set, the programmed timer recordings list will appear on the TV screen. Please refer to "Confirmation" and "Cancelling" on page 26.



2 Using the numeric buttons, enter the PlusCode number for the programme you want to record.

Example: Enter the PlusCode number **489135**.

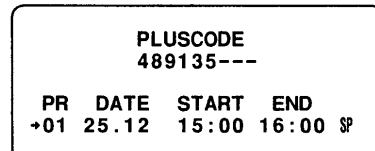


- If you entered a wrong number, press the **CLEAR** button to delete it, then enter the correct number.

3 Press the **OK** button.

- The settings for the programmed recording are displayed.

- If the programmed position number (**PR**) displays "--", refer to page 24.



Additional settings

- Daily/Weekly recording**

Press the **MENU/TV** button repeatedly to select:

"**M-F**": for daily recording (Monday through Friday)

"**WK**": for weekly recording (the same programme every week)

No display: for one off recording

Note:

Daily recording starting on a Saturday or Sunday will not be possible.

- PDC recording**

Press the **PDC** button repeatedly.

When the "**PDC**" indicator appears, the PDC function is set.

- Recording tape speed setting**

Press the **SP/LP** button repeatedly to display the desired tape speed.

- Changing the end time**

Each press of the (+ or -) button will change the recording end time by units of 10 minutes.

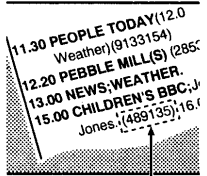
4 When all the settings are as desired, press the **OK** button.

- You can programme another recording by repeating steps 2 to 4.

5 Press the **POWER** button.

- The timer indicator (⏏) will light on the VCR display and the VCR goes into timer recording stand-by mode.

Newspaper or TV guide



PlusCode

VIDEO Plus+ and **PlusCode** are trademarks of Gemstar Development Corp. **VIDEO Plus+** system is manufactured under license from Gemstar Development Corporation.

VIDEO PLUS+ TIMER RECORDING PROGRAMMING

Programming on the VCR display

You can programme or confirm a VIDEO Plus+ timer recording on the VCR display even if the TV is turned off.

Before starting

- Be sure that the set date and time are correct.
- Insert a video cassette with erasure-prevention tab.

- 1 Press the **VIDEO Plus+** button.
 - 9 bars (–) will appear on the display.
- If 6 timer recordings have already been set, the 9 bars (–) are not displayed.

Please refer to "**Confirmation**" and "**Cancelling**" on page 26.
- 2 Using the numeric buttons, enter the PlusCode number for the programme you want to record.

Example: Enter the PlusCode number **489135**.



- If you entered a wrong number, press the **CLEAR** button to delete it, then enter the correct number.
- 3 Press the **OK** button.
 - The programmed recording programme position number and recording on time are displayed.
- If the programmed position number (**PR**) displays "--", refer to page 24.



Additional settings

□ Daily/Weekly recording

Press the **MENU/TV** button repeatedly to select:

"**MF**": for daily recording (Monday through Friday)

"**WK**": for weekly recording (the same programme every week)

No display: for one off recording

Note:

Daily recording starting on a Saturday or Sunday will not be possible.



□ PDC recording

Press the **PDC** button repeatedly.

When the "**PDC**" indicator appears, the PDC function is set.

□ Recording tape speed setting

Press the **SP/LP** button repeatedly to select the desired tape speed.

No display: Standard Play mode

"**LP**": Long Play mode

□ Changing the off time

Each press of the (+ or –) button will change the recording off time by units of 10 minutes.



- 4 When all the settings are as desired, press the **OK** button.

- You can programme another recording by repeating steps 2 to 4.

- 5 Press the **POWER** button.

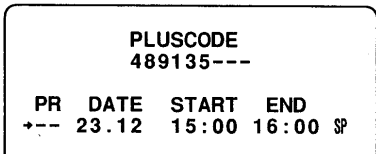
- The timer indicator (☐) will light on the VCR display and the VCR goes into timer recording stand-by mode.

