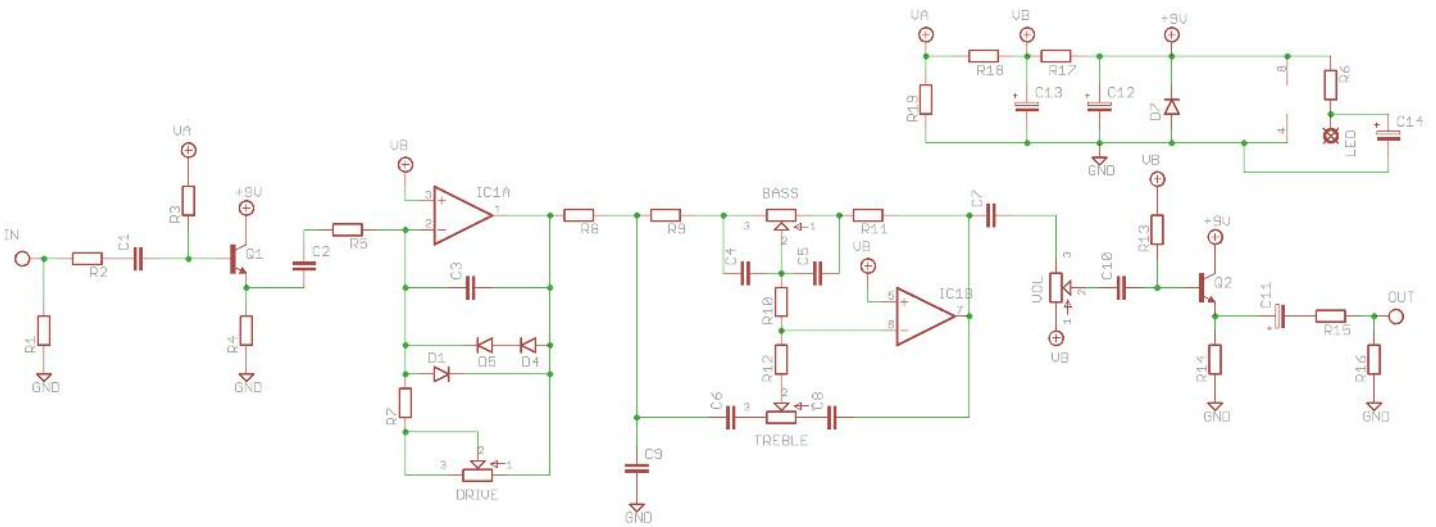


Acti-Boost

Clean boost and overdrive
with Baxanbdall active EQ

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Schematic - TYPE A

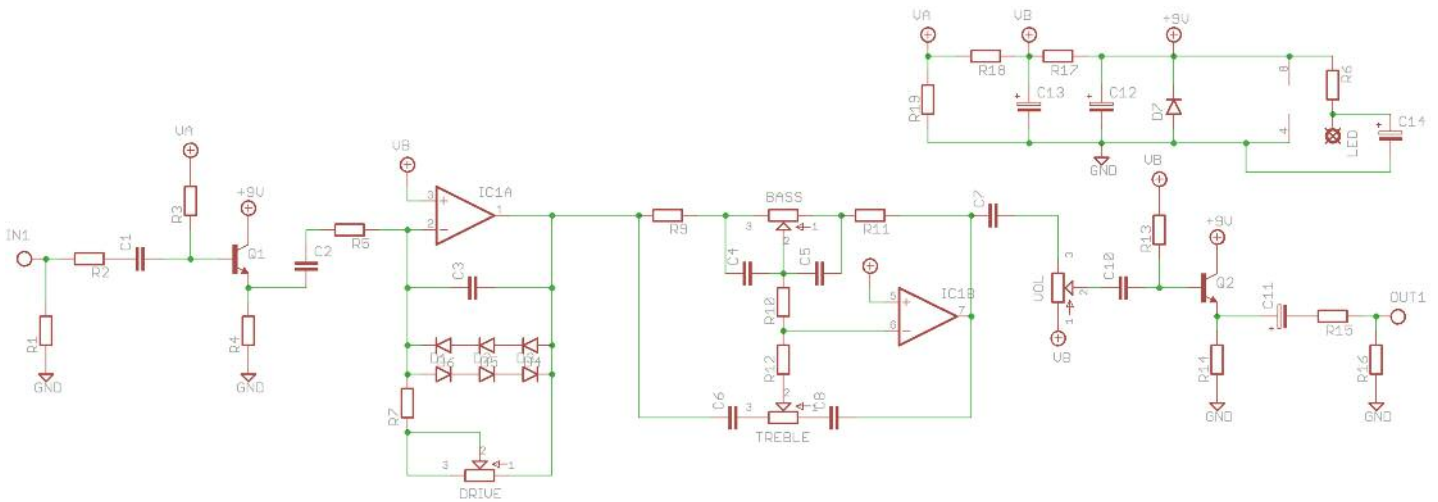


BOM

Bass-friendly values in BLUE

R1	1M				
R2	10K				
R3	1M				
R4	10K	D1	1N4148		
R5	10K	D2	Jumper		
R6	2K2 (CLR)	D3	Jumper	C1	22n (100n)
R7	47K	D4	1N4148	C2	100n
R8	1K	D5	1N4148	C3	150p
R9	4K7	D6	Jumper	C4	33n (68n)
R10	33K	D7	1N4001	C5	33n (47n)
R11	4K7			C6	4n7 (10n)
R12	10K	Q1-2	2N5088	C7	1u
R13	470K			C8	4n7 (10n)
R14	10K	IC1	4558	C9	100n
R15	470R			C10	100n
R16	100K	BASS	50KB	C11	10u elec
R17	22K	TREB	50KB	C12	10u elec
R18	6K8	DRIVE	500KB	C13	10u elec
R19	15K	VOL	100KA	C14	2u2 elec

