

K-Buffer Bypass

Because buffers aren't evil



Important notes

If you're using any of our footswitch daughterboards, DOWNLOAD THE DAUGHTERBOARD DOCUMENT

- Download and read the appropriate build document for the daughterboard as well as this one BEFORE you start.
- DO NOT solder the supplied Current Limiting Resistor (CLR) to the main circuit board even if there is a place for it. This should be soldered to the footswitch daughterboard.

POWER SUPPLY

Unless otherwise stated in this document this circuit is designed to be powered with 9V DC.

COMPONENT SPECS

Unless otherwise stated in this document:

- Resistors should be 0.25W. You can use those with higher ratings but check the physical size of them.
- Electrolytics caps should be at least 25V for 9V circuits, 35V for 18V circuits. Again, check physical size if using higher ratings.

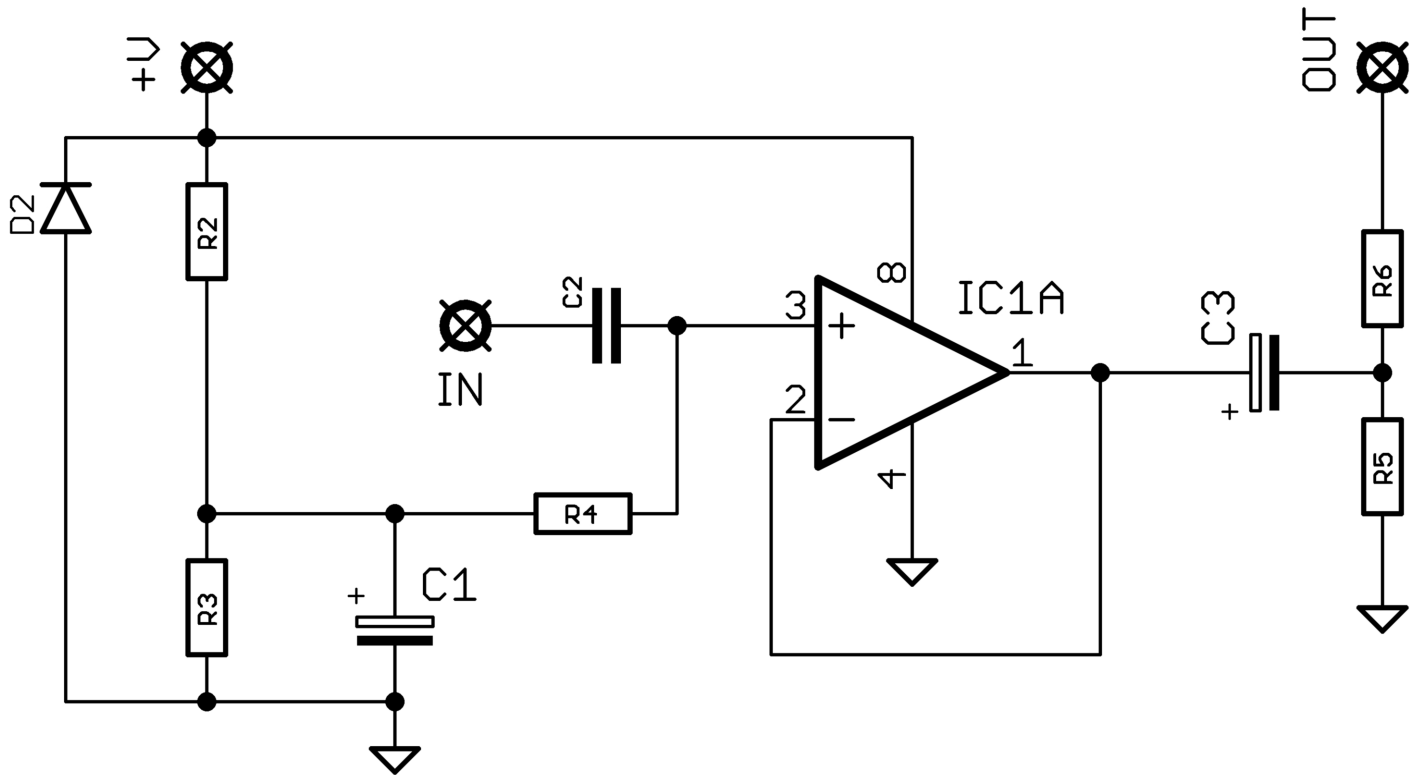
LAYOUT CONVENTIONS

Unless otherwise stated in this document, the following are used:

- **Electrolytic capacitors:**
Long leg (anode) to square pad.
- **Diodes/LEDs:**
Striped leg (cathode) to square pad. Short leg to square pad for LEDs.
- **ICs:**
Square pad indicates pin 1.

