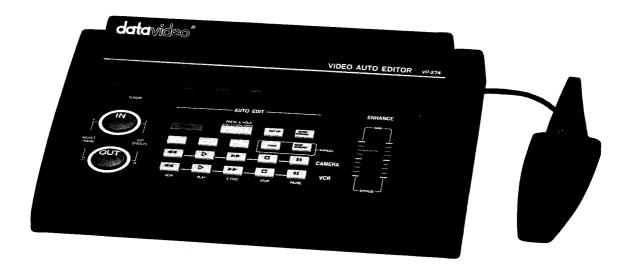


# Auto Video Editor

Transforms home videos into smooth, professional-looking productions



- · Allows both automatic and manual editing
- Holds up to 190 scenes in memory and edits them in any order
- · Provides automatic cut and fade effects between scenes
- · Allows frame-by-frame scene marking adjustments
- Controls all functions of playback camcorder and recording VCR
- Provides automatic preview of edit before final recording
- On-screen displays make operation easy

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#### About the Editor

The Auto Video Editor lets you edit home videos quickly and easily. It copies all the scenes you want to see, in the order you want to see them, from your camcorder to a VCR. At the same time, the Editor eliminates all the scenes you don't want to see (without erasing any of the original video).

In Automatic mode, the Editor's digital computer controls all functions of your camcorder and the recording VCR. All by itself, the Editor fast-forwards or rewinds the camcorder tape to a specific scene, plays it back, and records it on the VCR. You can program as many as 190 scenes (in any order you choose) for the Editor to combine on one final tape. You can also choose either cut or fade transitions between scenes.

In Manual mode, the Editor lets you make a super-quick edit, recording or skipping over scenes in chronological order as you play back the camcorder tape for the first time.

The Editor features on-screen displays for easy operation and a built-in video enhancer for high-quality recordings.

The Editor works with virtually all camcorders and VCRs.

#### Care and Servicing

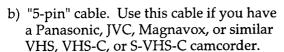
- 1. READ INSTRUCTIONS CAREFULLY.
- 2. POWER: Use only the power supply included. Do not overload wall outlets or extension cords. Overloading creates risk of shock and/or fire. Power cords from all equipment, including this device, should be routed away from areas where people walk.
- 3. SERVICING: Do not try to service this device yourself. Unauthorized servicing will void warranty and may damage device. Refer all questions and servicing only to qualified service personnel (see Warranty for details).
- 4. CLEANING: Unplug device from wall outlet before cleaning. Use damp cloth to wipe unit clear of dust and dirt. Do not use liquid or aerosol cleansers.

#### I. Before You Get Started

Make sure you have all the accessories you need.

#### Included with the Editor:

- 1. EDIT CONTROL CABLES. You will use **only one** of these two cables, depending on what camcorder you have.
  - a) "Control-L" cable. Use this cable if you have a Sony, Ricoh, Nikon, or similar 8mm or Hi-8 camcorder.





2. INFRARED REMOTE CONTROL UNIT.

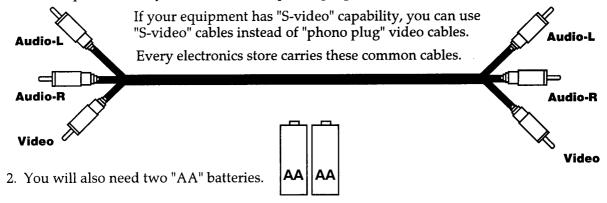


4. At the back of this manual are several blank STORYBOARDS. You should make plenty of photocopies of these Storyboards, so you can take sufficient notes for editing.

Scene Sequence	Scene Number	Scene Ti IN	ansition OUT	Counter IN	Number OUT	Remarks

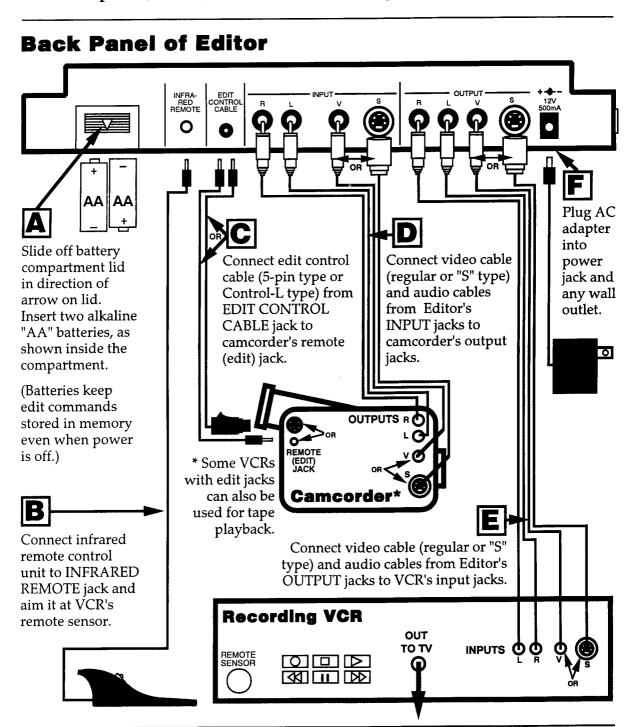
#### NOT included with the Editor:

