MOTU Digital Performer 5 and AlphaTrack

Changes on v1.0.1-
- AlphaTrack no longer resets to the first track whenever you press UNDO. It will now stay on the selected track.
- Changed Encoder and display behavior in AUTO mode to better match onscreen display.
- Fixed a bug that caused incorrect automation start/stop messages.

This document assumes you have already installed the AlphaTrack Macintosh 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 v1.0 drivers with Digital Performer 5 or later, and the v1.0 Digital Performer control plug-in, but may apply to later versions of software as well.

This configuration may work with earlier versions of Digital Performer, however some features may not be available.

DP5 Set-up

First, copy the AlphaTrackDPUB.bundle file from the 'Digital Performer' folder on the AlphaTrack CD-ROM, into the "Library/Audio/Plug-ins/MOTU Control Surface" folder of your Macintosh system drive.

Before starting DP5 click on the AlphaTrack applet in your taskbar and set the control mode to "AlphaTrack Native." This will configure the AlphaTrack to send and receive the correct set of MIDI messages for use with DP5. For more information on Control Modes see the AlphaTrack Users Guide.doc.

Start DP5 and open the Setup/Control Surface Setup window. Click on the '+' symbol to add a device to your configuration. Under Driver select "AlphaTrack" from the available device list. For the MIDI option select "Frontier Design AlphaTrack -16". DP5 does allow for multiple control devices if desired. Click OK to close the window. DP5 is now configured to operate with AlphaTrack.
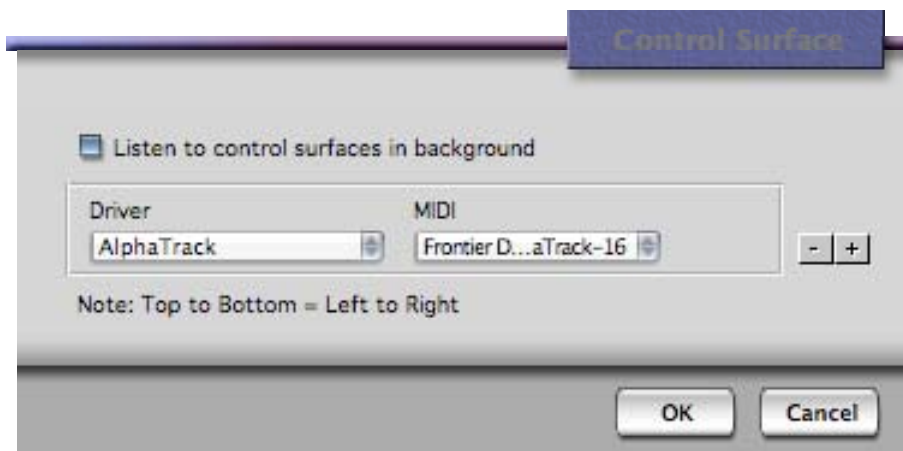
Operation

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 touch strip, and a 32 character LCD

display. There are also 17 LED indicators. Silk-screened labels clearly indicate the basic functions of many of the buttons, however detailed instructions for all functions follow. 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 basic 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 DP5 project AlphaTrack shows the name of the current track, or bus, on the top line of the LCD. The lower line of the 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 DP5 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 changes. In many cases press and turn together for finer resolution adjustments. 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.

SHIFT

The SHIFT key allows other buttons to perform more then one function, expanding the range of control that AlphaTrack has over DP5. 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 multiple 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 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 Track Down, Track Up, LOOP and FLIP. When SHIFT is added these become IN, OUT, PUNCH, and WINDOW. The upper row is labeled F1 - F4, and F5 - F8 respectively. These buttons are entirely user-programmable from the DP Setup/Commands window. All of the commands in the standard DP5 Commands menu, as well as several custom commands are available. More information about programming these can be found later in this document.

Transport Controls

AlphaTrack includes 5 standard transport buttons (REW, FFWD, STOP, PLAY, and RECORD) just above the touch stri. In addition to those standard functions, the buttons can be used with the SHIFT key to perform Return-To-Zero, (go to) END, ENTER key, and SAVE functions.

Touch Strip

AlphaTrack's innovative touch strip is located below the transport buttons. The touch strip behaves similarly 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 for quicker time location. Double-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.

Fader section

The 10-bit, 100mm motorized fader is also touch-sensitive to provide smooth operation and automation recording. There are 3 illuminated buttons for setting and indicating 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 Button and Encoder Function Chart for Digital Performer

The following charts summarize the normal and 'Shifted' functions of each button, and the encoder modes. Detailed descriptions of some of AlphaTrack's features follow.

