

DSM  HUMBOLDT
E L E C T R O N I C S



SIMPLIFIERX
ZERO WATT REVERB STEREO / DUAL AMPLIFIER



"The development of the Simplifier X marked a significant step forward for all of us, pushing past the barrier of what we once considered a 'great sounding unit' for an ultra-realistic experience, particularly in terms of the feel alongside the tube amp sound. Nowadays, it's easier to match a sound itself, which doesn't pose a significant challenge anymore. However, the feel – the sensation – remains something still impossible to recreate with digital technology. Yet, when it comes to analog, things feel more natural.

While the industry continues to churn out new products merely for the sake of competition, we've chosen to remain true to our vision and passion, it's because of this that we've never lost sight of the musician's experience and all the inspiration that comes with a dynamic, touch-responsive unit. We've never strayed from our approach, and this product is a testament to that commitment.

As a regular live guitar player, I fully understand, from an experiential perspective, what we need and what we don't. I could operate like any of the CEOs out there, focusing solely on numbers and testing products in the most controlled environments at our development studio. However, my most important office and laboratory are when performing live, as I still do, whether it's in the 2000-seat venue I regularly play at least 8 times per month, or large 12k+ people arenas, or even stadiums.

The Simplifier X in your hands has been tested in all those scenarios, and I personally ensure that you'll enjoy it in every situation.

On words of our Engineering Director and Founder, Mr. Daniel Schwartz: "The SIMPLIFIER X was thoroughly designed and developed to fulfill the needs of guitarists seeking for versatility, flexibility, practicality and of course, the ability to get the best tones ever produced by analog gear."

That's our promise, now it's time to enjoy!

Jano Acevedo & Team
CEO & Founder



INDEX

Introduction & Overview	3
Main features	4
Inputs	5
Modes of operation	6
FULL PARALLEL	6
A/B AMPS + STEREO CAB	7
A/B DUAL MONO RIG	8
Preamps	9
Power amps	10
Master Level	11
Reverb	11
Cabsims	12
Effects Loop	13
Outputs	14
Headphones Amp	15
Footswitch	15
Sample Settings	16
Tech Specs	18
EMI/EMC Emissions	19
Warranty	19

**INTRODUCTION:**

Congratulations! You have now in your hands the SIMPLIFIER X, a zero watt, all analog, two channel amplifier that produces the most realistic classic tube amp tones. The SIMPLIFIER X was thoroughly designed and developed to fulfill the needs of guitarists seeking for versatility, flexibility, practicality and of course, the ability to get the best tones ever produced by analog gear.

OVERVIEW:

The SIMPLIFIER X is an all analog, zero watt amplifier with two independent amp blocks with their own input preamp, power amp, cabinets, reverb, fx loop and outputs. These two amps can be configured in 3 MODES from full parallel to 2 channel mono, with tones ranging from pristine cleans to high gain.

DANIEL SCHWARTZ MUÑOZ
CPO & Founder

A stylized, handwritten signature in black ink, which appears to read 'Schwartz'.

MAIN FEATURES:

The Simplifier X is an all analog, Two channel, zero-watt guitar amplifier with stereo reverb, fully packed with routing and tone sculpting options.

These features include:

- **2 fully independent Amplifier channels, A & B.**
- **Preamp, power amp and cabinet type selector for each channel.**
- **Dual FX loop send**
- **Dual FX loop Return**
- **Dedicated stereo thru output**
- **Stereo Reverb with three modes (room, ether and plate)**
- **Power amp simulation with Power amp Type, Power amp Drive, Presence and Resonance for each channel.**
- **Cabinet simulation with cab type and Speaker color for each channel.**
- **Two Balanced DI outs with ground lift.**
- **Headphone amplifier with volume control.**
- **Auxiliary input that can be routed to the main output or headphones only.**
- **3 modes of operation (Full Parallel, 2 channel with stereo cabinet simulator and 2 channel dual mono)**
- **Mono Loop switch for mono fx into both returns.**
- **2 1/4 inch outputs with Cab Bypass option.**
- **Footswitchable channel selection (footswitch included)**



INPUTS



AMP B input

AMP B goes straight into Amp B. Use this input if using different signals for amp A and B.

AMP A (MAIN) input

AMP A input is the main input (if you are using one input only, use this one). AMP A (Main) is connected internally to AMP B input if no jack is inserted on it. The Thru output takes the signal from AMP A's input and buffers it.



AUX Input

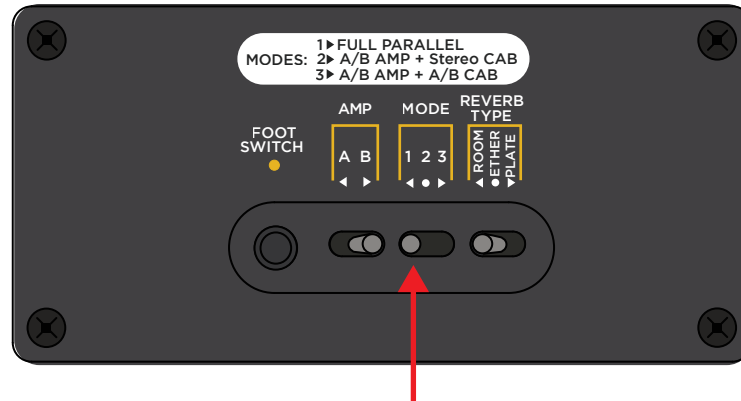
Stereo 1/8" Input for an Auxiliary input, such as a player or phone. The Auxiliary signal can be heard only on the Headphones out, or both on Headphones and main output by using the Main HP out switch.

