



Operators Manual

DiVA Editor & Controller Interactive Help Manual V1.1x80 >

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Manual Version DiVA V1.1x80

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Table of Contents

1. Conventions Used in this Manual	1
2. Contents & Specifications	3
2.1. The Basic DiVA Software Bundle consists of the Following:	3
2.2. Customer Supplied System Recommendations:	3
2.3. DiVA Hardware Options	3
2.4. Editware Supplied DiVA Hardware Specifications.....	4
3. Connecting the System	5
3.1. Connections	5
Power	5
Mouse and Keyboard	5
Jogger Panel	5
USB Software Security Key (Dongle)	6
Monitor(s)	6
Ethernet.....	6
Sync	6
Video Display Input.....	7
Video Output	7
GPI Output	7
RS-422 Break-out Panel.....	8
DIVA DATA TRAP	8
3.2. Start-Up and Shut-Down Sequence	9
Turning On the DiVA System.....	9
Logging On.....	10
Starting DiVA.....	10
Installing Software Updates	10
How to upgrade a DiVA Dongle in the field.....	11
Loading Configuration Files	13
Exit DiVA	13
Windows keys 	13
Shutting Off the Computer.....	14
Your DiVA Port & Device Assignment Table.....	15
4. Configuring DiVA	17
4.1. Assignment Page	17
Navigating the Assignment Page.....	17
4.2. Assigning Devices to Tracks	18
Track	18
On	18
Device Name	18
Class	18
Device	18
Auto.....	19
Port.....	19
Pool.....	19
Video Switcher.....	19

Audio Mixer	19
Color	20
4.3. Assignment Settings.....	20
Swap Tracks	20
4.4. Video Switcher Settings.....	21
Enabled (Communications Enabled)	22
Default M/E.....	22
Device File.....	22
Port.....	23
Status	23
Transition Delay.....	23
MEM Delay	23
PEG Delay.....	23
Set Forward	23
Send Commands.....	23
Enabled M/Es	24
4.5. Audio Mixer Settings.....	24
Audio Mixer Settings Enabled (Communications Enabled)	24
Device File, Mixer	24
Port, Mixer	25
Status	25
Transition Delay.....	25
MEM Delay	25
Send Commands.....	25
4.6. Preview Settings.....	25
Preview settings Enabled (Communications Enabled).....	26
Video Preview.....	26
E-E (VTRS only)	26
Use Aux Bus	26
PGM Reentry (PGM XPT).....	26
Timing Delay.....	26
Enabled	27
Separate Preview Switcher.....	27
Device File	27
Port.....	27
RVTR.....	27
PGM	27
Timing Delay.....	27
F1-F2	28
Audio Preview.....	28
E-E (VTRs only).....	28
Use Mixer.....	28
Record Confidence	28
Timing Delay.....	28
Enabled	28

5. Menu Bar **29**

5.1. File.....	29
New Timeline.....	29
Open Timeline	29
Save Timeline.....	30
Save Timeline As	30
Save Configuration	31
Exit DiVA	31
5.2. Settings	32
'Display' Options	32
Global Settings	34
Jogger.....	37

- Pre/Post Roll 39
- Time Settings 40
- Assignment Page 41
- Device Properties 41
- 5.3. Edit Mode 43**
 - Edit Mode On 43
 - Default Edit Mode (VTRs only) 43
 - PreRead (Read Before Write)..... 44
 - Auto Pickup After Edit..... 44
 - Pickup Match to In 44
 - Clear Tracks at Pickup 45
 - Auto Select Record Track..... 45
 - Lock TLG to Edit Track..... 45
 - Keep Outpoint..... 45
 - Use Source Duration 45
 - Record Off (Dummy Edit, Paper Edit)..... 45
- 5.4. Modules..... 46**
 - Add Small or Large Module 46
 - Audio/Video Modules 46
 - Device Control Modules 46
 - Edit Modules 47
 - Events..... 47
 - Keypad Modules 47
 - Macros Modules 47
 - Match Modules 47
 - Search Modes Modules 48
 - Server Control Modules 48
 - Save Module Configuration 48
 - Load Module Configuration..... 48
- 5.5. Special..... 49**
 - Multi Cam 49
 - Auto Multi 49
 - Record Lock 50
 - Allow CC for K2 Edit (Closed Captions for K2/Summit Servers Only)..... 51
 - Allow Omneon Reference CLIPS (Omneon/Spectrum Servers Only) 51
 - Lock CPI..... 52
 - No External Reference 52
- 5.6. Help 53**
 - Search... 53
 - DiVA Ops Manual 53
 - Keyboard help 53
 - Turn Off Hover Messages..... 53
 - About..... 53

6. Tracks 55

- Assigning a Track 55
- Selecting a Track..... 55
- Choosing Track Pages 55
- Second Page Data Warning 55
- Track Status Display..... 56
- Track Button 56
- The Timecode Display 56
- Active Track Status LEDs 57
- 6.1. Track Properties 58**
 - Participate ON-AIR Play/Rec..... 58
 - Participate On-Air Audio/Video 58
 - Control Enabled..... 59
 - Record Slave (Omneon / Spectrum only) 59

Track Frame Rate.....	60
Allow TC Jump.....	60
Hold Lock.....	60
Lock Window.....	60
Timer.....	61
Timecode LTC.....	61
DF (Drop Frame).....	61
More about NTSC Timecode.....	61
Frames Offset.....	62
Preset.....	62
Color.....	62
6.2. Swap Tracks.....	62
Swap Tracks on the DiVA Keyboard.....	62
Swap Tracks in the Assignment Page.....	62
7. Events.....	65
7.1. Events Explained.....	65
Transition Type.....	65
Transition Rate.....	65
Speed.....	66
Audio Transition.....	66
Audio sub-Tracks.....	66
Reel ID / Clip Name & Path.....	66
Video Server Internal Transition.....	66
Video Server Internal Transition Rate.....	66
Video sub-Track.....	66
Audio sub-Tracks.....	67
Event OUT-time.....	67
Disabled Audio sub-Track.....	67
Note.....	68
Event IN-time.....	68
Hot Event(s).....	68
Selected Event(s).....	68
7.2. Event Cursors.....	69
7.3. Record Events.....	69
Loading a Clip on a Server Track.....	70
'Load Live' for Omneon & Spectrum Servers.....	71
Search the Clip List.....	72
Loading a Clip on a VTR Track.....	72
Creating a Key, DVE, or other Crosspoint Event.....	73
8. Edit Mode.....	75
The VTR Black Track.....	75
The Server Black Track.....	75
The Record Event.....	75
Recorded Edits.....	76
Directory Path & Clip Name / Reel ID.....	77
Event IN-time.....	77
Event Out Time / Event duration.....	77
Status Icons.....	77
9. Keyboard Functions.....	79
9.1. Black Keys.....	79
ESC (Escape).....	79
EXIT.....	79

MACRO	79
Learn	80
AutoMac.....	80
Clear All	80
Load.....	80
RUN X2	85
PAGE UP	85
ARROW UP.....	85
PAGE DOWN	85
ARROW DOWN	85
ARROW LEFT (Points Of Interest, POI)	86
DEC (Decrement).....	86
ARROW RIGHT (Points Of Interest, POI).....	86
INC (Increment).....	86
9.2. White Keys	87
FASTLOG.....	87
FASTLOG SEARCH.....	87
FASTLOG ADD	87
FASTLOG MOD	87
TL MARK.....	87
NOTE	89
UNDO.....	89
REDO.....	89
9.3. Magenta Keys	90
MATCH EDIT TRACK.....	90
MATCH ALL	90
MATCH SOURCE	91
TAKE.....	91
MATCH MENU	91
Match to Device Position	92
Match to Device IN Time.....	92
OUT = Matched Event OUT	92
OUT = Original Rec OUT	92
Use Matched Event Duration	92
Use default Event Duration	92
Open Ended to Rec Reel Out	92
9.4. Light Green Keys.....	94
CUT.....	94
DISSOLVE	94
Video Effects.....	95
M/E Drop Down Menu.....	95
Bkgd A	95
Wipe #	95
Reverse	96
Auto N-R.....	96
Key Bus	96
Key Priority	96
Key Options	96
Transition IN	96
Transition Out	96
Cut Out	97
Out Same As In	97
Audio Follows Video	97
MEM	97
Learn	97
Recall.....	97
Add Effect.....	98
User Select	98
Force Trans	98

Force Run	98
Set Forward	98
SRVR (Server Transitions)	98
WIPE,	100
Set Forward	100
Show/Hide Wipes	101
Fire Wipe	101
KEY	101
Manual Select	101
Fill Bus	102
Matte	102
Manual Select	102
Fill Bus	102
Auto Select	102
Source Bus	102
Set As Default	103
MEM	103
Add Effect	103
User Select	104
Force Trans	104
Force Run	104
Recall	104
Learn	104
9.5. Light Blue Keys	105
GPI - General Purpose Interface	105
GPI 1 - GPI 8	105
Pulse Width	106
Offset	106
Remove All GPI	106
Enable all GPI	106
Show Lines	106
Fire Now	106
Setting a GPI Trigger on the Timeline	106
Record Tally	107
Moving a GPI	107
Properties	107
Delete Marker!	108
Delete All TL Markers!	108
Select All Markers	108
Deleting GPIs	108
Ripple GPIs	108
Select GPI Range	108
PEGS	109
Add	109
Delete	109
Pressing Delete deletes the currently selected PEG	109
Set Time	109
Tracking	109
Fire	110
On	110
Command	110
Time	111
Ref	111
Note	111
Adding Commands to the Command List	111
Removing Commands from the Command List	112
Properties	112
Delete TL PEG	112
Delete All TL PEGS	112

Select All TL PEGS.....	112
Examples of Valid PEGS Commands.....	113
PEGS Strings Commands.....	113
To fire a String PEG:.....	114
More About PEGS.....	115
ASSIGN.....	115
HELP.....	116
◀◀ REW.....	116
◀ REW.....	116
FF ▶▶.....	116
FF ▶.....	116
PLAY ▶.....	116
◀ PLAY.....	117
STOP.....	117
◀ SRCH.....	117
SRCH ▶.....	117
SPEED.....	118
Speed Ramps or Cuts.....	120
Using the Speed Dialog.....	120
Set/Add.....	120
Get Value.....	120
Ramp.....	120
Lock Source Position.....	120
Use TSO.....	120
Auto Fill.....	121
Control Points Move with Source Time.....	121
Copy.....	121
Paste.....	121
All Points.....	121
Clear All.....	121
Clear Quick Speed Entries.....	121
FILL (Fit & Fill).....	121
9.6. Light Purple.....	123
CLIP LIST.....	123
DELAY.....	123
NL INS.....	123
RIPPL (NL INS).....	123
NL DELETE.....	124
RIPPL (NL DEL).....	124
MOVIE (Make Movie).....	124
OPTIMIZE.....	124
9.7. Orange Keys.....	125
SEP EVENTS.....	125
ADD EVENT.....	125
GAPS (Fill Gaps).....	126
DELETE EVENT.....	126
Delete a Group of Events on a Track.....	126
Delete All Events on All Tracks.....	126
DELETE TRACK.....	127
KEEP TRACK.....	127
TOGGLE EVENT.....	127
TRIM IN.....	127
Trimming Events Using the Mouse.....	128
Slip an Event.....	128
Slide Events.....	128
MOD IN (Trim IN).....	128
TRIM OUT.....	129
Trimming Events Using the Mouse.....	129
Slip an Event.....	129

Slide Events.....	129
MOD OUT (<i>Trim OUT</i>).....	130
OPEN END.....	130
ALL (<i>OPEN END</i>).....	130
TRANSFER TC.....	130
TC/CTL.....	131
DURATION.....	131
Backtiming Event Durations.....	131
MOVE EVENT IN-point TO THE TLG.....	131
CUE THE CPI TO THE TLG.....	132
CUE ALL DEVICES CPI TO THE TLG.....	133
MOVE EVENT.....	133
Move an Event by a specific amount:.....	133
Move an Event using the Mouse.....	133
MOVE TLG.....	133
Move the TLG to a Specific Timeline Location.....	133
Move the TLG on the Timeline by a Specific Amount.....	133
9.8. Light Orange Keys.....	135
LOCK.....	135
LOCK (<i>partially</i>).....	135
Participate OnAir Play/Record.....	135
Participate OnAir Audio/Video.....	136
Control Enabled.....	136
GANG.....	136
LINK.....	136
TAG.....	137
ALIGN.....	138
9.9. Yellow Keys.....	140
SET IN.....	140
MOD IN (<i>set IN</i>).....	140
SET OUT.....	140
MOD OUT (<i>Set OUT</i>).....	140
MARK IN.....	141
MOD IN (<i>Mark IN</i>).....	141
MARK OUT.....	141
MOD OUT (<i>Mark OUT</i>).....	141
MARK IN TL.....	141
MOD IN (<i>Mark IN TL</i>).....	142
MARK OUT TL.....	142
9.10. Red Key.....	143
RECORD.....	143
MANUAL (<i>Record</i>).....	146
VTR Crash Record.....	146
9.11. Pink Keys.....	147
AUTO ASSEMBLE.....	147
Remove Other TL Events.....	147
Ignore R-Marks.....	147
Select All EDL Edits.....	147
Mode A.....	147
Mode B.....	148
Assemble.....	148
Cancel.....	148
Save Settings.....	148
From.....	148
Thru.....	148
Shortcut Keys.....	148
Set and Clear R-Marks.....	149
Set.....	149
Clear.....	149

All Edits.....	149
From	150
Thru	150
Shortcut Keys	150
The Auto Assembly Track.....	150
R-MARK	150
REPLAY	151
RECALL	151
PREVIEW.....	151
PREVIEW TL.....	151
9.12. Blue Keys.....	152
AUDIO-ONLY EVENT	152
VIDEO-ONLY EVENT	152
AUDIO SUB-TRACKS	152
LEVEL	152
ADDITIVE.....	153
SPLIT	153
Creating a Split Event	153
The Split Dialog	155
Select.....	155
Reset	155
Global	156
Keyframe	156
TBC CONTROL (VTRs only).....	157
SWITCHER OFF	158
MIXER OFF	158
9.13. Green Keys	159
EDIT TRACK	159
T1-T12 (optionally T2.1-T2.12)	159
SWAP TRACKS	159
10. Edit Mode	161
<hr/>	
10.1. The Edit Record Track	161
Assigning the Server Edit Record Track	161
Assigning the VTR Edit Record Track	161
10.2. Reel ID (VTRs Only).....	175
Assigning a Reel ID	175
Recalling a Reel ID.....	175
Show Reel ID	175
11. FastLog Database	177
<hr/>	
11.1. FastLog Table View.....	177
Media ID	178
Clip Name.....	178
Shot.....	178
Description	178
Keywords.....	178
A/V	178
TC In.....	178
Duration.....	179
TL Time	179
Rate.....	179
TC Type.....	179
Dev Name	179
Class	179
Device	179

IP Address.....	179
Media Format.....	179
Shot Date.....	179
Import Date.....	179
Imported By.....	179
Project.....	179
ShowName.....	180
Bin.....	180
Client.....	180
Producer.....	180
Director.....	180
Location.....	180
Camera.....	180
Record ID.....	180
TC Out.....	180
Project ID.....	180
Tenant ID.....	180
Group Num.....	180
11.2. The Search Function.....	180
11.3. The Mount Function.....	181
11.4. The FastLog Data Entry Dialog.....	182
11.5. The FastLog Modify Dialog.....	182

12. Omneon/Spectrum Server TechNote 183

12.1. Omneon / Spectrum Server Intro.....	183
12.2. DiVA Setup.....	183
12.3. Spectrum Directories.....	184
12.4. Playback and Record Timing.....	187
12.5. Protecting and recovering your work.....	193
12.6. Record Slaves.....	193

13. K2/Summit Server TechNote 197

13.1. K2 & Summit Server Intro.....	197
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1. CONVENTIONS USED IN THIS MANUAL

➤➤➤➤ Single keystrokes shown in the body of the text will be shown in uppercase, bold, and in brackets. For example: **[ASSGN]**. All keystrokes are understood to be specific to the DiVA keyboard unless otherwise marked.

➤➤➤➤ Shifted keystrokes shown in the body of the text will be shown in uppercase, bold, in brackets and *Italicized*. The **[SHIFT]** key is to be held down while a second key is pressed. When so, it is always shown before the second key to be pressed. For example: **[SHIFT][ASSGN]**. All keystrokes are understood to be specific to the DiVA keyboard unless otherwise marked.

➤➤➤➤ Mouse clicks shown in the body of the text are for use on the DiVA GUI, and will be shown in brackets preceded by **[Click]** for a left click, **[Right Click]** for a right click or **[Click][Click]** for a double left click. For example: **[Click][ASSGN]**. All mouse clicks are understood to be specific to the DiVA GUI unless otherwise marked.

➤➤➤➤ Instructions shown in mixed Upper and Lower Case text contained within {Braces} are specific to the DiVA Menu Bar. For example, to open a file you would click on: **{Menu Bar/File/Open}**.

➤➤➤➤ When keys are to be pressed in sequence they are separated by a comma. For example: **[SET IN],[2],[0],[00],[ENTER]**.

➤➤➤➤ Some commands require a keystroke to be pressed twice in a row in fast succession. These keystrokes are shown without commas. For example: **[PLAY][PLAY]** (pressing **[PLAY]** twice quickly) or **[SHIFT][PLAY][PLAY]** (holding **[SHIFT]** and pressing **[PLAY]** twice quickly).

➤➤➤➤ The word **Event**, when preceded with an initial capital letter, refers to an editing Event, a Clip or other Source that has been placed on the DiVA Timeline.

➤➤➤➤ The term **Current Event** refers to the Hot Event (with red border) on the current Track.

➤➤➤➤ The term **Selected Event** refers to an Event that has been [clicked] on with the mouse. When an Event is selected, it will have a yellow border.

➤➤➤➤ The term **Ghosted** is used to describe a text field or status area within DiVA that has been ghosted or turned light gray to show that it has been disabled or is for information display only.

➤➤➤➤ The term **At-rest** describes the DiVA application when it is not in the Preview or Record Modes, and no devices are currently playing.

➤➤➤➤ The **Timeline Guide** is described graphically as **TL**, and refers to the alignment of Events or actions that happen at the Timeline Guide position.

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2. CONTENTS & SPECIFICATIONS

2.1. The Basic DiVA Software Bundle consists of the Following:

- This Editware "DiVA Editing System" Manual.
- The DiVA software supplied on CD or USB drive.
- USB Dongle (Security key for software options).
- A Microsoft Intelli-mouse (or equivalent).
- A QWERTY keyboard.

2.2. Customer Supplied System Recommendations:

- Windows 7 OS 32-bit or 64-bit (We use 64). Windows XP will work.
- Multi Core Processor (Core 2 Duo, Quad, dual core Xeon or better).
- 4 Gig of memory (minimum).
- Graphics Adapter to handle 1680x1050 or 1920x1080 resolution
- HDD: 128GB SSD or Larger HDD.

- Graphics Card: PCIe, 16-Lane nVidia or FirePro - dual monitor.
- 1 PCI 16 Lane for the Graphics card (We use ATI Radeon, but any PCIe dual monitor card would work).
- 1 PCI 4-lane or better for the AJA Corvid card.
- 1 PCI 32-bit 5V - The key in the slot must be at the far end from the connectors, toward the middle of the Motherboard. If a serial port card is used that works with a 3.3V PCI slot, then the 5V slot is not needed. However, some serial 422 cards do not come with cables or breakout connector panels that are compatible with SMPTE RS422 pinouts.
- Ethernet 100 or 1Gb

- USB ports for Keyboard, Mouse, and Dongle.

2.3. DiVA Hardware Options

- DiVA rack mount chassis and Motherboard (DHW-TK)
- AJA Sync/Reference video capture card (DHW-C1) with Multi-format SD/HD-SD window for on-screen monitoring.
- AJA Sync/Reference video capture card (DHW-C2) with Multi-format SD/HD-SD window for on-screen monitoring and built-in frame-accurate Preview Switching.
- Fastrack or DiVA Jogger Panel (DHW-JOG).
- USB GPI. 8 output; 5V source (DHW-GPI).
- 8 serial I/O ports, 8 ports per card, (1m) connecting cables and a 19" 1- RU breakout panel per card (DHW-8P).

2.4. Editware Supplied DiVA Hardware Specifications

- Intel Core 2 Quad processor (or greater).
- 4GB of DDR RAM (or greater).
- 500GB (or greater) High Speed SATA hard disk.
- CD/DVD-RW Drive.
- 256MB (or greater) graphic acceleration card.
- 100Mb/1GB Base-TX, 32-bit auto configuring Ethernet.
- 400W, 110VAC or 220VAC auto-switching power supply.

Editware reserves the right to substitute parts and components that meet or exceed those listed.

3. CONNECTING THE SYSTEM

If you purchased your DiVA with the DiVA **chassis**, determine whether the editor is to be mounted in an equipment rack or placed on a console or tabletop. The DiVA chassis and optional Breakout Panel are both 19" rack mount ready. The following 'Connections' section is for connecting an Editware supplied hardware package.

Width:	19 in.	48.26 cm
Depth:	19 in.	48.26 cm
Height:	5.25in. (3 RU)	13.33 cm



Air is pulled from the front and expelled through the rear of the chassis. There are no sides, top, or bottom air vents.

3.1. Connections

POWER

Some chassis have two power switches; one switch on the back of the chassis, and the computer power-on switch on the front of the chassis behind the right side door. If your chassis has a rear power switch, and the switch is not **ON**, the computer power-on switch will not work. In normal operation, the front power-on switch is used to turn the computer on and off, and the rear power supply switch is left **ON**.

MOUSE AND KEYBOARD

Connect your keyboard and mouse in the corresponding ports on the rear of the chassis. A KVM type switch can be used if required. If you are using the DiVA USB control keyboard, a USB or wireless mouse can be connected directly into either side of the keyboard.



The DiVA keyboard is considered a 'USB hub', and might not work well with some types of KVM switches.

JOGGER PANEL

Connect the serial Jogger into one of the available serial ports (DHW-8P & DSW-8P are required for serial control). To assign the RS-422 Jogger Port, on the Menu Bar [click] **{Settings/Jogger.../Jogger Port Nbr}** and enter the number of the Port 1-8 that the Jogger is plugged into.

If available on your Motherboard, an RS-232 **COM** port can be used using a RS422 to RS232 converter. To assign a COM Port as the Jogger Port, on the Menu Bar [click] **{Settings/Jogger.../Jogger Port Nbr}** and enter **-1** (minus one) if using COM 1, or enter **-2** (minus two) if using COM 2.



Before plugging in your Jogger Panel, assure that the supplied power supply matches your countries voltage!

USB SOFTWARE SECURITY KEY (DONGLE)

On the rear of the chassis are several USB ports. Install the supplied USB Software Security Key in one of these ports. Failure to install the Key will disable the DiVA software.



Your DiVA chassis may have additional USB ports on the front, which should not be used for the Dongle unless absolutely necessary

MONITOR(S)

There are 2 (two) DVI ports on the video card. Connect accordingly to the display monitors. The DiVA is configured to operate on monitors capable of **1920x1080** or **1680x1050** resolutions.

ETHERNET

If a connection to a **LAN** is desired, connect it to the RJ-45 Ethernet connector on the rear of the DiVA chassis. There is a setup required in order for Windows to recognize the Ethernet connection. Please refer to the Microsoft Windows instructions for network setup.

SYNC

If you are using one of the optional AJA Video Capture Cards, connect a **color black reference** or **Tri Level Sync** to the top BNC connector on the video capture card. The reference type will be auto-detected. See diagram below.



When sync or reference is detected by the system, a green **reference present** indicator lamp is illuminated. The Sync indicator is located at the upper-right corner of the edit screen (shown below).



For server only applications, DiVA does not require an external sync reference, but it is always good to have. DiVA is defaulted to use external sync for reference. To use

the internal computer clock as reference in a 'server only' environment, on the **Menu Bar [click] {Special/No External Reference}**.

Even with servers, there is no guarantee of frame accuracy without an external reference.

VIDEO DISPLAY INPUT

SD or HD video output from your switcher, video server or VTR connects to the middle BNC input on the optional video capture card.

VIDEO OUTPUT

This function is not implemented at the time of this printing.

GPI OUTPUT

The optional USB-1024LS (DHW-GPI) has a physical capacity of 24 GPI I/O ports.

8 ports are available to be assigned as outputs for control by DiVA. They are designated B0 through B7 and correspond to pins 32 through 39.

A GPI triggered by DiVA causes a momentary contact closure between the associated port and ground.

Any of the GND pins 9, 12, 15, 17, 19, 29, 32 and 40 can be used.

Pin 30, +5V, is not used.

See [GPI - GENERAL PURPOSE INTERFACE, Page 105](#) for additional information on GPIs.



Pin	Signal Name
1	Port C0
2	Port C1
3	Port C2
4	Port C3
5	Port C4

Pin	Signal Name
21	Port A0
22	Port A1
23	Port A2
24	Port A3
25	Port A4

6	Port C5
7	Port C6
8	Port C7
9	GND
10	n/c
11	n/c
12	GND
13	n/c
14	n/c
15	GND
16	n/c
17	GND
18	n/c
19	GND
20	CTR

26	Port A5
27	Port A6
28	Port A7
29	GND
30	PC+5V
31	GND
32	Port B0
33	Port B1
34	Port B2
35	Port B3
36	Port B4
37	Port B5
38	Port B6
39	Port B7
40	GND

RS-422 BREAK-OUT PANEL

Each Break-out Panel provides 8 serial ports for device control.

These control ports use the RS-422 standard. These ports must be configured (assigned) before they will work. See [Assignment Page - Page 17](#).

Connect the Break-out Panel to the Chassis using the provided 62-pin cable, which attaches to the serial card on the rear of the chassis.

The interconnect cable from the chassis 62-pin connector attaches to the Optional Serial Port Breakout Panel. All serially controlled devices then connect directly to the Breakout Panel.

Not all devices are controlled serially. DiVA controls many devices via USB, over a network and via Ethernet. Check the DiVA or Fastrack Peripheral Setup Guide or the specific device's manual for additional control information.

DIVA DATA TRAP

The Fastrack "Data Trap" has been made available to the user to better help you and us diagnose problems with the serial ports if and when they arise. The settings for the Data Trap can be found under the heading **[Debug]** in the FTConfig.ini file (C:\Diva\Runtime). If all the items mentioned are not present, you may add them as shown in the example below.

```
[Debug]
DataTrapPort=none
```

```
OmitTimeCodeTraffic=1
Logging=1
LogFilename=C:\Diva\Runtime\Log.txt
ShowStatus=1
```

DataTrapPort=

Replace "none" with the port you want to monitor, such as P1 or P5. You can only monitor 1 port at a time. "none" turns the data logger OFF. The Data Logger should be left off when not needed, as it does consume resources.

OmitTimeCodeTraffic=1

Set this to =1 to make the Data Trap ignore timecode and status traffic, which is very prolific.

Set this to =0 to make the Data Trap include timecode and status traffic, which is very prolific.

You may leave this item ON, even if you are not actively trapping data.

Logging=0

Set this to =1 if you want to log the data to a file for a hard copy. You can then email it to Editware if requested or keep for your files. You must first define a file name using **LogFilename** (next item). The file created is shareable, and you can open it to see what is there at any time. Note that the copy you open will not get updated with new data. To refresh the data, you will need to dismiss the open copy and open it again. This item should be set to 0 when not in use, as it does consume resources.

LogFilename

If you wish to log the trapped data to a file, specify a file name, including a full path, such as:

```
LogFilename= C:\Diva\Runtime\datalog1.txt.
```

Note: You do not need to change this setting to turn off logging. Turn off logging by setting Logging=0 above.

ShowStatus

If you set ShowStatus=1, then all status messages displayed in the Message Window will go into the log if 'logging' is enabled, even if no DataTrapPort=n is defined. This is a background task.

3.2. Start-Up and Shut-Down Sequence

This section will give you information on how to start-up your DiVA system, load its software, and shut-down the system.

TURNING ON THE DIVA SYSTEM

After all connections are made to the DiVA chassis, turn on the power to your equipment in the following order:

- 1st: All controlled devices such as video servers, video switchers, audio mixers, VTR, etc.
- 2nd: Video and computer monitors including the monitor(s) for the DiVA.
- 3rd: The editor chassis.
- 4th: There may be two (model dependent) power switches on the editor chassis. **First**, turn on the power at the rear of the chassis, and **then** turn on the power on the front panel of the chassis.

When the DiVA starts up, a typical **BIOS** boot process will be displayed on the monitor and the **RAM** test will be run. ***Do not interrupt this process.***

When the boot process is complete, Windows should go directly to the Windows Desktop or wait for you to enter your password.

LOGGING ON

A single account has been set up at the factory for the Administrator.

User name: **Administrator**

Password: <none>

Log-in using the Administrator account. The system will initialize and display the Administrator's desktop. As with all Windows systems, the administrator should set up all necessary user accounts and desktops.

STARTING DIVA

On the desktop, you will find the DiVA icon. DiVA comes with 12-Tracks per page. This version of software is designed to be used with monitors whose native resolution is 1920 x 1080 or 1680 x 1050. The executable file will be installed automatically in the **C:/Diva/Runtime** folder when performing a full install of the DiVA software.



[**Double Click**] on this icon to start the DiVA Application.



If you double-click the icon more times than necessary before the application has loaded, you may receive this message:

“DiVA may only run once at a time”. Please ignore it.

INSTALLING SOFTWARE UPDATES

Editware uploads revised software updates to our FTP site on a regular basis. These software updates are recognized by the ‘X’ in the title; for example, **Divav1.1X15**. The ‘X’ denotes that the file is an update and an executable file, and does not need to be installed, just copied to the Runtime directory.

Once downloaded and available at your DiVA computer, simply...

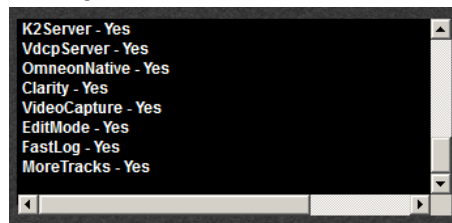
- 1 Drag the executable file into the C:/Diva/Runtime folder.
- 2 In the Runtime folder, create a 'Shortcut' to this software.
- 3 Drag or send the new shortcut to the Desktop.

To be able to utilize prior Configuration Files, see **Loading Configuration Files** below.




HOW TO UPGRADE A DIVA DONGLE IN THE FIELD.

The DiVA 'Dongle' is a USB mini-drive that must be plugged into DiVA for DiVA to function. The Dongle specifies what options are enabled in your DiVA system. If you purchase a new feature, we must send you a new dongle with the new feature enabled, or we can modify your current dongle with a new code. Here is the procedure for retrieving and installing a new code to your current dongle:

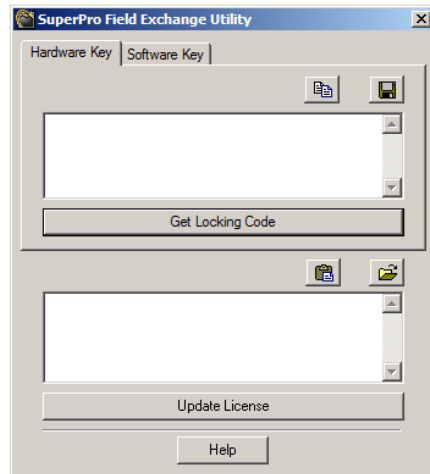
- 1 Press **[SHIFT][ALT][CTRL][D]** simultaneously to see which features are currently enabled & disabled in your current dongle. The list of features will appear in the Message Window.



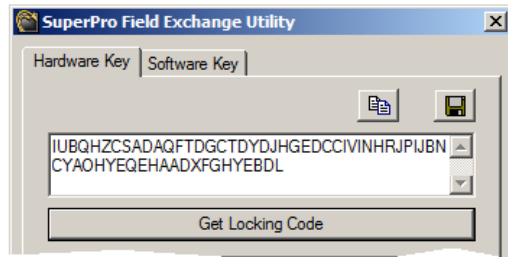
- 2 Press **[Windows Key][E]** to open Windows Explorer.
- 3 Navigate to **C:/DiVA**.
- 4 Open the Dongle Folder. You will find the following files:

Name ^	Type	Size
 DiVA Upgrade.exe	Application	70 KB
 USAFE32.DLL	Application extension	1,236 KB
 USAFE64.DLL	Application extension	1,563 KB

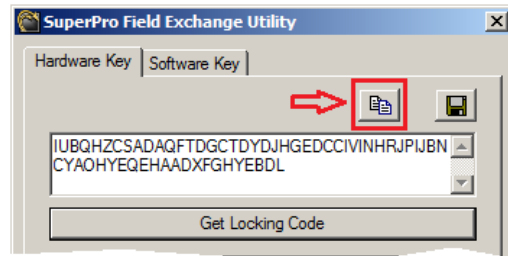
- 5 **[Double click]** on the **DiVA Upgrade.exe** file. The Field Exchange Utility will open:



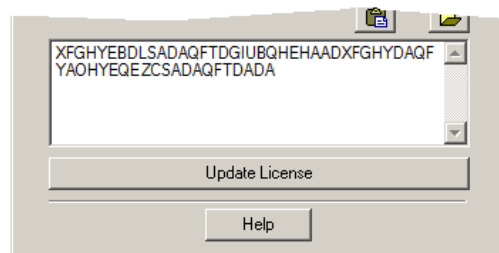
- 6 **[Click]** on **Get Locking Code**.
- 7 The top field will display the current code. For example:



- 8 **[Click]** on the button to save the code to the Clipboard.



- 9 Email the code to bobl@editware.com; jayc@editware.com; and garyw@editware.com.
- 10 You will be sent a new code. Cut and paste this code into the **Update License field** and **[click] Update License**. For example:



- 11 Restart the DiVA Application.

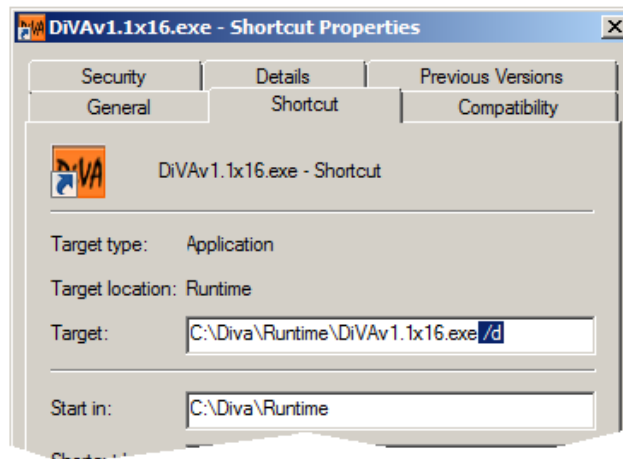
LOADING CONFIGURATION FILES

Upon start-up, the DiVA Screen will be displayed automatically and full screen.

If you have created a Configuration File and wish to run it, you will have to modify the Properties of the default shortcut. To have the DiVA icon open and display the directory where Configuration files (<name>.ini) are stored:

12 On the Windows Desktop, **[right click]** on the DiVA icon.

13 Select **“Properties”**. The following window will open:



14 On the “Target” line, at the end of the path, add a **space** and then **/d**
(space, forward slash, letter d)


15 Press **[APPLY]** then **[OK]**.

Now, whenever the DiVA icon launches the Application, you will be presented with the directory of Config files to choose from. See [Save Configuration, Page 31](#) for more information on Configuration Files.


EXIT DIVA


Press **[EXIT]** to close the DiVA Application and return to the Windows Desktop.


To return to the Windows Desktop without closing DiVA,


Hold down the **Windows key**  located on both the lower left and lower right of the DiVA keyboard, and press **[D]**.


WINDOWS KEYS ...

Hold down the **Windows key**  located on both the lower left and lower right of the keyboard between the **[CTRL]** and **[ALT]** keys and press...

Windows key  **[D]** to go directly to the **Desktop**

Windows key  **[B]** to bring up the **Taskbar**

Windows key  **[E]** to open **Windows Explorer**

Windows key  to open the **Start Menu**

SHUTTING OFF THE COMPUTER

If you wish to shut down the computer, after you have closed the DiVA Application, perform the following:

- 1 **[Click]** the **Start** menu located in the lower left corner of your screen.
- 2 **[Click] Turn Off Computer...** In the prompt that appears, [click] Turn Off.

The Windows operating system will close itself down, and then automatically turn off the computer safely.

YOUR DIVA PORT & DEVICE ASSIGNMENT TABLE

Use this Table to document your Assignments and Crosspoints.

	DEVICE	MODEL	PORT	V-XPT	A-XPT	COUNT	COLOR
MXR							
SWR							
JOG							
T1							
T2							
T3							
T4							
T5							
T6							
T7							
T8							
T9							
T10							
T11							
T12							
T2.1							
T2.2							
T2.3							
T2.4							
T2.5							
T2.6							
T2.7							
T2.8							
T2.9							
T2.10							
T2.11							
T2.12							
AUX							
PGM							

4. CONFIGURING DiVA

4.1. Assignment Page

Press **[ASSGN]** to open the **Assignment Page**. Here you assign devices to Tracks, assign audio mixer and video switcher drivers and crosspoints, and enable and disable the device controllers of each Track, as well as other related items.

Track On	Device Name	Class	Device	Auto	Port	Pool	V-Switcher	AudioMixer	Color
							Video	Logical	Virtual
1	OSR	OMNET	Rec	<input type="checkbox"/>	192.168.1.90:DV_play_4635/192.168.1.90:DV_play_4666		5	5	green
2	OSS	OMNET	auto	<input type="checkbox"/>	192.168.1.90:DV_play_4266		4	4	green
3	KP3 K2P3	K2	K2	<input type="checkbox"/>	K2-01BB01125:P3		2	2	blue
4	E1	VDCP_D	EVS-8	<input type="checkbox"/>	P1		12	8	magenta
5	KP2 K2P2	K2	K2	<input type="checkbox"/>	K2-01BB01125:P2		1	1	blue
6	OHR	OMNET	Rec-720P	<input type="checkbox"/>	192.168.1.94:P3/192.168.1.94:RP1		7	7	orange
7	OHS	OMNET	720P	<input type="checkbox"/>	192.168.1.94:P1		6	6	orange
8	BLK BLACK	X'NT		<input type="checkbox"/>			0	0	black
9	K2REC	K2	K2	<input type="checkbox"/>	K2-01BB01125:R1		3	3	blue
10	EV2 EVS2	VDCP_D	EVS-8	<input type="checkbox"/>	P2		13		magenta
11	KI PRO	SONY	A_6000	<input type="checkbox"/>	P3		9		brown
12	BM SSD	SONY	A_6000	<input type="checkbox"/>	P4		14		brown
2.1		none		<input type="checkbox"/>					none



Detailed setup information for many specific devices is found in the DiVA and Fastrack *Peripheral Setup Manuals* or online at www.editware.com.

NAVIGATING THE ASSIGNMENT PAGE

As long as you do not have a text field open, you may:

- Move your cursor up, down, left, or right by using the respective **arrow keys**.
- **[Click]** in any field using your mouse.
- Press **[SHIFT][PG UP]** or **[SHIFT][PG DN]** to select the next or previous **Page**.
- Use your mouse wheel to scroll through the Tracks and Pages.

Settings for the Video Switcher, Audio Mixer, A/V Preview are also found on this page.

The sections of this Dialog are explained below in **Assigning Devices to Tracks**.

4.2. Assigning Devices to Tracks

Following is an explanation of the Assignment Page headings.

Track

This number corresponds to the Track number to which you are assigning a device or crosspoint.

On

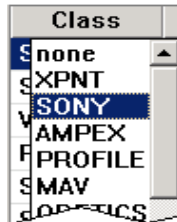
When selected, enables control of the device assigned to this Track. With this box not selected, DiVA will not control the assigned device or its crosspoints. It is recommended that you have your ports assigned for a device before enabling this control.

Device Name

Enter a descriptive name for the device assigned to this Track. This name will be displayed in the Track's Status Display, and if the Menu Bar **{Settings/Display Options.../Button Label}** is enabled, the first 3 letters of this name will be displayed in a larger font on the associated Track button.

Spaces and special characters are allowed here.

Class



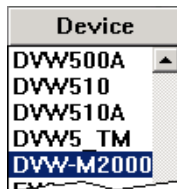
Select the type of device you are assigning, such as a VTR, video server channel, CG, etc. **[Click]** on the right side of this field for a drop-down menu of currently available classes.

If you are only assigning a crosspoint on a video switcher or audio mixer, select **XPNT**.

To clear all selections on this Track, select **none**.

All Panasonic VTRs should be assigned as Sony.

Device



Select the specific device you are assigning. For example, if the CLASS was SONY, the DEVICE might be a DVW-M2000, HDW-D1800, etc. **[Click]** on the right side of this field for a drop-down menu of available devices in the selected Class. Some devices do not have their own drivers, and may use drivers designed for other devices.

Auto

Auto
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

If this item is selected, DiVA will query an assigned Sony or Panasonic VTR, and if the device responds with a valid Sony code, DiVA will auto-select the correct driver. Note that this ability is not supported by all VTRs.

Port

Port
P1
P2
P3
B021390:1

[Click] on the right side of this field for the Port drop-down menu. If a device is assigned that is controlled through a **serial connection**, a list of all available serial ports is displayed.

If the device assigned is a **networked** device, a list of hosts and their Channels may be displayed. If not displayed, you can [double click] in the field and manually enter the address of the networked device, paying close attention to the proper syntax and nomenclature for the device.

Pool

Pool
VTR
VTR
Omneon
Omneon

Devices of the same kind should be assigned the same Pool name. For example, all VTRs may be given the Pool name of **VTR** even though one might be a **Sony** DVW-500 and the other a **Panasonic** AJ-D950. One purpose for the "Pool" assignment is to prevent a device of one type, such as a VTR, from being improperly treated as another type of device, such as a server channel.

Video Switcher

Video
1
2
5
7

Assign video crosspoints based upon the inputs to your video switcher.

Audio Mixer

Start	Count
1	4
5	2
7	4
11	4

Audio Mixer crosspoints are assigned based on the type of Mixer selected in the Audio Mixer Settings Dialog.

For a digital audio mixer using Extended **ESAM 2** protocol, enter the crosspoint number in the Start column as defined in the mixer.

Other mixers might require you to define both the crosspoint number a device starts at and the number of faders to control for that device.

For example, if you have the first four channels of audio on Track 1 and two channels on Track 2 you would enter:

Track 1 - Start =1, Count = 4

Track 2 - Start =5, Count = 2



If you are using a Graham-Patten D/ESAM IV Mixer, see your mixer manual for more specific details on logical and virtual assignments.

Color

Here you can assign colors to the Track Buttons to better help quickly associate Tracks, groups of devices, etc. This ability can also be found in [Track Properties](#), [Page 58](#)

4.3. Assignment Settings

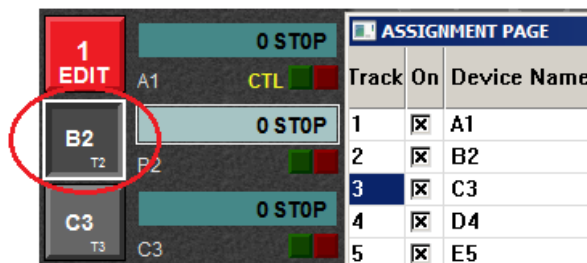
At the bottom portion of the Assignment Page are the Assignment Dialogs, where Audio Mixer, Video Switcher, and A/V Preview Switching each have their own Settings section.



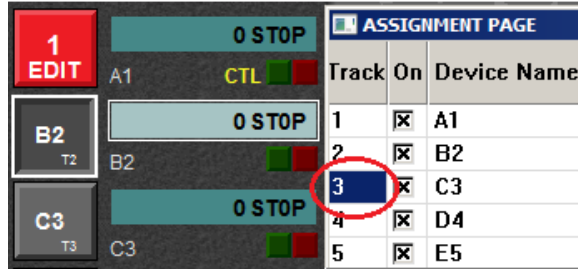
SWAP TRACKS

You can exchange (swap) Source Assignments for an entire Track automatically.

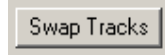
- 1 Press **[ASSGN]** to open the Assignment Page.
- 2 On the Edit Screen **Select the Track** you wish to exchange with. In the following example we selected Track **T2**, Device Name **B2**.



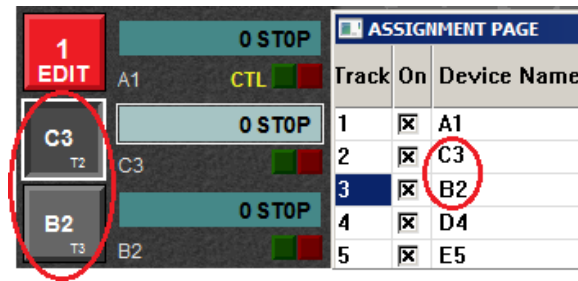
- 3 In the Assignment Page, **select the Track number** you wish to exchange. In the following example we selected Track 3, Device Name **C3**.



4 [Click] the **Swap Tracks** button on the Assignment Page.



The two sources in the Assignment Page and all their assigned values will be swapped.

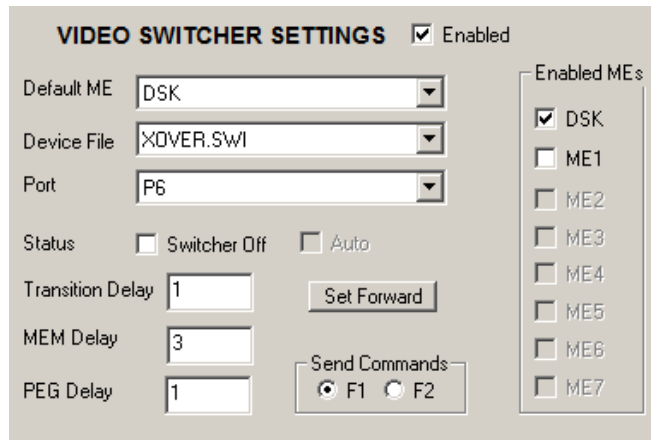


You can also swap Tracks directly on the DiVA keyboard.

- 1 Press the [T1]-[T12] key you wish to Swap.
- 2 Press [SWAP]. The word **SWAP** appears on the Button for that Track.
- 3 Press the [T1]-[T12] key you wish to swap with.

The two sources and all their assigned values will be swapped.

4.4. Video Switcher Settings



The options in this Dialog are explained below:

Enabled (Communications Enabled)

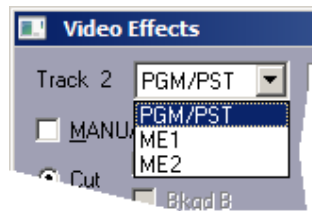
Selecting **Enabled** enables serial control over the video switcher. With this item not selected, there will be no communication to the video switcher.

Default M/E

The M/E selected in the **Default ME** drop-down menu will be the default control M/E for all Events placed on the DiVA Timeline.

Alternatively, any Event can be programmed to trigger an effect on any M/E. This can be defined at the Event level in the **Effects Dialog** after an Event has been placed on the Timeline. To assign a different M/E to be affected by an Event command on the Timeline:

- 1 Select the Event you wish to be addressed by an M/E other than the Default M/E.
- 2 Press **[CUT]** or **[DISS]** or **[KEY]** or **[WIPE]** to open the Video Effects Dialog.



- 3 From the drop-down menu select the M/E you wish to use to control the selected Event. In this way, every Event can be controlled by a different M/E.

See [Video Effects, Page 95](#) for more information on the Effects Dialog.

Device File

This drop-down menu is used to select the appropriate **.SWI** (switcher driver) file for your switcher.

For any new switcher protocol to properly load with the expected M/E's assigned (per the M/E mask in the .swi file), you must follow this procedure:

- 1 **[Click] OFF Switcher Enabled.**
- 2 **Select** your new Switcher Device File from the drop-down menu.
- 3 **[Click] ON Switcher Enabled.**

OR

Press **[SHIFT][RESET]** after you have selected the desired Device File from the drop-down menu and closed the Assignment Page. The Message area will show which ports were refreshed.

Port

Select the serial port from the drop-down menu to be used to connect and control your switcher.

Status

Selecting **Switcher Off** *disables* crosspoint control over the video switcher while still allowing MEM, PEGS and Preview command data to pass from and to the switcher.

This is the same as pressing **[SWITCHER]** on the DiVA Keyboard.

Transition Delay

Use this setting to adjust when the transition command is sent to the switcher. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

MEM Delay

For switchers with memory capability, use this setting to adjust when the memory recall command is sent to the switcher. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

PEG Delay

Use this setting to adjust when the PEGS command is sent to the switcher. Enter a lower number to send the command earlier, or enter a higher number to send the command later.

