

# 3 *Installing The Editor*

## Introduction

In this section you are given step-by-step instructions on how to install your Editor. We recommend that you read all instructions thoroughly at least once before doing them. The section includes:

- Things to consider when selecting a work space
- Information on cables
- The physical installation of the Editor
- A start-up/power on procedure

## The Work Space

The following is a synopsis of work space considerations when installing your Editor. For more complete information, consult the appropriate Installation Planning Guide. The Computing Chassis for your Editor is designed such that it may either be mounted in a standard 19" electronic equipment rack or placed on a level desk or table top. This, along with room for the Keyboard, are considerations in determining the work space. Other considerations are:

- The proximity of electrical outlets. (The power cord for the Computing Chassis is 6' long.)
- Signal cables are 16 meters (approximately 52') long.
- Routing of power cords and signal cables so that they do not present a hazard to personnel.

## Cable Information

Your Editor system was shipped with a set of cables. The number of cables depends on which Editor you ordered and what, if any, options were ordered in addition to the basic system. Cables supplied with a basic system are listed in Table 3-1.

*Table 3-1. BASIC CABLE SET*

Name	Part Number	Qty	Destination/Use
Echo Plug	054557-00	1	for maintenance
Printer Cable	054591-16	1	to a printer
Machine Control Cable	054602-16	*	to VTRs/ATR

\* 4 for the VPE-331  
7 for the VPE-341  
14 for the VPE-351

## Editor Installation

Installing your Editor consists of installing the Computing Chassis and, for a VPE-351, the Expansion Chassis; placing the Keyboard in the work space; and then making the power cord and signal cable connections. These are discussed in turn on the following pages.

## Installing The Computing Chassis

In installing the Computing Chassis, the first thing to determine is whether it is to be mounted in an equipment rack or placed on a console or table top.

### Console or Table Top Installation

If the Chassis is to be placed on a console or table top, you may want to protect that surface by installing the four rubber feet provided as illustrated in Figure 3-1. To install the rubber feet, refer to Figure 3-1 and perform the following procedure:

1. Locate the bag containing four grey mounting feet and remove them from the bag.
2. Carefully turn the Computing Chassis over and place it on a flat level work area on its top side.
3. One at a time, remove the backing from each foot and firmly press into place approximately 1" in from each side at the corners on the bottom plate. (See Figure 3-1.)
4. Carefully turn the Computing Chassis back over until it is resting on the mounting feet.

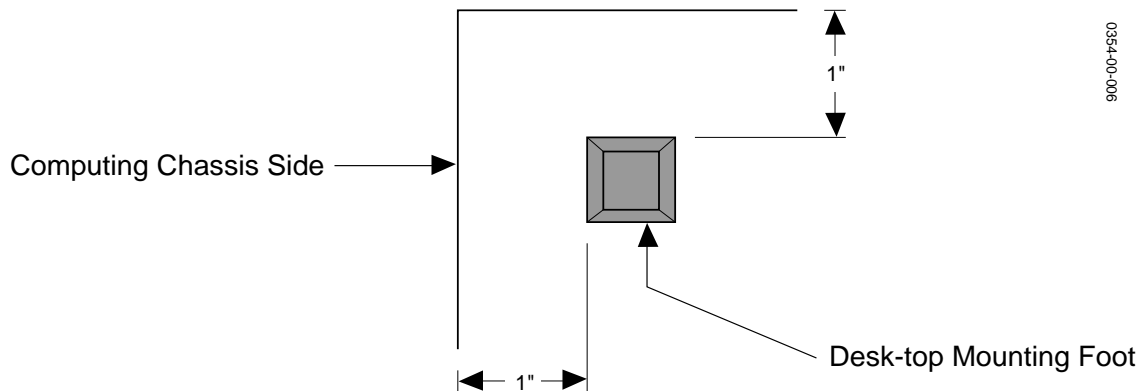


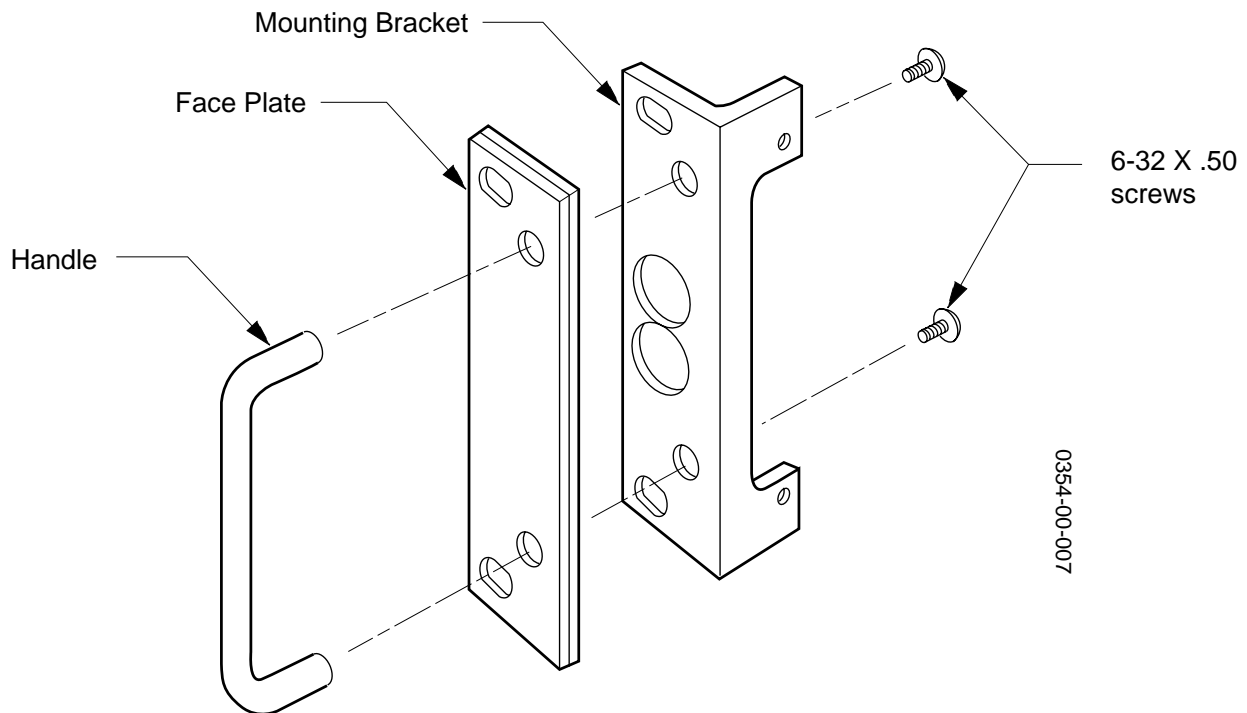
Figure 3-1. Table Top Mounting Foot Installation

### Equipment Rack Installation

If the Computing Chassis is to be mounted in an equipment rack, mounting hardware must first be attached to the unit. Hardware consists of handles, mounting brackets and support brackets. Figure 3-2 illustrates handle assembly which must be done before attachment to the Chassis. Figure 3-3 illustrates attachment of the handles and mounting brackets to the Chassis. Figure 3-4 shows installation of the Chassis into the rack.

To attach the hardware and install the Computing Chassis into the equipment rack, refer to Figure 3-2, 3-3, and 3-4 and proceed as follows:

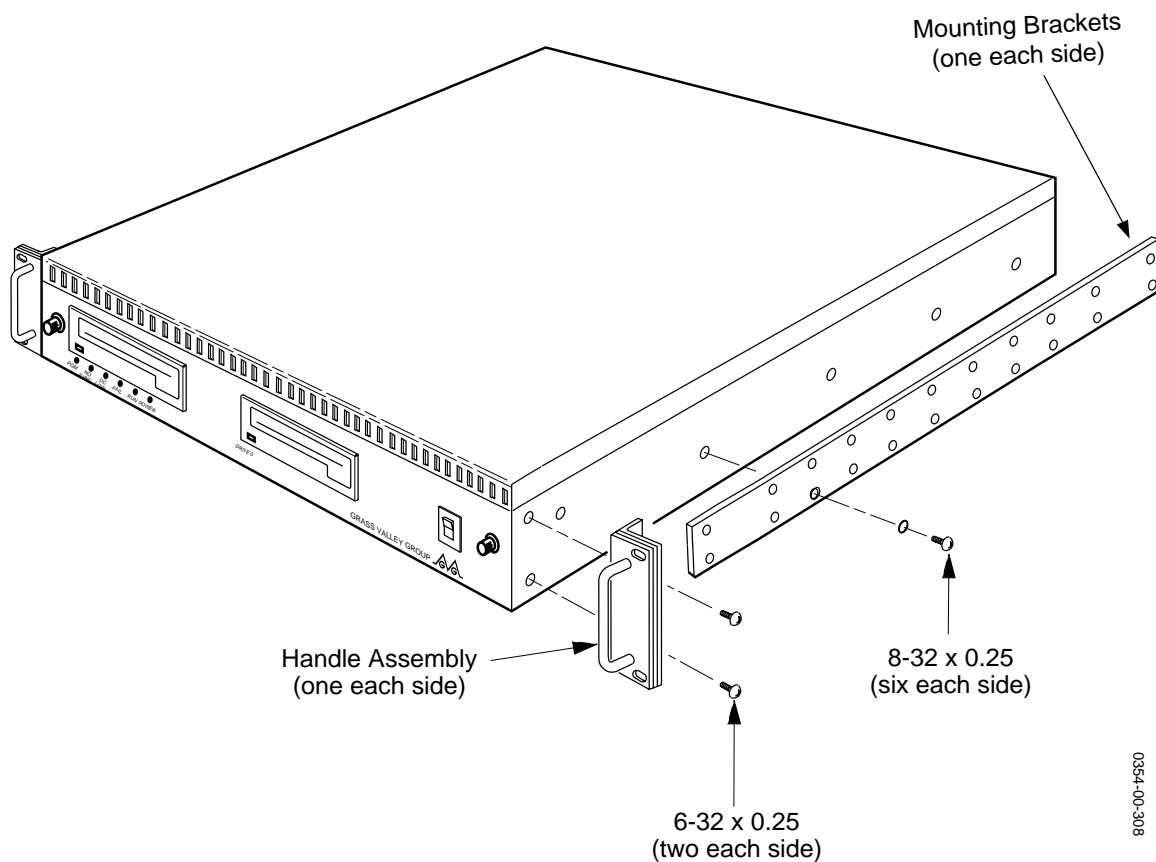
1. Position the Handle, Face Plate, and Mounting Bracket together as shown in Figure 3-2.



