Video Cassette Recorder

NV-F65EA

Operating Instructions

VHS
PAL

Before attempting to connect, operate or adjust this product, please read these instructions completely.

/QT3678

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Information for Your Safety

IMPORTANT

Your attention is drawn to the fact that recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

FOR YOUR SAFETY

DO NOT REMOVE OUTER COVER.

To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

HQ (High Quality Picture System)

Video recorders carrying the HQ symbol mark feature the new VHS High Quality Picture System. This system assures complete compatibility with VTRs that use the conventional VHS system.

CAUTIONS

Please read these cautions before you operate this VTR.

Cassette Compartment Door

When first unpacking the unit, you may notice that the cassette compartment door is partially open. This condition is due to the operation of a safety device designed to protect the unit from vibration during shipment; it is not a malfunction. When the AC mains lead is connected to a mains outlet, the door will return to its original position.

Avoid Sudden Changes in Temperature

If the VTR is suddenly moved from a cold place to a warm place, moisture may form on the tape and inside the VTR. In this case, the Dew Indicator " d " will flash on and off and the VTR will not operate.

Humidity and Dust

Avoid places where there is high humidity or much dust, which may cause damage to internal parts.

Do Not Obstruct the Ventilation Holes

The ventilation holes prevent abnormal increase in temperature. Do not block or cover these holes. Especially avoid covering the holes with soft materials such as cloth or paper.

Keep away from High Temperature

Keep the VTR away from extreme direct heat such as direct sunlight, heating radiators, or closed automobiles.

Keep Magnets away

Never bring a magnet or magnetized object near the VTR because it will adversely affect the performance of the VTR.

No Fingers or Other Objects Inside

Touching internal parts of this VTR is dangerous, and may cause serious damage to the VTR. Do not attempt to disassemble the VTR. There are no user serviceable parts inside.

Keep Water away

Keep the VTR away from flower vases, tubs, sinks, etc.
CAUTION: If liquids are spilled into the VTR, serious damage could occur. If you spill any liquid into the VTR, consult qualified service personnel.

Lightning

To avoid damage by lightning, disconnect the aerial plug from the VTR.

Cleaning the VTR

Wipe the VTR with a clean, dry cloth. Never use cleaning fluid, or other chemicals. And do not use compressed air to remove dust.

Stacking

Place the VTR in a horizontal position, and do not place anything heavy on it.

Video Head Clogging

The video heads are the means by which the recorder places picture signals on the tape during recording, and reads picture signals from the tape during playback. If these heads become dirty and clogged from long use, the signals can no longer be recorded correctly, and the playback picture will be distorted accordingly. This is the case, for example, during the playback of a tape, the sound is reproduced normally, but no picture is seen, or the picture is greatly distorted. When such a symptom case occurs have the recorder checked by qualified service personnel.

If Dew Condensation Forms in the VTR

Condensation may form in the VTR if:

- The VTR is in a room where the heater has just been turned on.
- The VTR is in a room with steam or high humidity.
- The VTR is brought from cold surroundings into a well-heated room.
- The VTR is suddenly brought from cool surroundings, such as an air-conditioned room or car, to a place which is hot and humid.

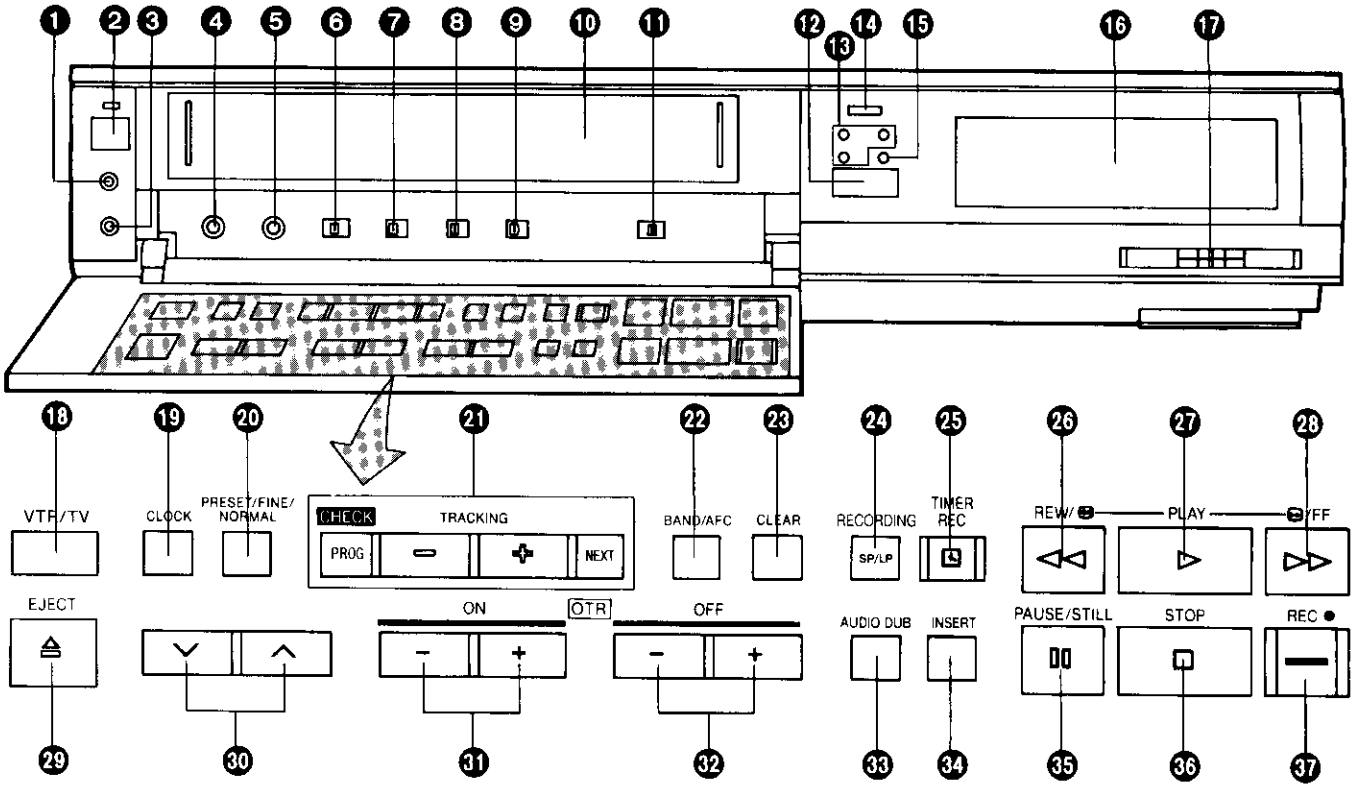
When dew forms in the VTR: (Refer to page 6)
The Dew Indicator " d " on the Multi-Function Display will flash on and off and all the function buttons are made non-operational to protect the tape and the video heads.

When the Dew Indicator flashes, wait until this indicator disappears.

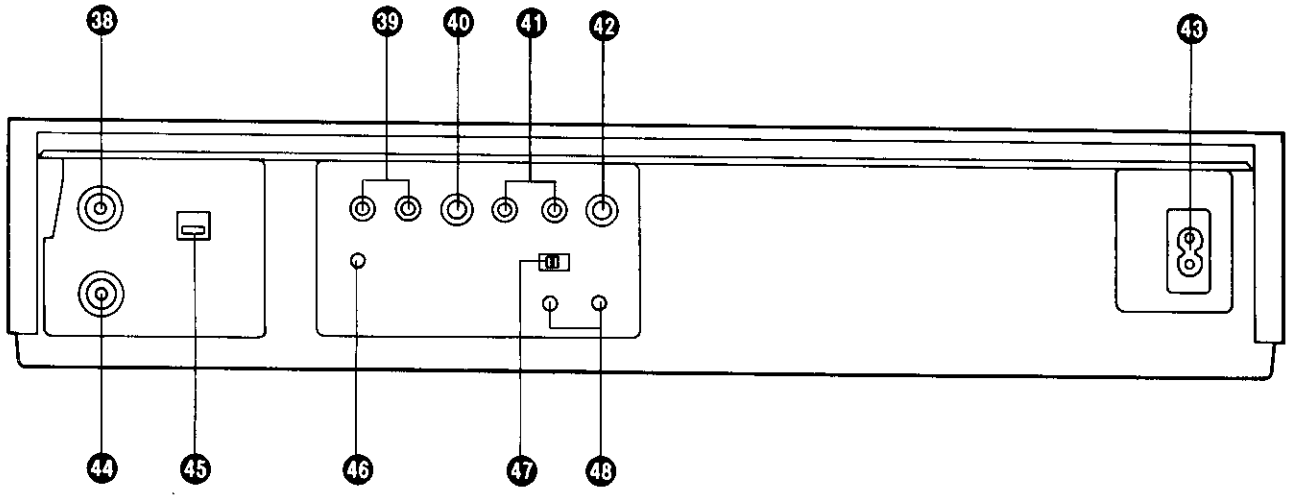
- If dew condensation forms inside the VTR while the VTR On/Off Switch is off, it will turn on automatically and the Dew Indicator will flash on and off. As soon as the dew condensation has been dissolved, the VTR will turn itself off again.
- If the Dew Indicator continues to stay on, have the recorder checked by qualified service personnel.

CONTROLS AND COMPONENTS

FRONT



REAR



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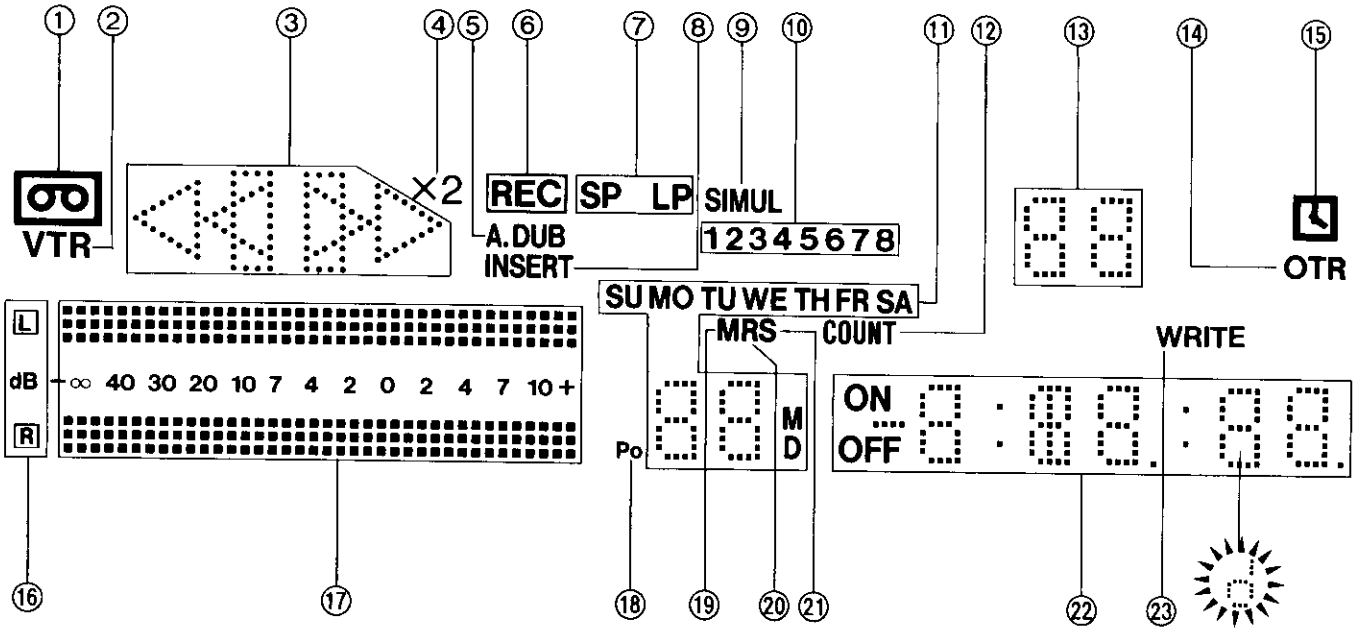
Multi-Function Display



When dew forms:
Dew Indicator

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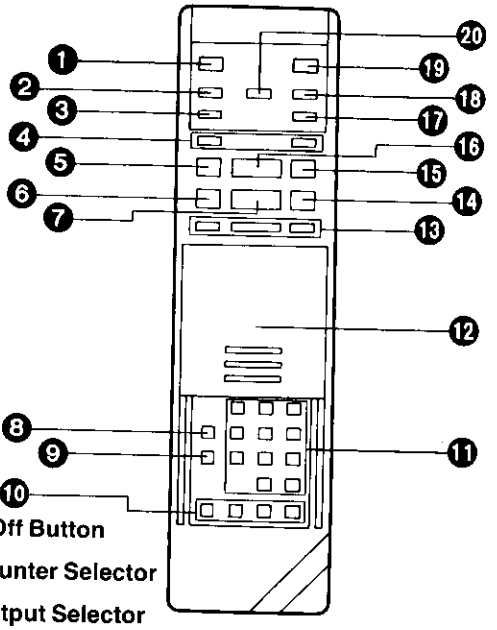
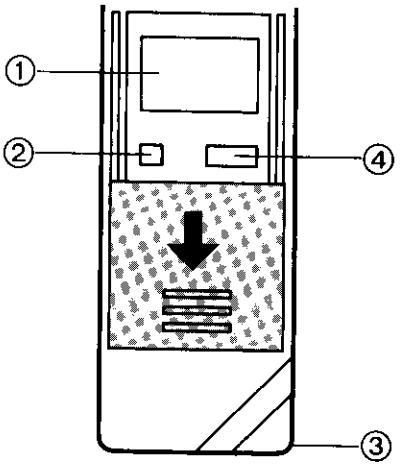
INFRA-RED REMOTE CONTROLLER



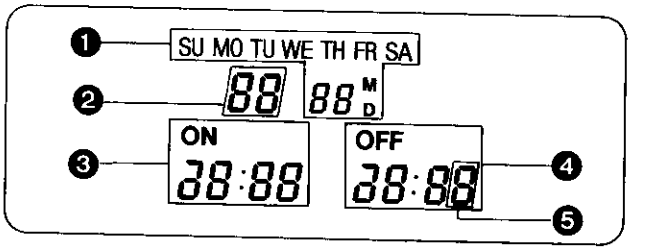
1. VTR On/Off Button
2. Clock/Counter Selector
3. Audio Output Selector
4. Record Buttons (●)
5. Pause/Still Button (❚❚)
6. Rewind ◄◄/Review (◄◄) Button
7. Play Button (►)
8. Time Search Button
9. Monitor Button
10. Auto Play Buttons
11. Programme Position (Channel) Selector Buttons
12. Mode Selector Cover
13. Search Buttons
14. Fast Forward ►►/Cue (►►) Button
15. Still Advance Button (❚►)
16. Stop Button (■)
17. Reverse Play Button
18. Memory/Repeat/Search Button
19. VTR/TV Selector
20. Reset/Index Button

Use as Digital Scanner

Slide the Mode Selector Cover downward.



① **Bar Code Reader Display**



1. Date Display
2. Channel Display
3. Start Time Display
4. End Time Display
5. Check Indicator

② **Digital Scanner On/Off Button**

③ **Bar Code Reading Section**

④ **Transmit Button**

When the Bar Codes Cannot Be Read

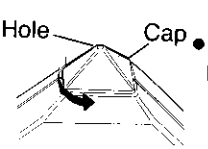
Although the lamp in the tip of the Bar Code Reading Section lights up:

- No figures appear in the Bar Code Reader Display
- No beep sounds is heard;

The tip of the Bar Code Reading Section is probably clogged with dirt.

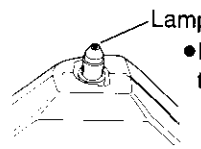
Cleaning

① Turn the Cap of the Bar Code Reading Section 90° counterclockwise, as shown below.



- Remove dirt and dust from the hole of the Cap.

② Gently wipe the tip of the lamp with a soft cloth.



- Reattach the Cap and lock it by turning it clockwise.

How to Operate the Remote Controller (Digital Scanner)

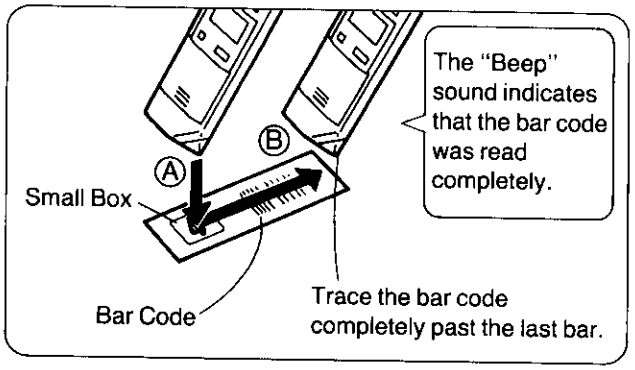
Press the Digital Scanner On/Off Button to "ON".

- If no operation is performed for more than 25 seconds (4 minutes during setting of the clock time), the scanner will automatically switch over to the power-saving standby condition and the lamp will go off. (In this case, if bar codes have already been read but not yet transmitted to the VTR, the data will be cancelled.)
- When the lamp is not lit, press the button to turn it "ON" again.

Tracing the Bar Codes

(A) Place the Remote Controller on the Small Box.

(B) Trace the bar code quickly in the direction of the arrow.



- Treat the Programming Sheet with care. If the sheet gets dirty or scratched, the bar code reading may become impossible.
- Protect the Remote Controller from strong shocks and vibration. Keep it away from water and places with high temperature and humidity.
- If the bar code is traced slowly, it cannot be read correctly.
- When there is no "Beep" sound, the reading of the bar code is incomplete. Trace the bar code again.
- When using the Programming Sheet, put it on flat surface: Reading the bar codes while holding it in your hand or bending it, may result in incorrect operation.
- Do not deviate from the bar code, nor stop tracing halfway.

Power Source for the Remote Controller

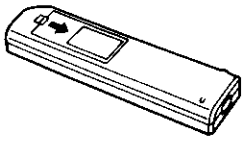
■ The Remote Controller is powered by 2 IEC "R6" size batteries. The life of the batteries is about one year, however, it depends on the frequency of use. Inspect and if necessary, replace the batteries once a year.

CAUTION FOR BATTERY REPLACEMENT

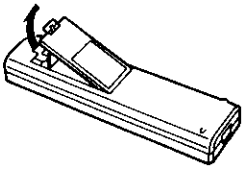
- Load the new batteries with their polarities (⊕ and ⊖) aligned correctly.
- Do not apply heat to batteries, or internal short-circuit may occur.
- If you do not intend to use the Remote Controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new batteries together. (Also never use an alkaline battery with a manganese battery.)

Load the batteries as follows:

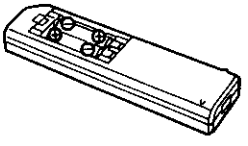
❶ Push back the battery compartment locking lever.



❷ Lift off the battery compartment lid.



❸ Insert the batteries with their polarities aligned as indicated inside the battery compartment.



❹ Replace the lid.

Note:

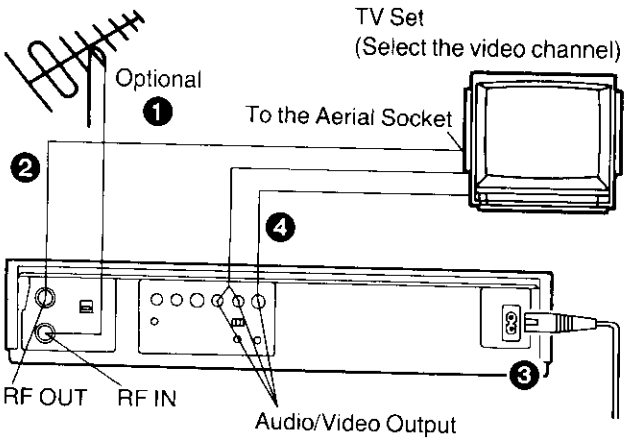
- The infra-red beam should be transmitted directly at the Infra-red Remote Control Receiver on the front of the VTR.
- Direct sunlight may interfere with the beam.
- The lightsensing angle of the Infra-red Remote Control Receiver in the VTR is about 30° for each side from the centre.
- The unit should be used within a range of about 7 meters from the front of the VTR.

Recommendation

After the programming of timer recording(s) is completed, press the Digital Scanner On/Off Button so that the indications in the LCD Display disappear, in order to save battery power.