1. To set up the Editor, you will need two "phono plug" audio/video cables like this:



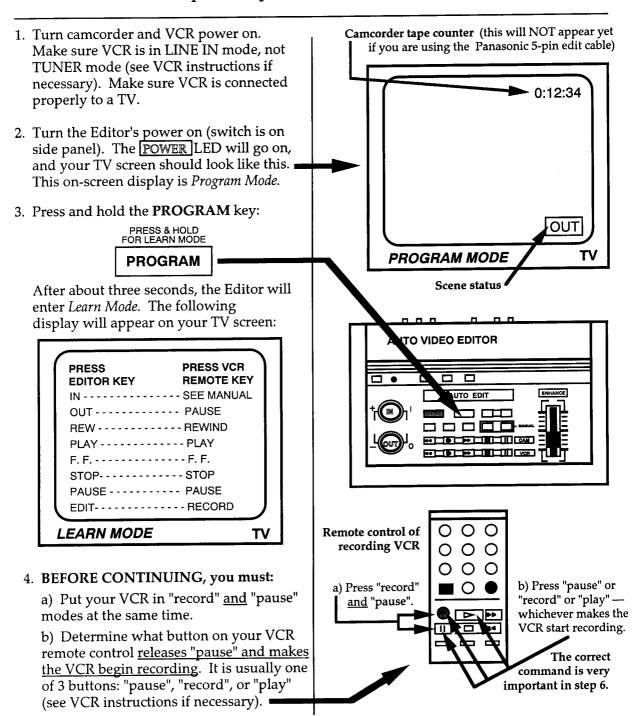
### II. Setting Up the Editor

Follow steps A-F, below, to connect the Editor to your camcorder and VCR.

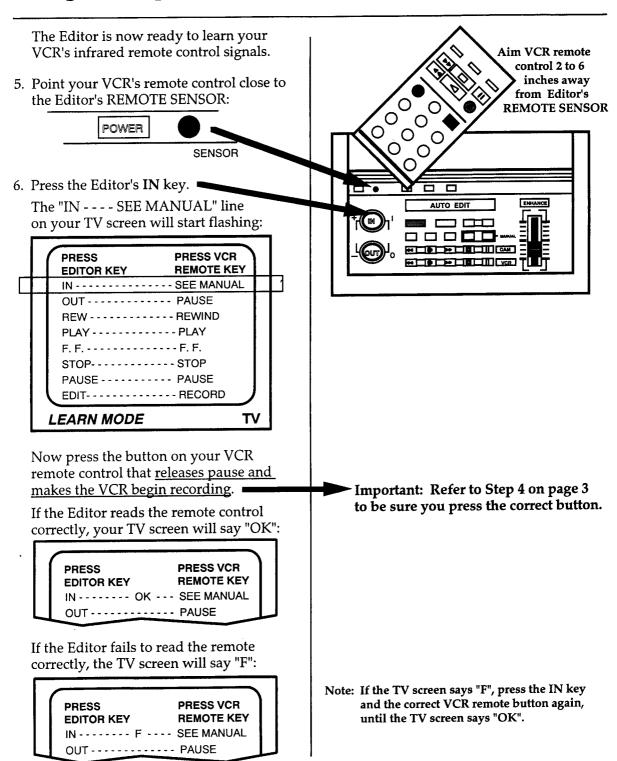


# III. Preparing to Edit

These steps are required for both Manual and Automatic editing.



### Preparing to Edit Learning VCR remote commands



#### **Learning VCR remote commands**

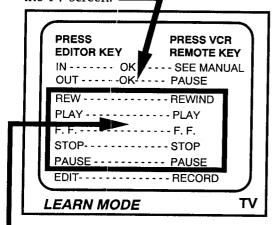
# **Preparing to Edit**

7. Press the Editor's OUT key.

The "OUT - - - - PAUSE" line will flash on the TV screen.

Once again aim your VCR remote control close to the Editor's REMOTE SENSOR, and press the <u>pause</u> button on your VCR remote control.

Once again you will get either an "OK" or an "F". Repeat until until you get "OK" on the TV screen:



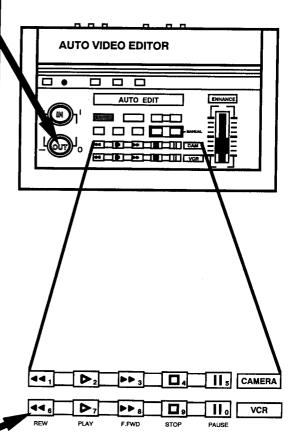
8. Just as they appear on the TV screen, press each of the Editor's VCR command keys (REW, PLAY, F. F., STOP, and PAUSE), and their corresponding VCR remote control buttons.

"OK" will appear on each line as the Editor learns each command.

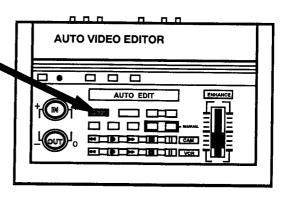
9. Press the Editor's blue EDIT key.
As with the other on-screen lines,
"EDIT - - - RECORD" will start flashing.

Press the VCR remote's <u>record</u> button. Note: many VCR remotes require you to press <u>two buttons at the same time</u> to start recording.

As before, "OK" will appear to confirm Editor has learned the correct command.

