

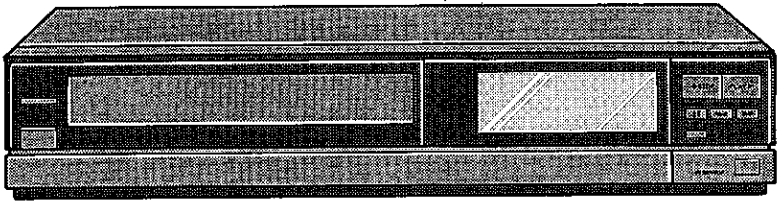
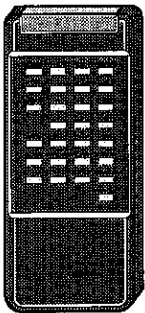
SANYO

Instruction
Manual

Video cassette
recorder

VHR-7100

VHS PAL HQ



CONTENTS

Congratulations. You are now the owner of a SANYO Video Cassette Recorder. Please read these instructions before operating the VCR.



- This VCR is based on a VHS-PAL signal system. Only video cassettes bearing the **VHS** symbol can be used.
- Video cassette recorders bearing the "HQ" mark incorporate VHS high picture quality technology. Note that there is interchangeability with former VHS video cassette recorders.

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PRECAUTIONS

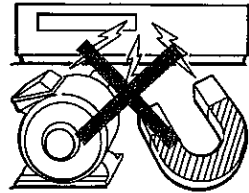
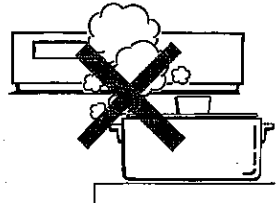
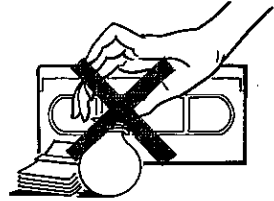
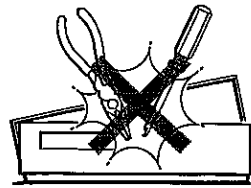
OPERATING PRECAUTIONS

- Removing the cabinet and touching the inside of the VCR with your hand, a screwdriver, or anything else, is not only harmful to the unit, but is also dangerous. **TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.**
- The unauthorized recording of television programmes, video tapes, films and other such material may infringe upon copyright or the rights of third parties.
- Be sure to use this VCR only in a temperature range of 5° C to 35° C and less than 85% humidity.
- This VCR is sensitive to magnetism. Do not expose to a magnetic source.
- Place the VCR on a flat, stable, level surface. Never subject it to violent shaking or any other shock or impact.
- Do not block the air vents that are provided to prevent the temperature inside the VCR from rising excessively.

The **POWER** button of this VCR is a secondary circuit, and does not disconnect the unit from an AC power source, even if the button is in the stand-by position, as long as the power cord is connected to an AC electrical outlet.

Note: Stand-by is the condition in which the digital display becomes dimmer and the date and time are displayed.

If the power supply cord of this appliance is damaged, it must be replaced. Return to a SANYO authorized service centre for replacement of the cord.



FEATURES

CAUTION

Be careful of condensation!

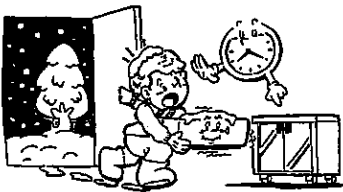
Condensation is the moisture that forms on the outside of a glass when you fill it with cold water. Condensation can also form inside a VCR when it is suddenly moved from a cold place to a warm, humid one, or when a heater has been turned on to quickly heat the room.

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.

Follow the procedures below the first time you use the VCR, and whenever you use it in places which are subject to condensation:

- 1 Connect the aerial cable and make all other necessary connections.
- 2 Plug the power cord into an AC outlet.
- 3 Turn on the VCR power to warm up the VCR and speed up the drying of any water particles that have formed on the video head drum.
- 4 Do not insert the video tape.

It takes about 1-1/2 to 2 hours to completely eliminate condensation. Wait at least this long before using the VCR.



- VHS high quality picture technology
- 39-position voltage synthesizer tuner
- Multi-function infra-red remote control
- Built-in 1 year, 6-event timer with every day function
- QSR (Quick Start Recording) timer
- Blank search function
- TV monitor
- Linear time counter
- Forward and reverse colour picture search
- Still picture playback
- Frame advance playback

DIRECT POWER ON AND GO SYSTEM

Power on

If a control button is pressed while the VCR is in stand-by, the power is supplied directly with that control button and functioning begins.

Example: If you press the **PLAY** button, the VCR will be turned on and playback will start.

Note: This function is not provided for the **REC** button. This is to prevent the VCR from being easily put into a video recording condition. Normally, when only the power is being supplied, press the **POWER** button.

Power off

The video recorder will be turned off if you press the **POWER** button.

CONVENIENT AUTOMATIC FUNCTIONS

Direct power on and go

When the VCR is in stand-by, press any one of the control buttons to turn on the power and perform the respective button's function.

AUTO power on

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

MEP (Miss 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.

Note: This function does not operate for timer recording or QSR timer recording.

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.

Off power eject

A video cassette will be ejected when the **EJECT** button is pressed even with the VCR in stand-by condition.

Auto-timer stand-by

When timer setting is completed, the VCR's power is automatically switched off and the VCR remains in the timer stand-by mode.

