



Fastrack Pre-Release Notes Version 4.0

This document covers changes made to Fastrack 3.7.R and introduces V4.0

Due to the descriptive graphics included, these TechNotes are best displayed and printed in color.

Version 4.0 software is now in Beta Test, and is due for release on August 15, 2005. It will be available for all systems that are under original warranty or are covered under the Editware Service Plus Policy. Please note the following regarding the 4.0 software release...

- **You must have a new Dongle in order to use this new software release. Please contact Editware to have yours replaced - (530) 477-4300.**
- **All “fixes” (F) listed below have also been added to the latest Fastrack version 3.7.Rn software and posted on the Editware ftp site.**

***** **Added to V4.0.x14 - 8/09/05** *****

1. **ALL – M/E Resets** – Fastrack now only resets the keyers on the default M/E when performing a preview or recording, or after a [SHIFT][RESET] or [ALLSTOP].
2. **ALL (F) – GV 4000 P/P Toggle** – A problem has been fixed that erroneously toggled the Program/Preset bus everytime a preview or edit was performed.
3. **ALL – Multiple M/E Switchers** – Fastrack can now be configured to automatically select the current M/E on the Program/Preset bus at the time the default M/E is defined, and at the beginning of a preview or edit. To enable this feature, in the Switcher Dialog select **Auto** . When not selected, the Program/Preset bus will be left as is.

***** **Added to V4.0.x11 - 7/22/05** *****

4. **ALL – J6 Jogger** – Many improvements have been made to the J6 Jogger performance.
5. **ALL – Extended Timeline** – You may now extend the Timeline and its Events over two monitors. In the INIT Page, set item **NumberOfMonitors** to =4 and restart the Fastrack Application. The Work Bin, EDL, and other windows can still be displayed over the second screen.

***** **Added to V4.0x10 - 7/18/05** *****

6. **360 SYSTEMS – Edit-to-Air** – The Edit-to-Air feature has been added for the 360 Systems Server 2000. This application allows the user to edit material while playing out to air, and to add the new material to the end of the material playing out to air without disruption. In Fastrack Terminology, “playing-to-air” refers to the real-time play-out of all Events on the Fastrack Timeline. See **TechNote #3** later in this document for related information.

- PROFILE – Edit-to-Air** – The Edit-to-Air feature has been added for the Profile PDR and XP Servers. This application allows the user to edit material while playing out to air, and to add the new material to the end of the material playing out to air without disruption. In Fastrack Terminology, “playing-to-air” refers to the real-time play-out of all Events on the Fastrack Timeline. See **TechNote #3** later in this document for related information.
- ALL – Sony SRW-5000/5500** – We have added a driver for the Sony SRW-5000 and SRW-5500 VTRs.
- ALL – Frame Bump (Play +/-)** – “Frame bump” functionality has been modified (VTRs only). During a Preview or Recording...

press **[SHIFT][PLAY+]** or **[SHIFT][PLAY-]**.

The timecode number for the In-time of the current Event will be changed by one frame accordingly, and the VTR will be resynchronized.

- LINEAR MODE – Super Edit Interface** – In order to make easier the transition from Super Edit and other linear editors, we are adding an optional Super Edit style interface to the Fastrack. This feature is only available for Fastracks equipped with the **Linear Mode option** and **Version 4** software, both of which are available from Editware.

The Super Edit interface runs in parallel with the Fastrack GUI, and all operations will be displayed in both interfaces simultaneously.

The Super Edit interface allows control and display of up to 24 serial devices and up to 80 Tracks.

The Super Edit interface is due to be released September 1, 2005. Contact bobl@editware.com for pricing, availability, and additional information on this option.

The screenshot shows two windows from the Fastrack software. The top window is titled "SE Marks Table" and displays a table of marks with columns for SOURCE, MARK IN, MARK OUT, DURATION, STATUS, POSITION, DF, and TC. The bottom window is titled "EDL BIN 1" and displays a table of edit operations with columns for EDIT, TL/OFFSET, FUNCTION, CODE, RATE/SPD, REEL/NAME, CHANNEL, IN TIME, OUT TIME, DURATION, and REC.

SOURCE	MARK IN	MARK OUT	DURATION	STATUS	POSITION	DF	TC
T1- Reel 1	03:59:48:18	04:59:45:00	00:59:56:12	STOP	00:00:00:00	N	LTC
T2- Reel 2	00:00:00:00	01:00:44:28	01:00:44:28	STOP	00:00:00:00	D	LTC
T3- Reel 3	00:00:00:00	00:01:00:02	00:01:00:02	STOP	00:00:00:00	D	LTC
T4- Reel 4	00:00:00:00	00:00:03:03	00:00:03:03	LCL	00:00:00:00	N	LTC
T5- Reel 5	00:00:00:00	00:01:00:00	00:01:00:00	LCL	00:00:00:00	N	LTC
T6- Reel 6	00:00:00:00	00:01:00:00	00:01:00:00	STILL	00:00:00:00	N	LTC
T7- Reel 7	00:00:00:00	00:00:02:06	00:00:02:06	STILL	00:00:00:00	N	LTC
T8- Reel 8	00:00:00:00	00:00:02:06	00:00:02:06	CUE	00:00:00:00	N	CTL
T1.1- Reel 9	00:00:00:00	00:00:01:03	00:00:01:03		00:00:00:00	N	LTC
T1.2- Reel 10	00:00:00:00	00:00:03:03	00:00:03:03		00:00:00:00	N	LTC
T1.3- Reel 11	00:00:00:00	00:00:02:00	00:00:02:00		00:00:00:00	N	LTC
T1.4- Reel 12	00:00:00:00	00:00:02:00	00:00:02:00		00:00:00:00	N	LTC
T1.5- Reel 13	00:00:00:00	00:59:55:12	00:59:55:12		00:00:00:00	N	LTC
T1.6- Reel 14	00:00:00:00	00:00:02:00	00:00:02:00		00:00:00:00	N	LTC

EDIT	TL/OFFSET	FUNCTION	CODE	RATE/SPD	REEL/NAME	CHANNEL	IN TIME	OUT TIME	DURATION	REC
	1:00:00:00	RECORD TRACK			Reel 1	A1234V	01:00:03;18	02:00:03;18	01:00:00;00	
0001	1:00:00:00	PREREAD			Reel 1	A12V	01:00:00;00	01:00:03;00	00:00:03;00	
	2;00	ME1 CUT			Reel 2	A1234V	01:00:00;00	01:00:01;00	00:00:01;00	
0002	1:00:03;00	PREREAD			Reel 1	A12V	01:00:03;00	02:00:03;00	01:00:00;00	
	2;00	ME1 CUT			Reel 3	A1234V	00:00:35;12	00:00:50;12	00:00:15;00	
0003	2:00:03;00	PREREAD			Reel 1	A12V	02:00:03;00	03:00:03;00	01:00:00;00	
	2;00	ME1 CUT			Reel 3	A1234V	00:00:50;12	00:01:05;14	00:00:15;00	
0004	1:02:18;12	PREREAD			Reel 1	A12V	01:02:18;12	04:00:03;00	02:57:44;18	
	2;00	ME1 CUT			Reel 2	A1234V	00:00:12;12	00:00:17;12	00:00:05;00	

11. **ALL – Event Icons** – We have modified the Event display so that the Event icons (cut wipe, etc) and Event Name remain displayed when the beginning of an Event is moved off the screen to the left. Also, the display of In- and Out-times no longer overlap when moved off the screen to the right.
12. **ALL – Wipe Pattern Numbers** – Because some video switchers use wipe numbers higher than 999, **4-digit** wipe pattern numbers are now allowed in the Effects Dialog.
13. **ALL – Events on Alternate Track Pages** – Currently, arrows to the left and right of each Track advise the user if there are Events on a Track that are not currently displayed. For those Fastrack systems that support 16 or 80 Tracks, there are arrows in the status area near the Timeline to indicate Events on earlier or later Track Pages.

- An **UP** arrow indicates that there are Events on **earlier** Track Pages.
- A **DOWN** arrow indicates that there are Events on **later** Track Pages.
- An **UP and DOWN** arrow indicates that there are Events on **earlier and later** Track Pages.

14. **ALL – Adding Event Times** – [Clicking] on the 'Show Time" display to the right of the CTI, will display the duration of **all selected** Events. As you select or de-select Events, the accumulated duration is displayed. The display turns blue to indicate you are displaying an accumulated duration. If you click on the display again, it will return to normal. **Note** that this function is only operative when not on-air.
 - To display the duration of a single Event, [**Click**] on the desired Event. A selected Event will have a yellow border.
 - To add the durations of multiple Events, hold down the [**CTRL**] key and [**Click**] on the desired Events. Each selected Event will have a yellow border.
 - To add the durations of a range of Events, select the first Event in the Range, hold down the [**SHIFT**] key and [**Click**] on the last Event in the range. Each Event in the defined range will have a yellow border.

15. **ALL – Swap Events** – We have added the ability to swap or exchange two Events on the same Track. If you select (highlight) two Events on the same Track and press [**ALT**][**EXCH**] or [**Right-click**] and select **Swap Event** from the drop-down menu, the two Events will replace each other. The manner in which the Events are swapped varies depending on whether "RIPPLE" is On or Off.

With Ripple **On**, the Events and their current IN, OUT, and DURATION are swapped, and Events in-between are rippled accordingly.

With Ripple **Off**, the Events and their current IN are swapped, maintaining the duration of the target space, and Events in-between are not rippled.

