editware
GRASS VALLEY, CALIFORNIA

TECH NOTE

Fastrack VS™ Version 1.0 and later

FASTRACK VS AND THE PROFILE VME (INTERNAL MIX/EFFECTS BOARD)

This document covers Fastrack VS and GVG Profile's internal VME mix/effects board utilized as the editing system's internal video switcher.

Covered in this technical note:
- Profile Configuration Manager
- Physical connections
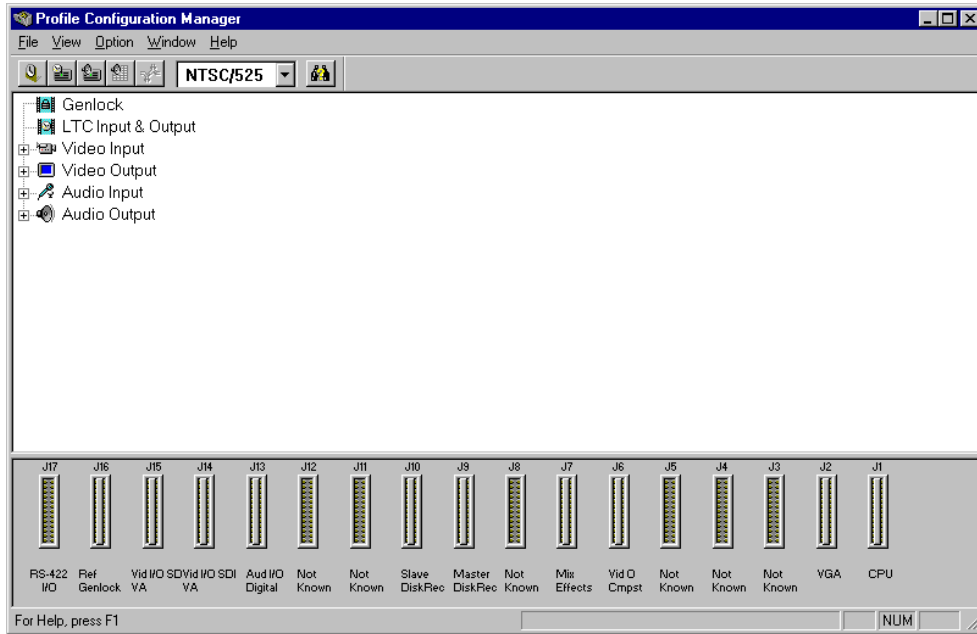- Profile and Fastrack configuration settings (PDRHosts.ini and FTConfig.ini files)

Profile Configuration Manager

Open the PDR Configuration Manger by double clicking on the **Configuration Manager** desktop icon.
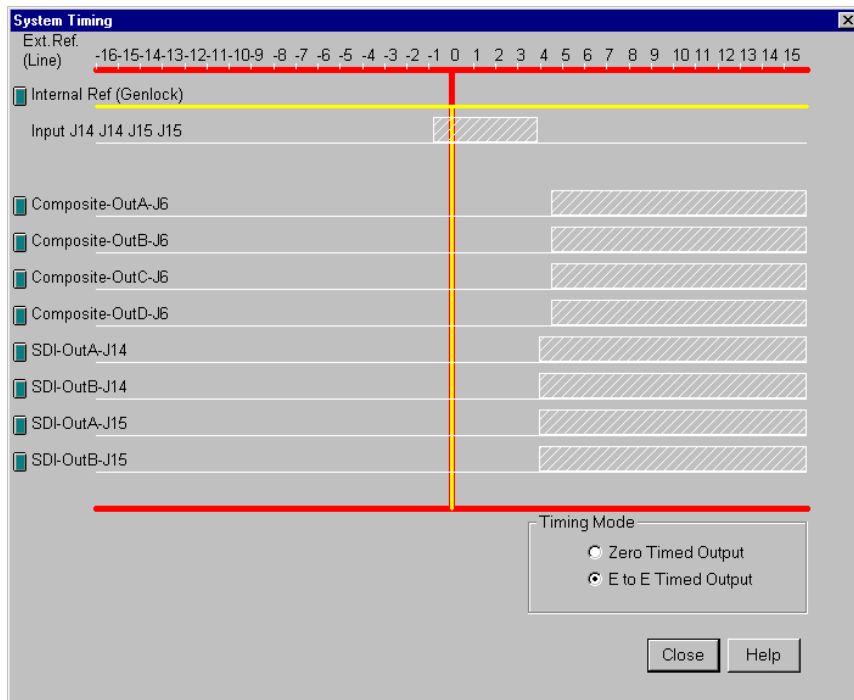

