Acuma™ LABS

USER'S GUIDE

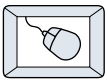
Delay Factor™

16-Tap, Stereo, Classic Tape Delay Modeling

Plug-in for Mackie Digital Mixers

MACKIE® Digital Systems™

Iconography



This icon identifies a description of how to perform an action with the mouse.

This icon identifies a description of how to perform an action from the console.

This icon will lead you to some further explanations of features and practical tips.

This icon marks information which is very important, so please make sure you have a read.

This icon does not appear in this guide.

Part No. 820-249-00 Rev. A 02/2001

Contents

Note: Any future revisions of this guide will be available for viewing and downloading from our website: www.mackie.com. Further plug-in details and preset downloads can be obtained from www.acumalabs.com.

Introduction

Thank you for purchasing Delay Factor from Acuma Labs. It is one of the exciting new family of 24-bit plug-ins for the D8B, specifically designed for the new Mackie Universal Effects (UFX) card.

Delay Factor is a highly creative tool that enables you to produce "classic tape delays" and many other multi-tap delay effects utilizing stereo ins and stereo outs. The 16 independent taps have individual control of regeneration, pan, time, and high and low pass filtering. You can combine the D8B's incredibly easy-to-use automation with Delay Factor's intuitive interface to create authentic tape delays, stereo ping-pong, multi-tap and polyrhythmic effects in seconds.

The first time that you use the visual and easy-to-use graphic user interface (GUI), you will quickly understand the power of this package. After experiencing the drag and drop functions, which let you move/edit taps in real time, you will soon realize that Delay Factor is destined to become an integral part of the way you produce sessions from now on.

About Acuma Labs (www.acumalabs.com)

One of the newly aquired companies in the growing Mackie family, Acuma Labs develops real-time embedded systems for professional audio applications to create high quality products for the music and pro audio industries. Acuma specializes in digital audio effects using DSP, real-time operating systems, graphical user interfaces, and digital hardware design.

About the D8B UFX Card

The UFX card provides robust processing power for computation-heavy plug-ins. The UFX card is a 4-in/4-out architecture, which means it can support four mono, two mono and one stereo, or two stereo sends simultaneously. Up to four UFX cards can be installed in the D8B, allowing up to sixteen simultaneous single-channel effects, eight stereo plug-ins, or combinations thereof.

Note: It is recommended that you increase the D8B's memory if you install more than one UFX card. Memory upgrade instructions are supplied with each card.

About Delay Factor

Each Delay Factor plug-in module uses one half of a UFX card (i.e. two audio inputs and two audio outputs). It can be routed as an "insert" or "auxiliary" connection, which affects the final audio output (see FX Routing on page 27) in mono, stereo applications or surround panning (using surround bus assignments). Each of the two input signals can have up to 8 taps working on it at a time. The main Delay Factor display uses a series of red and green colored balls (8 left effects and 8 right effects) to represent a total of sixteen mono or 8 fully functional stereo taps.

You can drag and drop each tap in real time to adjust the time and pan while hearing the tape delay speed up or slow down as if you were adjusting the speed of an analog tape delay. Additionally, the L/R Link button enables you to link selected taps as stereo pairs that can be moved around the screen simultaneously. Each tap models a tape delay so that when the tap is dragged to a new setting you won't hear the familiar "clicking" or "zippering" sound associated with digital delays. Fine-tune your edits using the global controls to adjust the Speed, Acceleration, BPM, Quantization, Effect Input levels, Dry Enable, and Effect Enable. Delay Factor allows you save edits as presets, mute individual taps, and toggle between Memory A and B for comparative reference.

As with all of the D8B plug-ins, Delay Factor lets you automate every parameter and save it all as part of your D8B session.

Let's Get Started

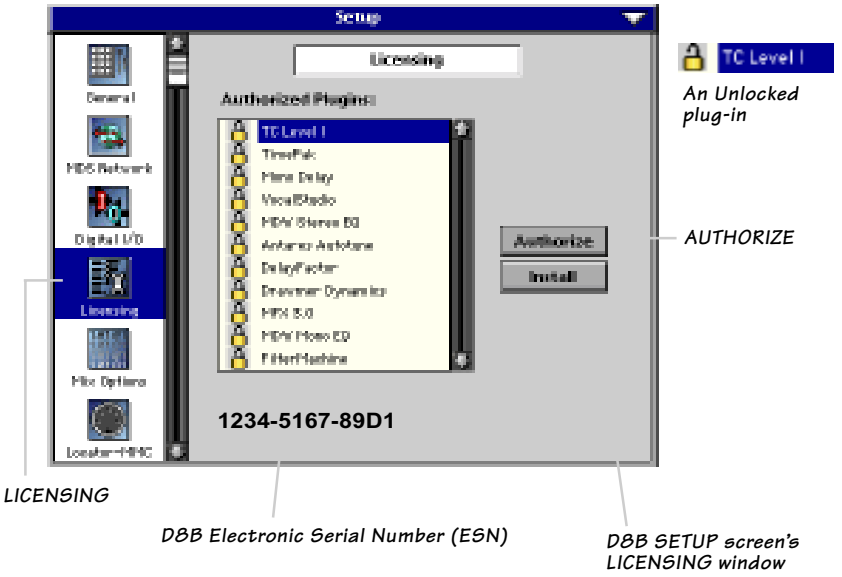
Requirements

- One or more Mackie UFX cards
- Mackie Real Time OS 3.0 Software
- Plug-in Software

We will assume you have successfully installed a Mackie UFX card and Mackie Real Time OS 3.0 software upgrade. If you have encountered problems with the installation of hardware or software please see their associated user guides or contact Mackie support (www.mackie.com).

Authorizing the Plug-in

If you have D8B v 3.0 b186 or greater, the plug-in is already installed on the D8B hard drive, however an authorized unlock code must be entered to unlock the plug-in for normal operation.



Unlock Procedure

1. Locate your D8B's Electronic Serial Number (ESN). This is displayed at the bottom of the Licensing window which is accessed from the Setup screen. The 12 digit ESN is made from numbers 0–9 and letters A–F. It is unique to the D8B processor, and is not the serial number label on the rear of the control surface or CPU chassis.

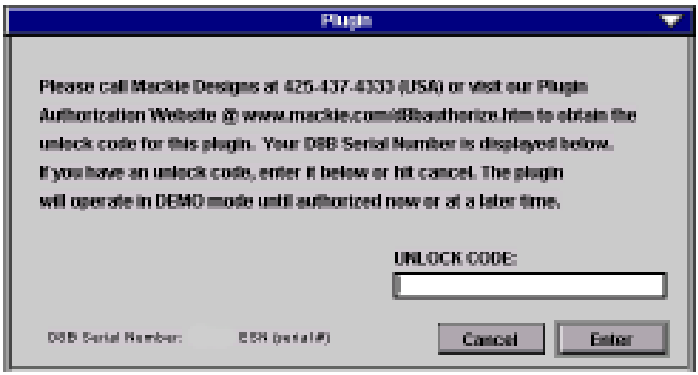
2. You will also need your plug-in's serial number which is printed on the floppy disk label.