Notes:

If the programme position number (PR) displays “_ _”

Enter the programme position number the TV station has been preset to.

That setting will be memorized and set the next time the same TV station is selected.



To record from an external source

Press the **INPUT** button repeatedly.

- The setting under “PR” (programme position) will change to “L2”.
- If a programme position number is already displayed, first press the **CLEAR** button.



Note:

Recording an external source is only possible using either the **EURO-AV1** or **EURO-AV2** connector. The two connectors cannot be used simultaneously. For recording from an external source it is recommended to use the **EURO-AV2** connector (select “L2” instead of programme position number).

PDC (Programme Delivery Control) function

The PDC function ensures that the recording is made according to the recording on and off time control signals broadcasted by the TV station. Therefore, if the recording start (on) and/or end (off) time are changed, the VCR is informed of the altered times and recording changed, whether it is at an earlier or later time.

Also, if the programme being recorded is interrupted (for ex. by a news special, etc.) and the PDC function is on, recording will be automatically interrupted and will automatically resume when the programme starts again.

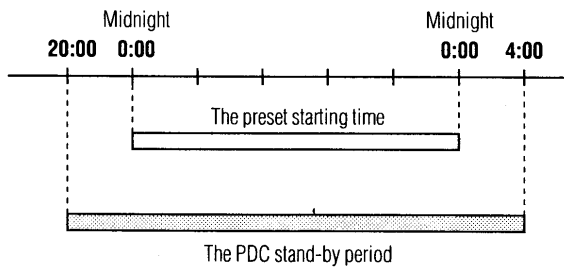
Notes:

- Set the recording times and date exactly as advertised. If the start (on) time is different from advertised, PDC timer recording will not be done.
- Not all TV stations transmit PDC signals. Check in your region to find out which stations transmit PDC signals.
- If the station does not transmit PDC signals or if the PDC function is not set, the recording will be held at the programmed times.



PDC stand-by period

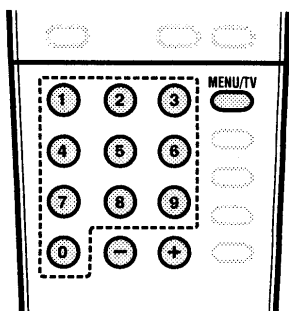
When programming with the PDC function, the recording can be held anytime in the stand-by period if the start (on) time differs from the scheduled one. The PDC stand-by period is from 20:00 (the previous day) to 4:00 (the following day)



You can set up to 6 programmes to be recorded upon a period of up to 1 year.

Before starting

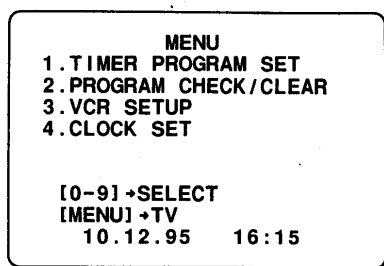
- Turn on the TV then set it to the preset video channel or AV mode.
- Be sure that the set date and time are correct.
- Insert a video cassette with erasure-prevention tab.



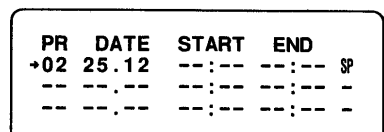
Example:

To record a programme from the TV station on programme position "2" from 21:30 to 23:15 on December 25.

- 1 Press the **MENU/TV** button.
- If 6 timer recordings have already been set, the programmed timer recordings list will appear on the TV screen. Please refer to "**Confirmation**" and "**Cancelling**" on page 26.



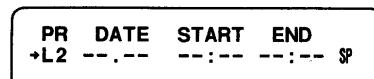
- 2 Press the numeric **1** button.
- 3 Using the numeric buttons, set the programme position number and the date. Enter **02 25 12**.



To record from an external source

Press the **INPUT** button.

- The setting under "**PR**" (programme position) will change to "**L2**".
- If a programme position number is already displayed, first press the **CLEAR** button.