Configuration
Manager

PDR Configuration Manager
desktop icon

Profile Configuration Manager

The lower section of the Profile Configuration Manager window shows all installed boards and the slots they occupy; count goes from right to left *(Note the VME board is in slot J7 in this example, each PDR display will vary depending on combination of boards)*


The second (from the left) icon image, just under the header bar in Configuration Manager, is the **System Timing** icon and brings up this window. Ensure that "E to E Timed" output is selected for VME. (*Your screen may appear different from the above image, but must be in E-E.)*

Video Input and **Video Output** selections in the Configuration Manager will list all available video inputs and outputs on your specific system. The example shown below has two SDI input boards (slots J14 & J15) with four SDI inputs (listed under Video Input) and two SDI output boards (four outputs), plus a Video Out Composite board (J6) with four Composite outputs.
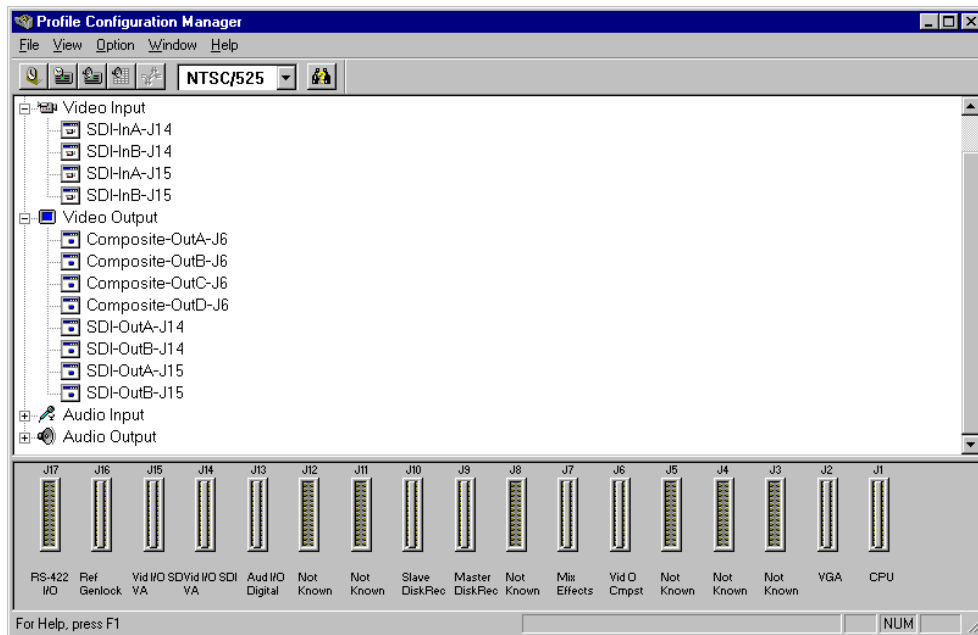
(Note the location in this list for each input and output; the "position" in this listing determines the Video crosspoint number used in the Fastrack configuration file; 1st = 0, 2nd = 1, etc.)
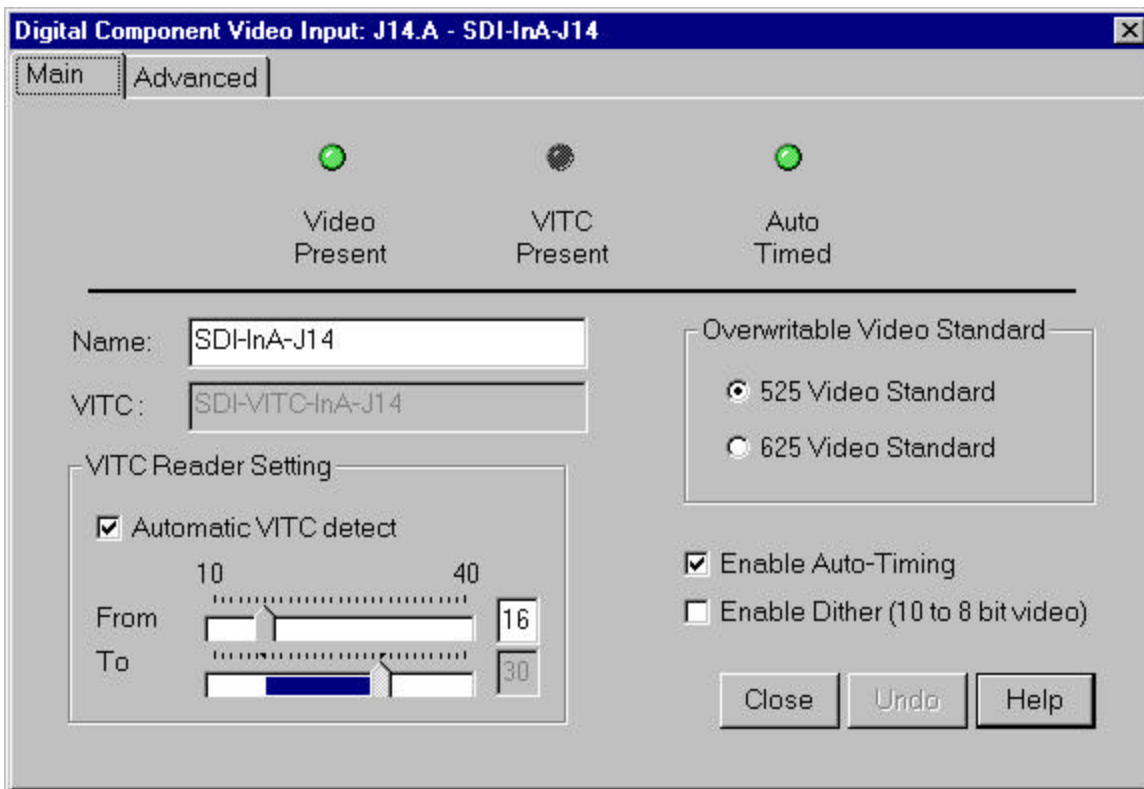
Each Video Input should be set to "**Enable Auto-Timing**" and confirm that both "Video Present" and "Auto Timed" lamps are illuminated, indicating video and timing are correct.

