

# POD® HD500



# **Advanced Guide**

An in-depth exploration of the features & functionality of POD HD500

Electrophonic Limited Edition

# **Table of Contents**

Overview	I•I
Home Views	1•1
Tuner Mode	1•3
Tap Tempo	1•4
Connections	1•4
POD HD500 Edit Software	1•5
System Setup	2• I
Accessing System Setup	2•1
Page 1, Setup: Utilities Options	2•2
Page 2, Setup: Utilities Options	2•3
Page 3, Setup: Input Options	2•4
Page 4, Setup: Output Options	2•8
Page 5, Setup: S/PDIF Output Options	2•9
Page 6, MIDI/Tempo Options	2•10
Page 7, Setup: Variax Options	2•11
Page 8, James Tyler Variax Tuning Options	2•16
Page 9, Setup: L6 LINK Audio	2•17
Page 10, Setup: L6 LINK Control	2•17
Features & Functionality	3•I
Amp Blocks	3•3
Mixer Block	3•4
Moving FX Blocks	3•5
Expression Pedal & Variax® Knob Controller Assignment	3•7
FX & Amp Block Footswitch Assignment	3•10
Dynamic DSP	3•14

Set Lists & Presets	4•I
Working with Set Lists	4•1
Working with Presets	4•4
Saving Presets	4•6
FX Edit Mode	5•I
Accessing FX Edit Mode	5•1
FX Loop	5•3
Amp, Cab & Mic Models	6•I
Amp Model Positioning	6•1
Selecting Amp, Cab & Mic Models	6•3
Editing Amp Parameters	6•7
Amp & Cab Edit Display	6•7
Amp/Preamp Models	6•12
Cab Models	6•15
FX Models	
Dynamics Models	7•1
Distortion Models	7•2
Modulation Models	7•3
Filter Models	7•5
Pitch Models	7•6
Preamp+EQ Models	7•9
Delay Models	7•10
Reverb Models	7 <b>•</b> 11
Volume/Pan & Wah Models	7•13
Looper Mode	8•I
Looper Footswitch Controls & Performance View	8•1
Looper Settings	8•5

USB Audio	9• I
The Line 6 USB Audio Driver	9 <b>•</b> 1
The Line 6 Audio-MIDI Devices Panel	9•3
Mac® - Line 6 Audio-MIDI Devices	9•4
Windows® - Line 6 Audio-MIDI Devices	9•8
Appendix A: Line 6 Monkey™	A•I
Launch Line 6 Monkey	A•1
Line 6 Variax Updates	A•3
Appendix B: MIDI	B•I
MIDI Input & Out/Thru	B•1
Bank & Program Change Messages	B•3
Using POD HD500 as a MIDI Controller Device	B•5

Line 6, POD, DT50, DT25, Variax, James Tyler, Vetta, L6 LINK, CustomTone and Line 6 Monkey are trademarks of Line 6, Inc. All other product names, trademarks and artists' names are the property of their respective owners, which are in no way associated or affiliated with Line 6. Product names, images, and artists' names are used solely to identify the products whose tones and sounds were studied during the Line 6 sound model development for this product. The use of these products, trademarks, images, and artists' names does not imply any cooperation or endorsement.

# **O**VERVIEW

Welcome to the **POD® HD500** Advanced Guide. This guide contains in-depth details of the POD HD500 features and functionality. Please be sure to also read through your **POD HD500** Pilot's Guide for basic info on POD HD500 and this Guide will take it from there! In this chapter, we'll present an overview of the main screens and features to get you started.

This Guide covers POD HD500 with Flash Memory version 2.0 (or later) installed. Please use Line 6 Monkey to check for and install the latest updates for your device - see "Appendix A: Line 6 Monkey<sup>TM</sup>" on page A•1.

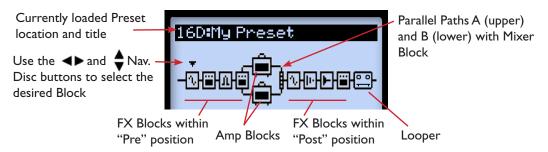
#### **Home Views**



The place to start is in one of the Home View screens. Press the **VIEW** button to rotate through the 3 available Home Views. While in any of these Home View screens, you can turn the **PRESETS** knob and call up a Preset in the current Setlist, or push the **PRESETS** knob to select from among other Set Lists!

#### Signal Flow View

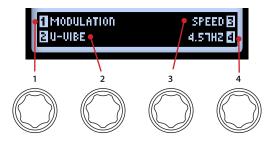
The Signal Flow View displays all Amp & FX "Blocks" and their ordering for the current Preset. As you'll see in several of the following chapters, this is the screen where you'll "select" the desired Block to perform other actions, such as choose a new Amp or FX Model, edit its parameters, move its position, and more.



The items within the Signal Flow View

The signal flow architecture of each Preset is comprised of 3 main sections where Amp & FX Blocks can be positioned: Pre, Post and parallel Paths A & B.

At the bottom of the Signal Flow View screen, you'll see up to four parameters that are accessed using the Multi-function knobs 1-4.

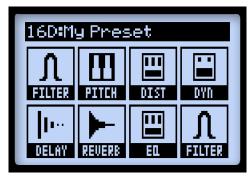


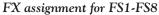
Accessing parameters with the Multi-select Knobs

These parameters are specific to the currently selected Block and allow you to choose new Models & edit parameters. Or, you can dive deeper in the Edit Mode and access additional settings in other screens, as covered in the following chapters.

#### **Performance View**

The Performance View screen displays the FX and/or Presets that are currently assigned to your POD HD500 footswitches. Footswitches **FS5** - **FS8** can be configured to either toggle FX On/Off, or to select Preset channels (see "Page 1, Setup:Utilities Options" on page 2•2).







ABCD assignment for FS5-FS8

These FX assignments for **FS1** - **FS8** can be edited for each Preset (see "FX & Amp Block Footswitch Assignment" on page 3 • 10). When the Looper is active, the Performance View screen displays a set of Looper functions (see "Looper Mode" on page 8 • 1).

#### **Big User View**

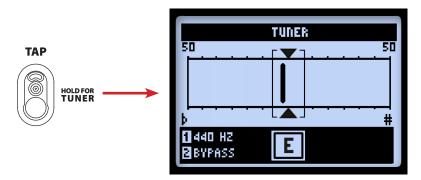
This screen simply provides you with one BIG display of the currently loaded Preset number - convenient for dark stages!



The Big User View

#### **Tuner Mode**

To enter Tuner mode, press and hold the **TAP** button. A few options are available, adjusted using the Multi-function knobs.



The Tuner screen

Pluck an individual string on your guitar and you'll see the name of the note displayed. When the graphic bar is to the left of center, your string is flat; when it is to the right, your string is sharp. When the bar is within the center range, triangles will appear above and below it, indicating your string is in tune.

- Reference (Knob 1): If you'd like to tune to a reference other than standard 440Hz, select from 425 to 455Hz.
- Audio (Knob 2): Select Mute to silence POD HD500 output while tuning, or select Bypass to hear your guitar dry.

Press the **TAP** switch, or any other footswitch, to exit Tuner Mode.

### **Tap Tempo**



Tap Tempo is the term we use to refer to the "System Tempo" value that is accessed via the **TAP** button on your POD HD500 device. Stomp rhythmically to set your Tap Tempo. Alternatively, you can set a numerical Tempo value within Setup (see "Page 6, MIDI/Tempo Options" on page 2 • 10). This setting is saved per Preset.

You'll see the LED on the **TAP** switch blink to indicate your current Tap Tempo BPM. Tempo-based FX (Modulation, Filter & Delay FX) that offer a **Tempo Sync** parameter can optionally be set to a note division of this Tap Tempo value.

#### **Connections**



Please refer to your **POD HD500 Pilot's Guide** for descriptions of the rear panel connections. You'll find more details on their specific uses within the following chapters as well!

#### **POD HD500 Edit Software**

Be sure to visit <a href="line6.com/software">line6.com/software</a> to download the Line 6 POD® HD500 Edit software the free patch editor/librarian for Mac® and Windows® computers. Using POD HD500 Edit and a USB connection you can easily create, audition, customize, backup/restore and save an unlimited number of Tone Presets for your device. You can even utilize POD HD500 Edit while simultaneously using the L6 LINK or MIDI connections!



The POD HD500 Edit application

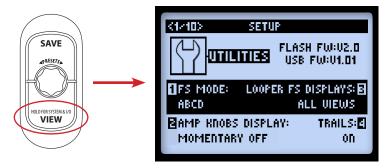
# SYSTEM SETUP

In this chapter, we'll cover the options for configuring your POD® HD500 system settings.

Note that some System Setup options are "global" settings (they persist always, regardless of the current Preset) while others are saved individually per Preset, as noted in the following sections. You'll want to be sure to save your Preset after changing settings of the latter type in order to retain them.

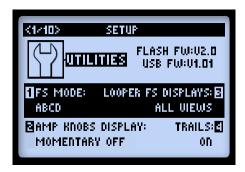
# **Accessing System Setup**

To access the System Setup options, press and <u>hold</u> the **VIEW** button. Here you can configure several device functions, Input & Output settings and more.



Use the ◀▶ Nav. Disc buttons to navigate through the several Setup pages.

# Page I, Setup: Utilities Options



The top portion of the screen lists the Flash Memory and USB Firmware versions currently installed on your POD HD500 device. The lower portion of the screen offers four options, adjustable using the Multi-function Knobs 1 - 4.

• Footswitch Mode (Knob 1): Configures the function of POD HD500 footswitches **FS5** through **FS8** for either "Pedalboard Mode" or "Preset Mode" (see "Bank & Channel Footswitches" on page 4•5). This setting is global.

Note that you can reference all current footswitch assignments in the Performance View screen, which will change its display according to the Footswitch Mode you choose here. See "FX & Amp Block Footswitch Assignment" on page 3•10.

- Amp Knobs Display (Knob 2): When set to "On," allows the LCD screen to momentarily display the actual Amp Tone Knob values whenever adjusting any physical amp knob. This setting is global.
- Looper FS Display (Knob 3): When the **LOOPER** footswitch is toggled On to engage Looper Mode, the Performance View screen automatically changes to display Looper footswitch functions (see <u>page 8•1</u>). This setting is global. The two selections here offer the following behaviors when Looper Mode is active:
  - All Views: Shows the Looper controls in the LCD regardless of the currently selected View.
  - Performance View: Shows the Looper screen as the Performance View screen (and allows the 3 Home View screens to still be displayed when toggling the **VIEW** button).

Note that the Looper display's icons represent what each footswitch will do when pressed, and not the function that the Looper is currently performing.

- Trails (Knob 4): When set to "On," allows the echo repeats and/or decay of Delay
  and Reverb FX to continue when the Model is toggled Off. With the Trails option
  "Off" the decay is muted instantly when toggling the Model Off. This setting is
  saved per Preset.
  - The FX Loop also utilizes Trails bypassing the FX Loop with this feature enabled causes the Return to remain active while the Send is shut Off.
  - The Trails feature does not provide a "spillover" of the FX decay when changing Presets.

# Page 2, Setup: Utilities Options

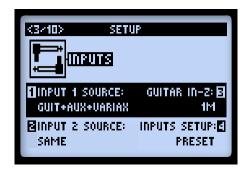


The options at the bottom of the screen are as follows - all are global settings:

- LCD Contrast (Knob 1): Adjusts the screen's contrast.
- Tap Tempo LED (Knob 2): Choose "On" to have the LED light for the TAP footswitch flash to indicate the current Tap Tempo value. Choose "Off" to have it remain unlit.
- AC Frequency (Knob 3): All HD Amp Models include simulation of AC hum, typical of the AC Vacuum Tube Heater component an important part of the tonality of a tube amplifier. Set the AC Rate to match that of the USA (60Hz) or UK (50Hz) frequency for authenticity. (This setting may be subtle depending on the current Amp Model settings, and may be more apparent when synchronizing this setting with the AC rate of any tube amplifier that POD HD500 may be plugged into.)

# Page 3, Setup: Input Options

The Inputs Setup page allows you to select which of the device's audio inputs are used as the "source" – sort of like a built-in, programmable patchbay. There is also a control which adjusts the Guitar input impedance.



- Input 1 and Input 2 Source (Knobs 1 & 2) Select the physical input(s) that you want to be the "source" fed into the signal path. Note that you can choose different Sources to independently feed each signal path, or choose Same to feed a common Source into both paths.
  - The Variax and Variax Mag Input Source options are provided for Line 6 Variax® guitars when connected into the POD HD500 VARIAX Digital Input (VDI).
  - With a James Tyler® Variax® (JTV), the "Variax" Input Source receives the Model or Magnetic signal, depending on the JTV's Model switch settings.\* The "Variax Mag" Input Source receives only the JTV's Magnetic Pickup signal.

\*Note: With a JTV in use, the "Variax" Input Source selection also recalls whether you were using mags or models per preset, allowing you to pick up exactly where you left off – no need for manual selection or input changes.

- If you own a first-generation Variax instrument, it is recommended to choose the Variax Input Source option. Please also refer to your Variax documentation.
- Guitar In-Z (Knob 3) Select the input impedance of the Guitar input. This feature affects tone and feel because your guitar pickups are being loaded as they would be by an effect pedal or a tube amplifier.

Note: The Guitar In-Z setting affects the **GUITAR IN** input only. Please see the Impedance Ratings table at the end of this section to reference the input impedance of each individual model.

- The **Auto** option dynamically sets the input impedance to match the input impedance of the very first Amp or FX model in your POD HD signal chain.
- Or, you can manually select from a variety of impedance values from low to high (22k, 32k, 70k, 90k, 136k, 230k, 1M, or 3.5M). A lower value will typically result in some high frequency attenuation, lower gain and overall "softer" feel. A higher value provides full frequency response, higher gain and overall "tighter" feel.
- Inputs Setup (Knob 4) Determines whether the other 3 options in this Inputs screen are applied per preset, or globally.
  - Preset Recalling a preset will load the Input 1 Source, Input 2 Source and Guitar In-Z parameter settings as last saved with the individual preset.
  - Global Once the "Global" option is selected here, the other three Input options' values on this Setup page (Input Sources 1 and 2, and Guitar In-Z) are utilized globally, regardless of their values that are saved with each individual preset. The Input values you choose on this Setup page are then retained independently for the Inputs Setup Global option. When you change the Inputs Setup back to "Preset," the Input options' values saved with each individual preset are once again utilized.

Note: Saving a preset while this option is set to "Global" will write the current global Inputs and Guitar In-Z values to the individual, saved preset.

Amp & FX Model - Guitar Input Impedance Ratings		
Model	Guitar Input Impedance (Ohms)	
Amps & Preamps		
All Amp & Preamp Models	IM	
Distortion FX		
Screamer	230k	
Color Drive	136k	
Buzz Saw	230k	

Amp & FX Model - Guitar Input Impedance Ratings		
Model	Guitar Input Impedance (Ohms)	
Facial Fuzz	22k	
Jumbo Fuzz	90k	
Fuzz Pi	22k	
Octave Fuzz	230k	
All Other Distortion Models	IM	
Dynami	cs FX	
All Dynamics Models	IM	
Modulation FX		
Dual Phaser	230k	
U-Vibe	90k	
Analog Chorus	22k	
All Other Modulation Models	IM	
Filter FX		
All Filter Models	IM	
Pitch	FX	
All Pitch Models	IM	
Delay	FX	
Multi Head	22k	
Analog Echo	230k	
Analog w/Mod	90k	
All Other Delay Models	IM	
Preamp + EQ FX		
All Preamp & EQ Models	IM	
Reverb FX		
All Reverb Models	IM	
Wah FX		
Weeper	90k	
All Other Wah Models	IM	

Amp & FX Model - Guitar Input Impedance Ratings		
Model	Guitar Input Impedance (Ohms)	
Volume & Pan FX		
All Volume and Pan Models	IM	
FX Loop		
FX Loop	IM	

#### **About Source Input Signal Routing:**

It is important to note how POD HD500 actually routes Source Inputs 1 and 2 through Amp & FX Blocks that are positioned "Pre" position. The following behaviors apply:

- In a configuration with no Amp or FX Blocks in Pre, Input 1 is fed only to Path A and Input 2 only to Path B. Therefore, this is the best configuration if you want to retain discrete Input Sources into Paths A & B.
- Placing an Amp Block or an active mono FX Model in Pre results in a "mix-down" of Input Sources 1 & 2, feeding the same, combined signal into each Path A & B.
- Placing a Stereo FX Model in Pre results in the left channel FX output being fed to Path A and its right output to Path B.\*
- The Mixer Block's Volume and Pan options provide independent control for Path A & B outputs before they are fed through any Blocks positioned "Post" the Mixer.
- By setting Input 2 to "Same," this effectively routes your Input Source to both stereo Paths A & B (which is how you can feed one guitar input into two Amp Models and/ or parallel FX, for example).

\*Please also see "Model Types and Mono/Stereo Signal Routing" on page 3 • 6 for more about how mono and stereo FX affect your signal chain.