Footswitch

Stereo 1/8" input for an external footswitch (included). The footswitch works by grounding the tip or the ring for activating channels or reverb. You can use an external switcher just like an amplifier to use with the device.



FULL PARALLEL



Full Parallel mode is like having two different amplifiers running at the same time. You can have different settings and effects for each side and make the perfect setup for a full stereo rig.

You can even use different effects at the input of each amp.

Note that the channel switching will not function on this mode (since both channels are being used simultaneously)

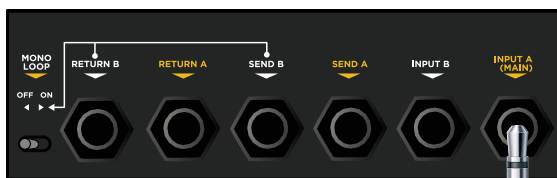
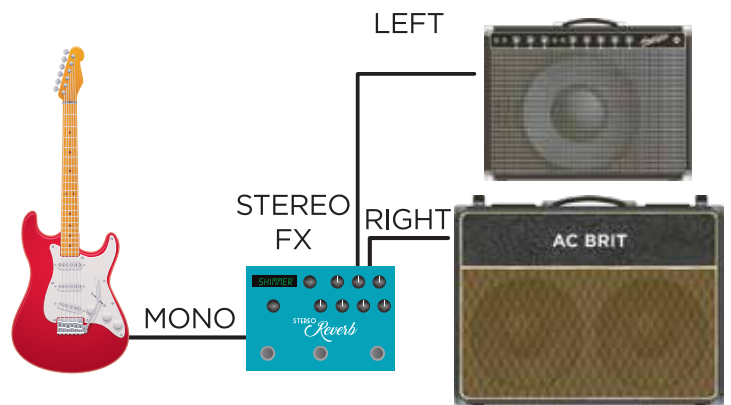
Tip 1: You can play along with a friend or a bass player using each one input.

Tip 2: If you want to use both amps in parallel, but in mono, use a jumper cable (or effect) between send A and Return A and use the “link loop” switch ON. This will mix both pre-amps in mono.

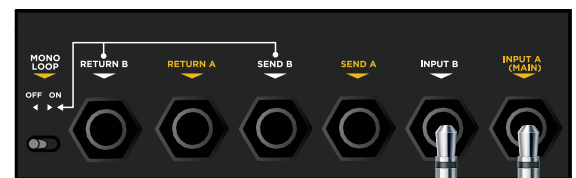
EXAMPLE APPLICATION 1 (MONO INPUT)



EXAMPLE APPLICATION 2 (STEREO INPUT)

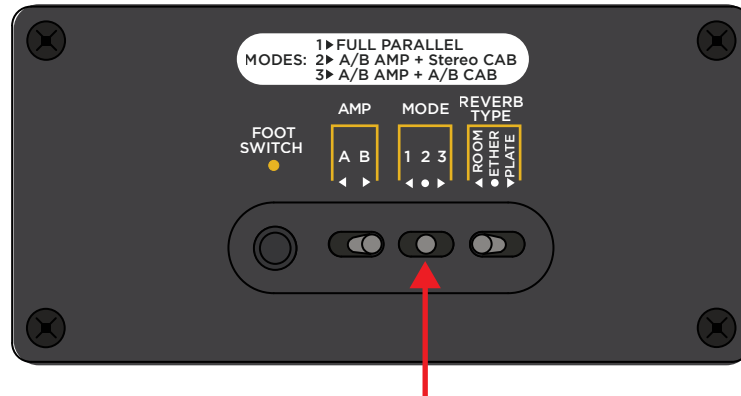


In this configuration, you can use a standard 1/4 inch mono signal straight to the INPUT A. The SIMPLIFIER X will duplicate internally your signal to have a full parallel stereo image with no need of external stereo effects.



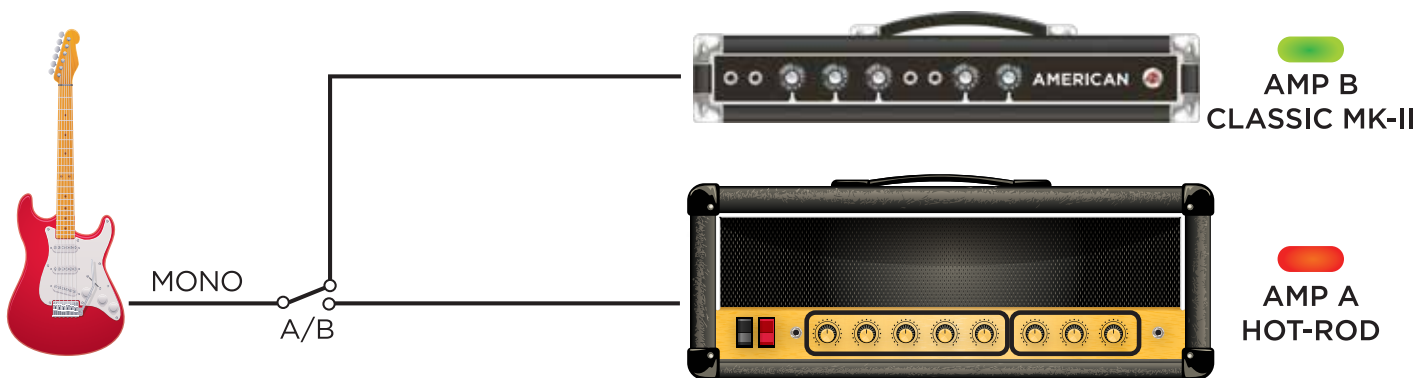
In this configuration, you can use a stereo input from a stereo effect, different drives per each channel, or even 2 different guitars to play a duo.