Physical Connections

Monitoring
Optimum monitoring for the Fastrack will occur when utilizing an SDI video output to an SDI capable monitor. Next best is to convert an SDI output to RGB Component video and/or Composite video with the appropriate monitor attached. If there are only Composite Video outputs available, then a composite monitor will suffice. Select a Video Output for displaying the Timeline playback (typically the first Profile channel using the first SDI-OutA-J14) and connect to your SDI monitor (or SDI converted to RGB or Composite) or between the first Composite output (Composite-OutA-J6 in our example) and a composite video monitor.

VME Effects Recording
Typically an SDI channel (if available) will be used for the "effects loop" out of the PDR back into the PDR. With two SDI boards (as in our example), there will be four SDI inputs and four SDI outputs. For ease of configuring the system, select the fourth PDR channel as the typical recorder channel (although any/all channels may record if connected to input signals) and the first channel as the typical VME "effects/monitor" output channel. Connect a short coax cable between the first input (SDI-InA-J14 on our example) and the fourth output (SDI-OutB-J15). This will send all "effects" video out of the VME board to the first input.

Fastrack VS Configuration
Fastrack can utilize the video inputs on the Profile as external video crosspoints for external devices such as VTRs, cameras, router feeds, etc.

Video Crosspoint assignments in the [Shift] +[Assign] configuration menu of Fastrack are from 0 to 10 (inputs 1 thru 11) with 0 relating to the first available video input (SDI-InA-J14 in our example), but will vary with each Profile and optional input board configuration/combination.