*Figure 3-2. Computing Chassis Handle Installation*

2. Attach the parts using two of the provided 6-32 x.50 screws.
3. Repeat Steps 1 and 2 to assemble the second Handle.
4. Position one Handle against the chassis and attach it with two of the provided 6-32 x .25 screws as shown in Figure 3-3.
5. Repeat Step 4 to attach the second Handle.

6. Position one of the mounting brackets at the side of the unit as shown in Figure 3-3 and attach it with six of the provided 8-32 x.25 screws.
7. Repeat Step 6 to attach the other mounting bracket.



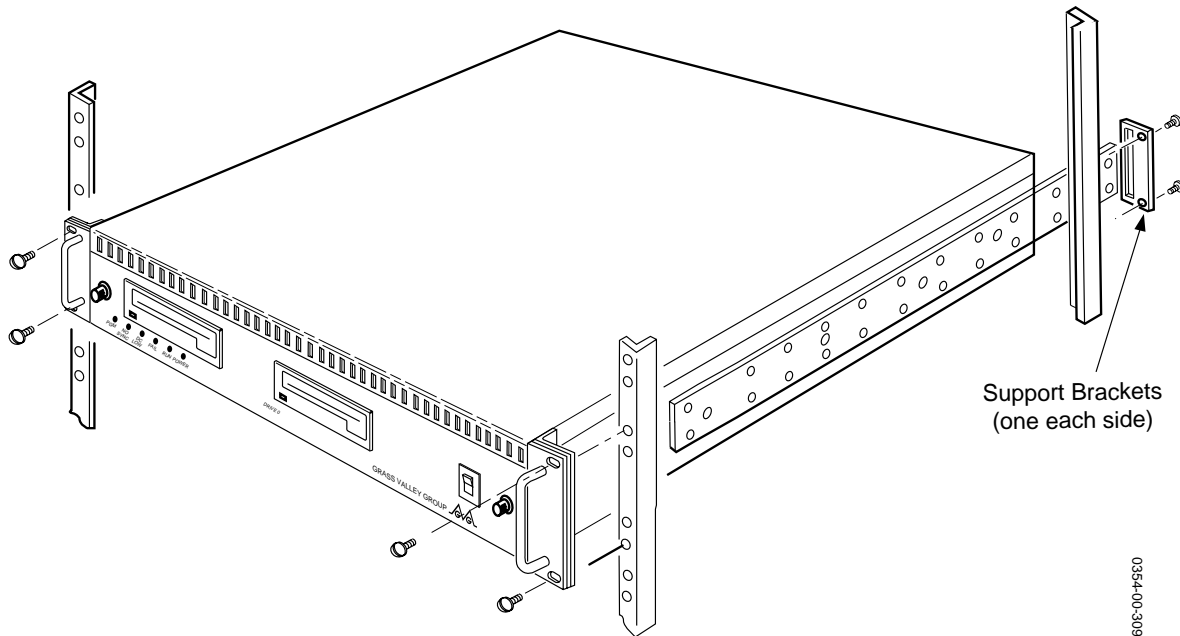
**Figure 3-3. Handle & Mounting Bracket Attachment**

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**NOTE:** Due to differences in racks, screws for attaching equipment to the rack are not provided.

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8. Attach one of the support brackets to the back of the equipment rack at the height for the Chassis when installed in the rack. (See Figure 3-4.)



*Figure 3-4. Installing The Computing Chassis Into The Equipment Rack*

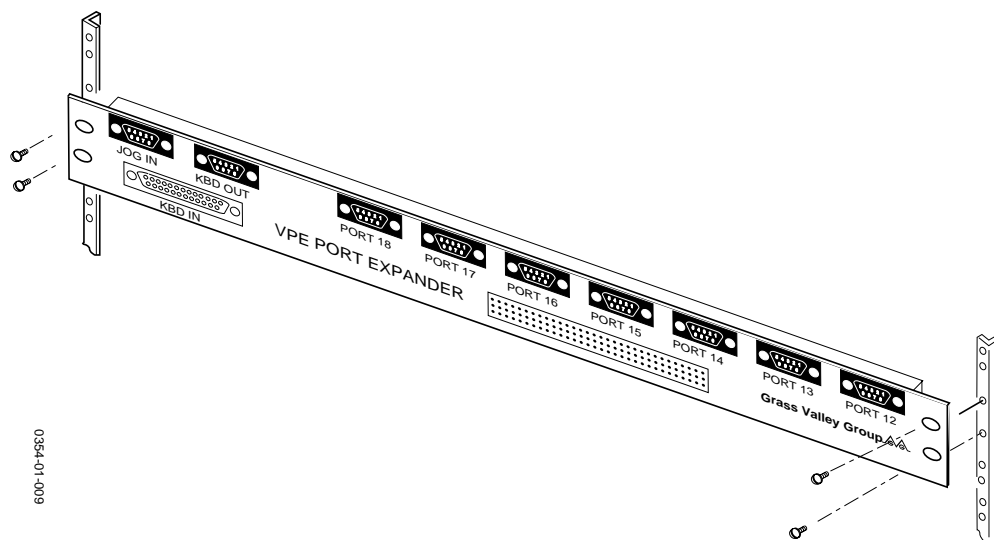
9. Repeat Step 8 to attach the other support bracket, being sure it is at the same height.
10. Supporting the unit, slide the rear of the mounting brackets on the Computing Chassis into the support brackets attached in Steps 8 and 9 and secure it to the equipment rack with two screws on each side at the handles.

This completes installation of the Computing Chassis into the equipment rack. If you are installing a VPE-351, proceed to *Installing The Expansion Chassis*. Otherwise, proceed with placing the Keyboard in the work space and then making power cord and signal cable connections.

## Expansion Chassis Installation

Although the Expansion Chassis may be placed on a desk, it is recommended that it be installed in the equipment rack, preferably at the rear of the rack. This will ensure that cables connected to the Chassis do not impede access to the front of the rack. The Expansion Chassis must be within 3 ft. (1 meter) of the Computing Chassis.

Figure 3-5 illustrates installation of the Expansion Chassis. To install the Expansion Chassis, refer to Figure 3-5. With the Chassis at a convenient height, use two rack mounting screws on each side to secure the Chassis to the equipment rack.



*Figure 3-5. Expansion Chassis Installation*

## Placing The Keyboard

The Keyboard is essentially the control panel in the editing environment. As such, you want to place it in a central location where other equipment is both visually and physically at hand. Ensure that it is within 16 meters (approximately 52 feet) of the Computing Chassis and, if using the optional K5 Keyboard, within 2 meters (6 feet) of a power source.

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***NOTE:** If you are using the K2 Keyboard extension cable, you must attach the cable grounding wire to an earth ground.*

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## Making The Connections

For the VPE-300 Series, connections are made at connectors on the rear panel of the Computing Chassis. For the VPE-351, additional connections are made to the Expansion Chassis. Also, for a VPE-351 using the K5 Keyboard, connection for that Keyboard is made on the Expansion Chassis. Appendix E contains some typical interconnecting diagrams.

### Computing Chassis Connections

Figure 3-6 illustrates the rear panel of the Computing Chassis and identifies the connections which will be made to it. To make these connections, refer to Figure 3-6 and proceed as follows:

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#### **CAUTION**

*Ensure that the routing of signal cables and power cords does not present a hazard to personnel or equipment.*

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1. Ensure that power switches of all equipment to be connected are OFF.
2. Connect AC power cords of all equipment to AC power outlets.

