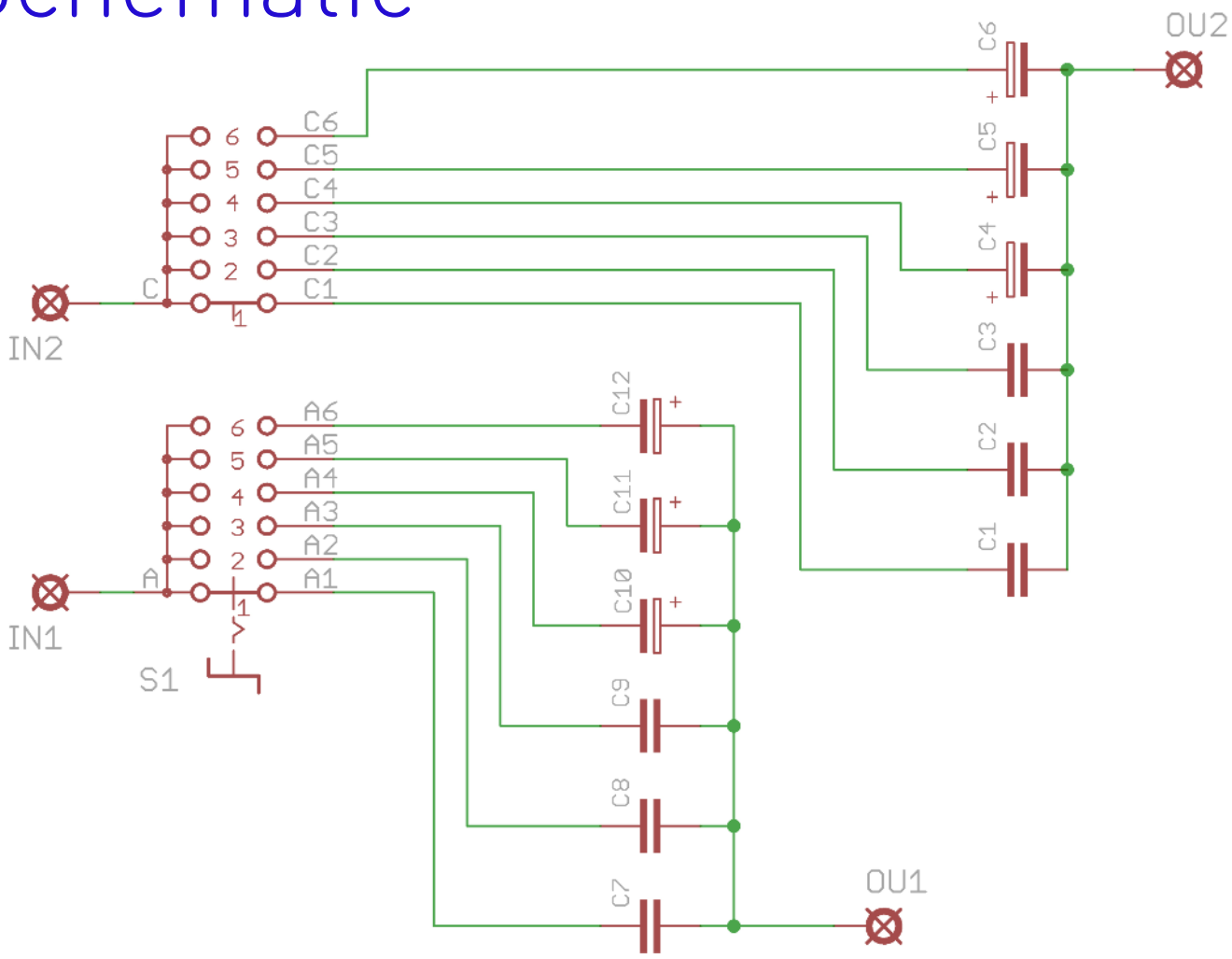
Cap Switcher

Filter Flipping Fun

Schematic



There is no BOM as the cap values are entirely up to you.

