editware
GRASS VALLEY, CALIFORNIA

Super Edit™ TECH NOTE
Version 8.5 / 1.1 and later

Tektronix Profile PRO Series (MPEG-2)
Setting up the MPEG-2 version's 2 decoders/1encoder

**These instructions are for using the internal video switcher (VME),
external audio mixer, E-E previewing with Full View Record on.**

NOTE: MPEG Profile control MUST be done in FULL VIEW RECORD mode

In **PRCCFG** or **CFGEDLIN**, set **Channel 1** as follows (RVTR/Timeline playback):

> Video Decoder: MPEG Player #1 (save file as MPEG1)
> 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. On the PRO Series, there are only two SDI and two analog video inputs, cross-point numbers 11-14. Video cross-point 19 is Black. This Black is generated by Pro*file*'s FTB (Fade to Black) circuitry.

> Video Output: To Line monitor. Select either the first SDI output or the first analog output.

When viewing the selections under Video Output for Channel 1 (in PRCCFG or CFGEDLIN), 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** or **CFGEDLIN**, set **Channel 2** as follows:

Video Decoder:	MPEG Player #2 (save file as MPEG2)
Video Input:	None
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	2
Timecode Input:	None
Timecode Output:	None

In **PRCCFG** or **CFGEDLIN**, **Channel 3 is unused** (BVTR= playback VTR, not a Profile channel)

In **PRCCFG** or **CFGEDLIN**, set **Channel 4** (CVTR/RCDR=RVTR/Timeline Record) as follows:

Video Encoder:	MPEG Recorder; encoder (save file as MPEG3)
Video Input:	This input must be externally connected to the Pro*file* Video Output specified in INIT# 171.
Video Output:	None.
Audio:	Select at least 1 and more if desired.
Timecode Codec:	3
Timecode Input:	None
Timecode Output:	None

Using CFGEDLIN.exe (Profile Protocol Resources) setup program.

Available as part of v2.5.1 Profile builds and V1.0.1 Profile PRO Series builds is a new configuration utility labeled "Profile Protocol Resources" in the desktop. It is actually a program called CFGEDLIN.exe.

Editware is currently recommending its use for configuring the ProLinks (serial control) configuration files. It is much more capable than either PRCCFG or QuickStart.

These instructions are only applicable to a CFGEDLIN.exe built on or after 4/15/99, so if this description does not match what you see, you may need an updated version of CFGEDLIN.exe. An updated version is available from the Editware Web site as a self-extracting file.

Before starting Profile Protocol Resources, ensure that VdrPanel is NOT running and that Super Edit is not currently in NLE mode. Start Profile Protocol Resources (CFGEDLIN.exe) from the desktop.

For each Profile channel (R, A, B, C), create a configuration file. Start by selecting the video resources for the first channel (R-VTR) as described in the setup instructions for your particular configuration. For example, assuming an MPEG-2 VME configuration, the R-VTR would normally have MPEG PLAY#1 and SDI-OutA-J14 as the only video resources selected. A resource accidentally selected can be unselected by again attempting to select. When properly selected, click on "Add Video" button. Next, select the desired audio resources and click on "Add Audio." Finally select Timecode resources.

Normally you would not select any Timecode Input nor Timecode Input resources, selecting only one Timecode Track. It is recommended that only the odd numbered Timecode Tracks be used (TCRec#1 for R-VTR, TCRec#3 for A-VTR, etc) at this time since this mirrors the convention established by PRCCFG. Click "Add Timecode." Now click on "Create File" and name this file: it is recommended that the name VTR1 (VTR2, VTR3, VTR4) be used for JPEG resource files and MPG1 (MPG2, MPG3, MPG4) be used for MPEG resources. (The Pro series will only have two JPEG codec channels and the MPEG Pro will have three file names; 2 decoders/1 encoder)

Continue for all resource files as needed. For a Profile that has both MPEG and JPEG resources (such as a PDR300) you should create both JPEG and MPEG configuration files if you wish to be able to access and/or generate both JPEG and MPEG media.

