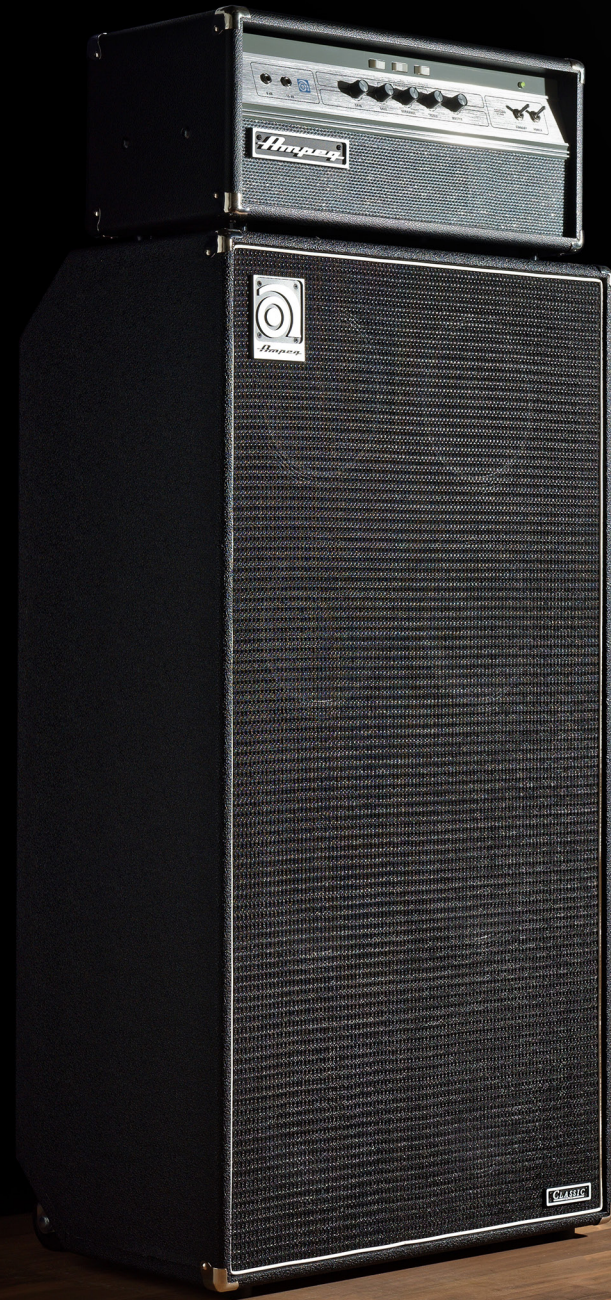# Ampeg V-4B

Plug-in Manual

Developed by Brainworx in partnership with Ampeg Yamaha Guitar Group

and Distributed by Plugin Alliance.

Introduction

The Ampeg V-4B 100W All-Tube Bass Head is a remarkable reissue of the legendary 1971 original, delivering the pure tube tone and unmistakable grind that earned the classic a place in bass history.

The Ampeg V-4B Bass Amplifier plugin offers an exacting emulation of the Heritage all-tube Bass Amp.

Brainworx have painstakingly modelled the V-4B exclusively for Plugin Alliance. Not only does the plugin nail the heart and soul of the Ampeg V-4B but you'll find the extra features you've come to expect from Brainworx products. A full FX Rack with host syncable lo-fi delay, noise gate, tight and smooth filters and a power soak feature.
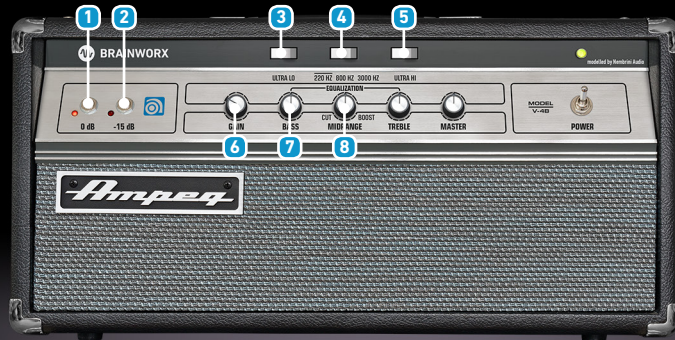
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Amp

1 0 dB Input

Input Sensitivity

2 -15 dB Input

Use this switch in to reduce the input signal by 15 dB and compensate for higher output sources. This attenuation is suited for use with basses that have active electronics or high-output pickups.

