Panasonic

Editing Controller

VW-EC310E

Operating Instructions
Bedienungsanleitung
Mode d'emploi

CONTENTS

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.

CAUTIONS FOR USE

- Never try to disassemble the Editing Controller and never touch any internal part.
- Do not place any heavy object on the Editing Controller and keep it away from high temperatures and direct sunlight.
- Wipe the Editing Controller with a clean, soft, dry cloth. When using a chemical cloth, carefully follow its directions for use.

- Protect Editing Controller from volatile liquids such as benzine, thinner and insecticide. Do not attach adhesive tape to it. All of these could cause damage to the surface.
- Avoid places with high humidity or much dust, as they can cause damage to internal parts.
- Never drop or shake the Editing Controller.

- There are some functions that cannot be used depending on the VTR connected to the VW-EC310E.
- During various mode editing, if the playback or recording VTRs remain in a still picture playback or recording pause state for more than about 5 minutes, editing will stop.

High-Speed Mode and Standard-Speed Mode

This Editing Controller features two modes, a High-Speed Mode and a Standard-Speed Mode. The High-Speed Mode is designed for use with two table-type VTRs, while the Standard-Speed Mode is used for a Movie Camera together with a table-type VTR.

A. Use of the Editing Controller with two table-type VTRs (High-Speed Mode).

When connecting the two VTR Connection Cords coming from this unit, as shown in the illustration on page 8, the High-Speed Mode is selected automatically.

- The "– – –" indications light up in the Display of the Editing Controller.
- Depending on the type of VTRs, it may not be possible to use the High-Speed Mode. In that case, perform editing in the Standard-Speed Mode according to the operation steps as described below B (2~4).
- To change from the Standard-Speed Mode to the High Speed Mode, press the (Edit) Stop Button and the Recorder Button on the Editing Controller simultaneously.

B. Use of the Editing Controller with a Movie Camera and a table-type VTR (Standard-Speed Mode)

1. Connect a Movie Camera to the connection cord for the playback VTR and a table-type VTR to the connection cord for the recording VTR.
2. After turning on both the playback and recording unit, confirm that indications appear in the Display of the Editing Controller.
3. Press the Player Button while pressing the (Edit) Stop Button on the Editing Controller.
4. After the indications in the Display of the Editing Controller flash for a moment, the Standard-Speed Mode is selected.

- To change from the Standard-Speed Mode to the High-Speed Mode, press the (Edit) Stop Button and the Recorder Button on the Editing Controller simultaneously.

CONTROLS AND COMPONENTS

VTR Controls
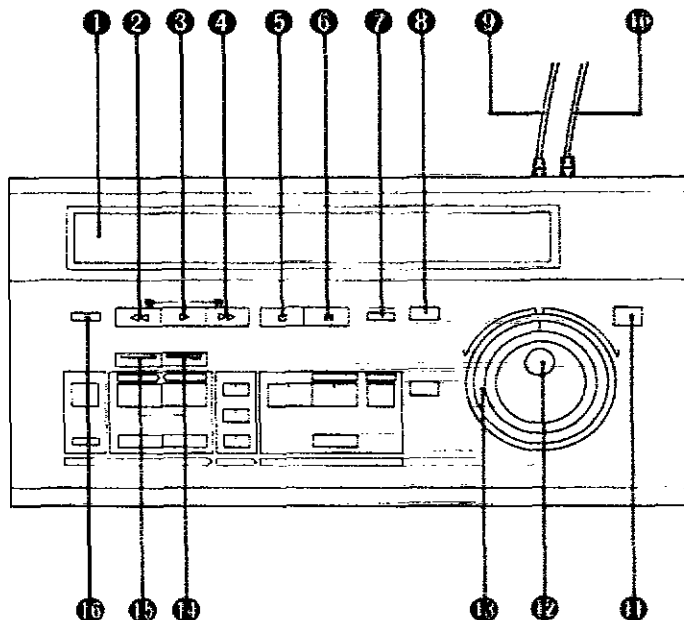
① Multi-Function Display
The operating conditions are displayed in this window.

② Rewind/Review Button
Press the REW/ [◄◄] Button to rewind the tape. When this button is pressed during playback, the tape will be played back at high speed in reverse direction.

③ Playback Button
Press the Play Button to start playback.

④ Fast Forward/Cue Button
Press the [►►] /FF Button to wind the tape forward rapidly. When this button is pressed during playback, the tape will be played back at high speed in forward direction.

⑤ Stop Button
Press the Stop Button to stop the tape.

⑥ Pause/Still Button
Press the Pause/Still Button to stop the tape temporarily. When this button is pressed during playback, the tape will be in the Still Playback mode. Press it again to restart the tape movement.

⑦ Record Button
Press the Record Button to start recording.

⑧ Direct Search Button
Press the Direct Search Button to activate the Direct Search mode.

⑨ Connection Cable to the Playback VTR
Connect this cable to the editing socket of the playback VTR.

⑩ Connection Cable to the Recording VTR
Connect this cable to the editing socket of the recording VTR.

⑪ Jog/Shuttle Button
Press the Jog/Shuttle Button to activate the Jog Dial and the Shuttle Ring.

⑫ Jog Dial
When the Jog Dial is used, the playback varies according to the speed and direction with which the dial is turned.

⑬ Shuttle Ring
The Shuttle Ring can be used to quickly and easily select Normal, Cue or Review playback.

⑭ Recorder Button
Press the Recorder Button to operate the recording VTR.

⑮ Player Button
Press the Player Button to operate the playback VTR.

⑯ Counter Reset Button
Press the Counter Reset Button to reset the tape counter of the VTR selected with the Player or Recorder Button.

Editing Controls
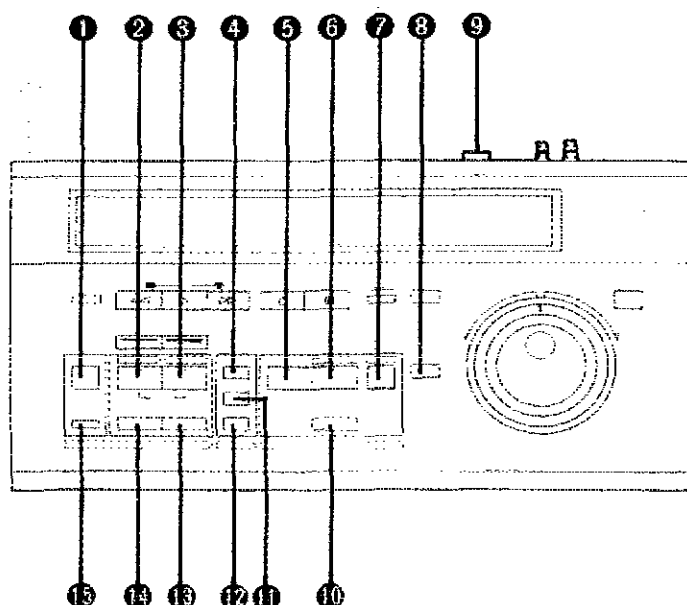
❶ Programme Button
Press the Programme Button to set editing start and end points, and also to change and clear editing start and end points.

❷ Mark In button
Press the Mark In Button to set the editing start point.

❸ Mark Out Button
Press the Mark Out Button to set the editing end point.

❹ Assemble Button
Press the Assemble Button to perform an assemble editing.

❺ Preview Button
Press the Preview Button to preview a preset editing operation.

❻ Edit Start Button
Press the Edit Start Button simultaneously with the Preview Button to start editing

❼ Stop Button
Press the Stop Button to stop the editing operation.

❽ Programme Check Button
Press the Programme Check Button to confirm on the Multi-Function Display the points (tape positions) where the editing is to start and end.

❾ Player Monitor Switch
Set the Player Monitor Switch to the ON position when a TV set is connected only to the recording VTR.

❿ Review Button
Press the Review Button after the editing is finished to play back from the editing start point to the editing end point on the recording VTR

⓫ Insert Button
Press the Insert Button to perform an insert editing
- When this button is pressed together with the Audio Dubbing Button, new sound can be inserted simultaneously on the normal audio track.

⓬ Audio Dubbing Button
Press the Audio Dub Button to perform an audio dubbing

⓭ Go To Button
After programming an editing operation, press the Go To Button to return to the editing end point.

⓮ Return Button
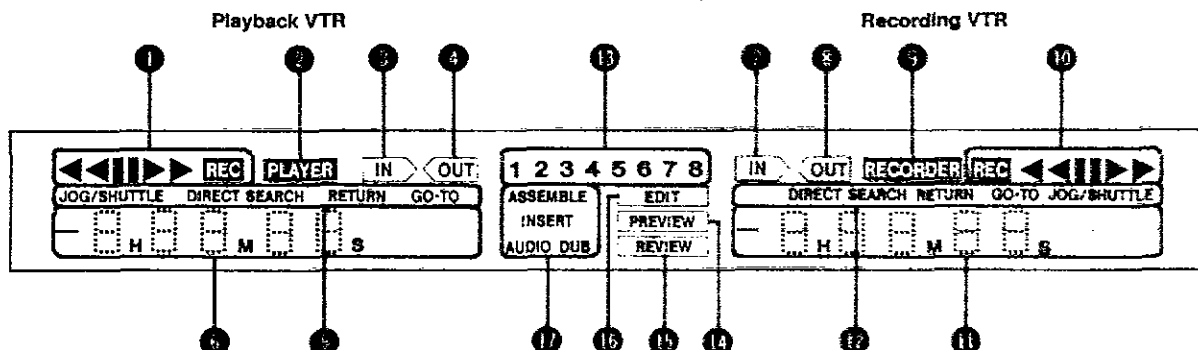After programming an editing operation, press the Return Button to return to the editing start point.

⓯ All Clear Button
Press the All Clear Button to clear all preset start and end points.

Multi-Function Display

The Multi-Function Display shows the operating conditions of the Editing Controller as well as both connected VTRs.


❶ Tape Transport Mode Indications for the Playback VTR
These indications indicate the present tape transport mode of the playback VTR.

❷ "Ready for Operation" Indication for the Playback VTR
It indicates that the playback VTR can be operated.

❸ Editing Start Point for the Playback VTR (IN)
This indication lights up to indicate that the displayed tape counter position is the editing start point of the playback VTR.