3. To obtain the unlock code, have the ESN and plug-in serial number ready. Then you have two options:
   - Log on to the Mackie plug-in authorization web page: (http://www.mackie.com/d8bauthorize.htm)

   or
   - Telephone Mackie Tech Support at 800-258-6883.

4. When you have obtained an unlock code, open the D8B Setup window, and click on **Licensing**.

5. With your plug-in highlighted in the Licensing window, click on **Authorize**, and enter your unlock code in the UNLOCK CODE box. Click **Enter**, and enjoy your newly expanded console.



Configuring the Plug-in

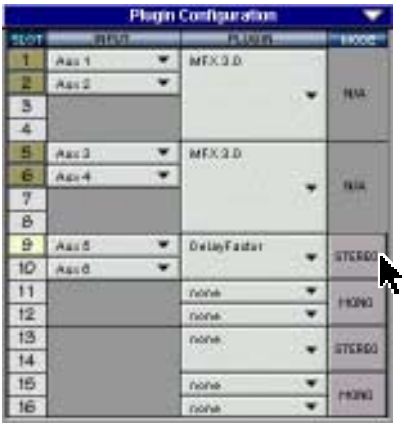
After booting the D8B you must assign the Delay Factor plug-in to a UFX card. See FX Routing on page 27 for more details.

Assign the Plug-in to a UFX card

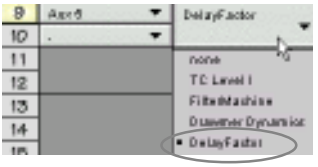
1. Click on the Plugins menu and select **Plugins**, or `Ctrl+P` on the keyboard.

2. In the Plugin Configuration window, locate the card slot that contains the UFX card you wish to assign.

3. In the MODE column, click on the Mono/ Stereo toggle button and set it to **Stereo**.



4. In the PLUGIN column, select **Delay Factor** from the stereo plug-in drop down menu.

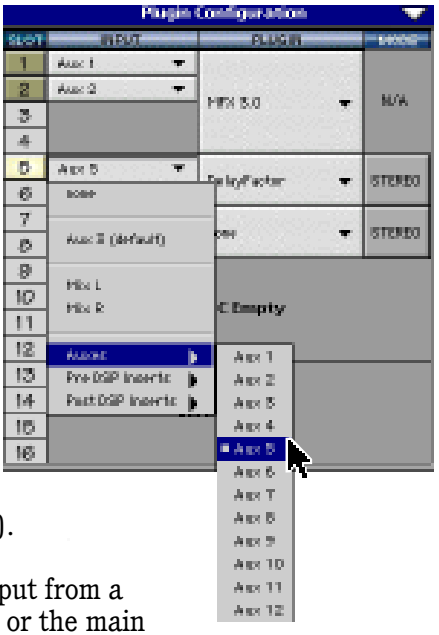


Note: A plug-in can also be loaded from the Setup section on the console.

Assign an Input Source to the Plug-in

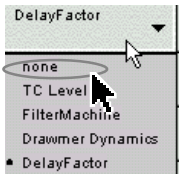
- Click the plug-in's INPUT menu button to select an input source. In the example below, we have chosen the **Aux 5** Bus as the input to the plug-in installed in slot 5.

When a plug-in is fed from an aux bus, its output appears on the FX Return channels (faders in the EFFECTS bank). The return channel is determined by the slot number and whether the effect output is mono or stereo. For example, a reverb with a mono input and stereo output that is installed in Slot 5 has its outputs on FX 5 and FX 6. **Note:** the default state for all FX channels is MUTE. You won't hear the effect until you unmute its FX return channel(s).



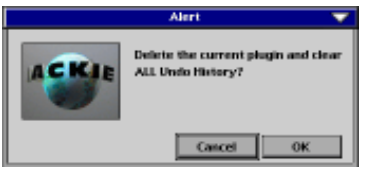
A plug-in can also receive its input from a channel pre- or post-DSP insert or the main stereo left and right bus. When a plug-in is inserted "in line" in this manner, its output is routed directly back into the channel. See FX Routing on page 27 for more details.

Removing the Plug-in



1. Select **none** from the associated plug-in drop-down assignment menu.

2. Click **OK** in the Alert dialog box.

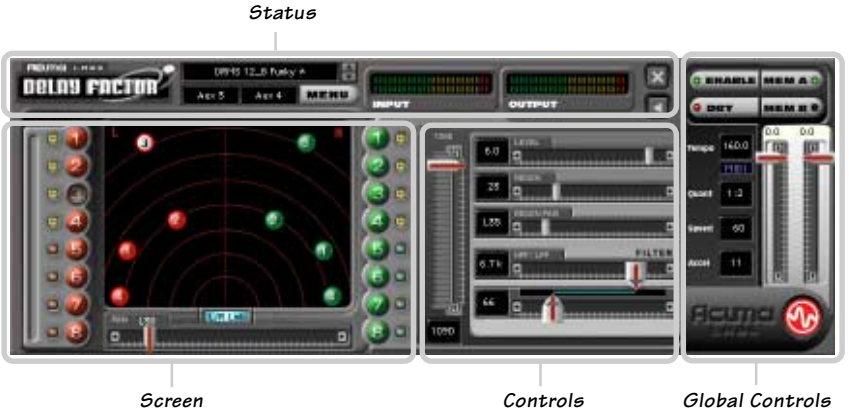


Note: A plug-in can also be deleted from the Setup section on the console.

Using the Delay Factor Plug-in

Front Panel Overview

You can think of Delay Factor as being broken into four blocks, starting at the top of the GUI (Graphic User Interface) and then moving from left to right:



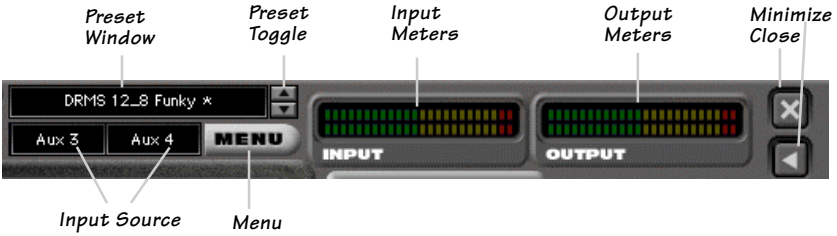
Status Block (see page 11)
The Status block includes the Preset select, Input Assign, Menu button, Input and Output meters, and the Minimize and Close buttons.

Screen Block (see page 13)
The Screen block includes: tap select buttons, the main Screen, mutes, Left/Right Link button, and Pan slider.

Controls Block (see page 15)
The Controls block includes the Time slider, Level slider, Regen slider, Regen Pan slider, and the High/Low pass filter sliders.

Global Controls Block (see page 17)
The Global Controls are located at the far right-hand side of the GUI. These controls include the Enable select button, Dry select button, Memory A and Memory B select buttons, Input gain sliders, and finally the manual tap Tempo button represented by the Acuma logo found at the bottom right hand corner.