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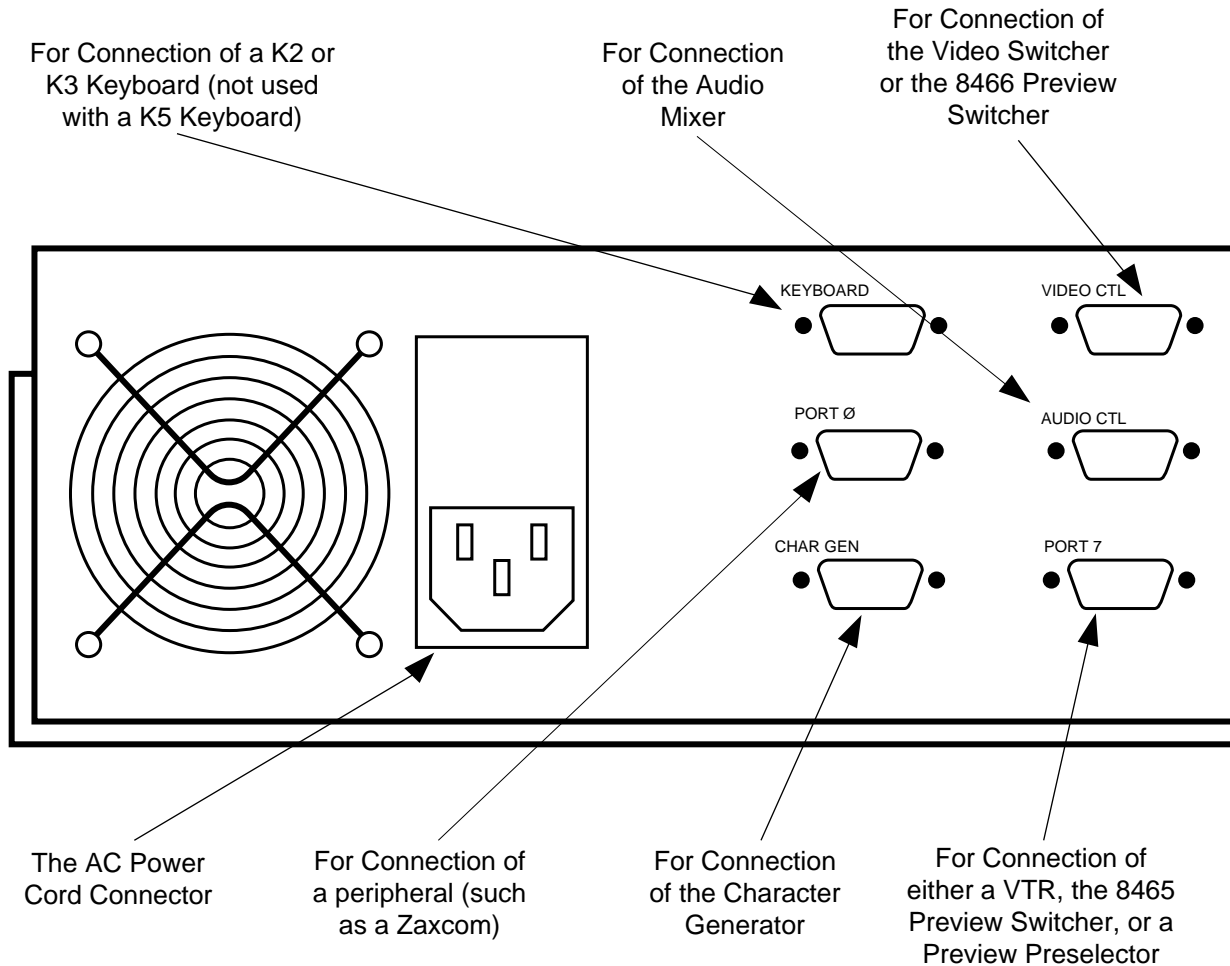
*NOTE: The remainder of this procedure is the suggested order of making connections. However, there is no recommended priority for connections.*

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3. If you have a Character Generator, attach the signal cable from it to the CHR GEN connector.
4. Attach the provided VTR cables from the VTRs to the appropriate PORT 1 - PORT 7 connectors. (See the NOTES on Figure 3-6 and especially Appendix B for additional information on VTR port availability and connections.)

Note that connection to these ports does not assign VTRs to the ports. That is done through software during the Start-up Sequence.

5. If using a peripheral device, such as a Zaxcom, attach the cable from it to the PORT Ø connector.
6. Attach a K2 or K3 Keyboard cable to the KEYBOARD connector. (The K5 Keyboard installation will be made later.) Note that if you are using the K2 Keyboard extension cable, you must attach the cable grounding wire to an earth ground.



**NOTES**

With the VPE-331, neither a Preview Preselector nor the 8465 Preview Switcher can be used. Although you may connect VTRs to as many ports as are available, you may only assign up to 4 ports.

With the VPE-341 and -351:

If using an 8465 Preview Switcher and a Preview Preselector, the 8465 is connected to PORT 7 and the Preview Preselector is connected to PORT 6.

If using a Preview Preselector and NOT an 8465, the Preview Preselector is connected to PORT 7.

7. Attach the signal cable from the Audio Mixer to the AUDIO CTL connector.
8. If using an 8466 Preview Switcher with a GVG serial video switcher, attach the signal cable from the 8466 to the VIDEO CTL connector. If not, attach the Video Switcher to the VIDEO CTL connector. (Also see Appendix B.)

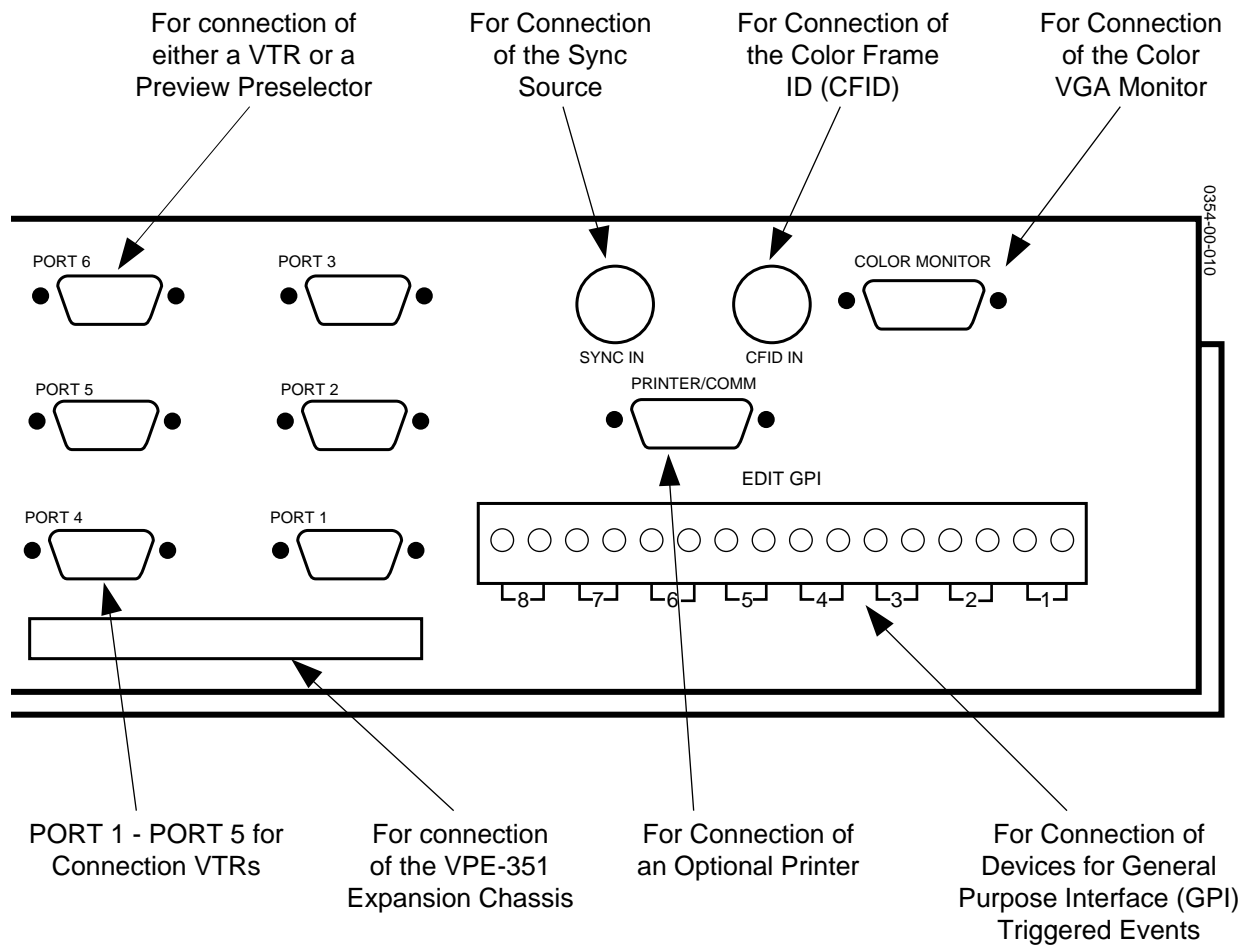


Figure 3-6. Computing Chassis Rear Panel Connectors

9. See the NOTES on Figure 3-6 if using an 8465 or 8466 Preview Switcher and/or a Preview Preselector. Also see Appendix B.
10. Make appropriate connections to the EDIT GPI connector.
11. If using a Printer, attach the provided cable from the printer to the PRINTER/COMM connector.
12. Attach a cable with BNC connectors from a composite video Sync generator to the SYNC IN connector.
13. If a CFID signal is available, attach a cable with BNC connectors from the CFID source to the CFID IN connector.
14. Attach the cable from your VGA Monitor to the COLOR MONITOR connector.