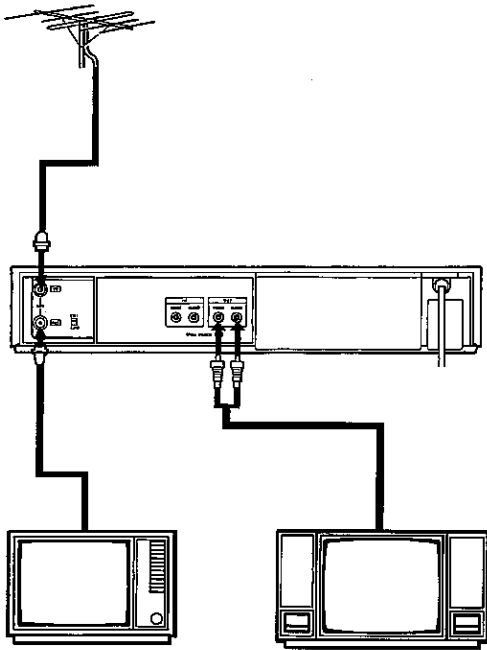
CONNECTIONS

ANTENNA CONNECTION

- Un-plug the antenna cable from your TV receiver and reconnect to the terminal marked "ANT IN" on the VCR.
- Connect the antenna cable supplied as an accessory of the VCR to the "ANT OUT" terminal on the VCR. Connect the other end of this antenna cable to the TV receiver.
- Insert the plug of the power cord into the wall socket.

CONNECTING A COLOUR MONITOR

- Connect the **VIDEO/AUDIO OUT** terminals on the VCR to the video/audio terminals on the TV receiver.
- The advantage of this connection is a superior quality picture and sound during playback.



ADJUSTING THE TV RECEIVER

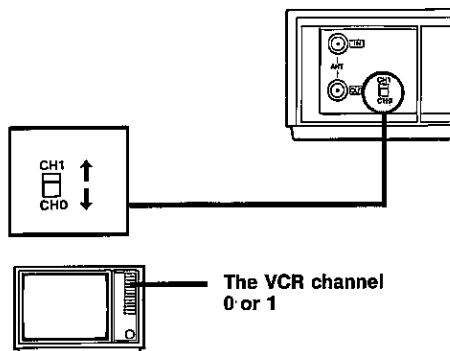
The VCR channel for this equipment is either channel 0 or 1. Select the channel which is not being used by a television broadcasting station in the area in which the equipment is to be used. On the rear panel of the VCR is the VCR channel select switch. Set the switch to the position which corresponds to the channel to be used.

ADJUSTING THE TELEVISION'S VCR CHANNEL

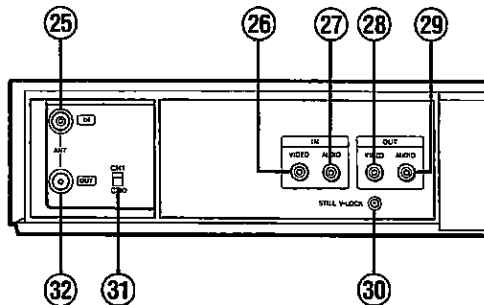
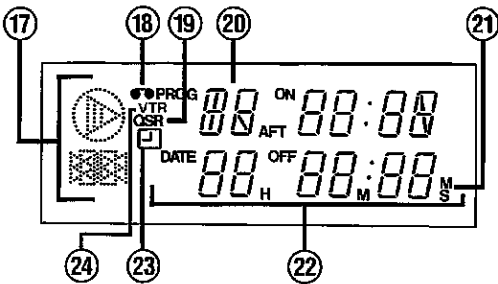
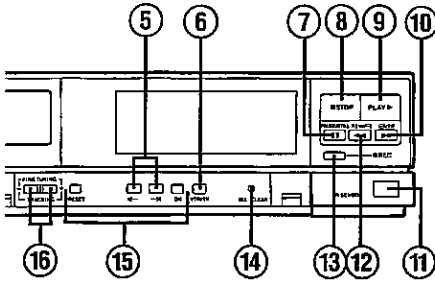
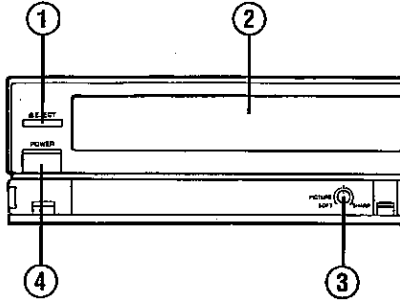
Varying from television to television, the VCR channel (channel 0 or 1) might be considerably out of adjustment. Use the following procedure to adjust the television's VCR channel.

- 1 Turn the television power on.
- 2 Set the television to the VCR channel. (0 or 1)
- 3 Select an active TV channel by pressing a channel button (← or →) on the VCR. If TV broadcast is not received, play back the pre-recorded tape.
- 4 Set the **VTR/TV** selector to the "**VTR**" position. "**VTR**" indicator will be on.
- 5 Adjust the channel tuning control on the TV (or fine tuning control) to the point at which the picture image and the audio output are best.

This is your VCR RF channel. To view video playback, always set your TV channel selector to the same channel.



PART NAMES AND FUNCTIONS



Front

- ① EJECT button
- ② Cassette loading compartment
- ③ PICTURE sharpness control
- ④ POWER button
- ⑤ ←:Channel down/Back
→:Channel up/Next

Use these buttons to select the desired channel. To select the AV input, press one of the selector buttons until "AU" appears on the display.

- ⑥ VTR/TV selector
- ⑦ PAUSE/STILL button
During playback: still picture.
During recording: pause during which no material will be recorded.
During still playback: advance the frame
- ⑧ STOP button
- ⑨ PLAYback button
- ⑩ Fast-Forward button
- ⑪ Remote control detector
- ⑫ REWInd button
- ⑬ RECOrd button
- ⑭ ALL CLEAR button

When pressing the **ALL CLEAR** button, the digital display will read "88:88", so that the current time and the desired times for recording programmes can be reset.

- Depress the **ALL CLEAR** button in the event that the function buttons cannot be activated.