Status Block



Factory/User Presets

To open the Factory or User presets, click the Menu button and select **Load Delay Factor**.

Selecting one of the presets will point the Preset Window to the preset folder, enabling you to use the up/down arrows to quickly select from an array of presets. Create and edit your own presets and save them to the User file by selecting **Save as** from the Menu button.

See page 33 for a table describing some of the factory presets available.

As there is no delay in loading presets, you might try building performances by stacking user presets and toggling between them using the up down arrows next to the Preset window.

Input Select

Assign Delay Factor's stereo inputs from any of the D8B's pre, post, or auxiliary channels.

Menu Button

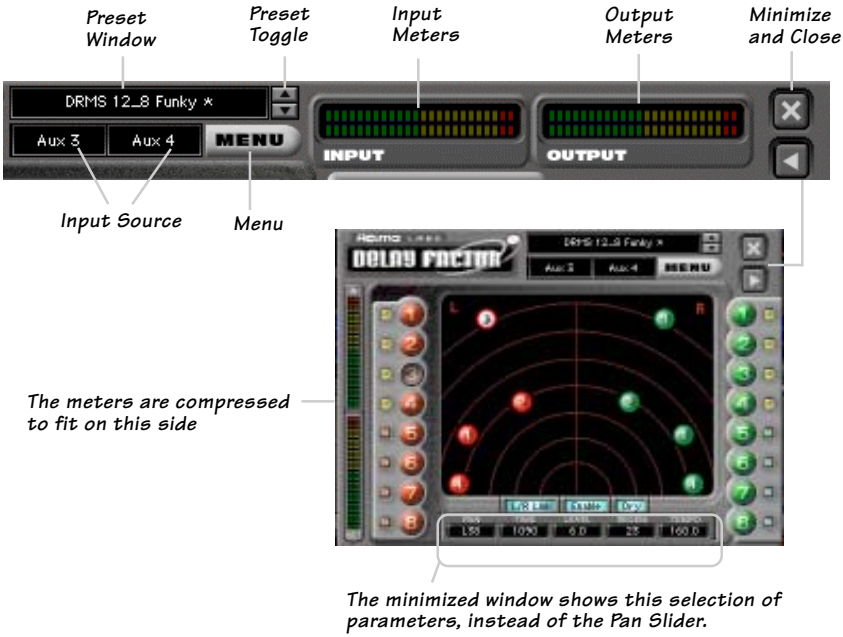
The drop-down menu button enables familiar functions such as undo, redo, load, save, reset, cut, copy and paste.

Input and Output Meters

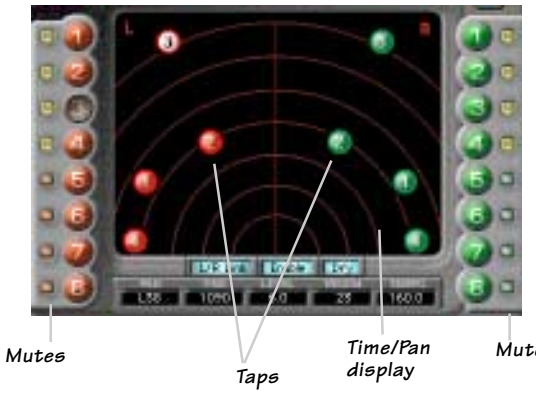
The input meters represent the incoming signal from the D8B as two rows of LEDs. The output meters represent Delay Factor's output. The output levels are controlled by the Master Input Sliders located on the far right-hand side of the GUI.

Minimize and Close Buttons

These buttons will minimize, expand or close the Delay Factor window. The minimized window condenses the various sliders and parameters into an area just below the main display. The parameters can still be adjusted using the mouse over each box. The meters are compressed to the left edge of the minimized window.



Screen Block



Delay Factor Taps

The red and green balls are virtual representations of the sixteen mono taps or eight stereo pairs that can be edited in real time using any control parameter. The ball highlighted by white or yellow represents the currently selected tap. This is a very visual way of keeping track of your time information and serves as a handy reference to give you a quick overview of your edited settings.

The eight red balls on the left take their signal from the left input and the eight green balls on the right take their signal from the right input. Use your mouse to select a tap by clicking on any individual ball at the left or right of the screen. For example, select the #1 red ball on the left-hand side of the screen. You will immediately see the #1 red ball appear on the screen. Using your mouse pointer, grab the ball and drag it around the screen to affect its time and pan. Repeat the same procedure to add additional taps to the mix. Select L/R Link at the bottom of the screen to link a red and a green ball (left and right taps) together as a stereo pair.

Mutes

Each of the taps has an individual Mute button found to the side of its corresponding colored ball. You can use mute to turn individual taps on or off to help you judge their effect on the final mix.

What is a Delay Tap?

One analogy is a water pipe with multiple tap outlets in your home. Water is constantly running through the pipe but each individual tap can choose different amounts of water flow combined with a unique mixture of hot or cold. A Delay tap can control the amount (level) of the tap in addition to other parameters such as pan, time, feedback, etc.

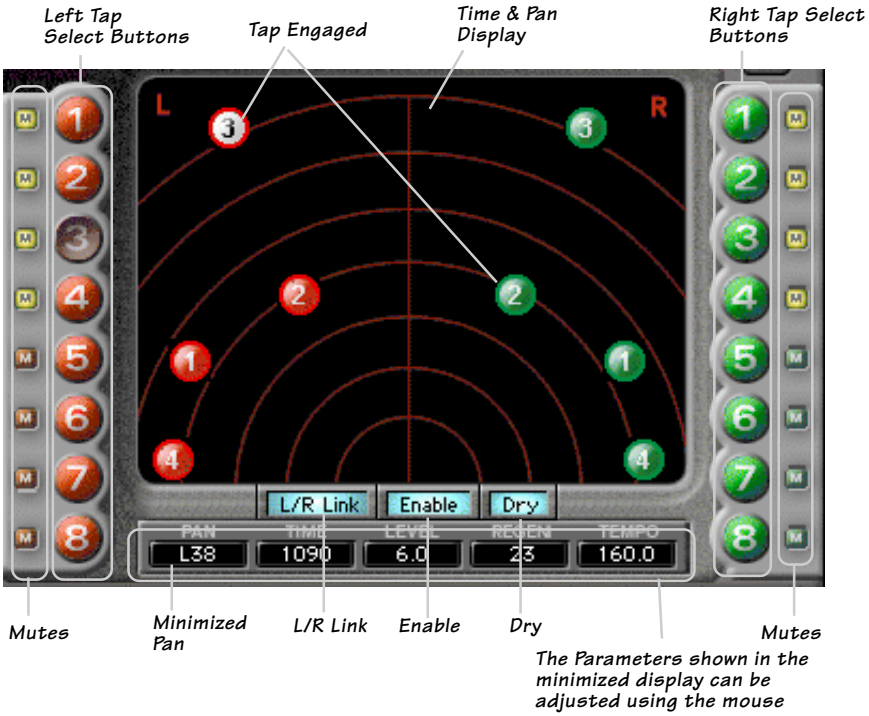
L/R Link

The L/R Link button located at the bottom of the screen will enable the selected taps to be linked in a left/right stereo pattern and simultaneously moved as a group using the mouse pointer.

