Section 5   Other Devices

Introduction

This section presents descriptions about various devices used with VPE Editors. Click here for how Super Edit deals with the Year 2000 issue!

Click Topic to Link!

Using A Serial Printer with VPE Editors

5k, 10k And 20k Character Generator

Aston 4 Character Generator

CBG/Texta CG w/o Serial Dual-Port Board

CBG/Texta CG w/Serial Dual-Port Board

Graphics Factory GF-30/40/50

Presto Character Generator

Abekas A53

GVG DPM-100, -700

GVG Kaleidoscope DPM-1

Ensemble TC-400

Zaxcom MTBC 1000

DPM-1325 Digital Source Selector

GVG Performer Preview Preselector

GVG TEN-XL Preview Preselector

Lexicon 1200c Audio Time Compressor/Expander

Lexicon 2400c Audio Time Compressor/Expander

RCI DVE-P2

Teletype Serial Tape Reader/Punch

Timeline Lynx/VSI Synchronizer

Accom RTD disk recorder

Tektronix Pro*file* disk recorder enhancement

Videotek SDC-101 color corrector

TypeDeko character generator cable

Changing Floppy Drive ID#

**Procedure for running Super Edit from the RAM disk**

Using a Serial Printer With VPE Editors

Serial Printer Setup

The following paragraphs provide interfacing, setup, and cabling information to allow the use of a serial printer with various VPE Editors. This information supplements the Editor Installation Instructions manuals. The following three items must be considered when connecting a serial printer to an Editor:

1. The Editor Printer Port is set up for RS-232 protocol at 1200 baud, 8 data bits, 1 stop bit, and no parity. These are default parameters which are set whenever either the Editor is powered up or when the editing application is accessed.

2. The printer connected to the Editor should be set up for XON/XOFF protocol to prevent the possible loss of data to the printer.

3. The printer connector pin outs are as follows:

PIN	SIGNAL
1	Chassis Ground
2	RS-232 RX
3	nc
4	Signal Ground
5	nc
6	Signal Ground
7	nc
8	RS-232 TX
9	Chassis Ground
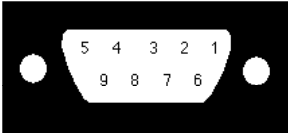
5K, 10K, and 20K CG

Setup

Connect the Editing System Character Generator Port to the Serial I/O board port B using the VPE-supplied cable.

Serial Interface Setup

Press **[CONFIG] [P]** to access the PORT DEFINITION MENU

Using **[↑]**, **[↓]**, **[   ]**, **[←]**, **[NEXT]**, and **[PREVIOUS]**, move the cursor to select the following:

    PORTDEF

    ACCY

    422

    9600

    8

    1

    N

(The Editor CG port will already have been set to match these parameters.)

Using **[↑]**, **[↓]**, **[   ]**, **[←]**, move the cursor to the USAGE column on the menu. Press **[NEXT]** or **[PREVIOUS]** until PEGS appears on the menu.

Press **[ENTER] [CONFIG]**, then **[Y]** to save these settings on disk. The next time you boot from disk these will be the default settings.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR	SIGNAL	CG
Pin		Pin
1	Chassis Ground	2
2	Rx A	7
3	Tx B	9
7	Rx B	6
8	Tx A	8

NOTE: Pins 4, 5, 6, and 9 are not connected.

ASTON 4 Character Generator

Setup

Connect the VPE Character Generator Control port to the Aston 4 Serial Port A. Use a cable as illustrated in the Control Cable section of this note. Note that this interface was tested using Aston 4 version 6.7 Character Generator software, all other Aston 4 programs were version 6.1.

Editor Interface Setup

1. The default port for an external character generator on most VPE Systems labelled **CHAR GEN** is Port 10 (see Installation Instructions for your system). You may select another port on the Assignment Page to communicate with the Character Generator.

2. Set the serial interface parameters on the Editor as listed below:

Baud Rate	4800
Data Bits	8
Parity	No Parity

Serial Interface Setup

1. The Buffered Serial Interface Option (a board which occupies the second slot in the Aston 4 frame) must NOT be installed. This board supports RS232 communications only; the Editor communicates using RS422. If it is necessary to remove this option from the system, verify that the appropriate jumper is placed on the backplane and the ribbon cable from the serial connectors is moved to the processor card slot. Consult Aston documentation for further information.

2. Set the jumpers on the main processor card to RS422 operation. For Port A set Jumpers 28 and 30; for Port B set Jumpers 32 and 34.

3. Set the serial interface parameters on the Aston 4 as listed below:

Baud Rate	4800
Data Bits	8
Parity	Disabled
Stop Bits	1
XON/XOFF	OFF

Access the interface parameter settings through the Aston 4 Menu 6, submenu 2. (Baud rates above 4800 were tested unsuccessfully.)

The Aston 4 must be in emulation mode, accessed through Menu 6, submenu 3. Emulation mode disables keyboard input.

Operation

Refer to the Editor Operator's Guide, PEGS, for information on programming the editing system and a Character Generator.

To <u>recall</u> a saved effect on the Character Generator:

1. Press **[PEGS]**. The system prompts:

<div align="center">

REGISTER # ?

</div>

2. Enter the PEGS register you wish to store the trigger data in (Registers 1 through 16) and press **[ENTER]**. The system prompts:

<div align="center">

FUNCTION = ?

</div>

3. Press **[T]**, **[ENTER]**. The system prompts:

<div align="center">

COMMAND = ?

</div>

4. Press a 3 digit number corresponding to the last 3 digits of your file name. Super Edit will add a preceding "1" to this number when the command is transferred to the Aston 4. When this PEG is executed, the Aston will load that effect as the 'NEXT' effect to be executed. Note that if you have starting pages for effects numbered lower than 1000 or higher than 1999, the effects must be renumbered within that range.

5. Press **[Ø]**, **[ENTER]**. Note that if additional time is needed to load the effect, enter a negative number of seconds, (e.g. -2:00), to have the page loaded before the IN time.

To <u>execute</u> an effect on the Character Generator:

1. Press **[PEGS]**. The system prompts:

<div align="center">

REGISTER # ?

</div>

2. Enter the PEGS register you wish to store the trigger data in (Registers 1 through 16) and press **[ENTER]**. The system prompts:

FUNCTION = ?

3. Press **[T]**, **[ENTER]**. The system prompts:

COMMAND = ?

Press **[Ø]**, **[ENTER]**. The system prompts:

TIME = ?

5. Perform a, b, or c below:

a. Enter or transfer a time representing the delay between the edit IN   time and the start of the effect (enter **[Ø]** if you want the effect to   occur at the edit IN time) and press **[ENTER]**.

b. Press **[MARK OUT]** to use the selected source's current tape   position as the start point.

c. Press **[SET OUT]**. The system prompts:

END OF DELAY =

Specify or transfer an absolute time code as the start of the effect (end of delay). The delay time is calculated. Subsequent executions of this PEG will cause successive pages on the Aston 4 to be executed. Thus multiple PEGS can be setup to execute a sequence of effects on the Aston.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR		CG	
Pin	Signal	Signal	Pin
1	GND	Ø V (GND)	1
2	Rx A	Tx Data (Return)	13
3	Tx B	Rx Data (Line)	18
6	Common	Ø V (Common)	7
7	Rx B	Tx Data (Line)	12
8	Tx A	Rx Data (Return)	19

9	GND	Ø V (GND)	1
No Connect		+5 Volts	25

NOTE: *Pin 4 and 5 on the Editor are not connected.*

CBG/Texta CG w/o Serial Dual-Port Board

Setup

Connect the Editing System Character Generator Port to the Serial I/O board port C using the VPE-supplied cable.

Serial Interface Setup

The Serial Dual Port board is installed in slot #1 of the upper card cage of the CBG (slot #2 on TEXTA). Configure the board using the following commands:

1. **[DO]** PORTDEF, C, 422, 9600, 8, 1, N, **[ENTER]**. This sets the serial Accessory Port to RS-422 protocol 9600 baud, 8-bit data, 1 stop bit, no parity, which is the configuration of the Editor character generator port.

2. **[DO]** PORTUSE,I, C **[ENTER]**. This sets the serial port C as an input.

3. **[DO]** PORTUSE, K, C, **[ENTER]**. This sets the serial port C for a second keyboard, with the Editor acting as that keyboard.

4. **[DO]** INPKBD, S, **[ENTER]**. This makes the character generator listen to the second keyboard as well as the main keyboard, processing input on a first come, first serve basis. The S suppresses update of LED data back to the second keyboard.

These commands can be saved to disk using a KPL program.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR	SIGNAL	CG
Pin		Pin
1	Chassis Ground	1
2	RxA	8
3	TxB	6

7	RxB	9
8	TxA	5

NOTE: *Pins 4, 5, 6, and 9 are not connected.*

CBG/Texta CG w/Serial Dual-Port Board

Setup

Connect the Editing System Character Generator Port to the Serial I/O board port A using the VPE-supplied cable.

Serial Interface Setup

The Serial Dual Port board is installed in slot #1 of the upper card cage of the CBG (slot #2 on TEXTA). Configure the board using the following commands:

1. **[DO]** PORTDEF, ACCY, 422, 9600, 8, 1, N, **[ENTER]**. This sets the serial Accessory Port to RS-422 protocol 9600 baud, 8-bit data, 1 stop bit, no parity, which is the configuration of the Editor character generator port.