16. **ALL – ADD** – We have changed the **ADD** functionality to match the speed at the end of the cloned Event rather than set the speed to unity.
17. **ALL – Eject** – We have added an "**EjectAll-VTRs Only**" switch to the Initialization Page.
 - When set to **Yes**, only VTRs are ejected when [**SHIFT**] [**EJECT**] is selected.
 - When set to **No**, all VTRs are ejected and server channels are released when [**SHIFT**] [**EJECT**] is selected.
 - When set to **Yes**, and you wish to eject all but leave the server connected, press [**CONTROL**][**DEL**].
18. **ALL – KayakDD** – More functionality has been added to the KayakDD switcher driver.
 - Added controls for Key 3 and Key 4
 - Added EMEM Learn and Recall
 - Added all extended PEGS commands (like SE XPEGS (Super Edit))

19. **ALL – 360 Systems Server 2000** – A special VDCP driver is now available for linear / non-linear control of the 360 Systems Server 2000. See **TechNote #1** later in this document for additional information.

20. **ALL - Panasonic AG-MX-70 Digital Switcher** – A control driver has been added for the Panasonic AG-MX-70 Digital Switcher. Note that this switcher does not allow external control of the audio or keyers.
21. **ALL - Panasonic HD-3700B 30/24p VTR** – A control driver has been added for the Panasonic HD-3700B.
22. **ALL – PEGS** – More functionality has been added to PEGS.
- [Click]ing on a Timeline PEG selects it, allowing it to move (ripple) when an Event below is moved.
 - You can now move both Timeline and Event PEGs by [Click]ing and dragging the PEG marker. Hold the **[SHIFT]** key down to move the PEG with finer control.
 - Holding down the **[CTRL]** key while selecting Timeline PEGS selects multiple PEGs, allowing them to be moved as a group.
 - If the PEGS Dialog is open and you move one or more PEGs, the PEGs times in the Dialog are updated.
 - You can sort PEGS by [Click]ing any of the columns in the PEGS Dialog.
 - You can trim a PEG by positioning the PEG marker under the CTI, and pressing **[SHIFT][TRIM IN]**, **[<#>]** (plus or minus number), then **[ENTER]**. If the dialog is open, it is updated. If you Trim a Timeline PEG and the dialog is open and Tracking is checked, the CTI will move to the new PEG position.
 - You can **[Right-click]** on either a Timeline or Event PEG to get a drop down menu.

For **Timeline PEGS** the menu is:

- 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

For **Event PEGS** the menu is:

- Properties** - Opens the Event PEGS Dialog.
- Delete Event PEG** - Deletes the selected Events PEG.
- Delete all this Events PEGS** - Deletes all PEGS on the selected Event.

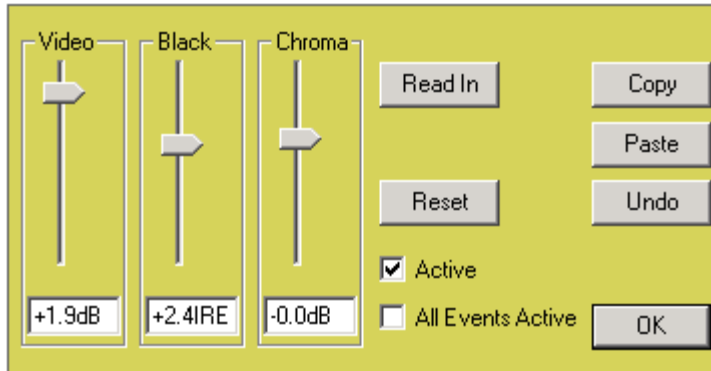
- PEGS delays have been added in the Switcher Dialog.

23. **ALL – Sony HD CAM J-H3 VTR** – A control driver has been added for the Sony HDCAM J-H3 VTR.
24. **ALL – Sony DVS-6000 Digital Switcher** – A control driver has been added for the Sony DVS-6000 Digital Switcher. See **TechNote #2** later in this document for additional information.
25. **ALL – Sony DME-7000**– A control driver has been added for the Sony DME-7000.
26. **ALL (F) – Vari-Speed** – Vari-speed control is working properly with TSO.
27. **ALL (F) – First Event Keys** – A problem that caused a Key at the beginning of an edit to not perform correctly if BlackPgmBlack was enabled in the Assignment Page, has been fixed.
28. **ALL – Real-time Duration** – We have changed the '**Duration**' display at the top of the screen to always display real-time duration.

Example: You only have one NON-drop Event and the Timeline is NON-drop.

```
Event IN = 1:00:00:00
Event Out = 1:26:42:00
Event Dur = 26:42:00 (displayed on the Event)
Duration = 26:43;18 (display at top shows true duration as indicated by a ' ; ')
```

29. **ALL - TBC Control** – TBC control has been added for many VTRs in **3.7.R2**. You must use the new **.dev** files that are automatically loaded with the update installer in order for it to work. **[Right Click]** on an Event and select **TBC Settings**. The TBC Settings Dialog will open.



Note the following about Fastrack TBC control:

- This feature is only available for Sony VTRs that enable TBC control over the RS422 control port.
- The TBC dialog may remain open during a Preview or Recording.
- A TBC setting is a 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 when it is encountered during a Preview or Recording.
- When All Events Active is checked, it means that the TBC settings stored in all Event are active, and will be activated when they are selected, or when encountered during a Preview or Recording.
- Undo will undo the last change made.

If this feature does not work with your particular VTR, and you feel that it should, please e-mail Editware the make and model of the VTR (TBC@editware.com).

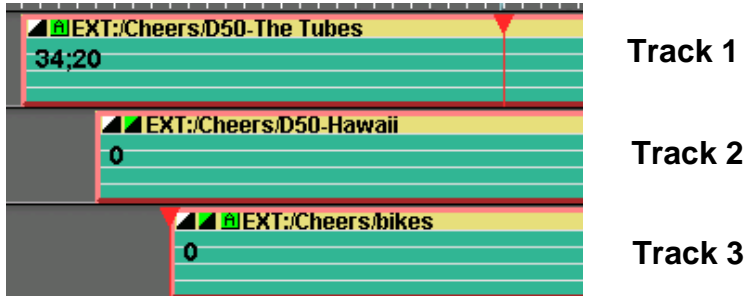
30. **ACCOM – A-6000** – Improvements and enhancements have been added to the A-6000 server driver.

- We have added the ability to preload a clip even though it is not yet "on air". This was preventing clips being preloaded if they were closer than 22 frames to the previous one.
- The A6K will now play back-to-back clips as short as 6 frames.
- The A6K now has improved handling and loading of clips on the Fastrack Timeline.
- The A6K now supports A6K V5.0 protocol, which contains some enhancements and fixes.
- Fastrack can now read and display the A6K protocol version, and display it in the system message area.
- A6K servers can be set to emulate all protocol versions of Accom V4.5 and beyond. If the server Fastrack is connecting to supports V5.0, Fastrack will set the server to emulate V5.0. Otherwise, Fastrack will degrade itself to use V4.5 features only. Fastrack will advise the user that they may need to upgrade. At this time, any version less than V5 is called "Version 0", and V5.0 is called "Version 1".
- When you create a clip from the Fastrack, you can now specify the IN-time of the clip.
- You can now stripe an existing clip with new timecode beginning at the time you specify. This is done in the Track INIT dialog to the currently selected clip using the "Preset" button.
- We have fixed Events being created with an undefined timecode mode when loaded from an L2D file. It now defaults to the controller's TC type, unless the controller is for some reason undefined, then it defaults to LTC.
- Fastrack now activates a preloaded clip when it is time to put it into play.









31. **ALL (F) – Recall Out** – A problem where [RECAL][OUT] would intermittently not display, has been fixed.
32. **LINEAR MODE – Transition Match** - Changed the Match functionality so that Events that are matched to transition Events become Cut Events.

***** Added to V4.0.x9 - 7/17/05 *****

33. **ALL – Audio Dissolve** – We have added a separate Event icon for audio dissolves.



For those seeing this document in black & white, the Audio Transition icon is green and black.

- If there is an A/V transition programmed with no modification to the audio, the diagonal transition icon  will be displayed as always.
- If there is an A/V transition programmed with a modification to the audio such as Split or Additive, the “modified audio” icon  will be displayed along with the transition icon . (See **Track 1** example above)
- If there is an A/V transition programmed with no modification to the audio such as Split or Additive, but a separate Audio Transition rate has been defined, the Audio Transition  icon will be displayed along with the transition icon . The Audio Transition icon is green instead of white. (See **Track 2** example above)
- If there is an A/V transition programmed and also a modification to the audio such as Split or Additive, but a separate Audio transition rate has been defined, the Audio Transition  icon will be displayed along with the transition icon  and the modified audio” icon . (See **Track 3** example above)
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***** Added to V4.0x8 - 7/14/05 *****

34. **OMNEON – Edit-to-Air** – We have created a new application for Omneon servers that allow the user to edit material while playing out to air, and to add the new material to the end of the material playing out to air without disruption. In Fastrack Terminology, “playing-to-air” refers to the real-time play-out of all Events on the Fastrack Timeline. See **TechNote #3** later in this document for additional information.
35. **JOGGER PANEL – J7 Jogger Panel** – For those users who would rather use a VTR type jog wheel, we now have the J7 Jogger Panel available. All functions on the Panel are the same, except for the Jog knob Jog, Variable and Shuttle functionality. Push the Jog knob in to Jog ... push again for Variable and Shuttle.

The Fastrack software will auto-detect which Jogger Panel is connected. Please check with Editware regarding upgrade price and availability.



