

Ampeg B-15N

Physically Modeled Bass Amp, Speaker Simulation and FX Rack with Unison Preamp Technology
The Modern Standard, Born from the '60s



Developed by Brainworx in partnership with Ampeg Limited and Distributed by Universal Audio.



brainworx
music & media gmbh

The Ampeg B-15N amp plug-in can be installed and operated like any other UAD-2 plug-in.
Please check www.uaudio.com for general info about the system requirements, etc

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Introduction

The Ampeg B-15 has been the “go-to” bass amp in studios around the world for over 50 years. Its ability to provide a wide variety of sought after bass tones, from jazzy clean, to warmer flavors to more raucous overdriven colors made it the selection by bass-slingers ranging from James Jameson on Motown hits and Donald “Duck” Dunn on Stax records, all the way up to contemporary studio hot shots like Darryl Jones, Justin Meldal-Johnsen, Alex AI, and Owen Biddle.

By working directly with Ampeg, Brainworx has produced an exacting plug-in emulation of this amazing amp, adding to their growing collection of classic bass amps for Universal Audio’s UAD platform. The B-15N plug-in with Unison preamp technology

faithfully provides the legendary fat, smooth and hearty sound that bassists and recording professionals have grown to depend on.

By emulating the bias circuit for the 1964 and 1966 B-15 models, Brainworx goes one step further by providing users of the B-15N plug-in with the colors of both amps in a single plug-in. An exacting digital replica of this exciting piece of history, the Ampeg B-15N from Brainworx is sure to please and pleasure even the most demanding of musical needs.

The Main Applications for this Plug-in Are:

1. Recording DI bass into the B-15N using Apollo’s Hi-Z input with Unison technology, then editing and processing them in the DAW completely.
2. Recording hardware preamps through the power amp simulation and Recording Chains.
3. Practicing at home with minimal latency (in Apollo’s Console, for example), via your studio speakers, a home stereo system, headphones or a real bass amp and cabinet.
4. Playing live via a real power amp and speaker setup.
5. Playing LIVE, plugged straight into a live console and / or an in-ear system.
6. Re-Amp less than perfect DI bass tracks, previously recorded with other amp simulations.

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The Basics

You can use the amp section of this plug-in exactly like you would operate the real Ampeg B-15N tube amplifier.

Plug in your bass [via your Apollo interface in this case], adjust Gain, Tone and Volume... and Rock'n'Roll!

Unison Technology

The Ampeg plug-in was developed with the Apollo series interfaces in mind and made compatible with Unison preamp technology. Of course the B-15N will work with any UAD-2 device, but to experience ultra-low latency along with important impedance, gain 'sweet spots', and circuit behaviors of the real amp, you need an Apollo interface. In order to do this, you should insert the B-15N in the preamp insert position of Apollo's Console application. This will greatly enhance your experience, making the tone and behavior of your sound an exacting replication of a physical bass amp.

Using the Ampeg B-15N in recordings

A good producer's trick is to also use a REAL Bass AMP [a small combo, for example] for real-time monitoring in the control room during tracking while recording only the DI bass signal. Then use the Ampeg plug-in when you play back the recorded tracks together with the rest of your music. You will need to split the dry bass signal so it can be recorded in the computer and routed to the real bass amplifier input at the same time.

To play and record dry DI bass tracks with the lowest latency and the highest quality possible, connect your bass to the Hi-Z Input of the Apollo interface or connect a quality DI Box and Mic Preamp to a line input of your Apollo Series interface.

If you insert the B-15N plug-in in the Console software mixer (to use the plug-in with the lowest possible latency) you have to decide whether you want to record processed bass amp sounds (click the INSERT EFFECTS switch to REC in the Apollo console) or whether you only want to record the dry DI bass signal, while monitoring the processed amp sound during tracking, of course (click the INSERT EFFECTS switch to MON in the Apollo console).

The advantage of only monitoring the processed sound is that you can alter the settings of your amp and FX completely during mixdown. If you find out later that less or more Gain would sound better for your song you can still make that happen.

The advantage of recording pre-processed bass tracks might be that you will need fewer plug-ins during mixdown, as your bass tracks will be ready to be mixed. All you can do then is EQ and compress the recorded bass tracks, or add effects, just like you would with traditional bass amp recordings. Once you know 'your sound' you may even save some time by recording processed bass tracks and using them without further tweaking or fiddling around... your band mates or your producer may even appreciate this. ;)

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The Controls of the Ampeg Amplifier Section

INPUT CHANNELS: To select the B-15N channel you would like to use in either circuits of the 1964 B-15NC or the 1966 B-15NF, click on one of the four jacks. Use the two jacks in the lower row to use either of the 1964 or 1966 channels at -15 dB and use the two jacks in the upper row to use either channel at 0 dB.

VOLUME (1964 channel): Use this control to adjust the output level of the 1964 channel.

TREBLE (1964 channel): Use this to adjust the high frequency level of the 1964 channel. This provides up to 18 dB of boost, or 18 dB of cut at 5 kHz. The high frequency output is flat at the center position.

BASS (1964 channel): Use this to adjust the low frequency level of the 1964 channel. This provides up to 10 dB of boost, or 10 dB of cut at 40 Hz. The low frequency output is flat at the center position.

VOLUME (1966 channel): Use this control to adjust the output level of the 1966 channel.

