

Ableton Live and AlphaTrack v1.2

This document assumes you have already installed the AlphaTrack v1.2 driver and have the AlphaTrack ready for operation. (If not, see the AlphaTrack Users Guide or Quick Start Guide for installation details.) It is based on using AlphaTrack v1.2 drivers with Live v6.0.9 or later, and may apply to other versions of software as well. We expect it would work with all versions of Ableton Live that support the Mackie Control (Live v5.2.1+), although details may differ.

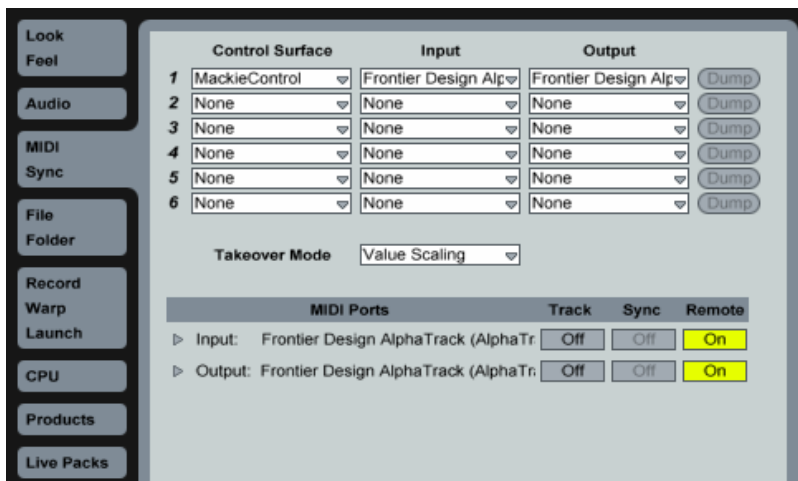
Live Set-up

With AlphaTrack v1.2 drivers installed, select the “Live (MCU)” protocol option from the System Tray (PC)/Menu Bar (Mac) AlphaTrack icon. (Note: it is important that the protocol is set *before* you start or attach to Live.) Launch Live and open the Preferences window, then go to the “MIDI Sync” tab. Select:

Control Surface - MackieControl
Input - Frontier Design AlphaTrack
Output - Frontier Design AlphaTrack

In “Live (MCU)” mode, AlphaTrack can both emulate a Mackie Control, and provide an additional set of user-mappable virtual faders, potentiometers, buttons, and lights. “Remote” should be turned ON for both Input and Output ports to enable Live to access these elements in MIDI Map Mode. MIDI Map Mode allows you to create custom controller mappings and is described in detail below.

For “Takeover Mode” you can select any value, “None,” “Pickup,” or “Value Scaling.” Take-over mode determines how Live initially reacts to MIDI mapped controller messages from devices. As long as AlphaTrack has its “Remote” Output set to “On” this setting will have no affect on AlphaTrack’s behavior.



Overview

The AlphaTrack features a variety of controls, as well as an LCD display and LED’s for feedback, organized into four basic groups:

- A. Fader and Encoder group. This group consists of the 100mm, touch-sensitive, motorized fader, the adjacent SOLO, MUTE, and REC illuminated buttons, the 3 touch-sensitive encoders, the LCD display, and the 5 mode buttons labeled PAN, SEND, EQ, PLUG-IN, AUTO. This set of controls provides comprehensive access to Live’s parameters associated with the *selected track* – a track which is selected either directly from AlphaTrack or by clicking on screen with your mouse.