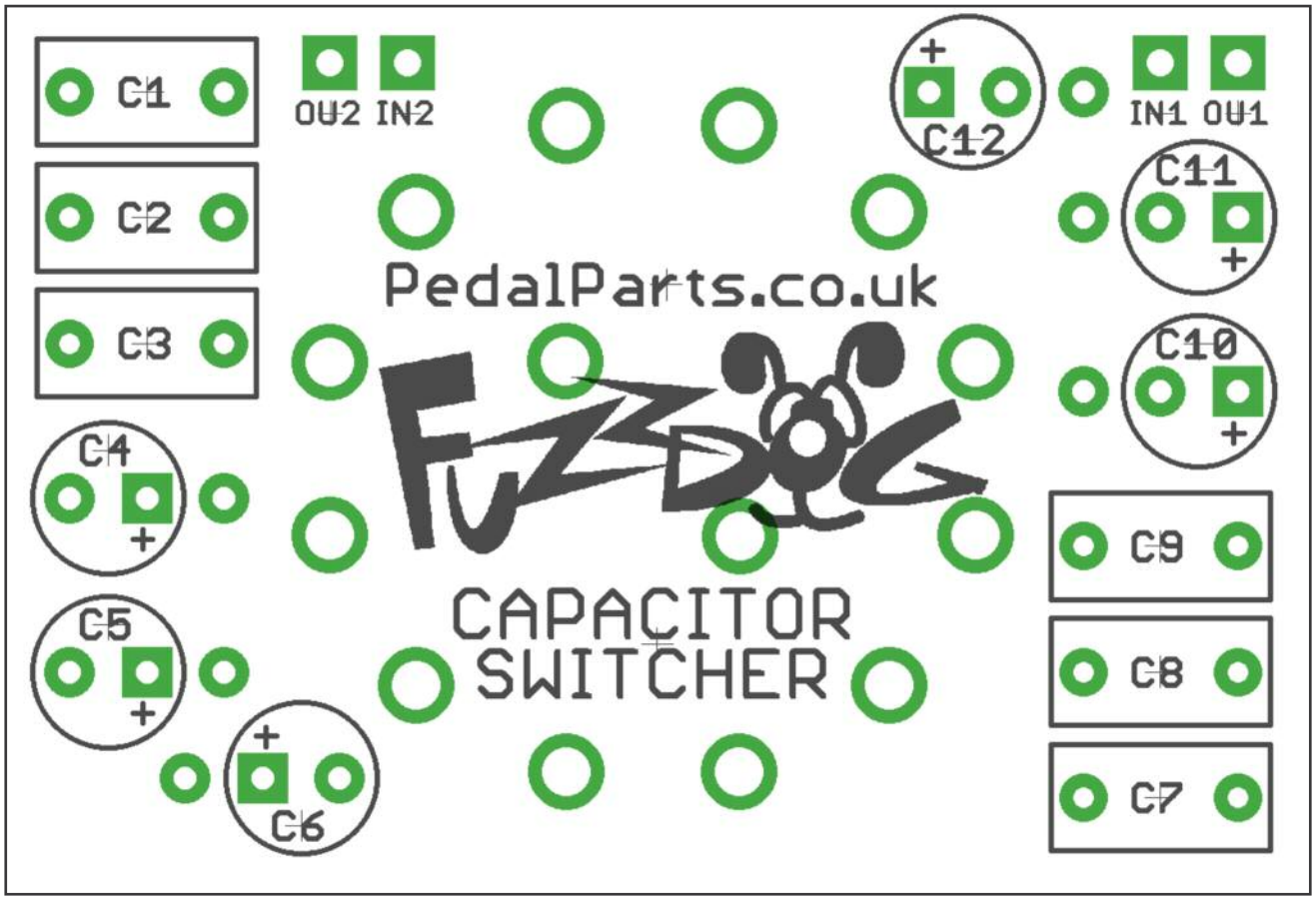
The schematic shows which caps correspond with each other on both sides of the switch. If you're only switching out one cap in a circuit, use either Set A (C1-C6), or Set C (C7-12).

