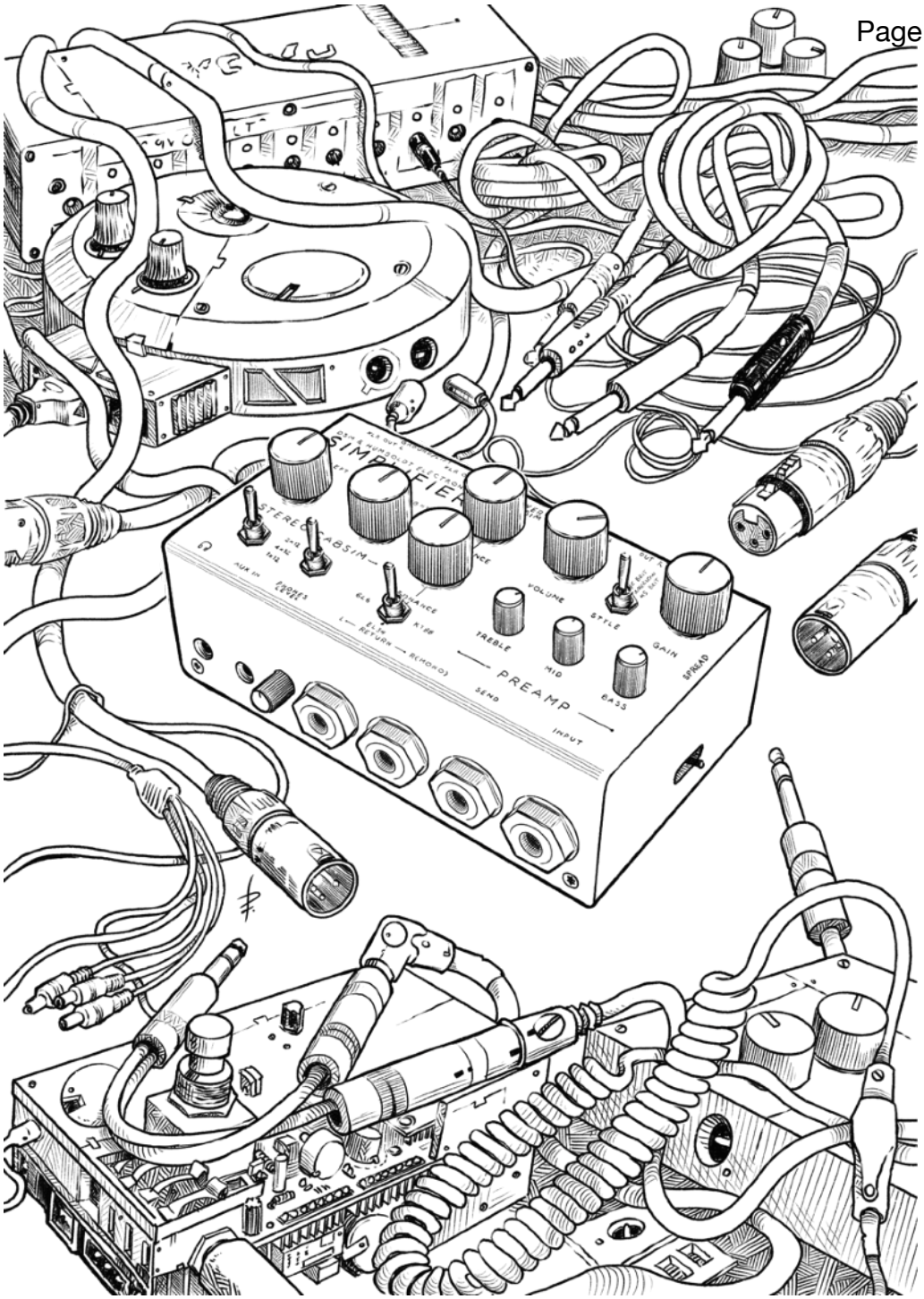


DSM & Humboldt Electronics
SIMPLIFIER
USER MANUAL

Congratulations!
You have now in your hands the most versatile, useful and amazing sounding piece of gear. The first Zero watt stereo amplifier that will fit in your pedalboard and replace a full amplifier signal chain, achieving unprecedented analog realism thanks to its stereo mic'd cabinet simulation, stereo FX loop, tube-like power amp stage, and a full featured clean preamp based on 3 classic amps.

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Powering Up:

Before powering up the unit, turn down the receiving device (PA, interface, headphones, etc) in order to avoid power up “pop”.

The best way to power up the Simplifier, is to use a 9V REGULATED DC adapter, make sure you are using a clean voltage source and you are not daisy chaining the power supply with high current digital units.