INSTALLATION

Connection to a TV Set



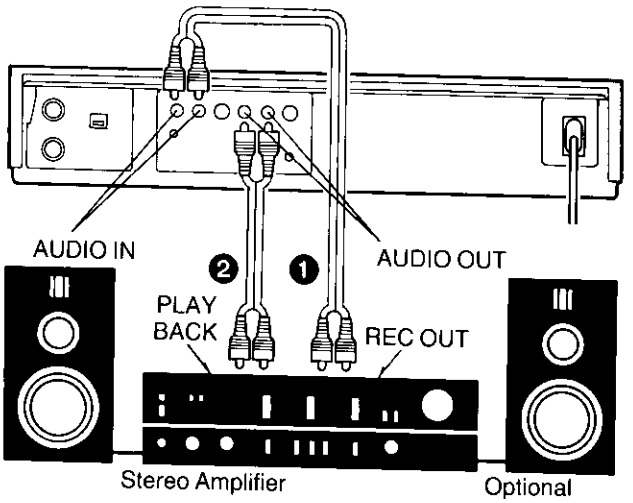
❶ Connect the external aerial to the RF Input Socket on the VTR.

❷ Connect the aerial terminal on your TV set to the RF Output Socket on the VTR with the supplied DIN-DIN Coaxial Cable.

❸ Connect the AC Mains Lead to the AC Mains Socket of the VTR to the mains outlet.

❹ If the TV set is equipped with separate video and audio input sockets, it is recommended to connect the VTR to the TV set with separate video and audio cables.

Connection to a Stereo Amplifier



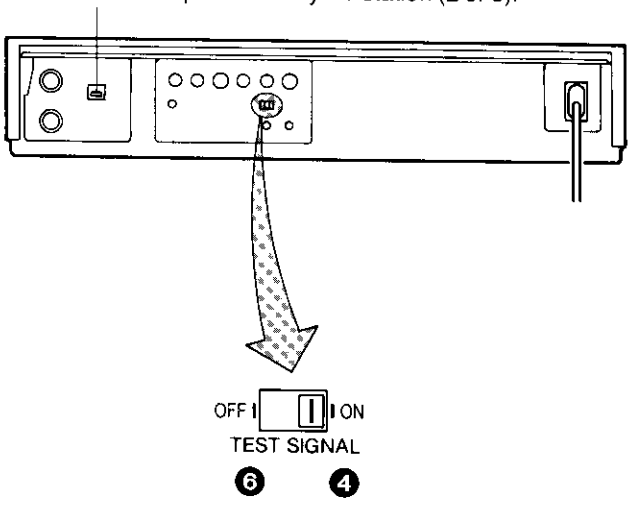
❶ Connect the Audio Input Sockets on the VTR to the REC OUT Sockets on the Stereo Amplifier.

❷ Connect the Audio Output Sockets on the VTR to the PLAYBACK Sockets on the Stereo Amplifier.

TUNING THE TV SET TO THE VIDEO PLAYBACK CHANNEL

The adjustments described on this page are not necessary, if the VTR is connected to the TV set via the Video/Audio output sockets.

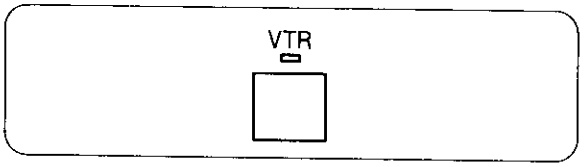
Video Playback Channel Selector
This switch is used to select the Video Playback channel which is not occupied with any TV station (2 or 3).



❶ Turn the TV set on and select the AV programme position or another programme position that is not occupied by any TV station.

❷ Press the VTR On/Off Switch to turn the VTR On.

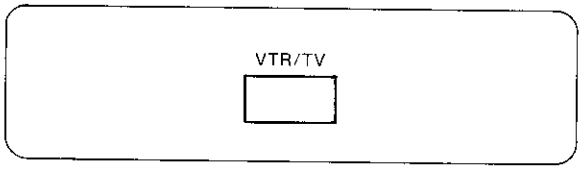
(FRONT SIDE)



- The corresponding indicator lights up.

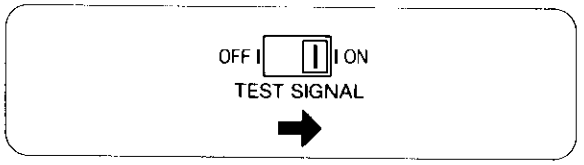
❸ Press the VTR/TV Selector to "VTR" position.

(FRONT SIDE)

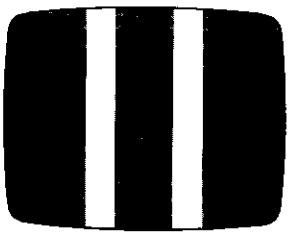


- VTR Indicator will appear in the Multi-Function Display.

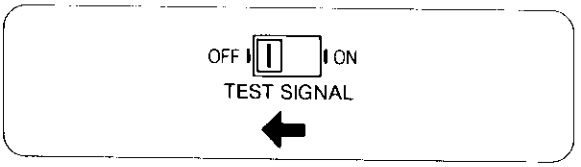
❹ Set the Test Signal Switch to "On".



❺ Tune the selected programme position (channel) of the TV set to VHF channel 2 or 3.
Confirm on your TV set that the received test pattern is as shown.



❻ Set the Test Signal Switch to "Off". Your TV is now ready to receive the RF output signal from the VTR.

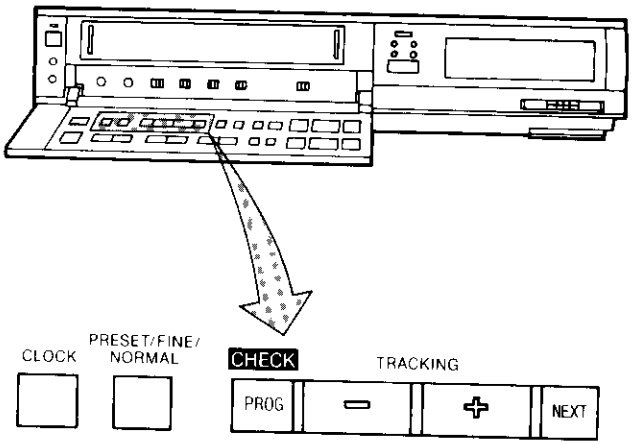


❼ To check, play back a pre-recorded tape and confirm picture quality.

❽ In some cases, further fine tuning is required in order to get optimum colour and sound. Note that the test signal is only a guide.

SETTING THE CLOCK TO THE PRESENT TIME

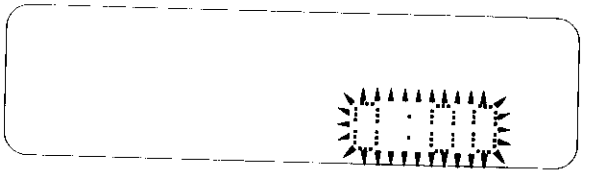
The built-in digital clock employs the 24-hour system.



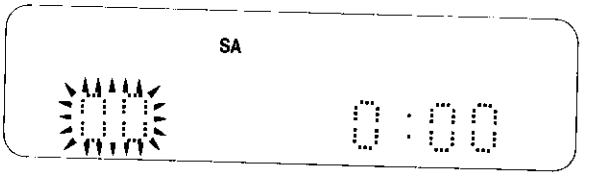
For Example: Set the clock for Sunday, October 10, 1999, 9:10

- Connect the VTR to the mains outlet.
- Press the VTR On/Off Switch to turn the VTR On.

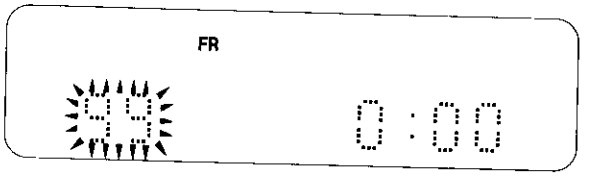
❶ When connecting this VTR to the mains or after a long power failure, the indications flash.



❷ Press the Clock Button to start the date and time setting.

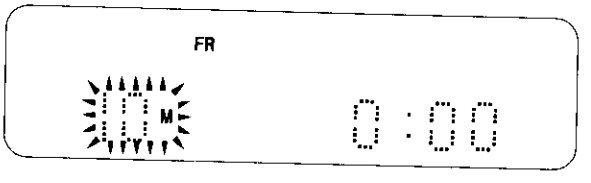


❸ Press the "+" or "−" Button to set the year.



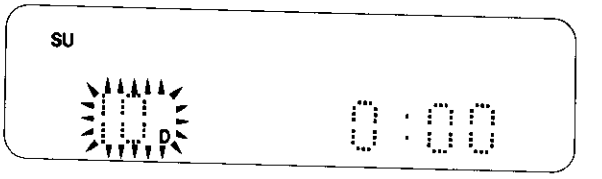
❹ Press the Next Button.

❺ Press the "+" or "−" Button to set the month.



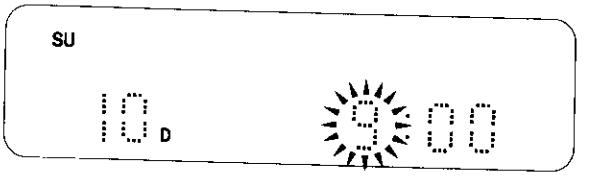
❻ Press the Next Button.

❼ Press the "+" or "−" Button to set the date.



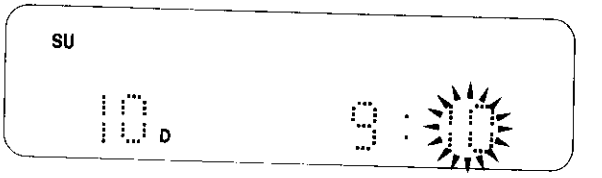
❽ Press the Next Button.

❾ Press the "+" or "−" Button to set the hour.

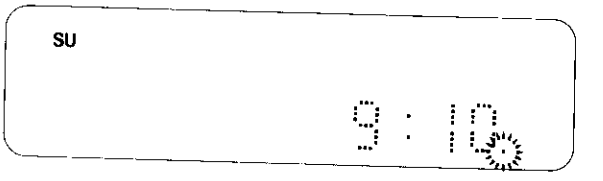


❿ Press the Next Button.

⓫ Press the "+" or "−" Button to set the minute.



⓬ Press the Clock Button when the present time becomes exactly 9:10'00".



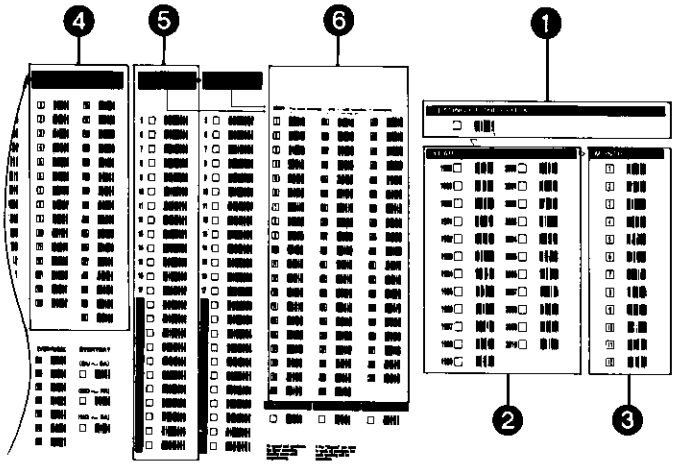
At every push of the Next Button, the flashing indication changes in the following order.

YEAR→MONTH→DATE→HOUR→MINUTE

- In case of a power failure, the timer back-up system maintains the clock operation and timer content for at least 60 minutes. However, depending on the charging time and the memory content, the back-up time may be considerably longer. However, it takes more than 60 minutes for the back-up circuit to become operational, after the VTR is connected to the mains.
- The Timer Record Function should be set to "Off", otherwise the VTR cannot be operated normally. In this case, the Timer Record Indicator "⊡" will flash to warn you.
- During date setting, the corresponding day is simultaneously set.
- The clock/timer of the VTR is programmed with the calendar up to the end of the year 2087.
  The indications 88-99 are for the years 1988–1999.
  The indications 00-87 are for the years 2000–2087.

SETTING THE CLOCK TO THE PRESENT TIME (CONT'D)

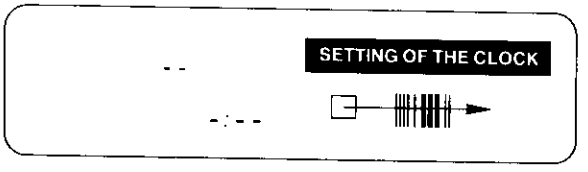
Setting the Clock to the Present Time Using the Bar Codes



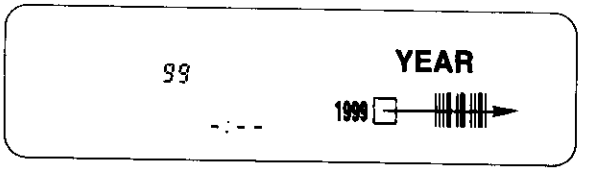
Preparation

- Slide down the Mode Selector Cover on the Remote Controller so that the Bar Code Reader Display can be seen.
- Press the Digital Scanner On/Off Button to turn it "ON".

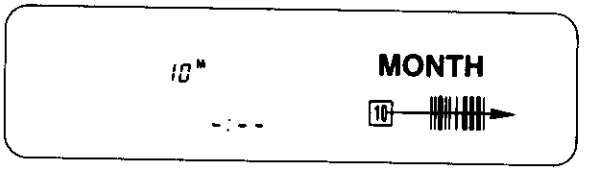
❶ Trace the bar code "SETTING OF THE CLOCK".



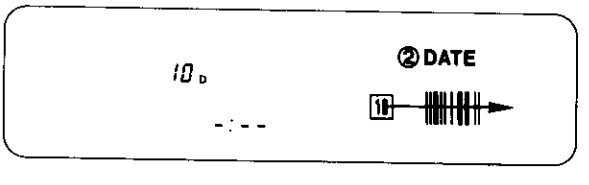
❷ Trace the bar code for the year (YEAR).



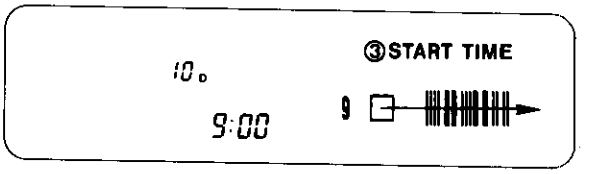
❸ Trace the bar code for the month (MONTH).



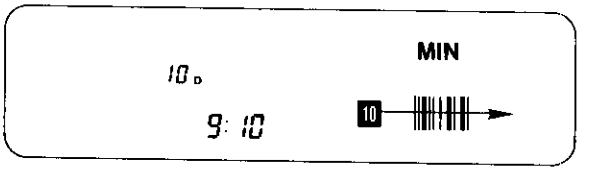
❹ Trace the bar code for the day of the month (DATE).



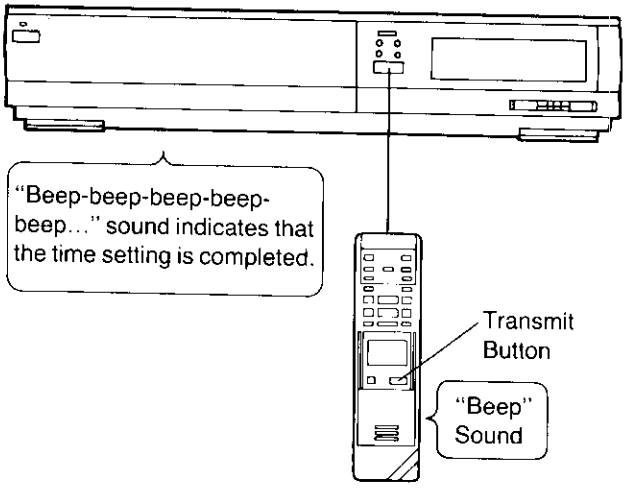
❺ Trace the bar code for the hour (START TIME).



❻ Trace the bar code for the minute (MIN).



❼ Press the Transmit Button (Remote Controller) and then confirm that the time is displayed in the Multi-Function Display of the VTR.

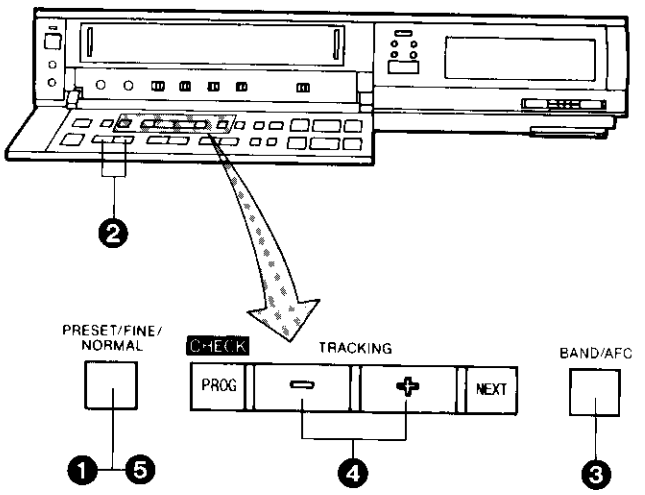


❽ Press the Digital Scanner On/Off Button to turn it "OFF".

- If the transmission was not received correctly, the "Beep-Beep, Beep-Beep" sound from the VTR will warn you. In this case, perform transmission again.
- If the Remote Controller is left with no operation performed for more than 4 minutes, it will automatically switch over to the power-saving standby condition and the lamp in the reading tip goes out. (In this case, bar codes that have already been read (but not yet transmitted to the VTR) will be cancelled.
- The bar codes "SETTING OF THE CLOCK", "YEAR" and "MONTH" are located on page 3 of the Programming Sheet.

SETTING THE TUNER IN THE VTR

The tuner in the VTR makes it possible to receive TV broadcasts and to record these programmes without having to turn on the TV set.



Preparation

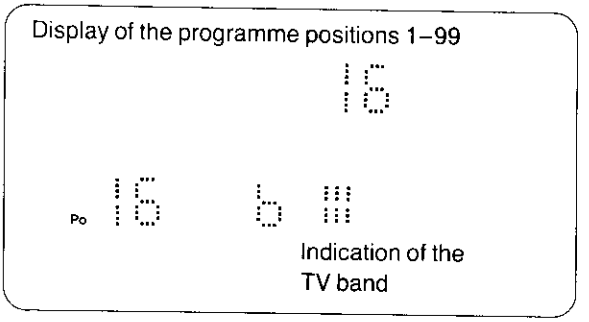
- Turn the TV set on and select the programme position (channel) which you have tuned to the video playback channel.
- Press the VTR On/Off Switch to turn the VTR on.
- Set the Input Signal Selector to "Tuner".
- Press the VTR/TV Selector to "VTR" position.

Tuning Procedure

❶ Press the Preset/Fine/Normal Button on the VTR.
The indication on the Multi-Function Display changes from the clock indication to the position indication.

❷ Press the Channel Up or Down Button to select a programme position (channel) which you want to tune to a TV station.

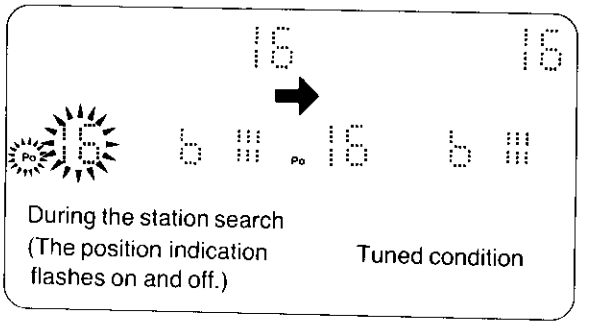
❸ Press the Band/AFC Button to select the "I", "III" or "U" position.



The tuner in the VTR can be preset with up to 99 stations.

VHF		UHF
I	III	U
1–3	4-11	21–69

❹ Press the "+" or "–" Button.

