**Acuma** ™
LABS

# Filter Machine™

*Intuitive, Powerful, Sweeping Filter Effects*

*Plug-in for Mackie Digital Mixers*

**MACKIE.®**
*Digital Systems*™

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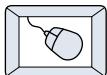
This icon identifies a description of how to perform an action with the mouse.

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.

# 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 Filter Machine, the ultimate in Filter Effects 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.

Filter Machine is a dedicated software plug-in that creates a multitude of classic *analog styled,* 4 pole filter effects utilizing stereo ins and stereo outs. 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 lets you move/edit filters in real time, you will soon realize that Filter Machine 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.

VERY IMPORTANT

**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 Filter Machine

The Filter Machine 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 26) in mono, stereo, or surround panning applications (using surround bus assignments). Each of the two input signals can have up to 8 filters working on it at a time. Filter Machine uses a series of red and green colored balls (8 left and 8 right) to represent a total of sixteen fully functional mono filters. You can drag and drop each filter in real time to adjust pan (horizontal movement) and frequency (vertical movement), or link filters together as a moveable group. Additionally, pan modulation, frequency modulation, and high and low pass filtering can be added to any selected filter or group of filters.

Filtering and panning effects can be fine tuned using the low-frequency oscillator (LFO) control block. This utilizes preset waveforms and envelope followers with adjustable rate, depth, volume and phase.

Global controls include Tap Tempo, Attack, Effect Input levels, Dry Enable, and Effect Enable. Filter Machine lets you save your edits as presets and toggle between Memory A and B for quick comparison.

As with all of the D8B plug-ins, Filter Machine 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.



*An Unlocked plug-in*

*AUTHORIZE*

**1234-5167-89D1**

*LICENSING*

*D8B Electronic Serial Number (ESN)*

*D8B SETUP screen's LICENSING window*
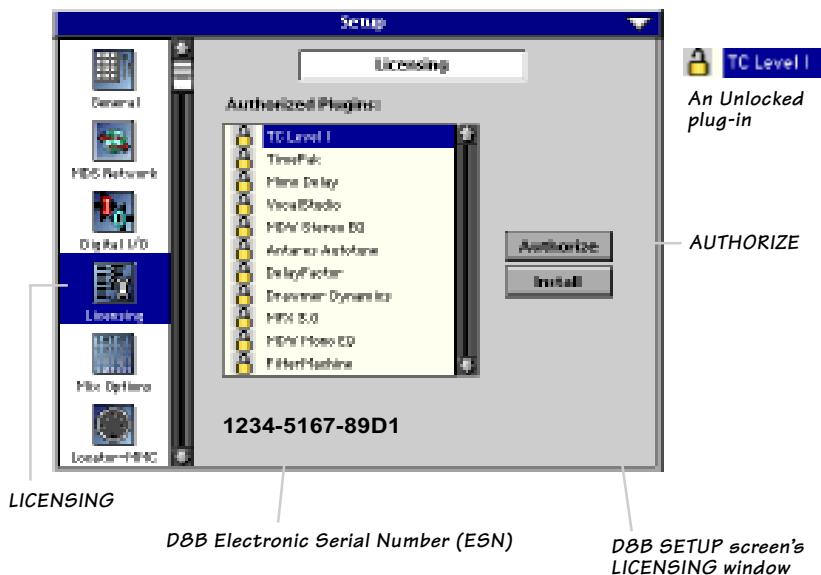
## Unlock Procedure

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.
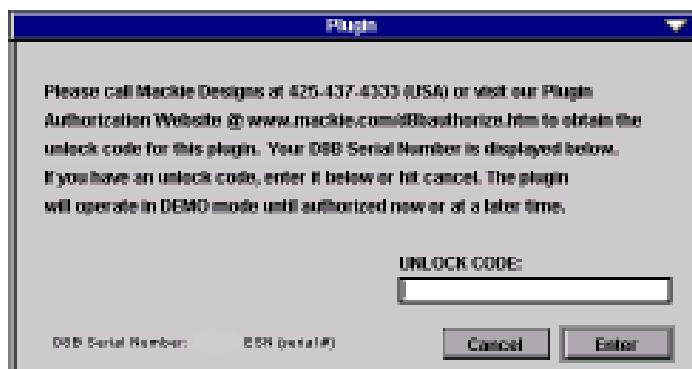
## Configuring the Plug-in

After booting the D8B, you must assign the Filter Machine plug-in to a UFX card. See FX Routing on page 26 for more details.