See [GPI - GENERAL PURPOSE INTERFACE, Page 105](#) for additional information on PEGS.

Set Forward

Pressing this button will add the transition type of the current Event to all following Events on the Timeline. For example, if the current Event is a :20 frame dissolve, pressing this button will make all Events later than the current Event on any Track become :20 frame dissolves.

Send Commands

Use this setting to define on which field commands are sent to the switcher.

Enabled M/Es

Enabled M/Es

- DSK
- ME1
- ME2
- ME3
- ME4
- ME5
- ME6
- ME7

As many DiVA users may be sharing the resources of their switchers with control rooms or additional edit bays, the Enabled M/Es section of the Video Switcher dialog gives the user the ability to enable which control area of the current switcher, as defined in the switchers' .swi file, will be enabled for use by this DiVA. No command will be sent to any control area of the current switcher if disabled here first.

In the image to the left, the DSK bus has been enabled for use by DiVA. M/E1 is available for use, but has been disabled, so no commands will be sent to that M/E. M/E2 through M/E7 are not defined in this switcher's .swi file, so they are unavailable and ghosted.

4.5. Audio Mixer Settings

AUDIO MIXER SETTINGS Enabled

Device File:

Port:

Status: Mixer Off

Transition Delay:

MEM Delay:

Send Commands: F1 F2

The options of this Dialog are explained below:

Audio Mixer Settings Enabled (Communications Enabled)

Selecting **Enabled** enables serial control over the audio mixer. With this item not selected, there will be no communication with the audio mixer.

Device File, Mixer

This drop-down menu is used to select the appropriate **.MIX** (mixer driver) file for your mixer.

For any new mixer protocol to properly load you must follow this procedure:

- 1 **[Click] OFF** Enabled.
- 2 **Select** your new Mixer Device File from the drop-down menu.
- 3 **[Click] ON** Mixer **Enabled**.

OR

Press **[SHIFT][RESET]** after you have selected the desired Device File from the drop-down menu and closed the Assignment Page. The Message area will show which ports were refreshed. (RS-422 controlled devices only).

Port, Mixer

Select the serial port from the drop-down menu to be used to control your mixer. If control is via USB, select **None**.

Status

Selecting **Mixer Off** disables crosspoint control over the audio mixer while still allowing MEM and Preview command data to pass from and to the mixer.

This is the same as pressing **[MIXER]** on the DiVA Keyboard.

Transition Delay

Use this setting to adjust when the transition command is sent to the mixer. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

MEM Delay

For mixers with memory capability, use this setting to adjust when the memory recall command is sent to the mixer. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

Send Commands

Use this setting to define on which field commands are sent to the mixer.

4.6. Preview Settings

PREVIEW SETTINGS Enabled

Video Switcher

EE Use Aux Bus 1 PGM XPT 19 Delay 5 Enabled

Separate Preview Switcher

Device File .NONE Port none

RVTR 2 PGM 1

Timing
Delay 0
 F1 F2

Audio Mixer

EE Use Mixer Record Confidence Delay 0 Enabled

The options of this Dialog are explained below:

PREVIEW SETTINGS ENABLED (Communications Enabled)

Selecting **Enabled** enables serial control over the Preview device. With this item not selected, there will be no communication with the Preview device.

VIDEO PREVIEW

E-E (VTRS only)

With **EE Audio** selected, the Record device (usually a VTR) will be used to monitor the preview and recording of audio via E-E switching circuitry in the VTR.

By monitoring the Record device "Audio Out", you should hear the record device in PB during the pre-roll, switch E-E to hear the device "Audio In" (usually the mixer program out), then switch back to the record device in PB at the edit OUT-point.



E-E Audio can be used when video is being previewed on an Aux Bus, and E-E Video can be used when audio is being previewed in the Mixer.

Use Aux Bus

With **Use Aux Bus** and **Enabled** selected, Video Preview Switching is performed on a video switcher **Aux Bus**.

In the **Use Aux Bus** text field, enter the desired Aux Bus number to be used as the Preview Switcher when the Edit Mode is enabled.

When monitoring the assigned **Aux Bus Out**, the crosspoint for the record device should be selected during the pre-roll, the Aux Bus should switch to the Program Re-entry crosspoint (PGM XPT) at the edit IN-point (usually the on-air M/E) and see the output of the switcher, then the Aux Bus should switch back to the record device crosspoint at the edit OUT-point.

PGM Reentry (PGM XPT)

Enter the crosspoint on the Aux Bus where the Program Out appears (usually the on-air M/E).

If this crosspoint number is not available for your particular switcher, patch or route the video switcher PGM OUT to an accessible crosspoint. Depending on the switcher, this re-routing may result in a frame delay.

Timing Delay

Enter the amount of delay, if any, needed for the switch between RVTR and PGM to be frame accurate. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

Enabled

Enables and disables preview switching on the Aux Bus.

SEPARATE PREVIEW SWITCHER

If you select a device from the **Separate Preview Switcher** Dialog and disable **Use Aux Bus**, an external switcher or router can be used as the preview switcher.

- 1 From the Device File drop-down menu, select the device you will use as a Preview Switcher.
- 2 From the Port drop-down menu, select the serial Port you have this device connected to.
- 3 In the **RVTR** field, enter the video crosspoint assigned to the Record device. This section may vary slightly in appearance depending on the preview switcher selected.
- 4 In the **PGM** field, enter the video crosspoint assigned to the Program Output of your switcher.

This section may vary slightly in appearance depending on the preview device selected.

When monitoring the preview switcher, you should see the **RVTR** during the pre-roll. At the edit In-point the preview switcher should switch to the **PGM** crosspoint, and switch back to the **RVTR** at the edit Out-point.

Device File

Select a device from the pull-down menu to be used as an external preview switcher.

Port

Select the port connected to the external preview switcher.

RVTR

Enter the crosspoint assigned to the R-VTR on the Preview Switcher.

PGM

Enter the crosspoint assigned to the PGM OUT on the Preview Switcher.

Timing Delay

Enter the amount of delay, if any, needed for the switch between RVTR and PGM to be frame accurate. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

F1-F2

Select the field in which the command to switch will be sent to the external preview switcher.

AUDIO PREVIEW

E-E (VTRs only)

With **EE Audio** selected, the Record device (usually a VTR) will be used to monitor the preview and recording of audio via E-E switching circuitry in the VTR. By monitoring the Record device "Audio Out", you should hear the record device in PB during the pre-roll, switch E-E to hear the device "Audio In" (usually the mixer program out), then switch back to the record device in PB at the edit OUT-point.



E-E AUDIO can be used when video is being previewed on an Aux Bus, and E-E Video can be used when audio is being previewed in the Mixer.

Use Mixer

With **Use Mixer** and **Enabled** selected, Audio Preview Switching is performed through the audio mixer. When monitoring mixer out, you should hear the record device during the pre-roll, the PGM or mixer out at the edit IN-point, then switch back to the record device at the edit OUT-point.

Record Confidence

With this item selected, the **record output**, rather than the PGM out, will continue to be monitored in the audio mixer during a recording.

Timing Delay

Enter the amount of delay, if any, needed for the switch between RVTR and PGM to be frame accurate. Enter a lower number to send the command later, or enter a higher number to send the command earlier.

Enabled

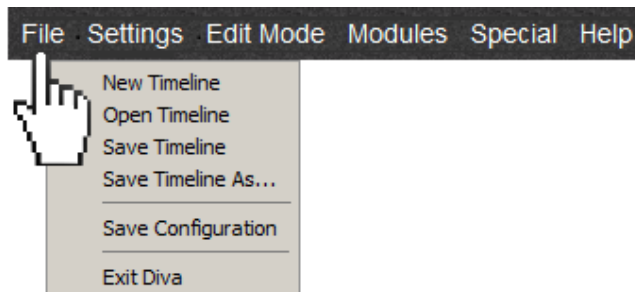
Enables and disables preview switching in the audio mixer.

5. MENU BAR

The **Menu Bar** found at the top of the DiVA GUI, allows access to many system functions, features, settings and menus.

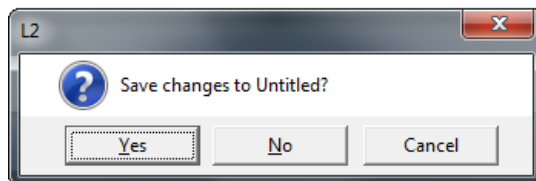
5.1. File

[Click] **{File}** to open the **File** dropdown Menu.



NEW TIMELINE

Opening a new Timeline will delete the current Timeline, clear the screen, and reset the Timeline Guide to the time defined in the **Menu Bar {Settings/Time Settings.../Timeline Guide Start}**. You will be offered the following option:



[Click] **Yes** to save current Timeline as an .L2D file before deleting it.

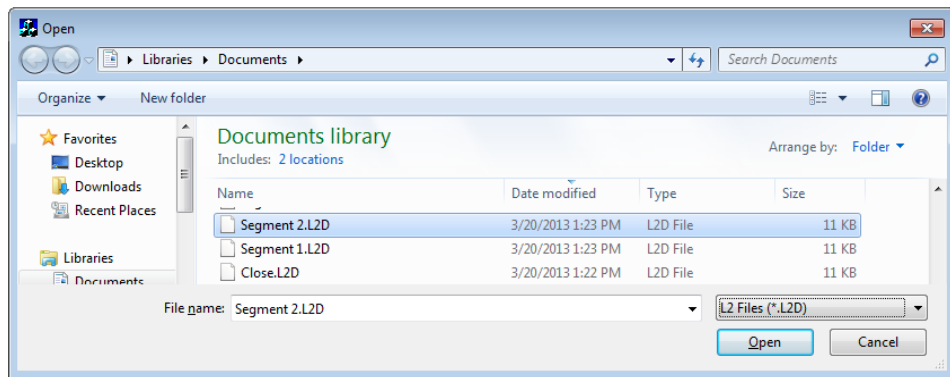
[Click] **No** to load a fresh Timeline without saving the current Timeline.

Press **[UNDO]** to reverse this action.

[Click] **Cancel** to cancel this operation.

OPEN TIMELINE

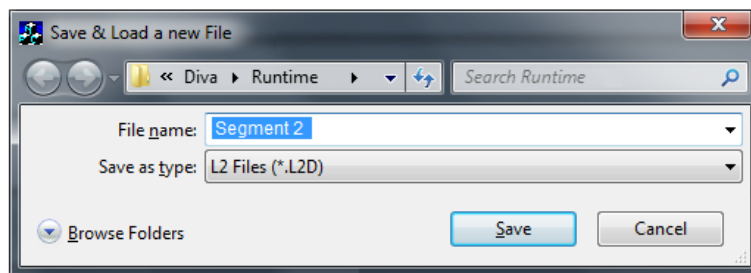
This will allow you to load a previously saved L2D Timeline file. Opening an existing Timeline will remove the current Timeline and load the selected Timeline, but will not reset the Timeline Guide time. You will be offered the following option:



- 1 Select an L2D file from the list of files.
- 2 **[Click] Open** to replace the current Timeline with the new L2D file.

SAVE TIMELINE

This will allow you to **Save** the current Timeline. If you have not already saved a Timeline during the current session, you will be presented with the following option:



- 1 Enter a File name for this Timeline.
- 2 **[Click] Save** to save the current Timeline to the system drive as an **L2D** file.

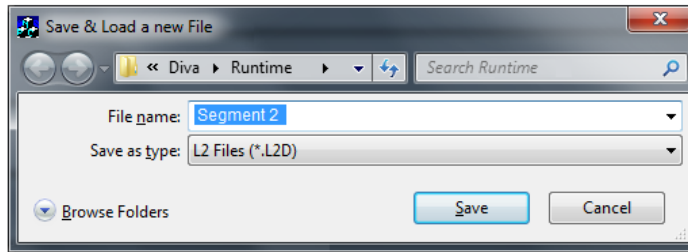
Once you have saved a Timeline with a File Name, each successive [click] on **{File/Save Timeline}** will save the current Timeline and overwrite the previous version with this same name **without verification**. The result of this action will be displayed in the Message window. For example:

Saved C:\Users\User\Documents\Segment 2.L2D

To save a new Timeline with a new name, see **Save Timeline As ...**

SAVE TIMELINE AS ...

This will allow you to save the current Timeline as an L2D file with a new File Name. This selection will always present you with the following option:



- 1 Enter a File Name for this Timeline.
- 2 **[Click] Save.**

The result of this action will be displayed in the Message window. For example:

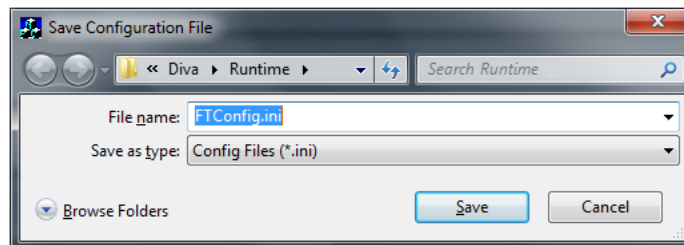
Saved C:\Users\User\Documents\Segment 2.L2D

SAVE CONFIGURATION

This allows you to save your current configuration to the system drive. A Configuration File is a copy of all current user settings and parameters.

Save a Configuration File

- 1 **[Click] {File/Save Configuration}.** The "Save Configuration" Dialog box will open, allowing you to save the current configuration with any file name you choose. **Spaces are not allowed in the name.** The **.ini** extension will be added automatically.



Modify or update an existing Configuration File

- 2 Make any **changes** to the current configuration.
- 3 On the **Menu Bar [click] {File/Save Configuration}** and **Save** the new configuration with the **same** name. The old settings will be overwritten by the new settings.



NOTE!

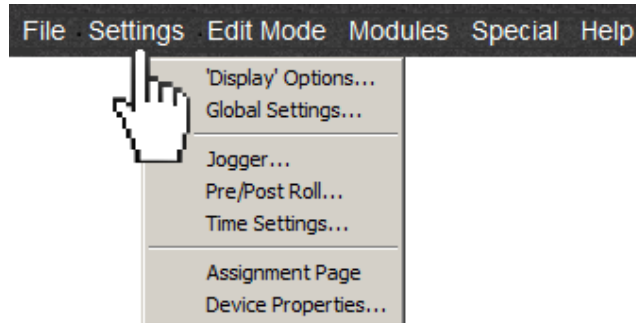
It is recommended that after configuring DiVA to your specifications, you save a separate Configuration File as a back-up.

EXIT DIVA

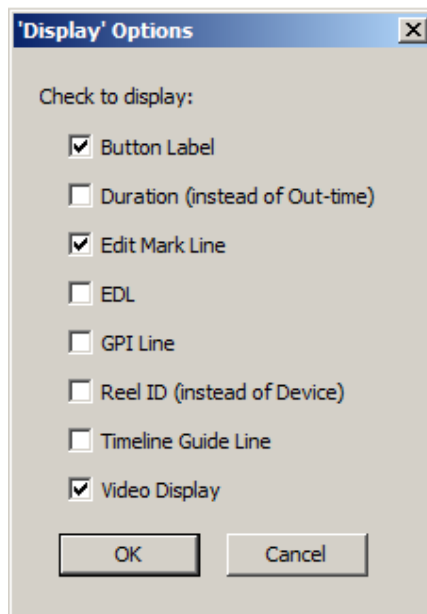
[Click] to Exit the DiVA Application and return to the Windows Desktop. This is the same as pressing **[EXIT]** on the DiVA Keyboard.

5.2. Settings

[Click] {Settings} to open the **Settings** dropdown Menu.



'Display' Options...



Button Label

Select this item to display the first three characters of the Device Name on the Track Button. The new labels will be larger and easier to read.

A good way to utilize this function is to name the Device Name in the Assignment Page as in the example below:

VT1 VTR 1

In this way the full name of the device is visible on screen, but the Track Label will display only **VT1**.

**Display Duration (Instead of OUT-time)
Display OUT-time (Instead of Duration)**

The displayed IN-point of an Event is always the IN-point, but the OUT-point of an Event can be displayed with the OUT-point timecode or with the Duration of the Event.

When selected, Durations will be displayed for all Events.
When not selected, OUT-times will be displayed for all Events.

TL Mark Line

Pressing [TL MARK] on the DiVA Keyboard will add a 'marker' to the Timeline. This marker can be used to mark a location to return to, and allows you to add a message at the marker point. Selecting this item will display a vertical yellow line coming down from the marker to more easily identify its location.

Enabling the Edit Mark Line will have no effect on the performance of DiVA.

See [TL MARK, Page 87](#) for more information on TL Markers.

EDL (Edit Decision List – Edit Mode Only!)

Select this item to open the EDL Bins Window.

See [EDL Bin Soft Keys, Page 164](#) for additional information on EDL Bins.

GPI Line

Selecting this item will display a vertical yellow line coming down from the GPI marker(s) to more easily identify its location.

Enabling the GPI Line will have no effect on the performance of DiVA.

**Reel ID (Instead of Device Name)
Device Name (Instead of Reel ID)**

Selecting this item will display the Reel ID assigned to a device in the Event Dialog rather than the Device Name as defined in the Assignment Page.

Timeline Guide Line

Selecting this item will display a vertical yellow line coming down from the Timeline Guide (TLG) to more easily identify its location.

Enabling the Timeline Guide Line will have no effect on the

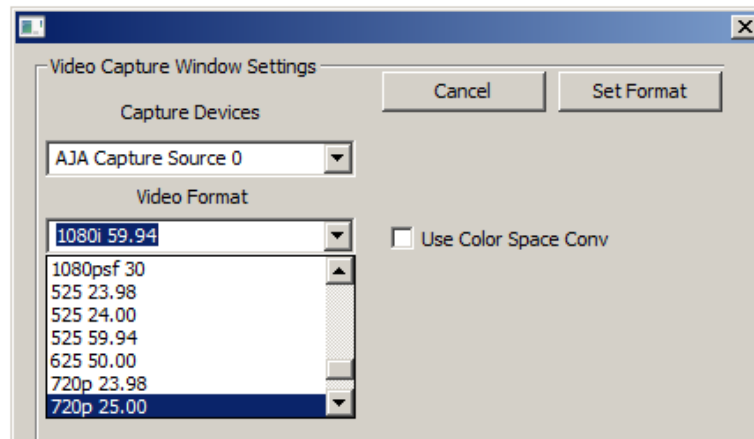
performance of DiVA.

Show Video Display

This will open the Video Capture Display Settings Window when the optional Video Capture Card is installed. This video window can be displayed in multi SD/HD formats.

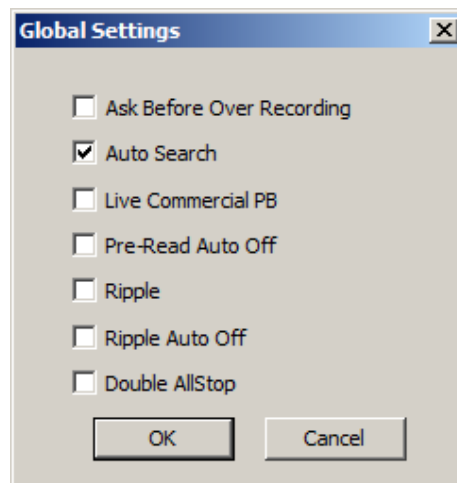
To change the format of the video display:

- 1 **[Double Click]** on the video display. You will be presented with the following option:



- 2 From the Drop-Down Menu select the desired format.
- 3 **[Click] Set Format.**

Global Settings





Ask Before Over-Recording (VDCP Only)

VDCP protocol (Video Disc Control Protocol) does not permit two files with the same name to share a directory, nor does it allow writing over an existing file.

Select this item If you create a new file with the same name as one that already exists in the server directory, and you wish the system to prompt you for your permission before it deletes the existing file. If this item is not selected, the original file will be deleted and replaced **without a warning**.

Auto Search

With this item selected,

- When you **[click]** on the **beginning** of an Event  the **CPI** cues to the **beginning** of the Event.
- When you **[click]** on the **end** of an Event  the **CPI** cues to the **end** of the Event.
- When you **[TRIM IN]** an Event, the Event is trimmed and the **CPI** cues to the new **IN-point** of the Event.
- When you **[TRIM OUT]** an Event, the Event is trimmed and the **CPI** cues to the new **OUT-point** of the Event.
- When you **[SET IN]** an Event, the time is entered and the **CPI** cues to the new **IN-point** of the Event.
- When you **[SET OUT]** an Event, the time is entered and the **CPI** cues to the new **OUT-point** of the Event.

See [◀ SRCH, Page 117](#) for more information on Search.

Live Commercial Playback

With this item selected, the Live Venue Commercial Playout feature is enabled. This application is designed to facilitate the playout of commercials during a live event, where it is not known when the commercial playout will begin, or when they will need to return to the live feed.

- 1 Enable **Live Commercial Playback**.
- 2 Select a Track to assign as the REMOTE source.
- 3 Assign the REMOTE Track as Class **XPT**.
- 4 Assign the appropriate audio and video crosspoints for the REMOTE.
- 5 On the server Track to be used for commercial playback, mount the commercials back-to-back.

DiVA selects a remote feed on a router or switcher (such as a sporting event remote truck), and at the command of the director, the operator will press the [PVW] key that will switch the router from the remote crosspoint to the commercial crosspoint(s), and automatically and simultaneously play out a string of commercials in a pre-defined order from a video server(s).

At any time during the playout of the commercials, the director can call for a return to the remote location, and at the push of the [ALLSTOP] key on the DiVA keyboard, the DiVA will, at the end of the currently airing spot, automatically select the remote crosspoint on the router or switcher and stop the commercial playout. The operator can then rearrange commercial spots on the DiVA timeline or just rearm the system and wait for the next command to begin the next sequence playout.

Safeguards are built into the application to keep the DiVA operator from accidentally changing a crosspoint during the airing of the commercials, or changing a crosspoint while prepping the next sequence of commercials.

Pre-Read Auto Off

When the Record Event is in the 'PRE-READ' mode, you have the choice of remaining in this mode after an edit is completed or to have this mode return to the default mode for this Track.

When selected, the Pre-Read mode will be turned OFF after each edit.

What is Pre-Read?

Pre-Read is a feature of some videotape recorders and video servers, that play back the video and/or audio signal off of the tape or clip before it reaches the record heads. The signal is then sent to an external switcher for modification, and then the modified signal is sent back to the record heads so that it can be re-recorded onto the tape in its original position. This basically allows you to transition from or to the Record Track, or add titles or effects directly onto the video on the Record Event.

Ripple

The Ripple function allows for the moving or deleting of any portion of an edit or Timeline, without leaving a gap and without disrupting the sequence and relationship of all following Events on the Timeline.

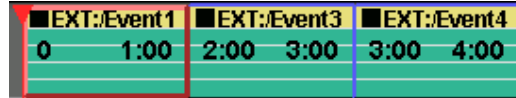
With this item selected, Ripple will be enabled and **RIPPLE ON** will be displayed in the status area at the top of the DiVA screen.

In the following example, the second Event in a sequence of four

Events has been deleted. Ripple is **OFF**, so a gap is left and all subsequent Events are left as they were.



In the following example, the second Event has been deleted again, only now Ripple is **ON**, so no gap is left and all subsequent Events are “pulled-up” while still maintaining their prior relationship to each other.



Ripple does not apply to Events that have been ‘cut’, only to Events that have been ‘deleted’..

Ripple Selected Events Manually

Even with the Ripple function turned **OFF**, Events can be rippled if they are **Selected**. A Selected Event is one that has been **[Clicked]** and has a **yellow border**. When you drag a Selected Event, all other **Selected** Events are moved accordingly.

To select multiple Events, see [Selected Event\(s\), Page 68](#) for more information on Selecting multiple Events.

Ripple Auto Off

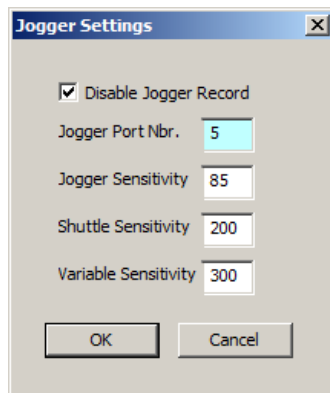
With **Ripple Auto Off** selected, the **Ripple** feature will be turned **OFF** as soon as the mouse is released after each use.

Double Allstop

With this item selected, in order to stop any playout or recording, DiVA will require that **[ALLSTOP]** be pressed twice and in quick succession; that is, **[ALLSTOP][ALLSTOP]**.

JOGGER...

Here is where your Jogger settings and assignments are found. You will be presented with the following options:



Disable Jogger Record

Disables the RECORD feature from being initiated at the Jogger Panel. This prevents the accidental sending of a Record command to a device while jogging or shuttling.

Jogger Port Number (Serial control only)

To assign the RS-422 Jogger Port, enter the number of the Port 1-8 that the Jogger is plugged into.

If available on your Motherboard, an RS-232 COM port can be used using a RS422 to RS232 converter. To assign a COM Port as the Jogger Port, enter **-1** (minus one) if using COM 1, or enter **-2** (minus two) if using COM 2.

Jogger Sensitivity

User definable setting for the Jogger. Enter a lower number for less frames per revolution, enter a higher number for more frames per revolution. Values are relative, and do not represent a defined amount of fields or frames.

Shuttle Sensitivity

User definable setting for Shuttle speed. Enter a lower number for less frames per revolution, enter a higher number for more frames per revolution. Values are relative, and do not represent a defined amount of fields or frames.

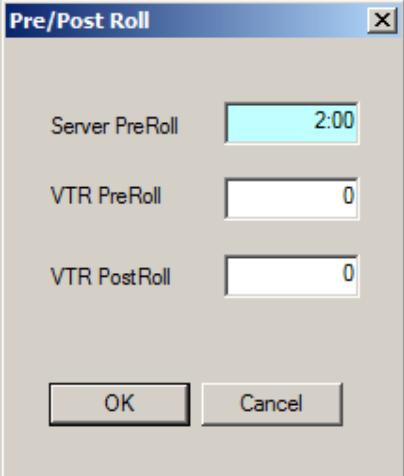
See [◀◀ REW, Page 116](#), for more shuttle options.

Variable Sensitivity

User definable setting for Variable speed. Enter a lower number for less frames per revolution, enter a higher number for more frames per

revolution. Many devices have a maximum allowed speed for Variable. Values are relative, and do not represent a defined amount of fields or frames.

PRE/POST ROLL...



The screenshot shows a dialog box titled "Pre/Post Roll" with a close button (X) in the top right corner. The dialog contains three input fields: "Server PreRoll" with the value "2:00", "VTR PreRoll" with the value "0", and "VTR PostRoll" with the value "0". At the bottom of the dialog are two buttons: "OK" and "Cancel".

Server Pre-roll

Enter a time to be used as preroll for your Server channels. Enter '0' for the minimal 3-5 frame pre-roll. This setting does not affect VTRs.

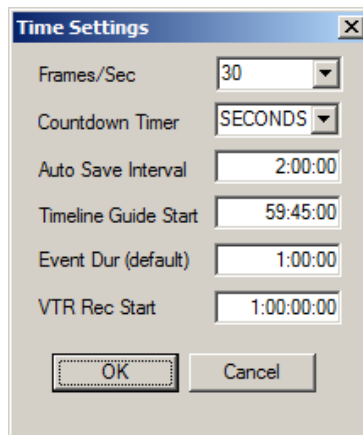
VTR Pre-roll

Enter a time to be used as the preroll for your VTRs. This setting does not affect servers.

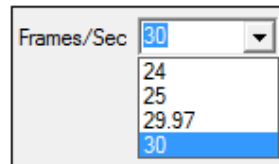
- Enter **[0]** to use the default Preroll defined for this device in its .dev file.
- Enter **<SS:FF>** to specify a higher (longer) preroll than the one defined for this device in its .dev file.

VTR Post-roll

Enter a time to be used as the postroll for your VTRs. This setting does not affect servers.

TIME SETTINGS...**Frames/Sec**

This setting establishes the system or Timeline frame rate with these values. You will be presented with the following options:

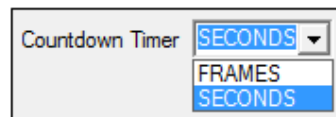


24 = 24 fps
 25 = PAL
 29.97 = NTSC Drop Frame
 30 = NTSC Non-drop Frame

A restart of the DiVA application is required for changes to take effect.

Countdown Timer

The count-down timer counts backwards during the edit preview or record Preroll, showing the time remaining until the IN-point. At the IN-point, the count reverses, showing how much time has passed since the IN-point. You will be presented with the following options:



Select Seconds to only display seconds **SS**:

Select Frames to display seconds and frames **SS:FF**.

Auto Save Interval

This setting defines how often, in seconds, the system will automatically save the current Timeline. The saved file is called Autosave.L2D, and its default location is C:\Diva\Runtime\EDL\.

Each time the Timeline is Auto saved, it writes the current Timeline condition over the previously saved Autosave.L2D file.

Auto Save is a background task, and only saves after changes have been made to the current Timeline. If the value is 0, Auto Save will be turned off.

Timeline Guide Start

The time entered here in hh:mm:ss:ff, defines the default location of the Timeline Guide at the start of the DiVA application, or whenever a new Timeline is created.

To create a new Timeline, see [New Timeline, Page 29](#).

Event Duration (default)

The time entered here in hh:mm:ss:ff, becomes the default duration of a new XPNT or VTR Event placed on the Timeline as a result of pressing [MARK IN].

VTR Record Start

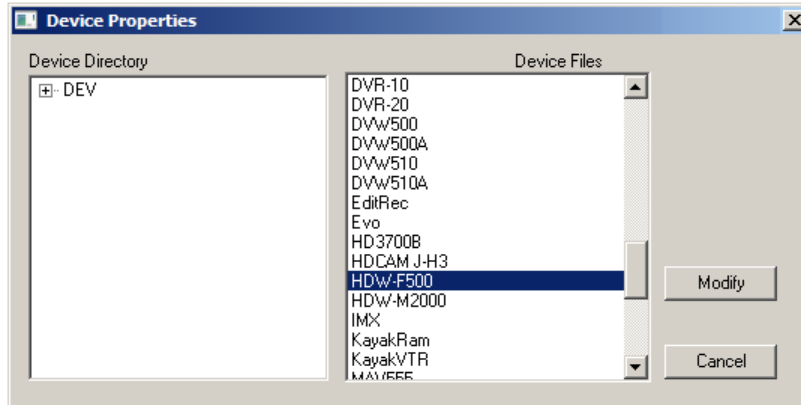
If a VTR is used as the Recorder in the Edit Mode, the timecode start time you wish to use as a default for that recorder will be entered here.

ASSIGNMENT PAGE

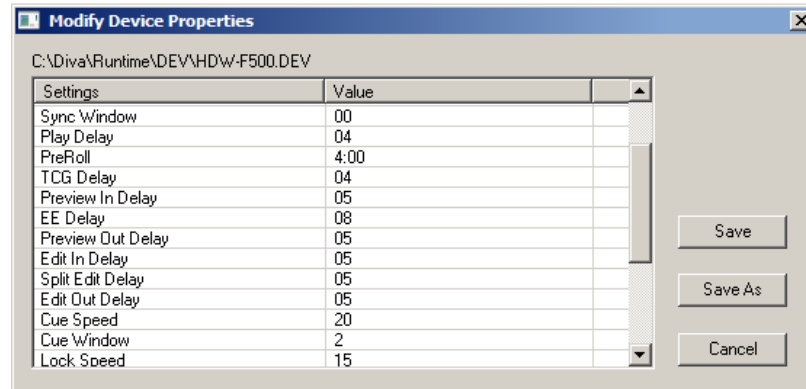
Opens the Assignment Page. See [Assignment Page, Page 17](#) for more information on the Assignment Page.

DEVICE PROPERTIES

Select this item to change the properties of a device driver. The following Dialog will open:



- 1 Select the device driver that you wish to modify.
- 2 **[Click] Modify**. The following Dialog will open:



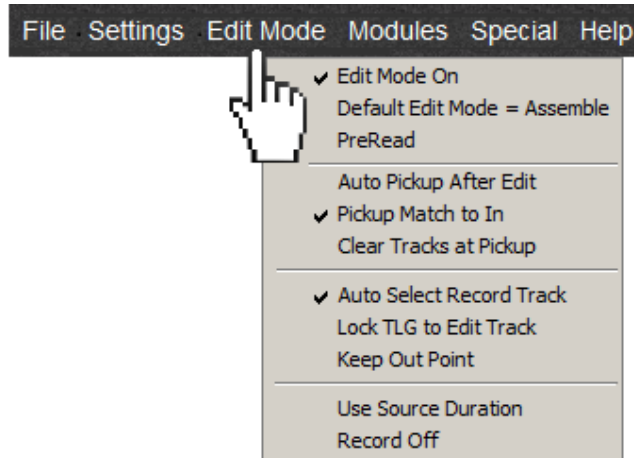
- 3 **[Double Click]** in the **Value** field that you wish to modify.
- 4 Make the desired change and press **[ENTER]** on the Keyboard.
- 5 **[Click] Save** to save the modified file with the same name as the original file, and automatically change the original file name to <original file>.bak...

OR

[Click] Save As to save the modified file with a new name (*recommended*).

5.3. Edit Mode

[Click] {Edit Mode} to open the **Edit Mode** dropdown Menu.



EDIT MODE ON

Selecting this item changes Track 1 to be the Edit Track. When enabled, the Edit Track becomes the Editing Record Track for both linear and NLE editing.

DEFAULT EDIT MODE (VTRS ONLY)

When this item is not selected, the default record mode for a VTR Record Track will be INSERT. When in the Insert mode, the Record Event color will become **RED**.

When this item is selected, the default record mode for a Record Track will be ASSEMBLE. When in the Assemble mode, the Record Event color will become **MAGENTA**.

An **INSERT** edit edits audio and video only, recording onto an existing track or base already containing timecode and Control Track. Insert edits should be frame accurate and enter and exit cleanly on a vertical interval.

An **ASSEMBLE** edit is different in that it edits audio, video, timecode and Control Track, recording onto either a virgin piece of tape or overwriting existing material. Assemble edits should be frame accurate and enter cleanly on a vertical interval, but will exit dirty, destroying several frames of Control Track.

Most VTRs require that while performing Assemble edits, in order to 'jam' the timecode and keep it continuous, the VTRs timecode settings be set to INTERNAL and REGEN.

With video servers, there is no difference between Insert and Assemble mode, as all edits, linear or non-linear, will be performed as if they were in the Insert Mode.

PREREAD (Read Before Write)

Pre-Read is a feature of most digital videotape recorders that play back the video or audio signal off of the tape before it reaches the record heads, sends the signal to the switcher and mixer for processing, and then allows selection of the already recorded material as a source on the PGM out.

When in the pre-read mode, the Record Event will be displayed ORANGE, and the word 'Pre-read' will be displayed in the Status area at the top of the screen.

Some notes about pre-read:

- A pre-read edit on a VTR cannot be 'un-done'.
- Depending on the server being used, when editing with DiVA and a server, a pre-read edit is almost always non-destructive.
- Unless you are using an aux bus for previewing, during a pre-read edit the Line monitor will display what was on the Record Event prior to the edit, and the results of the edit will not be visible until the edit is replayed.

AUTO PICKUP AFTER EDIT

A "pickup" point is the point at the end of an edit where the record device is terminated by pressing **[RECORD]** during the edit or by reaching a pre-determined OUT-point.

With **Auto Pickup** selected, at the termination of an edit DiVA will automatically perform an **Auto Match** to all "on-air" Events.

When not selected, all sources are left "as is" at the termination of an edit, whether by defined OUT-point or by "bumping out" with the **[RECORD]** key.

With **Auto Pickup** enabled, the update action on all sources at the termination of an edit will be determined by another Edit Mode item, **Pickup Match to IN**.

PICKUP MATCH TO IN

When this item is selected, and if **Auto Pickup After Edit** is also selected, at the termination of an edit by bump-out or by reaching the defined edit OUT-point, sources involved in the edit will update with the Source Event(s) In-points lining up with the new Record Event In-point, and with all Events open-ended.

When not selected, and if **Auto Pickup After Edit** is selected, at the termination of an edit by bump-out or by reaching the defined edit OUT-point, sources involved in the edit will update with the Source Event(s) OUT-points lining up with the new Record Event IN-point

CLEAR TRACKS AT PICKUP

With this item selected, and if **Auto Pickup After Edit** and **Pickup Match to In** are not selected, then all Tracks other than the Record Track will be cleared at the end of an edit.

AUTO SELECT RECORD TRACK

With this item selected, the Edit Record Track will always be selected at the initiation of a Preview or Record. When not selected, the currently selected Track will remain selected.

LOCK TLG TO EDIT TRACK

When this item is selected, when a device is put in any motion mode, the playhead (CPI) will remain married to the TLG and the Timeline will move with the CPI.

When not selected, the CPI is allowed to play off the screen.

KEEP OUTPOINT

With this item selected, when an edit is ended by pressing [RECORD] before it reaches its defined out-point, the out-time will remain the same and only the In-time is updated.

USE SOURCE DURATION

When selected, the latest source outpoint on the Timeline without a gap will define the edit duration. When PREVIEW or RECORD is pressed, the Record Event Out-point will be automatically aligned to the latest sources out-point.

When not selected, the Record Event will define the Edit duration.

RECORD OFF (Dummy Edit, Paper Edit)

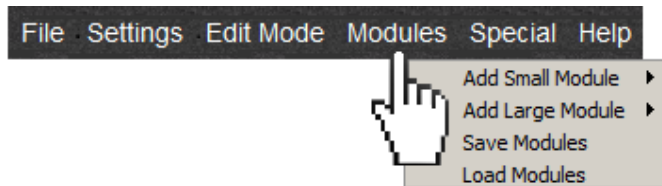
When selected, edits will not be performed to tape or server, but will only be sent to the EDL. When checked, pressing [RECORD] sends a "paper edit" or "dummy edit" to the EDL. This function only applies to the Edit Mode.

There will not be an R-Mark associated with this edit in the EDL, as it is a 'Dummy Edit'.

When an edit is performed with Record Off, the Record Track will display the edit in pink to distinguish it from an edit that has actually been performed.

5.4. Modules

[Click] {Modules} to open the **Modules** dropdown Menu.



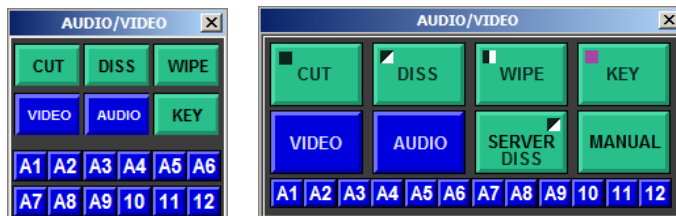
ADD SMALL OR LARGE MODULE

Add Command Modules (Key Modules) to the GUI for use with a mouse or touch screen. These windows are populated with related graphical function keys that perform the same functions as their keyboard counterparts, and can be used instead of, or in concert with, the DiVA keyboard.

These windows are available in small and larger sizes. Some items found in the large modules may not be present in the small modules. In both cases you will be presented with the following options:

- Audio/Video
- Device Control
- Edit
- Events
- Keypad
- Macros
- Match
- Search Modes
- Server Control

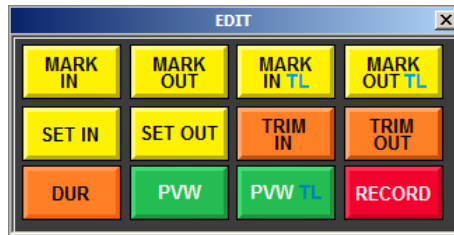
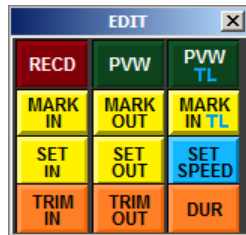
Audio/Video Modules



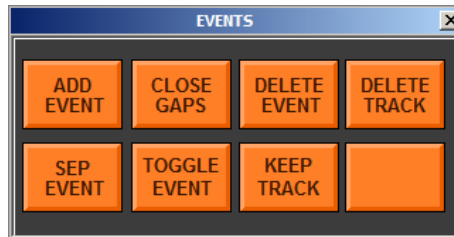
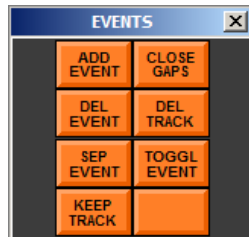
Device Control Modules



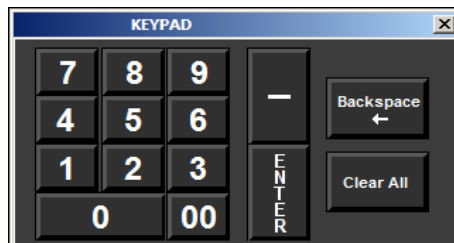
Edit Modules



Events



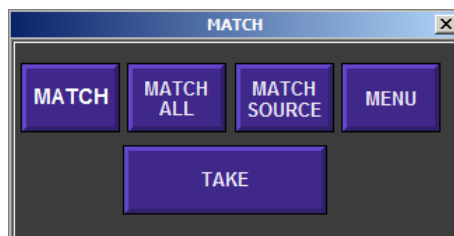
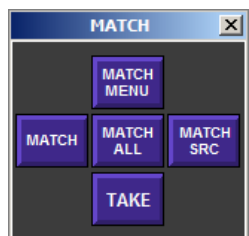
Keypad Modules



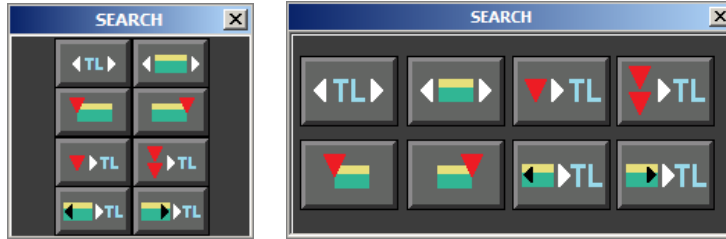
Macros Modules



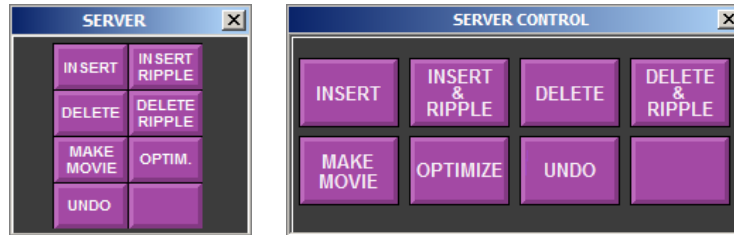
Match Modules



Search Modes Modules

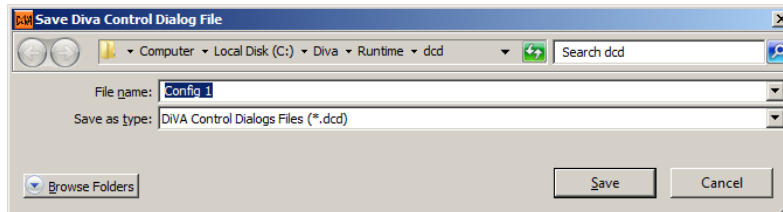


Server Control Modules



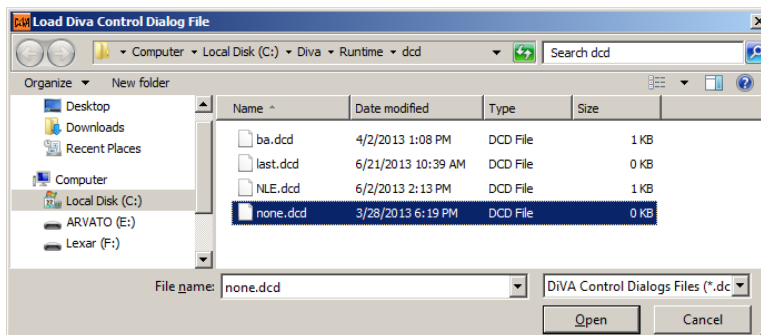
SAVE MODULE CONFIGURATION

Selecting **Save Modules** will allow you to save the configuration of currently displayed Modules and their positions. You will be presented with the following:



LOAD MODULE CONFIGURATION

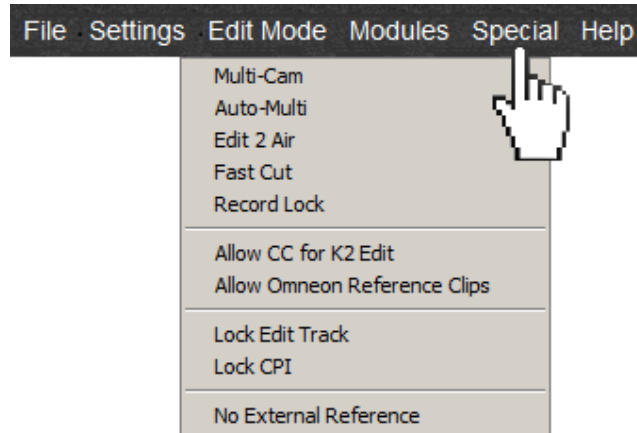
Selecting **Load Modules** will allow you to recall saved configurations of currently displayed Modules and their positions. You will be presented with the following:



Select **None** to clear all modules from the screen.

5.5. Special

[Click] {Special} to open the **Special** dropdown Menu.



MULTI CAM

MultiCam is a feature that allows the user to roll multiple devices in sync, usually "iso" reels, and switch the switcher via the Track select keys ([T1] - [T12]) on the DiVA Keyboard rather than manually at the switcher.

Each time a new Track is selected during a Preview or Record that has an Event currently involved in the Edit, that Event is separated. This allows the user to return to this point to perform a "fix", "slide" the Event(s) or otherwise modify what was previously performed, do a "pick-up", or even Auto-assemble the entire Timeline.

In the following example, each press of a Track select key created a separation in the Event mounted on that particular Track.

■ EXT:R1 CU	■ EXT:R1 CU	■ EXT:R1 CU	■ EXT:R1 CU	■ EXT:R1 CU	■ EXT:R1 CU	■ EXT:R1 CU	■ EXT:R1 CU
3:00:00:11	3:00:05:11	3:00:25:08	3:00:25:08	3:00:36:26	3:00:36:26	3:00:36:26	3:00:36:26
■ EXT:R1 MED	■ EXT:R1 MED	■ EXT:R1 MED	■ EXT:R1 MED	■ EXT:R1 MED	■ EXT:R1 MED	■ EXT:R1 MED	■ EXT:R1 MED
59:58:12	1:00:06:01	1:00:13:23	1:00:13:23	1:00:13:23	1:00:13:23	1:00:13:23	1:00:13:23
■ EXT:R1 WIDE	■ EXT:R1 WIDE	■ EXT:R1 WIDE	■ EXT:R1 WIDE	■ EXT:R1 WIDE	■ EXT:R1 WIDE	■ EXT:R1 WIDE	■ EXT:R1 WIDE
5:00:00:00	5:00:10:22	4:59:52:22	5:00:02:16	5:00:02:16	5:00:11:28	5:00:11:28	5:15:28

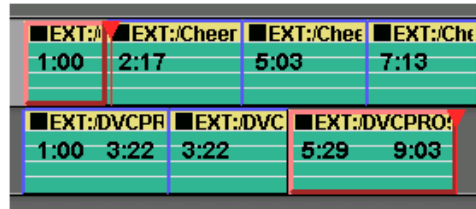
When active, the word **MultiCam** will be displayed in the status area at the top of the DiVA screen. You **must** turn this feature **OFF** before returning to normal linear or non-linear editing.

AUTO MULTI

When this item is selected, the **Auto Multi** feature will be activated. The word **Auto Multi** will be displayed in the status area of the screen.

This feature works the same as MultiCam, but when the MultiCam process is ended; all overlaps will be automatically removed. Compare the following images:

Without Auto Multi



With Auto Multi



Fast Cut

FastCut allows the user to have multiple Tracks populated with server clips or VTR Events, and when Record or Preview is initiated, all Tracks except the Record Track and the selected Track are disabled for the edit.

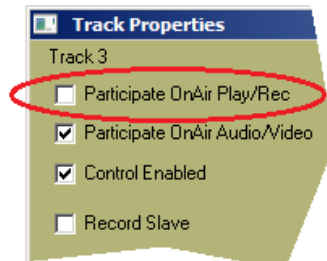
When this feature is enabled, the word 'FastCut' will be displayed in the Status area at the top of the screen.

RECORD LOCK

When enabled, this feature automatically disables control over all Record Tracks during a Recording, allowing the user to move to other Tracks and cue and play source devices without affecting the recordings.

DiVA must be in the Edit Mode with Track 1 assigned as the primary recorder.