❹ Editing End Point for the Playback VTR (OUT)
This indication lights up to indicate that the displayed tape counter position is the editing end point of the playback VTR.

❺ Playback VTR Mode Indications
These indications show the present operation mode of the playback VTR.

❻ Tape Counter for the Playback VTR
This tape counter display shows the editing start and end points for the playback VTR.

❼ Editing Start Point for the Recording VTR (IN)
This indication lights up to indicate that the displayed tape counter position is the editing start point of the recording VTR.

❽ Editing End Point for the Recording VTR (OUT)
This indication lights up to indicate that the displayed tape counter position is the editing end point of the recording VTR.

❾ "Ready for Operation" Indication for the Recording VTR
It indicates that the recording VTR can be operated.

❿ Tape Transport Mode Indications for the Recording VTR
These indications indicate the present tape transport mode of the recording VTR.

⓫ Tape Counter for the Recording VTR
This tape counter display shows the editing start and end points for the recording VTR.

⓬ Recording VTR Mode Indications
These indications show the present operation mode of the recording VTR.

⓭ Programme Number

⓮ Preview Indication
This indication is lit during the editing preview.

⓯ Review Indication
This indication is lit during the editing review.

⓰ Edit Indication
This indication is lit during the actual editing operation.

⓱ Editing Mode
This indication shows the type of editing mode to be performed.

Tape Transport Indications

Recording

▶ **REC**

Pause

❚❚ **REC**

Playback

▶

Reverse Playback

◀
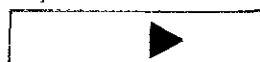
Fast Forward/
Cue Playback

▶▶

Rewind/Review Playback

◀◀

Still Playback
Field Advance Playback
Slow-motion Playback
Slow-motion Reverse
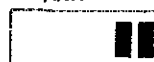Playback

❚❚

During Slow-motion Playback or Slow-motion Reverse
Playback of the VTR connected with the VW-EC310E, the
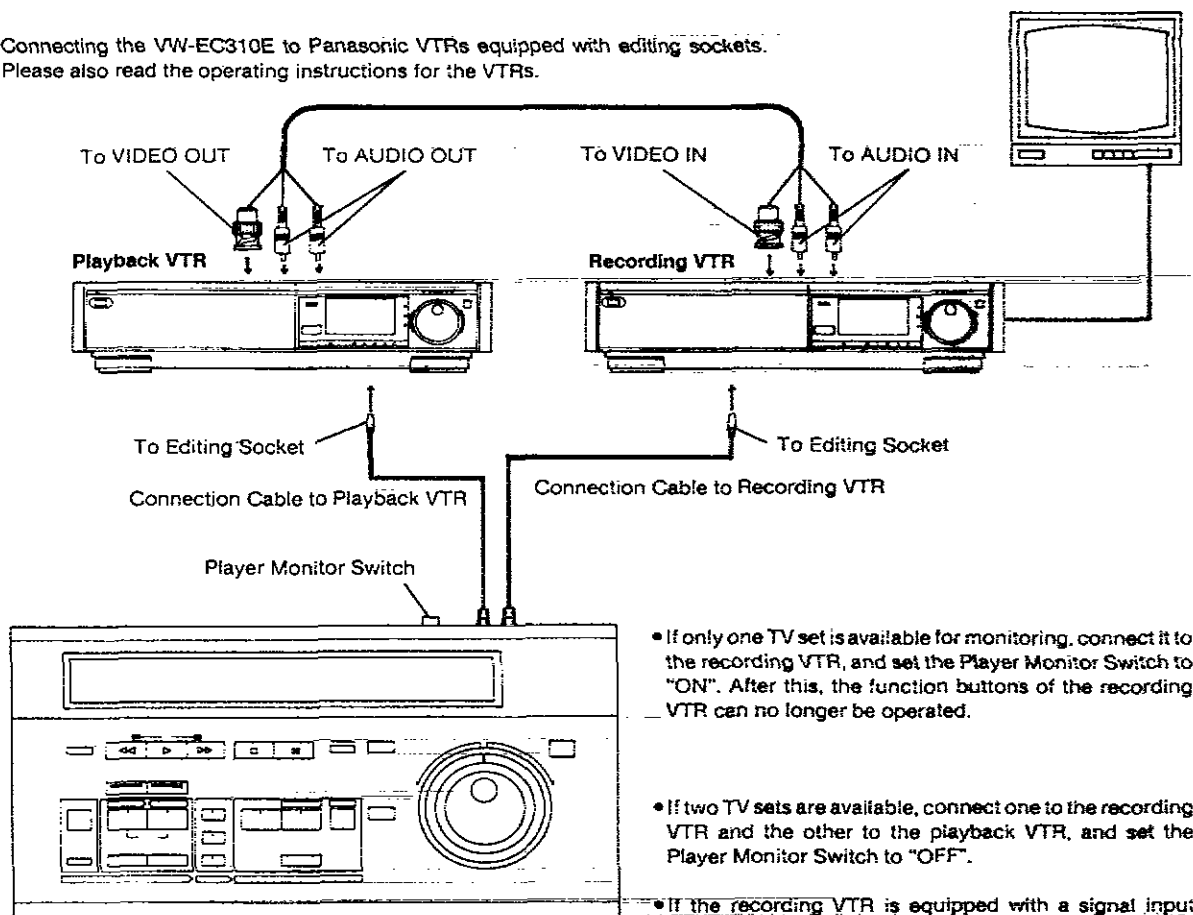indication is as shown on the right.

Slow-motion Playback

❚▶

Slow-motion Reverse Playback

◀❚

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INSTALLATION

Connecting the VW-EC310E to Panasonic VTRs equipped with editing sockets.
Please also read the operating instructions for the VTRs.

To VIDEO OUT   To AUDIO OUT   To VIDEO IN   To AUDIO IN

Playback VTR   Recording VTR

To Editing Socket   To Editing Socket

Connection Cable to Playback VTR   Connection Cable to Recording VTR

Player Monitor Switch

• If only one TV set is available for monitoring, connect it to the recording VTR, and set the Player Monitor Switch to "ON". After this, the function buttons of the recording VTR can no longer be operated.

• If two TV sets are available, connect one to the recording VTR and the other to the playback VTR, and set the Player Monitor Switch to "OFF".

• If the recording VTR is equipped with a signal input selector, set it to the "LINE" position.

When the VTR is turned on, the VW-EC310E is turned on simultaneously and the Tape Counter Display for the connected VTRs will light up in the Multi-Function Display.
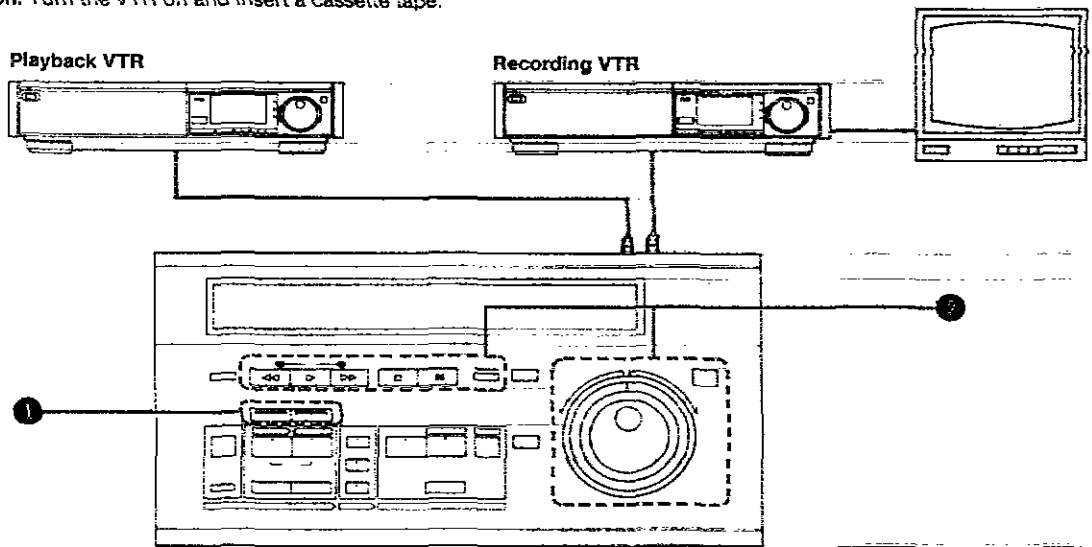
Playback VTR

Recording VTR

Tape Counter for the Playback VTR

Tape Counter for the Recording VTR
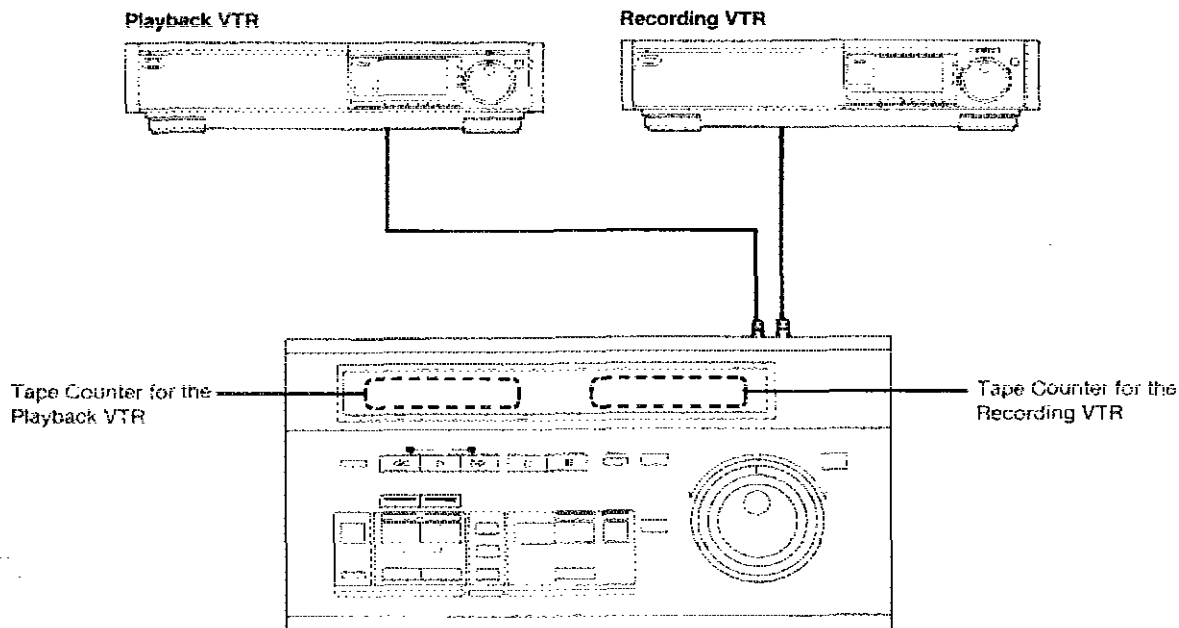
● The Counter Indication of the VW-EC310E also works as a lap time counter the indicated elapsed tape time is based on the recording time (hour, minute, second).