- ⑮ Tuning controls
- ⑯ FINE TUNING/TRACKING controls

Digital Display

- ⑰ Function indicators
- ⑱ Cassette loading indicator
- ⑲ QSR indicator
- ⑳ Channel position number
- ㉑ Counter memory indicator
- ㉒ Clock/Timer/Counter display
- ㉓ Timer indicator
- ㉔ VTR indicator

Rear

- ⑵ ANTenna INput terminal
- ⑶ VIDEO INput terminal
- ⑷ AUDIO INput terminal
- ⑸ VIDEO OUTput terminal
- ⑹ AUDIO OUTput terminal
- ⑺ STILL V-LOCK adjustment screw
- ⑻ VCR channel select switch
- ⑽ ANTenna OUTput terminal

REMOTE CONTROL UNIT

OPERATION

Aim the unit at the remote control detector on the front of the VCR during operation.

PART NAMES

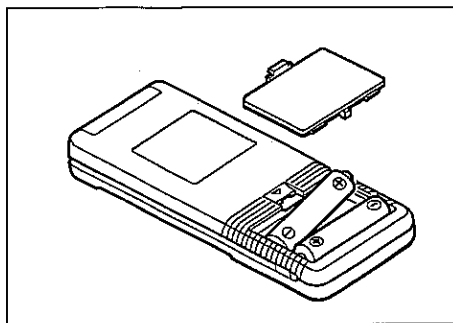
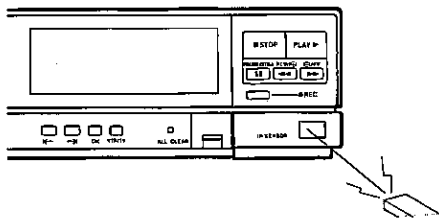
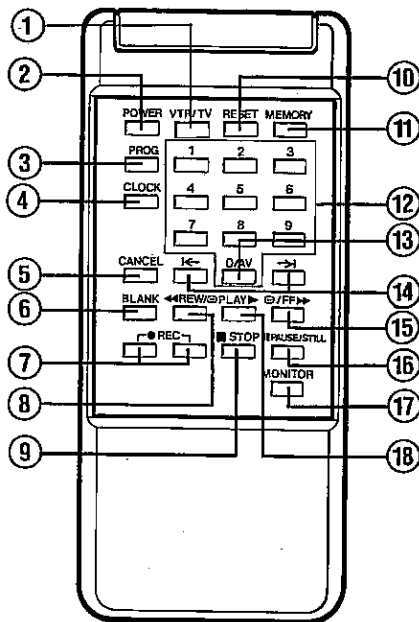
- ① VTR/TV selector
- ② POWER button
- ③ PROGramme set
- ④ CLOCK set
- ⑤ Programme CANCEL
- ⑥ Search BLANK area
- ⑦ RECord buttons
- ⑧ REWind button
- ⑨ STOP button
- ⑩ Counter RESET button
- ⑪ Counter MEMORY button
- ⑫ Numeric buttons
- ⑬ AV select button (0/AV)
- To select the external input mode, press this button.
- ⑭ ←:Channel down/Back
→:Channel up/Next
- ⑮ Fast-Forward button
- ⑯ PAUSE/STILL button
- ⑰ Tuner MONITOR
- ⑱ PLAYback button

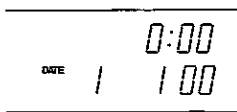
BATTERY INSERTION

1. Open the lid.
2. Insert 2 "AA(IEC R6)"1.5 volt batteries as indicated by the (+) and (-) signs.
3. Replace the lid.

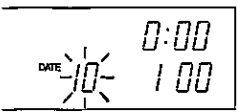
Notes:

- Operate the remote control unit within a range of approx. 30° from the front of the VCR.
- Operate unit within approx. 6m (20ft.) from the front of the VCR.
- The battery life under normal operating conditions is about one year. If the batteries become weak, the operable 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.

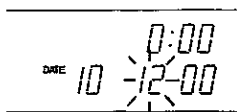




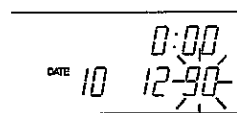
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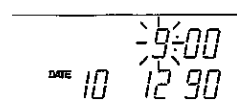
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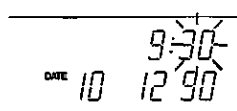
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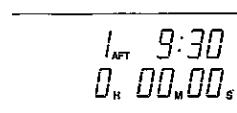
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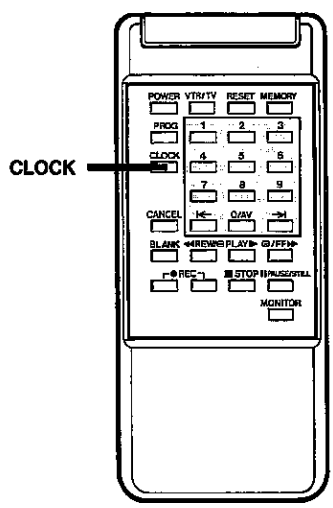
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CLOCK SETTING

- Clock setting takes place with the remote control unit.
- Clock setting can be changed by pressing the **←** or **→** button until the desired figure flashes. Then input correct number.
- When a single digit number is going to be set, press "0" first and then the desired number (ex: In case of 9: press "0" and then "9".)

Example: 9:30 December 10, 1990

- 1** Press the **CLOCK** button.
- 2** Set the **DAY** with numeric buttons.
Example: DAY = 10
- 3** Set the **MONTH** with numeric buttons.
Example: MONTH = 12
- 4** Set the **YEAR** with numeric buttons.
Example: YEAR = 90
- 5** Set the **HOUR** with numeric buttons.
Example: HOUR = 09
- 6** Set the **MINUTE** with numeric buttons.
Example: MINUTE = 30
- 7** For zero second setting, press the **CLOCK** button at the same time as an announced time signal. The seconds will begin counting from "00" at the moment the **CLOCK** button is pressed.



TUNING CONTROL ADJUSTMENTS

This VCR has a built-in tuner which can be preset for up to 39 TV channels. To preset channels, proceed as follows:

Check before starting

- Set the channel selector of your TV receiver to the VCR operating channel. (channel 0 or 1)

Example: To preset UHF channel "23" to channel position number "12".

- 1** Set the **VTR/TV** selector to the "VTR" position. "VTR" indicator will be on.