- 1 Enable Record Lock.
 - When enabled, RecLock is displayed in the display area at the top of the DiVA screen to show that you are in the Record Lock Mode.
- 2 Mount as many secondary Record Events as desired on other Tracks
- 3 Select a PB Source Track and press **[SHIFT][LOCK]** to open the **Track Settings Dialog**.
- 4 De-select the option 'Participate OnAir Play/Rec'.



5a. Repeat for each PB Source Track that will be controlled manually during

the edit. The Following icon should appear to the left of each Source Track:



Notice that the lock is white and only **partially** closed.

5b. Press **[RECORD]** to start Recording. The following icon should appear to the left of each Record Track:



Notice that the lock is black and is **completely** closed.

5c. Press **[RECORD]** to bump-out of the edit, send the edit to the EDL, and automatically re-enable the Record Tracks.

5d. Press **[SHIFT][ALLSTOP]** to abort the edit.

6 To be able to MATCH to a source that has been manually rolled into the show, once the source has been played and before ending the edit, with the Source Track selected press **[MARK IN]**. This is the TC number that will be placed in the EDL. Repeat for each source manually played.



Sources used in the edit that are not partially disabled (see #4 & 5 above), will not be accessible for play-out during an edit, but their edit information will still go to the EDL.

ALLOW CC FOR K2 EDIT (Closed Captions for K2/Summit Servers Only)

With this item selected, Closed Captioning data will be allowed to pass through to the K2 Record channel.

When not selected, CC Data is inhibited.

ALLOW OMNEON REFERENCE CLIPS (Omneon/Spectrum Servers Only)

Select this item if you wish DiVA to be able to create Reference Movies with Harmonic servers.

Movies are new 'clips' created from a DiVA Record Track or from multiple clips placed back-to-back on a Source Track. There are three types of Movies that can be created with Harmonic Servers; Reference, Discrete and Embedded.

A Reference Movie is the quickest Movie to make. It consists of just pointers to the original material or 'Essence' as Harmonic calls it.

If you delete a Reference movie using a Spectrum Application such as ClipTool or ProDrive, the underlying media or essence used to create it will also be deleted.

To delete a Reference Movie or clip without deleting the original essence, use Windows Explorer or consult your Spectrum documentation.

See the Harmonic TechNote for more information on Reference, Discrete and Embedded Movies.

LOCK CPI

With this item selected, the CPI (Current Position Indicator) is locked to the Timeline, so the current CPI position is always located at the TLG.

When this item is not selected, the CPI is running free and able to run off the screen.

NO EXTERNAL REFERENCE

For server only applications, DiVA does not require an external sync reference for synchronization purposes, but it is always good to have for reasons of accuracy. Without external reference, servers can be plus/minus one frame out of sync when playing out. This is not an issue when recording. DiVA is defaulted to use external sync for reference. To use the internal computer clock as reference in a 'server only' environment, select 'No External Reference'.

If you are using one of the optional AJA Video Capture Cards, connect a **color black reference** or **Tri Level Sync** to the top BNC connector on the video capture card.

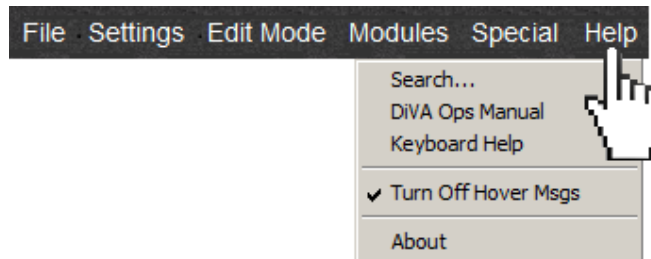


When sync or reference is detected, a **green reference present** indicator lamp is illuminated. The Sync indicator is located at the upper-right corner of the edit screen (shown below).



5.6. Help

[Click] {Help} to open the Help dropdown Menu.



SEARCH...

Press **Search...** to search the internal Manual for a specific item. Coming soon!

DIVA OPS MANUAL

An interactive PDF of the DiVA Manual is available at the push of a button.

Press **[HELP]** or **{Help/DiVA Ops Manual}** to select and open the DiVA Help Manual.

You can download continuously updated versions of this file from our website using the following URL:

http://www.editware.com/Diva_Ops_Manual-2014.pdf

Once downloaded, place the “DiVAOpsManual.pdf” file in the C:/Diva/Runtime directory.

KEYBOARD HELP

Get Help for a **KEY** function on the DiVA keyboard. Coming soon!

TURN OFF HOVER MESSAGES

When this function is enabled, placing your cursor over a key on a Module or an item in the drop-down menu, will display a short informative about that particular item. For example:

ABOUT

Displays the software version number and other data regarding the loaded version of software.

6. TRACKS

Each Track is assigned its own device or crosspoint. Events on a Track represent and display metadata related to that assigned device.

ASSIGNING A TRACK

See [Assigning Devices to Tracks, Page 18](#).

SELECTING A TRACK

A Track can be selected in several different ways:

- Pressing the appropriate **[T1]-[T12]** Track key. **[T1]** will select **Track 1**, **[T2]** will select **Track 2**, etc. Note that Tracks 9-12 are **[SHIFT]** functions.
- **[Click]** on the Track **[T1]-[T12]** you wish to select.
- Press **[↑]** or **[↓]** to move up or down between **[T1]-[T12]**.
- Use the mouse-wheel to travel between **[T1]-[T12]**, and optionally **[T2.1]-[T2.12]**,

When selected, the background color of the Track changes to a lighter shade and the Track button is highlighted.

CHOOSING TRACK PAGES

The Tracks on which you will work appear in groups of twelve. Each group of twelve Tracks is called a **Page**. To change from Page 1 to Page 2, press **[Pg Up]** or **[Pg Dn]**.

DiVA comes standard with 12 Tracks on 1 Page. DiVA is optionally available in configurations of **24** Tracks on 2 Pages.

The first Page is **Page 1** and its Tracks are labeled **1** through **12**.

The second Page is **Page 2** and its Tracks are labeled **2.1** through **2.12**.

You may also use the mouse wheel to scroll between pages.

SECOND PAGE DATA WARNING

If you have the optional second Tracks Page, an illuminated arrow at the top-left of the screen will let you know if there is data (Events) on the Page not currently being displayed.

If you are on Page 1 and there is data on Page 2, you will see:



If you are on Page 2 and there is data on Page 1, you will see:



TRACK STATUS DISPLAY



To the left of each Track is its **Track Status Display**. Timecode or Timer status from the device assigned to this Track is displayed here, as well as its Track number, current motion status, speed, and device name.

TRACK BUTTON

The number on the Button on the left end of the Track Status Display is the **Track Number**. The green [T1] - [T12] Source select keys on the keyboard correspond to these numbers.

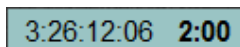
The Track number and its background will change colors depending on the situations below:

- If the **Track “button”** is surrounded by a **white border**, this indicates that this Track is selected.
- If the **Track 1 “button”** is **red** and has the letters **EDIT** (Edit Record Track) on it, the Track is assigned as the Edit Track. To change a Track from an Edit Track to a regular Track, on the **Menu Bar [click] {Edit Mode/Edit Mode On}**
- If the **Track “button”** is Black, Brown, Blue, Green, Magenta, Orange, Red, White or Yellow, these Tracks have been ‘branded’ with a distinct color for easier recognition.
- If there are three characters displayed on the Track Button, this means that **Menu Bar** item **{Settings/Button Label}** is selected.

See [Error! Reference source not found., Page Error! Bookmark not defined.](#) for more on Colored Buttons.

THE TIMECODE DISPLAY

The Timecode display indicates more than just the current timecode of the device. The data displayed here is actual ‘status’ provided directly from the assigned device.



Shows a 200% (2X) play speed.

3:26:12:06 JOG	Shows that the device is in the Jog mode.
3:26:12:06 STIL	Shows that the device is in the Still mode.
3:26:12:06 STOP	Shows that the device is in the Stop mode.
HH:MM:SS:FF	Timecode is shown as HH:MM:SS:FF , where HH is hours, MM is minutes, SS is seconds, and FF is frames.
3:26:12:06 play	A lower case play indicates a VTR is playing but not yet servo-locked.
3:26:12:06 Play	A Play with an initial capital letter indicates that the VTR is servo-locked.
3:26:12:06 PLAY	A PLAY with all capital letter indicates that the VTR is servo-locked and that Color Frame is enabled in the VTR (analog only). Video Servers will always display PLAY.
3:26:12:06 0.50	Shows a 50% (.5x) play speed.
3:26:12:06 REF?	The selected device has no, or improper, reference.
XXXX	There is no connection to the selected device.
3:26:12:06 SBOF	The VTR standby (head) is turned off.
3:26:12:06 LCL	Device is in local control.

ACTIVE TRACK STATUS LEDS

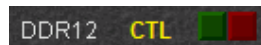
Below the Timecode display are two LEDs, one is **green** and the other is **red**.



Whenever a source device on this Track is involved in an Edit or Preview, the green LED is lit.



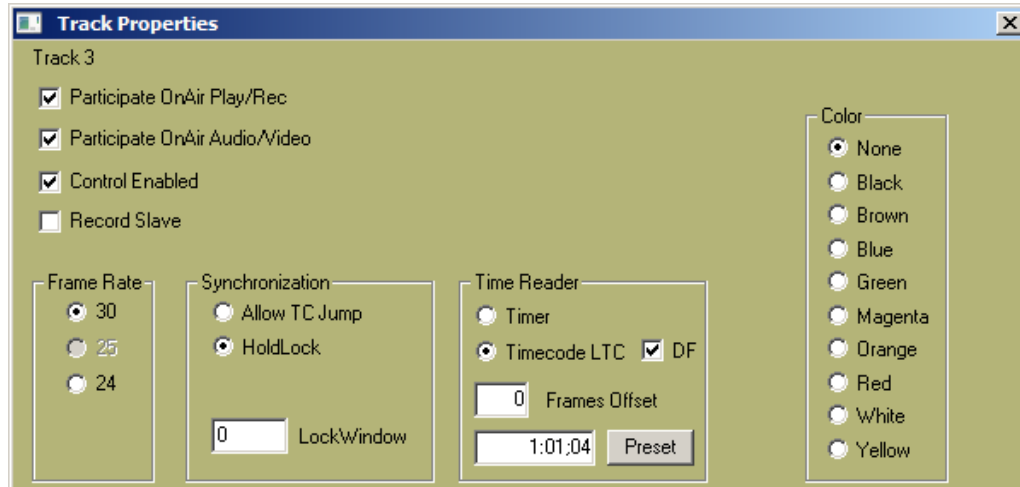
Whenever a device on this Track is in **record**, the **red** LEDs lit. This red Active Track Status LED is high only when the device reports it is actually recording.



When a yellow **CTL** is displayed, the source assigned to this Track is in **Timer** or **Control Track** mode. When **CTL** is not displayed, **timecode** of the current source is displayed.

6.1. Track Properties

Pressing **[SHIFT][LOCK]** displays the **Track Properties Dialog** for the selected Track. You may also obtain this Dialog by **[Right Clicking]** anywhere on the Track outside of an Event and selecting **Track Properties**.



The options for this Dialog are explained below:

Participate ON-AIR Play/Rec

If this item is not selected, the Track ID area will be ghosted, and the device assigned to this Track will not play or record during the preview, playout, or recording of the current Timeline edit.

The Events on this Track will still control any audio or video crosspoints assigned to the device on this Track. The following icon will be displayed to the left of the Track button to show it is only partially enabled/disabled:



Participate On-Air Audio/Video

If this item is not selected, the device crosspoints assigned to this Track will not be selected on the audio mixer and video switcher during a preview, playout, or recording of the current Timeline edit.

The following icon will be displayed to the left of the Track button to show it is only partially enabled/disabled:



Control Enabled

Uncheck **Control Enabled** to disable a Track from being controlled.

The following icon will be displayed to the left of the Track button to show it is completely disabled:



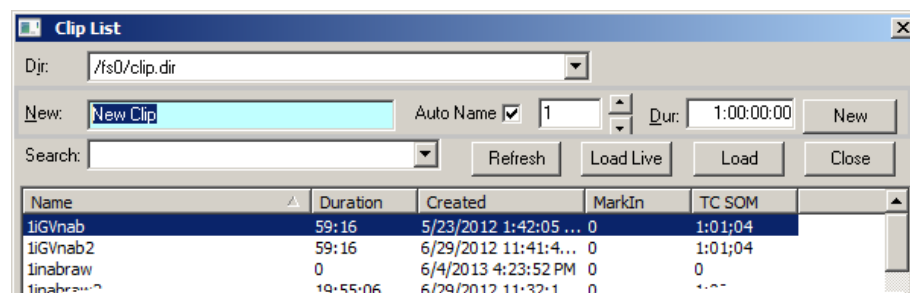
To open the **Track Properties Dialog** and select *partial* enable/disable of Tracks, press **[SHIFT][LOCK]**.

To toggle *complete* enable/disable of Tracks without opening the Track INIT Dialog, select a Track and press **[LOCK]**.

Record Slave (Omneon / Spectrum only)

This feature is designed to allow you to create and name a Record Clip on one or more server channels, start and stop the recording, and automatically have new Record Clips created using the same original names, but with incremental numeration*. For example; Original Record Clip Name=BOB. Subsequent Clip Name=BOB1. Next Clip Name=BOB2, and so forth.

- 1 Select the Omneon Track you wish to Record to.
- 2 Press **[SHIFT][LOCK]**. The Track Properties Dialog for that Track will open.
- 3 Check the **Record Slave** box.
- 4 Repeat for each Omneon Track you wish to Record to. When done, dismiss the Track Properties Dialog.
- 5 Select a Track to mount a Record Clip.
- 6 Press **[CLIP LIST]** to open the Clip Browser.



- 7 Enter a name for the record clip in the **New** text field.
- 8 Check the **Auto Name** box.
- 9 Set your chosen **suffix number** in the spin box field.
- 10 Enter your desired default Record Event duration in the Dur field. It is

wise to make this duration longer than needed. For an explanation, see #19 below.

- 11 With the cursor in the **Dur:** field, press the **[New]** button on the right and the Record Event will be placed on the Track at the TLG.
- 12 Repeat on other enabled Tracks as desired. There is no need to close the Track INIT Dialog each time. DiVA will remember your desired name, suffix and duration for each additional Track. When done, dismiss the browser dialog.
- 13 Record when ready. To end the recording and create an auto pickup with the next Record Events: Press the **[RECORD]** button to terminate the edit **before** reaching the end of the Record Events. If the recording ends, or if you press **[ALLSTOP]**, DiVA default behavior will occur. That is; the recording will end and no new Record Event will be created.

When you “bump out”, DiVA will turn your old Record Events into Play Events, and automatically place new Record Events at the end of the old Record Events. The Timeline Guide will be automatically positioned at the new record in-point. Press **[RECORD]** again to repeat the process.

Track Frame Rate

These radio buttons define the Track frame rate and override the system setting for this Track.

- **30** - 30fps (**NTSC**)
- **25** - 25fps (**PAL**)
- **24** - 24fps (Film Rate / **24P HD**)
- **60**- 720p 60 TC fields ps (device dependent)

DiVA must be restarted for this change to take effect.



*When this setting is different from the system setting in the Menu Bar {**Settings/Global Settings/Frame Rate**}, the Reel ID in the Track Status Area will be displayed in **BOLD yellow**.*

Allow TC Jump

Select this item if your source timecode contains timecode jumps within the scope of an Event.

Hold Lock

If this item is selected, the frame accuracy of the device on this Track will be defined according to the **Lock Window** setting.

Lock Window

This value specifies the frame accuracy of the device on this Track. The value reflects how accurate, in frames, the synchronization tolerance is set.

For example, **0** is frame accurate; **1** is plus or minus one frame; etc.

Timer

With this item selected, DiVA will control this device by reading the Timer of the device rather than timecode. The Track Status Display will display a yellow **CTL** in the Status Area when in this mode.



You may also toggle this ON and OFF by pressing **[TC/CTL]**.

Timecode LTC

Defaults the TC setting for this Track to be **Longitudinal Time Code** (LTC).



Note that some video servers do not support recorded timecode.

DF (Drop Frame)

When this item is checked, the system has identified a Drop Frame Timecode flag from this device (NTSC only).

When this item is not checked, the system has identified a Non-Drop Timecode flag from this device (NTSC only).

More about NTSC Timecode.

An absolute time used to identify a specific frame or address in a clip or VTR. Timecode is measured in hours, minutes, seconds, and frames, and in NTSC can be Drop Frame or Non-Drop Frame.

An hour of NTSC video has 107,892 frames of video. 1-hour of timecode (NDF) has 108,000 frames. That is 108 frames longer than a real-time hour. In order to compensate for this difference, and to make a 1-hour show be a true 1-hour length and not 01:00:03:18, drop-frame timecode is used.

Drop-frame timecode drops 2-frames (**;00** and **;01**) every minute except for the tenth minutes (1:10:00;00, 1:20:00;00, 1:30:00;00, etc.) for a total of 108 frames per hour (3;18). Note that Drop-frame timecode only drops the numbers that refer to the frames, and not the actual frames.

Non-drop-frame timecode is displayed with a (:) colon between the seconds and frames. For example, 01:08:20:15.

Drop-frame timecode is displayed with a (;) semi-colon between the seconds and frames. For example, 01:08:20;15.

Frames Offset

This is used to compensate for frame delay through digital devices such as DVEs.

Preset

Some device types allow timecode and CTL to be set to a specific value.

- 1 In the **Track Settings Dialog**, select **Timer**.
- 2 Enter the desired timecode into the Preset field then **[Click]** the **Preset** button. The Preset Time will be sent to Timer 1 of the VTR.

Presetting Timecode on a VDCP Record Event

- 1 Create a **Record Event** on a Track assigned to a VDCP **encoder** (Record) channel.
- 2 Type the desired time in **HH:MM:SS:FF** format. It will appear in the Numeric display field.
- 3 Press **[SET IN]**. The time will be transferred into the timecode area of the Record Event (Device Dependent).

Color

Here you can assign colors to the Track Buttons to better help quickly associate Tracks, groups of devices, etc. This ability can also be found in [Track Properties, Page 58](#)

6.2. Swap Tracks

You can exchange (swap) Source Assignments for an entire Track automatically.

Swap Tracks on the DiVA Keyboard

- 1 Press the **[T1]-[T12]** key you wish to Swap.
- 2 Press **[SWAP]**. The word **SWAP** appears on the Button for that Track.
- 3 Press the **[T1]-[T12]** key you wish to swap with.
The two sources and all their assigned values will be swapped.

Swap Tracks in the Assignment Page

- 1 Press **[ASSGN]** to open the Assignment Page.

- 2 On the Edit Screen **Select the Track** you wish to exchange with. In the example below, Track T2, Device Name B2.

The screenshot shows the 'EDIT' screen with three tracks: A1, B2, and C3. Track B2 (T2) is highlighted with a red circle. To the right is the 'ASSIGNMENT PAGE' table.

Track	On	Device Name
1	<input checked="" type="checkbox"/>	A1
2	<input checked="" type="checkbox"/>	B2
3	<input checked="" type="checkbox"/>	C3
4	<input checked="" type="checkbox"/>	D4
5	<input checked="" type="checkbox"/>	E5

- 3 In the Assignment Page, **select the Track number** you wish to exchange. In the example below Track 3 is selected.

The screenshot shows the 'ASSIGNMENT PAGE' with the same table as above. Track 3 is highlighted with a red circle.

Track	On	Device Name
1	<input checked="" type="checkbox"/>	A1
2	<input checked="" type="checkbox"/>	B2
3	<input checked="" type="checkbox"/>	C3
4	<input checked="" type="checkbox"/>	D4
5	<input checked="" type="checkbox"/>	E5

- 4 **[Click]** the **Swap Tracks** button on the Assignment Page. The two sources in the Assignment Page and all their assigned values will be swapped.

The screenshot shows the 'ASSIGNMENT PAGE' after a swap. Track 2 is now C3 and Track 3 is now B2. Both are circled in red.

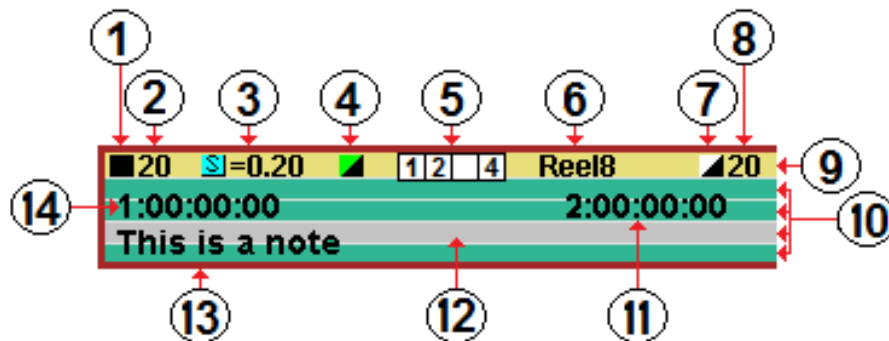
Track	On	Device Name
1	<input checked="" type="checkbox"/>	A1
2	<input checked="" type="checkbox"/>	C3
3	<input checked="" type="checkbox"/>	B2
4	<input checked="" type="checkbox"/>	D4
5	<input checked="" type="checkbox"/>	E5

7. EVENTS

Clips are loaded based on the type of device assigned to a Track. When a clip is placed on the Track, it becomes an **Event**.


7.1. Events Explained


When a clip from a server, VTR, or other source is placed on a Track, it becomes an **Event**. Each Event displays video and audio **sub-Tracks**, as well as related metadata and icons.




① Transition Type

The Transition icon defines what type of transition will be performed by an external Mixer & Switcher when transitioning **TO** this Event.

An  means that the Event will be transitioned TO with a CUT.

An  means that the Event will be transitioned TO with a DISSOLVE.

An  means that the Event will be transitioned TO with a WIPE.

If the Black portion of the transition icon is replaced by magenta, a video KEY will be transitioned.

For example: , , .

No Transition icon means that you have selected **MANUAL** for this Event. In this case, no transition will be performed, allowing the user to manually transition. See [CUT, Page 94](#) for additional information on Transitions.

② Transition Rate

This is the rate at which an **AV** transition will be performed by an external Audio Mixer & Video Switcher when transitioning **TO** this Event. The rate is displayed in SS:FF.

③ Speed

If an Event has a speed applied to it, the speed, in percentage of play speed, will be displayed here. If multiple speeds are applied to this Event, only the first speed will be displayed here. For example: a speed of 0.20 is 20% or 1/5 of 100% play speed. See [SPEED, Page 118](#) for additional information on Speed.

④ Audio Transition

By default, when you program a transition, it is applied to both audio and video. If you program the audio transition rate or transition location to be different than the video, this icon is displayed to show that the audio and video are not in their default configuration. See [DISSOLVE, Page 94](#) for additional information on A/V Transitions.

⑤ Audio sub-Tracks

This grouping of numbers reflects the audio sub-Tracks defined in the system `.dev` file for this device.

When **[A1-A12]** are selected on the keyboard or GUI, the result is also applied to the current Event in two ways; 1) the audio sub-Track selected will toggle between green and grey, as shown in **12** of the Event graphic, and 2) the audio sub-Track number will be toggled on and off respectively as shown in **5** of the Event graphic.

⑥ Reel ID / Clip Name & Path

The Reel ID identifies either a name given to a reel mounted on a VTR device, or the clip name and path of a clip from a video server. See [Assigning a Reel ID, Page 175](#) for additional information on assigning a Reel ID to a VTR,

⑦ Video Server Internal Transition

This is the type of **video** transition that will be performed by a Video Switcher internal to a GV Summit video server, when transitioning **FROM** this Event. See [SRVR \(SERVER TRANSITIONS\), Page 98](#) for more information on Server Transitions.

⑧ Video Server Internal Transition Rate

This is the rate at which an **A** or **V** transition will be performed by an Audio Mixer & Video Switcher internal to a GV Summit video server, when transitioning **FROM** this Event. The rate is displayed in SS:FF.

⑨ Video sub-Track

This is the Video sub-Track. Press **[VIDEO]** to toggle this sub-Track ON and

OFF.

When the video sub-Track is yellow, it is enabled. When enabled, the video XPT assigned to this Track will be switched during a Preview or Record.

When the video sub-Track is grey, it is disabled. When disabled, the video XPT assigned to this Track will not be switched during a Preview or Record.

Audio sub-Tracks

- ⑩ These are **Audio** sub-Tracks. When an Event is a **Player Source Event**, each **audio** sub-Track is green and represents an audio input from the assigned source. In the previous example there are 4 audio sub-Tracks. Source Event sub-Tracks only affect the system output; that is, the mixer out, the switcher out, the source outs, etc.

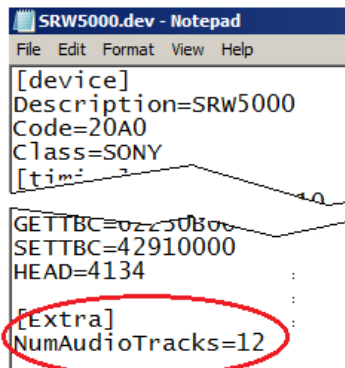
Press **[A1-A12]** to toggle the respective audio sub-Track ON or OFF.

Press **[SHIFT][AUDIO]** to toggle between currently enabled sub-Tracks and no sub-Tracks.

When an audio sub-Track is green, it is enabled. When enabled, the audio fader assigned to this sub-Track will be open during a Preview or Record.

When an audio sub-Track is grey, it is disabled. When disabled, the audio fader assigned to this sub-Track will be closed during a Preview or Record.

The amount of audio sub-Tracks within an Event is defined in the .dev file for the assigned device. For example: **Diva/Runtime/Dev/SRW-5000.dev**



```

SRW5000.dev - Notepad
File Edit Format View Help
[device]
Description=SRW5000
Code=20A0
Class=SONY
[time]
GETTBC=02250800
SETTBC=42910000
HEAD=4134
[Extra]
NumAudioTracks=12
  
```

⑪ Event OUT-time

This is the **OUT-time** of the current Event. This can be changed to show the **duration** of an Event by selecting on the Menu Bar **{Settings/'Display' Options/Duration}**. The OUT-time of the Event can be changed by the [MARK OUT], [SET OUT] or [TRIM OUT] functions.

⑫ Disabled Audio sub-Track

This is an audio sub-Track that has been turned off or disabled. In this state, the audio fader assigned to this sub-Track will be closed during a Preview or Record.

13 Note

This is a note that can be attached to an Event. The note will also be displayed with the edit in the EDL.

Event IN-time

- 14 This is the **IN-time** of the current Event. The IN-time of an Event can be changed by the [MARK IN], [SET IN] or [TRIM IN] functions.

HOT EVENT(S)



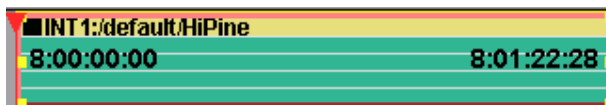
A **Hot Event** is the current Event on a Track, and it is displayed with a **red border**. When commands such as Play, Stop, Trim In, or Trim Out are executed, they are directed to the Hot Event on the **selected** Track.

An Event becomes a Hot Event by either **[Clicking]** on it, which also makes it the **Selected Event**, or by using the arrow keys to move to the beginning of the Event on the active Track.

There can only be **one** Hot Event per Track, so if multiple Events are on the same Track, the Hot Event has the focus, and all keystroke commands will be directed to it.

Each populated Track will have a Hot Event.

SELECTED EVENT(S)



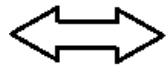
A **Selected Event** is an Event that has been **[Clicked]** on. When an Event is selected, it is displayed with a **yellow border**. Selected Event(s) will additionally respond to functions such as Cut, Delete, Copy, or Paste.

You may select multiple Events by holding down **[CTRL]** as you **[Click]** the Events. If one Event is already selected, you may select a range of Events by holding **[SHIFT]** as you **[Click]** the last Event you want selected; all Events in between will be selected.

Performing these procedures again will de-select Events.

7.2. Event Cursors

When dealing with Events, there are four locations on an Event where the cursor will change shape and function:



When you 'hover' on an Event and see this cursor, it means that you are in the body of the Event. This allows you to 'click & drag' the Event to the left or right until it comes in contact with another Event. Dragging an Event will only change the location of the Event, and not any times. Pressing [UNDO] will reverse this action.



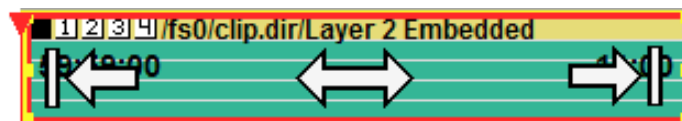
When you 'hover' on an Event and see this cursor, it means that you are within the boundaries of the Event IN-point. This allows you to 'click & drag' the Event IN to the left or right until it comes in contact with itself or another Event. Dragging the Event IN will change the location of the Event IN, and the Event duration, but will not affect the IN-Time. Pressing [UNDO] will reverse this action.



When you 'hover' on an Event and see this cursor, it means that you are within the boundaries of the Event OUT-point. This allows you to 'drag' the Event OUT to the left or right until it comes in contact with itself or another Event. Dragging the Event OUT will change the location of the Event OUT, and the Event duration, but will not affect the IN-Time. Pressing [UNDO] will reverse this action.



When you 'hover' between adjoining Events and see this cursor, it means that you are on the 'slip' boundary of the Event. This allows you to 'drag' the mouse left or right and change the respective IN and OUT-points of both Events, where the cut will occur, while still keeping the Event relationships the same. Pressing [UNDO] will reverse this action.



7.3. Record Events

When an Event is a **Record Event**, the sub-Tracks still represent video and audio, but they are different colors depending on the type of recording;

- **Insert** - The Event is **RED**.
- **Assemble** - The Event is **MAGENTA**.
- **Pre-Read** - The Event is **ORANGE**.

Record Events can be created at any time on any Track. Once a clip is placed on a Track:

Press **[TOGGL EVENT]**.

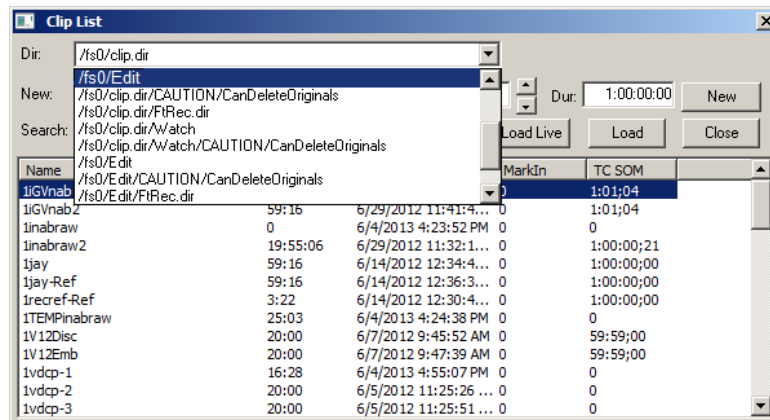
Each successive toggle will change the Event from a **GREEN PLAY** Event, to a **RED INSERT** Event, to a **MAGENTA ASSEMBLE** Event, to an **ORANGE PRE-READ** Event.



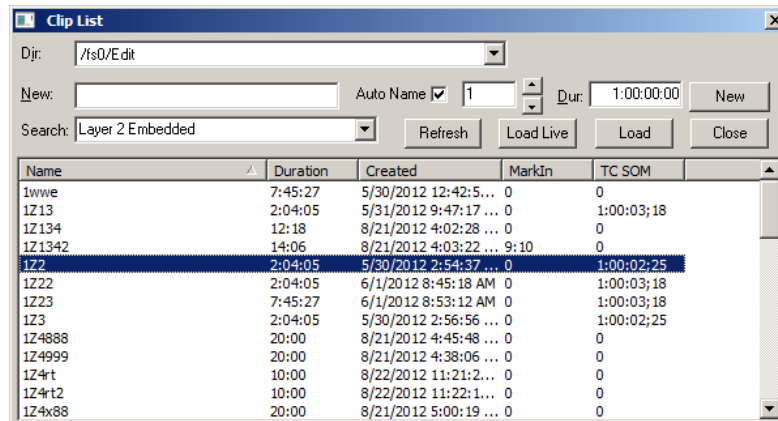
Note that on a video server, there is no difference between an Insert edit and an Assemble edit.

LOADING A CLIP ON A SERVER TRACK

- 1 Select **[T1] - [T12]** to select the server Track where you will load your Clip.
- 2 Press **[CLIP LIST]** to display the Server Clip List.
- 3 **[Click]** the directory list button to select the desired directory (if your server supports more than one directory). The Directory list will display.
- 4 **[Click]** on the desired directory in the Directory.



The selected directory and its Clip list will display.



[Double Click] on the desired Clip...

OR

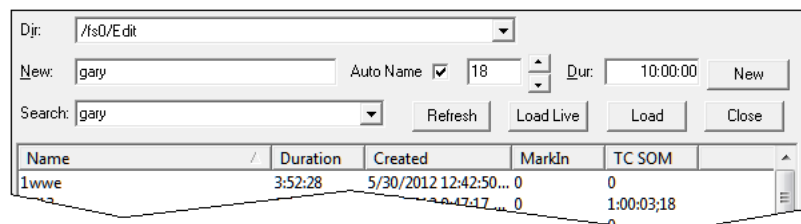
...use the **[UP ARROW]** and **[DOWN ARROW]** keys and press **[ENTER]**.

The entire Clip will load as an **Event** on the current Track aligned with the Timeline Guide.

'LOAD LIVE' FOR OMNEON & SPECTRUM SERVERS

The 'Load Live' function allows you to mount and play clips that are currently being recorded onto other channels, and allows the clip(s) to play past the point that they were loaded; that is, the PB clip is automatically given a duration of 2 hours.

- 1 Press **[ASSGN]** to open the Server Clip Directory.



Four new buttons have been added:



Refresh – Refreshes the current directory. Before you load a PB clip that is currently recording, you must first refresh the directory for the clip to be visible and available in the clip list.

Load Live – Loads the selected clip with a 2-hour duration, even if the clip is still recording. This clip will continue to play for the full 2 hours unless manually stopped.

Load – Loads the selected clip with its actual duration.

Close – Closes the dialog.

- 2 Click **[Refresh]** to refresh the current directory.
- 3 From the list of Clips, select the clip that you wish to load and play while it is still recording.
- 4 Click **[Load Live]**. The selected clip will be loaded on the selected Track. If you load a clip by mistake by **[double-clicking]** or by pressing **[ENTER]** rather than 'Load Live', select the PB Track and press **[DEL]**.

Note that DiVA automatically disables '**Participate OnAir Play/Rec**' and '**Participate OnAir Audio/Video**'.

Notes about the 'LOAD LIVE' feature:

- ▶ You can copy a clip that was loaded live and paste it to another Track, eliminating having to refresh the second Track.

- ▶ Once devices have been put into RECORD and their Tracks disabled, the only way to delete an Event on a PB Track is to select the Track and press **[DEL]**.

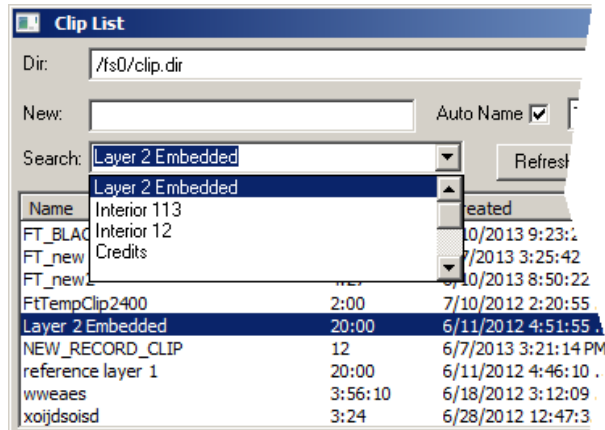
Search the Clip List

- 1 Type the name of the desired Clip in the Search text field. As you type in the name, clip names that match will be auto selected in the list.
- 2 Press **[ENTER]** to place the highlighted Clip on the Timeline at the TLG.

Once selected and placed on the Timeline, the Clip name as you entered it will be stored in a saved history list.

To access this list and load a Clip already in the list:

- 1 **[Click]** on the **Search** field Menu button. The drop down menu of previously loaded Clips is displayed.



- 2 Select the desired Clip and press **[ENTER]** to place the Clip on the Timeline at the Timeline Guide.

LOADING A CLIP ON A VTR TRACK

- 1 Select **[T1] - [T12]** to select the VTR Track where you will load your first Clip.
- 2 Press **[MARK IN]** and an Event will appear on the Track. This Event represents information from the VTR.

The default length of this new Event is the value set in the **Menu Bar {Settings/Time Settings/Event Dur (default)}**.

See ['Event Duration \(default\)', Page 41](#)

You may now edit this Event as you would edit any other Event.

CREATING A KEY, DVE, OR OTHER CROSSPOINT EVENT

Character Generators

With a Character Generator assigned to a Track, as in the example below, an Event for a CG may be placed on the Track, even if you are not controlling it through DiVA, and even if it is not a Deko.

6	<input checked="" type="checkbox"/>		CHARGEN	Deko	<input type="checkbox"/>	P3	\$	11
---	-------------------------------------	--	---------	------	--------------------------	----	----	----

Pressing **[MARK IN]** with this Track selected will place an Event at the TLG representing your CG. Set the duration of this CG Event as you would for any Event.

By default, CG Events will be a Key, and will have audio sub-Tracks turned **OFF**.

With certain Character Generators, serial control is available.

For additional information, see your **Character Generator's TechNote** in the **DiVA Peripheral Setup Manual**.

Switcher and Mixer Crosspoints

If you wish to call up a video switcher crosspoint, assign it in the Assignment Page as Class **XPNT**, and assign the desired crosspoint number. In this example the Track is named **Bars & Tone**, but any name is acceptable.

4	<input checked="" type="checkbox"/>	Bars & Tone	XPNT		<input type="checkbox"/>			4
---	-------------------------------------	-------------	------	--	--------------------------	--	--	---

Pressing **[MARK IN]** with this Track selected will place a Switcher crosspoint Event at the TLG. Set the duration of this Event as you would for any Event.

8. EDIT MODE

The EDIT MODE is a special mode within DiVA that allows you to perform linear and non-linear editing with both VTRs and/or servers, onto a virtual 'Black Track', representing the boundaries of a theoretical reel of tape.

THE VTR BLACK TRACK

The **Black Track** is a black overlay on Track 1 when in the Edit Mode. This 'Record Track' represents a "videotape", and defines the start and end boundaries of that tape as defined by the user in the dialog that opens when you press **[ASSGN]** with the Edit Track selected, and when a VTR is assigned to the Track. This Black Track overlay is automatically created when mounting the media, and cannot be moved or removed except by re-defining its parameters. Like a real record tape, throughout your edit session the black areas will represent un-recorded portions of your show.

See [Assigning the VTR Edit Record TRACK, Page 161](#).

THE SERVER BLACK TRACK

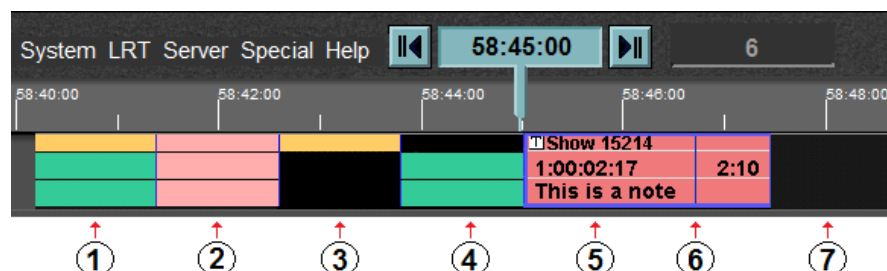
The **Black Track** is a black overlay on Track 1 when in the Edit Mode. This 'Record Track' represents a "Record Clip", and defines the start and end boundaries of that Clip. This Black Track overlay is automatically created when mounting the Record Clip, and cannot be moved or removed except by re-defining its parameters. Throughout your edit session the black areas will represent un-recorded portions of your show.

Each Model of Server has its own requirement for what can be used as the Record Event. Please see the Editware TechNote related to your server model.

THE RECORD EVENT

The **Record Event** or **Current Edit**, is the **dark red** Event defining the IN and OUT-points of the next edit to be performed. When first mounted, the Record Event is "open ended", and completely covers the Black Track.

The Record Track is comprised of four main components; **the Black Track**, **the Record Event**, **EDL Events**, and **Edit lines**.



Note the following about the Record Track. The following numbered items refer to the numbers in the above graphic:

- ① A 2-channel, audio & video edit. This Event is displayed with the standard colors of a PB Event, **yellow**, representing the video sub-Track and **green** representing the audio sub-Tracks, which on the Edit Record Track denotes that an edit with these boundaries is in the EDL, has R-Marks associated with it, and has probably already been recorded to tape or server.
- ② A 2-channel, audio & video edit. This Event is displayed in **light pink**, and on the Edit Record Track denotes that an edit with these boundaries is in the EDL, it is a 'dummy' edit recorded with 'Record Off', and therefore does *not* have R-Marks associated with it in the EDL.
- ③ An already recorded **video only** edit, with channels 1 & 2 of audio **not** recorded.
- ④ An already recorded channels 1 & 2 **audio only** edit, video **not** recorded.
- ⑤ The current Record Event.
- ⑥ A separator line of a previous edit under the Record Event.
- ⑦ A portion of your tape (the **Black Track**) that is still unrecorded.

Note the following about the Record Event:

- The In and OUT-points of your first edit are defined by...
 - ...pressing **[MARK IN]** and **[MARK OUT]**.
 - ...specifying new IN or OUT-times using the **[SET IN]** or **[SET OUT]** functions.
 - ...modifying the current IN or OUT-times using the **[TRIM IN]** or **[TRIM OUT]** functions.
 - ...recalling an Edit from the EDL.
- The Record Event displays the **Record Reel ID**, the **IN-point** and **OUT-point** or **duration** of the edit to be performed, and a **Note** if one has been added. It can also display a Transition icon if the Record Event is the FROM or TO source in a Pre-read edit.
- The Record Event is **TAGged** automatically when mounted. This allows the Record Event to be "dragged" along the Track, while maintaining its timecode relationship to the Black Track and the Timeline. This cannot be turned off on the Record Event.
- Pressing **[OPEN END]** will **open-end** the Record Event by extending its OUT-point to the end of the Black Track.

RECORDED EDITS

The **Recorded Edits, #1, #3, and #4** in the previous graphic, are Edits already performed (recorded). Note the following about the Recorded edits:

- Recorded Edits are displayed with the standard "yellow & green" colors of a PB Event, but cannot be moved. They can only be removed by deleting their edits from the EDL.
- The blue vertical lines are separators to help define the boundaries and A/V components of each individual edit. If the Record Event is placed over a separator line, it will not cover the separator line.
- The data used to create these Recorded Edits and "edit marks" comes from the EDL. If you delete an edit from the EDL, the Recorded Edit marker representing that edit is removed from the Record Track.
- If you select the Record Track, each Recorded Edit is a **POI (Point Of Interest)**. If you select any Track other than the Record Track, Recorded Edits are not treated as POIs.
- When you **[Click]** on any recorded portion of the Record Track, the corresponding Edit in the EDL will be found and highlighted.
- When you **[Click]** on any Edit Line in the EDL, the representative portion of the Record Track will be brought to the TLG.
- Record Events only affect the Record device, and define which sub-components of audio and video will be enabled for recording.

DIRECTORY PATH & CLIP NAME / REEL ID


When an Event is on a **server Track**, the entire directory path and name of the assigned clip will be displayed on the video sub-Track. When an Event is on a **VTR Track**, the clip's Reel ID is displayed on the video sub-Track.

EVENT IN-TIME

The timecode on the left end of the audio sub-Tracks is the Event's In-time. This timecode is related to the assigned clip, not the Timeline Display.

EVENT OUT TIME / EVENT DURATION

Depending on the selection made in **Menu Bar {Settings/ 'Display' Options/Duration}**, the timecode on the right end of the audio sub-Tracks is either the Event's OUT-time or the Event's duration. Again, this timecode is related to the assigned clip, not the Timeline Display.

If the Event has a separate audio transition rate applied to its audio sub-Track, a green and black **audio transition icon**  will appear. The rate of the audio transition is available in the [SPLIT] Dialog. .

If your server has an internal mixer or switcher, the transition type and rate is displayed on the far right of the Event. Both internal and external mixers and switchers can be used simultaneously.

STATUS ICONS

Various status icons appear on the Video sub-Track depending on which status elements have been applied to the Event. The following is a list of status icons and their meanings:



The Event has been tagged. See [TAG, Page 137](#)



The Event has had its audio altered. See [SPLIT, Page 153](#)



The Additive function has been applied to this Event. See [ADDITIVE, Page 153](#)



The Event has had its speed altered. See [SPEED, Page 118](#)



The Event has a memory option enabled in the Effects Dialog. See [DISSOLVE, Page 94](#)



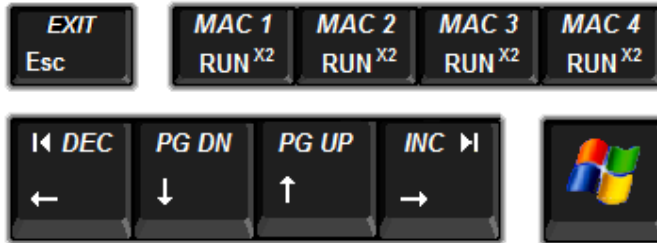
The Event has had its **video levels** adjusted from within the VTR **TBC Dialog**. See [TBC CONTROL \(VTRS ONLY\), Page 157](#)



The device attached to this Event has a **loop** applied.

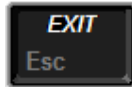
9. KEYBOARD FUNCTIONS

9.1. Black Keys



ESC (Escape)

Press **[Esc]** to close any open dialog.



EXIT

Press **[SHIFT][EXIT]** to close the DiVA application and return to the Windows Desktop.

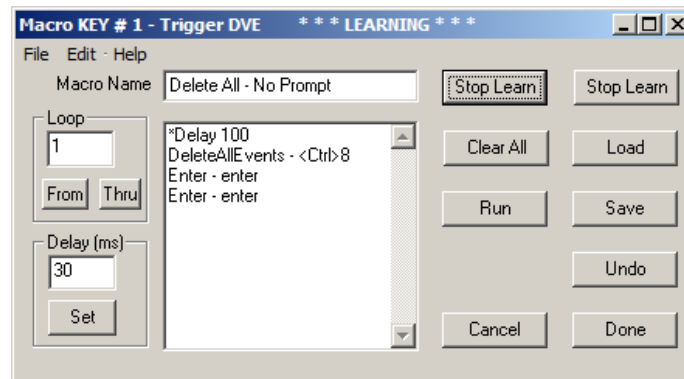
You can also press **[WINDOWS][D]** to get to the Windows Desktop without closing the DiVA application.



MACRO

Macros allow the users to program multiple keystrokes into a single key press. DiVA Macros can be edited, saved, recalled, nested, have defined loops, and can be executed from within PEGS and during an edit.

Press **[SHIFT][MAC 1]-[MAC 4]** to open the 'Program Macro' Dialog.



Macro Name

A name for the current Macro is displayed in the Macro Name field, and the list of the keystrokes in that macro, the **Command List**, is displayed immediately below. The Macro Name can be changed by typing a new name in the Macro Name field.

Learn

Press **[Learn]** to enable learning of new Macro keystrokes commands or to add new keystroke commands to an existing Macro.

As keys are pressed on the DiVA Keyboard, the commands are entered into the Macro Command List below the Macro Name field, but are not executed.

While in the **Learn** mode, '**Learning Macro**' is displayed in the Status area at the top of the screen, and both the **Learn** and **AutoMac** key legends change to **Stop Learn**.

AutoMac

Press **[AutoMac]** to enable learning of new Macro keystrokes commands or to add new keystroke commands to an existing Macro.

As keys are pressed on the DiVA Keyboard, the commands are executed as they are entered into the Macro Command List.

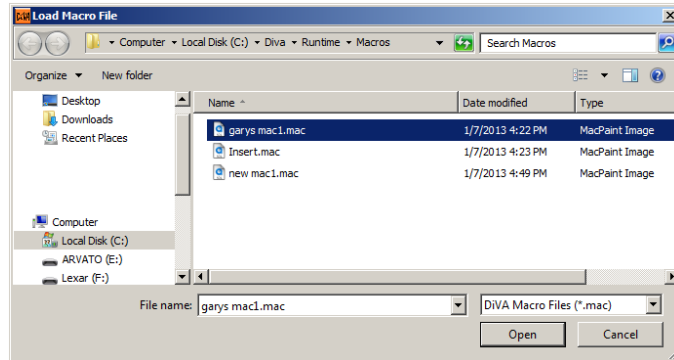
While in the **AutoMac** mode the title bar displays '**Learning Macro**'. The status display at the top of the DiVA screen also displays in red letters. Both the **AutoMac** and **Learn** key legends change to **Stop Learn**.