A/B AMP + STEREO CAB



In this mode, you can toggle between amp A and B Amplifiers, while the Cabinets and FX loop will remain Left and Right. This allows you to use different FX and cabinets for each side, expanding the stereo options and complimenting the responses of the cabs for a fuller, 3D sound.

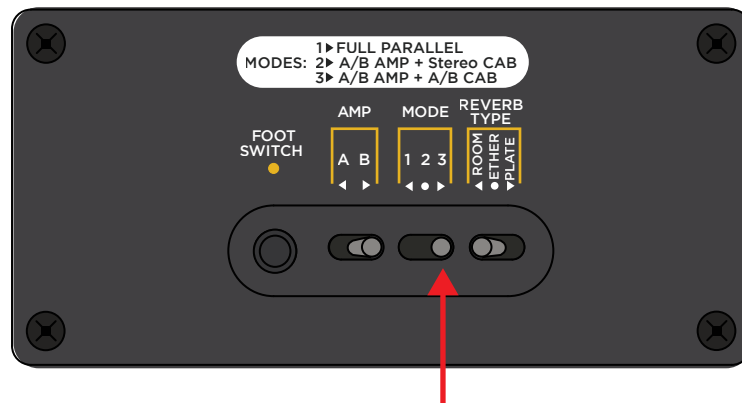
In this mode, use the AMP A FX send as the main. Only use the AMP B send if you are using different fx for each side.



EXAMPLE APPLICATION (MONO TO STEREO ROUTING)



A/B DUAL MONO RIG

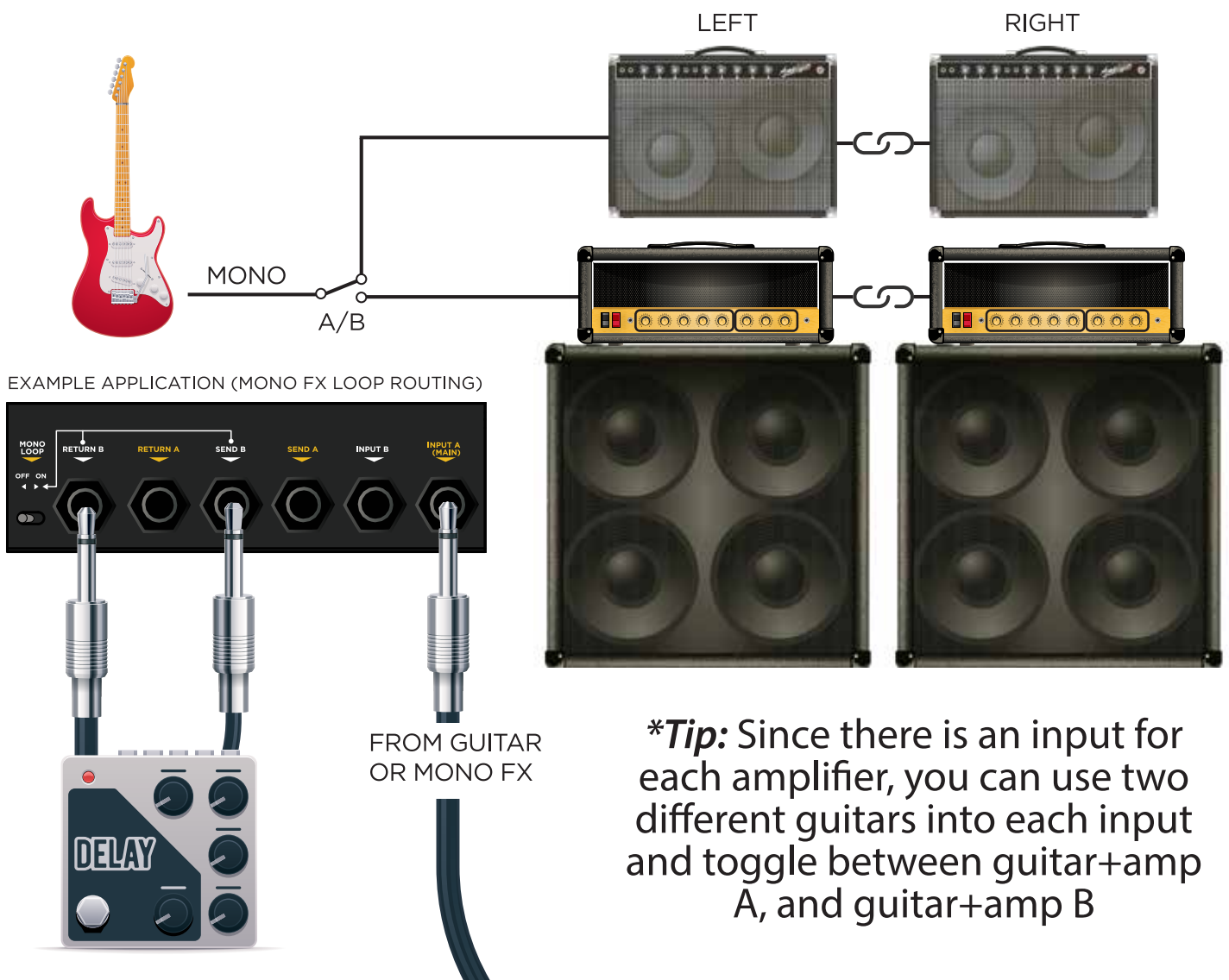


This mode is dual mono, like having two different complete amplifiers, selecting each one with an A/B switch. Each amp will have their own preamp, power, cabinet, reverb mix and Loop FX.

