

## GarageBand 4 and AlphaTrack

This document is meant to be used with the AlphaTrack v1.3.0, or later, Macintosh driver and the GarageBand 4 v1.0 control surface plug-in called “AlphaTrack-GB.bundle.” A second document called “GarageBand\_4\_Layout.pdf” is also available to use as a quick reference guide.

This plug-in may also work with GarageBand 3, however functionality may be limited or inconsistent with this document.

### GarageBand 4 Set-up

Using AlphaTrack with GarageBand 4 requires both the correct driver and controller plug-in. First run the AlphaTrack Installer v1.3 (or later), following the onscreen instructions. Be sure to disconnect the AlphaTrack when running the installer. It is NOT necessary to run the AlphaTrack Remover if a previous set of drivers is already installed. Once the driver is installed, reconnect the AlphaTrack and open the AlphaTrack Manager (normally located in your Applications folder). A Control Mode called “**Logic**” will be available. Logic mode is used for GarageBand as well. While you can select this mode from the list now, once the control surface plug-in is installed, GarageBand will also automatically select it when launched. This is important to remember because if another application that uses AlphaTrack was previously running, then launching GarageBand will cause AlphaTrack to change its control mode. After quitting GarageBand, and before starting another application that uses AlphaTrack, you will need to change the control mode. (This can also be done from the AlphaTrack icon on the menu bar, if it is enabled in AlphaTrack Manager.)

To install the AlphaTrack-GB.bundle controller plug-in file into GarageBand 4 it is important to follow these steps carefully. The Garageband application should NOT be running.

1. Open the Mac’s Applications folder and locate the ‘GarageBand’ application icon (do not launch GarageBand).
2. CTRL+Click, or Right-Click on the icon, and select “Show Package Contents” from the menu that appears. Do not launch the GarageBand application.
3. Open the folder “Contents” to access the folder “MIDI Device Plug-Ins”.
4. Place the AlphaTrack-GB.bundle inside the MIDI Device Plug-Ins folder.
5. Close the window and launch GarageBand normally.

Once the AlphaTrack driver and plug-in files are updated AlphaTrack should be mounted automatically when GarageBand 4 is launched.

### 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 (PAN, SEND, EQ, PLUG-IN, AUTO). This set of controls provides comprehensive access to GarageBand 4 parameters associated with the *current track*.
- B. Function buttons labeled F1 through F4. The function of these buttons can vary depending on the selected mode above. Alternate functions (F5-F8) are not available with GarageBand.
- C. Transport controls, including the scroll/shuttle touch strip. A set of standard transport buttons (REW, FFWD, STOP, PLAY, and RECORD) provide instant access to their GarageBand 4 equivalents. Some of these buttons have additional functions when pressed in combination with the SHIFT button. The touch strip provides scroll and shuttle navigation along the timeline of your project.

- D. Other miscellaneous controls:
- The row of buttons above the transport controls contains track navigation buttons (for selecting the *current track*).
  - The LOOP/PUNCH button. This toggles GarageBand's cycle mode on and off.
  - The FLIP/WINDOW button. This button swaps many of the encoder functions to the 100mm fader, depending on the encoder mode selected.
  - The SHIFT button. SHIFT can be used with some other 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" notes below on this page.
  - The Footswitch input acts just like the RECORD button and will accept either any standard momentary footswitch with a 1/4" jack.

## 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 GarageBand 4. Press and hold SHIFT, then press another function button to access its expanded feature. Note that SHIFT has a "sticky" feature to simplify one-handed operation. Pressing SHIFT alone will lock it in the enabled position. The SHIFT LED will blink steadily. Now multiple shifted functions can be performed without holding the SHIFT key. Press SHIFT again to exit "sticky" mode.

## Selecting Tracks and the Master Fader

The Fader and Encoder operations that AlphaTrack performs are directed to a track termed the *current track*. There are several ways to select the *current track*.

First, two dedicated buttons labeled ◀ and ▶ just above the transport keys allow you to navigate through your project. Press either Track select button briefly to move the focus of AlphaTrack to the previous or next track. Holding either Track select button down will cause AlphaTrack to scroll through your mixer tracks rapidly.

**Note** - Be careful not to press and release either track select button too quickly. If you are too fast GarageBand may not process the command properly and you will notice that the highlighted *current track* does not update as expected. If this happens just press the track select again.

