

POD® HD - DT Series





L6 LINK™ Connectivity Guide

Using L6 LINK for Audio & Control Connectivity Between POD HD300/400/500/Pro Devices & DT Series Amplifiers

Table of Contents

Overview	I•I
POD HD + DT	1•1
Line 6 Monkey TM	1•2
POD HD300 & POD HD400	1•2
POD HD500 & POD HD Pro	1•2
POD® HD300 & POD® HD400	2•1
Quick Start	2•1
Connecting Two DT Series Amplifiers	2•2
DT Series Amp - Channel A & B Operation	2•4
POD HD Rear Panel Connections & Options	2•7
POD® HD500 & POD® HD Pro	3•I
Quick Start	3•1
Connecting Two or More DT Series Amplifiers	3•3
Configuring the Audio Signal Fed to each DT Series Amp	3•4
The System MIDI Channel	3•5
Configuring the Control Options for Each DT Series Amp	3•6
Multiple DT Amp Setup Examples	3•9
DT Series Amplifiers	4•1
DT Series Amp Parameters	4•1
Additional DT Series Amplifier Features	4•5
MIDI Implementation	4•7

Line 6, POD, DT50, DT25, StageSource, James Tyler, Variax, Vetta, L6 LINK, 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. Copyright © 2012 Line 6, Inc.

OVERVIEW

This guide covers the revolutionary **L6 LINK™** technology created by Line 6 to intelligently connect Line 6 POD® HD300, HD400, HD500 or HD Pro devices to Line 6 DT50™ & DT25™ amplifiers.* There has never been a better way to integrate amps and effects into a highly customizable rig.

*Note: L6 LINK can also be used to connect these POD HD devices to Line 6 StageSource™ speakers, or even a mix of DT amps & StageSource speakers! For more info, see the additional POD HD documentation, available at www.line6.com/support/manuals/.

POD HD + DT

Designed by tube amp expert and tone guru Reinhold Bogner, the Line 6 DT Series amplifiers feature a powerful combination of reconfigurable analog components and HD modeling technology to create an incredibly versatile amp. All models operate as a standalone, 2-channel guitar amplifier, or in tandem with a Line 6 device, such as the above-mentioned POD HD devices, via the L6 LINK connection

- DT50[™] a 50/25 watt, EL34 tube amp, offered as a 112 or 212 Combo, or Head.
- DT25[™] a 25/10 watt, EL84 tube amp, offered as a 112 Combo or Head.



POD HD500 connected to DT50 using L6 LINK

1.2

L6 LINK technology uses a single XLR cable connection to stream audio and bidirectional data between a L6 LINK equipped POD HD device and DT ampl(s). The DT amp automatically "adapts" its configuration of analog components to authentically match POD HD amp & preamp model settings. These settings can be easily changed to create custom configurations. The best part is that all POD HD and DT amp settings are saved as part of the POD HD preset, providing instant recall for a myriad of customized rigs.

Line 6 Monkey™



It is highly recommended that you install and run Line 6 Monkey with both your POD HD and DT Series amplifier to make sure you have the latest firmware and other updates for these products. Line 6 Monkey is available for free download from http://line6.com/software/.

Line 6 POD HD Edit Software

POD HD Edit is the robust editor/librarian software, allowing you to easily customize, back-up, store and share all your POD HD Presets on your Mac® or Windows® computer. The DT amplifier's Voicing parameters are also accessible for each POD HD Preset within POD HD Edit, allowing you to view, edit and recall these settings for use with your POD HD + DT Series amp setup. To get POD HD Edit for your device, just run Line 6 Monkey, or download it from http://line6.com/software/.

POD HD300 & POD HD400

POD HD300 & POD HD400 devices include the ability to connect to up to two DT amplifiers using L6 LINK. Using two DT amps allows you to crank out your tones in spacious stereo, using the separate Left & Right POD HD audio channels! See <u>"POD® HD300 & POD® HD400" on page 2•1</u> for info on these POD HD devices.

POD HD500 & POD HD Pro

POD HD500 devices include the ability to connect to up to four DT Series amplifiers. When two or more DT amps are used, you have even more options, including assigning your POD HD output channels and/or dual Amp Models' audio signals independently among the DTamps for a variety of multi-amp configurations! See "POD® HD500 & POD® HD Pro" on page 3 • 1 for info on these POD HD devices.

The Dream Rig

But wait... there's more! POD HD500 & POD HD Pro devices also include a Variax® Digital Interface (VDI) input, which provides support for all Line 6 Variax guitar & bass instruments. Put together a James Tyler® Variax® electric guitar, POD HD500 or POD HD Pro and a DT Series amp and you get what we like to call "The Dream Rig." This setup not only provides all the previously mentioned amp & FX modeling and L6 LINK connectivity, but adds the ability to also customize the awesome guitar modeling & alternate tuning features of the Tyler Variax, and save it all within each POD Preset! Imagine pushing a single footswitch to reconfigure ALL your FX, analog amp components, guitar model and tuning! For more about the James Tyler Variax guitars, please go to http://line6.com/guitars#jamestylervariax.