### Assign the Plug-in to a UFX card

1. Click on the plug-ins 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 to.

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

4. In the PLUGIN column, select **Filter Machine** from the drop-down menu.
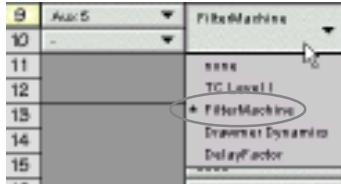
**Note:** A plug-in can also be loaded from the Setup section on the console.

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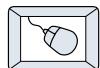
• Click the plug-in's INPUT menu button to select an input source. In the example below, we have chosen the **Aux 5** Bus as the input to the plug-in installed in slot 5.

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).
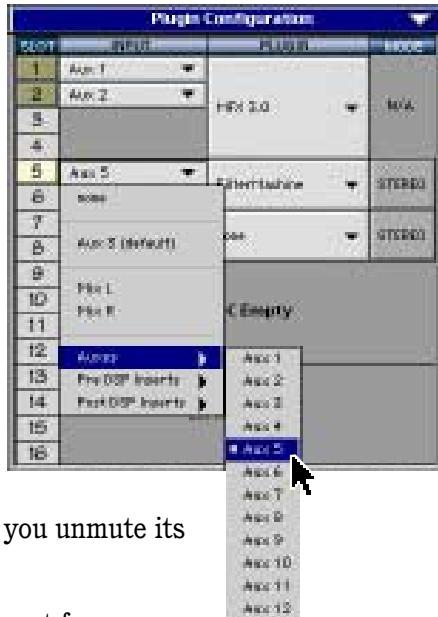
A plug-in can also receive its input from a channel pre- or post-DSP insert or the main stereo left and right Bus. When a plug-in is inserted "in line" in this manner, its output is routed directly back into the channel. See FX Routing on page 26 for more details.

### Removing the Plug-in
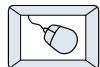
1. Select **none** from the associated Plugin drop-down assignment menu.

2. Click **OK** in the Alert dialog box.
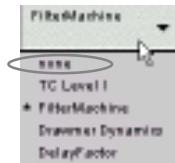
**Note: A plug-in can also be deleted from the Setup section on the console.**

# Using the Filter Machine plug-in

## Front Panel Overview

You can think of Filter Machine as being broken into four blocks, starting at the top of the GUI (Graphic User Interface) and then moving from left to the right:
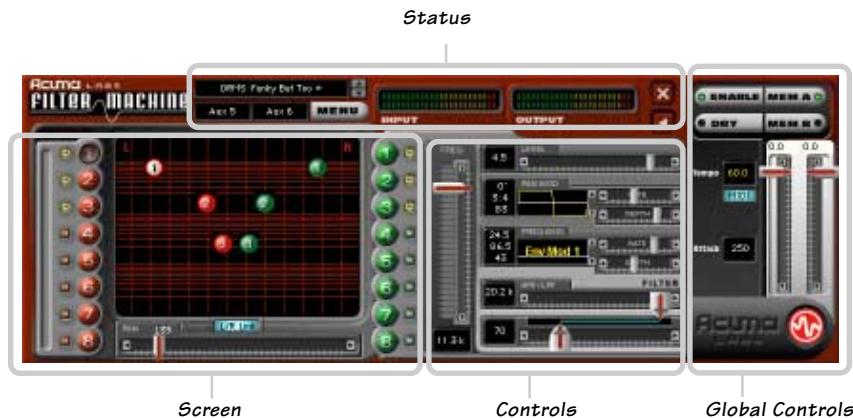
### Status Block (see page 11)
The Status block includes the Patch/Preset select, Input Assign, Menu button, Input and Output meters, and the Minimize and Close buttons.

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

### Controls Block (see page 15)
The Controls block includes the Frequency Slider, Level Slider, Pan Modulation Frequency Modulation, Phase adjust, Low Pass and High Pass filters.

### Global Controls Block (see page 19)
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



Preset Window

Input Meters

Output Meters

Simplify/ Close

Input Select
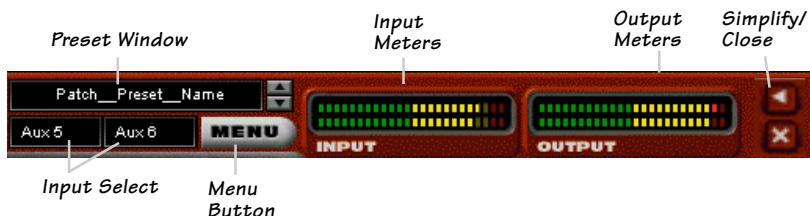
Menu Button

### Factory/User Presets

Click the Menu button to open Filter Machine's Factory or User presets, then select **Load Filter Machine** from the drop-down menu.