### Page 4, Setup: Output Options

The Mode setting on this page allows you to configure the type of signal fed to your POD HD500 analog outputs to optimize for direct recording versus connecting to an external amplifier.

Note that this Mode setting affects the signal fed to several POD HD500 outputs: Balanced, Unbalanced & Phones outputs as well as USB Record Send & L6 LINK audio outputs.



Knob 1 selects the Output Mode. This is a global setting.

- Studio/Direct: Typically the best option when connecting "Direct" to a mixing console or recording device. This signal includes "Studio" Cab Models, Mic Model and an "AIR" convolution to best emulate a mic'ed amp within a room.
- Combo and Stack settings: Optimizes your tone for connecting to an external amplifier. The signal includes "Live" Cab Models, with no Mic Model or "AIR" convolution, with a special EQ curve added for each.
  - Combo Front & Stack Front: For connecting into the front input of a typical combo amp or amp head + external cab, respectively. When choosing either of these Modes, you'll see the following additional options for further tone shaping:



- Lows (Knob 2): Attenuates the low frequencies.
- Focus (Knob 3): Increases the overall midrange.
- Highs (Knob 4): Attenuates the high frequencies.

• Combo Power Amp & Stack Power Amp: For connecting to the power amp of a combo or head amp.

TIP: When using the Combo or Stack options and connecting into a tube amplifier, we also recommend that you choose a Preamp Model from the Amp Model menu (rather than one of the "Full" Amp Models). HD Preamp Models include no power amp emulation, making them typically better suited for this connection. That said, there is no wrong choice! PODs have always been about flexibility... Check out all the possibilities and decide which Models work best for your tone!

# Page 5, Setup: S/PDIF Output Options



These options are strictly for configuring the signal fed to the **S/PDIF OUT**. Use this 24-bit digital connection when connecting to the S/PDIF input of other devices, such as a computer audio interface or digital mixing console.

Note: When connecting to another digital device, it is best to clock the external device to follow POD HD500 to maintain proper synchronization - please see your digital device's documentation for its digital clock features.

- S/PDIF Output (Knob 1): Selects the type of output mode signal: Match Outputs (uses the setting as configured on the Setup:Outputs screen see page 2•8) or Dry Input (your Source Input signal with no Amp, Cab, Mic, "E.R." or FX processing applied).
- Sample Rate (Knob 2): Selects the sample rate: 44.1kHz, 48kHz, 88.2kHz or 96kHz. When connecting to another device's S/PDIF input, always be sure to set both units to utilize the same sample rate.
- S/P Level (Knob 3): Increases the amplitude of the S/PDIF signal: 0 dB.

# Page 6, MIDI/Tempo Options



• MIDI Channel (Knob 1): Sets the "System" MIDI Channel that POD HD500 utilizes for both receiving and sending MIDI communication via the MIDI DIN Input/Output. Choose any individual Channel 1 - 16, or "Omni" for all Channels.\* This is a global setting.

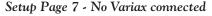
\*Note: The MIDI Channel selected here also affects the MIDI Channel settings utilized by L6 LINK - see "Page 10, Setup: L6 LINK Control" on page 2 • 17.

- MIDI Out/Thru (Knob 2): Allows the MIDI Out DIN to be switched between a MIDI Output versus MIDI Output + Thru.
- Tempo Sync (Knob 3): The "Speed" or "Time" parameters of all tempo-based FX (Modulation, Pitch & Delays) can optionally be set to a note value to follow the (Knob 4) Tempo BPM value. This Tempo Sync option is a global setting that allows you to choose whether the FX follow the Tap Tempo as a per-Preset value or globally.
  - Preset: Tempo settings are saved and recalled on a per Preset basis.
  - Global: Tempo information stored within any Preset is ignored. When saving a Preset while this option is set to "Global," the current tempo value will be saved with the Preset.
- Tempo (Knob 4): Enter in a specific "Tap Tempo" for your current Preset (as opposed to stomping rhythmically on the TAP footswitch). This value is saved individually per Preset.

#### 2•11

# Page 7, Setup: Variax Options







Setup Page 7 - James Tyler Variax connected

As illustrated above, Setup page 7 will display additional, model-specific options when a Variax instrument is connected to the POD HD500 **VARIAX** (VDI) input. The specific Variax family and its firmware version are displayed at the top right of the screen when the Variax is connected. Available options and behaviors displayed will differ depending on the Variax type and model you have connected, as described in the following sections. With any Variax connected to the VDI input, the Knob 1 option functionality is as follows.

- Variax Control (Knob 1): Choose whether you want to assign all your Variax settings on this Setup pg 7 screen on a per Preset basis or Globally.\*
  - When set to "Preset," all the parameter settings shown on the Variax Setup screens (Setup pages 7 & 8) are saved and recalled individually per POD HD500 preset. You'll see additional options in the screen when you have a Variax connected and choose "Preset."
  - When set to "Global," this provides complete manual control over all Variax functions, regardless what Variax settings you may have saved within the POD HD500 presets.

\*Note: For a James Tyler Variax (JTV) this will also determine whether the guitar's Mag/Model switch selection (as heard through the "Variax" Input Source option) will be recalled per Preset or Globally.

Also note that the Setup Pg 8 - JTV Tuning Options are *not* affected by this Variax Control setting - the Tuning settings are saved per Preset.

#### James Tyler® Variax®

All James Tyler Variax (JTV) family guitars are supported. Also see "Page 8, James Tyler Variax Tuning Options" on page 2 • 16 for even more JTV options!



- Variax Control (Knob 1): See page 2 11.
- Model (Knob 2): Selects the Variax Model & pickup position setting. Choose the "Don't Force" option if you prefer to not have the JTV local Model changed by the Model value saved within the POD HD500 presets.
- Local Control (Knob 3): Determines whether the JTV Volume and Tone knobs, and/ or toggle switch are to remain active or be "locked." When locked, the knob/switch no longer controls the JTV guitar's local functions for the Modeled output of the guitar.\*

\*Note: When utilizing the Magnetic output mode on the JTV guitar, only the Volume knob is "Locked" by any of the Local Control - Locked settings. For the Magnetic output, the Tone and Pickup switch functions remain unlocked even when set to "Locked" via Knob 3. This feature allows you to freely use the JTV Tone knob or Pickup selector switch when the JTV is in the Magnetic pickup output mode, while keeping the Modeled settings still "locked" if you prefer these Modeled settings to remain unchanged when you toggle back to Modeled output mode!

Also note that when any of these JTV controls are locked, changing the JTV guitar's Model Encoder knob automatically always resets all to unlocked.

Setting the JTV Volume and/or Tone knobs to "Locked" can be desirable when the knobs are assigned to remotely control any POD HD500 Amp or FX parameters
 see "Expression Pedal & Variax® Knob Controller Assignment" on page 3•7 for details.

• Tone (Knob 4): Allows the JTV Tone knob value to be saved with the current preset, or applied Globally, per the Variax Control (Knob 1) setting.

#### **Variax Electric**

All first generation Variax Electric Guitars are supported.



- Variax Control (Knob 1): See page 2 11.
- Model (Knob 2): Selects the Variax Model & pickup position setting. Choose the "Don't Force" option if you prefer to not have the Variax guitar's model changed by the Model value saved within the POD HD500 presets.
- Local Control (Knob 3): This feature is not applicable for first generation Variax instruments, therefore, no options are available.
- Tone (Knob 4): Allows the Variax guitar's Tone knob value to be saved with the current preset, if desired.

#### Variax Acoustic 700

For a Variax Acoustic Guitar, you'll see two Setup pages, 7a and 7b, to accommodate the additional controls. Multifunction Knobs 1, 2 & 3 are common controls, shown on both Setup pages. Knob 4 is unique on each page.





- Variax Control (Knob 1): See page 2 11.
- Model (Knob 2 pgs. 7a & b): Selects the Variax Acoustic Model. Choose the "Don't Force" option if you prefer to not have the JTV local Model changed by the Model value saved within the POD HD500 presets.
- Local Control (Knob 3 pgs. 7a & b): This feature is not applicable for Variax Acoustic, therefore, no options are available.
- Mic Position (Knob 4 pg 7a): Changing this value simulates changing the mic position on the acoustic from closer to further from the soundhole.
- Comp (Knob 4 on pg 7b): Selects the amount of compression effect applied to the Variax Acoustic tone.

For a Variax Bass, you'll see three Setup pages, 7a, 7b & 7c to accommodate all the controls on the Bass. Multifunction Knobs 1, 2 & 3 on all pages are common controls. Knob 4 on each page is unique.







- Variax Control (Knob 1 pgs. 7a, b & c): See page 2 11.
- Model (Knob 2 pgs. 7a, b & c): Selects the Variax Bass Guitar Model. Choose the "Don't Force" option if you prefer to not have the Variax Bass Model changed by the Model value saved within any POD HD500 preset.
- Blend (Knob 4 pg. 7a): Adjust this controls the balance between a neck and bridge pickup tone on the Bass.
- Bass (Knob 4 pg. 7b): Adjusts the amount of bass frequencies.
- Treble (Knob 4 pg. 7c): Adjusts the amount of treble frequencies.

# Page 8, James Tyler Variax Tuning Options

The Page 8 Setup screen offers Tuning options for James Tyler Variax guitars.\* These allow you to configure and edit alternate tunings for your connected JTV guitar, which can be saved right along with any POD HD500 preset!

\*Note: This tuning functionality is only available for James Tyler Variax family guitars. If no JTV (or any first-generation Variax) is connected, this screen offers no accessible options.



- Variax Tuning (Knob 1): Choose "Don't Force" if you do not want the POD HD500 preset to affect the local tuning on your JTV guitar. Choose "Custom" to create a tuning of your own, which can be saved with the current preset.
- String Select (Knob 3): Select the desired guitar string, 1 though 6, for which you want to change the pitch.
- Note Offset (Knob 4): Choose the amount of half-steps, positive or negative, for which you want to raise or lower the pitch of the selected string. The resulting note will then be displayed on the tuning graphic at the top of the screen. For example, in the screenshot above, we've altered the low E string down two half-steps to a D note.\*

\*Note: The offset value will always be accurate - the note labels displayed assume the guitar is tuned to standard pitch (E, A, D, G, B, E), with the A using a 440Hz reference pitch.

#### Page 9, Setup: L6 LINK Audio



These options configure the POD HD500 audio signal fed to up to four Line 6 DT50<sup>TM</sup>/DT25<sup>TM</sup> amplifiers using the L6 Link connection.\* These settings are saved per Preset.

\*Note: For details on using the POD HD500 L6 LINK connection with DT amplifiers, please see the additional documentation available at <a href="http://line6.com/support/manuals/">http://line6.com/support/manuals/</a>.

- Amp 1 Amp 4 Select the audio signal you want fed to each DT amplifier:
  - Choose the main output signal (Left, Right, Left/Right summed).
  - Choose the output of one specific Amp Model (Amp Model A or Amp Model B).

### Page 10, Setup: L6 LINK Control



These options allow you to dictate how up to four connected Line 6 DT50 or DT25 amplifiers each "follow" the POD HD500 Amp Models & settings. Parameters 1 - 4 correspond to L6 LINK connected DT amplifiers 1 - 4, respectively.

#### **System Setup**

- Each DT amplifier can be set independently to follow either the current Preset's Amp Model A or Amp Model B.
  - The DT amplifier automatically configures its power amp Topology settings to match the selected Amp Model A or B.
  - The DT amp controls are also synced to the selected Amp Model A or B.
- Alternatively, you can select a MIDI Channel to set the DT amp's MIDI communication channel. This effectively sets the respective DT amp to utilize its own internal Amp Model (rather than the POD HD500 Amp Model), and "syncs" its front panel controls with other DT amps that are set to the same MIDI Channel.

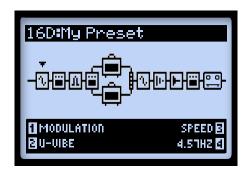
#### 3•I

# FEATURES & FUNCTIONALITY

Ready to dive deeper? In this chapter, we'll go into more detail on the major features & functionality offered on POD® HD500.

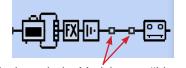
#### **FX Blocks**

For each Preset there are always a total of 8 FX Blocks, each capable of loading any FX Model, (or the FX Loop - see next section). When in the Signal Flow View screen, select any FX Block and you'll see options at the bottom of the screen, adjustable using the Multi-Function Knobs 1-4.



The Signal Flow View with an FX Block selected

- Knob 1 Model Type: Select from among the FX Model categories.
  - To load no effect in the selected Block, choose "None." You'll see the Block then appear "Null," as shown below. A Null FX Block can still be moved and loaded with a new Model at any time. Setting unneeded FX Blocks to None is a great way to minimize your tone's DSP usage (see "Dynamic DSP" on page 3•14).



FX Blocks with the Model set to "None"

• Knob 2 - FX Model: Choose the desired Model from the Model Type list.

- Knob 3 FX Parameters: Choose from up to 5 adjustable parameters. Alternatively, double-press the **ENTER** button to access all the Model's parameters in one screen see "FX Edit Mode" on page 5 1.
- Knob 4 Parameter Value: Adjusts the value for the currently selected parameter.

Each FX Block also offers the following features:

- On/Off: Toggle the FX Block "On" or "Off" by pressing the **ENTER** button once. When Off, your signal flows through the FX Block unprocessed.
- Move FX Position: Each FX Block can be moved throughout signal chain, providing complete routing flexibility. Place any FX Model before the Amp ("Pre"), after the Amp ("Post"), or within one of the parallel Paths A & B see <u>"Amp Model Positioning" on page 6 1</u> for details.
- Saved Per Preset: All FX Block positions, their loaded FX Models and all FX parameter values within the tone are saved with each Preset.

#### **FX** Loop

For any one of the 8 FX Blocks, you can load the FX Loop rather than an FX Model. This allows you to position the POD HD500 hardware FX Loop anywhere you like within the current signal path - even within one of the parallel Paths A or B!



The Signal Flow View with the FX Loop selected

Note that it is necessary to set one of the FX Blocks within your Preset to the "FX Loop" before you'll hear the signal fed through your SEND & RETURN device connections.

Access options for the FX Loop at the bottom of the Signal Flow View, or in the Edit Mode screen. You can also toggle the FX Loop "On" or "Off" by pressing the **ENTER** button once. The FX Loop's position and all its parameter values are saved per Preset. Please also see "FX Loop" on page 5 • 3.

### **Amp Blocks**

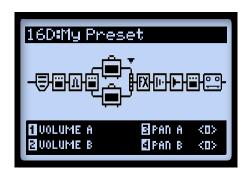
A single Amp Block can be placed in the "Pre" or "Post" signal flow positions, or within parallel Path A. Or, two Amps can be used if positioned within the Paths A & B, as shown below. Much like FX Blocks, Amp Blocks can be toggled On/Off and include several editable parameters. But there's quite a bit more available for Amps as well, so please refer to the dedicated chapter "Amp, Cab & Mic Models" on page 6•1 for details!



A Preset with two Amp Blocks

#### **Mixer Block**

The Mixer is permanently positioned at the end of the parallel Paths A & B and provides individual Level and Pan controls for each Paths' output before fed to the "Post" position. When the Mixer is selected in the Signal Flow View, its four parameters are available at the bottom of the screen, accessible using the Multi-function Knobs 1-4.

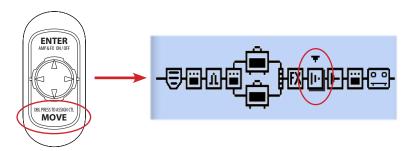


The Signal Flow View with the Mixer Block selected, showing its 4 parameters

- Volume A (Knob 1): Controls the volume level of the Path A output. 0 dB is unity gain.
- Volume B (Knob 2): Controls the volume level of the Path B output. 0 dB is unity gain.
- Pan A (Knob 3): Adjusts the left/right stereo balance of the Path A output.
- Pan B (Knob 4): Adjusts the left/right stereo balance of the Path B output.

#### **Moving FX Blocks**

Any of the 8 FX Blocks can be moved throughout your tone's signal flow, providing tremendous routing flexibility. To move any FX Block, start within the Signal Flow View and select the FX Block to be moved. Press the **MOVE** button and you'll see the selected FX Block appear "raised" to indicate it is now moveable.



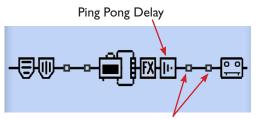
Pressing the Move button to reposition an FX Block

The FX Block can now be moved as follows:

- Use the ◀▶ Nav. Disc buttons to move the FX Block to the desired position.
- Move the FX Block into either Path A or B, and place it before or after an Amp Model within the path. Use the ♠ Nav. Disc buttons to move the FX Block to the opposite path. This allows you to run your effect in "parallel" and blend the individual Path A & B outputs using the Mixer's Level & Pan options!
- Once the FX Block is in the desired position, press the MOVE button again to drop
  it into place.
- Amp Blocks can be moved into fixed positions within the Pre or Post signal path areas, or within the Paths A & B see "Amp Model Positioning" on page 6 1.
- The Looper can also be selected and moved either to the start ("Pre") or end ("Post") of the signal flow see "Looper Mode" on page 8 1.