The Dream Rig: James Tyler Variax + POD HD500/HDPro + DT Series Amp

POD® HD300 & POD® HD400

This chapter covers using the POD® HD300 or POD® HD400 L6 LINK™ features to connect with up to two DT Series amplifiers. Instructions are the same for either POD HD300 or POD HD400 devices, unless otherwise noted. Likewise, DT50™ or DT25™ amplifiers can be utilized interchangeably with L6 LINK, therefore, instructions and functionality is the same unless noted. It is recommended that you read through the POD HD300 & POD HD400 Advanced Guide to get the most out of all the features available within your device - available from www.line6.com/support/manuals/.

Quick Start

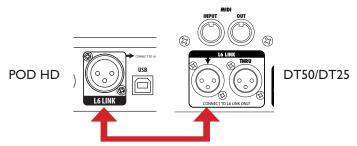
OK, we know you are much too anxious to read this entire chapter before blasting your neighbors with your new rig! Here are the quick steps to getting POD HD300/HD400 + a DT Series amp up and running. We'll dive into the details in the following sections. Start with all devices powered Off.

• Switch the POD HD **OUTPUT MODE** to **LIVE** to provide the optimal audio signal to the DT amp:



The 3-way OUTPUT MODE switch on the back of POD HD300/HD400

Connect an XLR cable from the POD HD L6 LINK jack directly to the DT amp's L6
LINK IN jack. Most XLR cables should provide sufficient performance. However,
the quality and manufacturing processes of XLR cables vary widely, so we can't
guarantee the performance of every XLR cable.



Make the L6 LINK connection using an XLR cable

2.2

• Power on POD HD, and call up one of your favorite Presets. Press the **PRESETS** knob to enter Edit Mode, and for the **AMP:Model** option, select "**Preamp**." This loads the Preamp version of the Amp Model, which is recommended whenever feeding an external tube amp.

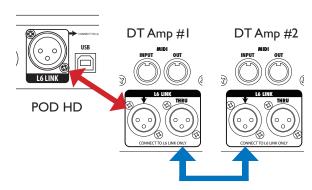


Selecting the "Preamp" setting for the Amp Model

- Power on the DT amp it will automatically detect POD HD and set itself to Channel A.
- Bang out a few of your favorite riffs and you'll hear your POD HD tone singing through the DT amplifier, slathered with all its analog tube goodness!
- Adjust the Amp Tone knobs on POD HD or on Channel A of the DT amp and you'll see that these POD HD & DT amplifier controls all work in "sync."

Connecting Two DT Series Amplifiers

To add a 2nd DT50 or DT25 amp, connect another XLR cable from the first amp's **L6 LINK THRU** jack to the other amp's **L6 LINK IN** jack. The amps will automatically configure themselves for stereo operation. The 1st DT amp will receive the POD HD left channel audio signal and the 2nd will receive the right channel audio.



Whenever your POD HD Amp/Preamp Model is "On," both DT Series amps receive the POD HD Amp Model audio, and adaptively set their tube power amp options to match. Adjust the Amp Tone knobs on POD HD or on Channel A of either DT amp and you'll see that all these POD HD Amp & DT controls all work in "sync."

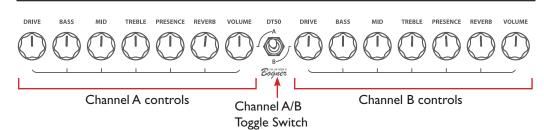


POD HD with a stereo, dual DT Series amplifier setup, using L6 LINK

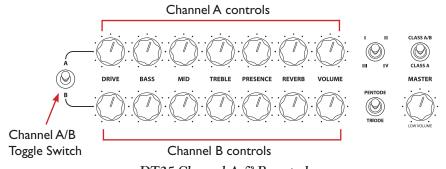
With POD HD and two amps connected this way, DT50/DT25 #2 follows the settings made on DT50/DT25 #1 for most adjustments, as noted in the following sections.

Note that two or more DT Series amps can also be connected using L6 LINK <u>without</u> POD HD, which provides sync of the controls on all DT amps. Please see the DT Series amplifier documentation for details on this type of setup.

DT Series Amp - Channel A & B Operation

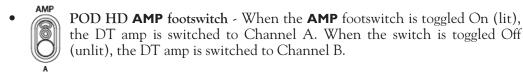


DT50 Channel A & B controls



DT25 Channel A & B controls

The DT50 or DT25 amp (or, all DT Series amps, if more than one is included in the L6 LINK connection) will automatically switch between Channels A & B based on the current POD HD Amp Model's On/Off state. Each DT amp's A or B Channel also follows specific behaviors as to the "syncing" of its Amp Tone knob and Voicing settings with those of the POD HD Amp Model. These POD HD behaviors are as follows:



Note that the state of the **AMP** switch is saved with your POD HD Preset, therefore, this will also impact the DT amp's Channel setting when recalling a Preset.

• FXONLY POD HD FX ONLY - When the FX ONLY mode is active, this toggles the POD HD Amp Model off, which also toggles the DT amp to Channel B.

- The DT amplifier's CH A/B switch You can also flip the Channel switch on the
 amp's front panel to toggle between Ch. A and B (or use a Ch. A/B footswitch).
 You'll see the POD HD AMP switch light automatically to indicate when Channel
 A is active.
- If two DT Series amps are connected, both amps' Channels are toggled simultaneously.

With an active L6 LINK connection, the DT amp's Channel A & B behaviors are as follows.

DT Series Amp - Channel A

When Channel A is active, using your POD HD is really not much different than using it without a DT Series amp connected, except that you'll hear all the aspects of your POD HD Amp & FX fed through the DT amp! If two DT amplifiers are connected, the same Channel A behaviors described below apply to the 2nd amp as well.