Alternatively, in PAN mode you can use the left encoder to scroll through tracks in a rapid manner. Note that the fader position will not update until you release the encoder knob – this keeps the fader from continually jumping back and forth while you are selecting the target track.

Finally, you can select a track by clicking a track on screen. AlphaTrack will immediately update to the *current track*.

AlphaTrack also has a shortcut to access GarageBand's "Master" fader. Press the PAN mode button a second time and the display above the right encoder will change from "Pan" to "MVol". Turn the right encoder to globally adjust project output level. Pressing PAN again will toggle back to Pan adjustment. You can also "Flip" the Master fader to the 100mm, motorized fader, as described in the "FLIP" section.

## Fader section

The high-resolution, 100mm motorized fader is also touch-sensitive to provide smooth operation and automation recording in most DAWs. However, since GarageBand does not support writing automation from external devices the fader's behavior is somewhat different when automation is enabled. Whenever automation is enabled for any parameter (volume, pan, etc) in GarageBand, that parameter can not be controlled by AlphaTrack. The automation curve drawn on screen WILL be reflected by motion of the

AlphaTrack's fader and/or displayed information though. To regain control of any parameter from AlphaTrack you must click on that parameters automation button to disable it.

Next to the fader are three illuminated buttons for setting and indicating the *current track's* Solo, Mute, and Record Arm status, as well as LED's for automation status. An "ANY SOLO" LED illuminates to alert you whenever at least one track in the project is being soloed. As with the encoders, the fader and buttons here will affect the currently selected track or bus, regardless of whether it is selected with the AlphaTrack or the mouse. Additionally, holding SHIFT while pressing SOLO, MUTE, or REC will clear that state across all tracks.

### Function Buttons

Eight function buttons with discrete LED's occupy the center portion of the AlphaTrack. The bottom row is pre-assigned and labeled Track Down, Track Up, LOOP (Cycle) and FLIP. The upper row labeled F1 - F4 are used in conjunction with the encoders and encoder mode buttons to select various effect inserts, EQ bands, or parameters. You will find details in the encoder mode section below.

### Transport Controls

The standard 5-button transport is located just above the scroll strip at the bottom. In addition to the basic REW, FFWD, STOP, PLAY, and RECORD functions, some of these buttons can also be used with the SHIFT key to "Return To Start Location" (Shift+REW), "Local Settings" (Shift+STOP), and "Pause" (Shift+PLAY).

### Button Functions

The following chart describes the normal and shift functions of each function and transport button. Some Shifted button combinations are not used.

Name	Normal Function	SHIFT + Function
<b>REW</b>	Rewind	Return To Start Location
<b>FFWD</b>	Fast Forward	
<b>STOP</b>	Stop	Local Settings (hold buttons)
<b>PLAY</b>	Play	Pause
<b>RECORD</b>	Record	
<b>◀ TRACK</b>	Previous Track	
<b>TRACK ▶</b>	Next Track	
<b>LOOP</b>	Toggle Cycle (Loop) Mode	
<b>FLIP</b>	Duplicate Encoder On Fader	
<b>F1</b>	See 'Encoder Modes' below.	
<b>F2</b>	See 'Encoder Modes' below.	
<b>F3</b>	See 'Encoder Modes' below.	
<b>F4</b>	See 'Encoder Modes' below.	
<b>REC</b>	Toggle Track Record Arm	Clear All Record Arms
<b>SOLO</b>	Toggle Track Solo	Clear All Solos
<b>MUTE</b>	Toggle Track Mute	Clear All Mutes
<b>FOOTSWITCH</b>	Record	

## Scroll Strip

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

1. Sweeping one fingertip along the strip in either direction scrolls through the project timeline in the same direction. If you sweep your finger across the strip and hold it at either end then the timeline will continue to advance in the selected 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.

## Encoders, Mode Buttons, and the LCD

AlphaTrack's LCD display, three adjacent rotary encoders, and the PAN, SEND, EQ, PLUG-IN, and AUTO buttons all work together to provide a quick and powerful way select and edit parameters in your GarageBand 4 project. The basic procedure for adjusting parameters is:

- A. Select the track that you want to work with.
- B. Press the Mode key indicating the basic type of parameter you want to adjust (PAN, SEND, EQ, PLUG-IN, or AUTO (Instrument)).
- C. Press F1 – F4 to select the desired EQ band , Send/Plug-In slot, or set of parameters.
- D. Adjust the parameters named in the LCD display with the adjacent rotary encoders. More details on this are below.

