

AlphaTrack and Reason

Introduction

This document is about using AlphaTrack with Reason. It is based on using AlphaTrack v1.0 drivers on either a Windows PC or a Mac running OS X along with Reason v3.0.4+. Reason uses its “Remote” interface technology to automatically map AlphaTrack controls to buttons, knobs, and faders on Reason's devices. The next sections are about how to install Remote support for AlphaTrack. There is then a general description of how AlphaTrack works with Reason followed by detailed control mapping descriptions for every Reason device.

Installing AlphaTrack Remote Support

On Windows XP and Vista

Just double-click the “AlphaTrack Remote Setup.exe” application and follow its instructions.

On Mac OS X

Double-click the “AlphaTrack Remote Installer” package and follow its instructions.

How AlphaTrack Works with Reason

Local, Global, and Device-specific Controls

With few exceptions, AlphaTrack controls always operate either “locally,” “globally,” or on the selected device. The only local control is the SHIFT button (described next). 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

All the other controls are each mapped to the single “global” control function, no matter what device is mapped to the AlphaTrack.

SHIFT Button

The illuminated SHIFT button is used to alter the behavior of the other controls on AlphaTrack. It can be enabled two ways:

- Temporary Shift: As on a computer keyboard, hold down SHIFT with one finger to enable it. When you press another button or turn a knob you get that control's “shifted” behavior. When you release the SHIFT button it is disabled.
- Sticky Shift: Press and release the SHIFT button, and it stays enabled until you press and release it again. This “sticky shift” feature can make shifted functions easier to perform when you are using just one hand.

The SHIFT button is illuminated whenever it is enabled.

Global Controls

This is a summary of the controls that are mapped to Reason's Transport section. AlphaTrack's five transport buttons control Reason's five transport controls. Their shifted versions are:

- SHIFT+REW Previous patch
- SHIFT+FFWD Next patch
- SHIFT+STOP AlphaTrack local operations (LCD contrast, backlight, sleep timer...)
- SHIFT+PLAY Click on/off
- SHIFT+RECORD Overdub/replace

The four buttons above the transports buttons, and their shifted versions, are used this way:

- <TRACK Previous track
- TRACK> Next track
- LOOP Loop on/off
- FLIP..... Undo
- SHIFT+<TRACK..... Go to left locator
- SHIFT+TRACK>..... Go to right locator
- SHIFT+LOOP Reset automation override
- SHIFT+FLIP Redo

The MUTE and SOLO buttons control the active sequencer track's mute and solo functions (except when a mixer or Redrum device is selected). SHIFT+MUTE clears all track mute's; SHIFT+SOLO clears all track solo's. The "ANY SOLO" LED is lit if any track solo is active, and the "AUTO WRITE" LED is lit if automation is "punched in." (The AUTO READ LED is unused.) Pressing the REC button displays the currently selected device on the first line of AlphaTrack's display.

The left and right locator positions and the song position can be moved using the touch strip. Slide 2 fingers on the strip to move the song position by 4 beats at a time (aligned to 4-beat units); use 1 finger to move by beats (aligned to beats). 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.

Selecting Devices

There are two way to map the AlphaTrack to a 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 clicking 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 to Frontier AlphaTrack."

On/Off/Bypass

SHIFT+REC is always used to control the Off/On/Bypass 3-way switch on effect devices which have this feature. The switch state is displayed on the top line of the display when it changes.

Control Modes

While there are only three encoders, they can be mapped to many different device controls using the

mode buttons. 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, a mode button can be used to select 0, 1, or 2 modes. If it is used for one or two modes, then when you first press it, 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 2 modes each. In this document, the mode buttons are named 1 through 5 (from left to right) instead of “Pan,” “Sends,” and so on. These names are useful for the mixer devices, for for all other devices these mode buttons are used generically. When we refer to mode “3b” that means the second mode of the middle (EQ) mode button (with its LED slowly flashing). Mode “5” or “5a” is the last (Auto) 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 always 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 1-of-N 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, turn 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. And for some complex devices, there are multiple sets of buttons controlled by the mode buttons.