- Whenever your POD HD Amp/Preamp Model is "On," the DT amp's Channel A
 dynamically reconfigures its analog components to match the current POD HD
 Amp/Preamp Model for such things as the appropriate Class A or AB operation,
 Biasing method, Feedback Topology, Pentode/Triode power tube configuration &
 more.
- The Amp tone knobs and Presence parameters all operate in tandem between POD HD and DT amp's Channel A. Changes to these controls made on either POD HD or on the DT amp modify the current POD HD Preset.
- The the DT amp front panel **VOICING**, **CLASS** & **PENTODE/TRIODE** switches can be manually toggled, and you'll still hear them affect Channel A. The changes for these parameters happen within the DT amp's circuitry, but the settings are saved within the POD HD see "DT Series Amp Parameters" on page 4•1.
- When the DT amp is in Channel A, the amplifier's Reverb is disabled, however, the amplifier's Channel A **REVERB** knob will control the POD HD **REVERB** Mix amount. This allows you to adjust the Reverb Mix from either device, but you'll always be hearing the Reverb Model as configured on POD HD.
- The Master Volume controls do not operate in tandem. The POD HD Master Volume has no effect on the signal fed to the DT amp. Simply use the amplifier's Master Volume knob to control your overall volume.

DT Series Amp - Channel B

Whenever your POD HD Amp/Preamp Model is "Off," the DT Series amp is automatically switched to Channel B. The Amp tone & settings are determined by the amplifier's Channel B knob settings only, and the FX are derived from POD HD. You can think of this Channel B configuration as your POD HD acting as a fully featured multi-FX device, with the DT amp internally providing all the Preamp + power amp aspects of the sound!

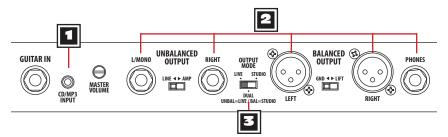
- The DT amp Channel B knobs, as well as **VOICING**, **CLASS** & **PENTODE**/ **TRIODE** switches, are also active only on the DT amp. Adjusting these amplifier's controls has no impact on the current POD HD settings or Presets. The positions of the Channel B knobs and these switches always reflect the actual parameter settings in use for Channel B what you see is what you get.
- Likewise, since none of the POD HD Amp/Preamp Model audio or control settings are sent to the DT amp's Channel B, adjusting any of these options on the POD HD device has no effect on the DT amp.
- All FX1, FX2, FX3 and Reverb* models and their settings are applied to your L6
 LINK audio signal that is fed from POD HD to the DT amp. Therefore, adjusting
 any of these FX settings on POD HD will affect what is amplified on the DT amp's
 Channel B.

*Note that, unlike the DT Series amp's Channel A behavior, both the POD HD and the DT amp Ch. B Reverb FX remain active, and independently adjustable on each device. Therefore, you may find it best to turn the DT amp's Ch. B Reverb knob "off" and use only the Reverb on your POD HD, since its settings are stored within each POD HD Preset.

- When a DT amp switches to Channel B and two DT Series amps are connected, the DT amp #2 syncs to all Channel B knob and VOICING, CLASS & PENTODE/ TRIODE settings of the DT amp #1.
- While two DT amps are connected, all Channel B knob & Voicing switch adjustments work in tandem between both DT amps (via the L6 LINK connection). The Master Volume knobs remain independent on each amp.

POD HD Rear Panel Connections & Options

Several connections and switchable options on the back panel of your POD HD300/400 device provide slightly different behaviors when using the L6 LINK connection to a DT Series amp. These behaviors are described as follows.



POD HD300/400 rear panel connections

CD/MP3 Input

Audio from any source device connected here, such as a CD or MP3 player, is fed to the analog outputs (Unbalanced, Balanced and Phones) and affected by the POD HD Master Volume knob. This audio is not fed to the L6 LINK output.

2 Balanced, Unbalanced & Phones Outputs

The analog signals from these outputs are still available and may be used simultaneously while a L6 LINK connection is active. The level heard from these outputs is still controlled by the POD HD Master Volume knob, while the L6 LINK - DT amp level is not.

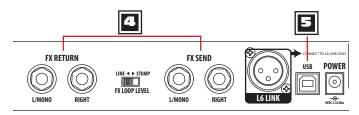
NOTE: If you want to utilize an analog direct output from your POD HD + DT50 rig, such as to feed to a Front-Of-House or recording system, it is recommended that you use the **DIRECT OUT** on the back of the DT amp - see page 4•6.

EOutput Mode Options

As described in the Quick Start, the Output Mode switch affects the signal fed to all the POD HD analog outputs. The signal fed from POD HD to a DT amp (when the DT amp is in Channel A operation) is also similarly affected by this switch.

- When the OUTPUT MODE switch is set to LIVE or DUAL The Live mode signal is fed to he DT amp, Channel A.*
- When the **OUTPUT MODE** switch is set to **STUDIO** The Studio mode signal is fed to the DT amp, Channel A.

*Note: The **LIVE** setting is recommended when utilizing the **L6 LINK** connection to a DT Series amplifier, but as always, there are no rules for experimenting with your tone! The **STUDIO** settings includes a different Cab/Mic/EQ set designed for direct recording, but give it a try if you like.