3 Ultra Lo

This switch, when engaged [right side down], enhances the amount of low frequency output by 2 dB at 40 Hz and reduces by 11dB at 500 Hz.

4 1•2•3 SWITCH

This switch selects the frequency that will be affected by the midrange control [8]. The available frequencies are: Left = 220 Hz Center = 800 Hz Right = 3 kHz.

5 Ultra-Hi

This switch, when engaged [right side down], enhances the amount of high frequency output by 7 dB at 8 kHz.

6 Gain

This control adjusts the basic level of signal in the preamp.

7 Bass

Use this to adjust the low frequency level of the amplifier. This provides up to 13 dB of boost, or 12 dB of cut at 40 Hz. The low frequency output is flat at the center position.

8 Midrange

Use this to adjust the midrange frequency level of the amplifier. This provides up to 11 dB of boost, or 21 dB of cut at the selected frequency [5]. The midrange frequency output is flat at the center position. Rotate the control counter-clockwise for a "contoured" sound (more distant, less midrange output) or clockwise for a sound which really cuts through.

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1 Treble

Use this to adjust the high frequency level of the amplifier. This provides up to 14 dB of boost, or 17 dB of cut at 4 kHz. The high frequency output is flat at the center position.

2 Master

Use this to control the overall output level.

3 Power Switch

Use this switch to engage or bypass the plugin.

FX Rack

Noise Gate

4 Closed

When lit, this LED indicates that the Noise Gate is Closed. This means the Threshold setting is higher than the incoming signal and the noise gate dims the output signal of the amplifier by the amount adjusted with the Range control (e.g. 38dB in the picture above).

5 Noise Gate on/off

On/Off switch. Enable or disable the Noise Gate completely. Switch up ('On') means the Noise Gate is activated.

6 Threshold

Continuous knob, -120db to 0db. The Noise Gate will dim the output signal of the amplifier as soon as the input signal (your bass signal) falls below a certain level. This level is called Threshold. Adjust the Thresold so the noise of the overdriven amp will be reduced, but make sure you don't cut fading notes or chords.

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1 Range

Continuous knob, 0db to 100db. The output level of your amplifier will be reduced or muted when the input signal is lower than the Threshold setting. You may dim the output level only by a few decibels (dB), or completely mute the output in pauses by setting the Range to its maximum.

Amp Filters

2 Tight Filter

Three-way switch: "Pre", "Post" and "Off". With the Tight filter you can cut Low frequencies of either the DI guitar signal (Pre) or the processed amp output (Post).

- Pre: If your pickups produce an unintentional rumbling bass sound you can filter the low end before the DI sound even hits the amplifier.
- Post: If you want to cut some of the low end of your amplifier setting (maybe even only temporary) you can use this studio quality high pass filter to reduce the bass.
- Off: When set to Off the Tight filter is in bypass mode.

3 Tight Frequency

With the Tight filter you can cut Low frequencies of either the DI bass signal (Pre) or the processed amp output (Post).

4 Smooth Frequency

With the Smooth filter you can cut high frequencies of either the DI bass signal (Pre) or the processed amp output (Post).

5 Smooth Filter

Three-way switch: "Pre", "Post" and "Off". With the Smooth filter you can cut HIGH frequencies of either the DI bass signal (Pre) or the processed amp output (Post).

- Pre: If your pickups catch a lot of hiss or noise you can filter the high end before the DI sound even hits the amplifier.
- Post: If you want to cut some of the high end of your amplifier setting (maybe even only temporary) you can use this studio quality low pass filter.
- Off: When set to Off the Smooth filter is in bypass mode.

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1 Input Gain

If you want to drive the input of the V-4B preamp harder or softer you may adjust the input gain to your liking. The opposite If you have recorded the DI signal too hot or if you are using other plugins before entering the V-4B amp plugin you may want to dim the input signal. With most standard signals you can and should leave the Input Gain at 0 (zero) though.

2 Power Soak

Controls the output volume.

In the Hardware world power soaks are being used to reduce the volume of a bass power amp. This way you can crank up a (tube) bass power amp to drive it until it starts clipping, and still record at a volume which will protect your hearing and keep the neighbors friendly. A clipping tube power amp adds distortion and harmonics to the amp signal and is something most bass players love. A fully cranked up tube amp tamed in volume with a power soak will sound different than the same amp with the master volume turned down. We have modeled the behavior of the V-4B tube power amp, so you may experiment with different settings of the Master of the amp and the internal Power Soak.