This completes the physical installation of the Computing Chassis for the VPE-300 Series. If you are installing a VPE-351, continue on with making the Expansion Chassis connections. Otherwise, proceed to the Start-up Sequence.

## Expansion Chassis Connections

Figure 3-7 illustrates the rear panel of the Expansion Chassis and identifies the connections which will be made to it. To make these connections, refer to Figure 3-7 and perform the following procedure:

1. Attach the provided ribbon cable from the Computing Chassis I/O connector to the Expansion Chassis 96-pin connector.
2. Attach the provided VTR cables from the VTRs to the PORT 12 - PORT 18 connectors.

This completes physical installation of the VPE-351 Editor. However, if you are using a K5 Keyboard, continue with K5 Keyboard Connections listed on the following page. Otherwise, proceed to the Start-up Sequence.

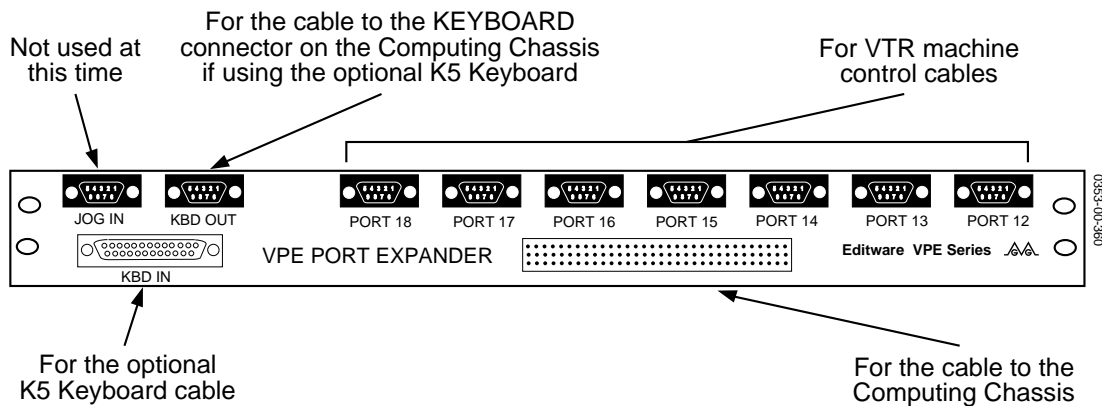
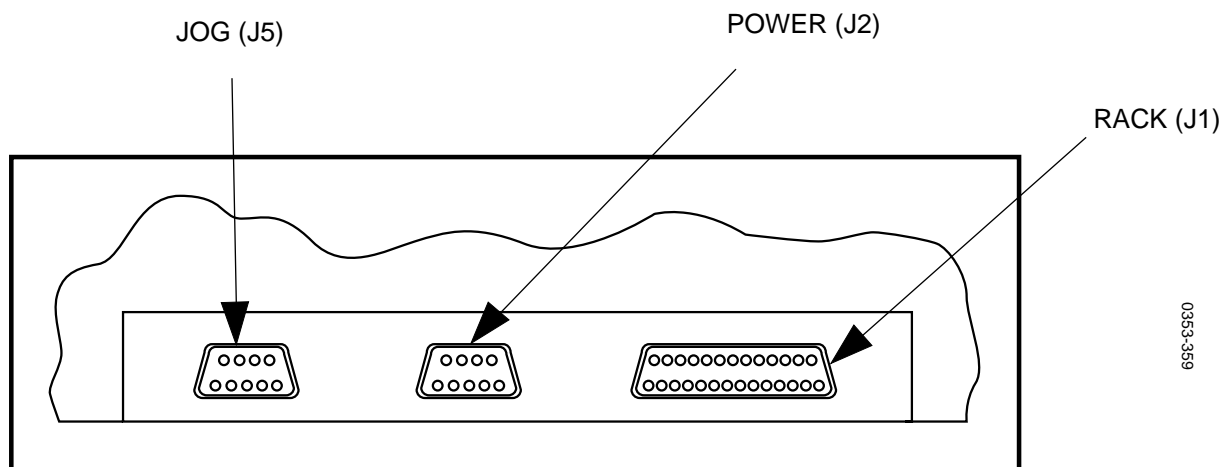


Figure 3-7. Expansion Chassis Connectors

## K5 Keyboard Connections

Figure 3-8 illustrates the rear panel of the K5 Keyboard and identifies the connections which will be made to it. To make these connections, refer to Figure 3-8 and proceed as follows:

1. Attach the keyboard cable from the RACK connector on the Keyboard to the KEYBOARD connector on the Expansion Chassis.
2. Attach the power cable from the POWER connector on the Keyboard to an AC Power outlet.
3. Attach the cable from the Jogger panel to the JOG connector on the Keyboard.



Rear View - K5 Keyboard

Figure 3-8. K5 Keyboard Connectors

4. If using the K5 Keyboard
  - a. Attach the K5 Keyboard cable to the KBD IN connector.
  - b. Attach the provided cable from the KBD OUT connector on the Expansion Chassis to the KEYBOARD connector on the Computing Chassis.

This completes physical installation of the K5 Keyboard. Proceed to the Start-up Sequence.

## The Start-up Sequence

The following provides information to ensure that your Editing system is properly installed and ready for use. It begins with turning power on and Monitor Settings, goes on to Making Assignments and Basic Checks, and then concludes with installation troubleshooting.

### Turning Power On

The recommended order for turning the power on to your editing system is as follows:

- All VTRs and ATR(s)
- The video switcher and the audio mixer
- The printer, monitor(s), and peripheral equipment
- The Editor Computing Chassis

After power up the Super Edit™ Main Menu, illustrated in Figure 3-9, appears on the screen. (Super Edit is the software program for your Editor.) If the Main Menu does not appear, see Installation Troubleshooting and/or Appendix F, System Software Installation.

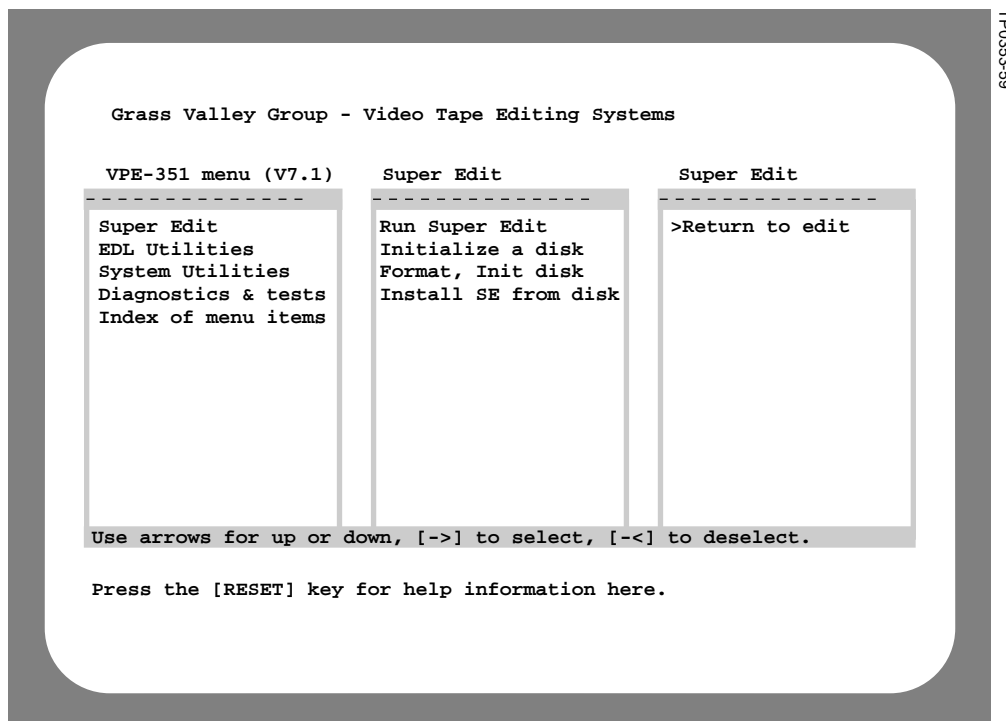


Figure 3-9. Super Edit Main Menu

## Menu Selection And Control

The MENU is divided into three sections on the editor screen. Use the [→] and [←] keys to move through the sections and use the [↑] and [↓] keys to move the cursor (>) up and down within the selected section.