POD HD400 rear panel connections

FX Loop (POD HD400 Only)

You can still utilize the POD HD400 FX Loop and it options for any Preset when using the L6 LINK connection.

USB Audio

All USB audio is **muted** whenever the POD HD300/HD400 L6 LINK connection is active. Note, however, that USB MIDI functionality remains fully functional, which allows you to still utilize the POD HD Edit software or access the device's USB MIDI In/Out ports, if desired.

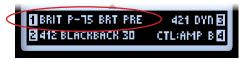
POD® HD500 & POD® HD Pro

This chapter covers using the POD HD500 or POD HD Pro L6 LINK™ to connect up to four DT Series amplifiers. Instructions are the same for either POD HD500 or POD HD Pro devices, unless otherwise noted. Likewise, DT50™ or DT25™ L6 LINK functionality is identical except where noted. It is highly recommended that you read through the POD HD500 or POD HD Pro *Advanced Guide* to get the most out of all the features available within your device - available from www.line6.com/support/manuals.

Quick Start

OK, we know you are much too anxious to read this entire chapter before blasting your neighbors with your new rig! Here are the steps to getting POD HD500/HD Pro + DT Amp up and running. We'll dive into more details in the following sections.

- Select one of your favorite Presets on POD HD.
- Let's keep it simple at first and use only the POD Amp Model A in your tone if your tone has Amp Model B active, toggle it "Off" for now.
- Select the Amp A Block and choose one of the **Preamp** Models. This is the recommended type of Amp Model to use when feeding an external tube amp.



Choosing a Preamp for the Amp Model

• Go to the SETUP - L6 LINK:AUDIO screen and set the AMP 1 option to "LEFT/ RIGHT," which captures both channels of your POD HD signal from the very end of signal chain and feeds it to the first (or only) connected DT Series amp.



The L6 LINK:AUDIO screen - Amp 1 set to Left/Right

3•I

Note: Whenever one or more DT amps (and/or Line 6 StageSource[™] speakers) are connected to the POD HD Pro - L6 LINK output, you'll see each identified on the screen, such as the "DT50" appears as connected in the #1 Amp position in the above screenshot.

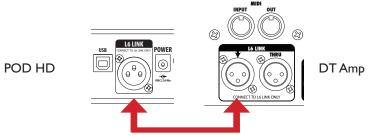
 Navigate to the Setup - L6 LINK:CONTROL screen and set the AMP 1 option to "AMP A (CH1)." This setting tells the first (or only) connected DT amp to "sync" with POD HD Amp Model A (or MIDI Channel 1).



The L6 LINK:CONTROL screen - AMP 1 is set to follow AMP A (CH1)

• Connect an XLR cable from the POD HD **L6 LINK** jack directly to the DT amp's **L6 LINK IN** jack:

Note: A standard XLR mic cable will work for this connection, but the use of an AES/EBU cable is recommended for best results, as this is a digital connection.

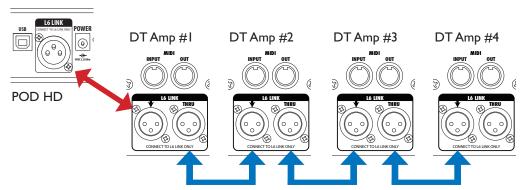


Make the L6 LINK connection using an XLR cable

- Power on the DT amp and it will automatically detect POD HD, as well as your Preset's "Amp A" Preamp Model, and configure its own tube power amp options automatically.
- Adjust the DT amp's Master Volume knob to the desired level, and let loose on a few
 of your favorite riffs. You'll hear your tone singing through the DT amp, slathered
 with all its analog tube goodness!
- Adjust the Amp Tone knobs on POD HD *or* on Channel A of the DT amp and you'll see that either controls the POD HD Amp Model A settings.

Connecting Two or More DT Series Amplifiers

To add a 2nd DT Series amp, connect another XLR cable from the first amp's **L6 LINK THRU** jack to the other amp's **L6 LINK IN** jack. Up to four DT Series amps can be connected this way in series, as shown here:



Connecting POD HD500 or HD Pro to up to four DT50 or DT25 amps via L6 LINK

With POD HD500/HD Pro and two or more amps L6 LINK-connected, your POD HD Amp Models and all DT Series amps can be synced, as noted in the following sections.

Note that two or more DT Series amps can also be connected using L6 LINK <u>without POD HD</u>, which provides sync of the controls on all DT amps. Please see the additional DT Series amplifier documentation for details on this type of setup.

Configuring the Audio Signal Fed to each DT Series Amp

As presented in the previous Quick Start steps, it is possible to configure L6 LINK audio signals and control/sync behaviors independently for up to 4 DT Series amps. This is all accomplished using the POD HD500/HD Pro SETUP - L6 LINK screens.

The **SETUP** - **L6 LINK**:**AUDIO** screen options to select your POD HD audio routings. These settings are all saved individually per POD HD Preset.



- Use the Multi-function Knobs 1 4 to choose the POD HD audio signal fed to each DT Series amp. Set the AMP 1 parameter for the first connected DT amp, and the additional AMP parameters for each consecutively connected DT amp. The available options for each DT amp are as follows.
 - L, R or Left/Right sends the Left channel only, Right channel only or both the Left & Right channels (summed to mono), respectively. This signal is derived from the very end of the POD HD signal path, therefore, it includes all active FX and Amp Models. (Note that you can utilize the POD HD Mixer Block options to change what is panned to each of the Left and Right output.)
 - Amp Model A, Amp Model B or Amp A/B sends the output directly from the respective Amp Model(s), wherever they reside within the signal flow. This audio signal includes FX Models positioned before the selected Amp Model, but not FX Models positioned after the Amp Model.

