

Record and AlphaTrack

Introduction

This document describes how to use AlphaTrack with Propellerhead's Record application. It is based on using AlphaTrack v1.1 drivers on either a Windows PC, or a Mac running OS X along with Record v1+. Record uses its "Remote" interface technology to automatically map AlphaTrack controls to buttons, knobs, and faders on Record's devices. The next sections include:

1. An overview of AlphaTrack and its features
2. A general description of how AlphaTrack works with Record
3. Detailed control mapping descriptions for each Record device.

Note that AlphaTrack can also be used with the instruments and effects in Propellerhead's Reason Application.

AlphaTrack's Remote support files are included in the Record installation. No additional installation is required. Once Record is installed make sure that your AlphaTrack is attached to a USB port on your computer (with drivers installed). Start Record and go to the "Keyboards and Control Surfaces" tab of the "Preferences..." window ("Edit/Preferences..." on Windows, "Record/Preferences..." on the Mac). Click "Auto-detect Surfaces" and your AlphaTrack will be detected and enabled for use in Record. Please see your Record documentation for general information about control surface use.

Overview

The AlphaTrack features a high-resolution, 100mm, touch-sensitive, motorized fader, 3 touch-sensitive encoders, 5 modes select buttons, 8 general function buttons, channel dependent backlit REC, SOLO, and MUTE buttons, 5-button transport controls, SHIFT key, a touch-sensitive strip, and a 32-character LCD display. There are also 17 LED indicators. Silk-screened labels clearly indicate the basic function of many of the buttons, however detailed instructions for all functions follow. On the back, next to the USB jack, is a 1/4" jack for a standard momentary foot-switch.

Pressing play will cause the project to begin playback just as if you had clicked the play button on the screen. Likewise most of the basic controls function just like their on-screen equivalents. While the AlphaTrack employs many advanced features, it is designed for ease of use right out of the box.

Encoders, Mode Buttons and the LCD

When you first open a Record song, AlphaTrack briefly shows the name of the current track on the top line of the LCD. It then changes to a list of device control names, with the lower line of the LCD showing the control values. The exact parameters displayed will depend upon what kind of device is attached to that track. As soon as any one of the encoders, or the fader, is touched, the display will instantly update with additional information about that parameter. Turn or press an encoder to make changes. For many parameter types you can press and turn an encoder for finer resolution adjustments. Releasing the encoder returns to the previous display. Below the three encoders are five mode buttons.

Pressing any of these buttons changes the mapping between encoders and device controls. This cooperative behavior between the encoders, mode buttons, and LCD are an important part of AlphaTrack's overall design. Each of the encoder modes for each device type is explained in detail below.

SHIFT

The SHIFT key allows other buttons to perform more than one function, expanding the range of control that AlphaTrack has over Record. Press and hold SHIFT, then press another function button to access its expanded feature. However, SHIFT also has a "sticky" feature to simplify one-handed operation. Pressing SHIFT alone will lock it in the enabled position. The SHIFT LED will stay on. Now multiple shifted functions can be performed without holding the SHIFT key. Press SHIFT again at any time to disable it. This "sticky" SHIFT is particularly useful when the AlphaTrack is locked to the Master section of the mixer where it is used to toggle between the master section a mixer channel strip. This is described in detail later.

Transport Controls

The standard 5-button transport is located just above the touch strip at the bottom. In addition to the basic REW, FFWD, STOP, PLAY, and RECORD functions, these buttons can also be used with the SHIFT key for additional functions.

Other Buttons

Above the transport controls are 4 buttons with LED's labeled Previous TRACK, Next TRACK, LOOP and FLIP. Above these are found generic function buttons labeled F1 - F4. More information about these buttons can be found later in this document.