Selecting one of the presets will point the Preset Window to the Factory preset folder, enabling you to toggle the up/down arrows to 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.



**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.**

A CLOSER LOOK

### Input Select

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

### Menu Button

This button enables familiar functions such as undo, redo, load, save, reset, cut, copy and paste.

### Input and Output Meters

The input meters show the level of the incoming signals from the D8B and are displayed by two rows of LEDs. The output meters represent Filter Machine'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 will minimize, expand or close the Filter Machine 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.



*Preset Window*

*Input Meters*

*Output Meters*

*Minimize/ Close*

*Input Select*

*Menu Button*

*The meters are compressed to fit on this side*

*The minimized display shows this selection of parameters, instead of the Pan Slider.*

## Screen Block



Freq/Pan
display

Mutes

filters

Mutes
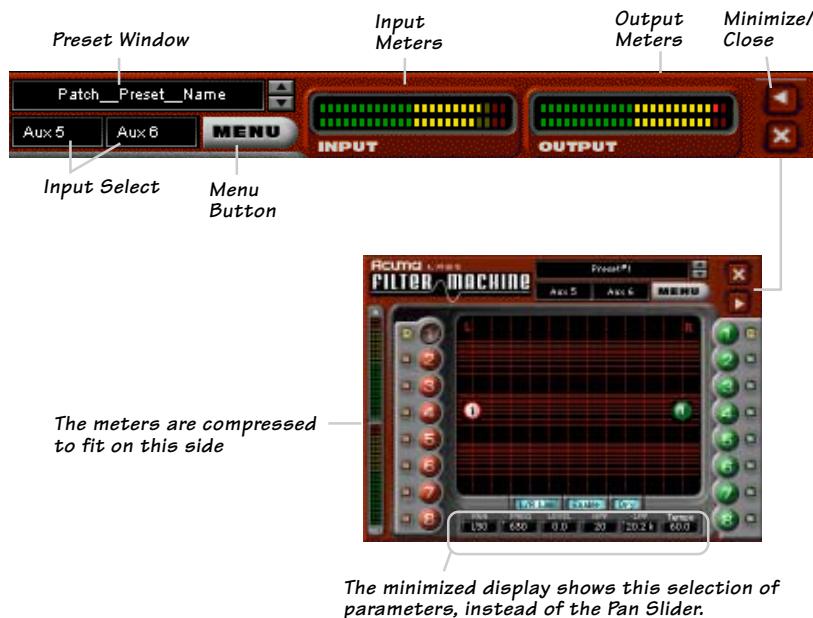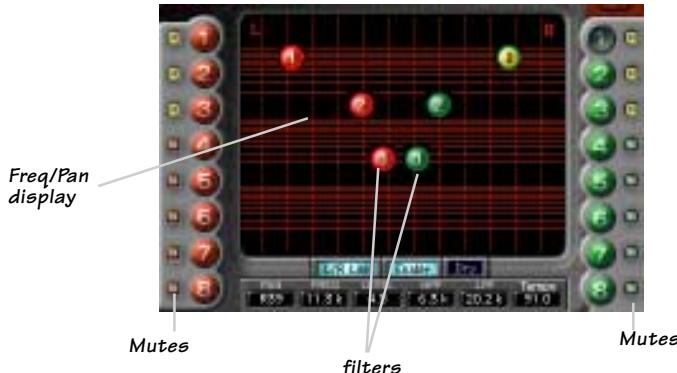
### Filter Select Buttons

The red and green balls found on either side of the large screen represent the sixteen mono filters or eight stereo pairs. The balls on the screen are virtual representations of individually selected or stereo pairs that can be edited in real time using any control parameter. The ball highlighted by white or yellow represents the currently selected filter. This is a very visual way of keeping track of your 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 filter 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 frequency and pan settings. Repeat the same procedure to add additional filters to the mix. Select L/R Link at the bottom of the screen to link a red and a green ball (left and right filters) together as a stereo pair.

### Mutes

Each of the 16 filters has an individual Mute button found just to the side of its corresponding colored ball. These allow you to turn filters on or off so you can quickly compare their effect.