Track	On	Name	Class	Device	Auto	Port	Pool	V	A1	A2	A3	A4
1	☒	PRD1	PROFILE	PDR	☐	B021390:1	PROFILE	0	1	2		
2	☒	PRD2	PROFILE	PDR	☐	B021390:2	PROFILE	1	3	4		
3	☒	PRD3	PROFILE	PDR	☐	B021390:3	PROFILE	2	5	6		
4	☒	PDR4(rec)	PROFILE	PDR	☐	B021390:4	PROFILE	3	7	8		
5	☒	Omneon1257	VDCP	Omneon	☒	COM4	Omneon	10				
6	☒	Omneon1017	VDCP	Omneon	☒	COM5	Omneon	11				
7	☒	Omneon1036	VDCP	Omneon	☒	COM6	Omneon	12				
8	☐		none		☐	COM7						
1.1	☐		none		☐	COM3						
1.2	☐		none		☐							
1.3	☐		none		☐							
1.4	☐		none		☐							
1.5	☐		none		☐							
1.6	☐		none		☐							
1.7	☐		none		☐							
1.8	☐		none		☐							
2.1	☐		none		☐							
2.2	☐		none		☐							

The numbering for the Fastrack video crosspoints is determined by the location in the "list of Video Inputs" (shown earlier) with the first **INTERNAL** (the Profile channels themselves) input having crosspoint 0, the second having crosspoint 1, and so on (zero based). **EXTERNAL** inputs add 10 for the external physical inputs (typically JA-14 IN = 10, etc), hence a VTR attached to the second video input would be assigned the video crosspoint of 11.

	Section	Name	Value	Comment
001	Settings	FramesPerSecond	30	determines the system frame rate (restart requ
002	Settings	AutoSaveInterval	00:00:00:00	the time to elapse before the next save (0=aut
003	Settings	TimelineStartDefault	01:00:00:00	where to place the timeline at startup
004	Settings	MaxTotalEditDur	00:50:00:00	will calculate an display the total/remaining ed
005	Settings	Timer	GenLock	use 'System' UNLESS you have no reference
006	Settings	UseWinTv	yes	use the internal TV board if installed
007	Settings	AllowCrashRecordOnce	no	'no' MAN REC must be pressed twice to start a
008	Settings	Keymap	K6	describes the AT keyboard style you are using
009	Settings	TotalDurMode	count up	'count up'=show total 'count down'=show rema
010	Settings	InkeyInvertShift	no	'yes'=the panel keys 'IN' and 'BAK IN' are swa
011	Shotlist	Type		Custom
012	Shotlist	Params		Custom
013	Keyboard	Port	COM1	normally COM1
014	Keyboard	JogFactor	300	
015	Keyboard	VariFactor	300	
016	Keyboard	ShuttleFactor	300	
017	Keyboard	TableFileName	L2_KeyTableV1.ini	
018	Jogger	Port	COM2	normally COM2
019	VideoSwitcher	Type	PROFILE	GVG and SONY depend on swi files in the swit

[Shift] + [Init] brings up the Initialization dialogue page for Fastrack.
Note line 019 is for the VideoSwitcher Type, for VME this is PROFILE.

	Section	Name	Value	Comment
012	Shotlist	Params		Custom
013	Keyboard	Port	COM1	normally COM1
014	Keyboard	JogFactor	300	
015	Keyboard	VariFactor	300	
016	Keyboard	ShuttleFactor	300	
017	Keyboard	TableFileName	L2_KeyTableV1.ini	
018	Jogger	Port	COM2	normally COM2
019	VideoSwitcher	Type	PROFILE	GVG and SONY depend on swi files in the swit
020	VideoSwitcher	Connection	B021390	COM10 is Port H
021	VideoSwitcher	Parity	ODD	
022	VideoSwitcher	IniFile		located in the Switcher directory
023	VideoSwitcher	PvwBus	0	
024	VideoSwitcher	PgmXpt	0	
025	AudioMixer	Type	ESAM	depend on swi files in the switcher directory
026	AudioMixer	Connection	COM10	
027	AudioMixer	Parity	ODD	
028	AudioMixer	Devicefile	esam2.mix	located in the Mixer directory
029	Jobs	CurrentMovieName	INT1:/default/DFDIZTES	the default name for the complex movie
030	Jobs	TempClipsDirectory	INT1:/temp	the default directory for the temporary files on

The remaining portion of the [Shift] + [Init] page shows the video switcher settings.
Line 020 refers to your PDR's 'network ID' while line 022 is blank for the VME.
Note this example includes the ESAM2 driver for audio mixer.