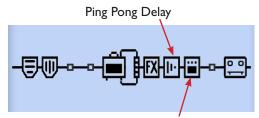
#### Model Types and Mono/Stereo Signal Routing

It is important to note that some Models (all EQs, Wahs & Volume, and some Modulations, Filters, Pitches and Delays, as well as the FX Loop) preserve a stereo output within the signal chain, while others (all Dynamics, Distortions, all Amps & Preamps, and other various Models) are mono FX and do not. The POD HD500 Inputs 1 & 2 are fed into the signal chain as stereo (see "Page 3, Setup: Input Options" on page 2 • 4). Therefore, wherever a mono FX or Amp Model is inserted, the Left & Right channels of this stereo signal is "mono-ized" and heard as a two-channel mono signal at the Model's output. To follow are a few examples:

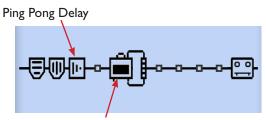


No mono-output FX or Amp follows Delay

 As shown above, if you place the Ping Pong Delay (a stereo-output FX Model) after any other FX and/or Amp Models, you'll hear its delay repeats bounce back and forth between your Left and Right outputs.



A Distortion (mono) FX Model follows Delay



An Amp Model Follows Delay, within same Path

- If you place the Ping Pong Delay immediately before a mono FX Model (as shown above, left) or Amp Model within the same Path (shown above, right), you'll hear its delays "mono-ized," equally through both the Left and Right outputs.
- The FX Loop is capable of stereo, just like any stereo-output FX Model, provided that you utilize a stereo cabling configuration from the **SEND** jack, through your pedals/rack devices, and back into the **RETURN** jacks.

- The above rules also apply within each of the parallel Paths A and B, since these are each stereo signal paths as well. The Mixer Block offers Pan controls to independently adjust the stereo balance of each of these Paths before they are fed into the first "Post" FX (or Amp Block, if the Amp is placed here), immediately following the Mixer.
- Please also see <u>"Amp Model Positioning" on page 6•1</u> for additional signal flow information.

# **Expression Pedal & Variax® Knob Controller Assignment**

POD HD500 includes two Pedal Modes, **EXP I** and **EXP 2** for the "on-board" Pedal, each of which can be assigned to any FX Model or FX Loop parameter, for endless control possibilities.\* Or, when an Expression Pedal is connected to the **PEDAL 2** input on the back of POD HD500, the on-board Pedal controls **EXP I** and Pedal 2 controls **EXP 2**. The **EXP I** and **EXP 2** Pedal Modes can each be assigned to control independent FX parameters. These **EXP I** & **EXP 2** assignments and all settings made here are saved per Preset.

\*Note that when you add a Wah FX Model to your tone, the "Position" parameter for the Wah is automatically assigned to **EXP 1**. Likewise, when adding a Volume or Pan FX Model, its Position parameter is automatically assigned to **EXP 2**. This will result in multiple items assigned to these EXP Pedals if you already have existing Pedal assignments. For all Factory Presets that already include a Wah, Volume or Pan, these are typically already assigned as well. You can change these Pedal assignments, and/or create your own for other FX parameters - read on!

#### **EXP I and EXP 2**

- When no additional Pedal is connected to the **PEDAL 2** input, the on-board Pedal's
- "Toe Switch" will toggle between the control of Pedal Modes **EXP I** and **EXP 2**.
- The red **EXP I** and green **EXP 2** LEDs illuminate to indicate the current Pedal Mode. (It is also possible to manually assign other functions to the Toe Switch see "Using the EXP Pedal Toe Switch" on page 3 13.)

Optionally, you can connect a 2nd Expression Pedal (such as a Line 6 EX-1 Expression Pedal) to the **PEDAL 2** input. With a Pedal 2 connected, the on-board Pedal controls only **EXP I**, and Pedal 2 controls only **EXP 2**. Whenever a Pedal 2 is connected, you'll see the **EXP I** & **EXP 2** LEDs both lit.

#### Variax Knobs as Controllers

It is also possible to assign the Volume and/or Tone knob of any Line 6 Variax guitar to control any POD HD500 Amp or FX parameter. Note that when assigning a Variax knob to remotely control a POD HD500 parameter, you might find it preferable to "Lock"the knob's Local Control option, so that it does not simultaneously affect the Variax guitar's Volume or Tone - please see "Page 7, Setup: Variax Options" on page 2 • 11 for instructions.

#### **Controlling Amp & FX Parameters**

Configuring the Expression Pedal and Variax Knob controller assignments is done within the Controller Assign screen. In the Signal Flow View, select the Amp or FX Block for which you'd like to create a controller assignment, then double-press the **MOVE** button. For our example, we'll select our Delay FX block in the Signal Flow View and configure it to be controlled via the EXP-1 Pedal:

Tip! Expression Pedal and Knob Controllers are capable of driving up to 50+ POD HD parameters simultaneously, making it possible to morph between sounds with a single Exp. Pedal or Knob move. Simply repeat the following steps to assign a common Controller to multiple parameters within the same Preset.





The Controller Assign screen is then displayed specifically for the selected Model. In our example, it is the Digital Delay W/Modulation. Use the Multi-function Knobs 1-4 to configure the controller assignment options.



The Controller Assign screen

- Parameter (Knob 1): Select the parameter for the current Model that you want to control.\* In our example, we'll choose the Mix parameter.
- Controller (Knob 2): Select the controller that you want to assign to the parameter. Choose Off to have no assignment, or choose EXP 1, EXP 2, Variax Vol or Variax Tone.
- Minimum Value (Knob 3): Set the parameter value you'd like for the Pedal's "heel" or Knob's minimum position.
- Maximum Value (Knob 4): Set the parameter value you'd like for the Pedal's "toe" or Knob's minimum position.

\* Note: As stated on page 3 • 7, when adding any Wah or Volume/Pan FX Model to your tone, their Position parameters are automatically assigned to the EXP 1 & EXP 2. These Wah & Volume/Pan EXP assignments will remain in addition to other parameters you assign, resulting in your Pedal controlling multiple parameters. Be sure to remove any unwanted Model's EXP assignment in the Controller Assign screen.

To create controller assignment to an FX Loop parameter, simply select the FX Loop Block within the Signal Flow View and go to the Controller Assign screen, as described above.

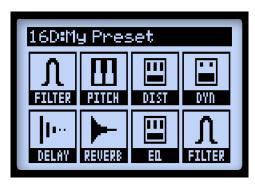


The Controller Assign options for the FX Loop

Note: When a Controller is assigned to any FX Model parameter, manually editing this parameter's value will result in changing the Controller's MIN or MAX value. For example, if the EXP-1 Pedal Controller is assigned to a Wah FX Model's Position parameter, select the Wah Model, go to its Edit View screen, and select the Position parameter. If you turn multifunction knob #4 when the Pedal is near the "heel" position, the MIN value is adjusted. If you turn the knob when the Pedal is near the "Toe" position, the MAX value is adjusted.

# FX & Amp Block Footswitch Assignment

Each of the **FSI** through **FS8** footswitches, as well as the Exp Pedal's "Toe Switch" can be configured to toggle any of the FX or Amp Blocks On/Off. You can reference the current Preset's FX footswitch assignments by pressing the **VIEW** button to display the **Performance View** screen. The assignments for **FSI-FS8** will differ depending on your current Setup - FS Mode setting (see "Page 1, Setup: Utilities Options" on page 2 • 2):



FX assignment for FS1-FS8



ABCD assignment for FS5-FS8

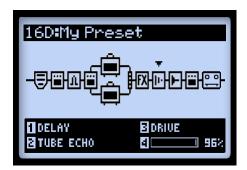
3.10

Note that when Looper Mode is active, the Performance View displays a set of Looper-specific footswitch functions, as covered in "Looper Footswitch Controls & Performance View" on page 8•1.

#### Assigning an FX or Amp Block to a Footswitch

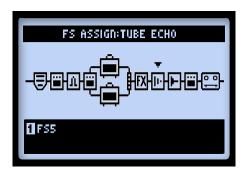
From the Signal Flow View, select the FX or Amp Block that you want assigned to one of your footswitches. As an example, we'll select the Delay FX Block. Then Press and hold the **ENTER** button to display the Footswitch Assign screen.







Select the desired Amp or FX block, then press and hold the ENTER button



The Footswitch Assign screen, with a Delay FX Model selected

Use Multi-function Knob 1 to select the footswitch to which you want this FX Block assigned - choose FS1 through FS8, the EXP Toe Switch, or None to remove the Block's assignment. The following behaviors apply:

• If a footswitch already has an FX or Amp block assigned: The existing Block remains assigned, and selecting this footswitch *additionally* assigns your new Block. When referencing the Performance View, you'll see the footswitch display a "Multi" graphic to indicate this. You can configure 2 or more parameters to the same footswitch to toggle them On/Off simultaneously - or, have one toggle On while another Toggles Off!



Indicates multiple Blocks assigned to a footswitch

TIP: To reference current footswitch assignments, when in the Footswitch Assign screen, use the ◀► Nav. Disc buttons to select each Block, and look at the Knob 1 setting for each at the bottom of the screen.

• When a footswitch has no Block assigned: You'll see the N/A graphic displayed in the Performance View for the respective footswitch.



Indicates no Blocks assigned to a footswitch

As noted in "Expression Pedal & Variax® Knob Controller Assignment" on page 3 • 7, when adding a Wah or Volume/Pan Model to your tone, their Position parameters are automatically assigned to the **EXP I** and **EXP 2** Pedal Modes. Most Factory Presets already include this Wah/Volume switching pre-configured for you. But the Toe Switch assignment is not set automatically for newly added FX Models, so here is how to set this up manually.

• With the Wah Model selected, go to the FS Assign screen and assign its FX Block to the **EXP TOE SWITCH**, following the instructions above. This allows the Wah to be toggled On/Off via the pedal Toe Switch.



Assigning an FX Block to the on-board pedal's "Toe Switch"

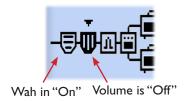
Further, if you have a different FX parameter (such as the Volume - Position) being controlled by the opposite EXP Pedal Mode, you'll likely find it useful to have the Toe Switch toggle both the FX On/Off alternately, so that only the desired Model is active while being controlled. For example, say you have a Preset where the Wah is controlled by **EXP 1**, and the Volume by **EXP 2**:

Note: If you have an additional Pedal connected to **PEDAL 2**, you may *not* want to use the following configuration, since the Wah and Volume are already controlled by the two Pedals individually.

• Click the **EXPTOE SWITCH** switch so that the red **EXP I** LED is lit.

3.13

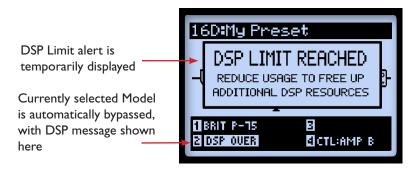
• In the Signal Flow View, select the Volume FX block and toggle it "Off" using the **ENTER** button. You should now see the Wah "On" and the Volume "Off."



- Repeat the previous Footswitch Assign steps for both the Wah and the Volume, assigning each to the **EXPTOE SWITCH**.
- Now whenever you click the **EXP TOE SWITCH** to **EXP I** for this Preset, the Volume is switched "Off" and the Wah is switch "On" and is controlled by the Pedal and vice versa when switching to **EXP 2**.
- Be sure to save to retain these settings with your Preset!

# **Dynamic DSP**

We've offered up a whole lot of sound possibilities in POD HD500, and it can take some serious Digital Signal Processing (DSP) to run these goodies. Rather than limit your creative potential with fewer Models or signal routing options, we chose to implement a "Dynamic DSP" system, which dynamically assigns DSP resources to accommodate your tone configurations. When creating a tone that utilizes several heavy-hitting DSP Models, it is possible to surpass the amount of processing power available. In these cases, you'll see the DSP LIMIT REACHED indicator appear, and the current Model is bypassed to allow your tone to remain active.



Signal Flow View - displaying DSP Limit alert

3.14

In the above example, trying to change the Model for a 2nd Amp placed our tone over the DSP limit. Therefore, the DSP LIMIT REACHED message is shown temporarily, and the Amp B Model we selected is automatically bypassed, as indicated by the DSP Over message. When the DSP Limit is reached, you have a few options to free up DSP resources.

- Try using different Amp Models. Some of the HD Amp Models require more DSP power than others, so try switching to a different Amp Model.
- Use only one Amp Model rather than two.
- Try toggling Amp and/or FX Models "Off" or set the Block's Model to "None," (see "FX Blocks" on page 3•1). Some FX types, such as Pitch Shifters and Reverbs, utilize DSP more heavily.

Note: Setting an Amp or FX Block to "None" reduces the Block's DSP usage more substantially than toggling its Model to "Off."

• Once you're happy with your customized tone, save it so that you can recall it later.

# **SET LISTS & PRESETS**

This chapter covers all you need to know about working with Set Lists and Presets to manage all your POD® HD500 Tones.

Be sure to also check out the free Line 6 POD HD500 Edit software. It can be used to create, customize & manage an unlimited library of POD HD500 Set Lists & Presets right on your Mac® or Windows® computer! See "POD HD500 Edit Software" on page 1 • 5.

# Working with Set Lists

POD HD500 stores 64 Presets within each of its 8 Set Lists. The big idea here is that you can load any one of these Set Lists to then gain access to any of its Preset locations - where you can save your complete settings to, or load a Preset from.

#### **Accessing Set Lists**

Push the **PRESETS** knob to display the **Set Lists** screen.



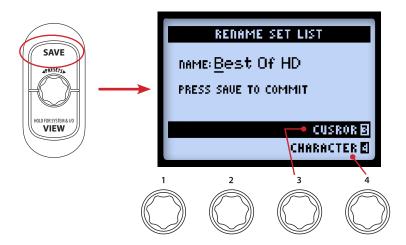
The Set Lists screen

Load a Set List: Use the 

and 

Nav. Disc buttons, or turn the PRESETS knob to select any Set List, then press the ENTER button. This immediately loads the selected Set List, making all its Presets available. Note that your previously loaded Preset is automatically closed, and the Preset of the same Bank/Channel location number from the new Set List is loaded.

Rename a Set List: With the desired Set List selected, press the **SAVE** button to display the Rename Set List screen.



To edit the Set List name, use Multi-function Knob 3 to select the desired character, then use Knob 4 to edit the character. Once complete, press **SAVE** again to commit your new name, and you'll be returned to the Set Lists screen. Or, just press **PRESETS** button to return to the Set Lists screen without committing any name changes.

# **Arranging Presets within Set Lists**

While in the Set Lists screen, double-press the **ENTER** button to display the list of Presets in the current Set List, where you can reference each Preset's Bank/Channel location, load a Preset, or rearrange the Presets into in any order you like.



The Set List - Presets screen

Load a Preset: Use the ♠ Nav. Disc buttons, or turn the PRESETS knob to select any of the 64 locations, or use the ◀▶ Nav. Disc buttons to navigate through the list one Bank at a time. Press the ENTER button to immediately load the selected location's Preset.

Move a Preset: Here is an example where we'll move the "HIWAY 100" Preset from location 2A to location 2C.

• Select location 2A for the "HIWAY 100" Preset, then press the **MOVE** button. You'll see the selected Preset appear "raised" to indicate it is now moveable:



• Use the Nav. Disc buttons or **PRESETS** knob to select the 2C destination location. Note that as you select a new Bank/Channel location, the resulting Preset order is displayed on the screen. For our example, "HIWAY 100" is inserted into 2C, resulting in the Presets from the original location (2A) to the destination (2C) to move up one slot:



"Hiway 100" moved from 2A to 2C

• Once you've placed the Preset over the desired channel location, press the **MOVE** button again to "drop" it into the slot.

• Repeat the above steps to rearrange any additional Presets as desired. To commit all your changes, you must next press the **PRESETS** button - you'll see the "Saving" screen displayed to indicate this process.



The Set List Saving screen

# **Working with Presets**

Each of the 8 Set Lists within POD HD500 includes 64 Channel locations for holding Presets. These Set Lists and Presets are all retained in your POD HD500 internal memory. Each Preset includes all current FX & Amps in use, all their parameters, their position within the signal flow, footswitch & pedal assignments, Mixer settings, as well as input & output options and other Setup options, as indicated throughout this Guide.

#### **Accessing Presets**

From any of the Home View screens, simply turn the **PRESETS** knob to increment through the current Set List. The currently loaded Bank/Channel number and Preset name are displayed at the top of the Home View screen. (Note that you'll need to save your current Preset before loading a different one if you wish to retain any changes made!)



