

# Digidesign Pro Tools and AlphaTrack v1.1

## Pro Tools v1.1 to v1.1a Changes (documentation only)

- Added note in Track Navigation section about AlphaTrack follow onscreen track selection done by the mouse.

## Pro Tools v1.0 to v1.1 Changes

- Added automatic LCD updates for all modes whenever the fader or an encoder is touched. This includes a large bar graph indicating level when the fader is touched. Indicated fader level will be  $\sim \pm 0.1\text{db}$ .
- Touch strip: changed the one-finger jog, and 2-finger shuttle resolution to match the user-definable nudge size instead of FFWD/REW. When audio scrub/shuttle mode is enabled (F3), normal audible scrub/shuttle is active and behaves as it did before. In this mode, the Pro Tools nudge setting does not affect behavior.
- Added +6/+12 max dB level select. This only affects how the numeric level is displayed when the fader is touched and it is above 0dB.
- Added touch strip navigation of markers
- STOP+FLIP now toggles the transport window on/off.
- STOP+EQ and STOP+PLUG-IN now toggle the plug-in window on/off.
- SHIFT LED now blinks when SHIFT is ON.
- The F4/F8 LED now only flashes when SHIFT is pressed and a REDO possible.
- PAN Mode; added marker navigation and addition
- PAN, SEND, and AUTO Modes: push+turn left encoder is now  $\pm 8$  tracks, and shift+push+turn goes to first/last track
- SEND Mode: when FLIP is enabled the PAN LED is no longer lit. (It was confusing to have two mode LED's, PAN and SEND, on at the same time.)
- EQ Mode: holding SHIFT while pushing the middle encoder acts just like turning the middle encoder to change the Slope on 1-band EQ's or toggle band On/Off on 4 and 7-band EQ's.
- PLUG-IN Mode: moved Plug-in Bypass and All Plug-in Bypass from push middle or SHIFT+push middle, to push left or SHIFT+push left.
- PLUG-IN Mode: pushing the middle encoder toggles the state of the lower parameter (if any). This used to be mapped to pushing the right encoder.
- PLUG-IN Mode: changed "Ins1-5" to read "InsA-E" on the LCD.

## Introduction

This document assumes you have already installed the AlphaTrack v1.1 driver. If not, see the AlphaTrack Users Guide or Quick Start Guide for installation details. It is based on using AlphaTrack v1.1 drivers with Pro Tools 5.3.1 or later, but may apply to *any* version of Pro Tools that supports the Mackie HUI control protocol.

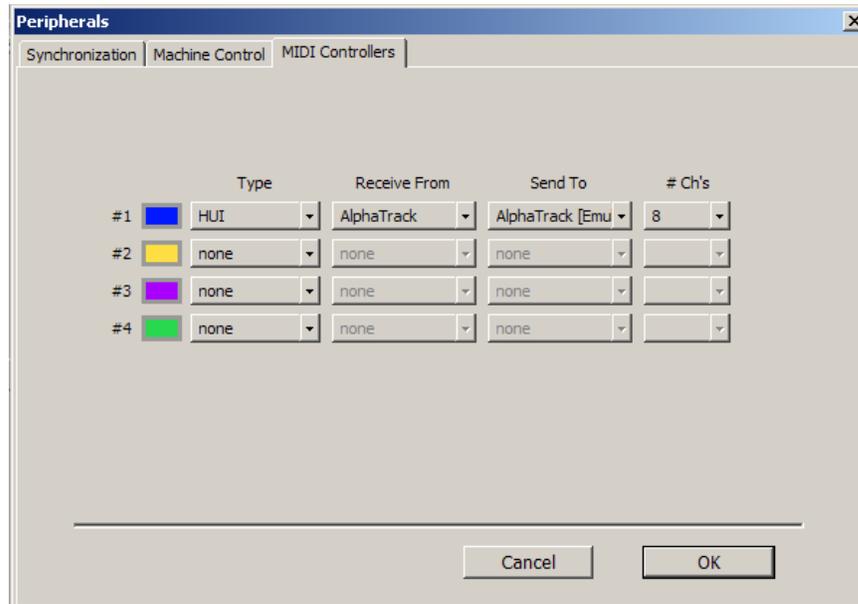
**Note:** Your Pro Tools installation **MUST** include support for the Mackie HUI control surface. Some versions of Pro Tools require that you copy a special HUI controller support file from the Pro Tools installation CD-ROM into your Pro Tools folder. Consult your Digidesign documentation for detailed instructions on verifying, or adding, support for Mackie HUI control to your Pro Tools system.