TECHNOTE #1 - 360 Systems Image Server 2000 (GUI V2.00)

INTRODUCTION

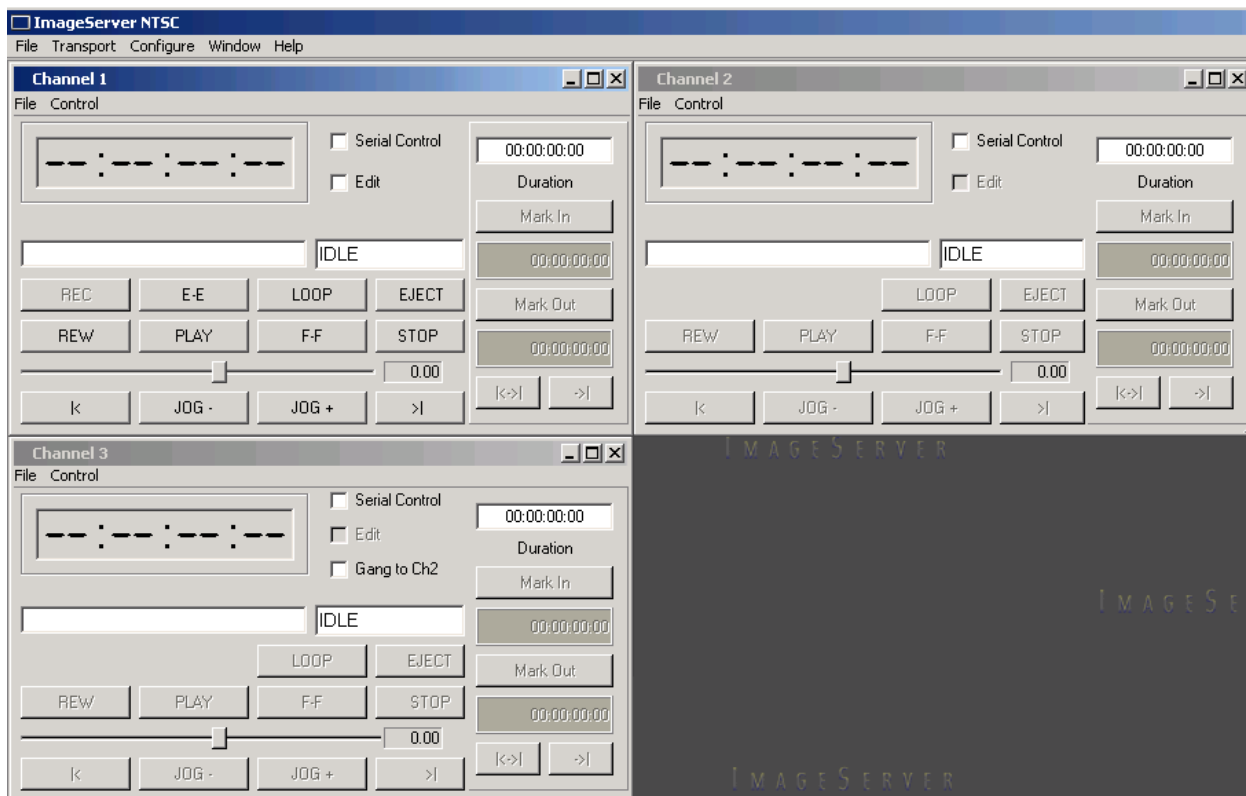
- Image Server 2000 & Fastrack Cable Connections
- Image Server 2000 Setup
- Fastrack Setup - Assignment Dialog and Crosspoint Selection
- Loading an Image Server 2000 PB Clip Onto a Fastrack Track.
- Creating an Image Server 2000 Record Event Onto a Fastrack Track.
- Installing the Optional Image Server 2000 Remote GUI.

SERVER & FASTRACK CABLE CONNECTIONS

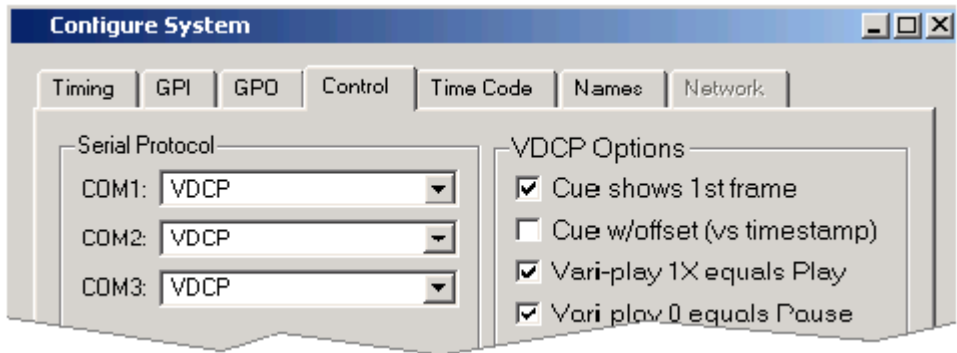
1. Connect RS422 cables from Channel 1, Channel 2, and/or Channel 3 on the rear of the server chassis to available ports on the Fastrack Port Expansion Panel(s). Server Channel 1 is Record or Play, and Channels 2 and 3 are Play only.
2. Connect a **Composite Sync** reference to the server **Genlock Input** BNC.
3. Connect Audio and Video IN and OUT as required.

IMAGE SERVER 2000 SETUP

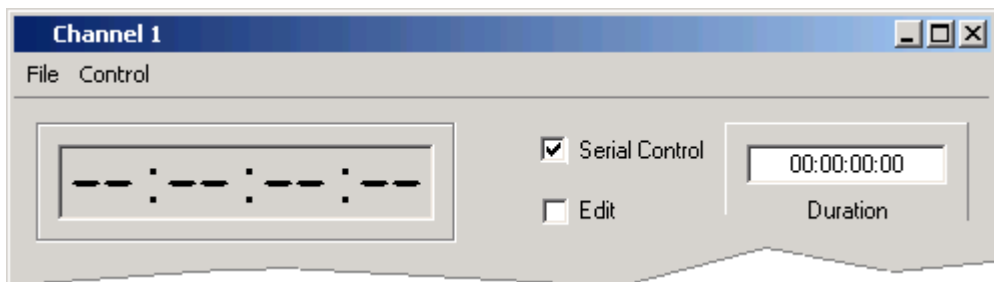
4. Run the 360 Systems Image Server 2000 application.
5. From the applications Menu Bar select **T**ransport / **C**hannel **1-3** / **C**lip ... and open the control windows for the desired channels.



- From the Menu Bar select **Configure / System ... / Control Tab** and select **VDCP** as the Serial Protocol for the channels connected to the Fastrack.



- Setup the Video as desired. From the Menu Bar select **Configure / Channel 1-3**.
- Enable the Editor by checking the **Serial Control** check box on each Channel to be controlled by the Fastrack.



FASTRACK SETUP

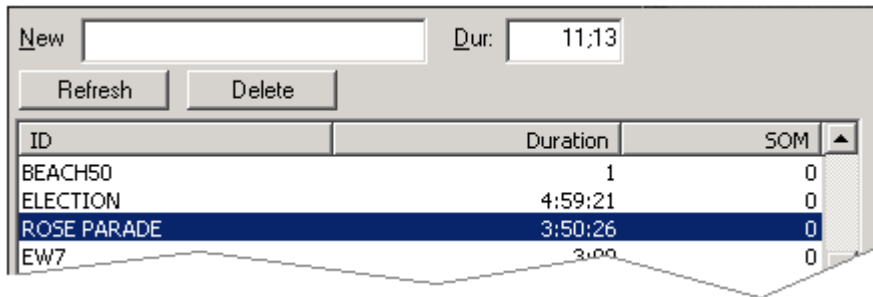
- On the Fastrack K6 keyboard, press **[SHIFT][ASIGN]** and setup the Image Server 2000 channels as shown in the example below on Tracks 3, 4, and 5:
 - Device Name** – The first number encountered in the Device Name must contain the number of the server channel, i.e., **1** for Port 1, **2** for Port 2 and **3** for Port 3.
 - Class** – Select **VDCP_D**
 - Device** – Select **360-2K**
 - Port** – Select the Fastrack port number connected to the defined 360 channels.
 - On** – Enable communication to the server. For example:

Track	On	Device Name	Class	Device	Auto	Port	Pool
1	<input checked="" type="checkbox"/>	BARS	XPNT		<input type="checkbox"/>		
2	<input checked="" type="checkbox"/>	CG-1	XPNT		<input type="checkbox"/>		
3	<input checked="" type="checkbox"/>	1-Record	VDCP_D	360_2K	<input type="checkbox"/>	P7	360
4	<input checked="" type="checkbox"/>	2-P1	VDCP_D	360_2K	<input type="checkbox"/>	P2	360
5	<input checked="" type="checkbox"/>	3-P2	VDCP_D	360_2K	<input type="checkbox"/>	P3	360
6	<input checked="" type="checkbox"/>	VTR-1	SONY	DVW500A	<input type="checkbox"/>	P6	VTR
7	<input checked="" type="checkbox"/>	VTR-2	SONY	AJ-D750	<input type="checkbox"/>	P5	VTR
8	<input checked="" type="checkbox"/>	BLACK	XPNT		<input type="checkbox"/>		

LOADING A IMAGE SERVER 2000 PB CLIP ONTO A FASTRACK TRACK

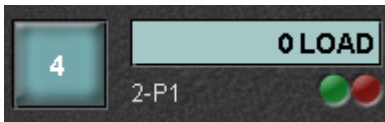
Once communication is established between the Fastrack and the Image Server 2000, Clips resident on the server can be mounted onto their assigned Tracks.

10. Select a Track with a **PB** channel assigned to it. Press **[ASIGN]** on the K6 keyboard to open the Image Server Directory Dialog. The Clip list will be displayed.