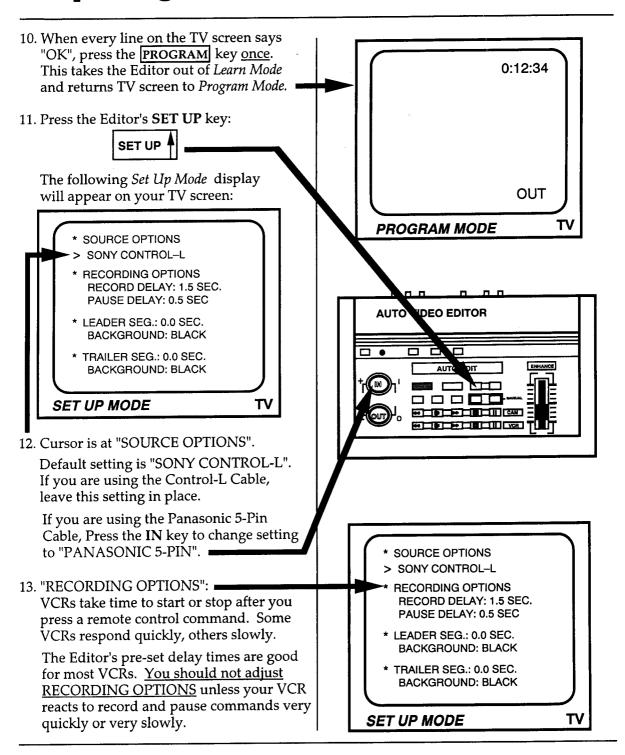


Note: make sure you press the Editor's VCR, not CAMERA, command keys.



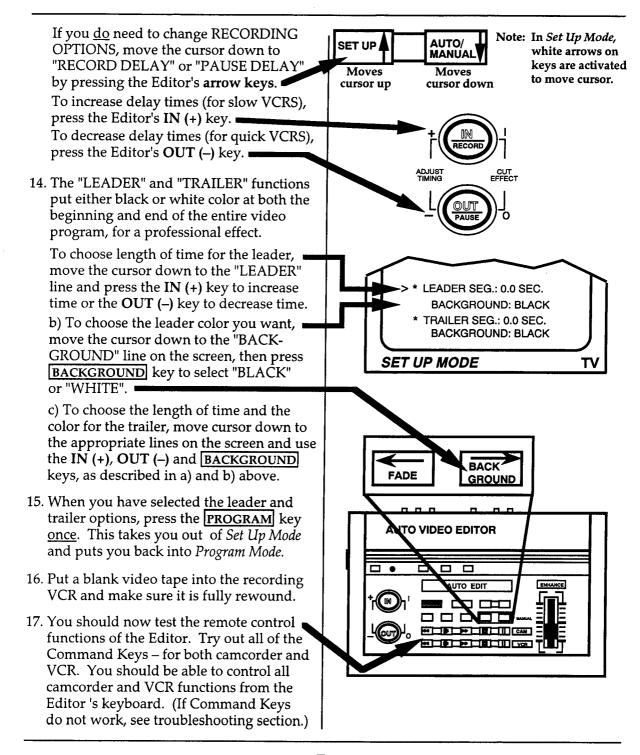
### Preparing to Edit

#### **Set Up Mode: Choosing Options**



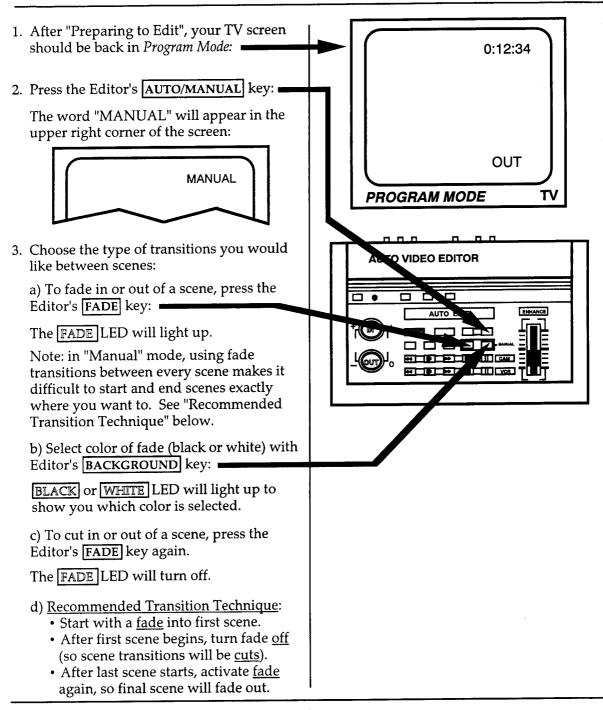
#### Set Up Mode: Choosing Options

#### **Preparing to Edit**

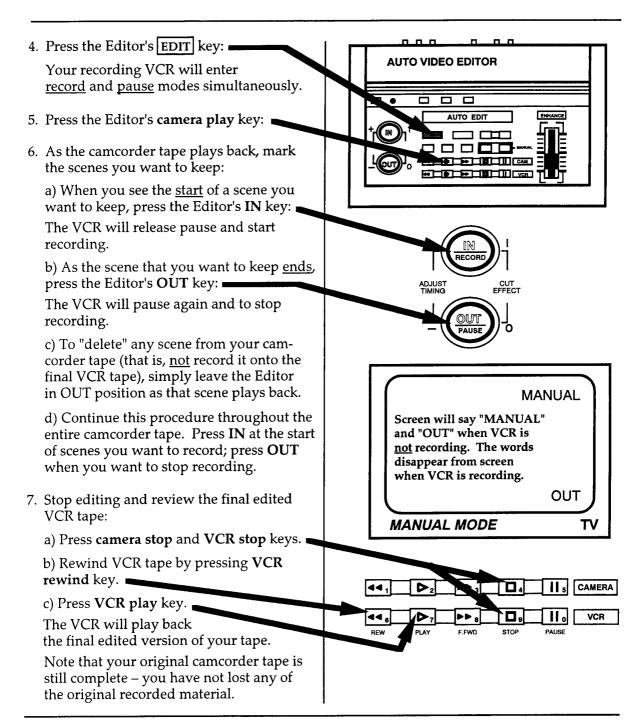


### IV. Manual Editing

The quickest, easiest way to edit your camcorder tape.



