

TUBEJUICE POWER ATTENUATOR FAQ

You can download connection instructions and these FAQ's for the TUBEJUICE on my website on the homepage and the product page where you buy online.

1. Does a power attenuator sound good?

A power attenuator can reduce dynamic depth to some degree. There is some debate about how significantly an attenuator flattens the dynamic depth. Guitar speakers sound best when pushed hard. Below about 1 watt, guitar speakers sound especially thin and fizzy. Although it should be minimal, you can simply adjust your amp's tone controls to compensate for any high end or low end loss. Power tube distortion, when an amp is cranked up through an attenuator, has more edge and some added compression providing you with an added palette of new tones. Your favorite guitarists are probably using attenuators to get that incredible sound when they record. Once you plug into an attenuator, you'll wonder how you've gone without one. There is the occasional player that doesn't like an attenuator, but overall by far, you can't get power tube tone without one.

2. Will a power attenuator hurt my amp?

It is possible but not probable for the use of a power attenuator to result in a blown output transformer or power tubes. The ability to push the amp so hard yet quietly, using an attenuator, encourages pushing the amp past its natural limit, in which case if the amp blows, it would have blown up anyway even when driving an actual cab at that level of output-stage saturation. Basically, pushing your amp to the limit with an attenuator is no different than pushing your amp to the limit without an attenuator. It's still being pushed hard which could possibly cause the amp to fail. Just remember to not push your amp to the maximum limit all the time **and most importantly always match the resistance/impedance of the attenuator with your amp.**

3. What kind of tube amps can I use an attenuator with?

Any tube amp head with a speaker cab, combo amps with a built-in speaker and/or an extension cab and you can use a tube amp with or without a "SPEAKER OUT" jack. You'll simply need the correct cables. Download my connection instructions to see the exact connection method for your amp. If you have multiple speakers, usually only one speaker is directly connect to the amp's "SPEAKER OUT" jack. **If you have a vintage/old tube amp, make extra sure it's strong enough to handle having an attenuator connected to it. Old, vintage equipment may have unstable or weak components that may not be able to handle the stress of being turned up to 10. Remember, it's not the attenuator that may cause problems, it's the amp and any weak or old components that may blow under the strain of being cranked up to a high level.**

If you use a conventional head and cab, you connect the attenuator between the amp's output transformer (the amp's Spk Out jack) and the cab's speaker input. If the amp has no such jack but only clips to a built-in speaker, make two short speaker cables with the needed quick connectors and 1/4" plugs. You can make these cables yourself with standard 16-18 AWG gauge speaker wire. I use standard cheap extension cords which work very well as speaker cable wire.

You need to match the impedance of the amp, attenuator, and cab. The TUBEJUICE has a certain impedance depending on which model you need. You should always try to match your amp with the attenuator and speaker(s). The impedance or resistance you need will be either 2, 4, 8 or 16 ohms.

You can also use headphones in the OUT on the TUBEJUICE, instead of your speaker, for silent practicing.

4. How does a power attenuator produce more of a cranked sound than playing quietly?

A power attenuator setting does not cause output-stage saturation or change the amount of output-tube saturation; it enables output-stage saturation at quiet sound pressure levels (SPL) in the room. There are three kinds of volume controls when using a power attenuator in a standard setup. The first ("gain or pre-gain") controls the amount of preamp distortion. The second ("master volume or post-gain") controls the amount of power-tube saturation and output transformer distortion. The third ("attenuation") controls the amount of power sent through to the speakers, as opposed to being sent to the dummy load; this controls speaker distortion and room volume level. Pre-Gain is where the preamp distortion lives (12AX7 tubes) and Post-Gain is where the power tube distortion lives (EL34, EL84 etc. tubes).

5. How does the TREBLE JUICE switch work? (You may or may not have this option)

This switch is used to boost the high frequencies on your amp. If you feel your amp needs more high-end from the attenuation, you have two choices to choose from. Choose "LIGHT" for a moderate boost in treble or choose "HEAVY" for a more pronounced boost in treble, and choose the middle position "NONE" for no boost at all. Usually the louder you have the attenuator, which is less attenuation, the less treble boost you will need. It's mainly used for "Bedroom" level playing where you would use high attenuation.

6. Do I need to buy a TUBEJUICE that is double the wattage my amp is rated at?

No you don't need to buy a TUBEJUICE that is double the wattage of your amp. The TUBEJUICE attenuator is built with this extra power built-in so you don't need to buy a larger attenuator for your particular amp. The MAX15 is for tube amps up to 15 Watts, the MAX50 is for tube amps up to 50 Watts and the MAX100 is for tube amps up to 100 Watts. If the tone you want is total, head exploding, maximum distortion and gain, you may want to move up to the larger attenuator to handle the extra power. All TUBEJUICE Attenuators have a cooling fan just in case you need to cool things down. Most players never use the fan but I like to include it for added protection just in case. The ordinary player that wants tone for blues to rock does not need to worry about buying a larger attenuator and only needs the attenuator rated for that amp.

7. My speaker has different connectors than you show in your instructions - what do I do?

If your amp has a different kind of connector that I don't show in my instructions, you can simply replace the kind of connectors I use to explain how to connect, to the kind of connectors you have. You'll still need to go through the same process of connecting the TUBEJUICE but you just have different connectors.

8. Does the TUBEJUICE require the power adaptor to work properly?

No. The TUBEJUICE is totally, 100% passive and requires no power to function properly. You don't need to have the adaptor plugged in to use the attenuator. The power adaptor is for the cooling fan only. You may find you don't even need the cooling fan. It depends on the amount of attenuation you use in conjunction with the amount of gain you use. The more gain you use will cause more heat to build-up. The post-gain (power tubes) produces the most heat so keep an eye on what your set-up produces.

IMPORTANT: NEVER USE THE BYPASS SWITCH WITHOUT A SPEAKER CONNECTED TO THE TUBEJUICE

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