# Cubase 4/Nuendo 4 and AlphaTrack

Changes in v1.0.4

- AlphaTrack can now select and edit VSTi plug-ins in the VST Instrument panel as well as insert effects plug-ins. Pressing Shift + Plug-In on AlphaTrack toggles between VSI and IFX modes.
- The Plug-In mode display had been enhanced to more clearly indicate encoder functions.
- Plug-In mode now suppresses the encoder 3 touch when on the first page (index page). This prevents Cubase/Nuendo (especially older versions) from accidentally removing the plug-in or restoring default values.
- Audible scrub and shuttle can now be locked on without affecting other function buttons. Press Shift and tap the touch-strip to toggle Audible Scrub/Shuttle on and off.

AlphaTrack Changes in v1.0.3

- AlphaTrack will now follow tracks selected with the mouse on the Mixer panel, and if "Sync Project and Mixer Selection" is enabled in Cubase Preferences, the Project panel as well.
- AlphaTrack will no longer select 'Hidden' tracks.
- When selecting tracks with the encoder the fader will now wait until the encoder is released before relocating.
- AlphaTrack will now stay in Record mode regardless of how long the Record button is pressed.
- Added support for some advanced characters  $(\ddot{a}, \ddot{o}, \ddot{u}, \tilde{n})$  and better handling of some others.
- In EQ mode, pressing the right encoder will now disable/enable only the selected band.
- In SEND mode the display now shows the send number being adjusted.

Changes in v1.0.0.2

- Improved track selection and navigation.
- Fixed a bug that caused Sends and EQ control to not follow channel selection in some cases.
- Added audible scrub feature. (Shift+Touch Strip)

This document assumes you have already installed the AlphaTrack drivers following the AlphaTrack Users Guide or Quick Start Guide. It is based on using AlphaTrack v1.1 Mac OS X or Windows drivers with Cubase4, Cubase Studio4, and Nuendo4 or later. Cubase SX 3.02, or Nuendo 3.02 may be used as well however some feature may be different that stated here. The AlphaTrack v1.0.0.2 plug-in uses Steinberg's controller SDK (Software Development Kit) to map its controls to buttons, knobs and faders on Cubase's interface. The following sections describe installing and using the Cubase/Nuendo plug-in.

Check the Downloads page at <u>www.frontierdesign.com</u> for the latest updates.

! NOTE: This plug-in will not work with versions of Cubase or Nuendo prior to version 3.

! NOTE: references to "Cubase" in this document apply to Cubase SX, SL, and Nuendo.

# Set-up

**Mac OS X** users: Locate the file AlphaTrackCN.bundle in the "Cubase-Nuendo" folder on your AlphaTrack CD-ROM. CTRL+Click on the Cubase application icon, and select "Open Package" from the menu that appears. Open the "Contents" folder and drag the AlphaTrackCN.bundle file into the "Components" folder.

**Windows** users: Select the Cubase or Nuendo plug-in options during the AlphaTrack Windows driver installation. This will place the file AlphaTrackCN.dll into the folder - C:\Program Files\Steinberg\Cubase (or Nuendo)\Components.

If you have multiple versions of Cubase installed on your computer be sure to locate the correct version. You may copy the AlphaTrackCN.dll file into multiple version folders.

Before starting Cubase, set the AlphaTrack control mode to "Native" (In Windows, right-click the AlphaTrack taskbar icon; on the Mac, click on the AlphaTrack status bar icon). This will configure the AlphaTrack to send and receive the correct set of MIDI messages for use with the Cubase plug-in. For more information on Control Modes see the AlphaTrack Users Guide.doc.

Start Cubase and open the "Devices/Device Setup…" window. Click on the "+" button to access the Add Hardware list and select "Frontier AlphaTrack." Set both the "MIDI Input" and "MIDI Output" field to AlphaTrack.

Below these fields is an area for setting up user-programmable functions. AlphaTrack supports 8 userprogrammable button combinations plus the footswitch, which are described in more detail in a section below. Click "OK" to exit the Device Setup window.

Devices	AlphaTrack			MIDI Input
MIDI All MIDI Inputs	AlphaTrack			MIDI Outpu
Default MIDI Ports	Button	Category	Command	
MIDI System		Transport	Record	
📁 Remote Devices	F3 F4	Edit	Undo	
Frontier AlphaTrack	Shift-F1	Lun	VINV	
📁 Transport	Shift-F2		-	
Time Display	Shift-F3			
📁 Video	Shift-F4	Edit	Redo	
📽 Video Player	Shift-Loop	Transport	Auto Punch In	
VST Audiobay   Built-in Audio   VST Inputs   VST Outputs   VST System Link	Shift-Flip			
	✓ Enable Help	Auto Select	Reset	Apply

**! NOTE:** Depending on your computer configuration Cubase may display your MIDI ports as "(Emulated)." If you experience any difficulty with these, or for more information on Cubase MIDI port filtering, go to:

http://knowledgebase.steinberg.de/95\_1.html

# Operation

The AlphaTrack features a high-resolution, 100mm, touch-sensitive, motorized fader, 3 touch-sensitive encoders, 5 mode select buttons, 8 general function buttons, channel dependent backlit Rec, Solo, and Mute buttons, 5-button transport controls, SHIFT key, touch-sensitive touch strip, and a 32 character LCD display. There are also 17 LED indicators. Silk-screened labels clearly indicate the basic functions of most of the buttons. On the back next to the USB connection is a <sup>1</sup>/<sub>4</sub>" 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 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.