Clear All

Press **[Clear All]** to remove all commands currently in the command list.

Load

Press **[Load]** to recall to the Command List a previously saved Macro from the system hard drive.



The selected Macro replaces the current Macro and the new Macro Name is displayed in the Macro Name box.

Run

Press **[Run]** to execute the current Macro Command List. The current Macro can be run even if it has not been saved to the hard drive or assigned to an F-Key.

When a Macro is **Run**, the status area of the DiVA displays **'Executing Macro'**.

Save

Press **[Save]** to save the current Macro to the system hard drive. The Macro is always saved to the current **DiVA/Runtime/Macro** directory. The **.mac** extension is added automatically. The DiVA Message window verifies the name and the path of the file that was saved.

Undo

Press **[Undo]** to reverse the last operation performed in the **Macro Command List**.

Cancel

Press **[Cancel]** to exit the Macro Dialog and discard any changes.

Done

Press **[Done]** to assign the current **Macro Command List** to the corresponding Macro 1-4.

FILE MENU

The two drop down File Menu items **Open** and **Save** are the same as the **Load** and **Save** keys respectively as described above.

All items in the **Edit Menu** only affect selected items in the Macro Command List.

Undo

Reverses the last operation performed to the Macro Command List. Once selected, the item changes to Redo, and selecting it again restores the original state of the Macro Command List. This item is ghosted if no previous operation has occurred.

Cut

Removes the highlighted keystrokes from the Macro Command List and puts them into the paste buffer. This item is ghosted if there are no keystrokes currently in the List.

Copy

Copies the highlighted keystrokes from the Macro Command List into the paste buffer, but does not remove them. This item is ghosted if there are no keystrokes in the List.

Paste

Pastes the keystrokes that are in the paste buffer (either cut or copied) below the highlighted keystroke. This item is ghosted if the paste buffer is empty.

Delete

Deletes the highlighted keystrokes from the Macro Command List, but does not put them into the paste buffer. This item is ghosted if there are no keystrokes in the List.

Help Menu

Selecting this item will access the Macro Help PDF file.

LOOP

The **loop** function is comprised of a Start Loop, the number of times to execute the loop, and the end of the loop.

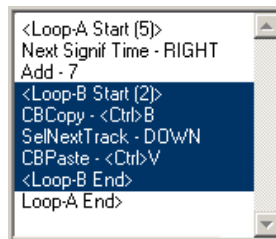
- 1 When specifying the loop, first type the Loop Number into the Loop numeric entry field. This is the number of times to execute this loop - 5 times in the example below.
- 2 In the Macro Command List, highlight the **first** keystroke of the loop and **[click] From**.
- 3 In the Macro Command List, highlight the **last** keystroke in the loop and **[click] Thru**.

Note that the keystrokes will execute 1 time more than the loop number. For example, the keystrokes in Loop A will execute 6 times... once normally, and then loop 5 more times.

Each macro can have 99 loops.

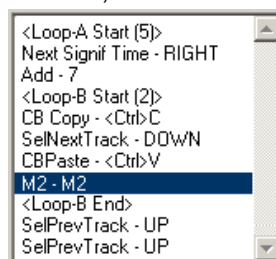
There are no restrictions on how loops are made. For example; one loop can be completely inside of another loop, partially inside of another loop, or completely outside of another loop

The following diagram below shows Loop B entirely inside loop A.



Nesting Macros

Nesting is when one Macro calls another Macro from within itself. Calls to other Macros may even be within a loop. In the example below, each time the keystroke 'M2' is encountered, this Macro will halt and the Macro assigned to Macro 2 will execute. After Macro 2 finishes, Macro 1 will continue where it left off.



Delay Macros

Some operations may require a time delay between keystrokes. For example, a Macro that opens a dialog and enters in some data will usually require some delay.

To specify a delay,

- 1 Type the **amount** of delay in the Delay (ms) window
- 2 Highlight the keystroke from where the delay is to begin and **[click] Set**.

The delay is specified in milliseconds (1/1000 of a second). For example, 100ms is 1/10 of a second. 33ms is approximately 1 frame.

Immediate Macro

A Macro dialog opened that has no data, Macro Name or title displayed can be used to preview a Macro without assigning it to a Key, or to save a new Macro to the hard drive without assigning it to a Key. All functions of this dialog work the same as explained previously for individual Keys.

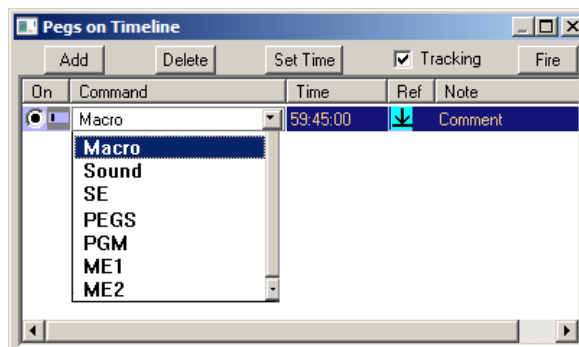
Macros in PEGS

DiVA Macros can also be executed from within PEGS. Execution of the Macro begins accurately, but because of the inherent multiple frame delays in keystrokes, it should not be considered as 'frame accurate' in the normal sense.

To enter a **Macro PEG**,

- 1 Press **[PEGS]** to open the PEGS Dialog.
- 2 **[Click] Add**.
- 3 Select **Macro** from the drop-down list of commands.

Immediately following the word **Macro**, type the Macro number **1** through **4** as displayed on the Keys.



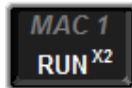
The **Fire** function is not available for Macro PEGS. However, the macro can be fired in the normal way by pressing the Macro Key.

Some additional notes on Macros:

- Pressing [**RUN^{X2}**] triggers **Macros 1-4** respectively. When pressed, the **System Status** area displays '**Executing Macro**'..
- Individual DiVA Macros are stored on the system hard drive in the directory:

C:\Diva\Runtime\macros\.

- The number of DiVA Macros is limited only by the amount of available memory on the system hard drive.
- Any 4 macros can be assigned to the Macro Keys at one time.
- The names of the Macros assigned to a Macro Key are displayed when the mouse cursor is **hovered** over the respective Macro Module key.



RUN X2

Press [**RUN^{X2}**] to run or execute the Macro programmed in the corresponding **MAC1-MAC4** keys.



PAGE UP

Press [**PG UP**] to jump from DiVA page 2 to DiVA page 1.



ARROW UP

Press [**UP ARROW**] to jump to the previous Track.



PAGE DOWN

Press [**PG DN**] to jump from DiVA page 1 to DiVA page 2.



ARROW DOWN

Press [**DN ARROW**] to jump to the next Track.

**ARROW LEFT (Points Of Interest, POI)**

Press to jump the Timeline Guide to the previous POI on the Timeline.

A **Point of Interest (POI)** in DiVA is any of the following:

- The beginning of an Event
- The end of an Event
- A CPI's location on the selected Track
- Any marker on the Timeline.

**DEC (Decrement)**

Press to move the current device to the left (earlier) frame-by-frame.

Hold the key depressed to auto-jog the selected device.

**ARROW RIGHT (Points Of Interest, POI)**

Press to jump the Timeline Guide to the next POI on the Timeline.

A **Point of Interest (POI)** in DiVA is any of the following:

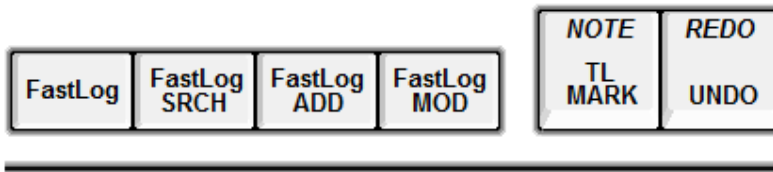
- The beginning of an Event
- The end of an Event
- A CPI's location on the selected Track
- Any marker on the Timeline.

**INC (Increment)**

Press to move the current device to the right (later) frame-by-frame.

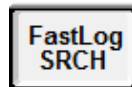
Hold the key depressed to auto-jog the selected device.

9.2. White Keys



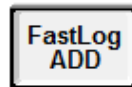
FASTLOG

Press [**FastLog**] to open the FastLog Database.



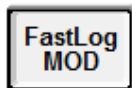
FASTLOG SEARCH

Press [**FastLog Search**] to open the SEARCH Dialog to search for items in the FastLog database.



FASTLOG ADD

Press [**FastLog ADD**] to open the ADD Dialog to add items to the FastLog database.



FASTLOG MOD

Press [**FastLog MOD**] to open the MODIFY Dialog to modify items in the FastLog database.



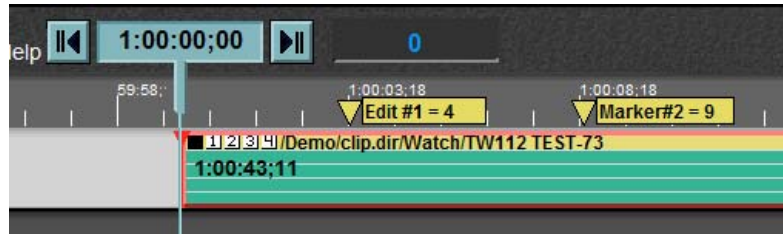
TL MARK

Press [**TL MARK**] to add a TL marker to the Timeline.

TL Markers are used to identify **Points of interest** on the Timeline and to give the user a visual numeric countdown (in seconds) to any point on the Timeline.

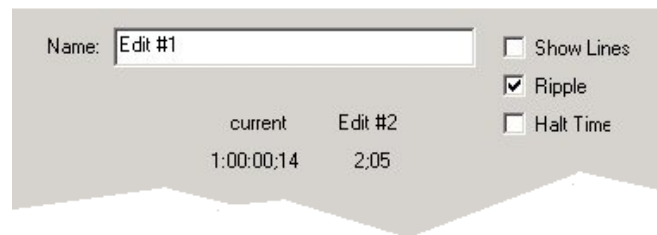
Press [**TL MARK**] and a TL Marker will be added at the location of the Timeline Guide. When in PVW or RECORD, with the Timeline moving, each Marker will display a countdown from its current location to the Timeline Guide.

With at least two Edit Markers you may measure the time between them. An Edit Marker appears on the Timeline as a yellow triangle with a label at its side.



Pressing **[TL MARK]** places an Edit Marker on the Timeline at the TLG.

Pressing **[TL MARK]** while over an existing Edit Marker brings up the TL Marker Dialog.

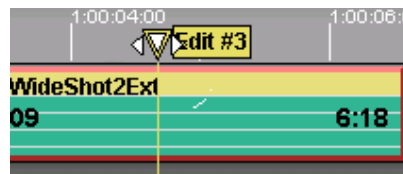


You may check **Show Lines** to superimpose lines over the Tracks that indicate the position of the Edit Marker(s).

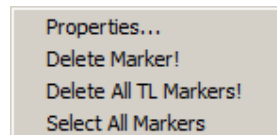
Deleting Edit Markers

To delete an Edit Marker, perform the following:

[Right Click] on the Edit Marker's yellow triangle...



...and select **Delete Marker!** from the drop-down menu.



Renaming an Edit Marker

To rename an Edit Marker, perform the following:

- 1 Place the Timeline Guide at the Edit Marker you wish to rename.
- 2 Press **[TL MARK]** to open the Edit Marker Dialog.
- 3 Enter the new name of the Edit Marker in the **Name** field. When you change the name of an Edit Marker to one that already exists, the existing Edit Marker is removed. Edit Marker names are case-sensitive.

Moving a TL Marker

There are two ways to move a TL Marker:

Create a new Edit Marker and assign it the name of an existing Edit Marker by performing the following:

- 1 Place the Timeline Guide where you wish to move an Edit Marker.
- 2 Press **[TL MARK]** to open the Edit Marker Dialog.
- 3 Enter the name of the Edit Marker you wish to move in the **Name** field. When you change the name of an Edit Marker to one that already exists, the existing Edit Marker is removed, and therefore "moved" to the new location on the Timeline.

OR

Place the mouse pointer over the triangle symbol of the Edit Marker and drag it to a new location.



NOTE

Press **[NOTE]** to add a note to the current Event on the Timeline.

The note will appear at the bottom of the current Event, and is limited to 71 characters.



UNDO

Press **[UNDO]** to undo the previous action that affected the Timeline. Each successive press will undo the previous action until you arrive at the point where the DiVA application was first executed.



REDO

Press **[REDO]** to redo the previous UNDO that affected the Timeline. Each successive press will REDO the previous action until you arrive at the point where you first pressed **[UNDO]**.

9.3. Magenta Keys



To 'match' is to establish a timecode relationship between the Primary Recorder and the Source(s) involved in a previous edit. The edit matched to must be in the EDL. Match functions only work if the Edit Mode option is installed and enabled.

For example: If the original Record IN-time of an edit was **00:10:00:00**, and the original Source IN-time of that edit was **00:20:00:00**, and the new IN-time of the Record Event is **00:09:12:15**, then the 'match' for that Source would be **00:19:12:15**. Note that the offset between the original times and the 'matched' times are the same.



MATCH EDIT TRACK

Press **[MATCH LRT]** to perform an immediate timecode **Match** to the current position of the **CPI** on the Record Track. The Record Event In-point will relocate to the CPI position and all the Sources involved in the highlighted edit of the EDL at this R-VTR timecode will be automatically recalled to the Timeline. The OUT-time for the matched edit is specified in the Match Menu, explained later in this section.

An LRT Match searches the current EDL for an edit that contains a Record Event that has the same **Reel name** and the same **A/V components** as the current Record Event, and includes the same timecode located at the Record Event CPI on the Edit Track. The search begins at the bottom of the current EDL.

If a Match to these criteria is not found, "**Match not found**" will be displayed in the Message Area.



MATCH ALL

Press **[MATCH ALL]** to initiate a search of the current EDL to find the last performed edit in the EDL that contains a Record Event that has the same **Reel name** as the current Record Event, and that includes the timecode located at the **Record Event CPI** on the Edit Record Track.

Unlike *Match LRT*, Match ALL does not look at the A/V components of the Record Event. The search begins at the bottom of the current EDL, and when found, the EDL will highlight the matched edit, but the Match is not yet performed. When you press **[MATCH ALL]** again, the previous match in the EDL will be found, and this is repeated until there are no more matched to find. When the desired match is found

(highlighted in the EDL)...

- 1 Press **[TAKE]** to perform the Match.

The OUT-time for the matched edit is specified in the Match Menu, explained later in this section.

When a match is not found, “**Match not found**” will be displayed in the Message Area.



MATCH SOURCE

- 1 Press **[MATCH SRC]**.

Source Match initiates a search of the current EDL to find the last edit in the EDL that contains a Source Event that has the same Reel name and the defined Match point of the Source Event on the current Track. Source Match does not look at the A/V components of the Record Event. The search begins at the bottom of the current EDL, and when found, the EDL will highlight the matched edit, but the Match is not yet performed. If you press **[MATCH SRC]** again, the previous match in the EDL will be found, and this is repeated until there are no more matches to find. When the desired match is found (highlighted in the EDL)...

- 2 Press **[TAKE]** to perform the Match.

The OUT-time for the matched edit is specified in the Match Menu, explained later in this section.

When a match is not found, “Match not found” will be displayed in the Message Area.



TAKE

Both **MATCH ALL** and **MATCH SRC** find matches to all relevant edits in the EDL. Each successive press of these Match keys will find the next relevant edit until **No More Matches Found** is displayed in the Message Area of the Edit Screen. At this point, the Matches will recycle again.

When the desired Match is found, Press **[TAKE]** to perform the Match.



MATCH MENU

When a Match is calculated, it is calculated based on a new In-point. In this Menu you can define whether you wish the new In-point to be defined by the Event In-point or the position of the CPI.

Once the new In-point is calculated, you can define what Out-point will be used when you press **[TAKE]**.

EDL Match Options

- Match to Device Position
- Match to Event IN Time

Matched Record OUT Point Options

- OUT = Matched event OUT
- OUT = Original Rec OUT
- Use matched event Duration
- Use default event Duration
- Open ended to Rec Reel Out

DONE

Match to Device Position

With this option selected, the **CPI** of the Match Event will be used as the Match point. (Recommended)

Match to Device IN Time

With this option selected, the **IN-point** of the Record Event will be used as the Match point.

OUT = Matched Event OUT

With this option selected, the Matched Events OUT-time will be set as the new Record OUT-point.

OUT = Original Rec OUT

With this option selected, the OUT-point as it was before the Match will be left as the Record OUT-point.

Use Matched Event Duration

With this option selected, the matched Events Duration will be used as the new Record Duration.

Use default Event Duration

With this option selected, the **Default Event Duration** will be used as the new Record Duration.

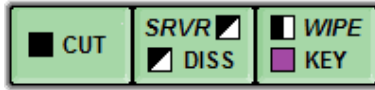
Open Ended to Rec Reel Out

With this option selected, the Record Event will open-end to the end of the Black Track (Recommended).



If you **[Click]** on a recorded area of the Edit Record Track, the EDL will scroll and display the last edit that occurred at that location. If you click on any part of an edit in the EDL, the Timeline Guide will position itself at that point.

9.4. Light Green Keys



These light green keys are the various transition effects that can be programmed using your video switcher, audio Mixer, and in some cases, a DVE. The symbols for these transitions are displayed on the top, far left of the Event, on the video sub-Track. They are as follows:



This is the symbol for a **CUT**.



This is the symbol for a **DISSOLVE**.



This is the symbol for a **WIPE**.



This is the symbol for a separate **AUDIO TRANSITION**.

If the symbols are located to the far right of the video sub-Track, then they apply to the Grass Valley Summit server's internal mixer and switcher. It is possible to have symbol for both devices displayed at the same time



CUT

To perform a CUT edit or to change the current transition to a cut, select the source Event and press **[CUT]**. The transition icon on the Event will reflect a CUT transition.

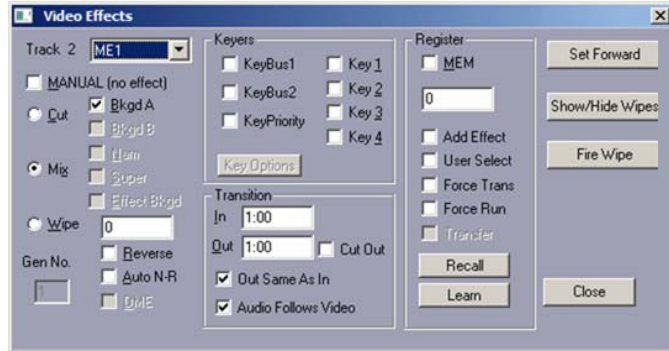
Press **[SHIFT][CUT]** to remove all transition icons from the Event. This will allow the user to perform a **manual** transition.



DISSOLVE

To perform a DISSOLVE edit or to change the transition to a dissolve, select the **DISSOLVE TO** source Event and press **[DISS]**. The transition icon on the Event will reflect a dissolve transition and the Effects Dialog will open with **Mix** selected. This Dialog may differ with different switchers.

Video Effects



M/E Drop Down Menu

The default primary M/E to be controlled is selected in the Video Switcher Settings Dialog

DiVA allows you to override this on a 'Track-by-Track' basis. For example, using a switcher with four M/Es, each Track can be selected to perform a different switcher effect on a different M/E in the same edit.

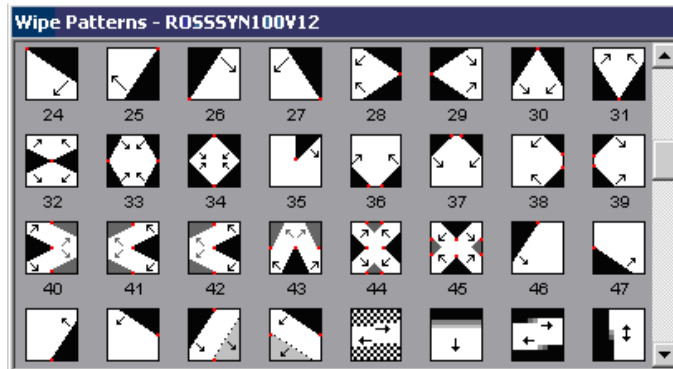
See [Default M/E, Page 22](#).

Bkgd A

If you wish to program a key "over" the background video, ensure that the "Bkgd A" check box is OFF. If selected, the key image will be taken full.

Wipe

Here is where you enter the Wipe number you wish to select when performing a Wipe effect. This number can be entered manually, or it will be entered automatically when you [click] on the wipe graphic from the dialog that is displayed when the [WIPE] key is pressed.



Note that the pattern and pattern numbers will be different for each switcher driver.

Reverse

Select this item when you wish to reverse the direction of the selected Wipe.

Auto N-R

Select this item when you wish to alternate the direction of the selected wipe.

Key Bus

Some video switchers have multiple Key Buses. See your switcher manual for more information on Key Buses.

Key Priority

Some video switchers allow you to control the key priority. This is where you can define which of multiple keys will be keyed over others. See your switcher manual for more information on Key Priority.

Key Options

Some video switchers allow additional control capability over their keyers. When not available, this item will be ghosted. When available and selected, you will be presented with the Key Options Dialog. See **Key Options** later in this same section.

Transition IN

Here is where you enter the Transition Rate for the transition you have chosen (Mix, Wipe or DVE). With the item 'Out Same As In' selected, the Transition OUT field will also automatically populate with this rate.

Transition Out

By default, this field is filled in automatically when you enter a Transition In time. However, if the item 'Out Same As In' is not selected, you can enter a different rate for the Transition Out.

Cut Out

By default, the Transition Out for an Event is the same effect used as the Transition In. However, select this item if you wish to perform a Wipe or Mix effect for the Transition In and a CUT for the Transition Out.

Out Same As In

By default, this field is filled in automatically when you enter a Transition In time. However, if the item is not selected, you can enter a different rate for the Transition Out.

Audio Follows Video

With this item selected, Transitions applied to the video switcher will also be applied to the audio mixer. With this item not selected, you can press **[SPLIT]** to program different transition rates for the audio mixer. When different transition rates are applied to the audio mixer, the Event will have the following icon added.



MEM

Most modern video switchers have some sort of memory or 'snapshot' feature, where switcher settings can be saved and recalled. For most of these switchers, DiVA has the ability to do this from the editor interface.

Learn

In the 'Register' section of the Effects Dialog,

- 1 Select **MEM**. Immediately below...
- 2 ...enter a valid register number for your switcher.
- 3 Press the **LEARN** button. The switcher data will be stored in the selected register of the switcher.

Recall

As long as the MEM data resides in the switcher register, it can be manually recalled by re-entering the register number and pressing the **RECALL** button.

MEMs can also be recalled frame accurately in PEGS.

Add Effect

See your video switcher manual for more information on this item. Not all switchers support this function.

Nomenclature may differ between models.

User Select

See your video switcher manual for more information on this item. Not all switchers support this function.

Nomenclature may differ between models.

Force Trans

See your video switcher manual for more information on this item. Not all switchers support this function.

Nomenclature may differ between models.

Force Run

See your video switcher manual for more information on this item. Not all switchers support this function.

Nomenclature may differ between models.

Set Forward

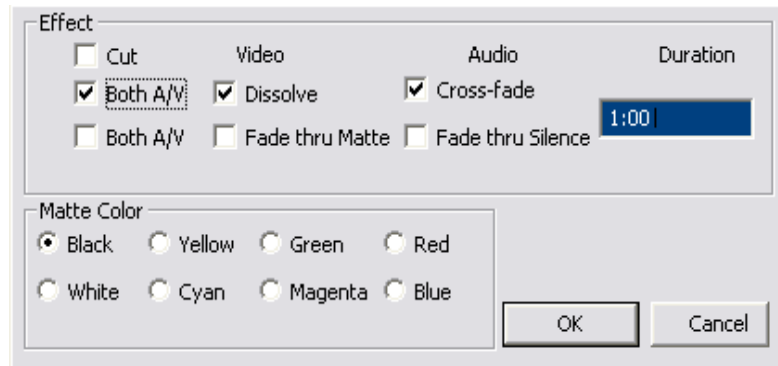
When an Event transition is changed, for example; you change a CUT to a DISSOLVE, you may wish to apply this change to all following Events on the Timeline. Press **Set Forward** to accomplish this.



SRVR (Server Transitions)

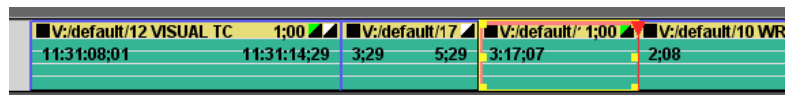
DiVA can control the internal A/V M/E of the GV Summit Server. No specific DiVA settings changes are required for this control, and an external switcher and mixer can still be controlled simultaneously.

To perform a dissolve or fade transition using the internal mixer & switcher in the Grass Valley Summit server, press **[SHIFT][SRVR]**. The SERVER Effects Dialog will open.






- 1 Assign back to back clips on a Summit Track with appropriate tail and head handles, as the Summit M/E performs CENTER-CUT DISSOLVES.
- 2 Select Effect type accordingly.

Notice in the Events shown below...



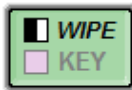
...that the transition icons are displayed at the end of the Events rather than at the beginning. This is because the Summit M/E effect is associated with the END of the selected Event; that is, the transition command is placed on the FROM Event rather than the TO Event. Transition icons at the beginning of the Event still reflect the transitions of any external mixer & switcher.

-  = Audio Only
-  = Video Only
-  = Audio & Video

The following transition types are supported:

- Transition between 2 (two) Summit clips directly (dissolve clip-to-clip)
- Transition through a matte background (dissolve clip to background to clip)
- Transition through black (dissolve clip to black to clip)
- Fade from black (fade from black to clip)
- Fade to black (fade from clip to black)

The Summit M/E works with Clips on the same Track. Transitions between Clips on separate Tracks would be performed by an external switcher.



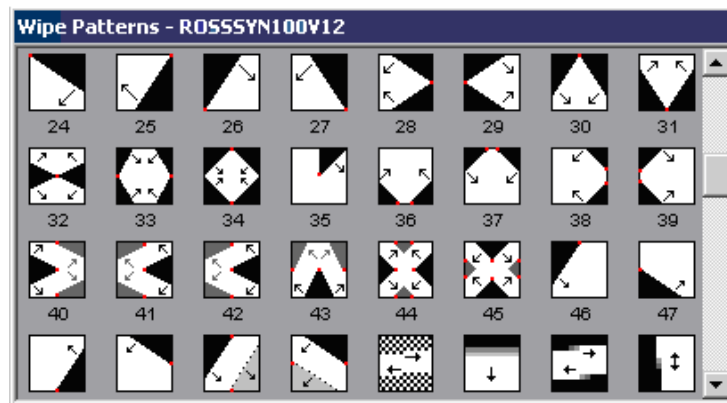
WIPE,

All functionality shown in the DISS section also applies to WIPES. Additional items shown in this section are specific to Wipe Effects.

- 1 Press the **[WIPE]** key to open the Video Effects Dialog with the Wipe field highlighted. Type the wipe pattern number desired, or...



...with the mouse, find and **[click]** on the desired pattern from the Wipe Patterns diagrams.



- 2 Enter a transition rate into the **Transition In** field.
- 3 Press **[ENTER]** when done. Notice that the Transition Icon in the corner of the Event will change to the Wipe symbol followed by the rate entered.

Set Forward

When an Event transition is changed, for example; you change a CUT to a WIPE, you may wish to apply this change to all following Events on the Timeline. Press **Set Forward** to accomplish this.

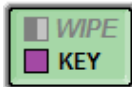


Show/Hide Wipes

Toggle the display of wipe patterns On and Off.

Fire Wipe

With a wipe pattern selected in the **Wipe Patterns** Window, press **[FIRE WIPE]** to preview the wipe pattern.



KEY

Press **[KEY]** to open the Video Effects Dialog.

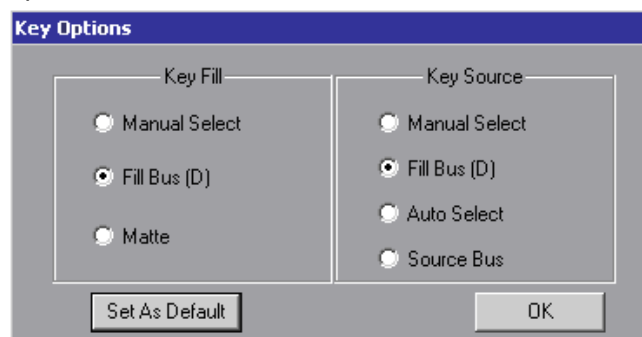


In the **Keyers** section you can select which Key(s) you wish to enable, Key Busses, and Key Priority. These features are switcher dependent, as some switchers have only one Key Bus and as few as one Keyer.

Key Options

Some switcher drivers enable the Key Options functions. These allow for additional switcher key functions.

- 1 Press **Key Options** in the Effects Dialog. If not greyed out like shown above, the following Key Options menu will open:



KEY FILL

Defines where the Key Fill will come from.

Manual Select

With this item selected, no changes will be made to the

current selection for the Key Source.

Fill Bus

With this item selected, the currently assigned crosspoint for this Track will be selected on the M/E Fill Bus, and FILL BUS will be selected as the KEY FILL for this Keyer.

Matte

With this item selected, no changes will be made to the current selection for the Key Fill, and MATTE will be selected as the KEY FILL for this Keyer.

KEY SOURCE

Defines what will be used to cut the Key.

Manual Select

With this item selected, no automatic changes will be made to the current selection for the Key Source.

Fill Bus

With this item selected, the currently assigned crosspoint for this Track will be selected on the Fill Bus, and FILL BUS will be selected as the KEY SOURCE for this Keyer.

Auto Select

With this item selected, the Key Source selection will come from the AUTO SELECT settings for this keyer.

Source Bus

With this item selected, the currently assigned crosspoint for this Track will be selected on the M/E Source Bus, and SOURCE BUS will be selected as the KEY FILL for this Keyer.



Note that pressing [PREVIEW] or [RECORD] turns OFF all enabled keyers on M/Es enabled in the Switcher Dialog.



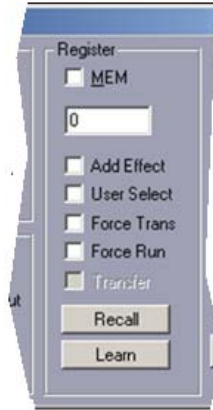
Note that if you wish to have the key "over" background video, ensure that the "Bkgd A" check box is OFF. If ON, the key image will be taken full.

Set As Default

Sets the current selections in this Dialog as the default key settings. A “(D)” will appear after the item is set as the default.

MEM LEARN AND RECALL

Some video switchers have the ability to learn and recall memory settings from the Video Effects Dialog.

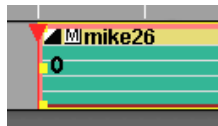


MEM

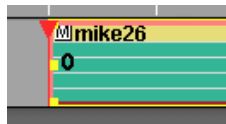
Select **MEM** to enable **MEM**ory options for this Event. In the field below this selection, enter the memory register number to be learned or recalled. Because some switcher Memory functions allow you to store a transition with the Memory register, there is a checkbox here to include or exclude a programmed transition on the DiVA.

Add Effect

When **Add Effect** is selected, both the MEM icon and the transition icon on the Event are displayed and are active.



When **Add Effect** is not selected, then the transition icon on the Event is suppressed, and only the MEM will be recalled as shown in the following example.



This feature is device dependent.

User Select

This function varies with the switcher protocol selected. Please see the specific video switcher DiVA TechNote or your switcher manual for this information.

Force Trans

With **Force Trans** selected, the saved transition type will also be triggered when recalled. With **Force Trans** not selected, the saved transition type will not be triggered when recalled.

Force Run

If there are switcher timelines associated with a MEM, selecting **Force Run** will force the timeline to run. This feature is device dependent.

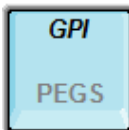
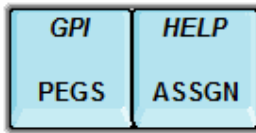
Recall

When **Recall** is pressed, the memory register specified in the register window will recall from switcher memory to the switcher panel. This feature is device dependent.

Learn

When **Learn** is pressed, the memory register specified in the register window will be saved from the switcher panel to the switcher memory. This feature is device dependent.

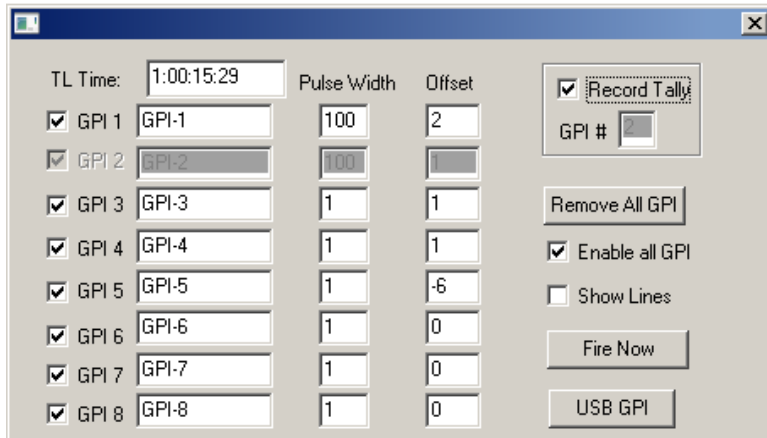
9.5. Light Blue Keys



GPI - General Purpose Interface

Eight GPI triggers are available through the optional USB GPI. GPIs are momentary triggers for external devices, usually used to connect to and trigger devices without serial control.

Press **[GPI]** to open the GPI Dialog, or ...



... press a number **[1]-[8]** and then press **[SHIFT][GPI]** to immediately add that GPI trigger to the Timeline.

GPI 1 - GPI 8

The **GPI 1 - GPI 8** checkboxes relate to the 8 GPI output triggers available for use. A checked box means that the GPI is enabled; an unchecked box means that the GPI is disabled.

You may enter a custom name for each GPI in the **GPI 1 - GPI 8** fields. The name of the GPI appears next to the GPI marker in the Timeline display.

Pulse Width

The duration of each GPI's relay closure may be set in the **Pulse Width** field. The entry is in frames.

Offset

If you enter a negative frame value into the Offset field for a related GPI, that GPI command will be sent earlier by the specified amount of frames. If you enter a positive frame value into the Offset field, that GPI command will be sent later by the specified amount of frames.

Remove All GPI

Pressing the Remove All GPI button will remove every GPI trigger from the Timeline.

Enable all GPI

When **Enable all GPI** is unchecked, all GPIs will be disabled (grayed), but not removed.

Show Lines

When **Show Lines** is checked, reference lines are displayed on the Timeline at each GPI marker.

Fire Now

Pressing the **Fire Now** button allows you to test the GPI relays that are checked .

Setting a GPI Trigger on the Timeline

To attach a GPI Trigger to the Timeline, perform the following:

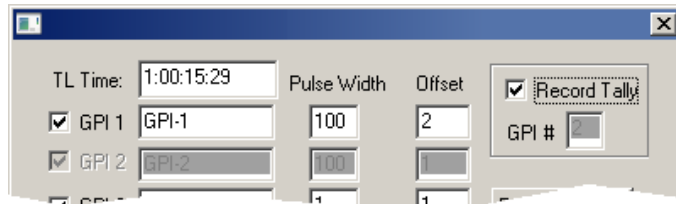
- 1 Position the TLG where you wish the GPI to be placed.
- 2 Press the desired GPI number **[1] - [8]**.
- 3 Press **[SHIFT][GPI]**.

The GPI is placed on the Timeline at the TLG. A green triangular GPI marker and GPI name will appear at the location of the Timeline Guide as seen in the following illustration.



Record Tally

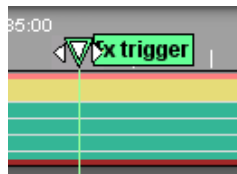
When Record Tally is selected, the GPI number entered as the Record Tally GPI will trigger at the Edit IN-point of an edit and trigger again at the Edit OUT-point of the edit. Note in the diagram below that the selected GPI #2 is greyed out and not available for general use.



Note the following about GPI triggers attached to the Timeline:

- Triggers attached to the Timeline remain at their location on the Timeline unless selected.
- GPIs do not Ripple, even if Ripple is ON, *unless they are selected.*
- GPIs are considered Points of Interest, just as Edit Markers are.

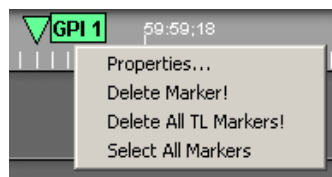
Moving a GPI



A GPI may be moved by dragging it with the mouse.

Timeline GPI Menu

[Right Clicking] a GPI marker will drop down the **Timeline Marker Menu**.



Properties...

Selecting **Properties...** will open the GPI Dialog for that GPI.

Delete Marker!

Selecting **Delete Marker!** will remove the GPI marker from the Timeline display.

Delete All TL Markers!

Selecting **Delete All TL Markers!** will remove all GPI markers from the Timeline display.

Select All Markers

Selecting **Select All Markers** will select (highlight) all Timeline Markers, including Edit Markers.

Deleting GPIs

There are two ways to delete a GPI marker.

- **[Right Click]** a GPI marker and select **Delete Marker!**.
- With the Timeline Guide at a GPI, press **[GPI]** and uncheck the appropriate **GPI 1 - GPI 8** checkbox.

Ripple GPIs

To Ripple a GPI when Ripple is OFF, **[Click]** the GPI triangle to highlight it. With the GPI highlighted, GPI markers will move with the Event.

Select GPI Range

You may select different ranges of Timeline GPIs for the purpose of rippling or deleting.

To select a consecutive group of GPIs, **[click]** on the first Timeline GPI you want selected, then **[SHIFT][click]** the final GPI you want selected. All GPIs in-between will also be selected.

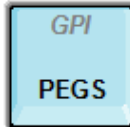
To select a specific group of GPIs, hold **[CTRL]** and **[click]** the GPIs you wish to select. The selected GPIs do not need to be in sequence.

More About GPIs

- GPIs are considered Points of Interest.
- Multiple GPIs can be selected in the Dialog and placed at the same location on the Timeline.
- Any change made to a GPI setting may be undone using the **[UNDO]** key, once the GPI Dialog has

been closed.

See [GPI Output, Page 7](#) for additional information on GPIs.



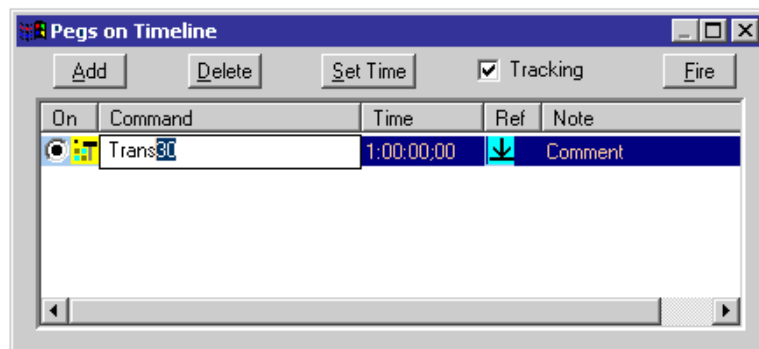
PEGS

PEGS are serial commands sent to a video switcher from DiVA through an RS-422 connection. These commands can set and trigger functions on the switcher based on Event timecode, CPI position, or Timeline time.

The following picture is an example of a Timeline PEG.



Press **[PEGS]** to open the PEGS Dialog.



Add

Pressing the **Add** button adds a blank PEG entry to the current PEGS Dialog. Each successive press adds another blank PEG entry.

Delete

Pressing Delete deletes the currently selected PEG.

Set Time

For a **Timeline PEG**, pressing Set Time marks in the current Timeline Guide position as the start for the PEG. For an **Event PEG**, pressing Set Time marks the current **CPI** position as the start for the PEG.

Tracking

When **Tracking** is checked, the Timeline "tracks" or

follows the selection of the PEG entries. Select a PEG entry in the PEGS Dialog and the Timeline moves to that location. If not checked, no tracking of PEGS markers occurs.

Fire

Pressing **Fire** immediately executes the currently selected PEG.

On

Selecting **On** enables the selected PEG. De-selecting **On** disables the selected PEG.


Command


[Click] on the right side of the **Command** field to display a drop-down menu of available PEG commands.


After selecting a command, the **qualifier** information must be typed in immediately following the command. In the following example, the command selected is **Trans** (transition), and the **qualifier** for that command is the **Trans rate**, which has been set to **30**. Therefore, the complete command entered is **Trans30**.

Note that there are no spaces in between the command and the qualifier. If you select **MEM** (memory) with a qualifier of **10**, the complete command in the Command field would be **MEM10**. More examples of Commands can be found at [Examples of Valid PEGS Commands, Page 113](#).

One of three possible icons will appear to the left of the Command field, depending on the status of the Command:

 - A red **X** means that a Command has not yet been added, or that the Command added is invalid or the syntax is defined incorrectly.

 - A video switcher icon means that the Command entered is a valid command.

 - A GPI icon means that the Command entered is for a GPI trigger (GPI 1-8), and that the Command entered is valid.

If an M/E is not specified in the Command field, the Command will be sent to the M/E defined as the current M/E.

Time

The **Time** field displays either the Absolute or Relative time that the PEG will be executed (depends on the state of the **Ref** selected).

Ref

[Click] this icon to toggle this value between Absolute time and Relative time.

Note

[Double Click] the Note field to input a note.

Absolute

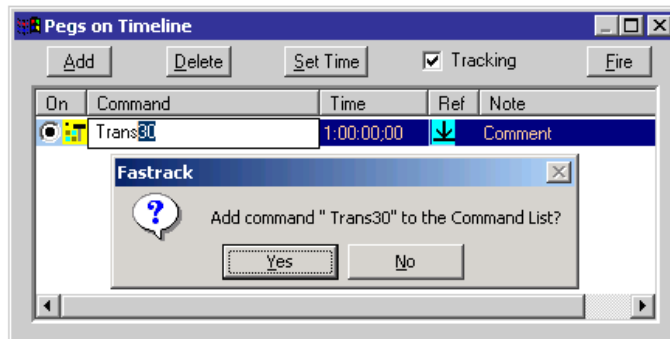
The **Time** displayed is the **timecode** or **timer** time for Event PEGS, or the **Timeline Time** for Timeline PEGS. The PEGs stay fixed at that absolute location regardless of whether the Events are moved or if the Start of Program changes.

Relative

The **Time** displayed is relative to the **Start of Program**, which is the Timeline time at the IN-point of the first Event on the Timeline. If the first Event is moved, the PEG will also move, maintaining the relative offset.

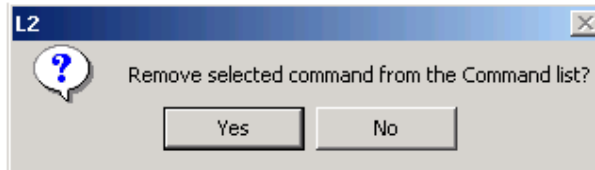
Adding Commands to the Command List

User created Commands can be added to the dropdown list by **[Right Clicking]** on a PEG command line. For example, if you created command **Trans30** and want to use it frequently, just **[Right Click]** and answer **Yes** to the question dialog that opens and **Trans30** will be added to the Command field dropdown list.



Removing Commands from the Command List

User created Commands can be deleted from the drop-down menu by **[Right Clicking]** on the entry in the drop-down menu. For example, if you created command **Trans30** and want to delete it, just **[Right Click]** on it and answer **Yes** to the question dialog that opens and **Trans30** will be deleted from the list.



Properties

Opens the TL PEGS dialog

Delete TL PEG

Deletes the selected TL PEG

Delete All TL PEGS

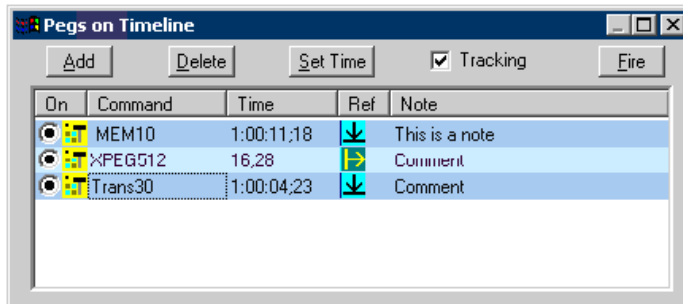
Deletes all TL PEGS

Select All TL PEGS

Selects all TL PEGS

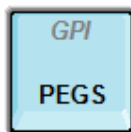
Some switchers will not accept multiple commands to the same M/E at the same time.

When multiple Command entries are made in the PEGS Dialog, each relates to its own PEG marker. For example, in the following example switcher **MEM10 is recalled at 1:00:11;18** of the current device, a trigger of **XPEG 512 at 16;28** into the current Event, and a **30 frame transition at 1:00:04;23** of the current device are programmed.



Examples of Valid PEGS Commands

Command	Description	Example
ME1, ME2, ME3, ME4	Specifies the M/E bus to be addressed.	ME1 Trans30
PGM or PP	Specifies the Pgm/Pst bus as the bus to be address	PGM MEM1
Rate	Sets the transition rate.	Rate30
Diss	Sets the transition to Mix, selects Background, and pushes the Auto-trans button.	Diss
Diss<time>	Sets the transition to Mix, selects Background, sets the rate to <time>, and pushes the Auto-trans	Diss60
Trans	Pushes the Auto-trans Button.	Trans
Trans<time>	Sets the rate to <time> and pushes the Auto-trans button.	Trans30
Cut	Selects Background, sets the rate to 0, and pushes the Auto-trans button.	Cut
Track<Track #>	Selects the crosspoint currently assigned to the specified Track.	Track5
MEM<MEM #>	Recalls the specified MEM.	MEM1
MEMX<MEM #>	Recalls and runs the specified MEM.	MEMX1
GPI<GPI #>	Triggers the specified GPI.	GPI2
Sound	<i>Plays a sound file (more to come)</i>	N/A
<clear>	Clears all Commands from the Command field.	



Continued

PEGS Strings Commands

The String command allows the user to send a Hex command string out any functional port on the DiVA.

To create a String PEG:

- 1 In **C:/Diva/Runtime**, open the **Dev** folder.
- 2 Find and open the **String.dev** file. It will look similar to the following:

```

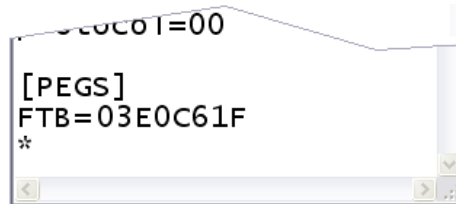
String.dev - Notepad
File Edit Format View Help
[device]
Description=String
Code=9990
Class=STRING

[timing]
delay= 0
protocol=00

[PEGS]
*
```

- 3 Add the new PEG command to the [PEGS] section of the file.

For example, the below modification to the file will add the Hex command **03E0C61F** that will trigger the Fade To Black on the Ross Vision 1 Switcher. Do not include spaces between the pairs.



The command name size, in this case **FTB**, is variable but it is recommended you keep it short for faster execution. It can be uppercase or lowercase, as the code changes everything into uppercase.

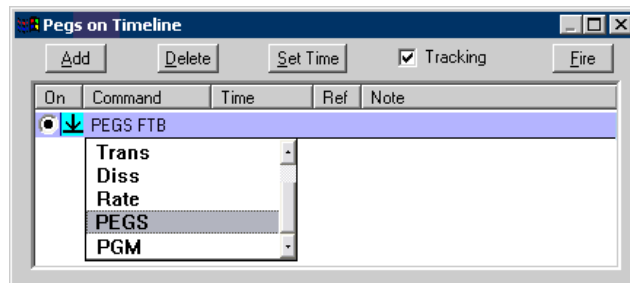
You may add as many new command entries as you like, but, the * (asterisk) must be present after the last command entry.

To fire a String PEG:

In the Assignment Page, assign the String as a device to a Track and give it a port number just like any device. In this example, the Ross Vision 1 switcher is connected to Port 5 of the DiVA.

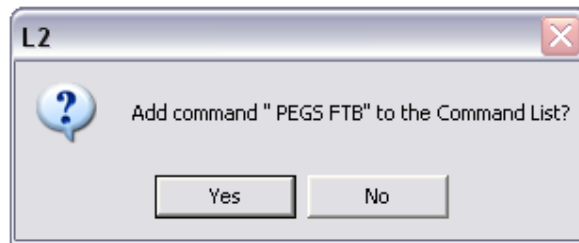
12	<input checked="" type="checkbox"/>	FTB	STRING	String	<input type="checkbox"/>	P5
----	-------------------------------------	-----	--------	--------	--------------------------	----

- 1 Place an Event on the Track, in the above example Track 12.
- 2 Select the Event and open the [PEGS] Dialog.
- 3 From the drop-down command menu, select PEGS.