Cautions

● Perform all operations during editing on the VW-EC310E itself and avoid operating the playback and recording VTRs directly, because it may result in unprecise editing

● Do not reset the counter after setting the editing start and end points, otherwise these points will no longer be correct.

● If the "M" mark (Memory Indication) is lit in the tape counter of one of the connected VTRs, the VW-EC310E cannot function properly

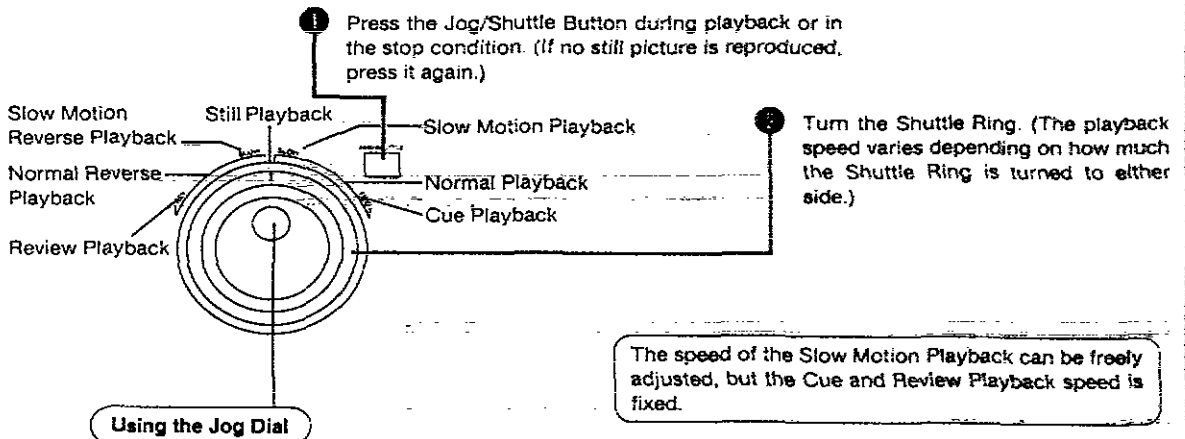Be sure to cancel the memory function of the VTRs before operating the VW-EC310E.

OPERATING VTRS WITH THE VW-EC310E

Preparation: Turn the VTR on and insert a cassette tape.

Playback VTR   Recording VTR

① Press the Player Button or the Recorder Button to choose the VTR that you want to operate. To operate both the playback and the recording VTR, press the two buttons simultaneously.

② Operate the VTR by using the Tape Transport Buttons. the Shuttle Ring and/or the Jog Dial.

Using the Shuttle Ring — Convenient for quickly locating a scene that you want to edit.

① Press the Jog/Shuttle Button during playback or in the stop condition. (If no still picture is reproduced, press it again.)

Slow Motion   Still Playback
Reverse Playback ———   Slow Motion Playback

Normal Reverse———
Playback   Normal Playback
                                Cue Playback
Review Playback

② Turn the Shuttle Ring. (The playback speed varies depending on how much the Shuttle Ring is turned to either side.)

> The speed of the Slow Motion Playback can be freely adjusted, but the Cue and Review Playback speed is fixed.

Using the Jog Dial

When this dial is turned after the operation described in step ① above. the picture playback speed varies according to the speed with which this dial is turned.
- Turning clockwise. . . . .Forward direction
- Turning counter-clockwise. . . . .Reverse direction

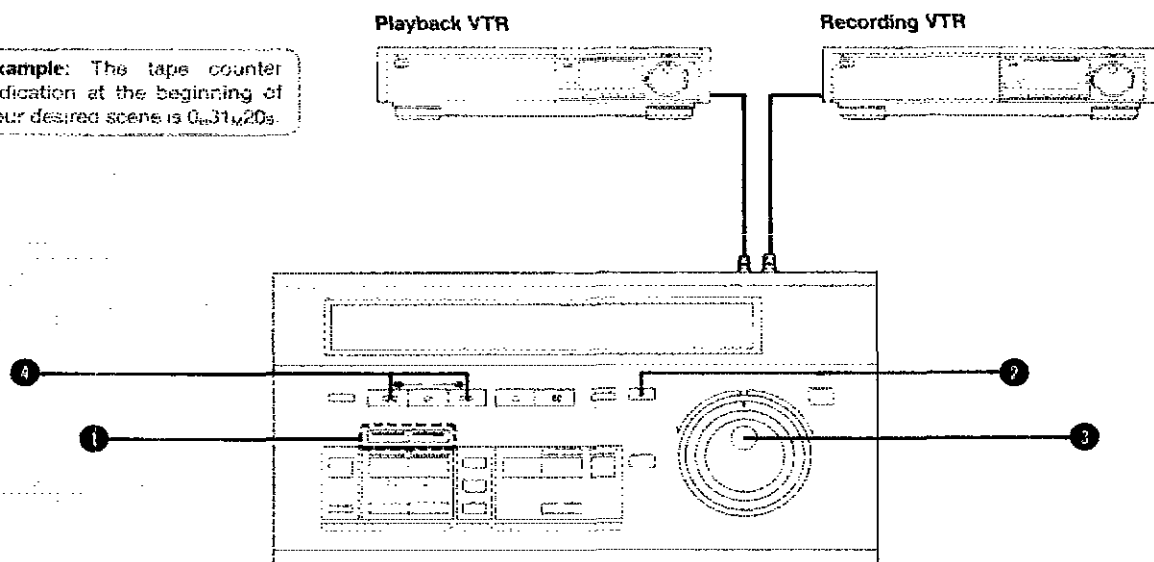Press the Jog/Shuttle Button again to revert to the Normal Playback.

DIRECT SEARCH

The Direct Search function of the VW-EC310E makes it easy to search for your favorite scenes.

Preparation: Turn the VTRs on and insert a cassette.

> **Example:** The tape counter indication at the beginning of your desired scene is $0_h 31_m 20_s$.

Playback VTR   Recording VTR

1 Press the Player Button or the Recorder Button to select the VTR that you want to operate.

2 Press the Direct Search Button after confirming that the VTR to be operated is in the stop mode.
   ● The tape counter that is indicated on the Editing Controller is reset.

3 Turn the Jog Dial clockwise or counter-clockwise to set the counter to $0_h 31_m 20_s$.
   ● Forward direction.....clockwise
   ● Reverse direction.....counter-clockwise

4 Press the FF or REW Button.
   The tape will be wound in forward or reverse direction and stop at approximately the tape counter position $0_h 31_m 20_s$.

Tape Arrangement
It is recommended to keep a log for each tape with recording contents and tape counter indication of the beginning and end of each tape segment. When making the first recording on a tape, be sure to reset the tape counter to "$0_h 00_m 00_s$".

EDITING FUNCTIONS

Video recorders and video cameras allow easy successive recording and shooting. And after watching previously recorded scenes or programmes, they can be erased and new material can be recorded over them. However, when you want to change the order of the recorded scenes or insert a scene from another tape, editing becomes necessary.
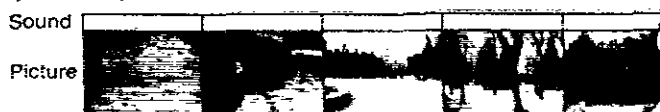
There are four basic video editing functions.

- Dubbing (Copying)
- Insert Editing
- Assemble Editing
- Audio Dubbing

Dubbing

This editing function allows re-recording (copying) picture and sound of a recorded tape onto another tape.

(Playback VTR)
Sound
Picture

(Recording VTR)
Sound
Picture

Insert Editing

With this function, the picture and sound of a part or parts of a recorded tape can be replaced by other scenes and sound.

- **Picture Insert Editing**
  Only the new picture is inserted, while the original sound on the tape remains unchanged.
  When this type of editing is done onto a tape with hi-fi sound, the original sound on the normal (longitudinal audio track) remains unchanged but the hi-fi sound (helical tracks) is erased.

  (Playback VTR)
  Picture

  (Recording VTR)
  Sound
  Picture

  (Tape after editing)

- **Picture & Sound Insert Editing**
  Both picture and sound (both normal and hi-fi audio tracks in case of a tape with hi-fi sound) are erased and replaced.

  (Playback VTR)
  Sound
  Picture

  (Recording VTR)
  Sound
  Picture
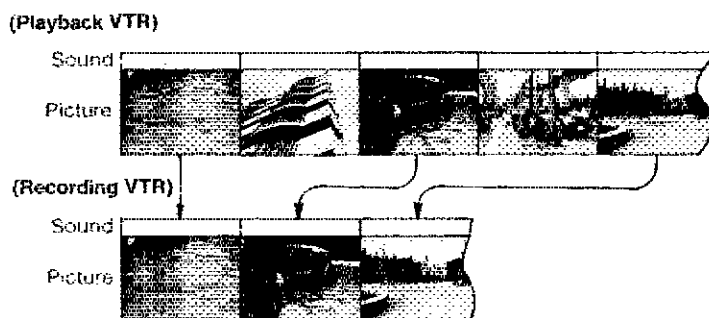
  (Tape after editing)

- Sound Insert Editing (Refer to "Audio Dubbing")

❸ Assemble Editing

With Assemble Editing, the required scenes (picture and sound) can be picked up from one or more recorded tapes and recorded in any desired order.