## L/R Link

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

> **VERY IMPORTANT**
>
> **Note: filters are affected one 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 filters. The same action can be achieved by clicking the mouse on a filter ball 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.
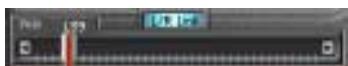


Left Filter Select Buttons    Filter Engaged    Frequency & Pan Display    Right Filter Select Buttons

Mutes    Parameter Value Displays    L/R Link Button    Enable Button    Dry Button    Mutes

**Acuma Filter Machine**

## Controls Block



**Center Frequency Slider**

**Level Slider**

**Rate Controls**

**Depth Controls**

**High Pass/ Low Pass filters**
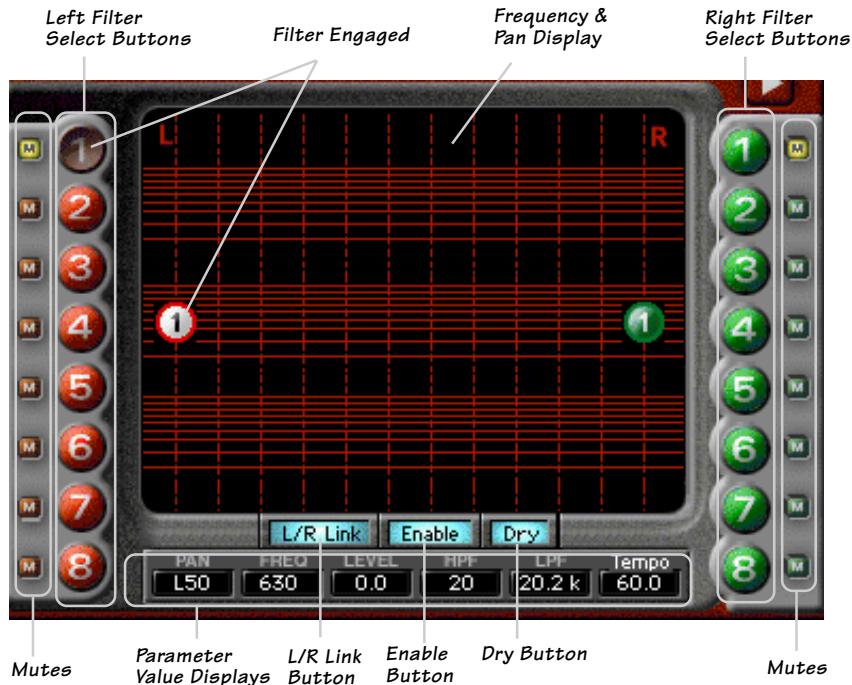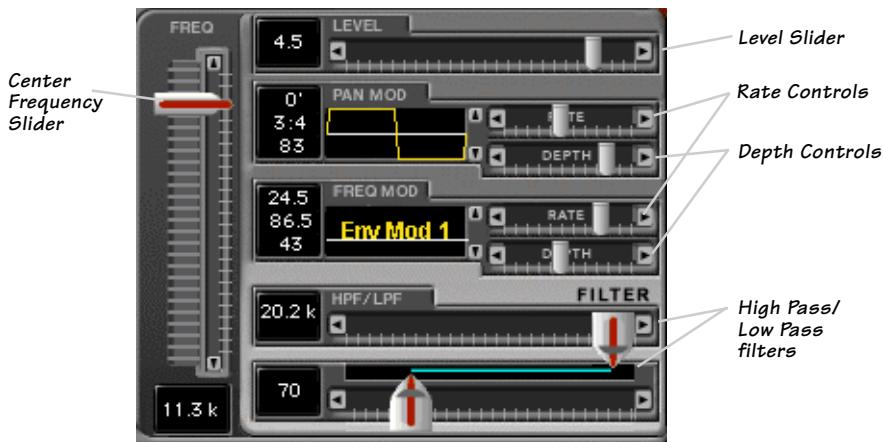
### Frequency Slider
This vertical slider controls the center frequency of the selected filter. It ranges from 20 Hz to 20 kHz (off). When you adjust this slider up or down, you will notice that both the LPF and HPF filters move together.

### Level
This slider determines the effect level of any selected filter and ranges from off (fully left) to +12 dB (fully right).

**VERY IMPORTANT**

**Ganging**
Clicking the word LEVEL, or any parameter name such as PAN MOD, FREQ MOD, or  HPF/LPF, will cause the letters to turn yellow, and allow the parameter settings to apply to all selected filters. For example, if you click on PAN MOD, all filters will be affected by the same pan modulation settings. If filters 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 selected filter levels to +12 dB.