- 2** Press the tuning **PRESET** button.

- 3** Select the desired channel position number (**Example: "12"**) by pressing the **←** or **→** button. Then press the **OK** button.

- 4** Select "L", "H" or "U" (Example: "U") by pressing the **←** or **→** button. Then press the OK button.

- When the **←** or **→** button is pressed, the character "L", "H", "U", or "S" (skip) will be sequentially displayed as a band indicator.

Band Indicator	Channel Range
L	0—5
H	5A—11
U	28—69
S	Skip function (See page 11.)

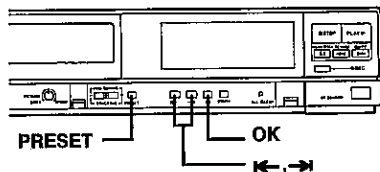
- 5** When the **←** or **→** button is pressed, a channel being used for broadcast will be automatically found.

Note: Since the lowest position of the band becomes the tuning point when a band has been selected, at the beginning push the **→** button and then start searching for the channel.

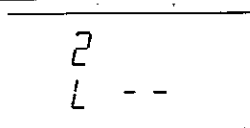
When a channel is located by channel searching, the same search stops and the channel indicator changes from blinking to steady illumination, and at the same time, "AFT" indicator illuminates. Check the TV screen to confirm that the located channel is the channel you want and, if it is, proceed to step 6. If it is not, repeat step 5.

- 6** Press the **OK** button, and the station selected is memorized. When presetting another channel position number display, repeat steps 3 to 6 by following the same procedure.

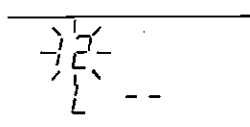
- 7** When the **PRESET** button is pressed, the display will return to the normal display.



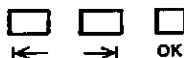
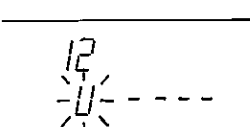
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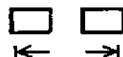
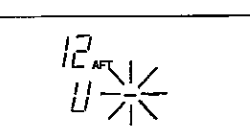
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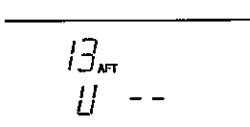
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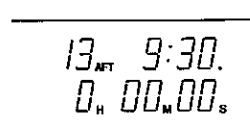
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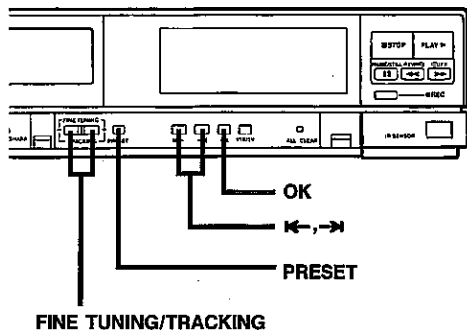


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7





CHANNEL FINE TUNING

For the preset channels, the received picture is automatically optimised in the AFT on condition, but it may happen that reception can be somewhat improved, if signals are weak or if the channel is disturbed by interference, by fine tuning with the AFT off.

- 1 Press the **PRESET** button.
- 2 Press the **←** or **→** button to select the unsatisfactory channel.
- 3 Press the **FINE TUNING/TRACKING** (– or +) button until obtaining the best possible picture and sound. When the **FINE TUNING/TRACKING** button is pressed the AFT indicator is turned off, and the fine tuning can then be made.
- 4 Then press the **PRESET** button.
Note: To reset AFT from "off" to "on", press the **PRESET** button once, select the channel position number, press the **OK** button, and once again press the **PRESET** button.
 If the AFT isn't reset to "on" despite performing the above operation, preset it once again (see page 10).

SKIP FUNCTION

This video recorder can memorise up to 39 TV channels. If not all preset positions are used, the skip function lets you skip over the unused positions.

Example: To skip channel position number "10".

- 1 Press the **PRESET** button.
- 2 Press the **←** or **→** button to select the channel position number (**Example: "10"**) to be skipped.
Then press the **OK** button.
- 3 Press the **←** or **→** button until the band indicator shows "**S**".
Note: "S" denotes SKIP.
 To cancel the SKIP mode, press the **←** or **→** button once again to select the band to be received, and then preset once again (see page 10).
- 4 Press the **OK** button.
- 5 When the **PRESET** button is pressed, the display will return to the normal display.

CASSETTE LOADING AND UNLOADING

LOADING

When a video cassette is inserted, it will be loaded automatically and the cassette indicator will illuminate.

Auto play

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

UNLOADING

The video cassette will be unloaded when the **EJECT** button is pressed.

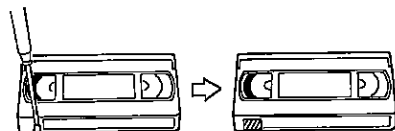
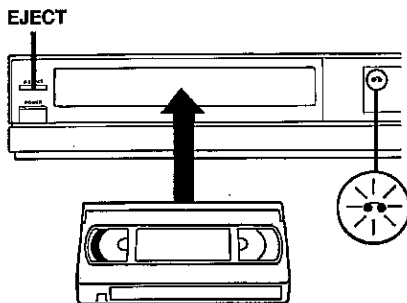
Off power eject

A video cassette will be ejected when the **EJECT** button is pressed even with VCR is in stand-by condition.

CAUTION:

Do not put your hand or other objects behind the cassette door because of the risk of injury or an accident.

Be sure to keep small children away from the VCR.



