

QUICK START

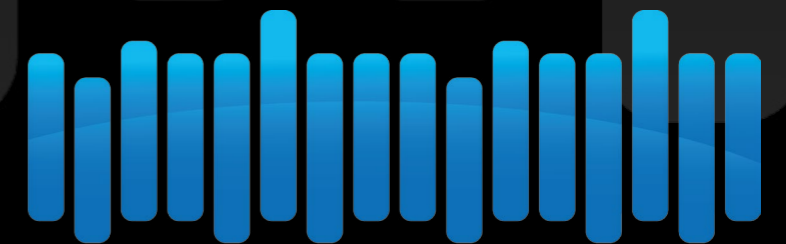
Install and Authorize your New Plugin:

- Double-click the .mpkg (Mac) or .exe (Win)
- Follow the installation instructions
- Open the plugin in your DAW of choice and click on the interface to activate.
- If your computer is connected to the internet, click the “I’m Online” button and enter your Plugin Alliance credentials on the following page.
- For offline activation instructions and additional information, please refer to the Activation Manual included in the installation folder of this plugin.
- You will also find the [online version of the manual](#) by visiting:

www.plugin-alliance.com

System Requirements and supported Platforms

For latest System requirements & Supported Platforms, please visit the [product page](#) at www.plugin-alliance.com to see the product specification on each product’s respective page.



PLUGIN ALLIANCE

BRAINWORX bx_megadual

Physically Modeled Tube Amp, Speaker Simulation and FX Rack
Instant Gratification



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Introduction

When they were released, Mesa Boogie's Rectifiers® really changed the guitar amp game by providing the high gain tones that helped to define modern metal by keeping the vintage warm cleans and crunch tones that made them a legend.

The Dual Rectifier® is among the most popular guitar amps ever made and a legend in rock and metal circles for 20 years. With 3 independent channels and 8 separate tone modes, this amp delivers an incredible array of colors.

The Main Applications for this Plugin Are:

1. Recording DI guitars, then editing and processing them in the DAW completely, using the internal amp simulation, the recording chains and the FX Rack.
2. Recording hardware preamps through the power amp simulation and Recording Chains.
3. Practicing at home with minimal latency, via your studio speakers, a home stereo system, headphones or a real guitar 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 guitar tracks, previously recorded with other guitar-amp simulations.

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The Basics

You can use the amp section of this plugin exactly like you would operate a real tube amplifier: Plug in your guitar (via your computer audio interface in this case), select a Channel, adjust Gain, Tone and Volume... and Rock'n'Roll!

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

If you insert the brainworx bx_megadual plugin into a track in your DAW, you have to decide whether you want to record processed guitar amp sounds or whether you only want to record the dry DI guitar signal, while monitoring the processed amp sound during tracking, of course.

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 or Delay would sound better for your song you can still make that happen.

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

The Controls of the bx_megadual Amplifier Section

Each channel of the bx_megadual has identical controls, which are highly dependent on the mode in which the active channel is sel (e.g. RAW / VINTAGE / MODERN). Aside from any tips you may find in this manual, achieving *Your* sound will take some experimentation. Have fun!

GAIN has three general settings - low, medium and high - based on the clockwise position of the knob. Arguably the most important control on the preamp, it controls the spectrum of sound from clean to overdriven. Higher gain settings are less influenced by the tone controls.

PRESENCE filters upper-end harmonics outside of the TONE control's range, while adding darkness and fatness when turned counter-clockwise. Aggression is enhanced when turned clockwise, and the character of this effect is also channel and mode-dependent.

TREBLE provides the most direct control over your sound's character, as it can mean the difference between smooth rhythm and crunchy lead. This control is highly affected by the different modes offered in each channel, adding anything from more gain, to more harmonics.

MID can level the tone for a more compressed, bulbous and washed sound in the lower settings, and add more midrange punch and presence in higher settings. Note it is generally not as potent a control as TREBLE, which is applied directly before this stage.

BASS is also staged after TREBLE, and thusly will have a more noticeable effect when TREBLE is at a lower setting.

MASTER controls the overall output of the channel's tone section, and allows for flexibility between very high-gain sounds to come through at potentially low levels and vice-versa.

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The Controls of the bx_megadual Amplifier Section

POWER ON/OFF

The bx_megadual amp plugin can be bypassed like any real amp. Using this switch will bypass any of the processing of this plugin, including the FX rack.

CHANNEL (CH1 / CH2 / CH3):

This is identical to plugging into a particular channel input on the face of a physical amp. Each channel setting corresponds to its respective tone section (indicated by the adjacent illuminated light).

POWER CONSUMPTION (SPONGY / BOLD):

This switch controls a behavior attributed to the power draw of a physical guitar amp:

SPONGY will produce a more vintage-feeling, muddy sound characteristic of low power draws. Use this with the VACUUM setting of RECTIFIER SELECT for a powerful, overdriven sound.

BOLD emulates full power consumption, allowing for clean headroom and maximum power when dialing-in the tone for your channel.