To execute a MENU item, select it with the cursor and press [ENTER]. This accesses the feature, or in some instances, presents you with a sub-menu or prompt. Prompts appear at the bottom of the screen and request user specific information (e.g. FROM DRIVE), TO DRIVE), etc.).

Pressing [←] with the cursor in the left column, places the system in the RT-11 operating system environment. To return to the Main Menu with a K2 Keyboard, type MENU at the RT> prompt and press [ENTER]; with a K5 Keyboard, press [MAIN MENU]; with a K3 keyboard press [SHIFT] [MENU].

### Running PROM-based Self Test

1. Use the [←], [→], [↑], and [↓] keys until the Diagnostics & Tests selection in the left hand column is highlighted and press [ENTER]. The Diagnostics & tests menu appears. (See Figure 3-10 for an example.)
2. Use the [←], [→], [↑], and [↓] keys until the PROM-based self-test selection is highlighted and press [ENTER]. After a few moments, test results appear. (See Figure 3-11 for an example.)

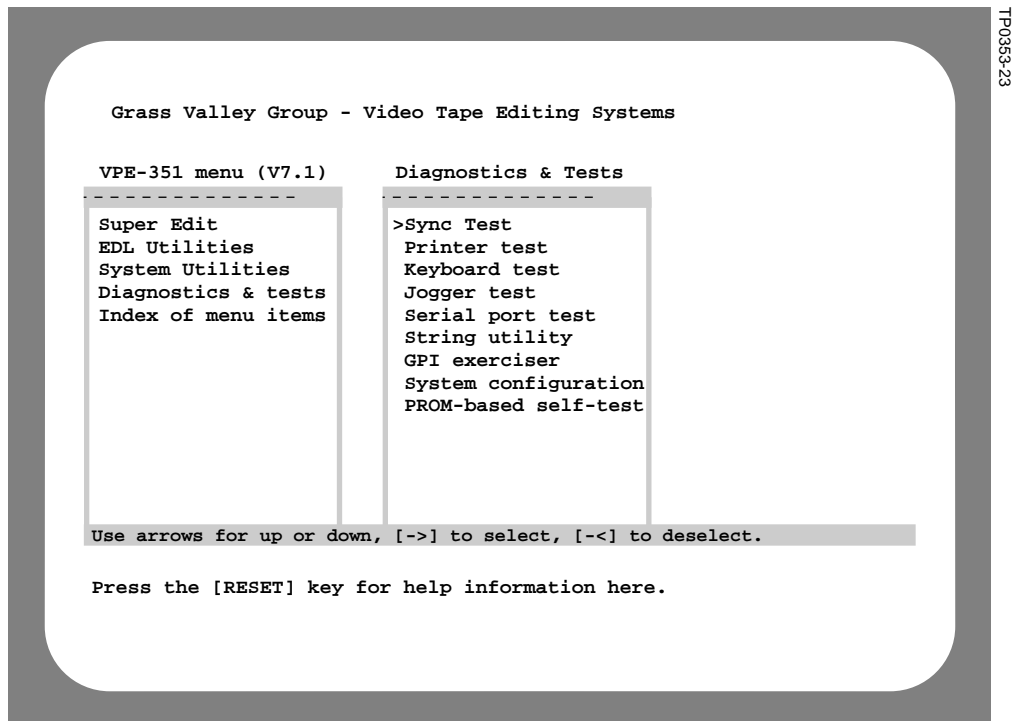


Figure 3-10. Diagnostics &amp; Test Menu

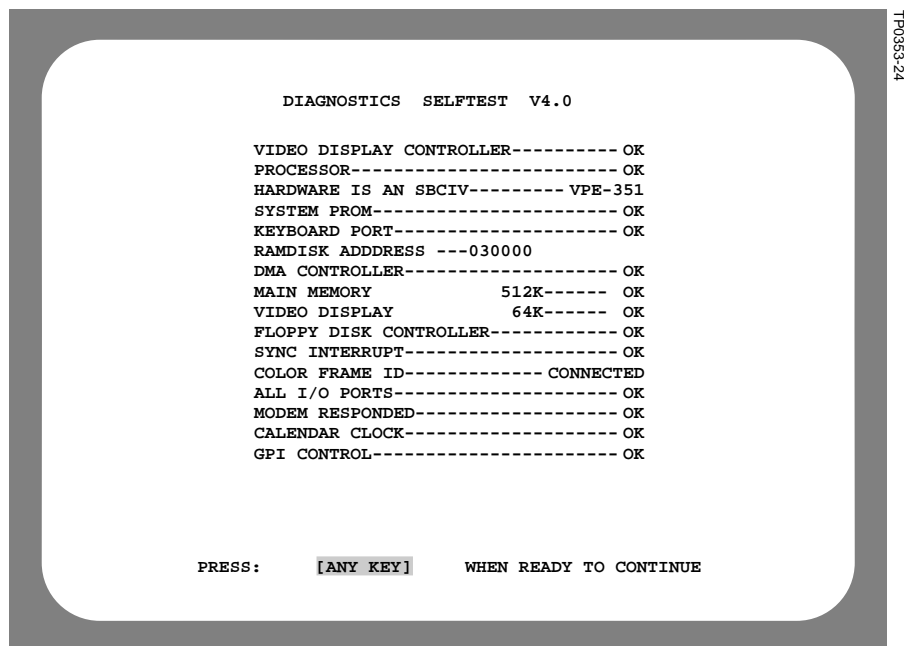
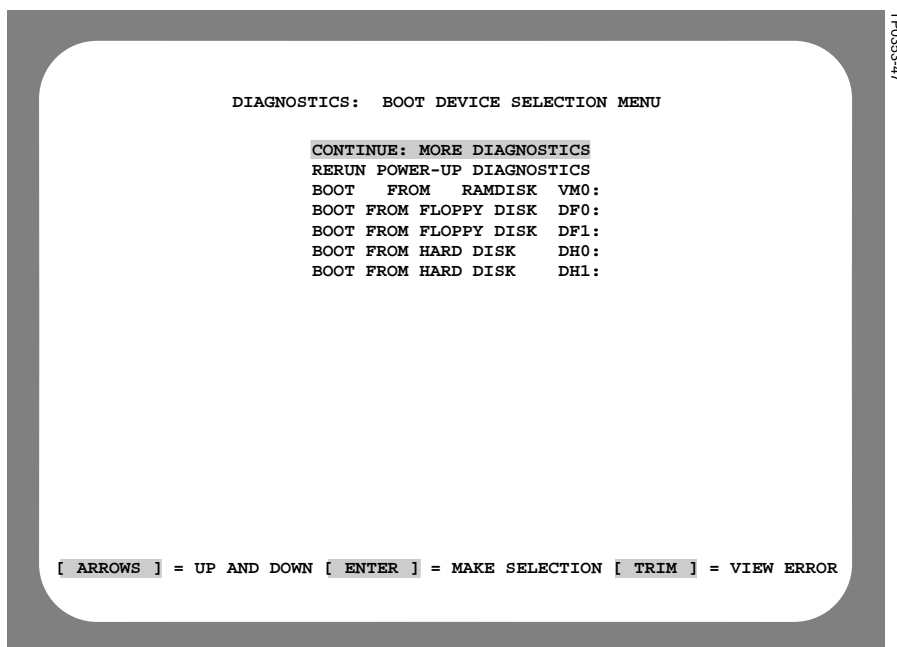


Figure 3-11. PROM-based Self-test Results

3. Press any key. The Boot Device Selection menu appears. (See Figure 3-12 for an example.)



*Figure 3-12. Boot Device Selection Menu*

4. Use the [←], [→], [↑], and [↓] keys until the BOOT FROM HARD DRIVE DH0: selection is highlighted and then press [ENTER]. After a few seconds, the Main Menu appears.

This concludes the Turning Power On procedure. Continue on to Making Basic Checks.

## Making Basic Checks

Making Basic Checks consists of making the assignments listed below and discussed on the following pages and then doing Communications Testing.

- Assign VTR control ports
- Assign video crosspoints
- Assign audio crosspoints
- VTR Model/Manufacturer Assignments
- Set VTR Sync QC

### Machine Assignments

Machine assignments allow you to assign control ports, video crosspoints, and audio crosspoints, and to identify the VTR model/manufacturer to the software. These assignments are made from the Assignment Page and must be done prior to editing. An example of an Assignment Page is illustrated in Figure 3-13.