11. **[Double Click]** on the Clip to be loaded, or use the UP and DOWN Arrow keys to select the Clip and press **[ENTER]**. The Clip will be mounted in its entirety as an Event at the CTI on the Current Track.

While the Clip is loading, the Status Area for this Track should display the following status sequence: **IDLE**, **LOAD**, **BUSY** and **STOP**. If after loading a Clip it does not play, return to the Fastrack Assignment Page and disable & re-enable the Track.

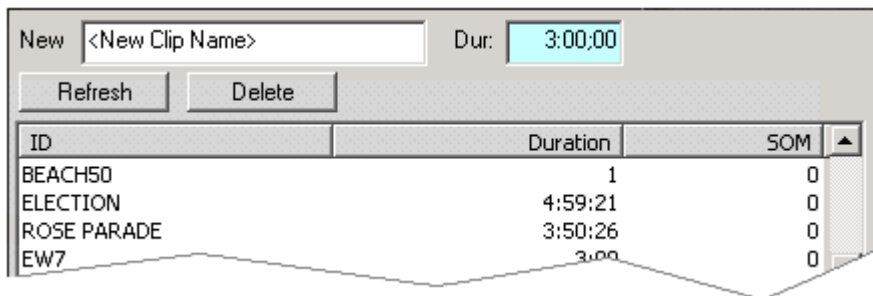


12. Once loaded, **[PREVIEW]** the Event and assure that the CPI is properly centered. If not, change the **Play Delay** setting in the **360_2K.dev file**. **Do not** use "Frames Offset" in the INIT Dialog if timing adjustment is required.

CREATING AN IMAGE SERVER 2000 RECORD EVENT ON THE FASTRACK

To create a Record Event for the Image Server:

13. Select the Track with the Image Server **Record** channel assigned to it. Press **[ASIGN]** on the K6 keyboard to open the Image Server Directory Dialog. The Clip list will be displayed.



14. In the "**New**" text field, enter the name for the new Clip.
15. In the "**Dur:**" text field, enter the duration for the new Clip. Press **[ENTER]** or select the **[F-key]** labeled **New**. The Record Event will be Automatically mounted on the current Track.

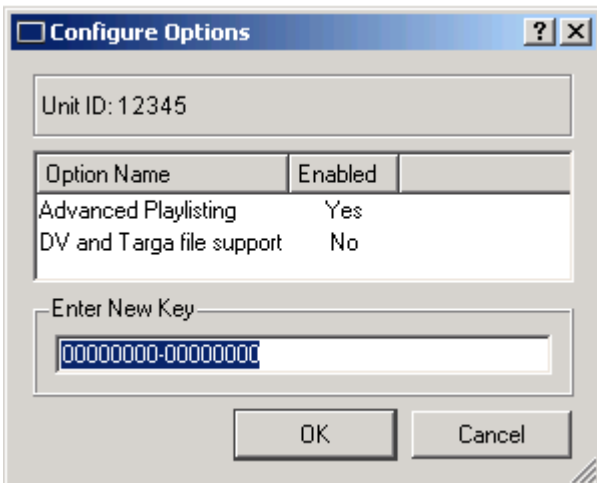
Note: You can define the starting timecode on the Record Event by setting-In a number into the Record Event prior to recording.

Note: At the end of a recording, you currently must remove the Record Event from the Track and reload the new Clip in order to play it. Do not use [ALT][EVENT] to change a Server 2000 Record Event to a Play Event.

INSTALLING THE IMAGE SERVER 2000 REMOTE GUI

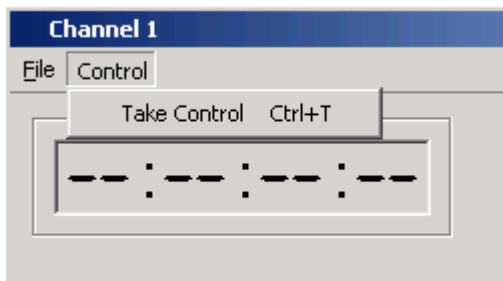
To install and connect the Image Server 2000 Remote GUI software option:

16. On the server Menu Bar, select **Configure / Options ... / Enter New Key** and enter the key numbers for the Remote GUI (The Key is provided by 360 Systems with the Remote GUI software).



17. Connect an Ethernet cable from the rear of the Server 2000 to your network.
18. Connect an Ethernet cable from the rear of the Fastrack to your network.
19. On the Server 2000, setup the network according to your local requirements.
20. On the server Menu Bar, select **Configure / System ... / Network Tab**. For example, in our tests we set the IP address to a fixed unused address:

IP Address – 192.168.1.195
Mask – 255.255.255.0
Default Router – 192.168.1.1
21. Install the Remote GUI software on the Fastrack. When prompted, enter the IP address that you assigned to the Server 2000. In the above example it would be 192.168.1.195.
22. The Remote GUI on the Fastrack should display the same as the local GUI on the Server 2000. You can take control of a specific Server 2000 channel by selecting **Control / Take Control** on the channel Menu Bar.



EDIT-TO-AIR

Introduction

The “Edit-to air” function allows the Fastrack user to add edited material from a Server 2000 channel to the end of material that is being played-out to air on another Server 2000 server channel.

In this application, an “**On-air**” channel is the server channel being used to play the show to “air”.

In this application, a “**Source**” channel is the server channel being used to prepare the material to add to the end of the “play-out” channel.

The examples shown in this document assume that you are already familiar with the basic operation of the Fastrack regarding server control, and that you have read the Server 2000 VDCP TechNote.

There are two ways to use the Edit-to-Air feature; cuts-only using one (1) On-air channel, or using two (2) On-air channels to allow transitions via a connected mixer and switcher.

Edit-to-Air with single play-out channel, cuts-only

1. Assign Server 2000 channels as described in the example below. In these examples, **Track 1** will be the “On-air” Track for cuts-only, **Track 2** will be the alternate “On-air” Track for transitions, and **Track 3** will be the “Source” Track.

Track	On	Device Name	Class	Device	Auto	Port	Pool	V-Switcher		AudioMixer	
								Video	Start	Count	
1	<input checked="" type="checkbox"/>	Server1	VDCP_D	360_2K	<input type="checkbox"/>	P5	360	5	1	2	
2	<input type="checkbox"/>	Server2	VDCP_D	360_2K	<input type="checkbox"/>	P6		6	3	2	
3	<input checked="" type="checkbox"/>	Server3	VDCP_D	360_2K	<input type="checkbox"/>	P4	360	4	5	2	

Note the following rules about the Assignments for the “cuts-only” mode:

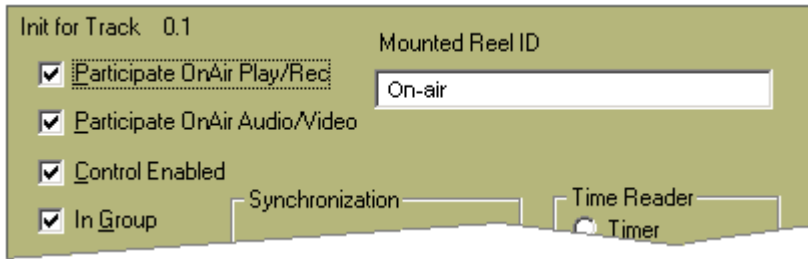
- The Device Names must have the Server 2000 channel # as the first number encountered in the name.
 - The Class must be **VDCP_D**, not VDCP.
 - The Pool names for all Edit-to-air involved Tracks must have **the same Pool name**.
 - The Pool name for Edit-to-Air devices must be removed from all Tracks not currently being used (ex: Track 2), even if the Track is disabled.
 - Only the On-air and Source Tracks are **On** (ex: Tracks 1 and 3).
 - You can only have one Source Track assigned the Edit-to-air Pool name (ex: Track 3).
2. In the Initialization Page, set the **Edit to Air** setting to **Yes**.

Settings	Edit To Air	yes
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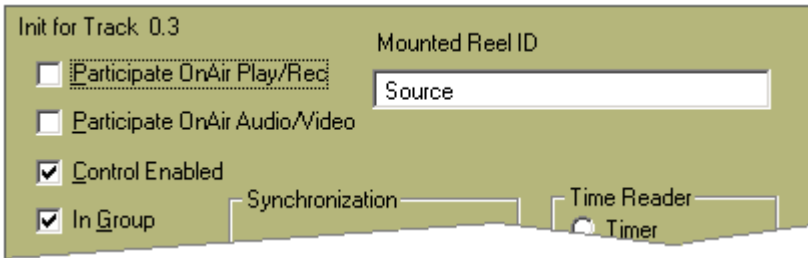
When this Init setting is set to Yes, **Edit to Air** will be displayed in yellow in the status area of the Fastrack screen.



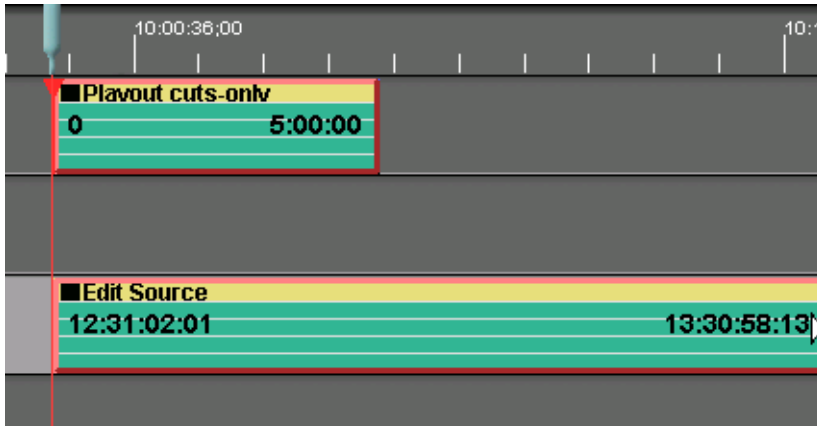
- Open the INIT Dialog for the **On-air Track**. Assure that Participate OnAir Play/Rec , Participate OnAir Audio/Video , Control Enabled and In Group are all checked.