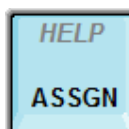
- 4 After the word PEGS, add a space and then type the command name you created in the String.dev file; in our example **FTB**.
- 5 To add this command to your drop-down menu, **[right-click]** on the command name in the PEGS

Dialog, in this case *PEGS FTB*, and you will be asked to add the command to the list.



More About PEGS

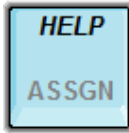
- The PEGS Dialog window is adjustable in size and can be repositioned on the screen. **[Click]** on the restore  button to toggle the dialog from its default position to its alternate position.
- You can sort PEGS by **[Clicking]** any of the columns in the PEGS Dialog.
- PEGS can be triggered before or after an edit, as long as the PEG falls within the limits of the pre-roll or post-roll.
- PEGS are a **POI** (Point Of Interest).
- After being added to the Timeline from the PEGS Dialog, PEGS can be modified on the Timeline in the following ways:
 - **[Clicking]** on a Timeline PEG selects it, allowing it to move (ripple) when an Event below is moved.
 - You may move PEG markers on the Timeline by **[Clicking]** and dragging them. Press and hold **[SHIFT]** to move the PEG with finer control.
 - Press and hold **[CTRL]** while selecting Timeline PEGS to select multiple PEGs, allowing them to be moved as a group.
 - You can trim a PEG by positioning the PEG marker under the TLG, and pressing **[SHIFT][TRIM IN]**, **[+or-]**, **[(number)]**, then **[ENTER]**. If you Trim a Timeline PEG and the dialog is open and **Tracking** is checked, the Timeline Guide will move to the new PEG position.
- After altering PEGS, the PEGS times in the PEGS Dialog are updated.



ASSIGN

Press **[ASSGN]** to open the Assignment Page.

See "[Assignment Page](#)", [Page 17](#) for information on the Assignment Page.



HELP

Press **[HELP]** to access the interactive version of this Manual.



◀◀ REW

Press **[REW]** to rewind or shuttle the current device backwards at full shuttle speed.



◀ REW

Press **[SHIFT][REW]** to rewind or shuttle the current device backwards at half shuttle speed.



FF ▶▶

Press **[FF]** to Fast Forward or shuttle the current device forwards at full shuttle speed.



FF ▶

Press **[SHIFT][FF]** to Fast Forward or shuttle the current device forwards at half shuttle speed.



PLAY ▶

Pressing **[PLAY▶]** will send a PLAY command to the device assigned to the current Track, and in turn play the current Hot Event from the location of the red CPI (Current Position Indicator). Most video servers require a clip to be loaded before motion commands can have any effect, but VTRs need only to be connected. The CPI will scroll across the Event as the video plays.

Note that the **[PLAY▶]** key plays the current Hot Event and does not preview the Timeline.

PLAY is also used with the following functions:

- **PLAY ALL GANGED EVENTS** - **[PLAY▶]** will play all

Ganged Events, but will not keep them in sync.

- **PLAY THE EVENT AT DOUBLE SPEED** - **[PLAY▶][PLAY▶]** will play the Event at double speed.
- **PLAY THE EVENT IN REVERSE** - **[SHIFT][◀PLAY]** will play the Event in reverse.
- **PLAY THE EVENT IN REVERSE AT DOUBLE SPEED** - **[SHIFT][◀PLAY][◀PLAY]** will play the Event in reverse at double speed. This feature is device dependent.



◀ PLAY

Pressing **[◀PLAY]** will send a REVERSE PLAY command to the device assigned to the current Track, and in turn play the current Hot Event backwards from the location of the red CPI (Current Position Indicator). Most video servers require a clip to be loaded before motion commands can have any effect, but VTRs need only to be connected. The CPI will scroll backwards across the Event as the video plays.

[◀PLAY] is also used with the following functions: **PLAY ALL GANGED EVENTS-** **[◀PLAY]** will play all Ganged Events in reverse, but will not keep them in sync.

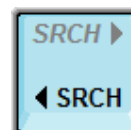
- **PLAY THE EVENT AT 2X SPEED** - **[◀PLAY][◀PLAY]** will play the Event in reverse at double speed. This feature is device dependent.



STOP

Pressing **[STOP]** stops the selected device. The Event's CPI and the timecode in the Track Status Display will also stop.

Alternately, you may also use **[ALLSTOP] (SPACEBAR)** to stop all enabled sources.



◀ SRCH

Pressing **[◀ SRCH]** will cue the **CPI** to the Hot Event's **IN-point**. On a server Track this will be immediate. On a VTR Track, the VTR will shuttle to the IN-time.

To cue to a specific timecode in an Event, enter a timecode into the Numeric Entry field and press **[SRCH]** to cue the Hot Event's CPI to that timecode.



SRCH ▶

Pressing **[SRCH ▶]** will cue the **CPI** to the Hot Event's **OUT-point**. On a server Track this will be immediate. On a VTR Track, the VTR will shuttle to the IN-time.

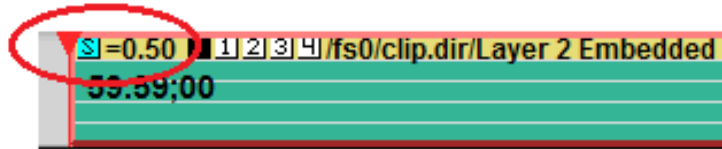


SPEED

To define a single speed for the current Event,

- 1 **Type** the desired speed with the Numeric Keypad.
- 2 **Press [SPEED]**. The defined speed will be applied to the current Event for the entire Event.

When a speed has been applied to an Event, the Speed icon is displayed on the Event with the speed percentage displayed alongside. For example:

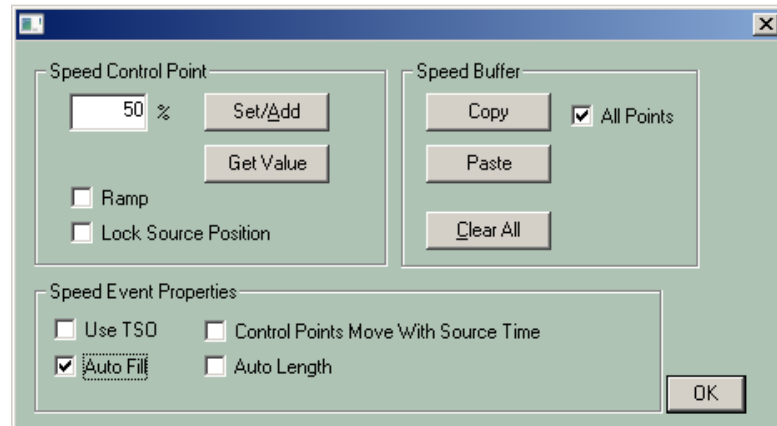


You can also enter a real-time Speed by first putting the device into Variable and then pressing [SPEED]. The current Variable speed will be entered at the beginning of the current Event regardless of the CPI position.

To remove the speed from an Event,

Press [1],[0],[0],[SPEED]

Pressing [SPEED] first opens the Speed Dialog and graphical interface.



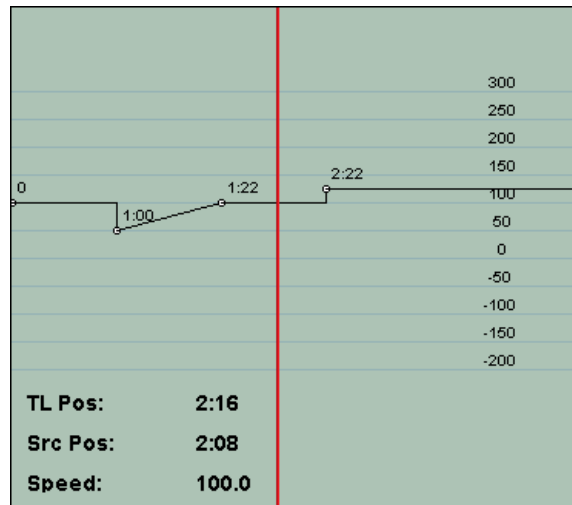
Here you may program speed changes as either **cuts** (instantaneous speed change) or **ramps** (gradual speed change).

With the Speed Dialog open, press the **[Set/Add]** button to place a speed control point (keyframe) at the CPI. Speed keyframes appear as white circles on the black line in the graphical interface. The keyframe will be placed at the Event's red **CPI**.

When a speed has been set in an Event, the Speed icon is displayed on the Event with the speed percentage displayed alongside. In the previous examples, Speed is set at 0.50%:

If multiple speeds are set for an Event, only the first speed is displayed on the Event.

In the following example there are four motion control points, or keyframes.



In the graphical interface, time is displayed horizontally, while speed percentage is displayed vertically.

In the previous example:

- The Event starts at **0**, so the first point is labeled **0**, and represents the start of the motion control sequence. The motion control Event begins at **100%** speed and continues for **1:00**, where it **cuts** to **50%** speed.
- At **1:00** into the Event, the speed **ramps** for the next **1:00** back to **100%** speed again. Had this change been a cut rather than a ramp, the source position would have been **1:15**.
- The device continues for **1:00** at **100%** speed and then **cuts** to **125%** speed. Had this change been a ramp rather than a cut, the source position would have been **2:25**.

The speed adjustment graphical interface also holds information about the speed and position at the Timeline Guide:

- **TL Pos** - This time is the **real time** or record time into the Event as if there had been no speed changes.
- **Src Pos** - This time is the actual timecode position of the source at the Timeline Guide.

- **Speed** - This value is the programmed speed for the source at the Timeline Guide.

Speed Ramps or Cuts

When changing speeds, you may define whether the speed change is instantaneous, defined as a **cut**, or gradual, defined as a **ramp**.

- To make a speed change a cut, press **[CUT]** or uncheck **Ramp** in the Speed Dialog while the Timeline Guide is positioned at a keyframe.
- To change a cut into a ramp, press **[DISS]** or check **Ramp** in the Speed Dialog while the Timeline Guide is positioned at a keyframe.

Using the Speed Dialog

Set/Add

After entering a value in the **Speed Control Point Entry** field, pressing the **Set/Add** button will set the speed to that of the entered value. Speed values can be entered in .10% increments, and the ability to perform the entered speeds is device dependent.

Get Value

A speed point value may be copied using the **Get Value** button. This places the current value under the Timeline Guide in the **Speed Control Point Entry** field.

Ramp

Checking **Ramp** enables a ramp (speed transition) between the current keyframe and the previous keyframe

Lock Source Position


This function only works when **Ramp** is also checked. Check **Lock Source Position** to lock the current keyframe to the current source position. If the speed leading into a "locked" source position is changed, and ramp is also selected, the control point will move its position on the Timeline in order to maintain its relationship with the source.

Use TSO

Some VTRs have a **Program Play** function that corrects the pitch of audio when the device is played

off-speed. Check **Use TSO** to enable this feature.

Auto Fill

With **Auto Fill** checked, you can change the length (duration) of an Event while still maintaining the integrity of the Event's already defined IN and OUT-points. An  icon is placed on the Event to show that a speed change has been added to the Event.

Control Points Move with Source Time

If **Control Points Move with Source Time** is checked, the points you have set will be locked to the source time and will move with these times even if the Event is trimmed.

Copy

Pressing the **Copy** button copies the value of the current keyframe at the Timeline Guide.

Paste

Pressing the **Paste** button pastes the value copied in the previous Copy operation to another location or Event.

All Points

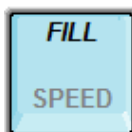
When **All Points** is checked, every keyframe position and value in the Current Event are copied. In this case, a **Paste** operation places all of these values and positions into the Event into which they are pasted.

Clear All

Pressing **Clear All** will clear all of the motion control points. To clear out individual motion control points, use the arrow keys to move to the point to be deleted and press **[BACKSPACE]**.

Clear Quick Speed Entries

Press **[1],[0],[0],[SPEED]** to clear all speeds within the selected Event without opening the Speed Dialog.

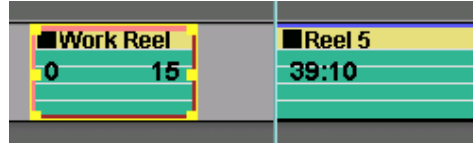


FILL (Fit & Fill)

[FILL] performs an automatic speed calculation to lengthen or shorten an Event as required to fill a specified time, or to fill a gap between Events. The IN and OUT-points of the Source


Event remain unaffected.

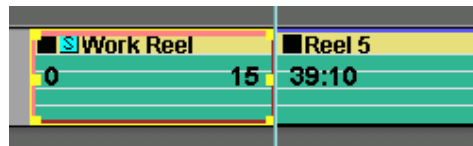
In the following example, we want the Event on the left to “fill” or extend to the Timeline Guide Line or the beginning of the adjoining Event.



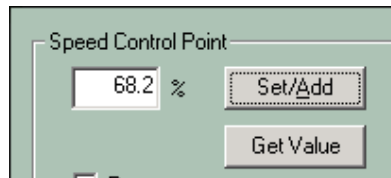
Perform the following:

- 1 Place the Timeline Guide where you wish the Fill to reach.
- 2 Make the Event to be modified a **Hot Event**.
- 3 Press **[FILL]**.

The Event will extend to the TLG, but the OUT-time (15) remains the same. An  icon in the upper left corner of the Event shows that this Event will be off-speed.



The calculated speed is displayed in the Speed Dialog.



9.6. Light Purple

<i>DELAY</i>	<i>RIPPL</i>	<i>RIPPL</i>	<i>OPTIM</i>
CLIP LIST	NL INS	NL DEL	MOVIE



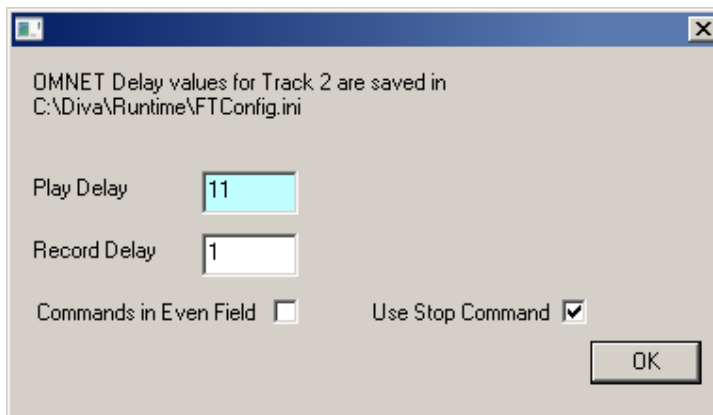
CLIP LIST

Press **[CLIP LIST]** to open the current server directory containing the clips for the video server assigned to the current Track.



DELAY

Press **[DELAY]** to open the Delay dialog where you can set the play and record delays for the video server channel assigned to the current Track.



NL INS

Press **[NL INSERT]** to non-linearly insert by CUT the Event located below, but within, the Record Event boundaries. A video-only or audio-only insert will take longer to perform than an audio/video insert.

See the DIVA TechNote for your specific server.



RIPPL (NL INS)

Press **[RIPPL]** to ripple (adjust) the Timeline to accommodate the inserted material without overwriting the existing material already on the Timeline.



NL DELETE

Press **[NL DEL]** to non-linearly remove the material located within the Record Event on the Edit Track and replace it with BLACK. A video-only or audio-only delete will take longer to perform than an Audio/video delete.

See the DiVA TechNote for your specific server.



RIPPL (NL DEL)

Press **[RIPPL]** to ripple (adjust) the Timeline to accommodate the deleted material. The material on either side of the deleted portion will be 'pulled up', and the Black Track will be shortened by the length of the deleted material.



MOVIE (Make Movie)

Press **[MOVIE]** to make a Movie (new clip) of either the Edit Track or material on a source Track.

See the DiVA TechNote for your specific server.



OPTIMIZE

Coming Soon!

9.7. Orange Keys



SEP EVENTS

Press **[SEP EVENTS]** to split a single Event into two Events. The Event will split at the **CPI**. If an Event with a transition is separated, the new Event is set to CUT **■**, and any speeds or audio ramps are set to unity.



ADD EVENT

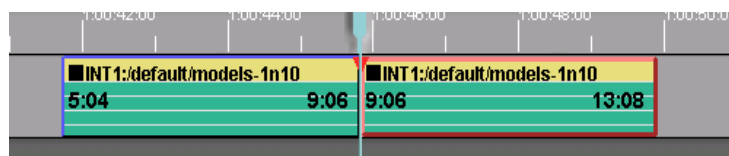
Pressing **[ADD EVENT]** extends the current Event that is positioned to the left of the Timeline Guide by adding another matching Event of the same length, A/V components, and contiguous timecode.

To add to an Event, perform the following:

- 1 Place the Timeline Guide at the **end** of the Event you wish to add to, or at an **empty** location of the Track.



- 2 Press **[ADD EVENT]**. A new Event is added at the location of the **TLG (Timeline Guide)**.



The following conditions apply to added Events created with **[ADD EVENT]**:

- The **enabled/disabled** status of the audio and video sub-Tracks of the previous Event is carried over to the new

Event.

- **Audio** and **Speed Ramps** of the previous Event are set to **unity** in the new Event.
- The new Event **transition** is a **CUT** ■.



GAPS (Fill Gaps)

Press **[GAPS]** to fill gaps between Events by extending the Out-point of the previous Event. This will not modify the speed of either Event.



DELETE EVENT

Press **[DEL EVENT]** to delete the selected Event from the selected Track. The deleted Event is not available to be pasted. When an Event is deleted, all rules pertaining to Ripple will apply.

Press **[UNDO]** to reverse the action.

Delete a Group of Events on a Track

- 1 First select a consecutive group of Events, **[Click]** on the first Event you want selected, then **[SHIFT][Click]** the final Event you want Selected. All Events in-between will also become Selected.

To Select a specific group of Events, hold **[CTRL]** and individually **[Click]** the Events you wish Selected.

- 2 Press **[DEL EVENT]**. All Selected Events will be deleted. The deleted Events are not available to be pasted. When Events are deleted, all rules pertaining to Ripple will apply.

You may also delete all selected Events on a Track by **[Right Clicking]** the desired Track, then selecting '**Delete Event**' from the menu.

Press **[UNDO]** to reverse the action.

Delete All Events on All Tracks

On the **MENU BAR**, select **{File/New Timeline}**. This will delete all Events on the Timeline and will reset the default Timeline time to the value set in the **Menu Bar {Settings/Global Settings/Time Settings/Timeline Guide Start}**.

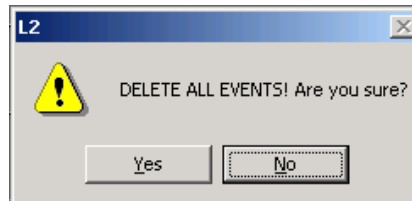
After a new Timeline has been created, there is only one level of undo available.



DELETE TRACK

Press **[DEL TRACK]** to delete all Events from the selected Track. When an Event or group of Events is deleted, all rules pertaining to Ripple will apply.

You may also delete all Events on a Track by **[Right Clicking]** the desired Track, then selecting '**Clear Track!**' from the menu.



Press **[UNDO]** to reverse the action.



KEEP TRACK

When in the Edit Mode, you may wish to delete all Tracks except one.

- 1 Select the Track to wish **not** to delete.
- 2 Press **[KEEP TRACK]**.

All Tracks, except the selected Track and the Edit Record Track, will be deleted. If the Edit Track is selected, than all Tracks but the Edit Track will be deleted.



TOGGLE EVENT

There are four conditions for an Event; **Play**, Record in **Assemble**, Record in **Insert**, and Record in **Pre-read**. To toggle an Event through these four modes:

Press **[TOGGL EVENT]**.

Each successive toggle will change the Event from a **GREEN PLAY** Event, to a **RED INSERT** Event, to a **MAGENTA ASSEMBLE** Event, to an **ORANGE PRE-READ** Event.



TRIM IN

To **TRIM IN** an Event is to add or remove time from the IN-point rather than entering or marking an absolute time or position.

Enter the amount of time to Trim and then press **[TRIM IN]**.

OR

Press **[TRIM IN]** followed by the amount of trim, then press **[ENTER]**.

Trimming Events Using the Mouse

Placing the cursor over an Event will produce three different cursor shapes depending upon where the cursor is placed within the Event.




Drag the IN-point to Trim the Event length accordingly. The IN-time will not change, only the duration will change.

Drag the OUT-point to Trim the Event length accordingly. The IN-Time will not change, only the duration will change.

Dragging in the center of the Event will move the entire Event. This is covered in the section [Event Cursors, Page 69](#)

Slip an Event

To 'slip' an Event is to 'click & drag' the video within an Event without moving the Event itself.

1 Place the mouse cursor over the Event. The cursor will change to .

2 Press **[SHIFT]** while 'dragging' an Event.

You will see the IN and OUT-times of the Event change while the Event itself remains in its original position.

Slide Events

To 'slide' Events is to 'click & drag' the cut-point between two Event on the Timeline, changing the OUT-point of the first Event (Event to the left) and the IN-point of the second Event (Event to the right).



MOD IN (TRIM IN)

Press **[MOD IN]** to trim the current Event by the defined time without changing the position or duration of the Event. For example, to trim in an Event by ten frames without changing the duration of the Event:

[TRIM IN],[1],[0],[MOD IN].



TRIM OUT

To **TRIM OUT** an Event is to add or remove time from the OUT-point rather than entering or marking an absolute time or position.

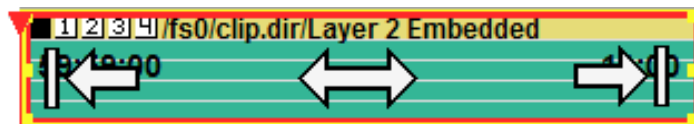
Enter the amount of time to Trim and then press **[TRIM OUT]**.

OR

Press **[TRIM OUT]** followed by the amount of trim, then press **[ENTER]**.

Trimming Events Using the Mouse

Placing the cursor over an Event will produce three different cursor shapes depending upon where the cursor is placed within the Event.




Drag the IN-point to Trim the Event length accordingly. The IN-time will not change, only the duration will change.

Drag the OUT-point to Trim the Event length accordingly. The IN-Time will not change, only the duration will change.

Dragging in the center of the Event will move the entire Event. This is covered in the section [Event Cursors, Page 69](#)

Slip an Event

To 'slip' an Event is to 'click & drag' the video within an Event without moving the Event itself.

- 1 Place the mouse cursor over the Event. The cursor will change to .
- 2 Press **[SHIFT]** while 'dragging' an Event.
You will see the In and Out times of the Event change while the Event itself remains in its original position.

Slide Events

To 'slide' Events is to 'click & drag' the cut-point between two Event on the Timeline, changing the In-point of the first Event (Event to the left) and the Out-

point of the second Event (Event to the right).

Add Graphic



MOD OUT (TRIM OUT)

Press **[MOD OUT]** to trim the current Event by the defined time without changing the position or duration of the Event. For example, to trim in an Event by ten frames without changing the duration of the Event:

[TRIM IN],[1],[0],[MOD OUT].



OPEN END

To “open end” an Event in the Edit Mode, is to extend Event(s) to the next encountered Event or to the end of the Record Track, whichever is encountered first. There are two levels of Open End:

Press **[OPEN END]** to open-end the Hot Event on the selected Track. The Hot Event will be extended to the beginning of the next Event encountered on the Track. If there is just one Event on the Track, then it will open-end to the end of the Record Track.

If **Ripple** is **enabled**, the open-end command will be ignored.



ALL (OPEN END)

Press **[SHIFT][OPEN END]** to open-end **all** Hot Events on **all** enabled Tracks. The Hot Events will be extended to the beginning of the next Event encountered on each Track. If the Hot Event is the only Event on a Track, then that Track will open-end to the end of the Record Track.

If **Ripple** is **enabled**, the open-end command will be ignored.



TRANSFER TC

To transfer or copy the In-point, Out-point, or duration from one Event to another:

- 1 **Select** the Event to copy **from**.
- 2 Press **[XFER TC][SET IN]**, **[XFER TC][SET OUT]**, **[XFER TC][DUR]**. The respective timecode or duration of the **from** Event is placed in the numeric display.
- 3 **Select** the Event to copy the displayed timecode or duration **to**.
- 4 Press **[SET IN]**, **[SET OUT]** or **[DUR]** to transfer the captured number to its respective destination.



TC/CTL

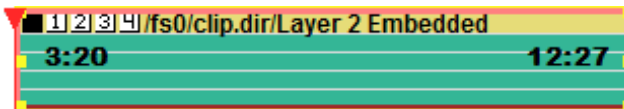
Press **[TC/CTL]** to toggle the device on the current Track between reading and displaying TC (Timecode) and CTL (Control Track) from the currently selected device.



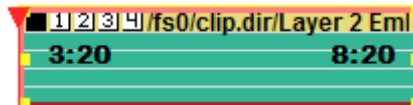
DURATION

These actions apply to the Hot Event on the selected Track.

Notice in the following example that the duration is **9:07** (12:27 minus 3:20).



- 1 On the numeric keypad, enter the desired duration in seconds and frames, for example **[5],[0],[0]** for five seconds.
- 2 Press **[DUR]**. Notice that the duration of the Hot Event is now **5:00** seconds.



Backtiming Event Durations

Setting a negative duration changes the IN-time but leaves the duration unchanged.

For example,

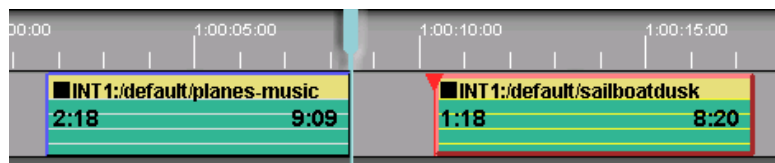
- 1 Select an Event
- 2 Press **[-],[2],[0],[0],[DUR]**.

This changes the IN-time two seconds **earlier** and leaves the duration as it was.




MOVE EVENT IN-POINT TO THE TLG

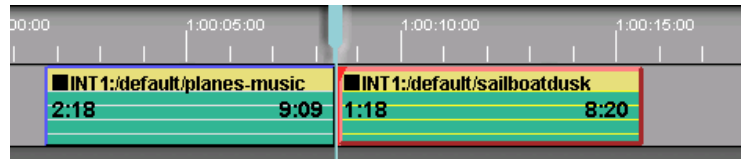
If you wish to close a gap between two Events as in the example below:



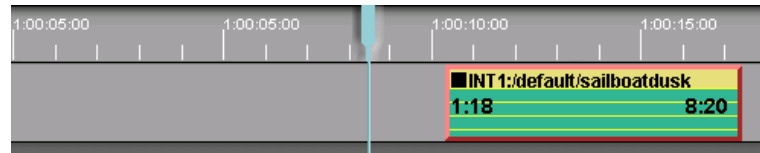
1 Press an **[ARROW KEY]** to position the **end** of the previous Event to the Timeline Guide; **planes-music** in the previous example.

2 **[Click]** on the Event you wish to move backwards. In the previous illustration this would be the Event labeled **sailboatdusk**. This will make that Event the Hot Event.


3 Press  (**TimeLine IN**). The timecode display at the beginning of the moved Event will not have changed. Notice in the following illustration that the IN-time remains **1:18**, the OUT-time remains **8:20**, and the gap is removed.

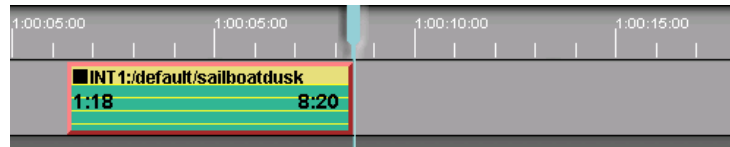


MOVE EVENT OUT-POINT TO THE TLG




1 **[Click]** on the Event you wish to move. This will make that Event the Hot Event.

2 Press  (**TimeLine OUT**). The timecode display at the beginning of the moved Event will not have changed. Notice in the following illustration that the IN-time remains **1:18**, the OUT-time remains **8:20**, and the Event OUT is now positioned at the TLG.




CUE THE CPI TO THE TLG

Pressing  will cue the CPI of the current Event to the TLG.



CUE ALL DEVICES CPI TO THE TLG

Pressing  will cue all devices CPI to the TLG.



MOVE EVENT

Move Event to a Specific Location

- 1 Using the keypad, enter the Timeline time where you wish to move the Event

- 2 Press .

Move an Event by a specific amount:

- 1 Press [TRIM IN].
- 2 Enter the amount you wish to move the Event later on the Timeline. Use the [-] to move the Event earlier by the specified amount.

- 3 Press .

Move an Event using the Mouse

To move an Event left or right on its Track, perform the following:

- 1 Place the mouse cursor over the middle of the Event; the cursor will become a connected left and right arrow.



- 2 [Click] and drag the Event left or right.



MOVE TLG

Move the TLG to a Specific Timeline Location

- 1 Using the keypad, enter the Timeline time where you wish to move the TLG.

- 2 Press .

Move the TLG on the Timeline by a Specific Amount

- 1 Using the keypad, enter the time that you wish to move the TLG later on the Timeline. Use the [-] key

to move it earlier.

- 2 Press  .

9.8. Light Orange Keys



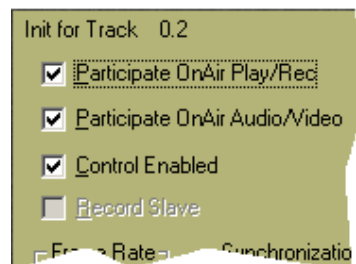
LOCK

Select a Track and press **[LOCK]** to disable the Track from DiVA control. If an Event on the locked Track is playing or recording at the time it is locked, it will remain playing or recording until the lock is removed and the device stopped. When locked, the black on orange **LOCK** symbol is displayed to the left of the Track button.



LOCK (PARTIALLY)

Select a Track and press **[LOCK]** to disable portions of the Track from DiVA control. The Track Settings Dialog will open.



Participate OnAir Play/Record

When not selected, Events on this Track will not play or record during a preview or edit, even though audio mixer and video switcher commands will be enabled.

When partially locked, the white on orange **LOCK** symbol is displayed to the left of the Track button.



Participate OnAir Audio/Video

When not selected, Events on this Track will play or record during a preview or edit, but audio mixer and video switcher commands will not be enabled.

When partially locked, the white on orange LOCK symbol is displayed to the left of the Track button.



Control Enabled

When not selected, Events on this Track will not play or record during a preview or edit, and audio mixer and video switcher commands will not be enabled.

This is basically the same as pressing [**LOCK**]. When not selected, the black on orange LOCK symbol is displayed to the left of the Track button.



GANG

Press [**GANG**] to enable and disable Linked Tracks.

See **LINK** below for additional information on GANG.

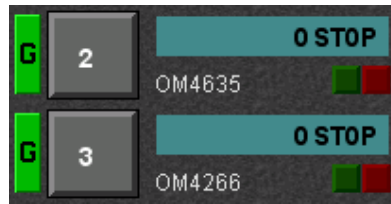


LINK

Link is used to define which Tracks are to be included in a GANG. To **GANG** Tracks is to tie the Hot Events on each ganged Track together so that commands sent by DiVA to a source on a ganged Track affects the Hot Events on all ganged Tracks.

To **GANG** Tracks, they must first be Linked.

- 1 Select the Track you wish to be Ganged.
- 2 Press [**SHIFT**][**LINK**].
- 3 Repeat for each Track to be ganged. The green GANG symbol 'G' appears to the left of each Track Linked.



In the previous image, Track 2 and Track 3 show Gang indications (a green 'G' icon to the left of the Track number) and will roll together when any of the following commands are invoked:

PLAY, 2X PLAY, REVERSE PLAY, 2X REVERSE PLAY, JOG, REWIND, REWIND VARIABLE, FAST FORWARD, FAST FORWARD VARIABLE, STOP, CUE, SEARCH, GOTO TLG.

For example, if you have Track 1, Track 2, and Track 3 Linked and Ganged, pressing **[PLAY]** will play the Hot Events on Track 1, Track 2, and Track 3 simultaneously.

Events on ganged Tracks will also all participate when the following commands are sent:

MARK IN, MARK OUT, SET IN, SET OUT, TRIM IN, TRIM OUT, SET DURATION.


For example, if you have Track 1, Track 2, and Track 3 Linked and Ganged, pressing **[TRIM IN],[3],[0],[ENTER]** will trim the Hot Events on Track 1, Track 2, and Track 3 all by 30 frames.

To **remove** a Track from a gang, select the Track and press **[SHIFT][LINK]**.

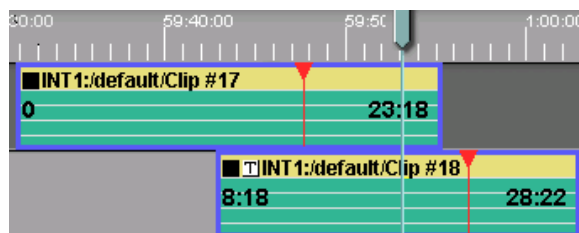


TAG

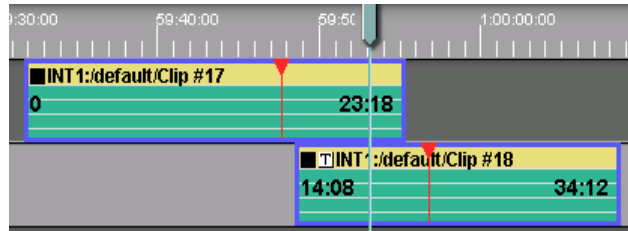
Tagging an Event locks its current position to the Timeline. If you drag or otherwise move a tagged Event, or even change the IN and OUT-points, the Event's sync relationship to the Timeline remains in place. Use this to keep an audio cue in one Event lined up with a visual point in an Event on another Track.

Press **[TAG]** to tag the Hot Event. A  status icon appears in the upper left corner of the Event, showing the Event has successfully been tagged.

In the illustration below, Event **Clip #18** has been tagged. Note the In and Out times.



In the illustration below, the tagged Event has now been moved to the right and the IN and OUT-times have been auto-adjusted. Because the Event was tagged, the frame that was under the Timeline Guide is still the same frame. The sync relationship of the Event to the Timeline has not changed.



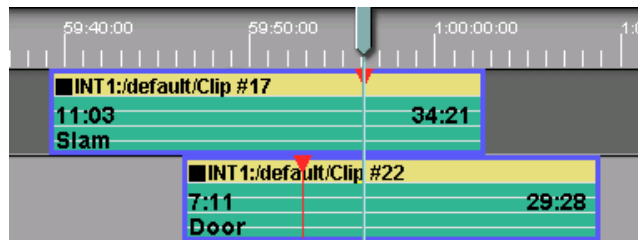
Note that the Edit Record Event is always tagged. This cannot be turned off.



ALIGN

This function is used to align two or more Points of Interest on different Tracks.

In the following example, the upper Event (Clip #17) has an audio cue of a door slam at the CPI. This is lined up under the TLG.

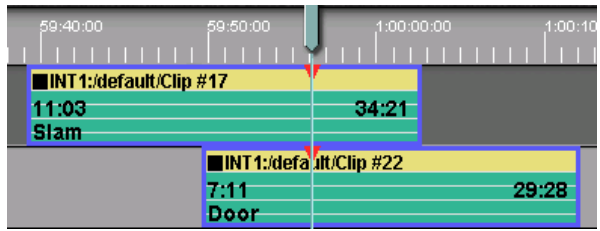


The Event below it (Clip #22) has the visual action of the door closing at the CPI. The intent is to bring the visual of the door in alignment with the audio of the door slam.

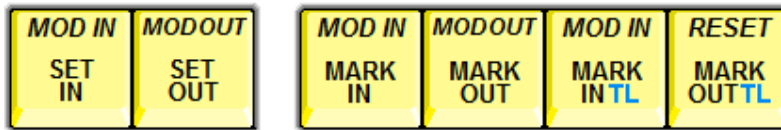
- 1 Select Track 1.
- 2 Jog the Event to the point of interest (in this example, the door slam audio).

At this point you have the situation shown in the previous example.

- 3 Select Track 2.
- 4 Jog the Event to the visual cue (in this example, the door closing visual).
- 5 Press **[ALIGN]**. The second Event will shift to align the current Event's CPI to the TLG.



9.9. Yellow Keys



SET IN

To **SET IN** a number is to specify a new IN-time timecode address for the current Event on the current Track.

- 1 **Type** a timecode number on the numeric keypad.
- 2 Press **[SET IN]**.

The number entered will be set into the Event as the new **IN-time**, and the Event duration will be adjusted accordingly.



MOD IN (SET IN)

To **MOD IN** a SET IN number, is to Set In a new IN-time timecode address for the current Event on the current Track without changing the duration of the Event.

- 1 **Type** a timecode number on the numeric keypad.
- 2 Press **[SHIFT][MOD IN]**.

The number entered will be set into the Event as the new **IN-time**, and the duration of the Event will not be changed.

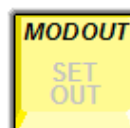


SET OUT

To **SET OUT** a number is to specify a new OUT-time timecode address for the current Event on the current Track.

- 1 **Type** a timecode number on the numeric keypad.
- 2 Press **[SET OUT]**.

The number entered will be set into the Event as the new **OUT-time**, and the Event duration will be adjusted accordingly.



MOD OUT (SET OUT)

To **MOD OUT** a number is to specify a new OUT-time timecode address for the current Event on the current Track without changing the duration of the Event.

- 1 Type a timecode number on the numeric keypad.
- 2 Press **[SHIFT][MOD OUT]**

The number entered will be set into the Event as the new **OUT-time**, and the duration of the Event will not be changed.



MARK IN

Press **[MARK IN]** to enter the current position of the selected device as the In-point for the current Event.



MOD IN (MARK IN)

To **MOD IN** a MARK IN number, is to mark the current position of the selected device as the In-point for the Event without changing the Events duration.

Press **[SHIFT][MOD IN]**.

The devices current position will be the new **IN-time**, and the duration of the Event will not be changed.



MARK OUT

Press **[MARK OUT]** to enter the current position of the selected device as the Out-point for the current Event.



MOD OUT (MARK OUT)

To **MOD OUT** a MARK OUT number, is to mark the current position of the selected device as the Out-point for the Event without changing the Events duration.

Press **[SHIFT][MOD OUT]**.

The devices current position will be the new **Out-time**, and the duration of the Event will not be changed.



MARK IN TL

In the Edit Mode, when you MARK IN an Event on the Timeline, the new In-time is marked and the Event is repositioned to align with the beginning of the Record Event.

Should you wish to MARK IN a new time, but position the Event at the TLG, press **[MARK IN TL]**.

The devices current position will be the new **In-time**, and the Event will be positioned at the TLG.



MOD IN (MARK IN TL)

In the Edit Mode, when you 'MARK IN TL' an Event on the Timeline, the new In-time is marked, the Event is repositioned to align with the TLG, and the duration of the Event is changed accordingly.

Should you wish to 'MARK IN TL', but you do not wish to change the duration of the Event, position the Event at the TLG, press **[SHIFT][MOD IN]**.

The devices current position will be the new **In-time**, and the duration of the Event will not be changed.



MARK OUT TL

In the Edit Mode, when you MARK OUT an Event on the Timeline, the new In-time is marked and the Event is repositioned to align with the beginning of the Record Event.

Should you wish to MARK OUT a new time, but position the Event at the TLG, press **[MARK OUT TL]**.

The devices current position will be the new **Out-time**, and the Event will be positioned at the TLG.



RESET

Press **[SHIFT][RESET]** to reset communications between DiVA and all devices serially connected via RS-422. The reset devices and respective ports will be listed in the Message Window.

9.10. Red Key



RECORD

Insert Edit

In the Edit Mode, an Insert Edit is an edit that is performed over existing Control Track on videotape or on a server clip. When **Insert** is selected as the Edit Mode, the Record Event will be **red**.

An Insert Edit edits only audio and video, leaving the control track and timecode untouched. Both the In-point and Out-point of an Insert Edit will be 'clean'; that is, that neither the In or Out edits will cause a disruption in the control track.

An Insert Edit differs from an Assemble Edit in that Assemble Edits record controls track, timecode, audio and video. While the In-point of an Assemble Edit will be 'clean', the Out-point of the edit will have anywhere from a 4 to 8 frame disruption in the control track.

Assemble Edit

In the Edit Mode, an Assemble Edit is an edit that is generally performed over blank videotape. With a video server as the Record Event, there is no difference between Insert Mode and Assemble Mode. When **Assemble** is selected as the Edit Mode, the Record Event will be **magenta**.

An Assemble Edit differs from an Insert Edit in that Assemble Edits record controls track, timecode, audio and video. While the In-point of an Assemble Edit on videotape will be 'clean', the Out-point of the edit will have anywhere from a 4 to 8 frame disruption in the control track.

Bump Out

When recording to a VTR, an edit will terminate automatically when the OUT-point of the Record Event is reached, or when the user presses the **[RECORD]** key before reaching the programmed OUT-point. This

action is called "bumping out" of an edit. When you 'bump-out' of an edit when in the Edit Mode, the Timeline will update according to your settings, and the edit, as performed, will be sent to the EDL.



When a VTR edit terminates frame accurately at the defined OUT-point of an edit, it is because the edit-out command is sent 4 to 8 frames earlier based on the device's protocol. Because of this latency, if you bump-out "on-the-fly" (terminate the edit using the **[RECORD]** key), the VTR will continue to record for an additional 4 to 8 frames.

VTR Crash Record

To Crash Record to a VTR:

- 1 Position the videotape where you want it to commence recording.
- 2 Press **[SHIFT][RECORD][RECORD]**. The VTR will record its current audio and video inputs, and will record timecode depending on the TC settings and routing of the VTR.

VTR First Edit

To crash record on a VTR starting with a specific timecode,

- 1 Position the videotape where you want it to commence recording.
- 2 On the numeric keypad type the desired starting timecode.
- 3 Press **[SHIFT][RECORD][RECORD]**. The VTR will record its current audio and video inputs, and will record the specified timecode depending on the TC settings and routing of the VTR.

VTR Insert Record (Virtual Edit)

To perform an **Insert edit** on a VTR while **not** in the Edit Mode, perform the following:

- 1 Set the IN and OUT-points for the Record Event.
- 2 Press **[TOGGL]** until the Event turns **red**.

Press **[RECORD]**. The VTR will cleanly edit IN and OUT as defined.



Note that there will be no record of this edit in the EDL. In order to save EDL data, you must be in the Edit Mode.

VTR Assemble

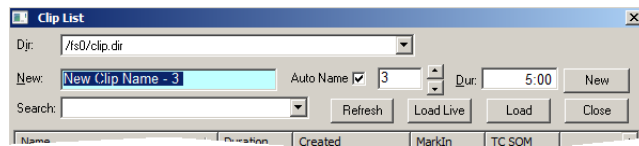
To perform an **Assemble edit** on a VTR while **not** in the Edit Mode, perform the following:

- 1 Set the IN and OUT-points for the Event.
- 2 Press **[TOGGL]** until the Event turns **magenta**.
- 3 Press **[RECORD]**. The VTR will cleanly edit IN, but the OUT-point will have a 4 to 8 frame break in the control Track.

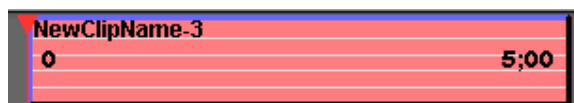
Server Record (VDCP)

To record on a **VDCP** controlled video server, perform the following:

- 1 **Select** the Track assigned to a record channel of your video server.
- 2 Press **[ASGN]**. The server clip directory will open.



- 3 In the **New** field enter the name for the new Clip.
- 4 Select **AutoName** to automatically increment the Clip file names if two or more Clips will be created with the same name.
- 5 In the **Dur:** field enter the duration for the new Clip.
- 6 With the **Dur:** field highlighted, press **[ENTER]**. A red record Event will be created at the Timeline Guide on the selected Track.



- 7 Press **[RECORD]** to initiate recording.

To stop a Record operation on the server press **[STOP]** or **[ALLSTOP] (SPACEBAR)**.



MANUAL (RECORD)

VTR Crash Record

To Crash Record to a VTR:

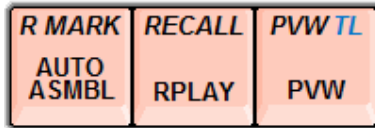
- 1 Position the videotape where you want it to commence recording.
- 2 Press **[SHIFT][RECORD][RECORD]**. The VTR will record its current audio and video inputs, and will record timecode depending on the TC settings and routing of the VTR.

VTR First Edit

To crash record on a VTR starting with a specific timecode,

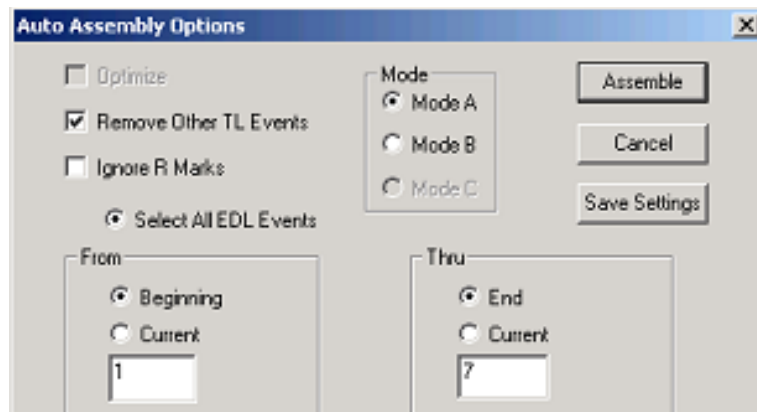
- 1 Position the videotape where you want it to commence recording.
- 2 On the numeric keypad type the desired starting timecode.
- 3 Press **[SHIFT][RECORD][RECORD]**. The VTR will record its current audio and video inputs, and will record the specified timecode depending on the TC settings and routing of the VTR.

9.11. Pink Keys



AUTO ASSEMBLE

Press **[AUTO ASMBL]** on the DiVA keyboard. The **Auto Assembly Options** Dialog will open.



Remove Other TL Events

With this item checked, recalling an edit from the EDL will remove Events currently on Tracks where recalled Events will be placed.

Ignore R-Marks

With this item checked, the selected Auto Assembly Mode will be performed on all applicable edits, ignoring whether or not there is an R-Mark associated with the Edit.

If unchecked, edits with an R-Mark are skipped.

Select All EDL Edits

With this item selected, the first and last edit numbers from the EDL will be entered into the “From” and “Thru” text entry fields, and the “Beginning” and “End” radio buttons will be selected.

Mode A

With **Mode A** selected, the Edits defined in the “From” and “Thru” text entry fields will be performed in

consecutive order as they appear in the current EDL, prompting you to Mount a new reel when necessary. An R-Mark will be added to each edit in the EDL after it is performed.

Mode B

With **Mode B** selected, the Edits defined in the “From” and “Thru” text entry fields will be performed in consecutive order as long as the Edit’s required Reel is mounted. If the Reel is not currently mounted, the Edit will be skipped. An R-Mark will be added to each edit in the EDL after it is performed.

Assemble

Press the Assemble button to **begin** the Auto Assembly process.

Cancel

Press the Cancel button or **[ALLSTOP]** to **stop** the Auto Assembly process.

Save Settings

Press the **Save Settings** button to **save** the current Auto Assembly dialog choices.

From

You may enter the desired starting Edit of the sequence, select **Beginning** to define the **first** Edit in the EDL, or select **Current** to specify the **highlighted** Edit in the EDL.

Thru

You may enter the desired last Edit of the sequence, select **End** to define the **last** Edit in the EDL, or select **Current** to define the **highlighted** Edit in the EDL.

SHORTCUT KEYS

The following “shortcut” keys may also be used in conjunction with the Auto Assemble feature:

[AUTO ASMBL],[A] = Auto Assemble **All** Edits

[AUTO ASMBL],[B] = Auto Assemble **B**eginning Edit

[AUTO ASMBL],[E] = Auto Assemble **E**nd Edit

[AUTO ASMBL],[C] = Auto Assemble **C**urrent

[AUTO ASMBL],[R] = Resume Edit sequence

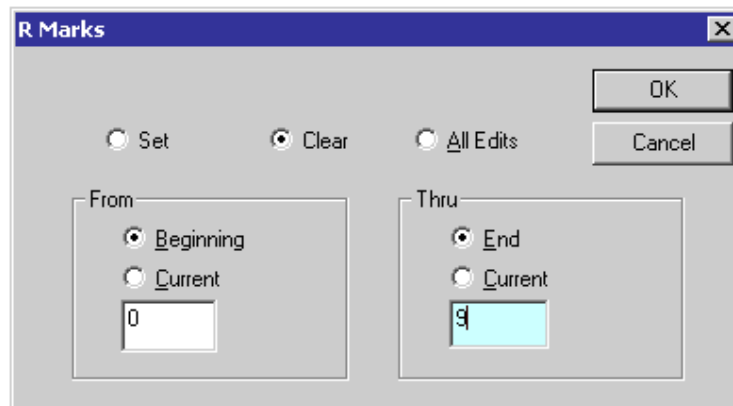
[AUTO ASMBL],[AUTO ASMBL] =
Auto Assemble current EDL Edit.