ERASURE-PREVENTION TAB

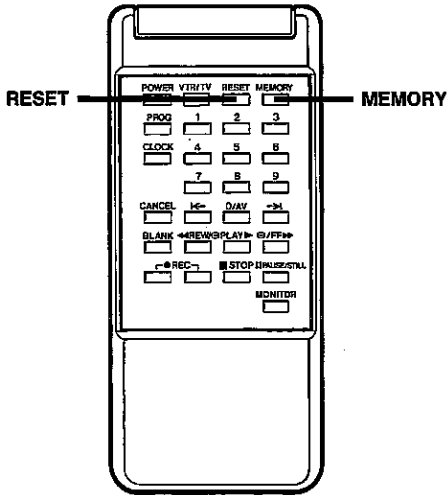
If the erasure-prevention tab on the back of the video cassette is removed, the cassette can not be recorded. This tab is designed to prevent the accidental erasure of recorded material. (The tab should be snapped off at its base, and removed completely.)

To record onto the same cassette again, place two layers of adhesive tape over the space where the tab was, so as to cover the space completely.

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 seconds.

- Whenever you load a cassette tape, the counter will be reset to "0 H 00 M 00 s".
- The counter operates using control signals which are recorded on the tape, hence if you play back a tape which has nothing recorded on it, the counter will not operate.



- 1** Press the **RESET** and **MEMORY** buttons before starting recording or playback.

The zero point of the counter is now memorized and the memory indicator "M" will illuminate.

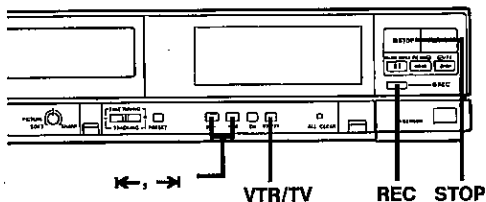
- 2** When the **REW** button is pressed at the end of recording, or playback, the tape will be rewound automatically to the memorized position and then stop.

- When rewinding further back from position "0 H 00 M 00 s" the counter shows figures beginning with "—".
- The tape stops at the memorized position even in fast forward.

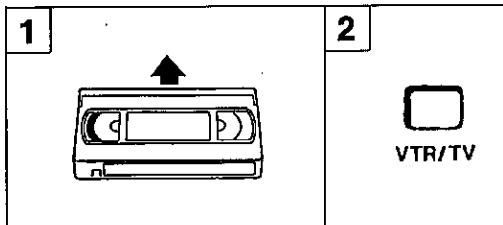
RECORDING TELEVISION BROADCASTS

Check before starting

- Set the channel selector of your TV receiver to VCR operating channel (channel 0 or 1).



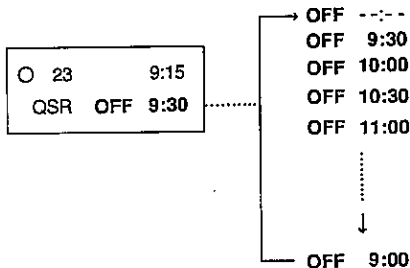
- 1 Insert a video cassette.
 - 2 Set the **VTR/TV** selector to the **VTR** position. "VTR" indicator will be on.
 - 3 Press the numeric buttons or **←, →** button for the channel (channel position) to be recorded.
Example: "23"
 - 4 Press the **REC** button.
- Video recording starts. This is the normal video recording procedure.



QUICK START RECORDING (QSR) TIMER

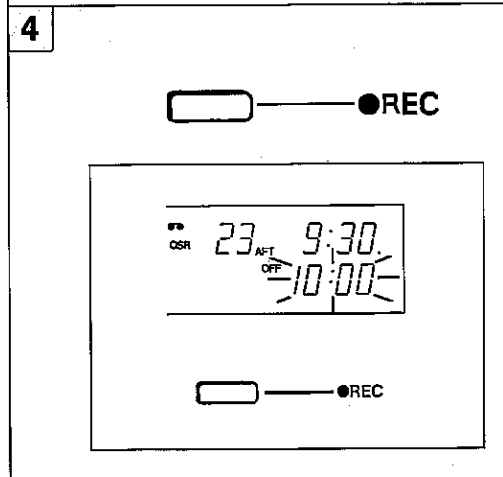
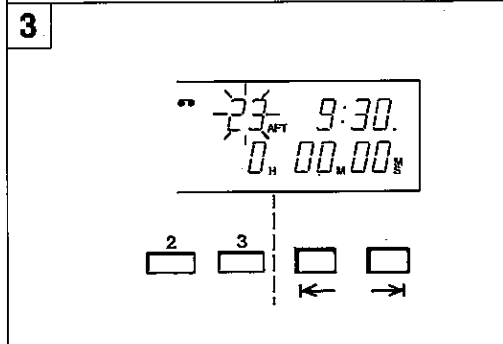
Timer Recording is simple.

- 1 Press the **REC** button to start recording.
 - 2 Then press the **REC** button again.
- The "OFF---" indication will start flashing on the VCR display. Within 10 seconds, use the **REC** button to set the recording end time. You can set the recording end time in units of 30 minutes.

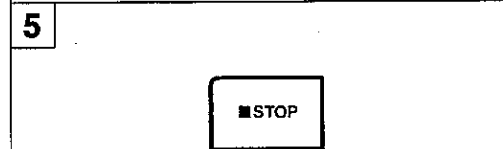


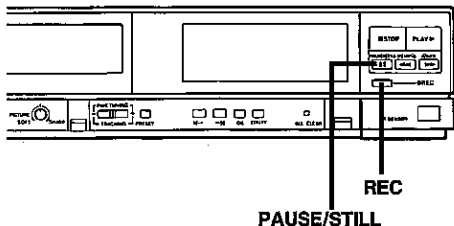
Check/change

When the **REC** button is pressed "during QSR recording, the QSR ending time will be displayed for 10 seconds. The QSR ending time can be changed by pressing the **REC** button during this 10 seconds period.