## Pro Tools Set-up

Before starting Pro Tools, open the AlphaTrack Manager (Mac), or right-click on the AlphaTrack applet in your taskbar (Windows), and set the control mode to "Pro Tools (HUI)." This will configure the AlphaTrack to emulate a version of the Mackie HUI optimized for use with Pro Tools. For more information on Control Modes see the AlphaTrack Users Guide.doc.

Open Pro Tools and select the Setups/Peripherals pull down menu. On the “MIDI Controllers” tab select “HUI” under “Type” in the first entry. Next, select “AlphaTrack” for both the “Receive From,” and “Send To” option boxes. Click “OK” to close the panel and complete the setup process.

**Note:** Multiple MIDI controller devices may exist that share control over many of Pro Tool’s common functions. However, they may not be able to edit the same tracks within a project simultaneously. Consult your Digidesign documentation of more detail on using external controllers. There is also an additional document called “Pro Tools Control Surfaces and TranzPort” available at <http://frontierdesign.com/Support/Downloads>. While the title of this document references the TranzPort controller, the information contained in it applies to AlphaTrack and all other MIDI controllers.



## Operation

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, touch-sensitive scroll 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 ¼” 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 easy of use right out of the box.

## General

**Important Note:** Because AlphaTrack uses a custom version of the HUI control spec as required by Digidesign, there may be brief, but noticeable, computer screen and LCD update delays when changing modes or adjusting some parameters as the emulated HUI is updated by Pro Tools.

### Encoders, Mode buttons and the LCD

When you first open a Pro Tools project the AlphaTrack LCD displays up to 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 Pro Tools is first launched, displaying Track

name, Marker, and Pan value. When you turn or press an encoder to make the desired changes, the display changes to show detailed information about that parameter. This cooperative behavior between the touch-sensitive encoders, mode buttons, and LCD are an important part of AlphaTrack's overall design. Each of the encoder modes are explained in detail below.

## SHIFT

The SHIFT button allows the other buttons to perform more than one function, expanding the range of control that AlphaTrack has over Pro Tools. Press and hold SHIFT, then press another function button to access its expanded feature. SHIFT also has a "sticky" feature to simplify one-handed operation. Press and release SHIFT by itself to lock it in the enabled position. The SHIFT button will flash its red LED to indicate that SHIFT is enabled. Now multiple shifted functions can be performed without holding the SHIFT key. Press SHIFT again at any time to disable it.

## Function Buttons

Eight 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 labeled Track Down, Track Up, LOOP and FLIP. When SHIFT is used these become Set IN, Set OUT, Quick-Punch, and Window. The Window function toggles the computer display between the Mix and Edit panels.

**Note:** In Pro Tools FLIP is only functional when SEND mode is active.

The upper row is labeled F1 - F4, and F5 - F8 respectively. F1 through F4 functions in order are Zoom In, Zoom Out, Enable Scrub, and Undo. When Shift is added F5 through F8 become Pre-roll, Post-roll, Audition, and Redo. A complete description of these functions can be found 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, these buttons can also be used with the SHIFT key to Return-To-Zero (RTZ), (go to) END, ESC, ENTER, and Clear Clips functions. See the chart below for exact assignments.

ENTER (SHIFT+PLAY) can also be used to add a Memory Location at the current time.

## 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 through 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. When using the touch strip this way, the granularity of movement (coarse or fine) is determined by the Pro Tools "Nudge" value. The Nudge value can be set with either a drop-down box or with direct numeric input on the Edit window.

The touch strip can also be used to go to the previous and next numbered marker. Using one finger to tap near the left end of the strip takes you to be previous marker, and tapping near the right end goes to the next marker.

When Scrub mode is enabled (via the F3 button) the touch strip can be used to audibly locate audio points on the selected audio region. In this mode, the Nudge value does not affect the play rate. See below for more information on Scrub/Shuttle mode.