Note that if your current Preset has only one Amp Block, then no "Amp B" actually exists. In this scenario, any of the AMP 1 through AMP 4 options in the above Setup screen set for "Amp Model B" will output the signal from the end of Path B to the respective DT Series amp.

The System MIDI Channel

Before covering the POD HD500/HD Pro L6 LINK:CONTROL options, it is important to first understand the way L6 LINK utilizes MIDI communication. The POD HD SETUP - MIDI/TEMPO screen offers an option to set the "System" MIDI Channel for the device.



The SETUP - MIDI/TEMPO screen, "System" MIDI Channel selector

L6 LINK utilizes MIDI to communicate the "control" data (knob positions, power amp Voicing settings, etc.) between POD HD500/HD Pro and all DT Series amps across the L6 LINK connections. The L6 LINK:CONTROL screen options determine the MIDI Channel used for this communication, allowing each DT amp to receive independent control data. The L6 LINK:CONTROL options *dynamically* follow the System MIDI Channel as follows:

- POD HD Amp Model A control data is always fed to the System MIDI Channel (as configured in the SETUP:MIDI/TEMPO screen, which is MIDI Ch. 1 by default).
- POD HD Amp Model B control data is always fed to the System MIDI Channel + 1 (which is MIDI Ch. 2 by default).
- All other MIDI Channels can be used for DT amp control data between DT amps (as described in the following section).

Changing the SETUP - MIDI/TEMPO System MIDI Channel will affect the options and current settings within the L6 LINK:CONTROL screen. Therefore, it is recommended to always set your System MIDI Channel first, and then configure L6 LINK:CONTROL options.

Configuring the Control Options for Each DT Series Amp

The SETUP - L6 LINK:CONTROL options determine the "sync" behavior between POD HD500/HD Pro and each connected DT Series amp. When configuring L6 LINK Audio parameters for specialized purposes, for example, 4 DT amps all set to the same source for one huge mono backline, setting these Control parameters all to the same MIDI Channel provides the desired Control behavior. These settings are all saved individually per POD HD Preset, allowing you to create and instantly recall any number of different multi-amplifier configurations!



The POD HD500/HD Pro SETUP - L6 LINK: CONTROL screen

Use the Multi-function Knobs 1 - 4 to choose the POD HD Amp Model or MIDI Channel for up to four connected DT Series amplifiers.

- AMP A (CH 1): Sets Channel A of the respective DT amp to "sync" to the POD HD Amp Model A. (Also see "DT Series Amplifier Channel A & B Operation" on page 3 8.)
 - The DT amp will auto-configure its tube power amp Topology settings (Class AB/A, Voicing Mode, Pentode/Triode, and more) to match the current POD HD500 Preset's Amp Model A.
 - The DT amp Channel A and POD HD Amp Model A knob values (Drive, Bass, Mid, Treble, Presence & Volume) are synced.
 - The POD HD System MIDI Channel is utilized for this communication, as indicated in parentheses e.g. "(CH1)" in the above screen example refers to the current System MIDI Channel 1. (See "The System MIDI Channel" on page 3 5.)

- AMP B (CH 2): Sets Channel A of the respective DT amp to "sync" to the POD HD Amp Model B.
 - The DT amp Channel A auto-configures its tube power amp settings to match the current POD HD Preset's Amp Model B.
 - The DT amp Channel A and POD HD Amp Model B knob values are synced.
 - The POD HD System MIDI Channel + 1 is utilized for this communication, as indicated in parentheses (e.g. "(CH2)" in the above screen example refers to the current System MIDI Channel 1, plus 1, which is Channel 2).
- MIDI CH XX: Select any available MIDI Channel, other than the MIDI Channels auto-assigned to Amp Model A & Amp Model B, to set the respective DT amp's L6 LINK MIDI Channel. By setting more than one DT amplifier to the same MIDI Channel, their front panel controls will be synced.

Note: This option also provides the benefit of controlling DT amplifiers by a third party MIDI controller device - set your MIDI controller to the same MIDI Channel and connect the controller directly to the DT amp's 5-pin MIDI IN.

Additional L6 LINK Control Behaviors

When the SETUP-L6 LINK:CONTROL option is set to AMP A or AMP B, the following "sync" behaviors also apply between the POD HD Amp Model and Channel A of the respective DT Series amplifier.

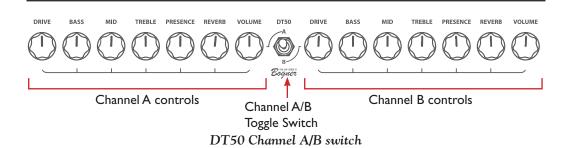
- The DT amp front panel **VOICING**, **CLASS** & **PENTODE/TRIODE** switches can be manually toggled, and you'll still hear them affect Channel A. The values of these switches are saved with the current POD HD Preset. Also see "DT Series Amp Parameters" on page 4•1.
- The DT amp REVERB knob for the active Channel independently controls the DT amp's built-in Reverb - it does not adjust any Reverb model that you may have active within your POD HD Preset. Therefore, you'll probably want to use either the DT amp's Reverb or add a Reverb model to your POD HD Tone.
- The MASTERVOLUME controls are not synced between POD HD or any connected DT amps. The POD HD Master Volume also has no effect on the signal fed to the DT amp. Simply use the DT amp Master Volume knob on each amp to control its volume.

