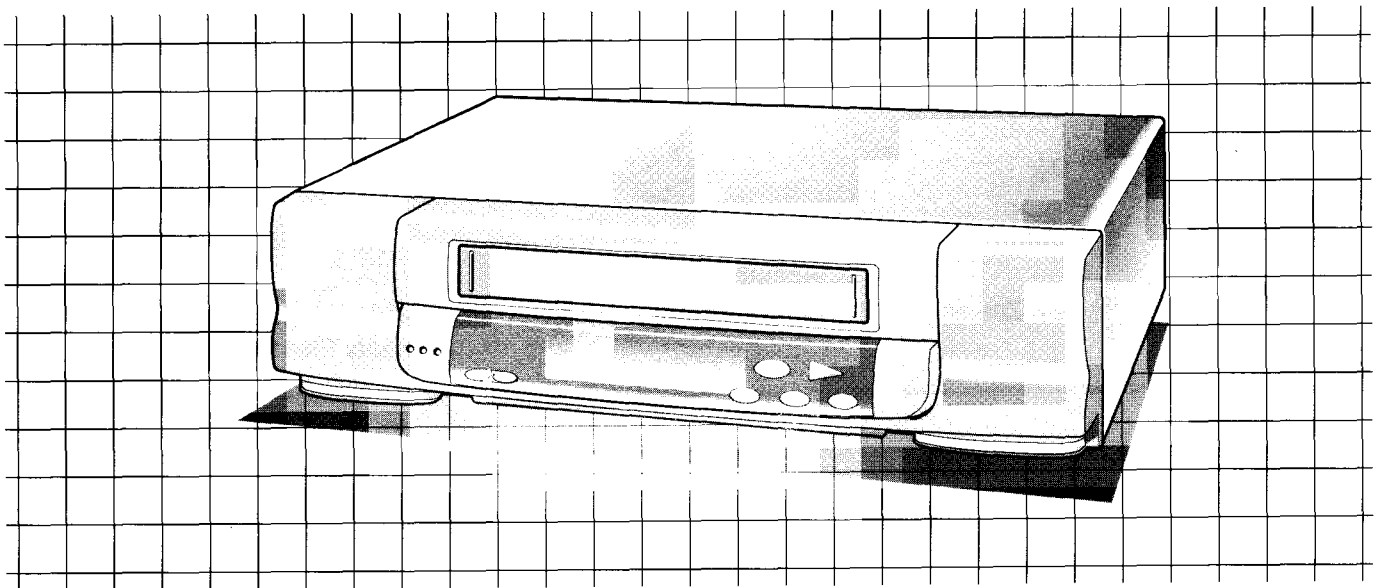


SANYO

INSTRUCTION MANUAL

VHR-610

Video cassette recorder



HQ

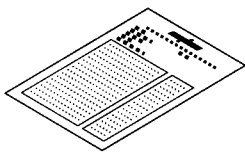
VHS

PAL NTSC4.43

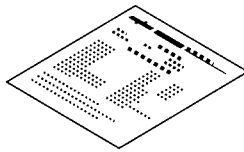
NOTE

This manual covers the model **VHR-610**, which is sold in New Zealand and in Australia.

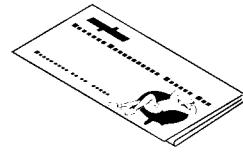
The warranty offered is different according on where the unit is sold. For customers in New Zealand, please refer to the Warranty card for New Zealand. For customers in Australia, please refer to the Warranty card and to the Extended Manufacturer's Warranty Plan for Australia.



Warranty card for New Zealand



Warranty card for Australia



Extended Manufacturer's
Warranty Plan for Australia

CONTENTS

GB

1 INTRODUCTION	PRECAUTIONS	2
	CONTROLS	3
	Remote control batteries insertion.....	3
2 PREPARATION	CONNECTIONS	4
	Accessories.....	4
	VCR PRESETTING	5
	SETUP1 Adjusting the TV receiver to the video channel.....	5
	SETUP2 Clock setting	5
	SETUP3 Tuning control (Auto)	6
3 BASIC OPERATION	PLAYBACK	7
	Variable playback modes	7
	Counter memory	8
	Index search	8
	Endless play	8
	Playback of an NTSC tape	8
	RECORDING TV PROGRAMMES	9
	Quick Start Recording timer	9
4 ADVANCED OPERATION	TIMER RECORDING PROGRAMMING	10
	Confirmation	10
	Cancelling	10
	TAPE COPY	11
5 OTHER	TROUBLESHOOTING	12
	SPECIFICATIONS	13

Make sure to make these settings before operating the VCR.