TREBLE (1966 channel): Use this to adjust the high frequency level of the 1966 channel. This provides up to 18 dB of boost, or -30 dB of cut at 5 kHz. The high frequency output is flat at the center position.

BASS (1966 channel): Use this to adjust the low frequency level of the 1966 channel. This provides up to 11 dB of boost, or 11 dB of cut at 40 Hz. The low frequency output is flat at the center position.

BIAS: Use this switch to select between 1964 cathode bias or 1966 fixed bias; 1964 and 1966 preamps have the ability to mix and match bias, adding an extra layer of tonal customization.

POWER SWITCH: Use this switch to engage or bypass the plug-in

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The Controls of the Ampeg FX Rack



(1) NOISE GATE

'CLOSED' LED

When lit this LED indicates that the Noise Gate is CLOSED. This means the THRESHOLD setting is higher than the incoming bass signal and the noise gate dims the output signal of the amplifier by the amount adjusted with the RANGE control.

NOISE GATE ON / OFF:

Enable or disable the Noise Gate completely. Switch up ['on'] means the Noise Gate is activated.

THRESHOLD:

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 Threshold so the noise of the overdriven amp will be reduced, but make sure you don't cut fading notes or chords.

RANGE:

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.



(2) AMP FILTERS (switchable pre / post)

TIGHT Filter:

With the TIGHT filter you can cut LOW frequencies of either the DI bass signal (PRE) or the processed amp output (POST).

PRE: If your bass 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.

SMOOTH Filter

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 bass 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 to reduce treble.

OFF: when set to OFF the SMOOTH filter is in bypass mode.

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The Controls of the Ampeg FX Rack

[3] INPUT GAIN:

If you want to drive the input of the Ampeg preamp harder or softer you may adjust the input gain to your liking. Some single coil pickups from older or vintage bass may deliver low level output that can be compensated with the INPUT GAIN.

The opposite goes for a lot of heavy metal style humbuckers. If you have recorded the DI signal too hot or if you are using other plug-ins before entering the Ampeg amp plug-in you may want to dim the input signal.

With most standard playing you can and should leave the INPUT GAIN at 0 (zero) though.

Internal POWER SOAK:

In the real 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 bass amp signal and is something most bass players love. A fully cranked up tube bass 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 Ampeg power amp, so you may experiment with different settings of the Master Volume of the amp and the internal POWER SOAK. We recommend a setting of roughly -10dB for most scenarios.

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The Controls of the Ampeg FX Rack

[4] REC CHAINS:

Simply select a speaker and a complete studio setup by browsing through the REC CHAINS pull-down 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 (www.brainworx-studio.de) is equipped with one of only nine NEVE VXS 72 consoles ever made, and it also hosts some of the finest outboard EQs and mic pre-amps available.

Using this impressive setup Dirk has produced a huge variety of customized 'Recording Chains' for the Ampeg amplifiers, which you can apply to your plug-in amp settings. Imagine a selection of 42 perfectly mic'd and EQ-ed bass cabinets that you can select and use instantly with a single mouse click!

Many bass 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 plug-in offers, you may use the very last setting (labeled EMPTY PLAY REAL CAB) and use your own mic'd cabinet. This setting will give you the sound of a tube bass amp wired straight into a console, which also may be a nice effects sound.

+ / - Switches (Plus / Minus):

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

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 chords, then grabbing the mouse to select the next REC CHAIN, playing a few notes again, grabbing the mouse again, etc.

For this reason the Ampeg amp plug-in offers you the AUTO mode:

Just select a pattern (1 Bar, 2 Bars or 4 Bars) and the plug-in will activate the available REC CHAINS automation, following the actual tempo setting of your DAW. You can now play uninterrupted and simply listen to the sound of the various REC CHAINS as the plug-in switches through all of them every single bar, every two bars or every four bars, depending on your setting.

As soon as you hear the speaker setup you like best just stop AUTO mode by clicking the AUTO button again and manually select the desired REC CHAIN. Afterwards, just fine-tweak the TONE STACK and GAIN and there you are.

HORN ON/OFF:

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.

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SETTINGS / Top Toolbar:

UNDO / REDO:

You can undo and redo changes you made to the controls of the Ampeg plug-in 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.

SETTINGS (A/B/C/D):

The Ampeg amp plug-in offers four internal settings [A/B/C/D] that will be stored with every preset. So, one preset can contain up to 4 amp and effects settings.

You may use similar amp settings with more or less bass, different bias settings, etc., to quickly switch between different sounds, or you can switch from 1964 to 1966 within one setup / preset.

The settings can be automated (!) in most DAW hosts. This way it's possible to switch from a clean picked sound to a grungy slapped sound, for example.

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 delay, 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 DELAY. Done.

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

FX Rack:

Toggle between standard and zoom view.

FACTORY PRESETS

We have made a lot of presets for the Ampeg plug-in, 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 Ampeg amp plug-in.

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 REC CHAINS.

- Select the amp channel you wish to play (1964 or 1966, for example)
- Adjust the TONE setting and select input 1 or 2 of either circuit
- Dial in as much GAIN or Distortion as you like.
- Play through as many REC CHAINS as you like and pick the one that sounds closest to what you are looking for without altering the TONE SECTION.
- NOW start tweaking the TONE SECTION to fine-tune your amp settings.
- Activate filters, the noise gate, etc.

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

Combine the Ampeg amp with other plug-ins (dynamics, effects, room simulation), and you will be able to create countless world-class production-ready bass sounds in the box. Enjoy.