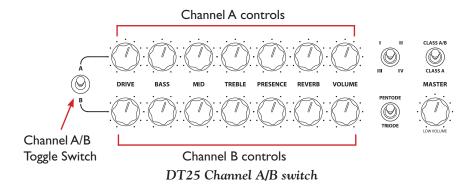
DT Series Amplifier - Channel A & B Operation

When any of the SETUP - L6 LINK:CONTROL AMP 1 through AMP 4 options are set to "AMP A" or to "AMP B," the respective DT amp(s) will automatically switch between Channels A & B based on the POD HD Amp Model A or B's On/Off state:

- When the POD HD Amp Model is "On," all respective DT amps switch to Channel A, and their controls operate in tandem.
- When the POD HD Amp Model is "Off" (or set to "None"), all respective DT amps switch to Channel B. The controls do *not* operate in tandem between the POD HD Amp Model & DT amp Channel B. When in Channel B, the DT amp behaves exactly as it does in stand alone mode, using HD modeling technology for the preamp and tonestack.
 - When a DT amp switches to Channel B and multiple DT amps are connected, all DT amps sync to the Channel B knob and VOICING, CLASS & PENTODE/ TRIODE settings of DT amp #1.
 - While two DT amps are connected, all Channel B knob & Voicing switch adjustments work in tandem between all DT amps. The Master Volume knobs remain independent on each amp.

Likewise, when toggling the front panel DT amp Channel A/B switch (or the DT amp Channel A/B footswitch), the respective POD HD Amp Model A or B to which this DT amp is synced will toggle On/Off in response.





• If the SETUP - L6 LINK: CONTROL includes the same Amp Model A or B setting for additional DT amps, all these DT amps will also respond to the Channel switch.

For **SETUP - L6 LINK:CONTROL** options that are set to "MIDI CHXX" (i.e. - **not** set to "AMP A" or "AMP B"), the following behaviors apply:

- Switching either POD HD Amp Model A or B On/Off has no affect on any DT amp.
- All DT amps set to follow the specific L6 LINK:CONTROL MIDI Channel setting are synced. Therefore, toggling the front panel Channel A/B switch on any will switch all other synced DT amps' Channels.

Multiple DT Amp Setup Examples

Just to illustrate a few L6 LINK possibilities with the previously described settings... POD HD with two or more DT amps allows you to create a variety of huge sounding rigs!

Note that the following examples utilize POD HD500 and DT50 amplifiers, however, POD HD Pro and DT25 amplifiers can be substituted in any respective position.

Stereo Setup

Employ the use of stereo Amp and/or FX Model configurations within POD HD and set its Left & Right Audio outputs to each for a "stereo" DT amp rig.



A Stereo setup with two DT Amps

Wet/Dry/Wet Setup

Expand on the Stereo setup by adding a 3rd DT amp, with it set to receive a "Dry" audio signal.



A Wet/Dry/Wet setup with three DT amps

Double Stereo Setup

Use four DT amps to create a massive double stereo rig!

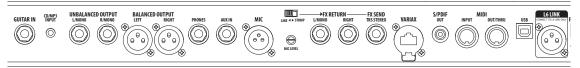


A double stereo setup with four DT amps

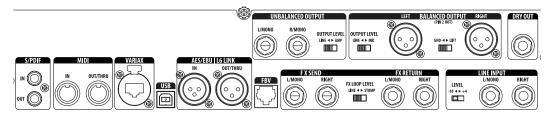
3.11

POD HD500 & POD HD Pro Connections & Options

Several connections and switchable options on your POD HD500 or POD HD Pro device provide slightly different behaviors when using L6 LINK. These behaviors are described as follows. (For more about the use of these connections please also see the additional POD HD500 & HD Pro documentation available from www.line6.com/support/manuals.)



POD HD500 rear panel connections



POD HD Pro rear panel connections

Input Sources

The **GUITAR**, **MIC**, **VARIAX** (POD HD500 only) and **LINE** (HD Pro only) inputs can each be utilized per the settings you choose in the POD HD device's **SETUP:INPUTS** screen. The signal from these inputs are fed to the **L6 LINK** output, following the same behaviors as fed to the POD HD device's main outputs.

Likewise, the POD HD Pro **SPDIF** and **AES/EBU** digital inputs can be utilized as well, but cannot be selected simultaneously with other input sources.

Outputs

The **BALANCED**, **UNBALANCED** & **PHONES** analog outputs are still available and may be used simultaneously while a L6 LINK connection is active. The level heard from these outputs is controlled by the POD HD device's Master Volume knob, while the L6 LINK - DT amp level is not.

The **DRY OUT** (HD Pro only) continues to output an unprocessed signal when L6 LINK is active - handy if you'd like to send a "naked" version of your signal into your recording system!

3.12

3-13

NOTE: If you want to utilize an analog direct output from your POD HD + DT amp rig, such as to feed to a Front-of-House or recording system, it is recommended that you use the **DIRECT OUT** on the back of the DT amp - see page $4 \cdot 6$.