Touch Strip

At the very bottom of AlphaTrack is located an innovative feature: the touch strip. This behaves similar to a ribbon controller and is another touch-sensitive surface that can detect different actions: 1- and 2-finger moves, and left, middle, and right side taps. If your touch strip is ever acting inconsistent, recalibrating your AlphaTrack's touch-sensitive surfaces may help. Press STOP+SHIFT+F4 to recalibrate your AlphaTrack. Be sure not to touch it while it is calibrating. Once the message disappears from the LCD display you can continue normal operation.

Fader section

The 10-bit, 100mm motorized fader is also touch-sensitive to provide smooth operation and automation recording. Next to the fader there are illuminated buttons and LED's for additional control.

How AlphaTrack Works with Record

Global, and Device-specific Controls

AlphaTrack controls are either “global” or “device-specific” within Record. Global controls function the same no matter what device is mapped to the AlphaTrack. These controls include:

- the 5-button transport keys (Rewind, Fast Forward, Stop, Play, Record)
- Track Prev/Next (Up/Down), Loop, and Flip buttons
- and, in most cases, the Rec, Solo, and Mute buttons,

and the shifted functions of these controls.

The device-specific controls are:

- the touch-sensitive fader
- 3 touch-sensitive encoders
- 5 “mode” buttons just below the encoders
- 4 “F” buttons just below the mode buttons,

and the shifted functions of these controls.

Global Controls

Below is a table that summarizes the global controls that are mapped to Record. You will also find “Record_Layout_v1.0.pdf” on the AlphaTrack download section of www.frontierdesign.com, which serves as a quick visual guide for the AlphaTrack functions with Record. You may want to print that document for quick reference.

Button Name	Normal Function	SHIFT + Function
REW	Rewind	Go to left locator
FFWD	Fast forward	Go to right locator
STOP	Stop	(AlphaTrack local settings)
PLAY	Play	Toggle click on/off
RECORD	Record	Reset automation override
◀ TRACK	Previous sequencer track	Previous patch/loop
TRACK ▶	Next sequencer track	Next patch/loop
LOOP	Toggle Loop on/off	New overdub
FLIP	Undo	New alternative take
MUTE	Toggle track’s mute on/off	Clear all mutes
SOLO	Toggle track’s solo on/off	Clear all solos
REC	Toggle “Record Enable Parameter Automation” and show select device name on LCD	Cycle on/off/bypass switch*

* This is a device-specific function, and is described in detail in the next section.

Using the Touch Strip

The left and right locator positions and the song position can be moved using the touch strip, as summarized in the following table. Slide 1 finger on the strip to move the song position by beats (aligned to beats); use 2 fingers to move by 4 beats at a time (aligned to 4-beat units). Tap the left end of the strip and slide 1 or 2 fingers to move the left locator. Tap the right end of the strip and do the same to move the right locator. Tap near the middle of the strip, or wait about 5 seconds without using the strip, and the 1 and 2 finger motions again move the song position.

Touch Strip Operation	Function
Tap left end*	Select left locator to move
Tap in middle	Select song position to move
Tap right end*	Select right locator to move
1-finger slide	Move by 1-beat (aligned)
2-finger slide	Move by 4 beats (aligned)

* After this tap, if the touch strip is untouched for 5 seconds, then the song position is reselected.

Device-Specific Controls and Selecting Devices

There are two ways to map the AlphaTrack to a specific device. One is by navigating through the sequencer tracks. As you select a track (using the Previous and Next Track buttons on AlphaTrack, or by selecting the track with your mouse), the AlphaTrack follows the track selection, automatically mapping to the selected track's device.

Alternatively, you can lock AlphaTrack to any device, whether it is represented by a sequencer track or not, by right-clicking (Windows)/control-clicking (Mac) on the device and selecting "Lock Frontier AlphaTrack to This Device." The AlphaTrack will now stay linked to that device regardless of what track is selected in the sequencer. Repeat this procedure to release AlphaTrack from the device.

Remember that by default, sequencer tracks are created only for audio tracks and instrument devices. Record will create a sequencer track for automation of mixer or effect devices if you hold down [Alt] (Windows) or [Option] (Mac) when you add the new mixer or effect device.