You can have different FX on each loop and select them by changing the channel.

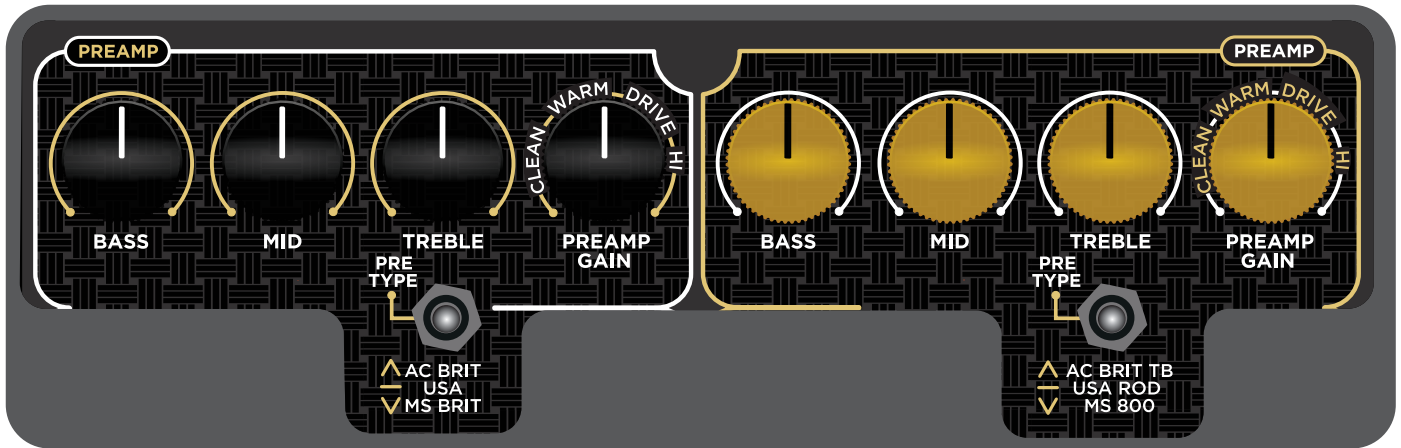
In this mode, both outputs are the same signal in mono.

Tip: Since there is an input for each amplifier, you can use two different guitars into each input and toggle between guitar+amp A, and guitar+amp B



PREAMPS

The Simplifier X features state of the art, low noise, and ultra versatile preamps that reproduce the character of 3 of the most iconic classic amplifiers. While AMP B models the stock versions of the amps, AMP B captures the tones of modded versions of these amps, ideal for crunch and lead work.

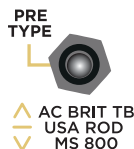


GAIN KNOB



Sets the gain/overdrive of the preamp. It ranges from very clean (below noon), up to mid/high gain at full throttle. Combine this gain with the power amp gain to achieve the desired level of compression and drive. You will notice AMP A has a bit more gain, but you can get equal amounts of gain from both amps if you reduce the gain of AMP A.

PREAMP TYPE



AC BRIT: On AMP B, is a Classic AC30 top boost with sparkly and three-dimensional sound, bridging the normal and bright channel. On AMP B it has more gain on the normal channel, getting that big bottom response when cranked, just like the real amp.

USA: On AMP B, Classic Bassman tones. Sweet and dynamic with a balanced response. By far the most used amp on studio recordings. On AMP B, its higher gain replicates the creamy drive of a famous custom american made amp.

MS BRIT: On AMP B, Classic clean-to-crunch vintage plexi style amp with bridged hi/lo inputs. The sound that defined rock music. On AMP A, it replicates the higher, more modern gain of a hot rodded JCM800.

TONE STACK



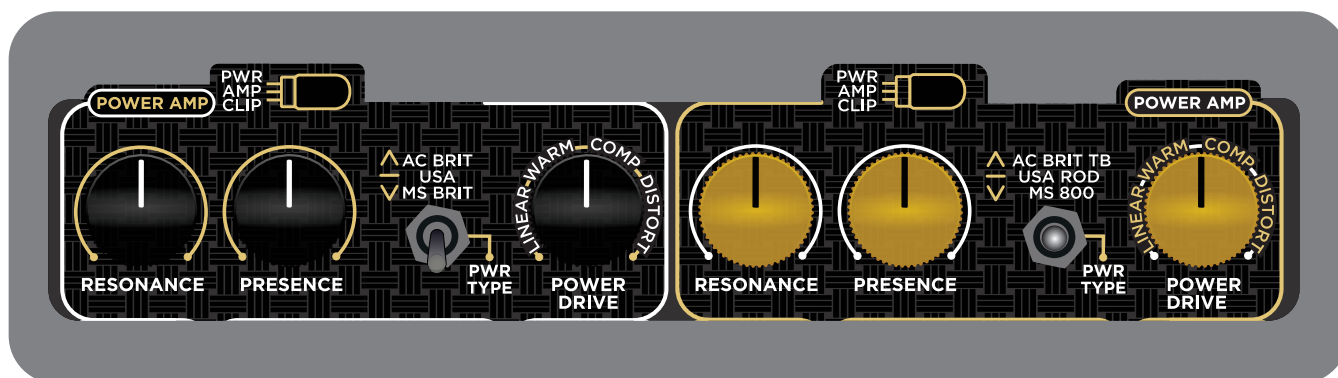
A key part of a tube amp sound and response is the tone stack behavior. The tone stack on the Simplifier is a genuine configurable three band classic amplifier topology, keeping the same feel, response and interaction of the original amp.

