Setting Up Your Effect Signal Chain

With all the different types of effects and devices available for musicians, there can be confusion with how to set up your signal chain with your effects. We offer a variety of pedals that can be placed in many different ways in your audio signal chain.

There is no wrong way to connect your effects in your signal chain as each method can provide you with different sonic results. Though what works for one person or rig may not work for another.

Common Placement

Here are some common effect placement suggestions for pedalboard setups in general.

- **Dynamics** (compressors), **filters** (wah), **pitch shifters**, and **Volume** pedals typically go at the beginning of the signal chain.
- Gain based effects such as and overdrive/distortion pedals come next.
- **Modulation** effects such as chorus, flangers, phasers typically come next in the chain.
- **Time** based effects such as delays and reverbs work best at the end of the signal chain.
- **Volume** pedals can go at the beginning or end of your signal chain to provide slightly different functionality in different locations in your chain.

Here are some example effect setups that many musicians use following the above suggestions.



Setup 1

Guitar => compressor => volume pedal => wah pedal => overdrive => chorus => tremolo => delay => reverb => amplifier

 In this particular setup, the volume pedal is placed near the beginning of the signal chain to control the volume level going to the other effects and the amplifier. This can be useful to clean up your signal by rocking back the volume a bit if you have the overdrive engaged.





Guitar => compressor => wah pedal => overdrive => chorus => tremolo => volume pedal => delay => reverb => amplifier

• This setup is the same as the first one above, however, the volume pedal has been placed near the end of the chain right before the delay and reverb effects. This allows you to have full control of the volume of your signal right before the delay and reverb effects. This is useful for fading in a fully overdriven signal without cleaning up the signal at the lower range of the sweep.

Effects Loops

Another way to set up your pedals is by placing them within the effects loop of your amplifier. An effects loop is an audio input and output loop that is placed after the preamp and before the power amp section of your amplifier, using the Effects Send and Effects Return jacks. On some amplifiers, these can be labels Preamp Out (Effects Send) and Power Amp In (Effects Return). Not all amplifiers have effects loops, but those that do allow for you to place some of your effects within the loop.

Typically, players tend to place their delay and reverb effects within the effects loops of their amplifiers. This placement is especially helpful if you get your overdrive and distortion from your amplifier instead of pedals. Otherwise you would be feeding your delay repeats and

reverb ambiance into the overdrive and distortion of your amplifier, which can sound muddy and washed out. You can also place your modulation pedals within the effects loop of your amplifier as well for a different sound.

There are 2 types of effects loops: series and parallel.

With **series** effects loops, the entire signal from the amplifier's preamp section is sent through Effects Send OUTPUT to pass through the effects and return through the power amp section from the Effects Return INPUT.

With **parallel** effects loops, half the the signal from the amplifier's preset section is sent through the Effects Sent OUTPUT to pass through effects, while the other half passes directly on to the amplifier's power amp section to always be heard unaffected. With this type of effects loop, there is typically an effect level control that allows you to dial in the amount of the effect you want heard along with your unaffected signal. We recommend setting the MIX control on any of your effects to 100% when placed within a parallel effects loop. Our TimeLine and BigSky pedals have a Kill Dry feature (DRYSIG parameter in the GLOBLS menu) that mutes your dry signal for use in parallel effects loops—however we do not recommend using this setting when using more than one pedal within the effects loop.

Here are some setups that include placing some of your effects within the effects loop of your amplifier:



Effect Loop Setup 1

Guitar => compressor => volume pedal => wah pedal => overdrive => chorus => tremolo => amplifier INPUT; amplifier effects send => delay => reverb => amplifier effects return

• With this setup, only the delay and reverb effects are placed within the effects loop of the amplifier. This setup allows the sound from your amplifier's preamp section to feed into these effects. Overdriven and distorted sounds generated by your amplifiers preamp section sound much clearer with delays and reverbs placed within the loop.



Effect Loop Setup 2

Guitar => compressor => wah pedal => overdrive => amplifier input; amplifier effects send => chorus => tremolo => volume pedal => delay => reverb => amplifier effects return

• With this setup, we have moved the volume pedal and modulation effects to the effects loop along with the delay and reverb effects. Much like setup 1, you get a different sound from your modulation effects when placed after the amplifier's preamp section.

Special Cases

Some of our pedals have qualities or features that allow them to work in multiple locations or a specific location in the signal chain.



Deco Tape Saturation & Doubletracker is a unique effects pedal that allows for a wide variety of tonal possibilities. You can place Deco near the beginning of your signal chain and use the Tape Saturation as a light overdrive. Or, you can place Deco at the end of your chain, use lower Tape Saturation settings, and provide your entire signal with the tape-like warmth, compression, and added low end harmonics.

<u>Mobius</u> Modulation has a unique Pre/Post connection feature that allows you to place the effects in one of two locations in your signal chain. Within the Params menu of each preset, you can select whether you would like it to be placed within the Pre or Post positions in the chain. (See <u>Mobius manual</u> pages 22-23 for details.)



Lex Rotary can work well after your gain based effect with your other modulation pedals, or at the very end of your signal chain as well to make it sound like your entire signal is passing through a rotating speaker cabinet.

<u>BigSky</u> Reverberator has a built-in cab filter activated by a toggle switch on the back of the pedal. This gives you the sound of playing through a custom 1×12 speaker cabinet with the reverb effects engaged or bypassed. This feature works well for direct recording or connecting directly to the mixer of a PA system.

Most important rule: There are no rules!

It's important to remember that these setups are not set rules that must be followed. You can get a variety of unique sounds by placing your effects in unorthodox locations. It's

common to run into that special sound that came about as a 'happy accident' when setting up your effects. Using these suggestions, you can build up your own pedalboard to suit your individual taste.

- February 29, 2016
- Hugo
- Tech Corner