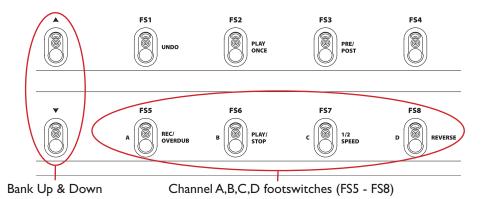
Turn the **PRESETS** knob to increment through Presets

Alternatively, you can access Presets that reside within any Set List from within the Set List - Preset screen (see page 4•1), or by using the POD HD500 Footswitches.

4•4

#### **Bank & Channel Footswitches**

Preset selection is completely "hands-free" by way of the Bank Up ▲, Bank Down ▼ and Channel A, B, C, D (FS5 - FS8) Footswitches. Note that you'll need to set the System - FS Mode setting to "ABCD" to allow FS5 - FS8 to instantly access the Channel locations - see "Page 1, Setup:Utilities Options" on page 2•2.



- Press the **A**, **B**, **C** or **D** switch to instantly recall its Channel location within the currently selected Bank.
- To navigate through Banks, press the Bank Up or Bank Down footswitch and you'll see the Queued Bank screen displayed, with the current Bank/Channel flashing:



The Queued Bank screen - the next Bank is queued

• Continue pressing the Bank Down or Bank Up footswitch and you'll see the previous/ next Bank's A, B, C & D Channels & their Presets "queued," as shown above. Then press the A, B, C or D footswitch to load the respective Preset from the desired Bank.

### **Saving Presets**

To retain any customization you may have performed on your Preset, or if you want to rename or move the current Preset, you can use the Save function. Whenever your current Preset is in an "unsaved" state, you'll see an asterisk appear in the Signal Flow View.



Asterisk indicating Preset is in an unsaved state

Remember to always save your Preset before calling up a different Preset to retain any changes you may have made!

Press the **SAVE** button to display the Save Preset screen.



The Save Preset screen

Use the Multi-function Knobs 1-4 to choose your Save functions.

- Set List (Knob 1): Choose any one of the 8 Set Lists here in which you'd like to save your Preset. By default, you'll see your currently loaded Set List.
- Destination (Knob 2): Choose the specific Bank/Channel location within the selected Set List to save your Preset. Note that this will permanently overwrite the Preset within the destination location once you commit the save.

4.6

• Cursor & Character (Knobs 3 & 4): To rename your Preset, select a character with Knob 3, then use Knob 4 to edit the selected character.

TIP! For speedy preset naming... The Nav Disc buttons may be used to move the cursor left & right. Pressing down clears the currently selected character. Pressing up cycles through the first character of Upper Case, Lower Case, Numeric, and blank.

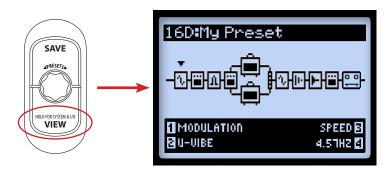
Once you've completed the above settings, press the **SAVE** button to commit. Or, to cancel the save, press the **PRESETS** knob or **VIEW** button.

# FX EDIT MODE

Within this chapter, we'll cover the Edit Mode for FX, which provides access to all editable parameters for the FX models and the FX Loop. (For info on Amp Models, see "Editing Amp Parameters" on page 6•7.) All changes made in the Edit Mode are saved per Preset.

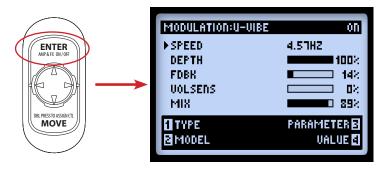
# **Accessing FX Edit Mode**

First press the **VIEW** button to display the Signal Flow View screen.



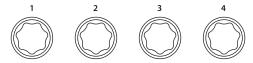
The Signal Flow View - Modulation FX Block selected

Use the ◀▶ Nav. Disc buttons to select the Block you wish to edit. In our example above, we've selected the first Block, which currently has a Modulation Model loaded. While in the Signal Flow View, you can edit a few options for the selected Block's FX Model using the Multi-select Knobs 1 - 4. However, by entering the Edit Mode screen, you'll have instant access to all parameters. Double-press the **ENTER** button to display Edit Mode.



The FX Edit Mode - Modulation: U-Vibe FX Model loaded

Use the Multi-Function Knobs 1- 4 to access the respectively numbered options at the bottom of the Edit Mode screen.



The Multi-Function Knobs

While the Edit Mode screen is displayed, these knobs access the following functions.

### Knob I - Type

Select the type of FX Model you want to insert into this Block location. You'll see the selected Type displayed at the top of the screen, as well as a handy Model On/Off indicator at the right.



- None: Choose "None" to remove any FX Model from the Block.
- FX: Choose from the list of FX types.
- FX Loop: Not technically an FX Model, but the device's FX Loop can be inserted and its options edited much like one! See "FX Loop" on page 5 3.

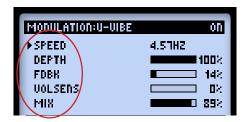
#### Knob 2 - Model

Choose the specific Model for the current FX Type. You'll see the selected FX Model displayed at the top of the screen.



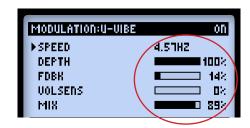
#### **Knob 3 - Parameter**

Use the  $\P$  Nav. Disc buttons to select from among the parameters that are displayed. The "selected" parameter is indicated by the arrow at the left.



#### Knob 4 - Value

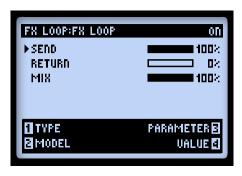
Set the value for the selected parameter.



As shown above, some parameters utilize numerical values, while others utilize a graphical bar display.

#### **FX** Loop

The FX Loop can be inserted into any *one* FX Block. .



The FX Loop Edit Mode screen

5•4

Adjust the Parameter & Value settings the same as with any FX Model. These FX Loop Edit Mode settings are saved per Preset.

• Send: Reduces the level fed out the FX Loop **SEND** to your external devices.

Note: Use the **LINE-STOMP** switch on the back of POD HD500 to choose between levels for Rack FX versus Pedals. This Send parameter can then be used to further fine-tune the level fed to your connected devices.

- Return: Adjusts the level of the signal received into the stereo FX Loop RETURN jacks.
- Mix: Blends the FX Loop signal that with the POD HD tone signal. When set to 100%, the full POD HD500 signal is fed to the **SEND**. When set to 0%, your input signal bypasses the FX Loop completely, so that you'll hear only your POD HD processed signal. Be sure to set the Mix to less than 100%, or toggle the FX Loop Block "Off," if you do not have a complete connection between the device's **SEND** & **RETURN** jacks, or you'll hear only silence from the output of POD HD500!

TIP: Most FX and FX Loop parameters can optionally be assigned for Expression Pedal control! See "Expression Pedal & Variax® Knob Controller Assignment" on page 3 • 7.

# AMP, CAB & MIC MODELS

This chapter provides details on selecting & editing the exemplary HD Guitar Amp & Preamp Models, all of which have been newly developed by our amazing team of sound engineers for POD® HD500! Also covered here are details on Speaker Cabs, Mic Models and putting Amp Models to use.

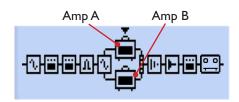
# **Amp Model Positioning**

Each Preset includes the ability to run one or two Amp or Preamp Models. Much like each FX Block, the Amp Block can be repositioned using the **MOVE** button (please see "Moving FX Blocks" on page 3 • 5). Here we'll cover the impact on your signal flow when placing the Amp in different positions.

\*Note: Looking for a Mic Preamp Model? You can find the Vintage Pre Model located within the "Preamps+EQ" category of any FX Block. Having this Preamp Model within the FX Blocks (rather than in the Amp Blocks) allows you the flexibility of using it with or without the Amp models, and positioning it anywhere in the signal chain. See "Preamp+EQ Models" on page 7.9 for more info.

#### Amps Within Paths A & B

You'll find that a number of the Factory Presets already utilize this type of configuration. When moving the single Amp Model into the parallel Paths A/B from the "Pre" position (before the Path A/B split) or "Post" position (after the Mixer Block), a 2nd Amp B Block is automatically created in Path B. In this configuration, the top amp is referred to as Amp A and the other Amp B.



Amp Models within Paths A & B

Behaviors for this configuration are:

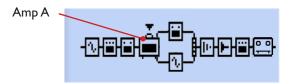
• Each Amp Block can be individually set to a different Amp or Preamp Model,\* edited and enabled/disabled.

\*Note: Some Amp/Preamp Models utilize more DSP than others. You may find it necessary to bypass or remove some FX Models to enable two simultaneous Amps - see "Dynamic DSP" on page 3•14 for more info.

- The Amp Blocks cannot be moved *within* the A or B Paths, however, it is possible to move any FX Blocks before or after the Amps within either Path.
- Specific behaviors apply for moving an Amp Block *out of* the parallel Paths A/B:
  - Select Amp A, push the **MOVE** button, then the ▶ Nav. Disc button. This removes Amp B from the tone and moves Amp A to the Post position, where it is placed directly after the Mixer (and before any "Post" FX).
  - Select Amp A, push the **MOVE** button, then press the ◀ Nav. Disc button. This removes Amp B from the tone and moves Amp A to the Pre position, where it is placed just before the Path A/B split (and after any "Pre" FX).
  - For the above actions, pressing **MOVE** when Amp B is selected has no function.

#### **Amp Block in Pre or Post Positions**

Only a single Amp Block can be used within either of these positions.

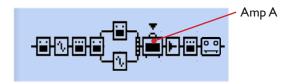


Amp in "Pre" position (before Path A & B)

With the Amp in Pre, as shown above, the single amp feeds both Paths A & B. You can always move FX into either Path A or B, in which case they'll behave as "Post Amp" FX, yet be in parallel, with each Path's output controlled by the Mixer's A & B Level and Pan.

6.3

Note that when utilizing both Inputs 1 & 2 (or when using "SAME" for either of these Input options) the two Input signals are combined to allow them to be fed into any Amp or mono FX Model within the Pre position, which can result in a hot signal level. Reduce your instruments' volume as needed to avoid overloading your Pre-positioned Models.



Amp in "Post" position (after Path A & B)

With the Amp in Post as shown above, the parallel Paths A & B are fed into the input of the Amp.\* You can still move FX into either Path A or B, in which case they'll be in parallel, with each Path's output individually controlled by the Mixer's A & B Level and Pan options to allow you to custom blend them before they hit the Amp.

\*Note: All Amps & Preamps behave as "mono" Models, which impact the stereo output of any FX Models positioned before them within the signal flow. For more info, please see "Model Types and Mono/Stereo Signal Routing" on page 3 • 6.

# Selecting Amp, Cab & Mic Models

Press the **VIEW** button to display the Signal Flow View and use the Nav. Disc to select Amp A or Amp B.



The Signal Flow View - Amp B selected

Once an Amp Model is selected, you'll see the 4 editable Amp options at the bottom of the screen, accessible via the Multi-function knobs 1 - 4.

- Knob 1 Selects the Amp Model.
- Knob 2 Selects the Cab Model.
- Knob 3 Selects the Mic Model.
- Knob 4 When the current Preset includes two Amp models, this selects which Amp (the Amp within Path A or B) is controlled by the Amp Tone knobs.

As you change the Amp Model (Knob 1), you'll also see that default Cab and Mic models are automatically selected for each Amp or Preamp (see "About Default Amp Settings" on page 6 • 5). But you can use Knobs 3 & 4 to select any Cab and/or Mic you like. These settings are saved per Preset.

Attention Bass Players: Try the Flip Top Bass Amp Model for some thump! Note that this Model loads with a matching 1x15 Flip Top speaker cab, as well as a full set of Mic Model options for stellar bass tones. (And yes, you can indeed select any other Cab with the Flip Top Bass Amp Model, or choose the Flip Top Cab with any Guitar Amp Model!) See the following sections for details about these models.

## **Amp and Preamp Models**

We've included a complete set of "Preamp" versions of each Amp as well. Choose one of these to obtain the tone of just the preamp stage of the amp - recommended when feeding your POD HD500 output into an external amplifier, or when using the L6 LINK<sup>TM</sup> connection.\*



A Preamp Model is selected for Amp B

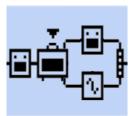
6.5

\*Note that, whether an Amp or Preamp is selected, the additional application of Cab and Mic Models is dependent upon the SETUP:OUTPUT settings. Please see <u>"Page 4, Setup: Output Options" on page 2.8.</u>

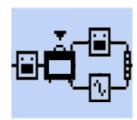
The overall volume levels among the different Preamp Models varies - this is normal. The Preamp sections of each of the classic amplifiers we modeled are indeed quite different, and we've set the Preamps' default values to best match the type of power amp into which they are intended to fed. Tweak the **DRIVE** and **VOLUME** knobs to optimize the level for your specific needs!

#### **Amp Block States**

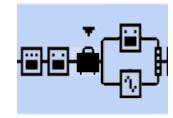
The Amp Blocks have 3 available states: On, Off (bypassed) or Disabled (sometimes referred to as a "Null" state for the Block).



Amp Block "On"



Amp Block "Off"



Amp Block "Disabled" (Null Block)

#### **About Default Amp Settings**

Whenever you change to a different Amp or Preamp Model, predetermined Cab & Mic models are automatically loaded, as well as Amp Tone Knob settings designed to complement the Amp type. As noted throughout this chapter, you can certainly switch to a different Cab and/or Mic Model - just be sure to save your Preset to retain these changes.

#### **Mic Models**

To follow is a list of all Mic Models. Note that all Guitar Amp's Cabs offer a selection of 8 Mics, and the 1x15 Flip Top Bass Cab offers its own selection of 8 Mic Models.

Mic Model Descriptions			
Mic Name	Based On*		
Guitar Cab Mic Models			
57 On Xs	Shure® SM57 Dynamic, On Axis		
57 Off Xs	Shure® SM57 Dynamic, Off Axis		
409 Dyn	Sennheiser® MD 409 Dynamic		
421 Dyn	Sennheiser® MD 421 Dynamic		
4038 Rbn	Coles 4038 Ribbon		
121 Rbn	Royer® I21 Ribbon		
67 Cond	Neumann® U67 Condenser		
87 Cond	Neumann® U87 Condenser		
Bas	s Cab Mic Models		
57 On Xs	Shure® SM57 Dynamic, On Axis		
421 Dyn	Sennheiser® MD 421 Dynamic		
I2 Dyn	AKG® D12		
112 Dyn	AKG® D112		
20 Dyn	EV® RE20		
7 Dyn	Shure® SM7B		
40 Dyn	Heil® PR40		
47 Cond	Neumann® U47		

<sup>\*</sup>All product names used in this manual are trademarks of their respective owners, which are in no way associated or affiliated with Line 6. These trademarks of other manufacturers are used solely to identify the products of those manufacturers whose tones and sounds were studied during Line 6's sound model development. Share® is a registered trademark of Share hecoporated, Semberier® is a registered trademark of Georg Neumann GMBH, Roye® is a registered trademark of Share hecoporated. Period of Bildling Audio, Inc. DBA Rower Line Share AKTO® is a registered trademark of Health of Share (Share) as registered tra

### **Editing Amp Parameters**

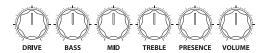
#### To toggle the selected Amp model On or Off



Press the **ENTER** - **AMP ON/OFF** button once. Toggling the Amp "Off" results in bypassing the Amp, Cab and Mic processing.

#### To adjust the Amp Tone

Turn any of the Amp Tone knobs to adjust the desired settings for the selected Amp.



The Amp Tone knobs

Whenever you adjust any of the Amp Tone knobs, you'll see the "Momentary" **AMP EDIT** LCD screen temporarily displayed, showing the actual values of the Tone knobs for both current Amp A & Amp B Models (depending on your Amp Knobs Display setting, see "Page 1, Setup:Utilities Options" on page 2•2). Also see the next section for more about the **AMP: EDIT** options.

# **Amp & Cab Edit Display**

Double-press the **ENTER** button to access the **Amp & Cab Edit** screens. You'll see up to 5 pages of options here, allowing you to fine-tune Amp, Cab and Mic settings.\* All settings in these screens are saved per Preset.

\*Note: When the selected Amp Model is a "full" Amp Model, you will see five Amp Edit pages, with pages 2 & 3 offering additional "deep-editing" power amp-related functions, and pages 4 & 5 offering deep-edit Cab functions, as described below. When the selected Amp Model is a Preamp, you will see only three Amp Edit pages, which offer the same options as the Amp/Cab Edit pages 1, 4 and 5 described below. Use the Nav. Disc left & right arrow buttons to access all available pages.

#### Amp Edit - Page I



Page 1 of the Amp: Edit Screen - both Amps are On

• With both Amp Models On: You'll see the screen's respective controls update as you adjust the Amp Tone knobs, as shown above. Note that the black "dots" around each knob indicate its last-saved value. You can also still access the Amp, Cab & Mic Model and Amp A/B selections via the Multi-function Knobs 1-4 while this screen is displayed.