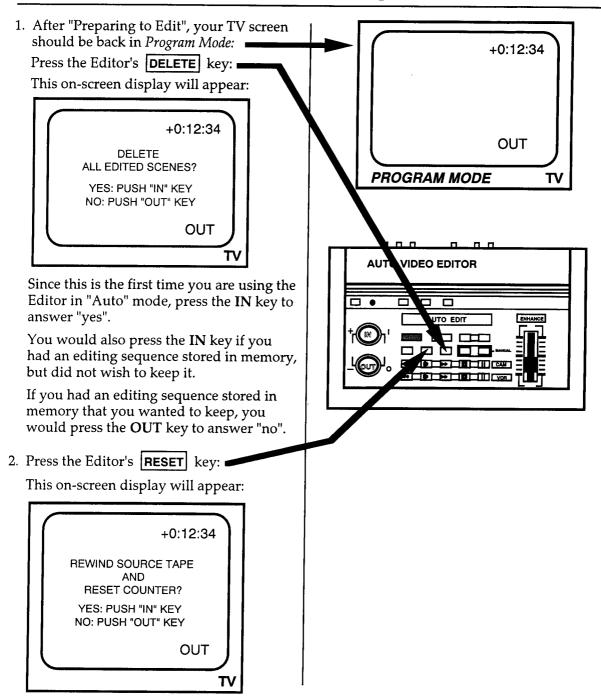
### **Manual Editing**



# V. Automatic Editing

**Setting Up** 

Requires more patience and preparation than Manual editing, but provides more flexibility and accuracy, producing a more polished final video.



#### Setting Up/Using Storyboards

# **Automatic Editing**

a) If you wish to start editing in the middle of your camcorder tape, press the **OUT** key to answer "no". Then wind your tape to the point you want to start editing.

Note: If you start editing from the middle of the tape, the first scene number will be whatever is on camcorder's tape counter.

b) If you wish to start editing from the beginning of your camcorder tape, press the **IN** key to answer "yes".

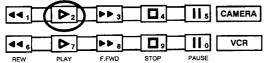
When you press the **IN** key, the Editor will automatically rewind the camcorder tape and reset the tape counter to "0:00:00".

3. After the camcorder tape is rewound to the point you wish to start editing, get ready to take notes on your Storyboards.

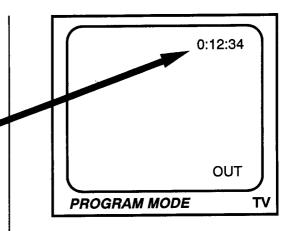
The Storyboards are essential for good edit planning and a smooth final video.

a) First, simply write down consecutive numbers (starting with 001) in the "Scene Number" column.

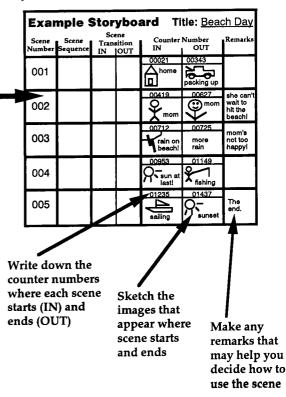
b) Press the Editor's camera play key:



- c) As your tape plays back, **pause** at the start of each scene you want to keep. In the "Counter Number IN" column, note both the <u>counter number and the image</u>.
- d) At the end of each scene you want to keep, **pause** again. In the "Counter Number OUT" column, note both the counter number and image.
- e) It is also helpful to make <u>remarks</u> about scenes that will help you choose what sequence to record them in.



Remember: make copies of the blank Story Board so you can take notes on your entire tape.



#### **Using the Storyboards**

- 4. Also during camcorder tape playback, adjust the ENHANCE slide control until you achieve optimal picture sharpness.
- 5. After all the scenes you want to keep are noted on the Storyboards, you have to decide in what <u>sequence</u> you want to see the scenes, and what <u>transitions</u> you would like to see between scenes.

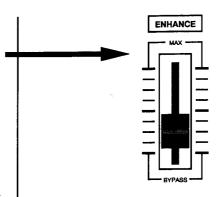
a) SCENE SEQUENCE. You can mix up your scenes in any order, or keep them in chronological order\*:

On the Example Storyboard, the scene sequence chosen for the final video is:

Sequence #	Scene #	<u>Description</u>
001	002	Mom says how much she loves the beach.
002	001	We pack up to go to the beach.
003	003	It's raining at the beach.
004	002	Mom says how much she loves the beach.
005	004	Sun comes out & we go fishing.
006	005	We go sailing & watch sun set.

This means that when you view the final tape after editing is complete, you will see scene number 002 first, scene number 001 second, then scene number 003, and so on.

Note that scene number 002 is given two sequence numbers; it will appear twice in the final video (as the 1st and 4th scenes in the sequence). Note also: because scene 002 is repeated, a six-scene sequence is created from only five scene numbers.