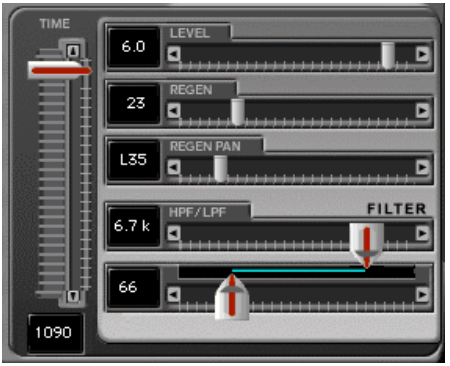
Note: Taps are affected one tap at a time unless the L/R Link is selected. The L/R Link will not take effect until some modification has been made.

Pan Control

The Pan control slider (full display) will enable left/right stereo panning of selected taps. The same action can be achieved by clicking the mouse on a selected tap and moving it to the left or right. In the minimized display, you can mouse over the small PAN box at the bottom of the screen.



Controls Block



Master Time Slider

This vertical slider controls the time of a selected tap. It is measured in milliseconds, with a maximum range of 1105mS. Playing a signal through a short delay (15-100 milliseconds) creates a thicker *doubling* or *unison* sound as if two tracks of sound were played at the same time. Using a longer time delay dramatically changes the result of the effect.

Level Control

The horizontal level control slider determines the effect level of any selected tap, and it ranges from off (fully left) to +12 dB (fully right).

Ganging

Clicking on the word LEVEL, or any parameter name such as REGEN, REGEN PAN, or HPF/LPF, causes the letters to turn yellow and allows the parameter settings to apply to all selected taps. For example, if taps 1,2 and 3 have level values of +3.0 dB, –3.0 dB, and +4.0 dB, clicking on LEVEL and moving the Level slider to +12 dB will change all tap levels to +12 dB.

The ganged state of any given parameter will not take effect until some modification or movement has been made.

Regen

Regeneration or feedback, refers to the amount of signal fed from the outputs back into the inputs. The Regen is off when the slider is placed to the far left, and is 100% when the slider is placed to the far right.

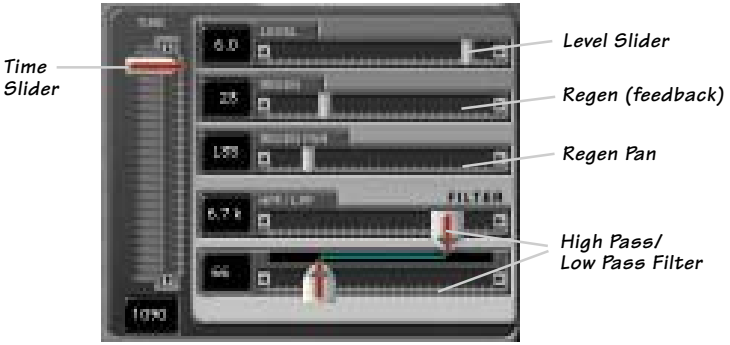
Regen Pan

As with the main pan control in the tap window, Regen Pan can be assigned to any of the 16 individual taps, allowing you to control which delay line (left or right) the regeneration feeds back in to. This is useful, for instance, for creating ping-pong delays. The Regen Pan ranges from -50 (hard left) to +50 (hard right). **Note:** If the Regen is turned to 0, this control has no effect.

High Pass/Low Pass Filters

The High-Pass (low cut) and Low-Pass (high cut) sliders act as an intuitive and graphic representation of HP/LP filters, showing how they work and how they reduce or eliminate frequencies below a set cutoff. The blue line represents the area in which frequencies are passed. The frequency range is from 20 to 20.2 kHz.

Tip: Using the HP/LP filters is a great way to EQ out the boomy sounding bottom end and/or excessive brightness that is often associated with regeneration.



Global Controls Block

Enable select

Selecting the ENABLE button will turn all taps on or off.

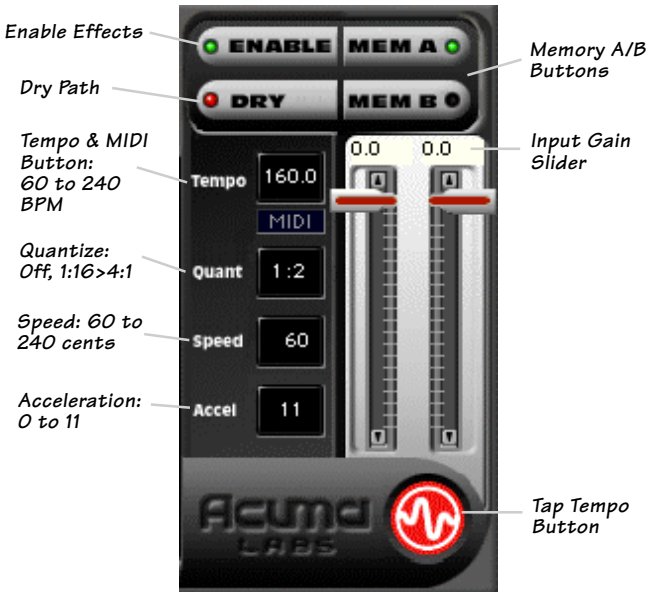
Dry select

The DRY button will turn the dry unaffected signal on or off. It can also be combined with the affected signal if you have selected an insert from Delay Factor's Input select.

Note: If you are using Aux routings, DO NOT use the Dry select. A good thing to remember is that you do not want to use two sources of dry signal with digital equipment as the sampled frames will not line up resulting in unwanted delay or comb filtering

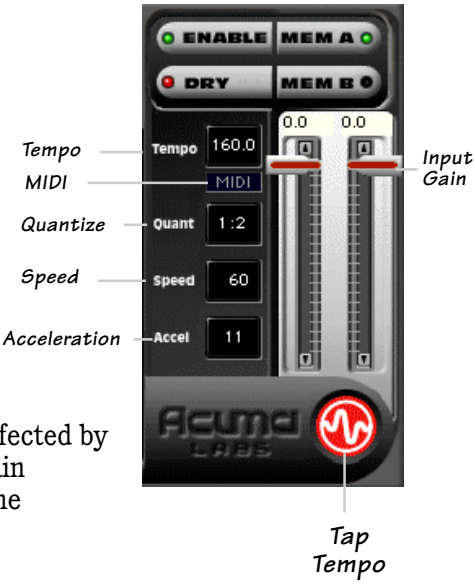
Memory A/B

Memory A and Memory B are two separate storage banks that let you temporarily store Delay Factor control set-ups. This is handy for quickly referencing and comparing sounds while you are creating edits.



Input Gain Sliders

These vertical sliders range from off to 0 dB in 0.5 dB steps and are ***pre-effect***, controlling the amount of signal that is being sent into Delay Factor. The sliders ***DO NOT*** affect the input meters, because they come after the meters in the signal chain. The input meters are metering the input signals that have been routed from the D8B. The effect output is affected by a combination of these Input Gain sliders and the Level slider in the Controls block.