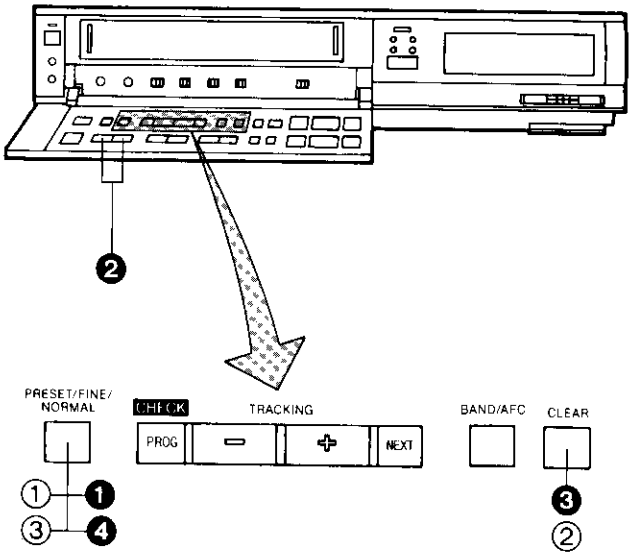


- When the tuning of the station is completed, the indication stops flashing and the tuned station is automatically memorized.
- At every push of the "+" or "–" Button, the station will be tuned automatically.

Repeat steps ❷–❹ for each channel you want to tune to a station.

❺ Press the Preset/Fine/Normal Button twice.
The indication on the Multi-Function Display changes back to the previous indication.

SETTING THE TUNER IN THE VTR (CONT'D)

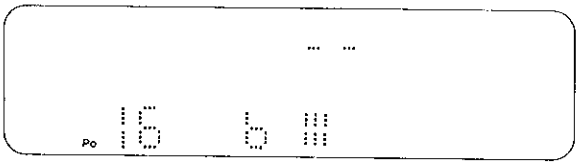


Blanking of Unoccupied Programme Positions

❶ Press the Preset/Fine/Normal Button.

❷ Press the Channel Up or Down Button to select a programme position (channel) which you do not want to tune to a TV station.

❸ Press the Clear Button ("– –" will be displayed in the Programme Position Indication).



- Repeat steps ❷ and ❸ for any programme positions on which no stations are to be tuned. Afterwards, these programme positions will be skipped during Up/Down selection of the programme position.

❹ Press the Preset/Fine/Normal Button twice.

Cancelling the Clear Function (Blanking)

① Press the Preset/Fine/Normal Button.

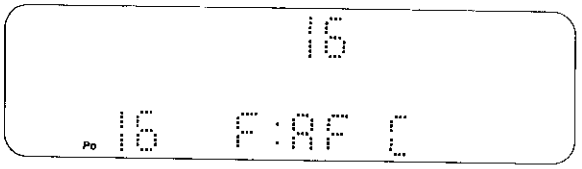
② To cancel the blanking of a programme position, select that programme position on the VTR and then press the Clear Button.

③ Press the Preset/Fine/Normal Button twice.

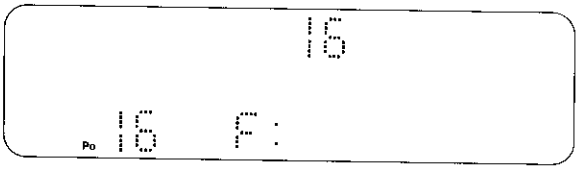
Fine Tuning Procedure

If fine tuning is necessary, for example for a weak station which is close to a strong station:

1. Press the Preset/Fine/Normal Button twice.



2. Press the "+" or "–" Button to obtain the best tuning condition.

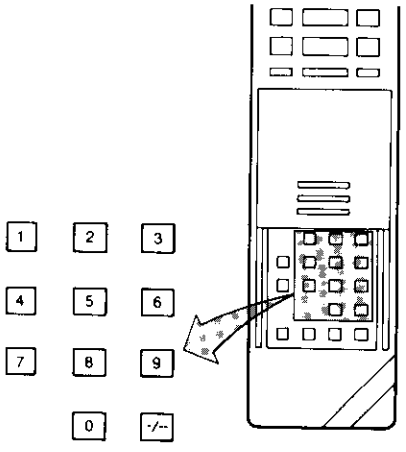


- "AFC" Indicator will not be displayed.
- To return the tuning to its former state, press the Band/AFC Button.

3. Press the Preset/Fine/Normal Button.

How to Select the Programme Position (Channel)

If more than 5 seconds pass between the first, second and third push, the channel will not be changed normally.



select channel	press button
1–9	1 — 9 respective channel
10	-/-- → 1 → 0
20	-/-- → 2 → 0
11–99 for example 32	-/-- → 3 → 2

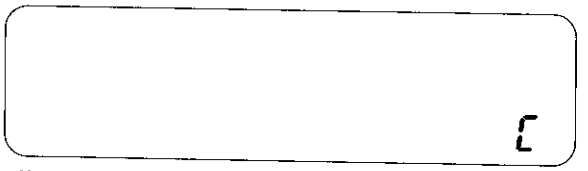
Setting the Tuner in the VTR Using the Digital Scanner

•Use the bar codes on page 47.

Preparations

- Turn the VTR on.
- Press the Digital Scanner On/Off Button on the Remote Controller to turn it on.

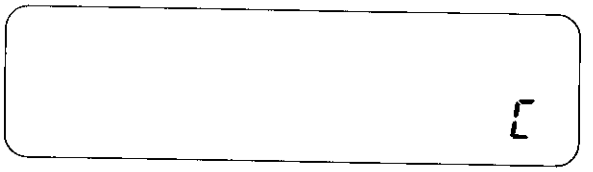
❶ Trace the "PRESET ON" bar code.



- If no operations are performed within more than 4 minutes, the Digital Scanner will automatically turn itself off.

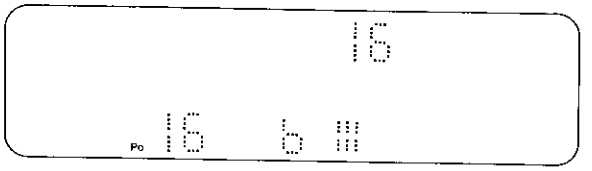
❷ Press the Transmit Button to transmit to the VTR.

❸ Trace the "BAND" bar code.

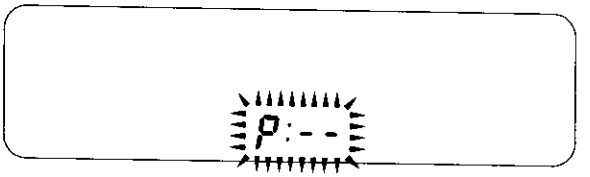


❹ Press the Transmit Button to transmit to the VTR and to select the desired band.
At every push of the button, the indication will change as follows:

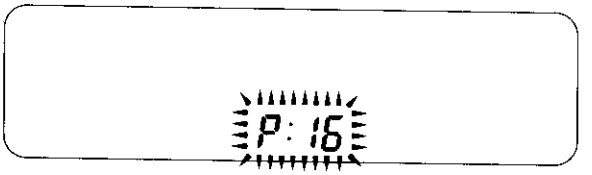
I→III→U→I→III. . . . . .



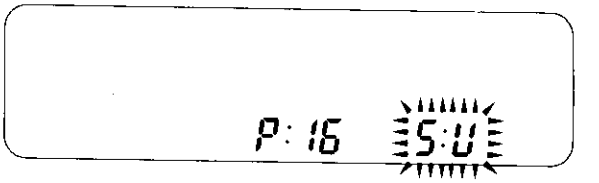
❺ Trace the "PROGRAMME POSITION" bar code.



❻ Trace the number bar code for the programme position (channel) that you want to tune to a station.

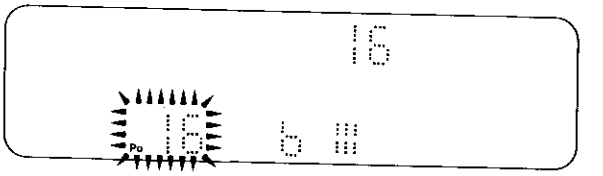


❼ Trace the "SEARCH UP" or "SEARCH DOWN" bar code.

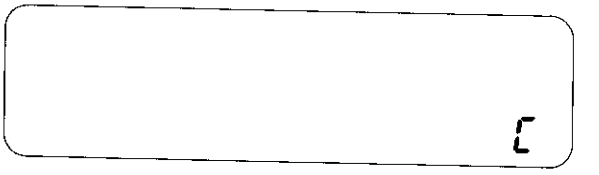


❽ Press the Transmit Button to transmit to the VTR.

- The channel will be tuned automatically.
- At every push of the button, the next channel will be tuned.



❾ Trace the "PRESET OFF" bar code.



❿ Press the Transmit Button.

- If you make a mistake in the above operation steps, trace the "CANCEL" bar code and start again from step ❺.
- When setting more than 2 channels, repeat the steps ❸–❽ above.

SETTING THE TUNER IN THE VTR (CONT'D)

Blanking of Unoccupied Programme Positions

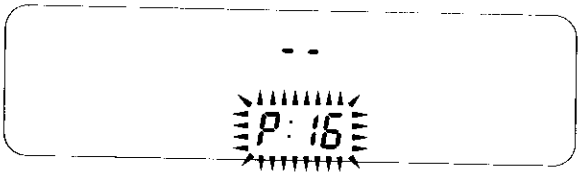
❶ Trace the "PRESET ON" bar code.

❷ Press the Transmit Button to transmit to the VTR.

❸ Trace the "PROGRAMME POSITION" bar code.

❹ Trace the number bar code for the programme position that you want to blank so that it will be skipped during Up/Down selection of the programme positions.

❺ Trace the "CLEAR ON" bar code.



❻ Press the Transmit Button to transmit to the VTR.

❼ Trace the "PRESET OFF" bar code.

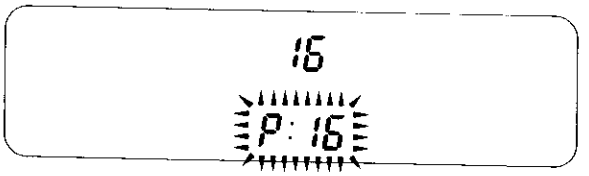
❽ Press the Transmit Button. wice.

Cancelling the Clear Function (Blanking)

Perform the operation steps ❶–❸ above.

❹ Trace the bar code for the programme position that has been blanked until now.

❺ Trace the "CLEAR OFF" bar code.



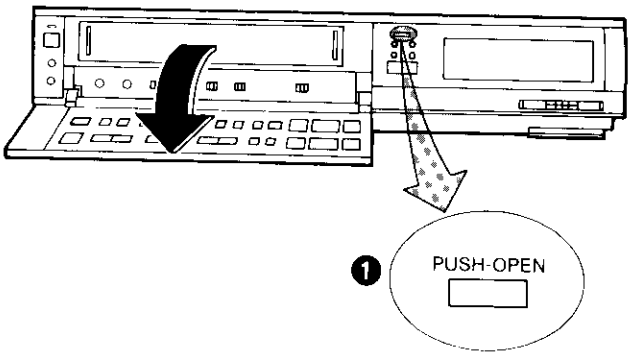
Perform the operation steps ❻–❽ above.

- To programme a timer recording or the set the clock time immediately after setting the tuner in the VTR by using the Remote Controller, first press the Digital Scanner On/Off Button on the Remote Controller to turn it off, before starting the above operation.

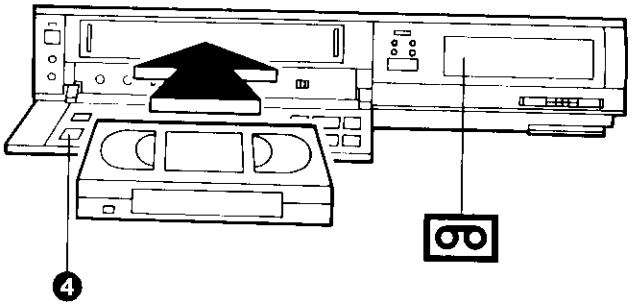
THE VIDEO CASSETTE

Inserting a Video Cassette (Auto Operation)

❶ Press the Control Panel Open Button.



❷ Insert the video cassette as shown. The VTR will be turned on automatically and the cassette will be automatically drawn into the VTR.



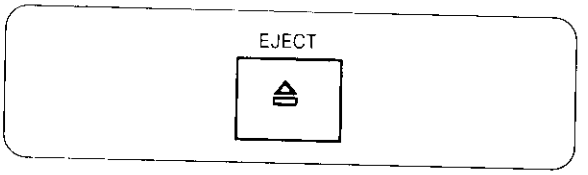
❸ When a video cassette is inserted, the "📼" mark will appear.

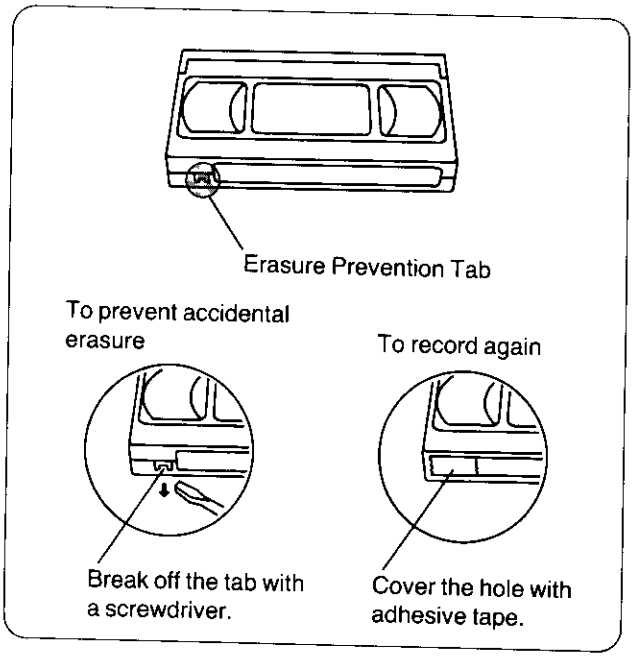
Notes:

- When a video cassette with broken out erasure prevention tab (for example a pre-recorded tape) is inserted, play-back will start immediately.
- Use VHS video cassette tapes only.
- We recommend the "Panasonic Hi-Fi" high grade video cassette tapes for improved picture and sound quality.

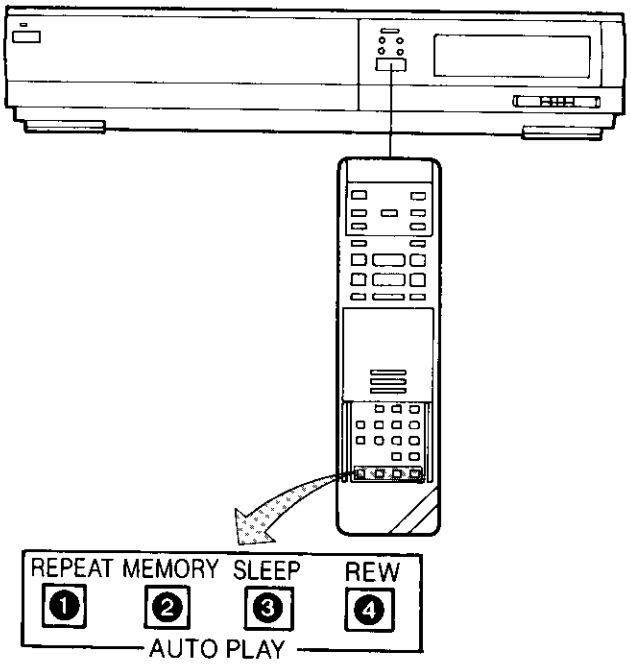
Removing a Video Cassette

❹ Press the Eject Button (⏏).





AUTO OPERATION



Convenient Automatic Playback Functions

The following convenient automatic playback operations can be activated simply by pressing a single button on the Remote Controller.

❶ Repeat Playback
When the Repeat Button is pessed, the "R" Mark in the Multi-Function Display on the VTR will light up and playback will start. When the tape reaches the end of its recorded portion, it will automatically be rewound to the beginning and playback will then start again. This process will be performed repeatedly.

❷ Memory Playback
When the Memory Button is pressed while the VTR is in the Stop mode, and the tape is then fast-forwarded or rewound, it will be stopped at the tape counter position "0:00.00" and playback will then start from that position.

❸ Sleep Playback
When the Sleep Button is pressed, playback will start. As soon as the tape reaches its end, it will automatically be rewound to the beginning, and the VTR will then turn itself off.

❹ Rewind Playback
When the REW Button is pressed, the tape will be rewound. As soon as the beginning of the tape is reached, playback will start automatically.

Auto Operation

Auto VTR On
When a cassette is inserted, the VTR turns itself on automatically.

Auto Play
When inserting a video cassette which has the erasure prevention tab removed playback will start automatically.

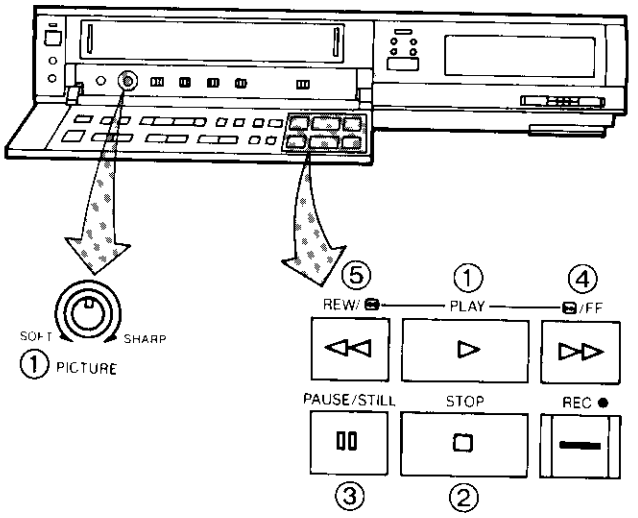
Auto Rewind
When the tape reaches its end during recording (except OTR and timer recording) or playback, it will automatically be rewound to the beginning.

VTR-Off Eject
When the VTR is off, the inserted cassette can be ejected simply by pressing the Eject Button, and VTR will automatically turn itself off again.

Rewind Auto Shut Off
When pressing the VTR On/Off Button during rewinding, the tape will be rewound to the beginning of the tape and the VTR will turn itself off.

Auto Timer Recording Standby
When the Timer Record Button is pressed during rewinding, the VTR will switch over to the timer recording standby mode after the beginning of the tape is reached.

PLAYBACK

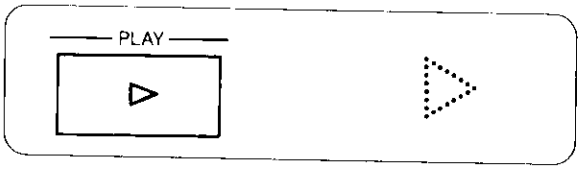


Preparation

- Make sure that the Timer Record Function is set to "Off".
- Insert a recorded video cassette. When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Turn the TV set on and select the video playback channel.
- Set the Noise Filter/Edit Selector to "Off".

① Normal Playback

Press the Play Button (▶).



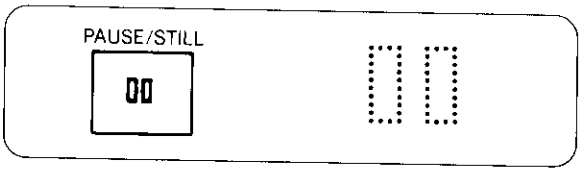
- Control the picture as you like with the Picture Sharpness Control (sharp or soft contours).

② To Finish Playback

Press the Stop Button (■) to stop the playback.

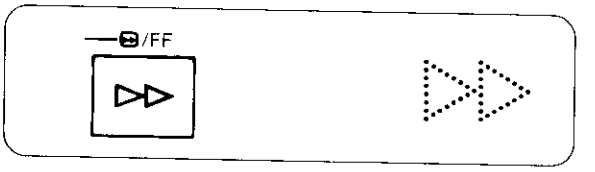
③ Super Still Playback

When the VTR is in the playback mode, press the Pause/Still Button (❚❚) to view a still-picture. To continue the normal playback, press this button again.



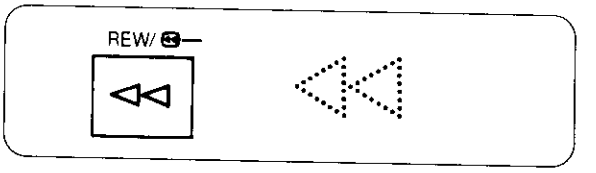
④ Cue Playback

When the Fast Forward ▶▶/Cue Button is kept pressed while the VTR is in the playback mode, the tape will be played back at high speed in forward direction.