(Playback VTR)

Sound

Picture

(Recording VTR)

Sound

Picture

❹ Audio Dubbing

This editing method allows recording new sound on a recorded tape. (Normal audio track only)

(Playback VTR)   Narration   Narration   **(Edited Tape)**

Sound

(Recording VTR)

Sound

Picture
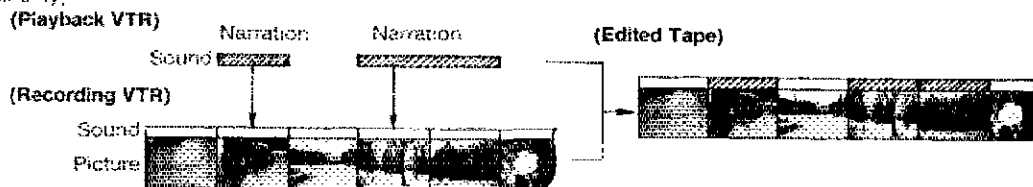
(When Audio Dubbing is performed on a tape with hi-fi sound, the original hi-fi sound on the tape will remain unchanged.)

How to Choose the Right Editing Method

Choose a suitable method according to the purpose of the editing and the programme content.

| Editing Method		Examples
Dubbing		• Recording a recorded tape onto another tape (tape copying). • Re-recording (copying) a tape recorded in a different recording system (system conversion recording).
Insert Editing	Picture Insert Editing	• Inserting titles and new scenes into an already recorded tape. • Making original tapes by inserting pictures afterward. (Record the sound beforehand, and then add visual scenes to suit it.)
	Picture & Sound Insert Editing	• Inserting new pictures and sound into an already recorded tape. • Modifying partially after editing.
Assemble Editing		• Shooting photographs and printed matter with a video camera, and then joining the necessary cuts to edit them into a finished tape. • Editing out (omitting) unnecessary scenes in a TV programme while editing it onto another tape.
Audio Dubbing		• Recording narration, commentary, background music, etc. to match the picture. • Erasing undesired sound on a recorded tape.

DUBBING (COPYING)

For recording (copying) an already recorded tape from beginning to end onto another tape, follow the operations described below.

(Playback VTR)

Sound

Picture

(Recording VTR)

Sound

Picture
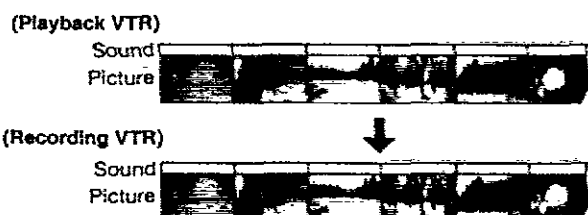
Preparation:

Turn the Playback VTR on and insert the recorded tape.
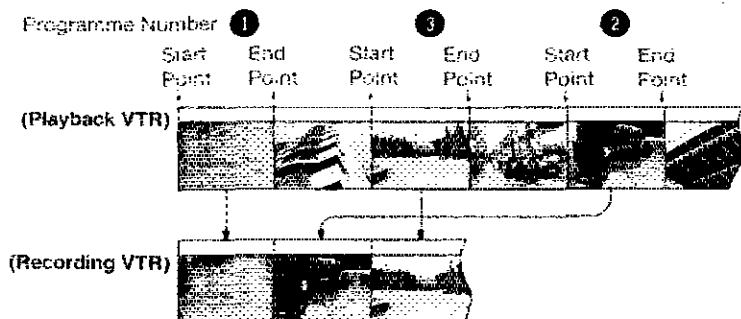Turn the Recording VTR on and insert a tape with erasure
prevention tab intact.

Playback VTR   Recording VTR
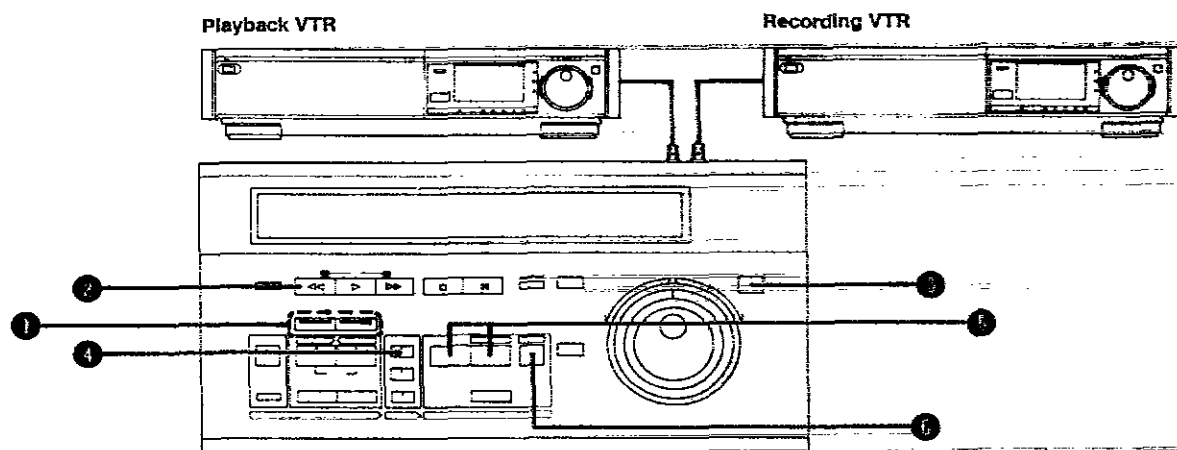
❶ Press the Recorder Button and the Player Button
simultaneously.
(The "RECORDER" and "PLAYER" Indicators light
up.)

❷ Press the Rewind/Reverse Button.
(The tapes in the recording and playback VTRs begin
to rewind.)

❸ Press the Jog/Shuttle Button after the rewinding is
finished.
(Press it again if no still picture is reproduced both on
the monitor for the recording VTR and on the monitor
for the playback VTR.)

❹ Press the Assemble Button.
(The VW-EC310E is now in the Assemble Editing
mode.)

❺ Press the Preview Button while keeping the Edit Start
Button pressed.
(The Dubbing starts.)

❻ To stop the dubbing before it is finished, press the
Stop Button.
Both the recording VTR and the playback VTR will be
in the Still Playback mode. Press the Stop Button
again to release the Assemble Editing mode. Before
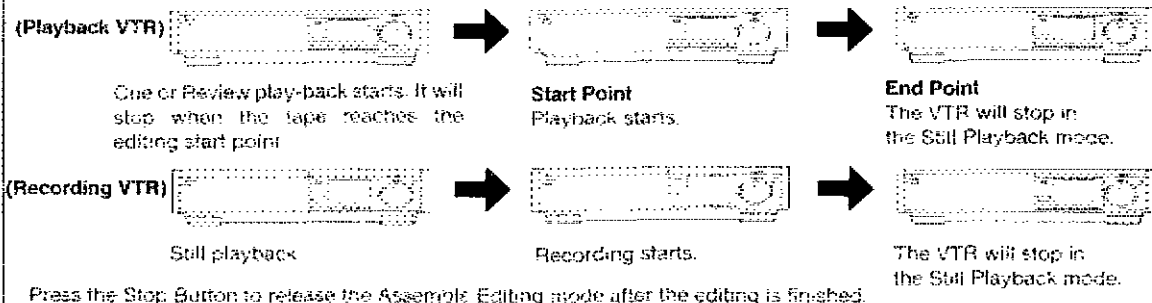operating the VTR, press the Stop Button on this unit.

AUTOMATIC ASSEMBLE EDITING

The automatic editing functions of the VW-EC310E allow automatic Assemble Editing of up to 8 scenes.

- Decide the start and end points of each desired scene before editing.
- Then decide in which order you want to edit these scenes and assign them programme numbers. (The automatic editing function edits the scenes in numerical order of the programme numbers.)
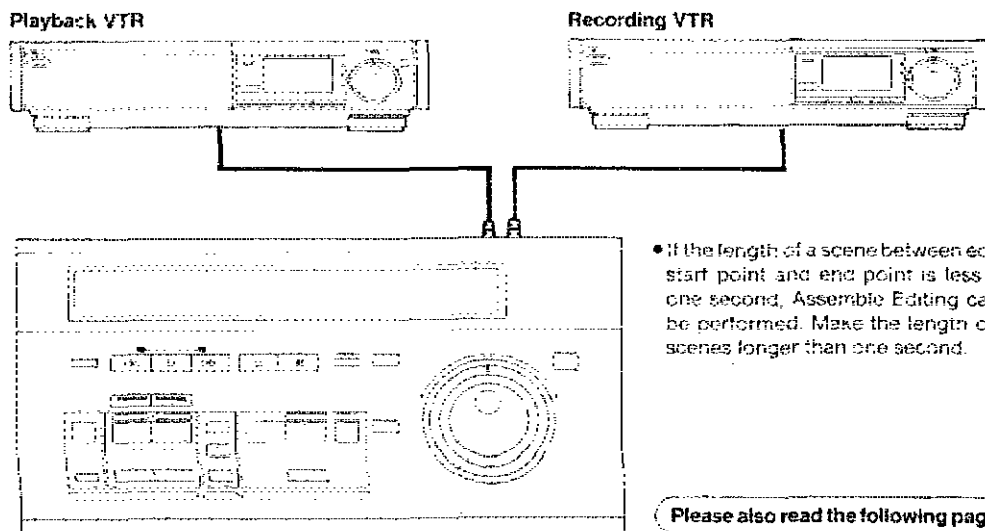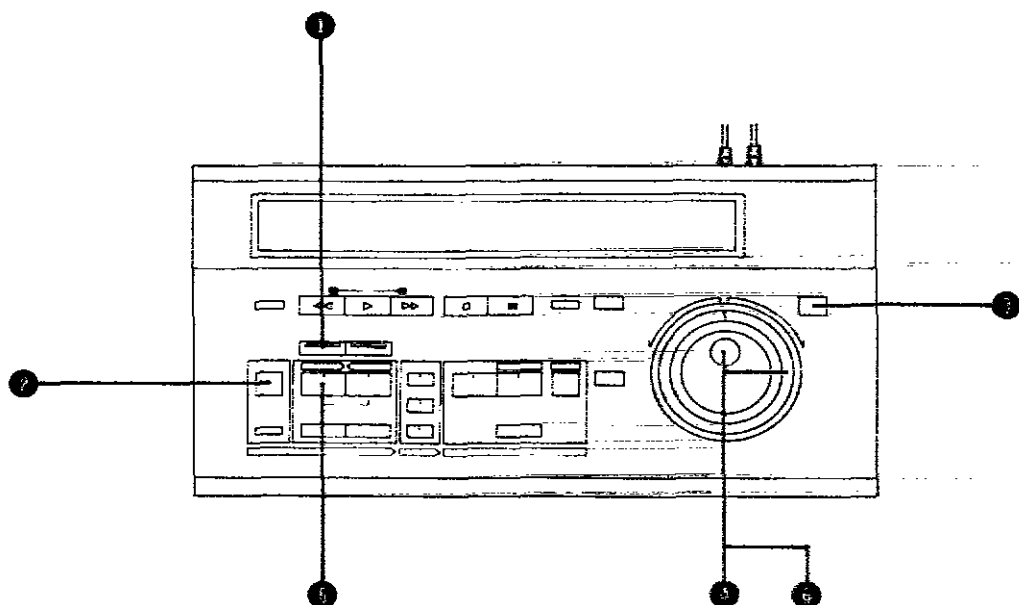
Programme Number ① ③ ②

| | Start Point | End Point | Start Point | End Point | Start Point | End Point |

(Playback VTR)

(Recording VTR)

The following operations are automatically repeated for every programme number.