Fastrack Configuration file: <u>FTConfig.ini</u> (engineers only)

The Fastrack configuration file (FTConfig.ini) is in the FTRuntime directory and opened with NotePad (after making changes, SAVE -- do not "Save As" -- this will alter the extension). It must be saved in its original ".ini" file format.

```
FTConfig.ini - Notepad
File  Edit  Format  Help

[Settings]
FramesPerSecond=30
Timer=GenLock
UseWinTv=1
Keymap=K6
FramesPerPixel=70
OnAirPrerollMode=2
CheckAllstop=1
LockCtiToOnAir=1
AutoRipple=0
EEMode=3
MyRecorder=-1
AutoHot=1
AutoFollow=0
AutoSelect=0
AudioMixerEnabled=1
ShowEditmarkerLines=0
InkeyInvertShift=0
AllowCrashRecordOnce=0
VideoSwitcherEnabled=1
BlackProgramBlack=1
BlackVideoBlack=1
EventOutDisplayMode=1
TotalDurMode=0
SpeedState=0
DurMismatchMode=0
MyLayer=1
SingleEdit=0
MaxTotalEditDur=00:50:00:00
TimelineStartDefault=01:00:00:00
ShowGpiMarkerLines=1

[Keyboard]
Port=COM1
TableFileName=L2_KeyTableV1.ini

[VideoSwitcher]
Type=PROFILE
Connection=B021390
Stage=ALL
VideoOut=0
VideoMonOut=7
Parity=ODD

[AudioMixer]
Type=ESAM
Connection=COM10
DeviceFile=esam2.mix
SendonEven=1
AutoLearn=1
Parity=ODD
```
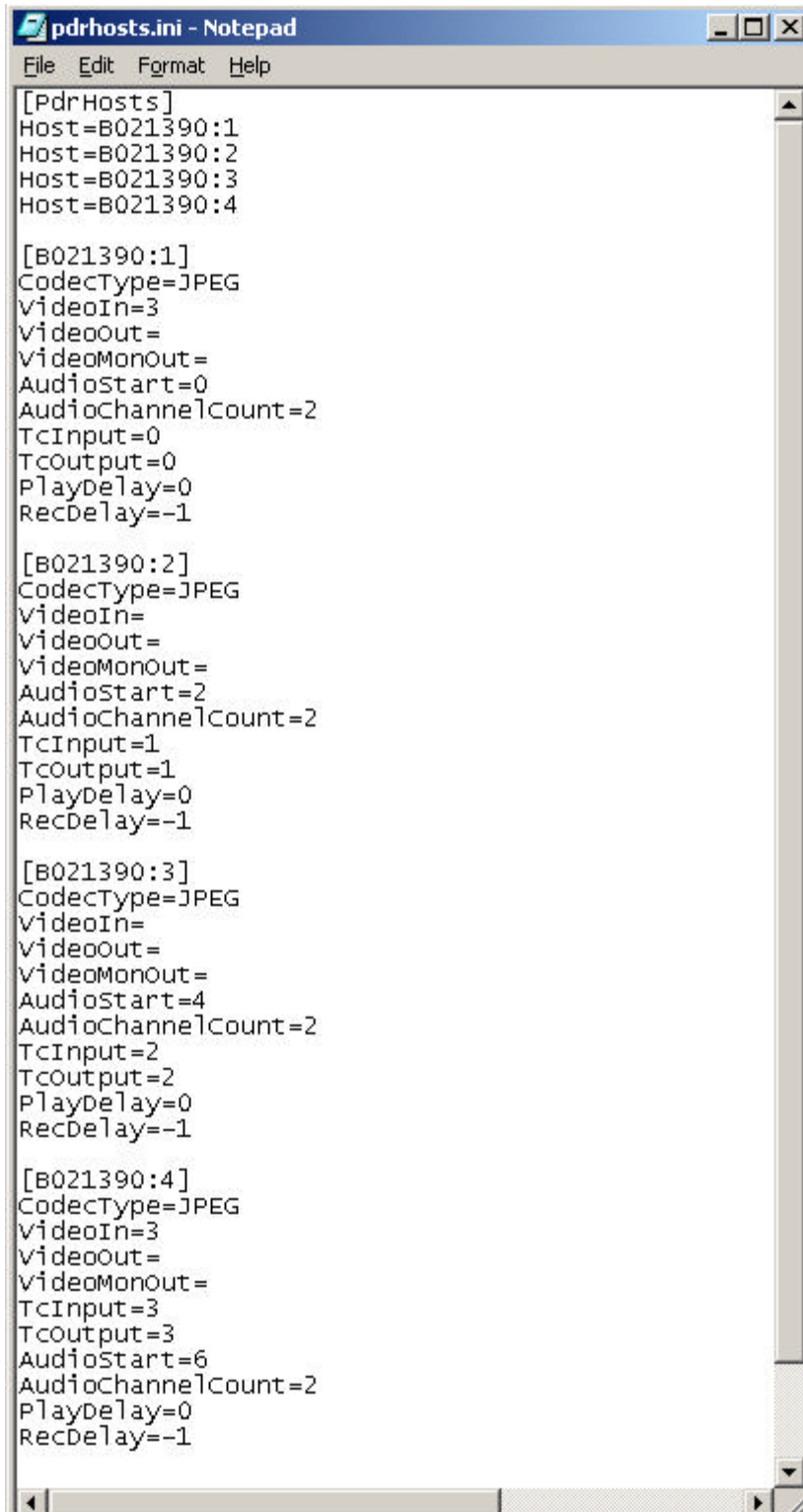
Please note the [VideoSwitcher] section should match this example. Put your PDR's "Network ID" into "Connection" (B021390 in this example).   The Video Out number will be for the physical connection used to 'loop back into' the current record channel on the PDR (set in PDRHosts.ini as that channel's Video In).   VideoMonOut is the output to your monitor. In our example, the first SDI out is our VideoOut (0) and last composite out (7) is the VideoMonOut.

