

Audio Simplified



PEDAL PUSHER

Dual-mono Console/DAW to Guitar Pedal Interface

The Pedal Pusher is designed to incorporate guitar pedal effects into your console or workstation. It has two effect loop channels and also includes six high quality isolated power supplies for powering your pedals.

Overview

- Dual Mono Pedal loop channels. Each channel contains:
 - High headroom line level balanced input to guitar pedal send with impedance and level matching.
 - High impedance guitar pedal return to high headroom line level balanced output.
 - Selectable pickup simulation, Active or Passive.
 - Additional high frequency variable equalizer in the passive position to simulate (or negate) the effect of guitar cable.
- Low noise universal power supply built in. (No wall wart!)
- Six isolated, high current power supplies with selectable voltages for low noise pedal power.
- The Pedal Returns are also useful as high quality, dual mono or stereo, high impedance, direct instrument inputs (DI) with line level outputs. Each return has two gain settings.
- The Pedal Sends can function as high quality sends from a console/DAW to a guitar amp for re-amp use.
- Routing switches add flexibility for feeding both loops from one input or both outputs from one Pedal return. For example: feed two different pedal loops from a single line input or feed a clean and effected signal to the console from a guitar input.

Setup:

Console/DAW to Pedal Pusher:



Attach line level wiring from the rear panel XLR/TRS connectors to Console/DAW line inputs/outputs. On a console this would be the patch bay insert points, on a DAW, a pair of input/outputs on your interface. The line inputs and outputs of the Pedal Pusher have a nominal line level of +4dbu and are balanced, with XLR pin 2 plus, pin 3 minus and pin 1 ground or TRS

pin tip plus, ring minus and shield ground. The outputs are active on the XLR and TRS simultaneously in parallel, but bear in mind that connecting one output to an unbalanced load also unbalances the corresponding output. The upper TRS is Pedal Chain 1 and the lower is Pedal Chain 2. They can be used in an unbalanced setup, just tie the minus pin (XLR pin 2 or TRS ring) to ground. Although not optimum, the line inputs and outputs can be used at lower operating levels with little consequence. With no cables plugged into the front panel of Pedal Pusher, it is in loop through mode. This allows you to check your inserts or send/returns without the unknown variable of the pedals.

Add Pedals:

Attach high quality 1/4" mono cables from the Pedal Pusher front panel "To" jack to the input of a pedal (or chain of pedals). Attach the final pedal output to the "From" jack. The "Polarity" switch provides a quick way to flip the signal polarity, which sometimes helps when combining the pedal signal with the original. The "Pickup" switch provides two different levels of drive (and gain on the return). You can think of it like this: If you have a passive guitar (like an original Strat) the level is about 18dB lower than a guitar with active pickups. Pedals respond differently to those levels and the "Pickup" switch lets you experiment to see what works best for your pedal setup. So... switch out = active pickup guitars, switch in = passive pickup guitars. Additionally, with the switch in, you have the "Pasv Tone" control, a reproduction of the tone control on many passive pickup guitars. Use it to boost or cut the high frequency to better simulate those guitars (or leave it straight up to have no effect).

Double it up:

Each channel of Pedal Pusher is independent, unless you engage one of the switches above the second channel.