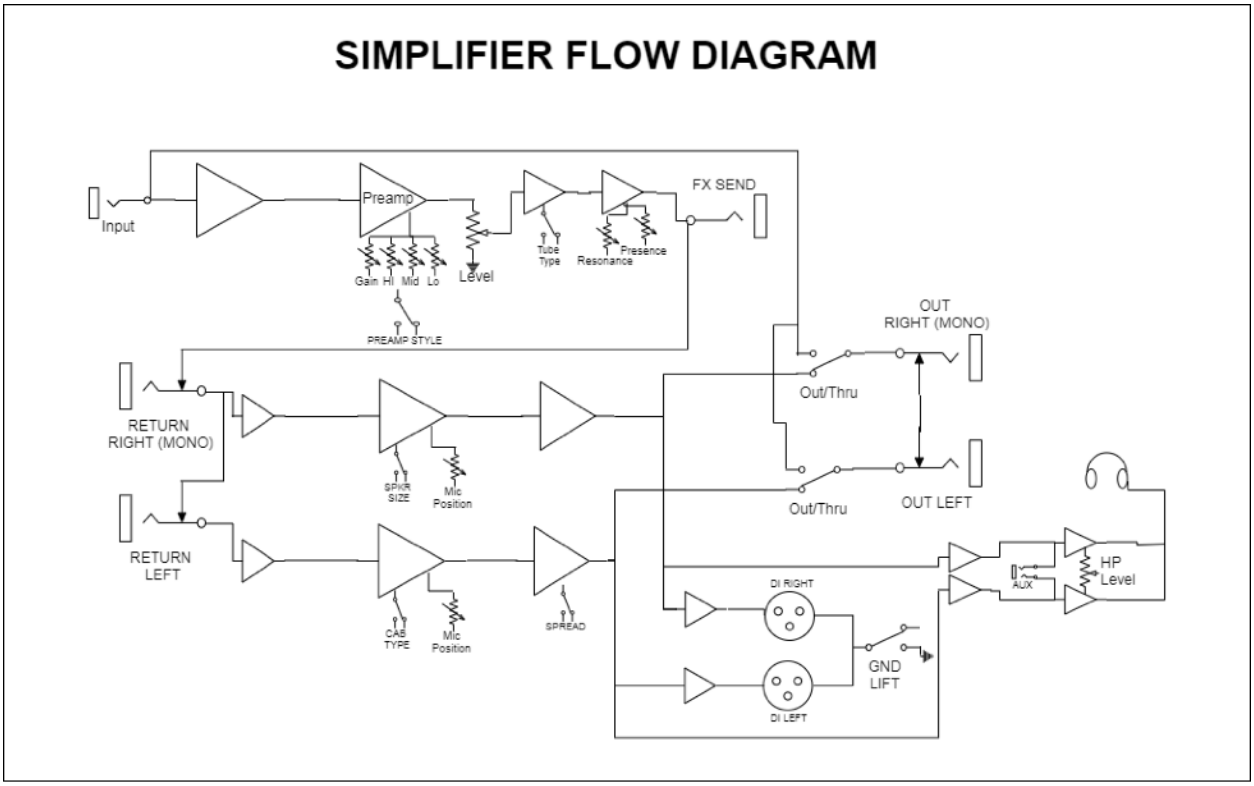
Recommended Power supply:

The Power supply specs should be:

- 9V to 12V DC voltage
- Regulated (designed for low noise, musical instruments use)
- 80 mA minimum current rating. You can use higher current rating supplies.
- Center negative.

*** DO NOT USE CENTER POSITIVE SUPPLIES, IT MAY DAMAGE THE UNIT AND IT WILL NOT BE COVERED BY WARRANTY. PLEASE MAKE SURE THE POLARITY IS CORRECT BEFORE POWERING UP.**

Connections



- **Input Jack**: Connect the guitar or other instrument here.
- **FX Send:** The fx send output is after the preamp amp power amp stages, ready to feed your modulation and ambience effects.
  *** PLEASE NOTE THAT WHEN USING FX LOOPS SOME EFFECTS ALLOWS YOU TO CHOOSE BETWEEN LINE/MIC LEVEL. NOT SETTING PROPERLY MAY OCURR ON UNDESIRED CLIPPING RETURNING FROM THE FX LOOP. IF YOUR DEVICE DOESN'T HAVE A SELECTABLE GAIN ADJUSTMENT, PLEASE TAKE CARE ON SETTING UP FIRST YOUR DESIRED AMOUNT OF GAIN IN THE PREAMP SECTION, THEN ADJUST THE VOLUME, THIS WAY YOU CAN HAVE ABSOLUTE CONTROL OVER SOME UNDESIRED CLIPPING. IF YOU NEED MORE VOLUME, YOU'LL BE ABLE TO ADD MORE FROM THE AUDIO DEVICES POST-SIMPLIFIER (PA System, In-ear Monitors, Floor/Side Powered Monitors, Audio Interfaces and even the Headphones volume control) avoiding clipping completely.**
- **FX return Right (mono):** Connect the right (mono) output from your stereo effects here.
- **FX return Left**: Connect the left side of your effects here. If this input is unconnected, the left side will take the signal from the FX Return Right (mono) side.
- **TRS Right (mono) Out:** Carries the right side output or the input signal (bypass), if selected.
- **TRS Left :** Carries the left side output or the input signal (bypass), if selected. If the left side is disconnected and not in bypass mode, the Right side will sum both outputs.
- **DI Right**: Carries the Right side output in a balanced signal.