We!	rample Storyboard Title: Beach Day						
Scene Number	Scene Sequence	Tran	ene sition  OUT	Counter IN	Number OUT	Remarks	
001	002			00021 home	00343 packing up		
002	001 004			00419 Rom	00627	she can't wait to hit the beach!	
003	003			00712 rain on beach!	more rain	mom's not too happyl	
004	005			00953 Sun at lasti	01149 Stahing		
005	006			01235 sailing	01437 - sunset	The end.	
1			<b>_</b>				

SCENE NUMBER indicates the order in which scenes appear on your original camcorder tape.

SCENE SEQUENCE indicates the order in which scenes will appear on the final edited video.

#### \* Note:

For the smoothest final video, minimize the number of changes you make in scene order. Slight frame variances occur when the Editor rewinds and fast-forwards looking for scenes. The more you mix up the chronology of the scenes, the more variance there will be.

#### **Using the Storyboards**

# **Automatic Editing**

b) TRANSITIONS. You can choose the type of transition at the start and end of every scene. There are three types of transitions – CUT, WHITE FADE, and BLACK FADE – which can be combined in many ways.

In your Storyboard's "Scene Transition" column, write the appropriate code for each transition you want.

The Editor's code for scene transitions is:

C = Cut (IN or OUT)

W = Fade IN from (or fade OUT to) White

**B** = Fade IN from (or fade OUT to) Black

Note: when a scene ends in a fade out, the next scene should either cut in or fade in with the same color.

Also, for a professional effect, the first scene should start with a fade in, and the last scene should end with a fade out.

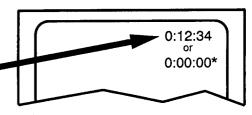
On the Example Storyboard, Sequence 001 (Scene 002) will fade in from black and cut out.

Sequence 003 (scene 003) will cut in and cut out.

Sequence 006 (scene 005) will cut in and fade out to white.

- 6. When your Storyboards are complete, you must transfer the information into the Editor's memory.
  - a) Rewind camcorder tape to the counter number you selected as the starting point for your edit (0:00:00 if you are starting at the beginning of the camcorder tape\*).

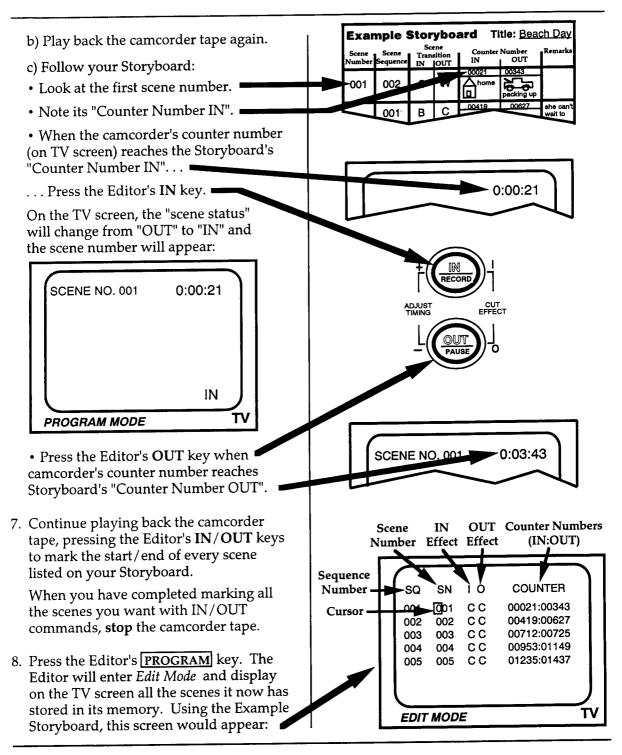
Example Storyboard Title: Beach Day							
Scene Number	Scene Scene Transition Number Sequence IN OUT			Counter Number IN OUT		Remarks	
001	002	С	w	00021 home	00343 packing up		
002	001 00	ВС	СВ	00419 Pmom	00627 (3) mom	she can't wait to hit the beach!	
003	003	С	С	00712 rain on beach!	00725 more rain	mom's not too happyl	
0	005	В	С	00953 Sun at last!	01149 Stishing		
005	006	С	w	01235 sailing	01437 — sunset	The end.	



\* Note:

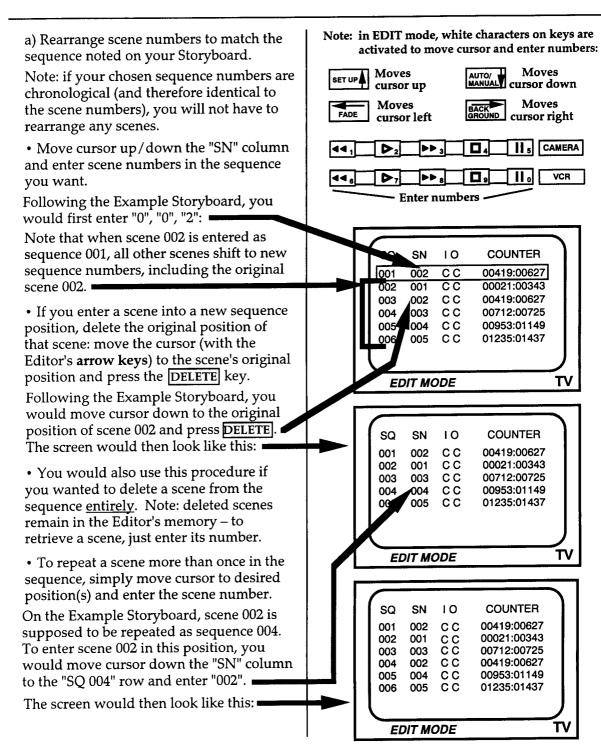
Some camcorders will rewind to "-0:00:01". If this occurs, press the RESET key. Then, after the screen prompt, press the IN key to answer "YES" (see item 2 on page 10).