PRECAUTIONS

Only cassettes marked **VHS** can be used with this VCR.

Video cassette recorders bearing the "HQ" mark incorporate VHS high picture quality technology. Note that there is interchangeability with former VHS video cassette recorders.

Note:

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

Power on/off

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

VCR display

Power on



Power off

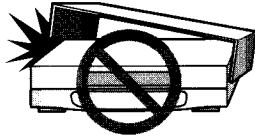


"Power off" is the condition in which only the time is displayed.

Safety precautions

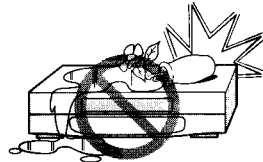
DANGER:

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.



Caution concerning condensation

Be careful of condensation

Condensation can 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.

Do not insert a video cassette if you use this VCR in areas subject to condensation. Wait for 1-1/2 to 2 hours to completely eliminate condensation before using the VCR.

Operating precautions

- 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. to enter 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 benzine.
- Do not forget that even in the power off state there is an electrical voltage inside the VCR as long as it is connected to a wall socket.
- Disconnect the power cord from the wall socket if the VCR is not to be used for a long time.

CONTROLS

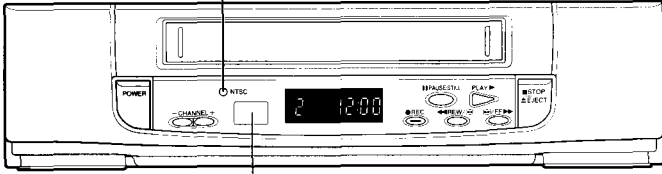
1

INTRODUCTION

GB

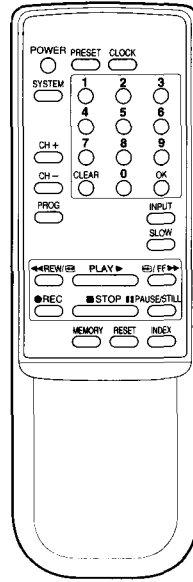
NTSC playback indicator

Lights during playback or copy of an NTSC colour signal.



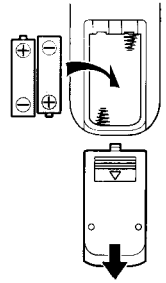
Remote control sensor

Operate the remote control unit within a range of approx. 30° and approx. 6m (20 ft.) from the front of the VCR.



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.



Indication	Function
POWER	Power on/off
CHANNEL+, -	Tuner programme selection
REC	Recording
PAUSE/STILL	Pause during recording, still picture during playback
REW	Rewind, reverse search during playback
PLAY	Playback
FF	Fast-forward, forward search during playback
STOP/EJECT	Tape stop, cassette ejection
(On the remote control only)	
PRESET	Tuner preset
CLOCK	Clock set
SYSTEM	NTSC playback system selector
CH+, CH-	Programme selection
PROG	Timer programme set
0 - 9	Direct programme selection, for various input
OK	Confirms data
CLEAR	Clears data
INPUT	External input mode selection
SLOW	Slow motion
MEMORY	Counter "0:00:00" position memory
RESET	Counter reset
INDEX	Index search

Function indicator



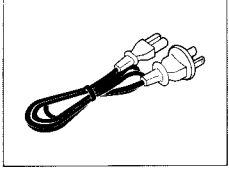
Mode	Display
Playback	
Forward search	
Slow motion	
Fast-forward	
Rewind	
Reverse search	
Record	
Record pause	
Still picture	
Frame advance	

(: Flashing)

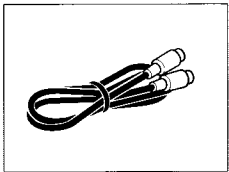
CONNECTIONS

Accessories

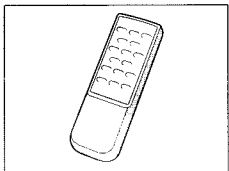
Is everything in the box?