⑤ Review Playback

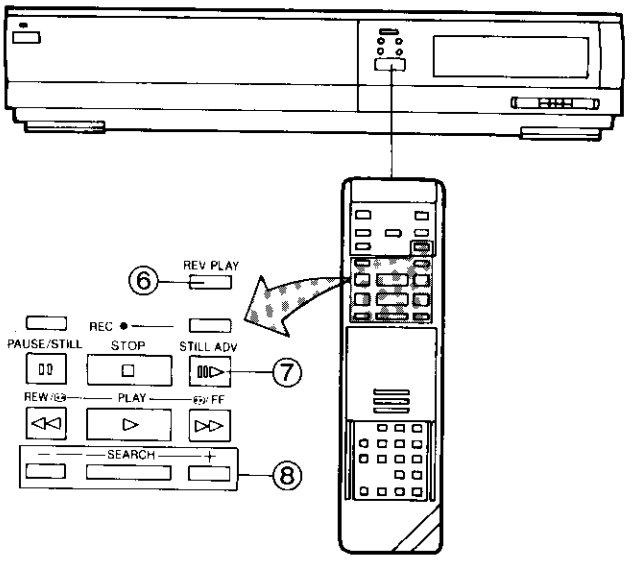
When the Rewind ◀◀/Review Button is kept pressed while the VTR is in the playback mode, the tape will be played back at high speed in reverse direction.



To make possible Cue or Review playback without having to keep the respective button pressed, first press the Memory/Repeat/Search Button (Remote Controller) so that the Search Indicator "S" appears in the Multi-Function Display, and then press the Fast Forward ▶▶/Cue Button or the Rewind ◀◀/Review Button.
To switch the VTR back to normal playback, press the Play Button (▶).

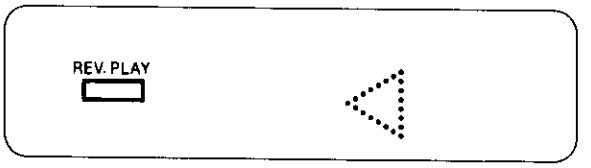
- When Cue or Review playback continues for more than 10 minutes, the VTR will automatically switch back to the normal playback mode.

Using the Remote Controller



⑥ Reverse Playback

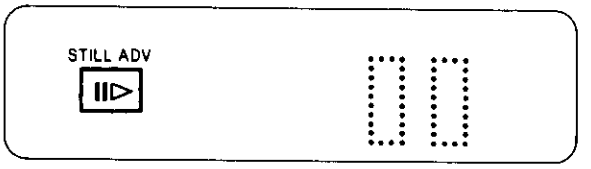
When the VTR is in the playback mode, switching over to Reverse Playback is possible by pressing the Reverse Playback Button.



- During Reverse Playback, noise bars may appear in the upper centre and lower centre parts of the picture.

⑦ Super Still Advance Playback

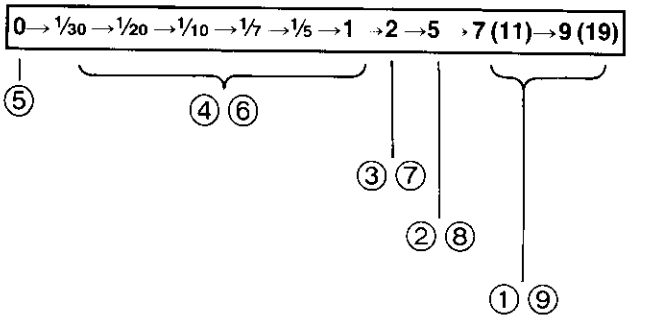
Press the Still Advance Button (II▶) while the VTR is in the still playback mode. Each time you press this button, the still-picture will advance one single field.



⑧ Search Function

Press the Search Button to activate the Search Function, and the VTR changes over to the Still Playback mode. When the "+" Button is now pressed once, the tape will be played back at 1/30th of normal playback speed. At every further press of the "+" Button, the playback speed will be increased step by step as shown.

SP (LP) mode



Playback Mode	Indication
① Review Playback	◁◁
② Double Speed Reverse Playback	◁ ×2
③ Reverse Playback	◁
④ Reverse Slow Motion Playback	◁‖
⑤ Still Playback	‖
⑥ Slow Motion Playback	‖▷
⑦ Normal Playback	▷
⑧ Double Speed Playback	▷ ×2
⑨ Cue Playback	▷▷

- By pressing the "−" Button, the playback speed can be changed in the reverse direction (Still Playback-Reverse Slow Motion Playback-Reverse Playback-Double Speed Reverse Playback-Review Playback).
- The figures indicate fractions and multiples of the normal playback speed.
- If Cue or Review playback continues for more than 10 minutes, the VTR will automatically switch over to the normal playback mode. If the Still and Slow playback continues for more than 5 minutes, the VTR will automatically switch over to the stop mode. If the VTR is left in the reverse playback or double speed reverse playback mode for more than 10 minutes, it will automatically switch over to the stop mode.
- When pressing the Search Button again, the indications "R", "S" and "RS" in the Multi-Function Display will all be off.
- To return to the normal playback mode, press the Play Button.

The following may happen except during Slow and Normal playback in forward direction.

Still and Slow Playback

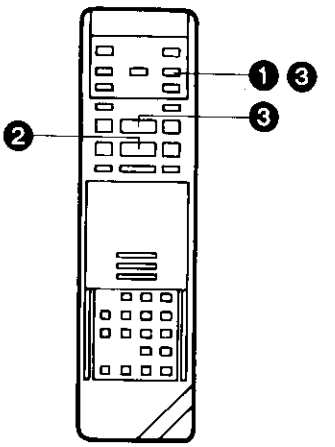
- Depending on the TV set used, it may not be possible to obtain a proper picture during Still and Slow playback.
- If the TV set is equipped with an automatic vertical hold control, the picture may shake vertically. In this case, set the TV set's vertical hold (AUTO/MANUAL) selector to the "MANUAL" position, and adjust its vertical hold control.
- When changing over from Review Search to Still playback, the picture will reverse by a few frames approx. 2 seconds later.

Slow Tracking Control

- When noise bars appear during Still, Still Advance or Slow playback, switch over to slow playback and adjust with the Tracking "+" or "−" Button to reduce the noise bars.
- It may not be possible to eliminate the noise bars completely.

- The sound will be played back only during normal playback.
- If you leave the VTR in the still playback mode for more than 5 minutes, the VTR will automatically switch over to the Stop mode to protect the tape and the video heads.
- Immediately after starting Cue or Review playback, the picture may be distorted. Also, when these modes are cancelled, some momentary picture distortion may occur. However, this is not due to any malfunction.
- Noise which takes the form of horizontal bars appears on the TV in the Cue and Review playback modes. This is not an indication of a malfunction.
- The top of the picture may become distorted in the Cue, Review or Super Still (LP) mode. This is not an indication of a malfunction.
- When the picture rolls vertically in the Cue or Review mode, adjust the vertical hold control on the TV set.
- In "LP" mode only:
  1. During any playback mode other than normal playback, the picture may have some noise bars, the colour may be unstable, or a black and white picture may appear.
  2. When playing back a tape which was recorded on another VTR, it may be necessary to adjust the Tracking Control. In some cases the picture quality may still be inferior. This is due to limitation of format.

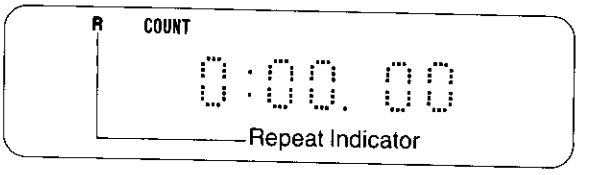
Repeat Playback



Repeat Playback between the Beginning of the Tape and the End of the Recorded Part

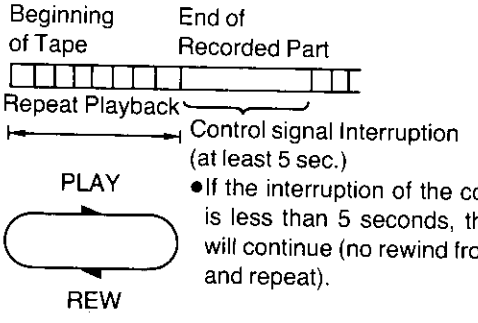
To play back the tape repeatedly between the beginning of the tape and a place where the video signal is interrupted for at least 5 seconds (see diagram below).

❶ Press the Memory/Repeat/Search Button so that the Repeat Indicator "R" lights up.



❷ Press the Play Button.

- The playback will continue until the VTR detects the end of the video recording (no control signal for more than 5 seconds). At this point, the tape will be rewound to the beginning and the playback will be repeated.

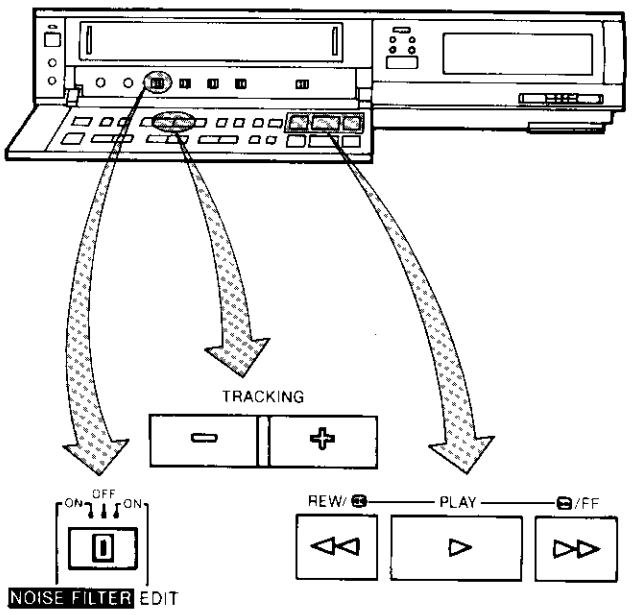


- If the interruption of the control signal is less than 5 seconds, the playback will continue (no rewind from this point and repeat).

❸ To stop the Repeat playback, press either the Stop Button or the Memory/Repeat/Search Button (the Repeat Indicator "R" will go out.)

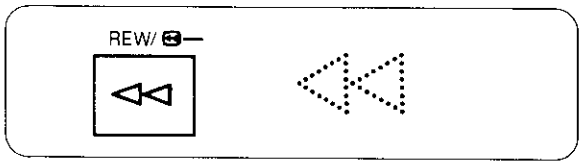
Note:

- If a short tape portion is played back many times, the tape may become damaged at that part.

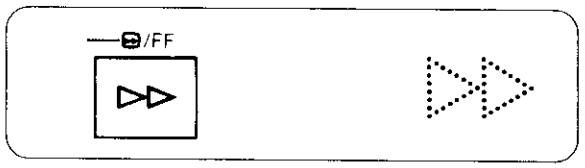


Rewind and Fast Forward

Press the Rewind ◀◀/Review ⏪ Button to rewind the tape.

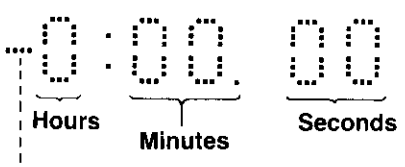


Press the Fast Forward ▶▶/Cue ⏩ Button to wind the tape forward rapidly.



Lap Timer Counter

It shows the elapsed recording or playback time.



The "–" indication will appear when the tape is rewound further than the tape counter position "0:00.00".

- If the figures on the Tape Counter do not change during Fast Forward, Rewind or any of the Playback functions, this means that nothing is recorded on that tape section.
- The Tape Counter is automatically reset to "0:00.00" when the video cassette is inserted.

Digital Tracking

When playback is started after inserting a cassette, and the VTR is turned on, the Digital Tracking function will be activated automatically, the Digital Tracking Indicator will flash for several seconds, and the tracking will be adjusted automatically (after the adjustment, the Digital Tracking Indicator will remain lit).

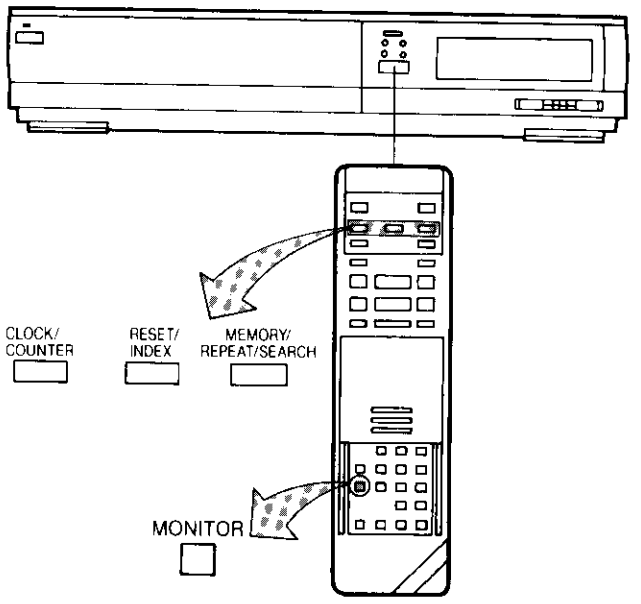
- During playback, the Digital Tracking function will be activated whenever the playback changes over from an unrecorded part to a recorded part, provided the recorded part is longer than 4 seconds.

- When the picture is distorted by noise bars, press the Tracking "+" or "–" Button to select manual tracking and adjust with these two buttons. The Digital Tracking Indicator goes out. To change back to Digital Tracking, press the Tracking "+" and "–" Buttons simultaneously.

Noise Filter/Edit Selector

EDIT ON:	For editing operations such as dubbing.
OFF:	For ordinary use of the VTR.
NOISE FILTER ON:	For playback of tapes with inferior picture quality caused, for example, by repeated dubbing.

- When the Noise Filter/Edit Selector is set to "EDIT ON", the picture sharpness cannot be adjusted with the Picture Sharpness Control.



Memory/Repeat/Search Button

Repeatedly pressing this button will change the indication in the following order: "M" (Memory)→"R" (Repeat)→"S" (Search)→"RS" (Index Repeat)→all indications are off→ "M"...

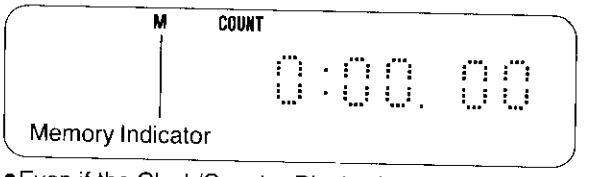
Clock/Counter Selector

By pressing this button when the VTR On/Off Switch is set to "On", it is possible to change over the display mode of the Clock/Counter Display in the Multi-Function Display from "Clock" to "Counter" Display and vice versa.

- Even if the selector button is set for "Counter" the display will automatically changes over to "Clock" Display in all the following cases; When you set the VTR On/Off Switch to "Off", adjust the clock to present time, programme a timer recording, check a timer recording programme or programme and perform an OTR.
- When the Clock/Counter Display shows the time, the counter cannot be reset and the Memory and Search Function cannot be activated ("M", "R", "S" and "RS" indication does not light up).

Memory Function

The Memory function makes it simple and fast to find a certain position on the tape later again, simply by pressing the Reset Button at that position to set the tape counter to "0:00.00" and by pressing the Memory/Repeat/Search Button. During Rewind or Fast Forward, the tape will then stop at approximately the desired position.



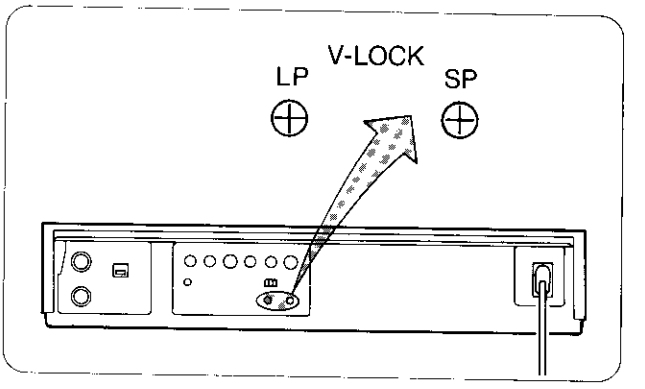
- Even if the Clock/Counter Display is switched over to "Clock" Display after pressing the Memory/Repeat/ Search Button, the Memory function will stop the tape at the desired position.

Monitoring Function

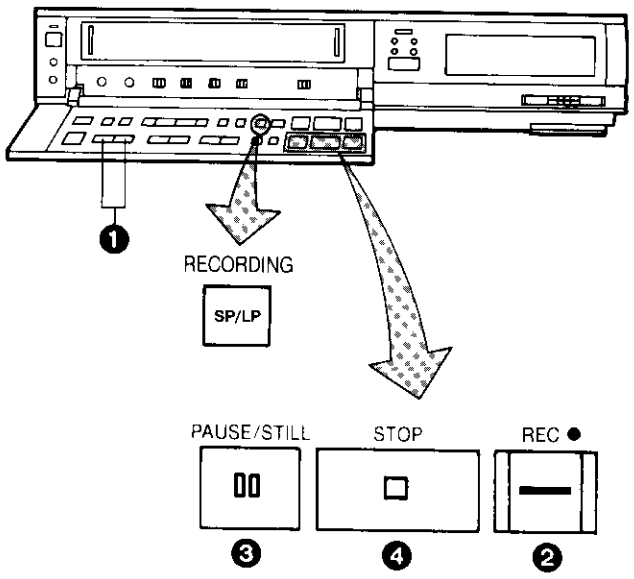
When the Monitor Button is kept pressed during playback (except Cue or Review), the broadcast picture of the selected programme position (channel) or input signal through Audio/Video input socket will be displayed. When this button is released, the picture will change back to the playback picture of the tape.

Vertical Lock Adjustment

If vertical jitter occurs during Still playback, adjust the V-Lock Control (on the rear of the VTR) for the corresponding recording speed (LP or SP) with the screw driver. A one-time adjustment should be all that is necessary.



RECORDING FROM A TV BROADCAST SIGNAL



Preparation

- Make sure that the Timer Record Function is set to "Off".
- Reset the Tape Counter to "0:00.00".
- Set the Input Signal Selector to "Tuner".
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.

Tape Speed Selector (SP/LP)

For recording, either of two tape speeds can be selected. During playback, the VTR will automatically select the correct speed.

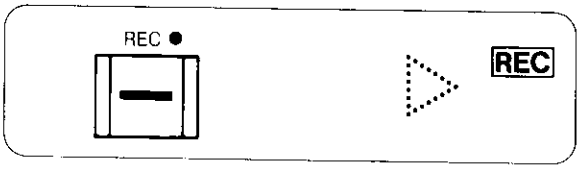
- SP Mode: For better picture quality.
- LP Mode: For longer recording time.

It is not recommended to change from the SP to the LP mode or vice versa in the middle of recording. Even if the switching is done while the VTR is in the pause mode, picture distortion will occur at the switching point during playback.

Note:
The picture quality in the LP mode is not as good as that in the SP mode.

❶ Select on the VTR, the programme position (channel) to be recorded. In order to confirm proper reception, turn on the TV set and select the video playback channel.

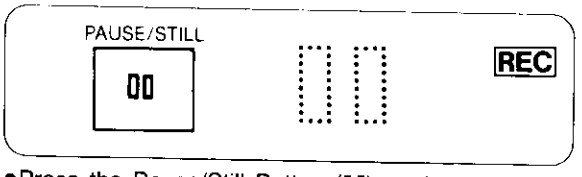
❷ Press the Record Button (●).



- If a tape with broken out erasure prevention tab is inserted, the VTR will sound a warning to let you know that the recording cannot be made.
- During recording, the programme position (channel) on the VTR cannot be changed.
- To start a recording with the Remote Controller, press the two Record Buttons on the Remote Controller simultaneously.

If You Wish to Avoid Recording Unwanted Material

❸ Press the Pause/Still Button (❚❚) to stop the tape temporarily.



- Press the Pause/Still Button (❚❚) again to continue the recording.
- If you leave the VTR in the pause mode for more than 5 minutes, the VTR will automatically switch over to the stop mode to protect the tape and the video heads.

To Finish the Recording

❹ Press the Stop Button (■).

Recording One TV Programme While Watching Another

① Record (following steps ❶ and ❷).

② Press the VTR/TV Selector to "TV" position.