### General

#### Encoders, Mode buttons and the LCD

When you first open a Cubase project the AlphaTrack LCD displays 3 adjustable parameters, one for each of the touch-sensitive encoders. The exact parameters displayed will depend upon which of the 5 mode buttons is pressed immediately below the encoders. This will normally default to PAN when Cubase is first launched, displaying Track, Marker, and Pan values. 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 desired changes. Releasing the encoder returns the previous display. This cooperative behavior between the encoders, mode buttons, and LCD are an important part of AlphaTrack's overall design. Each of the encoder modes are explained in detail below. In Cubase several of the encoder modes also use the F1/F2 buttons to provide additional navigation through multiple pages of parameters.

### SHIFT

The SHIFT key allows other Mode and Function buttons to perform more then one function, expanding the range of control that AlphaTrack has over Cubase. 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 blink steadily. Now a series of shifted functions can be preformed without holding the SHIFT key. Press SHIFT again at any time to disable it.

### **Function Buttons**

8 function buttons with discrete LED's occupy the center portion of the AlphaTrack. Each of these buttons also has a shifted function. The bottom row is pre-assigned and labeled Track Down, Track Up, LOOP and FLIP. When SHIFT is added these become Go to IN, Go to OUT, Auto-Punch, and "Open channel editor." The last 2 of these functions can be reprogrammed by the user in the Device Setup panel. The upper row is labeled F1 - F4, and F5 - F8 respectively. Except for F1 and F2, these buttons are entirely user-programmable from the Device Setup panel as well. All of the commands in the Device Setup menu are available. More information about programming these can be found below.

### **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 to Return-To-Zero, (go to) END, and Toggle Read/Write automation functions. See the chart below for exact assignments.

### **Touch strip**

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

Moving one fingertip along the strip in either direction will jog the project timeline in the same direction. Using 2 fingers will act like a shuttle wheel, accelerating and decelerating the timeline according to how far they are moved across the strip. Tapping a finger on either end of the touch strip will jump to the nearest marker in that direction. Additional taps will continue to move the timeline from one marker to the next in that direction.

AlphaTracks Touch-Strip can also be used for scrubbing audio in the same way. Hold Shift and tap the Touch Strip to toggle audible scrub/shuttle mode on and off. Note that when audible scrub/shuttle is enabled tapping the ends for marker navigation is disabled.

### Fader section

The high-resolution, 100mm motorized fader is also tough-sensitive to provide smooth operation and automation recording. There are 3 illuminated buttons for setting the current track's solo, mute, and record arm status, as well as LED's for automation status, and to alert you if any other track is 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. AlphaTrack will follow tracks selected with the mouse on the Mixer panel, and if "Sync Project and Mixer Selection" is enabled in Cubase Preferences, the Project panel as well.

# AlphaTrack Function Buttons and Encoder Modes

The following charts describe the normal and Shifted functions of each function button, and the encoder modes. You will also find "Cubase-Nuendo\_Layout.pdf" on the AlphaTrack CDROM, which serves as a quick visual guide for the AlphaTrack functions with Cubase. You may want to print this document for quick reference.

### AlphaTrack Button Functions

Name	Normal Function	SHIFT + Function
REW	Rewind	Return to zero
FFWD	Fast forward	Go to end
STOP	Stop	Access Local Parameters
PLAY	Play	Toggle Read Automation
RECORD	Record	Toggle Write Automation
TRACK ◀ TRACK ► LOOP FLIP	Move 1 Track Left/Up Move 1 Track Right/Down Toggle Loop mode Swap Fader and Selected Encoder	Go to In point Go to Out point Defaults to Toggle Punch (User definable) Defaults to Open Channel Editor (User definable)
		(Oser definable)
F1 F2 F3 F4	Parameter page down Parameter page up User definable Defaults to Undo (User definable)	User definable User definable User definable Defaults to Redo (User definable)
REC SOLO MUTE	Toggle record arm on/off Toggle track's solo on/off Toggle track's mute on/off	<i>Not used</i> Clear all solos Clear all mutes
FOOTSWITCH	User definable	