Set and Clear R-Marks

An **R-Mark** (Record Mark) is automatically displayed in the **REC** column to let the user and the system know if a specific Edit in the EDL has or has not already been recorded. Unless the "Ignore R-Marks" setting is selected in the Auto Assembly Dialog, the Auto Assemble process will perform all of the Edits defined in the From & Thru text fields that do not have R-Marks associated with them in the EDL.

You may manually **Set** R-Marks to Edits to prevent them from being Auto Assembled, or **Clear** them from Edits to enable them to be Auto Assembled.

Press **[SHIFT][ASMBL]** on the DiVA keyboard. The **R-Marks Dialog** will open.



Set

With this item selected, R-Marks will be Set or added to the range of Edits defined in the "From" and "Thru" text entry fields.

Clear

With this item selected, R-Marks will be cleared or deleted from the range of Edits defined in the "From" and "Thru" text entry fields.

All Edits

With this item selected, R-Marks will be Set or Cleared from all Edits in the EDL.

From

You may enter the desired starting Edit using the numeric keypad, select **Beginning** to define the **first** Edit in the EDL, or select **Current** to define the **highlighted** Edit in the EDL.

Thru

You may enter the desired last Edit using the numeric keypad, select **End** to define the **last** Edit in the EDL, or select **Current** to define the **highlighted** Edit in the EDL.

Shortcut Keys

The following shortcut keys may also be used when entering Edit numbers in the **From** and **Thru** text entry fields:

[A] = All Edits

[B] = Beginning Edit

[E] = End Edit

[C] = Current Edit

The Auto Assembly Track

When an EDL is loaded into the current EDL Bin, it is automatically displayed on the Timeline with blue “edit line” separators at each edit point. Edits with R-Marks associated with them are green to show that they have been recorded. Edits without R-Marks are displayed pink to show they have yet to be recorded.

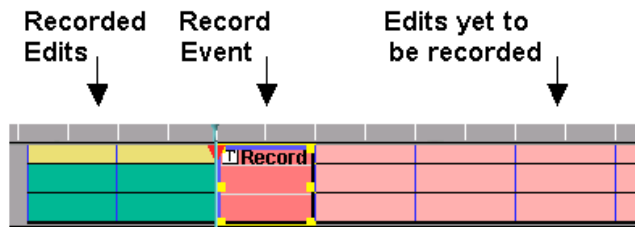
When the Auto Assembly process is initiated by pressing the **Assemble** button in the Auto Assemble Dialog, the next Edit is recalled to the Timeline, and the Record Event is displayed **red** for an Insert Edit, **orange** for a Pre-read Edit, or **magenta** for an Assemble Edit.

Once the Edit has been performed, the Record Event is displayed green to show that it has now been recorded, and an R-Mark is placed to the right of the Edit in the EDL.



R-MARK

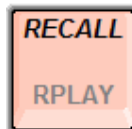
Press **[R MARK]** to open the ‘R’ Mark Dialog. [See “Set and Clear R-Marks”, Page 149.](#)



REPLAY

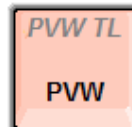
Press **[RPLAY]** to replay the Record Event just performed.

Any edit in the EDL can be replayed by selecting the edit in the EDL and pressing **[RPLAY]**.



RECALL

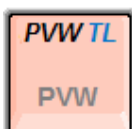
Press **[RECALL]** to recall the currently highlighted edit in the EDL to the Timeline.



PREVIEW

Press the **[PVW]** key to preview the current edit. All Events on Tracks that are set to "participate on air" will play out, together with all programmed switcher and mixer transition effects.

Regardless of where the Timeline is currently positioned, the preview will start from the beginning of the Record Event, and continue until it reaches the end of the Record Event or until you press **[ALLSTOP]**.



PREVIEW TL

If you wish to preview a section of the current edit from a location other than the beginning of the Record Event, position the TLG at that location and press **[PVW TL]**.

At the start of an edit, if several Events are encountered on the Timeline with the same Timeline start and the same A/V components enabled, DiVA will select the highlighted Track on the video switcher as the first Event on the Timeline. If an inactive Track is selected that is not part of the current edit, the topmost of the Events will be the first Event on the Timeline selected on the video switcher.

9.12. Blue Keys

AUDIO	A9	A10	A11	A12	LEVEL	ADD	SPLIT	TBC	MIX OFF
VIDEO	A1	A2	A3	A4	A5	A6	A7	A8	SWR OFF



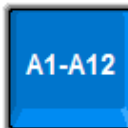
AUDIO-ONLY EVENT

To change the Selected Event to be an **Audio Only Event**, press **[VIDEO]**. This toggles the Video Track **ON/OFF**.



VIDEO-ONLY EVENT

To change the Selected Event to be a **VIDEO Only Event**, press **[AUDIO]**. This toggles **all** the enabled audio sub-Tracks **ON/OFF**. You may also toggle each audio sub-Track independently by pressing **[A1] - [A8]** and **[A9] - [A12]**.



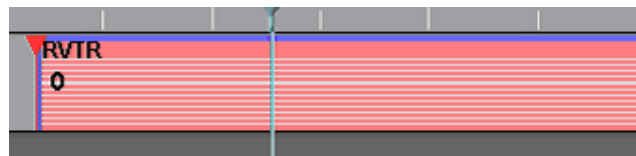
AUDIO SUB-TRACKS

To select or deselect audio sub-Tracks of the first eight channels of the Selected Event, press the corresponding **[A1] - [A8]** keys. On a Record Event with 8-12 audio channels, press **[SHIFT][A9] - [A12]** to select or deselect channels **A9 - A12**.

Selecting and de-selecting audio sub-Tracks on a Source Event affects the channel(s) that will be opened on the audio mixer during a preview or recording. Selecting and de-selecting audio sub-Track on a Record Event affects which channels of the record device will be armed during a recording.

Twelve Channel Audio

DiVA supports 12-channel audio **record** control for VTRs that have that capability; for example the Sony SRW-5000. When enabled, all 12 sub-Tracks are shown in the Event display.



LEVEL

Press **[LEVEL]** to capture the current level settings of the audio mixer. This feature is device dependent and does not work for all audio mixers



ADDITIVE

In the previous Dialog, you see that **A7** and **A8** have been checked under the **Additive** heading. With this setting, when the current Event's audio channels are enabled in a Preview or Recording, channels **A7** and **A8** of the previous Event will be left open.

Pressing **[SHIFT][ADD]** will toggle the current Event 'Additive' without the need to enter the SPLIT Dialog. To differentiate Additive from other audio modifications, its icon will change to a white box with a red **A**.

This section will only appear when a driver that supports this function is installed.



SPLIT

A **Split Event** or **split edit** is an Event where either the video or audio channel(s) are delayed. That is, at least one A/V component of the Event starts before the other.

The simplest way to perform a split edit, is to separate an Event by pressing **[SEP EVENT]** at the desired split point, identified by the **position** of the **CPI** or **TLG**, and change the A/V components of an Event as shown in the following example:

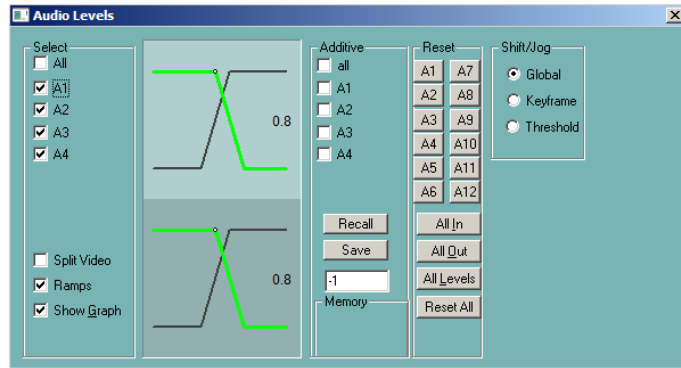


In the previous example, the edit starts with video and 8 channels of audio enabled. At the **SEP EVENT** point at 4:10 into the original Event, audio channels 1-4 are turned off, and the edit continues with video and audio channels 5-8 enabled.

Split edits can also be performed by using the Split Dialog.

Creating a Split Event

To make these Split Edits, press **[SPLIT]**. The following dialog is opened.



- 1 Place the **CPI** at the desired split point.
- 2 Check **Split Video** and/or one or more of the **A1 – A12** Audio Channels check boxes in the **Select** section of the dialog.
- 3 Press the **[MARK IN]** key. The sub-Tracks on the Event will display the results.

In the following example of a **simple** split Event, audio channels 1-4 are present at the beginning of the Event. Video is introduced later in the Event.



In the following example of a **complex** split Event, these Events happen in sequence:

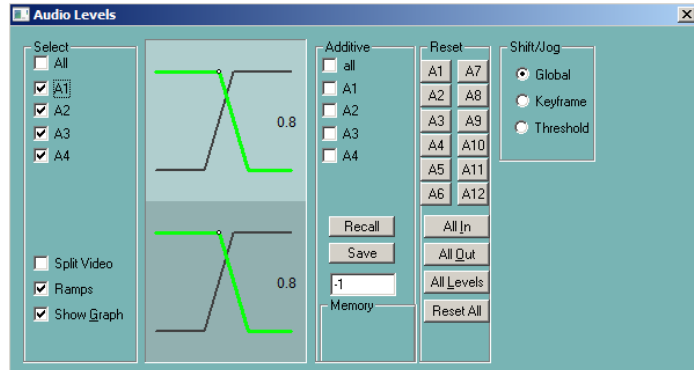


- 1 Audio channels 3-4 are present.
- 2 Video is introduced.
- 3 Audio channel 2 is introduced.
- 4 Audio channel 1 is introduced.
- 5 Video is removed.
- 6 Audio channel 4 is removed.
- 7 Audio channel 3 is removed.
- 8 Audio channel 2 is removed.

The Event ends with only audio channel 1 active.

The Split Dialog

Pressing [**SPLIT**] opens the Split Dialog, below.



Select

The **Select** section of the dialog contains options for the split operation:

- **ALL** - Checking **All** will select all audio sub-Tracks to be affected by the split.
- **A1 – A12** - Checking **A1 – A12** will select audio sub-Tracks 1 - 12 to be affected by the action.
- **SPLIT VIDEO** - Checking **Split Video** will select the video sub-Track to be affected by the split operation.
- **RAMPS** - When **Ramps** is checked, audio levels will transition smoothly from one keyframe to the next.
- **SHOW GRAPH** - Checking **Show Graph** turns on the graphic display of the current Event's audio channels.

Reset

The **Reset** section of the Dialog contains options for resetting audio levels back to their original level.

- **A1-A8** - will reset any level changes, split points, and ramps for the selected audio channel
- **RESET ALL** - will reset all level changes, split points, and ramps for all active audio channels.
- **ALL LEVELS**- will reset any level changes made to all Select channels.
- **ALL IN** - will reset all SPLIT IN points, regardless of Select status.

- **ALL OUT** - will reset all SPLIT OUT points, regardless of Select status.

Global

Select **Global**, press **[SHIFT]** and turn the Jog wheel to change the overall global level for the Selected audio sub-Tracks of the current Event.

Keyframe

Select **Keyframe**, press **[SHIFT]** and turn the Jog wheel to change the level for the keyframe at the TLG.

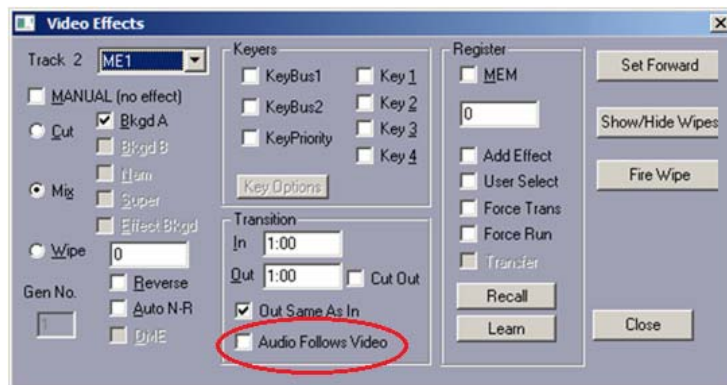
When the Split Dialog is open, pressing **[LEFT ARROW]** or **[RIGHT ARROW]** will jump to the previous or next speed keyframe for all audio channels that are selected.

Audio Transition Rates

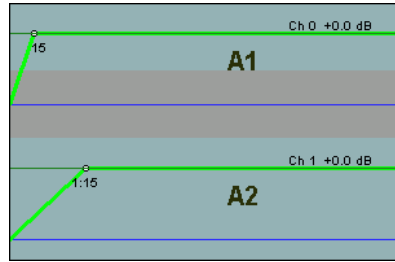
When setting up a video transition rate, the audio will, by default, transition at the same rate as the video.

If you wish the audio to cut or to transition at a different time or rate than the video, perform the following:

- 1 Press **[DISS]** to open the Effects Dialog.



- 2 Uncheck **Audio Follows Video**. In the following example, the video will dissolve at a rate of 1:15 but the audio will transition as defined in the **Split Dialog**.
- 3 Press **[SPLIT]** to open the **Split Dialog** and select the audio channel you wish to change. In the following example, only audio channel **A1** is selected.
- 4 Assuming that you wish an audio transition rate of 15 frames for audio channel **A1**, press **[1],[5],[DISS]**.



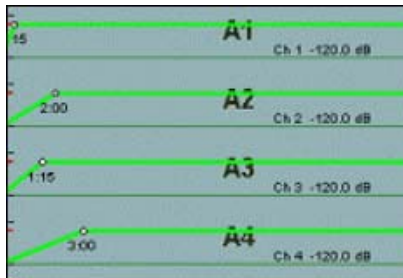
Since only audio channel **A1** was selected in the Split Dialog, the rate for this channel is seen as different from audio channel **A2**.

Setting Different Transition Rates for Each Audio Channel

Using the same method as described previously, you may set different transition rates (audio mixer dependent) for each audio channel.

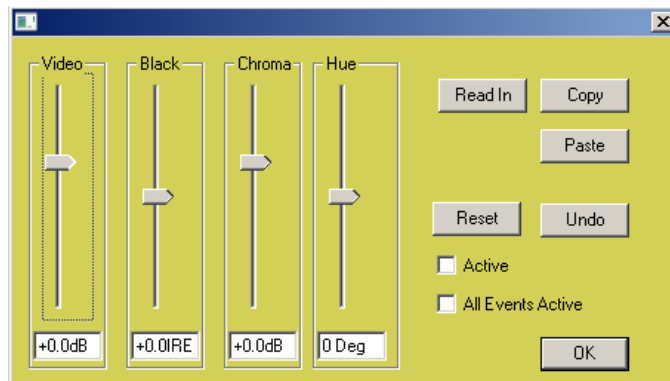
- 1 Press **[SPLIT]** to open the Split Dialog.
- 2 Check the appropriate audio channel(s) in the Split Dialog and set its rate.
- 3 Repeat for each channel.

The following example shows different transition rates for each channel:



TBC CONTROL (VTRs only)

To activate VTR TBC Control, press **[TBC]**. The TBC Settings Dialog will open.

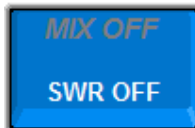


More about DiVA TBC control:

- This feature is only available for Sony or Panasonic VTRs that enable TBC control over the RS422 control port.
- The TBC dialog may remain open during a Preview or Recording.
- A TBC setting becomes part of the Event.
- TBC settings can be saved and recalled to an .L2D file, but not from and to the EDL.
- When **Active** is checked, it means that the TBC setting stored in an Event will be activated when that Event is Selected or encountered during a Preview or Recording.
- When **All Events Active** is checked, it means that the TBC settings stored in all Events are active, and will be activated when they are Selected or encountered during a Preview or Recording.

If this feature doesn't work with your particular VTR, and you feel that it should, contact Editware: support@editware.com.

Be sure to include the make and model of the VTR.

**SWITCHER OFF**

Press **[SWR OFF]** to disable DiVA control of the video switcher.

**MIXER OFF**

Press **[SWR OFF]** to disable DiVA control of the video switcher.

9.13. Green Keys



EDIT TRACK

This Track (T1) is the Only Track that can be used for the Edit Mode Record Track. When the Edit Mode is not enabled, this Track follows the same rules as all other Tracks.



T1-T12 (optionally T2.1-T2.12)

Press **[T1]-[T12]** to select the respective Track. When selected, the Track will become a darker shade, and the Track button will become highlighted.

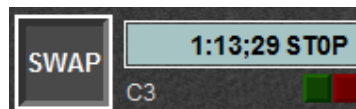


SWAP TRACKS

Press **[SWAP]** to exchange the contents and assignments of one Track with another.

- 1 Press the **[T1]-[T12]** key you wish to Swap.

Press **[SWAP]**. The word **SWAP** appears on the Button for that Track.



- 2 Press the **[T1]-[T12]** key you wish to swap with.

The two sources and all their assigned values will be swapped.

See "[Swap Tracks](#)", [Page 20](#) for Swapping Tracks while in the Assignment Page.

10. EDIT MODE

The Edit Mode adds a more traditional linear editing style and look to DiVA. The primary features of the Edit Mode are the **Record Track**, the **Settings**, the **EDL BINs**, **Matches**, and **Auto Assembly**. This section will discuss these and other features that are directly related to linear and non-linear editing functionality on the DiVA.

Please note that the Edit Mode is an **option** to the system. If you have not ordered your DiVA with the Edit Mode option, it will not be active.

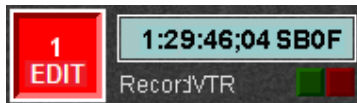
10.1. The Edit Record Track

The Edit Record Track is the Timeline representation of the videotape or clip that you will use as your record master. Like videotape, the Record Track or 'Black Track', will have a beginning and an end, a specified length, and it will display recorded Events, Events yet to be recorded, the currently programmed record Event, and black where there is nothing yet recorded.



Note that the Edit Record Track is always Track 1.

Assigning the Server Edit Record Track

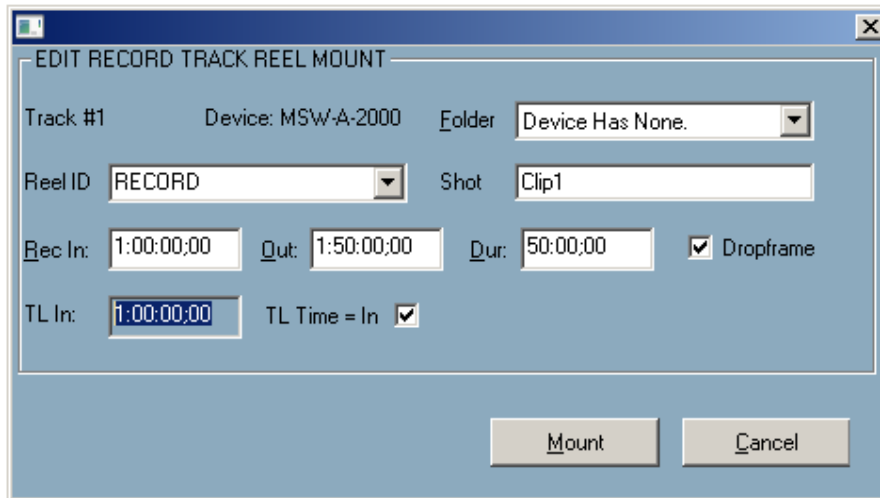


In the above image, the Track 1 button has turned **red**. This shows that the edit Mode has been enabled. Also, below the Track ID number are displayed the letters **EDIT**.

Assigning the VTR Edit Record Track

Different devices have different ways of mounting the Edit Record Track. This example is for VTRs.

- 1 Select the Edit Record Track.
- 2 Press **[MARK IN]**. The **EDIT RECORD TRACK MEDIA MOUNT** Dialog will open to allow you to define the parameters of the Edit Record Track or the "R-VTR".
- 3 Press **Mount** to mount the record tape. Press **Cancel** to abort the Dialog.



The options for this Dialog are explained below:

Reel ID

This field displays the currently assigned **Reel ID** for the Primary Recorder. If you change the Reel ID in this dialog, the change will also be reflected in the Track Settings Dialog.

The drop-down menu for this field contains any previously assigned Reel IDs. Selecting one of them will automatically change the currently assigned Reel ID for the tape currently mounted, or about to be mounted, on the Edit Record Track.

Folder

The **Folder** menu is for future expansion.

Shot

This field allows you to enter a descriptive name for this recording. The default is **Clip1**. This Name will be used for the entire show, unless you change it in the Event Dialog to mark a segment change, a revision number, a new show number, etc.

Rec In

This field defines the **start** time of the Record tape and the beginning of the “Black Track”. Initially, this number comes from the INIT Page Values under the **LinearMode** section, **DefRecStart**. You can:

- Leave this value.
- **[Double click]** in the field and enter a new In-time for this Record tape.
- **[Double click]** in the field and press the **[IN]** key to enter the **current TC** position of the VTR assigned to the Record Track.

Out

This field defines the **end** time of the Record tape and the end of the “Black Track”. The OUT-point field is auto-calculated based

on the IN-point and Duration. You can:

- Leave this value.
- **[Double click]** in the field and enter a new OUT-time for this Record tape.

Dur

This field defines the **duration** of the Record tape. The Duration field is auto-calculated based on the IN-point and OUT-point. You can:

- Leave this value.
- **[Double click]** in the field and enter a new Duration for this Record tape. The OUT-point will auto-calculate.

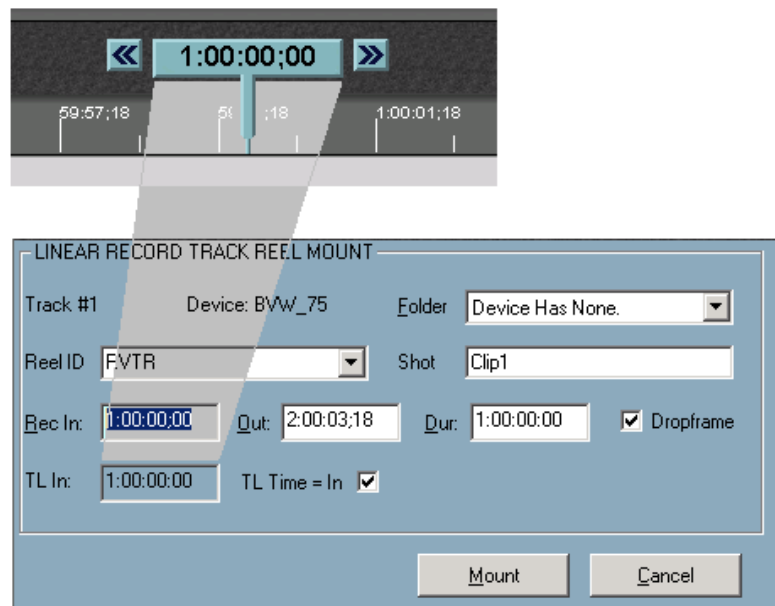
Dropframe

This check box allows the user to set the Record tape timecode to DF or NDF (NTSC). If the videotape is already mounted, this will be selected automatically. You can:

- Select to set the Record Tape to Drop-Frame TC.
- De-select to set the Record Tape to Non Drop-Frame TC.

TL In

This check box allows the user to set the Timeline Guide time to match the Record timecode.



- Select **TL TIME=IN** to ENABLE this feature.
- De-select **TL TIME=IN** to DISABLE this feature..

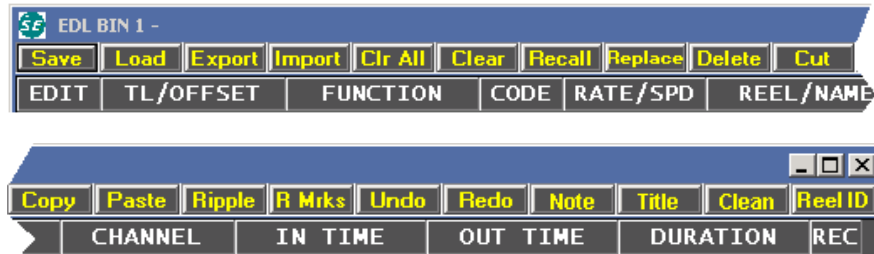
EDL Bin

The EDL Bins are only active in the **Edit Mode**. The EDL Bin displays the results of an edit after the user presses **[RECORD]** to terminate the edit manually, or when an edit is completed by reaching the pre-defined OUT-point.

The results of the edit are automatically placed in the EDL with an **R-MARK** displayed alongside the Record Event under the **REC** column, to show that this edit has been recorded to tape. If an edit in the EDL does not have an R-Mark, the R-Mark has either been manually removed or the edit was created in the Record OFF Mode. **See record off mode**

There are 10 EDL Bins, and each Bin can have its own EDL. Press the desired **BIN tab** to open that Bin.

EDL Bin Soft Keys



The functionality of each of the EDL Soft Keys is described below.

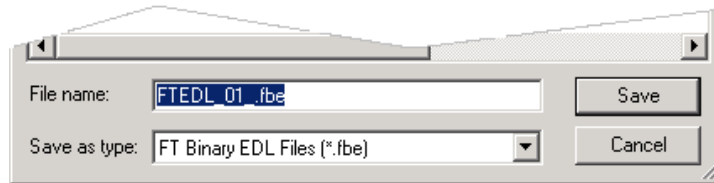
Save

[Click] Save to save the **current EDL** from the **current BIN**. The Save File Dialog is opened allowing the user to name the file and select the directory to which it will be saved. The file is saved to the hard drive as an **.fbe** file (**Fastrack Binary EDL**). The **.fbe** file is proprietary to DiVA, and must be **exported** in a **GVG format EDL** to be of use outside of the Fastrack and DiVA systems.



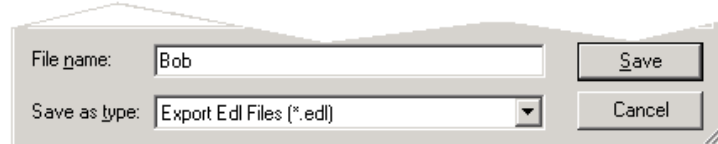
Load

[Click] Load to load an existing **.fbe** file from the system hard drive. This Timeline will be your working file and file name.



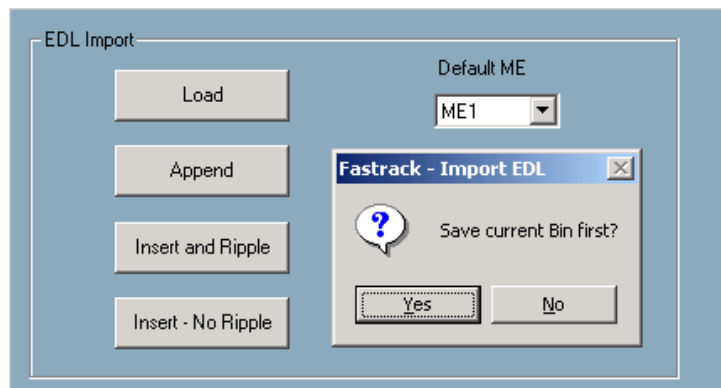
Export

[Click] Export to output the current EDL Bin **.fbe** file in **GVG/Editware .edl** format.



Import

[Click] Import to input a **GVG/Editware .edl** format EDL into the current EDL Bin as an **.fbe** file. The EDL Import Dialog will open, and offer you the opportunity to save the current EDL first.



Load

[Click] Load to select and import a **GVG format** EDL into the current EDL Bin. It will auto-translate automatically to **.fbe** format.

Append

[Click] Append to select and import a **GVG format** EDL and add it to the **end** of the current EDL in the current EDL Bin. It will auto-translate automatically to **.fbe** format.

Default M/E

From the pull-down menu, select the **M/E** to be assigned to the edits in the EDL being imported.

CLEAR ALL

[Click] Clear All to delete **all edits** from **all EDL Bins**.

CLEAR

[Click] Clear to delete all edits from the **current EDL Bin**.

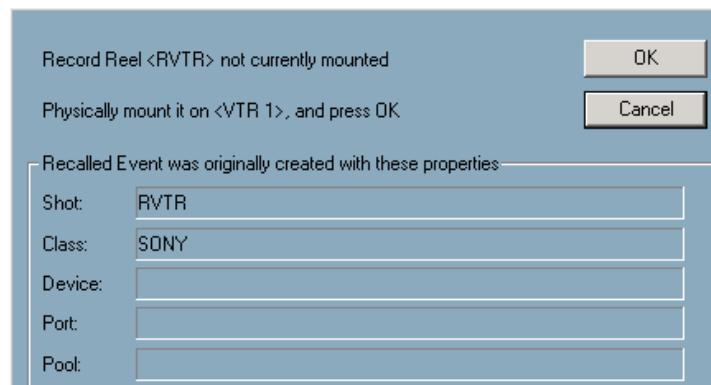
RECALL

[Click] Recall to recall the **selected** edit in the EDL. All other Events on the Timeline will be removed. The Event may then be executed or modified and replaced into the EDL.

When an Event is recalled to the Timeline, it is not removed from the EDL. The EDL remains intact and all related data and metadata such as speeds, stored TBC and MEM data and PEGS are copied with the Events to the Timeline.

To undo the result of an unwanted recall, press **[UNDO]**.

DiVA checks to see if the reel numbers involved in the recalled edit are currently mounted. If an Event with a **REEL ID** not currently assigned is recalled, the system prompts which Reel needs to be assigned.



Assign the Reel by pressing the appropriate **[T1]-[T12]** key or by **[clicking]** on its Track.

Changes are not a requirement of a RECALL operation. If an event is recalled, it does not have to be replaced into the EDL and regular editing may be resumed.

If a change is made to the event, it may be re-recorded as it is now programmed on the Timeline. Recording the event places it into the EDL as a new edit.

Replace

[Click] Replace to replace a **recalled** edit back into the EDL.

After an EDL edit has been recalled and modified, you can now replace the modified edit back in the EDL. *Only recalled edits can be replaced.* Trying to replace an event not recalled with the Recall feature results in a REPLACE ERROR message.

Delete

[Click] **Delete** to delete the highlighted edit and all of its components.

Cut

[Click] **Cut** to open the **EDL Management Dialog**, and cut (remove) edits from the EDL.

From

- **BEGINNING** – Select **Beginning** as the **first** edit in a **group** to cut from the EDL.
- **CURRENT** – Select **Current** the **first** edit in a **group** to cut from the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **first** edit in a **GROUP** to cut from the EDL.

Thru

- **END** – Select **End** as the **last** edit in a **group** to cut from the EDL.
- **CURRENT** – Select **Current** the **last** edit in a **group** to cut from the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **last** edit in a **group** to cut

from the EDL.

- **ALL EDITS IN A BLOCK** – All edits that physically fall **within** the **From** and **Thru** range defined will be cut from the EDL.
- **BY EDIT NUMBER IN A BLOCK** – All edits whose edit numbers fall **within** the **From** and **Thru** range defined will be cut from the block of edits defined.
- **BY EDIT NUMBERS, WHOLE LIST** – All edits whose edit numbers fall **within** the **From** and **Thru** range defined will be cut from wherever they are found in the EDL.
- **RIPPLE AFTERWARDS** – All edits following the last edit in the Cut group, will have their **Record** times adjusted accordingly so as not to leave a gap in the EDL.

Copy

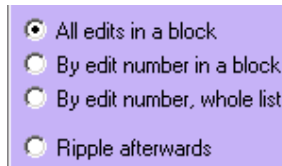
From

- **BEGINNING** – Select **Beginning** as the **first** edit in a **group** to copy from the EDL.
- **CURRENT** – Select **Current** the **first** edit in a **group** to copy from the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **first** edit in a **GROUP** to cut from the EDL.

Thru

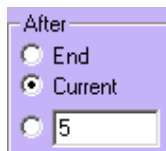
- **END** – Select **End** as the **last** edit in a **group** to copy from the EDL.

- **CURRENT** – Select **Current** the **last** edit in a **group** to copy from the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **last** edit in a **group** to copy from the EDL.

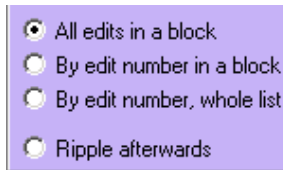


- **ALL EDITS IN A BLOCK** – All edits that physically fall **within** the **From** and **Thru** range defined will be copied from the EDL.
- **BY EDIT NUMBER IN A BLOCK** – All edits whose edit numbers fall **within** the **From** and **Thru** range defined will be copied from the block of edits defined.
- **BY EDIT NUMBERS, WHOLE LIST** – All edits whose edit numbers fall **within** the **From** and **Thru** range defined will be copied from wherever they are found in the EDL.
- **RIPPLE AFTERWARDS** – All edits following the last edit in the copied group, will have their **Record** times adjusted accordingly so as not to leave a gap in the EDL.

After



- **END** – Select **End** to paste the copied group of edits at the end of the EDL.
- **CURRENT** – Select **Current** to paste the copied group of edits after the current (highlighted) edit in the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number **after** which you will **paste** the copied group of edits.

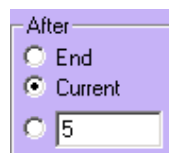


- **ALL EDITS IN A BLOCK** – All edits in the EDL that physically fall **within** the defined **From** and **Thru** range will be copied.
- **BY EDIT NUMBER IN A BLOCK** – All edits whose edit numbers fall **within** the defined **From** and **Thru** range will be copied.
- **BY EDIT NUMBERS, WHOLE LIST** – All edits whose edit numbers fall **within** the defined **From** and **Thru** range will be copied from wherever they are found in the EDL.
- **RIPPLE AFTERWARDS** – All edits following the last edit in the pasted group will have their **Record** times adjusted accordingly so the pasted edits do not overlap other edits in the EDL

Paste

[Click] Paste to open the **EDL Management** Dialog and paste edits copied from the EDL to another location in the EDL or to another EDL Bin.

After



- **END** – Select **End** to paste the copied group of edits at the end of the EDL.
- **CURRENT** – Select **Current** to paste the copied group of edits after the current (highlighted) edit in the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number **after** which you will **paste** the copied group of edits.
- **RIPPLE AFTER** – All edits following the last edit in the pasted group will have their **Record** times adjusted accordingly so the pasted edits do not overlap other edits in the EDL.

Ripple

[Click] Ripple to open the **EDL Management** Dialog and

Ripple the Record times in the EDL.

Ripple and its effects on the EDL are very important. After an event is added, deleted, or moved, rippling the EDL adjusts the record times of a specified group of events. The specified events themselves remain where they are in the EDL. Ripple automatically changes the record times of any event with an equal or later record IN- time, regardless of where it appears in the EDL.

For example, when a new event is inserted into the EDL, all events with Record IN-times later than or equal to the Record IN-time of the inserted event would have their record times adjusted by the amount of the inserted Event's duration. Source times are not affected. All rippled events lose their R-Marks, since they are unrecorded in their current form.

From

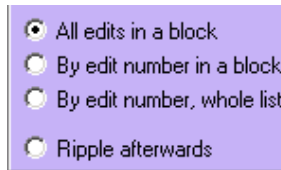
The 'From' dialog box is a small purple window with a title bar. It contains three radio buttons: 'Beginning', 'Current', and a 'Text Field' containing the number '1'. The 'Text Field' is highlighted with a light blue background.

- **BEGINNING** – Select **Beginning** as the **first** edit in a **group** to ripple in the EDL.
- **CURRENT** – Select **Current** the **first** edit in a **group** to ripple in the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **first** edit in a **group** to ripple in the EDL.

Thru

The 'Thru' dialog box is a small purple window with a title bar. It contains three radio buttons: 'End', 'Current', and a 'Text Field' containing the number '15'. The 'Text Field' is highlighted with a light blue background.

- **END** – Select **End** as the **last** edit in a **group** to ripple in the EDL.
- **CURRENT** – Select **Current** the **last** edit in a **group** to ripple in the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **last** edit in a **group** to ripple in the EDL.

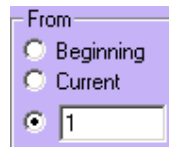


- **ALL EDITS IN A BLOCK** – All edits that physically fall **within** the **From** and **Thru** range defined will be rippled in the EDL.
- **BY EDIT NUMBER IN A BLOCK** – All edits whose edit numbers fall **within** the **From** and **Thru** range defined in the block of edits will be rippled.
- **BY EDIT NUMBERS, WHOLE LIST** – All edits whose edit numbers fall **within** the **From** and **Thru** range defined will be rippled wherever they are found in the EDL.

R Marks

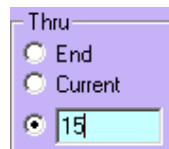
[Click] **R Mrks** to open the **EDL Management** Dialog and **clear, set** or **toggle R Marks** from an edit or group of edits in the EDL.

From



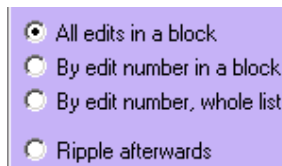
- **BEGINNING** – Select **Beginning** as the **first** edit in a **group of edits** to **clear, set** or **toggle R Marks** in the EDL.
- **CURRENT** – Select **Current** as the **first** edit in a **group** of edits to **clear, set** or **toggle R Marks** in the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **first** edit in a **group** of edits to **clear, set** or **toggle R Marks** in the EDL.

Thru



- **END** – Select **End** as the **last** edit in a **group** of edits to **clear, set** or **toggle R Marks** in the EDL.

- **CURRENT** – Select **Current** the **last** edit in a **group** of edits to **clear, set** or **toggle R Marks** in the EDL.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **last** edit in a **group** of edits to **clear, set** or **toggle R Marks** in the EDL.

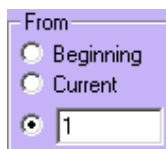


- **ALL EDITS IN A BLOCK** – All edits in the EDL that physically fall **within** the defined **From** and **Thru** range will have their R Marks cleared, set or toggled.
- **BY EDIT NUMBER IN A BLOCK** – All edits whose edit numbers fall **within** the defined **From** and **Thru** range will have their R Marks cleared, set or toggled.
- **BY EDIT NUMBERS, WHOLE LIST** – All edits whose edit numbers fall **within** the defined **From** and **Thru** range will have their R Marks cleared, set or toggled from wherever they are found in the EDL.

REEL ID

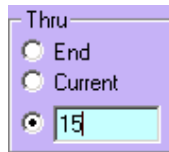
[Click] Reel ID to open the **EDL Management** Dialog and **edit** or change one or more Reel ID in the EDL.

From

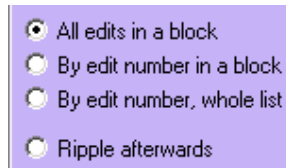


- **BEGINNING** – Select **Beginning** as the **first** edit in a **group** of edits in the EDL to change the Reel ID.
- **CURRENT** – Select **Current** as the **first** edit in a **group** of edits in the EDL to change the Reel ID.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **first** edit in a **group** of edits in the EDL to change the Reel ID.

Thru



- **END** – Select **End** as the **last** edit in a **group** of edits to of edits in the EDL to change the Reel ID.
- **CURRENT** – Select **Current** the **last** edit in a **group** of edits in the EDL to change the Reel ID.
- **TEXT FIELD** – Select the **Text Field** and type the edit number to be the **last** edit in a **group** of edits in the EDL to change the Reel ID.



- **ALL EDITS IN A BLOCK** – All edits in the EDL that physically fall **within** the defined **From** and **Thru** range will have their Reel ID changed.
- **BY EDIT NUMBER IN A BLOCK** – All edits whose edit numbers fall **within** the defined **From** and **Thru** range will have their Reel ID changed.
- **BY EDIT NUMBERS, WHOLE LIST** – All edits whose edit numbers fall **within** the defined **From** and **Thru** range will have their will have their Reel ID changed wherever they are found in the EDL.

Note

[Click] Note to open the Note Dialog to allow the addition of a text note to the selected Edit Line.

Title

[Click] Title to open the Title Dialog to allow the addition of a Title or name to the current EDL Bin.

Clean N/A.

Reel ID (VTRs Only). See [Reel ID \(VTRs Only\), Page 175](#)

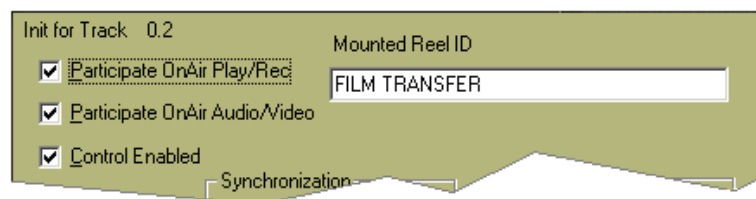
10.2. Reel ID (VTRs Only)

Each VTR Event on a Timeline can have its own Reel ID. A Reel ID is the name of the tape that is currently mounted on a current VTR. If you have not assigned a Reel ID to a mounted Reel, DiVA uses the Device Name of the VTR as the default Reel ID.

ASSIGNING A REEL ID

To assign a Reel ID to a mounted VTR Reel:

- 1 Press **[SHIFT][LOCK]**. The Track Settings Dialog will open for the current Track.

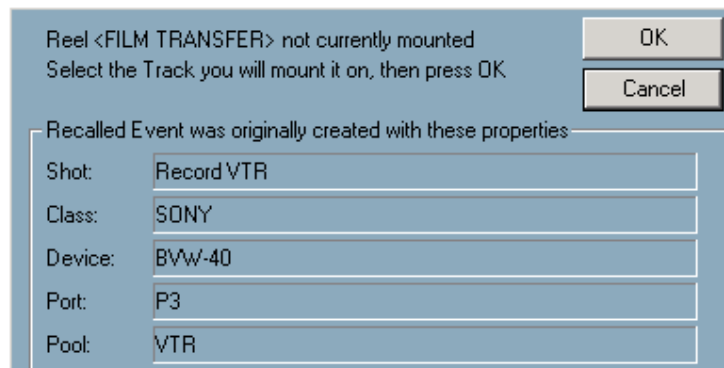


The **Mounted Reel ID** field will display the currently assigned Reel ID. To change the Reel ID,

- 2 Enter a new name in this field and press **[ESC]** to close dialog.

RECALLING A REEL ID

If you attempt to recall an edit from the EDL with a Reel ID that has not been mounted, you will be prompted with the following Dialog:



Select the Track where you wish this Reel mounted and **[Click] OK**.

SHOW REEL ID

The name displayed on the DiVA screen to the right of the Track number can either be the **Device Name** as assigned in the Assignment Page, or the **Reel ID** as assigned in the Track Properties Dialog. See [Track Properties, Page](#)

58.

The Auto Assemble function works in conjunction with the current EDL. This feature allows you to automatically reproduce or repeat edits in the current EDL individually, in a group, or by the presence or absence of an 'R' Mark. See [SET AND CLEAR R-MARKS, Page 149](#).

To use the Auto Assembly feature, your DiVA system must have the **Edit Mode** option installed and enabled in the Assignment Page.

DiVA will Auto Assemble imported **GVG.EDL** lists or its own native **.L2D** files that have been generated in a DiVA or Fastrack.

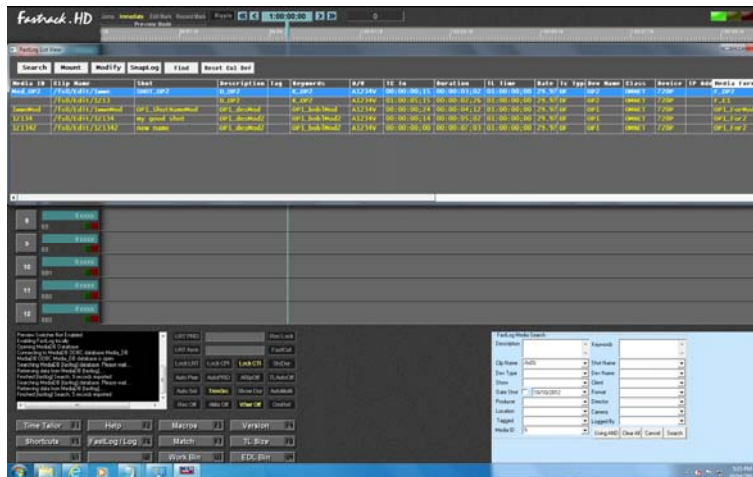
11. FASTLOG DATABASE

FastLog is an optional Media Management application within DiVA, which may be activated during an editing session. FastLog can be used in a standalone mode, or in tandem with the MediaDB Asset Management System from ReelData.

The FastLog database can be queried and updated during a session, and data related to a particular Event can be recalled and placed on the edit Timeline. Tape-based Events are treated as they would be during normal editing: If the tape is currently mounted, the Event is ready to use, otherwise a prompt is issued to the operator to mount the tape. Server-based Events are loaded on a Server channel, ready to use. Clips can be loaded, trimmed if desired, and full path name and related information can be logged to the database while editing.

11.1. FastLog Table View

If the feature is enabled on the DiVA, press the **[FastLog]** key to open the table view of the FastLog database.



Media ID	Clip Name	Shot	Description	Tag	Keywords	A/U
Med_OP2	/fs0/Edit/1wwe	SHOT_OP2	D_OP2		K_OP2	A1234V
	/fs0/Edit/1Z13		D_OP2		K_OP2	A1234V
1wweMod	/fs0/Edit/1wweMod	OP1_ShotNameMod	OP1_desMod		OP1_bob1Mod	A1234V
1Z134	/fs0/Edit/1Z134	my good shot	OP1_desMod2		OP1_bob1Mod2	A1234V
1Z1342	/fs0/Edit/1Z1342	new name	OP1_desMod2		OP1_bob1Mod2	A1234V

TC In	Duration	TL Time	Rate	Tc Typ	Dev Name	Class	Device	IP Add	Media Format
00:00:00;15	00:00:03;02	01:00:00;00	29.97	DF	OP2	OMNET	720P		F_OP2
01:00:05;15	00:00:02;26	01:00:00;00	29.97	DF	OP2	OMNET	720P		F_E1
00:00:00;24	00:00:04;12	01:00:00;00	29.97	DF	OP1	OMNET	720P		OP1_ForMod
00:00:00;14	00:00:05;02	01:00:00;00	29.97	DF	OP1	OMNET	720P		OP1_For2
00:00:00;00	00:00:07;03	01:00:00;00	29.97	DF	OP1	OMNET	720P		OP1_For2

Shot Date	Import Date	Imported By	Project	ShowName	Bin	Client
10-11-2012, 12:00:00	10-11-2012, 14:02:34	JAY	bobble	SHOW_OP2	0	JAY
10-11-2012, 12:00:00	10-11-2012, 14:10:20	JAY	bobble	bobble	0	C_E1
10-08-2012, 12:00:00	10-12-2012, 10:42:52	JAYMod	bobble	bobbleMod	0	OP1_CliMod
10-15-2012, 12:00:00	10-14-2012, 14:24:36	JAY	bobble	bobble	0	OP1_Cli2
10-15-2012, 12:00:00	10-14-2012, 17:07:10	JAY	bobble	bobble	0	OP1_Cli2

Producer	Director	Locat	Camera	Record ID	TC Out	Project	Tenant ID	Group Num
P_OP2	Dir_OP2	L_OP2	Cam_OP2	77	00:00:0			
P_E1	Dir_E1	L_E1	Cam_E1	79	01:00:0			
OP1_ProMod	OP1_DirMod	OP1_L	OP1_Cam	82	00:00:0	20	3	1
OP1_Pro2	OP1_Dir2	OP1_L	OP1_Cam	83	00:00:0	20	3	1
OP1_Pro2	OP1_Dir2	OP1_L	OP1_Cam	84	00:00:0	20	3	1

MEDIA ID

Identifies a unique clip or sub-clip which could be anything from a still image to an entire tape or clip. Media ID is also used in MediaDB to relate FastLog data to Library, Shot Log, Transcript, and Clip Vault data.

In FastLog, database Events on Omneon and Spectrum Tracks have a default Media ID set to the clip name (without the path). Data entered from other device Tracks may leave the Media ID blank for the user to fill in.

CLIP NAME

Identifies the clip name and path. To load the complete clip (including IN and OUT times, this record can be used at any future time to restore the Event exactly as originally created, as long as the media still resides on the server.

SHOT

Identifies a sub-clip by a short descriptive name.

DESCRIPTION

Detailed descriptive media information.

KEYWORDS

Like Description, but used to pre-define a list of exact words to facilitate searching.

A/V

Specifies Audio sub-Tracks and Video channel.

TC IN

Time code of the In-time of the Event. In the format **hh:mm:ss:ff**. For drop-frame time code, the last punctuation between ss; and ;ff is a semi-colon.