RECTIFIER SELECT (VACUUM / SOLID)

Selects between two different types of rectifiers to be used:

VACUUM emulates the classic tube sound that imparts a sweet warmth to the tone. It especially oozes character when used in combination with channel 2 and 3 RAW and VINTAGE settings (see CHANNEL MODES).

SOLID emulates the behavior of a silicone diode rectifier, adding a crisp attack and tighter punch to the sound, along with more brightness and headroom. Use this for tight, rhythmic playing or loud and clean leads.

OUTPUT VOLUME (OUTPUT / SOLO):

These knobs control the level of sounds coming from the bx_megadual. Set the overall master level with **OUTPUT**, then set a higher or lower level with **SOLO**.

Below, the **SOLO** switch will activate this knob's effect, which can be assigned to a footpedal to be used during performance. The **SOLO** knob at full counter-clockwise will produce no audible volume change. Make sure to consider your overall headroom when first setting the **OUTPUT** level, so as to avoid digital clipping when engaging your secondary, **SOLO** level.

CHANNEL MODES (CLEAN / PUSHED, VINTAGE / RAW / MODERN):

These modes will drastically affect the characteristics of your sound when manipulating the TONE controls for each channel.

CLEAN (CH 1 Only) produces the lowest gain of all modes, allowing for a precise and clean tone to be created. Warmth is added with the addition of GAIN; sustain is affected with MID and TREBLE.

PUSHED (CH 1 Only) introduces a huge amount of gain to this channel while maintaining tight response with a crunchy sound. Keep the TREBLE low for a nice bloom, push it with the GAIN for dirty oscillation.

RAW (CH 2 & 3 Only) is the lowest gain mode for each of Channels 2 and 3. The GAIN setting offers a wide range of tone in this mode, from clean to shred, and is highly influenced by the TREBLE control.

VINTAGE (CH 2 & 3 Only) provides a high-gain go-to guitar sound that is both rich in pleasing harmonics and smooth in character. A low GAIN setting in VINTAGE mode can be similar to a high GAIN setting in RAW mode.

MODERN (CH 2 & 3 Only) has sounds that are aggressive and responsive- tight in the low-end and present in the highs; this is the setting most suitable for 'hardcore' styles. The affect of PRESENCE on this mode is more tame in CH 2 than in CH 3.

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The Controls of the bx_megadual 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 guitar signal and the noise gate dims the output signal of the amplifier by the amount adjusted with the RANGE control (e.g. 15dB in the picture above).

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 guitar 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 guitar signal (PRE) or the processed amp output (POST).

PRE: If your guitar pickups produce a 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 guitar signal (PRE) or the processed amp output (POST).

PRE: If your guitar 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 bx_megadual FX Rack

(3) 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 bx_megadual amplifier, which you can apply to your plugin amp settings. Imagine a selection of 62 perfectly mic'd and EQ-ed guitar cabinets that you can select and use instantly with a single mouse click!

Many guitar 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 CABINET BYPASS) and use your own mic'd cabinet. This setting will give you the sound of a tube guitar 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 bx_megadual amp plugin offers you the AUTO mode:

Just select a pattern (1 Bar, 2 Bars or 4 Bars) and the plugin 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 plugin 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.

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(4) LO-FI DELAY

We have modeled a vintage stomp box delay and emulated the typical sound of it. Limited frequency bandwidth, fading high frequencies on repeats, etc. Then we added modern features like a mix control, DAW controlled bpm-based tempo sync, etc. Of course you will use your favorite selection of external effects like Chorus, Flanger, Reverb and even other Delays to achieve your signature guitar tone, but we feel that a nice & easy delay comes in handy even if you only want to try out presets etc.

Testing a lead / solo sound without hearing at least a touch of delay wouldn't sound realistic for many players, so we added this one effect. Plus, we really like the sound of this vintage delay lay lay lay la la l.....

DELAY on/off:

Activate or deactivate the delay and all of its parameters with this switch. Switch up: Delay is activated. Switch down: Delay is bypassed / off.

TAP:

You can adjust the delay time by clicking rhythmically on the TAP button with your mouse. This way you can adjust the tempo of your delay to your guitar riffs even if you don't play with a DAW and bpm-based tempo or click track.

TIME:

Alternatively you may just dial in a delay time based on milliseconds using the TIME knob. Maximum Delay Time: 400 ms.

X2 & /2 (adjusting the delay time):

You may switch the actual delay time to double speed by clicking the /2 button. You may switch the actual delay time to half time by clicking the x2 button.

Both buttons can be pressed repeatedly as long as the maximum delay time of 400 ms is not exceeded.

HOST BPM:

This LED panel indicates the actual tempo (4/4th, based on bpm, beats-per-minute) reported by the DAW host software.

MIX:

Use the MIX control to blend in as much delay signal with the dry amplifier sound as desired. For unobtrusive delays we recommend settings around 10%, heavier effect sounds may require settings of 50% or more.