## Fader Section

The high-resolution, 100mm motorized fader is also touch-sensitive to provide smooth operation and automation recording. When the fader is touched, the LCD updates to show a bar graph of the current level, and a numeric level value. This displayed numeric value may not exactly match that shown for the track in the mix view since it is interpolated based on the HUI fader position. By default, the maximum fader gain is assumed to be +6dB, however it can be set to +12dB by pressing STOP+TRACK>. Press STOP+<TRACK to reset back to +6dB.

There are also 3 illuminated buttons next to the fader for setting the current track's solo, mute, and record arm status. There are also LED's that show the track's automation status, and an LED to alert you if any other track is soloed.

## AlphaTrack Button and Encoder Functions

The following charts describe the normal and modified functions of each function button, and the encoder modes. You will also find “Pro\_Tools\_Layout\_v1.0.pdf” on the AlphaTrack CD-ROM, which serves as a quick visual guide for the AlphaTrack functions with Pro Tools. You may want to print this document for quick reference.

### AlphaTrack Buttons

Name	Normal Function	SHIFT + Function	STOP + Function
<b>REW</b> <b>FFWD</b> <b>STOP</b> <b>PLAY</b> <b>RECORD</b>	Rewind Fast forward Stop Play Record	Return To Zero Go To End ESC ( <i>Local Settings</i> ) ENTER Clear Clips	½ Speed Play Record Mode
<b>TRACK ◀</b> <b>TRACK ▶</b> <b>LOOP</b> <b>FLIP</b>	Move 1 Track Left/Up Move 1 Track Right/Down Toggle Loop Mode Flip (in Send Mode Only)	Set In Point Set Out Point Toggle Quickpunch Toggle Edit/Mix Window	+6dB max gain +12dB max gain Transport Win. On/off
<b>F1</b> <b>F2</b> <b>F3</b> <b>F4</b>	Zoom In Zoom Out Scrub/Shuttle Mode Undo	Pre-roll On/off Post-roll On/off Audition Mode Redo	
<b>REC</b> <b>SOLO</b> <b>MUTE</b>	Record Arm On/off Track's Solo On/off Track's Mute On/off	Clear All Armed Tracks Clear All Solos Clear All Mutes	Save Online On/off Motor On/off
<b>FOOTSWITCH</b>	Record		

## Encoders Modes

	Encoder 1	Encoder 2	Encoder 3
<b>PAN</b>	Track Select +/-1, Push+Turn= +/-8 Trks	Go to Previous/Next Marker Push = Go to Current Marker	Pan Position Left/Mono
SHIFT	Push+Turn = Go to 1 <sup>st</sup> /Last Track	Push = Add Marker	
<b>PAN</b> (LED flash)	(Same)	(Same)	Pan Position Right
<b>SEND</b>	Track Select +/-1, Push+Turn= +/-8 Trks	Turn = SEND Select Push = Pre/Post	SEND Level
SHIFT	Push+Turn = Go to 1 <sup>st</sup> /Last Track	Turn = SEND Select Push = Send Mute	SEND Level Push to set Unity gain
FLIP		Turn = SEND Select Push = Pre/Post	Send Pan Position Left/Mono or Right Shift+Push to center
<b>EQ</b>	Q (for EQ bands) Input Level (for I/O)	Frequency (for EQ Bands) Phase Invert (for I/O)	Gain (for EQ Bands) Output Level (for I/O)
SHIFT	Band/Function Select	Band Enable In/Out	Band Type (Low/High and band pass only)
<b>PLUG-IN</b>	Insert Slot Select Push = Bypass	Turn = Parameter Select Push = Toggles value of lower parameter (if any)	Turn = Change Upper Parameter Value
SHIFT	Track Select +/-1 Push = Bypass All		
<b>AUTO</b>	Track Select +/-1, Push+Turn= +/-8 Trks	Track Automation Mode	Automation Enable List Turn = Select parameter Push = On/Off param.
SHIFT	Push+Turn = Go to 1 <sup>st</sup> /Last Track		

**Important Note About Encoders** - In many cases where a Pro Tools parameter can be adjusted by turning an encoder, pressing the encoder while turning will result in finer resolution. This allows you to make very accurate adjustments wherever possible. If a separate function is assigned to the push function of the encoder then fine adjustment may not be available for that parameter.