### **Encoders Modes**

	Encoder 1	Encoder 2	Encoder 3
PAN	Track Select	Marker Add (push)/Select (turn)	Turn for Pan Position Push for Input Monitor
From any mode SHIFT	Track Select	Channel Type Select	Fader Motor On/Off
SEND	Send Level	Send On/Off	Send Pre/Post
	Press left encoder to enable/disable all Sends	* use F1/F2 to select send	
EQ	Gain	Frequency	Q
	Press left encoder to enable/disable entire EQ	* use F1/F2 to select band	Press right encoder to enable/disable current band
PLUG-IN	Insert Slot Select	Insert On/Off	Insert Effect Select
Shift +Plug-In (VST Instrument mode)	VSTi Slot Select	VSTi On/Off	VST Instrument Select
	* use F1/F2 to page thru banks of parameters	* Press Plug-In button any time to return to page 1	
AUTO	Turn for All Read On/Off Push for All Write On/Off	Channel Read On/Off	Channel Write On/Off

### Paging

The Send, EQ, and particularly Plug-In modes all may have more variable parameters than will fit on just 3 encoders. To solve this we have used the F1 and F2 buttons to move up and down through multiple pages of parameters as necessary. For example, in Send and EQ modes use F1/F2 to select which Send or EQ Band you wish to adjust. When Plug-In mode is selected the first page contains the Insert Select, On/Off, and Insert Effect parameters. Additional pages access all of the parameters available for the selected effect. Pressing the Plug-In mode button a second time is a shortcut to jump back to the first page making it easier to move to another insert slot, or select a different effect.

# **Insert Effects or VST Instruments**

Beginning with Cubase/Nuendo control plug-in version 1.0.4 AlphaTrack has the ability to access and edit the parameters of both Insert Effects and VST Instruments in the instrument rack. By pressing Shift+Plug-In you can toggle between "IFX" and "VSI" control modes. The LCD display will indicate which mode is current just above the left encoder. Both modes work in the same way. When the Plug-In mode is selected the 3 encoders will select the "IFX" or "VSI" slot, On/Off for that slot, and effect/instrument select. Once these selections are made press F2 to see and edit the first set of 3 variable parameters. Continue using F1 and F2 to page up and down through any number of available parameters. At any time you can press the Plug-In button again to quickly jump back to page 1 and select another slot or plug-in to edit.

### FLIP

The FLIP button allows the user to switch the level control of the Fader with one of the encoders. In this mode the high-resolution fader can be used to adjust a parameter otherwise assigned to an encoder. At the same time, channel level will be temporarily assigned to the encoder while this mode is enabled. To make this feature even more flexible, in EQ and Plug-In mode the user can choose which encoder is flipped. Touch an encoder while holding the FLIP button to change the assignment. That encoder will update to indicate it controls 'Volume' and the fader will then control the parameter. Pan and Send modes can only flip with the Pan and Send Level functions and therefore can't be reassigned in those modes.

Note - Remember, even though an encoder is assigned to flip, it will not actually be flipped unless the FLIP mode button is enabled and its LED is lit.

### Selecting Channel View Sets (Inputs, Tracks, Outputs)

Beginning with Cubase plug-in v1.03 AlphaTrack has a simplified method of selecting which type of channels to display and control. You can now select Inputs, Tracks, or Outputs by simply pressing Shift and turning the middle encoder, regardless of what encoder mode is selected. This can make navigation within large or complex projects much simpler. When Tracks are selected all track types will be available including the new Instrument tracks. Tracks which have been 'hidden' from view on-screen will also be hidden from Alphatrack.

# **User Defined Buttons**

The footswitch function and up to 8 button combinations are user programmable in the "Devices/Device Setup..." window of Cubase. There are literally hundreds of functions that can be used here, making the AlphaTrack extremely adaptable different needs. Open the Devices/ Device Setup panel and select Frontier AlphaTrack from the list. In the right-hand portion of the panel is a chart listing the various button combinations available. Click in the appropriate fields to select functions, first by category, and then a specific command from within that category. When you have entered your choices click Apply and close the panel to begin using them.

# **Known Issues**

- A bug exists in Cubase v3.02 (but *not* Nuendo v3.02) where a previously defined controller may not be recognized when Cubase is first opened. Clicking on the RESET button in the Devices/Device Setup panel will cause Cubase to crash. The correct thing to do in this case is to select the controller in the Device Setup list (in this case the AlphaTrack) and click the Remove button (-) in the upper left corner to remove it from the list. Then click the Add button (+) and immediate reselect the device. This should reestablish communication between Cubase and the AlphaTrack.
- In Cubase or Nuendo 3, when selecting a plug-in or instrument with the right encoder, if you stop turning the encoder too long Cubase will load the currently displayed selection and reset the encoder to the beginning of the list next time you turn it. Therefore, if you have a long list of effects or instruments and want to select one that is far down the list, do not pause between turns of the encoder. You should be able to turn, release, and continue turning before it loads the incorrect plug-in. Cubase 4 does not reset the list when a plug-in is loaded so this is not an issue.