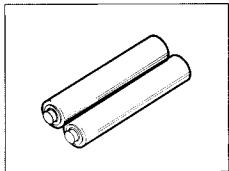
Power cord



Aerial output cable



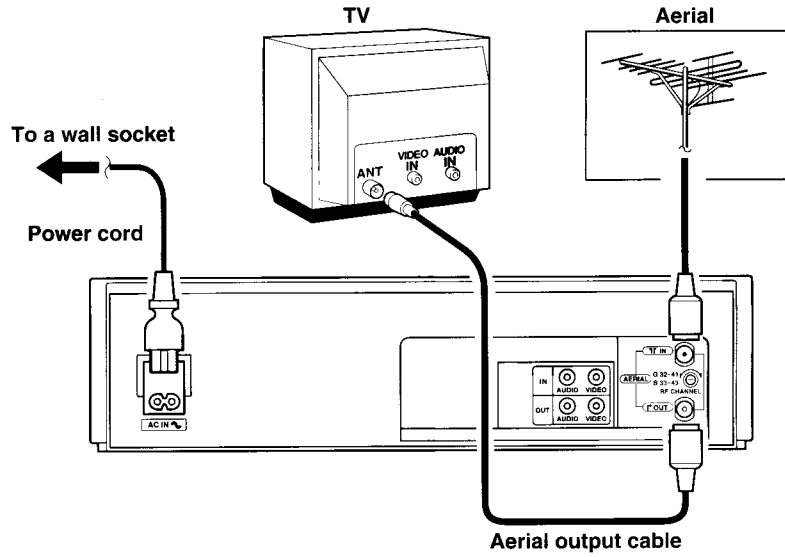
Remote control unit



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

Aerial/RF connection

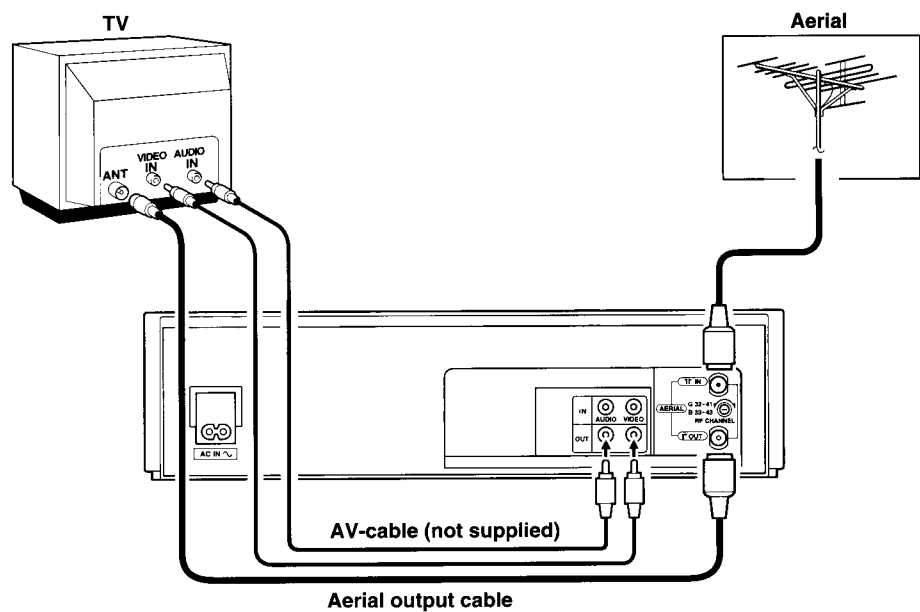
Connect as indicated below.



AV connection

If your TV receiver has an AV terminal, the following AV connections are also possible.

- The advantage of this connection is a higher quality of picture and sound during playback.