LABEL	REEL	PORT	MODEL	QC	VIDX	AUDX	PSLX	CFRM	TYPES AVAILABLE
R-VTR	001	01	--	03	000	000	01	00	00 = BETA-SP
A-VTR	002	02	--	03	001	001	02	00	01 = VPR3
B-VTR	003	03	--	03	002	002	03	00	02 = AJD350
C-VTR	---	---	---	---	---	---			
D-VTR	---	---	---	---	---	---			
E-VTR	---	---	---	---	---	---			
F-VTR	---	---	---	---	---	---			
AUX	AUX				007	007			
BLK	BLK				000	000			
PVSW	8466	PORT	09	38.4	ODD				
VIDSW	GVG100	PORT	09	38.4	ODD				
MIXER	AMX170	PORT	08	38.4	ODD				
PRSEL	GV10XL	PORT	--						
PERIF	NONE	PORT	--						
CHRG	NONE	PORT	--						
ASGN=GREEN KEYS OR ALLSTP    NO=DEASGN    SCROLL=ARROWS    RESET=EXIT									

TP0383-80

Figure 3-13. Machine Assignment Page

The Assignment Page consists of essentially three sections. The first section, headed by LABEL, REEL, PORT, etc., identifies machines (and AUX and BLK) to be assigned. Note that the lower portion of this section is used to identify devices other than VTRs and the headings do not apply.

The second section, TYPES AVAILABLE, lists the models of VTRs (and codes) to which you have protocols included in your Super Edit™ software. Basic instructions for the Assignment Page are in the third section at the bottom.

Note the following:

- A [NO] to a question de-assigns the selected VTR (i.e., makes it unavailable).
- For a VTR, AUX, and BLK to appear in the Mark Table, VTRs must be assigned via the Assignment Page, and AUX and BLK must have crosspoints.
- Pressing [ENTER] at a prompt accepts the factory default setting.
- You may exit the Assignment Page by pressing either [RESET] or an invalid key at any time as long as you are not at a prompt.
- Cable connections between the VTRs and the video switcher and audio mixer must be known before making video and audio crosspoint assignments.

### VTR Machine Assignments

To make Machine Assignments, follow the steps listed below:

1. With a K2 Keyboard, press [SHIFT][ASGN]; with a K5 Keyboard, press [VTR ASGN]. A display similar to Figure 3-13 appears with the R-VTR device (top line) highlighted.
2. If you are making assignments for the R-VTR, press [ENTER] or [SPACEBAR] (K2 /K5), or [ALL STOP] (K3). Otherwise, either press the appropriate green key or use [↑] and [↓] to highlight the desired machine and press [ENTER]. At the bottom left hand corner, the system prompts:

**ENTER REEL #**

3. Enter up to six alphanumeric characters, and then press [ENTER]. The Reel ID you entered appears on the line with the selected device and the REEL ID in the Mark Table changes accordingly. The system prompts:

**PORT = ?**

Before making port assignments, note the following items:

- You cannot assign more software ports than hardware ports connected.
- Multiple keys may not be assigned to the same port.
- VTR (green) keys should be assigned to only those ports having machines attached and set for remote operation.
- For the VPE, the following are factory set port assignments:

PORT 8 - Audio mixer

PORT 9 - Video Switcher

PORT 10 - Character Generator

- For the VPE-351, the factory set assignment for PORT 11 is the JOGGER panel.

4. Enter the port number to which the selected machine is connected at the Editor chassis rear panel (e.g., if the R-VTR is connected to PORT 1, enter 01) and then press [ENTER]. The port number you entered appears on the line with the selected device and the system prompts:

**MODEL = ?**

5. Enter the number from the right-hand column of Figure 3-15 which corresponds to the VTR you are using for the selected VTR and press [ENTER]. (For example, if the R-VTR is a VPR-3, you would enter 01.) The model code you entered appears on the line with the selected device and the system prompts:

**QC VALUE = ?**

6. The default QC value is 3. To accept this value, press [ENTER] or enter a value from -1 to 5 and then press [ENTER]. Note that a QC value of -1 tells Super Edit™ to make every attempt to synchronize the machine right up to the IN-point, but DO NOT abort the edit if the source is not properly positioned. The edit will occur and, based on the machine assignment, Super Edit™ will attempt to have the source properly positioned for the event. The QC value you entered appears on the line with the selected device and the system prompts:

**VID XPNT = ?**

Before making video crosspoint assignments, note the following items:

- Color bars, digital effects systems, cameras, and other special video signals can also be assigned to switcher crosspoints.
- For E-E previewing, the R-VTR cannot be changed from crosspoint zero.

7. Enter the desired video crosspoint and press [ENTER]. The video crosspoint you entered appears on the line with the selected device and the system prompts:

**AUD XPNT = ?**

Before making audio crosspoint assignments, note the following items:

- Non-audio sources are assigned to crosspoint 0.
  - For E-E previewing, the R-VTR cannot be changed from crosspoint zero.
8. Enter the desired audio crosspoint and press [ENTER]. The audio crosspoint you entered appears on the line with the selected device.
  9. If you have the Preview Preselector option, the system prompts:

**PRSEL XPNT = ?**

10. Enter the desired Preview Preselector crosspoint and press [ENTER]. Your entry appears on the display.
11. Super Edit provides PAL users the opportunity to assign a color frame offset. Enter the desired color frame offset value (from 0 to 3) and press [ENTER]. The frame offset you entered appears on the display.
12. Repeat Steps 1 through 11 for all connected VTRs.

### **AUX and BLK Crosspoint Assignments**

Default video and audio crosspoints are 007 for AUX and 000 for BLK. To change the AUX and BLK assignments, perform the following steps:

1. Use [↑] and [↓] to highlight AUX or BLK. The system prompt indicates:

**VID XPNT = ?**

2. Enter the desired video crosspoint and press [ENTER]. The crosspoint you entered appears on the selected AUX or BLK line and the system prompts:

**AUD XPNT = ?**

3. Enter the desired audio crosspoint and press [ENTER]. The crosspoint you entered appears on the selected AUX or BLK line.

### **Fast Column Data Entry**

The Assignment Page also provides a fast mode of entering data by column. That is, all vertical column data (reel, port, model, etc.) can be entered at the same time without having to go through the dialog for each source line-by-line.

This mode is activated by selecting a column with the [→] or [←] keys and pressing [ENTER]. You may now enter data vertically in the selected column. To go from one line to the next in the column, either after entering data or to skip a line, press [ENTER].

There are two ways to terminate the column mode. One is to press [ENTER] when at the bottom of the column. The other, which is a fast way of terminating the column mode, is by pressing either [→] or [←] while in the column.

## Other Machine Assignments

Other machines are listed below the AUX and BLK assignment sections. If the protocol for a particular machine is built into your software, it is identified. If a machine protocol is not built into your software, NONE appears next to it.

For example, if (as in Figure 3-13) you have the protocol for a GVG Model 100 Video Switcher, but not a Character Generator, GVG100 appears next to VIDSW and NONE appears next to CHRGN. Assignment choices are limited to port number, baud rate, and EVEN or ODD parity. The assignment procedure is:

1. Use [↑] and [↓] to highlight the desired machine and then press [ENTER]. The system prompts:

**PORT # = ?**

2. Enter the port number the selected machine is connected to and press [ENTER]. The port number you selected appears on the display next to the selected machine and the system prompts:

**0 = 38.4 1 = 9600 BAUD =**

3. Press, as applicable, either [Ø] for 38.4K baud or [1] for 19.6K baud and then press [ENTER]. The baud rate you selected appears on the display on the same line as the selected machine and the system prompts:

**0 = NONE 1 = ODD 2 = EVEN PARITY =**

4. Press, as applicable, either [Ø], [1], or [2] and then press [ENTER]. The EVEN/ODD parity selected appears on the display on the same line as the selected machine.
5. Repeat Steps 1 - 4 for the remaining machines.

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*NOTE: Press [SHIFT][RESET] (all keyboards) to re-establish communication between the Edit System and all peripheral devices.*

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## Communications Testing

Before performing communications testing, all peripheral equipment should be set up and timed. Refer to the Peripheral Equipment Setup and Timing Manual, P/N TP0377-01, for those procedures.

TP0383-54

		TITLE					
SUPER EDIT		V7.1	"system"	Snnnnn	EDIT SUITE #1		
	SOURCE	IN	OUT	DUR	SPD	POS	
A12V	R-VTR	01:00:25:00	01:00:30:00	00:05:00		N	01:00:28:03
	>A-001	01:02:45:00				N	01:02:48:01
CUT TO	B-002	02:15:35:03			->	N	02:15:35:00
A-VTR	AUX					T=	00:00:25:00
	BLK					EVENT	0006
				(MESSAGE AREA)			
				(EDIT TIMER)			

Figure 3-14. Edit Screen Example

To do the communications testing, refer to the Edit Screen illustration, Figure 3-14, and perform the following steps:

1. Load tapes with time code into your machines.
2. Activate the EDIT ENABLE buttons on the video switcher and the audio mixer.
3. Press [SHIFT] and the dark grey [RESET] key.
4. Alternately press the dark green R-VTR, A-VTR, and B-VTR keys. The Mark Table cursor (\*\*) moves from source to source, and video switcher and audio mixer crosspoints switch to the assigned crosspoints as you press the different keys.
5. Select the A-VTR and press the light blue [FF] key. The A-VTR fast forwards.