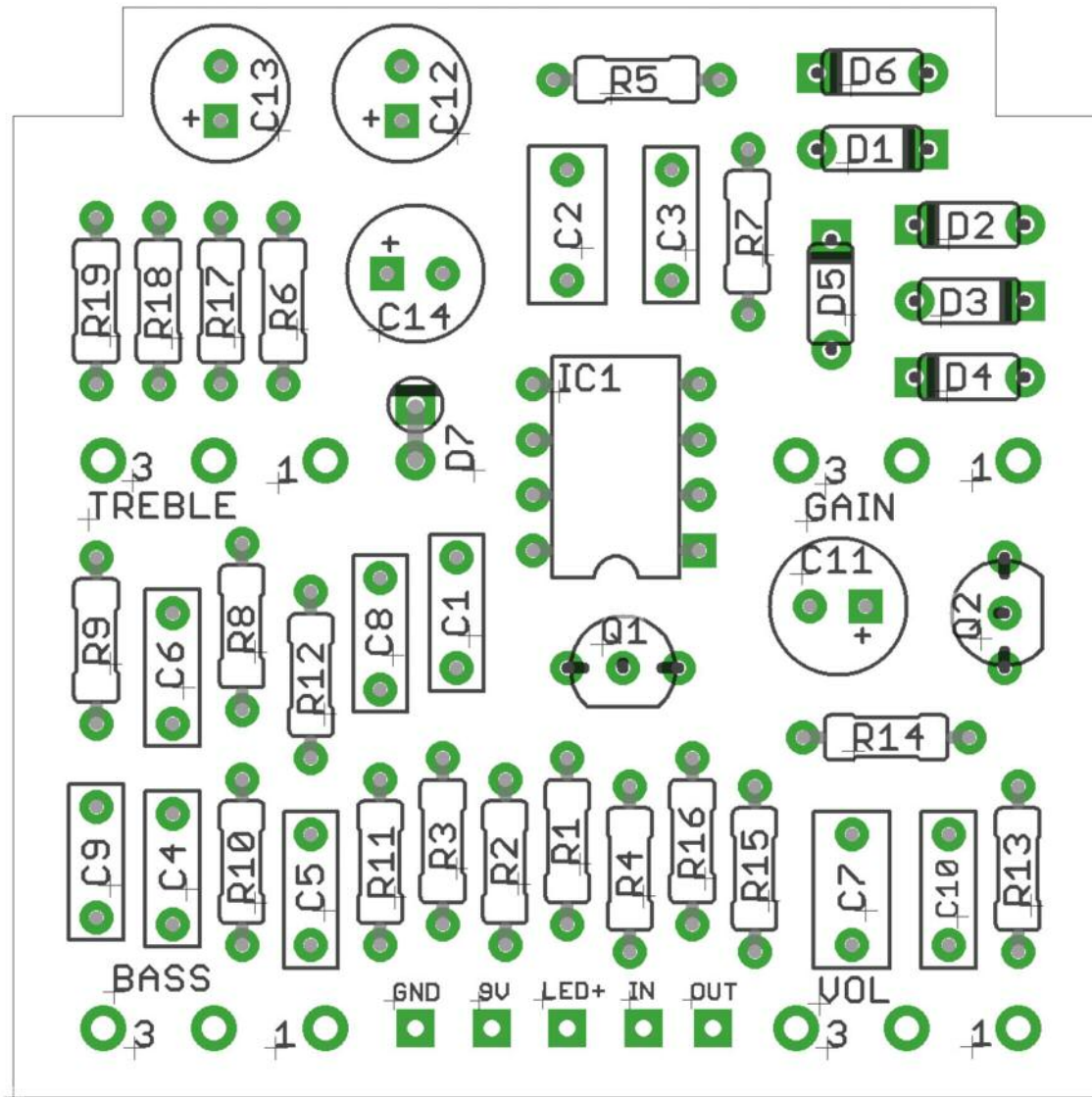
Schematic - TYPE R



BOM

R1	1M				
R2	10K				
R3	1M				
R4	10K				
R5	22K				
R6	2K2 (CLR)				
R7	47K				
R8	Jumper				
R9	4K7	D1-6	1N4148	C1	47n (100n)
R10	33K	D7	1N4001	C2	1u
R11	4K7			C3	150p
R12	10K	Q1-2	2N5088	C4	33n (68n)
R13	470K	IC1	4558	C5	33n (47n)
R14	10K			C6	4n7 (10n)
R15	470R			C7	1u
R16	100K	BASS	50KB	C8	4n7 (10n)
R17	22K	TREB	50KB	C9	Empty
R18	6K8	DRIVE	250KB	C10	100n
R19	15K	VOL	100KA	C11	10u elec
				C12	10u elec
				C13	10u elec
				C14	2u2 elec