- The fader, encoders, and mode buttons are also capable of performing many user-mappable functions as described in the “MIDI Map Mode” section.
- B. Programmable Function buttons. The buttons labeled F1 through F4 are user-mappable. They also have alternate functions (F5-F8) which are accessed by pressing SHIFT in combination with the F1-F4 button. User mapping is accomplished through Live’s MIDI Mapping feature.
 - C. Transport controls, including the scroll/shuttle strip. A set of standard transport buttons (REW, FFWD, STOP, PLAY, and RECORD) provide instant access to their equivalents on the Live display. These buttons have additional functions when pressed in combination with the SHIFT button. In Arrangement View, the scroll strip provides three ways to navigate along the timeline in your project: scroll, shuttle, and locate. The scroll strip can also be used as a 2 separate mappable controllers and 2 mappable buttons in Session View.
 - D. Other miscellaneous controls:
 - a. The row of buttons above the transport controls contains previous and next track navigation buttons (for selecting the selected track).
 - b. The LOOP button toggles Live’s loop mode on and off. In combination with SHIFT, it toggles AlphaTrack’s display between Bars/Beats and SMPTE time format.
 - c. The FLIP button swaps the right-hand encoder function with the 100mm fader function, for precise control during automation or performance. When used with SHIFT, FLIP will toggle Live between Session and Arrangement views.
 - d. As mentioned SHIFT can be used with many controls to provide additional functionality. The SHIFT button itself can be used in a “sticky” mode to permit one-handed access to the alternate functionality. See the “SHIFT” section later in this guide.
 - e. Footswitch input. When connected, pressing the footswitch will emulate the transport RECORD button.

Operational Details

SHIFT and “STICKY SHIFT”

The SHIFT key allows other buttons to perform more than one function, expanding the range of control that AlphaTrack has over Live. Press and hold SHIFT, then press another function button or use an encoder to access its expanded feature. Note that SHIFT has a “sticky” feature to simplify one-handed operation. Press and release SHIFT by itself and it will lock in the enabled position. The SHIFT LED will blink steadily. Now multiple shifted functions can be performed without holding the SHIFT key. Press and release SHIFT again to exit “sticky” mode.

Selecting Tracks, Returns and the Master

Most of the Fader and Encoder operations that AlphaTrack performs are directed to a track termed the *selected track*. There are several ways to select this track.

First, two dedicated buttons just above the REW and FFWD transport keys allow you to navigate one track at a time. This is handy when working on small projects, or within a narrow range of tracks. These buttons will move through your project’s Tracks, Returns, and Master in their displayed order.

Alternatively, as long as you are not in MIDI Map Mode (see below), you can use the left encoder to scroll through tracks in a rapid manner. Note that the fader position will not update until either you release the encoder knob or stop changing tracks for over a second – this keeps the fader from continually jumping back and forth while you are selecting the target track.

You can select a track by clicking in Live’s display, and AlphaTrack will automatically update to the *selected track*. This is handy for many two-handed operations: click a track with the mouse, and then use your other hand to adjust its gain, pan, etc. using the AlphaTrack.

Pressing the left encoder immediately jumps to the Master track, but it is *not* the *selected track*. This is just a shortcut to quickly get at the Master fader. Press a second time to return to your previously selected track,

or turn to scroll through the Returns and Tracks. To make the Master track the *selected track* you must either navigate to it using the prev/next track buttons, or the left encoder, to click it on-screen with your mouse. Note that when you jump to the MASTER, only the fader and left encoder are functional. This is due to a limitation of the Mackie Control hardware. Other features of the Master channel, such as Pan, Cue level, and the Crossfader can be controlled by the AlphaTrack using MIDI Map functions, if desired. When MASTER is the *selected track* you can also be in DEVICE (to access MASTER devices) or LAUNCH modes. (More on these below.)

Encoders, Mode buttons and the LCD

AlphaTrack’s LCD display, the adjacent three rotary encoders, and the PAN, SEND, EQ, PLUG-IN, and AUTO buttons work together to provide a quick and powerful way to work with many of the parameters in your Live projects. The basic procedure for adjusting parameters is:

- A. Select the track that you want to work with.
- B. Press the Mode button for the type of parameter you want to adjust (PAN, SEND, EQ (I/O), PLUG-IN (Device), or AUTO (Launch)). Note that with Live, pressing EQ accesses the track I/O assignments rather than EQ parameters. Likewise, the AUTO button allows you to select and launch clips and scenes when in Session View.
- C. Adjust the parameters named in the LCD display with the adjacent rotary encoders.