2. **[DO]** PORTUSE,I, A **[ENTER]**. This sets the serial port A as an input.

3. **[DO]** PORTUSE, K, A, **[ENTER]**. This sets the serial port A for a second keyboard, with the Editor acting as that keyboard.

4. **[DO]** INPKBD, S, **[ENTER]**. This makes the C/G listen to the second keyboard as well as the main keyboard, processing input on a first come, first serve basis. The S suppresses update of LED data back to the second keyboard.

These commands can be saved to disk using a KPL program.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR	SIGNAL	CG
Pin		Pin
1	Chassis Ground	1
2	Rx A	8
3	Tx B	6

7	Rx B	9
8	Tx A	5

NOTE: *Pins 4, 5, 6, and 9 are not connected.*

Graphics Factory GF-30, -40, -50

Setup

Setup of the Graphics Factory Models GF-30, -40, and -50 is as follows:

1. Connect the cable between Serial Port 12 on the Graphics Factory and a machine control port on the Sabre DCE, the Accessory Port (31, 41, 51), the Character Generator Port (VPE-131, 141, 141L, 241, 241L, 251) or Port 12 (VPE-151) of the Editor.

2. Press **[CONFIG] [P]** to access the PORT DEFINITION MENU

3. Using **[↑]**, **[↓]**, **[   ]**, and **[←]** to move the cursor, press **[PREVIOUS]** and **[NEXT]** to select the following (if not already selected):

   PORTDEF, 12, 422, 9600, 8, 1, N.

   This sets the Port to RS-422 at 9600 baud, 8-bit data, 1 stop bit, and no parity.

4. Use **[↑]**, **[↓]**, **[   ]**, and **[←]** to move the cursor to the USAGE column on the menu.

5. Press **[NEXT]** or **[PREVIOUS]** until PEGS appears on the menu.

6. Press **[ENTER]** to save these settings on disk.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR	SIGNAL	CG
Pin		Pin
1	Chassis Ground	1
2	Rx +	8
3	Tx -	7
4	Gnd	4
6	Gnd	6
7	Rx -	3
8	Tx +	2
9	Chassis Ground	9

NOTE: Pin 5 is not connected.

Presto Character Generator

Setup

Setup of the Presto is as follows:

1. Connect the cable between Serial Port B on the Presto and a machine control port on the Sabre DCE, the accessory Port (41, 51), the Character Generator Port (VPE-131, 141, 141L, 241, 241L, 251) or Port 12 (VPE-151) of the Editor.

2. Press **[CONFIG] [P]** to access the PORT DEFINITION MENU

3. Using **[↑]**, **[↓]**, **[   ]**, and **[←]** to move the cursor, press **[PREVIOUS]** and **[NEXT]** to select the following (if not already selected):

Port	B
Protocol	RS422
Baud	9600
Parity	Odd
StopBit	1
Handshake	None
Usage	Pegs
Enable	On

4. Press **[ENTER]** to save these settings on disk.

The Editor port will have been set to match these parameters.

5. Press **[CONFIG][T]** to access the TRIGGER MENU.

6. Use **[↑]**, **[↓]**, **[   ]**, and **[←]** to move the cursor, and press **[PREVIOUS]** or **[NEXT]** to select the following:

GPI	On

7. Press **[ENTER]** to save these settings on the disk.

Editing Features

Refer to the Editor Operator's Guide, under PEGS, for information on programming the editing system and the Presto.

The VPE Videotape Editing System allows control of the Presto through PEGS commands. The PEGS registers are used to specify times to call Presto sequences named 9001 through 9999. The sequences can be used to command any function possible on the Presto. In addition, a special command in the PEGS register can be used with the sequences to trigger an event on the Presto with frame accuracy.

NOTE: A PEGS "T" Function will execute a sequence that is named in the range 9001 to 9999. If a Trigger is called out in the wait column on the sequence, a PEGS "T" Function and command 000 will trigger it.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR	SIGNAL	CG
Pin		Pin
1	Chassis Ground	1
2	Rx +	8
3	Tx -	7
4	Gnd	4
6	Gnd	6
7	Rx -	3
8	Tx +	2
9	Chassis Ground	9

NOTE: Pin 5 is not connected.

Abekas A53

TBC	None
Latest Revision	6/88
NTSC/PAL	NTSC
Control	Direct, RS-422
Device Options Required	Dual Channel RS-422 SMPTE Control
Special Modifications	None
Address	001
Edit Modes	Source only
Sync Control Reference	Device generated Time Code
Motion Control Functions	Jog, Variable, Play, Fast Forward, and Rewind
PROM Level	V.8 or later

System Timing

For S.C Phase, Sync Position, and Horizontal Picture Centering, see the Setup Menu in the Abekas A53.

A53 Setup

The Abekas A53 is setup from the Front Panel Menu and a DIP switch on the Computer PC Board.

FRONT PANEL MENU

Set Remote to SMPTE

Enable Remote mode

Set Record Offset to: 00:00 (Sabre Edit 1.0, Super Edit V4.1 or later)

60:00 (Super Edit 4.04 or earlier)

Table 5-1. Computer PC Board Dip Switch (12HO)

Switch	Function	Setting	
		ON	OFF
8	Serial Port Baud Rate	38.4	9.5K
7	CMX-RS422.RS232	RS422	RS232
6	SMPTE Address MSB	0	1 (32-63)
5	SMPTE Address Bit 4	0	1 (16-31)
4	SMPTE Address Bit 3	0	1 (8-15)
3	SMPTE Address Bit 2	0	1 (4-7)
2	SMPTE Address Bit 1	0	1 (2-3)
1	SMPTE Address LSB	0	1 (0-1)

Set switch 12H to: 8, 7, 6, 5, 4, 3, 2 = ON

GVG DPM-100, DPM-700

Options Required   None

Special   None
Modifications

Address   8080 (hex)

Cable   Color Black to REF IN.
Requirements

Positional   98% of all DPM-100 effects are frame accurate when the DPM-100 and
Accuracy   system are timed per VPE recommendations and the Editor QC is set to
                               nominal.

Edit Timing   Nominally correct with current DPM software. IN and OUT times are
Accuracy   adjustable via the Editor.

Sync Control   EXT REF
Reference

Motion Control   Jog: Approximately 3 frames per revolution of Jogger control.
Functions   Variable: ±394% Play speed.

Programmed   SLOW KEY: Learn current Variable Speed into **[SLO]**
Motion   with**[SHIFT][SLO]**.

                               SLO-MO MATCH: yes.

                               FILL: yes.

DPM PROM   The DPM-700 works properly with any version PROMs. However, the
Level   DPM-100 requires the following PROM versions (or later):

                                      Panel: 074709-20
                                      Comm: 074709-20
                                      Trans: 074709-20

R-VTR E-E   N/A
Monitoring

Setup

Direct, RS-422 communication between the Editor and the DPM takes place at 38.4K baud, 8 data bits, 1 stop bit, ODD parity. A standard RS-422 control cable (supplied with the DPM) connects between an unused port on the Editor and the EDIT port on the DPM frame. DPM communication parameters are changed using a Diagnostics/Software disk (P/N 074710). To use this disk, turn DPM power OFF, insert the disk, and turn power ON.

On the DPM-700, the ports can also be set up directly in the regular system menus (i.e., the Diagnostic Disk will work also but is not needed). To access the port parameters, select **[ENG]**, **[SETUP]**, and **[UARTS]**. After the diagnostics programs have been loaded from disk, perform the following procedure:

1. Press **[COMM]** in the System Diagnostics main menu.

2. Press **[SETUP]**.

3. Press **[USETUP]** (for UART Setup).

4. Press **[EDITOR]**. Once in the Editor Setup menu, set the following parameters:

5. Press **[TYPE]** and select **[KSCOPE]**.

6. Press **[HOME/EXIT]** to return to the next higher menu level.

7. Press **[BAUD]** and select **[38400]**.

8. Press **[ADDRS]** and enter 8080 (hex).

9. Press **[UART]** and select:

        ODD parity
        8 MSGBIT
        1 STPBIT

10. Changes are not saved as you make them. If any changes have been made, a **[SAVE]** selection will appear in the menu. Press **[SAVE]** to save the changes.

Pass-Through Mode Connection

The DPM-100 and DPM-700 have the capability to accept and pass on communication destined for the Model 100/110 Video Switcher. Advantages of this operational mode are that the DPM can automatically address the KeyLink™ feature in conjunction with the Model 110 Switcher, and the DPM disk drive can be used to store and recall Model 100/110 E-MEM® data.

In this configuration, the Editor connects to both the EDITOR port and the ACCY port on the DPM. Machine control commands destined for the DPM are accepted by the EDITOR port. It is also this port that is used as the destination for PEGS commands that have **K** as the FUNCTION.

The VID port on the Editor is connected to the DPM ACCY port. This port must be configured for the edit system that is controlling it (for example, the 41 and 51 Systems communicate with the switcher at 9600 baud, while the VPE-131, 141, 141L, 241, 241L, 151, and 251 communicate with the switcher at 38.4k baud).