Tempo

The Tempo box displays the current BPM (beats per minute) and can be adjusted by clicking and dragging the mouse pointer over the box to increase or decrease the overall tempo. The range is 60 to 240 beats per minute.

The Tempo display is also linked to the flashing red Acuma logo, which is the manual Tap Tempo control. You can insert the exact BPM of your program, or manually input the beat using your mouse pointer to tap the rhythm on the flashing Acuma logo. The value of your taps will be displayed in the Tempo display.

If you are satisfied with the timing, you can lock or unlock the tempo using the right mouse button to click on the red Acuma logo. It will stop flashing once lock is selected. Resyncing the tempo (the setting where beat one is placed) is achieved with one left tap of the mouse on the correct beat while in either the tempo lock or unlock position.

If you are unsatisfied with the timing, you can simply start over again by unlocking the current tempo (right mouse click) and tapping the left mouse button more than once to calculate a new tempo.

Tempo = Rate + Position

Tempo has two main characteristics, the tempo rate and the position of the beats. The time interval between beats is the rate. The position or placement of the beats is best described by the classic band question; "where's one?" Or if you've ever had the pleasure of turning the beat around while playing with a drum machine, you'll know what we mean.

MIDI

The MIDI button lets you sync Delay Factor to MIDI values that are set within the Setup/Locate window of the D8B software. See the D8B manual for more details.

Quantize

The Quantize command rounds the times of the taps to the nearest specified time interval. Set a Quantization amount to whole, half, quarter, sixteenth notes, triplets, 5/4, etc. This function is very useful for correcting timing errors in your taps and finding just the right groove.

Speed

This global command allows you to control the speed of the taps to fine-tune the effect that you want. Create everything from a real fast forward sound to a slower smooth transition. Speed is calibrated in cents (1/100th of a semitone) so you can keep the delay in tune while it changes. For instance, 1200 cents is 1 octave. This control (and Acceleration) only takes effect when you change a tap's delay time (by dragging it in the window, adjusting the time slider, or by using the d8b's automation).

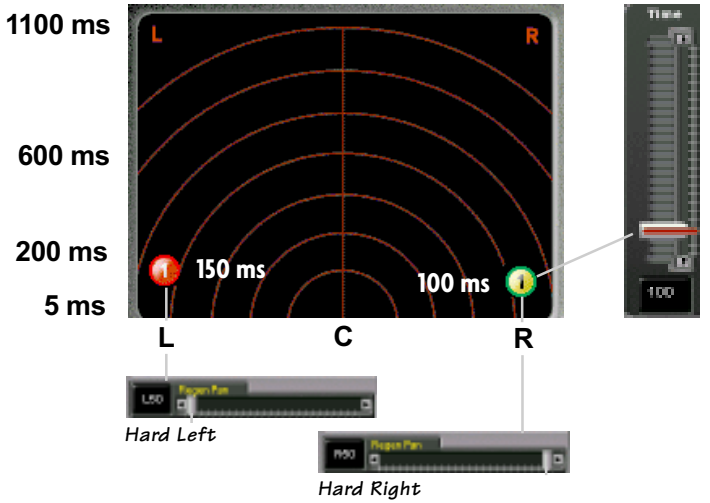
Acceleration

Acceleration refers to the speed at which the effect "ramps up" or comes in to play. Use this in conjunction with the Speed parameter for the ultimate control of your taps. The range is from 0 to 11, with 11 being the fastest acceleration.

Sample Setups

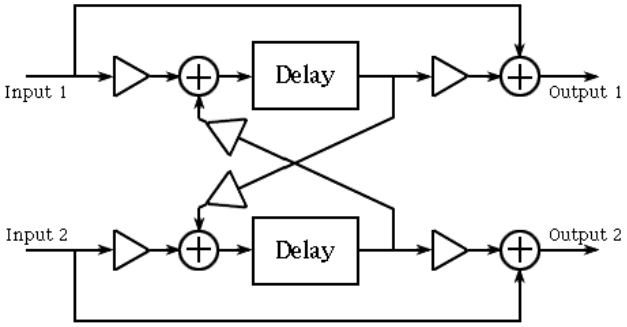
Basic Stereo Delay

Probably the most commonly used type of delay is the simple stereo delay. Applied to your source, it can create a “bigger” sound and enhance your mix by spreading out tracks in the stereo field. Properly applied stereo delays often have more effect on your mix than simple panning. The level for the following example is set at +12 with the Regen Pan set to hard left and hard right.

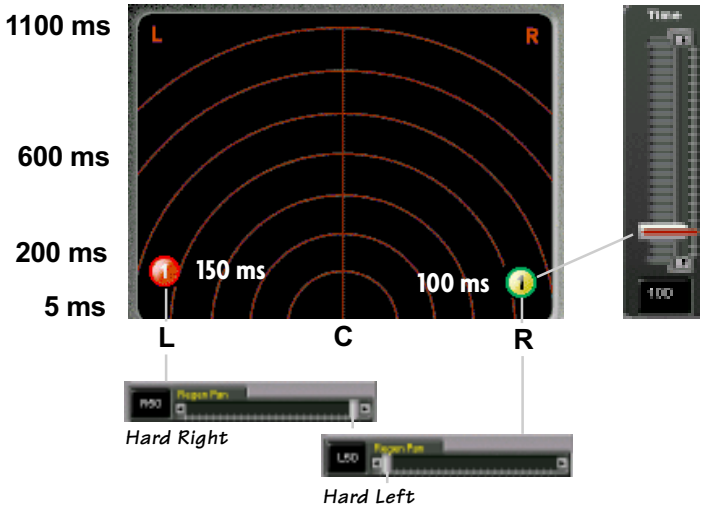


Ping-Pong Delay

A ping pong delay produces a bouncing effect that alternates between the hard left and hard right channels of the stereo signal. Rather than regenerating the output back into itself, the two separate delays feed their signals into the others' input.

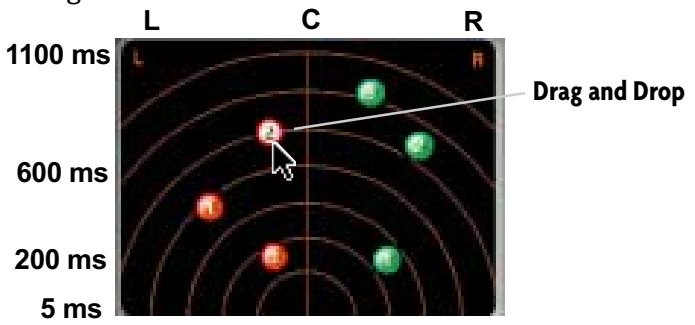


The settings for this example are exactly the same as the stereo delay shown previously, but have the Regen Pans switched: left delay to hard right, and right delay to hard left.