### Automatic Editing Programming Scenes in Memory



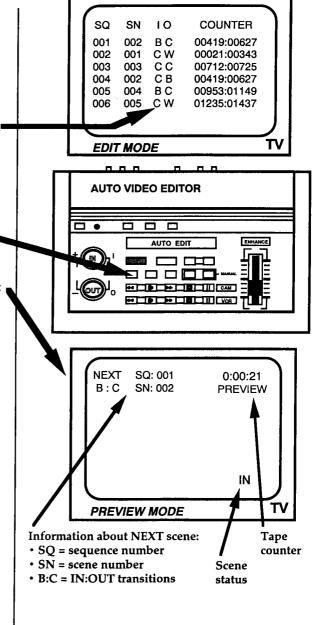
#### Rearranging & Deleting Scenes

# **Automatic Editing**



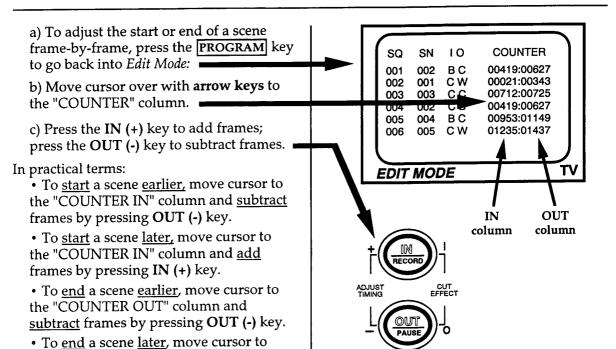
### Automatic Editing Scene Transitions/Preview Mode

- b) Select the transition effects for each scene, as noted on your Storyboard:
- Move cursor to the right, to the "IO" column, then up/down to each scene.
- Press **IN**/**OUT** keys to cycle through choices for **IN** and **OUT** transition effects (**C** = cut; **B** = black fade; **W** = white fade).
- c) When you have completed arranging the entire sequence of scenes, press the <a href="PROGRAM">PROGRAM</a> key to exit Edit Mode and return to Program Mode.
- 9. Press the Editor's **PREVIEW** key.
  - a) The Editor will automatically rewind and playback the camcorder tape. The TV screen displays *Preview Mode* information:
  - b) The Editor will cue up and play every scene in the sequence you have arranged.
  - c) During "cue up time", you will see several seconds of video before each selected scene actually starts. Scenes start when scene status changes from "OUT" to "IN". (During an actual edit, the VCR will begin recording when scene status changes to "IN".)
  - d) As each scene ends, scene status returns to "OUT", and the Editor winds the tape to locate and cue up the next scene. (During an actual edit, the VCR will pause while scene status is "OUT".)
  - e) At the end of the preview, the screen will say "PREVIEW END". Press the PROGRAM key to exit *Preview Mode* and return to *Program Mode*.
- 10. During preview, you may notice scenes that have imperfect transitions; they may start slightly earlier or end slightly later than they should. But you can return to *Edit Mode* now and adjust the start or end of any scene, frame-by-frame:



#### Frame-by-Frame Adjustments

### **Automatic Editing**



On the example screen (above right): Let's say that during preview, sequence 003 (scene 003) looked like it went to "IN" status too late (after the scene actually started). You would need to make the start of the scene come earlier. Thus, you would move cursor to "COUNTER IN" column and press the OUT (-) key to subtract frames from the start of the scene (you might change "00712" to "00709").

the "COUNTER OUT" column and add

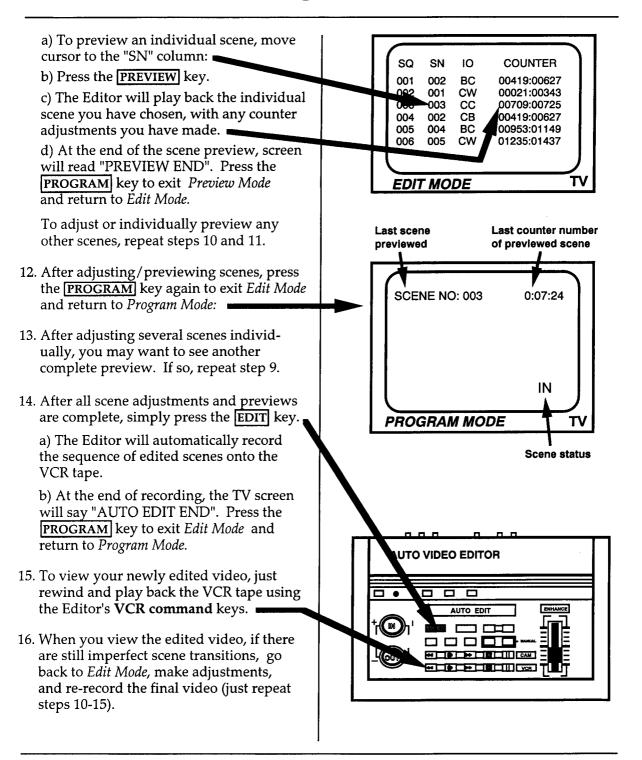
frames by pressing IN (+) key.