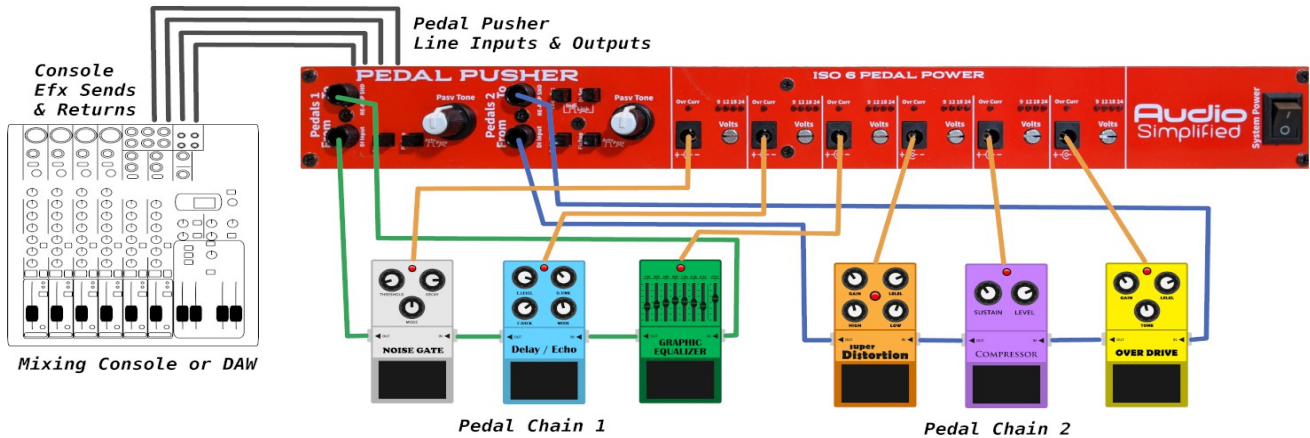


With "Loop Src" switch in, the Pedal Chain 1 input will feed both of the front panel "To" jacks. This would be useful if you want to send one guitar (or vocal, or anything) to two different pedal chains and then return them separately. Just imagine two analog delays set almost the same delay, but drifting off ever so slightly... panned to the stereo bus!

With the "DI Src" switch in the front panel "From" jack of Pedals 1 feeds both rear panel Pedal Chain outputs. An example use is to setup a pedal chain on Pedals 1, then feed output 1 to the console and output 2 to an amp (via Amp Link).

ISO 6 Pedal Power:

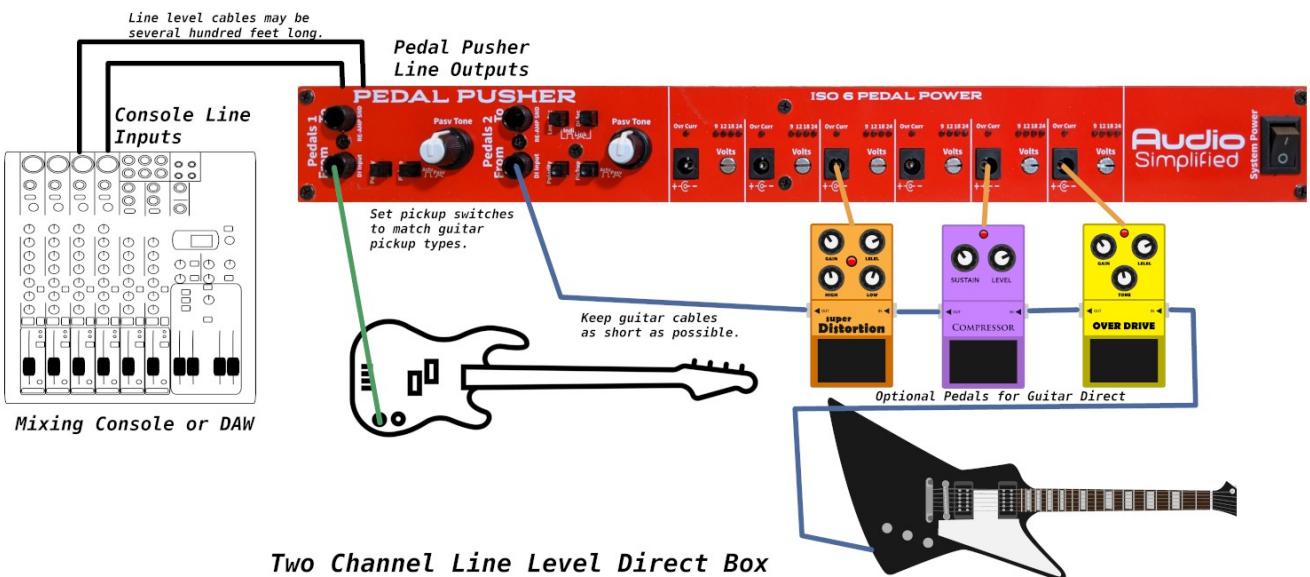
Pedals need power, ISO 6 provides power for pedals. The power outputs are individual and isolated from each other. This means that if you have a pedal requiring a reverse power cable, it will not interfere with the rest of your setup. Some pedals require different voltages. To obtain a different voltage, **first turn off the Pedal Pusher**. Use a small screwdriver to turn the "Volts" selector. Turn the power back on and make sure the correct light is on before plugging in your pedal. If you have a bad pedal or cable, the over current light will come on to let you know. If you're not sure what voltage your pedal needs, there is an excellent chart at: <http://stinkfoot.se/power-list> (plus all kinds of other pedal stuff for pedal heads). When you are done with special voltage pedals, best practice is to return the "Volts" setting to 9v, so as not to accidentally destroy a pedal with the wrong voltage.



Pedal Pusher Basic Connections

DI:

Pedal Pusher also excels as a stereo or dual-mono DI (direct instrument input). Connect your guitar, bass, keyboard (or any other unbalanced instrument) into the front panel "From" jacks and connect the rear panel outputs to your console/DAW line inputs. By bypassing the usually required mic preamp stage, you have a tone neutral DI. The "Pickup" switch gives you two gain settings (out=low, in=high). With the switch in, the "Passive Tone" control is also active.



