DR SCIENTIST

BoostBot

THANKS - Thanks very much for picking up this BoostBot, we really appreciate it! I'll tell you a bit about it here and if you have any questions you can check in with me, ryan@drscientist.ca.

WHAT IS IT - The BoostBot is an always-on circuit that can provide buffering, boosting, and level-metering for any instrument you'd like to plug in, anywhere in your signal chain. Generally buffers and boosters go at the start or end of a pedal chain but that's really up to you, try a few spots and trust your ears. Vintage fuzz pedals and buffers often don't get along so keep that in mind, usually fuzz goes first.

POWER - For power your BoostBot needs 9-18VDC, centre negative, standard 2.1mm, and 100mA of current. Higher voltage doesn't sound much different, it's a little louder and a little cleaner, but it's more about power supply convenience. Make sure you use a nice regulated and filtered power supply, something specially made for guitar pedals, or you could have hum/noise from it.

HOW'S IT WORK - Looking down at the BoostBot, input is on the right and output is on the left. The lit up knob is for your boost amount. With the knob all the way down your BoostBot is a buffer, a high-input-impedance low-output-impedance current driving circuit that preserves the frequency range and signal strength of an instrument plugged into it. Buffers are important if you use long cables, dark (high capacitance) cables like the coiled kind, weak-ish passive pickups, or have lots of pedals between your instrument and amplifier.. all that extra cabling and hardware to go through can weaken and darken the original signal. A buffer might make your signal seem a little louder or a little brighter but it's just the circuit restoring your signal to what you should have been hearing.

WHAT TO EXPECT - If you turn the knob up you'll boost your signal, up to about 20dB without much clipping. The volume versus saturation of a boost pedal really depends on the clean headroom of your amplifier.. if you have a lot of clean headroom the BoostBot will add volume to your sound, if your amp is already running hot and has no more headroom available then the BoostBot will add saturation to your signal but without volume increase.

THE LIGHTS – The bar graph LED shows the level of signal coming out of the buffer/booster circuit. I set it to not light up all the way with the boost knob low and to light up all the lights when the boost knob is turned all the way up. That depends on the input signal level and also your preference, so there's a little trim-pot on the PCB that you can adjust with a small screwdriver to set that how you like. The brightness of the lights is fixed and uses a special chip to control it.

THANKS AGAIN - I think that about covers it, hope you enjoy your BoostBot and thanks again!