Defining Configuration Files

INITs 172, 173, *174* and 175 relate to the particular Profile channel configurations that NLE uses when running NLE.   If defining clips as suggested above, these Configuration Files should be assigned as:

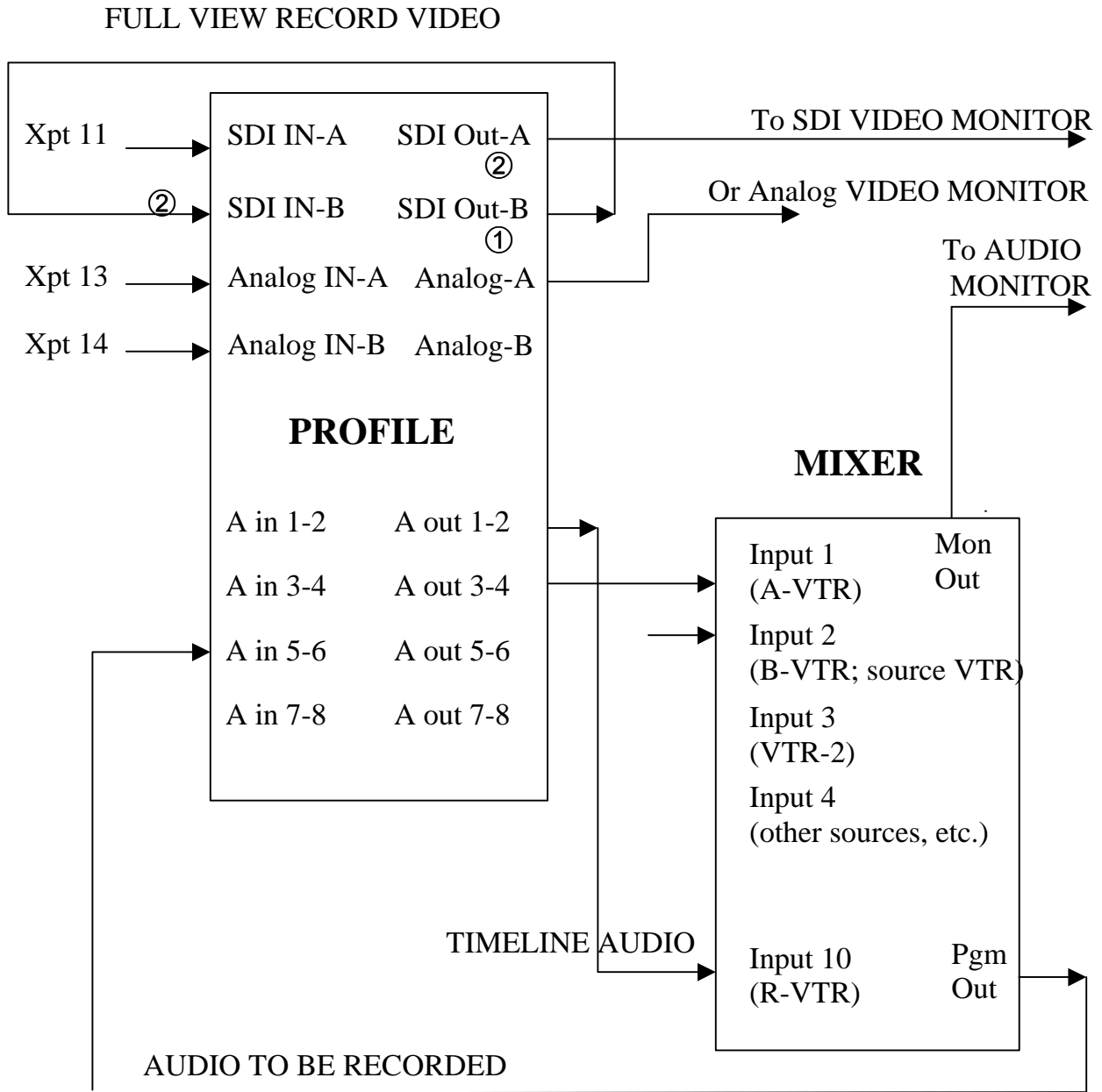|	
INIT 172	MPEG1 (MPEG Player #1; decoder 1)
INIT 173	MPEG2 (MPEG Player #2; decoder 2)
INIT 174	*Not used with PRO series; disregards any file name here*
INIT 175	MPEG3 (MPEG Recorder; encoder)