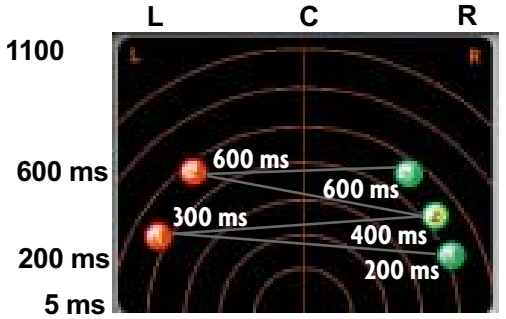
Multi-Tap Delay

Outputs taken from points within the delay line are referred to as ‘taps’. Delay Factor has 16 independent multi taps that allow individual control of regeneration, pan, time, and high and low pass filtering. Simply choose a tap from the selects on the left or right hand side of the screen and ‘drag and drop’ taps into any desired configuration to create a multitude of unique delay settings.



Polyrhythmic Delay

Polyrhythmic delays can add rhythmic qualities to your track that allow you to create more complex patterns. Polyrhythmic patterns are two beats that are lined up but are periodically unrelated. Using this effect can create interesting and unusual results. In this example, we have selected two taps on the left that are set at 300ms and 600ms. The selected taps on the right represent a rhythmic triplet that interacts with the selected taps on the left to create a polyrhythmic delay.



Note: Regen is off but the filters can be adjusted to any setting.

Saving, Loading and Resetting a Preset

Delay Factor settings can be saved and recalled from the hard drive. You can save and load files from either Memory A or Memory B.

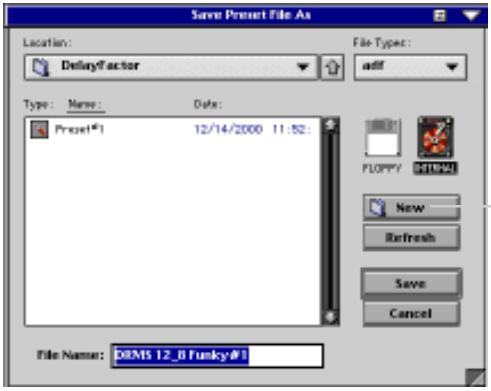
To Save a Preset:

1. Click and hold the MENU button.

2. Select **Save User Preset** to overwrite the file currently opened.

3. Select **Save User Preset As** to save to a new file name. The Save Preset File As dialog box now appears.

4. A default name for the preset is automatically displayed, such as Preset#1. If you want to rename it, simply type in the name you want, using up to 32 characters.



A new sub folder can be easily created to help organize custom patches.

5. Select INTERNAL (default hard drive) or FLOPPY.

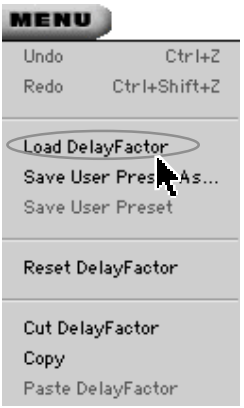
6. Click **Save** to complete the operation.

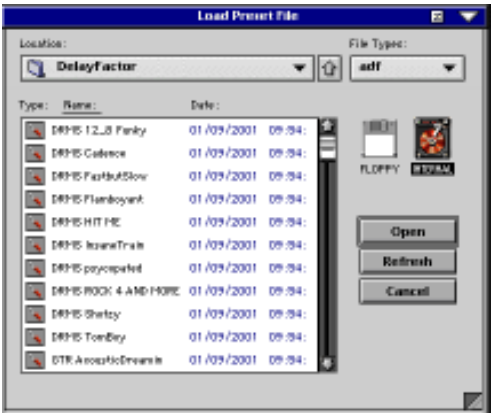
To Load a Preset:

1. Click on MEM A or MEM B to choose the memory location from which to load the file.

2. Click and hold on the MENU button.

3. Select **Load Delay Factor** to open a file. The Load Preset File dialog box appears.





4. Click INTERNAL if the file is on the internal drive, or click FLOPPY if the file is on a floppy disk.

5. Select the preset you want to load.

6. Click **Open** to load the selected preset.

Note: Presets can also be downloaded from www.acumalabs.com, then saved to a floppy disk and loaded onto the D8B.

To Reset the Plug-in:

Reset will reload the previous patch.

1. Click and hold the MENU button.
2. Select **Reset Delay Factor**

To Cut Preset Settings:

1. Click and hold the MENU button.
2. Select **Cut Delay Factor**

The current settings are temporarily stored in the clipboard memory in case you want to paste them to a new preset. The plug-in also reverts to its default state (it is reset).

To Copy Preset Settings:

1. Click and hold the MENU button.
2. Select **Copy**.

The current settings are temporarily stored in the clipboard memory in case you want to paste them to a new preset.

To Paste Preset Settings:

1. Click and hold the MENU button.
2. Select **Paste Delay Factor**

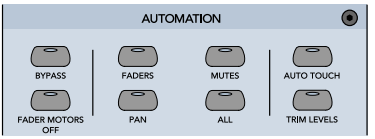
The current settings are replaced with the settings in the clipboard memory.

Automation and Snapshot Control

Dynamic Real Time

To write automation on a loaded plug-in:

On The Console



1. Engage AUTO TOUCH.
2. Engage ALL, disengage BYPASS, and send timecode to the console – the POSITION readout will change to show TC is being received.
3. Move a parameter or recall a patch (user or factory preset).

Subsequent edits to any recorded automation moves may be performed in the Mix Editor. Enable the channel view by clicking on the Channel View button, then choose the plug-in you wish to view from the page drop-down menu.This will display a list of available channel and plug-in automation tracks on a parameter basis.

Note: Parameters can be controlled from either the GUI plug-in graphic parameters (using a mouse to modify the parameters) or via the VFD V-Pots and SELECT buttons (with the plug-in parameters called up on the VFD readout).

Dynamic Off-line

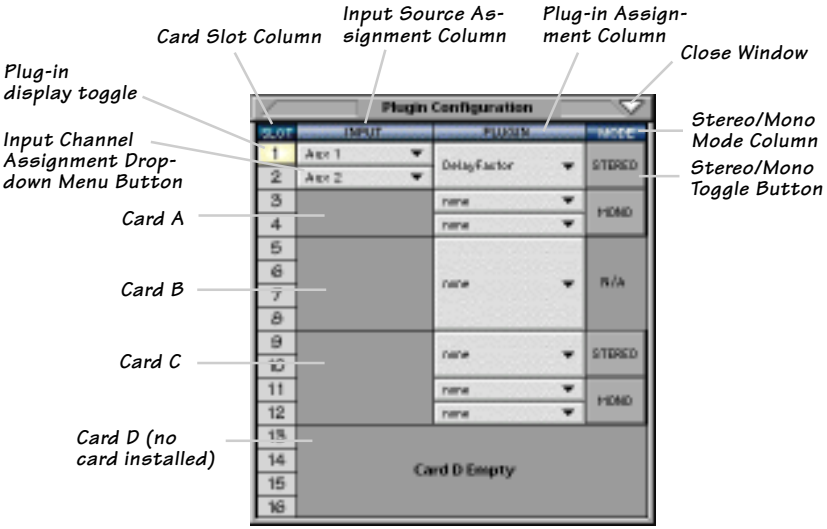
To write a snapshot on a loaded plug-in:

- Use the Event Automation Track, available under the Window Menu as 'Event Track', to load plug-in user (previously stored) or factory preset patches, at a specific time during automation playback.