Page 1 of the Amp:Edit Screen - Amp A Bypassed

• With an Amp Model Off: You'll see only a VOL knob, as shown above for Amp A. This is a separate parameter strictly for the Amp Model's Bypass Volume. Use the **VOLUME** knob on your device to adjust this, and its value is stored separately with the Preset for whenever the Amp Block is Bypassed.

6.8

- Use the Multi-Function knobs 1 4 to adjust the options at the bottom of the screen:
  - Knob 1: Select the desired Amp or Preamp Model.
  - Knob 2: Select the desired Cab Model (also see the Page 4 options).
  - Knob 3: Select the desired Mic Model (also see the Page 4 options).
  - Knob 4: Choose between adjusting controls for Amp A or Amp B. (This option is available on all AMP EDIT screens.)

#### Amp Edit - Page 2

Page 2 offers three options that affect the power amp characteristics of your Amp Model.



#### Page 2 of the Amp:Edit Screen (not displayed for Preamp Models)

- Knob 1: Use this Master Volume to adjust the amount of power amp distortion. This parameter is highly interactive with all other power amp parameters the lower the Master is set, the less effect the other controls will have.
- Knob 2: Setting the Sag to minimum offers a "tighter" responsiveness, and turning clockwise provides more "touch" dynamics & sustain.
- **Knob** 3: Controls how much heater hum & AC ripple interacts with your tone. At the maximum setting things get really freaky.

6.9

#### Amp Edit - Page 3

Page 3 offers two more options that affect the power amp characteristics.

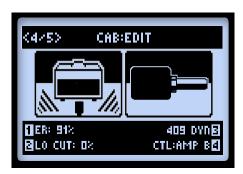


#### Page 3 of the Amp:Edit Screen (not displayed for Preamp Models)

- Knob 1: Changes the Bias of the power tubes. Set to minimum to achieve a very "cold" Class AB biasing. At maximum the amp is operating in Class A.
- Knob 2: The Bias Excursion determines how the power amp tubes' voicing reacts when they are pushed hard. Set low for a tighter feel. Set high for more tube compression. This parameter is highly reactive with the **DRIVE** & **MASTER** settings.
- Knob 3: Has no function on this page.

#### Amp Edit - Page 4

Here you'll find Microphone and Speaker Cabinet options.



Page 4 of the AMP:EDIT Screen (appears as Page 2 for Preamp Models)

6-10

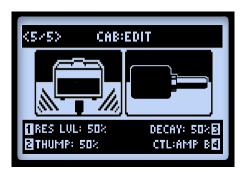
Note: If you selected "No Cab" for your Cab Model, these Mic and Early Reflections settings will perform no function since no Speaker, Mic or Early Reflections processing is applied.

- Knob 1: Sets the amount of "early reflections." Higher values add more reflective room sound to your Amp tone.
- Knob 2: Applies low frequency attenuation helpful to tighten up the low end of your tone.
- Knob 3: Selects the Mic type (see the Mic Model table on page 6 6).

Note: If you select the 1x15 Flip Top Bass Cab Model, you'll see a unique set of Mic Models in this list, best suited for Bass.

#### Amp Edit - Page 5

Here you'll find even further "deep-editing" parameters for the Speaker Cab, allowing you to surgically refine the feel and frequency response to your personal taste.



- Knob 1: Adjusts the overall level of the modeled speaker Resonance, which results in a more "lively," brighter response on higher settings. Increasing the Resonance Level will cause the overall volume to increase as well.
- Knob 2: Adjusts the low frequency level of the modeled speaker resonance. Just as the name implies, increasing the value on this knob adds more low end "Thump" to the Cab tone.

6•11

Note: The above three Cab parameters are interactive - As the Resonance Level is decreased so are the effects of the Thump and Decay parameters. Thump and Decay are applied to the modeled speaker resonance, therefore, if the Resonance Level is set to a minimum, the effects of Thump and Decay parameters will not be audible.

Resonance Level, Thump, and Decay controls will only be audible when the POD is in Studio/Direct output mode.

Press the **HOME** button, or double-press the **ENTER** button to exit the **AMP:EDIT** screen when done. Be sure to save your Preset to retain customized Amp Model settings.

# **Amp/Preamp Models**

To follow is a table showing the classic amplifiers upon which all our HD Amp/Preamp Models are based.\* For more details, please also check out the **POD HD Model Gallery**, available from http://line6.com/support/manuals/.

POD HD Amp/Preamp Models			
Amp/Preamp Model	Based On*		
Amp Disabled	When selected, no Amp Model is loaded		
Blackface Double Normal	'65 "Blackface" Fender® Twin Reverb®, Normal input channel		
Blackface Double Vibrato	'65 "Blackface" Fender® Twin Reverb®, Vibrato input channel		
Hiway 100	Hiwatt® Custom 100		
Super O	'60s Supro® S6616		
Gibtone 185	Gibson® EH-185		
Tweed B-Man Normal	'59 Fender® Tweed Bassman®, Normal input channel		
Tweed B-Man Bright	'59 Fender® Tweed Bassman®, Bright input channel		
Blackface 'Lux Normal	Fender® "Blackface" Deluxe Reverb®, Normal input channel		
Blackface 'Lux Vibrato	Fender® "Blackface" Deluxe Reverb®, Vibrato input channel		
Divide 9/15	Divided By 13 9/15		

<sup>\*</sup> All product names are trademarks of their respective owners, which are in no way associated or diffiliated with Line 6. These product names and descriptions are provided for the sole purpose of identifying the specific products that were studied during Line 6's sound model development. Fender®, Thinn Reverb®, Bassman® and Delwac Reverb® are registered trademarks of Fender Musical Instruments Corporation. Vox® is a registered trademark of Vox R&D Limited. Marshall® is a registered trademark of Marshall® is a registered trademark of Dr. 2 Amps, Inc. Mesal@Boogie@ and Dual Revtifier® are registered trademarks of Mesal@Boogie. Lil. Engl@ is a registered trademark of Beate Ausflug and Edmund Engl. Hiwatt® is a registered trademark of Gibson Gittar Corp. Suproß is a registered trademark of The International. Gibson® is a registered trademark of Gibson Gittar Corp. Suproß is a registered trademark of Loud Technologies, Inc.

6-12

POD HD Amp/Preamp Models			
Amp/Preamp Model	Based On*		
PhD Motorway	Dr. Z® Route 66		
Class A-15	'61 "Fawn" Vox® AC-15		
Class A-30 TB	Vox® AC-30 "Top Boost"		
Brit J-45 Normal	'65 Marshall® JTM-45 Mkll, Normal input channel		
Brit J-45 Bright	'65 Marshall® JTM-45 MkII, Bright input channel		
Plexi Lead 100 Normal	'59 Marshall® "Plexi" Super Lead 100, Normal input channel		
Plexi Lead 100 Bright	'59 Marshall® "Plexi" Super Lead 100, Bright input channel		
Brit P-75 Normal	Park 75, Normal input channel		
Brit P-75 Bright	Park 75, Bright input channel		
Brit J-800	Marshall® JCM-800		
Bomber Uber	2002 Bogner Uberschall		
Treadplate	Mesa/Boogie® Dual Rectifier®		
Angel F-Ball	Engl® Fireball 100		
Line 6 Elektrik	A face-melting Line 6 original		
Flip Top	Ampeg® B-15NF Portaflex® bass guitar amp		

#### **Amp Control Labels**

For some Amp Models, you'll see slightly different labels for the Amp Tone knobs displayed in the Amp:Edit screen. In the cases where the classic amps we've modeled include special knob controls, we've emulated their behaviors accordingly. These are listed as follows:

• Super O: The actual Supro® only has a Drive and a Tone knob, so we mapped Tone to the MID knob and invented Bass, Treble, and Presence controls:



Super O Amp:Edit screen

<sup>\*</sup> All product names are reademarks of their respective owners, which are in no ways associated or affiliated with Line 6. These product runns and descriptions are provided for the sole purpose of identifying the specific products that were studied during Line 6's sound model development. Fine(Bern St. This international Composition View) for a registered reademark of a registered reademark of the art personal reademark of the secondary of the registered reademarks of Pearled Nucleical Instruments Corporation View) is a registered reademark of Composition View (Instruments of Secondary of the secondary of the registered reademarks of Pearled Nucleical Instruments of Secondary of the registered reademarks of Pearled Nucleical Instruments of Secondary of the registered reademarks of June 10 (Secondary of Secondary o

• Divide 9/15: The Divided by 13 amp offers two interactive channels. The **DRIVE** knob controls the "clean" channel, and the **BASS** knob is being used as the Drive knob for the "dirty" channel. The **MID** & **TREBLE** knobs behave like the amp's Tone & Cut knobs.



Divide 9/15 Amp:Edit screen

• Class A-15 & Class A-30TB: Following the Vox® design, we've labeled the MID knob as "Cut" for these two Amp Models - turning the knob counter-clockwise reduces the high-end frequencies.



Class A-15 & Class A-30TB Amp:Edit screen

#### Cab Models

To follow is a table showing the classic speaker cabinets upon which our Cab Models are based \*

POD HD Cab Models			
Cab Model	Based On*		
No Cab	Choosing this option applies no Speaker, Mic or Early Reflections processing to your Amp Model.		
212 Blackface Double	Fender® "Blackface" Twin Reverb® combo cabinet, 2x12 inch Jensen® speakers		
412 Hiway	Hiwatt® cabinet, 4x12 inch Fane® 12287 50 watt speakers		
6x9 Super O	Supro® S6616 combo cabinet, one "6x9" size speaker		
112 Field Coil	Gibson® EH-185 combo cabinet, 1x12 Field Coil Speaker		
410 Tweed	'59 Fender® Tweed Bassman® combo cabinet, 4x10 inch Jensen® alnico speakers		
112 BF 'Lux	Fender® "Blackface" Deluxe Reverb® combo cabinet, one 12 inch Oxford 12K5-6 speaker		
112 Celest 12-H	Divided By 13 9/15 combo cabinet, one 12 inch Celestion® G12H Heritage (70th anniversary) speaker		
212 PhD Ported	Dr. Z®, Z Best cabinet, 2x12 inch Celestion® speakers (one G12H Heritage and one Vintage 30)		
I I 2 Blue Bell	'61 "Fawn" Vox® AC-15 combo cabinet, one 12 inch Celestion® Alnico Blue speaker		
212 Silver Bell	Vox® AC-30 "Top Boost," 2x12 inch Celestion® Alnico Silver Bell speakers		
412 Greenback 25	Marshall® cabinet, 4x12 inch Celestion® G12M "Greenback" speakers		
412 Blackback 30	Marshall® cabinet, 4x12 inch Celestion® Rola G12H30W "Blackback" speakers		
412 Brit T-75	Marshall® cabinet, 4×12 inch Celestion® G12T75 speakers		
412 Uber	Bogner Uberschall cabinet, 4x12 inch Celestion® speakers (2 x G12T75 and 2 x Vintage 30 speakers)		
412 Tread V-30	Mesa/Boogie® cabinet, 4x12 inch Celestion® Vintage 30 speakers		
412 XXLV-30	Engl® Pro cabinet, 4x12 inch Celestion® Vintage 30 speakers		
115 Flip Top	Ampeg® Custom Design, CTS 15 inch speaker		

<sup>\*</sup> All product names are trademarks of their respective owners, which are in no way associated or affidiated with Line 6. These product names and descriptions are provided for the sole purpose of identifying the specific products that were studied during Line 6's sound model development. Forder®, Twin Reverb®, Bassman® and Delace Reverb® are registered reademarks of Pender Musical Instruments Corporation. Voo® is a registered trademark of Port Rep. 1 and Port Reverb® are registered trademarks of Messal Bugst and Line Reverb® and Dela Rectified and Dela Rectified are registered attendances for Messal Analytic and Eliment for Bugst Analytic Analytic and Eliment for Bugst Analytic Analytic

# FX Models

POD HD500® includes a plethora of amazing FX Models, primarily from the popular Line 6 M13 Stompbox Modeler! This chapter provides Reference Tables showing all POD HD500 FX Models by category, as well as details on their parameters. FX Model parameters are all accessible within the Edit Mode. Please see "FX Edit Mode" on page 5 • 1 for details on Edit Mode features.

TIP: For more details about the POD HD500 FX Models, please also check out the POD HD Model Gallery and M13 Advanced Guide documents, available from <a href="http://line6.com/support/manuals/">http://line6.com/support/manuals/</a>.

# **Dynamics Models**

Dynamics FX Models - Parameter Reference Table					
Model		Paran	neters		
Noise Gate	Threshold	Decay			
Hard Gate	Open Threshold	Close Threshold	Hold	Decay	
Tube Comp	Threshold	Level			
Red Comp	Sustain	Level			
Blue Comp	Sustain	Level			
Blue Comp Treb	Sustain	Level			
Vetta Comp	Sensitivity	Level			
Vetta Juice	Amount	Level			
Boost Comp	Drive	Bass	Comp	Treble	Output

### **Common Parameters**

The following parameters are common to most Dynamics FX Models.

- Threshold: For compressor FX, lower values result in greater compression, along with an automatic makeup gain stage dependent upon the Threshold setting.
- Sustain: Some compressors include Sustain, which is much the same as a Threshold control, but functions in reverse higher settings add more compression and thus more sustain and squishy goodness.
- Level: Adjusts the overall volume higher settings typically offer an output boost.

## **Distortion Models**

	Distortion Model - Parameter Reference Table					
Model		Parameters				
Tube Drive	Drive	Bass	Mid	Treble	Output	
Screamer	Drive	Bass	Tone	Treble	Output	
Overdrive	Drive	Bass	Mid	Treble	Output	
Classic Dist	Drive	Bass	Filter	Treble	Output	
Heavy Dist	Drive	Bass	Mid	Treble	Output	
Color Drive	Drive	Bass	Mid	Treble	Output	
Buzz Saw	Drive	Bass	Mid	Treble	Output	
Facial Fuzz	Drive	Bass	Mid	Treble	Output	
Jumbo Fuzz	Drive	Bass	Mid	Treble	Output	
Fuzz Pi	Drive	Bass	Mid	Treble	Output	
Jet Fuzz	Drive	Fdbk	Tone	Speed	Output	
Line 6 Drive	Drive	Bass	Mid	Treble	Output	
Line 6 Distortion	Drive	Bass	Mid	Treble	Output	
Sub Octave Fuzz	Drive	Bass	Sub	Treble	Output	
Octave Fuzz	Drive	Bass	Mid	Treble	Output	

## **Common Parameters**

The following parameters are common to most Distortion FX Models.

- Drive: Adjusts the amount of overdrive, distortion or fuzz.
- Bass: Adjusts Bass EQ level
- Mid: Adjusts the Midrange EQ level.
- Treble: Adjusts Treble EQ level.
- Output: Adjusts the overall volume level higher settings offer an output boost.

# **Modulation Models**

M	Modulation Models - Parameter Reference Table				
Model		ı	Parameters		
Pattern Tremolo	Speed	Step I	Step 2	Step 3	Step 4
Panner	Speed	Depth	Shape	VolSens	Mix
Bias Tremolo	Speed	Level	Shape	VolSens	Mix
Opto Tremolo	Speed	Level	Shape	VolSens	Mix
Script Phase	Speed				
Panned Phaser	Speed	Depth	Pan	Pan Spd	Mix
Barberpole Phaser	Speed		Fdbk	Mode	Mix
Dual Phaser	Speed	Depth	Fdbk	LFO Shp	Mix
U-Vibe	Speed	Depth	Fdbk	VolSens	Mix
Phaser	Speed	Depth	Fdbk	Stages	Mix
Pitch Vibrato	Speed	Depth	Rise	VolSens	Mix
Dimension	SwI	Sw2	Sw3	Sw4	Mix
Analog Chorus	Speed	Depth	Ch Vib	Tone	Mix
Tri Chorus	Speed	Depth	Depth2	Depth3	Mix
Analog Flanger	Speed	Depth	Fdbk	Manual	Mix
Jet Flanger	Speed	Depth	Fdbk	Manual	Mix
AC Flanger	Speed	Width	Regen	Manual	
80A Flanger	Speed	Range	Enhance	Manual	Even Odd
Frequency Shifter	Freq	Mode			Mix
Ring Modulator	Speed	Depth	Shape	AM/FM	Mix
Rotary Drum	Speed	Depth	Tone	Drive	Mix
Rotary Drm/Hrn	Speed	Depth	Horn Dep	Drive	Mix

### **Common Parameters**

The following parameters are common to most Modulation FX Models.

- Speed: Adjusts the modulation/oscillation/tremolo speed for the effect, with higher settings providing faster rates. Note that the Speed can be adjusted to a Hz value or Note Division:
  - Choosing a Hz value provides a specific modulation speed in cycles per second.
  - Choosing a **Note Division** value provides a time that is based on the current **Tap Tempo** (see "Tap Tempo" on page 1 4).
- Depth: Adjusts the intensity of the modulation. Higher settings result in more extreme pitch bending, wobble or throb, depending on the effect.
- Fdbk (Feedback): The amount of delayed signal that is fed back into the effect. Higher settings can provide more dramatic textures.
- Mix: Sets the balance of the "Dry" and "Wet" signals. At 0% no effect is added to your signal; at 100% you will hear the effected signal only. For Chorus, Flanger & Phase FX, results are typically best with the Mix set between 0 to 50%. For Vibrato, Tremolo and Rotary FX, try the Mix at 90 100%. Feel free to experiment!