(Playback VTR)

Cue or Review play-back starts. It will stop when the tape reaches the editing start point.

Start Point
Playback starts.

End Point
The VTR will stop in the Still Playback mode.

(Recording VTR)

Still playback

Recording starts.

The VTR will stop in the Still Playback mode.

Press the Stop Button to release the Assemble Editing mode after the editing is finished.

Preparation:
- Turn the Playback VTR on and insert a recorded cassette.
- Turn the Recording VTR on and insert a tape with erasure prevention tab intact.

Playback VTR

Recording VTR

- If the length of a scene between editing start point and end point is less than one second, Assemble Editing cannot be performed. Make the length of the scenes longer than one second.

(**Please also read the following page.**)

AUTOMATIC ASSEMBLE EDITING (CONT'D)

1 Press the Player Button to select the playback VTR.

2 Press the Programme Button to select programme number 1.

3 Press the Jog/Shuttle Button.
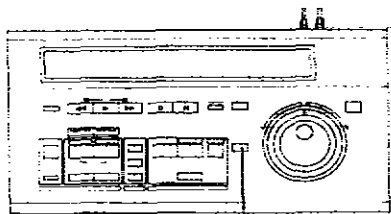Press this button again if the playback VTR does not reproduce a still picture.

4 Use the Shuttle Ring and the Jog Dial to search on the playback VTR for the point where you want the editing to start (start point), and put the VTR at this position into the Still Playback mode.
(Refer to "Using the Shuttle Ring" on page 10.)

5 Press the Mark In Button. (The start point is now set.)

6 Use the Shuttle Ring and the Jog Dial to search on the playback VTR for the point where you want the editing to end (end point), and put the VTR at this position into the Still Playback mode.
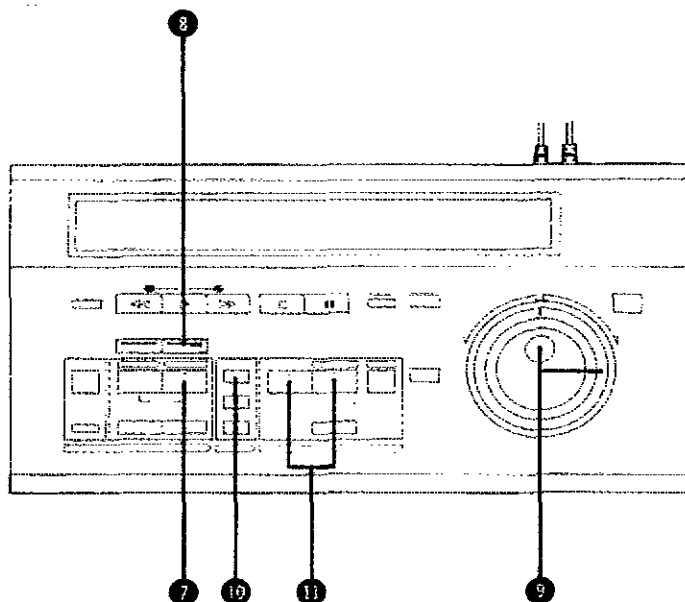
⑦ Press the Mark Out Button. (The end point is now set.)
- If you want to set two editing programmes or more, repeat the steps ③ and ④ to ⑦ after operating step ⑥.

⑧ Press the Recorder Button.
Press the Jog/Shuttle Button again if the recording VTR does not reproduce a still picture.

⑨ Use the Shuttle Ring and the Jog Dial to search on the recording VTR for the point where you want the editing to start (start point), and put the VTR at this position into the Still Playback mode.

⑩ Press the Assemble Button.
(The editing system is now in the Assemble Editing mode.)
- If the programme number flashes (which indicates a mistake in setting), set the start and end points again.

⑪ Press the Preview Button while pressing the Edit Start Button. (The editing starts.)
- It will take a few moments before the editing starts.
- After editing, press the **STOP** Button to release the Assemble Editing mode.
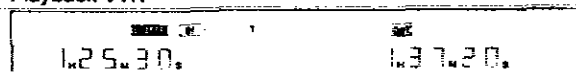- Before operating the VTRs, press the Stop Button (☐) on the VW-EC310E.

To Confirm the Editing Start and End Points

Press the Programme Check Button to select the programme that you want to confirm.
(The programme number and the editing points will be indicated as shown in the figure on the right.)
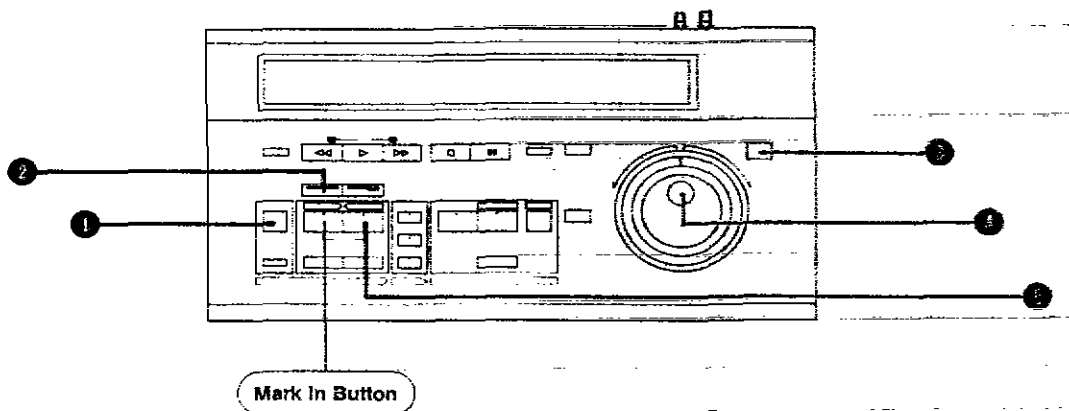
To Change the Editing Start and End Points

If you want to change the editing start and end points after confirming the editing programmes or performing editing, follow the operation steps below.
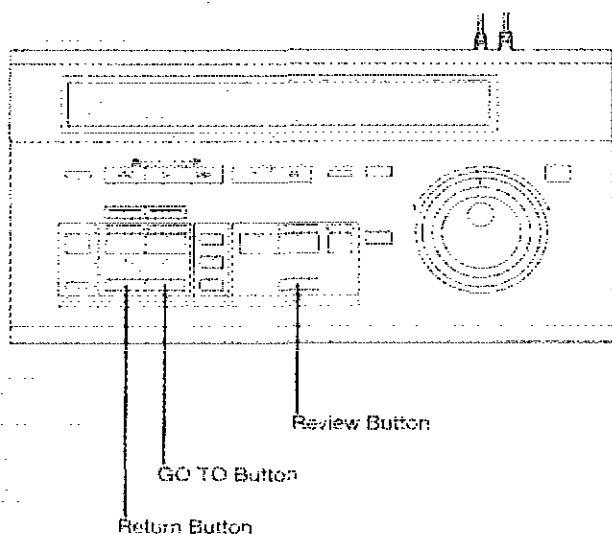
Playback VTR

| Editing Start Point | Editing End Point |

Recording VTR — A few seconds later

A few seconds later

The display will again show the present tape counter indications.

(Mark In Button)

❶ Press the Programme Button to select the number of the programme that you want to change.

❷ Press the Player Button to select the playback VTR.

❸ Press the Jog/Shuttle Button.
Press this button again if the playback VTR does not reproduce a still picture.

❹ Use the Shuttle Ring and the Jog Dial to search for the point where you want the editing to end, and then put the VTR into the Still Playback mode.

❺ Press the Mark Out Button. (The editing end point is now changed.)

After an editing point has been changed, repeat steps ❸ to ❹ on the previous page to start editing.

To Change the Editing Start Point
All operation steps are the same as above, except step ❺. In step ❺, use the Shuttle Ring and the Jog Dial to search for the scene where you want to set the editing start point, and then put the VTR into the Still Playback mode. Then press the Mark In Button. (The editing start point is now changed.)

Review Button

GO TO Button

Return Button

• Go To
Press the Go To Button after setting the editing start and end points, and the tape will be wound to the editing end point. Use this function after the programme number has been selected.
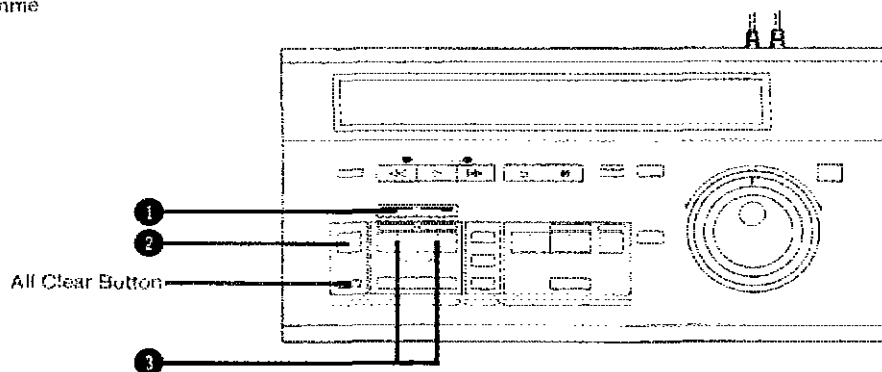
• Return
Press the Return Button after setting the editing start and end points, and the tape will be rewound to the editing start point.
Use this function after the programme number has been selected.