Note: consecutive scenes must be at least 3 seconds apart. For example, if scene 001 ends at counter number 000123, then you cannot make scene 002 start earlier than counter number 00126.

11. After you have adjusted the start or end of any scene, you can look at it again in an individual scene preview (you do not have to preview the entire tape again):

### **Automatic Editing**

#### Scene Preview/Auto Editing



# VI. Post-Edit Modifying

PROGRAM MODE

0:12:34

OUT

After you have made an Automatic Edit, you may need to insert additional scenes or rearrange the order of scenes.

Note, however, that you cannot make these modifications to Manual Edits.

- 1. To insert additional scenes on your tape:
  - a) Press **PROGRAM** key for *Program Mode*:
  - b) Rewind and play back camcorder tape using Editor's camera command keys.

During playback, existing scenes are noted:

- Scene status "OUT" will begin to flash 3 seconds before existing scenes start.
- As existing scenes start, scene status changes from "OUT" to "IN".
- Scene status "IN" will begin to flash 3 seconds before existing scenes end.
- As existing scenes end, scene status changes from "IN" to "OUT".
- c) As the camcorder tape plays back, note the counter numbers of both the <u>start</u> and <u>end</u> of any new scene you wish to add.
- d) Rewind and play back the tape again. When the tape counter number reaches the start of each new scene, press the Editor's IN key. When the tape counter number reaches the end of each new scene, press the Editor's OUT key.
- e) When you have marked all the new scenes you want to add, stop the camcorder tape and press the PROGRAM key to enter *Edit Mode*.

Every new scene will be retained in the Editor's memory – listed at the <u>end</u> of the "SO" column.

Following the example scene addition, above, the TV screen would look like this in *Edit Mode*:

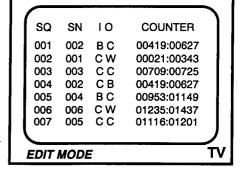
(See next page for detailed explanation.)

Example:

NEW SCENE ADDITION

counter no. IN counter no. OUT

0:11:16 0:12:01



### **Post-Edit Modifying**

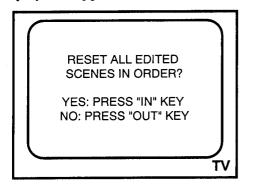
#### **Adding/Rearranging Scenes**

Following the example scene addition, notes A-D, at right, explain how the TV screen appears in *Edit Mode* when new scenes are added to the Editor's memory.

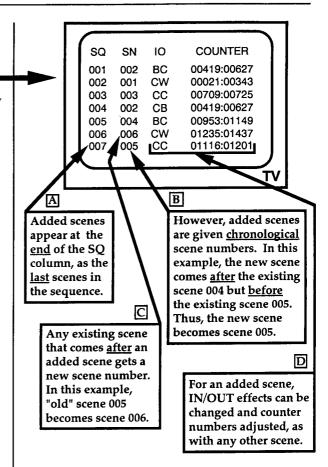
- f) You can now rearrange the scenes in any sequence and, if you wish, go through the preview/edit procedure again (steps 8-15 in the "Automatic Editing" section).
- 2. If you want to substantially rearrange an existing scene sequence, or if you add a lot of new scenes to an existing sequence, the "scene by scene" method of rearrangement may be difficult to use.

To speed up the process of rearranging many scenes, the Editor offers a RESET command, which restores all scenes to their chronological order (as they appear on the original camcorder tape):

- a) From *Program Mode*, press **PROGRAM** key to enter *Edit Mode*.
- b) Press the **RESET** key. This on-screen display will appear:



- c) Press the IN key.
- d) If scene rearrangement is very complex, it might be easier just to go back to the beginning of the "Automatic Editing" section and create a whole new set of Storyboards.



# **Troubleshooting**

Problem	Possible Cause	Solution		
No data on screen.	<ul> <li>Power is not on to a device in use.</li> <li>Cables are not connected properly.</li> <li>VCR is not in LINE IN mode.</li> </ul>	<ul><li>Turn power on to all devices.</li><li>Refer to Set Up diagram on page 2.</li><li>Put VCR into LINE IN mode.</li></ul>		
Editor will not "learn" VCR remote commands.	VCR remote is not aimed close enough to Editor's sensor.	Aim VCR remote closer to sensor (see page 4).		
Editor's VCR and camera command keys do not work properly.	<ul> <li>Edit cable is not connected properly.</li> <li>Wrong "Source Option" was selected.</li> <li>Editor did not learn VCR commands.</li> <li>Editor's remote control unit is not pointed accurately at VCR sensor.</li> </ul>	<ul> <li>Refer to Set Up diagram on page 2.</li> <li>Change "Source Option" (see page 6).</li> <li>Review <i>Learn Mode</i> (pages 4-5).</li> <li>Point Editor's remote control unit more directly at VCR.</li> </ul>		
VCR does not record & pause when you press Edit key.	Edit key requires 2 VCR buttons to be pushed simultaneously, but they were not.	• Review <i>Learn Mode</i> for Edit key. (page 5).		
Picture has too much noise.	• "Enhance" control is set too high.	• Reduce "Enhance" level.		
Screen reads: "Counter Not Found" or "Start Counter Not Found".	<ul> <li>Camcorder power is off.</li> <li>Edit cable is disconnected.</li> <li>No scenes are stored in memory yet.</li> <li>Camcorder tape is damaged.</li> </ul>	<ul> <li>Turn camcorder power on.</li> <li>Connect edit cable properly.</li> <li>Program scenes in memory (page 14).</li> <li>Replace camcorder tape.</li> </ul>		
Wrong scenes are edited.	IN/OUT commands are not used properly.	Review how IN and OUT commands work during editing (pages 8-9; 10-11)		
Scenes are not edited in correct order.	Edit Mode is not utilized properly.	• Review Edit Mode (pages 14-15).		
A scene is recorded that should have been cut out.	IN key did not "learn" the right command.	• Review Learn Mode (pages 3-4).		
A small part of a scene is recorded that should have been cut out.	• "Record Delay" time is too long.	Reduce "Record Delay" time (page 6).		
Scenes are not starting or ending exactly on time. (Accuracy of edit points is generally poor.)	<ul> <li>When camcorder tape was rewound all the way, counter said "-0:00:01"</li> <li>"Record Delay" time too long/short.</li> <li>Scene counter numbers (frames) are not adjusted properly yet.</li> <li>Camcorder tape is old and loose.</li> </ul>	<ul> <li>Rewind tape and reset counter to "0:00:00" (page 13)</li> <li>Adjust "Record Delay" time (page 6).</li> <li>Adjust scene frames (page 17).</li> <li>Replace camcorder tape.</li> </ul>		