Control Modes

Although there are only three encoders, they can be mapped to many different device controls using the mode buttons (which are right below the encoders). While these buttons have mixer-oriented labels (and are used that way when a mixer device is selected), they are used as generic mode buttons here. Only one mode is selected at a time.

When mapped to a device, each button may have up to 2 modes. When a mode button is pressed its LED lights up showing it is selected (and all other mode button LED's are off). If it is enabled for 2 modes, then pressing it again makes its LED slowly flash indicating that its second ("b") mode is selected. Pressing this mode button again toggles between its first and second modes ("a" and "b").

A device can use up to 10 modes if all 5 mode buttons are enabled for both their “a” and “b” modes. In this document, the mode buttons are usually listed by number instead of their names: “1” for “Pan,” “2” for “Sends,” and so on. Note, however, that while these names are useful for mixer functions, the mode buttons are used generically for all other devices. Using the “Send” mode for an amp model probably has nothing to do with Sends. When we refer to a mode such as “2b”, that means the second mode of the Plug-in mode button (with its LED slowly flashing). Mode “3” or “3a” is the middle (EQ) mode button with its LED on solid.

If a mode button is only used for 1 mode then its LED will not flash no matter how many times you press it. If a mode button is not used at all, then pressing it will not light its LED (and the currently selected mode’s LED will stay lit). If a device has only one mode, then none of the mode buttons are used, and none of their LED’s are lit.

While the 3 encoders are mapped differently with each mode, the fader and “F” buttons have a single set of mapped functions for simpler devices, and have multiple “modal” functions for the more complex devices. Touching the fader will cause the display to show what is currently mapped to the fader and show its value. Pressing an “F” button that is mapped will cause the top line of the display to show its mapped parameter’s name and new value.

The Display

When you are not touching the fader or encoders, the display shows a short device parameter name and value for each encoder. Touch the fader, or an encoder, and the display responds with the top line showing the control’s long parameter name and the bottom line giving either its long parameter value or its short numeric value and a graphic display of its value. This graphic display can be a level bar graph, a left/right pan indicator, or a numeric selection indicator, depending on the type of parameter.

The display’s top line can also temporarily show other items when they change, including the selected device name, the patch name, and “F” button parameter name and values.

Encoders

AlphaTrack’s encoders are not only touch sensitive, they can also be pushed down like a button. Sometimes pushing down on the encoder doesn’t change its behavior. This is the case when it is being used to select among a small number of items, as when it is used to select a channel on a mixer or select one of 5 parameter settings.

But most of the time the encoder is mapped to a parameter with a large range, like from 0 to 127 (for many level parameters) or from -64 to 63 (for a pan value, for example). In these cases, turning the encoder changes the value by +/-8 per “click.” This lets you cover the full range of the control in one turn of the wrist. You can also accurately adjust the control by +/-1 per click by pushing and turning the encoder.

In most cases, the device knobs are mapped to the encoders from left to right. For complex devices, logical groups of knobs are kept together. Not all three encoders are always enabled. In any given mode, only one or two of the encoders might be in use.

“F” Buttons

AlphaTrack’s 4 “F” buttons can be used to control more than 4 device parameters. There is an unshifted set of 4 (F1-4) controls, and a shifted set of 4 (F5-8) controls. For some complex devices there are multiple sets of buttons controlled by the mode buttons.

Each “F” button is either mapped to an on/off type control, a “select from list” type control, or is unused. When mapped to an on/off control, the button’s LED is lit if the control is on. For a list control, the button’s LED is lit when the last item in the list is selected. If an “F” button is used by a device then pressing it will briefly show the mapped parameter’s name and value on the top line of the LCD.

Generally these buttons are mapped to device controls from left-to-right, at least for simple devices.

Enable Off/On/Bypass

If the currently selected device has an Off/On/Bypass switch, then it is controlled by SHIFT+REC (the illuminated REC button in the left column above the MUTE and SOLO buttons). Enabling SHIFT and hitting REC will cycle through the three switch states, and its state will be temporarily shown on the top line of AlphaTrack’s display.