To familiarize yourself with this procedure, try navigating through one of your GarageBand 4 projects with AlphaTrack. When you first open the project and select PAN mode, AlphaTrack shows the name of the current track on the left of the top line of the LCD. In this state the left encoder can be used to select the *current track*. You will also note that on the far right the display shows "PAN" indicating that the right hand encoder will control the PAN value at this time. The lower line of the LCD displays the track number and the current Pan value. Turn or press the right encoder to adjust the PAN value. If you press the encoder momentarily it allows for fine-resolution adjustments of the Pan value. As soon as you lift your fingers off the encoder it will return to coarse adjustment. The following table shows the functions that are mapped to the encoders and F1 through F4 buttons in each mode.

Note that Pan and PLUG-IN modes have two pages. Press the desired mode button a second time to alternate between the pages. See specific details about each mode below. Functions highlighted in **BLUE** can also be controlled by the fader using the FLIP feature. See additional details on FLIP below.

### Encoder Modes

	Encoder 1	Encoder 2	Encoder 3
<b>PAN</b>	Track Select		Pan Position***
Page 2	Track Select		Master Volume
<b>SEND</b>	Send On/Off		Parameter adjust
	Use F-buttons to select	Gate, Echo, or Reverb	See details below.
<b>EQ</b>	Frequency		Gain
	Option - Use F-buttons	to select EQ bands 1 - 4.	See details below.
<b>PLUG-IN</b>	Effect Insert Select	Toggle On/Off	Plug-In select
Page 2	Parameter 1	Parameter 2	Parameter 3
	Use F-buttons to select	insert slot.	See details below.
<b>AUTO (Instrument)</b>	Parameter 1	Parameter 2	Parameter 3

\*\*\* Push and turn for fine adjustment.

## **PAN Mode**

In PAN mode the left encoder can be used to scroll through tracks quickly. The Track name and number will appear in the LCD display, and the fader will relocate to the selected track after the encoder is released. The right encoder is used to adjust the track PAN. Press the encoder to toggle between Coarse and Fine mode, and turn to adjust. (Note: once your fingers leave the encoder, it immediately goes back to coarse mode.) PAN can also be controlled with the hi-resolution fader by pressing FLIP. The word 'FLIP' will appear on AlphaTrack's LCD display and FLIP LED will illuminate.

Press PAN a second time and you will notice that the display changes from Pan to "MVol" above the right encoder. You can now adjust the Master output level of GarageBand.

The middle encoder is not used in PAN mode.

## **SEND Mode**

SEND mode is used to adjust 3 of the built in effects in GarageBand. Press SEND to enable that mode and use the F1, F3, and F4 function buttons to select Gate (not available on Software Instrument tracks), Echo, and Reverb. Each of these effects has only 1 variable setting, and an On/Off toggle. Note that Gate Threshold can only be adjusted if the Gate is enabled (On), whereas the Echo and Reverb levels can be changed whether they are On or Off.

The Threshold or Level parameter can also be controlled with the fader as well as the right-hand encoder by pressing the FLIP button. The word "FLIP" will appear in its position on the display to indicate that the parameter is duplicated on the fader. The FLIP LED will also illuminate. Press FLIP a second time to disable FLIP mode. You can also exit FLIP mode at any time by pressing any encoder mode button.

## **EQ Mode**

EQ mode is designed for quick access to the built-in Visual EQ in GarageBand 4. Use the F1 through F4 function buttons to select EQ bands 1 through 4. The left encoder will control frequency and the right encoder will control gain of the selected band.

The Frequency and Gain can also be controlled with the fader by pressing the FLIP button. Pressing FLIP once will assign Frequency to the fader and the word "FLIP" will appear in its position on the display to indicate that the parameter is duplicated on the fader. The FLIP LED will also illuminate. Press FLIP a second time to move the fader to the Gain encoder. Pressing FLIP a third time will disable FLIP mode entirely. You can also exit FLIP mode at any time by pressing any encoder mode button.

## **PLUG-IN Mode**

The PLUG-IN mode is used to edit the 6 user selectable effects plug-ins, labeled A through F. PLUG-IN mode has 2 'pages' of operation.