Button Functions

Name	Normal Function	SHIFT + Function
REW	Rewind	Return to zero
FFWD	Fast forward	Go to end
STOP	Stop	*Hold for Local Settings (LCD contrast, backlight, & sleep timeout)*
PLAY	Play	Enter Key
RECORD	Record	Save
TRACK ◄	Move 1 Track Left/Up	Set loop in point
TRACK ►	Move 1 Track Right/Down	Set loop out point
LOOP	Toggle Loop mode	Toggle Punch mode
FLIP	Swap Fader and Selected Encoder	Toggle Edit and Mix window
F1	User definable (Opt + F1)	User definable (Shift + Opt + F1)
F2	User definable (Opt + F2)	User definable (Shift + Opt + F2)
F3	User definable (Opt + F3)	User definable (Shift + Opt + F3)
F4	User definable (Opt + F4)	User definable (Shift + Opt + F4)
REC	Toggle record arm on/off	Clear all record arming
SOLO	Toggle track's solo on/off	Clear all solos
MUTE	Toggle track's mute on/off	Clear all mutes
FOOTSWITCH	Record	

Encoders Modes

	Encoder 1	Encoder 2	Encoder 3
PAN	Track Select	Marker Add (push) , Select (turn)	Pan Position
(SHIFT)	Track Select		Motor On/Off
SEND	Send Select	Send Level	Send Pan
(Page 2)	Send Mute On/Off	Pre/Post	
EQ	Frequency	Gain	Q
(Page 2)	Band Select	Filter Type	Band Bypass

PLUG-IN	Insert Select	Parameter Select	Value Adjust
(Page 2)			
AUTO	Automation Mode	Read On/Off	Write On/Off
(Page 2)	Automation On/Off		

In many cases the encoders can make coarse or fine adjustments. Press and turn an encoder for fine adjustment when available.

Paging

As indicated by the 'Encoder Modes' chart above, when used with DP5 most of AlphaTrack's encoder modes have 2 sets of functions. This is used when there are more then 3 logical controls that can be applied to the encoders. An example of this is EQ mode. Frequency, Gain and Q values are a logical set of 3 parameters that are grouped together. However, Band Select, Filter Type and Bypass are also necessary and provided as well. To access the additional parameters, or "Page", simply press the selected mode button a second time. Its LED will begin to flash slowly and the displayed parameters will change to the alternate set.

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 the user can often choose which encoder is flipped. Touch another encoder while holding the FLIP button to change the assignment. If that encoder is available to be flipped the LCD will update to indicate 'Lvl' above the selected encoder when Flip is enabled.

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 Tracks or Buses

Selecting tracks with AlphaTrack can be done in a couple of ways. On the lower row of the function buttons there are 2 dedicated buttons to navigate up or down one track at a time. This is handy when working on small projects, or in a narrow range of tracks. Alternatively you can use the left encoder to scroll through tracks in a rapid manner. When AlphaTrack is in PAN mode the left encoder will default to track select. When not in PAN mode you can press, or lock, SHIFT using its sticky feature, and the left encoder will temporarily snap back to track selection. The LCD display will show the currently selected track name, track number and pan settings. Likewise, LED's for record arm, mute, and solo status will update to reflect the state of the selected track. Use the REC, MUTE, and SOLO to change settings for the current track.

AlphaTrack is also able to navigate the split Track/Master Bus architecture of DP5. Anytime the left encoder is in track select mode, press and turn the encoder one click clockwise to select Master bus control. Now you can use either of the above track select methods to select the project buses. Press and turn the left encoder counter-clockwise to return to track control mode. Because a bus cannot be armed for record or soloed, the REC and SOLO buttons are not available while in bus mode.

EQ

To use the EQ mode insert a standard Digital Performer 2, 4, or 8-Band "ParaEQ" in one of the track insert slots. When you press the EQ mode button AlphaTrack will look in each of the insert slots on the selected track and display "No

ParaEQ Insert" if none are found. If an appropriate EQ is found then settings for frequency, gain, and Q will be displayed for the first band. Press EQ again to access band select, band type, and bypass settings.

NOTE: When making adjustments in EQ and Plug-In modes you may find that for some parameters the resolution of the encoders appears to be very coarse, or requires large turns to make small changes. This is not a fault of the AlphaTrack but rather due to the way Digital Performer presents that value to its external control interface. In these cases we recommend using the FLIP button to map that parameter to the fader. While the fader will not add additional selections, or finer adjustment than DP offers, the much larger value range of the fader can result in better control for that parameter.

User-definable Buttons

The DP5 Commands menu is a list of key bindings that let you customize AlphaTrack for your needs.
You can assign the AlphaTrack Function buttons (F1-F8) to any command from the DP5 Commands menu.

To assign commands to the Function buttons go to the Setup/Commands panel, or type Shift+L on the Mac keyboard, and follow these steps:
1. Select the desired command from the list in the Commands menu.
2. Click to highlight the box after the command name under 'MAC KEY 1', or 'MAC KEY 2' if the first entry is already used.
3. Refer to the chart on page 3 for the keyboard equivalent of the button you would like to program and enter it into the box using your Mac keyboard.
4. Repeat this for each of the button combinations you wish to program or close the window.

Now pressing the assigned button on AlphaTrack will generate the commands you have programmed.
NOTE: If any of the 8 key commands has already been used a warning message will appear to alert you. You can choose to cancel the command or delete the previous one and add the new one.