General Note:
Plug-in settings are recalled as part of a console Snapshot, but may also be recalled as Presets (patches). If you are recalling snapshots and presets, be aware that one may override the other.

FX Routing

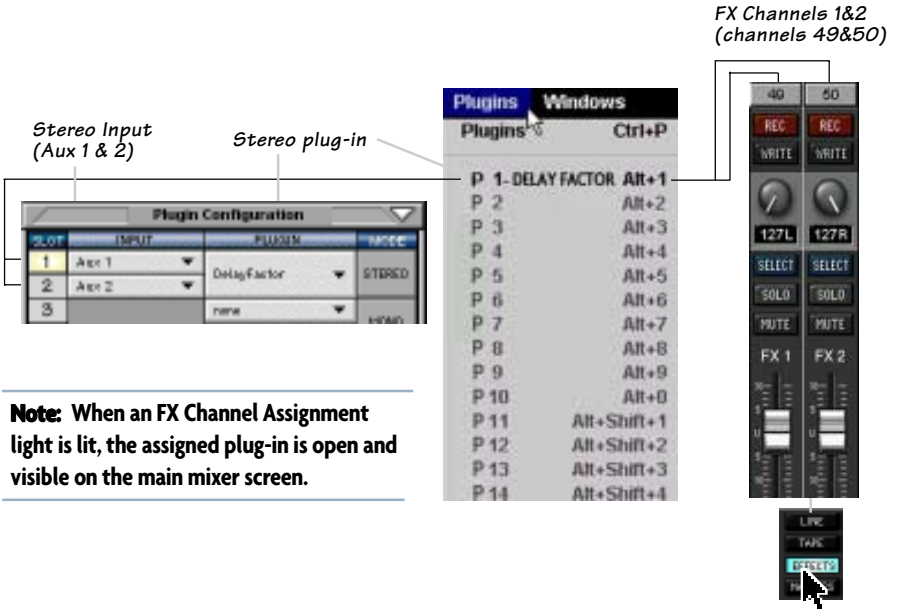
The Plugin Configuration Window



Stereo Plug-in Routing

If the plug-in has a stereo input as well as stereo output, typically it will be fed from two aux buses and returned to a pair of FX return channels. In the diagram below, Aux 1 and Aux 2 feed the plug-in in stereo, and its output is returned to FX 1 and FX 2.

If the plug-in has a stereo input, it is permissible to send the same aux bus to both inputs.

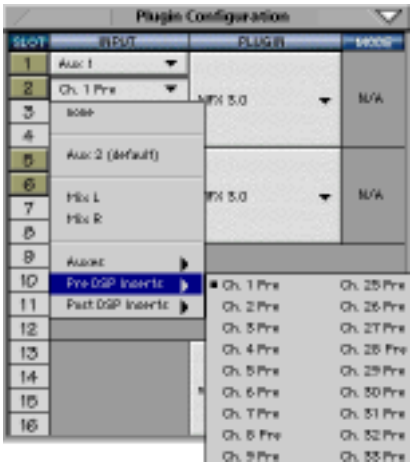


Note: When an FX Channel Assignment light is lit, the assigned plug-in is open and visible on the main mixer screen.

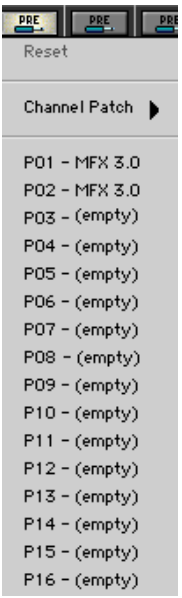
Inserting a Plug-in into a Channel

A pre- or post-DSP channel insert can also be used as the input source for a plug-in. When a channel insert point is selected, the plug-in output returns to the channel. The FX return path is disconnected, although the plug-in output is still displayed on the FX return channel meter.

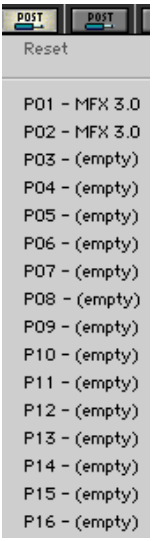
A plug-in channel insert assignment can be made from the plug-in Configuration window, or from a drop-down menu from the mixer screen.



Plug-in Configuration Window



Pre-DSP Drop-down

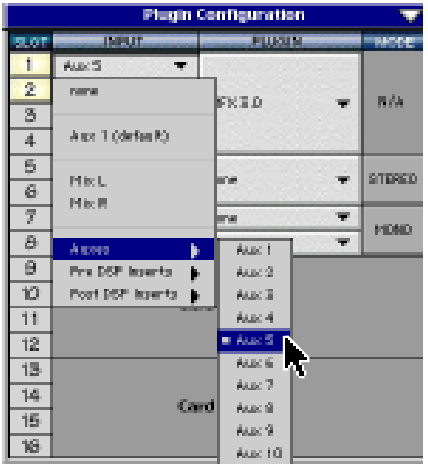


Post-DSP Drop-down

This assignment can also be made from the control surface and VFD by holding in the desired channel's SELECT button for two seconds, then paging over to Plug Pre or Plug Post, selecting the input source, then selecting the desired plug-in slot from the follow-on menu.

Using an Aux Send with a Plug-in

- Click on the associated INPUT menu button and select an aux input source. In the example below, we have chosen the **Aux 5** Bus.

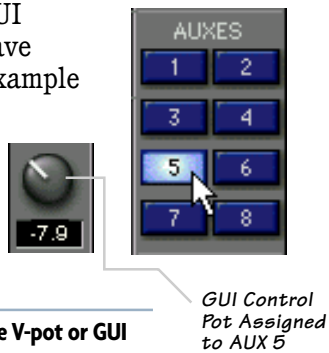


Send the Input Signal to the Aux Bus

1. Send a signal to a D8B mixer input channel (MIC/LINE or TAPE IN).

2. Assign the input channel V-Pot/GUI Control Pot to an aux send. We have chosen **AUX 5** according to the example above.

3. Use the **AUX 5** control to adjust the input level to the plug-in.



GUI Control Pot Assigned to AUX 5

VERY IMPORTANT

Remember to select an aux send before using the V-pot or GUI Control Pot on the mixer input channel (MIC/LINE or TAPE IN).

You will see the plug-in's input meter become active as you raise the mixer input channel's aux send.

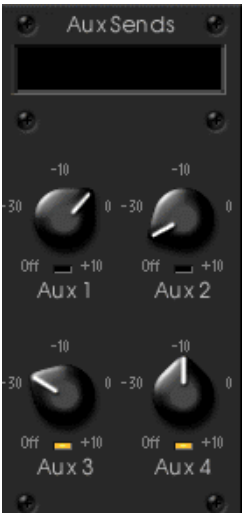
Set the plug-in input/output signal levels as you would with any effect, so the meter reaches its upper-most range every so often (always trust your ears first). This can be accomplished from the console or GUI.