DURATION

Time code representation of the clip length.

TL TIME

Time code representation of the position on the DiVA Timeline where the Event was positioned when it was saved to the FastLog table.

RATE

Frame rate of media; 24, 25, 29.97, 30, 59.94 or 60 fps.

TC TYPE

DF or NDF

DEV NAME

This is the **Device Name** assigned to the Track from which the Event was saved.

CLASS

This is the **Class** assigned to the Track from which the Event was saved.

DEVICE

This is the **Device** assigned to the Track from which the Event was saved.

IP ADDRESS

This is the IP Address assigned to the Track from which the Event was saved.

MEDIA FORMAT

Specifies type of media, such as MPEG, DVC, etc.

SHOT DATE

SQL data element with date and time of shot. Entered manually when a FastLog record is saved from DiVA.

IMPORT DATE

Date the FastLog record was saved to the FastLog table. Entered automatically, but may be edited.

IMPORTED BY

Name or initials of person doing the FastLog logging.

PROJECT

Set automatically by DiVA in a special Project dialog.

SHOWNAME

Name of the show this media is part of. Entered manually on DiVA

BIN

Entered on MediaDB system if relevant

CLIENT

Entered manually on DiVA. Last Value entered is filled in as the default.

PRODUCER

Entered manually on DiVA. Last Value entered is filled in as the default.

DIRECTOR

Entered manually on DiVA. Last Value entered is filled in as the default.

LOCATION

Entered manually on DiVA. Last Value entered is filled in as the default.

CAMERA

Entered manually on DiVA. Last Value entered is filled in as the default.

RECORD ID

Assigned by SQL database internally. Sequential integer, unique to each FastLog record.

TC OUT

Entered manually on DiVA. Last Value entered is filled in as the default.

PROJECT ID

Entered manually on MediaDB.

TENANT ID

Entered manually on MediaDB.

GROUP NUM

Entered manually on MediaDB.

11.2. The Search Function

Press **[FastLog SRCH]** on the keyboard or click on the **[Search]** button at the top of the table to launch the Search Dialog. The Search Dialog will appear at the lower

right of the DiVA screen.

The Search dialog allows the user to enter data values or partial data values to retrieve all matching records. Complex queries can be created by entering values in multiple fields and selecting **OR** or **AND** logic. The drop down list at each field displays the ten most recent entries in each field. Each time the Search dialog is used, the fields contain the values used in the last search as default values.

Data Entry Fields

Each field has a label and a data entry area. The field can be selected with a mouse click or by using the **[Tab]** key to move from one to the next. The down arrow key displays the most recent entries for that field. A “%” sign is a wild-card entry. For example, using the search value “%blue sky%” in the Description field will find all records that have that exact phrase anywhere in the Description.

Using AND/OR

Click on this button to toggle between using OR and using AND. The button reflects the current state, so [clicking] on OR changes the search logic to AND. **OR** logic causes a record to be found if **any** of the search criteria is met. **AND** logic finds records for which **all** search criteria are met.

Clear All - This button clears all entries in the search fields.

Cancel - Closes the Search dialog.

Search - Starts the search currently specified in the dialog.

11.3. The Mount Function

[Click] Mount to load the clip or Event associated with the selected FastLog record onto a Track. Server clips are loaded on the server’s playout channel assigned to that Track.

11.4. The FastLog Data Entry Dialog

The Data Entry dialog is similar to the Search dialog. To start the Data Entry Dialog, Click on an Event on the DiVA Timeline, then press [Shift][F6].

FastLog Data Entry			
Clip Name	/fs0/Edit/1Z134	Shot Name	Adding new record
Media ID	1Z134	Dev Name	OP1
TC In	00:00:00:14	Duration	00:00:05:02
		A/V	A1234V
Description	OP1_desMod	Keywords	OP1_bobIMod
Show	bobble	Client	OP1_Cli2
Date Shot	10/ 8/2012	Format	OP1_For2
Producer	OP1_Pro2	Director	OP1_Dir2
Location	OP1_Loc2	Camera	OP1_Cam2
Logged By	JAY	<input type="button" value="Cancel"/> <input type="button" value="Save To MediaDB"/>	

Note that some of the fields are already filled in by DiVA with data related to the Track, clip and Event. Other fields are filled with the last value entered, and the drop down menu at each field contains a list of the last values entered.

Enter or modify information in any of the fields with white backgrounds, except the Show and Logged By fields. Those are preset in DiVA and are not changeable here, but can be modified in the Modify function.

The drop-down menu for each field allows you to select from recently entered values for that field. When all information is entered, click on Save to FastLog.

11.5. The FastLog Modify Dialog

Press the Modify button to open the Modify dialog, where most Fastlog fields can be changed as desired. This dialog is almost the same as the data entry dialog, and works similarly.

FastLog Data Modify			
Clip Name	/fs0/Edit/1wweMod	Shot Name	OP1_ShotNameMod
Media ID	1wweMod	Dev Name	OP1
TC In	00:00:00:24	Duration	00:00:04:12
		A/V	A1234V
Description	OP1_desMod	Keywords	OP1_bobIMod
Show	bobbleMod	Client	OP1_CliMod
Date Shot	10/ 8/2012	Format	OP1_ForMod
Producer	OP1_ProMod	Director	OP1_DirMod
Location	OP1_LocMod	Camera	OP1_CamMod
Logged By	JAYMod	<input type="button" value="Cancel"/> <input type="button" value="Update MediaDB"/>	

12. OMNEON/SPECTRUM SERVER TECHNOTE

12.1. Omneon / Spectrum Server Intro

DiVA (V1.1 Release or higher) can perform linear and non-linear editing with Harmonic Spectrum (Omneon) servers. All 'edits' are 100% non-destructive, as the 'Edited Master' is a Playlist that resides on the server. Throughout this document, for reasons of description and instruction, we call the DiVA Edit Track and the Spectrum Playlist the 'Edited Master'. This document does not cover the Setup or Operations of the Editware 'QuickEdit'™ NLE Proxy Editor for the Spectrum Servers.

Note the following about the OmNet Application:

- The "Recorder" requires the use of two (2) channels; one to record and one to preview/playback the recording (Edited Master).
- Before editing with DiVA and your server, you MUST first record a black clip and call it **DiVA_BLACK**. ***DO NOT make this clip a Reference clip.*** This clip will be the Record Clip for all future edit sessions.
- This clip must reside in the current directory for the Edit Track (usually /fs0/clip.dir).
- [Clicking] on **New** in the clip list dialog will mount this clip automatically. It is recommended that this clip be at least the length of the longest show you plan to edit.
- Audio edits are comprised of all assigned audio channels. OmNet and Spectrum do not break down audio edits into individual channels when editing to the Spectrum.
- DiVA OMNET control of the Spectrum Servers(s) is over a TCP/IP network. Please have the connection between DiVA and Spectrum verified and the IP address noted before continuing.
- To assign and use Spectrum channels, a 'Player' must be created for each channel on the server through the Spectrum 'System Manager'. For information on creating Spectrum Player(s), see Harmonic documentation.

12.2. DiVA Setup

1. Press **[ASSGN]** to open the DiVA Assignment Page.

Track	On	Device Name	Class	Device	Auto	Port
1	<input checked="" type="checkbox"/>	OM_REC'D	OMNET	Rec	<input type="checkbox"/>	192.168.1.94:P3/192.168.1.94:RP1
2	<input checked="" type="checkbox"/>	OM_P1	OMNET	auto	<input type="checkbox"/>	192.168.1.94:P1
3	<input checked="" type="checkbox"/>	OM_P2	OMNET	auto	<input type="checkbox"/>	192.168.1.95:P2
4	<input type="checkbox"/>					

1a. For **SD/1080i** operation, Make the following assignments for the OmNet Track(s):

- 1.1 Any **Device Name** can be given to this Track.
- 1.2 Select **OMNET** as the **Class**.
- 1.3 Select **Rec** for the Primary Record **Device** on the Edit Track (Track 1).
- 1.4 Select **auto** for PB sources.
- 1.5 De-select **Auto** column checkmark.
- 1.6 Skip 1b and jump to **#2: Assign Ports to OmNet Tracks**.

1b. For **720p** operation, make the following assignments for the OmNet Track(s):

- 1.7 Any **Device Name** can be given to an OmNet Track.
- 1.8 Select **OMNET** as the **Class**.
- 1.9 Select **Rec_720p** as the Primary Record **Device** on the Edit Track (Track 1).
- 1.10 Select **720p** for PB sources.
- 1.11 De-select **Auto** column checkmark.
- 1.12 Continue with **#2: Assign Ports to OmNet Tracks**.

2. Assign Ports to OmNet Tracks:

For the Edit Track Recorder Port (Track 1):

IP_address:Spectrum_Preview_Player_name/IP_address:Spectrum_Recorder_Playe
r_name.

Example: 192.168.1.94:**P3**/192.168.1.94:**RP1** (where '**P3**' is the preview Player name and '**RP1**' is the Record Player name).

For the Source(s) Port(s):

IP_address:Spectrum_Player_name.

Example: 192.168.1.94:**P1** (where '**P1**' is the name of a Player associated with a source channel).

Note the following about enabling Tracks and server channels:

- When enabling a server channel for the first time, the status area will display the word '**free**'. At this time DiVA is connecting to the server and retrieving the clip list. The length of time it takes for this action depends on the number of clips in the directory... the more clips, the more time it takes. When the retrieval of the clips is complete, the word **free** changes to **STOP** or **STILL**.

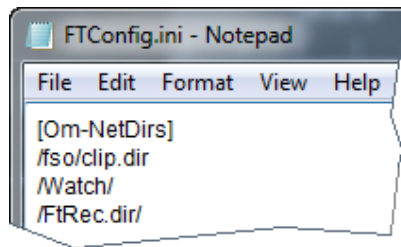
12.3. Spectrum Directories

DiVA, by default, only has visibility of the current server directory. The 'current' directory is the directory where the clip mounted on the Edit Track resides. The factory default Current Directory for OmNet is **/fs0/clip.dir**. We recommend that you retain this as your 'Current Directory' so that all other directories will be 'under' this directory, giving you access to all clips and Movies as sources for new Movies.

For the DiVA editor to see and have access to other primary directories in the server, add these directory names to the directory list in the DiVA **FTConfig.ini** file.

To add directory names to the list,

1. On the DiVA, open **Windows Explorer**.
2. Navigate to **C:/DiVA/Runtime/FTConfig.ini**
3. Open the FTConfig.ini file. If asked, open it in **Notepad**.
4. Find the **[Om-NetDirs]** section. Following the format shown in the example below, add any other server directories or sub-directories you wish to browse or access from DiVA. When done, save the file and restart DiVA.



Certain directories and sub-directories may be displayed in the browser that are not found in this list. These directories are used to store Clips and Movies created by DiVA, and are added automatically when DiVA is run.

/Watch/ = This folder is where Discrete and Embedded Movies are automatically placed when created by DiVA.

/Watch/CAUTION/CanDeleteOriginals/ = This folder is where Reference Movies and .BAK files are automatically placed when created.

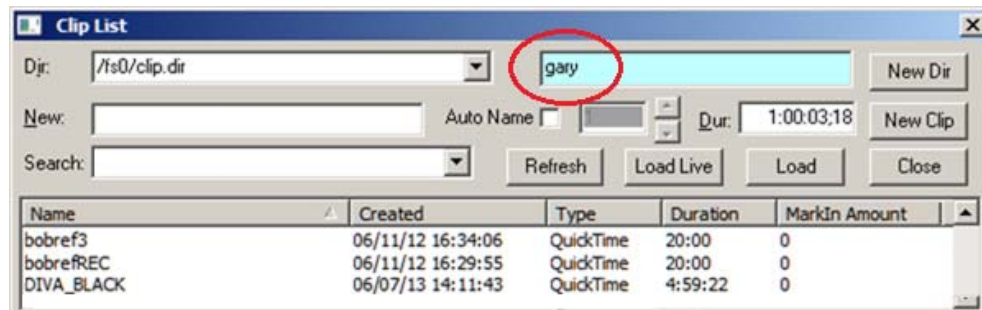
/FtRec.dir/ = This folder is where real-time edit recordings are automatically placed when created.

/CAUTION/CanDeleteOriginals/ = This folder is where Reference Clips are automatically placed when created.

MAKE A SUB-DIRECTORY DIRECTORY ON SPECTRUM SERVER FROM DIVA

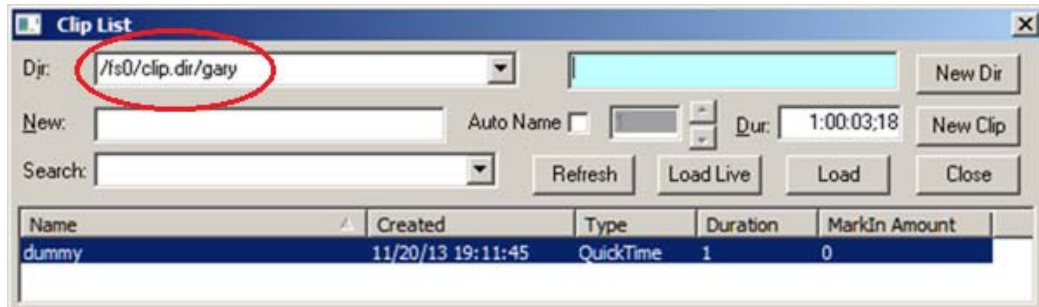
You can create a new sub-directory of any directory that has a clip called DIVA_BLACK in it.

1. Enter a name for the new directory and click '**New dir**'. In the example below, 'gary'.



There is no command in the API to create a new directory on Spectrum, but if you move an existing clip from one directory to a directory that doesn't exist, then Spectrum will create that directory.

When you 'Add a new Directory', we copy 1 frame of DIVA_BLACK to the new directory and rename it 'dummy'.



Note the following about Movie Directories:

- Reference, Discrete or Embedded Movies can be used as sources for new edits. They can reside in, and be loaded from, any currently accessible Spectrum directory when used as a source in a **linear edit**.

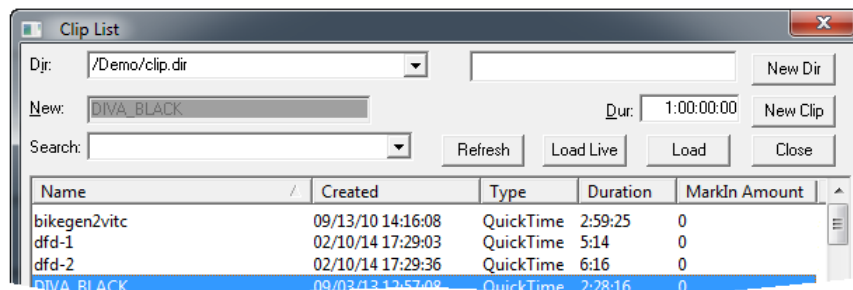
For Movies to be used as sources in a non-linear edit or in a new Movie, the Movies must reside in the Current Directory or a sub-directory of the Current Directory. As a reminder, the 'Current Directory' is the same directory where the currently mounted clip on the Edit Track resides.

LOADING THE RECORD EVENT (EDIT MASTER) ON THE EDIT TRACK

- Select the **Edit Track 1**. (This should only be done for the Edit Track and not the source Tracks.)
- Press **[ALT TC]** to make the Edit Track Track **CTL**. The letters **CTL** will be displayed in yellow in the Status area to the left of the Record Track. This will assure that the Timeline 'timecode' will be sequential and consecutive.



- Press **[ASSIGN]** to open the **Assign Dialog** (Clip Browser).

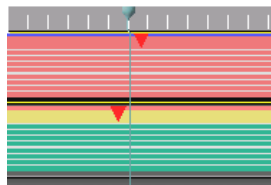


4. Select and **[double click]** the DiVA_BLACK Clip from the list of clips or click **New Clip**. **DiVA_BLACK** will then be mounted on the Edit Track with its underlying 'Black Track'. If **DiVA_BLACK** does not exist in the current directory for the Edit Track, create it on the server. Make sure that the DiVA_BLACK clip is long enough to contain your entire program.

This clip will be a 'place-holder' for the timeline, and the original DiVA_BLACK clip will not be changed in any way, as this process is completely non-destructive.

12.4. Playback and Record Timing

If the CPI (**C**urrent **P**osition **I**ndicator - red, inverted triangle) and the TLG are not aligned, they might look like the following example. If so, the accuracy of the edits and the starting source position may not be frame accurate.



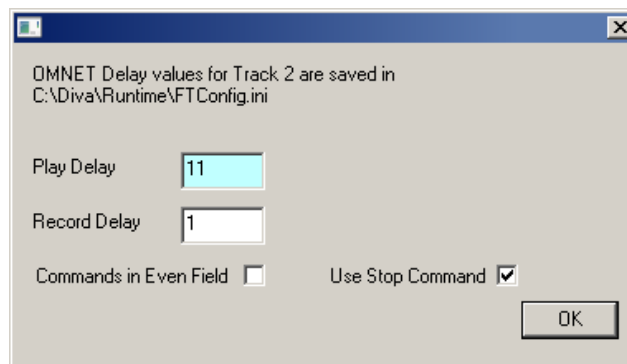
WRONG ALIGNMENT OF CPI'S AND TLG

To align the CPI to the TLG:

1. Select each OmNet Track and press **[INIT]**. Assure that the **OFFSET** field for each OmNet Track is set to '0'.
2. Mount a clip on the Edit Track.
3. Mount a clip on a Source Track.
4. Perform a **Preview**. If the CPI and the TLG are aligned continue with **#7**. (It may be easier to see the relationship between the CPI and the TLG if the screen scaling is set to its maximum.)

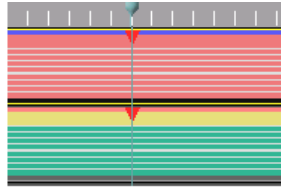
If the alignment is off between the CPI and the TLG like the previous graphic:

5. Select the Source Track and press **[SHIFT][DELAY]** to open the Server Delay Dialog.



- Adjust the **Play Delay** by incrementing or decrementing the value in the Play Delay field so that the CPI lines up with the TLG when doing a preview.

The CPI's should be lined up correctly in both Record and Preview and the edit should be correct. The adjusted Timeline should look like the following example:



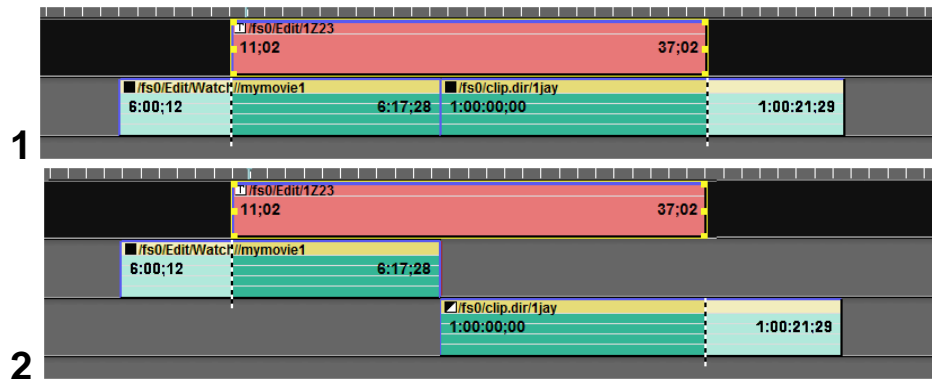
CORRECT ALIGNMENT OF CPI'S AND TLG

- Perform a short edit with an identifiable frame on the PB source.
- Check the edit and see that the first frame of the edit was the correct source frame. If so, save your Configuration File and move on to **WHAT GETS RECORDED**.

If not, press **[SHIFT][DELAY]** to open the Server Delay Dialog again and adjust the **Record Delay** by incrementing or decrementing the value in the Record Delay field. Repeat # 7-8 until the correct source frame is the first recorded frame.

WHAT GETS RECORDED

Whether the source(s) is a server clip, a VTR or a switcher crosspoint, only the material placed directly below the Record Event will be recorded, regardless of whether the edit is performed linearly or non-linearly. Also remember that the duration of the edit is ALWAYS defined by the duration of the Record Event.



In EXAMPLE 2 above...

If this edit is performed linearly where there is a video switcher, there will be a DISSOLVE between the two Events, because of the way it was programmed.

If this edit is performed non-linearly, there will be a CUT between the two Events, regardless of whether there is a video switcher or the way it was programmed. NLE edits are always performed as CUTs.

PERFORMING A LINEAR EDIT WITH OMNET

When you perform a 'linear edit' with the Harmonic server, all Events and effects programmed within the IN and OUT-points of the Record Event are performed and recorded in real-time. The newly recorded segment is stored in the **'/FtRec.dir/** and then placed on the Timeline. All other operations are the same as with a standard Linear Edit. See DiVA Manual for additional information.

To add a Pre-roll for your server channels, press **[SHIFT][INIT]** and in the INIT item **Server Pre-roll**, enter the desired pre-roll time. The pre-roll time entered here will be applied to all OmNet channels globally. This can be set to **0** if no pre-roll is desired, but this may result in audio 'clicks' at the edit points.

Note that if you attempt to record a new linear edit before the previous linear edit has completed updating, the CPI's may not align properly with the TLG. To correct this, press **[ALLSTOP]** and try the recording again.

PERFORMING NON-LINEAR EDITS WITH OMNET (NLE)

Non-linear edits can also be performed with the OmNet Application. This allows the user to insert Spectrum server clips residing on the current server, and loaded under the Record Event, to be placed on the Timeline in much faster than real-time. This includes multiple clips placed back-to-back or on separate Tracks. Any effects (vari-speed, keys, DVE moves, etc.) included in the edit will be ignored when inserting a NLE.

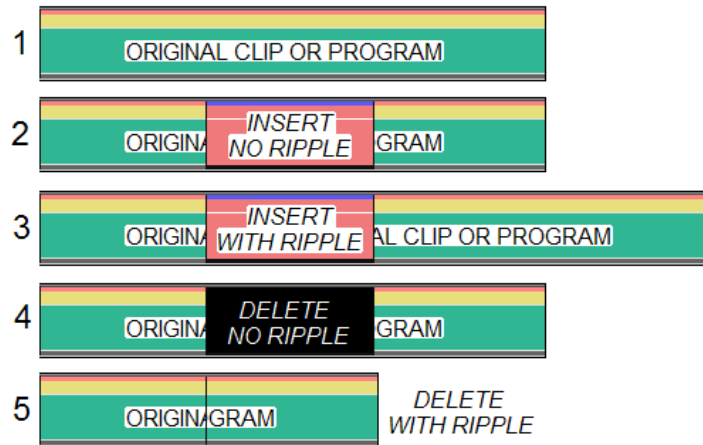
You can insert new media into an existing 'Edit Master', and either overwrite the old material resulting in no length change to the Black Track, or you can insert the new material and ripple the existing material to follow at the end of the newly inserted material, resulting in the Black Track becoming longer in length by the duration of the inserted material.

Likewise, you can delete a section of media from an existing Edit Master, and either overwrite the old material with black or 'pull-up' the remaining segments.

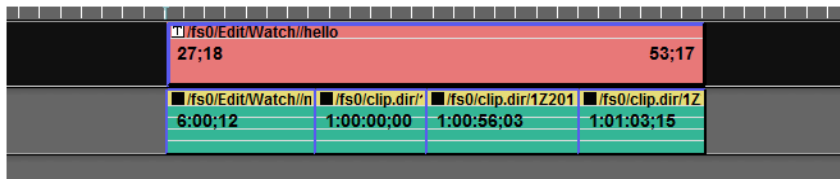
It is important to remember that the duration of the edit is ALWAYS defined by the duration of the Record Event on the Edit Track. The only exception to this rule is when you are using **UseSrcDur**, which automatically changes the Record Event duration to match the PB Track(s).

- A. Press **[INSERT]** to **INSERT** the material from the selected Track and over-write the existing material. A-only, V-only & A/V edits are allowed. (See #2 in the following graphic)
- B. Press **[SHIFT][INSERT][RIPPL]** to **INSERT** the material from the Track(s) and ripple the existing material following the edit on the Timeline. Only A/V edits are allowed. (See #3 in the following graphic)
- C. Press **[DELETE]** to **DELETE** the portion of the Timeline under the Record Event, and replace it with BLACK and silence. A-only, V-only & A/V edits are allowed. (See #4 in the following graphic)

- D. Press **[SHIFT][DELETE][RIPPL]** to **DELETE** the portion of the Timeline under the Record Event, and *ripple* the remaining material following the edit on the Timeline. Only A/V edits are allowed. (See #5 in the following graphic)



Regardless of whether the edit is performed linearly or non-linearly, server Events can be placed back-to-back on the same Track, on different Tracks, and they can be from different clips.



A-ONLY / V-ONLY EDITS

Audio only and video only edits can also be performed linearly and non-linearly. When performed linearly, they are recorded in real-time. When performed non-linearly, they can be created as Reference clips (Fast) or Discrete clips (Not as fast). Reference clips are pointers to the original material and Discrete clips are pointers to newly created copies of the original material.

You will find that when performing A-only or V-only NLE edits, the post-edit update takes longer than an A/V edit. This is due to the manner in which these new clips need to be re-assembled internally.

If you delete A-only and V-only Reference clips using a Spectrum Application such as ClipTool or ProDrive, the underlying media or essence will be deleted. To delete a Reference Movie or clip, use Windows Explorer or refer to your Spectrum documentation.

To disable the ability to create A-only and V-only Reference clips, press **[SHIFT][INIT]** to open the Initialization Page, and set INIT item # 71, 'Enable Omneon Reference Clips' to **NO**.

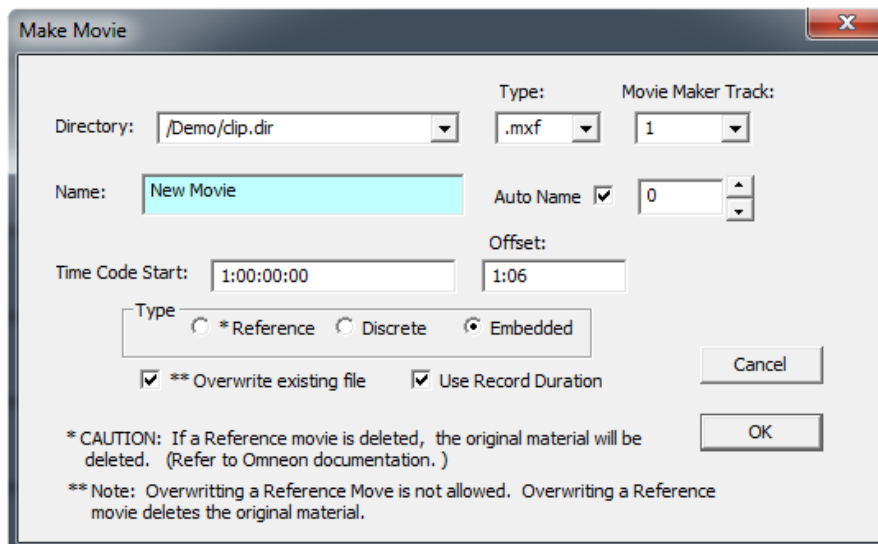
Note the following about non-linear edits:

- Non-linear inserts and deletions are cuts-only.
- Non-linear inserts with Ripple and non-linear deletions with Ripple are always audio AND video.
- Audio only and Video only non-linear edits cannot be Rippled.
- The DiVA Ripple indicator has no effect on whether non-linear edits are rippled or not.

MAKING MOVIES

After editing a show using the OmNet application, in order to export the Timeline or use it as a new source, it must first be made into a Movie; that is, the various clips and segments used to create the Timeline must be turned into a single clip. This is done faster than real-time, and your choices of three different types of Movies are made available in different wrappers.

1. Press **[MOVIE]** to open the Make Movie Dialog.

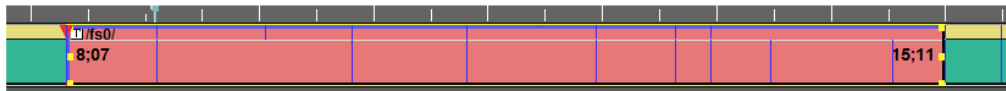


2. **Name:** Enter a name for the Movie you are going to create. See the Harmonic manual for any rules governing the naming of clips.
3. **<Extension Field>:** Select between **.mov** and **.mxf** wrappers.
4. **Time Code Start:** Enter the starting Time Code value to be applied to the new Movie.
5. **Offset:** Enter an offset for the starting timecode. In the example above, the user wants the show to start at 1:00:00:00, but the show doesn't start on the clip for one second and six frames. With a 1:06 offset, the actual start time of the timecode at the beginning of the movie will be 59:58:24 (NTSC).
6. **Type:** Select the type of Movie to create.
 - **Reference:** This is the quickest Movie to make. It consists of just pointers to the original material.



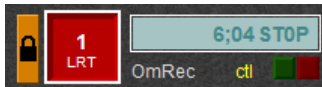
If you delete a Reference movie using a Spectrum Application such as ClipTool or ProDrive, the underlying media or essence will also be deleted. To delete a Reference Movie or clip without deleting the original essence, use Windows Explorer or consult your Spectrum documentation.

- **Discrete:** This movie copies just the required essence included in the Timeline. If you delete this Movie, only the copied material will be deleted.
 - **Embedded:** This movie copies the required essence included in the Timeline and embeds this essence into a self-contained clip. If you delete this Movie, only the copied material will be deleted.
7. **Overwrite:** You can overwrite Discrete or Embedded Movies with the same name without affecting the original essence. *Overwriting a Reference Movie is not allowed by DiVA, as it would delete original essence.*
8. **Use Record Duration:** When a Movie is created of the DiVA Timeline, the whole Record Timeline is included in the Movie. However, if you wish to make a Movie of a specific portion of the Record Timeline, select **Use Record Duration**. With this item selected, all portions of the program that fall within the current boundaries of the Record Event on the Edit Track will be used in the making of the Movie.

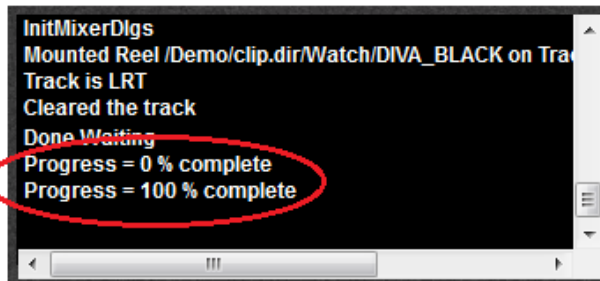


In the example above, only the portion of the Timeline between 8;07 and 15;11 will be used in the making of this Record Duration Movie.

9. **OK:** Sends the command to create the Movie. While the Movie is being created, the Edit Track Track is locked-out, protecting against accidental interference ...



... and the progress is shown in the Message Window



Note the following about Movies:

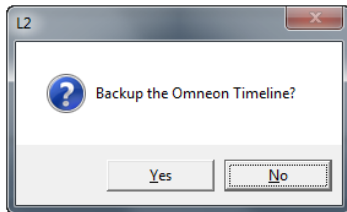
- Reference Movies are automatically stored in **/Watch/CAUTION/CanDeleteOriginals/**.

- Discrete and Embedded Movies are automatically stored in /Watch/
- Reference, Discrete or Embedded Movies can be used as sources for new edits. They can reside in, and be loaded from, any currently accessible Spectrum directory when used as a source in a **linear edit**.

For Movies to be used as sources in a **non-linear edit**, the Movies must reside in the Current Directory, a sub-directory of the Current Directory, or in the path below the Current Directory. As a reminder, the 'Current Directory' is the same directory where the currently mounted clip on the Edit Track resides.

12.5. Protecting and recovering your work

Once the DiVA Application is running and you already have a server clip mounted on the Edit Track, if you try to load a new clip or delete the current clip, you will be asked if you want to make a backup copy of the clips on the Spectrum timeline.



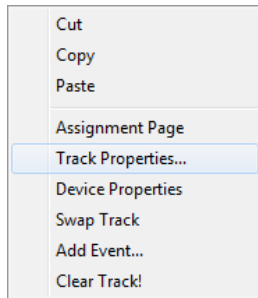
If you answer **Yes**, a backup movie will be made on the Spectrum. Then the Spectrum timeline will be deleted and the new clip loaded onto DiVA. If you answer **No**, the Edit Track will be deleted and no additional action will be taken. This backup file is stored in **/CAUTION/CanDeleteOriginals/**.

To recover and use the backup clip, you will need to move it to the Current Directory you are currently working in. See your Harmonic documentation on how to move clips between directories.

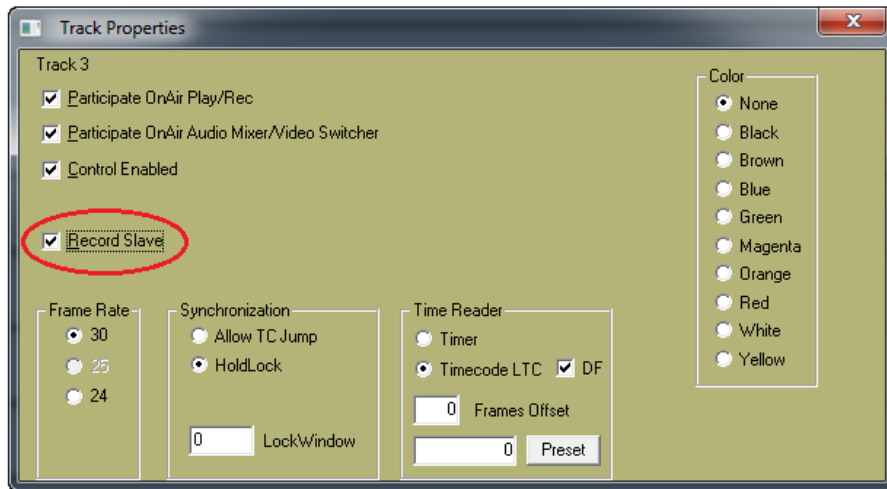
12.6. Record Slaves

This feature is designed to allow you to create and name a Record Clip on one or more Omneon channels, start and stop the recording, and immediately have new Record Clips created automatically using the same original names, but with incremental numeration. For example; Original Record Clip name=BOB. Subsequent Clip Name=BOB-1. Next Clip Name=BOB-2, and so forth.

1. Select the Spectrum Track to which you wish to apply this feature.
2. **[Right click]** on the selected Track and select **Track Properties** from the menu.



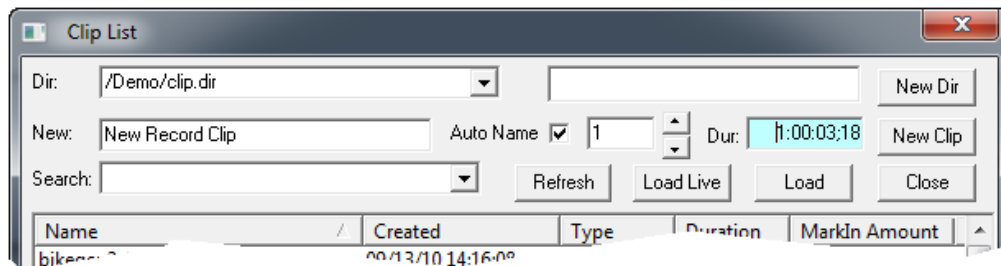
The Track Properties Dialog for that Track will open.



3. Check the **Record Slave** box.
4. Repeat for each OmNet Track you wish to apply this feature. When done, dismiss the Dialog.

RECORD SLAVE OPERATION

5. Select a server Track to mount a Record Clip. The Edit Track need not be enabled for this operation.
6. Press **[CLIP LIST]** to open the Clip Browser.



7. Enter a name for the record clip in the **New:** text field.
8. Check the **Auto Name** box.

9. Set your chosen **suffix number** in the spin box field.
10. Enter your desired default Record Event duration in the **Dur** field. It is wise to make this duration longer than needed.
11. With the cursor in the **Dur:** text field, press **[ENTER]** and the Record Event will be placed on the Track at the TLG.
12. Repeat on other enabled Tracks as desired. There is no need to close the Track Properties Dialog each time. DiVA will remember your desired name, suffix and duration for each additional Track. When done, dismiss the browser dialog.
13. Record when ready. To end the recording and create an auto pickup with the next Record Events, press the **[RECORD]** key to terminate the edit **before** reaching the end of the Record Events. If the recording ends or if you press **[ALLSTOP]**, DiVA default behavior will occur. That is; the recording will end and no new Record Event will be created.

When you “bump out”, DiVA will turn your old Record Events into Play Events, and automatically place new Record Events at the end of the old Record Events. The TLG will be automatically positioned at the new record in-point. Press **[RECORD]** again to repeat the process.

13. K2/SUMMIT SERVER TECHNOTE

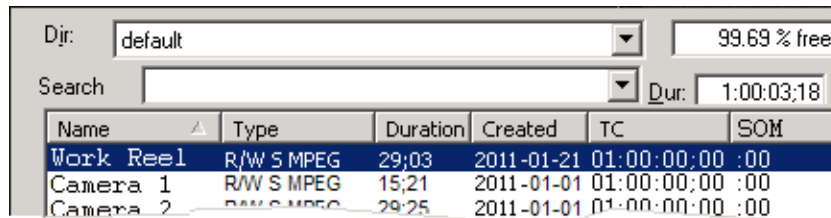
13.1. K2 & Summit Server Intro

The Editware K2-Hybrid Application is a multi-function tool designed as both a controller and a full function on-line and off-line, linear and non-linear editor for use with the Grass Valley K2 and Summit Series of video servers in conjunction with the Editware DiVA Hybrid Edit Controller. Control of the server(s) is via Ethernet network using Grass Valley .Net and AMP native protocols.

DiVA AS A CONTROLLER

DiVA can frame accurately control as many as 24 (twenty four) K2 server channels simultaneously, stand-alone or SAN, encoder, decoder or codec. DiVA can also simultaneously control up to 8 (eight) VTRs or other supported serial devices via RS-422 serial ports, with a maximum combined total of 24 channels and serial devices. Additional devices can be controlled via USB.

K2 Clips are loaded onto DiVA "Tracks" directly from the Clip List Browser located on the DiVA GUI.



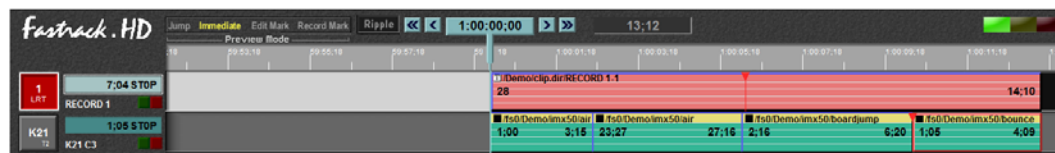
Name	Type	Duration	Created	TC	SOM
Work Reel	R/W S MPEG	29:03	2011-01-21	01:00:00:00	:00
Camera 1	R/W S MPEG	15:21	2011-01-01	01:00:00:00	:00
Camera 2	R/W S MPEG	29:25	2011-01-01	01:00:00:00	:00

This browser displays the Clip Name, whether the clip is write enabled or read only, whether it is a simple Clip or a Clip comprised of multiple Clips, the duration of the Clip, the date the clip was created, the time-code associated with the Clip, the Start-of-Message, and whether 'Marks' have been added to the Clip on the K2 App Center.

When DiVA connects to the K2, it automatically "grabs" all the K2 directories and Clips and stores them in DiVA memory. This cache is automatically updated with any Clip changes, additions or deletions of Clips at the K2 AppCenter. When DiVA displays the K2 Clip list, it gives you access to all the Clips currently in the cache.

Once a K2 Clip is selected and loaded onto a Track, that Clip can be individually shortened, lengthened, copied, pasted, added to, deleted, slipped, slid, enabled, disabled, linked, ganged, split, separated and joined.

Clips can be placed back-to-back and played out sequentially and frame accurately or optionally placed on separate Tracks with external mixer & switcher transitions applied between them.



Clips can also be placed back-to-back and played out sequentially and frame accurately with

transitions applied between them by the Internal M/E built into the K2 Summit server. For even added flexibility and power, DiVA can control both internal and external mixer and switcher effects and transitions simultaneously.

DiVA AS AN EDITOR

There are three types of edits that can be performed with the DiVA K2-H application and the Grass Valley K2 server as a recorder; **Linear**, **Virtual** and **Optimized**. The resulting “edit master” is referred to by the K2 as a “**Program**”, and this Clip can be viewed, imported and exported by most other applications such as Aurora Edit and Fairlight.

Linear Edits

Linear edits recorded directly to the K2 that include mixer and switcher transitions, audio or video pre-read, vari-speeds, audio or video key-framing, any keys or other switcher effects, are performed in real-time as they are encountered on the Timeline. Sources can be all K2 or a mixture of K2, VTR, other supported peripheral devices and switcher crosspoints. There is no additional rendering required for VTR, peripheral devices or cross-point sources.

Virtual Edits

Virtual Edits are cuts-only by definition, and are inserted directly and instantly from the DiVA Timeline into the Record Event with a single keystroke. Once the edit is performed, that edit is an integral part of the “program”, and no further preparation is required to play, transfer or archive this Master Clip.

Optimized Virtual Edits

Optimized Virtual Edits start out as Virtual edits; that is, all K2 material defined in the edit is first inserted virtually into the Program. DiVA then records only the occurrences of mixer and switcher transitions, audio or video pre-read, vari-speeds, audio or video key-framing, and any keys or other switcher effects with user defined handles, and then inserts them virtually into the program. For example, if you are adding a 30 frame dissolve between two 1:00:00 segments, the first 59:15 of the first clip and the last 59:15 of the second clip are immediately inserted into the Program. The DiVA then records the 30 frame transition by itself, and then inserts it into the Program.

Editing with the K2-H application is substantially the same as standard linear editing with the DiVA, with the following exception; A K2 assigned as a Linear Recorder requires 2 (two) K2 channels; one for Record and one for Playback. On the DiVA assignment page, when you assign a channel for the Recorder, the channel for the Player is automatically assigned the same digit as the recorder. For example; if the Record channel is assigned as R1 (Recorder 1), the playback channel is automatically assigned to P1 (Player 1) by DiVA.

Editing in the Linear or Virtual Mode

When an “insert edit” recording takes place with the K2, a Clip of the K2 Input is created and placed in the “Default” folder. At this time it does not yet appear on the record timeline. The act of sending the Clip to be added to the record timeline is called “flushing”. This happens at 30:00 second intervals during an edit, and again at the end of each edit. During an edit, this operation is a background task invisible to the editor except for the notification in the DiVA message window. At the end of an edit, this process happens in real time.

If you stop an edit with [ALLSTOP], the screen and EDL will not be updated, but if the recording lasted longer than 30:00 before stopping, the system will have been flushed one or more times and will have been added to the program. No action is required on your part to reinitiate the original recording other than to press [RECORD] again.

After the K2 has flushed the current edit, you can jog, play and otherwise control the Record

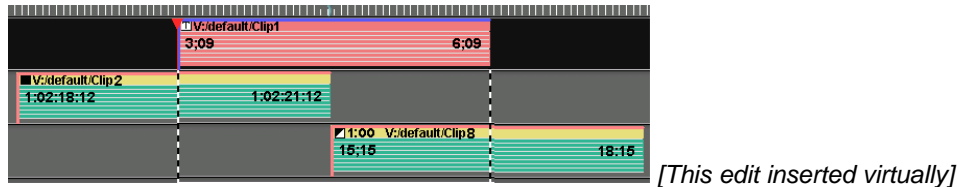
Event. When you are playing the Recorder, you are actually controlling and seeing a playback of the Program using Playback Channel C2.

Once flushed, the edit (Temp File recording) is automatically placed in the K2 Default directory, and is by default hidden by DiVA prefixing a “~” to the name in the K2. The K2 routinely deletes these temp files if they are not being used by any other file. However, some users need to be able to see these temp files and not have them deleted. They may wish to use them at a later time and delete them manually. So DiVA has an easy and quick way to enable or disable the hiding of these temp files by editing the K2host.ini.

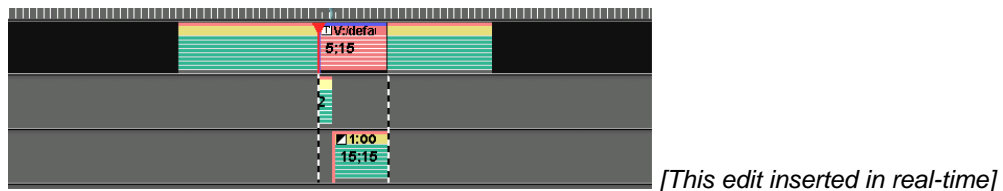
Optimized Virtual Edits allow the user to perform virtual insert edits including any programmed transitions and effects. This is accomplished by DiVA first inserting the programmed K2 source material into the Program “cuts-only”, and then automatically recording only those specific portions of the Timeline that are subject to transitions, keys, or vari-speed Events. When completed, these new clips of the recorded transitions and effects are then automatically inserted virtually into the Program. This feature can take a 10 minute edit and reduce it to the time it takes to record a transition.

Optimize any effected source material from Track(s), and then Virtually insert the new material into the Program.

For example, in the Timeline below there are two K2 clips with a transition between them. An Optimized Virtual Edit will first virtually insert the non-effected potions of the clips into the program,...



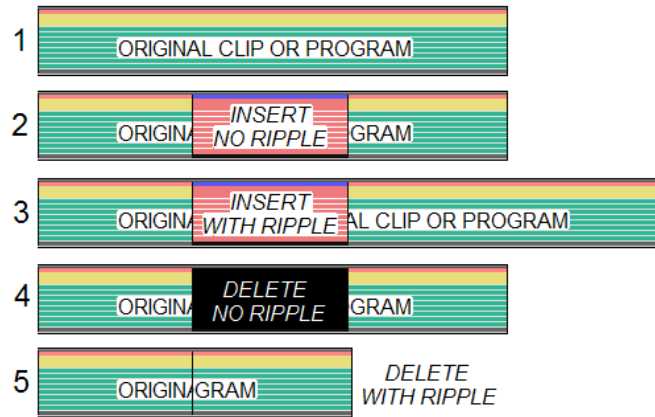
...and then automatically create individual record Events for each effected segment and then insert them into the Program.



INSERT and DELETE with & without Ripple

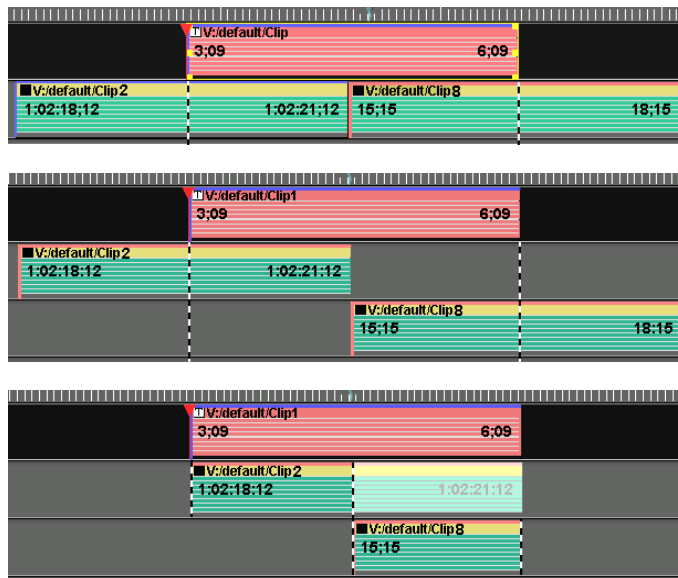
DiVA can insert (device dependent) new media into an existing K2 clip and either overwrite the old material, resulting in no length change to the original clip, or you can insert the new material and ripple the existing material to follow at the end of the newly inserted material, resulting in a clip longer in length by the duration of the inserted material.

Likewise, you can now delete a section of media from an existing K2 clip, and either overwrite the old material with black, or pull-up the remaining segments.



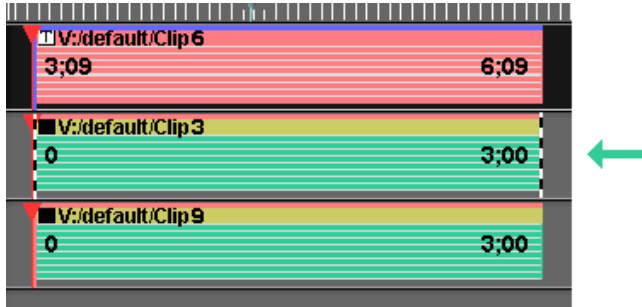
- 1a. Press **[CTRL][INSERT]** ([GANG]) to **INSERT** the material from the selected Track and over-write the existing material, regardless of the state of the Ripple indicator - Image 2 above.
- 1b. Press **[ALT][INSERT]** ([GANG]) to **INSERT** the material from the selected Track and ripple the existing material, regardless of the state of the Ripple indicator - Image 3 above.
- 1c. Press **[CTRL][DELETE]** ([CONST]) to **DELETE** the material from the Record Event, and replace it with BLACK video and silence, regardless of the state of the Ripple indicator - Image 4 above.
- 1d. Press **[ALT][DELETE]** ([CONST]) to **DELETE** the material from the Record Event, and ripple the remaining material, regardless of the state of the Ripple indicator - Image 5 above.