FEEDBACK:

The FEEDBACK controls the number of repeats. While a setting of 99% will result in an almost infinite delay loop, a typical setting for a rock lead sound may be around 25%.

LO-FI:

With the LO-FI knob you control the amount of internal distortion, the resampling quality, etc. The higher you go the worse the quality gets from a pure technical stand point... but the more interesting it may sound for many guitar sounds and styles.

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The Controls of the bx_megadual FX Rack

(5) INPUT GAIN:

If you want to drive the input of the bx_megadual preamp harder or softer you may adjust the input gain to your liking. Some single coil pickups from older or vintage guitars 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 plugins before entering the bx_megadual amp plugin you may want to dim the input signal.

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

(6) Internal POWER SOAK:

In the real world, power soaks are being used to reduce the volume of a guitar power amp. This way you can crank up a (tube) guitar 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 guitar amp signal and is something most guitar players love. A fully cranked up tube guitar 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 bx_megadual tube 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.

(7) PRE-AMP and POWER AMP Activation:

BYPASS PRE:

With the BYPASS PRE switch you can switch off the bx_megadual preamp completely, which may be wanted if you record your own hardware (tube or solid state) guitar preamp with the bx_megadual amp plugin.

In this case you may still use the internal POWER AMP and speaker / REC CHAINS simulation and will be able to achieve amazing results recording your guitar sounds without using an external power amp and speaker.

Switch up: Preamp is bypassed (off), Switch down: Preamp is active (on).

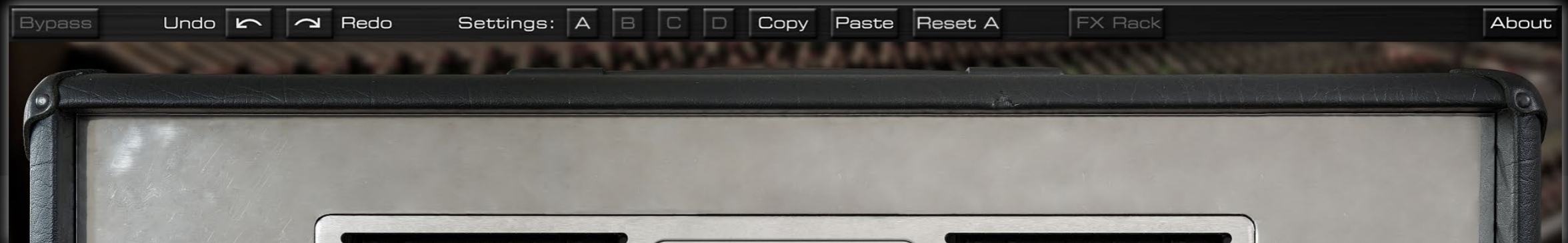
BYPASS POWER AMP:

If you want to use only the distortion of the bx_megadual preamp you may switch the power amp simulation off. This may sound cool if you use the ENGL plugin to distort other signals than a guitar. For a realistic guitar recording we recommend leaving the power amp on, as it is an integral part of the overall sound of the amp.

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(8) SETTINGS / Top Toolbar:

UNDO / REDO:

You can undo and redo changes you made to the controls of the bx_megadual 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.

SETTINGS (A/B/C/D):

The bx_megadual amp plugin 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 delay, different delay times, etc., to quickly switch between different sounds, or you can switch from clean to crunch to lead within one setup / preset.

The settings can be automated (!) in most DAW hosts. This way it's possible to switch from a dry rhythm sound to a lead sound with tons of delay, 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 bx_megadual amp plugin, many of them have been made to work perfectly with classic guitars like Strats, Teles or Paulas. All of the factory presets offer A/B/C/D variations, do try them out!

This effectively quadruples the factory sounds you can browse through, and many similar amp settings sound quite different with different FILTER or DELAY settings.

These presets are only intended to give you an easy start and to demo some of the tones you can get out of the bx_megadual amp plugin.

CREATING YOUR OWN SOUNDS & PRESETS

When you start to create your own sounds the most important elements to adjust are the DRIVE, TONE SECTION and the REC CHAINS.

- Select the amp channel you wish to play (clean or lead, for example)
- Adjust the TONE setting and select input HIGH or NORMAL
- 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.
- Add Delay or 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 bx_megadual amp with other plugins (dynamics, effects, room simulation), and you will be able to create countless world-class production-ready guitar sounds in the box. Enjoy.

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Plugin Alliance Toolbar

“KEY” ICON

Opens the plugin Activation Dialog

“WRENCH” ICON (Beta Testers Only)

Shows information regarding the plugin version, software specifications, and user account.

“?” ICON

Opens a dialog through which one can access the plugin’s help documentation, online product page, or any available updates.

“\$” ICON (When Applicable)

If you’ve purchased your plugin using the Plugin Alliance Installment Payments option, the “\$” icon, links to your account so you can make a payment on your Lease-License

For More Information
Please Visit:

[Plugin Alliance Website: plugin-alliance.com](http://plugin-alliance.com)