ditware
THE VPE AND SUPER EDIT COMPANY

Profile NLE Application Notes
Super Edit V8.4 A BETA

Documentation **Version 1.1 -** Supercedes all dated prior to **03/23/99**

NLE PART 1-
INSTALLATION & SETUP

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Document Overview

The Pro*file*™ NLE protocol provides Non-Linear control of the Pro*file* from Super Edit.

This document covers Setup and Installation procedures that pertain to the Pro*file* NLE application of Super Edit. Please consult the Super Edit operations manual for more detailed information on Super Edit functions and the Tektronix Pro*file* PDR manual for more detailed information on the Pro*file*.

This document will take you through the steps needed to configure the Pro*file* and the VPE for use in the NLE mode. Although you may have already done some or all of these procedures, please read through this entire document.

RS-422 Control Interconnect

Depending on how many Pro*file* channels you wish to use, connect one (1), two (2), three (3), or four (4) standard RS-422 9-pin machine control cables from the VTR ports on the rear of the VPE chassis to the Pro*file* RS-422 Connector Panel. VPE machine control ports can be connected to any of the 8 Pro*file* ports. While the following example shows VTR Ports 1 through 4, any Super Edit port, including 0, can be used.

On the <u>VPE</u>		On the <u>Pro*file*</u>
VTR Port 1	=	RS422 port P1
VTR Port 2	=	RS422 port P2
VTR Port 3	=	RS422 port P3
VTR Port 4	=	RS422 port P4

Pro*file* Audio/Video Outputs

The Video and Audio outputs from Pro*file* are always associated with the VPE's R-VTR, A-VTR, B-VTR, and C-VTR as indicated below and should be routed as appropriate in your facility.   The D-VTR, E-VTR, and F-VTR are used for linear Sources only. An example follows:

	<u>Video</u>	<u>Audio 1</u>	<u>Audio 2</u>	<u>Audio 3</u>	<u>Audio 4</u>
R-VTR	Vid 1 Out	Aud 1 Out	Aud 2 Out	Aud 3 Out	Aud 4 Out
A-VTR	Vid 2 Out	Aud 5 Out	Aud 6 Out	Aud 7 Out	Aud 8 Out
B-VTR	Vid 3 Out	Aud 9 Out	Aud 10 Out	Aud 11 Out	Aud 12 Out
C-VTR	Vid 4 Out	Aud 13 Out	Aud 14 Out	Aud 15 Out	Aud16 Out

Pro*file* Configuration Setup

The next step is to configure the Pro*file* INPUTS and OUTPUTS, and to select which codecs and which video recording rate to use. Each Pro*file* channel has a default configuration file in the Pro*file*. They are:

>   Channel 1   =   VTR1. CFG
>   Channel 2   =   VTR2. CFG
>   Channel 3   =   VTR3. CFG
>   Channel 4   =   VTR4. CFG

A utility program called **PRCCFG.EXE** is used to modify these configuration files and enable use of NLE applications. If this program does not already reside on your Pro*file*, Editware supplies it on a 3.5" floppy disk.

If this is the first time you are performing this procedure, and your Pro*file* does NOT have this utility program installed, copy **PRCCFG.EXE** from the floppy disk supplied by Editware to the Pro*file*/Configs folder. If desired, a Windows Shortcut can be created.

Once installed, from NT Explorer or from the File Manager, double click the '**PRCCFG**' icon to open the program. If ProLink is running (ProLink is described later in this document), the following prompt may appear: **'Your change will take effect the next time you start ProLink'**. Click **OK**! The Resource Manager window will open.

CONFIGURING YOUR VIDEO SWITCHER, AUDIO MIXER, & PREVIEW SWITCHER

The following are four common JPEG configuration scenarios. Each is followed by diagrams of typical set-ups and PRCCFG configurations. Select the one that best fits your application. They are:

> ## Configure Pro*file* for internal video switcher (VME) and E-E preview.

In **PRCCFG**, set **Channel 1** as follows:

Video Codec:	Codec 1
Video Input:	None.

The list of video inputs you see in the video inputs tables are the available inputs for your Pro*file,* and can be mapped to any VPE source key (R-VTR through F-VTR Green Keys). The first entry in the table is mapped to Super Edit video cross-point 11, the second video cross-point 12, and so on. Video cross-points 11 through 18 can select any of the first 8 Pro*file* video inputs. Video cross-point 19 is Black. This Black is generated by Pro*file*'s FTB (Fade to Black) circuitry.

Video Output:	To Line monitor.

When viewing the selections under Video Output for Channel 1 (in PRCCFG), the video outputs that are available on your Pro*file* will be listed. Select the one to be the video out to the Line monitor, similar to the R-VTR output on an E-E connected VTR.

Audio:	Select at least 1, and more if desired.
Timecode Codec:	1
Timecode Input:	If INIT # 165 is set to "**TC FROM GEN**" (recommended), select **None**. The assignment of the Time Code Generator is made by Super Edit based on the current setting of "FULL-VIEW RECORD" in INIT # 169. If INIT # 165 is set to "TC FROM TAPE" the LTC from the currently controlled VTR must be routed to the Pro*file* LTC port selected.
Timecode Output:	None.

In **PRCCFG**, set **Channel 2** as follows:

Video Codec:	Codec 2
Video Input:	None
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	3
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 3** (if used) as follows:

Video Codec:	Codec 3
Video Input:	None
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	5
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 4** (if used) as follows:

Video Codec:	Codec 4
Video Input:	If "FULL VIEW RECORD" option is selected in INIT# 169 (recommended), this will be the video input for record. This input must be externally connected to the Pro*file* Video Output specified in INIT# 171. (See INIT PAGE 6 DEFINITIONS) If "FULL VIEW RECORD" is not used, select "None".
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	7
Timecode Input:	None
Timecode Output:	None

Set video timing

Open the Pro*file* utility called **Configuration Manager**. On the Menu Bar, select **Option / <u>S</u>ystem timing**. The check box near the bottom marked "**E-E Timed Output**" must be selected.

Profile has an internal 16-line delay. When the E-E timed output option is selected, the external outputs are zero timed with the internal codecs, and the output switches cleanly between internal and external sources.

Diagram 1… The following is a typical set-up for a **VME switcher, EE preview, and an external mixer in FULL VIEW RECORD ON**.

FULL VIEW RECORD VIDEO

Xpt 11 → V in 1   V out 1   To VIDEO MONITOR

② V out 2 ①

Xpt 12 → V in 2   V out 2

To AUDIO MONITOR

Xpt 13 → V in 3   V out 3

     V in 4   V out 4

②

PROFILE

MIXER

A in 1-4   A out 1-4   Input 1   Mon
                                  (A-VTR)   Out

A in 5-8   A out 5-8   Input 2
                                    (B-VTR)

A in 9-12   A out 9-12   Input 3

A in 13-16   A out 13-16   Input 4
                                    (VTR-1)

Input 5
(VTR-2)

TIMELINE AUDIO   Input 10   Pgm
                                    (R-VTR)   Out

AUDIO TO BE RECORDED
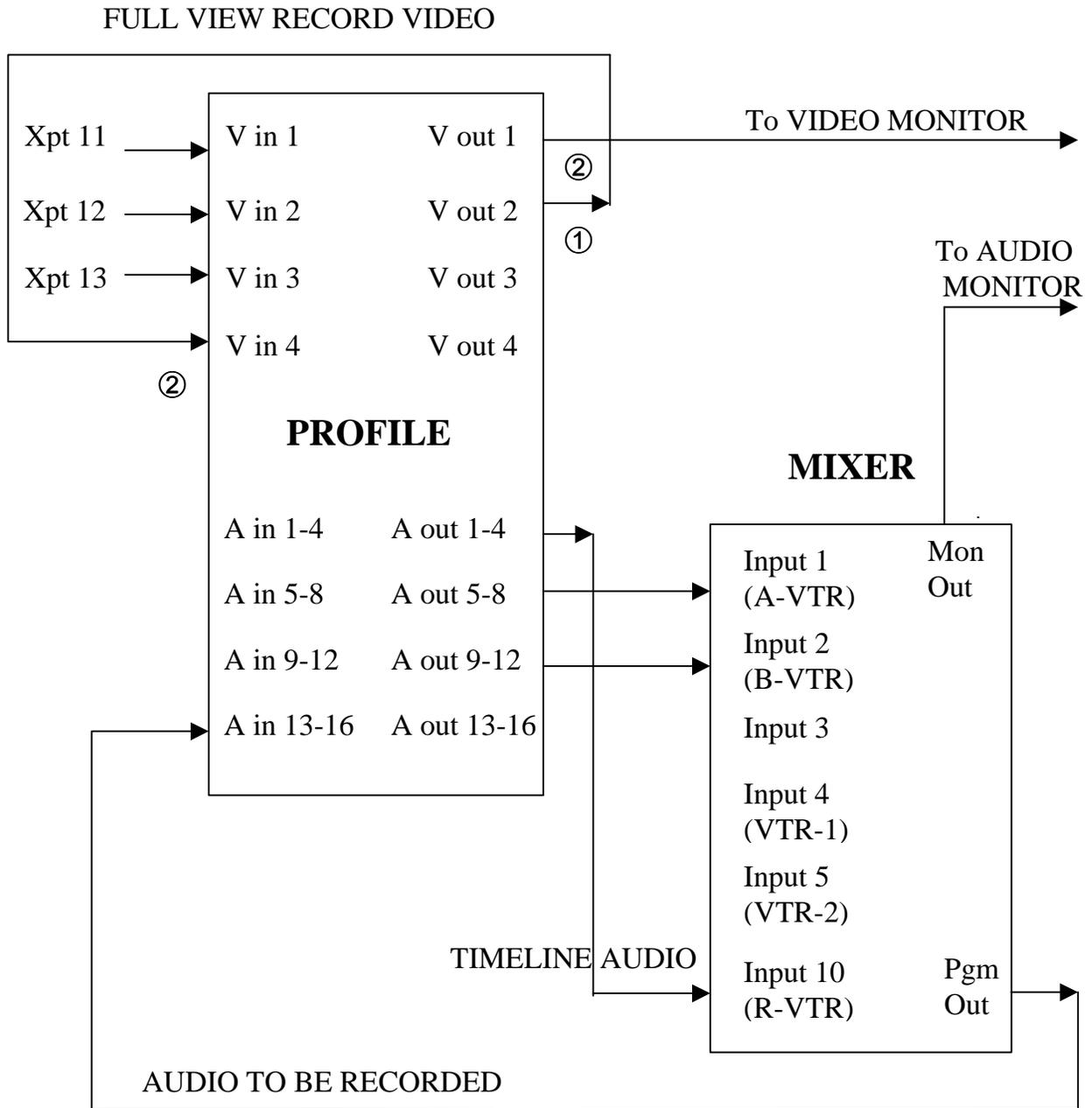
VIDEO Xpts.