- Open the INIT Dialog for the **Source Track**. Assure that Participate OnAir Play/Rec and Participate OnAir Audio/Video are not checked. Assure that Control Enabled and In Group are checked.

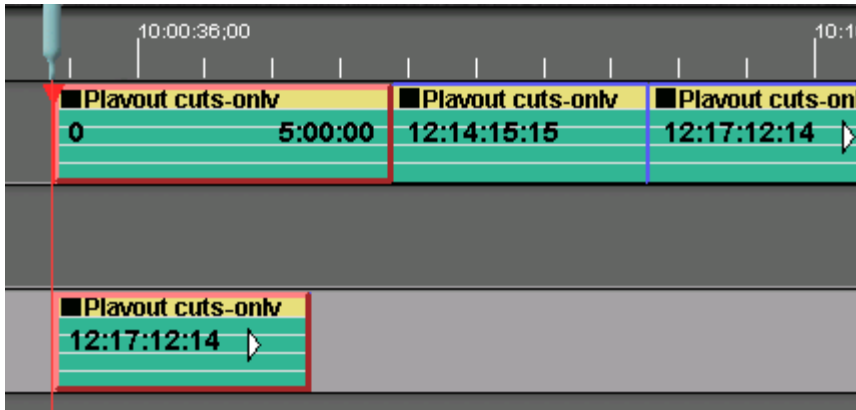


- Load the first portion of the Clip to go On-air onto Track 1.
- Load the first portion of the Source onto Track 3.



- Press **[SHIFT][PREVIEW]** to pre-set the play-out.
- Press **[PREVIEW]** to begin the play-out.
- Once the play-out has begun, you are free to select the next IN and OUT-points on the Source material (ex: Track 3)
- Select the Source Track and press **[ALT][PASTE]** (paste-at-end) to append the current Source Event (ex: Track 3) to the last Event on the On-air Track (ex: Track 1).

If the Source Track is not selected when you press **[ALT][PASTE]**, the Source Event will not be pasted, and the message **“Can not paste from On Air Track”** will be displayed in the message area of the screen. Select the Source Track and try again.



Note the following about “Paste-at-end” and “Edit-to-air” in the cuts-only mode.

- When in the Edit-to-air mode, the [ALLSTOP] key (space bar) does not abort an edit or preview. It will, however, stop Source Clips. Press [CTRL][ALLSTOP] to stop the On-air operation.
- When in the Edit-to-air mode, the time display will count-down to the end of the current material on the On-air Track. As Clips are Pasted to the End, the time is automatically updated.
- When in the Edit-to-air mode, when the count-down time remaining goes below 1 minute, the timer flashes.
- If the Clips are long-GOP, due to the nature of the application, the sources may be off by several frames from the desired timecode positions. However there will be no gaps between Events.
- You may UNDO a paste-at-end operation without disrupting the play-out.

Edit-to-Air with two (2) play-out channels

Should you wish to transition between your selected Source Events, and have a mixer and/or switcher connected to your Fastrack...

1. Assign Server 2000 channels as described in the example below. In these examples, **Track 1** will be the primary “On-air” Track, **Track 2** will be the alternate “On-air” Track, and **Track 3** will be the “source” Track.

P	Track	On	Device Name	Class	Device	Auto	Port	Pool	V-Switcher		AudioMixer
									Video	Start	Count
	1	<input checked="" type="checkbox"/>	Server1	VDCP_D	360_2K	<input type="checkbox"/>	P5	360	5	1	2
	2	<input checked="" type="checkbox"/>	Server2	VDCP_D	360_2K	<input type="checkbox"/>	P6	360	6	3	2
	3	<input checked="" type="checkbox"/>	Server3	VDCP_D	360_2K	<input type="checkbox"/>	P4	360	4	5	2

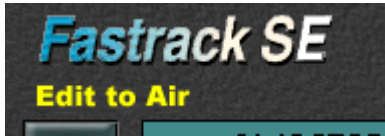
Note the following rules about the Assignments for the “transition” mode:

- The Device Names must have the Server 2000 channel # as the first number encountered in the name.
- The Class must be **VDCP_D**, not VDCP.
- The Pool names for all Edit-to-air involved Tracks must have **the same Pool name**.
- Only the On-air and Source Tracks are **On** (ex: Tracks 1, 2 and 3).
- You can have more than one Source Track assigned the Edit-to-air Pool name.

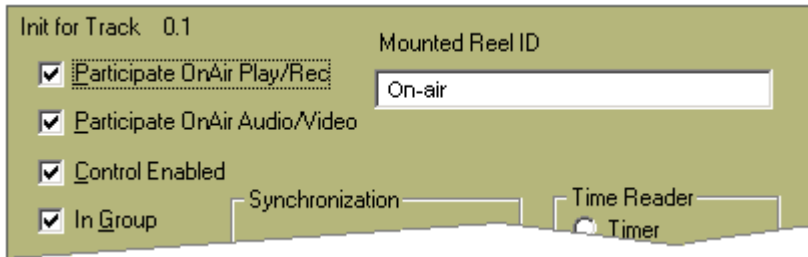
2. In the Initialization Page, set the **Edit to Air** setting to **Yes**.

Settings	Edit To Air	yes
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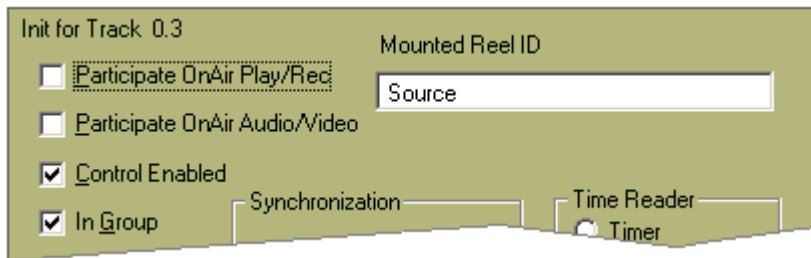
When this Init setting is set to Yes, **Edit to Air** will be displayed in yellow in the status area of the Fastrack screen.



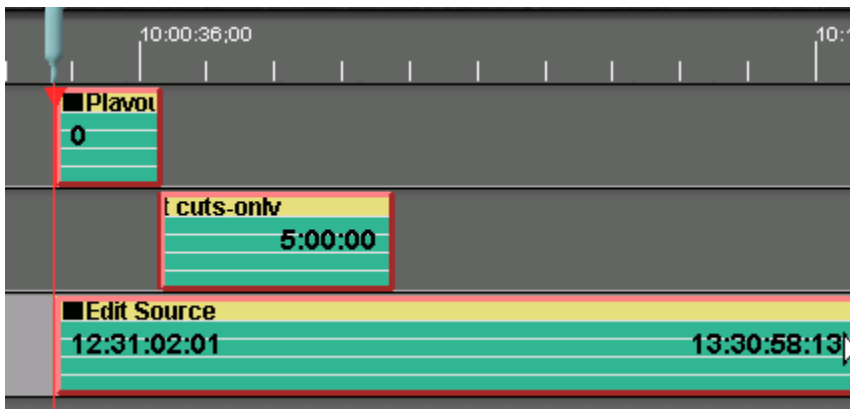
- Open the INIT Dialog for both **On-air Tracks** (ex: Tracks1 and 2). Assure that Participate OnAir Play/Rec , Participate OnAir Audio/Video , Control Enabled and In Group are all checked.



- Open the INIT Dialog for each **Source Track**. Assure that Participate OnAir Play/Rec and Participate OnAir Audio/Video are not checked. Assure that Control Enabled and In Group are checked.



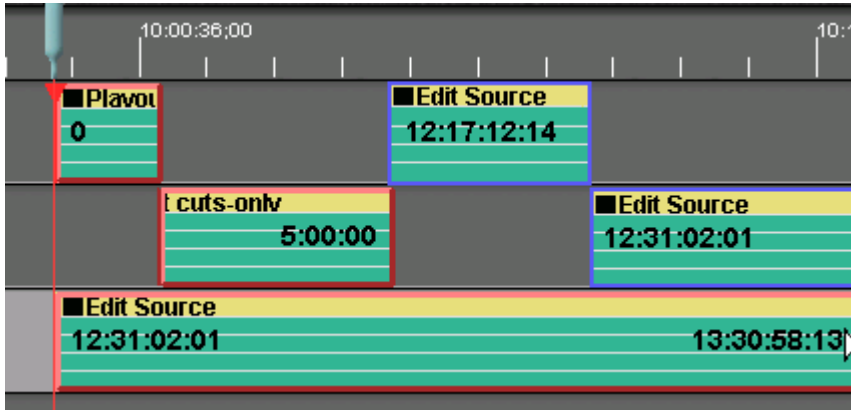
- Load the first portion of the Clip to go On-air onto Track 1.
- Load the second portion of the Clip to go On-air onto Track 2. If there is only one Clip ready for play-out, [SEP]arate the Clip on Track 1 and cut & paste a section of it onto Track 2.
- Load the first portion of the Source on Track 3.



- Press **[SHIFT][PREVIEW]** to pre-set the play-out.
- Press **[PREVIEW]** to begin the play-out.