To familiarize yourself with this procedure, try navigating through one of your Live projects with AlphaTrack. When you first open the project AlphaTrack resets to PAN mode and shows the name of the selected track or return, and a graphic of the pan position on the top line of the LCD. The lower line of the LCD displays the current sequencer location and the pan position in text. As soon as an active encoder, or the fader is touched, the display will instantly update with additional information about that parameter. Turn or press an encoder to make changes. In many cases you can push and hold an encoder in while turning for fine-resolution adjustments. To set a parameter to its default value, you can often press and release its encoder. Releasing the encoder returns to the previous display. This cooperative behavior between the encoders, mode buttons, and LCD is an important part of AlphaTrack’s overall design.

The following table shows the functions that are mapped to the encoders in each mode. Note that holding SHIFT while pressing any mode button will enable one of AlphaTracks MIDI Map Modes (and its mode LED flashes slowly). Press any mode button without SHIFT to exit MIDI Map Mode.

Encoder Modes

	Encoder 1	Encoder 2	Encoder 3
PAN			
Turn	Track Select	---	Pan Position (push/turn = fine)
Push & Release	Master Track	---	Pan Default (Center)
SEND			
Turn	Track Select	Send Select	Send Level (push/turn = fine)
Push & Release	Master Track	---	Send Default
EQ (I/O)			
Turn	Track Select	I/O Type/Channel Select	I/O Option Select
Push & Release	Master Track	---	---
PLUG-IN (Device)			
Turn	Track Select	--- Parameter Select	See Devices, Push to Select/ Param. Adjust (push/turn fine)
Push & Release	Master Track	---	Parameter Default
AUTO (Launch)			
Turn	Track Select	Track Select	Scene Select
Push & Release	Master Track	Launch Clip	Launch Scene

EQ (I/O) Mode

Because Live's Mackie Control interface doesn't support built-in access to a "track" EQ, this mode is instead used to assign track I/O settings. When the EQ button is pressed and its LED is lit solid (not flashing), encoders 2 and 3 control the following:

Encoder 2 – the type of I/O value to edit. There are 4 possibilities; Input Type (It), Input Channel (Ic), Output Type (Ot), and Output Channel (Oc). These directly relate to the fields on screen.

Encoder 3 – Selects from the available options for the input or output type or channel selected by encoder 2.

PLUG-IN (Device) Mode

When PLUG-IN (Device) mode is pressed, and its LED is lit solid (not flashing), you can edit device parameters. AlphaTrack will display the name of the first device on the selected track above encoder 3. If there is more than device for that track, then turning encoder 3 will show the devices in order. Press encoder 3 to select the displayed device. To back out and select another plug-in on the same track just press PLUG-IN again. Once you have selected a device to edit encoders 2 and 3 control the following:

Encoder 2 – selects parameters in the order presented by the software.

Encoder 3 – adjusts the value of the selected parameter. Push encoder 3 to reset the selected parameter to its default value. Push and turn the encoder for fine adjustments.

AUTO (Launch)

AUTO mode is used to select and launch Clips and Scenes when in Session View. This is useful for performing or composing on the fly in Live. Turning encoders 2 and 3 navigates your Session view, while pressing them will launch the selected clip or scene, respectively.

Note that when MASTER is the selected track, PAN, SEND, and I/O modes are not active.

The Fader section

The high-resolution, 100mm motorized fader is also touch-sensitive to provide smooth operation and automation recording. Next to it are 3 illuminated buttons for setting, and indicating, the *selected track's* solo, mute, and record arm status. (Note that the MUTE LED is the opposite polarity of the track's ACTIVATE button and indicator.) As with the encoders, the fader and buttons here will affect the currently selected track regardless of whether it is selected with the AlphaTrack or the mouse.

Normally, if a track is soloed and you select another track to solo, the new track will disable the solo on the first. However, if you hold SHIFT while pressing SOLO on the 2nd track, then both tracks will be soloed. You can solo any number of tracks in this manner. If you press Solo a 2nd time on any soloed track, without holding SHIFT, it will clear ALL solos. An "ANY SOLO" LED illuminates to alert you whenever at least one track in the project is soloed

This behavior is also true for the track REC (arm) button as well. Holding SHFIT will allow you to Record Arm multiple tracks. Disarming any track will disarm all tracks unless SHIFT is held.