R-VTR   0
A-VTR   1
①   Assigned in INIT # 171 (VIDEO OUT=002)   B-VTR   2
②   Assigned in PRCCFG   VTR-1   11
    Externally Cabled   VTR-2   12
                                              VTR-3   13
                                              BLACK   19

PRCCFG setups for example in Diagram 1 are…

Channel 1: (Timeline)

    Video Codec: 1
    Video IN: NONE
    Video OUT: SDI-OUT A-J14 (#1)
    Audio IN/OUT: 1 through 4
    Timecode Codec: 1
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 2: (A-VTR)

    Video Codec: 2
    Video IN: NONE
    Video OUT: NONE
    Audio IN/OUT: 5 through 8
    Timecode Codec: 3
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 3: (B-VTR)

    Video Codec: 3
    Video IN: NONE
    Video OUT: NONE
    Audio IN/OUT: 9 through 12
    Timecode Codec: 5
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 4: (Recorder channel)

    Video Codec: 4
    Video IN: SDI-IN B-J15 (#4)
    Video OUT: NONE
    Audio IN/OUT: 13 through 16
    Timecode Codec: 7
    Timecode IN: NONE
    Timecode OUT: NONE

> **Assign Super Edit video cross-points** in the Super Edit Assignment page.

R-VTR: (Codec 1):   Video cross-point 0.
A-VTR: (or source that represents Pro*file* Codec 2):   Video cross-point 1.
B-VTR: (or source that represents Pro*file* Codec 3, if any): Video cross-point 2.
C-VTR: (or source that represents Pro*file* Codec 4, if any): Video cross-point 3.
Any external source you wish to route through
Pro*file*'s internal switcher. The first input is: Video cross-point 11
   and so on.   Video cross-point 12 through 18
Black: (from Pro*file*)   Video cross-point 19

If the Pro*file* timecode input was set to either **None** (use "Internal Generator") or **Genlock** (VITC), Super Edit INIT# 165 must be set to "TC FROM GEN". If the Pro*file* timecode input was set to "**External LTC"** timecode, Super Edit INIT# 165 must be set to "TC FROM TAPE".

> **NOTE**: When changes are made to the **PRCCFG** or to the **Configuration Manager** while in the NLE mode, or even if you exit PRCCFG with a CANCEL, you must:
>
> 1. Exit the NLE mode via INIT # 100
> 2. Close all open ProLinks
> 3. Wait 15 seconds, or the internal VME (video combiner) may not operate properly
> 4. Re-open the desired ProLinks and re-enter the NLE mode
>
> **NOTE**:   There is a 1-frame video delay through the Pro*file* internal switcher (VME). INIT # 41, SOURCE ADVANCE, is set to a default value of "1" to account for this delay.
>
> **NOTE**: "Hybrid" record mode using a VTR as the recorder is not available for systems configured to use the VME as the video switcher. This is because the same Pro*file* port is shared for the R-VTR and the VME Switcher.

> **Insert Edits - Full View Record Option**

Individual Pro*file* Audio and Video codecs are unable to operate in a true insert-edit mode. When a recording is made with the default settings described above, you will see and hear only the new material being inserted. You will NOT hear or see the material on the timeline up to the record-in point, nor the material after the record-out point as you would with a normal VTR insert edit.

If you wish to hear and see the material already on the timeline while you do a recording, the resources of the C-VTR (codec 4) can be used as the actual recorder codec. To activate this mode, select **INIT# 169**. INIT# 169 toggles between "**FULL VIEW RECORD ON/OFF**".

In order to use the **FULL VIEW RECORD ON** option, the video and audio signals normally routed to the R-VTR must be routed to the C-VTR audio and video inputs as specified by the PRCCFG setups described earlier. VIDEO inputs are taken care of by Super Edit INIT #171 (described earlier). For the AUDIO inputs, if an audio distribution amplifier is available, route the same audio outputs from the

audio mixer into the audio codecs assigned to both the R-VTR and the C-VTR. Alternatively, the audio signal connections can be moved or left permanently attached to the desired record codecs.

> **NOTE:** If any resources are changed while ProLinks are running, it is necessary to first turn off Non-Linear mode (INIT# 100) if it is on, shut down all ProLinks, reopen all ProLinks and re-enter Non-Linear mode.

> **NOTE:** It is necessary to have the C-VTR assigned as **NATIVE** in order to use it as the Recorder. If FULL VIEW RECORD is being used, its source name will be "RCDR".

> **NOTE:** Switches between FULL VIEW RECORD OFF (R-VTR record) and FULL VIEW RECORD ON (C-VTR record) can be made "on the fly" if the recommended Time Code Generator settings are made.

> **NOTE:** INIT# 171 must be set to indicate the Pro*file* video output that is externally routed to the Pro*file* video input as noted in the section under PRCCFG for channel 4.

Configure Pro*file* for internal video switcher (VME) and preview switcher

In this configuration, one output of Pro*file* is connected to the preview switcher as the "R-VTR" input, and another output of Pro*file* is connected to the "SWITCHER" input of the preview switcher.

In **PRCCFG**, set **Channel 1** as follows:

Video Codec:	Codec 1
Video Input:	None.

The list of video inputs you see in the video inputs tables are the available inputs for your Pro*file,* and can be mapped to any VPE source key (Green Key). The first entry in the table is mapped to Super Edit video cross-point 11, the second is video cross-point 12, and so on. Video cross-points 11 through 18 can select any of the first 8 Pro*file* video inputs. Video cross-point 19 is Black. This Black is generated by Pro*file*'s FTB (Fade to Black) circuitry.

Video Output:	Pro*file* output connects to the R-VTR input of the preview switcher.

When viewing the selections under Video Output for Channel 1 (PRCCFG), the video outputs that are available on your Pro*file* will be listed. Select the one that will be the R-VTR output to the preview switcher.

Audio:	Select at least 1 and more if desired.
Timecode Codec:	1
Timecode Input:	If INIT # 165 is set to "**TC FROM GEN**" (recommended), select **None**. The assignment of the Time Code Generator is made by Super Edit based on the current setting of "FULL-VIEW RECORD" in INIT # 169. If INIT # 165 is set to "TC FROM TAPE" the LTC from the currently controlled VTR must be routed to the Pro*file* LTC port selected.
Timecode Output:	None.

In **PRCCFG**, set **Channel 2** (if used) as follows:

Video Codec:	Codec 2
Video Input:	None
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	3
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 3** (if used) as follows:

Video Codec:	Codec 3
Video Input:	None
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	5
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 4** (if used) as follows:

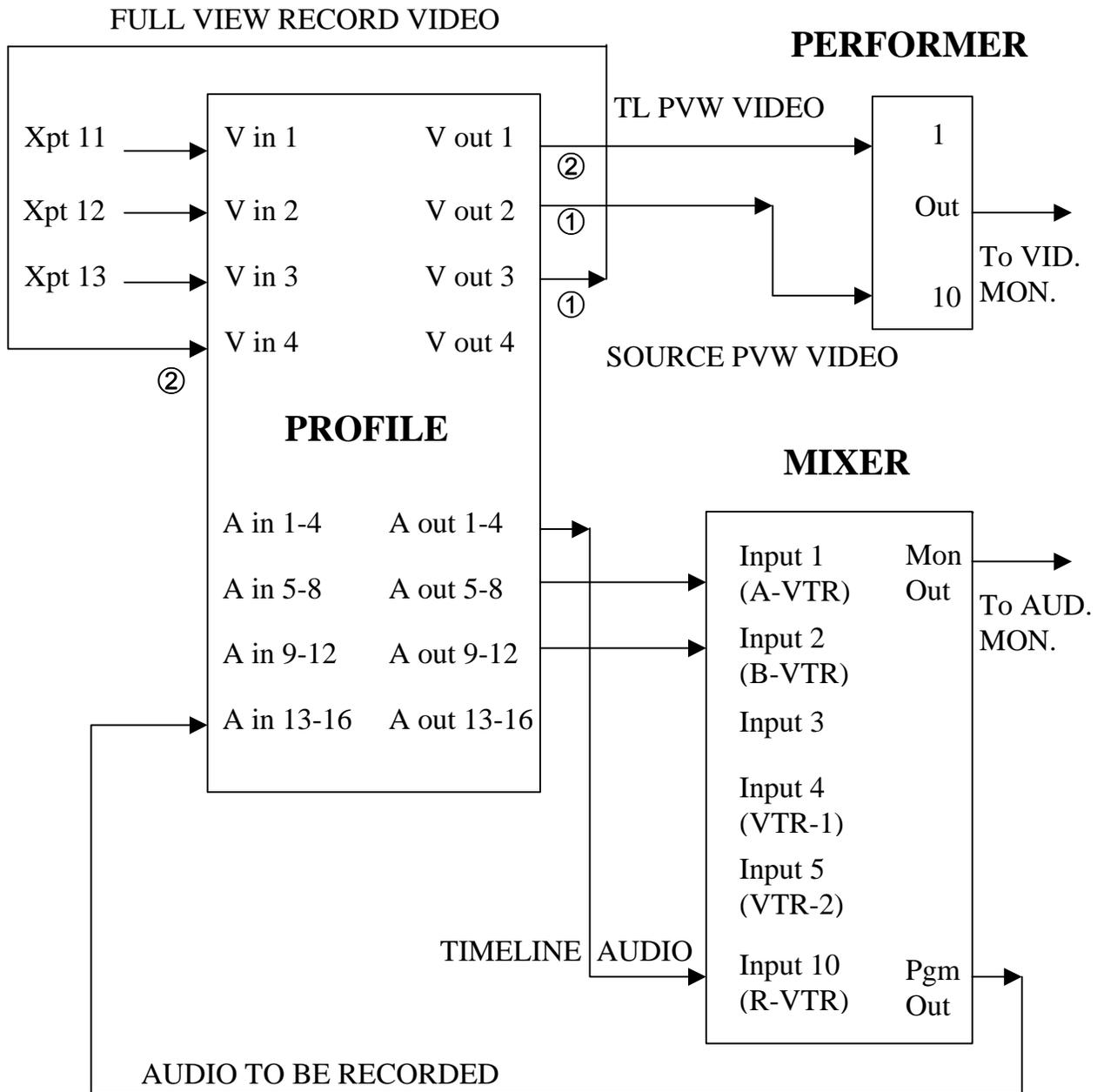|	
Video Codec:	Codec 4
Video Input:	If "FULL VIEW RECORD" option is selected in INIT# 169, this will be the video input for record. This input must be externally connected to the Pro*file* Video Output specified in INIT# 171. If "FULL VIEW RECORD" is not used, select "None".
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	7
Timecode Input:	None
Timecode Output:	None

Set video timing

Open the Pro*file* utility called **Configuration Manager**. Select **Option / System timing**.
The check box near the bottom marked "**E-E Timed Output**" must be checked. This setting is necessary to align the output of the R-VTR codec with the output of the video combiner, which is delayed.

Profile has an internal 16-line delay. When the E-E timed output option is selected, the external outputs are zero timed with the internal codecs, and the output switches cleanly between internal and external sources.

> **NOTE**:   When changes are made to the **PRCCFG** or the **Configuration Manager** while in the NLE mode, or if you exit PRCCFG with a CANCEL, you must:
>
> 1. Exit the NLE mode via INIT # 100
> 2. Close all open ProLinks
> 3. Wait 15 seconds, or the internal VME (video combiner) may not operate
> 4. Re-open the desired ProLinks and re-enter the NLE mode

Diagram 2 ... The following is a typical set-up for a Pro*file* **VME video switcher, preview switcher** (GV Performer shown here)**, and an external audio mixer in FULL VIEW RECORD ON**.

FULL VIEW RECORD VIDEO

PERFORMER

Xpt 11 → V in 1   V out 1 ——— TL PVW VIDEO
②
Xpt 12 → V in 2   V out 2
①
Xpt 13 → V in 3   V out 3
①
V in 4   V out 4   SOURCE PVW VIDEO
②

1
Out
To VID.
MON.
10

PROFILE

A in 1-4   A out 1-4
A in 5-8   A out 5-8
A in 9-12   A out 9-12
A in 13-16   A out 13-16

MIXER

Input 1   Mon
(A-VTR)   Out   To AUD.
Input 2   MON.
(B-VTR)
Input 3
Input 4
(VTR-1)
Input 5
(VTR-2)
TIMELINE AUDIO   Input 10   Pgm
                  (R-VTR)   Out

AUDIO TO BE RECORDED

VIDEO Xpts.

① Assigned in INIT # 171
② Assigned in PRCCFG
   Default R-VTR Pre-selector Xpt
   Default Performer Source Video Xpt 10
   ("AUX" Pre-selector Xpt)

R-VTR	0
A-VTR	1
B-VTR	2
VTR-1	11
VTR-2	12
VTR-3	13
BLACK	19

PRCCFG setups for Diagram 2 example are…

Channel 1: (Timeline)

    Video Codec: 1
    Video IN: NONE
    Video OUT: SDI-OUT A-J14 (#1)
    Audio IN/OUT: 1 through 4
    Timecode Codec: 1
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 2: (A-VTR)

    Video Codec: 2
    Video IN: NONE
    Video OUT: NONE
    Audio IN/OUT: 5 through 8
    Timecode Codec: 3
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 3: (B-VTR)

    Video Codec: 3
    Video IN: NONE
    Video OUT: NONE
    Audio IN/OUT: 9 through 12
    Timecode Codec: 5
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 4: (Recorder channel)

    Video Codec: 4
    Video IN: SDI-IN B-J15 (#4)
    Video OUT: NONE
    Audio IN/OUT: 13 through 16
    Timecode Codec: 7
    Timecode IN: NONE
    Timecode OUT: NONE

> **Assign Super Edit video cross-points** in the Super Edit assignment page. They are:

R-VTR: (Codec 1):   Video cross-point 0.
A-VTR: (or source that represents Pro*file* Codec 2):   Video cross-point 1.
B-VTR: (or source that represents Pro*file* Codec 3, if any):   Video cross-point 2.
C-VTR: (or source that represents Pro*file* Codec 4, if any):   Video cross-point 3.

Any external source you wish to route through Pro*file*'s internal switcher.
The first input is: Video cross-point 11
and so on.

Black: (from Pro*file*)   Video cross-point 19

From Super Edit, assign the output to be used to connect the internal Pro*file* switcher to the switcher input of the preview switcher.

When in PRCCFG, viewing the selections under Video Output for Channel 1, the video outputs that are available on your Pro*file* were listed. For assignment to Super Edit, the first one in the list is 1, the second is 2, and so on. Pick one of these, and enter its number in Super Edit INIT# 171. This is the output that is connected to the Preview Switcher. If FULL VIEW RECORD mode is to be used, the NEXT sequential output must be externally routed to the Pro*file* video input as noted in the section under PRCCFG for channel 4.

If the Pro*file* timecode input was set to either **None** (use "Internal Generator") or **Genlock** (VITC), Super Edit INIT# 165 must be set to "TC FROM GEN". If the Pro*file* timecode input was set to "**External LTC"** timecode, Super Edit INIT# 165 must be set to "TC FROM TAPE".

> **NOTE**: When changes are made to the **PRCCFG** or the **Configuration Manager** while in the NLE mode, or if you exit PRCCFG even with a CANCEL, you must:
>
> 1. Exit the NLE mode via INIT # 100
> 2. Close all open ProLinks
> 3. Wait 15 seconds, or the internal VME (video combiner) may not operate
> 4. Re-open the desired ProLinks and re-enter the NLE mode

> **NOTE**:   There is a 1-frame video delay through the Pro*file* internal switcher (VME).
> INIT # 41, SOURCE ADVANCE, is set to a default value of "1" to account for this delay.

> **NOTE**: "Hybrid" record mode using a VTR as the recorder is not available for systems configured to use the VME as the video switcher. This is because the same Pro*file* port is shared for the R-VTR and the VME Switcher.

Insert Edits - Full View Record Option

Individual Pro*file* Audio and Video codecs are unable to operate in a true insert-edit mode. For this reason, while a recording is made with the default settings described above, you will see and hear only the new material being inserted. You will NOT hear or see the material on the timeline up to the record-in point, nor the material after the record-out point as you would with a normal VTR insert edit.

If you wish to hear and see the material already on the timeline as you do a recording, the resources of the C-VTR (codec 4) can be used as the actual recorder codec. To activate this mode, select **INIT# 169**. INIT# 169 toggles between "**FULL VIEW RECORD ON/OFF**".

In order to use the **FULL VIEW RECORD** option, the video and audio signals normally routed to the R-VTR must be routed to the C-VTR audio and video inputs as specified by the PRCCFG setups described earlier. VIDEO inputs are taken care of by Super Edit INIT #171 (described earlier). For the AUDIO inputs, if an audio distribution amplifier is available, route the same audio outputs from the audio mixer into the audio codecs assigned to both the R-VTR and the C-VTR. Alternatively, the audio signal connections can be moved or left permanently attached to the desired record codecs.

> **NOTE:** If any resources are changed while ProLinks are running, it is necessary to first turn off Non-Linear mode (INIT# 100) if it is on, shut down all ProLinks, reopen all ProLinks and re-enter Non-Linear mode.

> **NOTE:** It is necessary to have the C-VTR assigned as **NATIVE** in order to use it as the Recorder. If FULL VIEW RECORD is being used, its source name will be "RCDR".

> **NOTE:** Switches between FULL VIEW RECORD OFF (R-VTR record) and FULL VIEW RECORD ON (C-VTR record) can be made "on the fly" if the recommended Time Code Generator settings are made in the Profile configuration files.