The important things to remember are:

- pressing REC will always tell you what device you have selected.
- the AlphaTrack display will always show you what parameter you have selected.
- there is always one more trick you haven’t found yet.

Explore, Create, and Have Fun!

AlphaTrack and Record's Devices

The following sections describe how AlphaTrack is used to control each Record device.

Mixer 14:2 and Line Mixer 6:2

Many of AlphaTrack's features are optimized for per-channel mixing functions. When a 14:2 mixer device is selected, the left encoder always controls which mixer channel is selected. When the PAN mode (1a) is selected the right encoder controls channel PAN position. Press SEND (2a) to control the Aux 1 and 2 Send levels for that channel. Press SEND a second time (2b) to control Aux 3 and 4. If the Master channel is selected the SEND mode controls Returns 1 – 4 in the same way.

EQ mode (3a) accesses the Treble and Bass knobs.

The F1 button controls the Aux Pre/Post switch, and F2 button enables the EQ controls.

Turn the left encoder all the way to the right to select the master. The fader sets channel level, and the illuminated MUTE and SOLO buttons are mapped to the mixer channel's mute and solo, *not* the sequencer track's mute and solo as with other devices.

The Line Mixer 6:2 mapping includes the PAN mode and one SEND mode for the encoders. The center encoder, F1 and F2 are not used.

As you turn the left encoder to select different mixer channels, the fader is not updated until either the encoder knob is released or after a one second of delay, whichever comes first. This keeps the fader from being "beaten up" as you quickly scroll through the mixer channels.

Combinator

This is a simple mapping, with a single fader/encoder mode. The fader controls the first of the four rotary controls; the three encoders control the other three. F1-4 map to the four buttons below the rotary controls. F5 (shifted F1) is "Run Pattern Devices" and F6 is "Bypass All FX."

Additionally, you can use the Previous and Next Patch controls (SHIFT+<TRACK/TRACK>) to recall Combinator patches.

The Show Programmer and Show Devices controls are not accessible from AlphaTrack.

Mix Channel

When AlphaTrack is mapped directly to a mix channel, you can access essentially all of the mix channel's features ... Sends, EQ, Inserts, Dynamics, and more. The fader and solo and mute buttons are mapped to the mix channel's. The following table shows all the mappings for the encoders and F buttons:

Sample Table Format:

		Left/F1	Middle/F2	Right/F3	.../F4	
Mode	Section	Left Encoder	Middle Encoder	Right Encoder	-----	Encoders
		Left Encoder	Middle Encoder	Right Encoder	-----	Shifted Encoders
		F1	F2	F3	F4	Buttons

		Left/F1	Middle/F2	Right/F3	.../F4	
1	Pan	Input Gain	Pan Width	Pan	-----	Encoders
		Invert Phase	Insert Pre	Dyn Post EQ		Buttons
2a	Sends1	FX1 Send Level	FX2 Send Level	FX3 Send Level	-----	Encoders
		FX1 Send On	FX2 Send On	FX3 Send On		Buttons
		FX1 Pre Fader	FX2 Pre Fader	FX3 Pre Fader		Shifted Buttons
2b	Sends2	FX4 Send Level	FX5 Send Level	FX6 Send Level	-----	Encoders
		FX4 Send On	FX5 Send On	FX6 Send On		Buttons
		FX4 Pre Fader	FX5 Pre Fader	FX6 Pre Fader		Shifted Buttons
3a	EQ1	LMF Gain	LMF Frequency	LMF Q	-----	Encoders
		LF Gain	LF Frequency	LPF Frequency	-----	Shifted Encoders
		EQ On	EQ E Mode	LF Bell	LPF On	Buttons
		Filters Dyn S/C	EQ E Mode	LF Bell	LPF On	Shifted Buttons
3b	EQ2	HMF Gain	HMF Frequency	HMF Q	-----	Encoders
		HF Gain	HF Frequency	HPF Frequency	-----	Shifted Encoders
		EQ On	EQ E Mode	HF Bell	HPF On	Buttons
		Filters Dyn S/C	EQ E Mode	HF Bell	HPF On	Shifted Buttons
4a	Insert1	Rotary 1		Rotary 2	-----	Encoders
		Button 1			Button 2	Buttons
4b	Insert2	Rotary 3		Rotary 4	-----	Encoders
		Button 3			Button 4	Buttons
5a	Dynamics1	Compr. Ratio	Comp. Threshold	Comp. Release	-----	Encoders
		Compressor On	Compr. Peak	Comp. Fast Atk.	Key On	Buttons