Note that the Script Phase, Pattern Tremolo, AC Flanger & 80a Flanger do not offer a Mix parameter. Their dry/wet balance is "fixed" just like the classic pedals that inspired them!

7.4

### **Filter Models**

Filter Models - Parameter Reference Table							
Model		Parameters					
Voice Box	Speed	Start	End	Auto	Mix		
V-Tron	Start	End	Speed	Mode	Mix		
Q Filter	Freq	Q	Gain	Туре	Mix		
Vocoder	Mic	Input		Decay	Mix		
Seeker	Speed	Freq	Q	Steps	Mix		
Obi Wah	Speed	Freq	Q	Туре	Mix		
Tron Up	Freq	Q	Range	Туре	Mix		
Tron Down	Freq	Q	Range	Туре	Mix		
Throbber	Speed	Freq	Q	Wave	Mix		
Slow Filter	Freq	Q	Speed	Mode	Mix		
Spin Cycle	Speed	Freq	Q	VolSens	Mix		
Comet Trails	Speed	Freq	Q	Gain	Mix		
Octisynth	Speed	Freq	Q	Depth	Mix		
Synth O Matic	Freq	Q	Wave	Pitch	Mix		
Attack Synth	Freq	Wave	Speed	Pitch	Mix		
Synth String	Speed	Freq	Attack	Pitch	Mix		
Growler	Speed	Freq	Q	Pitch	Mix		

## **Common Parameters**

The following parameters are common to most Filter FX Models.

- Frequency: Selects the center frequency used by the effect.
- Q: Adjusts the frequency width of the filter in use.
- Speed: Adjusts the rate of the model's modulation or oscillators, can be adjusted to a Hz value or Note Division:
  - Choosing a Hz value provides a specific modulation speed in cycles per second.
  - Choosing a **Note Division** value provides a time that is based on the current **Tap Tempo** (see "Tap Tempo" on page 1 4)

• Mix: Sets the balance of the "Dry" and "Wet" signals. At 0% no effect is added to your signal; at 100% you will hear the effected signal only. For most Filter FX, try the 100% setting to achieve the full weirdness factor.

## **Pitch Models**

Pitch Models - Parameter Reference Table					
Model	Parameters Parameters				
Bass Octaver	Tone	Normal	Octave		
Pitch Glide	Pitch				Mix
Smart Harmony	Key	Shift	Scale		Mix

### Pitch FX Model Parameters

Since these FX are a bit more complex, we've provided examples of each Pitch FX Model's Edit Mode screen and parameter descriptions.

### **Bass Octaver**



- Tone: The overall tone of the effect.
- Normal: Controls the volume of the dry signal.
- Octave: Controls the volume of the processed, octave signal.

7•6

#### Pitch Glide



This effect is best used by assigning your POD® HD500 pedal to the Pitch parameter to "wham" out some wild pitch-bending effects!

- Pitch: Manually lets you select the Pitch. For best results you'll want to set your heel and toe values using your POD HD500 pedal!\*
- Mix: Controls the balance of wet & dry signals.

\*Note: To assign your pedal, double tap on the **MOVE** button and choose "Pitch" as the parameter to be controlled (see "Expression Pedal & Variax® Knob Controller Assignment" on page 3•7). Try setting the MIN VALUE to 0% and the MAX to 100% to allow your pedal to sweep the full Pitch range, and set the MIX to 100% to hear only the pitched signal.

## **Smart Harmony**



Select a Scale, Key and Shift value and our DSP algorithms will do the rest, producing a perfect harmony note along with your guitar riffs. The available parameters are:

- Key: Select the Key you'll be playing in.
- Shift: Determines the interval value for the desired harmony note.
- Scale: Select the Scale you'd like to use (see the following instructions and table).
- Mix: Sets the balance or your dry signal + harmony notes.

The Smart Harmony effect automatically detects your guitar's single-note pitch and shifts it to match a user-selected Key and Scale. A choice of Keys is provided - Consult the table below to achieve other scalic modes.

- Choose your Key on the left, then your mode on the top.
- The cell where the two connect is the Key to choose to get to the mode you'd like. For example, for C Lydian, the Scale you want is G Major.

	Mode						
Key	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Locrian
Α	A Maj	G Maj	F Maj	E Maj	D Maj	C Maj	Bb Maj
В	В Мај	A Maj	G Maj	Gb Maj	E Maj	D Maj	C Maj
С	C Maj	Bb Maj	Ab Maj	G Maj	F Maj	Eb Maj	Db Maj
D	D Maj	C Maj	Bb Maj	A Maj	G Maj	F Maj	Eb Maj
Е	E Maj	D Maj	C Maj	B Maj	A Maj	G Maj	F Maj
F	F Maj	Eb Maj	Db Maj	C Maj	Bb Maj	Ab Maj	Gb Maj
G	G Maj	F Maj	Eb Maj	D Maj	C Maj	Bb Maj	Ab Maj

Smart Harmony Model - Scale Reference Table

## **Preamp+EQ Models**

Preamp+EQ Models - Parameter Reference Table					
Model		Parameters Parameters			
Graphic EQ	80Hz	220Hz	480Hz	I.IkHz	2.2kHz
Parametric EQ	Lows	Highs	Freq	Q	Gain
Studio EQ	Low Freq	Low Gain	Hi Freq	Hi Gain	Gain
4 Band Shift EQ	Low	Low Mid	Hi Mid	Hi	Shift
Mid Focus EQ	Hi Pass Freq	Hi Pass Q	Low Pass Freq	Low Pass Q	Gain
Vintage Pre	Gain	Output	Phase	Hi Pass Filter	Lo Pass Filter

### **Common Parameters**

The following parameters are common to EQ Models.

- Frequency (as well as Low, Mid, High): Selects the center frequency or range for the particular EQ Band. (The Graphic EQ model includes "fixed" Bands where the gain is adjustable for each.)
- Q: Adjusts the frequency width or shape of the frequency band filter.
- Gain: Adjust the output level of the particular Band. (The Gain parameters accessed by Multi-function Knob #4 adjust the overall output level.)

## Vintage Pre



This Model is a vintage-voiced, mono tube mic preamp based on\* the Requisite® Y7 vintage Tube Mic Preamp, excellent for use with your Mic source input, Variax acoustic guitar models, or even in conjunction with Bass or Guitar Amps, anywhere in the signal path, to provide some nice tube warmth.

- Gain: Dial in the amount of input gain higher levels will add some tube distortion.
- Output: Determines the final output level, capable of a significant signal boost.
- Phase: Choose 0 for normal, or 180 to reverse the phase. (It can sometimes be necessary to reverse the phase of one mic'ed signal when combined with another, to correct for a resulting "hollow," out-of-phase sound.)
- HPF: A High Pass Filter to reduce bass frequencies. Increase this Hz value to choose where the low frequency reduction begins.
- LPF: A Low Pass Filter to reduce treble frequencies. Decrease this KHz value to choose where the high frequency reduction begins.

# **Delay Models**

Delay Models - Parameter Reference Table					
Model		F	Parameters		
Ping Pong	Time	Fdbk	Offset	Spread	Mix
Dynamic Dly	LTime	L Fdbk	R Time	R Fdbk	Mix
Stereo Delay	Time	Fdbk	Thresh	Ducking	Mix
Digital Delay	Time	Fdbk	Bass	Treble	Mix
Dig Dly W/Mod	Time	Fdbk	ModSpd	Depth	Mix
Reverse	Time	Fdbk	ModSpd	Depth	Mix
Lo Res Delay	Time	Fdbk	Tone	Res	Mix
Tube Echo	Time	Fdbk	Wow/Flt	Drive	Mix
Tube Echo Dry	Time	Fdbk	Wow/Flt	Drive	Mix
Tape Echo	Time	Fdbk	Bass	Treble	Mix
Tape Echo Dry	Time	Fdbk	Bass	Treble	Mix
Sweep Echo	Time	Fdbk	Swp Spd	Swp Dep	Mix
Sweep Echo Dry	Time	Fdbk	Swp Spd	Swp Dep	Mix
Echo Platter	Time	Fdbk	Wow/Flt	Drive	Mix
Echo Platter Dry	Time	Fdbk	Wow/Flt	Drive	Mix
Analog W/Mod	Time	Fdbk	ModSpd	Depth	Mix
Analog Echo	Time	Fdbk	Bass	Treble	Mix
Auto-Volume Echo	Time	Fdbk	ModDep	Swell	Mix
Multi-Head	Time	Fdbk	Heads I-2	Heads 3-4	Mix

7-10

### **Common Parameters**

The following parameters are common to most Delay FX Models.

- Time: Adjusts the delay/repeat time, with higher settings providing longer delays. Time can be adjusted to a MS value or Note Division:
  - Choosing a MS value provides a specific time in milliseconds.
  - Choosing a **Note Division** value provides a time that is based on the current **Tap Tempo** (see "Tap Tempo" on page 1 4).
- Fdbk (Feedback): Sets the number of delayed repeats.
- Depth: Some delays include modulation. These will typically include a Depth parameter to adjust the intensity of the pitch modulation applied to the repeats.
- ModSpd: Control the speed of the pitch modulation.
- Mix: Sets the balance of the "Dry" and "Wet" signals. At 0% no effect is added to your signal; at 100% you will hear the delayed signal only.

### **Reverb Models**

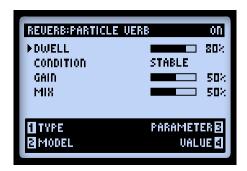
Reve	Reverb Models - Parameter Reference Table					
Model		Param	eters			
Plate	Decay	PreDelay	Tone	Mix		
Room	Decay	PreDelay	Tone	Mix		
Chamber	Decay	PreDelay	Tone	Mix		
Hall	Decay	PreDelay	Tone	Mix		
Echo	Decay	PreDelay	Tone	Mix		
Tile	Decay	PreDelay	Tone	Mix		
Cave	Decay	PreDelay	Tone	Mix		
Ducking	Decay	PreDelay	Tone	Mix		
Octo	Decay	PreDelay	Tone	Mix		
Spring	Decay	PreDelay	Tone	Mix		
'63 Spring	Decay	PreDelay	Tone	Mix		
Particle Verb	Dwell	Condition	Gain	Mix		

## **Common Parameters**

The following parameters are common to all Reverb Models, with the exception of the Particle Verb Model, which we've described separately.

- Decay: Sets the length of time the reverb effect sustains.
- Predelay: Configures the time before the reverb effect is heard.
- Tone: Adjusts the overall Tone of the wet reverb signal. Higher settings provide a brighter, more reflective reverb quality.
- Mix: Sets the balance of the dry & wet signals, from 0% (dry signal only) to 100% (wet reverb signal only).

#### Particle Verb



A new kind of reverb effect which turns your chords into a lush modulated pad in STABLE mode. CRITICAL mode is similar, but with a slight rise in pitch. In HAZARD mode, all stops are removed. The parameters for this model differ from the other Reverbs:

- Dwell: Essentially a decay parameter, which adjusts the length of time the reverb tail lasts.
- Condition: Choose between STABLE, CRITICAL and HAZARD here for some different reverb experiences!
- Gain: Sets overall output level of the effect.

7-12

## Volume/Pan & Wah Models

The **Volume/Pan** and **Wah** sets of Models are all just waiting to be put to use with your POD HD500 pedal! To follow is info on the FX parameters & some tips on using them.

When you add any Volume or Wah model to your tone, they are automatically assigned to be controlled with your POD HD500 Expression Pedal! Please see "Expression Pedal & Variax® Knob Controller Assignment" on page 3 • 7 for more information.

Volume/Pan Models - Parameter Reference Table			
Model Parameter			
Volume	Volume Level		
Pan	Pan L-R Balance		

### **Volume**



Volume: Adjusts the signal level. 100% is unity gain. This parameter can be accessed via the Multi-function knob at any time. With your EXP Pedal assigned to control the Volume, you'll see this Volume parameter visually adjust with the pedal as well.

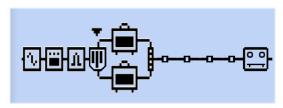
### Pan



• Pan: Adjusts the signal balance sent to the let and right stereo channels. 0% sends full left, 50% sends equally left & right, and 100% sends full right.

The audible effect heard when using the Pan can differ quite a bit depending on the position in your signal chain and what types of FX follow it. Here are a few examples:

## Before Path A & B split

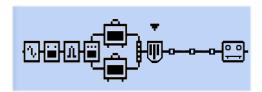


Pan positioned before Path A & B split

When placed here, your guitar signal is panned left to Path A and right to Path B. This can be a cool way to "blend" the sounds of two Amp models.

7-14

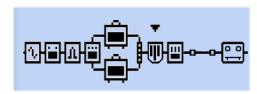
### After Path A & B Mixer



Pan positioned after Path A & B Mixer

In this position, the stereo left & right signals fed into the Pan is determined by your Mixer Pan settings. The Pan effect then pans these signal to the left and right main outputs. Obviously, you'll only benefit from using the Pan in this post-Mixer position when utilizing both the left and right outputs from POD HD500.

## Placing a Mono Output FX Model after the Pan



Mono FX Model (EQ) positioned after Pan

Just as with all stereo FX Models, when a mono FX Model is placed after the Pan, the Pan Model's output will become "mono-ized, as described in "Model Types and Mono/Stereo Signal Routing" on page 3 • 6. Therefore, you'll typically want to avoid placing a mono FX Model later within the same signal path as the Pan Model.

## Wah Models

Wah Models - Parameter Reference Table				
Model Parameters				
Fassel	Position	Mix		
Conductor	Position	Mix		
Throaty	Position	Mix		
Colorful	Position	Mix		
Vetta Wah	Position	Mix		
Chrome	Position	Mix		
Chrome Custom	Position	Mix		
Weeper	Position	Mix		

## **Common Parameters**

Each Wah offers the following two parameters:

- Position: This controls the "sweep" of the Wah. Any Wah Model is best used with this parameter assigned to your pedal, however, you can also access this parameter with the Multi-function Knob, such as to dial in a "parked" Wah tone.
- Mix: Sets the balance of the "Dry" and "Wet" signals. At 0% no Wah effect is added to your signal; at 100% you will hear the Wah-effected signal only. Try lowering the Mix to less than 100% for a more subtle effect!

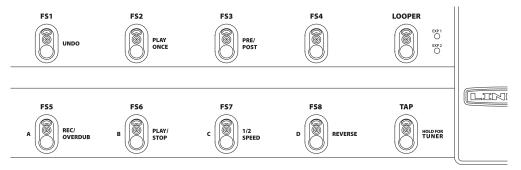
7.16

# LOOPER MODE

The Looper in POD® HD500 offers you up to 48 seconds of mono recording time (in Half-Speed Mode) or 24 seconds recording time (in Normal Mode), as well as the ability to undo, record overdubs, playback Loops at half speed, in reverse, and more!

## **Looper Footswitch Controls & Performance View**

When you engage the Looper mode, the POD HD500 footswitches control the Looper according to their gold-colored function labels, providing hands-free operation.



The Looper footswitch controls

Additionally, the LCD Performance View displays the behavior of several Looper functions. You can think of these as "this is what will happen when the respective footswitch is pressed" indicators. Press the **VIEW** button to show this screen whenever you use the Looper. (Also see the Looper FS Display options - "Page 1, Setup:Utilities Options" on page 2•2.)



The Performance View, Looper functions

To follow are descriptions for each of the footswitch functions and Performance View while Looper mode is active.



LOOPER - Toggles Looper Mode On/Off. When this switch's LED is lit, the POD HD500 Looper Mode is active. The Performance View screen will display the Looper functions when the Looper is active, as shown above.



**UNDO** - Use the **FSI** switch to "undo" the last recorded overdub. You can press this footswitch while actively in Overdub-Record mode, Loop Playback mode, or while stopped and only the last recorded overdub is erased. This function will not erase the originally recorded Loop.

**PLAY ONCE -** Pressing the **FS2** switch plays your recorded Loop (including overdubs, if you've recorded any) for one cycle. Cool for triggering a pre-recorded phrase on demand!



While playback is active, the Play/Stop icon appears as "STOP," to indicate that it can be pressed to stop playback immediately.

**PRE/POST -** Toggling the **FS3** switch determines the position of the Looper in your Signal Flow, which dictates whether Amp & FX processing is added to your guitar signal during the recording of your Loop, or only for the Loop's playback.