### Track Navigation

AlphaTrack is able to navigate through the tracks and busses of Pro Tools allowing the fader, encoders, and relevant function buttons to control parameters throughout your project. Pressing the '<TRACK' and 'TRACK>' buttons alone will move from one track to the next. This works fine when working within a narrow range of tracks. For moving across larger distances use AlphaTrack's left encoder. In PAN, SEND, and AUTO modes, as well as PLUG-IN mode when SHIFT is enabled, turning the left encoder rapidly scrolls through your tracks and busses.

**Hot Tip:** To have AlphaTrack follow the onscreen track selection, "right-click" (Windows) or "control-click" (Mac) with the mouse on the track.

**Shortcut Alert:** In PAN, SEND, or AUTO modes, press and turn the left encoder to move 8 tracks at a time to the left or right. Enable SHIFT and press and turn to immediately go to the first or last track or bus.

The LCD display will show the currently selected track name, marker, and pan settings. LED's for record arm, mute, and solo status will update to reflect the state of the newly selected track. Navigating to the left or right will move you through the tracks and busses of your project in the same order as they appear in the mixer panel.

It is quite possible to scroll faster than Pro Tools and your computer can update. If you scroll fast then your monitor and AlphaTrack's display may take a second or two to catch up.

### **Setting Playback IN and OUT points**

Holding SHIFT while pressing the <TRACK (IN) and TRACK> (OUT) buttons will place these markers at the current timeline. It is important to note that the In and Out markers can only be set while the sequencer is in motion. This is a Digidesign/Pro Tools restriction.

### **Window**

SHIFT+FLIP (Window) toggles the currently displayed Pro Tools window between the Edit and Mixer views. STOP+FLIP toggles the Pro Tools transport window on and off.

### **Zoom In/Out (F1/F2)**

Pressing F1 or F2 will zoom horizontally in the Edit window.

### **Scrub/Shuttle (F3)**

Pressing F3 toggles Pro Tools Scrub/Shuttle mode on and off. With Scrub/Shuttle enabled (F3 LED lit) slide 1 finger across the touch strip in either direction to scrub audio back and forth, on 1 or 2 tracks at a time. This is useful when trying to accurately locate points in the recorded audio. Holding 1 finger down for more than 0.5 sec on either end of the touch strip will cause Pro Tools to do a continuous scrub in that direction. The touch strip resolution is much finer when Scrub is enabled. See your Pro Tools documentation for further details on scrub mode and selecting which audio clips will playback.

Use 2 fingers on the touch strip to Shuttle. Shuttle mode allows you to playback audio while using the touch strip to varispeed forward and backward, accelerating and decelerating the timeline according to how far they are moved across the strip.

Scrub/Shuttle mode has several important features and limitations;

- While in Scrub mode press Enter (SHIFT+PLAY) to drop a marker at the current location.
- Hold 1 finger on either end of the touch strip for a continuous scrub in that direction.
- All other buttons except the transport buttons, MUTE and SOLO are disabled while in Scrub mode. This includes your computer keyboard and mouse as per Pro Tools' design.
- When switching from 1-finger (Scrub) to 2-finger (Shuttle) there may be a noticeable delay as Pro Tools audio engine resets. It is best to give Pro Tools a second to reset to prevent unexpected audio artifacts.

Note: If you are experiencing erratic Scrub/Shuttle behavior this is probably do to Pro Tools and the HUI protocol. However, careful scrub movements and 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.

### **Undo/Redo (F4/F8)**

AlphaTrack offers multiple layers of Undo and Redo using F4 and its Shifted function (F8). When SHIFT is active, the F8 LED flashes if a Redo action is possible.

### **Pre-roll/Post-roll (F5/F6)**

Pressing F5 or F6 will enable/disable the Pre- and Post-roll features in Pro Tools. The amount of Pre-/Post-roll is determined by the value entered in the appropriate fields on Pro Tools transport panel.