- **DI Left:** Carries the Left ide output in a balanced signal.
- **Aux In**: The auxiliary input receives a signal from an mp3 player, phone, or any audio device, and sends the signal in stereo to the headphone out. The aux signal will not sound through the regular outputs. Perfect for monitoring or late night practice.
- **Headphone out:** Connect your headphones here.

All these connections makes the Simplifier one of the most versatile devices on the market. Here are a few ways you can connect it:

APPLICATION METHODS

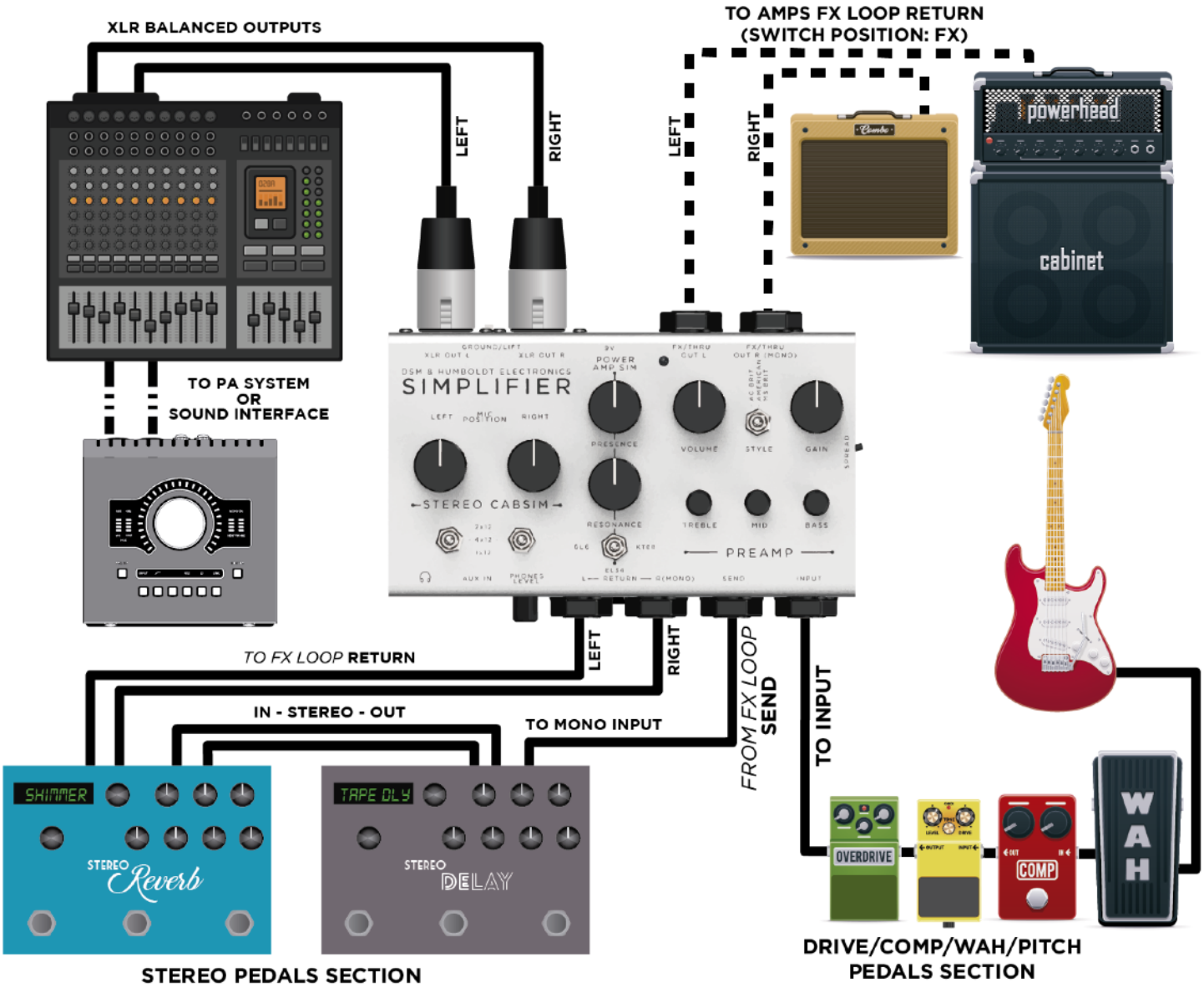
DSM & HUMBOLDT ELECTRONICS

SIMPLIFIER

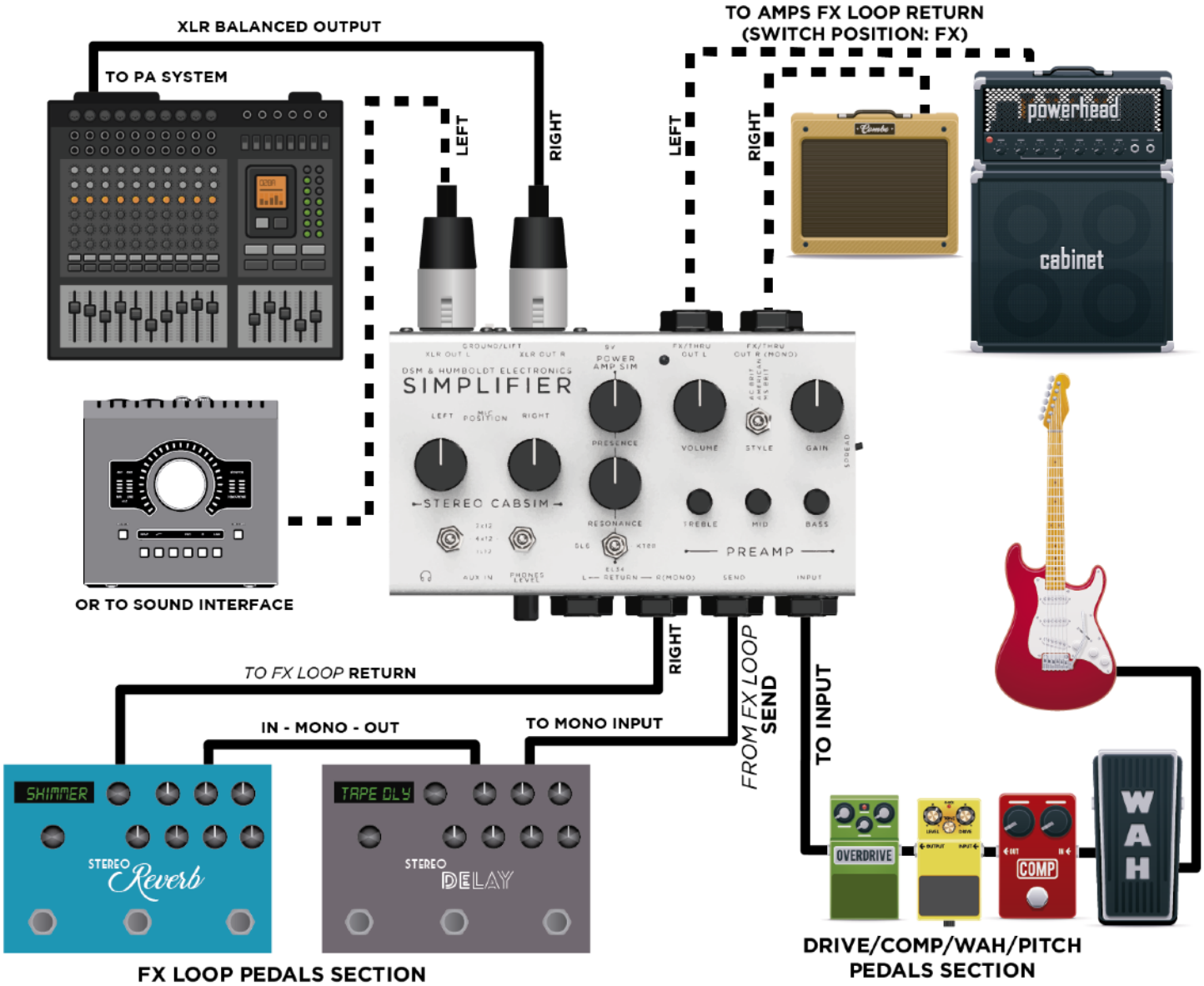


FULL STEREO ROUTING
MONO FX LOOP ROUTING
FRONT END MONO CONNECTION
SILENT PRACTICE/MONITORING
TO FRFR/POWERED CABINETS
USING AS PREAMP ONLY
USING AS CABSIM ONLY