On the DPM, the ACCY port is assigned as MODEL100. The SLAVE/ACCY port on the DPM is then connected from the DPM to the switcher's EDITOR PORT. The DPM SLV/ACC port is then designated as a SLV port, slaved to the ACCY port. In addition, the ACCY port must also be slaved (SLV) to the SLV/ACCY port. (See the figure below for a wiring diagram.)

To use this method of control, DPM-100 software version -20 or later is required. Control of the DPM-100 is present in Sabre Edit Version 1.0 and all versions of Super Edit Software after Version 6.0.
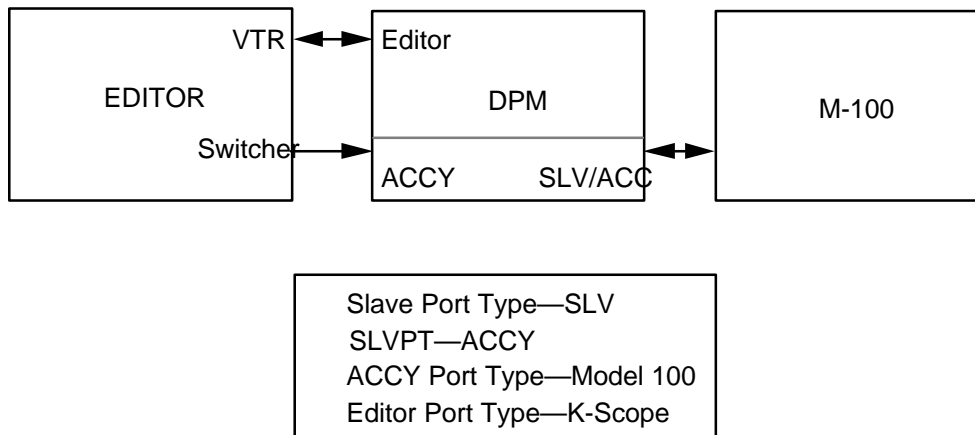

Fiogure 5-1. Pass-Through Mode Wiring Diagram

GVG Kaleidoscope DPM

TBC	Software assignment of the KALEIDOSCOPE is made in the same manner as assigning a VTR.
NTSC/PAL	N/A
Control	Both
Device Options Required	Editor Option
Special Modifications	None
Address	130.128 (82.80 hex)
Cable Requirements	Color Black Ref to REF IN
Positional Accuracy	98% of all KALEIDOSCOPE effects are frame accurate when the Editing System and KALEIDOSCOPE are timed per VPE recommendations and the Editor QC is set to nominal.
Sync Control Reference	REF IN
Alt TC Ref Selectable	None
Motion Control Functions	Jog: Approximately 3 frames per revolution of Jogger control. Variable: ±394% of Play Speed.
Programmed Motion	**[SLOW]** key: Learn current variable speed into **[SLOW]** key with **[SHIFT][SLOW]**.
	PEGS Control: 1.5% resolution over Variable speed range.
	SLO-MO Match: Yes
	FILL: Yes
KALEIDOSCOPE PROM Level	The Serial Control PROM on the Editor Option board must be Part Number 056483-01 or later.

NOTE: The Editor Control Option board is located on the Serial I/O board in the KALEIDOSCOPE Controller.

Record VTR E-E   N/A
Monitoring

Software Version   Super Edit V5.0 or later, Sabre Edit V1.0 or later.

KALEIDOSCOPE Setup

Communication protocol is RS-422. Communication between the Editor and the KALEIDOSCOPE is at 38.4K baud, 8 data bits, 1 stop bit, ODD parity. A standard RS-422 control cable (supplied with KALEIDOSCOPE) is used to connect between an unused port on the editor and the EDITOR port on the KALEIDOSCOPE Controller. The KALEIDOSCOPE's serial port is set up for external control by the following procedure:

1. Press the [RESOURCES] button, located in the Top Menu.

2. Press SYSTEM CONFIG **[F6]**.

3. Press MORE **[F6]**.

4. Press SERIAL SETUP **[F6]**. Once in the SERIAL SETUP menu, set the following parameters:

5. Press PROTOCL **[F1]**.

6. Press VPE SELECT **[F4]**.

7. Press LAST MENU Key.

8. Press BAUD/PARITY **[F2]**.

9. Press 38.4K **[F1]**.

10. Press ODD **[F6]**.

Press LAST MENU Key.

1. Press SELECT ADDR **[F3]**.

2. Enter 130.128 (82.80 hex).

3. Press EXIT. Next, enable Editor control via the KALEIDOSCOPE serial port:

4. From the RESOURCES menu select USER PREFS **[F4]**.

5. Press EXTERNAL CNTRL **[F3]**.

6. Press ENABLE SERIAL **[F1]**. The ENABLE SERIAL button is an ON/OFF toggle for the KALEIDOSCOPE serial port.

Ensemble TC400 TBC Controller

Setup

The serial interface capability of the TC400 Time Base Corrector (TBC) Controller allows it to be interfaced to the VPE line of edit controllers. This interface permits the operator to access the memory functions of the TC400 directly from the Editor. TBC settings can be stored in the EDL, allowing scenes to be revised without losing the precise TBC values originally used.

This interface requires that the VPE Editor be equipped with version 5.0 or later software. In addition, the ESP1 protocol must be installed in the edit controller. Interface to this protocol is a standard feature of the TC400. Connect and program the TC400 for operation with the Editor as follows:

1. Connect the Editor peripheral port to the DB-9 edit interface port of the TC400, using the 054602-16 control cable supplied with the Editor. (Typical Editor port assignments are listed in Section 1 of this manual and Editor installation details are explained in the Editor Installation manual.)

2. On the TC400, press MENU FUNC and turn the menu knob until **[Pgm Edit Port]** appears.

3. Press **[ENT]**.

4. Turn the menu knob until **[GVG ESP1]** appears. (This selects the GVG ESP1 protocol as required.)

5. Press **[   ]** and turn the menu knob to select **[38400]** as the baud rate.

6. Press **[   ]** and turn the menu knob to select **[ODD]** as the parity.

7. Press MENU FUNC twice.

8. Turn the menu knob until **[Backup Memory]** appears and then press **[ENT]**. This saves the port parameters to non-volatile backup memory. Once saved in backup memory, they will be recalled automatically whenever the unit is turned on.

Operation

TC400 Memory registers are accessed through PEGS in much the same manner as production switcher memory or VTR motion control. PEGS provides a three-digit command for use with peripheral devices like the TC400. The first digit of this command corresponds to the TBC control channel, 1 through 4. Digits 0 and 5 through 9 are not valid.

The second and third digits of the command refer to the register number to be accessed. Thus, a PEGS command of 234 would be TBC2, register 34. The Editor can recall and store TC400 registers 0 through 49 to the EDL. The Editor can also execute registers 50 through 99, but cannot store or recall them to the EDL. For example, PEGS registers might be set up as follows:

Function	Command	Time
P	101	00:00:00
P	201	00:01:00
P	301	00:02:00

At the time the edit is recalled, data previously stored for the three commands is sent to the peripheral. Once an edit has been executed, the data can be stored in the EDL by selecting STORE E-MEM from the INIT page (E-MEM key on the VPE-151). The EDL reflects which P-MEM number is stored.

The limitation in the number of registers that can be controlled is actually a feature of the Editor. The PEGS command line allows you to differentiate between registers so that for some, both Recalls (referred to as Restores in the TC400) and memory storage in the EDL will take place, whereas for others only the Recall will take place. By adding 50 to the register number, it can be accessed for Recall purposes but the data contents will not be transferred back and forth between the TC400 and the EDL.

When a register Recall is initiated by PEGS, the TC400 will perform just as if you had performed a manual Restore. Thus, if the register has a non-zero transition rate, a smooth transition from the current TBC settings to those in the register will take place. This is done without the need for any other control mechanism such as a GPI trigger. All you need to do is program the appropriate transition rate when you originally Save the register.

Additional information is provided in the operator's manual for the VPE Editor under the heading Peripheral Control Via PEGS.

Zaxcom MTBC1000 Multiple TBC Controller

Features

The Zaxcom MTBC1000 Multiple Timebase Corrector Control System provides control of up to eight TBCs from two locations: the edit room and the machine room. The unit controls video gain, setup level, chroma, hue, Y/C delay color framing, video phase, horizontal timing, and subcarrier timing. It stores this information for up to 25 different video tapes per TBC, Battery backup ensures against data loss when power is turned off. Memory entries can be accessed by either memory or reel number.

The MTBC1000 incorporates TBC transition, an automatic real time dissolve between one memory and another within the unit. All of the setups dissolve independently and simultaneously. The duration can be set from 1 to 999 frames. The transition can be started by a GPI input pulse. The purpose of TBC Transition is to correct tape level variations over a period of time.

An RS422 DB9 female auxiliary port interfaces to VPE Editors for off-line storage to the EDL and PEGS control.

Operation

Control of the Zaxcom MTBC1000 is provided through the Super Edit PEGS dialogue per the procedure below. (Operation is similar to PEGS E-MEM.)