- **PRE (FS3 switch light is Off):** Your guitar signal is recorded unprocessed (i.e. the Loop is recorded "pre" Amp & FX processing). When played back, the Loop audio is mixed with incoming guitar to feed the current Preset's Amp & FX processing. If you change Presets or tone settings while set to **PRE**, you'll hear them applied to your Loop playback.
  - When the Looper is set to **PRE**, the Pre/Post icon appears as "POST," to indicate that pressing the **PRE/POST** footswitch will set the Looper to **POST**.
- **POST(FS3 switch light is on):** Your guitar signal is recorded processed (i.e. the Loop is recorded "post" Amp & FX processing). When played back, the Loop audio is mixed with incoming guitar AFTER the guitar signal has been processed through the Amp and FX. This provides the ability select a new Preset which is applied only on your guitar input, while the Loop plays back with the original recorded Preset tone!



When the Looper is set to **POST**, the Pre/Post icon appears as "PRE," to indicate that pressing the **PRE/POST** footswitch will set the Looper to **PRE**.

Note: If you record your Loop in POST mode and then switch to PRE for Loop playback, this results in the current Amp+FX to be applied to the Loop playback (where the Loop was already recorded with Amp+FX applied). Be aware that this can cause the Loop playback to be significantly louder!

**REC/OVERDUB** - To record a Loop, step on the **FS5** switch and POD HD500 will immediately start recording. The footswitch will remain lit while recording is active. You'll see the Performance View display the following:

- The Record function shows "DUB IN." Pressing the **REC/OVERDUB** switch will immediately put you into Overdub-Record mode.
  - If you press **REC/OVERDUB** at this time, whatever you play will be recorded on top of the original Loop recording, and you'll see the Performance View indicator show "DUB OUT." Press the switch again to stop the overdub recording.
- The Play/Record function shows "STOP" to indicate that pressing the **PLAY/STOP** switch will stop playback & recording.

Once you have a Loop recorded, you can layer an overdub on top of your current Loop at any time. Simply play back the Loop and step on the **REC/OVERDUB** switch *while the* **Loop is playing**. Your new live guitar will be recorded on top of your previously recorded Loop. You can repeat this step and layer as many overdubs as you like!

Note: If you press **REC/OVERDUB** while Loop playback is stopped, this will always record a new Loop, and any previously recording will be discarded.

• While playback is active, the Play/Stop icon appears as "STOP."

I/2 SPEED - Press the FS7 switch to toggle the 1/2 Speed feature On/Off. The FS7 switch remains lit whenever 1/2 Speed is active.

Note that you can use the 1/2 Speed option for recording as well as playback. Specific behaviors apply to each - please see "1/2 Speed Operation" on page 8 • 5.

- When 1/2 Speed is active, the Speed icon appears as "FULL."
- **1/2** When 1/2 Speed is Off, the Speed icon appears as "1/2."

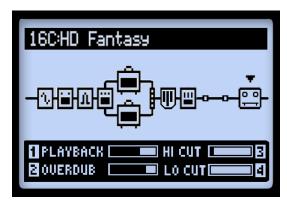
**REVERSE** - Press the **FS8** switch to toggle the Reverse Play feature On/Off. All Loop playback is backwards when on. The **FS8** switch remains lit whenever Reverse is active.

- When Reverse is active, the Reverse icon appears as "FWD."
- When Reverse is Off, the Reverse icon appears as "REV."

8.4

# **Looper Settings**

Press the **VIEW** button to display the Signal Flow View screen and select the Looper to access several additional settings.



The Signal Flow View screen, Looper options

- 1 Playback Use Multi-function Knob 1 to adjust the Looper playback volume. You
  may find it useful to turn this down a bit so that your live guitar can be slightly
  louder.
- 2 Overdub Use Multi-function Knob 2 to adjust the level at which all Overdubs are recorded. This level does not affect the level of your original Loop recording.
- 3 Hi Cut & 4 Lo Cut Use Multi-function Knobs 3 & 4 to adjust these EQ options, to reduce the treble and bass of your Loop playback. It can be helpful to reduce these to optimize the "mix" of your Loop playback with your live guitar. These controls reduce the High and Low frequencies more as you raise their values.

# I/2 Speed Operation

The Looper utilizes both the 1/2 Speed and Full Speed options for recording and playback. These options directly affect the maximum Loop recording time.

POD HD500 Looper Record Time				
Full Speed	24 Seconds maximum			
1/2 Speed	48 Seconds maximum			

### **Using the Looper**

Specific behaviors apply, as follows:

- Full Speed: When set to Full Speed before recording, the Looper provides up to 24 seconds max. recording time.
  - Playback of the recorded Loop at the Full Speed setting is heard just as recorded.
  - If you change the setting to 1/2 Speed, your recorded Loop is played back at half speed, as well as pitched one octave lower.
- 1/2 Speed: When set to 1/2 Speed before recording, the Looper provides up to 48 seconds maximum recording time.
  - Playback of the recorded Loop at the 1/2 Speed setting is heard just as recorded.
  - If you change the setting to **Full Speed**, your recorded Loop is played back at double speed, as well as pitched one octave higher.

# **USB** Audio

In this chapter, we'll cover the USB audio capabilities of POD® HD500. With the installation of the Line 6 USB audio driver, you can use POD HD500 as a high quality audio interface for your Mac® or Windows® computer!

### The Line 6 USB Audio Driver

Before you connect POD HD500 to your computer, it is recommended that you download and install the free Line 6 POD HD500 Edit software. This installs the necessary Line 6 USB Audio Driver\*, as well as the Line 6 Monkey update utility (also see "Appendix A: Line 6 Monkey" on page A•1).

\*NOTE: As of the POD HD500 USB Device Driver version 5.7.0, Mac OS® X 10.4 (Tiger®) is no longer supported. To use the POD HD500 USB connection with a Mac® running OS® X 10.4, you'll need to download and install the earlier POD HD500 Driver version 5.1.2, available from <a href="http://line6.com/software/">http://line6.com/software/</a>.



The Line 6 Software Downloads site - selecting the POD HD500 Edit software

Once installation is complete, just connect your device directly to a USB 2.0 port on your computer and power On your POD HD500. Note that POD HD500 requires the use of a USB 2.0 port on your computer (not into a USB hub).

Also see the POD HD500 Edit Installer Guide and the POD HD500 Edit Pilot's Guide, available from <a href="http://line6.com/support/manuals">http://line6.com/support/manuals</a>.

## **Audio Routing**

When using the POD HD500 USB connection, the audio driver manages several tasks. The driver feeds the processed guitar signal out the USB Record Send to your computer and receives playback audio from the computer. It also grabs the processed guitar signal before routing it to the Record Send, to provide a low latency monitor signal, and then mixes the monitor signal with the playback audio and feeds this combined signal to your POD HD500 analog outputs.

Note that all USB audio is muted whenever a L6 LINK<sup>TM</sup> connection is active between POD HD500 and a DT50<sup>TM</sup> or DT25<sup>TM</sup> amplifier.



USB audio routing provided by the Line 6 USB audio driver

#### The POD HD500 Record Send

As shown above, the Record Send is the virtual "pipeline" that carries your POD HD-processed, 24-bit digital signal across the USB connection, making it available to your audio software as an input signal for recording.

The POD HD500 Record Send appears as an available audio input/recording device within your audio software. Simply select this Send as the input for your audio track and you'll be able to record your POD HD500 signal. The level of the signal fed to the Send is affected by your POD HD500 controls: Mixer block Volume A & B, Amp Model Drive & Volume, FX Model Gain controls, Volume Pedal, etc., (but *not* the Master Volume knob). For the best recording quality, watch the input meters provided in your software and adjust your level to be at least halfway up, but never "clipping."

Note that the type of audio signal fed to the Record Sends is controlled by the Output Mode setting found in the POD HD500 Setup:Outputs screen. For most USB recording situations, you'll likely want to set this to "Studio/Direct." Please see "Page 4, Setup: Output Options" on page 2 • 8 for more info.

## The Line 6 Audio-MIDI Devices Panel

The Line 6 Audio-MIDI Devices utility is the place where you configure various audio driver settings. The options in the Line 6 Audio-MIDI Devices dialog are slightly different if you are on a Mac® versus a Windows® system. See the following descriptions that match your setup: For Mac® see next section, or for Windows® see page 9•8.

### Mac® - Line 6 Audio-MIDI Devices



Launch the Line 6 Audio-MIDI Devices utility from within the Mac® System Preferences. This utility provides access to several driver options.

## Line 6 Audio-MIDI Settings - Driver Options (Mac®)



The Line 6 Audio-MIDI Settings window - Driver page

- **Device Selector:** Select your POD HD500 here. If you have more than one supported Line 6 audio device connected, each will be selectable in this list.
- **2 Driver Version:** Displays the current device's installed driver version number.
- **3 ESN:** Displays the current device's unique Electronic Serial Number.
- **Driver/Inputs & Recording Selector:** Choose between displaying the two pages of the Driver Options window. (Also see "Inputs & Recording Page" on page 9.5.)
- **E** Run Audio MIDI Setup: Mac<sup>®</sup> Core Audio interface driver settings are configured in the Mac OS<sup>®</sup> X Audio MIDI Setup utility. This button launches this dialog for you (see "Mac OS® X Audio MIDI Setup Utility" on page 9•6).

9.4

- **Sample Rate Converter Active:** You'll see this indicator light up whenever the device is operating at a sample rate other than its native 48kHz rate. In addition to 48kHz, POD HD500 supports 44.1kHz, 88.2kHz and 96kHz rates by utilizing an internal sample rate converter. Please check your specific software's documentation for details on configuring its audio sample rate.
- **USB Audio Streaming Buffer:** Adjusts the buffer size for the audio responsiveness of the Input Monitoring signal. Basically, the default setting should be fine for most systems, but if getting audio dropouts or working with large CPU demands on your system, raise the slider a notch or two to the right until it alleviates the problem.

## **Inputs & Recording Page**



The Line 6 Audio-MIDI Settings window - Inputs & Recording page

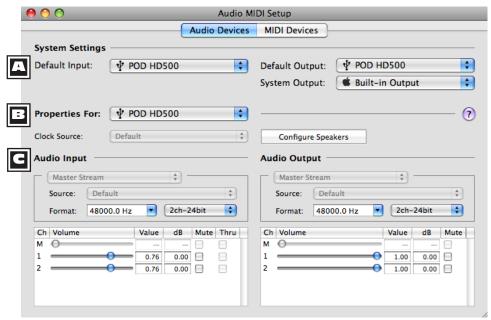
**Record Sends List:** Displayed here are the Record Sends for the current Line 6 device that will be available to your audio software. For POD HD500 you'll see the one, stereo "1-2 Main Out" Record Send.

**9** Hardware Monitor Level: This slider independently controls the volume of your processed guitar tone output for monitoring (the signal fed to the device's main outputs). It does <u>not</u> affect the level of the signal fed to your computer via the Record Send. This allows you to balance your guitar's monitor level against the playback audio from your computer, such as when recording in DAW software.

If using POD HD500 as the audio interface for recording into a DAW application, then your DAW may also offer its own "software monitoring" function. You may want to use the DAW's software monitoring in some scenarios, such as if you want to hear your guitar signal processed with plug-ins on the DAW track. When utilizing DAW software monitoring, you'll want to set this slider's level to minimum to allow you to hear only the DAW software monitoring signal.

## Mac OS® X Audio MIDI Setup Utility

POD HD500 utilizes the Mac® Core Audio driver type, making it a compatible audio interface for practically any Mac® audio/multimedia software. As with most Core Audio devices, some settings are found in the Audio Devices page of the Mac® Audio MIDI Setup dialog.



The Audio MIDI Setup utility - Mac OS® X 10.5\*

9.6

\*Note: The Audio MIDI Setup utility window within Mac OS® X 10.6 and higher has a slightly different layout, but offers the same options and functionality as described here.

# **System Settings:**

- The **Default Input** and **Default Output** options allow you to choose the audio interface you want your Mac® audio applications to use by default. If you want this to be your Line 6 device, select it here.
- The **System Output** option allows you to choose which audio interface the Mac<sup>®</sup> System sounds are played through.
- **Device Properties:** Choose your POD HD500 device here to allow the Audio Input and Audio Output options display its settings.
- **Audio Input & Output Options:** If you've selected your POD HD500 in the Device Properties, these settings will all refer to your POD HD500 device:
  - You'll see the Input and Output selectors both disabled, showing Master Stream for each. POD HD500 includes one stereo "fixed" Input (Record Send 1-2) and one fixed stereo Output (Out 1-2).
  - The Source options are also disabled for POD HD500.
  - The **Format** selectors show you the Sample Rate\* and Bit Depth that POD HD500 is operating at for recording. The Bit Depth for POD HD500 is fixed at 24 bit.

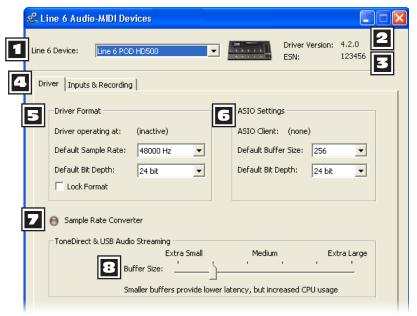
\*It is recommended that you do not use the Sample Rate selectors in this window to set the sample rate when your audio software is running. Typically, your audio software will offer a sample rate option within its own "Preferences" settings.

- The Input Volume Sliders offer level control for the Record Send signal fed to your recording software. Note that the sliders offer 18dB of input gain at the highest setting.
- The Output Volume Sliders offer stereo level control for your software's audio playback fed to POD HD500.

# Windows® - Line 6 Audio-MIDI Devices

The following settings are the same for Windows® XP, Windows Vista® or Windows® 7, unless otherwise noted.

Launch the Line 6 Audio-MIDI Devices from within the Windows® Control Panel. On Windows® systems, POD HD500 offers both a DirectSound and ASIO® recording driver for maximum compatibility with audio & multimedia software applications. It is always recommended that you select the ASIO® audio driver within your audio software, if supported, since this offers higher performance. When prompted for ASIO® driver settings, this dialog is where you will make them.



The Line 6 Audio MIDI Devices - Driver tab (Windows® XP)

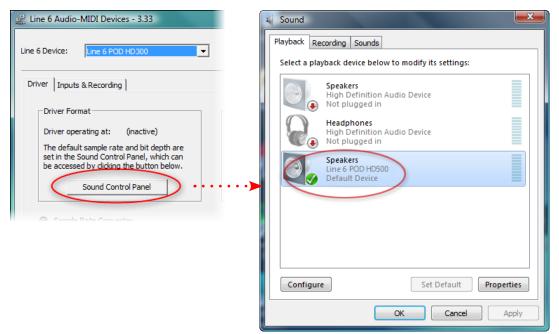
- **Device Selector -** Select your POD HD500 here. If you have more than one supported Line 6 audio device connected, each will be selectable in this list.
- **2 Driver Version -** Displays the current device's installed driver version number.
- **3 ESN** Displays the current device's unique Electronic Serial Number.

9•8

- **Driver/Inputs & Recording Selector** Choose between displaying the two tabs of the Driver Options window. (Also see "Inputs & Recording Page" on page 9 12.)
- **Driver Operation (Windows® XP only) -** These options are only applicable for when an application utilizes the POD HD500 device via the Windows® DirectSound® driver. They will be non-selectable when in use via the ASIO® driver.
  - **Driver operating at:** Displays the actual Sample Rate & Bit Depth the driver is operating at when in use by an audio application. If not in use, "inactive" is displayed.
  - **Default Sample Rate & Bit Depth:** Use this option to set the default sample rate & bit depth that (non-ASIO®) applications will use when using POD HD500 as the audio interface.
  - **Lock Driver Format:** When checked, this forces the DirectSound® driver to always operate at the Sample Rate and Bit Depth settings entered in the two fields above (as opposed to following the sample rate requested by a Windows® audio application).

# 5 Driver Operation (Windows Vista® & Windows® 7)

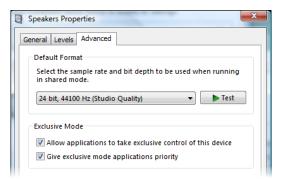
On Windows® Vista & Windows® 7 you will see a **Sound Control Panel** button - click this to launch the Windows® Sound panel. Within the Sound panel's Playback and Recording tabs you can designate POD HD500 as the "Default" audio device if you want all your Windows® multimedia programs to utilize it as their sound card device.



POD HD500 selected as the Default Playback Device

You can also click on the **Properties** button in the Sound dialog to access the default format settings for the POD HD500 Sample Rate and Bit Depth when used with Windows® multimedia applications. (Note that if you are using an audio application that is set to utilize the ASIO® driver for your Line 6 device, then ASIO® communicates directly with the device, and these "default format" settings do not apply.)