5b	Dynamics2	Gate Range	Gate Threshold	Gate Release	-----	Encoders
		Gate Range	Gate Threshold	Gate Hold	-----	Shifted Encoders
		Gate On	Expander	Gate Fast Atk.	Key On	Buttons

Master Section (and Mix Channel)

This is perhaps the most powerful AlphaTrack mapping in Record. If you lock AlphaTrack to the master device, you can access for of its features *and* access a single mix channel. The fader maps to the master or channel fader, and the Mute and Solo buttons map to mute and solo on the channel. Use “sticky” SHIFT to toggle between the master section (SHIFT off) and the mix channel (SHIFT on). Use SHIFT+TrackLeft and SHIFT+TrackRight to navigate from channel to channel in the mixer. The selected channel has a yellow arrow on it right above the SEQ and RACK buttons (above the channel’s name.) The following table shows all the mappings for the encoders and F buttons:

Sample Table Format:

		Left/F1	Middle/F2	Right/F3	.../F4	
Mode	Master	Left Encoder	Middle Encoder	Right Encoder	-----	Encoders
		F1	F2	F3	F4	Buttons
	Channel	Left Encoder	Middle Encoder	Right Encoder	-----	Shifted Encoders
		F1	F2	F3	F4	Shifted Buttons

		Left/F1	Middle/F2	Right/F3	.../F4	
1	Mstr. Pan	Ctrl. Rm. Level			-----	Encoders
	Ch. Pan	Input Gain	Pan Width	Pan	-----	Shifted Encoders
		Invert Phase	Insert Pre	Dyn Post EQ		Shifted Buttons
2a	Mstr.Sends1	FX1 Return Lvl	FX2 Return Lvl	FX3 Return Lvl	-----	Encoders
		FX1 Mute	FX2 Mute	FX3 Mute		Buttons
	Ch. Sends1	FX1 Send Level	FX2 Send Level	FX3 Send Level	-----	Shifted Encoders
		FX1 Send On	FX2 Send On	FX3 Send On		Shifted Buttons
2b	Mstr Sends2	FX4 Return Lvl	FX5 Return Lvl	FX6 Return Lvl	-----	Encoders
		FX4 Mute	FX5 Mute	FX6 Mute		Buttons
	Ch. Sends2	FX4 Send Level	FX5 Send Level	FX6 Send Level	-----	Shifted Encoders
		FX4 Send On	FX5 Send On	FX6 Send On		Shifted Buttons
3a	EQ1	FX1 Send Level	FX2 Send Level	FX3 Send Level	-----	Encoders
	Ch. EQ1	LPF Frequency	LMF Gain	LMF Frequency	-----	Shifted Encoders
		EQ On	EQ E Mode	Filters Dyn S/C	LPF On	Shifted Buttons
3b	EQ2	FX4 Send Level	FX5 Send Level	FX6 Send Level	-----	Encoders
	Ch. EQ2	HMF Gain	HMF Frequency	HPF Frequency	-----	Shifted Encoders
		EQ On	EQ E Mode	Filters Dyn S/C	HPF On	Shifted Buttons
4a	Mstr Insert1	Rotary 1		Rotary 2	-----	Encoders
		Button 1			Button 2	Buttons