**VERY IMPORTANT**

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

## Pan Modulation

The Pan Modulation control will let you assign preset waveforms to modulate the pan of a selected filter. By clicking the up and down arrows found at the right of the Pan Modulation display, you can choose between graphically illustrated waveform presets representing a variety of sine waves, triangle waves, inverted triangle, square waves and two separate envelope followers.
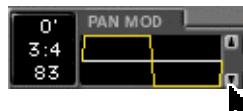
You can also change the phase of a selected waveform by grabbing the graphic with your mouse and moving it to the left or right, placing the modulation in or out of phase. The phase increments are measured in degrees and are represented by the top set of numbers just to the left of the waveform window.

There are two separate envelope followers included in the collection of preset waveforms. Although an envelope follower is not technically a waveform, the regular controls will apply. To control the threshold of Envelope Modulation 1 and 2, use the mouse to grab the horizontal white line that separates the window.

**Note: Envelope Mod 1 shifts the modulation up, while Envelope Mod 2 shifts the modulation down.**

The modulation RATE is controlled with a slider and is measured in beat ratios that are directly linked to the master tempo. The DEPTH of the modulation is also controlled with its own slider and is measured in percent. The block numbers just to the left of the sliders represent the values of the rate and depth sliders.

Clicking the word PAN MOD causes the letters to turn yellow and allows the settings to apply to all selected filters.

## Frequency Modulation

Frequency modulation is a very effective tool that adds modulation or movement to the frequency range of any given filter or group of filters. The up and down arrows will let you choose between presets representing a variety of sine waves, triangle waves, inverted triangle, square waves and two separate envelope followers.

You can change the phase of a selected waveform by grabbing the graphic with your mouse and moving it to the left or right to place the modulation in or out of phase. The phase increments are measured in degrees and are represented by the top set of numbers just to the left of the waveform display.

Two separate envelope followers are included in the collection of preset waveforms. Although an envelope follower is not technically a waveform, the regular controls will apply. To control the threshold of Envelope Modulation 1 and 2, use the mouse to grab the horizontal white line.

The modulation RATE is controlled with a slider and is measured in beat ratios that are directly linked to the master Tempo. The DEPTH of the modulation is also controlled with its own slider and is measured in percent. The block numbers just to the left of the sliders represent the values of rate and depth sliders.
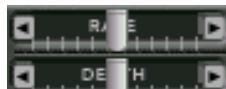
Clicking the word FREQ MOD causes the letters to turn yellow and allows the settings to apply to all selected filters.

**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 20.2kHz.

When a limited frequency range is set, the master Frequency slider provides a very visual example of HP/LP filtering and its relationship to the frequency sweep.

Clicking the word HPF/LPF causes the letters to turn yellow and allows the settings to apply to all selected filters.
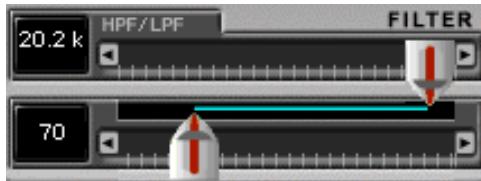
## Global Controls Block

### Enable select
Selecting the ENABLE button turns all filters on or off.

### Dry select
The DRY button turns the dry unaffected signal on or off. It can also be combined with the affected signal if you have selected an insert  from Filter Machine's Input select.