VCR PRESETTING

2

PREPARATION

GB

After all the connections are completed, please follow steps

SETUP1 to **SETUP3** before using the VCR.

SETUP1 Adjusting the TV receiver to the video channel



SETUP2 Clock setting



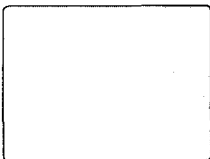
SETUP3 Tuning control (AUTO)

SETUP1

Adjusting the TV receiver to the video channel

If the VCR has been connected to the TV using the "AV connection", simply set the TV to the AV mode. You can skip this step.

- 1 Press the **POWER** button.
- 2 Turn on your TV and set it to the "VCR", "AV" or to the position designated for videorecorder use (usually a position where no TV programme is received).
For more details, please refer to your TV receiver instruction manual.
- 3 Adjust the tuning on the TV to UHF channel 36 (37 - 38) so that the test pattern (2 vertical bars) is clear (TV screen)



This is your video channel. Whenever you play back a tape or watch a TV programme tuned on the VCR tuner, set the TV to your video channel.

Area	RF converter output (Video channel)	
	Factory setting	Range
New Zealand	36	32 - 41
Australia	37 - 38	33 - 43

Note:

If the clock setting and/or the tuning control adjustments are completed before setting the video channel, the test pattern will not appear on the TV screen.

If the test pattern does not appear, set the video channel using a prerecorded VHS video cassette.

- 1 Play back the tape.
- 2 Tune the TV receiver to obtain clear pictures and sound while monitoring playback on the TV screen.

SETUP2

Clock setting

Example: To set December 9, 1997, 16:15.

- 1 Press the **CLOCK** button.
- 2 Set the date using the numeric buttons. Enter **09 12 97**.



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

- 3 Set the time using the numeric buttons. Enter **16 15**.



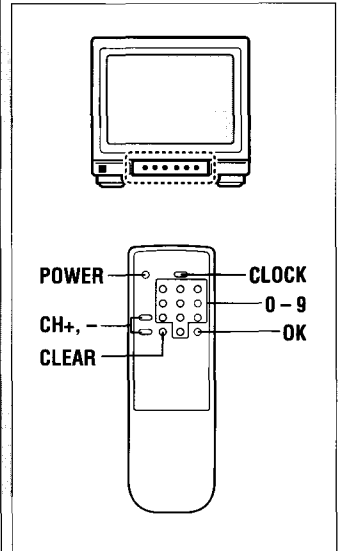
- 4 Press the **OK** button.
Seconds will start counting from "00" as the **OK** button is pressed.

Summer/Standard time setting

- 1 Press the **CLOCK** button.
- 2 Each press of the (**CH+** or **CH-**) button, will advance or retard the clock by 1 hour.
- 3 When finished, press the **OK** button.

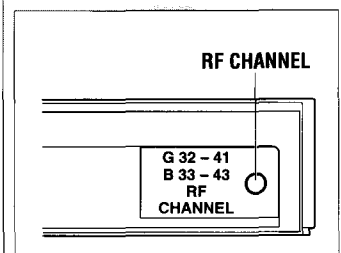
Changing the time/date

- 1 Press the **CLOCK** button.
- 2 Continue pressing the **CLEAR** button to clear the digits to correct, then enter the new settings for the date, then for the time, using the numeric buttons.
- 3 When finished, press the **OK** button.

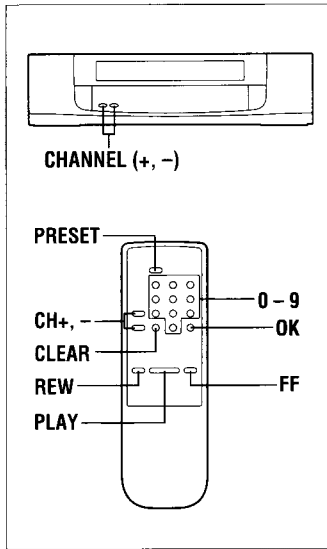


If in your area, UHF channel 36 (37 - 38) is used by a broadcaster, follow the steps below.