The **SPDIF** and **AES/EBU** (HD Pro only) digital outputs are also fed a POD HD-processed signal. The type of output signal for these is determined by the **SETUP:DIGITAL** OUTPUT screen. Note that the **AES/EBU | L6 LINK** Output is a dual purpose connection, which can be utilized for either AES/EBU digital audio *or* L6 LINK output. (The HD Pro **SETUP:DIGITAL** OUTPUT screen's settings do not affect the audio signal when a L6 LINK - DT amp connection is active.)

USB

USB functionality remains fully functional while a L6 LINK connection is active, which allows you to simultaneously utilize the POD HD Pro Edit software, if desired.

FX LOOP

The signal of any external devices connected within the FX Loop is also incorporated into the audio output fed to **L6 LINK**, so feel free to put it use with your favorite pedals & rack gear.

FBV (POD HD Pro only)

Connect a supported Line 6 FBV[™] Series Foot Controller device here for remote control of POD HD Pro functions - with or without an active L6 LINK connection. Further, you can utilize the FBV as a MIDI controller - see next item.

MIDI IN/OUT

POD HD500 & HD Pro are capable of sending and receiving MIDI control messages using these MIDI DIN connections, and will continue to send & receive MIDI data on these ports when L6 LINK is active - please see the POD HD **Advanced Guides** for details.

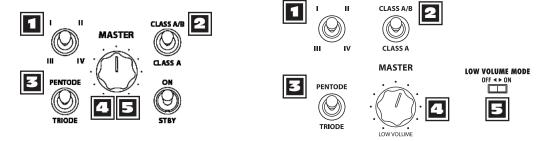
NOTE: When using L6 LINK with DT Series amplifiers, it is not necessary to also use this MIDI connection, however, it is also possible to access & configure DT amplifier functions via MIDI. Please see the *Line 6 DT Series Amplifiers - MIDI Implementation Guide*, available at www.line6.com/support/manuals.

DT Series Amplifiers

In this chapter, we'll cover the parameters and features found on Line 6 DT Series amplifiers that are relevant when using the L6 LINK[™] connection with a POD® HD300/400/500 or HD Pro device. Also included are some tips for controlling DT Series amps via MIDI.

DT Series Amp Parameters

To follow are descriptions of the parameters specific to the DT50 and DT25 amplifiers. When utilizing the L6 LINK connection, the amps' analog components are adaptively set to best match those of the classic amplifiers upon which each specific POD HD Amp or Preamp Model is based. But you can also adjust these settings manually to create your own customized amp tone & feel!



DT50 Tube Power Amp Parameters

DT25 Tube Power Amp Parameters

Note that these DT amp parameters are not accessible within the POD HD devices' screens - simply use the amp's front panel controls to make these settings, and their states are sent to POD HD via the L6 LINK connection and saved with the current POD HD Preset!

Voicing Switch

This switch offers a choice of 4 different Negative Feedback Loop Topology Modes to emulate the circuits of different classic tube amplifiers. The amount of Negative Feedback utilized in an amp's design affects the "feel" of the amp's responsiveness and distortion characteristics. Each Voicing Mode has its own amount of gain. If your POD HD is set to a Preamp Model and you change only the Voicing switch, you'll notice a change in tonality and volume for each.

- **Position I -** High amount of Negative Feedback, providing a "tight" clean sound.
- Position II Medium amount of Negative Feedback, providing a more "loose" feel.
- **Position III -** Zero Negative Feedback, providing slightly more distortion and an "open" sound.
- Position IV "Modern" Negative Feedback this provides zero Negative Feedback on low frequencies, but keeps a "loose" Negative Feedback on mids and upper frequencies.

2 Class AB - A Switch

This switch toggles the state of the DT amplifier's Bias type, wattage and operating class. Again, these are factors that differ within classic tube amps, further adding to their overall tone and feel.

DT50

- **Up** Fixed Bias, 50 watts, Class AB.
- **Down** Cathode biased, 25 watts, Class A.

DT25

- **Up** Fixed Bias, 25 watts, Class AB.
- **Down** Cathode biased, 10 watts, Class A.

Pentode/Triode Switch

This switch toggles the state of the DT amplifier's power tubes.

- **Up** Sets the **PENTODE** state. This results in a higher power mode, with a "tighter" and "punchier" response, with a brighter high end. This setting is often preferable for high volume playing.
- **Down -** Sets the **TRIODE** state. This results in a lower power mode, with a slightly "softer" feel and less brilliant high end response. You'll likely notice an overall volume decrease in Triode mode as compared to Pentode.

Master Volume

This knob controls the Master Volume of the DT amp's tube power amplifier, regardless of the current amp channel in use.

E Low Volume Mode Switch

Pull the Master Volume knob on DT50, or use the switch on the back of DT25 to toggle the Low Volume Mode "On." Low Volume Mode functions independently of POD HD and significantly lowers the overall DT amplifier's volume level. Way beyond a traditional master volume, Low Volume Mode lets you take your DT amp down to whisper-quiet levels for recording or late-night jamming. Since tubes distort less at low volumes, Low Volume Mode utilizes HD technology to pick up the slack and fill out the tone with rich power amp modeling so it still feels and sounds like it's cranked up even at low levels (Also see the Direct Out functionality on page 4.6.)

DT Amp Parameter Usage Tips

As you can see by the above options, the analog circuitry of the DT Series amplifiers is capable of radical reconfiguration. Feel free to experiment with different settings all you like, but here are some helpful tips in understanding the nature of these amplifier options, and what to expect when combining POD HD Amp Models and these settings.