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**VERY IMPORTANT**

**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 un-wanted delay or comb filtering**

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



Enable Effects

Dry Path

Memory A/B Buttons

Tempo

MIDI

Input Gain Slider

Attack

Tap Tempo
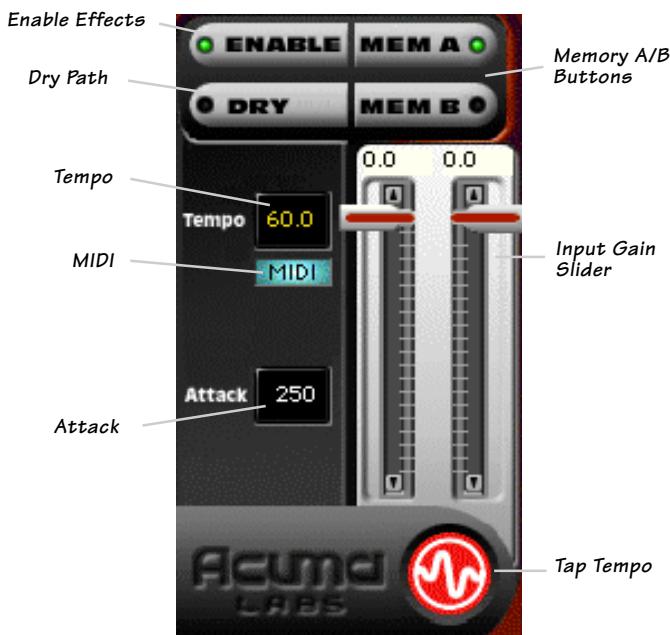
### Input Gain Sliders

The Input Gain sliders range from off, to 0dB in 0.5 dB steps and are *pre-effect*, controlling the amount of signal that is being sent into the Filter Machine. The Input Gain Sliders DO NOT correspond to the input meters because they come after the meters in the signal chain. The input meters are metering the input channels that have been routed from the D8B. The effect output level is affected using a combination of the Input Gain and the Level slider in the Controls block.

### Attack

The Attack display is calibrated in milliseconds and globally modifies the overall speed of the modulators. Attack is subtle. A good way to really hear what it does is to run sound through a square wave in one of the modulators, adjusting the rate to 8:1 and depth to 50. Listen to the changes in the sound as you run the attack from one extreme to another.

### Tempo

The Tempo window 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 numeric 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.

If you are satisfied with the timing, you can lock or unlock the tempo using the right mouse button to click on the logo. It will stop flashing once lock is selected. Resyncing the tempo (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 Filter Machine to MIDI values that are set within the Setup/Locate window of the D8B software. See the D8B manual for more details.

## Saving, Loading and Resetting a Preset

Filter Machine 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 on 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 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.
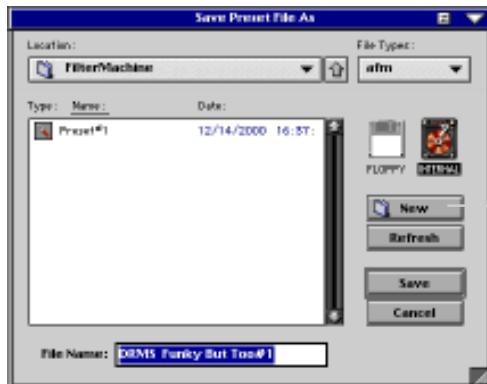
*A new sub folder can be easily created to help organize custom patches.*

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

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

## To Load a Preset:



1. Click 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 Filter Machine** to open a file. The Load Preset File dialog box appears.
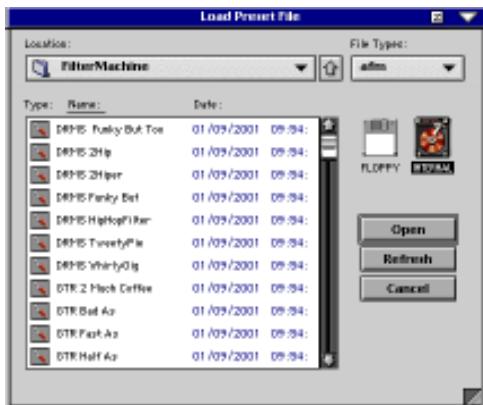




4. Click INTERNAL if the file is on the internal drive, or click FLOPPY if the file is on a floppy disk.

5. Select the preset you want to load.

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



*Click in the Preset Display to load from the drop-down menu or scroll through presets using the Up/Down buttons alternatively.*

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

### To Reset The Preset:

Reset will reload the previous patch.



1. Click and hold on the MENU button.

2. Select **Reset Filter Machine**.

### To Cut Preset Settings:



1. Click and hold on the MENU button.

2. Select **Cut Filter Machine**.

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 on 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 patch.

### To Paste Preset Settings:



1. Click and hold on the MENU button.

2. Select **Paste Filter Machine**.

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

# Automation and Snapshot Control

## Dynamic Real Time

### To write automation on a loaded plug-in:

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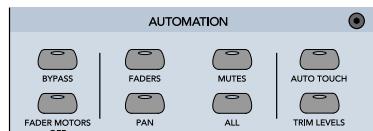
Subsequent edits to any recorded automation moves may be performed in the Mix Editor. Enable the channel view by clicking the Channel View button, then choose the plug-in you wish to view from the page drop-down menu. This will display a list of available channel and plug-in automation tracks on a parameter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