To create a Virtual Edit,



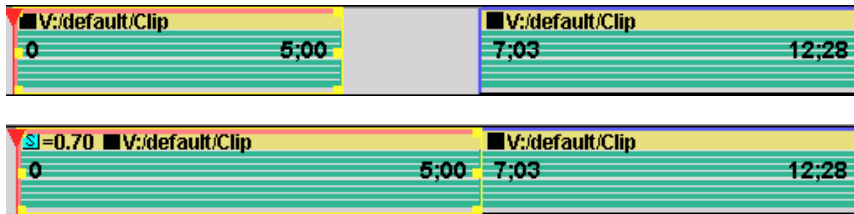
The results of a Virtual edit are placed in the EDL.

If more than one Track and Event(s) are involved in an edit, and all the Events are identical in position and A/V components as in the following example...:



... then the topmost Event is the Event that will be inserted into the Program.

Fit & Fill can be utilized to force a specified clip to automatically “Fit” within a specified time frame or fill gaps in the Timeline.

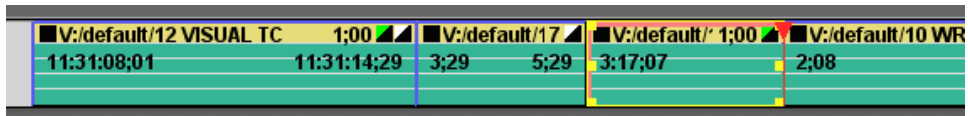


The DiVA K2-H can be fully controlled locally or remotely, and comes with unlimited PEGS[®] to frame accurately trigger external devices and events. PEGS include the ability to program and send any user-defined protocol “strings” out through any designated serial port.




Controlling the Summit Internal M/E

DiVA can control the internal A/V M/E of the GV Summit Server. No specific DiVA settings changes are required for this control, and an external switcher and mixer can still be controlled simultaneously.

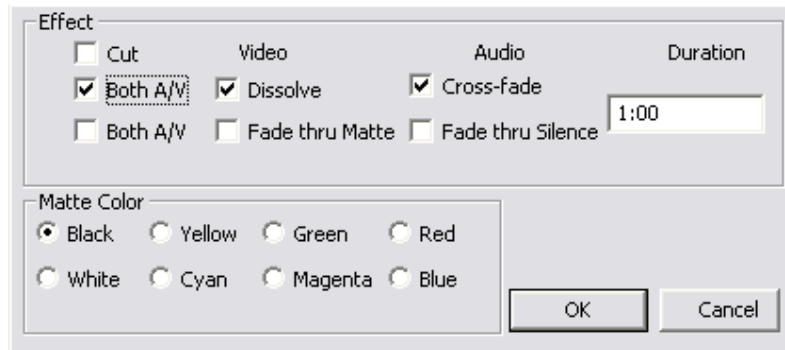
Assign back to back clips on a Summit Track with appropriate heads and tails. The head and tail handles are required because the Summit M/E performs CENTER-CUT DISSOLVES. This means that you need handles on the end of the FROM clip and the head of the TO clip, or freeze frames equal to half the transitionrate will be visible on either side of the transition.



Notice in the Events shown above that the transition icons are at the end of the Events rather than at the beginning. This is because the Summit M/E effect is associated with the END of the selected Event; that is, the transition command is placed on the FROM Event rather than the TO Event. This is a Summit requirement. Transition icons at the beginning of the Event still reflect the transitions of any external mixer & switcher.

 = Audio Only
  = Video Only
   = Audio & Video

Select the FROM clip and press **[SHIFT][SRVR]**. The following Summit M/E Dialog will open.



The following transition types are supported:

- ▶ Transition between 2 (two) K2 clips directly (dissolve clip-to-clip)
- ▶ Transition through a matte background (dissolve clip, background, clip)
- ▶ Transition through black (dissolve clip, black, clip)
- ▶ Fade from black (fade black, clip)
- ▶ Fade to black (fade clip, black)

The Summit M/E works between Clips on the same Track. Transitions between Clips on separate Tracks would be performed by an external switcher.

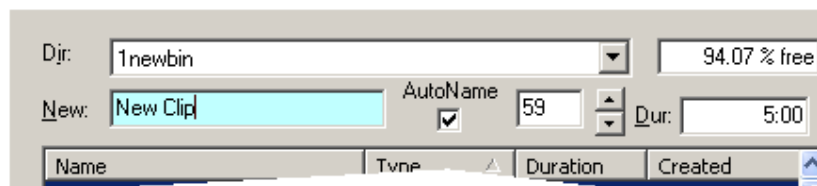
L2D files created with previous DiVA software versions will not be compatible with this software.

Save As New

This feature allows the user to condense all the K2 clips on a specific Track into a single clip with a new name.

This new clip can be used like any other K2 clip, even as a source. When you create a clip in this manner, effects and transitions will be treated as cuts. To create a New Clip:

1. **Select** the Track you wish to use.
2. Press **[ASGN]**. The Assign Dialog will open.



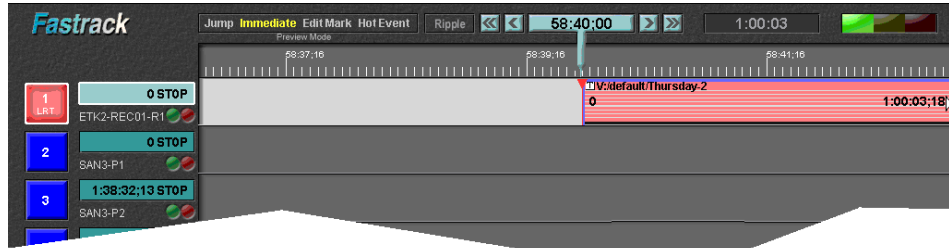
3. In the **New:** text field, enter the name of the new clip that you will be creating. All conventions relating to naming K2 clips will be applied.
4. **[Click]** or press **[F5] SaveAsNew**.

If you selected the Linear Record Track, a copy of the current show as it now exists will be made, through the end of the Black Track.

If you selected a K2 source Track, a New Clip will be created of all K2 material falling within the currently defined boundaries of the Record Event.

K2-Mon Tracks

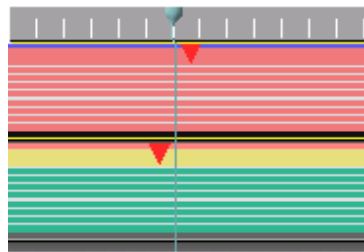
The only change to the standard edit screen is that when a Track is assigned as K2Mon, the Track button changes to Blue as an alert to the user that there are specific rules that pertain to this Track.



Note in the above graphic, that some source buttons are blue. This denotes that these K2 channels are assigned as K2Mon channels in the DiVA Assignment Page. In this special mode, Clips loaded into a Playlist can be manually rolled at the K2 App Center and [MARKed IN] prior to or during a recording so as to be added to the edit and EDL. In the K2 mode, these buttons remain Gray.

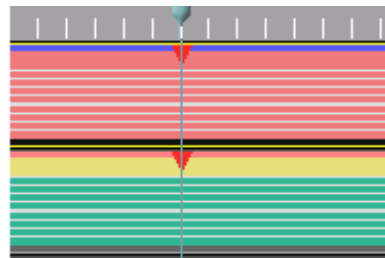
Playback and Record Timing

If the CPI (red, inverted pyramid) and the CTI (blue or red line down the center of the screen) are not aligned, they might look like the following example.



[WRONG ALIGNMENT OF CPI AND CTI]

In the K2Host.ini file, you can adjust the **RecDelay** setting for the Record Track. The adjusted timeline should look like the following example:



[CORRECT ALIGNMENT OF CPI AND CTI]

SOME DIVA FEATURES relate directly to K2 servers. For example:

- ▶ **Add CC** - If this item is set to **Yes**, Closed Caption data from the K2 source will be inserted to the K2 Program when an edit is made.

If there is no CC data, or if you do not want the data to be a part of the edit, you can defeat this by setting this item to No.

▶ **Server Pre-roll** - The time entered here will be applied to all K2 channels as the pre-roll time. This can be set to **0** if no pre-roll is desired.

▶ **Double Allstop OnAir (D-Pop)** - When this item is set to **Yes**, the [ALLSTOP] key must be pressed twice in rapid succession to abort an Edit or Preview. This adds added protection against accidental stoppage when the K2 is being used to edit live on-air. The action of pressing a key twice in rapid succession is called a “D-Pop” (double-pop).

▶ **[TAG]**

Lock sync to the record Track.

Pressing [TAG] will place a “T” on an Event on the selected Track, and will cause the Event to always maintain the current sync relationship to the Timeline. This is useful if you need to drag a manually rolled Clip to an earlier position on a Track and maintain sync.

All Events “marked” onto a K2Mon Track when in record will automatically be tagged.

Index

.ini Files, 13
 1080x768, 10
 1680x1050, 10
 1920x1080, 10
 24 fps, 40
 25 fps, 40
 29.97 fps, 40
 29.97 fps, 61
 30 fps, 40

A

A1-A12, 152
 Add, Audio, 153
 Add, Events, 125
 Additive, 153
 Administrator, 10
 AJA Card, 52
 AJA Card, 6
 ALIGN, 138
 Allow CC for K2 Edit, 51
 Allow Omneon Reference CLIPS, 51
 Allstop, Double Tap, 37
 Arrow Down, 85
 Arrow Left, 86
 Arrow Right, 86
 Arrow Up, 85
 Ask Before Recording (VDCP), 35
 Assemble Edit, 143
 Assemble, Edit, 43
 ASSIGN, 115
 ASSIGN PORT, 19
 Assign, Jogger Port, 38
 Assignment Page, 41
 Assignment Page, 17
 Assignment Settings, 20
 At-rest, 1
 Audio, 153
 AUDIO, 152
 Audio Mixer Settings, 20
 Audio Mixer, Count, 19
 Audio Mixer, Crosspoints, 19
 Audio Mixer, Device File, 24
 Audio Mixer, Port, 25
 Audio Mixer, Settings, 24
 Audio Mixer, Start, 19
 Audio Only, 152
 Audio, 12 Channel, 152
 Audio, Additive, 153
 Audio, Confidence Monitoring, 28
 AUDIO, DISABLE SUB-TRACK, 67
 Audio, E-E Preview, 28
 Audio, Follow, 156
 Audio, Global, 156
 Audio, Ramp, 155
 Audio, Record Confidence, 28
 Audio, SPLIT, 153
 AUDIO, SUB-TRACK, 67
 AUDIO, SUB-TRACKS, 66
 Audio, Sub-Tracks, 152
 Audio, Sub-Tracks, 154
 Audio, Transition Icon, 77
 Audio, Transition Rates, 156, 157
 AUDIO, TRANSITIONS, 66
 Audio/Video, Modules, 46
 Auto Assemble, Mode-A, 147
 Auto Assemble, 147
 AUTO ASSEMBLE TRACK, 150
 Auto Assemble, EDL, 147
 Auto Assemble, Mode-B, 148
 Auto Assemble, Shortcut Keys, 148
 Auto Assembly, Ignore R-Marks, 147
 Auto Fill, 121
 Auto Macro, 80
 Auto Multi, 49
 AUTO MULTICAM, 49
 Auto Off, Ripple, 37
 Auto Save, 41
 Auto Search, 35
 Auto, Pickup, 44
 Auto, Select Record Track, 45
 AutoMac, 80
 Aux Bus Preview, 20
 Aux Bus, Delay,, 26, 27
 Aux Bus, Preview, 26

B

Backtime, 131
 Bios, 10
 Black Burst, 6
 Black Keys, 79
 Black Keys, Arrow Left, 86
 Black Keys, Arrow Right, 86
 Black Keys, Arrow Up, 85
 Black Keys, Decrement, 86
 Black Keys, Escape, 79
 Black Keys, Exit, 79
 Black Keys, Increment, 86
 Black Keys, Macros, 79
 Black Keys, Page Down, 85
 Black Keys, Page Up, 85
 Black Keys, POI, 86

- Black Keys, RUN, 85
- Black Track, 75
- Blue Keys, 152
- Blue Keys, A1-A12, 152
- Blue Keys, Add, 153
- Blue Keys, Audio, 152
- Blue Keys, MIX Off, 158
- Blue Keys, Split, 153
- Blue Keys, SWR Off, 158
- Blue Keys, TBC, 157
- Blue Keys, Video, 152
- Boot System, 9
- Border, Red, 68
- Border, Yellow, 68
- Break-Out Panel, 8
- Browser, 70
- Bump Out, 143
- Button, 56
- Button Label, 32
- BUTTON, COLOR, 20, 62

C

- Character Generator Keys, 73
- CLASS, 18
- Clear all Macros, 80
- Clear Tracks at Pickup, 45
- Clip List, 70, 123
- Clip List, Search, 72
- CLIP NAME, 66
- ClipTool, 51
- Colon, 61
- COLOR, 20, 62
- Configuration File, Modify, 31
- Configuration Files, 13
- Configuration Files, View, 13
- Configuration, Save, 31
- Configure DiVA, 17
- Connection, GPI, 7
- CONNECTION, MONITORS, 6
- Connection, Sync, 6
- Connections, 5
- Connections, Dongle, 6
- Connections, Ethernet, 6
- CONNECTIONS, JOGGER PANEL, 5
- CONNECTIONS, KEYBOARD, 5
- CONNECTIONS, MOUSE, 5
- CONNECTIONS, POWER, 5
- Connections, Reference, 6
- Connections, RS-422, 8
- Connections, Video Capture, 6
- Connections, Video Display, 7
- Connetions, 5
- Contact Editware, 3

- CONTROL ENABLE, 59
- Control Track, 131
- Control Track, 57
- Control, Disable, 136
- Conventions Used in this Manual, 1
- Corvid Card, 52
- Corvid Card, 6
- Count, Audio Mixer, 19
- Countdown Timer, 40
- CPI, Cue All, 133
- CPI, CUE CURRENT, 132
- CPI, Lock, 52
- Crash Record, 146
- Crash Record, 144
- Crosspoint, Mixer, 19
- Crosspoint, Switcher, 19
- Crosspoints, 73
- crosspoints, Audio Mixer, 19
- CTL, 131
- CTL, 57
- CTL, 61
- Current Event, 1
- Cursors, 69
- Cursors, Drag Event, 69
- Cursors, Drag IN, 69
- Cursors, Drag OUT, 69
- Cursors, Slip, 69
- Cut, 94

D

- Data Base, 87
- Data Trap, 8
- Database, 177
- Debug, Serial Ports, 8
- DECREMENT FRAME, 86
- Default Event Duration, 41
- DEFAULT, M/E, 22
- DEL Event, 126
- Del, Trk, 127
- Delay, Aux Bus, 26, 27
- Delay, E-E, 28
- Delay, Macro, 84
- Delay, PEGS, 23
- Delay, Server, 123
- DELAY, SWITCHER MEM, 23
- DELAY, SWITCHER TRANSITION, 23
- Delete, Event, 126
- Delete, Event Groups, 126
- Delete, GPI, 108
- Delete, TL Mark, 88
- Delete, Track, 127
- DEV FILE, 67
- Dev File, 22

Device Control Modules, 46
Device File, Audio Mixer, 24
Device File, Preview Switcher, 27
DEVICE FILE, VIDEO SWITCHER, 22
DEVICE, CLASS, 18
Device, Modify, 41
DEVICE, NAME, 18, 33
Device, Properties, 41
DEVICE, TYPE, 18
DF, 61
Diagram, Add Event, 125
Diagram, AJA Card, 6
Diagram, Align, 138
Diagram, Assignment Page, 17
Diagram, Assignment Settings, 20
Diagram, Assignment Table, 15
Diagram, Black Keys, 79
Diagram, Blue Keys, 152
Diagram, Clip List, 59
Diagram, Cursors, 69
Diagram, Dev File, 67
Diagram, Device Properties, 42
Diagram, Display Options, 32
Diagram, DiVA Icon, 10
Diagram, Duration, 131
Diagram, Effects Dialog, 95
Diagram, Enabled M/E's, 24
Diagram, Events Explai9ned, 65
Diagram, File Menu Bar, 29
Diagram, Fill, 122
Diagram, Frame Rates, 40
Diagram, Gang, 137
Diagram, Global Settings, 34
Diagram, GPI Menu, 105
Diagram, GPI Record Tally, 107
Diagram, Green Keys, 159
Diagram, Hot Event, 68
Diagram, Icons, 77
Diagram, Jogger Settings, 38
Diagram, Key Options, 101
Diagram, Keys, 101
Diagram, Light Blue Keys, 105
Diagram, Light Green Keys, 94
Diagram, Light Orange Keys, 135
Diagram, Light Purple Keys, 123
Diagram, Lock, 51, 59
Diagram, Lock, 135
Diagram, Macro Dialog, 79
Diagram, Macro Loop, 83
Diagram, Macro Nest, 83
Diagram, Magenta Keys, 90
Diagram, Match Menu, 92
Diagram, Mem, 103
Diagram, Menu Bar Edit Mode, 43
Diagram, Menu Bar Help, 53
Diagram, Menu Bar Modules, 46
Diagram, Menu Bar Special, 49
Diagram, Mixer Settings, 24
Diagram, Move Event, 131
Diagram, Multi Cam, 49
Diagram, Orange Keys, 125
Diagram, Page Data Warning, 56
Diagram, PEGS, 112
Diagram, PEGS, 84, 109
Diagram, PEGS Strings, 113
Diagram, Pink Keys, 147
Diagram, Pre/Post-roll, 39
Diagram, Preview Settings, 25
Diagram, Record Track, 76
Diagram, Red Key, 143
Diagram, Ripple, 37
Diagram, Search Clip List, 72
Diagram, Secondary M/E Control, 22
Diagram, Selected Event, 68
Diagram, Server Delay Dialog, 123
Diagram, Server Directories, 70
Diagram, Server Transitions, 98
Diagram, Settings Menu Bar, 32
Diagram, Shortcut Properties, 13
Diagram, Slip & Slide, 128
Diagram, Speed Dialog, 118
Diagram, Speed Graph, 119
Diagram, Swap, 20
Diagram, Switcher Settings, 21
Diagram, Tag, 137
Diagram, TBC Control, 158
Diagram, Time Settings, 40
Diagram, TL Marker, 88
Diagram, TL Marker Dialog, 88
Diagram, TL Marker Menu, 88
Diagram, Track Properties, 50, 58
Diagram, Track Status, 61
Diagram, Track Status Display, 56
Diagram, Transition Icons, 94
Diagram, USB GPI, 7
Diagram, Valid PEGS Commands, 113
Diagram, Video Capture Settings, 34
Diagram, White Keys, 87
Diagram, Wipe Patterns, 96
Diagram, Yellow Keys, 140
Dimensions, Chassis, 5
Directories, 13
Disable, Control, 136
DISABLE, EVENTS, 135
Disable, Jogger, 37
Disable, Jogger Record, 38
Disable, Mixer, 25
Disable, Switcher, 23

Disable, Track, 18
DISABLE, TRACKS, 135
DISABLED AUDIO SUB-TRACK, 67
Display, Duration, 33
Display, Duration, 77
Display, Options, 32
Display, OUT-Time, 33
Display, Reel ID, 175
Display, Status Lamps, 57
Display, Timecode, 56
Display, Track Status, 57
Display, Track, Status, 56
Display, Video, 34
Display, Video Capture Card, 52
Dissolve, 94
DiVA Icon, 10
Dongle, 6
Dongle, Update, 11
Double Allstop, 37
Download, Manual, 53
Drag Event, 69
Drag IN, 69
Drag OUT, 69
Drop Frame, 61
Drop Frame Timecode, 61
Dummy Edit, 45
DUR, 131
Duration, 131
Duration, Backtime, 131
Duration, Edit, 163
Duration, Use Record, 45
Duration, Use Source, 45
DVI, 6

E

Edit Mode, 43
Edit Mode, 161
Edit Mode, Assemble, 43
Edit Mode, Insert, 43
Edit Mode, On/Off, 43
Edit Modules, 47
Edit Record Event, 75
Edit Record Track, 161
Edit Record Track, Reel ID, 162
Edit Track, 75
Edit Track Selection, 159
Edit, Duration, 163
Edit, Pre-read, 44
Edit, SPLIT, 155
Editware, Contact, 3
EDL, 164
EDL, Append, 165
EDL, Auto Assemble, 147
EDL, Bin, 164
EDL, Clear, 166
EDL, Clear All, 166
EDL, Clear All Bins, 166
EDL, Clear Current Bin, 166
EDL, Copy, 168
EDL, Cut, 167
EDL, Default M/E, 165
EDL, Delete, 167
EDL, Dummy Edit, 45
EDL, Function Keys, 164
EDL, Import, 165
EDL, Load, 165
EDL, M/E, 165
EDL, Note, 174
EDL, Open, 33
EDL, Paper Edit, 45
EDL, Paste, 170
EDL, Recall, 166
EDL, RECALL EDIT, 151
EDL, Record Off, 45
EDL, Reel ID, 173, 174
EDL, Replace, 166
EDL, REPLAY EDIT, 151
EDL, Ripple, 170
EDL, R-Mark, 45
EDL, R-Marks, 172
EDL, Title, 174
E-E Preview, 20
E-E, Delay,, 28
E-E, Preview Video, 26
ENABLE CONTROL, 59
Enable, Jogger, 37
Enable, Jogger Record, 38
Enable, Mixer Preview, 28
Enable, Track, 18
ENABLED M/ES, 24
ESCAPE, 79
Ethernet, 4, 6
Event, Change M/E, 95
Event, Cursors, 69
Event, Default Duration, 41
Event, Drag, 69
Event, Drag IN, 69
Event, Drag OUT, 69
Event, Duration, 77
Event, Edit Record, 75
Event, Hot, 68
EVENT, IN-TIME, 68
Event, In-Time, 77
Event, Linear Record, 75
Event, MARK IN, 141
Event, MARK OUT, 141
Event, Mark Out TL, 142

EVENT, MOVE, 133
 EVENT, MOVE, 131
 EVENT, OPEN END, 130
 EVENT, OUT-TIME, 67
 Event, Out-Time, 77
 Event, Pink, 76
 Event, Record, 69
 Event, Selected, 68
 Event, Set Forward, 98, 100
 Event, SET OUT, 140
 Event, Slide, 128, 129
 Event, Slip, 128, 129
 Event, Slip, 69
 Event, SPLIT, 153
 Event, Toggle, 127
 Event, Trim In, 127
 Event, Trim OUT, 129
 Events, 1
 Events, 65
 Events, Add, 125
 EVENTS, ALIGN, 138
 Events, Delete, 126
 Events, Delete Group, 126
 EVENTS, DISABLE, 135
 Events, Explained, 65
 Events, Extend, 126
 EVENTS, GANG, 136
 EVENTS, LINK, 136
 Events, Log, 177
 Events, Ripple, 37
 Events, Ripple, 36
 Events, Selected, 126
 Events, Separate, 125
 Events, SET IN, 140
 Events, Tag, 137
 Events, Trim, 128, 129
 Execute Macro, 85
 Exit, 79
 Exit DiVA, 31
 Exit DiVA, 13
 Extend Events, 126
 External Reference, 7

F

Fast Cut, 50
 FAST FORWARD, 116
 FAST FORWARD, HALF, 116
 FastLog, 87
 FastLog, 177
 FastLog Add, 87
 FastLog Modify, 87
 FastLog Search, 87
 FastLog, Data Entry, 182

FastLog, Modify, 182
 FastLog, Search, 180
 FastLog, Table View, 177
 File, Dev, 22, 67
 File, Menu Bar, 29
 File, Save Configuration, 31
 Files, Configuration, 13
 Fill, 121
 Fill, GAPS, 126
 Fit & Fill, 121
 FRAME OFFSET, 62
 FRAME RATE, 60
 Frames Per Second, 40

G

GANG, 136
 Gang, Play, 116
 GAPS, 126
 General Purpose Interface, 7, 105
 Genlock, 52
 Ghosted, 1
 Global Settings, 34
 GPI, 105
 GPI, Connection, 7, 109
 GPI, Delete, 108
 GPI, Delete All Markers, 108
 GPI, Delete Marker, 108
 GPI, Enable All, 106
 GPI, Fire, 106
 GPI, Line, 33
 GPI, Move, 107
 GPI, Offset, 106
 GPI, Pin Outs, 7
 GPI, Properties, 107
 GPI, Properties, 107
 GPI, Pulse Width, 106
 GPI, Record Tally, 107
 GPI, Remove, 106
 GPI, Ripple, 108
 GPI, Rules, 108
 GPI, Select, 105
 GPI, Select Markers, 108
 GPI, Show Lines, 106
 GPI, Timeline Menu, 107
 GPI, Timeline Triggers, 106
 Green Keys, 159
 Green Keys, Edit, 159
 Green Keys, Swap, 159
 Green Keys, T1-T12, 159

H

- Hardware Requirements, 3
- Hardware Specs, 4
- Help, 53
- HELP, 116
- HOLD LOCK, 60
- Hot Event, 68
- Hover, Messages, 53

I

- Icon, Audio Transition, 77
- Icons, 65
- Icons, 77
- Icons, Keys, 65
- Icons, Status, 77
- ICONS, TRANSITIONS, 65
- Icons, Transitions, 94
- Increment Frame, 86
- Insert Edit, 143
- Insert, Edit, 43
- INTERNAL Reference, 52
- In-Time, 77

J

- Jam Timecode, 43
- JOGGER PANEL, 5
- Jogger, Disable, 37
- Jogger, Disable Record, 38
- Jogger, Enable, 37
- Jogger, Enable Record, 38
- Jogger, Port Assign, 38
- Jogger, Sensitivity, 38
- Jogger, Settings, 37

K

- K2, Allow CC for Edit, 51
- Keep Out-point, 45
- Keep Track, 127
- Key, Fill, 101
- Key, Key Bus, 96
- Key, Key Fill (Fill Bus), 102
- Key, Key Fill (Manual Select), 101
- Key, Key Fill (Matte), 102
- Key, Key Source, 102
- Key, Key Source (Auto Select), 102
- Key, Key Source (Fill Bus), 102
- Key, Key Source (Manual Select), 102
- Key, Key Source (Source Bus), 102
- Key, Options, 96

- Key, Priority, 96
- Key, Set Default Key Option, 103
- Keys, 101
- Keys, 73
- Keys, CG, 73
- Keys, Icons, 101
- Keys, Options, 101

L

- L2D File, 29
- L2D File, Save, 30
- L2D File, Save As..., 30
- Learn, Macro, 80
- Light Blue Keys, 105
- Light Blue Keys, Assgn, 115
- Light Blue Keys, Fast Forward, 116
- Light Blue Keys, Fast Forward 1/2, 116
- Light Blue Keys, Fill, 121
- Light Blue Keys, GPI, 105
- Light Blue Keys, Help, 116
- Light Blue Keys, PEGS, 109
- Light Blue Keys, Play, 116
- Light Blue Keys, Play Reverse, 117
- Light Blue Keys, Rewind, 116
- Light Blue Keys, Rewind 1/2, 116
- Light Blue Keys, Search IN, 117
- Light Blue Keys, Search OUT, 117
- Light Blue Keys, Speed, 118
- Light Blue Keys, Stop, 117
- Light Green Keys, 94
- Light Green Keys, Cut, 94
- Light Green Keys, Dissolve, 94
- Light Green Keys, Keys, 101
- Light Green Keys, Server Transitions, 98
- Light Green Keys, Video Effects, 95
- Light Green Keys, Wipe, 100
- Light Orange Keys, 135
- Light Orange Keys, Align, 138
- Light Orange Keys, Gang, 136
- Light Orange Keys, Link, 136
- Light Orange Keys, Lock, 135
- Light Orange Keys, Lock (partial), 135, 136
- LIGHT ORANGE KEYS, TAG, 137
- Light Purple Keys, 123
- Light Purple Keys, 123
- Light Purple Keys, Clip List, 123
- Light Purple Keys, Delay, 123
- Light Purple Keys, Movie, 124
- Light Purple Keys, NL Del Ripple, 124
- Light Purple Keys, NL Delete, 124
- Light Purple Keys, NL INS Ripple, 123
- Light Purple Keys, NL Insert, 123

Light Purple Keys, Optimize, 124
 Line , TL Mark, 33
 Line, GPI, 33
 Line, TLG, 33
 Lines, GPI, 106
 Lines, Recorded Edits, 77
 LINK, 136
 Live Com'l Playback, 35
 Load, Macro, 80
 Load, Server Clip, 70
 Load, VTR Clip, 72
 LOCK, 135
 Lock TLG to Edit Track, 45
 Lock, CPI, 52
 Lock, Full, 59
 LOCK, HOLD, 60
 LOCK, PARTIAL, 58, 135
 LOCK, PARTIAL, 51
 LOCK, WINDOW, 60
 Log Events, 177
 Log On, 10

M

M/E, DEFAULT, 22
 M/E, ENABLE, 24
 Macro, 79
 Macro 1-4, 79
 Macro Modules, 47
 Macro, Auto, 80
 Macro, Cancel, 81
 Macro, Clear All, 80
 Macro, Copy, 82
 Macro, Cut, 82
 Macro, Delay, 84
 Macro, Delete, 82
 Macro, Edit Menu, 82
 Macro, Execute, 85
 Macro, Immediate, 84
 Macro, Learn, 80
 Macro, Load, 80
 Macro, Loop, 83
 Macro, Name, 80
 Macro, Nest, 83
 Macro, Paste, 82
 Macro, PEGS, 84
 Macro, Run, 85
 Macro, Run, 81
 Macro, Save, 81
 Macro, Undo, 81
 Magenta Keys, 90
 Magenta Keys, Match ALL, 90
 Magenta Keys, Match LRT, 90
 Magenta Keys, Match Menu, 91
 Magenta Keys, Match Source, 91
 Magenta Keys, Match Take, 91
 Make Movie, Server, 124
 Manual, 53
 Manual Version, 3
 Manual, Download, 53
 MARK IN, 141
 MARK IN TL, 141
 MARK IN TL, Mod In, 142
 MARK IN, Mod In, 141
 MARK OUT, 141
 MARK OUT TL, 142
 MARK OUT, Mod OUT, 141
 Markers, GPI, 108
 Match, 90
 Match All, 90
 Match Menu, 91
 Match Modules, 47
 Match Source, 91
 Match Src, 91
 Match, Device In Time, 92
 Match, Device Position, 92
 Match, Edit Track, 90
 Match, LRT, 90
 Match, Not Found, 90
 Match, Take, 91
 Mem, Add Effect, 103
 Mem, Add Effectl, 98
 Mem, Enable/Disable, 103
 Mem, Force Run, 98
 Mem, Force Run, 104
 Mem, Force Trans, 98
 Mem, Force Trans, 104
 Mem, Learn, 97
 Mem, Learn, 104
 Mem, Recall, 97
 Mem, Recall, 104
 MEM, SWITCHER, 103
 Mem, User Select, 98
 Mem, User Select, 104
 Mem, Video Switcher, 97
 Menu Bar, 1, 29
 Menu Bar, Edit Mode, 43
 Menu Bar, Edit Mode On/Off, 43
 Menu Bar, File, 29
 Menu Bar, Global Settings, 34
 Menu Bar, Help, 53
 Menu Bar, Modules, 46
 Menu Bar, New Timeline, 29
 Menu Bar, Open Timeline, 29
 Menu Bar, Save Configuration, 31
 Menu Bar, Save Timeline, 30
 Menu Bar, Save Timeline As..., 30
 Menu Bar, Settings, 32

Menu Bar, Special, 49
Menu Bar, Time Settings, 40
MIX OFF, 158
MIXER OFF, 158
Mixer, Crosspoint, 19
Mixer, Disable, 158
Mixer, ENable, 158
Mod In, 140
Mod In, MARK IN, 141
Mod In, MARK IN TL, 142
MOD IN, SET IN, 140
Mod IN, Trim IN, 128
Mod Out, 140
Mod OUT, MARK OUT, 141
Mod Out, SET OUT, 140
Mod OUT, Trim OUT, 130
Mode-A, Auto Assemble, 147
Mode-B, Auto Assemble, 148
Modify, Configuration File, 31
Modify, Default Pre-roll, 41
Modify, Device Properties, 41
Modules, 46
Modules, Audio/Video, 46
Modules, Device Control, 46
Modules, Edit, 47
Modules, Load, 48
Modules, Macro, 47
Modules, Match, 47
Modules, Numeric Keypad, 47
Modules, Save, 48
Modules, Search Modes, 48
Modules, Server Control, 48
Modules, Tracks & Events, 47
Monitors, Connection, 6
Monitors, Resolution, 6
Motion Control, 119
MOUSE, 5
MOV, 133
MOVE, 131
MOVE EVENT, 131
MOVE IN, 131
MOVE OUT, 132
MOVE, EVENT, 133
Move, GPI, 107
MOVE, TL, 133
Move, TL Mark, 89
Movies, Reference, 51
Multi Cam, 49
MULTICAM, 49
MULTICAM, AUTO, 49

N

NAME, DEVICE, 18

New Timeline, 29
NL Delete, Ripple, 124
NL Delete, Server, 124
NL Insert, Ripple, 123
NL Insert, Server, 123
NL, Optimize, 124
No External Reference, 7
Non Drop Frame Timecode, 61
NOTE, 68
Note, 89
NTSC, Drop Frame, 40
NTSC, Non-Drop Frame, 40
Numeric Keypad Modules, 47

O

OFFSET FRAMES, 62
Omneon, Allow Reference CLIPS, 51
OPEN END, 130
Open End, All, 130
Open Timeline, 29
Ops Manual, 53
Optimize, Server, 124
Orange Keys, 125
Orange Keys, Add Event, 125
Orange Keys, Cue All CPI, 133
Orange Keys, Cue CPI, 132
Orange Keys, Del Event, 126
Orange Keys, Del Track, 127
Orange Keys, Duration, 131
Orange Keys, Gaps, 126
Orange Keys, Keep Track, 127
Orange Keys, Move Event, 133
Orange Keys, Move Event In to TLG, 131
Orange Keys, Move Event Out to TLG, 132
Orange Keys, Move TL, 133
ORANGE KEYS, OPEN END, 130
Orange Keys, Open End All, 130
Orange Keys, Sep Events, 125
Orange Keys, TC/CTL, 131
Orange Keys, Toggle Event, 127
Orange Keys, Trim In, 127
Orange Keys, Trim In Mod In, 128
Orange Keys, Trim Out, 129
Orange Keys, Trim Out Mod Out, 130
Orange Keys, Xfer TC, 130
OUT Time, 77

P

Page Down, 85
Page Up, 85

PAL, 40
 Paper Edit, 45
 Participate On Air, Audio/Video, 136
 PARTICIPATE ON AIR, PLAY/RECORD, 58
 Participate On Air, Play/Record, 135
 PARTICIPATE ON-AIR, AUDIO/VIDEO, 58
 PARTICIPATE, ON AIR PLAY/RECD, 50
 Password, 10
 PEGS, 109
 PEGS, Absolute Time, 111
 PEGS, Absolute/Relative, 111
 PEGS, Add Command, 109, 111
 PEGS, Delay, 23
 PEGS, Delete Command, 109
 PEGS, Enable/Disable, 110
 PEGS, Fire, 110
 PEGS, Icons, 110
 PEGS, Macro, 84
 PEGS, New Commands, 110
 PEGS, Note, 111
 PEGS, Relative Time, 111
 PEGS, Set Time, 109
 PEGS, Strings, 113
 PEGS, Tracking, 109
 PEGS, Valid Commands, 113
 PGM Reentry, 26
 Pickup Edit, 44
 Pickup Match, 44
 Pickup, Clear Tracks, 45
 Pink Event, 76
 Pink Keys, 147
 Pink Keys, Auto Assemble, 147
 PLAY, 116
 PLAY REVERSE, 117
 Play, Double Speed, 117
 PLAY, GANGED EVENTS, 117
 PLAY, REVERSE X2, 117
 POI, 86
 POI, 77, 86
 Point of Interest, 86
 Point of Interest, 77
 Points of Interest, 86
 Pool, 19
 Port & Device Assignments, 15
 PORT, ASSIGN, 19
 Port, Audio Mixer, 25
 Port, Jogger, 38
 Port, Preview Switcher, 27
 PORT, VIDEO SWITCHER, 23
 Ports, RS-422, 8
 PostRoll, VTR, 39
 Power, 5

Power, Caution, 6
 Pre-Read, 36, 44
 Pre-Read, Auto Off, 36
 Pre-roll, 39
 PRESET TIMECODE, 62
 PREVIEW, 151
 Preview Audio, E-E, 28
 Preview Audio, Use Mixer, 28
 Preview Settings, 20
 Preview Switcher, Device File, 27
 Preview Switcher, Port, 27
 PREVIEW TIMELINE, 151
 PREVIEW TL, 151
 Preview, Aux Bus, 20
 Preview, Aux Bus, 26
 Preview, E-E, 20
 Preview, PGM Reentry, 26
 PREVIEW, SEPARATE SWITCHER,, 27
 Preview, Settings, 25
 Preview, Video, 26
 ProDrive, 51
 Program Reentry, 26
 PVW, 151

R

Ramp, Speed, 120
 Read Before Write, 44
 RECALL, 151
 RECALL EDIT, 151
 Record, 143
 Record Confidence, 28
 Record Event, 69
 Record Lock, 50
 Record Off, 45
 Record Tally GPI, 107
 Record Track, 75
 Record Track, Auto Select, 45
 Record, Assemble Edit, 145
 Record, Assemble Edit, 143
 Record, Auto Assemble, 147
 Record, Crash, 144
 Record, Crash, 146
 Record, Insert Edit, 143
 Record, Pre-Read, 36
 Record, Server, 145
 RECORD, SLAVE, 59
 Record, VDCP, 145
 Record, Virtual Edit, 144
 Recorded Edits, 76
 Red Border, 68
 RED KEY, 143
 RED KEY, Record, 143
 Redo, 89

- REEL ID, 66
- Reel ID, 33
- Reel ID, 77
- Reel ID, Assignment (VTR), 175
- Reel ID, Change, 173
- Reel ID, Display, 175
- Reel ID, Edit Record Track, 162
- Reel ID, Recall, 175
- Reel ID, VTRs Only, 175
- Reference, 6
- Reference Movies, 51
- Reference, Black Burst, 52
- Reference, External, 52
- Reference, Indicator, 52
- Reference, Internal, 52
- Reference, System, 52
- Reference, Tri Level, 52
- Rename TL Mark, 88
- REPLAY EDIT, 151
- RESET, 142
- Reset RS422 Ports, 142
- RESOLUTION, 6, 10
- REWIND, FULL, 116
- REWIND, HALF, 116
- Ripple, 36
- Ripple, Auto Off, 37
- Ripple, GPI, 108
- Ripple, NL Delete, 124
- Ripple, NL Insert, 123
- Ripple, Selected Events, 37
- R-Mark, 45
- R-MARK, 150
- R-Marks, 147, 149
- R-MARKS, CLEAR, 149
- R-Marks, Clear, 149
- R-Marks, EDL, 172
- R-MARKS, SET, 149
- R-Marks, Set, 149
- R-Marks, Shortcut Keys, 150
- RS-422 Connection, 8
- Run Macro, 85
- Run Macro, 81

- S**
- Save Timeline, 30
- Save Timeline As..., 30
- Save, L2D File, 30
- Save, Macro, 81
- Save, Modules, 48
- SEARCH, 117
- Search Modes Modules, 48
- Search, Auto, 35
- Search, Clip List, 72
- Selected Event, 68
- Semi-colon, 61
- Sensitivity, Jogger, 38
- Sensitivity, Shuttle, 38
- Sensitivity, Variable, 38
- Sep, 125, 153
- Separate, 153
- SEPARATE PREVIEW SWITCHER,, 27
- Separate, Events, 125
- Serial Ports, Debug, 8
- Server Modules, 48
- SERVER TRANSITIONS, 66
- Server, Clip ID, 77
- Server, Clip List, 123
- Server, Delay, 123
- Server, Make Movie, 124
- Server, NL Delete, 124
- Server, NL Insert, 123
- Server, PostRoll, 39
- Server, Record, 145
- SERVER, TRANSITION RATE, 66
- SERVER, TRANSITIONS, 98
- SET FORWARD, 23, 98, 100
- SET IN, 140
- SET IN, MOD IN, 140
- SET OUT, 140
- SET OUT, Mod Out, 140
- Settings, Audio Mixer, 20, 24
- Settings, Jogger, 37
- Settings, Menu Bar, 32
- Settings, Preview, 20
- Settings, Video Switcher, 20, 21
- Shifted Keystrokes, 1
- Shortcut, Properties, 13
- Shut down, 14
- Shut-down, 9
- Shuttle, Sensitivity, 38
- Slide, Event, 128, 129
- Slip Events, 69
- Slip, Event, 128, 129
- SLO-MO, 66
- Software Rev Number, 53
- Software, Update, 10
- Source Track Selection, 159
- Special, 49
- Specifications, 3
- Spectrum, Allow Reference CLIPS, 51
- SPEED, 66
- Speed, 119
- SPEED, 118
- Speed, All Points, 121
- Speed, Auto Fill, 121
- Speed, Clear, 118, 121
- Speed, Clear All, 121

Speed, Control Points, 121
 Speed, Copy, 121
 Speed, Dialog, 120
 Speed, Fit & Fill, 121
 Speed, Get Value, 120
 Speed, Graph, 119
 Speed, Keyframes, 121
 Speed, Lock Source Position, 120
 Speed, Paste, 121
 Speed, Ramp, 120
 Speed, Ramp, 120
 Speed, Set/Add, 120
 Speed, Shortcut, 118
 Speed, TSO, 121
 SPLIT, 153
 Split Dialog, 155
 SPLIT Edit, 153, 155
 Split, Global, 156
 Split, Graph, 155
 Split, Keyframe, 156
 Split, Reset, 155
 SRCH IN, 117
 SRCH OUT, 117
 Start, Audio Mixer, 19
 Starting DiVA, 10
 Start-up, 9
 Status Lamps, 57
 STOP, 117
 SUB-TRACK, AUDIO, 67
 SUB-TRACK, VIDEO, 66
 Sub-Tracks, 155
 sub-Tracks, Audio, 152
 SUB-TRACKS, AUDIO, 66
 Swap, 62
 Swap, 20
 Swap, 159
 Swap Source Assignments, 62
 Swap Tracks, 20, 62
 Swap, Assignment Page, 21
 Swap, Keyboard, 21
 Swap, Tracks, 159
 Switcher M/E, 21
 Switcher Crosspoint, 19
 Switcher Mem, 97
 SWITCHER, Disable, 158
 SWITCHER, ENable, 158
 SWITCHER, OFF, 158
 SWR OFF, 158
 Sync, 6
 Sync, Black Burst, 52
 Sync, Black Burst, 6
 Sync, Connections, 6
 Sync, Indicator, 6
 Sync, Tri Level, 52

Sync, Tri Level, 6
 System Specs, 3
 System, Boot, 9
 System, Configure, 17
 System, Connections, 5
 System, Dimensions, 5
 System, Frame Rate, 40
 SYSTEM, FRAME RATE, 60
 System, M/E Select, 21
 System, Reference, 52
 System, Shut-down, 9
 System, Start-up, 9

T

Table of Contents, i
 Tag, 76
 Tag, 137
 Take Match, 91
 TBC Control, 157
 TC/CTL, 61, 131
 TechNote, K2/Summit, 197
 TechNote, Omneon/Spectrum, 183
 Time Settings, 40
 Timecode, 29.97, 61
 TIMECODE, ALLOW JUMP, 60
 Timecode, CTL, 131
 Timecode, Drop Frame, 61
 Timecode, Drop Frame, 61
 Timecode, Jam, 43
 Timecode, MARK IN, 141
 Timecode, MARK OUT, 141
 Timecode, Non Drop Frame, 61
 TIMECODE, PRESET, 62
 Timecode, SET IN, 140
 Timecode, SET OUT, 140
 TIMECODE, TRANSFER, 130
 Timecode, VDCCP, 62
 Timeline Guide, 1
 Timeline Guide Start, 41
 Timeline Mark, 87
 Timeline, GPI, 106
 TIMELINE, IN, 131
 Timeline, Mark In, 141
 Timeline, Mark Out, 142
 TIMELINE, MOVE, 133
 TIMELINE, OUT, 132
 TIMELINE, PREVIEW, 151
 TIMER, 61, 62
 TL Mark, 87
 TL Mark, 33
 TL Mark, Delete, 88
 TL Mark, Line, 33
 TL Mark, Move, 89

- TL Mark, Rename, 88
- TL, PREVIEW, 151
- TLG, 1
- TLG, Default Start, 41
- TLG, Line, 33
- TLG, Lock to Edit Track, 45
- Toggle, Event, 127
- Track Pages, 55
- Track Status, 57
- TRACK, AUTO ASSEMBLE, 150
- Track, Black, 75
- Track, Button, 56
- Track, Data Warning, 55
- Track, Delete, 127
- Track, Edit, 75
- Track, Edit, 159
- Track, Edit Record, 161
- Track, Keep, 127
- Track, M/E Select, 22
- Track, Pages, 55
- Track, Properties, 58
- Track, Second Page, 55
- Track, Selection, 55
- Track, Status Display, 56
- Track, Status Lamps, 57
- Tracks, 55
- Tracks & Events Modules, 47
- Tracks, Assign, 55
- Tracks, Delete All Events, 126
- Tracks, Delete Entire Track, 126
- TRACKS, DISABLE, 135
- Tracks, Swap, 159
- Tracks, Swap, 62
- Tracks, Swap, 20
- Tracks, Timecode Status, 56
- TRANSFER TIMECODE, 130
- Transition Delay, 23
- Transition, AFV, 97
- Transition, Background, 95
- Transition, Cut Out, 97
- Transition, Delay, 27
- Transition, In, 96
- Transition, Out, 96
- Transition, Out Same as In, 97
- Transitions, 94
- TRANSITIONS, ICONS, 65
- TRANSITIONS, RATE, 65
- TRANSITIONS, SERVER, 66
- TRANSITIONS, SERVER RATE, 66
- TRANSITIONS, SERVERS, 98
- TRASITIONS, AUDIO, 66
- Tri Level Sync, 6, 52
- Trim In, 127
- Trim In, Mod In, 128

- Trim OUT, 129
- Trim OUT, Mod OUT, 130
- TSO, 121

U

- Undo, 89
- Undo Macro, 81
- Update Dongle, 11
- Update, Software, 10
- Use Source Duration, 45
- User Manual, 53
- User Name, 10

V

- VARI SPEED, 66
- Variable, Sensitivity, 38
- VDCP, 145
- VDCP, Ask Before Recording, 35
- VIDEO, 152
- Video Capture, 34
- Video Capture Card, 52
- Video Display, 34
- Video Effects, 95
- Video Input, 7
- Video Only, 152
- Video Preview, 26
- Video Switcher Settings, 20, 21
- VIDEO SWITCHER, DEVICE FILE, 22
- VIDEO SWITCHER, MEM, 103
- VIDEO SWITCHER, PORT, 23
- Video, Preview E-E, 26
- VIDEO, SUB-TRACK, 66
- View Configuration Files, 13
- Virtual Edit, 144
- VTR, Assemble Edit, 145
- VTR, Default Rec. Start, 41
- VTR, PostRoll, 39
- VTR, PreRoll, 39
- VTR, Record Start, 41

W

- White Keys, 87
- White Keys, FastLog, 87
- White Keys, FastLog Add, 87
- White Keys, FastLog Mod, 87
- White Keys, FastLog SRCH, 87
- White Keys, Note, 89
- White Keys, Redo, 89
- White Keys, TL Mark, 87
- White Keys, Undo, 89

Windows Key, 13
Windows Shortcuts, 13
Wipe, 100
Wipe, Auto N-R, 96
Wipe, Patterns, 95
Wipe, Reverse, 96

X

XFER TC, 130

Y

Yellow Border, 68
Yellow Keys, 140
Yellow Keys, Mark In, 141
Yellow Keys, Mark In Mod In, 141
Yellow Keys, Mark In TL, 141
Yellow Keys, Mark In TL Mod In, 142
Yellow Keys, Mark Out, 141
Yellow Keys, Mark Out Mod Out, 141
Yellow Keys, Mark Out TL, 142
Yellow Keys, Set In, 140
Yellow Keys, Set In Mod In, 140
Yellow Keys, Set Out, 140
Yellow Keys, Set Out Mod Out, 140