1. Select PEGS. The system prompts:

    FUNCTION =

2. Enter [P] (for peripheral) and press [ENTER]. The system prompts:

    COMMAND =

3. Answer with a 3-digit number where:

    a.   The hundreds digit specifies the TBC number starting with 1 the 1st   TBC through 8 as the 8th TBC.

    b.   The tens and ones digits specify which of the 25 memories (1 through 25) is requested.

Press **[ENTER]**. The system prompts:
                              TIME =

     5. Answer with the time of actual execution (same as any PEGS command) and
         press **[ENTER]**.

The Zaxcom data (TBC settings) is stored to disk the same as E-MEM registers by
selecting STORE E-MEM TO EDL from the INIT page (or the E-MEM key on the VPE-
151). The data is transferred from the EDL to the Zaxcom when the edit is recalled or
auto-assembled. The actual execution of the TBC data occurs at the time specified in the
PEGS register. For example, the PEGS registers might be set up as follows:

Function	Command	Time
P	101	00:00:00
P	201	00:01:00
P	301	00:02:00

DPM-1325 Digital Source Selector

The DPM-1325 can be used as both a digital preview switcher and a digital preview preselector when operated in conjunction with the 8466 preview switcher. In this mode, the editor video port is connected to the 8466, the 8466 switcher port is connected to the production switcher, and the 8466 parallel port is connected to the Bus control ports on the DPM-1325. The editor sends switcher commands to the 8466, which passes them on to the production switcher, and then returns switcher communication back to the editor. The editor also sends preview commands to the 8466, which will perform them, and also provide preview commands to the DPM-1325 via the parallel port. When a preselector is indicated, the editor sends preselector commands to the 8466, which passes them on the DPM-1325(s) via the parallel port. Both the 8466 and the DPM-1325 require proper dip switch set ups and, in addition, the editing application must be configured correctly for the desired operation.

Operation As A Digital Preview Switcher

Operation as a preview switcher does not require any special options, other than it must be configured for an 8466 preview switcher. In this mode, the DPM-1325 is configured to perform the switching of the digital video to the preview monitor. The audio switching can be done by the 8466 or the audio mixer. If digital audio is desired, it must be switched in a digital mixer. This configuration requires one 8466, and one DPM-1325.

Operation As A Digital Preview Preselector

Operation as a preview preselector requires the editing application to be configured with 8466 preview, digital preselector, Graham-Patten D/ESAM 800 audio and SWAP. This feature is available only on VPE editors that have the SWAP option. SWAP allows you to choose which VTR will function as the RECORD VTR from the editor, with the video signals automatically routed via the digital preview preselector. Audio switching must be done by the audio mixer. Only the Graham-Patten D/ESAM 800 audio mixer currently supports this type of preview preselection.

There are two ways to operate the DPM-1325 as a preselector. One method requires one 8466 and two DPM1325 source selectors. This configuration will provide a preview switcher and an 8 input preselector. For applications that only require a 4 input preselector, the system can be configured to allow one DPM-1325 to act as both the preview switcher and the preselector, therefore requiring one 8466 and only on DPM-1325. Choosing between these two configurations can be done in the field via a soft switch in Super Edit.

The key elements for a typical configuration using an 8466 and a DPM-1325 are defined below:

Table 5-2. Preview Switcher Configuration

Typical Configuration Using An 8466 & DPM-1325	
Editing application must be made with 8466 preview.	
The 8466 must have dip switch S3, number 5 closed (ON).	
The DPM-1325 rear panel dip switches must be as follows:	
Bus Address:	Out 0 = 0 Out 1 = 0
Transcode Mode:	Bus 0 = 0 Bus 1 = 0

The key elements for a typical configuration using an 8466 and 2 DPM-1325, one as a preview switcher, and one as a preview preselector as defined below:

Table 5-3. Preview Switcher & Preview Preselector Configuration

Typical Configuration Using An 8466 & 2 DPM-1325	
Editing application must be made with 8466 preview, digital preselector, Graham-Patten Audio, and must be a model that allows SWAP	
Editing application must be told to send the preselector commands to Bus 4, and can be stored with the configuration data.	
The DPM-1325 rear panel dip switches must be as follows:	
Bus Address:	Out 0 = 0 Out 1 = 0
Transcode Mode:	Bus 0 = 0 Bus 1 = 0
The DPM-1325 that is the preview preselector must be configured as follows:	
Bus Address:	Out 0 = 4 Out 1 = 4
Transcode Mode:	Bus 0 = 0 Bus 1 = 0

The key elements for a typical configuration using an 8466 and one DPM-1325 as both the a preview switcher and a preview preselector as defined below:

Table 5-4. Preview Switcher/Preview Preselector Configuration

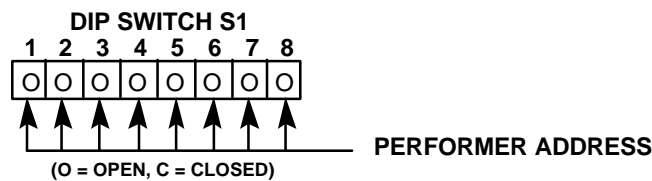| Typical Configuration Using An 8466 & One DPM-1325	
Editing application must be made with 8466 preview, digital preselector, Graham-Patten Audio, and must be a model that allows SWAP.	
Editing application must be told to send the preselector commands to Bus 2e, and can be stored with the configuration data.	
The 8466 must have dip switch S3, number 5 closed (ON).	
The DPM-1325 rear panel dip switches must be as follows:	
Bus Address:	Out 0 = 0 Out 1 = 0 Out 2 = 2 Out 3 = 2
Transcode Mode:	Bus 0 = 0 Bus 1 = 0 Bus 2 = 0 Bus 3 = 1

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

8466	SIGNAL	PERFORMER™
Pin		Pin
1	D1	14
2	D2	2
3	D4	3
4	A2	8
5	A4	7
6	A1	18
7	A5	20
8	D5	16
9	DØ	1
10	D3	15
11	Strobe	21
12	A3	19
13	AØ	5
14	VIC	11
15	Gnd	9, 10, 22, & 23

GVG PERFORMER Preview Preselector

The PERFORMER is a 10 x 1 Preview Preselector which is a wide bandwidth direct plug-in replacement for the TEN-XL. It includes a serial editor port as standard equipment. You can make connections to and operate the PERFORMER from the Editor as described previously for the TEN-XL. Setup of the PERFORMER is described below:

Switcher Setup

DIP SWITCH S1

1	2	3	4	5	6	7	8
O	O	O	O	O	O	O	O

(O = OPEN, C = CLOSED) — **PERFORMER ADDRESS**

DIP SWITCH S2

1	2	3	4	5	6	7	8
O	O	O	O	O	C	X	X

(O = OPEN, C = CLOSED, X =VERIFY*) — **PROTOCOL - PERFORMER ASCII**

DIP SWITCH S3

1	2	3	4	5	6	7	8
O	C	C	C	C	O	O	O

(O = OPEN, C = CLOSED) — **8 DATA BITS, 38.4K BAUD, ODD PARITY**

Crosspoints

Performer has 10 crosspoints. As a preview switcher, one crosspoint is assigned as the Record VTR (R-VTR) and another is assigned as Program Out (PGM OUT). The default settings in Super Edit have the R-VTR on crosspoint 1 and PGM OUT on crosspoint 10.

You may change these assignments via the column for preselector crosspoints on the Machine Assignment page. The PGM OUT crosspoint assignment is stored in the preselect column of the AUX device.

NOTE: If you enter a crosspoint number greater than 10 for either field, Super Edit will update the display but will not recognize a number greater than 10 in interaction with the Performer.

Preselector

The Swap VTR feature will interface with Performer as a Preselector.

1. Select the VTR in the Marks Table to swap with the Record VTR and press **[SHIFT][A-VTR]**.

2. Press **[YES]** at the query to perform the Swap. Do not swap with a VTR whose crosspoint assignment exceeds 10. See the above note.

Control Cable

The Performer™ is connected through the 8466 Preview Switcher. Cable pin-outs are listed below:

8466	**SIGNAL**	**PERFORMER™**
Pin		Pin
1	Chassis Ground	18
2	Rx A	2
3	Tx B	14
7	Rx B	1
8	Tx A	15

NOTE: Pins 4, 5, 6, and 9 are not connected.

GVG TEN-XL Preview Preselector

Setup

The Preview Preselector option consists of a TEN-XL 10 x 1 switcher with serial interface card, two audio channels, mating audio connectors, and a new Super Edit program disk. It also has an 8-meter cable to connect the TEN-XL to the Videotape Editing System I/O Panel.

Connections

Connections for the option are discussed below.

Video

Installation of the preselector option involves patching the TEN-XL into the Editing System. The TEN-XL contains ten loop-through video connections. Video from each VTR can be looped-through the TEN-XL directly to a production switcher, or routed through a distribution amplifier (DA) to the TEN-XL and terminated with 75 ohms.

If the loop-through method of installation is used, the cables connecting the TEN-XL to the switcher should be of equal length to preserve system timing. Input timing to the TEN-XL and VTRs need not be the same for proper operation. A typical installation is shown in Figure 5-1.

NOTE: The Black video is connected to input 1 of the TEN-XL. This corresponds to the default in Super Edit for Black video. However, a VTR can be connected to input 1, if desired.