If you're switchout out two caps in a circuit, take note of which caps will be switched together. When C1 is in the circuit, C7 will be. With C2 selected, C8 is also.

ELECTROLYTICS

Note the orientation of the electrolytics. They're placed to be the correct orientation for input and output caps on a standard polarity circuit. IN-OU1 for input, IN-OU2 for output. If you're building a positive ground circuit you should use IN-OU2 for input, IN-OU1 for output, or simply reverse the orientation of the electrolytic caps.

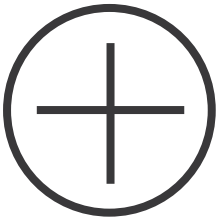
There are extra pads placed next to each electrolytic part so you can use a 5mm pitch non-polarised cap in any of the positions. Simply ignore the centre pad and use the two outer pads for C4-6 and C10-12.

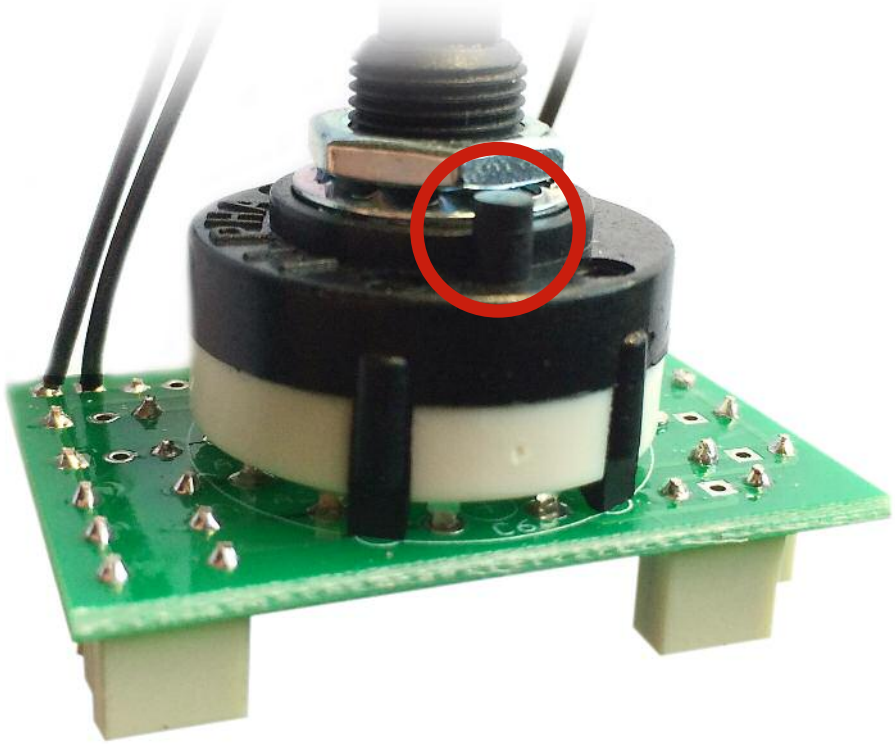


You don't have to use all six switch positions. The Alpha 2P6T rotary switch can be adjusted to move between two and six clicks.

When you remove the fixing nut you'll see a metal washer with a locator tab which sits in a hole within the plastic body. Moving this tab into a hole further counter-clockwise will reduce the amount of clicks. Move it back two holes and you'll only have four different positions instead of six, so will only utilise C1-4 and C7-10.