• Review
After the editing is finished, press the Review Button to play back the tape from the editing start to end point of the tape in the recording VTR.

To Clear the Programmed Editing Start and End Points

• To clear only one programme

All Clear Button

1 Press the Player Button to select the playback VTR.

2 Press the Programme Button to select the number of the programme which you want to clear.

3 Press the Mark In Button and the Mark Out Button simultaneously.
  • The editing point indications will disappear as shown in the figure, and the programme is cleared.

  • To clear all programmes, press the All Clear Button.

— 19 —
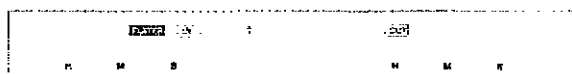
INSERT EDITING & AUDIO DUBBING

The automatic editing functions of the VW-EC310E allow automatic Insert Editing and Audio Dubbing of up to 8 scenes.

- The two programming methods **A** and **B** explained on the right are the same for both Insert Editing and Audio Dubbing.

A Cutting out an unnecessary part from a point decided on the recording VTR and replacing it by a scene whose start and end points are decided on the playback VTR.

B Cutting out a scene whose start and end points are decided on the recording VTR and replacing it with a scene whose start point is decided on the playback VTR.
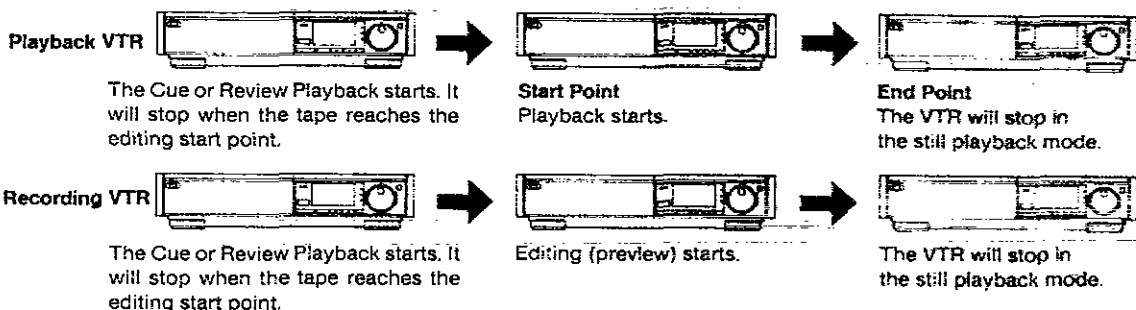
Programme Number **1** **2**
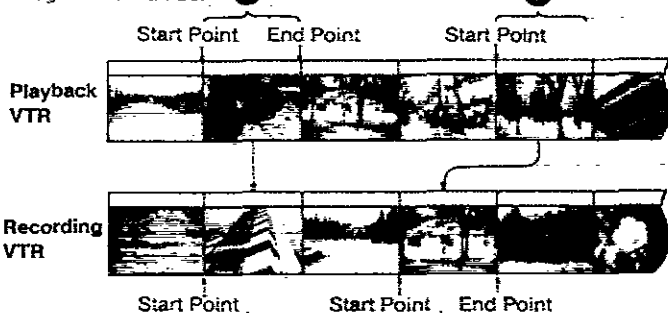
Start Point End Point Start Point

Playback VTR

Recording VTR

Start Point Start Point End Point

A Set the start and end points on the playback VTR and the start point on the recording VTR.

**B** Set the start point on the playback VTR and the start and end points on the recording VTR.

The following operations are automatically repeated for every programme number.

Playback VTR

The Cue or Review Playback starts. It will stop when the tape reaches the editing start point.

Start Point
Playback starts.

End Point
The VTR will stop in the still playback mode.

Recording VTR

The Cue or Review Playback starts. It will stop when the tape reaches the editing start point.

Editing (preview) starts.

The VTR will stop in the still playback mode.

- Before operating the VTRs, press the Stop Button on the VW-EC310E.

Preparation:
Turn the playback VTR on and insert a recorded cassette.
Turn the recording VTR on and insert a tape with erasure prevention tab intact.

Playback VTR   **Recording VTR**
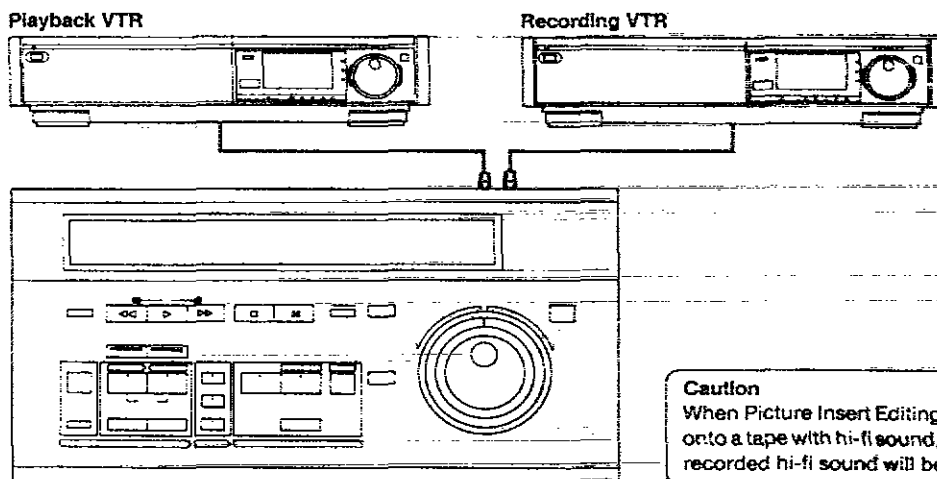
> **Caution**
> When Picture Insert Editing is performed onto a tape with hi-fi sound, the originally recorded hi-fi sound will be erased.
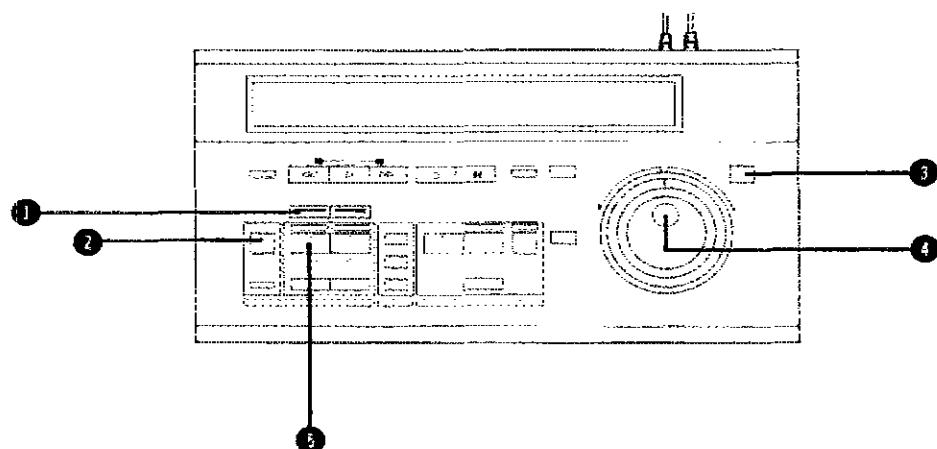
- 20 -

1 Press the Player Button to select the playback VTR.

2 Press the Programme Button to choose programme number 1.

3 Press the Jog/Shuttle Button.
   • Press this button again if the playback VTR does not reproduce a still picture.

4 Use the Shuttle Ring and the Jog Dial to search on the playback VTR for the point where you want the editing to start (start point), and then put the VTR into the still playback mode.

5 Press the Mark In Button. (The start point is now set.)

The operation steps **6** to **10** are different for programming methods **A** and **B**. (See the next two pages.)

INSERT EDITING & AUDIO DUBBING (CONT'D)

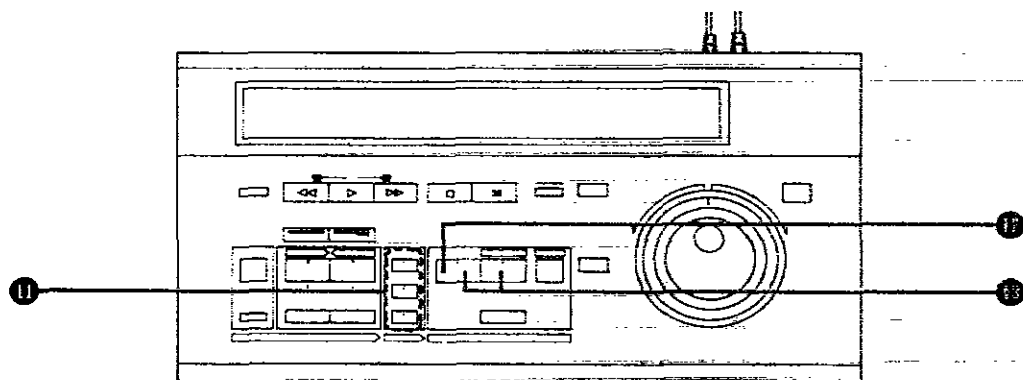**A** Setting the start and end points on the playback VTR and the start point on the recording VTR.
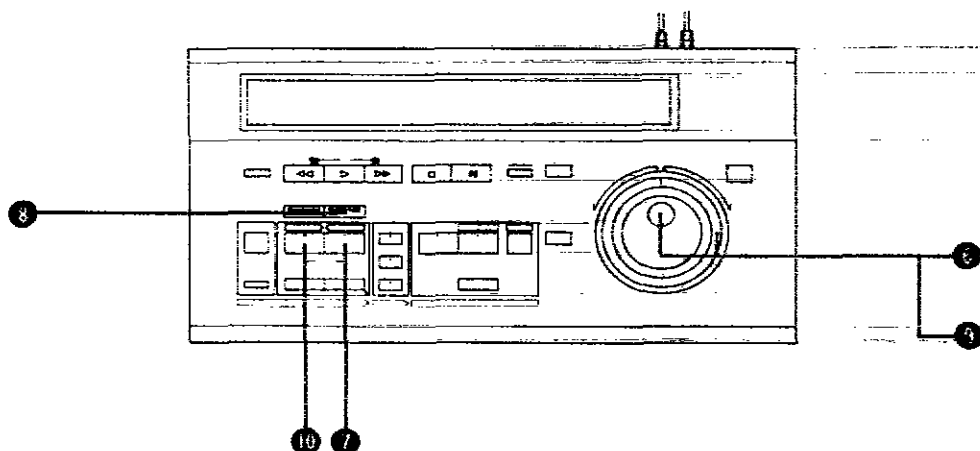
6 Use the Shuttle Ring and the Jog Dial to search on the playback VTR for the point where the editing is to end (end point), and then put the VTR into the Still Playback mode.