The first page of Plug-In mode displays Insert Select, On/Off, and Plug-In Select. Insert Select lets you use the left encoder to choose which insert slot you are editing (A-F). If a plug-in is assigned to that slot it will automatically open on your desktop. The middle encoder toggles the Bypass state On and Off. When an insert is Off an '\*' is placed before the plug-in name on the right. The right encoder is used to select which effects plug-in is assigned to that insert slot. The right encoder scrolls through all available plug-in options and will flash to indicate that the displayed plug-in is not yet active. Press (click) the encoder to select the displayed plug-in and make it active. To cancel the selection change, or return to the previous selection, just touch either of the other encoders or press any encoder mode button.

Pressing PLUG-IN a second time toggles the display to the parameter edit page. All of the available parameters for the selected effects plug-in will appear in pages of three parameters at a time. Note that some effects may have parameters that can only be edited with a mouse. Turn encoders for most adjustments. Some parameters that are toggles can be controlled by pressing the encoder. Control resolution is determined by the individual plug-in used. Note that pressing an encoder that has a variable value assigned to it will set it to its lowest possible value.

Use the F-buttons to select which parameters appear on the display and encoders. Pressing F 1 or F4 will move the display up or down the list 3 parameters at a time. F2 and F3 will move the display 1 parameter at a time, as long as there are more parameters available. If there are 3 or fewer total parameters available then they will remain unchanged.

Any Plug-In parameter can also be controlled with the fader by pressing the FLIP button. Pressing FLIP once will assign the left parameter to the fader and the word “FLIP” will appear in its position on the display to indicate that the parameter is duplicated on the fader. The FLIP LED will also illuminate. Press FLIP a second time to move the fader to the middle encoder, and again for the right encoder. Pressing FLIP a fourth time will disable FLIP mode entirely. You can also exit FLIP mode at any time by pressing any encoder mode button.

### **INSTRUMENT Mode (AUTO)**

If the *current track* is a Software Instrument then pressing the AUTO button will select Instrument editing mode. Instrument works very similar to the second page of PLUG-IN mode. That is, the display will show up to 3 parameters of the selected Software Instrument at a time. Pressing either F1 or F4 will move you through the available parameters 3 at a time. F2 and F3 will move 1 at a time. If there are 3 or fewer available parameters than the F-buttons will do nothing.

Any Instrument parameter can also be controlled with the fader by pressing the FLIP button. Pressing FLIP once will assign the left parameter to the fader and the word “FLIP” will appear in its position on the display to indicate that the parameter is duplicated on the fader. The FLIP LED will also illuminate. Press FLIP a second time to move the fader to the middle encoder, and again for the right encoder. Pressing FLIP a fourth time will disable FLIP mode entirely. You can also exit FLIP mode at any time by pressing any encoder mode button.

### **FLIP**

The FLIP button allows the fader to duplicate the functionality of one of the three encoders. In this mode the fader can be used to adjust a parameter that would normally be assigned to an encoder. To make this feature even more flexible, in some modes the user can choose which encoder is flipped. Pressing the FLIP button will cause the word “FLIP” to be displayed in place of a parameter name and the FLIP LED to light. That parameter is now controllable by either its encoder, or the fader. When the encoder or fader is touched the LCD display will show the full parameter name and value.

All modes have at least one parameter that can be flipped. EQ, PLUG-IN, and INSTRUMENT have more than one encoder (parameter) capable of being flipped. Pressing FLIP repeatedly will cycle through each possible encoder and then off. Also, pressing any mode button will instantly disable FLIP. However, you can change tracks, EQ bands, and plug-in parameter pages, without disabling FLIP.

Note that if the word “FLIP” does not appear on the LCD when the FLIP button is pressed and none of the currently displayed parameters can be mapped to the fader. Functions highlighted in **BLUE** in the Encoder Mode chart above can be controlled by the fader using the FLIP feature.

## Troubleshooting

The following list is meant to provide a few helpful hints towards solving some of the more common potential problems.

1. When GarageBand 4 launches it will automatically force AlphaTrack into “GarageBand 4” operating mode. Be sure that you do not have another application running that is using AlphaTrack at the same time. This includes applications running in Rewire such as Propellerheads’ Reason.
2. If AlphaTrack is not able to control a specific track parameter such as volume, pan, etc, check to be sure that the parameter does NOT have automation enabled. GarageBand does not allow external control of automated parameters.
3. After updating the GarageBand plug-in, if you experience any unexpected behavior with AlphaTrack it may help to disconnect, and reconnect, your AlphaTrack.