Connect a video output of the TEN-XL to the 8465/8466 Preview Switcher R-VTR input.

Audio

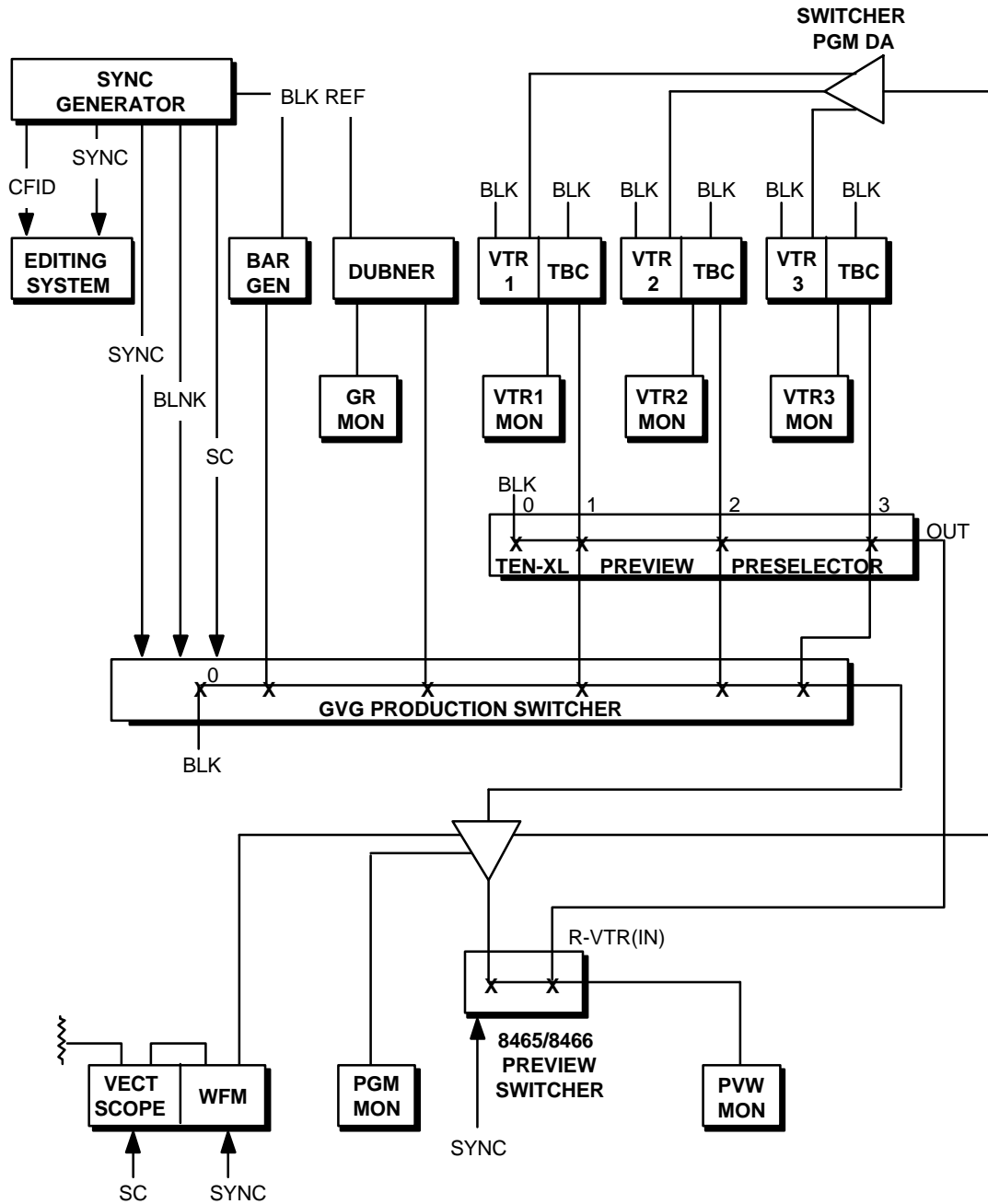The TEN-XL provides ten pairs of high-impedance, bridging audio inputs.

Figure 5-1. GVG TEN-XL Preview Preselector Connections

Connect audio from each VTR directly to the back of the TEN-XL via the two 37-pin D-connectors (J31 and J32; audio channels 1 and 2, respectively). See the TEN-XL installation manual for the pin outs of these connectors.

Connect channel 1 and channel 2 audio outputs from the TEN-XL to the channel 1 and channel 2 inputs of the Preview Switcher. If a Graham-Patten audio mixer is used, the audio portion of the TEN-XL is not used. The monitor bus of the mixer provides for audio previews.

Control

For 41/51 editing systems, connect the Remote Control input (J31) on the rear of the TEN-XL to the Editing System at I/O Port 2 using the supplied cable (054565-08). If your software version uses an alternate switcher on Port 1 (per Start-Up in the Master Program), the TEN-XL will appear on Port 2 which is the next port in sequence. If the alternate switcher is moved to Port 2 with Start-Up, then the TEN-XL would move to Port 3, etc. Be certain a VTR is not assigned to Port 2.

For VPE-151 systems, connect the TEN-XL Preview Preselector to the Editor ACCY 2 port in all cases. For VPE-241/251 systems, connect the TEN-XL to Port 7 if you are not using a peripheral, such as a Zaxcom or an 8465 Preview Switcher. If you are using a peripheral, connect it to Port 7 and connect the TEN-XL to Port 6.

Lastly, if you are using a TEN-XL, a peripheral, and an 8465, connect the 8465 to Port 7, the peripheral to Port 6, and the TEN-XL to Port 5. If you have an 8466 Preview Switcher, it connects to the VIDEO port and the TEN-XL connects to Port 7 or Port 6 as described above. These connections are summarized in the list below:

>   TEN-XL only = Port 7
>
>   Peripheral, TEN-XL = Port 7, Port 6
>
>   8465, Peripheral, TEN-XL = Port 7, Port 6, Port 5
>
>   8466, Peripheral, TEN-XL = VIDEO, Port 7, Port 6

For 41/51 systems, verify that the I/O port is set for 38.4K baud, ODD parity, and 8-bit data. Refer to the Videotape Editing System Service manual, I/O Boards section, for strapping information. Ports on the newer editors are automatically set correctly by Super Edit.


NOTE: The VPE-141 does not control a Preview Preselector.

Switch Settings

The serial I/O board in the TEN-XL is configured and tested at the factory for use with your editing system. If you need to verify the settings on the board, use the following procedure:

1. Turn-off power to the TEN-XL and remove the front cover.

2. Remove the video board (large board) and turn the board over so the piggy-back board is facing up.

3. Verify that the DIP switches (S1 and S2) on the piggyback serial interface board are set as shown in below. These switch settings configure the TEN-XL for ASCII mode, 38.4K baud, ODD parity and address 00.
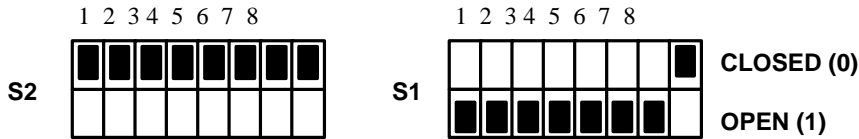
Operational Tests

Perform the following operational tests:

1. Selection of the R-VTR is made by first entering the TEN-XL port assignment in the Assignments Menu in Super Edit.

2. Boot the system and run the Super Edit program supplied with the Preselector option.

3. Press **[SHIFT][ASGN]** and assign the VIDEO XPTS.

4. Enter a crosspoint number (0-9) corresponding to a TEN-XL crosspoint input (1-10). The VTR connected to this crosspoint will become the R-VTR; the assignment can be cloned.

5. Exit the assignment dialog and the TEN-XL should now select the crosspoint assigned to the R-VTR. Selection data is sent to the TEN-XL automatically when the assignment dialog is exited or when **[SHIFT][RESET]** is pressed.

Testing or troubleshooting the Preview Preselector installation can be accomplished with STRINGS tests as described in the Diagnostics section of the Videotape Editing System Service Manual.

The following test string may be sent to check operation of the TEN-XL serial link, using the NOTES function of Super Edit:

05   02   30   30   31   31   SET   TEN-XL   A/V   XPT1

The number 05 is the number of bytes to be transmitted from the editing system; the TEN-XL command, starting with 02, sets audio and video crosspoint number 1.

Control Cable

The I/O Port Character Generator connector pin outs are as follows:

EDITOR	SIGNAL	CG
Pin		Pin
1	Chassis Ground	18
2	Rx A	2
3	Tx B	14
7	Rx B	1
8	Tx A	15

NOTE: *Pins 4, 5, 6, and 9 are not connected.*

Lexicon 1200C Audio Time Compressor/Expander

Setup

Interface to the Lexicon 1200C is available as an option with Super Edit version 3.0 and later software. The option provides selection of a direct control VTR as the source of speed information for the Lexicon. The Lexicon 1200C connects to an Editing System RS-422 VTR port with a VPE control cable (054602-16) supplied with the option. (The option is not available for RS-232 VTRs.) Make audio connections in accordance with edit suite design and layout. Complete installation per the following:

1. Set the 41/51 Editor I/O port to be used for control of the Lexicon to 38.4K baud, RS-422 protocol. Refer to the Videotape Editing System Service Manual, I/O Boards section. The VPE-131, 141, 141L, 241, 241L, 151, 251 and IPS-100/110 are already set correctly.