Each "F" button is either mapped to a device's on/off control, mapped to a device's 1-of-N control, or unused. When mapped to an on/off control, the button's LED is lit if the control is on. For a 1-of-N control, the button's LED is lit when the "Nth" item 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.

AlphaTrack and Reason's Devices

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

Mixer 14:2 and Line Mixer 6:2

Many of AlphaTrack's features are optimized for per-channel mixing functions. When a mixer device is selected, the left encoder always controls which channel is selected. Turn the left encoder all the way to the right to select the master. The fader maps to the channel level, and the illuminated MUTE and SOLO buttons are mapped to the mixer channel's mute and solo, *not* the track's mute and solo!

The Line Mixer 6:2 mapping includes mode 1 (Pan) and mode 2 (Sends/Aux) settings for the encoders. The Mixer 14:2 mapping has additional mode 3 (EQ) and mode 2b (second Sends/Aux) settings. When the master is selected, mode 2 (Sends) let you control the level of the Returns. The F1 button controls the Aux Pre/Post switch, and with the Mixer 14:2 mapping the F2 button enables the EQ controls.

As you turn the left encoder to select different mixer channels, the fader is not updated until either the encoder knob is release or after 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 others. F1-4 map to the four buttons below the rotary controls. F5 (shifted F1) is "Run Pattern Devices" and F6 is "Bypass All FX".

SubTractor Analog Synthesizer

This mapping is different than most in that the "F" buttons change their function depending on the

mode. It is also a very large mapping, with all 10 modes being used with separate shifted encoder functions. The fader always controls the master volume, and SHIFT+REW/FFWD calls up the previous/next patch, as usual. Almost all the controls in the right 3/4ths of the SubTractor panel's display can be controlled. Here is how the encoders and buttons are used in each mode:

Format:		
Mode.	Section	Left Encoder/Middle Encoder/Right Encoder (unshifted) Left Encoder/Middle Encoder/Right Encoder (shifted) F1/F2/... (buttons)
1a.	Oscillator 1	Phase/Waveform/FM (unshifted encoders) Octave/Semitone/Cent (shifted encoders) Phase Mode/Keyboard Track (buttons)
1b.	Oscillator 2	Phase/Waveform/FM (unshifted encoders) Octave/Semitone/Cent (shifted encoders) On-Off/Phase Mode/Keyboard Track/Ring Modulation (buttons)
2a.	Filter 1	Frequency/Resonance/Keyboard Track (encoders) F Buttons: Filter 1 Type/Link (buttons)
2b.	Filter 2	Frequency/Resonance (encoders) On-Off (button)
3a.	Noise	Decay/Color/Level (encoders) On-Off (button)
3b.	Mod Envelope	Attack/Decay/Gain (unshifted encoders) Sustain/Release/Gain (shifted encoders) Invert/Destination (buttons)
4a.	LFO1	Rate/Amount (unshifted encoders) Waveform/Destination (shifted encoders) Sync Enable (button)
4b.	LFO2	Destination/Rate/Amount (unshifted encoders) Destination/Keyboard Track/Delay (shifted encoders)
5a.	Filter Envelope	Attack/Decay/Amount (unshifted encoder) Sustain/Release/Amount (shifted encoder) Invert (button)
5b.	Amp Envelope	Attack/Decay (unshifted encoders) Sustain/Release (shifted encoders)

Malstrom Grintable Synthesizer

This mapping, like the SubTractor mapping, is different than most in that the "F" buttons change depending on the mode. It's also another huge mapping ... all 10 modes are used, and many encoders

have shifted functions as well. The fader controls the master volume, and SHIFT+REW/FFWD maps to previous/next patch, as usual. Almost all the controls in the right 3/4ths of the Malstrom panel display can be controlled. Here's how the modes work:

1a. Modulator A	Curve Select/Rate Pitch/Index/Shift On-Off/One Shot/Sync/Target	(unshifted encoders) (shifted encoders) (buttons)
1a. Modulator B	Curve Select/Rate Pitch/Index/Shift On-Off/One Shot/Sync/Target	(unshifted encoders) (shifted encoders) (buttons)
2a. Oscillator A	Motion/Index/Shift Octave/Semitone/Cent On-Off/To Shaper/To Filter B	(unshifted encoders) (shifted encoders) (buttons)
2b. Oscillator A	Attach/Decay/Gain Sustain/Release/Gain	(unshifted encoders) (shifted encoders)
3a. Oscillator B	Motion/Index/Shift Octave/Semitone/Cent On-Off/To Filter B	(unshifted encoders) (shifted encoders) (buttons)
3b. Oscillator B	Attach/Decay/Gain Sustain/Release/Gain	(unshifted encoders) (shifted encoders)
4a. Shaper	Mode/Amount/Spread Amount On-Off	(encoders) (button)
4b. Filter Envelope	Attack/Decay/Amount Sustain/Release/Amount Invert	(unshifted encoders) (shifted encoders) (button)
5a. Filter A	Mode/Resonance/Frequency On-Off/Envelope/Keyboard Track	(encoders) (buttons)
5b. Filter B	Mode/Resonance/Frequency On-Off/Envelope/Keyboard Track	(encoders) (buttons)

NN19 Digital Sampler

The NN19 uses all 10 modes for these encoder mappings:

1a. Osc	Sample Start/Octave/Semitone
1b. Osc	Envelope Amount/Keyboard Track/Fine Tune
2a. LFO	Rate/Amount
2b. LFO	Waveform/Destination
3a. Filter	Frequency/Resonance/Keyboard Tracking
3b. Filter Env	Attack/Decay/Amount (and shifted: Sustain/Release/Amount)
4a. Amp Env	Attack/Decay
4b. Amp Env	Sustain/Release

- 5a. Portamento/Stereo Spread/Spread Mode
- 5b. Controller Filter Frequency/LFO/Amp

When mapped to an NN19, the fader controls the master level, F1 toggles Solo Sample, F2 enables LFO Sync, F3 turns the filter on/off, and F4 inverts the filter envelope.

NN-XT Advanced Sampler

AlphaTrack can control the NN-XT's "Global Controls" (the ones on its front panel interface); it cannot access the many "Remote Editor" controls. The AlphaTrack's fader maps to the Master Volume, F1 selects the External Control Source, and F2 turns "High Quality Interpolation" on and off.

The encoders are used in three modes:

1. Mod Wheel/External Control Wheel
2. Filter Freq/Resonance/Mod Envelope Decay
3. Amp Envelope Attack/Decay/Release

As usual, SHIFT+REW/FFWD selects the previous/next patches.

Dr.REX Loop Player

With this device, the fader controls the master level, F1 is Preview, F2 is Filter On/Off, and F3 is LFO Sync. SHIFT+REW/FFWD selects the previous/next loops. The encoder functions in the different modes are:

- | | |
|------------|----------------------|
| 1a. Osc | Osc/Fine/Env Amount |
| 1b. Slice | Transpose |
| 2. Filter | Freq/Res/Mode |
| 3a. Filter | Amount/Attack/Decay |
| 3b. Filter | Sustain/Release |
| 4a. LFO | Rate/Amount |
| 4b. LFO | Waveform/Destination |
| 5a. Amp | Attack/Decay |
| 5b. Amp | Sustain/Release |

Redrum Drum Computer

AlphaTrack can control Redrum's 10 drum channels one at a time, much like it controls a mixer's channels. You change which drum is selected using the left encoder. The fader always controls the master level, and SHIFT+REW/FFWD can be used to select the previous/next patch. AlphaTrack does not control the pattern section of Redrum.

For the selected drum channel, the illuminated MUTE and SOLO buttons control the drum's mute and solo functions (not the sequencer track's mute and solo). You can "play" the selected drum using the F1 button, and F2 toggles the drum's decay/gate mode. Five encoder modes are used, one per mode button. They map the middle and right encoders to the drum's:

1. Pan (on right, middle encoder not used)
2. Send 1 and Send 2 levels
3. Level and Velocity-to-Level
4. Length and Pitch
5. Tone/Start/Rate and Velocity-to-Tone/Start/Rate

MClass Equalizer

There are 3 parametric controls on four bands mapped to three knobs on four modes. Press the mode button for a select band a second time and its controls are mapped instead to the fader and the left and right encoders. This gives you finer frequency control (1000 steps) and more space for encoder labels. The enable button for the four parameterized buttons are mapped to F1-4. Shift F1 accesses the Lo Cut enable button.

