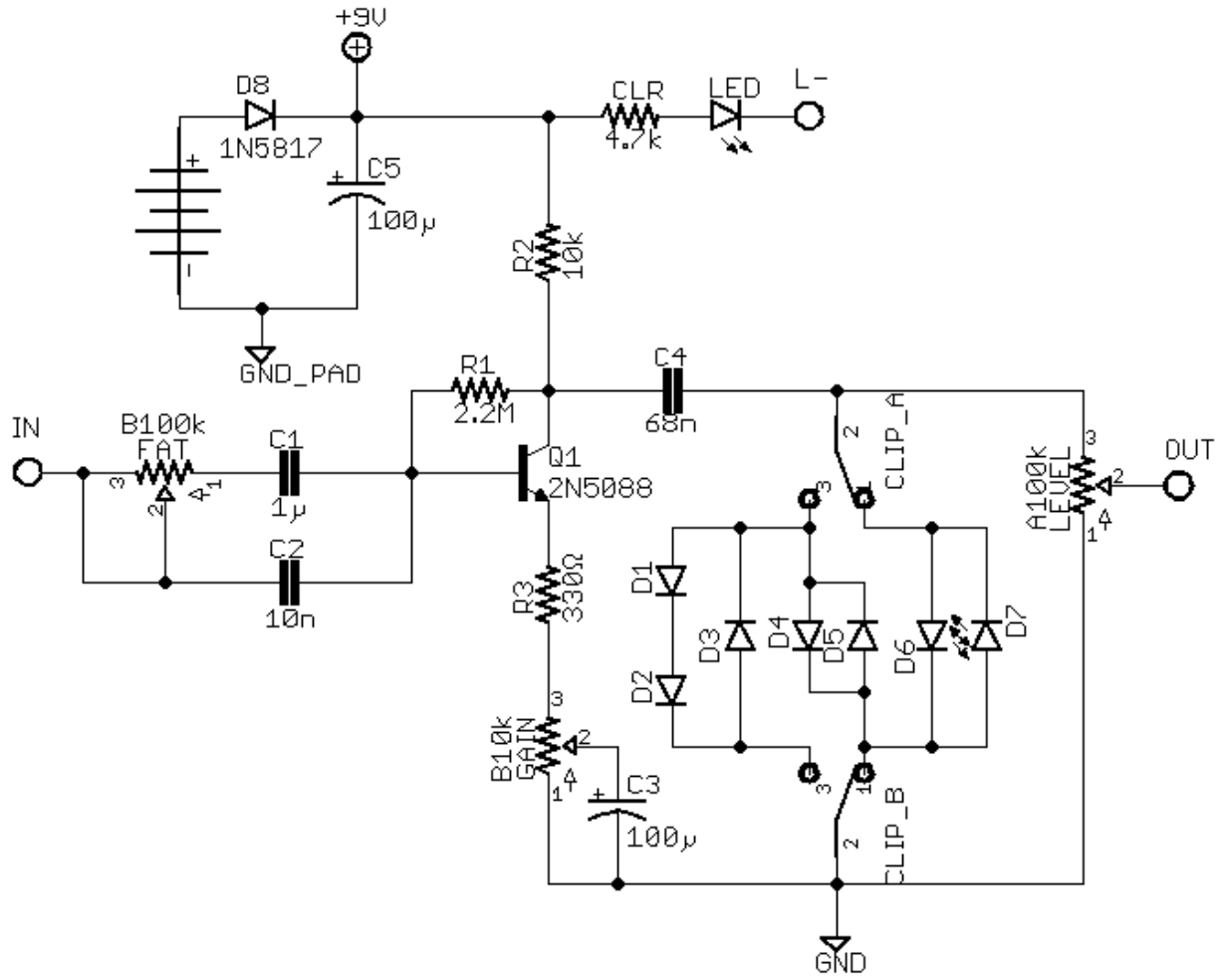
# UltraLectra

**DESCRIPTION**

The ULTRALECTRA is a great beginner project and is ripe for experimentation. It's based on the classic Electra Distortion circuit with a few mods—the added Fat control at the input (blends in a larger input capacitor for a fatter sound), and clipping switch at the end of the circuit (this uses a DPDT on/on/on switch for 3 different clipping options). Grab some sockets and experiment if you like, or build it as outlined here.

**SCHEMATIC**



**BILL OF MATERIALS**

Resistors

| | |
|---|---|
| R1 | 2.2M |
| R2 | 10k |
| R3 | 330Ω |
| CLR | 4.7k |

Capacitors

| | |
|---|---|
| C1 | 1µ |
| C2 | 10n |
| C3 | 100µ |
| C4 | 68n |
| C5 | 100µ |

Semiconductors

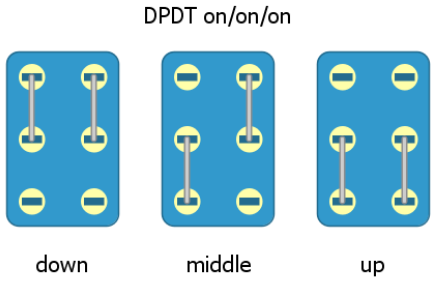
| | |
|---|---|
| D1-3 | 1N60P |
| D4-5 | BAT41 |
| D6-7 | 3mm red LEDs |
| D8 | 1N5817 |
| LED | 3/5mm LED |
| Q1 | 2N5088 |

Electromechanical

| | |
|---|---|
| Fat | B100k |
| Gain | B10k |
| Level | A100k |
| Clip | DPDT on/on/on |