Profile Configuration file: <u>PDRHost.ini</u> (engineers only)

The PDRHosts.ini file is typically set via the [Shift] + [Init] dialogue from within the Fastrack application. It can be edited directly using NotePad, but remember to Save (not Save As) any changes to keep the .ini file format intact.

```
pdrhosts.ini - Notepad                                    _ □ ×
File  Edit  Format  Help
[PdrHosts]
Host=B021390:1
Host=B021390:2
Host=B021390:3
Host=B021390:4

[B021390:1]
CodecType=JPEG
VideoIn=3
VideoOut=
VideoMonOut=
AudioStart=0
AudioChannelCount=2
TcInput=0
TcOutput=0
PlayDelay=0
RecDelay=-1

[B021390:2]
CodecType=JPEG
VideoIn=
VideoOut=
VideoMonOut=
AudioStart=2
AudioChannelCount=2
TcInput=1
TcOutput=1
PlayDelay=0
RecDelay=-1

[B021390:3]
CodecType=JPEG
VideoIn=
VideoOut=
VideoMonOut=
AudioStart=4
AudioChannelCount=2
TcInput=2
TcOutput=2
PlayDelay=0
RecDelay=-1

[B021390:4]
CodecType=JPEG
VideoIn=3
VideoOut=
VideoMonOut=
TcInput=3
TcOutput=3
AudioStart=6
AudioChannelCount=2
PlayDelay=0
RecDelay=-1
```
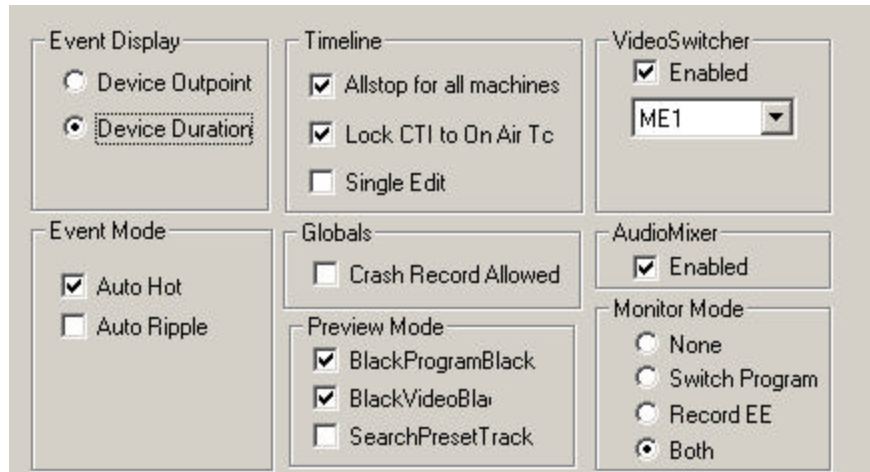
Note: The VideoIn on the fourth channel (default recorder)
is the fourth SDI input (3).