6. When video appears, press the light blue [STOP] key. The A-VTR stops.
7. Press the light blue [PLAY] key. Video and audio play at normal speed. In the Mark Table, the time code numbers in the selected source's POS column increment.
8. Press [STOP]. The A-VTR and the time code numbers in the POS column of the Mark Table stop.
9. Press the yellow [MARK IN] key. The time code currently displayed in the A-VTR's POS column appears in its IN column.
10. Press the yellow [MARK OUT] key. The time code currently displayed in the A-VTR's POS column appears in its OUT column.
11. Press the [FF], [REW], and [SLOW] keys and ensure the VTR reacts accordingly.
12. Repeat steps 5 through 11 for the remaining VTRs.

If any of the above indications do not occur, check cabling and connections. If any cabling or connection had to be corrected, repeat the procedure. If after repeating the procedure, any indication was still in error, or if cabling and connections were correct, proceed to Installation Troubleshooting.

## Installation Troubleshooting

If any problems arise during the installation, you will want to begin checking the most obvious possible causes first. Verify the following items are true:

- All power cords are connected to the correct power source
- All power switches are in the ON positions
- All cables are attached to the correct connectors
- All machines are in their correct mode of operation (i.e., local or remote)

If during the Start-up Sequence the Super Edit Main Menu did not appear on the Monitor, the checks listed below and discussed on the following pages are starting points for Installation Troubleshooting. Note that if you suspect the software is the problem, re-install system software before proceeding. See Appendix F for the System Software Installation procedure.

- Chassis front panel status indicators
- Program failed to execute
- Switches not set correctly
- Jumpers not placed correctly

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*NOTE: Make notes of all troubleshooting activities. They will help service personnel in the event that more detailed troubleshooting is required.*

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## Front Panel Status Indicators

There are six (6) LEDs visible at the front panel. These LEDs provide a quick check of the Editor status. Figure 3-15 shows their locations and the following is a brief description of them. (The Service Information Manual contains a more detailed description of these LEDs.)

- PGM (Program) - This green LED is not normally lit. It lights to indicate successful completion of the PROM-based self-test.
- NO SYNC - This red LED is not normally lit. If lit, it indicates that either house sync is not connected or has been lost.
- DC LOW - This red LED is not normally lit. If lit, it indicates that the +5 VDC output of the DC Power Supply is not within proper operating range.

- FAIL - This red LED is not normally lit. If lit, it indicates that the microprocessor failed its internal start-up diagnostics.
- RUN - This green LED is normally lit. If not, the RUN/HALT toggle switch on the SBC board may be in the wrong (HALT) position.
- POWER - This red LED is normally lit when the power switch is in the On position.

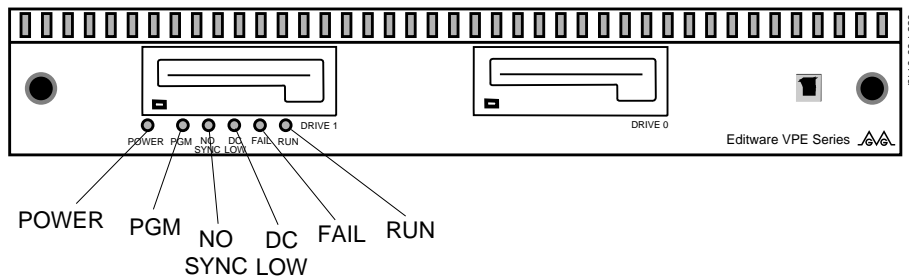


Figure 3-1. Computing Chassis Front Panel Indicators

## Program Execution

Check for the possibility that the program failed to execute. This can be done by re-booting the Editor from the Distribution Floppy Disk. (See Appendix F, System Software Installation.)

## SBC Switches

There are three switches on the SBC (see Figure 3-16). They are accessible without removing the SBC from the Chassis. Two are toggle switches (RUN/HALT and BOOT) and one is a rotary thumbwheel switch (MODE).

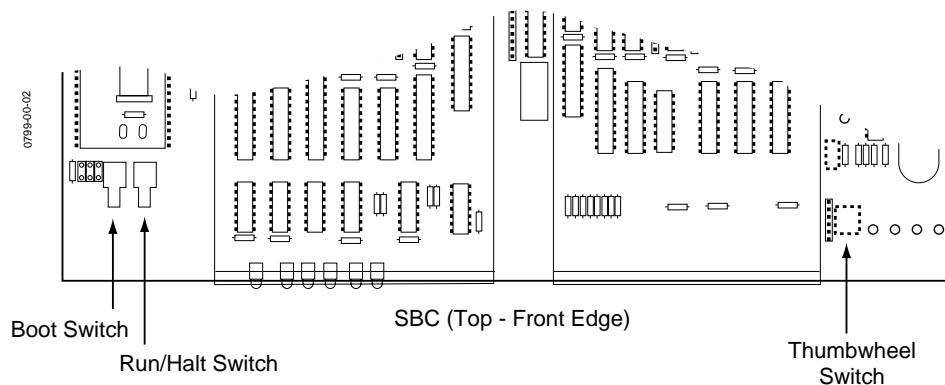


Figure 3-2. SBC Switch Locations

### SBC Jumpers

There are numerous jumpers on the SBC which set the operating conditions of the Editor. To check jumper positions, it is necessary to remove the SBC from the Chassis. Refer to Figure 3-17 below which illustrates removal of the SBC.

All the jumpers are shown in Figure 3-18 and listed in Table 3-2. The table describes the default settings of the jumpers, which are set at the factory. A detailed description of all the jumpers are on the pages following the table.