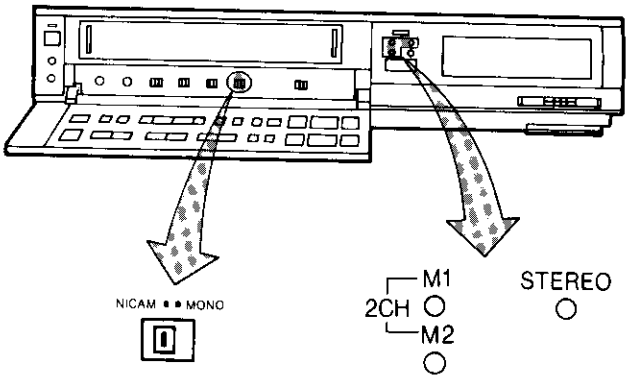
③ Select the desired programme position (channel) on your TV set.

Adjustment of the Audio Recording Level

Setting the Audio Rec Level Controls to the centre "5" position (click stop) assures satisfactory audio recording results in most cases. When using the VTR as a hi-fi audio recorder or when producing your own video tapes, it may be desirable to adjust the Audio Rec Level Controls to some other position.
(It is recommended to adjust so that peaks in the audio level reach about +5 dB.)

NICAM SYSTEM

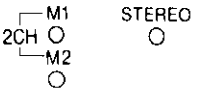
The NICAM system is a ground-based TV service for digital stereo sound. To receive NICAM broadcasts, the NV-F65 incorporates a NICAM decoder.
When a stereo, dual-soundtrack or monaural NICAM programme is being received, the indicators light up to inform you of the type of broadcasts. The NICAM programmes are always accompanied by standard broadcasts and you can select the desired soundtrack for recording with a single switch. NICAM soundtracks can only be recorded on the hi-fi audio track.



Preparation

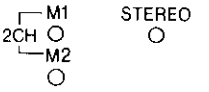
- Set the Input Signal Selector to "Tuner".

Recording of a NICAM stereo programme



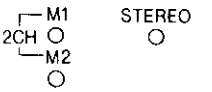
The STEREO Indicator is lit while a NICAM stereo programme is being received. To record such a programme, set the Nicam/Mono Switch to "Nicam".
NICAM stereo sound will be recorded on the hi-fi track and the regular (standard) sound will be recorded on the normal audio track.

Recording of a NICAM dual-sound track programme



Both the M1 and M2 Indicators are lit while a NICAM dual-soundtrack programme is being received. To record such a programme, set the Nicam/Mono Switch to "Nicam".
The M1 and M2 sounds will be recorded on the hi-fi track: M1 on the left channel and M2 on the right channel.

Recording of a NICAM monaural programme



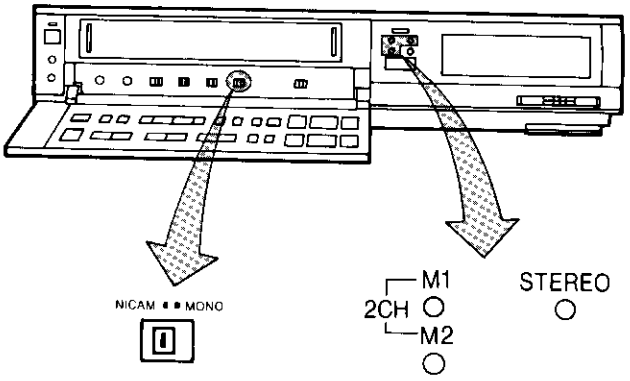
Only the M1 Indicator is lit while a NICAM monaural programme is being received. To record such a programme, set the Nicam/Mono Switch to "Nicam".
The same monaural sound will be recorded on both channels of the hi-fi track.

Recording options according to the type of broadcasts and the setting of the Nicam/Mono Switch

Type of broadcast \ Nicam/Mono switch position \ Audio track		Normal audio track (mono)	Hi-fi audio track	
			L	R
Regular broadcast (standard audio)	Either position	Standard audio	Standard audio	Standard audio
Regular+NICAM stereo (L, R)	NICAM	Standard audio	Stereo L	Stereo R
	MONO	Standard audio	Standard audio	Standard audio
Regular+NICAM dual mono (M1, M2)	NICAM	Standard audio	M1	M2
	MONO	Standard audio	Standard audio	Standard audio
Regular+NICAM mono	NICAM	Standard audio	M1	M1
	MONO	Standard audio	Standard audio	Standard audio

Note: NICAM audio programmes cannot be recorded on the normal audio track.

NICAM SYSTEM (CONT'D)



Nicam/Mono Switch

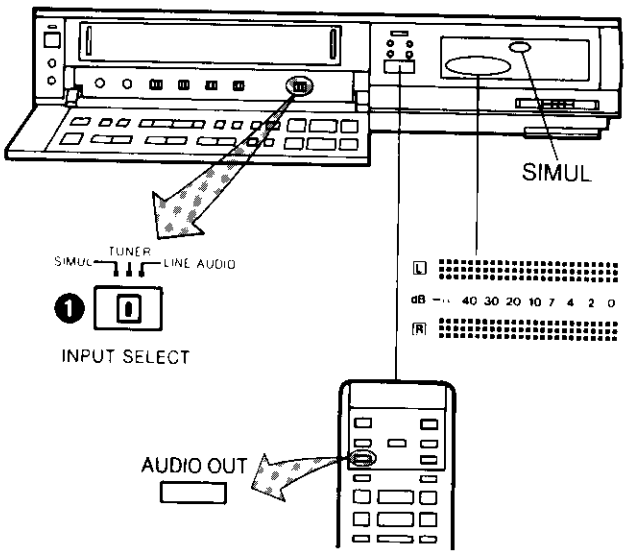
- When a NICAM programme is being received, this switch can be used to select the desired type of sound to be recorded on the hi-fi audio track. This switch functions only when the Input Signal Selector is set to "TUNER". To record a NICAM programme, this switch must be set to "NICAM".

Note:

If NICAM broadcast signals are weak, the sound quality deteriorates remarkably. When the signals are extremely weak, the Audio Recording Mode Indicator goes off and the FM sound is recorded on the hi-fi track irrespective of the setting of this switch.

- If the Nicam/Mono Switch is intentionally set to "MONO" even though a NICAM programme is being received, the indicator(s) remain lit.
- To record the regular sound (ordinary normal sound) on the FM audio tracks when a NICAM programme is received, set the Nicam/Mono Switch to "Mono".
- When a NICAM programme is received and the sound is distorted due to inferior reception conditions, set the Nicam/Mono Switch to "Mono".

HI-FI AUDIO SYSTEM



Preparation

- Connect your VTR to the Stereo Amplifier and FM Stereo Tuner as described on page 27.
- Tune the FM Stereo Tuner to the desired station.

Recording of Simulcast Sound

❶ Set the Input Signal Selector to "Simul".
The "Simul" indicator lights up.
- The operation procedure is the same as for normal recording; see "Recording from a TV broadcast signal" on page 24.

While this switch is in the "Simul" position, the sound portion of the TV broadcast signal will be recorded only on the "normal" sound track. And the stereo sound signal received via the FM tuner will be recorded on the hi-fi sound tracks.

Playback (or Monitoring during Recording)

Press the Audio Output Mode Selector (Remote Controller) to select the desired sound mode.
At the every push of this button, the audio playback mode changes as follows:

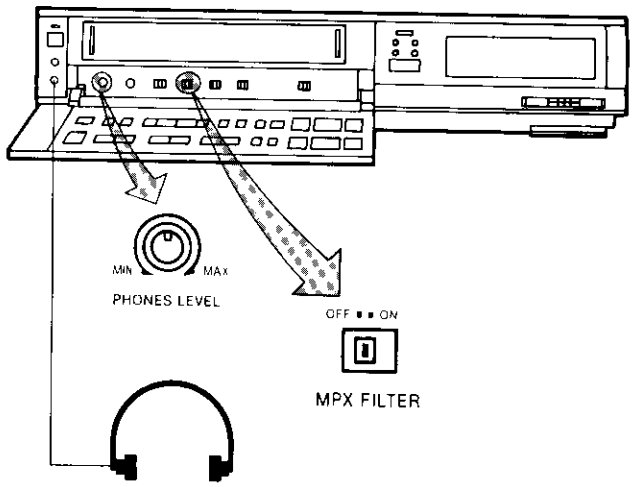
→Stereo→Left→Right→Normal audio track→

and the Left and Right Indicators show which sound mode is selected in the following way.

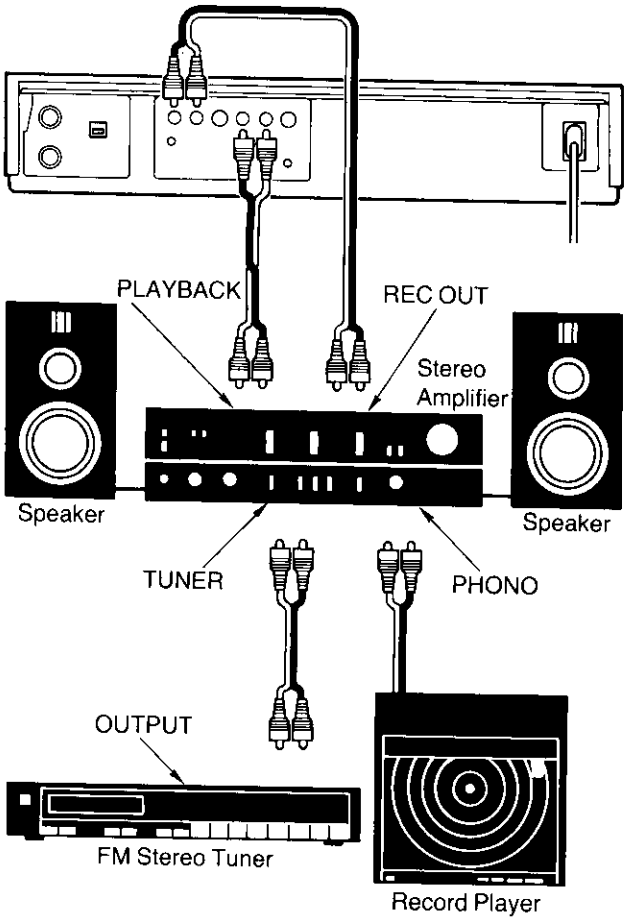
Stereo: Both the Left and Right Indicators are lit.
Left: The Left Indicator is lit.
Right: The Right Indicator is lit.
Normal: Both the Left and Right Indicators are not lit.

- If a video cassette recorded on this VTR with stereo or bilingual sound is played back on a conventional VHS video recorder, the sound will be reproduced from the normal audio track (in mono).

USING THE VTR AS A HI-FI AUDIO RECORDER



Headphones
(Optional)



Preparation

- Connect the VTR to the hi-fi audio system. (Example of a connection diagram is shown).
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Switch on the hi-fi audio system and select an audio source.
- For "Adjustment of the Audio Recording Level", see page 24.
- Set the Tape Speed Selector to "SP" or "LP".

Headphones Level Control

When using headphones, the volume level can be adjusted with the Headphones Level Control.

Hi-Fi Audio Recording

Note: Selection of an audio track is not necessary for recording.

1. Set the Input Signal Selector to "Line/Audio".
2. To start the recording, press the Record Button (●).
3. To achieve smooth transitions between adjoining recordings, see notes on page 40.

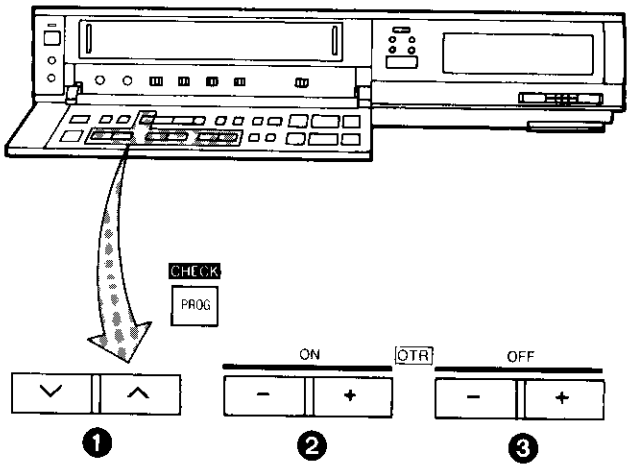
Hi-Fi Audio Playback

- Press (for playback of both mono and stereo recordings) the "Audio Output Mode Selector Button" (Remote Controller) repeatedly so that the "Left" and "Right" Audio Playback mode Indicator light up.
- To start the playback, press the Play Button (▶).

- If the sound is impaired by high frequency distortion when recording from an FM tuner, set the MPX Filter switch to "On". If there is no distortion when recording from an FM tuner, and for all other recordings, set this switch to "Off".

SUPER OTR FUNCTION (ONE-TOUCH TIMER RECORDING)

This convenient function makes it possible to easily programme the VTR for recording of TV programmes with immediate start or with start within 24 hours by precisely setting the starting time and ending time to the desired minute, and the VTR will automatically turn itself off when the recording ends.



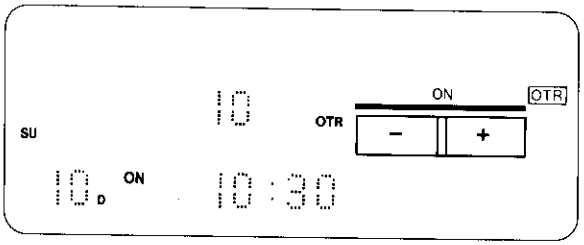
Preparation

- Make sure that the clock shows the present time correctly.
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Set the Input Signal Selector to "Tuner".
- Adjust the audio recording level as described on page 24.
- Set the Tape Speed Selector to "SP" or "LP".

It is possible to programme an OTR recording for a TV programme which will start immediately or within the next 24 hours.
(For example, OTR recording of a TV programme broadcast from 10:30 to 11:00.)

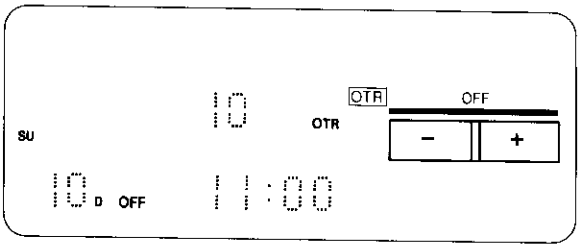
❶ Select the programme position (channel) to be recorded.

❷ Press the OTR On "+" or "−" Button to set the OTR starting time to 10:30.



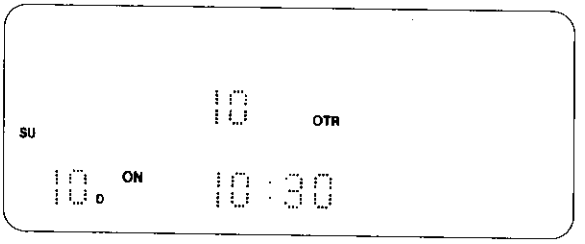
- The "OTR" indicator will be displayed.
- If a tape with broken out erasure prevention tab is inserted, the VTR will sound a warning to let you know that the recording cannot be made.

❸ Press the OTR Off "+"or "−" Button to set the OTR ending time to 11:00.

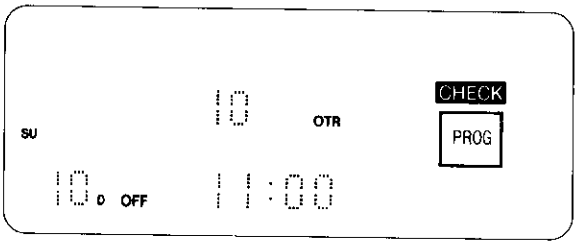


- When quickly and repeatedly pressing the OTR On "+" or "−" Button or the OTR Off "+" or "−" Button, the corresponding time indication changes in 1-minute steps. When it is kept pressed, the indication changes in 10-minute steps.
- After setting the OTR starting time in step ❷, the OTR Off "+" or "−" Button must be pressed within 8 seconds to select the OTR ending time, otherwise the selected starting time will be cancelled.

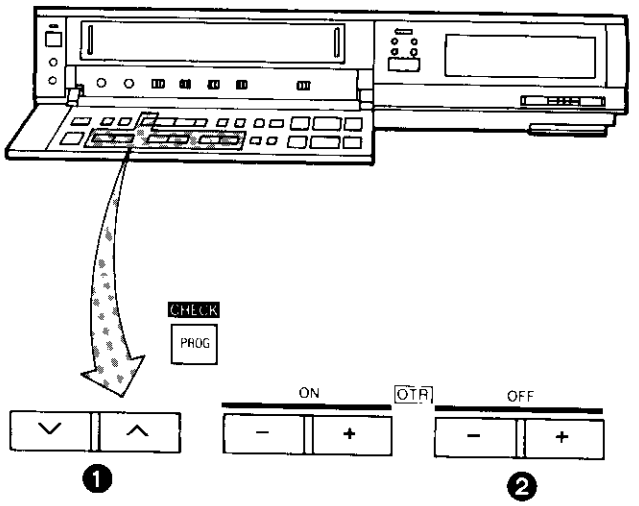
After 4 seconds, the display will automatically change back to the starting time indication.



To confirm the OTR ending time, press the Check/Programme Button once. When this button is pressed twice, the display will change to the clock indication mode.

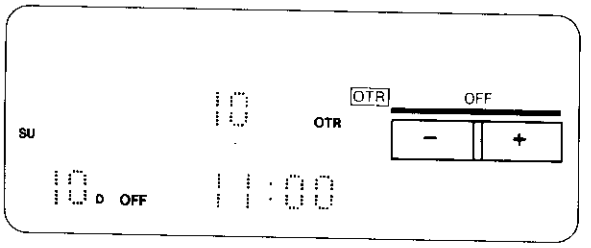


- The VTR will automatically switch off, when the OTR is completed. To turn the VTR on again, press the VTR On/Off Switch.



OTR Function with Immediate Start

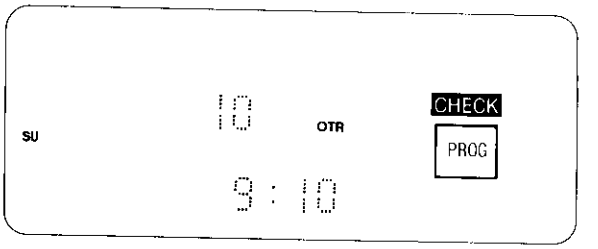
1. Select the programme position (channel) to be recorded.
2. Press the OTR Off "+" or "−" Button to set the OTR ending time to 11:00.



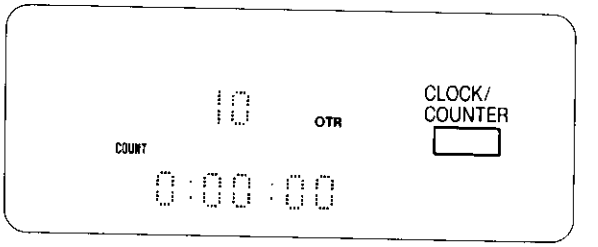
- The "OTR" indicator will be displayed.
- If a tape with broken out erasure prevention tab is inserted, the VTR will sound a warning to let you know that the recording cannot be made.

- The VTR will automatically switch off, when the OTR is completed. To turn the VTR on again, press the VTR On/Off Switch.

When the Check/Programme Button is pressed once, the present time will be displayed.



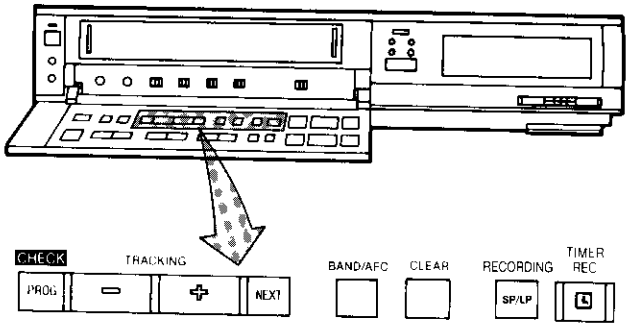
When the Clock/Counter Selector Button (Remote Controller) is pressed during OTR recording, the display will change over to the counter mode.



- When the tape reaches its end during an OTR the VTR will turn itself off.
- Make sure that the OTR Function (One-Touch Timer Recording) does not overlap a programmed timer recording. An OTR always takes precedence over a timer recording.
- It is possible to change the OTR starting time or the ending time before the recording starts.
- It is possible to perform any VTR operation (except timer recording) until the recording starts.
- It is possible to change the OTR ending time even during the recording.
- To interrupt an OTR, press the VTR On/Off Switch to turn the VTR off.

TIMER RECORDING

The programming of timer recordings is possible both on the VTR itself and via the Remote Control Unit.
Programming of as many as 8 timer recording is possible up to one month in advance.