MClass Stereo Imager

Its three knobs map to the three encoders. F1 maps to the Solo Mode selector, and F2 maps to the Separate Out band selector (found on the back of the unit).

MClass Compress

There are two sets (left and right) of 3 knobs on this device that map to the three encoders via two modes. The three buttons map to F1-F3.

MClass Maximizer

The three encoders map to the three device knobs. F1-F4 unshifted map to the Limiter, Look Ahead buttons and the Attack and Release selections. When shifted, F1 maps to the Soft Clip button and F2 maps to the meter mode selection

RV7000 Advanced Reverb

Five control modes are used for this device. The first maps the fader to Dry-Wet and the three encoders to the other three knobs on the main panel. The other 4 modes map the left and right encoders to left and right knobs on the "remote." (Note: When the left knob is mapped to the first programmer knob for Reverb, this selects the reverb algorithm. You will need to press the left knob while turning it to get at all the algorithms.) F1-3 are mapped to EQ Enable, Gate Enable, and Edit Mode select.

Scream 4 Distortion

Master level is mapped to the fader. The three on/off buttons (Damage, Cut, and Body) are mapped to F1-3. Five modes are used:

1. Damage Control/Param 1/Param 2
2. Damage Type
3. Cut Lo/Cut Mid/Cut Hi
4. Body Resonance/Scale/Auto
5. Body TUpe

BV512 Digital Vocoder

All 10 modes are used for this devices. In mode "1a" the three encoders control three red knobs (the red Equalizer/Vocoder knob is controlled by F1), and they control the three green knobs in mode "1b." The rest of the modes map the fader and three encoders to control frequency band levels, four at a time. (Note: not all band level controls are used when fewer than 32 bands are selected.) The "2a" mode maps the fader to band 1 and the encoders to bands 2-4. The "3a" mode maps them to bands 5-8. This continues in groups of 4 bands with the "5a" mode selecting bands 12-16, the "2b" mode selecting bands 20-24, and the final "5b" mode selecting bands 29-32. Finally, the Hold button is controlled by F2.

RV-7 Digital Reverb

There are two modes used by this device. In both, the left encoder controls the algorithm. The middle and right encoders switch between two sets of two knobs.

DDL-1 Digital Delay Line

The three knobs are mapped to the three encoders. The two buttons are mapped to "F1" and "F2." And there's one wrinkle: the unshifted fader is mapped to delay time in milliseconds; the shifted fader is mapped to delay time in steps.

D-11 Foldback Distortion

It's two knobs are mapped to the left and right encoders.

ECF-42 Envelope Controlled Filter

This device has two sets of 4 knobs which are mapped onto two modes of the fader and three encoders. The "F1" button controls the 3-value MODE button.

CF-101 Chorus/Flanger

This device has one set of 4 knobs mapped to the fader and the three encoders. Its two buttons are mapped to "F1" and "F2."

PH-90 Phaser

There is a simple mapping of the 6 knobs to the 3 encoders using two modes. The "F1" button is mapped to the SYNC switch.

UN-16 Unison

This simple device uses the left and right encoders, and the "F1" button to change Voice Count. (Note: the Voice Count value shown on the display is just an index, from 0 to 2. It is not the number of voices.)

COMP-01 Compressor/Limiter

This device's four knobs are mapped to the fader and three encoders. No modes or "F" buttons are used.

PEQ-2 Two Band Parametric EQ

The fader is not used with this device. Two modes are used: one for filter A and one for filter B. The three encoders control the three parametric EQ knobs. The F1 button turns Filter B on and off.

Spider Audio Merger & Splitter

This device has no input controls.

Spider CV Merger & Splitter

This device has no input controls

Matrix Pattern Sequencer

The fader and middle encoder are unused with this device. The left encoder selects one of four pattern banks; the right encoder selects the resolution. There are three modes that affect the four "F" buttons. In the first, the buttons select patterns 1-4, in the second they select patterns 5-8, and in the third mode the

first button is Pattern On/Off, and the second is Run On/Off.

ReBirth Input Machine

This device has no input controls.