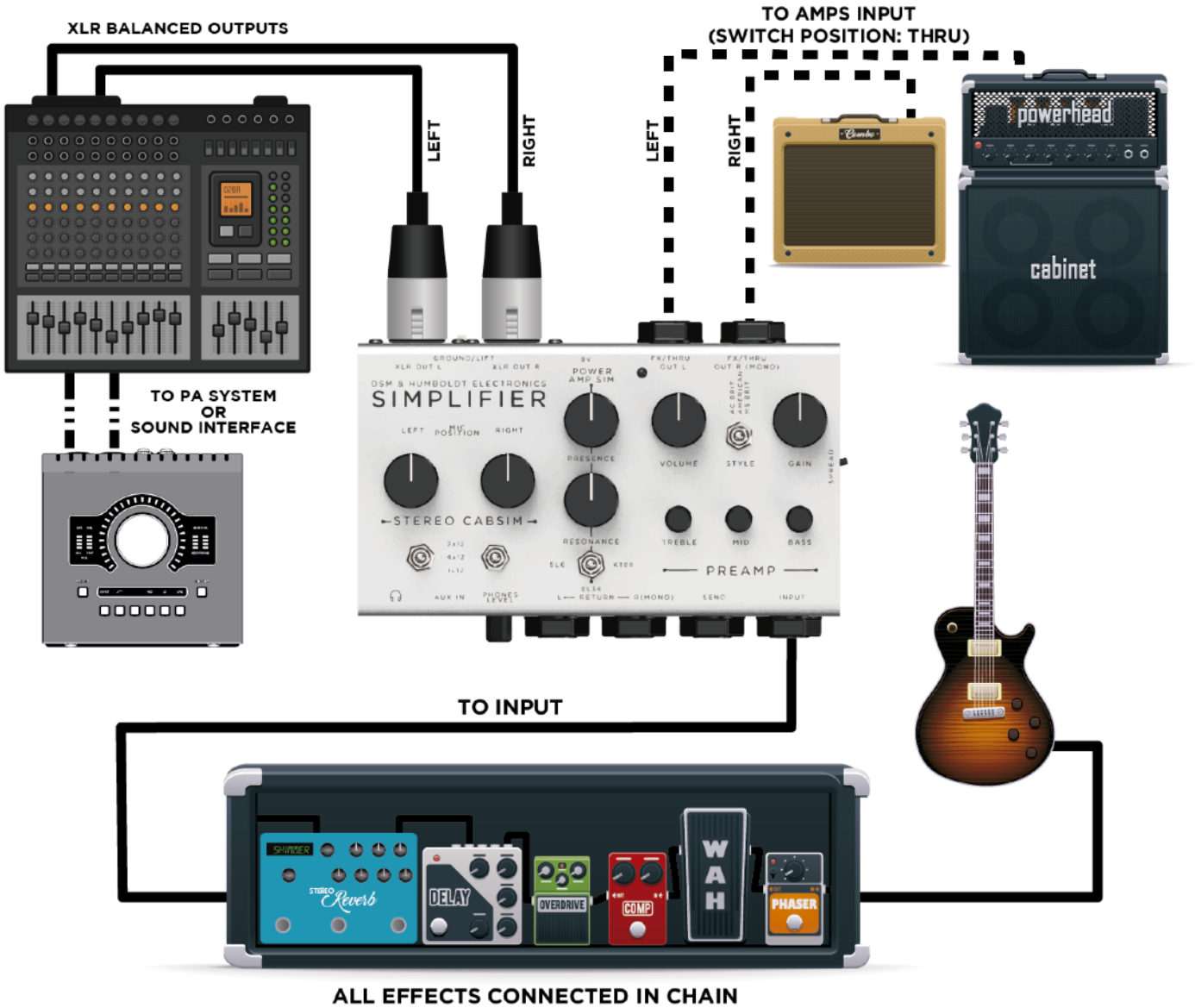
FULL STEREO ROUTING (5 CABLE METHOD) *APPLICATION METHODS*



MONO FX LOOP ROUTING (4 CABLE METHOD) *APPLICATION METHODS*