- 1 Tune the TV receiver to an available UHF channel between channel 32 and 41 (33 and 43) (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 a higher channel than 36 (37 - 38) and to the left for a lower channel than 36 (37 - 38).
- 3 Adjust the tuning on the TV, if necessary, so that the test pattern is clear.



VCR PRESETTING



Power interruption

If the power to the VCR has failed or has been disconnected for more than 1 hour, the VCR display shows "--:--".

However, the tuner preset memory will not be erased. So there is no need to retune the VCR stations.

The date, time and recording information regarding future recordings should be reset.

First refer to "SETUP2 Clock setting" on page 5, to set the clock (date and time), then, the timer recording programmes should be set again as desired.

SETUP3

Tuning control (AUTO)

This VCR has a built-in tuner capable of tuning up to 44 TV stations.

Auto tuning

Press both the **CHANNEL (+, -)** buttons on the VCR simultaneously for more than 2 seconds.

The TV stations available in your area will be automatically preset in order starting from programme position number "01".

Because of this you may have to sort the TV stations into the correct order. Please refer to "Sorting the TV stations".

When all available TV stations have been preset, the function will stop and the TV station preset to programme position number "01" will be tuned on your TV screen.

Notes:

- During the auto tuning operations, please do not press any of the buttons or controls on the VCR or remote control.
- Auto tuning is not possible if the VCR is set to AV input mode.
- The skip function will be automatically set for all position numbers where no TV station has been preset.

Additional tuning adjustments

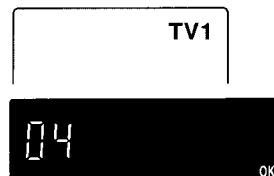
Sorting the TV stations

Example: To change TV1 from programme position "4" to programme position "1".

TV station	Sky	TV2	TV3	TV1
Programme position	1	2	3	4
	↓			↓
	4			1

- 1 Press the **PRESET** button.
- 2 Using the (**CH+** or **CH-**) button select the desired TV station (e.g. **TV1**).

(TV screen)



- 3 Using the numeric buttons (**0 - 9**), enter the target programme position number (e.g. "01").



- 4 Press the **OK** button.
- Repeat steps 2 to 4 to change another TV station programme position number.
- 5 When finished, press the **PRESET** button.

Fine tuning

If the tuning is not optimum, it can be improved by manual fine tuning.

- 1 Press the **PRESET** button.
- 2 Press the **FF** or **REW** button to obtain the best possible picture and sound.
- 3 Press the **OK** button.
- 4 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 stations will appear when pressing the (**CH+** or **CH-**) button.

- 1 Press the **PRESET** button.
- 2 Using the numeric buttons or the (**CH+** or **CH-**) button, select the programme position number to skip.
- 3 Press the **CLEAR** button.
 - The "S" indicator will light.

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.

Manual tuning

This tuning mode can be used to modify the settings entered by the Auto tuning function, or to manually preset the TV stations to particular programme position numbers.

- 1 Press the **PRESET** button.
- 2 Using the (**CH+** or **CH-**) button, select the desired programme position number.
- 3 Press the **PLAY** button.

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 appears on the TV screen.

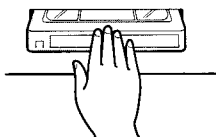
- 4 Press the **OK** button when the desired TV station appears on the TV screen.

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

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

1 Turn on the TV, then set it to the preset video channel or AV mode.

2 Insert a recorded video cassette. Gently push the centre of the cassette until it is loaded automatically.



3 Press the **PLAY** button.

4 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.

Variable playback modes

Forward search

- 1 Press the **FF** button during playback or fast-forward operation.
- 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.
- 2 Press the **PLAY** button to resume normal playback, or the **REW** button to resume rewind operation.

Still picture

- 1 Press the **PAUSE/STILL** button during normal playback.
- 2 Press the **PLAY** button to resume normal playback.

Frame advance

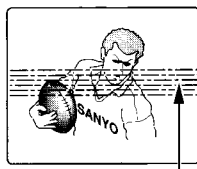
- 1 Press the **PAUSE/STILL** button during still playback to advance the picture frame by frame.
- 2 Press the **PLAY** button to resume normal playback.