## Audition (F7)

Audition allows you to preview clips of audio before and after your In and Out Playback Markers and prior to performing a punch-in or loop function. To use Audition you must first set your Pre- and Post-roll values to the amount of time you want to hear. Audition will not work if these are set to '0'. Next, press the SHIFT key once to lock it on followed by the F7 button. The F7 LED will light to indicate Audition mode is active. Now pressing the IN, OUT, F5, or F6 buttons will play the selected amount of audio before and after the Playback Marker points. Press the F7 or SHIFT button again at any time to disable Audition

## Mode Buttons

### PAN Mode

The right encoder can be used to set the pan position of mono and stereo tracks and sends. By default, the left side is selected if it is a stereo track or send. Pressing the PAN mode button a second time will cause its LED to blink slowly and the right encoder to set the right side pan position. This is also true when using SEND mode in conjunction with the FLIP button. In this case SEND Pan mono/left is assigned to the right encoder and pressing the PAN button can be used to access the right side of a stereo Send.

**MARKERS** - In PAN mode, the middle encoder lets you navigate and add numbered markers on the timeline. Pro Tools lets you place markers anywhere on the timeline, not necessarily in numeric order. Instead they can jump around throughout the session. In PAN mode, the middle of the LCD display shows a marker number under the word "Marker." Pressing the middle encoder moves the playback marker to that marker location. Turning the middle encoder counter-clockwise goes to the previous numbered marker, and turning clockwise goes to the next one. Remember, these may not be in sequential order along the timeline. You can rename markers in the Pro Tools/Memory Locations window however AlphaTrack will always display and navigate them by their original number. Finally, SHIFT+Push on the middle encoder to add a numbered marker at the current playback location

**Shortcut Alert:** You can also navigate markers by tapping on either end of the touch strip.

**Note** – Because AlphaTrack emulates the HUI which uses the numeric keypad to select the numbered Memory Locations, be sure that you don't also have a text field, such as the Nudge value, highlighted when navigating markers. Doing so will cause the highlighted text field to also receive these numeric messages.

### SEND Mode

AlphaTrack can access and control many of the Send parameters in your Pro Tools project. Pressing SEND assigns level control of the selected Send to the right encoder. The Send name will also be displayed on the LCD above the right encoder. The middle encoder is used to select which Send you are controlling on that track, A through E. Pushing the middle encoder toggles Pre or Post fade. The Send letter and Pre/Post state are displayed above this encoder. Hold Shift and press the middle encoder to toggle the Send Mute on/off.

### FLIP

Normally when SEND mode is selected, Send level is assigned to the right encoder. Pressing FLIP allows Send Level to be controlled by AlphaTrack's 100mm fader and assigns Send Pan to the right encoder. Send Mute and Solo also move to the channel Mute and Solo buttons for easier access. If you have a stereo Send selected then the PAN mode button can be used to toggle between the left and right sides. Send Pre/Post fade control remains as the push function of the middle encoder.

Three important things to remember:

1. FLIP can only be enabled when SEND mode is selected.
2. The FLIP LED will continue to flash as long as FLIP is enabled.
3. You cannot select another operating mode until FLIP is disabled.

## EQ Mode

AlphaTrack's EQ mode accesses all of the parameters of Pro Tools "EQ3" series of EQ plug-ins. To use EQ mode you must first add a 1, 4, or 7-band EQ3 into insert slot 'C' of the selected track. If the selected track is stereo then you must select the "Multi-mono plug-in" version of the EQ. Once configured, selecting EQ Mode will immediately present you with Q, Frequency, and Gain controls for the Low Frequency band. Turning each encoder will adjust these EQ values. Press and turn the encoders for fine adjustment.

Pressing SHIFT brings additional controls to AlphaTrack's encoders. The left encoder selects the band or other functions that are available, including Input and Output level, as well as High and Low pass filters. The middle encoder sets the In/Out status of the selected band (via a push or a turn). The right encoder selects the band type, Peak or Shelving, when available. Use the Shift key to toggle between selecting a band/function and its adjustable parameters.

If Input/Output is selected as the function, then releasing SHIFT lets you set the Input and Output levels, as well as the Phase Invert if desired.

If the High or Low Pass filters are selected then you can select Pass or Notch filter. Release SHIFT and set Q, Frequency, and Slope.

Some notes about EQ mode;

- Pro Tools takes a moment to process the changes you make. So it is best if you don't make adjustments too fast, and expect the display to have a slight delay in updating information. This is normal behavior particularly when changing your band/function selection.
- Use the SHIFT key to toggle between selecting a band/function and its adjustable parameters.
- The plug-in window for the 4 and 7-band EQs look identical. The 4-band EQ just has a limit on how many filter bands can be active.
- STOP+EQ toggles the EQ (plug-in) window on and off.
- After adding an EQ to the currently displayed track it may be necessary to change tracks momentarily for the AlphaTrack to see it for the first time.