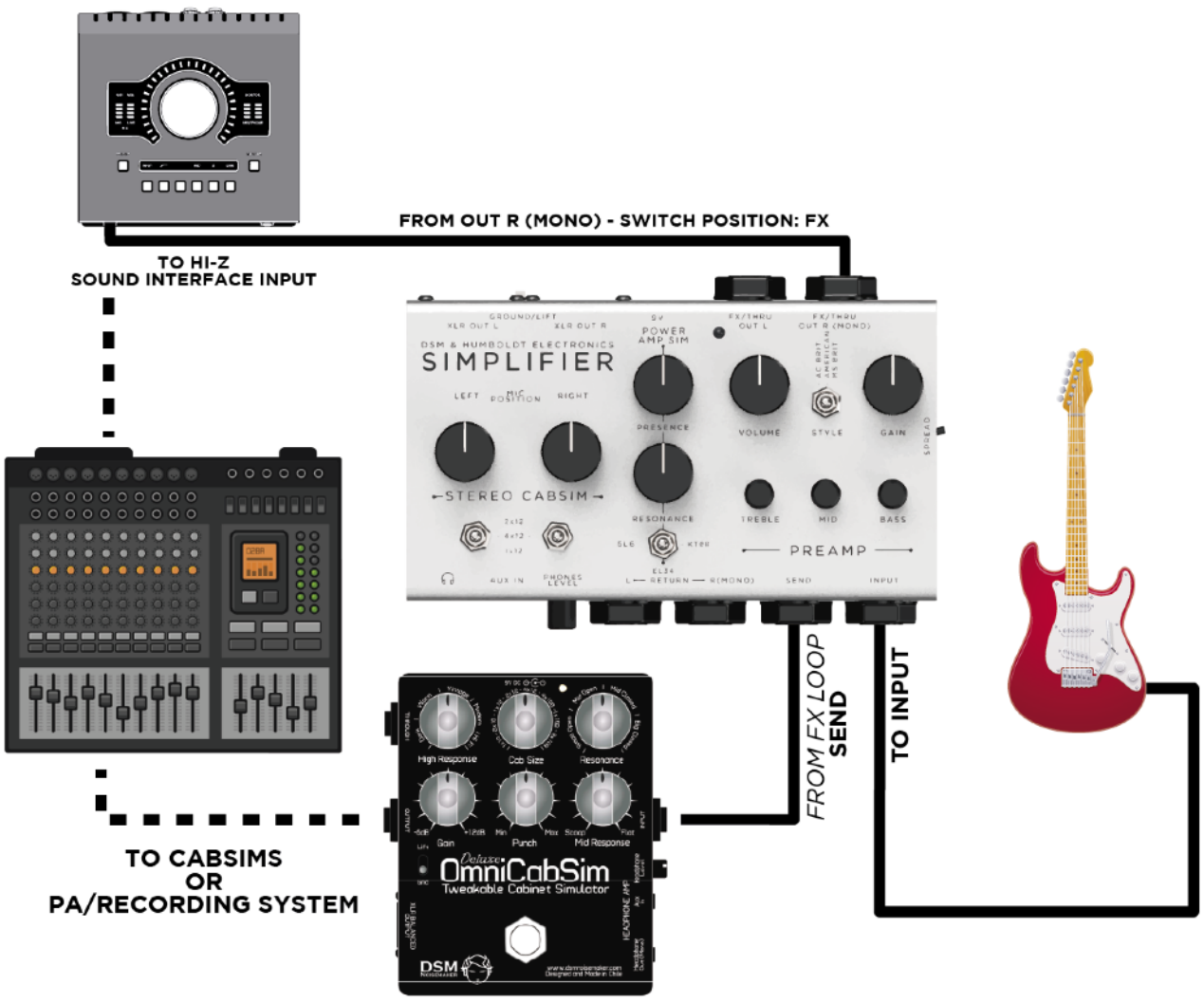
FRONT END MONO CONNECTION



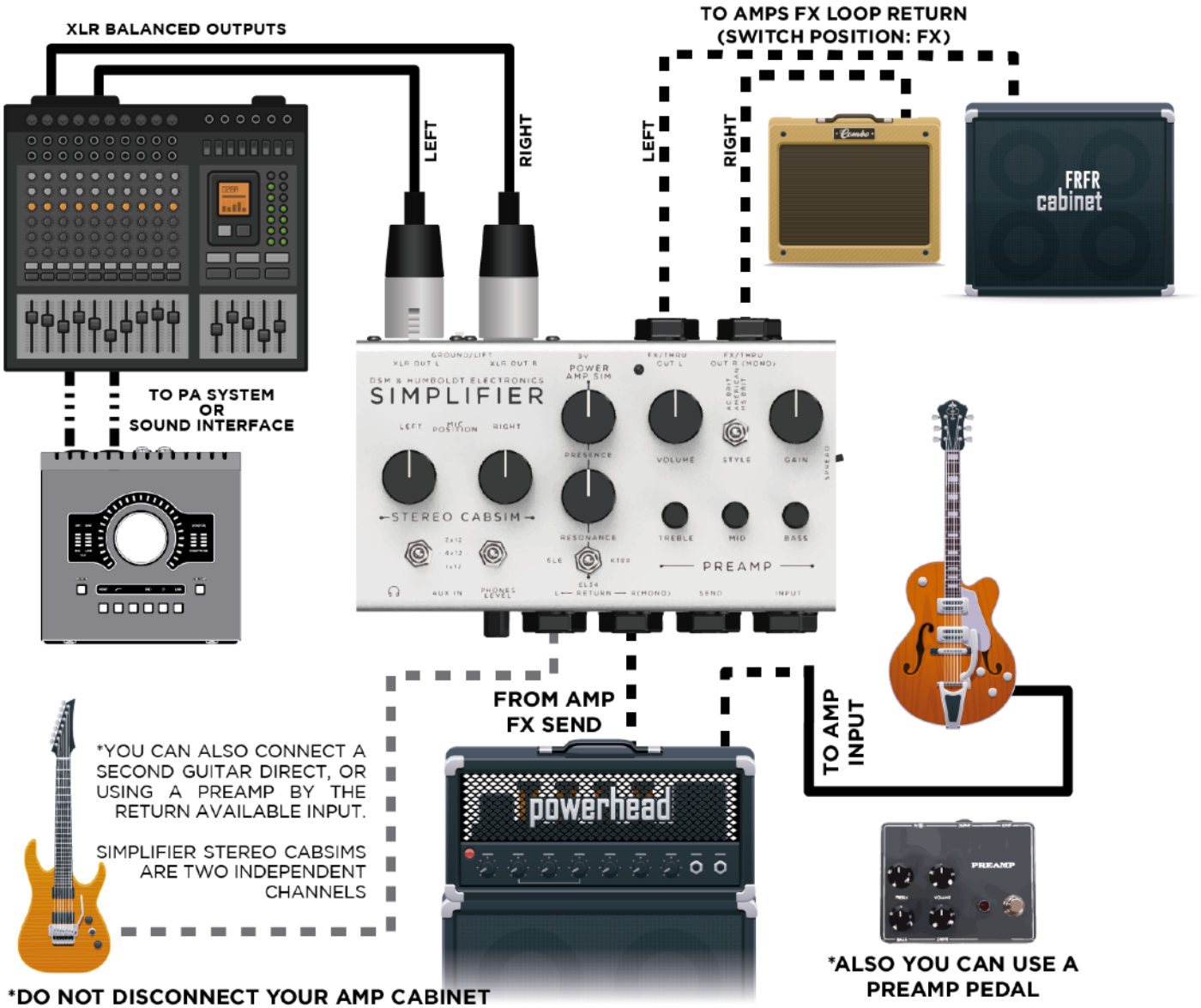
SILENT PRACTICE/MONITORING