Additional settings

Daily/Weekly recording

Press the **(+)** button repeatedly to select:

"**M-F**": for daily recording (Monday through Friday)

"**WK**": for weekly recording (the same programme every week)

No display: for one off recording

Note:

Daily recording starting on a Saturday or Sunday will not be possible.

PDC recording

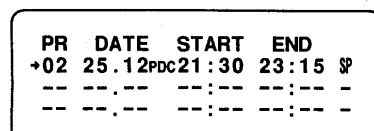
Press the **PDC** button repeatedly.

When the "**PDC**" indicator appears, the PDC function is set.

Recording tape speed setting

Press the **SP/LP** button repeatedly to display the desired tape speed.

- 4 Set the recording start and end times. Enter **21 30 23 15**.



- If you entered a wrong number, press the **CLEAR** button to delete it, then enter the correct number.

- 5 When all the settings are as desired, press the **OK** button.

- You can programme another recording by repeating steps 3 to 5.
- When finished, press the **MENU/TV** button.

- 6 Press the **POWER** button.

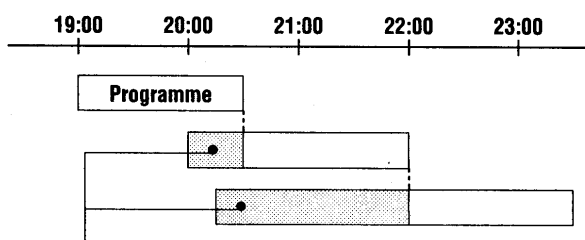
- The timer indicator (⏏) will light on the VCR display and the VCR goes into timer recording stand-by mode.

Notes:

- If there is a power failure during a timer recording, the recording will stop. If the power is returned to the VCR within 60 minutes, the recording will resume if the end time has not yet been reached.
- The (⏏) indicator will flash if no video cassette is loaded when going into timer stand-by mode.
- The (⏏) indicator will flash and the video cassette is ejected if a video cassette with no erasure-prevention tab is loaded.

Programme priority

- If several timer recordings have overlapping recording time, the recording with the earliest start time will be recorded first, until the end.
- Recordings programmed with PDC always have priority.
- If two PDC-programmed recordings overlap, the recording that starts first will have priority.



These portions will not be recorded

Please refer to "Confirmation" to check recording times.

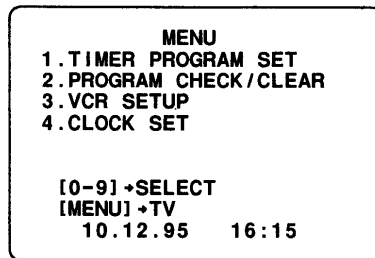
Power interruption

If the power to the VCR has failed or has been disconnected for more than 1 hour, the Auto clock set function will reset the clock, when the power is restored to the unit, if the VCR receives at that time a station broadcasting a clock setting signal.

However, the programmed timer recordings (if any) will be cancelled, and the Timer indicator (⏏) will not be displayed when the power is restored to the unit. They will have to be reset.

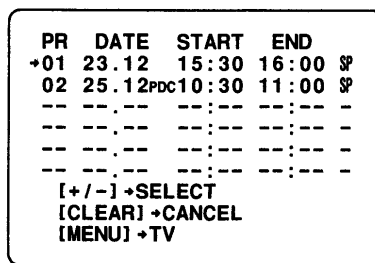
Confirmation

- 1 Press the **MENU/TV** button.



- 2 Press the numeric **2** button.

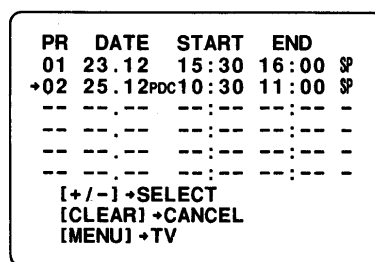
- Programmed timer recordings are listed.