POD HD Preamp Models vs. Full Amp Models

 Typically, the most authentic sonic experience for POD HD + DT is to use a POD HD Preamp Model, and then allow the DT amp to "adaptively" select the intended power amp options to match.

POD HD Preamp Models, by design, exhibit fairly significant variations in volume levels. Therefore, it is recommended to either take some time in adjusting the Preamp Model's Drive and Volume knob settings and save them in Presets, especially if using your gear in a live situation (more about Preset loading below).

Class AB vs. Class A

- Class AB amplification works by alternating the power between a pair of power tubes one tube is in "cutoff" while the other tube is conducting. This results in a bit of inherent background distortion that you'll hear, when your signal is still loud enough to cause the tubes to enter "cutoff."
- Class AB has about twice the headroom of Class A. Therefore, if you're not getting enough "dirt" using the Class AB option, try Class A since it will clip the tubes harder at a lower overall volume.

About Preset Loading and DT50 Amp Settings

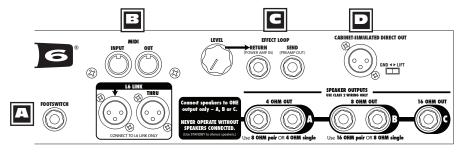
Due to the higher voltage components utilized in DT50 amplifiers, you may find that not all amplifier changes can be instantaneous.* If you require the most seamless change between two POD HD Presets - for instance, during live performance - the simplest approach when switching Presets (or DT50 amp Channels) is to use the same amp Voicing switch settings for both. For those times when you want more significant reconfigurations between settings, here are some tips:

*Note: Since DT25 amplifiers utilize lower voltage components, their setting changes are typically less affected. However, the following practices can be followed with DT25 amps as well if Preset changes are not as seamless as desired.

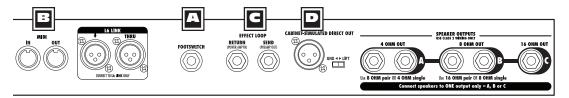
- Keeping Class A consistent between consecutively-switched Presets will help avoid the greatest potential for disruption.
- The Super O, Tweed B-man, Class A-15 and Brit Plexi J-45 share an aspect (their analog B+ voltage) that differs from the other POD HD Amp Models, which can also be a source of disruption. To minimize this disruption, limit the cases where you switch between one of these Amp Models and one of the other POD Amp Models.
- Avoid making setting changes within 5 seconds of each other, especially if you've
 included the Class and B+ voltage changes mentioned above. The DT50 circuitry
 can take up to 5 seconds to fully stabilize after such a transition, and making another
 change before then can cause disruptions that you wouldn't hear if you waited
 slightly longer.

Additional DT Series Amplifier Features

The following features are available on the DT amplifier when in Channel A or B. You can utilize these functions when using POD HD Tones for even more sonic options! Please also see the DT50 or DT25 documentation for more details on these features.



DT50 - Rear panel connections



DT25 - Rear panel connections

Footswitch

This is where you connect an optional footswitch pedal to toggle the DT amplifier's Channel A/B switch. The DT amplifier's Channel state is saved within the current POD HD Preset.

■ MIDI Input/Out

The DT amplifier's **MIDI INPUT** and **MIDI OUT** DIN and MIDI Send & Receive features are still functional when the POD HD - L6 LINK connection is active.*

*Note that this type of MIDI DIN connection is not necessary between DT amps when POD HD is also connected via L6 LINK, since all "control" communication is automatically routed using the L6 LINK connection. However, you can alternatively use a MIDI Controller device to remotely access many DT amp features - see "MIDI Implementation" on page 4•7.

DT Amplifier Effect Loop

The **SEND** and **RETURN** jacks here are for the analog, series **EFFECT LOOP** of the amplifier. You'll hear your POD HD Preset Tones fed through any effects you connect in this Effect Loop chain before the signal is fed through the DT amp's power amp stage.

Direct Out

The DT amplifier's **DIRECT OUT** continues to function as an analog output with L6 LINK in use. Use of this XLR output is recommended to feed your "fully baked" POD HD + DT amp tone to an external recorder, mixing console, etc. Since the audio signal fed to the DT amp via L6 LINK is a mono signal, this Direct Out is a mono signal as well. Note that the Direct Out functionality differs based on the DT amp's **LOW VOLUME MODE** (see page 4•3) and **STANDBY** switch settings:

- Low Volume Mode Off, Amp in Standby = The DT amp's Direct Out is disabled.
- Low Volume Mode On, Amp in Standby = Direct Out signal consists of the "Full" (preamp + power amp) Amp Model with no analog amp. This is a handy option for "silent recording" while still providing the tone of a cranked amp.
- Low Volume Mode Off, Amp On (not in Standby) = Direct Out signal consists of the "Preamp" Amp Model with the analog amp.
- Low Volume Mode On, Amp On (not in Standby) = Direct Out signal consists of the "Full" Amp Model and the analog amp.

MIDI Implementation

When using L6 LINK with DT Series amplifiers, it is not necessary to also use this MIDI connection, however, it is also possible to access & configure DT amplifier functions via MIDI. Please see the *Line 6 DT Series Amplifiers - MIDI Implementation Guide*, available at http://line6.com/support/manuals/.

