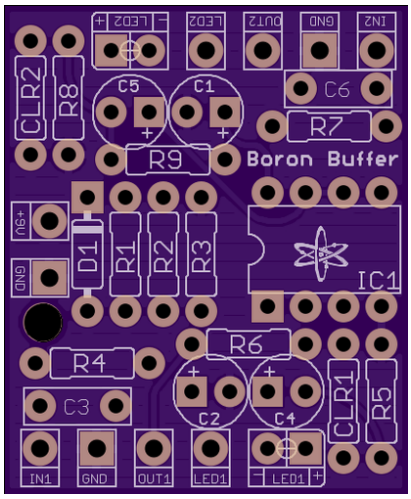
Quantum Effects Boron Buffer - Dual Buffer Circuit
Based on the Klon Centaur



This circuit is entirely based on the input buffer section of the Klon centaur, which in turn is basically a standard non-inverting op-amp buffer as suggested in the data sheet of TI standard op-amps such as the TL072. Additionally, there is some standard power filtering. The board offers the functionality of adding two buffers, eg. an input and an output buffer. If only one buffer is needed, just leave off the second half: R7, R8, R9, C6, C5.
The value of CLR1&2 depends on the LED you want to use. Usually, 4k7, will be fine, but for blue or white LEDs I'd go for 10-15k as they will be too bright otherwise, in my opinion.

For wiring, refer to the standard wiring diagram of madbeanpedals, which can be found here: http://www.madbeanpedals.com/tutorials/downloads/StandardWiring_MBP.pdf

The LEDS can be wired directly from the board for neatness. Run a wire from the LED1/2 pad to the appropriate lug of your 3PDT footswitch. Or you can leave the LEDS entirely, your choice.

BOM

Resistors		**Diodes**	
R1	33R	D1	1N5817
R2	100k		
R3	100k	**Caps**	
R4	1M	C1	100u
R5	100k	C2	47u
R6	560R	C3	100n
R7	1M	C4	1u
R8	100k	C5	1u
R9	560R	C6	100n
CLR1	ca. 4k7	**ICs**	
CLR2	ca. 4k7	IC1	TL072

Schematic