- To correct a programmed timer recording, first cancel it, then reprogramme it as desired.
- To cancel a programmed timer recording, continue with step 3.
- To return to the normal TV broadcast screen, press the **MENU/TV** button.

Cancelling

- 3 Using the (- or +) button, select the programme to cancel.



- 4 Press the **CLEAR** button.

- 5 When finished, press the **MENU/TV** button.

Using this function, you can add a voice over or background music to the image recorded on a tape.

To perform an audio dub on a tape recorded with a camcorder, you will have to first make a Hi-Fi copy of the camcorder tape to a VHS format video cassette using this VCR. (Refer to **"COPYING A TAPE"** on page 28.)

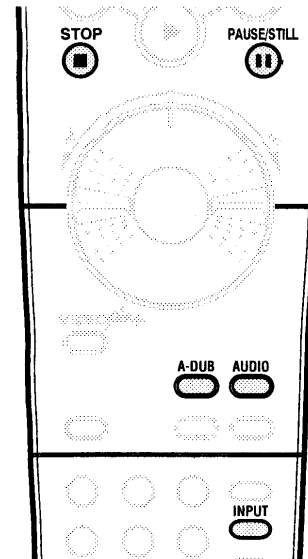
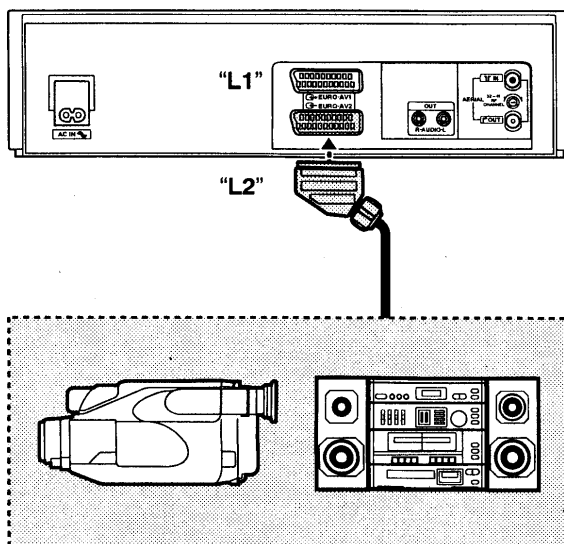
You can then add a voice over or background music to the copy you have made.

Note:

If you are using a tape with a monaural only original sound recording, the audio dubbing will erase the original sound. Audio dubbing is only possible on a tape with Hi-Fi original sound.

Before starting

- Make the audio connection indicated in the illustration.
- Set the sound source.
Press the **INPUT** button repeatedly.
 - EURO-AV1: "L1"**
 - EURO-AV2: "L2"**
 - "L1" or "L2" is displayed instead of the programme position number.
 - If the external sound you desire to record is coming from a TV programme, select the desired TV station.



- 1 Insert a video cassette tape with erasure-prevention tab.
 - Make sure the recorded sound (original sound) is Hi-Fi.
- 2 Playback the tape to select the audio dubbing start point.
 - Press the **|| PAUSE/STILL** button at the audio dubbing start point.
- 3 Press the **A-DUB** button.
 - The VCR goes into audio dubbing stand-by mode. The "L" and "R" indicators will go off. If monitoring the external sound, the sound will be heard.
- 4 Press the **A-DUB** button again to start the audio dubbing.
 - The image will be played back, and the original sound will be recorded together with the sound from the external source.
- 5 When finished, press the **■ STOP** button.

Note:

After an audio dubbing, to listen to the Hi-Fi sound, press the **AUDIO** button to display the "L" and "R" indicators on the VCR display.

To listen to the dubbed sound, press the **AUDIO** button to erase the "L" and "R" indicators from the VCR display.

Copying (dubbing) a tape can be done using two video recorders, a playback VCR and a recording VCR.

Before starting

■ Connect the **PLAYBACK VCR** (or **Camcorder**) and the **RECORDING VCR**.

■ Set the sound source.