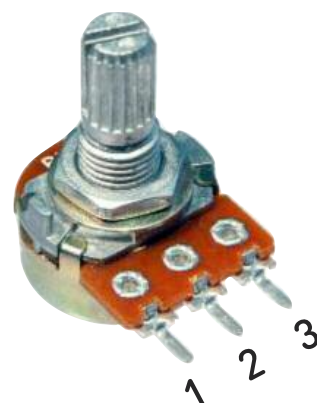
Bass-friendly values in BLUE

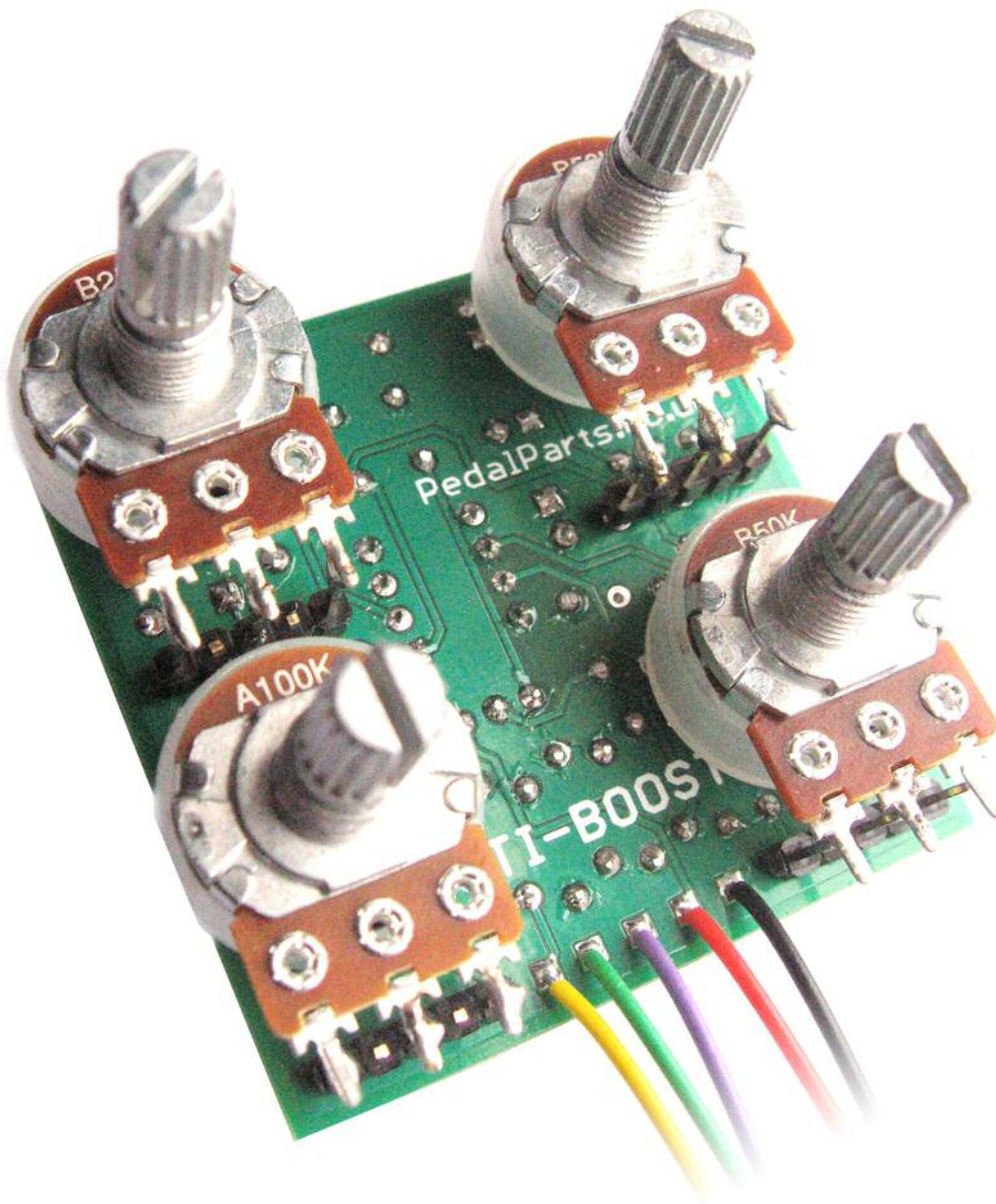


Snap the little metal tag off the pots to mount them flush in the box.

You should use some kind of heat sink on the legs of the diodes and transistors when soldering. They aren't keen on heat. Any more than 3-4 seconds of iron and they're toast.

I've incorporated the Current Limiting Resistor for the LED into the board for your pleasure.