Configure Pro*file* for any external video switcher and AUX Bus preview

The Pro*file* has a 16-line delay associated with the internal video circuitry (the codecs) when it is configured to work properly as an E-E switcher device. However, the video outputs have only a -12 to + nn timing range. Therefore the outputs of Pro*file* sent to an external switcher are at minimum 4 lines late. Unless this delay is compensated for, the Pro*file* inputs will not be able to be properly timed into the external switcher.

We recommend the use of a preview switcher or Aux.-bus previewing methods when using an external switcher, which allow the Pro*file* to be set as "zero timed outputs".

In **PRCCFG**, set **Channel 1** as follows:

Video Codec:	Codec 1
Video Input:	The video input connected to the PGM output of the external video switcher. The list of video inputs you see in the video input table are the available inputs for your Pro*file*. Super Edit must be notified of your selection as discussed later in this document.
Video Output:	To Line monitor.

When viewing the selections under Video Output for Channel 1 (PRCCFG), the video outputs that are available on your Pro*file* will be listed. Pick one of these. This will be the Line monitor video out, similar to the R-VTR output on an E-E connected VTR.

Audio:	Select at least 1 and more if desired.
Timecode Codec:	1
Timecode Input:	If INIT **# 165** is set to "**TC FROM GEN**" (recommended), select **None**. The assignment of the Time Code Generator is made by Super Edit based on the current setting of "FULL-VIEW RECORD" in INIT # 169. If INIT # 165 is set to "TC FROM TAPE" the LTC from the currently controlled VTR must be routed to the Pro*file* LTC port selected.
Timecode Output:	None.

In **PRCCFG**, set **Channel 2** (if used) as follows:

Video Codec:	Codec 2
Video Input:	None
Video Output:	Select the output that will be connected to the input of the external switcher for this source.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	3
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 3** (if used) as follows:

Video Codec:	Codec 3
Video Input:	None
Video Output:	Select the output that will be connected to the input of the external switcher for this source.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	5
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 4** (if used) as follows:

Video Codec:	Codec 4
Video Input:	None if you do not intend to use the FULL VIEW RECORD option. If you wish to use FULL VIEW RECORD, select the video input connected to the PGM output of the external video switcher. The list of video inputs you see in the video inputs tables are the available inputs for your Pro*file*.
Video Output:	Select the output that will be connected to the input of the external switcher for this source.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	7
Timecode Input:	None
Timecode Output:	None

Set video timing

Open the Pro*file* utility called **Configuration Manager**. Select **Option / <u>S</u>ystem timing**. The check box near the bottom marked "**E-E Timed Output**" must be selected if using E-E Preview.
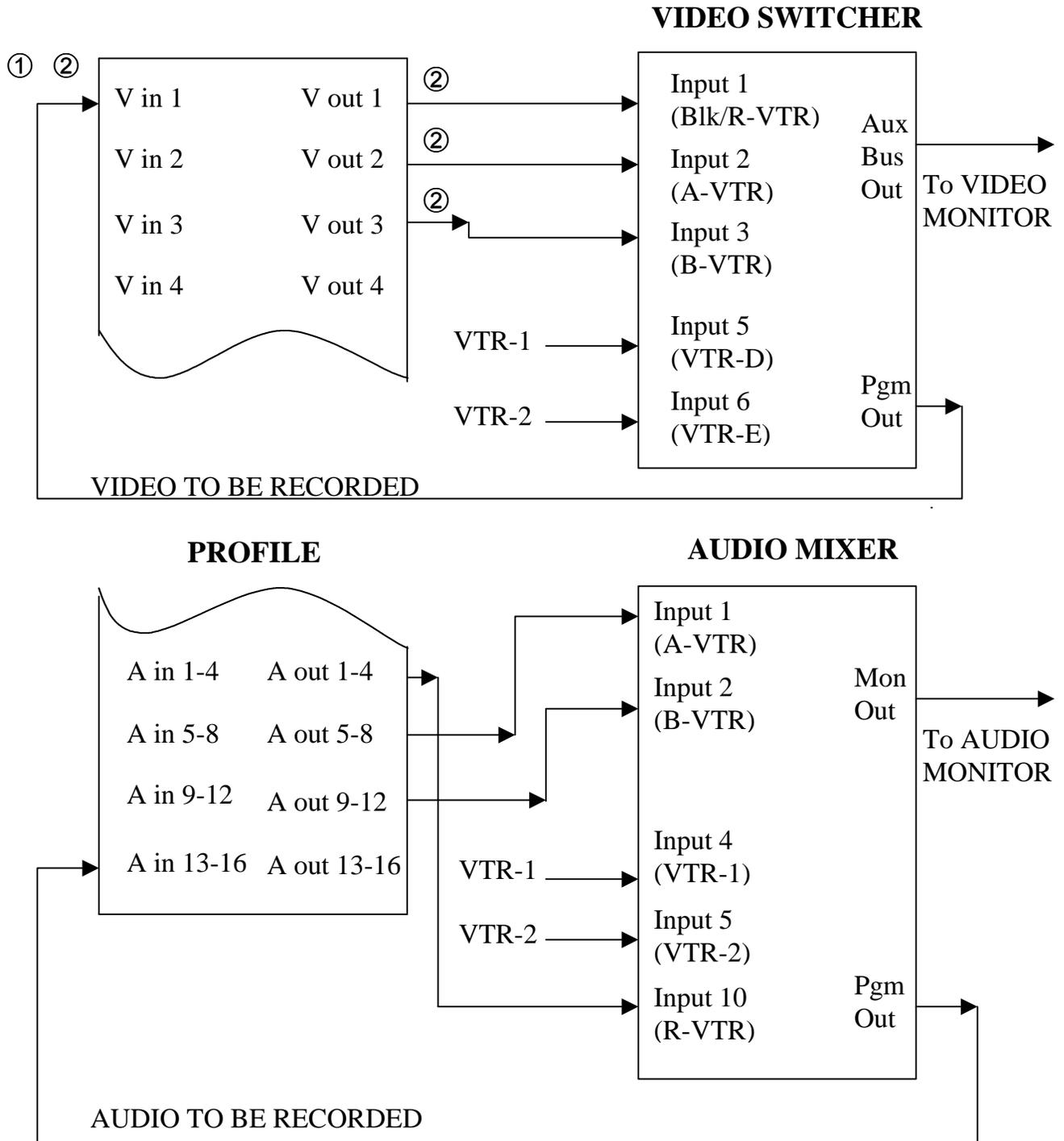If using Aux. Bus Preview, select "**Zero Timed Output**".
Profile has an internal 16-line delay. The delay of any output can be trimmed to -11 or -12 lines relative to this 16-line delay, depending on the type of output.

> **NOTE**: When changes are made to the **PRCCFG** or the **Configuration Manager** while in the NLE mode, or if you exit PRCCFG with a CANCEL, you must:
>
> 1. Exit the NLE mode via INIT # 100
> 2. Close all open ProLinks
> 3. Wait 15 seconds, or the internal VME (video combiner) may not operate
> 4. Re-open the desired ProLinks and re-enter the NLE mode

Diagram 3...The following is a typical set-up for an **external video switcher and audio mixer with FULL VIEW RECORD ON,** using **AUX BUS preview for video and mixer preview for audio.** If run with E-E software but with Aux. Bus Preview as diagrammed, in the **Configuration Manager** select **Option / System timing** and check "**Zero Timed Output**".

VIDEO SWITCHER

① ②

V in 1	V out 1	②
V in 2	V out 2	②
V in 3	V out 3	②
V in 4	V out 4	

VIDEO SWITCHER:
Input 1 (Blk/R-VTR)
Input 2 (A-VTR)
Input 3 (B-VTR)
VTR-1 → Input 5 (VTR-D)
VTR-2 → Input 6 (VTR-E)

Aux Bus Out → To VIDEO MONITOR
Pgm Out

VIDEO TO BE RECORDED

PROFILE   **AUDIO MIXER**

A in 1-4   A out 1-4
A in 5-8   A out 5-8
A in 9-12   A out 9-12
A in 13-16   A out 13-16
VTR-1
VTR-2

AUDIO MIXER:
Input 1 (A-VTR)
Input 2 (B-VTR)
Input 4 (VTR-1)
Input 5 (VTR-2)
Input 10 (R-VTR)

Mon Out → To AUDIO MONITOR
Pgm Out

AUDIO TO BE RECORDED

① Assigned in PRCCFG
② Super Edit notified of assignment with INIT # 171

PRCCFG setups for the Diagram 3 example are…

Channel 1: (Timeline)

    Video Codec: 1
    Video IN: NONE
    Video OUT: SDI-OUT A-J14 (#1)
    Audio IN/OUT: 1 through 4
    Timecode Codec: 1
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 2: (A-VTR)

    Video Codec: 2
    Video IN: NONE
    Video OUT: SDI-OUT B-J14 (#2)
    Audio IN/OUT: 5 through 8
    Timecode Codec: 3
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 3: (B-VTR)

    Video Codec: 3
    Video IN: NONE
    Video OUT: SDI-OUT A-J15 (#3)
    Audio IN/OUT: 9 through 12
    Timecode Codec: 5
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 4: (Recorder channel)

    Video Codec: 4
    Video IN: SDI-IN A-J14 (#1)
    Video OUT: NONE
    Audio IN/OUT: 13 through 16
    Timecode Codec: 7
    Timecode IN: NONE
    Timecode OUT: NONE

Assign the Video Cross-points in Super Edit

Super Edit, assign the video cross-points in the Assignment Page as would be normally done for the switcher and mixer types you are using.