3 Horn

The Ampeg 8x10 speaker cabinet included a piezo horn which contributed that classic attack tone. We've created a separate impulse response for the horn and added this on/ off switch so the sound of the horn can not only be added to the impulse responses of the 8x10 cabinet, but any of the provided cabinets whether the original had the horn or not.

4 + / - Switches

Browse through the REC CHAINS by either using the pull-down menu of the REC CHAIN text box or just click through the settings using the + and - symbols.

5 Auto & Bar Selection

If you are trying to find the best sounding REC CHAIN for your actual song it can be tiring having to play a few notes, then grabbing the mouse to select the next REC CHAIN, playing a few notes again, grabbing the mouse again, etc.

6 RC Info

The RC Info feature showing you exactly what kind of setup was used to produce the Recording Chain you selected.

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1 Recording Chain

Brainworx Advanced IR Technology
Simply select a speaker and a complete studio setup by browsing through the Recording Chains pulldown menu.

In the past two decades Brainworx owner Dirk Ulrich has produced and recorded with members of Dream Theater, Toto, Michael Jackson and with many more famous and infamous acts. The Brainworx Studio in Germany is equipped with one of only nine NEVE VXS 72 consoles ever made, and it also hosts some of the best outboard EQs and mic pre-amps available.

Using this impressive setup Dirk has produced a huge variety of customized 'Recording Chains' for the Ampeg V-4B amplifier, which you can apply to your Plugin amp settings. Imagine a selection of 65 perfectly mic'd and EQ-ed cabinets that you can select and use instantly with a single mouse click!

We carefully placed up to 12 microphones on each cabinet used. These mics were then fed to individual channels on the vintage Neve VXS console. This configuration gave us fine control over the mix of the various microphones used and the ability to apply Neve filters and EQs. The final mix was routed to Pro Tools for recording.

Many amp simulations give you some captured impulses of a selection of cabinets and microphones, then they leave it up to you to EQ and further process these incomplete setups by mixing different microphone setups, adjusting phase and EQ, and so on. But this really is not an easy job; it takes years of experience to get it right.

Now all you have to do is select the Recording Chain that sounds best for your amp channel and setting, adjust the Tone Stack and Gain and you're good to go. Recallable, reliable, flexible and fast.

And if for any reason you should not like any of the Recording Chains the Plugin offers, you may use the very last setting (labeled 66 NO REC CHAIN) and use your own mic'd cabinet or external IR software. This setting will also give you the sound of a tube amp wired straight into a console, which also may be a nice effects sound.

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Top Toolbar

1 Undo / Redo

You can undo and redo changes you made to the controls of the V-4B plugin at any time. The Undo / Redo will work for as many as 32 steps. This makes experimenting and tweaking knobs easy. If you don't like what you did... just undo it.

2 Settings (A/B/C/D)

The V-4B amp plugin offers four internal settings (A/B/C/D) which will be stored with every preset. So, one preset can contain up to four amp and effects settings.

You may use similar amp settings with more or less bass, different Recording Chain settings, etc., to quickly switch between different sounds. The Settings can be automated in your DAW.

3 Copy / Paste

To set up variations of similar sounds you don't have to dial in all the parameters several times. Let's say you like your setting A and want to use the same sound, just without Horn, as Setting B:
- Simply press Copy while you are in Setting A.
- Switch to Setting B by pressing 'B' in the Settings section.
- Press Paste, now Setting B is identical to Setting A.
- Bypass the Horn. Done.

Now you can switch between A & B and play the same sound with or without Horn.

4 FX Rack

Toggle between FX Rack and Standard view.

5 About

Information about the development of the plugin.

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Factory Presets

We have made a lot of presets for the plugin, many of them have been made to work perfectly with your bass. These presets are only intended to give you an easy start and to demo some of the tones you can get out of the plugin.

Creating Your Own Sounds & Presets

When you start to create your own sounds the most important elements to adjust are the Tone Section and the Recording Chain Section.

• Set the controls of the Tone Stack to the center position ('12-o-clock').

• Play through as many Recording Chains as you like and pick the one that sounds closest to what you are looking for before altering the knobs.

• Once you found the Recording Chain you like best for your sound, start tweaking the Tone Stack and the Gain & Master Volume to fine tune your amp settings.

• Add Horn or activate the Filters, the Noise Gate, etc. for variations of your sounds.

• Have fun!

Experiment, be creative. We are confident that the different tone selections of the amp and the huge selection of Recording Chains will offer you many possible combinations that will sound great on a big variety of musical styles and genres.

Combine the Ampeg V-4B amp with other plugins (dynamics, EQs and effects), and you will be able to create countless world-class production-ready bass sounds in the box. Enjoy.