Pre-Fader and Post-Fader Auxiliary Sends

Normally, effect sends are post-fader, so the signal sent to the effect follows the program level in the mix. Occasionally you may wish to feed an effect from a pre-fader source so that the signal level from the Aux control is independent of the channel fader position. Aux sends are selectable pre- or post-fader globally (all Aux 1's for instance) from the Mix Options screen in the Setup window, or individually on a channel-by-channel basis either from the channel strip or the Fat Channel.

In the channel strip, Alt-click on the Aux Send level indicator to toggle between pre-and post-fader operation. Post-fader is indicated by a red bar, pre-fader is indicated by a yellow bar.

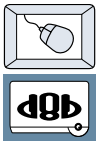
Channel Strip



Fat Channel

In the Fat Channel, clicking on the small indicators below the Aux knobs toggles between pre- and post-fader operation. Yellow indicates pre-fader, post-fader is indicated by the background color.

The FX Return Channel



- Switch the D8B Bank Select to **EFFECTS (49-72)** and bring up faders one and two (channels 49 and 50). You will also see meter activity associated with these channels.

FX Channels 1&2 (channels 49&50)

Stereo plug-in

The Plug button toggles between Windows menu buttons and FX buttons (lower left on the D8B mixer screen).

Plugins button opens the Patch Configuration window (or Ctrl+P on the keyboard)

Here the Delay Factor Plug-in is selected for display.

Factory Presets

The following table is a simple guideline to help you understand the factory presets, and which type of source file was applied to the individual presets. But don't be afraid to run anything through the plug-in preset and customize the parameters to your specific needs, and save it as a user preset. So, get creative and have fun!

You can visit www.acumalabs.com periodically to download more presets.

Drums

Preset Name	Source Sound	Notes
FastButSlow	Snare	Single Shot snare
100 ms Ping Pong	Snare	Single Shot snare
200 ms Ping Pong	Snare	Single Shot snare
300 ms Ping Pong	Snare	Single Shot snare
400 ms Ping Pong	Snare	Single Shot snare
500 ms Ping Pong	Snare	Single Shot snare
500 ms Hard Roll Off	Snare	Single Shot snare
90bpm Whole	Snare	Single Shot snare
90bpm Half	Snare	Single Shot snare
90bpm Quarter	Snare	Single Shot snare
90bpm Eighth	Snare	Single Shot snare
90bpm Triplet	Snare	Single Shot snare
120bpm Whole	Snare	Single Shot snare
120bpm Half	Snare	Single Shot snare
120bpm Quarter	Snare	Single Shot snare
120bpm Eighth	Snare	Single Shot snare
120 Triplet	Snare	Single Shot snare
Doubler	Snare	Single Shot snare
130bpm Whole	Snare	Single Shot snare
130bpm Half	Snare	Single Shot snare
130bpm Quarter	Snare	Single Shot snare
130bpm 8th	Snare	Single Shot snare
130bpm Triplet	Snare	Single Shot snare
Doubler	Snare	Single Shot snare
Mono tape Delay	Snare	Single Shot snare
Flamboyant	Snare	Single Shot snare
Sammy D	Snare	Single Shot snare
Stutter Shotz	Snare	Single Shot snare
Tripped Up	Snare	Single Shot snare
Soft Shoe	Snare	Single Shot snare
Whack It	Snare	Single Shot snare

Continued over..

Drums continued

Preset Name	Source Sound	Notes
Cadence	Snare	Single Shot snare
Psycopated	Snare	Single Shot snare
Hit Me	Snare	Single Shot snare
Shotzy	Snare	Single Shot snare
Tom Boy	Toms	Use Slow Tom fill 60 BPM
12_8 funky	Full Kit	Full Kit/ Slow 12/8 or 6/8 160BPM
Insane Train	Full Kit	Full Kit/ shuffle Train beat 190BPM
Rock4 And More	Full Kit	Full Kit/ Straight 4 Rock beat 120BPM

Guitar

Preset Name	Source Sound	Notes
Say What?	Electric	Good for repeating chord shots
AutoStrum	Electric	Use with electric using one strum to create many
PongDexter	Electric	Good for repeating chord shots
Grit Pong	Electric	Great with Distortion Guitar
PongBoy	Electric	Cool Ping pong
MarchingHome	Electric	Single hit gives a marching cadence effect
WannaPoly	Electric	Like a parrot it repeats everything you play
SlowPicken	Electric	Like a slow auto finger picking
QuickPickin	Electric	Look out Chicken Pickers
AutoStrum	Electric	Play one stroke of a chord, it does the rest!
Medium Pickin	Electric	Adds richness to medium tempo finger picking
So and So	Electric	50s Style short delay
CopyCat	Electric	It loves to play what ever you do.
Poly Hit	Electric	One shot is many
Laid To The Side	Electric	Great effect that throw the delay to one side
Stage Acoustic	Acoustic	Live, bright sounding acoustic guitar
One More Beer	Acoustic	Live, bright sounding acoustic guitar
Great Big Sea	Acoustic	Live, bright sounding acoustic guitar
Cave Dweller	Acoustic	Live, bright sounding acoustic guitar
AcoustiKat	Acoustic	Live, bright sounding acoustic guitar
Quick Strum	Electric	Try it with uptempo rhythm guitar
Acoustic Dreamin	Acoustic	Big rich acoustic sound

Keys

Preset Name	Source Sound	Notes
SOS Strings	JV80- B15	Use with Strings or sustaining sounds using a quick attack for pulsating effects
Medium Pong	JV80- B12	Use with quick attack voices for a Medium Ping Pong effect.
Quick Pong	JV80- B12	Use with quick attack voices- Single notes for quick bouncy ping pong delay
SlowPong	JV80- B11	Use with quick attack voices Single notes: for slow Ping Pong effect.
String Pulse	JV80- B25	Use with slow strings and quick attack for pulsing sustain.
OrchestraStab	JV80- B25	Use a quick attack with slow patches such as Strings for pulsating effect.

Full Mix

Preset Name	Source Sound	Notes
Stand In My Shoes	MP3	For cool rhythm effect,
Stay Together	MP3	Imaging Stereo delay effect used with easy tempos 80-100 BPM.
Body Movin	MP3	
Growth	MP3	Imaging Stereo delay effect used with Dance tempos 130-140 BPM.
All The Love	MP3	Imaging Stereo delay effect used with All the Love MP3.

Vocals

Preset Name	Source Sound	Notes
Chesnuts	Vocals	
Stand Up Chris	Vocals	
Love Is 4	Vocals	
Oooo Too	Vocals	
Oooo	Vocals	
Tupalo	Vocals	
Chant	Vocals	
Love Is 5	Vocals	
Bass Voice	Vocals	
More Me	Vocals	
Cone Head	Vocals	
Chant Again	Vocals	

Part No. 820-249-00 Rev. A 02/2001