If the Pro*file* timecode input was set to either **None** (use "Internal Generator") or **Genlock** (VITC), Super Edit INIT# 165 must be set to "TC FROM GEN". If the Pro*file* timecode input was set to "**External LTC"** timecode, Super Edit INIT# 165 must be set to "TC FROM TAPE".

Notify Super Edit of Video Input: Since Super Edit cannot read the video input you have selected in PRCCFG, assign INIT#171 the number of the video input of Pro*file* to which the output of the Video Switcher is connected.

Insert Edits - Full View Record Option

Individual Pro*file* Audio and Video codecs are unable to operate in a true insert-edit mode. For this reason, while a recording is made with the default settings described above, you will see and hear only the new material being inserted. You will NOT hear or see the material on the timeline up to the record-in point, nor the material after the record-out point as you would with a normal VTR insert edit.

If you wish to hear and see the material already on the timeline as you do a recording, the resources of the C-VTR (codec 4) can be used as the actual recorder codec. To activate this mode, select **INIT# 169**. INIT# 169 toggles between "**FULL VIEW RECORD ON/OFF".**

In order to use the **FULL VIEW RECORD** option, the video and audio signals normally routed to the R-VTR must be routed to the C-VTR audio and video inputs as specified by the PRCCFG setups described earlier. For the VIDEO input, use PRCCFG to configure the same video input as used for the R-VTR for the C-VTR. For the audio inputs, if an audio distribution amplifier is available, route the same audio outputs from the audio mixer into the audio codecs assigned to both the R-VTR and the C-VTR. Alternatively, the audio signal connections can be moved or left permanently attached to the desired record codecs.

NOTE: If any resources are changed while ProLinks are running, it is necessary to first turn off Non-Linear mode (INIT# 100) if it is on, shut down all ProLinks, re-open all ProLinks and re-enter Non-Linear mode.

NOTE: It is necessary to have the C-VTR assigned as **NATIVE** in order to use it as the Recorder. If FULL VIEW RECORD is being used, its source name will be "RCDR".

NOTE: Switches between FULL VIEW RECORD OFF (R-VTR record) and FULL VIEW RECORD ON (C-VTR record) can be made "on the fly" if the recommended timecode input settings are made in the Profile configuration files.

Configure Pro*file* for any external video switcher and GV preview switcher

In **PRCCFG**, set **Channel 1** as follows:

Video Codec:	Codec 1
Video Input:	Select the video input connected to the PGM output of the external video switcher. The list of video inputs you see in the video inputs table are the available inputs for your Pro*file*.
Video Output:	Pro*file* output connects to the R-VTR input of the preview switcher.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	1
Timecode Input:	If INIT # 165 is set to "**TC FROM GEN**" (recommended), select **None**. The assignment of the Time Code Generator is made by Super Edit based on the current setting of "FULL-VIEW RECORD" in INIT # 169. If INIT # 165 is set to "TC FROM TAPE" the LTC from the currently controlled VTR must be routed to the Pro*file* LTC port selected.
Timecode Output:	None.

In **PRCCFG**, set **Channel 2** (if used) as follows:

Video Codec:	Codec 2
Video Input:	None
Video Output:	Select the output that will be connected to the input of the external switcher for this source.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	3
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 3** (if used) as follows:

Video Codec:	Codec 3
Video Input:	None
Video Output:	Select the output that will be connected to the input of the external switcher for this source.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	5
Timecode Input:	None
Timecode Output:	None

In **PRCCFG**, set **Channel 4** (if used) as follows:

Video Codec:	Codec 4
Video Input:	None if you do not intend to use the FULL VIEW RECORD option. If you wish to use FULL VIEW RECORD, select the video input connected to the PGM output of the external video switcher. The list of video inputs you see in the video inputs tables are the available inputs for your Pro*file*.
Video Output:	Select the output that will be connected to the input of the external switcher for this source.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	7
Timecode Input:	None
Timecode Output:	None

Set video timing

Open the Pro*file* utility called **Configuration Manager**. Select <u>**Option**</u> **/** <u>**System timing**</u>. The check box near the bottom marked "**Zero Timed Output**" must be selected.
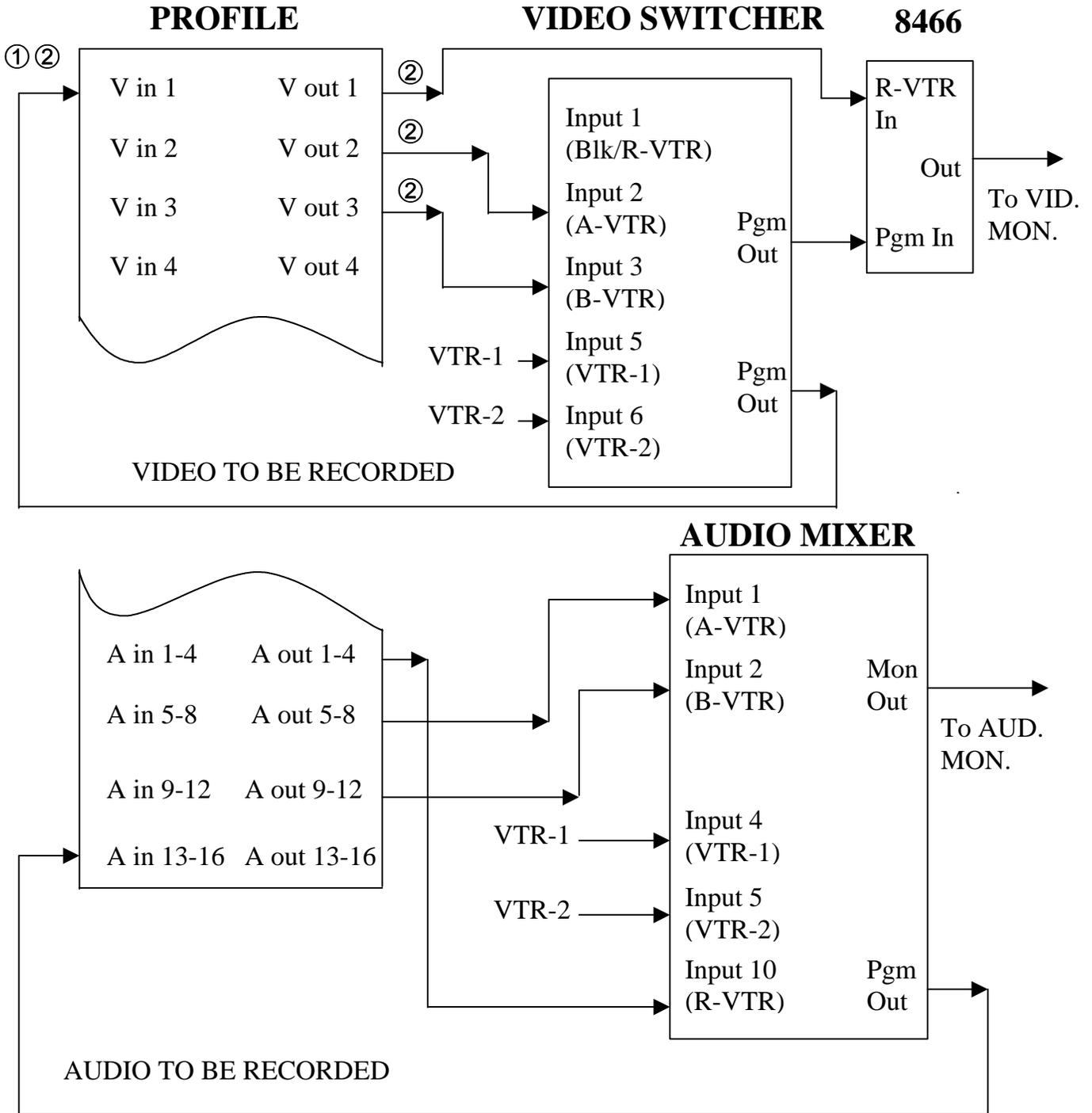
Pro*file* has an internal 16-line delay, but this delay is compensated for on all outputs, including the R-VTR, when the Zero Timed Output option is invoked.

When changes are made to the **PRCCFG** or the **Configuration Manager** while in the NLE mode, or if you exit PRCCFG with a CANCEL, you must:

1. Exit the NLE mode via INIT # 100
2. Close all open ProLinks
3. Re-open the desired ProLinks and re-enter the NLE mode

If the Pro*file* timecode input was set to either **None** (use "Internal Generator") or **Genlock** (VITC), Super Edit INIT# 165 must be set to "TC FROM GEN". If the Pro*file* timecode input was set to "**External LTC"** timecode, Super Edit INIT# 165 must be set to "TC FROM TAPE".

Diagram 4... The following is a typical set-up for an **external video switcher, external preview switcher** (GV 8466 shown here), and an **external audio mixer in FULL VIEW RECORD ON**.

PROFILE

VIDEO SWITCHER

8466

① ②

V in 1	V out 1
V in 2	V out 2
V in 3	V out 3
V in 4	V out 4

② V out 1 → Input 1 (Blk/R-VTR)

② V out 2 → Input 2 (A-VTR)

② V out 3 → Input 3 (B-VTR)

Pgm Out

R-VTR In

Out → To VID. MON.

Pgm In

VTR-1 → Input 5 (VTR-1)

VTR-2 → Input 6 (VTR-2)

Pgm Out

VIDEO TO BE RECORDED

AUDIO MIXER

A in 1-4	A out 1-4
A in 5-8	A out 5-8
A in 9-12	A out 9-12
A in 13-16	A out 13-16

Input 1 (A-VTR)

Input 2 (B-VTR) — Mon Out → To AUD. MON.