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





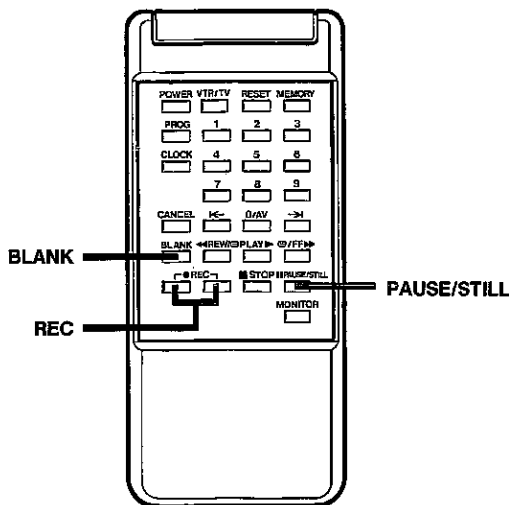
OTHER RECORDING POSSIBILITIES

If you wish to avoid recording unwanted material

- 1 During recording, press the **PAUSE/STILL** button. The TV picture will not be recorded.
- 2 Press the **PAUSE/STILL** button or **REC** button, and the recording will resume.
Note: If REC PAUSE mode continues for about five minutes, the VCR will automatically go into the stop mode in order to prevent the tape from damage.

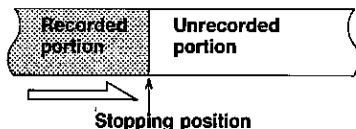
Recording one programme while watching another

- 1 Start recording the desired TV programme.
- 2 Set the **VTR/TV** selector to the "TV" position. "VTR" indicator will be off.
- 3 Select the desired programme position on your TV receiver.



USING THE BLANK SEARCH FUNCTION

The blank search function automatically searches for the next blank (unrecorded) portion of the tape, and stops the VCR at that position. This is convenient when you want to continue recording at the end of a previous recording.



- Press the **BLANK** button. The VCR will locate the next blank portion on the tape, and stop at that position.
- If no blank portions are found all the way to the end of the tape, the VCR will switch directions and start searching toward the start of the tape.
- If no blank portions are found, the VCR will go all the way to the start of the tape and then stop.
- During the search, the words "TO End" will be shown in the VCR display.

Notes:

- The stopping position may vary slightly. Play back a few seconds of the tape to make sure it is at the position you want.
- This function may also stop the VCR during slight pauses (unrecorded portions) between taped programmes.

CAMERA RECORDING/ CAMCORDER DUBBING

Check before starting

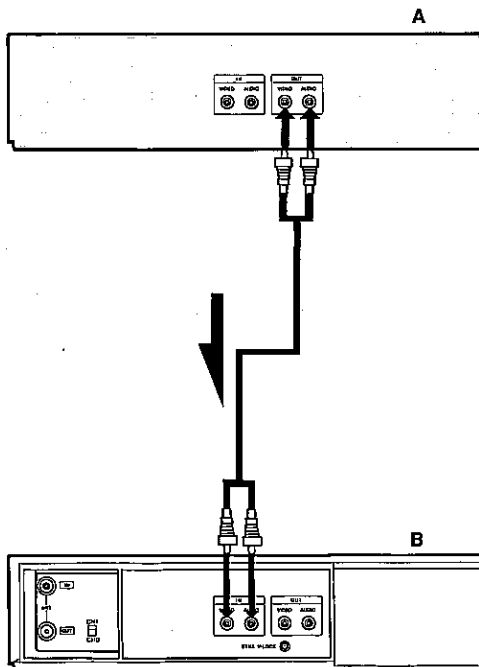
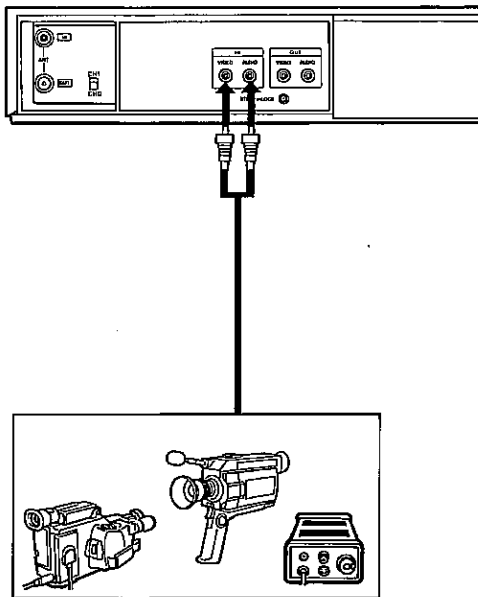
- Set the channel selector of your TV receiver to VCR operating channel (channel 0 or 1).
- Insert the video cassette.
- Press the **←** or **→** button so that "AU" appears on the channel position number display, or press the 0/AV button on the remote control unit. The "AV" input status is the one in which "AU" is displayed in the channel position number display.

- 1 Turn on the power of the video camera and adjust the focus, white balance, etc..
For Camcorder dubbing select **PLAY** on the Camcorder.
- 2 Press the **REC** button on the VCR.
- 3 To stop the recording, press the **STOP** button on the VCR.

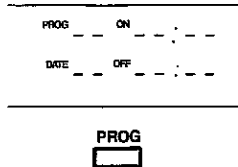
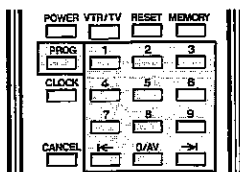
DUBBING

You can monitor a programme while dubbing by connecting a TV to the VCR B's **ANT OUT** terminal.

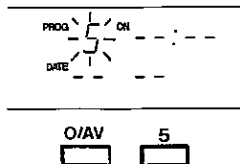
- 1 Connect VCR A and VCR B.
- 2 Insert the pre-recorded tape into the VCR A.
- 3 Insert the blank video cassette into the VCR B.
- 4 Set VCR B to the "AV (external)" input condition.
- 5 Press the **PLAY** button on the VCR A, and then press the **REC** button on the VCR B.