## PLUG-IN Mode

Plug-in mode gives you quick access to the plug-in parameters of all track Insert slots A - E. The left encoder selects which Insert slot is displayed. If the Plug-in window is open on your computer screen then it will follow your selection from AlphaTrack. STOP+Plug-in button will toggle the Plug-in window on and off.

Pressing the right encoder toggles the Bypass state for that Insert slot only. Hold SHIFT and press the right encoder to toggle ALL Inserts on the selected track.

Turning the middle encoder selects which parameter that the right encoder will adjust. While parameters are highlighted on screen in groups of 4, just as if you had an actual HUI controller, the LCD display will indicate which of the group is currently assigned to the right encoder. Any parameters that are simple on/off switches, or selectors, are assigned to the 'push' function in the order that they appear. These appear on the bottom row. If no on/off parameter is available, then a simple 4-character graphic representation of the top line parameter is shown on the bottom line.

The right encoder is used to adjust the selected parameter values. Parameters that have a range of adjustment are shown on the top line and are assigned to the 'turn' function in the order that they are presented by the specific plug-in. When you touch the right encoder the lower display line will automatically update with an expanded bar graph matching the parameter value.

**Note:** When adding a new plug-in to the same insert slot that the AlphaTrack is currently focused on it may not immediately show up on the display. If this is the case momentarily selecting a different insert slot or track with AlphaTrack will refresh its display and show the new plug-in.

## AUTO Mode

Auto(mation) mode provides a quick way to set track and global automation parameters. In this mode the left encoder remains assigned to track select. The middle encoder allows you to select the automation mode for the currently selected track. And the right encoder enables/disables various automation parameters globally.

The LCD display above the right encoder will look something like:

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Vpmism  
*  **
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Each of the letters refers to an automation parameter, Volume, Pan, Mute, Insert, Send level, and send Mute. The asterisk below each letter indicates that it is currently globally enabled for automation.

Turning the left encoder will select each parameter by changing it to an upper-case letter. Press the encoder to enable/disable it from the automation parameter list.

**Shortcut Alert:** Individual Plug-in (Insert) parameters can be enabled for automation by either clicking the “Auto” button at the top of the plug-in window in Pro Tools and selecting from the available parameter list, or, holding CTRL+OPT+ALT and clicking directly on the desired parameter. This will open a shortcut window where you can quickly enable a specific parameter.

## Special Commands

### Motor On/Off

Pressing STOP+MUTE will disable the fader entirely. This is useful when the noise from the fader motor might interfere with critical listening or recording. Pressing STOP+MUTE again will re-enable the fader.

### Windows

Stop+Plug-In or Stop+EQ toggles the Plug-in window on/off.

Stop+Flip toggles the Transport panel on/off.

Shift+Flip toggles between the Edit and Mix windows.

## Troubleshooting

Because AlphaTrack uses only HUI emulation to control Pro Tools, and does not install any additional plug-in, or control software other than its basic driver, troubleshooting problems are usually quite easy. The 3 most common problems encountered are;

1. AlphaTrack's operating mode has not been set to Pro Tools (HUI) from its system tray (Windows) or status bar (Mac) icon, or from the AlphaTrack Manager (Mac only).
2. The MIDI Controller settings in Pro Tools are not set correctly. Often installing an upgrade to your Pro Tools system will wipe out your previous settings. Go to the Pro Tools Setup/Peripherals.../MIDI Controllers panel and verify that you have 'Type' set for HUI, and both 'Receive From' and 'Send To' set for AlphaTrack.
3. If AlphaTrack appears to be set up properly but can't seem to access all of your project tracks it may be that you also have another Midi Controller in your system, or that you have some tracks hidden to conserve screen space.

If you have another controller in your system then refer to the document titled “Pro Tools Control Surfaces and TranzPort” on our TranzPort downloads page for more information and tips for dealing with them. Otherwise, make sure that any tracks you want to access are also visible in your Pro Tools mixer panel.

For additional information about installing and setting up your AlphaTrack see the Pro Tools SET-UP section at the beginning of this document.