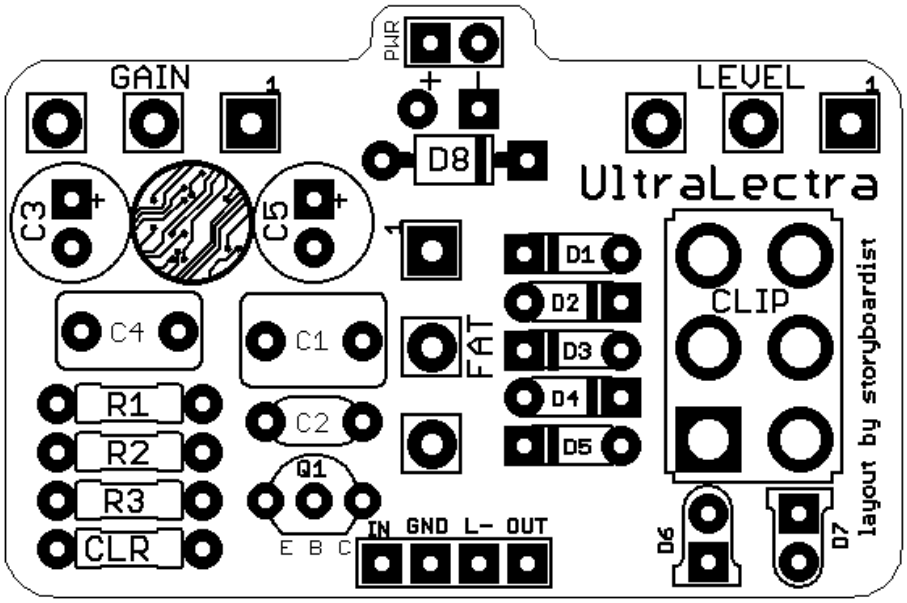
Notes

The clipping switch needs to be a type 2 switch where the lugs are connected like the following diagram (check with a multimeter):

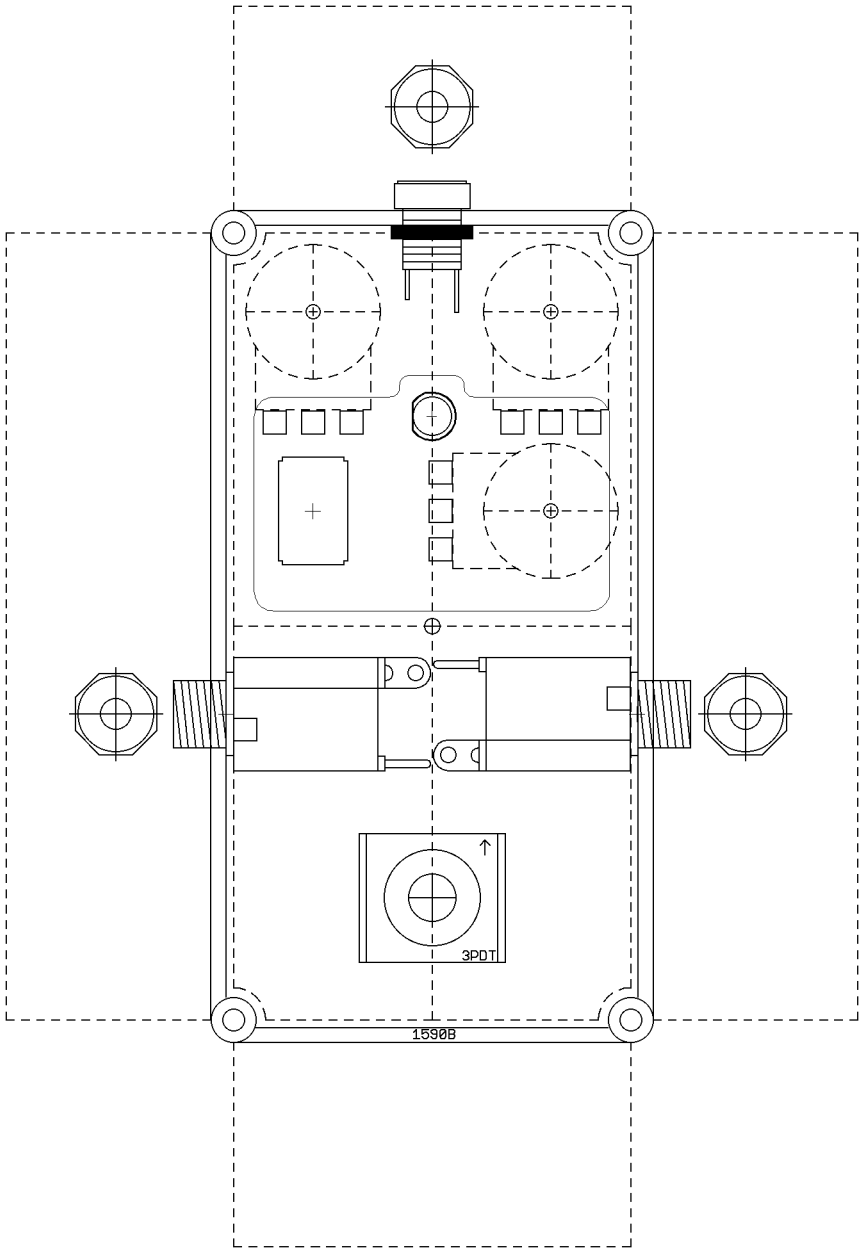



If you're unable to find this type of switch or just want to use a DPDT on/on, omit D4-5.

**LAYOUT**



**DRILL TEMPLATE** (1590B)

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