NOTE: On the AC BRIT type preamp, the MID control is disabled (as the original amp does not have a mid control)

POWER AMP SECTION

The **Power amp section** models the behavior of a true push-pull all tube amp, including the compression, clipping, bias drift and variable frequency response that makes Tube power amps so special.

The Power amp type selector now changes the whole topology of each power amp, changing the tube type, bias and feedback characteristics of each model.



POWER DRIVE KNOB



The **POWER AMP DRIVE** allows you to dial the perfect amount of power amp compression for that sweet-spot that only a tube amp can achieve. A Clip indicator will visually show when the virtual power tubes start clipping, helping you find the perfect balance between pre and power amp gain.

Complement your preamp gain with this Power Drive. Low preamp gain needs high power drive to make up the volume loss and add sweetness to the tone. Mild clipping preamp tones benefit a lot from a compressing power amp, which softens the transients and adds body to the final tone. High preamp gains are also modulated by the power drive. Lower the power drive for tighter, brighter tones, and raise it for singing, creamier tones, and find the sweet spot for your guitar where you get the best of both worlds and can control the distortion with the guitar volume control.

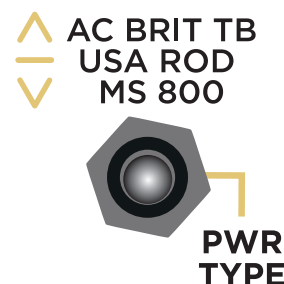
POWER TYPE SWITCH

The Power type switch selects between 3 power amp types:

- **AC BRIT:** Very hot biased class AB amplifier with no feedback, based on the venerable AC30 power amp. Big low end and low headroom with a response that varies from scooped on clean settings, to mid rich when pushed, and this happens dynamically.

- **USA:** Class AB 6L6GC with a lot of feedback. Very flat and balanced, but it screams when overdriven at full presence.

- **MS Brit:** Class AB EL34 with less feedback. Rich low-mids, and responds more consistently to overdrive.



POWER AMP SECTION

PRESENCE KNOB

The presence knob is implemented just like the real amps. It works by reducing the high end feedback, thus boosting the treble into the power amp. If AC Brit power amp type is selected, the presence acts as the High cut control, like the original amps. Note that if the power amp section is clipping, the presence knob will modify the distortion character.



RESONANCE KNOB

The resonance controls the amount of low end feedback into the power amp. Although this control is not present on the original amps, we added it to allow the user to adjust the low end response to different PA speaker sizes to avoid boominess or adding weight to the sound of small speakers.



MASTER LEVEL

The Master Level Knob controls the final level into the FX loop. Avoid clipping any effects on the loop by tuning this control accordingly.



REVERB

The Simplifier X integrates a stereo digital reverb with mix control for each amplifier, and 3 modes of reverb:

- **Room:** Short and warm decay
- **Ether:** Very long and spatial reverb
- **Plate:** Mid length decay

The Reverb function is footswitchable via the included footswitch or an external switcher control.



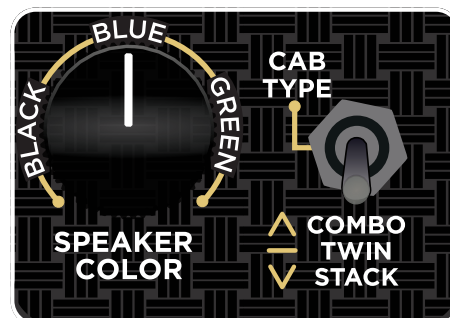
REVERB KNOB

The Reverb knob controls the reverb mix for each channel.



CABSIM SECTION

Tweakable Cabinet simulator that takes the heritage and experience of ©DSM Noisemaker developing the most useful and innovative analog cabinet simulators of the market. You can easily dial two independent cabinet simulators panned LEFT - RIGHT.



CAB TYPE SWITCH

A three way toggle switch allows you to choose independent cabinet STYLE for each side. 1x12 Combo, 2x12 or big 4x12 cabinet simulations that you can combine with any of the 3 preamps per channel, adding an extra dimension to your sound development. Now you can combine the different Cabinet sizes with different speaker types (Eminence blackface, Celestion Blue Alnico, Celestion Greenbacks, or even the points between them).

SPEAKER COLOR KNOB

The speaker color knob sweeps between the characteristic high-mid response of the different speaker type. This control is crucial to get the desired texture out from the cabinet.

BLACK

Black is based on vintage Eminence high power speakers, typical of fender combos. These are smooth and balanced, great to compensate for the shrill from single coils and fender preamps.



BLUE

Blue is based on alnico blue speakers, midrangey and defined, but not harsh.



GREEN

Green is based on greenbacks, great for those marshall jangly tones, or extra definition is required.



Note: The effect of this control is quite subtle on clean tones, but very noticeable with overdriven tones.

EFFECTS LOOPS

The Simplifier X features a dual FX loop, one for each channel. The FX loop is placed between the power amp output and the Cabinet simulation modules. This is to avoid unwanted clipping if using high power amp drive gains. You can set the appropriate send level via the MASTER LEVEL knob.



The FX Return jacks are the input for the Reverb and Cabinet Simulator path for each amplifier.

The FX sends are mono TS jacks. The level is controlled by the Master Level knob of each channel. Adjust this control according to the input level of the effects you put on the loop. If the effects clip, reduce the Level.

MONO LOOP



The FX loops are independent, but they can be linked together by using the MONO LOOP function. This will connect both returns in parallel and take the signal from send A or B. This is useful if you have a mono FX and want to have the effect active on both sides at all times.