10. Once the play-out has begun, you are free to select the next IN and OUT-points on the Source material (ex: Track 3)
11. Select the Source Track and press **[ALT][PASTE]** (paste-at-end) to alternately append the current Source Event (ex: Track 3) to the last Event on the On-air Track. Each time you press **[ALT][PASTE]**, the Event from the Source Track will be pasted alternately between Tracks 1 and 2.

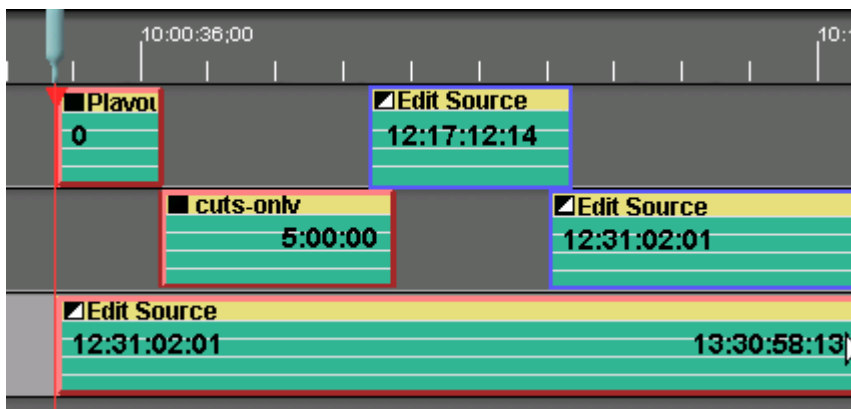
If the Source Track is not selected when you press **[ALT][PASTE]**, the Source Event will not be pasted, and the message “**Can not paste from On Air Track**” will be displayed in the message area of the screen. Select the Source Track and try again.



Note the following about “Paste-at-end” and “Edit-to-air” in the transition mode.

- The two On-air Tracks must be on Track 1 and Track 2.
- You must have a Clip on both Track 1 and Track 2 when you begin play-out.
- The Pool name for all On-air and Source Tracks must be the same.
- Server 2000 Clips will freeze at the transition point (end of Event) if no overlap is accounted for. To automatically create On-air Events with an overlap, set the Source transition type and rate before pasting the Event. This transition type and rate will be applied to the pasted Event, and the pasted Event will automatically overlap the FROM Event by the amount of the transition rate.

To change the transition type or rate on an existing Event, select the Event and press the desired transition type. The Effects Dialog will open.



- When in the Edit-to-air mode, the **[ALLSTOP]** key (space bar) does not abort an edit or preview. It will, however, stop Source Clips. Press **[CTRL][ALLSTOP]** to stop the On-air operation.
- When in the Edit-to-air mode, the time display will count-down to the end of the current material on the On-air Track. As Clips are Pasted to the End, the time is automatically updated.

- When in the Edit-to-air mode, when the count-down time remaining goes below 1 minute, the timer flashes.
- You may UNDO a paste-at-end operation without disrupting the play-out.
- You need not apply switcher transitions to the alternating Events.

TECHNOTE #2 – SONY DVS-6000 DIGITAL SWITCHER

INTRODUCTION

This document describes the interface between the Fastrack editor and the Sony DVS-6000 video switcher.

Detailed operating instructions for the Fastrack are in the Fastrack Operator's Guide and Help files. Detailed operating instructions for the Sony DVS-6000 are in the Sony Operators Manual.

This Technical Note discusses only those features that are unique to the Fastrack interface to this Sony switcher.

The following are discussed in the order given:

- Connection and setup
- Assignment Dialog and Crosspoint Selection
- Aux Bus Previewing
- Video Effects: Cut, Wipe, Dissolve, Key, DME
 - DME Commands
 - PEGS
- Learn / Recall Snapshots, MEMs, Effects

CONNECTION

Connect an RS422 serial 9-pin cable between any available serial port on a Fastrack Serial Break-out Panel to the "Editor "A" serial port on the switcher electronics frame.

SWITCHER SETUP

- In the switcher section TOP MENU press **[ENBL]**
- In the switcher Display Window, toggle **EDITOR ON**
- On the editor keyboard press **[SHIFT][RESET]**

FASTRACK ASSIGNMENT PAGE

The **Fastrack Assignment Page** is accessed by pressing **[SHIFT] [ASGN]** on the **K6** keyboard.

Assign Video Crosspoints

Once the Fastrack Assignment Page is open, assign the Video crosspoints for each switcher source. Note that Black is crosspoint "0" on this switcher.

Select Switcher Type

In the Video Switcher Dialog of the Assignment Page, press **[SETTINGS]**.

Video Switcher

Set All Events Default ME: ME1

Device File: DVS-6000.SWI

Port: P1

Status: Switcher Enabled Switcher Off

Parameters:

Transition Delay: 2

MEM Delay: 4

Command in Field: F1 F2

Enabled MEs:

- P/P
- ME1
- ME2
- ME3
- DSK
- ME4
- ME5
- ME6

OK

Enable MEs

Select the sections of the switcher that you wish to have control of. No commands from the editor will be sent to any section not selected here.

Default ME

From the pull-down menu, select the ME you will be controlling as the primary ME.

Device File

From the pull-down menu, select DVS-6000.SWI as the switcher driver to use.

Assign Port

From the pull-down menu, assign the **Port** number that corresponds to the port number on the Serial Breakout Panel (P1-P8, P9-16, P17-24).

Enable Switcher

Ensure that the **Enabled** check box is checked in the Status area in order to have control of the video switcher. This setting is duplicated on the Short Cut area of Fastrack with the VSWR On/Off toggle (yellow indicates selected, meaning Switcher OFF).

A press of **[SHIFT][RESET]** is recommended after any serial device assignment or changes. This sends a break command (wake up call) to all serial devices.

See your Fastrack manual or Help files for additional information on switcher control.

AUX BUS PREVIEWING

Setting up Aux Bus Previewing

In the **Audio/Video Preview Switcher Dialog** of the Assignment Page, press **[SETTINGS]**. The **Preview Switcher** Dialog will open.

Preview Switcher for Track 1

Video

Use Aux Bus , PGM Reentry Delay Enabled

Audio

Use Mixer Delay Enabled

Separate Preview Switcher

Device File Port

Timing

Delay F1 F2

OK

Use Aux Bus

To use an Aux Bus as your Preview Switcher, check this box and enter the number of the Aux Bus to be used.

Program Reentry

The Aux Bus to be used for previewing should have the controlled M/E (M/E1 or M/E2) as a re-entry crosspoint. The re-entry crosspoint number for **M/E1** is **18**, and the re-entry crosspoint number for **M/E2** is **19**.

Enabled

Check this box to enable use of the Aux Bus as a Preview Switcher.

*See your Fastrack manual or Help files for additional information on Aux Bus Preview Switching.
See your Sony manual for additional information on Aux Bus operation and functionality.*

VIDEO EFFECTS

Cut, Dissolve, Wipe and Keys are all accessible by **[right-clicking]** on an Event and selecting "**Video Effects**" or by pressing either the **[CUT]**, **[DISS]**, **[WIPE]** or **[KEY]** keys. Once the Video Effects Dialog is open, you can select any of the available video effects.

Dissolves

Dissolves are a "MIX" with the Transition being the length of the dissolve. The Dissolve Dialog and icon stay with an Event wherever and whenever it is moved, so that it always remains the "TO" source in a dissolve.

Keys

Video Keys are accessed by pressing **[SHIFT][WIPE]**, or by **[right clicking]** Video Effects. Under **Keyers**, select **Key Bus 1** and either Key 1 or Key 2. A transition rate is needed for any effect other than a Cut. 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.

Wipes

Pressing the **[WIPES]** key will bring up bit-map icons representing the various wipes available on this switcher. Simply click on the desired wipe pattern icon or enter the wipe pattern number into the dialog field.

DME Effects

The internal DME is controlled via Inserts into the switcher timeline (Effects).
*See your Fastrack manual or Help files for additional information on the Effects Dialog.
See your Sony manual for additional information on Wipes, Keys and switcher Effects.*

PEGS

The following is a list of PEG commands from Super Edit that can be entered into the PEGS Dialog using the **SE** Command. Add a **1** to the beginning of each entry for **M/E1**, add a **2** for **M/E2**.

For example, an Auto Trans on the DSK would be 50. An Auto Trans on M/E 1 would be 150. A Key 2 wipe on M/E2 would be 262.

Items with an asterisk are valid for the DSK portion of the switcher.

MIX	WIPE	FUNCTION(S)
50*	N/A	Auto Trans Only
51*	61	Key 1
52	62	Key 2
53	63	Key 1 & Key 2
54*	64	Background
55*	65	Background & Key 1
56	66	Background & Key 2
57	67	Background & Key 1 & Key 2
58*	N/A	FTB

See your Fastrack manual or Help files for additional information on PEGS.

LEARN and RECALL MEMORY

USING THE PEGS MEM FUNCTIONS

Open the **PEGS Dialog**.

Recall a Snapshot from switcher memory

To recall Snapshot 0-99, in the PEGS dialog select the **MEM** command. Following the MEM entry, add the Snapshot number to be recalled. Example MEM12.

Recall and Run an Effect (Timeline) from switcher memory

To recall and run Effect 0-99, in the PEGS dialog select the **MEMX** command. Following the MEMX entry, add the Effect number to be recalled. Example MEMX4.

USING THE EFFECTS DIALOG MEM CONTROL

Open the **Video Effects Dialog**.

Learn an effect into memory

Set up the switcher M/E you are controlling as desired. Check **MEM** and enter any valid Memory number into the MEM text field and then select "**Learn**". The M/Es current setting will have a 'snap shot' stored.