	Ch. Insert1	Ch Rotary 1		Ch Rotary 2	-----	Shifted Encoders
		Ch Button 1			Ch Btn 2	Shifted Buttons
4b	Mstr Insert2	Rotary 3		Rotary 4	-----	Encoders
		Button 3			Button 4	Buttons
	Ch. Insert2	Ch Rotary 3		Ch Rotary 4	-----	Shifted Encoders
		Ch Button 3			Ch Btn 4	Shifted Buttons
5a	Mstr Dyn1	Threshold	Ratio		-----	Encoders
		Compressor On			Key On	Buttons
	Ch. Dyn1	Ch. Ratio	Ch. Threshhold	Ch. Release	-----	Shifted Encoders
		Compressor On	Ch. Peak	Ch. Fast Atk.	Ch. Key	Shifted Buttons
5b	Mstr. Dyn2	Attack	Release	Make-up Gain	-----	Encoders
		Compressor On			Key On	Buttons
	Ch. Dyn2	Gate Range	Gate Threshold	Gate Release	-----	Shifted Encoders
		Gate On	Expander	Gate Fast Atk.	Key On	Shifted Buttons

ID8 Instrument Device

This simple device has two parameter knobs mapped to the left and right encoders. It also has buttons for previous/next category and previous/next preset, and direct access to the four currently visible presets. Finally, the fader is mapped to the device's volume.

Left Encoder	Middle Encoder	Right Encoder
Parameter 1		Parameter 2

F1	F2	F3	F4
Previous Category	Next Category	Previous Preset	Next Preset
Sound A (Shifted)	Sound B (Shifted)	Sound C (Shifted)	Sound D (Shifted)

MClass Equalizer

The MClass Equalizer is a basic 4 band EQ with 3 standard controls per band. Select each band with mode buttons 1 – 4. For each band the 3 encoders will map to Frequency, Gain, and Q. As usual, you can press and turn an encoder for fine control. Optionally, pressing the desired mode button a second time will remap Frequency control to the fader for fine control (1000 steps), as well as move Gain to the first encoder to expand the LCD display information.

The enable/disable function for each band is controlled with the F1 – F4 buttons, and Shift+F1 controls the Lo Cut enable switch. In summary:

		Left Encoder	Middle Encoder	Right Encoder	
1a	Lo Shelf	Frequency	Gain	Q	Encoders
1b	Lo Shelf	Gain		Q	Enc. (Freq on Fader)
2a	Param 1	Frequency	Gain	Q	Encoders
2b	Param 1	Gain		Q	Enc. (Freq on Fader)
3a	Param 2	Frequency	Gain	Q	Encoders
3b	Param 2	Gain		Q	Enc. (Freq on Fader)
4a	Hi Shelf	Frequency	Gain	Q	Encoders
4b	Hi Shelf	Gain		Q	Enc. (Freq on Fader)

MClass Stereo Imager

The Lo Band, X-Over Freq, and Hi-Band knobs map to the three encoders. F1 controls the Solo Mode selector, and F2 the Separate Out band selector (found on the back of the unit). In summary:

Left Encoder	Middle Encoder	Right Encoder

Lo Band	X-Over Freq	Hi-Band
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F1	F2	F3	F4
Solo Mode	Separate Out		

MClass Compressor

There are two sets (left and right) of 3 knobs on this device that map to the three encoders via two modes. The Soft Knee, Sidechain, and Release Adapt buttons map to F1-F3. In summary:

F1	F2	F3	F4
Soft Knee	Sidechain	Release Adapt	

		Left Encoder	Middle Encoder	Right Encoder
1a	Left	Input Gain	Threshold	Ratio
2a	Right	Attack	Release	Output Gain

MClass Maximizer

The three encoders map to Input Gain, Output Gain and Soft Clip amount. F1-F4 map to the Limiter and Look Ahead enable buttons, and the Attack and Release speed selections. When shifted, F1 maps to the Soft Clip button and F2 maps to the meter mode selection