2. Assign an unused VTR port (A - F) to the Lexicon.

3. Select VTR Model/QC and enter the Lexicon protocol number at corresponding VTR assignment.

4. On the Lexicon front panel, press **[F]**, **[RCL]**, **[17]**. The display should read 1.00

5. Select Pitch Corrected mode on the Lexicon. Adjust the VTR speed with variable mode or with a Programmed Motion event. The Lexicon display should indicate the approximate percent of audio pitch correction.

Operation

Audio from the controlled VTR is routed through the Lexicon. The Lexicon receives and displays speed information from the Editing System for the VTR selected in the Mark Table. Audio pitch is corrected to normal for VTR speeds within the Lexicon correction range (± 20%).

When the Lexicon correction range is exceeded, the 1200C displays PASS, showing that audio is being passed through uncorrected (same as VTRoutput). The accuracy of correction depends on the type of VTR and method of specifying VTR speed. The correlation of VTR speed to pitch will be good for Sony BVH-2000 and Ampex VPR-3. Others will have fair correlation, limited by the VTR.

With Programmed Motion, the speed of the VTR and Lexicon can be specified in increments of 1/64 of play speed. From the Jogger, adjustments can be in increments of 1/16 of play speed.

Lexicon 2400 Audio Time Compressor/Expander

Setup

Interface to the Lexicon 2400 is available as an option with Super Edit version 3.0 and later software. The option provides selection of a direct control VTR as the source of speed information for the Lexicon. The Lexicon 2400 connects to an Editing System RS-422 VTR port with a VPE control cable (054602-16) supplied with the option. (The option is not available for RS-232 VTRs.) Make audio connections in accordance with edit suite design and layout. Complete installation per the following:

1. Set the 41/51 Editor I/O port to be used for control of the Lexicon to 38.4K baud, RS-422 protocol. Refer to the Videotape Editing System Service Manual, I/O Boards section. The VPE-131, 141, 141L, 241, 241L, 151, 251 and IPS-100/110 are already set correctly.

2. Assign an unused VTR port (A - F) to the Lexicon via Super Edit.

3. Select VTR Model/QC and enter the Lexicon protocol number at corresponding VTR assignment.

4. On the Lexicon front panel, use the MENU/SELECT buttons to set Machine Interface to BVH2000, and Mode to SLAVE. Turn the Lexicon power OFF then ON again and verify selections with MENU status mode. The Lexicon should respond to editor commands.

5. Select Pitch Corrected mode on the Lexicon. Adjust the VTR speed with variable mode or with a Programmed Motion event. The Lexicon display should indicate the approximate percent of audio pitch correction.

Operation

Audio from the controlled VTR is routed through the Lexicon. The Lexicon receives and displays speed information from the Editing System for the VTR selected in the Mark Table. Audio pitch is corrected to normal for VTR speeds within the Lexicon correction range ($\pm$ 20%).

When the Lexicon correction range is exceeded, the 2400 displays PASS, showing that audio is being passed through uncorrected (same as VTR output). The accuracy of correction depends on the type of VTR an method of specifying VTR speed. The correlation of VTR speed to pitch will be good for Sony BVH-2000 and Ampex VPR-3. Others will have fair correlation, limited by the VTR.

With Programmed Motion, the speed of the VTR and Lexicon can be specified in increments of 1/64 of play speed. From the Jogger, adjustments can be in increments of 1/16 of play speed.

RCI DVE-P2

TBC   None

Latest Revision   12/94

NTSC/PAL   NTSC/PAL

Control   Direct, RS-422 Communications port, In.
                SMPTE: 38.4 Kbaud rate
                        1 Start bit
                        8 Data bits
                        Odd Parity
                        1 Stop bi

VTR Options   None
Required

Special   None
Modifications

VTR Address   None

Edit Field Select None

Edit Modes   Insert

Sync Control   Device generated Time Code
Reference

Motion Control Jog, Shuttle, Variable, Play, Fast Forward, and Rewind
Functions

Minimum Preroll Super Edit: 90 Frames

Postroll   Super Edit: Requires none

Synv Quality   Super Edit: On the Assignment page set the QC = 3
Check

VTR PROM Level Operational Software Version:??

Super Edit   V7.0M or later
Software

System Setup

Reference the RCI Manual: "VDR Configuration Guide"

From the "config" login, select either D1 or D2 operation

From the "vdoc" login, select either 525 or 625 operation

From the "startup" login, ensure the following selections:

A:	Device ID	RCI VDR
B:	BOD LTC Value	00:00:00:00
F:	Field / Frame	FIELD

The items not listed do not affect editor operation and/or are operator preference.

Save changes when setup is complete

NOTE: Occasionally the disk will "fall asleep." When this happens, the RS422 interface stops operating and the video output goes black. To restore disk operation send an EJECT command to the disk by pressing the [EJECT] key on the editor keyboard when the RCD disk is selected, or login (to disk via its login port) as "vdoc" and issue the "res" (reset) command. CAUTION– DO NOT remain logged in as vdoc; this disables RS422 communications. Exit before resuming operation. Type "exit" to exit vdoc login.

System Timing

VDR maint MENU. Select the following settings:

Line Delay: Vertical adjustment -4 to +3

Pixel Delay: Horizontal adjustment units of 2 pixels

Sub-Pixel Delay: Horizontal adjustment units of 1/2 nano-second pixels.

Teletype Serial Tape Reader/Punch

Installation & Setup

The model 4350 series paper tape punch and reader unit provides for storage and transmission of EDLs in the form of eight-level, 1-inch wide perforated tape for the 41/51 editor (not supported on the later model Editors). To set up the model 4350, proceed as follows:

1. Connect the Editor reader/punch port JØ on the 8494 Accessory Panel to the 25-pin D-Type connector on the rear of the Teletype unit using the supplied VPE cable (054528-00).

2. Set the switches on the rear of the Teletype unit to: 30 (300 baud) and NORM.

3. Set both the PUNCH and READER switches on the front panel of the Teletype unit to AUTO.

4. Load a roll of blank tape onto the Teletype unit and feed one end through the punch.

5. Use the FEED switch to run approximately 6 inches of tape through the punch.

6. Start up the XFR utility and select the <u>Output List (from disk) to tape or</u> <u>modem menu</u> option from the list displayed.

7. Answer the XFR prompt **Output file <current file>?** with either **[N]** (if you don't want the file sent to tape) or **[Y]** (if the current file is an EDL file that you wish sent). If **[N]** is selected, XFR prompts **Output Which File?** and displays a list of files from which to choose.

8. Move the menu pointer to any desired file and press **[RETURN]** to select the file for transmission to tape.

9. Answer the XFR prompt **What Protocol?** by selecting Paper Tape protocol from the choices.

10. Press **[RETURN]** with the menu pointer in front of the selection.

11. Choose whether you want Carriage Return/line feed pairs sent only as carriage returns (line feeds are stripped).

12. Answer the XFR prompt **Strip Line feeds?** with either **[N]** (for no stripping) or **[Y]** (to ensure their removal).

13. XFR should start the paper tape reader and output the EDL. After completion of the transfer, XFR returns you to the options menu.

14. Use the XFR <u>Input list from tape or modem</u> option to load the list.

15. Check the received list for errors.

This completes Installation and Setup.

Timeline Lynx/VSI Synchronizer

Installation & Setup

Interface to the Timeline LYNX/VSI Synchronizer with SMPTE time code reader and generator is available as an option with Super Edit version 3.0 and later software. The option provides control of the LYNX/VSI to allow edit control involving a variety of Audio and Video Tape Recorders. The LYNX/VSI connects directly to the Editing System via a VTR port. Option SU-LYNX and one active RS-422 port are required.

The LYNX/VSI connects to an Editing System VTR port with a VPE control cable (054602-16) supplied with the system. Perform the following complete the installation:

1. Connect reference Black video to the EXT VID connector on the LYNX.

2. Connect the other video connector on the LYNX to REFERENCE IN of the machine to complete the reference loop.

3. Connect the time code output of the machine to the TC IN connector on the LYNX. The cable should be dual-circuit with phone plug connector for balanced audio input.

4. Connect a control cable between the LYNX and the machine and between the Editing System control port and the LYNX.

5. Make sure the 41/51 Editor Control port is set for 38.4K baud, RS-422. Refer to the Videotape Editing System Service Manual, I/O Boards section for strapping information. The VPE-131, 141, 141L, 241, 241L, 151, 251, and IPS-100/110 ports are already set correctly.

6. On the Editor, assign the port connected to the LYNX to a source key using Super Edit.

7. On the Editor, select VTR Model/QC and enter the LYNX protocol number at the corresponding VTR assignment.

8. Turn the LYNX power switch to ON. The LYNX should display the flashing message **ATR-100** (or a similar message).

9. Press the **[CODE TYPE]** button to scroll the control selections until your machine's model is displayed.

10. Press the **[STORE]** button.

11. Press **[DSPL SEL]** and a DONE message will be displayed.

12. Press the **[STORE]** button again. The display should show all zeros.

13. Place the machine in play mode and verify the following on the front panel of the LYNX:

      a.   Time code is being displayed on the LED display.
      b.   The green LTC LED is ON.
      c.   The green RDR LED is ON.
      d.   The green DF LED is ON (drop-frame time code) if drop frame is being used.