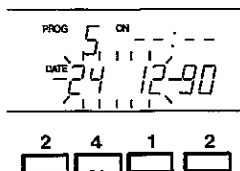
TIMER RECORDING



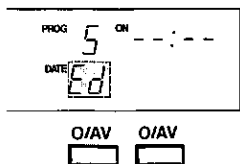
1



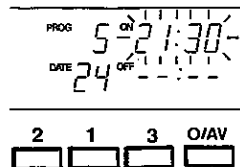
2



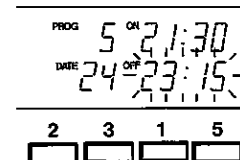
3



4



5



Timer recording enables you to carry out unattended video recording of television broadcasts at preset times. The following data must be entered to set the timer programme:

- Channel position number
- Day and month on which the recording is to be made
- Time at which timer recording is to start (on-time)
- Time at which timer recording is to stop (off-time)

Use the remote control unit to set the timer. Before setting the timer programme, be sure that the present time shown in the display is correct.

Example: Reserve channel 5 from 21:30 to 23:15 on December 24, 1990.

Insert a video cassette (with erasure-prevention tab).

1 Press the **PROG** button.

2 Set the **CHANNEL (position number)** with numeric buttons.
Example: Channel 5

3 Set the **DAY** with numeric buttons.
Example: 24
Set the **MONTH** with numeric buttons.
Example: 12

Everyday recording
To record everyday, press the "O/AV" numeric button twice. "Ed" appears on the display.

4 Set the **ON-HOUR** with numeric buttons.
Example: 21
Set the **ON-MINUTE** with numeric buttons.
Example: 30

5 Set the **OFF-HOUR** with numeric buttons.
Example: 23
Set the **OFF-MINUTE** with numeric buttons.
Example: 15

6 This completes the setting of timer controlled recording and the VCR will resume automatically the timer stand-by mode. Timer indicator () will be on. To set other time recording settings, repeat steps 1 to 5.

The VCR memory can store up to 6 programmes.

PROGRAMME CANCELLATION

- 1 Press the **PROG** button until the programme to be cancelled appears.
- 2 Press the **CANCEL** button.

PROGRAMME CHECK

- 1 When the **PROG** button is pressed, the programme, day, on-time and off-time will be displayed successively.
- To confirm month/year, press the **→** button twice during confirmation.

PROGRAMME CHANGE

- 1 Press the **PROG** button until the programme desired to be changed, is displayed.
- 2 Press the **←** (or **→**) button until the number to be changed is blinking.
- 3 Press the numeric buttons and correct the number.
- 4 After revisions are completed, press the **PROG** button.



By using the timer in this unit, you can record a source from an external audio/video unit.

At the step for setting the channel position number (for ordinary programming), cause "AU" to appear in the channel position number display and enter the external input mode into the memory.

To select the external input mode, enter "00" by pressing the **0/AV** button on the remote control unit twice.

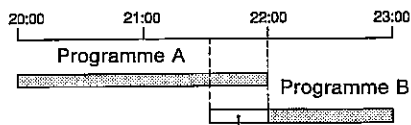
Note: You cannot turn the power to the external unit ON or OFF.

NOTES ON TIMER SETTING

- The timer indicator () will flash to inform you if no video cassette is loaded.
- The timer indicator () will flash 5 minutes before the starting time of each of the set programmes is reached.
- If programme setting is abandoned midway, the programme is automatically cancelled.
- If the same time is set for the recording start time and recording stop time, timer recording will be set to take place for 24 hours. Please note that, when a tape is inserted, recording will continue to the end of the tape.

Programme priority

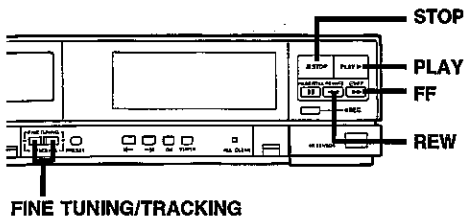
- If several recordings have been timer-programmed with overlapping recording times, then the recording with the earliest start time will be recorded first.
- If the start time for a second recording is reached before the programmed stop time for the first recording, the first recording will continue to the original stop time and the second recording will start after the first recording has finished.



This portion will not be recorded.

- If several recordings have been programmed for the same start time on the same day, the programmed recording that was first entered has priority.

PLAYBACK



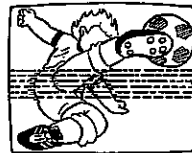
Check before starting

- Set the channel of your TV receiver to VCR operating channel (channel 0 or 1).

- 1 Insert the video cassette.
- 2 Press the **PLAY** button.
- 3 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.

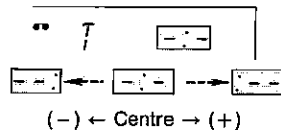
TRACKING ADJUSTMENT

If the playback picture shows noise interference, adjust the **FINE TUNING/TRACKING** (-, +) control buttons to minimize the noise.



Noise interference

Tracking condition will be displayed as follows:



Note: If you wish to return the tracking adjustment to its original "centre position" after having changed it, press the **FINE TUNING/TRACKING** "-" and "+" buttons simultaneously.

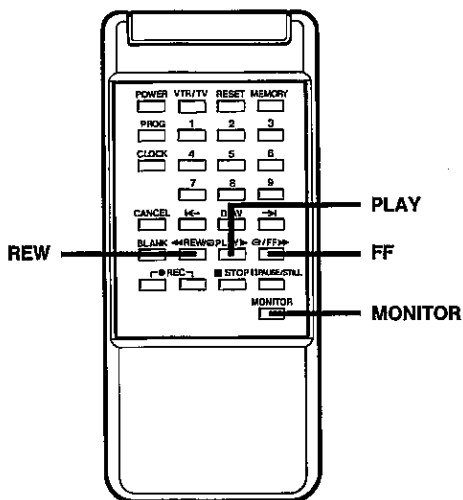
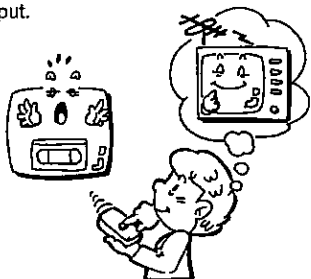
PICTURE SHARPNESS ADJUSTMENT

Set the **PICTURE** sharpness control for the picture quality that suits your tastes.