SHIFT + MUTE enables or disables the fader motor. (For example, you might want to disable the fader motor to conserve battery capacity when using AlphaTrack with a notebook computer.) A slowly flashing 'X' will be displayed on the left end of the bottom row of AlphaTrack's LCD to indicate when the fader motor is disabled.

Function Buttons

8 function buttons with discrete LEDs occupy the center portion of the AlphaTrack. Each of these buttons also has a shifted function. The bottom row is pre-assigned and labeled Previous Track, Next Track, LOOP

and FLIP. When SHIFT is added these become Punch-In, Punch-Out, Time display format (SMPTE or Bars/Beats), and View select. The upper row is labeled F1 - F4, and F5 - F8 respectively. These buttons are entirely user-programmable using Live's MIDI Map Mode. More information about programming these can be found below. The following chart summarizes the normal and modified functions of every button.

Button Functions

Name	Normal Function	SHIFT + Function
REW	Rewind	Return to Zero
FFWD	Fast Forward	Go to End
STOP	Stop	Local Settings (hold buttons)
PLAY	Play	Add Locator
RECORD	Record	Back To Arrangement (BTA)
◀ TRACK	Go to Previous Track	Enable Punch-In
TRACK ▶	Go to Next Track	Enable Punch-Out
LOOP	Toggle Loop Mode	Select time format (SMPTE/Bars)
FLIP	Swap Fader and Value Encoder	Toggle Session/Arrangement View
F1	F1 - User Definable	F5 - User Definable
F2	F2 - User Definable	F6 - User Definable
F3	F3 - User Definable	F7 - User Definable
F4	F4 - User Definable	F8 - User Definable
REC	Track's Record Arm On/off	Rec Arm multiple tracks
SOLO	Track's Solo On/off	Solo Multiple Tracks
MUTE	Track's Mute On/off	Toggle Fader Motor On/Off
FOOTSWITCH	Record	

Scroll Strip

At the very bottom of AlphaTrack is an innovative feature called the scroll strip. This behaves similarly to a ribbon controller and is another touch-sensitive surface that can be used in several ways:

In Arrangement View:

1. Move one fingertip along the strip in either direction to scroll through the project timeline in the same direction. If you pause with your finger at either end of the strip, the timeline will shuttle in that direction.
2. Move 2 fingers along the strip and it will act like a shuttle wheel, allowing you to move the current project position with a direction and speed proportional to the movement of your fingers.
3. A brief tap of one finger at either end of the scroll strip will cause a jump to the nearest locator point in that direction. Additional taps will continue to move the timeline from one locator to the next in that direction.
4. Hold or lock SHIFT and move one finger across the strip to zoom horizontally.
5. Hold or lock SHIFT and move 2 fingers to zoom the selected track vertically.

In Session View:

The scroll strip can be programmed for 2 separate functions using MIDI Mapping. One each for 1 finger and 2 finger control. These are particularly useful as a Crossfader and Master Pan controllers. One-finger taps on the left and right ends of the strip are also programmable, and can be used for Crossfader hard left and right control, among other options.

FLIP

The FLIP button allows the user to swap the functionality of the fader with the right-hand encoder in several modes. When flipped, the high-resolution fader can be used to adjust a parameter that would normally be assigned to an encoder. At the same time, except for AUTO mode, the *selected tracks*'s channel level will be temporarily assigned to the encoder while this mode is enabled.

Flip can be used:

- In PAN mode to swap track Pan to the fader.
- In SEND mode to swap the selected Send level to the fader.
- In PLUG-IN mode to control the selected plug-in parameter.
- In AUTO mode to control the track Pan (Track level does NOT go to encoder).

Note that when the MASTER is selected, FLIP mode and the FLIP button are disabled. The MASTER level is always controlled by the fader.