14. Press the **[TRAN MODE]** button on the LYNX to select the ONLINE mode; the green LED lights.

15. Press **[SHIFT] [RESET]** on the Editor keyboard to establish communications and gain control of the LYNX.

---

*NOTE: The LOCK and RESOLVE LEDs on the LYNX should illuminate when synchronization with another editor-controlled **device occurs.***

Operation

Time code information from the machine is routed to the LYNX/VSI and displayed on the front panel of the LYNX and on the edit screen Mark Table. Precise edits are made possible by using the time code information displayed to control the ATR and VTR edit points. The Jog function is not supported. The user should contact Timeline for information regarding interface to various models.

Accom RTD Disk Recorder

10/15/97

This version of the Accom RTD driver is only available in Version 8.0 and higher.

This is the improved motion control driver for the Accom RTD real time disk recorder. This driver permits PEGS speed control in increments of 1% from -999% to 900% of play speed. Complete setup instructions for the RTD are included in this document.

TBC: None

STANDARD: NTSC/PAL

CONTROL: Direct, RS-422.
                                 SMPTE: 38.4Kbaud rate
                                 1 Start bit
                                 8 Data bits
                                 Odd Parity
                                 1 Stop bit.

ADDRESS: 0x80a2 (see system setup below)

EDIT FIELD: Field selectable on the RTD Recorder

EDIT MODES: Insert

SYNC CONTROL: Reference

MOTION FUNCTIONS: Jog, Shuttle, Variable, Play, Fast Forward and Rewind.

SYNC QC: Super Edit: On the Assignment page, set the QC = 3. (As with any device, if difficulty is experienced with synchronization, set the QC = -1.)

MINIMUM PRE-ROLL: 3:00 (no post-roll required)

RECORDER SW: 2.01 2/13/97   16:34

SUPER EDIT: Version 8.0 or later

SYSTEM SETUPS: On the RTD keyboard, Press Normal Play switch, then press the Setup I/0 switch.

Select "Remote Setup" from the menu.

1. Set the desired RS422 port as follows:

Enable	-	ON
Protocol	-	SMPTE
Baud	-	38.4K
Fld-Dom	-	f1

For example: if port #1 is selected, the display should look like this:

RS422 #1A ON SMPTE   38.4K   f1

2. Select "CONFIG" from the Remote Setup menu. Set the configuration parameters as shown below:

<u>Parameter</u>	<u>Set to</u>	<u>(default value)</u>
Edit Delay	4 fields	(default 8)
Edit On Adjust	0	(default 0)
Edit Off Adjust	0	(default 0)
Field Reporting (TC)	OFF	(default ON)
Park Offset (Play)	0	(default 0)
Park Offset (Record	0	(default 0)
Prod ID	128 (0x80) : RTD	(default is same)
Roll Delay (Play)	2 fields	(0 fields)
Roll Delay (Record)	4 fields	(0 fields)
SMPTE Address	1:0x80a2	(default is same)
Time Code Offset	0	0
Transport Delay	0	0

Note: For use as a source, it is very important to set the Roll Delay (Play) to 2 fields for accurate synchronization.

Enhancement to the Tektronix Profile

Introduction

The Super Edit interface to the Tektronix Pro*file* has been improved and enhanced to support Pro*file* Software version 1.4.17. Detailed operation instructions for Super Edit are given in the Super Edit Operator's Guide. The Pro*file* Operations Manual provides excellent information for the Pro*file*. This note discusses only the new Super Edit/Pro*file* features. No additional setup is required.

On Pro*file*, select the BVW protocol.

On Super Edit select the Pro*file* protocol.

4 Channel Audio

Super Edit now supports control of up to four channels of audio on the Pro*file*.

Random Access Search and Cue

Super Edit now provides immediate search and cue on the Pro*file* for previews and edits.

Improved Synchronization

Synchronization of Pro*file* has been optimized for Pro*file* software Version 1.4.17. This results in less sync aborts and no initial 'learn' edits required.

Shorter Pre-roll Times

Pre-roll times of 90 or 120 frames are typical with a QC = 3. (This ensures frame accurate edits). However, if no other tape machines are involved in the edit and +/- 1 frame accuracy is acceptable, shorter pre-rolls (30 frames) can be used with a QC = 0.

Videotek SDC-101 Color Corrector

Introduction

This document describes the interface between Super Edit and the Videotek SDC-101 Serial Digital Color Corrector.

Detailed operations instructions for Super Edit are given in the Super Edit Operator's Guide. The Videotek Instruction and Service Manual provides excellent information for the color corrector. This Setup Guide discusses only those features which are unique to the Super Edit/SDC-101 interface.

The following are discussed in the order given:

• Hardware/Software Requirements
• Connection
• PMEM™ Recall from SDC-101 Memory/PEGS Immediate
• STORE/RECALL PMEM from the EDL

Hardware/Software Requirements

The Videotek SDC-101 must have the Editor Interface installed and must have version SDC244 or later software installed. Note the Videotek Security Key must remain connected to the PC port.

Other peripheral devices may not be used at the same time that the SDC-101 is connected.

Connection

a. Connect an RS422 cable from the Peripheral port on the editor to the EDIT port on the SDC-101 (Do not connect to the Security Key).

b. In the SDC-101 set up the Editor port as follows:

Select "Communications" from the menu, then set the Editor communications parameters as
    follows:

        (1) Parity = ODD

        (2) Interface Mode = Native or Sony Emulation. Refer to the Videotek Instruction
            and Service manual "Editor Interface Option" for a description of the two modes.
            Super Edit automatically supports either. No change in Super Edit is required.

Note: The baud rate is fixed at 38,400 baud with 8 data bits and 1 stop bit.

c. In Super Edit, select the VTR Assignment page and verify that the default settings for the
    Peripheral port are set as follows:

PERIF   COLCOR   PORT 00 38.4   ODD (Port may be different on your editor)

PMEM™ Recall from SDC-101 Memory / PEGS Immediate

The PMEM Recall function with the SDC-101 recalls the selected color corrector data. Super
Edit accesses registers "0" through "50". To set up the Recall function first select PEGS entry
by pressing the [PEGS] key. Answer the prompts as follows:

REGISTER # ?   Enter any PEGS register 1 through 16, then press [ENTER].

FUNCTION= ?   Press [P], then press [ENTER].

COMMAND= ?   Enter the Effects Register (0 through 50 as described above), then
                press [ENTER].

TIME=   Enter the offset from the RECORD IN point, then press [ENTER].

When an edit or preview is performed the color corrector data from the selected register is
automatically recalled as the current setting on the SDC-101.

To Immediately recall the data from PEGS entry select the PEGS register number and press [I]
or [VVV]. The data from the specified color corrector register is immediately recalled as the
current setting on the SDC-101.

STORE/RECALL PMEM from the EDL

This interface allows Super Edit to store the selected color corrector data in the EDL when an
event is put into the EDL. Subsequently recalling that event from the EDL to the Mark Table
automatically transfers the data from the editor back into the specified SDC-101 register.

Before the data can be stored in the EDL it must first be saved into that register at the SDC-101.

The operation is the same as described in the Super Edit operations manual for INIT 22 - STORE EMEM and INIT 23 - AUTO-EMEM.

Example: Saving and restoring color corrector data to/from EDL using SDC-101 Register 7 (any free register may be used).

Saving color corrector Data to EDL

1. In Super Edit, select INIT 23 and turn AUTO-EMEM ON.

2. Set up the SDC-101 as desired.

3. Save the setup in SDC-101 Register 7.

4. In Super Edit, Select [PEGS] and enter the PMEM PEG as follows:

        REGISTER #?   1 (any free register will do)
        FUNCTION=?   P
        COMMAND= ?   7 (this is the number of the SDC-101 Register)
        TIME=   0 (a negative time not to exceed the pre-roll time may be used)

    The PEGS register will now show:

        01   P   007   00:00:00

5. The status line of the Super Edit display should show that " PEGS" and "AUTO-EMEM" are enabled.

6. Perform the edit.

    The SDC-101 data is automatically stored in the EDL and the EDL indicates "PMEM 007".