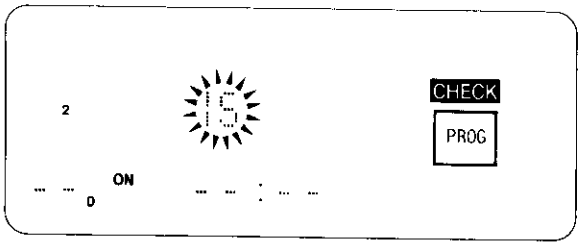


Preparation

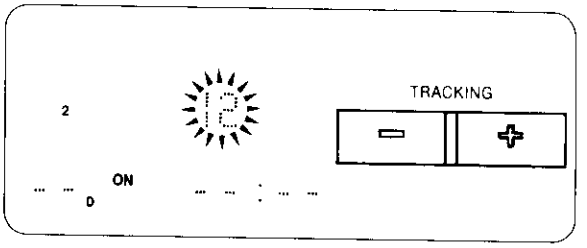
- Make sure that the clock shows the present time correctly.
- Make sure that the Timer Record Function is set to "Off".
- Set the Input Signal Selector to "Tuner".
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Adjust the audio recording level as described on page 24.

For Example:
Programming a timer recording for a TV programme that will be broadcast on Wednesday, October 27, from 10:30 to 11:45, on programme position (channel) 12, on timer programme number 2. (Present date=October 10, 1999)

❶ Press the Check/Programme Button to select the next unoccupied timer programme number.
- Press the Tape Speed Selector Button until the Indicator of the desired tape speed ("SP" or "LP") is lit in the Multi-Function Display.

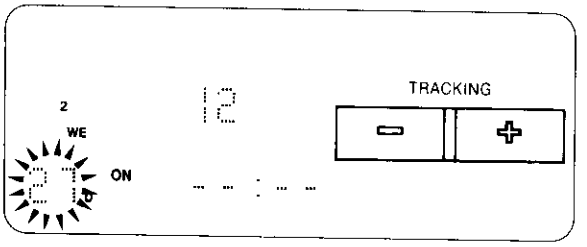


❷ Press the "+" or "−" Button to select the programme position (channel) on which the TV programme will be broadcast.



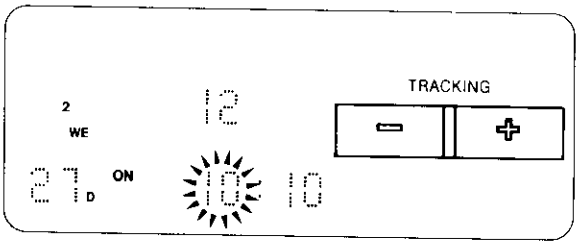
❸ Press the Next Button.

❹ Press the "+" or "−" Button to set the date.



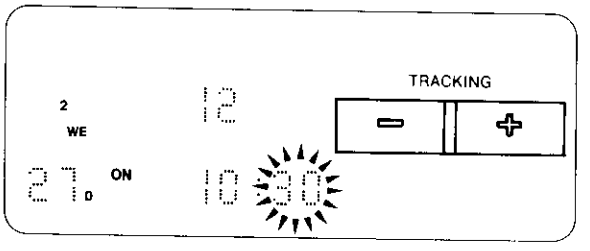
❺ Press the Next Button.

❻ Press the "+" or "−" Button to select the hour of the starting time of the TV programme.



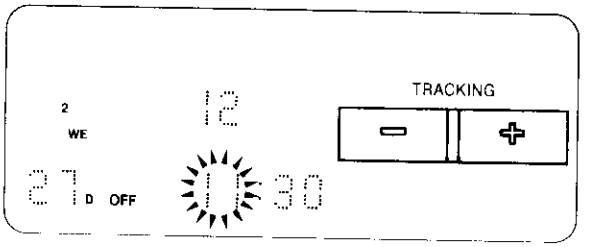
❼ Press the Next Button.

❽ Press the "+" or "−" Button to select the minute of the starting time of the TV programme.



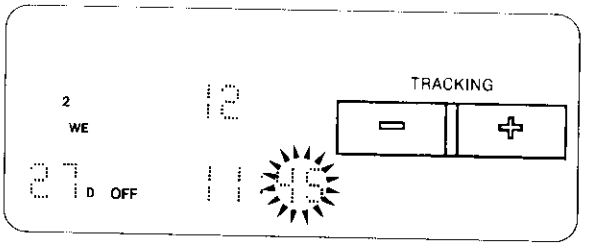
❾ Press the Next Button.

⑩ Press the "+" or "−" Button to select the hour of the end time of the TV programme.

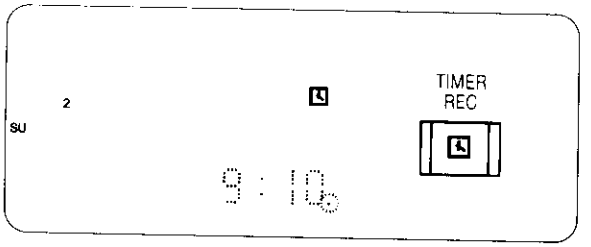


⑪ Press the Next Button.

⑫ Press the "+" or "−" Button to select the minute of the end time of the TV programme.



⑬ Press the Timer Record Button.



- If a tape with broken out erasure prevention tab is inserted, the VTR will sound a warning to let you know that the recording cannot be made.

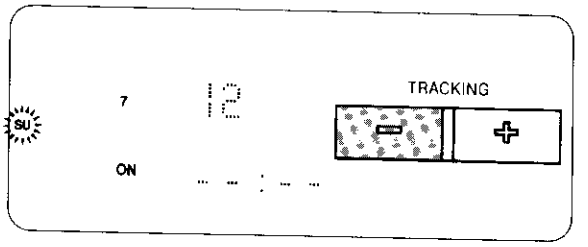
- The tape speed (SP/LP) can be selected in any of the steps ❶ to ⑫.

For Everyweek Recording

For Example:
Programming a timer recording for a TV programme that is broadcast every week on Sunday, from 10:30 to 11:45 on timer programme number 7.
Programming for everyweek recording can be made on any of the timer programme numbers 1 – 8.

Perform the operation steps ❶ to ❸.

❹ Press the "−" Button repeatedly until the "SU" Indicator (=Sunday) is lit.



Perform the operation steps ❺ to ⑬.

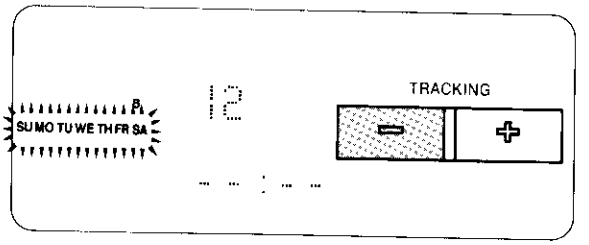
For Everyday Recording

For Everyday Recording, you have the choice between 3 different modes: Monday through Friday, Monday through Saturday, and Sunday through Saturday.

For example:
Programme time for timer recording every day from 10:30 to 11:45 on timer programme number 8.
Programming for everyday recording can be made on any of the timer programme numbers 1 – 8.

Perform the operation steps ❶ to ❸.

❹ Press the "−" Button until the desired type of Everyday Recording (①, ②, ③) is displayed.

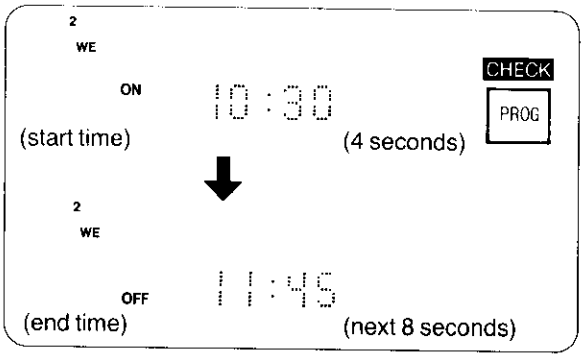


Perform the operation steps ❺ to ⑬.

TIMER RECORDING (CONT'D)

To Confirm the Programme of a Timer Recording

Make sure that the VTR is turned on.
Make sure that the Timer Record Function is set to "On".
Select the programme number to be checked, by repeatedly pressing the Check/Programme Button.
The preset channel and start and ending times of the timer recording will be indicated for about 12 seconds.



To Cancel a Timer Recording

Make sure that:
the VTR is turned on,
the Timer Record Function is set to "Off".

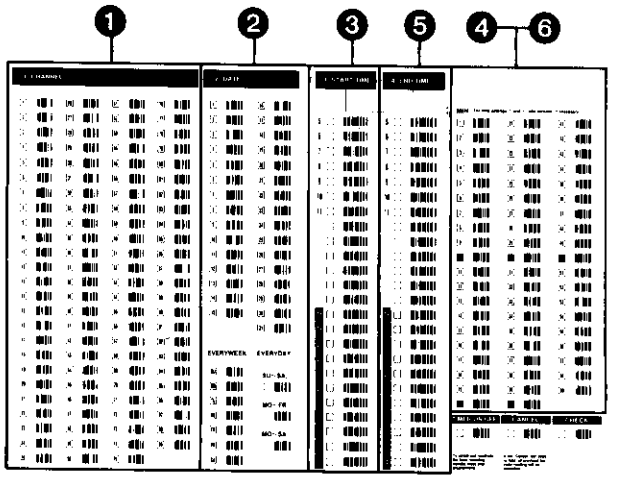
❶ Press the Check/Programme Button repeatedly, until the number of the timer programme that you want to cancel is displayed.

❷ Press the "+" and "−" Button simultaneously for more than 3 seconds.

- When the Timer Record Function is set to "On", the VTR is turned off, the Timer Record Indicator "⏲" will be displayed, and only the timer is left operating.
- If no cassette is inserted in the VTR, the "📼" Mark will flash.
- After the programmed timer recording has been made, set the Timer Record Function to "Off", otherwise the VTR cannot be operated normally.
- During recording, the programme position (channel) on the VTR cannot be changed.
- When you want to watch TV after setting a timer recording, select the desired channel on the TV set.
- To cancel a timer recording during recording, set the Timer Record Function to "Off".
- It is impossible to confirm programmes of timer recordings while an OTR is being performed.
- To turn the VTR on and use it for playback or recording before the timer recording is performed, set the Timer Record Function to "Off".
- When the Timer Record Function is set to "On" but no video cassette is inserted or no timer recording has been programmed, the Timer Recording Indicator ⏲ will flash to inform that the timer recording cannot be performed.

TIMER RECORDING BY USING THE REMOTE CONTROLLER

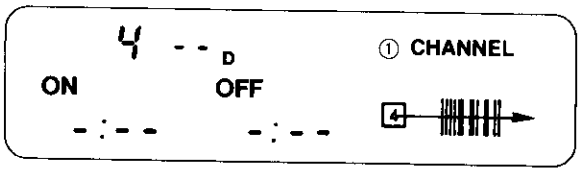
Tracing the Bar Codes



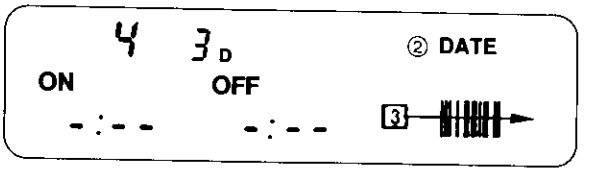
Example: When programming a timer recording for a programme that will be broadcast on channel position 4 on the 3rd of the month, from 7:02 to 7:30, trace the bar codes in the order of the numbered arrows shown below.

- Press the Digital Scanner On/Off Button to turn it "ON".

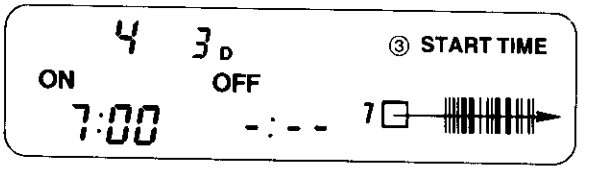
❶ Trace the bar code for "CHANNEL".



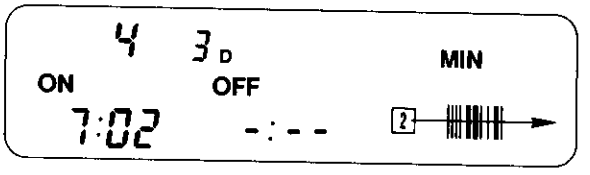
❷ Trace the bar code for "DATE".



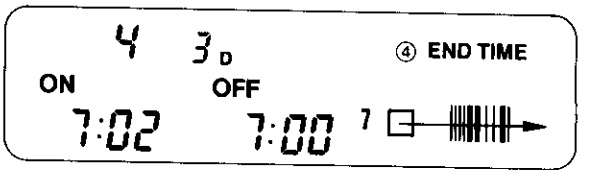
❸ Trace the bar code for "START TIME".



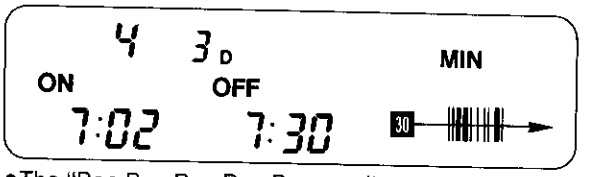
❹ Trace the bar code for "MIN".



❺ Trace the bar code for "END TIME".



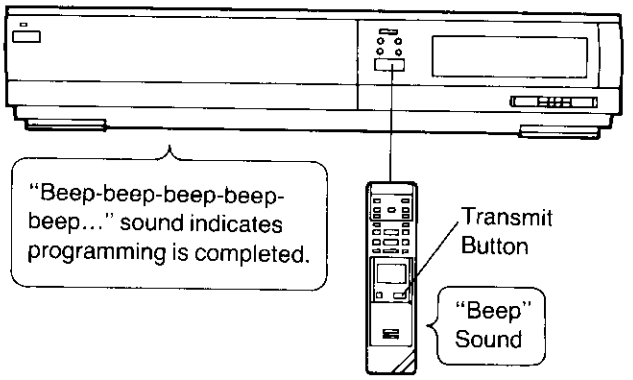
❻ Trace the bar code for "MIN".



- The "Bee Bee Bee Bee Beeeeep" sound signals that the scanner is now ready for data transmission.
- When no sound is heard, read the bar codes once again.
- If more than one bar code is read in the same group, only the last code will be effective.
- If the "CANCEL" bar code is read, all bar codes that have been read so far will be cancelled.

Transmit the Programming Data

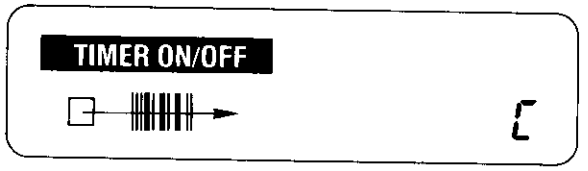
Keep pressing the Transmit Button and confirm that the programmed data on the Multi-Function Display of the VTR are as desired.
After releasing the button, the data will continue to be displayed for about 12 seconds.



- If the transmission was not received correctly, the "Beep-Beep, Beep-Beep" sound from the VTR will warn you. In this case, perform transmission again.
- The transmission is possible when the VTR is turned on but is not in any of the recording or playback operation modes. It is also possible when the VTR is in the timer recording standby mode (⏲ indication is lit).
- The programming will be done on the next lower unoccupied timer programme number (8–1).
- If all programme numbers are occupied, the "Beep-Beep, Beep-Beep" sound from the VTR will warn you that the programming cannot be made.
- When the Transmit Button is pressed, the VTR will automatically be put into the timer recording standby condition and the VTR will be turned off.
- To operate the VTR before the timer recording will be performed, press the Timer Rec. Button to suspend the timer recording standby condition. After using the VTR, be sure to press the Timer Rec. Button again, otherwise the timer recording will not be made.

TIMER ON/OFF

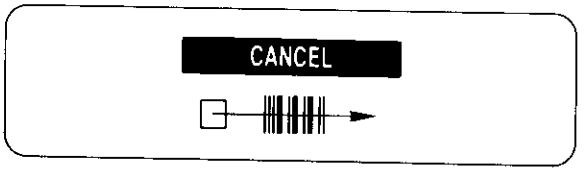
After programming a timer recording, the VTR is in the timer recording standby mode and cannot be used for any other operation, such as playback. If some other operation is desired, first trace the "TIMER ON/OFF" bar code and transmit it to the VTR with the Transmit Button.
To later reset the VTR to the timer recording standby mode, trace the "TIMER ON/OFF" bar code again and transmit it with the Transmit Button.



For Programming More Than One Timer Recording in Succession

Repeat the following operation steps ❶–❸.

❶ Trace the "CANCEL" bar code on the Programming Sheet.

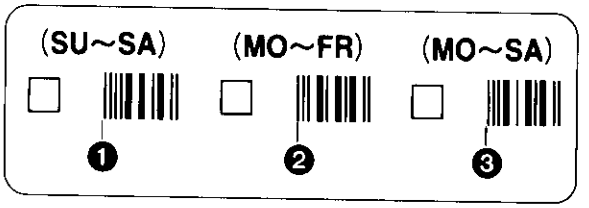


❷ Trace the bar codes for "CHANNEL", "DATE", "START TIME" and "END TIME".

❸ Confirm that the present time is displayed on the Multi-Function Display of the VTR, and transmit the data.
- If the next timer programming data are transmitted while the previous timer programming data are still being displayed, the displayed timer recording data will be cancelled.

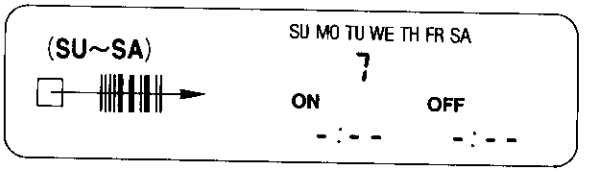
For Everyday Recording

When programming an everyday recording using the bar codes, you have the choice between 3 different modes: Sunday through Saturday, Monday through Friday, and Monday through Saturday.

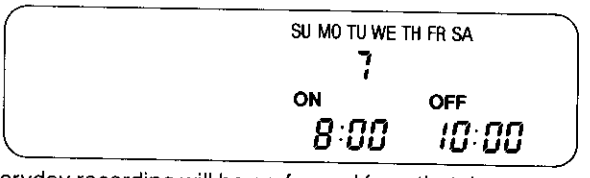


❶ Turn on the Digital Scanner and trace the "CHANNEL" bar code.

❷ Trace the desired "EVERYDAY" bar code (❶, ❷, ❸).



❸ Trace the "START TIME" and then the "END TIME" bar codes, and transmit the data to the VTR.

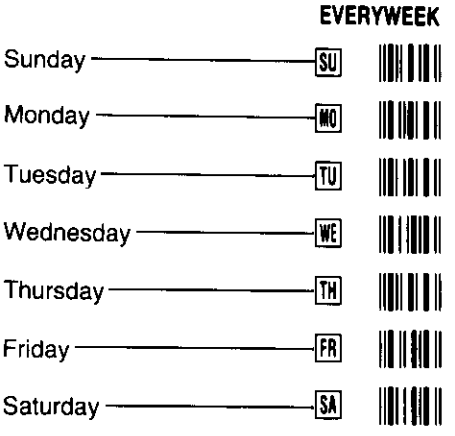


- Everyday recording will be performed from that day on.
- If a "DATE" bar code is traced after tracing the "EVERYDAY" bar code, everyday recording will not be performed.

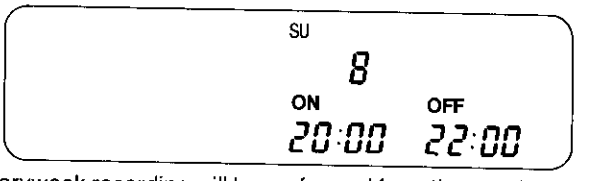
For Everyweek Recording

① Turn on the Digital Scanner and trace the "CHANNEL" bar code.

② Trace the bar code for the desired day of the week among the "EVERYWEEK" bar codes.



③ Trace the "START TIME" and then the "END TIME" bar codes, and transmit the data to the VTR.



- Everyweek recording will be performed from that week on.
- If a "DATE" bar code is traced after tracing the "EVERYWEEK" bar code, everyweek recording will not be performed.

To Confirm the Programme of a Timer Recording

To perform this operation, the VTR must be turned on or it must be in the timer recording standby mode (◳ indication is lit).

❶ Trace the "CHECK" bar code.