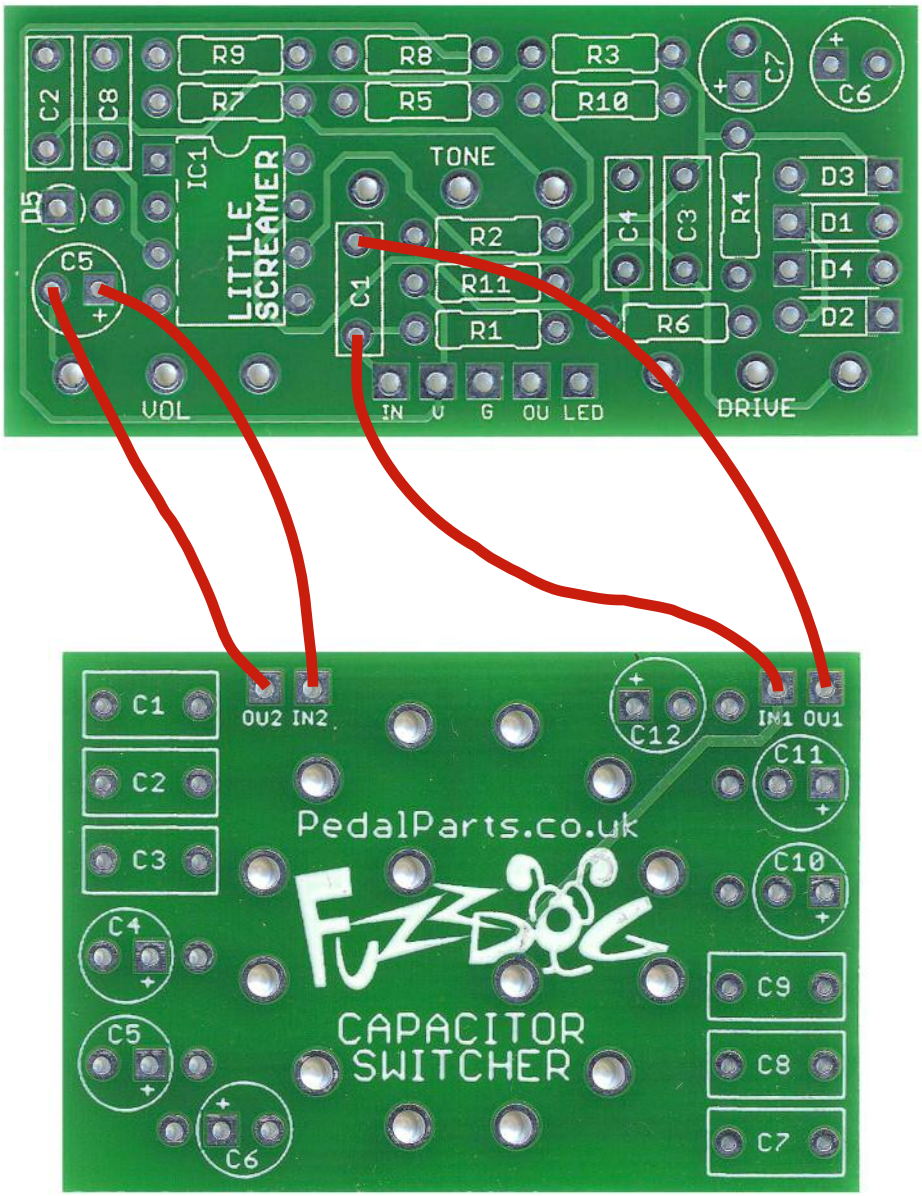
Align this cylindrical tab with the point on the board marked





Connecting to your circuit

In this example we're switching both the input (C1) and output (C5) caps on the Little Screamer. If you're going to use electrolytic caps you'll have to determine which side of the cap you're replacing is connected to what. In this case you can see the copper trace leading from the IN pad goes to the bottom pad of C1, so that's where we'll connect the IN1 pad. If you're using only non-polar caps on the switcher board it doesn't matter which way around you connect IN and OUT.



If you check the schematic for the Little Screamer you can see that the cathode (negative) pad of C5 is connected to VOL3, so that is the OU2 connection. Again, it only matters if you're using electrolytics on the switcher PCB.