7 Press the Mark Out Button. (The end point is now set.)

8 Press the Recorder Button.

9 Use the Shuttle Ring and the Jog Dial to search on the recording VTR for the point where you want the editing to start (start point), and then put the VTR into the Still Playback mode.

10 Press the Mark In Button. (The start point is now set.)
 • For the operation steps ⑪ to ⑬, see page 24.
 • To set two or more programmes, repeat steps ❻. ❼ and ❽ to ❿.
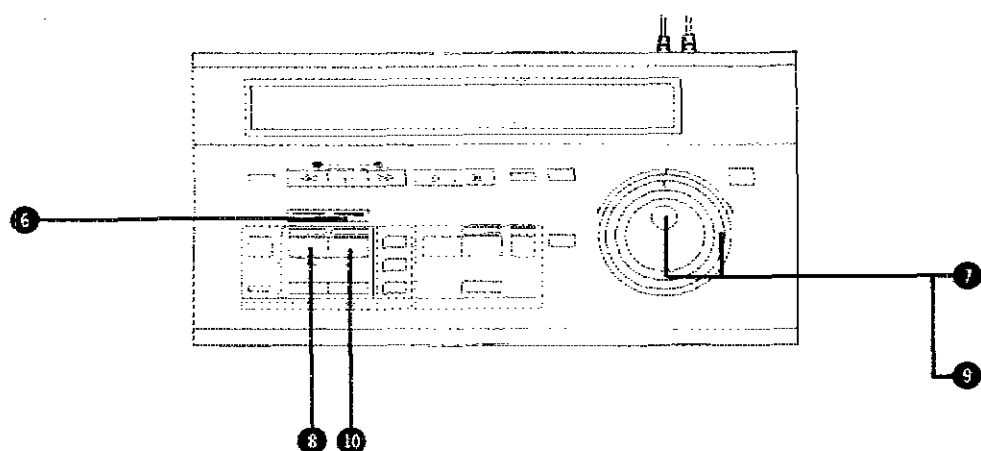
6 Press the Recorder Button to select the recording VTR
- Press the Jog/Shuttle Button again, if the recording VTR does not reproduce a still picture

7 Use the Shuttle Ring and the Jog Dial to search on the recording VTR for the point where you want the editing to start (start point), and then put the VTR into the Still Playback mode.

8 Press the Mark In Button. (The start point is now set.)

9 Use the Shuttle Ring and the Jog Dial to search on the recording VTR for the point where you want the editing to end (end point), and then put the VTR into the Still Playback mode.

10 Press the Mark Out Button. (The end point is now set.)
- For the operation steps 1 to 10, see page 24.
- To set two or more programmes, repeat steps 6, 9 and 8 to 10.

⓫ Choose the desired editing mode.
- If the programme number flashes (incorrect setting), set the start and end points again.

⓬ Press the Preview Button. (The editing preview starts.)
- If preview is not desired, do not press this button.

⓭ Press the Preview Button while pressing the Edit Start Button.

Editing Mode	Picture Insert Editing	Picture and Sound Insert Editing	Audio Dubbing
Button to Press	INSERT / AUDIO DUB	INSERT / AUDIO DUB	INSERT / AUDIO DUB
Indication in Display	INSERT	INSERT AUDIO DUB	AUDIO DUB

If four points (start and end points of both playback VTR and recording VTR) have been set, the editing ends when the tape in either VTR reaches the end point.

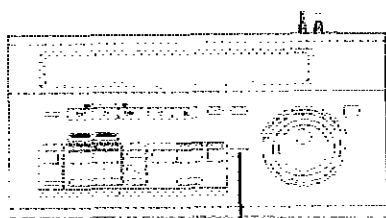**About the Editing Preview Function**

During an Insert Editing or Audio Dubbing, the originally recorded picture or sound is erased and thus irretrievably lost. Therefore, it is recommended to preview before performing the actual editing, so you can confirm that the editing will be made exactly as you want it to be.

- The actual editing is not carried out when using this function.
- In the Preview Editing Mode, the picture will be blurred at the insert editing end point. However, this is no malfunction of the unit. The actual Insert Editing will be carried out normally and without any blurring.

To Confirm the Editing Start and End Points

Press the Programme Check Button to select the programme that you want to confirm.
(The programme number and the editing points will be indicated as shown in the figure on the right.)

To Change the Editing Start and End Points

If you want to change the editing start and end points after confirming the programmes or previewing, follow the operation steps below.

Playback VTR

Editing Start Point   Editing End Point
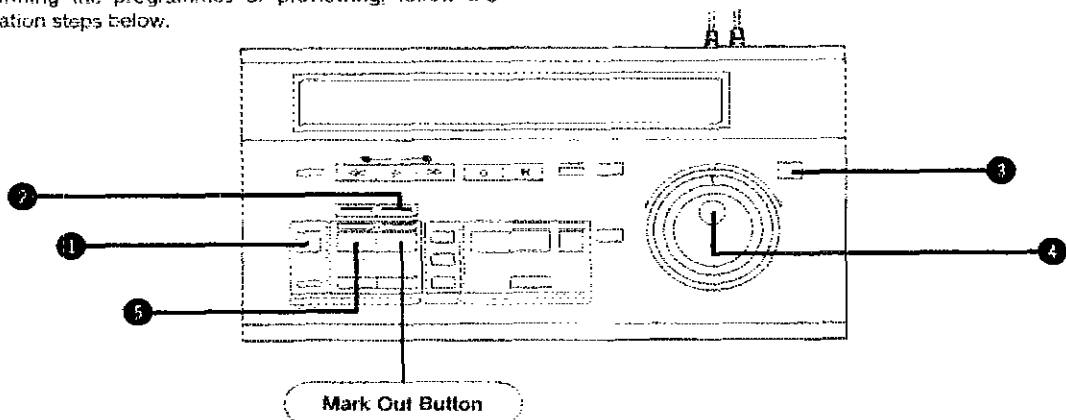
Recording VTR   A few seconds later

A few seconds later

The display will again show the present tape counter indications.

> **Example:** To change the editing start point of programme number 1.

Mark Out Button

❶ Press the Programme Button to choose programme number 1.

❷ Press the Recorder Button to select the recording VTR.
Press the Player Button if you want to change an editing point on the playback VTR.

❸ Press the Jog/Shuttle Button.
Press this button again if the recording VTR does not reproduce a still picture.

❹ Use the Shuttle Ring and the Jog Dial to search for the point where you want the editing to start (start point), and then put the VTR into the Still Playback mode.

❺ Press the Mark In Button.
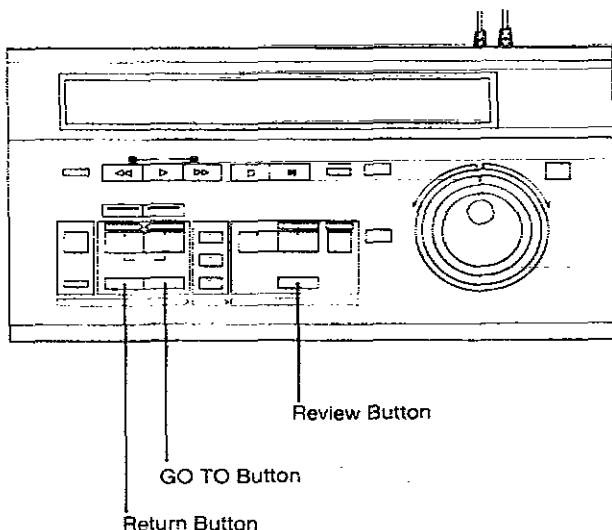The editing start point on the recording VTR is now changed.

It is possible to change the start and end points on the playback VTR and the end point on the recording VTR in the same operation sequence.
• To set the end point, press the Mark Out Button in step ❺.

After changing some editing point(s), put both the recording VTR and the playback VTR into the Still Playback mode and repeat steps ❶ to ❾ on the preceding page to start editing.

INSERT EDITING & AUDIO DUBBING (CONT'D)

Convenient Functions
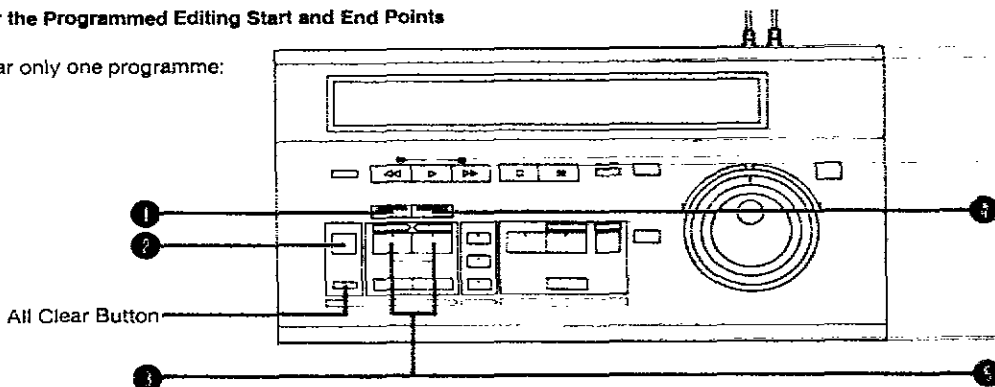

Review Button

GO TO Button

Return Button

• Go To
Press the Go To Button after setting the editing start and end points, and the tape will be wound to the editing end point. Use this function after the programme number has been selected.