The Current Event will have an "M" Icon displayed to let you know that a MEM has been associated with this Event. This MEM will always be affected at the beginning of the Event.

Recall an effect from memory

Check **MEM** and enter any valid Memory number into the MEM text field and then select "**Recall**." The MEM is assigned to Events with an "M" on the Event dialog line representing a memory recall.

Transitions may be recalled simultaneously by selecting "**Add Transition**" and defining a dissolve wipe or key in the dialog. If Add Transition is not selected, any programmed effect on the Event will be ignored.

"**User Select**", when this item is checked, MEM settings for both M/E1 and M/E2 will be recalled . If not selected, then only the MEM from the primary M/E or P/P will be recalled.

See your Fastrack manual or Help files for additional information on PEGS and MEMs.

See your Sony manual for additional information on Learning and Recalling Effects and Snapshots.

TECHNOTE #3 – Edit-to-Air with Omneon

Introduction

The “Edit-to air” function allows the Fastrack user to add edited material from an Omneon server channel to the end of material that is being played-out “to air” on an Omneon server channel, all without disruption. In Fastrack Terminology, “playing-to-air” refers to the real-time play-out of all Events on the Fastrack Timeline.

In this application, an “**On-air**” channel is the server channel being used to play the show to “air”.

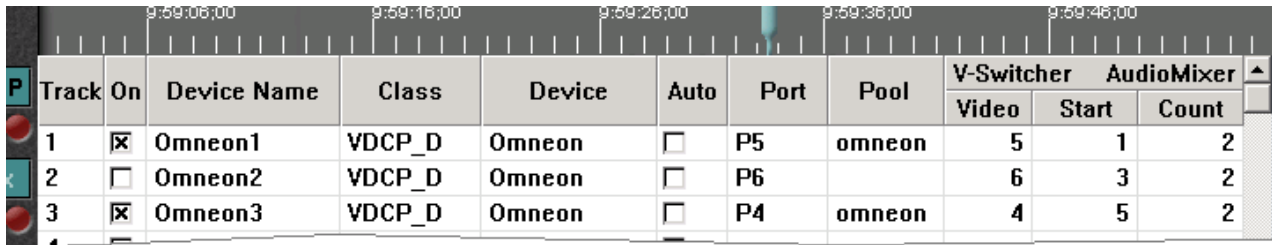
In this application, a “**Source**” channel is the server channel being used to prepare the material to add to the end of the “play-out” channel.

The examples shown in this document assume that you are already familiar with the basic operation of the Fastrack regarding server control, and that you have read the Omneon VDCP TechNote.

There are two ways to use the Edit-to-Air feature; cuts-only using one (1) On-air channel, or using two (2) On-air channels to allow transitions via a connected mixer and switcher.

Edit-to-Air with single play-out channel, cuts-only

11. Assign Omneon channels as described in the example below. In these examples, **Track 1** will be the “On-air” Track and **Track 3** will be the “Source” Track.



Track	On	Device Name	Class	Device	Auto	Port	Pool	V-Switcher		AudioMixer
								Video	Start	Count
1	<input checked="" type="checkbox"/>	Omneon1	VDCP_D	Omneon	<input type="checkbox"/>	P5	omneon	5	1	2
2	<input type="checkbox"/>	Omneon2	VDCP_D	Omneon	<input type="checkbox"/>	P6		6	3	2
3	<input checked="" type="checkbox"/>	Omneon3	VDCP_D	Omneon	<input type="checkbox"/>	P4	omneon	4	5	2

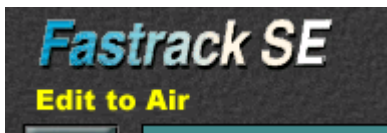
Note the following rules about the Assignments for the “cuts-only” mode:

- The Device Names must have the Omneon channel # as the first number encountered in the name.
- The Class must be **VDCP_D**, not VDCP.
- The Pool names for all Edit-to-air involved Tracks must have **the same Pool name**.
- The Pool name for Edit-to-Air devices must be removed from all Tracks not currently being used (ex: Track 2), even if the Track is disabled.
- Only the On-air and Source Tracks are **On** (e.g. Tracks 1 and 3).
- You can only have one Source Track assigned the Edit-to-air Pool name (e.g. Track 3).

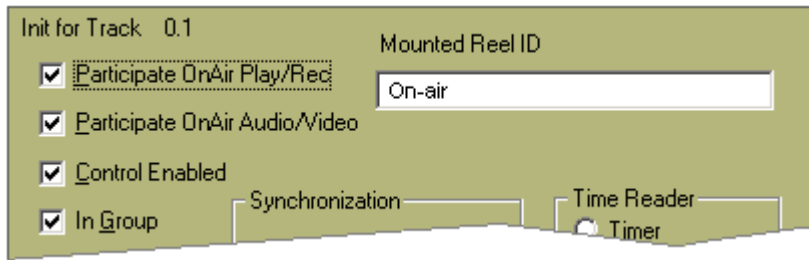
12. In the Initialization Page, set the **Edit to Air** setting to **Yes**.



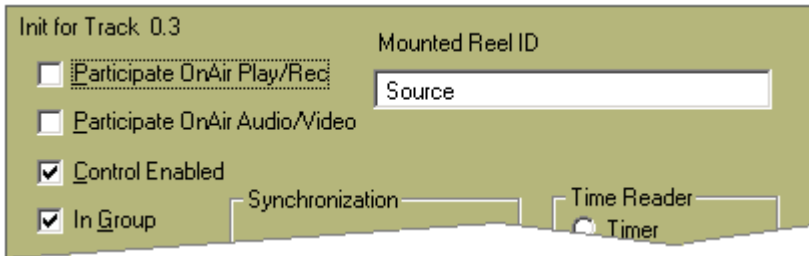
When this Init setting is set to Yes, **Edit to Air** will be displayed in yellow in the status area of the Fastrack screen.



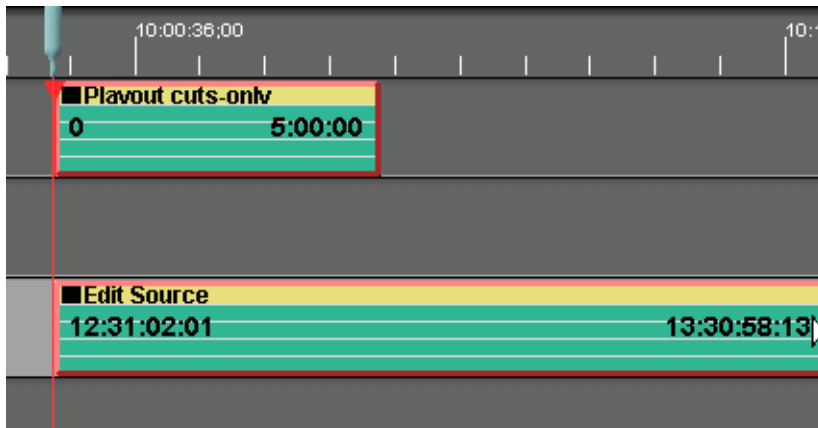
- Open the INIT Dialog for the **On-air Track**. Assure that Participate OnAir Play/Rec , Participate OnAir Audio/Video , Control Enabled and In Group are all checked.



- Open the INIT Dialog for the **Source Track**. Assure that Participate OnAir Play/Rec and Participate OnAir Audio/Video are not checked. Assure that Control Enabled and In Group are checked.

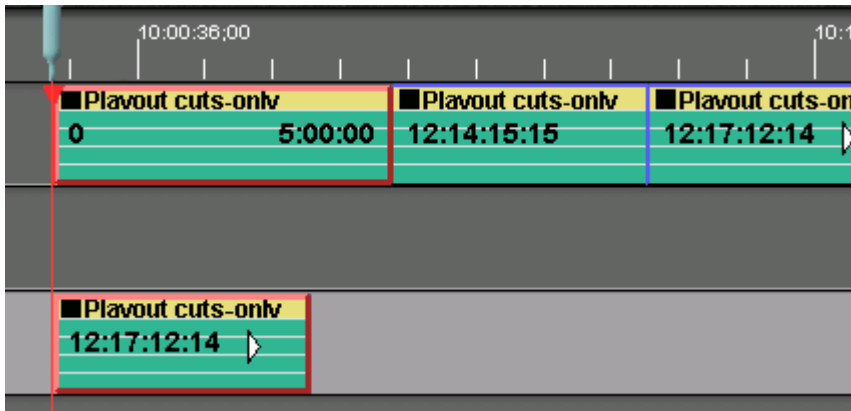


- Load the first portion of the Clip to go On-air onto Track 1.
- Load the first portion of the Source onto Track 3.



- Press **[SHIFT][PREVIEW]** to pre-set the play-out.
- Press **[PREVIEW]** to begin the play-out.
- Once the play-out has begun, you are free to select the next IN and OUT-points on the Source material (ex: Track 3)
- Select the Source Track and press **[ALT][PASTE]** (paste-at-end) to append the current Source Event (ex: Track 3) to the last Event on the On-air Track (ex: Track 1).

If the Source Track is not selected when you press **[ALT][PASTE]**, the Source Event will not be pasted, and the message **“Can not paste from On Air Track”** will be displayed in the message area of the screen. Select the Source Track and try again.



Note the following about “Paste-at-end” and “Edit-to-air” in the cuts-only mode.