    Recalling color corrector Data to the SDC-101

1. In Super Edit, use the UP and DOWN arrows to select the EDL event that has PMEM 007.

2. Press [RECAL] to recall that event into the Mark Table.

The SDC-101 setup is automatically recalled from Super Edit to the SDC-101 Register number 7.
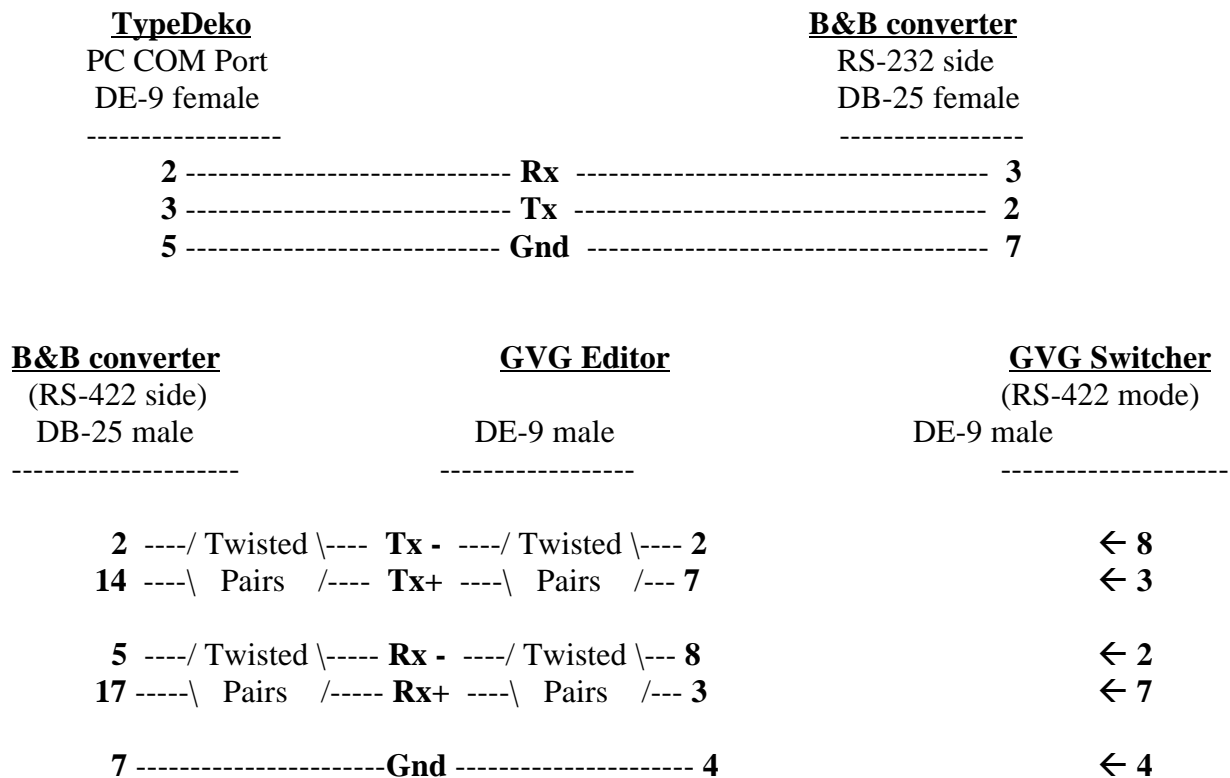
Digital Graphix/Pinnacle TypeDeko Cable

COM Port setup for EMEM and PEGS
To enable PEGS from a Grass Valley VPE editor to control the TypeDeko:
At the TypeDeko Set the COM port to 9600 baud, 8 bits, NO parity, I stop.
At the TypeDeko set the Flow Control to NONE.

Cables for EMEM and PEGS
To connect the TypeDeko's PC's COM port (RS232) to a Grass Valley Editor or Switcher (RS422),
you will need a B&B converter, model 422CON, with plug-in power supply.
For reference, Rx and Tx are relative to the PC's side.

```
         TypeDeko                                    B&B converter
        PC COM Port                                   RS-232 side
         DE-9 female                                  DB-25 female
        -----------------                            ----------------
            2 ---------------------------- Rx ------------------------------------- 3
            3 ---------------------------- Tx ------------------------------------- 2
            5 --------------------------- Gnd ------------------------------------- 7
```

```
      B&B converter                 GVG Editor                      GVG Switcher
       (RS-422 side)                                                (RS-422 mode)
        DB-25 male                  DE-9 male                        DE-9 male
       ---------------------        ------------------              ---------------------

         2 ----/ Twisted \---- Tx - ----/ Twisted \---- 2               ← 8
        14 ----\  Pairs   /---- Tx+ ----\  Pairs   /--- 7               ← 3

         5 ----/ Twisted \----- Rx - ----/ Twisted \--- 8               ← 2
        17 -----\  Pairs   /----- Rx+ ----\  Pairs   /--- 3             ← 7

         7 ----------------------Gnd --------------------- 4            ← 4
```

Some Grass Valley Switchers may be configured to use the same 9-Pin port for RS-232. If yours can be so configured, and you wish to operate this way, the cable is much simpler. Please consult your switcher manual for the correct jumper settings.

<pre>
          <u>TypeDeko</u   <u>GV Switcher</u>
         PC COM Port   (RS-232 mode)
         DE-9 female   DE-9 male
        -----------------   -----------------
              2 --------------------- Rx ----------------------- 2
              3 --------------------- Tx ----------------------- 8
              5 --------------------- Gnd ---------------------- 4
</pre>

DF0:/DF1: - Floppy Drive Designation

Introduction

When adding or replacing a HDFD (High Density) floppy disk drive in your IPS or VPE system, it may be necessary to change the default drive number setting of the new floppy drive(s). If your system has 1 (one) floppy drive it is by default **DF0:**. If your system has 2 (two) floppy drives, the drive on the left is **DF1:**.

Changing the DF: setting in your HDFD floppy drive

Using a small screwdriver, gently pry up the lock tabs (two on each side) as shown in *Figure 1*. With all four tabs loosened, you should have access to the designator jumper shown in *Figure 2*.

For the drive to be configured as **DF0:** jumper posts **2** and **3**.
For the drive to be configured as **DF1:** jumper posts **1** and **2**. (Refer to *Figure 3*)
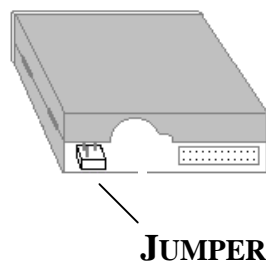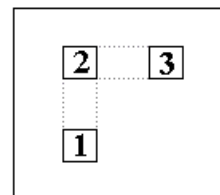
Figure 1

GENTLY PRY UP

Figure 2   *Figure 3*

JUMPER

Procedure for running Super Edit from the RAM disk

This procedure will allow you to run Super Edit from the Ram disk of your VPE in the event that you have a non functioning hard drive on your system. If you have a VPE-151 or 251 start the procedure with item # 1. If you have a VPE-331, 341 or 351 editor, begin with item # 5.

<u>**VPE-151 or 251**</u>

1. Boot to the UTILITIES DISK 1 OF 2

2. When prompted if you wish to do an UPDATE press [CTRL][PLAY] twice on a K2 keyboard, or press [RECORD][PLAY] twice on the K5 keyboard.

3. At the RT> prompt type the following:

   INIT/NOQ   VM:
   COPY/SYS   DK: VM: (This takes a while)
   COPY/BOO   RT11SJ.SYS   VM:
   COPY   VM:STARTS.H   VM:STARTS.COM
   BOO   VM:

The system will boot to the Ram disk (VM:) and you should see the MAIN MENU

4. Run your listed Super Edit Program (Snnnnn).

<u>**VPE-331, 341 or 351**</u>

5. Boot to the UTILITIES DISK 1 OF 2

6. When prompted if you wish to do an UPDATE press [NO]

7. When prompted if you wish to do an INSTAL press [NO]

8. When prompted if you wish to install a new system on RAMDISK press [YES]

Super Edit and the Year 2000

There are no fundamental operational concerns having to do with calendar dates on these editing systems. However, files are "date-stamped" when they are created or updated. The current date (and time) is maintained on the system clock, powered by a battery with an expected life of 5 to 10 years. As long as a good battery is connected on the main board of the editing system, the date will be updated daily, at midnight. If the battery runs down and is replaced, or is disconnected for any reason, the system date must be reset manually to be accurate. If it is not reset, it defaults to a date in 1972.

Currently, The RT-11 Operating system does not support setting the date to a year of 00. However, on a system with a functional battery, at midnight of December 31, 1999, the date will change to 01-JAN-:0. Instead of rolling from 99 to 00, it rolls to ":0" (colon-zero). Then in 2001, it will roll to ":1" and so on. The system will not allow setting the year to :0. The only years currently allowed are between 73 and 99 inclusive, which means that if the battery is disconnected, the year can only be set to between 73 and 99.

Editware is now investigating the feasibility of modifying the RT-11 operating system to support setting the year to 00, and to having the date roll to 01-JAN-00 at midnight December 31, 1999. It is not known if we will be able to make the necessary changes.

To resolve this issue, Editware recommends that users of VPE and IPS systems plan to handle the year 2000 as follows:
(1) Wait until March 31, 1998 for Editware to announce whether the Current RT-11 limitations to RT-11 date handling will be fixed, allowing setting the system date year to 00, and rolling the date from 1999 to 2000 correctly. If this is the case, then there will be no change in function or procedures at the year 2000 change.
(2) If Editware announces that the RT-11 limitations can't be fixed, establish a procedure to set the date to January 1, 1980 on the first day of the year 2000. From that point on, maintain the system date to be exactly 20 years earlier than the actual date. This will not affect any VPE functionality, and will be noticeable only to those users who pay attention to file dates. The main reason for file dates is to tell which is the current version of a file when multiple copies are saved with the same name. For this purpose, the date does not need to be accurate; it only needs to be predictable (as it will be if it's always maintained at 20 years prior to the actual date.)