• Return
Press the Return Button after setting the editing start and end points, and the tape will be rewound to the editing start point.
Use this function after the programme number has been selected.

• Review
After the editing is finished. press the Review Button to play back the tape from the editing start to end point of the tape in the recording VTR.

To Clear the Programmed Editing Start and End Points

• To clear only one programme:
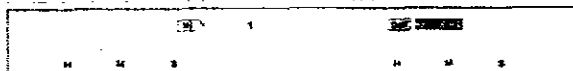

All Clear Button

① Press the Player Button to select the playback VTR.
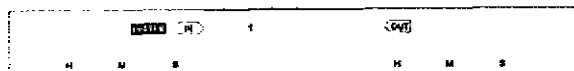
② Press the Programme Button to select the number of the programme which you want to clear.

③ Press the Mark In Button and the Mark Out Button simultaneously.
The editing point indications will disappear as shown in the figure below. and the editing start and end points on the playback VTR are cleared. If the indications are not cleared. press the two buttons again.

④ Press the Recorder Button to select the recording VTR.

⑤ Press the Mark In Button and the Mark Out Button simultaneously.
The editing point indications will disappear as shown in the' figure below. and the editing start and end points on the recording VTR are cleared. If the indications are not cleared. press the two buttons again.

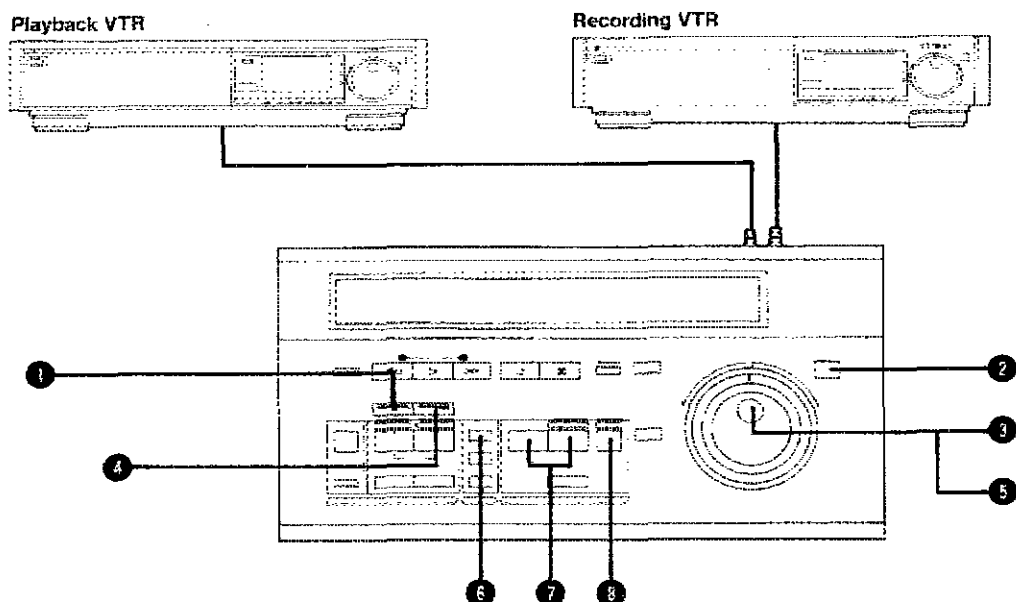**• To clear all programmes, press the All Clear Button.**

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MANUAL EDITING

To perform Assemble Editing, Insert Editing or Audio Dubbing without programming, follow the operation steps below.

Preparation:
- Turn the playback VTR on and insert a recorded cassette.
- Turn the recording VTR on and insert a tape with erasure prevention tab intact.

Playback VTR	Recording VTR

Example: To perform Assemble Editing manually.

① Press the Player Button to select the playback VTR.

② Press the Jog/Shuttle Button.
Press this button again if the playback VTR does not reproduce a still picture.

③ Use the Shuttle Ring and the Jog Dial to search on the playback VTR for the point where you want the editing to start, and put the VTR into the still playback mode.

④ Press the Recorder Button to select the recording VTR.
If the recording VTR does not reproduce a still picture, press the Jog/Shuttle Button again.

⑤ Put the recording VTR into the still playback mode at the point where you want the editing to start.

⑥ Press the Assemble Button to activate the Assemble mode.
To perform an Insert Editing, press the Insert Button.
To perform an Audio Dubbing, press the Audio Dub Button.

⑦ Press the Preview Button while pressing the Edit Start Button.
(The editing starts.)

⑧ Press the **STOP** Button at the point where you want to finish the editing.
Press the **STOP** Button again to cancel the Assemble mode.
Both the recording VTR and the playback VTR will stop in the Still Playback mode. In the high-speed mode, however, they may not return to the Still Playback mode. Before operating the VTRs, press the Stop Button (□) on the VW-EC310E.
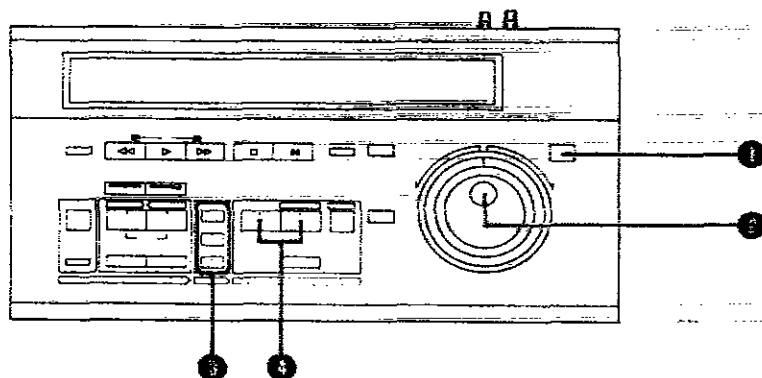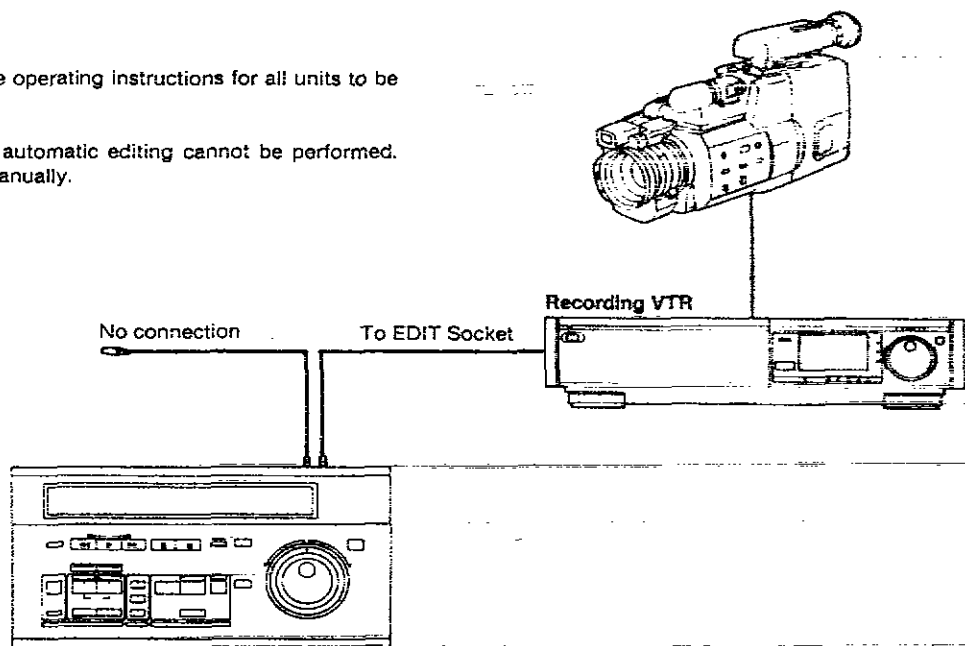
MANUAL EDITING (CONT'D)

Editing Pictures from a VHS/VHS-C Movie

Connections

Please read the operating instructions for all units to be connected.

● In this case, automatic editing cannot be performed. Please edit manually.

No connection   To EDIT Socket

Recording VTR

❶ Press the Jog/Shuttle Button.
(A still picture will be reproduced.)

❷ Put the VTR into the still playback mode at the point where you want to begin editing.

❸ Choose the desired editing mode.

❹ Press the Preview Button while pressing the Edit Start Button.
(The editing starts.)

BEFORE REQUESTING SERVICE

Before requesting service, check the following points again.

SYMPTOM	CAUSE	REMEDY	Page
The connected VTR does not work.	The connections are not correct.	Reconnect correctly.	8
	The VTR is not turned on	Turn the VTR on	9
	The VTR that you want to operate is not selected	Select the VTR to be operated with the Player or Recorder Button.	—
The Editing functions do not work.	The connections are not correct.	Reconnect correctly.	8
	The editing start and end points are not set correctly.	Set the points correctly.	16 · 17 21~24
	The editing end point was set before the start point.	Set the points in the correct order.	—
	The accidental erasure prevention tab on the cassette in the recording VTR is broken out.	Insert a cassette with intact tab.	—
	The tape counter was reset.	Set the start and end points again	—
	The playback VTR and the recording VTR are not in the still playback mode.	Put both VTRs into the still playback mode.	—
	The Input Signal Selector on the recording VTR is not selected correctly	Select the correct position	—
The Editing cannot be performed correctly	The tape counter was reset after the programme had been set	Set the start and end points again.	—
The Direct Search function does not work.	The VTR is not in the stop mode	Put the VTR into the stop mode	11

The VW-EC310E is equipped with a micro computer. When it is connected to VTRs, distortion and noise may occur and the VTRs and the editing controller may not work correctly. If this is the case, disconnect the cables from the VTRs and then connect them again

SPECIFICATIONS

Information for Your Safety

Power Source:	DC 5 V (supplied from VTR)
Power Consumption:	0.2 W

Weight:	Approx. 910 g
Dimensions:	315 (W) × 40 (H) × 165 (D)mm
Length of Cables:	2 m

INHALT

Information für Ihre Sicherheit.

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WICHTIGER HINWEIS

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ZU IHRER SICHERHEIT

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