Slow motion

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

Tracking adjustment

This VCR starts the automatic tracking function when you insert the tape. During playback this function will adjust the tracking to the best possible image. If noise appears in the playback picture, press the (**CH+** or **CH-**) button, to reduce the noise interference in the image.



Noise interference

Note:

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

Correcting noise interference during variable playback modes

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 (**CH+** or **CH-**) button, to correct. You can then resume still picture or frame advance mode.

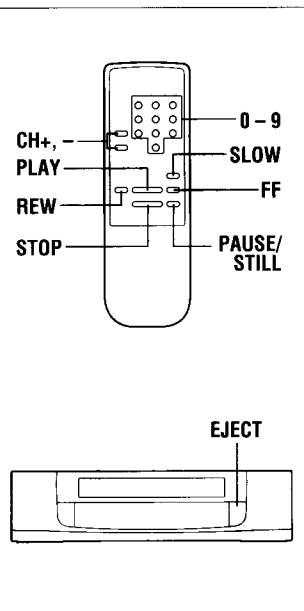
If the still picture moves up and down

Use the (**CH+** or **CH-**) button, to correct. When noise interference is corrected using the (**CH+** or **CH-**) 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.



Notes:

- 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.



Auto power on

The power is automatically switched on as a cassette is inserted while the VCR is in the stand-by mode.

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 when the VCR is in stand-by mode.

PLAYBACK

Counter memory

The counter memory is used to find a point on the tape. At the desired point, press the **RESET** button to reset the counter to "0:00:00".

Then, press the **MEMORY** button to display "M" to the left of the counter reading.



After recording or playback, that point can be easily found by pressing the **REW** button (or the **FF** button if the counter reading is negative), the tape will be rewound (or fast-forwarded) and stop at the memorized position.

Notes:

- Whenever you load a cassette tape, the counter is reset to "0:00:00".
- 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 the next (or present) 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 next (or present) recording.

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.

The search function will start.



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

Notes:

- Make sure that indexes are at least five minutes apart from each other.
- Index signals are not recorded after a recording pause.

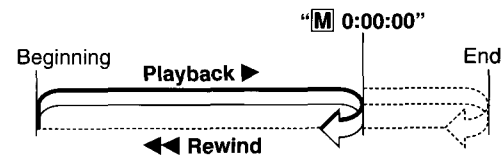
Endless play

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

1 In the stop or playback mode, first press the **PLAY** button then while holding it down press the **REW** button.

2 To cancel the endless play, press the **STOP** button.

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.

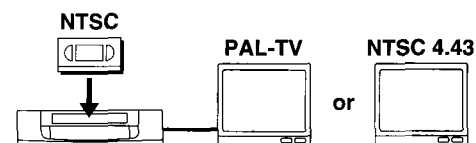


Notes:

- 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.

Playback of an NTSC tape

The playback, on this VCR, of an NTSC tape can be viewed on a PAL (B/G) or NTSC4.43 system TV.



Select the TV system on the VCR to match the system of the TV used, as indicated below.

- 1** Press the **SYSTEM** button.
- 2** Press the **(CH+)** button.

TV system	VCR display
PAL B/G	PAL
NTSC4.43	NT443

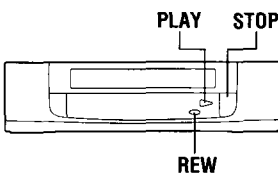
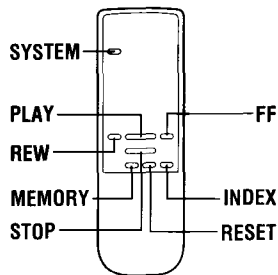
3 Press the **SYSTEM** button.

Notes:

- When using an NTSC4.43 system TV, please use the **AUDIO/VIDEO OUT** terminals. (Refer to "AV connection" on page 4.)
- An NTSC tape cannot be copied normally.
- Picture quality of NTSC tapes cannot be guaranteed with this VCR.