VTR-1 → Input 4 (VTR-1)

VTR-2 → Input 5 (VTR-2)

Input 10 (R-VTR) — Pgm Out

AUDIO TO BE RECORDED

① Assigned in PRCCFG
② Super Edit notified of assignment with INIT # 171

PRCCFG setups for the Diagram 4 example are…

Channel 1: (Timeline)

    Video Codec: 1
    Video IN: NONE
    Video OUT: SDI-OUT A-J14 (#1)
    Audio IN/OUT: 1 through 4
    Timecode Codec: 1
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 2: (A-VTR)

    Video Codec: 2
    Video IN: NONE
    Video OUT: SDI-OUT B-J14 (#2)
    Audio IN/OUT: 5 through 8
    Timecode Codec: 3
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 3: (B-VTR)

    Video Codec: 3
    Video IN: NONE
    Video OUT: SDI-OUT A-J15 (#3)
    Audio IN/OUT: 9 through 12
    Timecode Codec: 5
    Timecode IN: NONE
    Timecode OUT: NONE

Channel 4: (Recorder channel)

    Video Codec: 4
    Video IN: SDI-IN A-J14 (#1)
    Video OUT: NONE
    Audio IN/OUT: 13 through 16
    Timecode Codec: 7
    Timecode IN: NONE
    Timecode OUT: NONE

Assign the Video Cross-points in Super Edit

From Super Edit, assign the video cross-points in the Assignment Page as would be normally done for the switcher and mixer types you are using.

If the Pro*file* timecode input was set to either **None** (use "Internal Generator") or **Genlock** (VITC), Super Edit INIT# 165 must be set to "TC FROM GEN". If the Pro*file* timecode input was set to "**External LTC"** timecode, Super Edit INIT# 165 must be set to "TC FROM TAPE".

Notify Super Edit of Video Input: Since Super Edit cannot read the video input you have selected in PRCCFG, assign INIT#171 the number of the video input of Profile to which the output of the Video Switcher is connected.

Insert Edits - Full View Record Option

Individual Pro*file* Audio and Video codecs are unable to operate in a true insert-edit mode. For this reason, while a recording is made with the default settings described above, you will see and hear only the new material being inserted. You will NOT hear or see the material on the timeline up to the record-in point, nor the material after the record-out point as you would with a normal VTR insert edit.

If you wish to hear and see the material already on the timeline as you do a recording, the resources of the C-VTR (codec 4) can be used as the actual recorder codec. To activate this mode, select **INIT# 169**. INIT# 169 toggles between "**FULL VIEW RECORD ON/OFF**". If this selection is made while INIT# 100 (Non-Linear mode) is active, INIT# 100 must be toggled OFF and back ON to properly establish signal routing.

In order to use the **FULL VIEW RECORD (**Record on C-VTR**)** option, the video and audio signals normally routed to the R-VTR must be routed to the C-VTR audio and video inputs as specified by the PRCCFG setups described earlier.   For the VIDEO input, use PRCCFG to configure the same video input as used for the R-VTR for the C-VTR. For the AUDIO inputs, if an audio distribution amplifier is available, route the same audio outputs from the audio mixer into the audio codecs assigned to both the R-VTR and the C-VTR. Alternatively, the audio signal connections can be moved or left permanently attached to the desired record codecs.

> **NOTE:** If any resources are changed while ProLinks are running, it is necessary to first turn off Non-Linear mode (INIT# 100) if it is on, shut down all ProLinks, re-open all ProLinks and re-enter Non-Linear mode.

> **NOTE:** It is necessary to have the C-VTR assigned as **NATIVE** in order to use it as the Recorder. If FULL VIEW RECORD is being used, its source name will be "RCDR".

> **NOTE:** Switches between FULL VIEW RECORD OFF (R-VTR record) and FULL VIEW RECORD ON (C-VTR record) can be made "on the fly" if the suggested timecode generator settings are made in the Profile configuration files.

Super Edit Software Installation

In the VPE, INSTALL or UPDATE the Super Edit software using the enclosed installation floppy disks. (See 'Super Edit Software Installation instructions'). Make note of your port and cross-point information, as Configuration Files created from earlier non-NLE versions of Super Edit may will longer be usable.

Setup Super Edit VTR Assignment Table

Run the Super Edit program, and in the Assignment Page select **NATIVE** protocol for Pro*file* NLE Sources. Set the Video and Audio cross-points as appropriate for your installation. Other non-Pro*file* devices may be assigned to any other unused source keys you may have. An example follows:

LABEL	REEL	PORT	MODEL	QC	VIDX	AUDX
R-VTR	001	01	NATIVE	3	< 001>	<ANY>
A-VTR	002	02	NATIVE	3	< 002>	<ANY>
B-VTR	003	03	NATIVE	3	< 003>	<ANY>
C-VTR	004	04	NATIVE	3	< 004>	<ANY>
D-VTR	WILD01	05	BRD-85	3	< 011>	<ANY>
BLK	BLACK				< 019>	<ANY>

Some ASSIGNMENT rules to remember:

- Pro*file* NATIVE protocol can only be assigned to R-VTR, A-VTR, B-VTR, and C-VTR.

- In the NON-LINEAR mode, the R-VTR must always be assigned as NATIVE.

- For Super Edit 8.3D and later, any available VPE port, including port 0, can be used for a Pro*file* Native Source.

Open ProLink Ports on Pro*file*. To enable the Native Protocol in Pro*file*…

1. Make sure there are no **ProLinks** applications currently opened. Double click on the '**ProLink'** icon found in the **PDR APPLICATIONS** folder in the **PROGRAM MANAGER,** or on the Windows Desktop.

2. Select Port **P1** and **OK** (this will be used as the record Timeline.) When the P1 window opens, MINIMIZE it.

3. Repeat for port **P2,** and for P3 and P4 if desired. Selected Ports should correspond to the physical Ports connected to the VPE via the RS-422 machine control cables.

4. An example of a batch file that can be used to open all ProLinks is shown in the Appendix.

IMPORTANT NOTE…
If for any reason you must re-start or re-boot your editor while in the NON-LINEAR mode, each ProLink should be closed and then re-opened once the editor is back on-line.

Setup Initialization Page Options

There are four Initialization Options in Super Edit that must be defined before you can edit in the NON-LINEAR mode;

- **Non-Linear Control ON/OFF**
- **VTR.CFG assignment**
- **Pro*file* Directory selection**
- **Sort by RECORD IN-TIME**

Other Initialization options are required for the Logger operation, and are explained later. Most NON-LINEAR options are on Initialization Page #6. This page is not displayed until INIT#100 is turned on. However, you can go directly to INIT Page #6 by selecting INIT #120 - NLE INIT PG.

1. INIT #100 - **NON LINEAR MODE ON/OFF** - Note that the default is OFF. To enable the non-linear mode, toggle this function to ON. When you exit the INIT Page, **NON-LINEAR** will be displayed in the status line of Super Edit. When Non Linear mode is ON, INIT page # 6 will always appear first, allowing you to directly access the Pro*file* related INIT items. Turn this item OFF to return to the standard linear editing mode.

2. Assign the 4 VTR.CFG files to the R-VTR, A-VTR, B-VTR, and/or C-VTR. This is done through INIT #s 172-175. The default example follows:

> 172   RVTR CFG = VTR1
>
> 173   AVTR CFG = VTR2
>
> 174   BVTR CFG = VTR3
>
> 175   CVTR CFG = VTR4

3. INIT #151 -   On a **PDR 100**, **DIR = INT:/DEFAULT/**
                      On a **PDR 200**, **DIR = INT1:/DEFAULT/**

One of these is usually the default name of the directory on the Pro*file* that will contain the source Clips. Other possibilities may begin with the "file system" name **INT2**, **EXT1**, or **EXT2**. The applicable directory path can be determined using the Pro*file*'s MEDIA MANAGER.   To change this directory select **INIT #151**. Super Edit prompts: **PROFILE DIRECTORY =**
You may type in any directory name that already exists on Pro*file* as long as the complete directory name is less than 32 characters long.   If you enter a directory name that does not yet exist, it will be created automatically when the system attempts to output to that directory.

The format of the directory name is very important and must be followed exactly. The format must be a "file system" identifier followed by a colon (**:**) and a forward slash (**/**). Subsequent directories must each be followed by a forward slash. The path name must end with a forward slash. If you do not add the trailing forward slash, Super Edit will do it for you automatically. The directory that you specify will apply to all further operations. The directory name is CASE SENSITIVE, so it must be **UPPER CASE**.

              Examples: INT**:/DEFAULT/**
                            INT1**:/MYCLIPS/**
                            EXT1**:/WILDSHOT/**

    NOTE that the directory name is not saved with the EDL. Each time you load a new EDL you
    must specify the correct directory.

Having completed the above steps, you are ready to begin non-linear editing with any Clips that are already stored on the Pro*file*. To copy (digitize) new material from tape to the Pro*file*, continue with the next section.

4. While in the NON LINEAR mode, INIT# 8 must be set to **STORE IN TIME SEQ**.

Error Messages & System Prompts

If you get the message **"UPDATING"** all is well**.**

If you get a message such as:

A-VTR PORT: NOT CONNECTED OR PROLINK NOT OPEN ERROR
PRESS ANY KEY TO CONTINUE

The editor was unable to establish initial contact with the Pro*file*.

- ➢ Check that the VPE port assigned to the VTR that failed to connect is in fact connected to the Pro*file*.
- ➢ Ensure that the ProLink for that Pro*file* channel is running.
- ➢ Ensure that INIT # 172-175 for this VTR is set correctly.
- ➢ It is possible that the RS-422 port on either the VPE or Pro*file* is defective or that RS-422 control cable is bad.