Card Slot Column

Input Source As-
signment Column

Plug-in Assign-
ment Column

Close Window

Plug-in
display toggle

Stereo/Mono
Mode Column

Input Channel
Assignment Drop-
down Menu Button

Stereo/Mono
Toggle Button

Card A

Card B

Card C

Card D (no
card installed)
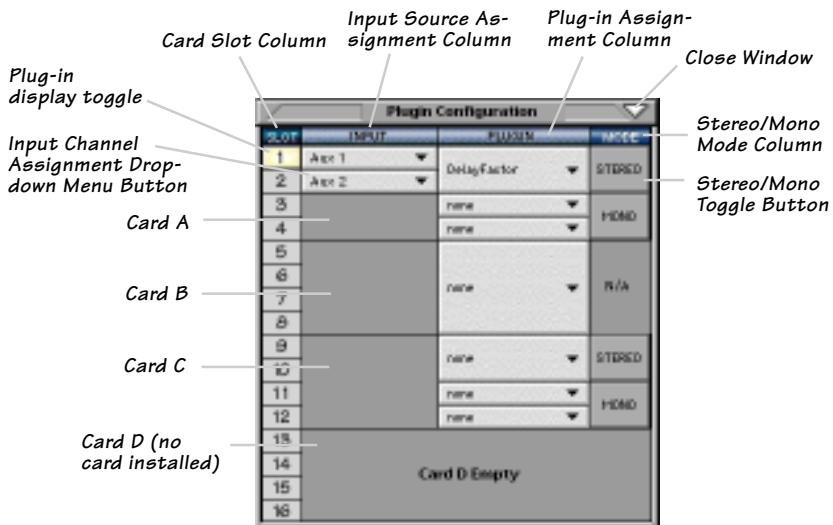
## Stereo Plug-in Routing

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.

FX Channels 1&2
(channels 49&50)

Stereo Input
(Aux 1 & 2)

Stereo plug-in

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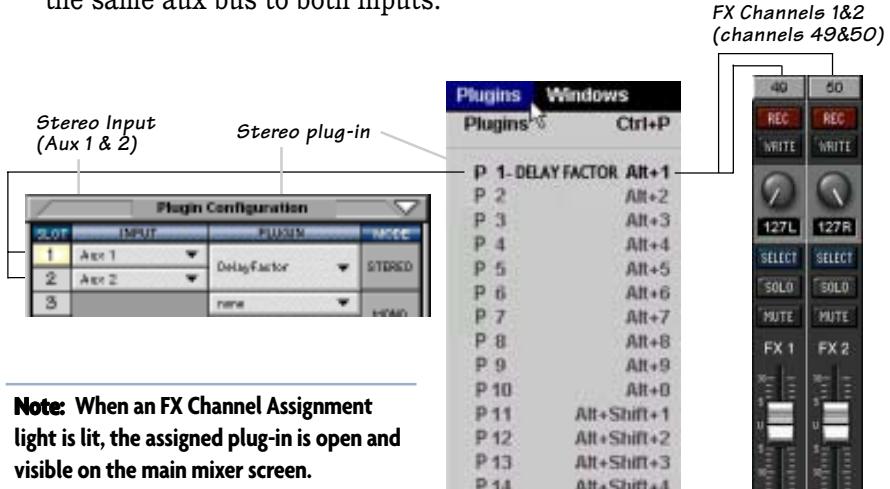
## Inserting a Plug-in into a Channel

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 Plugin Configuration window, or from a drop-down menu from the mixer screen.
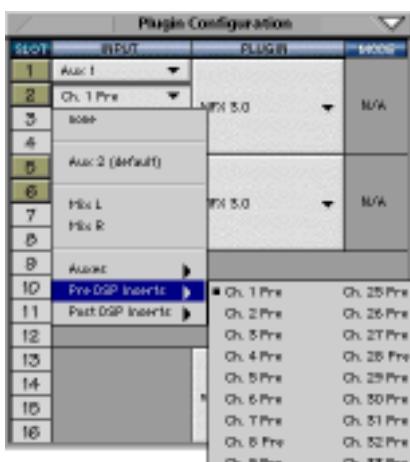