- When in the Edit-to-air mode, the [ALLSTOP] key (space bar) does not abort an edit or preview. It will, however, stop Source Clips. Press [CTRL][ALLSTOP] to stop the On-air operation.
- When in the Edit-to-air mode, the time display will count-down to the end of the current material on the On-air Track. As Clips are Pasted to the End, the time is automatically updated.
- When in the Edit-to-air mode, when the count-down time remaining goes below 1 minute, the timer flashes.
- If the Clips are long-GOP, due to the nature of the application, the sources may be off by several frames from the desired timecode positions. However there will be no gaps between Events.
- You may UNDO a paste-at-end operation without disrupting the play-out.

Edit-to-Air with two (2) play-out channels

Should you wish to transition between your selected Source Events, and have a mixer and/or switcher connected to your Fastrack...

12. Assign Omneon channels as described in the example below. In these examples, **Track 1** will be the primary “On-air” Track, **Track 2** will be the alternate “On-air” Track, and **Track 3** will be the “source” Track.

Track	On	Device Name	Class	Device	Auto	Port	Pool	V-Switcher		AudioMixer
								Video	Start	Count
1	<input checked="" type="checkbox"/>	Omneon1	VDCP_D	Omneon	<input type="checkbox"/>	P5	omneon	5	1	2
2	<input checked="" type="checkbox"/>	Omneon2	VDCP_D	Omneon	<input type="checkbox"/>	P6	omneon	6	3	2
3	<input checked="" type="checkbox"/>	Omneon3	VDCP_D	Omneon	<input type="checkbox"/>	P4	omneon	4	5	2

Note the following rules about the Assignments for the “transition” mode:

- The Device Names must have the Omneon channel # as the first number encountered in the name.
- The Class must be **VDCP_D**, not VDCP.
- The Pool names for all Edit-to-air involved Tracks must have **the same Pool name**.
- Only the On-air and Source Tracks are **On** (e.g. Tracks 1, 2 and 3).
- You can have more than one Source Track assigned the Edit-to-air Pool name.

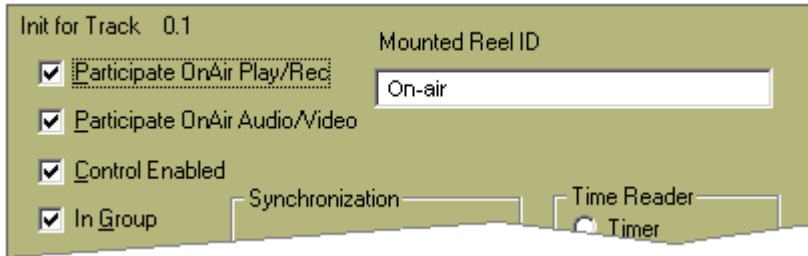
13. In the Initialization Page, set the **Edit to Air** setting to **Yes**.



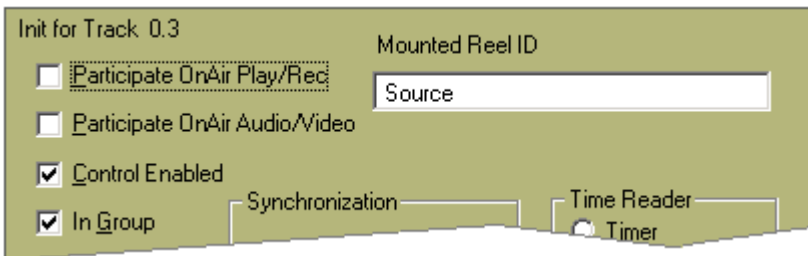
When this Init setting is set to Yes, **Edit to Air** will be displayed in yellow in the status area of the Fastrack screen.



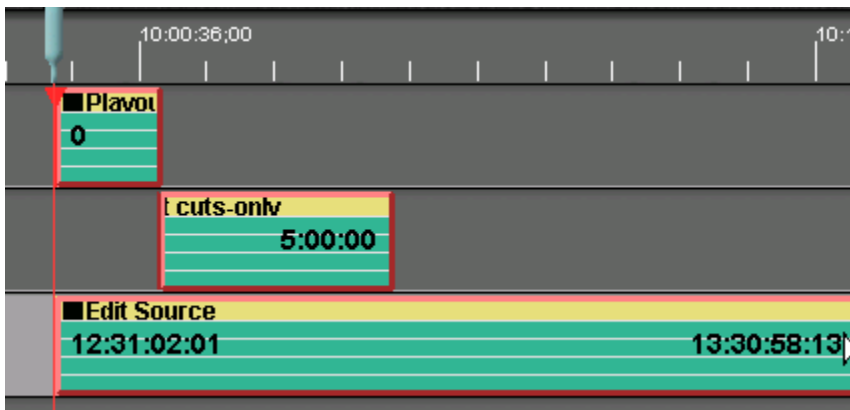
14. Open the INIT Dialog for both **On-air Tracks** (ex: Tracks1 and 2). Assure that Participate OnAir Play/Rec , Participate OnAir Audio/Video , Control Enabled and In Group are all checked.



15. Open the INIT Dialog for each **Source Track**. Assure that Participate OnAir Play/Rec and Participate OnAir Audio/Video are not checked. Assure that Control Enabled and In Group are checked.



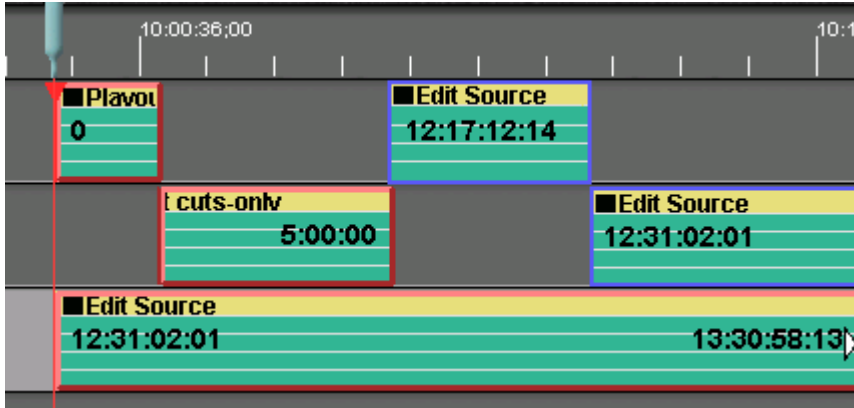
16. Load the first portion of the Clip to go On-air onto Track 1.
17. Load the second portion of the Clip to go On-air onto Track 2. If there is only one Clip ready for play-out, [SEP]arate the Clip on Track 1 and cut & paste a section of it onto Track 2.
18. Load the first portion of the Source on Track 3.



19. Press **[SHIFT][PREVIEW]** to pre-set the play-out.

20. Press **[PREVIEW]** to begin the play-out.
21. Once the play-out has begun, you are free to select the next IN and OUT-points on the Source material (ex: Track 3)
22. Select the Source Track and press **[ALT][PASTE]** (paste-at-end) to alternately append the current Source Event (ex: Track 3) to the last Event on the On-air Track. Each time you press **[ALT][PASTE]**, the Event from the Source Track will be pasted alternately between Tracks 1 and 2.

If the Source Track is not selected when you press **[ALT][PASTE]**, the Source Event will not be pasted, and the message “**Can not paste from On Air Track**” will be displayed in the message area of the screen. Select the Source Track and try again.

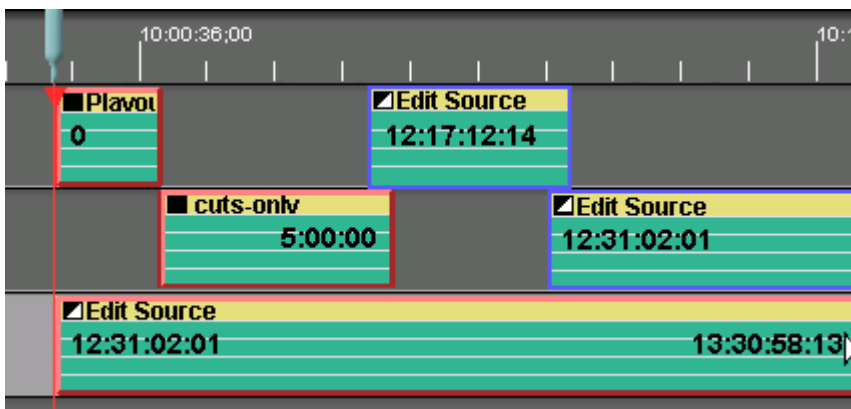


23. To change the transition for the next Event, select the Event and press the desired transition type and rate.

Note the following about “Paste-at-end” and “Edit-to-air” in the transition mode.

- The two On-air Tracks must be on Track 1 and Track 2.
- You must have a Clip on both Track 1 and Track 2 when you begin play-out.
- The Pool name for all On-air and Source Tracks must be the same.
- Omneon Clips will freeze at the transition point if no overlap is accounted for. To automatically create On-air Events with an overlap, set the Source transition type and rate before pasting the Event. This transition type and rate will be applied to the pasted Event, and the pasted Event will automatically overlap the FROM Event by the amount of the transition rate.

To change the transition type or rate on an existing Event, select the Event and press the desired transition type. The Effects Dialog will open.



- When in the Edit-to-air mode, the [ALLSTOP] key (space bar) does not abort an edit or preview. It will, however, stop Source Clips. Press **[CTRL][ALLSTOP]** to stop the On-air operation.
- When in the Edit-to-air mode, the time display will count-down to the end of the current material on the On-air Track. As Clips are Pasted to the End, the time is automatically updated.
- When in the Edit-to-air mode, when the count-down time remaining goes below 1 minute, the timer flashes.
- You may UNDO a paste-at-end operation without disrupting the play-out.
- You need not apply switcher transitions to the alternating Events.