❷ Perform transmission.
- After releasing the Transmit Button, the programmed data will be displayed for about 12 seconds on the Multi-Function Display.
- At every push of the Transmit Button, the timer programme number advances to the next higher number.

To Cancel a Programmed Timer Recording

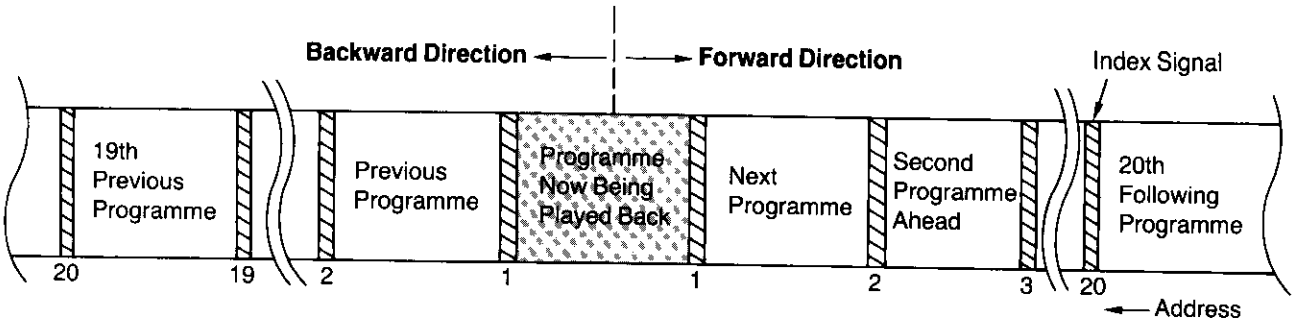
To perform this operation, the VTR must be turned on but not be in any of the recording or playback operation modes, or it must be in the timer recording standby mode (◳ indication is lit). To cancel a programmed timer recording, its data must be displayed on the Multi-Function Display. If they are no longer displayed, first, trace the "CHECK" bar code and perform transmission (several times, if necessary, until the programme you want to cancel is displayed). Then, within 12 seconds.

① Trace the "CANCEL" bar code.

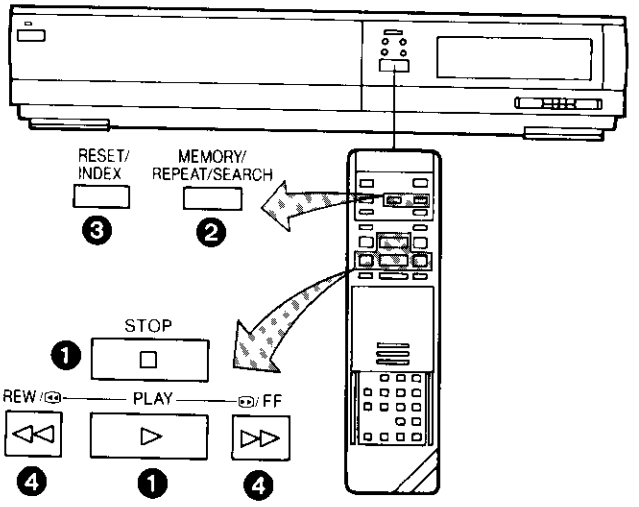
② Perform transmission.
- To programme a new timer recording, perform the programming from the beginning.

VHS INDEX SEARCH SYSTEM

How to Count the Addresses



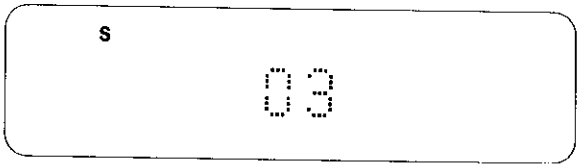
With the VHS Index Search function, up to 20 addresses (places where index signals are recorded) can be skipped to directly locate the beginning of the desired programme in both forward and reverse direction in the Fast Forward or Rewind mode.



❶ Press the Play Button (▶) or Stop Button (■).

❷ Press the Memory/Repeat/Search Button.
- The indication "S" appears on the Multi-Function Display.

❸ Repeatedly press the Reset/Index Button to select the desired address.
The number of the selected address is shown on the Multi-Function Display.



❹ Press the Rewind ◀◀/Review ⏪ or Fast Forward ▶▶/Cue ⏩ Button to start the VHS Index Search function (the VTR will switch to the rewind or fast-forward mode).

- Every time an index signal (address) is skipped the number in the Address Indication decreases by one.
- When the preset address is reached, the Tape Counter Indication will appear in place of the Address Indication, and the normal playback will start.
- To abort the Index Search function midway, press the Play or the Stop Button.

- When activating the VHS Index Search function from the Still playback mode, the Playback will start when the selected programme is reached.
- If there are unrecorded parts on the tape, or if recordings have repeatedly been made on the same tape portion, the VHS Index Search function may not work correctly.
- The VHS Index Search function can only count the addresses correctly, if the index signals are spaced at least 2 minutes (SP mode) and 5 minutes (LP mode).
- If the VHS Index Search function is started extremely close to the beginning of the next programme (place where an address signal is recorded) or from the beginning of the tape, the first address may not be counted.

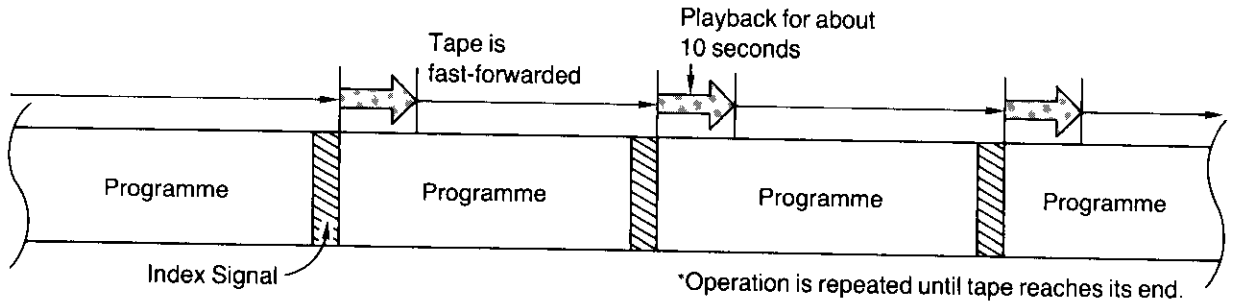
Recording of Index Signals

While recording an index signal, the indication "WRITE" on the Multi-Function Display lights up for a few seconds.

Index signals will be recorded automatically in the following cases:
- At the tape position at which the Record Button is pressed to start recording.
- At the tape position at which a Timer Recording is started.
- At the tape position at which an OTR recording is started.
- When pressing the REC Button during recording.

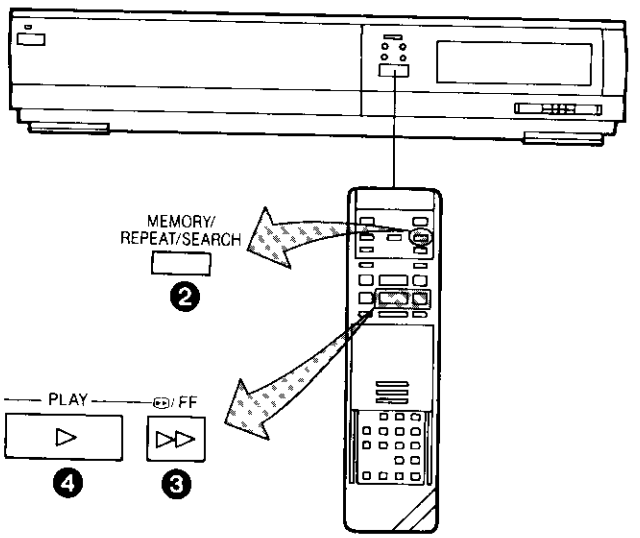
INTRO SCAN FUNCTION

How the Intro Scan Function Works...



The Intro Scan function plays back the first 10 seconds of each programme (recorded with index signal) on a tape one after another. This is convenient for quick checking what programmes are on a tape, or to find the desired instalment of a TV series you have recorded on a tape.

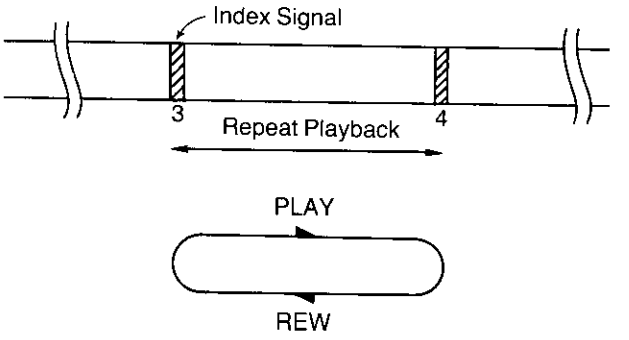
Intro Scan Operation



1. Insert a video cassette.
   (Put the VTR in the stop mode.)
2. Press the Memory/Repeat/Search Button until "S" appears.
3. Press the Fast Forward ▶▶/Cue ⏩ Button.
   (The Intro Scan starts.)
4. When the desired scene is reached, press the Play Button.

- The Intro Scan function may not be activated for the first programme recorded close to the beginning of the tape.
- The Intro Scan function may not be activated, if the interval between programme starts is less than 5 minutes in the LP mode, or less than 2 minutes in the SP mode.

Index Repeat Playback

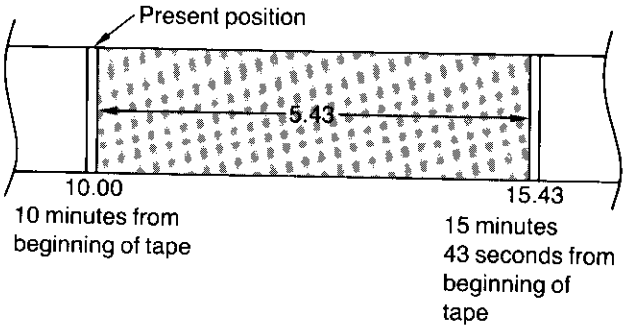


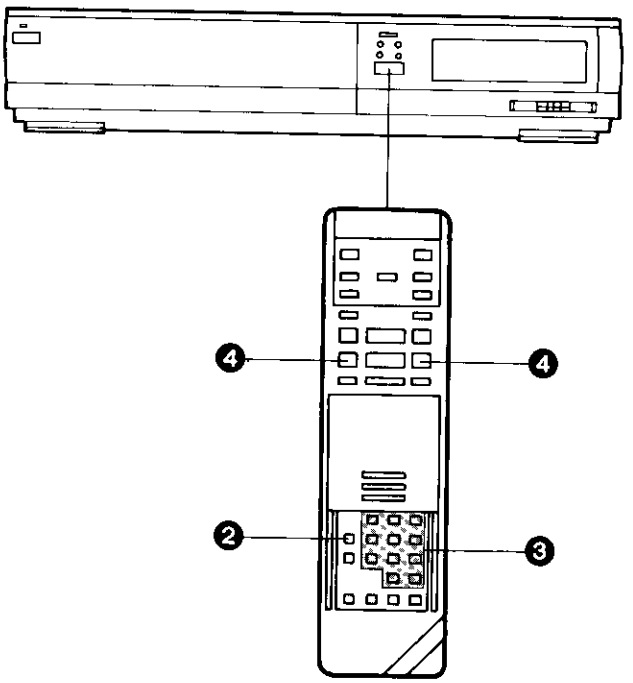
1. When the VTR is in the playback mode, press the Memory/Repeat/Search Button so that the "RS" Indicator lights up.
   - When the next index signal is found, the tape will be rewound. When the index signal, where the playback is to start, is found, the playback will restart. In this way, automatically repeated playback can be performed for a tape portion as defined by the number of index signals that are skipped.
2. To stop the Index Repeat playback, press the Stop Button or press the Memory/Repeat/Search Button so that the "RS" Indicator goes out.

If Index Repeat playback is performed on a tape for long periods of time, the picture quality may become inferior.

TIME SEARCH

The Time Search function makes it possible to quickly advance the tape from any position by inputting the exact desired amount of playback time of the part that you want to skip.

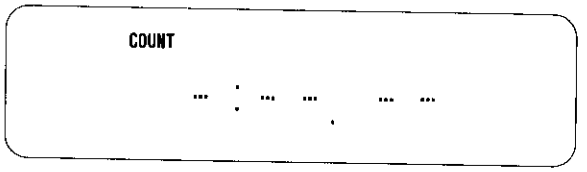




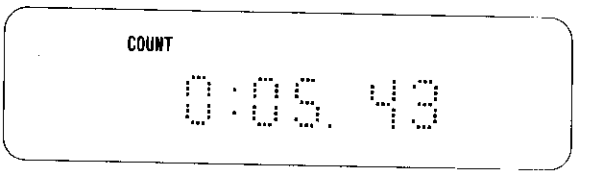
Time Search from the Stop Mode

❶ Put the VTR in "STOP" mode.

❷ Press the Time Search Button.
The indication in the Multi-Function Display changes as shown below.



❸ Input the time of the desired scene.
- The time is input by pressing the number buttons in the order: hour, minute, second.
- The "–" indicatioin will be counted as "0".

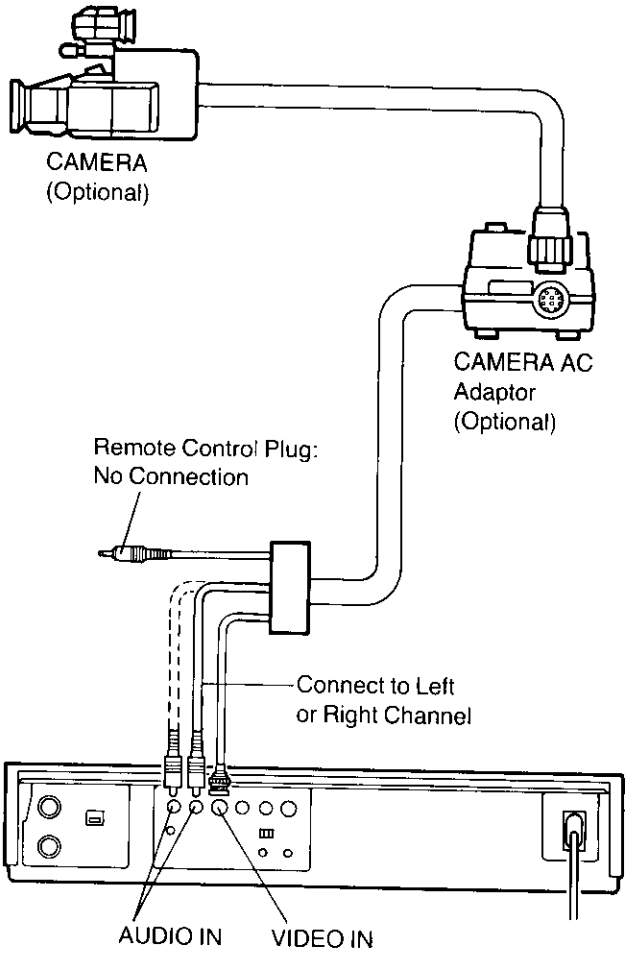


❹ Press the Fast Forward ▶▶/Cue ⏩ Button or the Rewind ◀◀/Review ⏪ Button.
The playback starts after rewinding or fast forwarding to the tape position of the designated time.

Time Search from the Play Mode

The operation is the same as that for the stop mode but in operation step ❹, the Cue or Review (playback) is performed to the tape position of the designated time and the playback will then start.
If the time search function is activated during playback, a time of up to 9 minutes 59 seconds can be input.

- The numbers in the Tape Counter do not change during parts of the tape on which there is no recording.
- When the tape is inserted, the Tape Counter will automatically be reset to "0:00.00".
- When no time is input for the time search, a 2-minute tape segment is skipped and the playback will then resume. If the time search function is activated during playback, but no time is input, a 30-second tape segment will be skipped and the playback will then resume.



Preparation

- Connect the Video Camera via the Camera AC Adaptor to the VTR as shown in the illustration above.
- Set the Input Signal Selector to "Line/Audio".
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Adjust the audio recording level as described on page 24.
- Set the Tape Speed Selector to "SP" or "LP".

❶ Turn the Camera AC Adaptor on and make the necessary adjustments on the camera.
Refer to the operating instructions of the camera you are using.

❷ Press the Record Button (●) on the VTR to start recording.

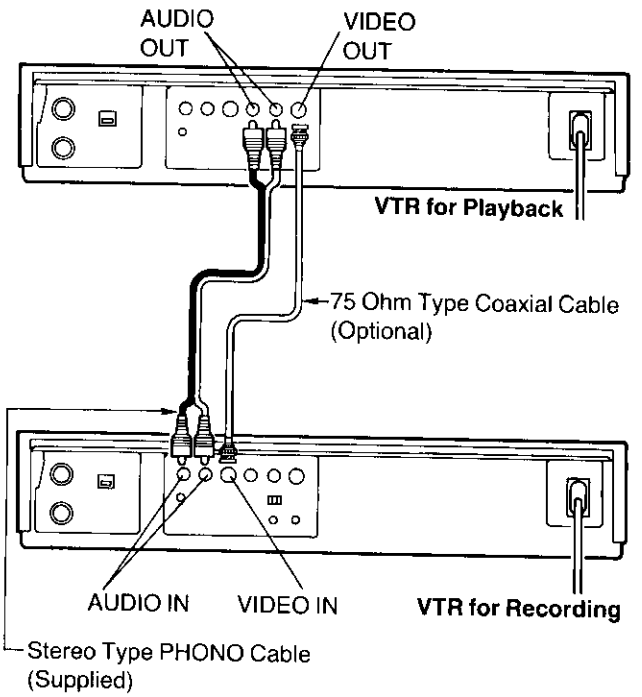
Avoid recording unwanted material:
Press the Pause/Still Button (❚❚) of the VTR, and the recording will stop temporarily. To restart recording, press the Pause/Still Button (❚❚), again.

❸ Press the Stop Button (■) on the VTR to stop the recording.

- For playback of a tape that was recorded via a camera, select the audio track on which the sound from the camera microphone was recorded by pressing the corresponding Audio Playback mode Selector Button.
- If you leave the VTR in the pause mode for more than 5 minutes, the VTR will stop automatically to protect the tape and the video heads.
- Even if the video camera is equipped with video recorder remote control functions, this VTR can not be remote-controlled from the camera.

DUBBING (COPYING)

Dubbing (copying) from one video cassette to another.



Preparation

- Make the necessary connections as shown in the connection diagram.
- Press the VTR On/Off Switches to turn both VTRs on.
- Set the Input Signal Selector to "Line/Audio". (Recording VTR)
- Adjust the audio recording level as described on page 24. (Recording VTR)
- Make sure that the Noise Filter/Edit Selector of both the recording and playback VTRs (if equipped) are in the "EDIT ON" position. Set these switches to "OFF" for ordinary use of the VTRs.
  (The Noise Filter/Edit Selector is on the front panel.)

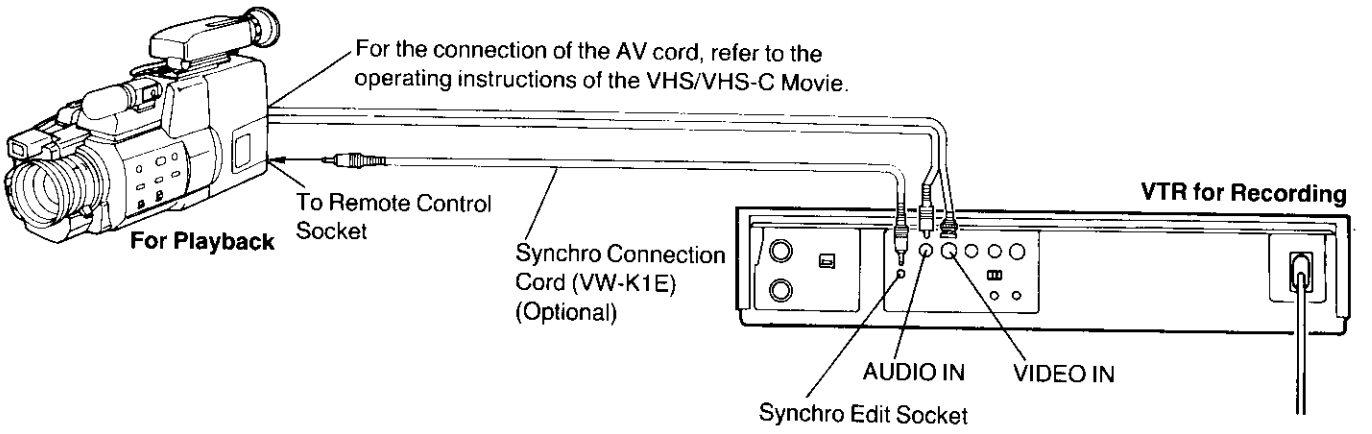
❶ Place the recorded cassette in the playback VTR and a blank video cassette with the erasure prevention tab intact in the recording VTR.