Motor On/Off

If you wish to turn AlphaTrack's fader motor off for any reason (for example, to "run silent" or to conserve battery power when using AlphaTrack with a notebook computer) you can do so by pressing SHIFT + MUTE. A slowly flashing 'X' will appear on the left end of the bottom row of the LCD to indicate that the fader motor is disabled.

MIDI Map Mode

Live supports a very fast and flexible external control feature called MIDI Mapping that lets you link incoming MIDI notes or control data to just about any parameter within Live. Using this feature, and AlphaTrack's surprising number of user-definable controls, you can create your own custom interface for recording or performance. The F1- F8 buttons (always), the fader / encoders (in MIDI Mapping Mode), and Scroll strip (while in Session view) are all programmable. The fader and encoders can be programmed with up to 5 discrete sets of functions for a total of 32 user programmable controls in all.

The MIDI Mapping basics:

1. Select 'Edit MIDI Map' from the Live/ Options menu, or use the appropriate keyboard short-cut. Objects in Live that can be mapped to MIDI control will become highlighted in violet (purple).
2. Click on the desired parameter on screen. It will become further highlighted with brackets or an additional border.
3. Push, turn, or slide the AlphaTrack button, encoder, fader, or scroll strip that you want to map to that parameter. You will see the MIDI value for that control appear on the highlighted parameter on screen, as well as a new entry in the MIDI Mappings list on the left.
4. Repeat steps 2 and 3 for as many controls as you want and then disable 'Edit MIDI Map'. That's all there is to it. Your custom mappings should now take effect.

Note: Remember 'Remote' must be turned ON in the Live/Preferences/ MIDI Sync panel for AlphaTrack Input and Output for this to work properly.

The AlphaTrack controls that can be mapped are:

1. F1 –F4, and with the SHIFT button, F5 – F8, are best mapped to parameters that are switches. Link them to launch specific clips, enable/disable devices, or other parameters that you want instant access to. When Live supports it, each button's LED will light to indicate the On/Off state of the selected parameter. Note that these 8 programmable buttons will do the programmed function always, no matter what AlphaTrack mode is currently active.
2. Fader and encoders. In addition to their normal functions, AlphaTrack's fader and encoders have 5 MIDI Map Modes, labeled A-E, that allows these controls be user-defined. Hold the SHIFT button while pressing any of the five mode buttons (Pan, Send, EQ, Plug-In or Auto) to select one of these special modes. The selected mode LED will flash slowly, the LCD will display 3 small bar graphs on the top line, and 'MMM-A' (B,C,D,E) will be shown in the lower right of the LCD to indicate that the fader and encoders are now in the 'MIDI Map Mode – A' (for example). Modes A – E are separate sets that can be programmed to any combination of controls. These are particularly handy for dynamically changing device effects such as filters, oscillators, and EQ parameters. Pressing any mode button without SHIFT will immediately exit MIDI Map Mode and return the fader and encoders to their normal functions. Note that the bar graphs above the encoders change to reflect the current parameter value.
3. The Scroll strip has 4 programmable actions in Session view; 1-finger slide, 2-finger slide, tap left, and tap right. These makes a great performance controls for items like the Crossfader, Master Pan, and any other control that you want instant access to. Just remember that whenever you switch to Arrangement view, the scroll strip will revert to time line and locator point navigation, and will automatically return to your mapped control when you return to Session view.

Two Important Things to Remember About MIDI Mapping:

1. Your mappings are linked to a specific control in a specific project that will be available regardless of whether or not it is currently visible on the computer, or AlphaTrack's display. This is important because it frees you to be as creative as you wish. You can switch tracks, devices, or views on your computer to make other changes, but still have control of the same hidden parameter via the AlphaTrack.
2. If you should start to experience a problem with the behavior of your AlphaTrack after editing Live's MIDI Map, it may be because a MIDI command was created that you didn't intend to make. Once 'Edit MIDI Map' mode is enabled in Live it is easy to accidentally click on something and create a mapping without realizing it. In this case, re-enable 'Edit MIDI Map' mode and review the mappings list on the left. Highlight and delete any mappings that you don't want, or don't recall making.