# **Troubleshooting**

#### Continued

Problem	Possible Cause	Solution		
Scenes are not cutting or fading in desired fashion.	Scene transition effects are not coded correctly.	Adjust transition effects (page 16).		
"Rainbow" noise occurs during scene transitions.	Recording VCR does not have "FE" type recording head.	Use a VCR with a shuttle jog dial – most of these have "FE" heads.		
Counter number will not change when you press IN or OUT key.	<ul> <li>Counter number is within 3 seconds of preceding (or following) scene's counter number.</li> </ul>	• Make consecutive scenes at least 3 seconds apart (see page 17).		
There is no response when you press either Preview or Edit key.	Editor is not in correct mode for keys to work.	• Make sure Editor is in correct mode (see pages 16-18).		
Program stored in memory is lost, even with back-up batteries installed.	Power switch was turned on and off very quickly.	After turning power on or off, wait at least 3 seconds before turning power off or on again.		

#### **Specifications**

#### General

• Dimensions:

· Weight:

• Power requirements:

270mm (W) x 170mm (D) x 50mm (H)

approximately 1 kg

12V DC 500mA

#### Video

• Input/output impedance:

• Input level:

· Output gain:

• S-video frequency response:

75 ohms

1.0 Vp-p nominal

Unity +/- 1dB (into 75 ohms)

approximately 5.5 MHz

#### **Audio**

· Input impedance:

• Frequency response:

• THD:

• S/N ratio:

• Output gain:

• Output impedance:

47K ohms min.

20-20KHz +/- 3dB

0.05%

60dB typical

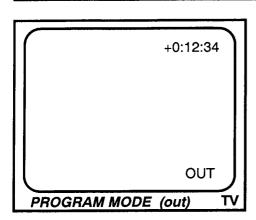
Unity +/- 1dB

1K ohms

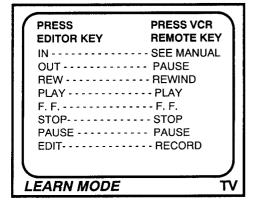
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\* SOURCE OPTIONS
> SONY CONTROL-L

\* RECORDING OPTIONS
RECORD DELAY: 1.5 SEC.
PAUSE DELAY: 0.5 SEC

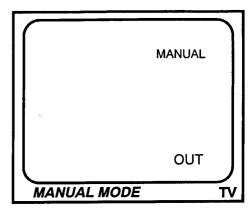
\* LEADER SEG.: 0.0 SEC.
BACKGROUND: BLACK

\* TRAILER SEG.: 0.0 SEC.
BACKGROUND: BLACK

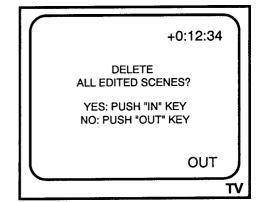
SET UP MODE

TV

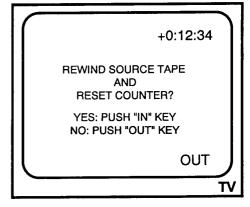
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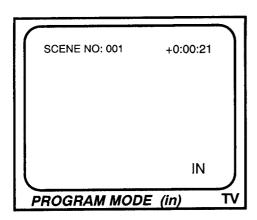


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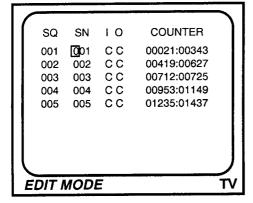


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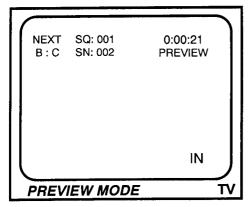
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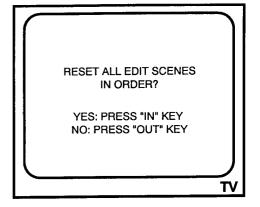
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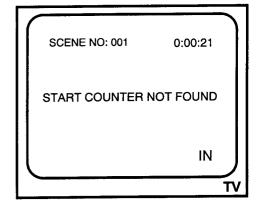
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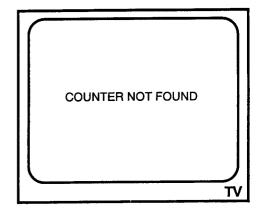
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