If you get a message such as:

R-VTR PORT: BAD PROFILE CONFIG OR PROLINK RESET ERROR
PRESS ANY KEY TO CONTINUE

The profile port was opened, but opened in error. The two most common causes for this are:

- ➢ Either the configuration file on profile that was configured with PRCCFG has an output resource that is used in another channel or by a VDR Panel.

- ➢ If this is not the case but the VDR Panel is open, terminate (close) the panel and reset the ProLink configurations by closing and reopening each ProLink.

NOTE: Following the **PRESS ANY KEY TO CONTINUE** message for the above two errors, if any key except the **[RESET]** key is pressed, the ports will be closed and the VPE will not enter the NON LINEAR mode.

If the [**RESET**] key is pressed, then the NON LINEAR mode, as far as it has been initialized to this point, can be run. For example, if the error was related to the B-VTR and you press **[RESET]**, then you would still be in the NON LINEAR mode for the R-VTR and the A-VTR.

```
INITIALIZATION PAGE  # 6                                    2001 EDIT LINES
```

151 WORK DIR = INT1**:/**DEFAULT**/**	166 CAPACITY = 04:07:53:18
152	167 REMAINING = 02:43:00:24
153	168 AUTO ASMB DIGITIZE OFF
154 HOT LOG MODE OFF	169 FULL VIEW RECD ON
155 AUTO-HANDLES OFF	170 TL START 00:58:30;00
156 REW/FF SPEED = 032X	171 VIDEO OUT = 002
157 DISK PREROLL = 030	172 RVTR CFG = VTR1
158 SOURCE PREROLL ON	173 AVTR CFG = VTR2
159 ALT/RECD = NO HANDLES	174 BVTR CFG = VTR3
160 LOGGER MODE OFF	175 CVTR CFG = VTR4
161 CLIP NAME = MY_CLIP	176
162 HEAD HANDLE = 180 FRAMES	177 VME KEY SETUP
163 TAIL HANDLE = 180 FRAMES	178 AUTO SCROLL EDL ON
164 CLIP JOIN TIME = 180 FRAMES	179 PDR ROLL TRIM = 000
165 TC FROM GEN	180 PDR RECD TRIM = **-**001

151   **DIR = INT1:/ -** Defines the current or working directory on the Pro*file*, where Super Edit will store and retrieve Clips. The file system designations can be INT, INT1, INT2, EXT, EXT1 or EXT2. The file system designation must always be followed by a colon (**:**) and a front slash (**/**). The directory can consist of up to 32 characters, and must be followed by a front slash (**/**). If the user does not put a front slash at the end of the directory name, one is inserted automatically by Super Edit. If a directory name is defined that does not exist, it is created automatically when an attempt is made to store data there.

   NOTE that the "file system" identifier in Pro*file,* **INT:, EXT1:, etc**., .must be in UPPER CASE .

152   **N/A**

153   **N/A**

154   **HOT LOG MODE OFF =** Hot Log is a method of digitizing and logging at the same time. It allows you to record one long Clip from your source with as many sub-Clips as you like. These sub-Clips are pointers to the large Clip and do not take up any extra media space. They allow non-linear access to any point within the large Clip that you define.

155   **AUTO-HANDLES OFF =** This option allows additional source material (handles) to be digitized during the normal Pre-roll and Post-roll periods.

156 **REW/FF SPEED = 032X** – This option defines how many times Play speed the Pro*file* channel will shuttle when REW and FF are pressed. If set to **0**, pressing [REW] will send the disk to the first frame. Pressing [FF] will send the disk to the last frame.
If set to **1,** the disk will shuttle forward and reverse at approximate Play speed. 32X (32 times Play speed) is the maximum shuttle speed.

157 **DISK PREROLL = 030** – This setting defines the pre-roll length for Pro*file* sources when used in the NLE mode. VTR pre-rolls are still set with INIT# 1.

158 **SOURCE PREROLL ON/OFF –** This setting defines whether the pre-roll specified in INIT #157 will be applied to Profile sources.

This item should be set to **OFF** when the marked In-point of a Clip and the physical beginning of that Clip is less than the DISK PREROLL specified in INIT #157. If left **ON**, a timeline error offset in the amount of the difference between the two will result.

NOTE: that with "0" pre-roll or SOURCE PREROLL OFF selected, the first frame of Pro*file* audio may be heard ramping, and audio "pops" may be heard in the audio.

159 **ALT/RECD = NO HANDLES –** If the "**NO HANDLES**" option is selected, when **[ALT][RECORD]** [K2] or **[U4][RECORD]** [K5] (Digitize Immediately) is invoked, Logging (digitizing) of material will begin on-the-fly as soon as Pro*file* is ready (typically one second). If "**USE HANDLES**" is selected, when **[ALT][RECORD]** [K2] or **[U4][RECORD]** [K5] will cause the VTR to stop, cue up, pre-roll, and record using the handle times.   For more information see **Digitizing Clips On-the-Fly.**

160 **LOGGER MODE ON/OFF** – This turns the Logger mode, used for Auto digitizing Clips to the Pro*file*, ON or OFF. When ON, **EDIT LOG** is displayed on the Status Line of the Super Edit screen.

161 **CLIP NAME = MY_CLIP** – This is where you assign the default Clip name for Clips that are created without names. Each time this default Clip name is used, an incremental number is appended, e.g.: **MY_CLIP001, MY_CLIP002,** etc.

162 **HEAD HANDLE = 180 FRAMES** – Assign an amount of frames from "0" to "999", that will be added to the beginning of a Clips IN point when digitizing using the Logger mode in NLE.

163 **TAIL HANDLE = 180 FRAMES** – Assign an amount of frames from "0" to "999", that will be added to the end of a Clips OUT point digitizing using the Logger mode in NLE.

164 **CLIP JOIN TIME = 180 FRAMES** – While Auto digitizing in the Logger mode, selected Clips that are separated by less time than specified here ("0" to "999" frames), will not stop digitizing between Clips. These Clips are still created as separate Clips in the Pro*file* directory.

165 **TC FROM GEN / TC FROM VTR** – If the Pro*file* time-code input was set to either "**Internal Generator"** or "**Genlock (VITC)",** Super Edit INIT# 165 must be set to

"**TC FROM GEN**". If the Pro*file* time-code input was set to "**External LTC**", Super Edit INIT# 165 must be set to "**TC FROM TAPE**".

166 **CAPACITY = 04:07:53:18** – This is the total record capacity of this Pro*file* at the current compression rate.

167 **REMAINING = 02:43:00:24** – This is the total remaining record capacity of this Pro*file* at the current compression rate.   This time is also displayed in the Show Timer display area when in the LOGGER or HOT LOG Modes.

168 **AUTO ASMB DIGITIZE = ON/OFF** – When Auto Assemble is selected, Super Edit asks for the range of events to be assembled "From / Through". The events in this range are sequentially inserted on the Time Line. INIT# 168 allows the option of re-digitizing TEMP Clips. If INIT# 168 is turned OFF, the Auto Assembly operation continues without stopping to 'cue the timeline' or the sources.   If INIT# 168 is turned ON, then all Clips located in the TEMP directory will be re-digitized by recalling the sources to the Mark Table, cueing the sources and re-digitizing them. Note that the *CLIP note is changed to show the new TEMP Clip name.

169 **FULL VIEW RECD OFF -** Uses the R-VTR Codec only as the recorder codec during Record. A codec is not capable of true E-E operation, so you will not see or hear the material on the timeline before the edit point or the material after the edit point during the recording.

FULL VIEW RECD ON - The C-VTR codec is devoted to Recording during Record operations, allowing you to see and hear the material on the timeline before and after the edit points as if you were doing an insert edit on a VTR with E-E capability. In addition, you see and hear any tracks not involved in the edit. In this mode you lose the use of the C-VTR and its codec as a source. Please note that the system routing must be set up for this option as discussed earlier.

170 **TL START 00:58:30:00 –** This entry sets the Start Time of the Timeline. For **NTSC**, the default TC mode is **NON-DROP FRAME**.

If you wish to set the TL to **DROP FRAME**, press **[ALT][FRAMES]** when entering the start time.   SHOW START TIME, INIT # 16, is automatically changed to DROP FRAME Mode to match that of the TL START.

The set mode will be retained in your Configuration File.

NOTE: It is important that no time <u>earlier</u> than this time is placed on the Timeline. If earlier times are present, incorrectly digitized movies will result.

171   **VME PORT = 002** – When using the internal switcher of the Pro*file* (VME) and an 8465 or 8466 Preview Switcher, assign whichever codec is being fed from the Pro*file* to the SWITCHER IN of the Preview Switcher.

VIDEO OUT = 001 – When using an external Switcher, Super Edit must be told which Pro*file* Video input the output of the Video Switcher is connected to.

172   **RVTR CFG = VTR1** – This is the Profile configuration file that is assigned to Codec 1.

173   **AVTR CFG = VTR2** – This is the Profile configuration file that is assigned to Codec 2.

174   **BVTR CFG = VTR3** – This is the Profile configuration file that is assigned to Codec 3.

175   **CVTR CFG = VTR4** – This is the Profile configuration file that is assigned to Codec 4.

176   **N/A**

177   **VME KEY SETUP -** Opens the VME KEY SETUP menu, enabling adjustments of clip, gain, etc. for the keyer on the internal VME switcher.

178   **AUTO SCROLL EDL ON/OFF –** When turned ON, this feature enables the EDL to follow the Timeline whenever PLAY is implemented.