When you playback an NTSC recorded tape on a PAL TV,

- the image may shrink vertically and a black band may appear at the top and bottom of the screen.
- the image may be unstable, rolling vertically. In that case, use the TV vertical hold button to stabilize the image.
- When using a multi-system TV in automatic mode, the image may be black and white and/or no sound may be heard. In that case, select on your TV the PAL or NTSC4.43 system.



RECORDING TV PROGRAMMES

3

BASIC OPERATION

GB

- 1 Turn on the TV then set it to the preset video channel or AV mode.
- 2 Insert a video cassette with erasure-prevention tab.
- 3 Press the numeric buttons, or the (CH+ or CH-) button, to select the TV station to be recorded.
- 4 Press the **REC** button.
The "REC" indicator will light, and recording starts.
- 5 To stop the recording, press the **STOP** button.

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** button.
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.

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.
If the VCR has been connected to the TV using the "AV connection", set the TV to the TV mode.

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.

- 1 Press the **REC** button twice.
- 2 Within 10 seconds, set the recording end time by using **REC** and (CH+ or CH-) buttons.

REC: units of 30 minutes

(CH+, CH-) : units of 1 minute



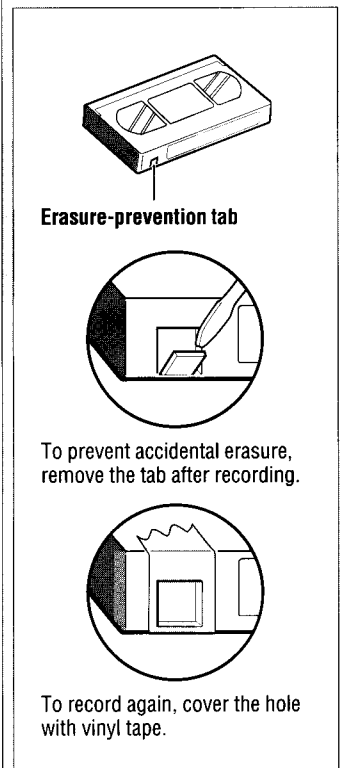
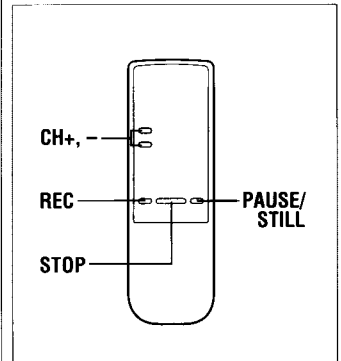
The timer indicator (□) will light after the recording end time is set.

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

Checking/Changing

When the **REC** button is 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 (CH+ or CH-) buttons during this 10-second period.



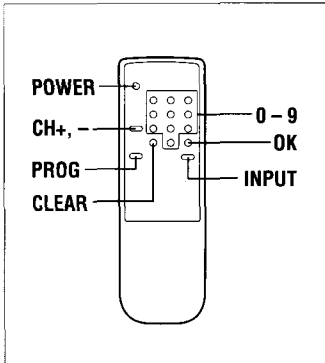
Mis-erasure prevention eject

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

Auto rewind

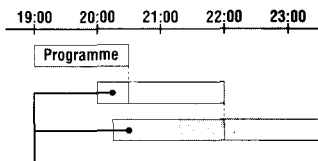
The VCR automatically rewinds the tape when it reaches the end. This function does not operate with timer recording or Quick Start Recording timer.

TIMER RECORDING PROGRAMMING



Programme priority

- If several timer recordings have overlapping recording time, the recording with the earliest start time will be recorded first, until the end.



These portions will not be recorded

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

Example: Programme position: 2
Date: December 25
On time (start): 21:30
Off time (end) 23:15

- 1 Press the **PROG** button.
- 2 Using the numeric buttons, set the programme position number (e.g. "02")
Enter **02**.



- 3 Set the date (e.g. December 25)
Enter **25 12**.



- 4 Set the recording on time (e.g. 21:30)
Enter **21 30**.



- 5 Set the recording off time (e.g. 23:15)
Enter **23 15**.



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

You can programme another recording by repeating steps 2 to 6.

- 7 Insert a video cassette with erasure-prevention tab.
Make sure the tape is longer than the total recording time.