VME mix/effects board Configuration

[Shift] + [Config] (K6 keyboard) or [Shift] + [CFG] (FT) on Fastrack opens this screen.

Ensure that the **VideoSwitcher** "Enabled" box is checked and that you control **ME1**.
Other selections should match the above unless you have user preferences that differ
(most typical choices shown; Device Duration, Auto Hot, Lock CTI to On Air Tc, Allstop for all
machines, BlackProgramBlack, BlackVideoBlack, and Both).

Caution: Individual clips can have their "own" effects settings that can differ from the global
setting (the other choice with the internal VME switcher interface is PGM/PST). Effects set to
anything other than ME1 will not work. All clips and tracks must be set to ME1 for proper
control of the VME internal video switcher.
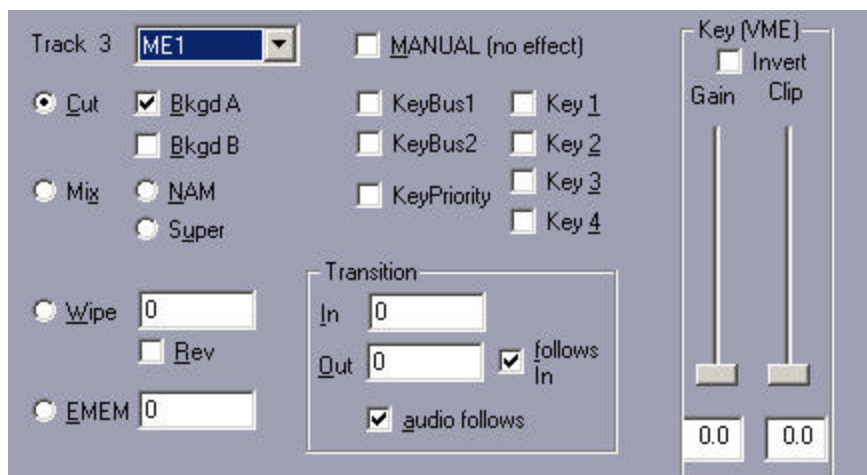
This menu appears by right mouse clicking on a clip and selecting "Effects"
or by pressing any of the effects keys: Cut (in this example), Dissolve or Wipe.

VME Wipe Patterns

The internal VME board supports 16 wipe patterns assigned in the Wipe dialogue accessed by pressing the Wipe key or right mouse clicking on a clip and selecting "Effects" from the menu.
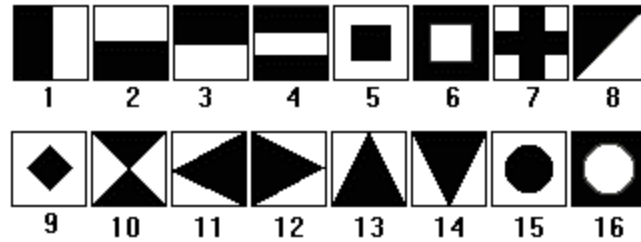
Wipe pattern direction: new image is represented by black area,
replacing the existing white area.