9.10



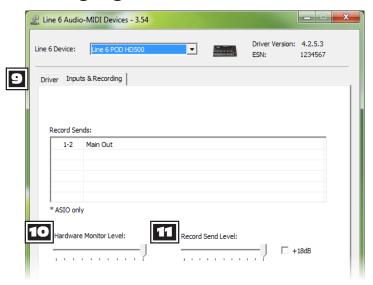
The Window Vista/7 Control Panel>Sounds>Properties - Advanced tab

# **6** ASIO® Driver Settings

- ASIO® Client: If you are running audio software that is using POD HD500 as its ASIO® audio device, the name of the software will appear here.
- Buffer Size: The ASIO® buffer size in use, which will affect the "responsiveness" and "latency" of the DAW software. The lower the setting, the faster the response, but with the trade-off of higher processor usage and the risk of audio dropouts. Raise the value if you are getting inconsistent playback or recording in the audio software. 256 is generally a good setting to start with.
- Bit Depth: The ASIO® bit depth in use. It is recommended to use 24-bit here.
- **Sample Rate Converter Active -** You'll see this indicator light up whenever the device is operating at a sample rate other than its native 48kHz rate. In addition to 48kHz, POD HD500 supports 44.1kHz, 88.2kHz and 96kHz rates by utilizing an internal sample rate converter.
- **USB Audio Streaming Buffer -** This slider adjusts the buffer size for the audio responsiveness of the Input Monitoring signal. Basically, the default setting should be fine for most systems, but if getting audio dropouts or working with large CPU demands on your system, raise the slider a notch or two to the right until it alleviates the problem.

# 9-12

## **Inputs & Recording Page**



The Line 6 Audio MIDI Devices - Inputs & Recording tab

- **PRECORD Sends List:** Displayed here are the Record Sends for the current Line 6 device that will be available to your audio software. For POD HD500 you'll see the one, stereo "1-2 Main Out" Record Send.
- Hardware Monitor Level: This slider independently controls the volume of your processed Source Input tone output for monitoring (the signal fed to the device's main outputs). It does <u>not</u> affect the level of the signal fed to your computer via the Record Send. This allows you to balance your guitar's monitor level against the playback audio from your computer, such as when recording in DAW software.

Your DAW software may also offer its own "software monitoring" function. You may want to use the DAW's software monitoring in some scenarios, such as if you want to hear your guitar signal processed with plug-ins on the DAW track. When utilizing DAW software monitoring, you'll want to set this Hardware Monitor slider to minimum to allow you to hear only the DAW software monitoring signal.

**Record Send Level:** This slider independently controls the level of the POD signal fed to your computer via the Record Send. This directly affects the signal level that is recorded into your DAW tracks. Note that you can also check the +18dB checkbox here if you need to boost the signal fed to your DAW.

# APPENDIX A: LINE 6 MONKEYTM



Line 6 Monkey™ is the free, intelligent updater software that can be used to keep your POD® HD500, as well as related Line 6 products, up to date. Line 6 Monkey is installed automatically on your Mac® or Windows® computer along with the POD HD500 USB device drivers. If you have not yet installed the USB device drivers, you'll need to do so now to utilize POD HD500 with your computer - please see "USB Audio" on page 9•1. It's highly recommended to run Line 6 Monkey periodically to check for and install the latest updates.

Attention Line 6 Variax® Owners: It is highly recommended that you also use Line 6 Monkey to also get the latest updates for your Variax instrument! Please see <u>"Line 6 Variax"</u> Updates" on page A•3 for instructions.

# **Launch Line 6 Monkey**

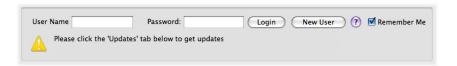
Connect POD HD500 to your computer's USB 2.0 port and power On your device. To launch Line 6 Monkey:

- On Mac®, go to /Applications/Line 6/Line 6 Monkey.
- On Windows®, go to Start menu\Programs\Line 6\Tools\Line 6 Monkey.

The following instructions are the same on Mac® or Windows®, unless otherwise noted.

## **Login Account**

You'll need to Login so that Line 6 Monkey can communicate with Line 6 and provide you with exactly what you need. It's just a few clicks, and it's free! If you have not yet created an account, click the New User button and you'll be walked right through the steps.



A•I

## Register Your Hardware

If you have not already done so, you'll be prompted to Register your connected Line 6 hardware. It's a painless process really, so click that Register button now.



# **Grab Those Updates**

If you see any items where a newer version is available, then you should click on that item and let the little Monkey fellow walk you through the installation steps.



Line 6 Monkey - Update screen for POD HD500

As an example, the above screenshot shows Monkey has detected that a newer Firmware - Flash Memory version is available than is currently installed in our device. In this scenario you can select the Flash Memory item and click **Update Selection**. Be sure to read the prompts carefully and Monkey will assist you in performing the update in minutes. It is especially important not to disturb the devices' controls and cable connections until the update fully completes!

# **Line 6 Variax Updates**

If you own any Line 6 Variax instrument, it is highly recommended that you check for and install the latest available firmware update. This may be required for compatibility with the newest POD HD500 firmware and POD® HD500 Edit and Variax® Workbench™ software applications.

Simply plug your Variax into the **VARIAX** input on the back of POD HD500 and then launch Line 6 Monkey. You'll be prompted to select from among the connected devices.



Select your Variax instrument in the window and click **OK** to proceed. The Line 6 Monkey Updates window will then appear, showing all available updates for your Variax. If a Flash Update is available, you should select it and click on **Update Selected** to install the latest version.

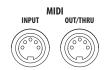
If you haven't already done so, be sure to download and install the latest Variax Workbench software - you'll see this listed within the Line 6 Monkey Updates window as well!

# APPENDIX B: MIDI

This Appendix covers the MIDI features available for your POD® HD500 device. POD HD500 will respond to incoming MIDI messages for remote access of its assignable Footswitch & Pedal Controllers, and for loading Banks & Presets. POD HD500 also outputs Bank & Program Change messages when navigating Set Lists and Presets. POD HD500 additionally includes the ability to function as MIDI Controller device, with its footswitches and Expression Pedals capable of sending customized MIDI commands.

# MIDI Input & Out/Thru

The MIDI INPUT and MIDI OUT/THRU DIN ports are the connections to use for all MIDI communication. (POD HD500 does not include USB MIDI functionality.) To send MIDI communication to another device, connect a standard 5-Pin MIDI cable from the MIDI OUT/THRU to the MIDI Input of your external device. To receive MIDI communication, connect a MIDI cable from the POD HD500 MIDI IN to the device MIDI Out.



#### The POD HD500 MIDI INPUT & OUT/THRU DIN connectors

\*Details for MIDI commands and features for other Line 6 products is available at <a href="http://line6.com/support/manuals/">http://line6.com/support/manuals/</a>.

## **POD HD500 MIDI Setup options**

To set the MIDI Channel for sending & receiving MIDI messages, use the POD HD500 SETUP:MIDI/Tempo - MIDI Channel option. It is also possible to receive MIDI data on this MIDI Channel and to pass it "thru" the POD HD500 MIDI OUT/THRU to other MIDI devices. To do so, be sure to set the MIDI Out/Thru option on this same Setup page to "Thru." See "Page 6, MIDI/Tempo Options" on page 2•10.

POD HD500 Footswitch & Pedal assignments, Looper functions and more can be can controlled remotely via a MIDI Controller device connected to the POD HD500 **MIDI** IN port. The following reference table shows the necessary MIDI CC settings to configure your MIDI Controller device to access these POD functions.

R	•

POD HD500 - MIDI Control Reference					
MIDI CC#	Value	Function			
Pedal & Footswitch Assignments					
001	0 - 127	EXP-1 Pedal Assignment			
002	0 - 127	EXP-2 Pedal Assignment			
051	0 - 127	Toggles FSI Assignment On/Off			
052	0 - 127	Toggles FS2 Assignment On/Off			
053	0 - 127	Toggles FS3 Assignment On/Off			
054	0 - 127	Toggles FS4 Assignment On/Off			
055	0 - 127	Toggles FS5 Assignment On/Off			
056	0 - 127	Toggles FS6 Assignment On/Off			
057	0 - 127	Toggles FS7 Assignment On/Off			
058	0 - 127	Toggles FS8 Assignment On/Off			
059	0 - 127	Toggles EXP Toe Switch Assignment On/Off			
Looper Controls					
060	0-63 = Overdub, 64-127 = Record	Looper Record/Overdub Switch			
061	0-63 = Stop, 64-127 = Play	Looper Play/Stop Switch			
062	64-127 = Play Once	Looper Play Once Switch			
063	64-127 = Undo	Looper Undo Switch			
065	0-63 = Forward 64-127 = Reverse	Looper Forward/Reverse Switch			
067	0-63 = Pre 64-127 = Post	Looper Pre/Post Position Switch			
068	0-63 = Full 64-127 = Half	Looper Full/Half Speed Switch			
099	0-63 = Off 64-127 = On	Looper Mode On/Off			

POD HD500 - MIDI Control Reference				
MIDI CC#	<b>V</b> alue	Function		
Additional Controls				
064	64-127 = Tap	Tap Tempo - Enter Tap Tempo		
069	0-63 = Off 64-127 = On	Tuner Mode On/Off		

# **Bank & Program Change Messages**

POD HD500 will respond to incoming MIDI Bank & Program Change messages as follows.

- Load Set List: From your MIDI controller device, send a Bank Change CC0 (Bank MSB), CC32 (LSB) message with a value of 0 (for Setlist 1), 1 (for Setlist 2), etc., followed by a Program Change message (Value 0-63 for Preset 01A 16D) for the desired Preset within the Set List. The Set List and Preset are loaded on POD HD500.
- Load a Preset within the current Set List: Send a Program Change message (Value 0-63 for Preset 01A 16D) for the desired Preset within the current Set List.

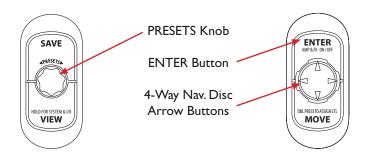
When using the POD HD500 hardware options for navigating Presets (the **PRESETS** knob, **4-Way Nav. Disc**, and footswitches **A**, **B**, **C**, **D\***) the device will automatically transmit MIDI a Program Change message corresponding to the selected Preset. These messages are transmitted to the **MIDI OUT/THRU** DIN. It is also possible to configure Footswitches to send Bank and Program Change messages - see the next section.

\*Note that you'll need to set your "Footswitch Mode" Setup option to "ABCD" for this specific Preset data to be sent when pressing the FS5 - FS8 footswitches to change the Preset on POD HD500 see "Page 1, Setup: Utilities Options" on page 2 • 2.

This feature allows you to use POD HD500 to control external devices by sending the following MIDI Bank & Program Change commands. Also note that if you connect to another Line 6 POD HD500 or POD HD Pro, the connected device will respond to the Setlist & Preset loading behavior of the initial POD HD500!

B•4

The following describes the automatic MIDI messages sent when these POD HD500 controls are accessed when using specific gestures.



POD HD500 Controls that transmit Bank & Program Changes

- Turning the PRESETS Knob: Internally on POD HD500, turning clockwise and counter-clockwise increments & decrements through Presets in the current Set List. These actions also send the following MIDI messages:
  - Clockwise turn: Transmits a Program Change Increment message.
  - Counter clockwise turn: Transmits a Program Change Decrement message.
- Press Footswitches A, B, C & D: Internally this selects the respective Preset within the current Bank. These switches also transmit MIDI Program Change Fixed messages, with Values from 0 to 64. The specific value is determined by the current Bank (e.g. for Bank 1 these four footswitches send Values 0 3, for Bank 2 they send Values 4 7, etc.)
- Press PRESETS Knob > Press Nav. Disc Arrow Button > Press Enter Button: Internally, this sequence calls up the Set Lists screen, selects a Set List (1 8) and loads the Set List. This sequence also transmits a MIDI Bank Change Fixed message, with a Value of 0 through 7, respectively, when selecting Set List 1 8.

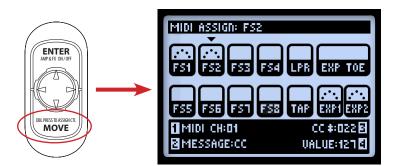
## Using POD HD500 as a MIDI Controller Device

You can configure any number of your POD HD500 Presets to include customized MIDI Control assignments for most footswitches and Pedal controls. This allows you to use POD HD500 to remotely control other hardware or software, such as Line 6 M13, M9, POD® Farm 2 Plug-In, another POD HD500 or HD Pro device, or any other Line 6 or 3rd party products that respond to external MIDI control!

Note that footswitches FS5 - FS8 will only transmit your configured MIDI assignments when their Setup option is set to the FS5 - FS8 "Pedalboard Mode" - see "Page 1, Setup: Utilities Options" on page 2 • 2. Also, when POD HD Pro is actively in Looper Mode, fixed MIDI CCs are transmitted from some footswitches - see "Looper Mode Footswitch Behaviors" on page B • 8.

### The MIDI ASSIGN Screen

The MIDI ASSIGN screen is where you configure custom MIDI commands. To access the MIDI ASSIGN screen, start on the Home View page and press and hold the **MOVE** button. All settings in this screen are saved per Preset.



Press and hold the MOVE button to display the MIDI ASSIGN screen

Use the ◀▶ and ♠ Nav. Disc buttons to select the desired footswitch or Exp Pedal control. The selected control is indicated by the down arrow (such as FS2 in the above screen). Once selected, the control's MIDI options can be edited using the Multi-function Knobs 1-4. Each respective control in the screen indicates if it has an active MIDI assignment:





FS1 with MIDI Assignment

FS1 with no MIDI Assignment

**B•6** 

- **MIDI Channel (Knob I):** Select the MIDI Channel on which the selected control will transmit its MIDI command.
  - None: Send no MIDI data. (Note that you won't see Knob 2 4 options appear until you select an option other than "None.")
  - 01 16: Choose the MIDI Channel on which to transmit the selected control's messages.
  - Base: Sets the control to follow the current "system" MIDI Channel, as set in the device Setup (see "Page 6, MIDI/Tempo Options" on page 2•10). This is a handy feature to have any Presets' MIDI Controls set to "Base" to dynamically follow the common Setup -MIDI Channel value.
- **Message Type (Knob 2):** Select the type of MIDI message sent by the selected control.
  - FSI FS8, LOOPER, TAP and EXP TOE SWITCH footswitches can each be assigned to send MIDI CC, CC Toggle, Program Change (fixed), Bank Change (fixed) or Note On messages.
  - The **EXP1** and **EXP2** pedal controls can be assigned to each send one MIDI CC with a definable Value Range, which allows you to sweep a variable parameter on your target device.
- **CC/Program/Bank # (Knob 3):** Selects further options, depending on the Message Type selected (Knob 2).
  - CC #: When the Message Type is "CC" or "CC Toggle," this allows the choice of any MIDI CC number from 000 to 127. If editing EXP1 or EXP2 controls, this knob sets the Minimum CC value for the pedal. (Also see the Knob 4 Value description.)
  - Program #: When the Message Type is "Program Change," this allows the choice of a fixed Program Value of 000 to 127.

- Bank #: When the Message Type is "Bank Change," this allows the choice of fixed Bank Value of 000 to 127. Note that an additional Program Change #001 message is automatically sent as well, which typically results in selecting the first patch within the selected Bank on your receiving device.
- Note: When the Message Type is "Note On," this allows the choice of the specific musical note value (C0 to G9)
- **Value/Velocity (Knob 4):** Selects further options, depending on the Knob 2 and Knob 3 settings.
  - Value (CC): When the Message Type is "CC," this sets the value for the CC that is sent on every press of the switch control (000 127). When editing the EXP1 or EXP2 controls, this sets the Maximum Value for the pedal.
  - Value (CC Toggle): When the Message Type is "CC Toggle," you can select 000 or 127 to choose an "On" or "Off." The control sends alternating messages per click Perfect got "MIDI Mute" messages!
  - Note that no Knob 4 option is displayed if the Message Type is "Program Change" or "Bank Change."
  - Velocity: Sets the Velocity value for the Note message (000 127).

## **Looper Mode Footswitch Behaviors**

When POD HD500 is actively in Looper Mode, the Looper function footswitches automatically transmit the following MIDI CC messages. These are global MIDI CC assignments and cannot be edited.

**B•8** 

Note: These assignments are specifically the MIDI CC messages that POD HD500 and POD HD Pro devices respond to for these Looper Mode functions. Therefore, if you are sending MIDI Out from your POD HD500 to the MIDI In of another POD HD500 or POD HD Pro device, its Looper functions can be switched simultaneously!

Looper Mode Footswitches - MIDI CC Transmit Reference				
Footswitch	MIDI CC#	Value		
FSI (Undo)	063	127		
FS2 (Play Once)	062	127		
FS3 (Pre/Post)	067	Toggle: Pre = 0-63, Post = 64-127		
FS5 (Rec/Overdub)	060	Toggle: Overdub = 0-63, Record = 64-127		
FS6 (Play/Stop)	061	Toggle: Stop= 0-63, Play = 64-127		
<b>FS7</b> (1/2 Speed)	068	Toggle: Full = 0-63, Half = 64-127		
FS8 (Reverse)	065	Toggle: Forward = 0-63, Reverse = 64-127		