Re-Amp:

Pedal Pusher can be used as a re-amp device. Place Pedal Pusher at the amplifier to be driven. Connect a 1/4" cable from the front panel "To" jack to the desired amp input, keep the cable as short as possible to minimize high frequency loss and noise. Connect a line level send from the console/DAW to the rear panel line input. The "Pickup" switch provides two basic levels, with the switch out, the level should be that of an active pickup guitar; With the switch in, the level will be lower, that of a passive pickup guitar.

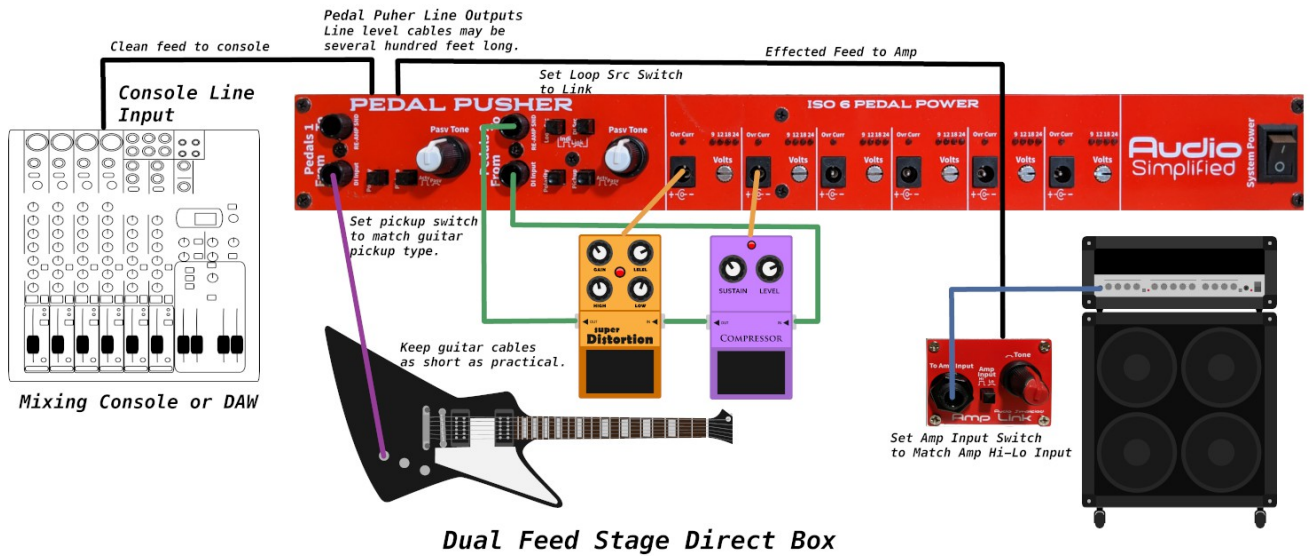


Long Line extender:

Often a player will need to be some distance from their amplifier. Some examples are: the studio, where a player would like to play in the control room, but the amp needs to be in an iso booth; the big stage, where the player is some distance from the amp back line. In these cases, Pedal Pusher can be connected as the last device in the pedal chain (Pedals 1 "From").



Pedals 1 "From"). With the "DI Src" switch in, Pedals 1 output can be sent to the PA board as an effected direct signal, Pedals 2 output can be connected via Amp Link to the distant amplifier (which could also be miked).



Specifications:

Line Inputs:

- Nominal Level : +4dBu
- Maximum Input level: +24dBu
- Impedance: 48k Ω differential

Line Outputs:

- Nominal Level : +4dBu
- Maximum Balanced Output level: +27.5dBu into 600 Ω
- Maximum UnBalanced Output level: +22dBu into 600 Ω

Frequency Response:

- 20hZ to 20kHz +0.05dB,-0.11dB

Noise level:

- -102.7 dBa

Distortion:

- THD: .00099%
- IMD: .00258%

Power:

- Voltage Range: 80-246vac (universal power)
- Frequency Range: 47-63Hz
- A/C Current:1.5A @115VAC

Isolated DC Supplies:

- 500ma@9V

Dimensions:

- width: 14.75" (375mm), height: 1.75" (42mm), depth: 4" (100mm)

Addendum:**Rack Ears Kit**

The optional rack ears kit is shipped unattached to help prevent damage in shipping. To attach rack ears, simply use supplied 4-40 screws to attach a rack ear to the pre tapped holes on each side of the unit. Attach securely, but do not over tighten, the side rails of the enclosure are made of aluminum and the tapped holes can be stripped if over tightened.