- 8 Press the **POWER** button.
The timer indicator (⏰) will light on the VCR display and the VCR goes into timer recording stand-by mode

Notes:

- 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.

To record from an external source

At step 2,

Press the **INPUT** button.

"L1" is displayed instead of the programme position number.

Additional settings

After step 2,

Everyday/Weekly recording

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

"Ed": for everyday recording

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

No display: for one time recording

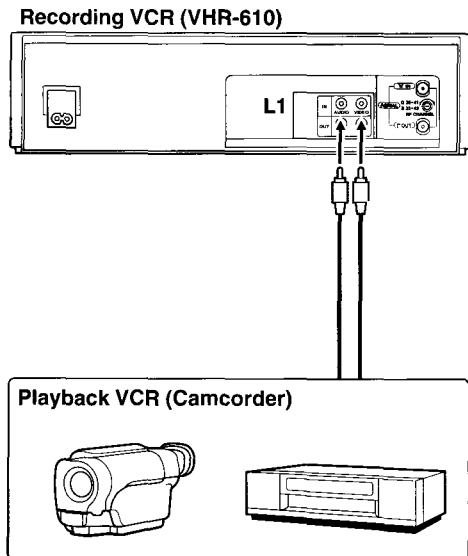
Confirmation

- 1 Press the **PROG** button repeatedly.
"PR -- -- --" will be displayed first if less than 6 recordings have been programmed.
The settings (programme position and date) for the programmed recordings are displayed in sequence.
- 2 When the settings you want to confirm are displayed, press the **(CH-)** button.
The date will change to the on time then to the off time.

Cancelling

- 1 When the settings you want to cancel are displayed, press the **PROG** button.
- 2 Press the **CLEAR** button.
The VCR will automatically return to the clock (counter) display.
To correct a programmed timer recording, first cancel it, then reprogramme it as desired.

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



for RECORDING VCR

- 1** Insert a video cassette with erasure-prevention tab.
- 2** Press the **INPUT** button. "L1" is displayed instead of the programme position number.



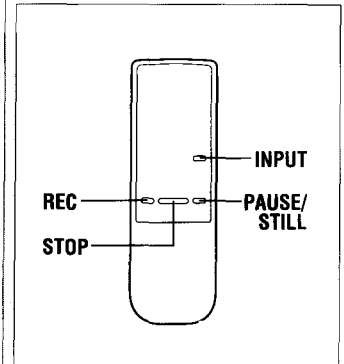
- 3** Set to the record pause mode. The record pause mode is set by pressing the **REC** button then the **PAUSE/STILL** button.

for PLAYBACK VCR (Camcorder)

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

for RECORDING VCR

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



CAUTION:

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

TROUBLESHOOTING

Symptom	Check points
POWER TROUBLE	
No power	<ul style="list-style-type: none"> The power cord 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 an Authorized Service Centre or dealer.
NTSC playback picture is black and white	<ul style="list-style-type: none"> Is the NTSC playback system correctly selected?
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 1 hour.

SPECIFICATIONS

5

OTHER

GB

General

Video format:	VHS PAL/NTSC4.43
Television system:	CCIR: 625 lines, PAL colour signals
Video heads:	2 heads
Tape speed:	PAL: 23.39 mm/sec NTSC (Playback only): 33.35 mm/sec
RF converter:	Built-in UHF converter
Converter output:	On channel G: 32 - 41, B: 33 - 43
Timer indication:	24-hour indication
Power failure backup:	Approx. one hour
Timer recording:	1 year 6 programmes with every day and weekly recording function
Power requirement:	220-240 V AC, 50Hz
Dimensions (W x H x D):	360 x 97 x 296 mm
Weight:	Approx. 3.6 kg
Power consumption:	22 W

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:	-8.0 dBs, more than 50 kohms
Audio output:	-8.0 dBs, less than 10 kohms
Video S/N:	More than 43 dB
Horizontal resolution:	More than 240 lines

Appearance and specifications are subject to change without notice.

Repairs

This VCR is a precision instrument and if treated with care will provide 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 dealer or Authorized Service Centre.