*Plugin Configuration Window*
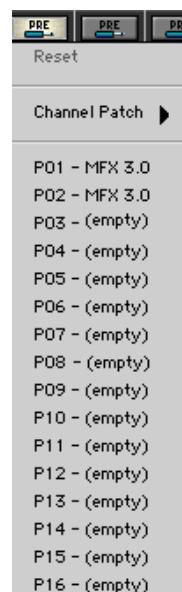


*Pre-DSP Drop-down*
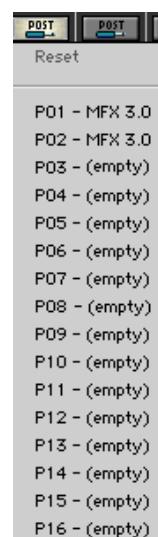


*Post-DSP Drop-down*

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.
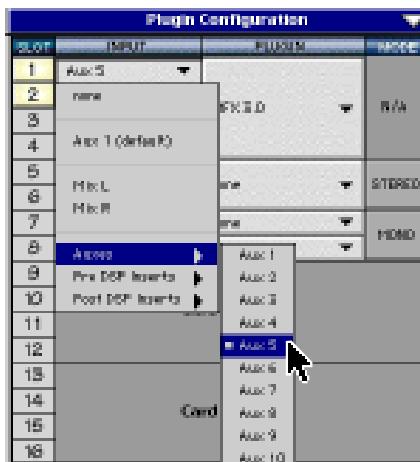


## Send the Input Signal to the Aux Bus

 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.
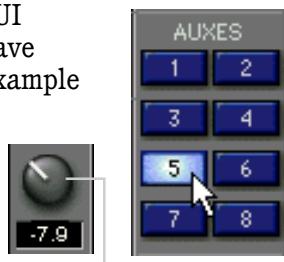


GUI Control Pot Assigned to AUX 5

 **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 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
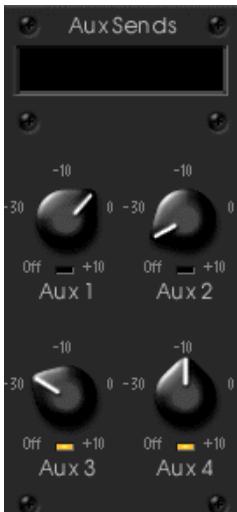


Fat Channel

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
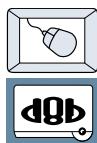


- Switch the D8B Bank Select to **EFFECTS (49-72)** and bring up faders one and two (channels 49 and 50). You will also see meter activity associated with these channels.



*FX Channels 1&2
(channels 49&50)*

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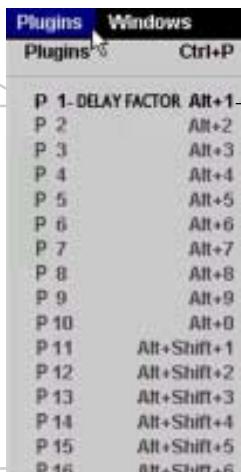
*The Plug button toggles between Windows menu buttons and FX buttons (lower left on the D8B mixer screen).*

*Plug-ins 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. 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!

Be sure to check www.acumalabs.com periodically to download new presets.

| Preset Name | Source Sound | Notes |
| --- | --- | --- |
| Changing World | Full Mix (L&R) | Mix, 80-100 BPM |
| Body Movin' | Full Mix (L&R) | Mix, 130-140 BPM |
| Subtle Sweep | Full Mix (L&R) | Mix, 130-140 BPM |
| Where Am I | Full Mix (L&R) | Mix, 130-140 BPM |
| Bombay | Full Mix (L&R) | Mix, 130-140 BPM |
| Cross Roads | Full Mix (L&R) | Mix, 130-140 BPM |
| SpineLess | Full Mix (L&R) | Mix, 130-140 BPM |
| 2 Much Coffee | Electric | Guitar: Use with overdrive guitar for big radio swirl |
| Bad As | Electric | Guitar: as above |
| Fast As | Electric | Guitar: as above |
| Half As | Electric | Guitar: as above |
| 2 Hip | Full Drum Kit (L &R) | Drums: Use with Hip Hop Shuffle 80-90BPM |
| 2 Hiper | Full Drum Kit (L &R) | Drums: Use with Hip Hop Shuffle 80-90BPM |
| Whirly Gig | Full Drum Kit (L &R) | Drums: Use with Hip Hop Swing 80-90 BPM |
| Tweety Pie | Full Drum Kit (L &R) | Stereo Drums/ Drum Machine |
| Funky But | Full Drum Kit (L &R) | Stereo Drums/ Drum Machine |
| Funky But Too | Full Drum Kit (L &R) | Stereo Drums/ Drum Machine |
| Hip Hop filter | Full Drum Kit (L &R) | Stereo Drums/ Drum Machine |
| Vocals | Vocals | Wacky Vocals |

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