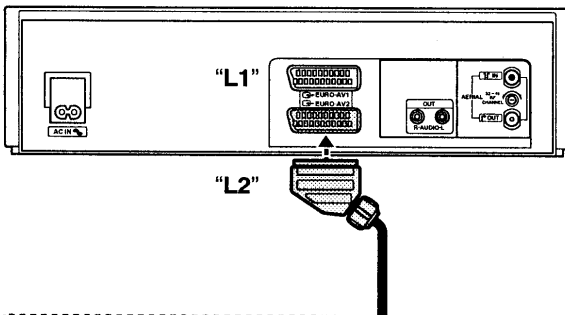
Press the **INPUT** button repeatedly.

EURO-AV1: "L1"

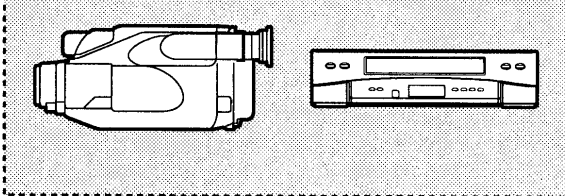
EURO-AV2: "L2"

- "L1" or "L2" is displayed instead of the programme position number.

RECORDING VCR



PLAYBACK VCR (Camcorder)



for RECORDING VCR

- 1 Insert a video cassette with erasure-prevention tab.
 - Press the **SP/LP** button repeatedly to select the desired tape speed.
 - No display:** Standard Play mode
 - "LP":** Long Play mode
- 2 Set to the record pause mode.
 - The record pause mode is set by pressing the **●REC** button then the **II PAUSE/STILL** button.

for PLAYBACK VCR (Camcorder)

- 3 Insert the recorded video cassette.
- 4 Start playback by pressing the **PLAY ►** button.

for RECORDING VCR

- 5 When the desired starting position is reached, start recording by pressing the **II PAUSE/STILL** button or the **●REC** button.
- 6 When finished, press the **■STOP** button on the **RECORDING VCR** then on the **PLAYBACK VCR**.

Symptom	Check points
POWER TROUBLE	
No power	<ul style="list-style-type: none"> The mains lead is disconnected.
The remote control unit doesn't operate	<ul style="list-style-type: none"> The batteries are low.
RECEIVER TROUBLE	
No TV programmes received	<ul style="list-style-type: none"> Are the connections between your VCR and TV correct? Was tuning correctly preset?
Off the air reception on the VCR is poor	<ul style="list-style-type: none"> The video channel setting of the TV receiver does not correspond to the video channel presetting of the VCR.
PLAYBACK TROUBLE	
Playback picture does not appear	<ul style="list-style-type: none"> The video channel setting of the TV receiver does not correspond to the video channel presetting of the VCR.
Interference in playback picture	<ul style="list-style-type: none"> Adjust the tracking control. Dust or dirt on video heads. Take the VCR to your Sanyo authorized service agent.
RECORDING TROUBLE	
No recording	<ul style="list-style-type: none"> The erasure-prevention tab on the cassette has been removed.
Timer recording is not possible	<ul style="list-style-type: none"> The starting day and time have not been set correctly. The clock time is not set correctly. There has been a power interruption of more than 60 minutes.
ON-SCREEN TROUBLE	
The main menu does not appear	<ul style="list-style-type: none"> The VCR has not been preset as described under "VCR PRESETTING".
HI-FI TROUBLE	
Hi-Fi audio recording is performed incorrectly	<ul style="list-style-type: none"> The external source selection is not set correctly.
Sound of a Hi-Fi recorded tape drops out	<ul style="list-style-type: none"> The tape might be defective. Use a new video cassette tape.