❷ Press the Record Button (●) on the recording VTR.

❸ Press the Play Button (▶) on the playback VTR.

❹ Press the Stop Button (■) on both VTRs to stop the dubbing.

- To assure smooth, noiseless cuts when interrupting the recording, always use the Pause/Still Button (❚❚).
- To obtain smooth cuts when starting the recording from the stop mode:
  1. Play back the last part of the previously recorded material to confirm its ending point, and then press the Pause/Still Button (❚❚).
  2. Press the Record Button (●).
     (The VTR is still in the pause mode.)
  3. To start recording, press the Pause/Still Button (❚❚) again.
- The picture quality of a re-recorded tape is not as good as that of the original.



Connecting to a Movie Camera Equipped with Synchro Edit Function

It is possible to synchronize the playback start and stop of the Movie Camera with the recording start and stop of this VTR.

Preparation

- Make the necessary connections as shown in the connection diagram.
- Set the Edit Switch (Noise Filter/Edit Selector) on both the Movie Camera and on this VTR to "ON" (or "EDIT ON").

❶ Put the VTR in the recording pause mode.

❷ Put the Movie Camera in the still playback mode.
- Put the Movie at the point where you want to start editing into the still playback mode.

❸ Press the Pause/Still Button on the VTR.
- The Movie Camera changes over to the playback mode and the dubbing will start automatically.

To Leave Out Unwanted Scenes

① Press the Pause/Still Button on the VTR.
The VTR changes over to the recording pause mode and the Movie Camera changes over to the still playback mode.

② Operate the Movie Camera to skip the unwanted scenes and then put it in the still playback mode again.

③ Press the Pause/Still Button on the VTR.
- The dubbing will restart.

To stop the dubbing, press the Stop Button on the VTR and then put the Movie Camera in the stop mode.

Synchronized Editing between the VTRs

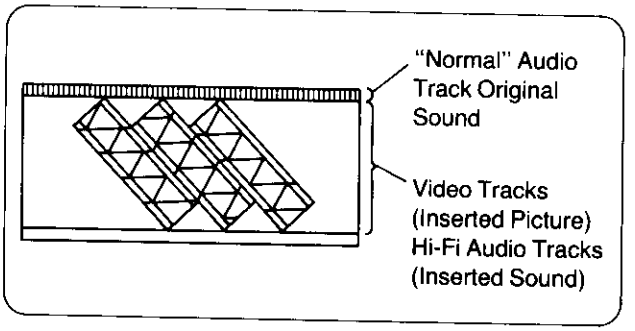
When editing from another VTR equipped with Synchro Edit Socket, synchronized start and stop of both VTRs can be activated from this VTR.

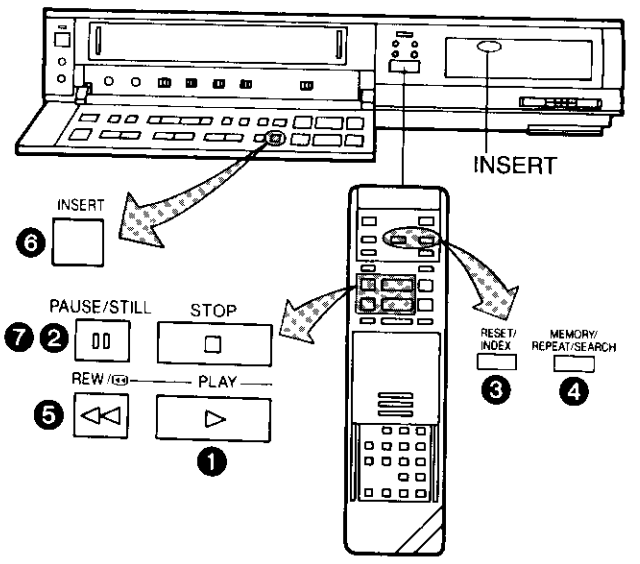
The operation is the same as described on the left for synchronized editing from a VHS/VHS-C Movie Camera.

INSERT EDITING

When this type of editing is done, the picture and the sound are recorded on the tape as shown below. However, if no new sound is input, the original sound remains only on the "normal" audio track of the tape because the original Hi-Fi sound will always be erased during insert editing.
By performing insert editing together with audio dubbing, the sound on the "normal" audio track can also be replaced at the same time.

Video and Audio Track Recording Pattern





Preparation

- Insert a video cassette with the erasure prevention tab intact.
- When performing insert editing from another VTR, set the Noise Filter/Edit Selector to "EDIT ON".
- Set the Input Signal Selector according to the type of insert editing to be performed.

"Line/Audio": When inserting picture and sound from equipment connected to the Video Input Socket and the Audio Input Sockets on the rear of this VTR.

"Tuner": When inserting scenes from a TV programme.

1. Press the Play Button.
2. Locate the tape position where you want the insert editing to end, and press the Pause/Still Button to put the VTR into the still playback mode.
3. Press the Reset/Index Button (Remote Controller) to reset the Tape Counter to "0:00.00".
4. Press the Memory/Repeat/Search Button on the Remote Controller so that the Memory Indicator "M" mark will light up.
5. Perform review playback to locate the tape position where you want the insert editing to start, and press the Pause/Still Button to put the VTR into the still playback mode.
6. Press the Insert Editing Button.
   (The Insert Editing Indicator lights up.)
   If you want to replace the sound on the "normal" audio track, too, press the Audio Dubbing Button.
   (The Audio Dubbing indicator lights up.)
7. After the picture to be inserted is prepared, press the Pause/Still Button (❚❚).
   (The insert editing will start.)
   - The insert editing will end at the point where the Tape Counter indicates "0:00.00", and the editing VTR will stop in the still playback mode.

Playback of a Tape on Which Insert Editing Was Performed

The sound inserted during insert editing is recorded on the Hi-Fi sound tracks (STEREO, LEFT, RIGHT). If the normal sound track is selected, the original sound before the insert editing will be heard. Select the desired sound with the Audio Output Mode Selector (Remote Controller).

Hi-Fi/Normal Mix Switch

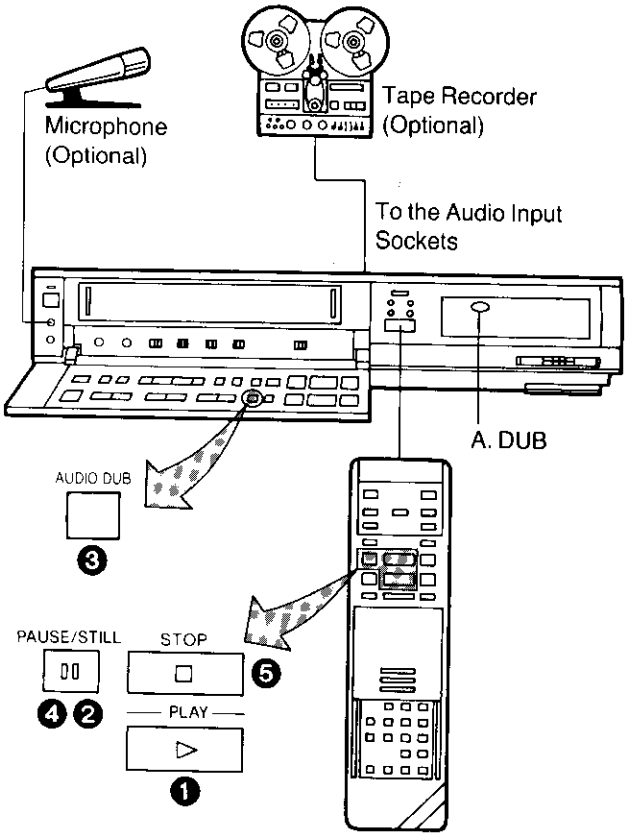
Set this switch to "On", if you want both the "Hi-Fi" sound and the "normal" sound to be played back mixed together.

- The mixed sound may not be very clear.
  Always set this switch to "Off", except when playing back a tape on which the insert editing or audio dubbing was performed.

- The picture quality of an inserted part is always somewhat inferior to that of the original.
- Avoid performing insert editing repeatedly on the same part of the tape because the picture quality of that part becomes inferior.
- The inserted picture may contain slight colour noise or the colours may be unstable.
- Do not press the Memory/Repeat/Search Button during insert editing. If it is pressed, the Memory Indication "M" will disappear, and the insert editing will not end automatically at the preset editing end point.
- It is not necessary to operate the Tape Speed Selector.

AUDIO DUBBING

Note that the original sound on the "normal" (mono) sound track will be completely erased during audio dubbing.



Preparation

- Set the Input Signal Selector to "Line/Audio".
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Reset the Tape Counter to "0:00.00".
- Turn the TV set on and select the video playback channel.
- Select the "normal" (mono) sound track by repeatedly pressing the Audio Output Mode Selector (Remote Controller) until the Audio Output Mode Indicators "Left" and "Right" are no longer lit.

1. Press the Play Button (▶) to look for the point where you want to start the audio dubbing.
2. Press the Pause/Still Button (❚❚) at the exact point where you want to start the audio dubbing.
3. Press the Audio Dubbing Button (the indicator will light up).
4. Press the Pause/Still Button (❚❚) once again to release the tape from pause, and at the same time start the operation of the audio source. The audio dubbing will start.
5. To interrupt the audio dubbing, press the Pause/Still Button.
   - The VTR will stop in the still playback mode.

Playback of a Tape on Which Audio Dubbing Was Performed

The sound inserted during audio dubbing is recorded on the normal sound track. If the Hi-Fi sound tracks (STEREO, LEFT, RIGHT) are selected, the original sound (before the audio dubbing) will be heard.

Hi-Fi/Normal Mix Switch

Set this switch to "On", if you want both the "Hi-Fi" sound and "normal" sound to be played back mixed together.

- The mixed sound may not be very clear.

Always set this switch to "Off", except when playing back a tape on which the insert editing or audio dubbing was performed.

- Sound recorded by using the audio dubbing function is recorded on the "normal" audio track (always in mono).
- When a microphone is used for dubbing, do not place it near the speaker of your TV to prevent howling noise (acoustic feedback).
- If the erasure prevention tab of the cassette is missing, no audio dubbing can be made.

BEFORE REQUESTING SERVICE

Before requesting service, check the following points once again.

SYMPTOM	CAUSE	REMEDY
Power doesn't turn on.	Mains lead is not connected.	Connect mains lead to mains outlet.
	The Timer Record Function is set to "On".	Set the Timer Record Function to "Off".
Power is on but unit doesn't operate.	Dew condensation inside the VTR.	Wait until the Dew Indicator " d " goes off.
	Safety devices are operating.	Turn off the VTR On/Off Switch, disconnect mains cord from outlet, then reconnect mains cord to mains outlet and turn on the VTR On/Off Switch again.
TV programmes cannot be recorded.	Connection of aerial lead is not correct.	Connect aerial lead correctly.
	Reception channel is not properly tuned.	Tune reception channel.
	The Input Signal Selector is not set correctly.	Set the Input Signal Selector to "Tuner".
OTR Function (One-Touch Timer Recording) cannot be performed.	Clock is flashing "0:00".	Set clock to present time.
Unattended timer recording cannot be performed.	Recording start or recording stop time setting is incorrect.	Set recording start and recording stop time correctly.
	The Timer Record Function is set to "Off".	Set the Timer Record Function to "On".
	Clock shows incorrect time.	Adjust clock to present time.
	Clock is flashing at "0:00".	Set clock time and perform timer setting.
	The Input Signal Selector is not set to "Tuner".	Set the Input Signal Selector to "Tuner".
If you attempt to carry out Recording, Timer Recording, or OTR, the cassette will be automatically ejected.	Accidental erasure prevention tab on the cassette is broken out.	Cover tab hole with adhesive tape.
Recording via external input terminals cannot be performed.	The Input Signal Selector is not set correctly.	Set the Input Signal Selector to "Line/Audio".
Recorded programmes with two-channel sound (stereo, bilingual or Simulcast) can not be played back.	Setting of the Audio Output Mode Selector Button (Remote Controller) is not correct.	Press the Audio Output Mode Selector Button (Remote Controller) to select the desired audio playback mode. (See page 26.)

SYMPTOM	CAUSE	REMEDY
Playback picture is not in colour. Playback picture has large amounts of "snow".	Reception channel was not adjusted correctly during recording.	Readjust reception channel correctly.
	TV set is not properly tuned to the video playback channel of the VTR.	Properly tune the TV set to the video playback channel of the VTR.
	The video heads are clogged with dirt.	Consult qualified service personnel.
	The video heads are abraded.	Consult qualified service personnel.
	Tape is old and/or defective.	Use new tape.
Remote Controller does not work.	Remote Controller is not being pointed at Infra-red Receiver Window on the VTR.	Point the Remote Controller at Infra-red Receiver Window on the VTR.
	Distance is too far.	Use the Remote Controller within 7 m from the VTR.
	An obstacle is between Remote Controller and VTR.	Remove obstacle.
	Batteries are exhausted.	Replace batteries.
	Battery polarities (+, −) are reversed.	Insert batteries correctly.
Bar code reading with Remote Controller is impossible.	The Remote Controller is in the power-saving standby condition.	Press the Digital Scanner On/Off Button to turn it "ON" again.
	The bar code has been traced too slowly.	Trace the bar code quickly.
	The bar code was not traced all the way from the Small Box past the last bar.	Trace the bar code correctly.
	The bar code was not traced straight.	Trace the bar code straight from left to right.
Transmission from the Remote Controller to the VTR cannot be performed.	The VTR is turned off.	Turn the VTR on.
	The VTR is in an operation mode.	Put the VTR into the stop mode.
	There is no unoccupied timer programme number left.	A maximum of 8 timer recordings can be programmed at the same time.
	Reading a bar code was not followed by a "beep" sound from the Remote Controller.	Perform the bar code reading again.
	The transmission was not followed by a repeated "beep" sound from the VTR.	Keep pressing the Transmit Button until the confirmation sound is heard.

SPECIFICATIONS

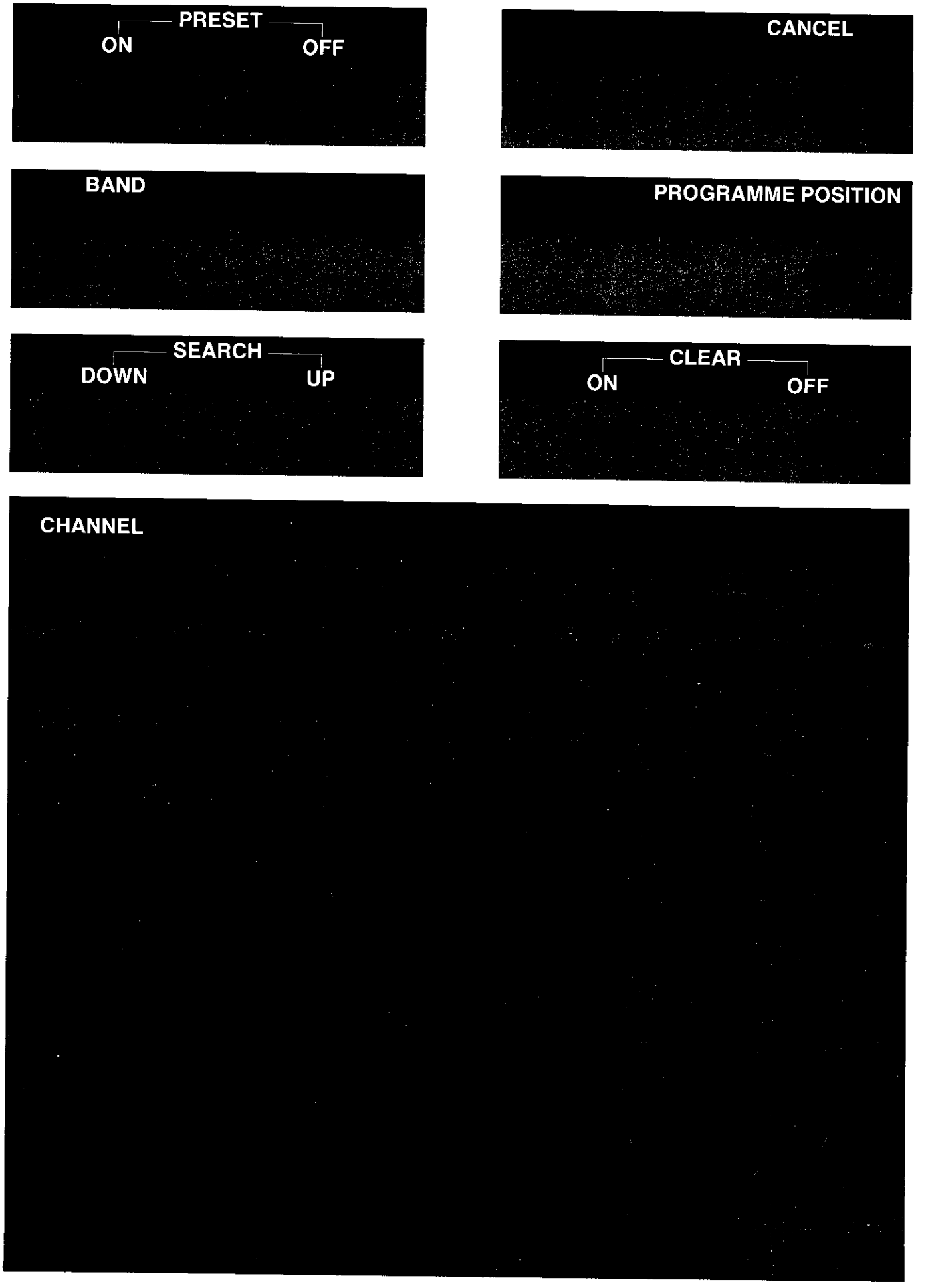
NV-F65EA

Information for Your Safety

Power Source:	230 V AC 50–60 Hz
Power Consumption:	Approx. 33 watts

Video Recording System:	2 rotary heads, helical scanning system		
Video Heads:	4 heads		
Tape Speed:	SP; 23.39 mm/sec. LP; 11.7 mm/sec		
Tape Format:	VHS tape		
Record/Playback Time:	SP; 240 min. with NV-E240 LP; 480 min. with NV-E240		
FF/REW Time:	Less than 2.5 min. with NV-E180		
VIDEO			
Television System:	CCIR; 625 lines, 50 fields, PAL colour signal		
Modulation System:	Luminance; FM azimuth recording Colour signal; converted subcarrier phase shift recording		
Input Level:	VIDEO IN (BNC);	1.0 Vp-p,	75 ohm, terminated
Output Level:	VIDEO OUT (BNC);	1.0 Vp-p,	75 ohm, terminated
	RF Modulated;	VHF channel 2 or 3,	75 ohm, terminated
AUDIO			
Input Level:	AUDIO IN (PHONO);	−10 dB,	more than 50 kohm, unbalanced
	MICROPHONE;	−70 dB	
Output Level:	AUDIO OUT (PHONO);	−8 dB,	less than 1 kohm, unbalanced
	HEADPHONES;	−30 dB,	8 ohm
Audio Track:	1 track (Normal-mono only), 2 channels (Hi-Fi sound-stereo)		
Video Horizontal Resolution:	Colour; more than 240 lines (SP)		
Signal-to-Noise Ratio:	Video; more than 43 dB (SP)		
Dynamic Range:	Audio; more than 90dB (Hi-Fi audio track)		
Audio Frequency Response:	20 Hz–20 kHz (Hi-Fi audio track)		
Wow and Flutter:	0.005% Wrms/Hi-Fi		
Operating Temperature:	5°C–40°C		
Operating Humidity:	35%–80%		
Weight:	5.9 kg		
Dimensions:	430 (W)×86 (H)×363 (D) mm		
Standard Accessories:	1 pc. DIN-DIN Coaxial Cable 1 pc. Infra-red Remote Controller 2 pcs. "R6" size batteries 2 pcs. Stereo type Phono Cable 1 pc. AC Mains Lead		

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.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