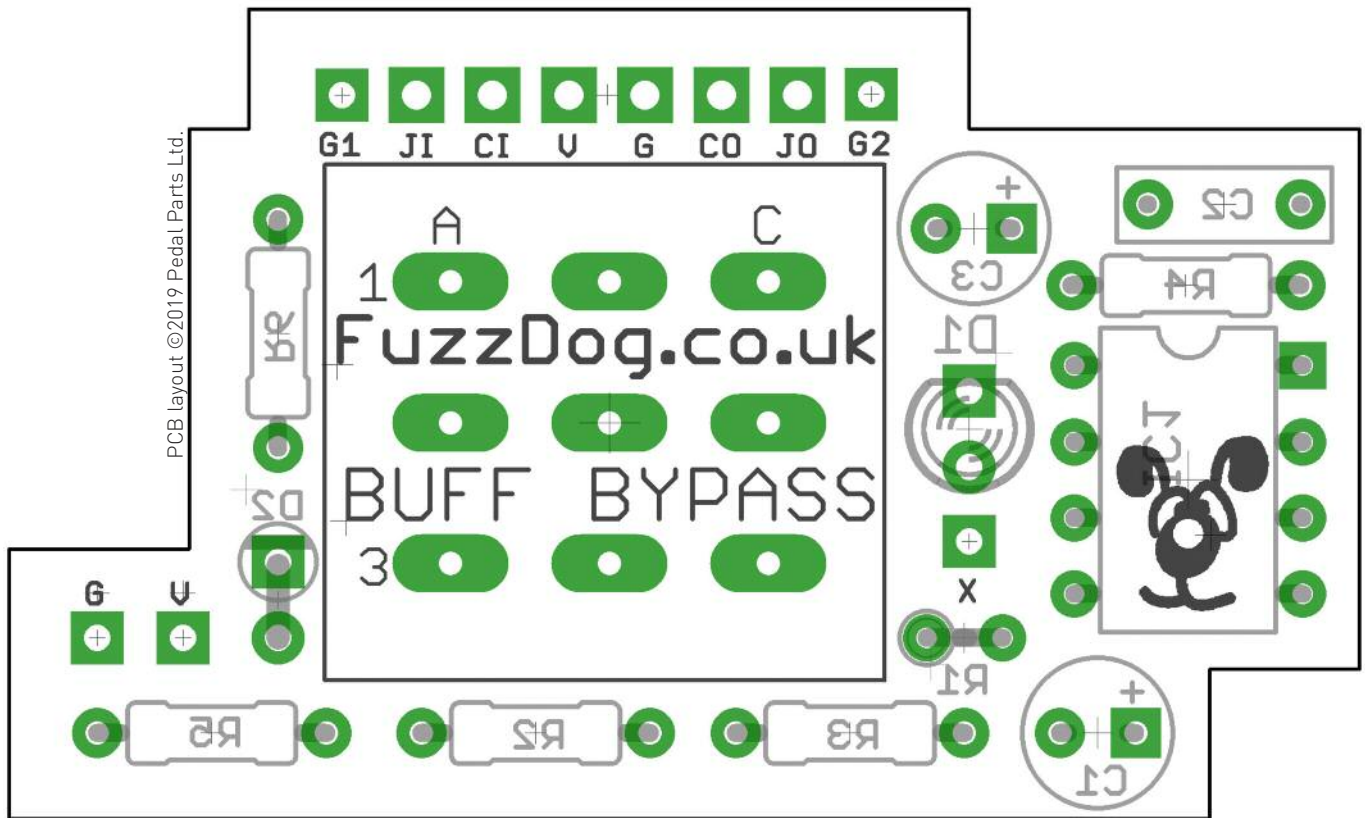
Schematic + BOM

Buffer section only



R1	CLR*	C1	47u elec	D1	LED
R2	100K	C2	100n	D2	1N4001
R3	100K	C3	1u elec	IC1	TL072
R4	1M				
R5	100K				
R6	560R				

*R1 is the current limiting resistor for the LED.
We use 2K2 for normal LEDs, but 470R bi-colour.



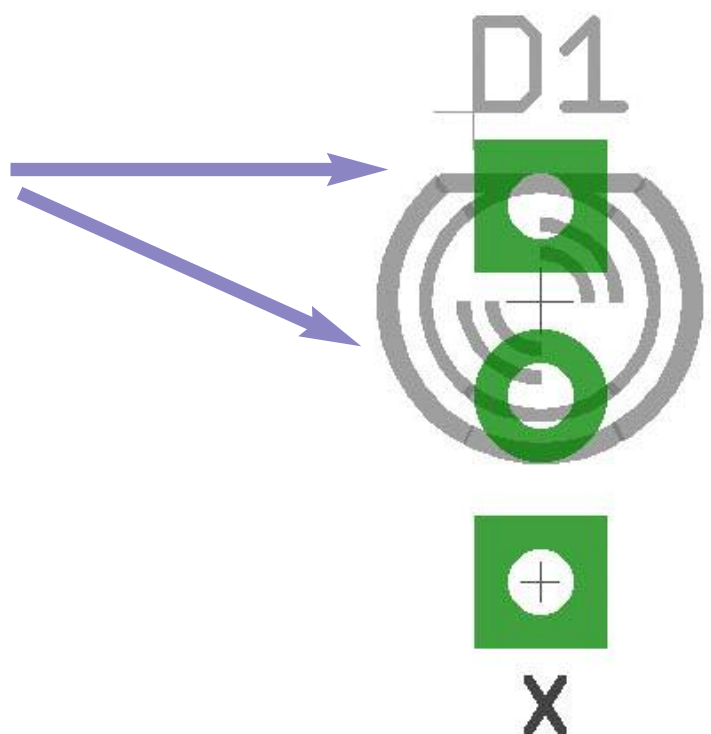
The power and signal pads on the PCB conform to the FuzzDog Direct Connection format, so this board can easily be paired with most of our other circuits.

Be very careful when soldering the transistor, diode and LED. They're very sensitive to heat. You should use some kind of heat sink (crocodile clip or reverse action tweezers) on each leg as you solder them. Keep exposure to heat to a minimum (under 2 seconds). It's best to use a socket for the IC. If not, use the same precautions as above.

If you're using a normal, two-legged LED place that in the two pads shown here, long leg (anode) to round pad.

If you're using a three-legged bi-colour LED you'll also use the pad marked 'X'. How the two outer legs are placed is up to you, depending on what colour you want shown when the circuit is bypassed or engaged.

Those we supply are GREEN on the shorter leg, RED on the longer. Whichever leg is placed in the X pad is the colour that will be shown on bypass.



Wire it all up... simple!