General

Video format:	VHS PAL
Television system:	CCIR: 625 lines, PAL colour signals
Video heads:	4 heads
Tape speed:	SP: 23.39 mm/sec LP: 11.70 mm/sec
RF converter:	Built-in UHF converter
Converter output:	On channel 32 - 41
Timer indication:	24-hour indication
Power failure backup:	Approx. one hour
Timer recording:	1 year 6 programmes with daily (Monday through Friday) and weekly recording function
Power requirement:	220-240 V AC, 50Hz
Dimensions (W x H x D):	360 x 97 x 290 mm
Weight:	Approx. 5.4 kg
Power consumption:	22 W (in operation) less than 6 W (power off)

Electrical characteristics

Video input:	0.5 - 2.0Vp-p, 75 \pm 5 ohms
Video output:	1.0 \pm 0.2Vp-p, 75 \pm 5 ohms
Audio input:	-3.8 dBs, more than 10 kohms
Audio output:	-3.8 dBs, less than 1 kohm
Video S/N:	More than 43 dB
Horizontal resolution:	More than 240 lines

Hi-Fi audio

Audio recording system:	VHS Hi-Fi system (2 tracks), (Normal audio track is monaural)
Frequency response:	20 Hz - 20,000 Hz
Dynamic range:	More than 90 dB
Wow and flutter:	Less than 0.005% (WRMS)
Channel separation:	More than 60 dB

Appearance and specifications are subject to change without notice.

This apparatus complies with EC Directives 89/336/EEC, 92/31/EEC and 93/68/EEC.

Automatic head-cleaning system

This VCR is equipped with an automatic head-cleaning system which automatically cleans the heads every time a cassette is loaded or unloaded. However if during playback noise appears in the picture, it is recommended to use commercially available head-cleaning cassettes to completely clean the VCR heads.

Repairs

This VCR is a precision instrument and, if treated with care, will provide years of satisfactory performance. However, in the event of difficulty, the owner is advised not to attempt to make repairs or open the cabinet. Servicing should always be referred to your Sanyo authorized service agent.

GUARANTEE TO CUSTOMER

Sanyo U.K. Sales Ltd. (the Company) guarantees to the initial retail purchaser that if this equipment is or becomes defective and that, in the opinion of the Company, the defect is due to faulty material or workmanship the Company will, for a period of 12 calendar months from the date of sale to the original purchaser repair or replace, at its sole option, free of charge, any such defective component part of the equipment, always provided that:-

1. The equipment has at all times been used in accordance with the operating instructions issued by the Company, and has not been connected to an electrical mains supply for which it has not been adjusted.
2. Accidental damage, or damage caused by negligence or misuse by the user, including leakage from exhausted batteries, is specifically excluded.
3. Unauthorised repairs, or any modification to the equipment which has not been expressly approved by the Company, shall render this guarantee null and void.
4. Failure due to fair wear and tear of any item, such as batteries, record playing styli, and tape recording, playback and erase heads and head cleaning is specifically excluded.

This guarantee is not transferable and is only applicable within the United Kingdom (and the Republic of Ireland). Nothing in this express guarantee affects the statutory rights available to the purchaser of this equipment.

Dear Customer

Thank you for buying Sanyo. This equipment should give you many years of pleasure and faithful service but in the event that a fault occurs, the following notes for your guidance may be helpful:-

1. PLEASE RETAIN YOUR PURCHASE RECEIPT WHICH WILL BE REQUIRED FOR SERVICE DURING GUARANTEE.
2. If your Sanyo equipment proves faulty during the period of guarantee, take it or send it back to the dealer who originally supplied it together with this guarantee and the proof of purchase. We have made arrangements with our approved dealers under which they will carry out in guarantee service repairs on our behalf. In this way, we hope to reduce to a minimum the amount of time you will be without your equipment.
3. If for some reason it is impossible to return the equipment to the original supplier, please contact our Service Administration Department at the address below for further advice.
4. Should the equipment require servicing after the expiry of the guarantee period, take or send it to the original supplier or any other Sanyo dealer. He will be pleased to give you a quotation for the repair. If you are in any doubt about what to do, write to us at the address below or telephone:

Sanyo U.K. Sales Ltd.
Sanyo House Otterspool way, Watford, Hertfordshire WD2 8JX Tel: Watford 246363

SANYO

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