NOTE: Any file name may be used to define the MPEG-2 Configuration files as long as they begin with the letter "M" (ie., MPG1, MM1, MAMMA1, etc)

Set video timing

Open the Pro*file* utility called **Configuration Manager**. On the Menu Bar, select **Option / System 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 audio mixer with FULL VIEW RECORD ON with SDI output for video monitoring** (alternatively, use Analog Video Out for monitoring).

FULL VIEW RECORD VIDEO

Xpt 11 →	SDI IN-A	SDI Out-A ② → To SDI VIDEO MONITOR
② →	SDI IN-B	SDI Out-B ① → Or Analog VIDEO MONITOR
Xpt 13 →	Analog IN-A	Analog-A
Xpt 14 →	Analog IN-B	Analog-B

PROFILE

A in 1-2	A out 1-2
A in 3-4	A out 3-4
A in 5-6	A out 5-6
A in 7-8	A out 7-8

To AUDIO MONITOR

MIXER

Input 1 (A-VTR)   Mon Out

Input 2 (B-VTR; source VTR)

Input 3 (VTR-2)

Input 4 (other sources, etc.)

TIMELINE AUDIO

Input 10 (R-VTR)   Pgm Out

AUDIO TO BE RECORDED

① Assigned in INIT # 171 (VIDEO OUT=002)
② Assigned in PRCCFG as MPEG player #1 and externally cabled (out #2, in #2)

VIDEO Xpts.		AUDIO Xpts.	
R-VTR	0	R-VTR/ply1	10
A-VTR	1	A-VTR/ply2	1
B-VTR	11	B-VTR/vtr1	2
C-VTR(RCDR)	12	C-VTR (n/a)	-
BLACK	19	BLACK	0

PRCCFG setups for example in Diagram 1 are…

Channel 1: (R-VTR/Timeline playback)

Video Decoder #1:	MPEG Player #1
Video IN:	NONE
Video OUT:	SDI-OUT A-J14 (#1)
Audio IN/OUT:	1 and 2
Timecode Codec:	1
Timecode IN:	NONE
Timecode OUT:	NONE

Channel 2: (A-VTR)

Video Decoder #2:	MPEG Player #2
Video IN:	NONE
Video OUT:	NONE
Audio IN/OUT:	3 and 4
Timecode Codec:	2
Timecode IN:	NONE
Timecode OUT:	NONE

Channel 3: (B-VTR)   No Profile PRO resources used for B-VTR

Source videotape machine should configured for B-VTR,
do NOT use a Profile channel for B-VTR

Channel 4: (C-VTR is named "RCDR" because Full View Record On uses this channel
for recording only, not used for playback)

Video Encoder:	MPEG Recorder
Video IN:	SDI-IN B-J14 (#2)
Video OUT:	NONE
Audio IN/OUT:	5 and 6
Timecode Codec:	3
Timecode IN:	NONE
Timecode OUT:	NONE

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

R-VTR: (Decoder/MPEG Player #1):   Video cross-point 0.
A-VTR: (Decoder/MPEG Player #2):   Video cross-point 1.
B-VTR: (Source that represents source VTR):   Video cross-point 11.
C-VTR: (Used exclusively for recording only, not playback, hence no cross-point)

Full View Record mode (turn ON w/Init #169): FVR uses Video cross-point 12

 Black: (from Profile)   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 Profile port is shared for the R-VTR and the VME Switcher.

   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 (INIT# 100).

   NOTE: It is necessary to have the C-VTR assigned as **NATIVE** in order to use it as the Recorder. FULL VIEW RECORD will automatically name the C-VTR "RCDR".

   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.