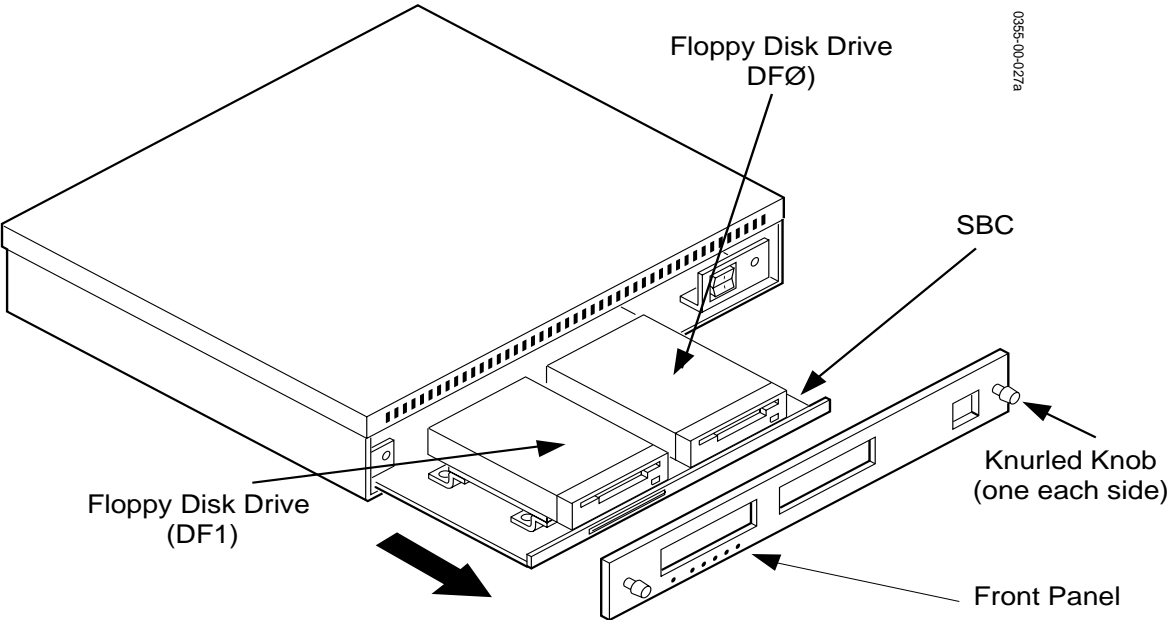


Figure 3-3. Removing the SBC

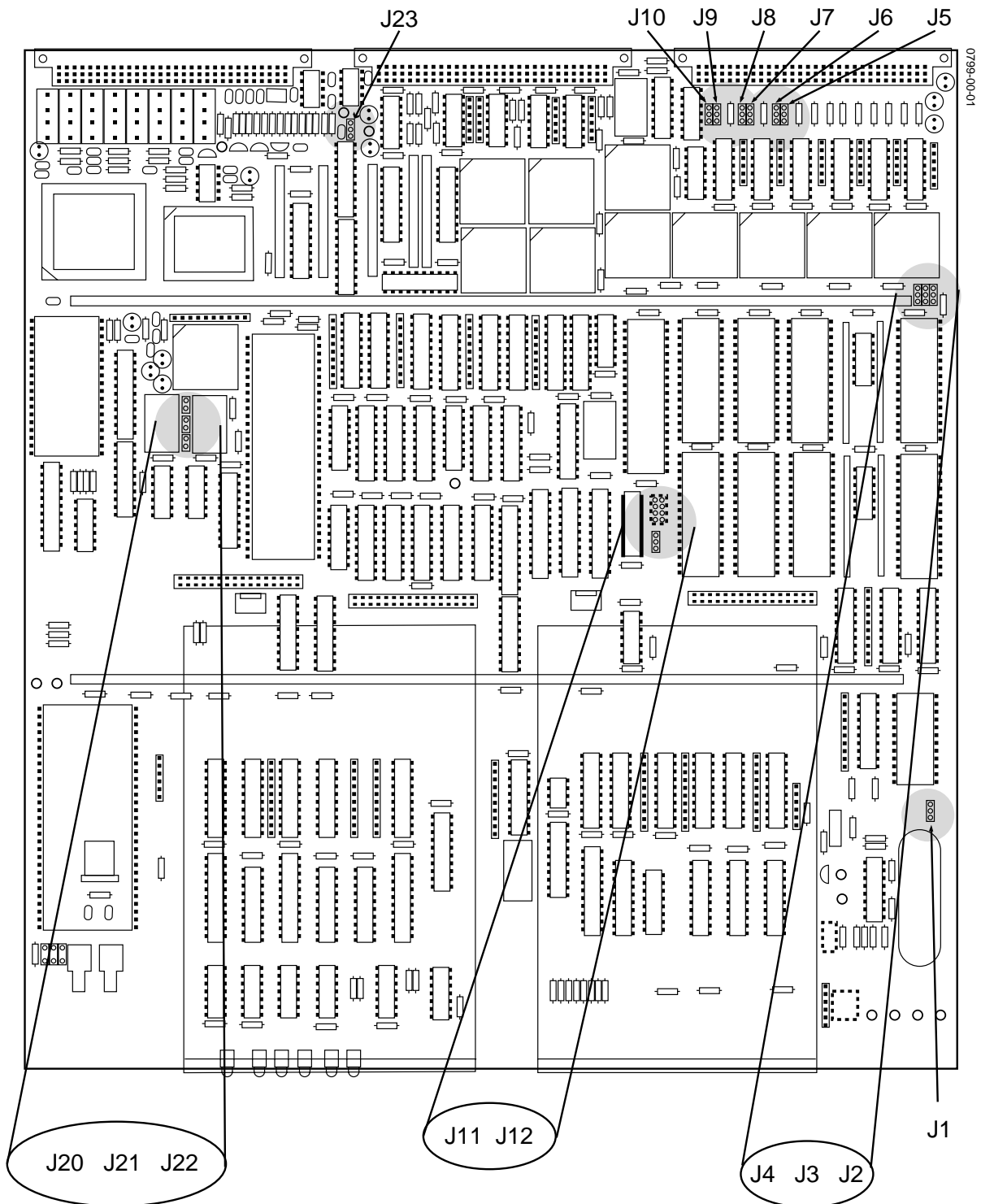


















Figure 3-4. SBC Jumper Locations

Table 3-2. SBC DEFAULT JUMPER SETTINGS

Jumper	Position	Setting
J1	1 	Jumper block at pins 1-2. Connects the battery to the circuitry.
J2	1 	Jumper block at pins 1-2. With jumpers J3 & J4, selects 27C256 as the type of EPROM (see Table 3-4).
J3	1 	Jumper block at pins 1-2. With jumpers J2 & J4, selects 27C256 as the type of EPROM (see Table 3-4).
J4	1 	Jumper block at pins 1-2. With jumpers J2 & J3, selects 27C256 as the type of EPROM (see Table 3-4).
J5	1 	With jumper J6, selects RS-422 (block at pins 1-2) or RS-232 (block at pins 2-3) as the Port 7 serial interface.
J6	1 	With jumper J6, selects RS-422 (block at pins 1-2) or RS-232 (block at pins 2-3) as the Port 7 serial interface.
J7	1 	With jumper J8, selects RS-422 (block at pins 1-2) or RS-232 (block at pins 2-3) as the Port 6 serial interface.
J8	1 	With jumper J7, selects RS-422 (block at pins 1-2) or RS-232 (block at pins 2-3) as the Port 6 serial interface.
J9	1 	Jumper block at pins 1-2. With jumper J10, selects RS-422 as the Keyboard Port serial interface.
J10	1 	Jumper block at pins 1-2. With jumper J9, selects RS-422 as the Keyboard Port serial interface.
J11	1 	Jumper block at pins 2-3. Selects 60Hz as the frequency for the on-board EVENT clock signal. (Also see jumper J23.)
J12	1 	Jumper blocks at pins 3-4 and 7-8. Selects 9,600 as the baud rate for the Keyboard Port. Jumper block must always be at pins 1-2 to enable programmable baud rate selection through software.
J13 - J19		These jumper numbers not used on this board
J20	1 	Jumper block installed. Selects MOTOR-ON line low to the Floppy Disk drive connector.
J21	1 	Jumper block not installed. selects a precompensation value of 125 nS for the floppy disk drive.
J22	1 	Jumper block not installed. Disables the DISK CHANGE drive feature for the Floppy Disk drive.
J23	1 	Jumper block at pins 1-2. Selects the house sync input as the EVENT clock signal.

**J1 – Battery Voltage Enable**

A 3-pin jumper used to control battery power to the VBATT bus per the following jumper placement:

- 1-2 Connects the battery to VBATT bus
- 2-3 Disconnect battery from VBATT bus

**J2, J3 & J4 - Memory Type**

These 3-pin jumpers select the type of EPROM memory devices being used. Selection is per the jumper placement listed in Table 3-3.

*Table 3-3. EPROM SELECTION JUMPERS*

J2	J3	J4	EPROM Type
1 - 2	1 - 2	1 - 2	27C256
1 - 2	1 - 2	2 - 3	27C010
1 - 2	2 - 3	1 - 2	27F256 Flash, Non-program
2 - 3	2 - 3	1 - 2	27F256 Flash, Program
1 - 2	2 - 3	2 - 3	28F010 Flash, Non-program
2 - 3	2 - 3	2 - 3	28F010 Flash, Program

**J5 & J6 - Port 7 Serial Interface Selection**

These two 3-pin jumpers, which must agree, select the type of interface for Port 7 per the following jumper placements:

- 1-2 selects RS-422
- 2-3 selects RS-232

**J7 & J8 - Port 6 Serial Interface Selection**

These two 3-pin jumpers, which must agree, select the type of interface for Port 6 per the following jumper placements:

- 1-2 selects RS-422
- 2-3 selects RS-232

**J9 & J10 - Keyboard Port Serial Interface Selection**

These two 3-pin jumpers, which must agree, select the type of interface for the Keyboard Port per the following jumper placements:

- 1-2 selects RS-422
- 2-3 selects RS-232

**J11 - 50/60 Hertz EVENT Clock Source Select**

A 3-pin jumper used to select an on-board EVENT clock source of either 50Hz or 60Hz. (It is only active when the jumper at J23 is placed at the 2 - 3 position.) Selection is per the following jumper placements:

- 1-2 selects 50 Hz
- 2-3 selects 60 Hz

**J12 - Keyboard Port Baud Control/Select**

This jumper consists of four sets of two pins each. Pins 1 & 2 are used to inhibit/enable programmable baud selection through software. The remaining pins are used to select the baud rate for the Keyboard Port according to the jumper placements shown in Table 3-4.

*Table 3-4. KEYBOARD PORT BAUD RATE SELECTION JUMPERS*

Pins 3 & 4	Pins 5 & 6	Pins 7 & 8	Baud Rate
OFF	OFF	OFF	300
OFF	OFF	ON	600
OFF	ON	OFF	1,200
OFF	ON	ON	2,400
ON	OFF	OFF	4,800
ON	OFF	ON	9,600
ON	ON	OFF	19,200
ON	ON	ON	38,400

### **J20, 21 & J22 - Floppy Drive Selection**

These three 2-pin jumpers are used to match the requirements of the floppy disk drive installed. Matching is per the following jumper placements:

J20 Jumper on, the MOTOR LINE signal to the drive connector(s) is low.

Jumper off, the MOTOR LINE signal to the drive connector(s) is high

J21 Jumper on, compensation value is 187 nS

Jumper off, compensation value is 125 nS

J22 Jumper on, enables the DISK CHANGE drive feature.

Jumper off, disables the DISK CHANGE drive feature.

### **J23 - EVENT Signal Source Selection**

This 3-pin jumper is used to select the source of the EVENT signal to the microprocessor.

1-2 selects house sync input as the EVENT clock

2-3 selects the on-board sync as the EVENT clock (see J11)

This concludes Installation Troubleshooting. If after performing all the checks described here, your Editing System is not working, refer to the Troubleshooting and Diagnostics section of the Service Information Manual.

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***SPECIAL NOTE: At the completion of this Installation Instructions Manual, it is recommended that you go through the Super Edit Tutorial Set.***

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