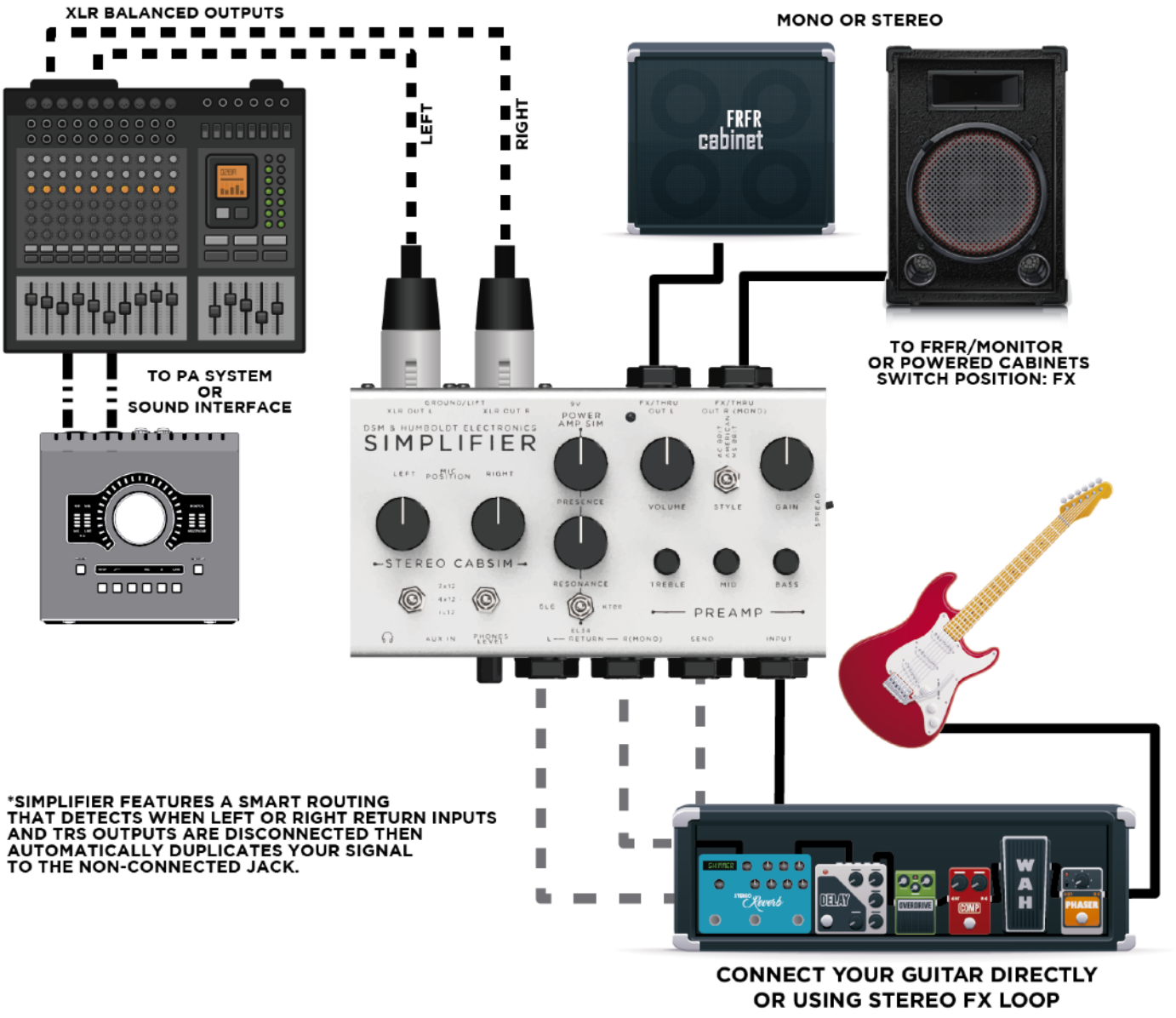
USING AS PREAMP ONLY



USING AS CABSIM ONLY



TO FRFR/POWERED CABINETS



Controls and Switches:

Preamp Section:

Amp model: Selects between 3 classic amplifiers:
AC BRIT: Classic AC30 sparkly and three-dimensional sound. A true British heritage since the 60's.
AMERICAN: Classic blackface deluxe sound. Sweet and dynamic with a balanced response. By far the most used amp on studio recordings
MS BRIT: Classic clean-to-crunch vintage plexi style amp. The sound that defined rock music.

Gain: Sets the gain of the selected amp model.
Level: Sets the preamp master volume level.

Tonestack: 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.
High: Controls the high frequency band
Mids: Controls the mid band (AC Brit 500Hz, American 450Hz, MS Brit 650Hz)
Lows: Controls the low end frequencies.

Power amp section:

This stage is an accurate approximation of the interaction between the power tubes, output transformer and global feedback, which produces a particular frequency response for different tubes and speakers.

PRESENCE: Controls the hi-mids response just like the feedback based presence control on tube amps. Turn it up to cut through the mix or turn it down to sweeten aggressive distortions.
RESONANCE: Controls the low-end and resonance peak caused by transformer-speaker interaction in tube amps. Now you can control the dampening factor and get super tight lowend clarity and authority.

POWER TUBES SECTION: 3 way toggle switch that mimic the different response of classic tube types:
EL34: Complex mid response with a compressed feel.
6L6: A more open and dynamic response with deeper bass and sparkling highs.
KT88: Similar to 6L6 but with improved lowend range, perfect for bass or 7+ string Guitars.

Stereo Cabsim:

MIC POSITION: Controls that responds like a real CENTER/OFF AXIS microphone position adjusting the precise amount of high-end roll off you look for. As usual with real mics and speakers, placing the MIC outside the center works best for distorted tones, and cleans sound best near the center.

Cab Style Switch:

1x12: Open Back combo with vintage speakers that emphasize the high mids (2-4 Khz), great for cutting through the mix without too much low end mud.

4X12 : Huge sounding resonant low end cabinet with modern speakers, great for rock and heavier tones with sparkly high end, and in-your-face lows.

2x12 : Warm and well rounded open back combo, with rich mids (1-3 KHz) and creamy high end.

Other Switches and Controls:

SPREAD CONTROL: This unique feature allows you to create a pseudo stereo imaging, by delaying certain frequencies (like a phaser effect). It will make your sound bigger and 3 dimensional, even if you are using a mono configuration.

GND LIFT: Disconnects the ground connection from the XLR out. Use in case you are getting hum problems when connecting to an external device.

TRS OUTPUTS :

Each TRS output has a switch beneath them. You can use them if you want to use a different amplifier in parallel, or use the signal to record the guitar without the effects, for later reamp on the DAW.

RIGHT OUTPUT SWITCH:

OUT R: Same as XLR RIGHT OUT, in this mode you have the overall signal chain coming from the RIGHT CABSIM of the Simplifier.

SUM MONO: This mode blends both channels of the Simplifier and turns into a Mono output. Very useful when you're sending full stereo signal thru the XLR outputs and need a mono signal to add another device (mono monitor or single amp for example) without losing one of the channels if you're using both CabSims from FX Return.

LEF OUTPUT SWITCH:
OUT L: Same as in XLR LEFT OUT in this mode you have the overall signal chain coming from the RIGHT CABSIM of the Simplifier.
THRU: This output Bypasses completely the Simplifier taking your signal straight from the PreAmp Input. Very useful for ReAmping purposes or just to take your pedals “in-front” right to the input of your amp whilst can approach all other 3 outputs (2 x XLR + RIGHT TRS OUTPUT) to your preferred devices as PA System, Audio Interfaces, FRFR Monitor, etc.
*This Bypass doesn’t include the FX LOOP signal.
Headphone Level: Controls the volume on the headphone output.

Technical Specs

Current consumption: 50mA to 100mA (if Headphone out is used)
Supply voltage: 9V - 12V
Polarity: Center negative
Input impedance: 1 Meg Ohm
TRS output impedance: 100 Ohm
DI Output impedance: 120 Ohm
Send output impedance 100 Ohm
Return Input Impedance: 1 Meg ohm
Headphone Power : 120mW @ 32 Ohm

Dimensions:

Width : 115 mm (4.53 in) /
Height: 65 mm (2.55 in)
Depth: 55 mm (2.16 in)
Weight: 430 g (0.94 lb)

EMI and 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