Left Encoder	Middle Encoder	Right Encoder
Input Gain	Output Gain	Soft Clip

F1	F2	F3	F4
Limiter	Look Ahead	Attack	Release
Soft Clip (Shifted)	Meter Mode Select (Shifted)		

F1	F2	F3	F4
Lo Shelf On-Off	Param 1 On-Off	Param 2 On-Off	Hi Shelf On-Off
Lo Cut On-Off (Shifted)			

Line 6 Guitar Amp

All of this device's controls are mapped to the AlphaTrack.

If SHIFT is off, the fader is mapped to the Wah Pedal. If SHIFT is on, the fader is mapped to the Volume Pedal.

	Mode	Left Encoder	Middle Encoder	Right Encoder
1,2,4,5	Non-EQ	Drive	Presence	Volume
3	EQ	Bass	Middle	Treble

F1	F2	F3	F4
Prev Amp Model	Next Amp Model	Prev Cab Model	Next Cab Model
Wah On (Shifted)			

Line 6 Bass Amp

All of this device's controls are mapped to the AlphaTrack.

The fader is mapped to the compressor threshold. As for the other controls ...

	Mode	Left Encoder	Middle Encoder	Right Encoder
1,2,4,5	Non-EQ	Drive	Treble	Volume
3	EQ	Bass	Lo Mid	Hi Mid

F1	F2	F3	F4
Prev Amp Model	Next Amp Model	Prev Cab Model	Next Cab Model
Compr. (Shifted)			

RV7000 Advanced Reverb

Five control modes are used for this device. The first maps the fader to Dry-Wet and the three encoders to Decay, HF Damp, and HI EQ on the main panel. The other 4 modes map the left and right encoders to left and right knobs on the RV7000 "Remote Programmer." (Note: To view the Remote Programmer you must click on the arrow to the left of the "Remote Programmer" port on main panel.)

Important, when mode 2 is selected and the programmer Edit Mode is set for "Reverb", the left encoder is used to select the reverb algorithm. You will need to press the left encoder while turning (fine adjust) to get at all the algorithms.

	Fader	Left Encoder	Middle Encoder	Right Encoder
1a	Dry-Wet	Decay	HF Damp	HI EQ
2a		Left Knob 1		Right Knob 1

3a		Left Knob 2		Right Knob 2
4a		Left Knob 3		Right Knob 3
5a		Left Knob 4		Right Knob 4

F1	F2	F3	F4
EQ Enable	Gate Enable	Edit Mode	

Scream 4 Distortion

Here are the mappings:

Fader	F1	F2	F3	F4
Master Level	Damage On-Off	Cut On-Off	Body On-Off	

	Fader	Left Encoder	Middle Encoder	Right Encoder
1a	Damage	Damage Control	Param 1	Param 2
2a	Damage	Damage Type		
3a	Filter	Cut Lo	Cut Mid	Cut Hi
4a	Body	Body Resonance	Scale	Auto
5a	Body	Body Type		

DDL-1 Digital Delay Line

Feedback, Pan, and Dry/Wet are mapped to the three encoders. Unit and Step Length are mapped to “F1” and “F2.” The fader is mapped to delay time in milliseconds; the shifted fader is mapped to delay time in steps.

Fader	Left Encoder	Middle Encoder	Right Encoder
Delay Time (ms)	Feedback	Pan	Dry/Wet
Delay Time (steps) (Shifted)			

CF-101 Chorus/Flanger

This device has one set of 4 knobs mapped to the fader and the three encoders. Its two buttons, Sync and Send Mode, are mapped to “F1” and “F2.”

Fader	Left Encoder	Middle Encoder	Right Encoder
Delay	Feedback	Rate	Mod Amount

F1	F2	F3	F4
Sync	Send Mode		

Spider Audio Merger & Splitter

This device has no input controls.

Spider CV Merger & Splitter

This device has no input controls.