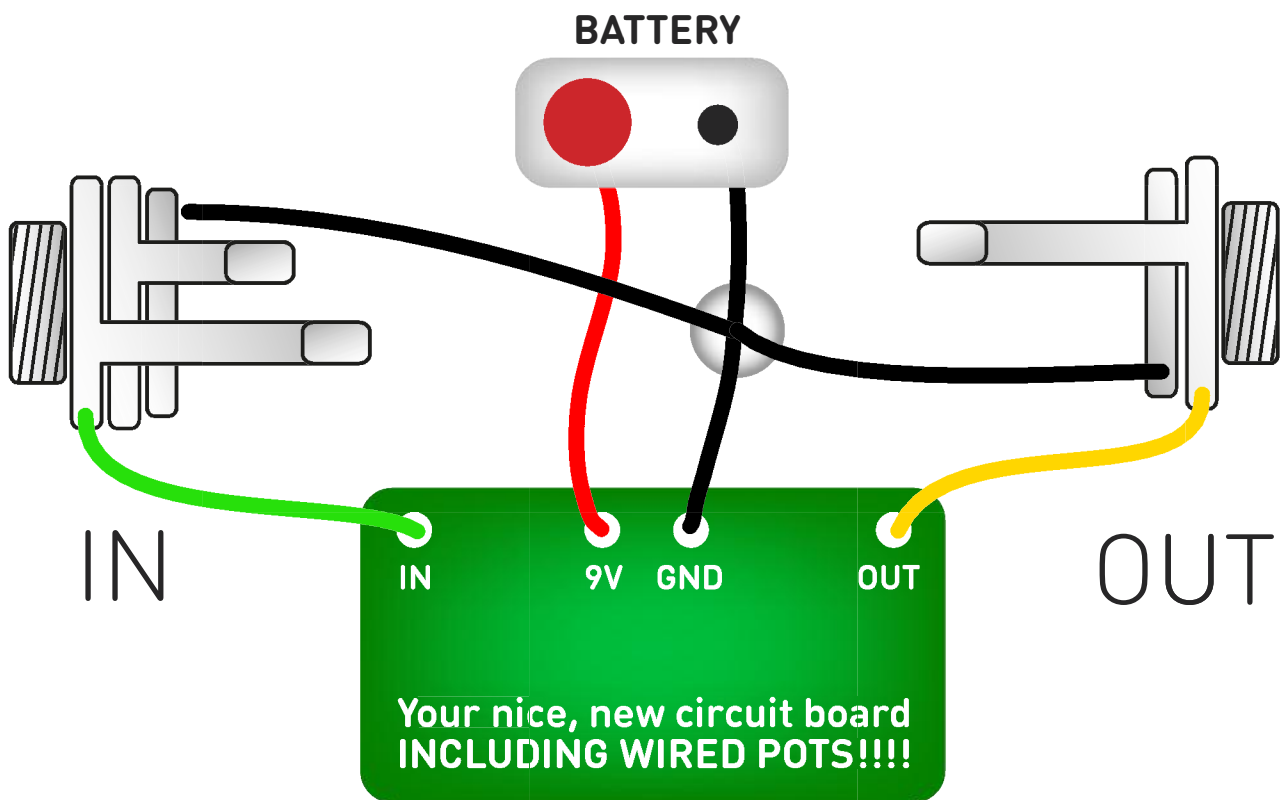
The pots can be wired conventionally, or you can neatly mount them on the back of the PCB using 2.54mm-pitch header pins. Simply snap off a 5-pin length, snip the 2nd and 4th pins out, and solder them into place.

For accurate positioning, get your pre-drilled enclosure (if you have one), and place it face-up on your workspace. Drop the pot shafts into the holes (having already snapped off the metal lugs), taking care to get the right pot in the right position - check against the PCB. Place the pcb down onto the pot legs and solder in place. You can place them directly on the pot pins as shown above, or you may wish to bend the pot pins 90° and solder against the header pins.

You can achieve the same results by simply using snipped component legs in place of the header pins.

If using pots without plastic covers, place a piece of thick card between the pots and PCB when soldering to keep some space between them.

Test the board!