TV MONITOR FUNCTION

This function lets you view a TV programme during video playback.

- Press and hold the **MONITOR** button during video playback. The TV programme on the channel that was most recently selected will be shown on the TV screen for as long as the button is held.
- You can also monitor other external input sources if you wish. To do so, select AV input.



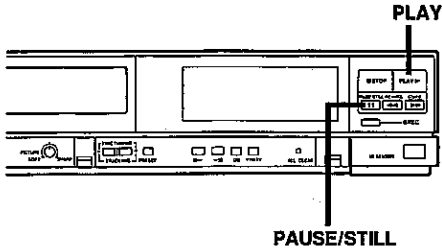
FORWARD SEARCH

- Press the **FF** button during playback or fast-forward operation. The picture can be viewed while the tape is advanced at a fast speed.
- Normal playback will resume as the **PLAY** button is pressed.

REVERSE SEARCH

- Press the **REW** button during playback or rewind operation. The picture can be viewed while the tape is rewound at a fast speed.
- Normal playback will resume as the **PLAY** button is pressed.

You can perform fast forward, forward search, rewind, and reverse search operations by simply pressing the **FF** and **REW** buttons on this VCR. For example, each time the **FF** button is pressed, the VCR will change from fast forward to forward search, or vice-versa. This is extremely useful when searching for a particular scene.

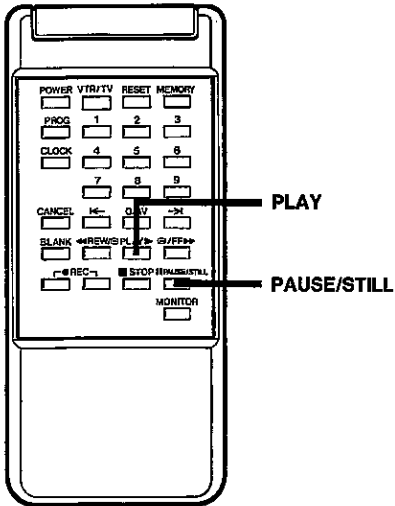


STILL PICTURE

- Press the **PAUSE/STILL** button during playback. A still picture can be viewed.
- Normal playback will resume when the **PLAY** button is pressed.

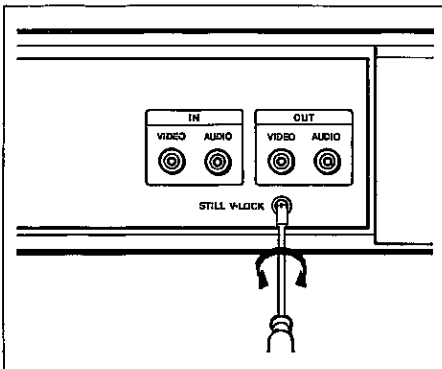
FRAME ADVANCE

- Press the **PAUSE/STILL** button during still playback. Playback picture will advance frame by frame. One press advances one frame.
- Normal playback will resume when the **PLAY** button is pressed.



Notes:

- During the special playback (forward search, reverse search, still picture and frame advance) the picture may contain some noise or vibration. But this is not a malfunction.
- If still picture playback is continued for about five minutes, the VCR will automatically change to stop mode in order to protect the tape from damage.
- If still picture moves up and down, turn the **STILL V-LOCK** adjustment screw on the rear panel. If the VCR's **STILL V-LOCK** adjustment cannot remove this movement, also adjust the V-HOLD control of the TV receiver.



REPAIRS

This VCR is a precision instrument and 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 servicing dealer or SANYO Authorized Warranty Station.

TROUBLESHOOTING

This VCR is highly sophisticated. It is shipped from the factory after having been checked and adjusted under the most rigid quality control and inspection system. Should problems occur, check the following points.

Symptom	Check points
No power	<ul style="list-style-type: none"> The power cord is disconnected.
No off the air programmes received	<ul style="list-style-type: none"> Are the connections between your VCR and TV correct? The TV channel selector has not been set to VCR operating channel (Channel 0 or 1).
Off the air reception on the VCR is poor	
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.
Playback picture does not appear	<ul style="list-style-type: none"> The TV channel selector has not been set to VCR operating channel (channel 0 or 1).
Interference on playback picture	<ul style="list-style-type: none"> Adjust the tracking control. Dust and dirt on video heads. <p>Take the VCR to an Authorized Service Station or dealer.</p>

SPECIFICATIONS

General

Video format:	VHS PAL
Television system:	CCIR: 625 lines, PAL colour signals
Recording system:	Rotary two head helical-scan system
Tape speed:	23.39 mm/sec
Recording time:	240 minutes with E-240 cassette
Tuner input:	VHF: 0 — 11 UHF: 28 — 69
RF converter:	Built-in VHF converter
Converter output:	On channel 0 or 1
Timer indication:	24 hour indication
Power failure backup:	Approx. one hour
Timer recording:	1 year 6 programmes with every day function
Power requirement:	AC 240 V \pm 10%, 50 Hz
Dimensions (W x H x D):	420 x 79 x 320mm
Weight:	Approx. 6 kg
Power consumption:	30 W

Electrical characteristics

Video input level:	0.5 - 2.0 Vp-p
Video input impedance:	75 \pm 5 ohms
Video output level:	1.0 \pm 0.2 Vp-p
Video output impedance:	75 \pm 5 ohms
Video S/N:	Luminance: more than 43 dB
Resolution:	Colour: more than 240 lines
Audio input level:	-8 dBs
Audio input impedance:	More than 50 kohms
Audio output level:	-8 dBs
Audio output impedance:	Less than 10 kohms

Remote control unit

Power requirements:	3 V (2 "AA (IEC R6)" size, 1.5-volt batteries)
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Accessories

Instruction manual	1
Antenna output cable	1
Remote control unit	1

Appearance and specifications are subject to change without notice.

1AC6P10A59300
RP1/A-2 (0990-D-SY01)

SANYO

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