179   **PDR ROLL TRIM = 000** – This trim compensates for Pro*file* roll timing when it is used as a Source. This setting defaults to 0 and normally should not be changed.

180   **PDR RCD TRIM = -001 -** This trim compensates for Pro*file* roll timing when it is used as a Recorder. This setting defaults to 0 and will need to be changed depending on the current Pro*file* software version.

For Pro*file* software version **2.2.1.89**   Set to " **0**"
For Pro*file* software version **2.2.2.2**   Set to "**-1**"
For Pro*file* software version **2.2.3.9**   Set to "**-1**"
For Pro*file* software version **2.2.3.13**   Set to "**-1**"
For Pro*file* software version **2.2.3.16m**   Set to "**-1**"
For Pro*file* software version **2.4.1.19**   Set to "**-1**"
For Pro*file* software version **2.4.3.5**   Set to "**-1**"
For Pro*file* software version **2.4.4.1**   Set to "**-1**"
For Pro*file* software version **2.4.4.2**   Set to "**-1**"
For Pro*file* software version **2.5.2.61**   Set to "**-1**"
For Pro*file* software version **2.5.0.261**   Set to "**-1**"
For Pro*file* software version **2.5.3.11**   Set to "**-1**"
For Pro*file* software version **2.5.3.13**   Set to "**-1**"

As Tektronix releases new Pro*file* software, Editware will advise you of the new settings.

Appendix A: Hybrid Editing Mode (NL SOURCE mode).

This is the operational mode in which there are Pro*file* NATIVE sources, without a Pro*file* NATIVE R-VTR (Timeline). This is called the **NL SOURCE** mode. To utilize this mode, it is necessary to first establish Native mode communications with INIT # 100. The Super Edit Status Line will show **NL SRC** as the mode.

Native sources, if present, must be assigned to A, B and/or C sources. FULL VIEW RECORD ON/OFF (INIT # 169) has no effect on NL SOURCE mode. SWAP of a Profile Native channel with a VTR as the R-VTR is allowed, with one caution: the Profile Native channel swapped to the R-VTR position must have been on source A, B or C. Profile Native channels must be assigned to R, A, B and/or C. It is possible to SWAP the Timeline (R-VTR) to a source position (A, B or C) and lay-off the timeline to a VTR. Proper routing of A/V must be established.

As of Version 8.3D, this feature is not allowed for systems configured for a VME (Pro*file* internal) Video Switcher, since the port that controls the Profile Timeline Channel also controls the VME.

Appendix B: MPEG Encoders and Decoders.

The PDR-300 running V2.4 and higher Pro*file* software supports MPEG decoders and encoders as well as the standard JPEG codecs. In these systems, an assortment of JPEG codecs and MPEG decoders and encoders can be intermixed. You can create JPEG timelines from either, both or a mixture of JPEG and MPEG sources, as well as allowing the creation of MPEG Timelines from either, both or a mixture or MPEG and JPEG sources.

A Source, Timeline, or Recorder in Pro*file,* when controlled by Super Edit can be of EITHER a JPEG or MPEG type, it cannot be both. The decision of whether the source, Timeline or Recorder is MPEG or JPEG is based on the first letter of the name of the Pro*file* configuration file as named in INIT # 172-175. If the first letter is M, then that port is treated as MPEG. For example, if source "B" configuration file named in INIT # 174 is VTR3, that is a JPEG source. If the configuration file named is MPG3, then that will be a MPEG source.

Profile JPEGs are codecs, meaning **CO**der**DEC**oder. Thus they can either be used as a decoder (source) or encoder (recorder). MPEGs are EITHER decoders or encoders.

If it is desired to have the Timeline (R-VTR) MPEG, then Super Edit MUST be configured for FULL VIEW RECORD (INIT # 169), since MPEG channels are either an encoder or decoder, and not a codec as are the JPEG channels. Also, the type of the FULL VIEW Recorder (C-VTR) must match that of the Timeline. If the Timeline is MPEG then the C-VTR must be MPEG as well.

When running a MPEG encoder, which must be C-VTR, the data rate and other parameters of MPEG encoding are either defaulted or set. More will be said of this later. We must mention that the MPEG encoder data rate determines the minimum size Clip that can be digitized. The TEK MPEG note states that "the shortest MPEG Clip that the Pro*file* system can play, is four GOPs or two seconds long, which ever is greater". The allowed MPEG data rate is from 4 to 50 MBits (Megabits) per second. In our tests we have found that if the data rate is set to or near the lower limit, than edits MUST be at least two

seconds long. If the MPEG data rate is set to the higher data rates than shorter edits are allowed, but be aware that Pro*file* promises nothing below two seconds.

Operational Notes

    1. In the case of JPEG Timeline and MPEG Clips, since the actual Clips and Timeline are not compatible, in the case of a cut that would normally be a "drop in", the Clip will be digitized in real-time. The same is true in the case of a MPEG timeline and a JPEG Clip.

    2. We observe that it is possible to mount a JPEG source onto a MPEG decoder and get audio only, no video, without ill effects. Mounting a MPEG source onto a JPEG source appears to work the same (audio, no video) but has the side effect of adding a 0 duration JPEG track on the Clip. This causes no ill effects that we have noticed, however Media Manager now identifies this Clip as a multi, rather than MPEG.

    3. MPEG movies can only be made in Mode 1 (PDR Shared Media). Early versions of Pro*file* V2.4 software do not work correctly: V 2.4.4.2 is the first version that corrects Movie Mode 1. Tektronix has advised us that a Mode 2 movie (Rendered media) will not be supported for the immediate future.

The Setup of Configuration Files with MPEG is slightly more entailed than with JPEG, since PRCCFG does not know about MPEG encoders or decoders. This is the recommended procedure for Pro*file* version 2.4. Pro*file* version 2.5 will have a new configuration utility.

    1. Set up everything as if this was a PDR100/200 using all JPEG codecs, using PRCCFG and assure all works as expected.

    2. Using NT Explorer, locate the configuration files in C:/Profile/Configs. Double click on VTR1.CFG. The first time this is performed, a pop-up window should appear asking which viewer to run for this file. Select NOTEPAD (or your favorite text editor). SAVE AS the file, naming it MPG1.CFG (or something similar, starting with M).

    3. Locate the line that resembles:

        01-00 75000   // Index 02

        … it should be one of the first several lines.

    4. Put in "//" (no quotes, just the double slashes). This is a comment symbol and tells the system to ignore the line.

    5. Immediately under the line you just commented out, paste a copy of (or just retype) the line you just commented out, but without the comment symbols. Change the 01 (type of JPEG) to 13 (type of MPEG decoder). Remove the 75000. It should look like:

        //01-00 75000   // Index 02
        13-00   // Index 02

    6. Close and exit.

7. Repeat the procedure for VTR2.CFG and VTR3.CFG files, renaming them MGP2.CFG and MPG3.CFG.   Change the line that has the 75000, but BE CAREFUL since the other number will be different, and you want to use the number in the file. On our system:

MPP2.CFG:
// 01-01 75000   // Index 01
13-01   // index 01 - MpegDec#1 (Use 13-01 for MpegDec#2, etc.)

MPG3.CFG
//01-02 75000   // Index 01
13-02   // index 01

Yours may differ. The -01, -02 etc is "which" JPEG/MPEG. 00 is the first, 01 is the second, etc.

8. The C-VTR file is DIFFERENT since it is the recorder.   Make a copy as before and call it MPG4.CFG. The line you are looking for will look like:

01-03 75000   // Index 02

Comment it out and make a copy. Change the 01 to 12 (MPEG encoder) and change the 03 (yours may differ) to 00. This dictates to use the FIRST MPEG encoder. Should look like:

//01-03 75000   // Index 02
12-00   // index 02

Look at a Pro*file* sample configuration file named MPEGEnc.cfg in the configuration directory of your Pro*file* for additional information regarding MPEG encoder parameters.

Appendix C: Time Code Generator Compatibility (TCG) issues.

In previous releases of Super Edit NLE software, the specification of the source of timecode for recording from external sources was made in the configuration files on Pro*file* using PRCCFG. This makes it difficult to switch between FULL VIEW RECORD ON and OFF. In this release, we have moved this decision into Super Edit if INIT # 169 is set to "TC FROM GEN".   There are possible compatibility issues if the old configuration files are used unmodified.

The suggested modification is to edit the configuration files with PRCCFG to set all of the "Timecode Inputs" to None. If this is not done, there will some interaction between TCG assigned in PRCCFG and letting Super Edit allocate the TCG. These are the rules:

1. If NO TCG is assigned by PRCCFG, the allocation of TCG by Super Edit works in all cases of INIT # 100, INIT # 29 and INIT # 169 (FULL VIEW RECORD ON/OFF). In all cases, the needs of INIT # 169 are honored.

2. If TCG is assigned to the R-VTR in PRCCFG and INIT # 169 is set to FULL VIEW RECORD OFF, all works as before.

3. If TCG is assigned to the C-VTR in PRCCFG and INIT # 169 is set to FULL VIEW RECORD ON, all works as before.

4. There is a resource assignment conflict if the TCG is assigned to either R-VTR or C-VTR, and the opposite VTR is used as the Recorder.

Appendix D: Batch File to open all ProLinks

This is an example of a Batch File (we call ours ps.bat) located in the Pro*file* Directory. Create the file using your favorite text editor:

```
Sleep 1
Start/min     prolink        P1

Sleep 1
Start/min     prolink        P2

Sleep 1
Start/min     prolink        P3

Sleep 1
Start/min     prolink        P4
```

Create a Shortcut and drag it to the desktop.