NOTE: Turn off Mono Loop if using MODE 1 (Full parallel). If Link Mono is activated Fx loop A will be muted unless an effect or jumper is connected.

TIP: You can use mode 1 (Full Parallel) in mono (mixing both channels) by selecting "Mono Loop" and use a jumper (or fx) from send A to Return A.

OUTPUTS



A & B 1/4" UNBALANCED OUT :

Unbalanced TS output for AMP A signal. You can Bypass the cabinet simulation with the "Cabsim Bypass" switch. If Cabsim is Bypassed, the signal will include Preamp + FX loop + Reverb stages. In Mode 1, both outputs have the same signal.

A & B BALANCED DI OUTPUTS:

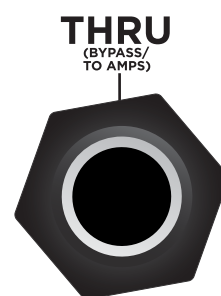
Low Impedance (150 Ohms) XLR outputs for left and right signals, with Ground Lift. These outputs carry the final output with cabinet simulation always ON. In Mode 1, both outputs have the same signal.

NOTE: The DI outs can withstand **phantom power voltage** without damage, but it will affect the quality of the sound, mainly causing low-end distortion and/or lack of bass frequencies. Make sure to have **Phantom Power Off** before using the unit.

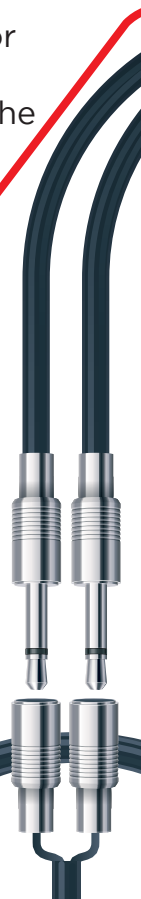
THRU OUTPUT

The THRU output is a TRS jack that carries an unaffected, buffered signal from input A to the TIP and input B to the Ring. Use this signal to go to a guitar amplifier or to record the raw guitar signal for reamping

TIP: If you have a stereo pedalboard, use inputs A and B in parallel mode. If you want to use your stage amplifiers in stereo, use a stereo Y cable from the Thru output into each amp, and use the simplifier's XLR outputs into the FOH.



THRU OUTPUT
(TRS STEREO)



HEADPHONE AMP



The Auxiliary signal can be heard only on the Headphones out, or both on Headphones and main output by using the Main HP out switch.

The unit includes a stereo headphone amplifier with stereo AUX input, for those silent late night practice sessions, or even in-ear monitoring.

The Amplifier works best with Headphones between 32 and 96 Ohms

NOTE: Ground noise issues may occur if the power supply used is not referenced directly to ground when using only headphones. Since the device will not have a reference to earth potential, unwanted noise may occur. Please use a ground referenced supply, a battery pack, or simply connect any output to a device that is connected to earth (like an amp or mixer input, even if powered off).

FOOTSWITCH

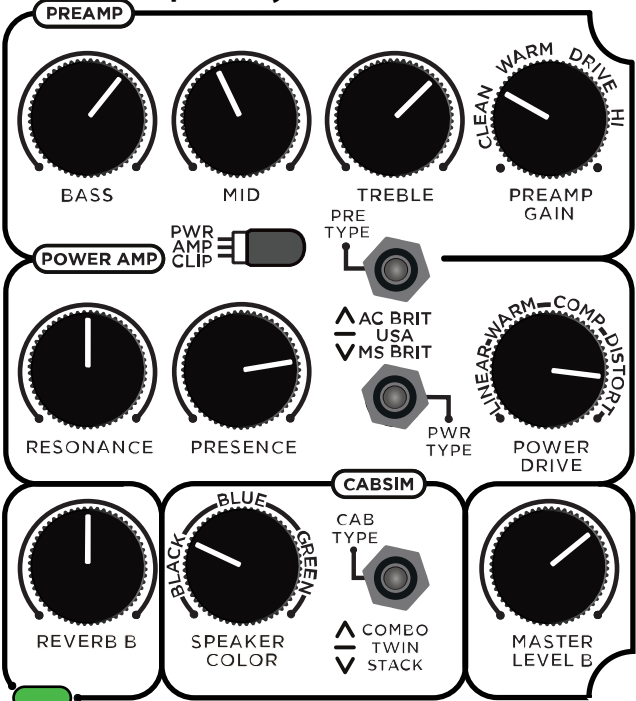
The Simplifier X includes a footswitch to control the channel selection and Reverb on/off status. This Footswitch is compatible with TRS channel controllers (as found in many pedal switchers). The Tip controls the Channel selection, and Ring controls the Reverb.