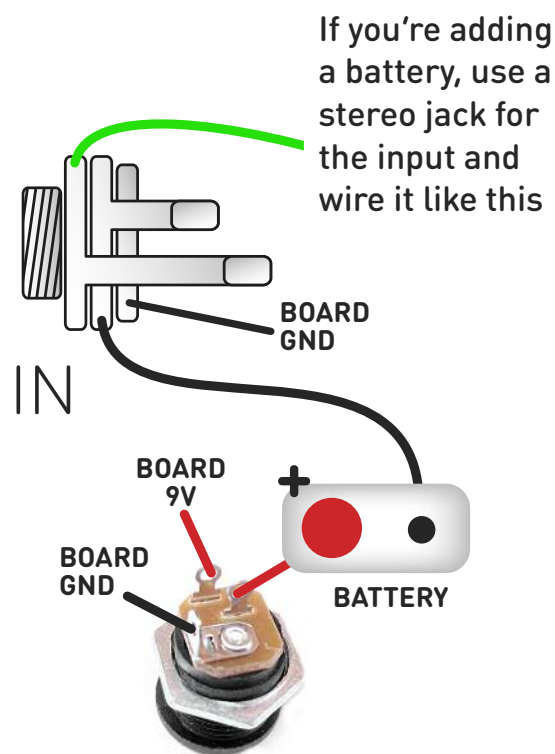
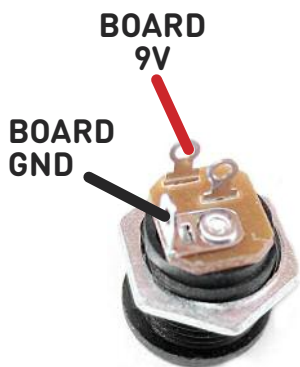
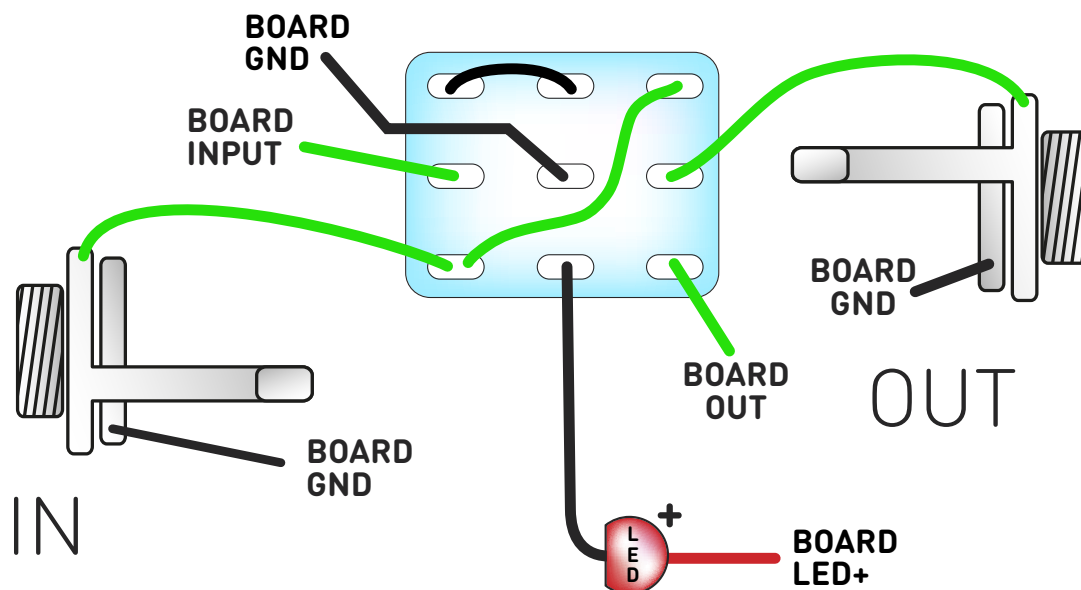


Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

If it works, crack on and do your switch wiring. If not... aw man. At least you know the problem is with the circuit. Find out why, get it working, THEN worry about the switch etc.

Wire it up



If you're adding a battery, use a stereo jack for the input and wire it like this

The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack.

It doesn't matter how they all connect, as long as they do.

This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal. Now... Boost your shizzle

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