* For your convenience, we've included a TRS 3.5mm cable to operate footswitch



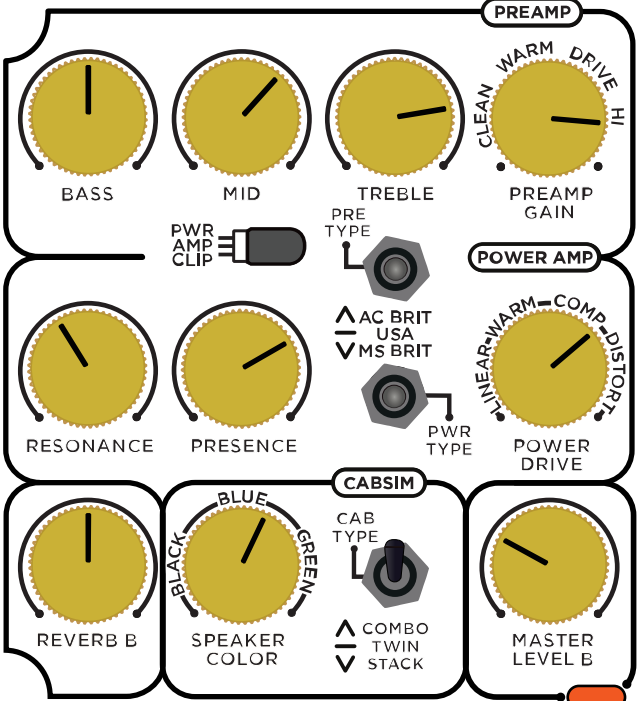
SAMPLE SETTINGS

USA Spanky Clean



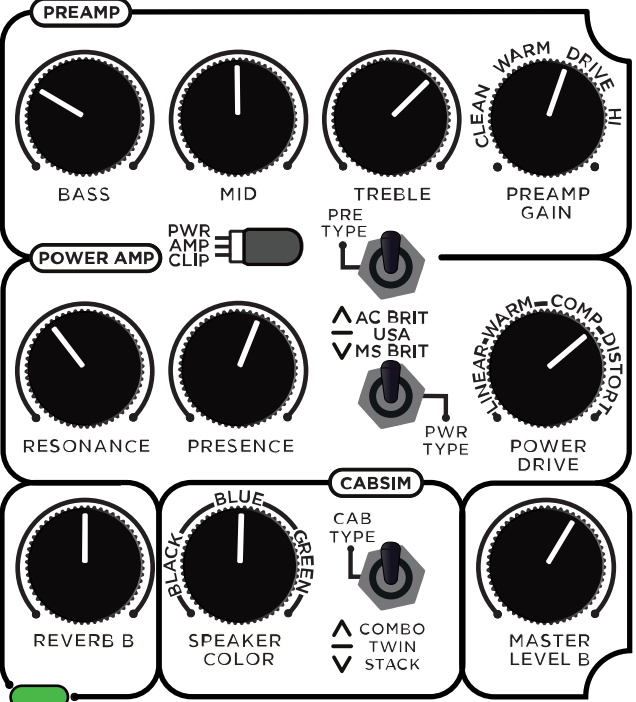
AMP B
CLASSIC MK-II

USA Custom Lead



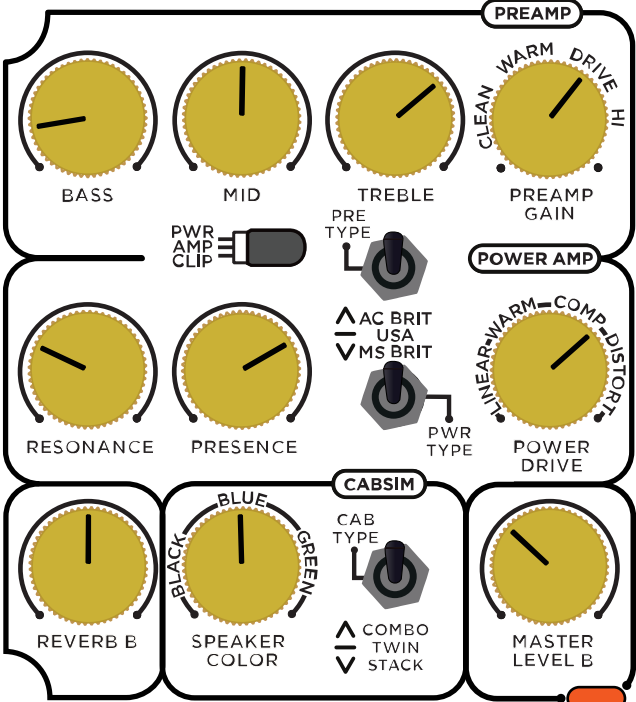
AMP A
HOT-ROD

AC Jangle



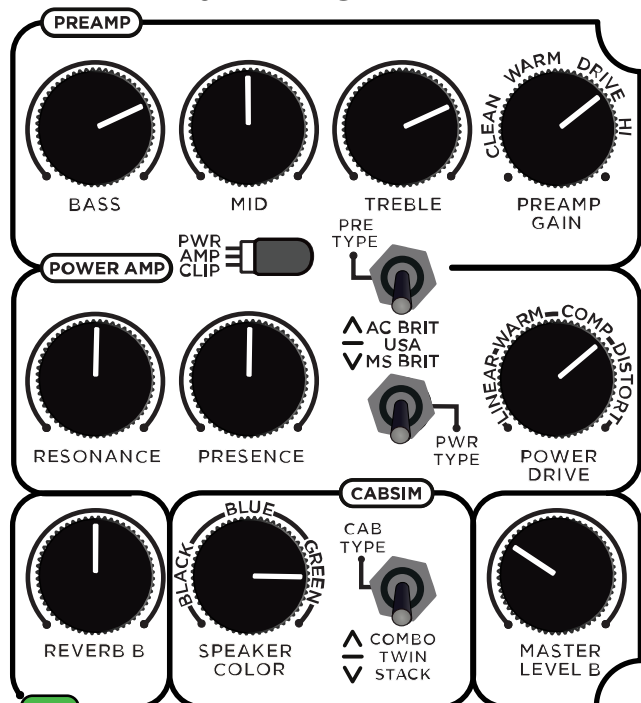
AMP B
CLASSIC MK-II

TOP BOOST Crunch



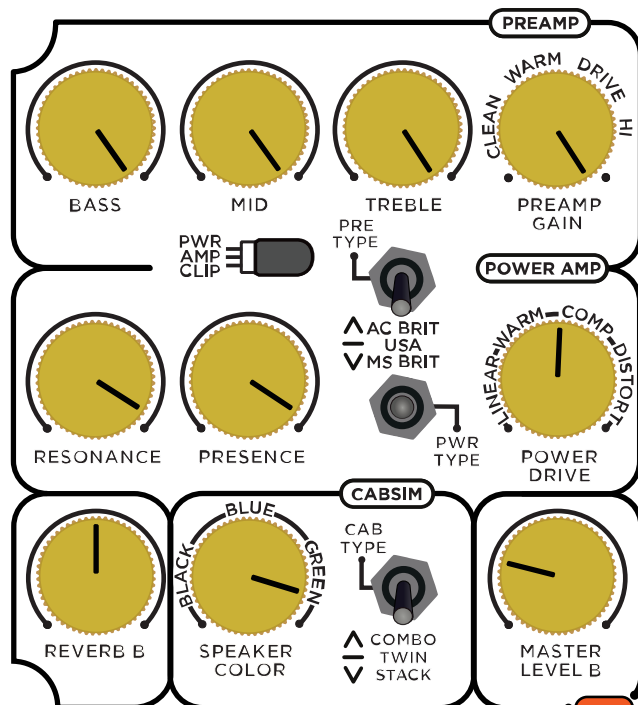
AMP A
HOT-ROD

Warm Plex



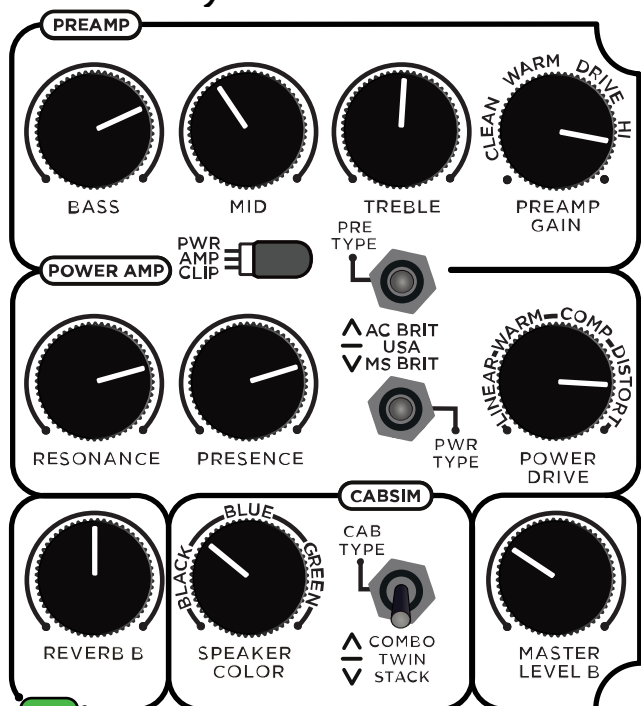
AMP B
CLASSIC MK-II

Eddie on 10



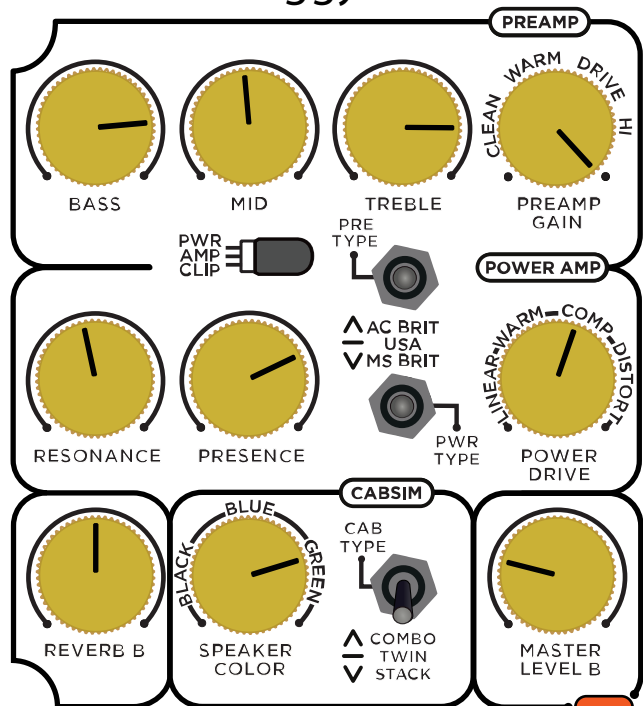
AMP A
HOT-ROD

Creamy Bassman



AMP B
CLASSIC MK-II

Buggy



AMP A
HOT-ROD

TECH SPECS

- Operation Voltage: 9V DC (max 12V)
- Polarity: Center Negative
- Current Consumption: 200mA
- Dimensions: 12.5 x 10.5 x 6.5 cms (4.9 x 4.2 x 2.6 in)
- Weight: 490 gr (1 pound)
- Input impedance
- Instrument: 680 kff
- FX Returns: 470 kff
- Aux: 50 kff
- Output Impedance
- DI: 150 ff
- Fx Sends: 200 ff
- 1/4 outputs: 200 ff
- Headphone amp Output power::
- 80mW @32ff
- 40mW @64ff



EMI/EMC EMISSIONS

The manufacturer claims that the above product fulfills the requirements as set by EN55013, EN55020, EN60555-2, EN60555-3, RoHS, WEEE.

EMC / EMI This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

WARRANTY

:All of our products have a 2 year warranty covering production defects or malfunctions. If you have any issue with your unit, please contact your dealer or contact us at support@simplifieramp.com



DSM  HUMBOLDT
E L E C T R O N I C S

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A N A L O G W I L L S T A N D