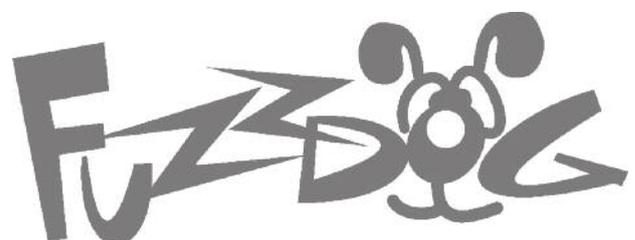




Klon Buffer

Invigorate your signal chain



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:

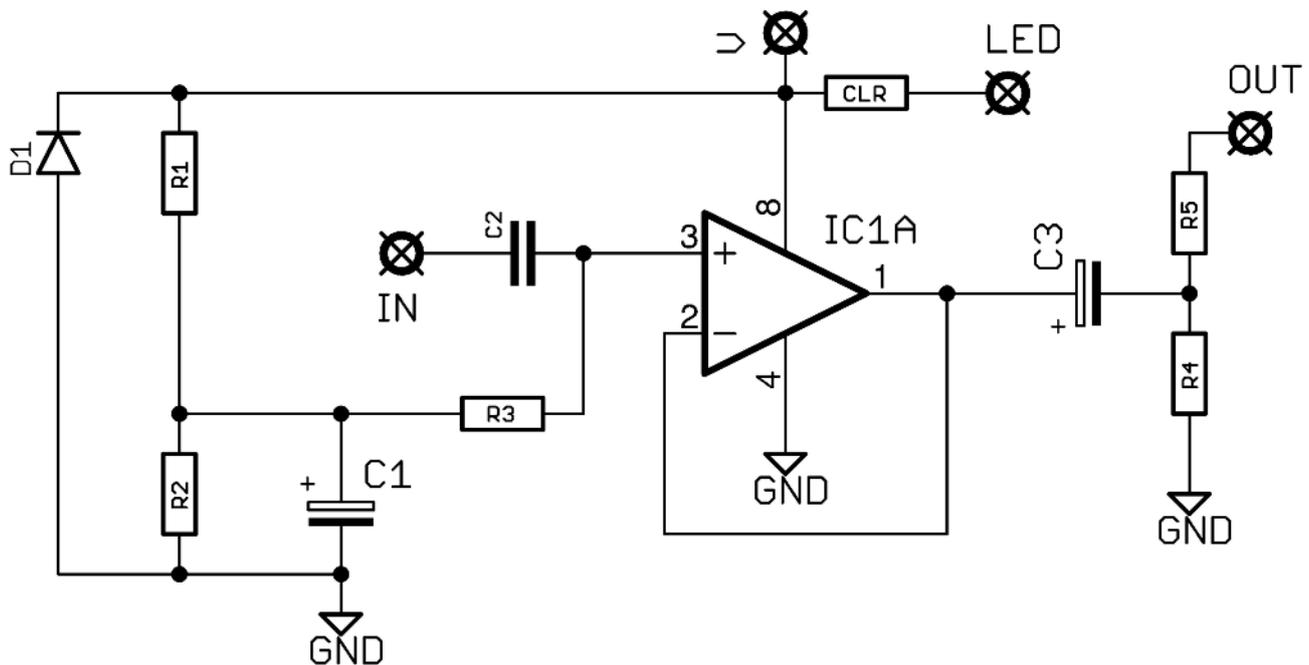
- Resistors should be 0.25W. You can use those with higher ratings but check the physical size of them.
- Electrolytics caps should be at least 25V for 9V circuits, 35V for 18V circuits. Again, check physical size if using higher ratings.

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



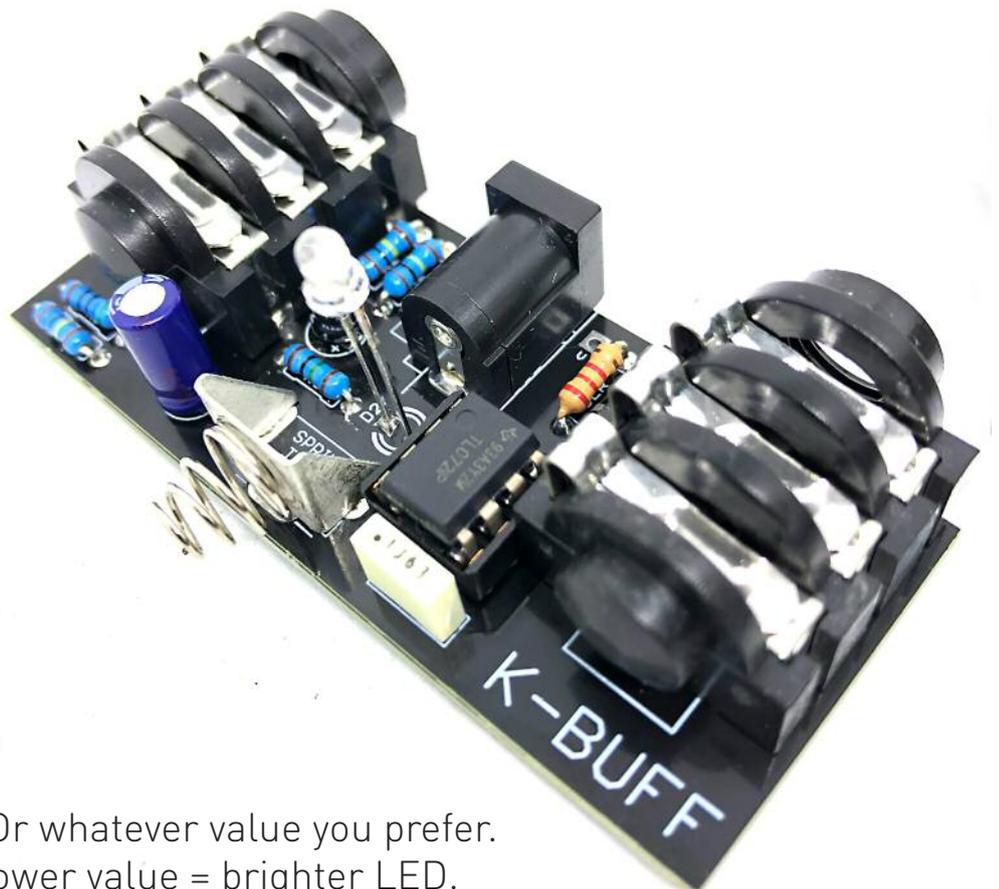
R1	100K
R2	100K
R3	1M
R4	100K
R5	560R
CLR	2K2*

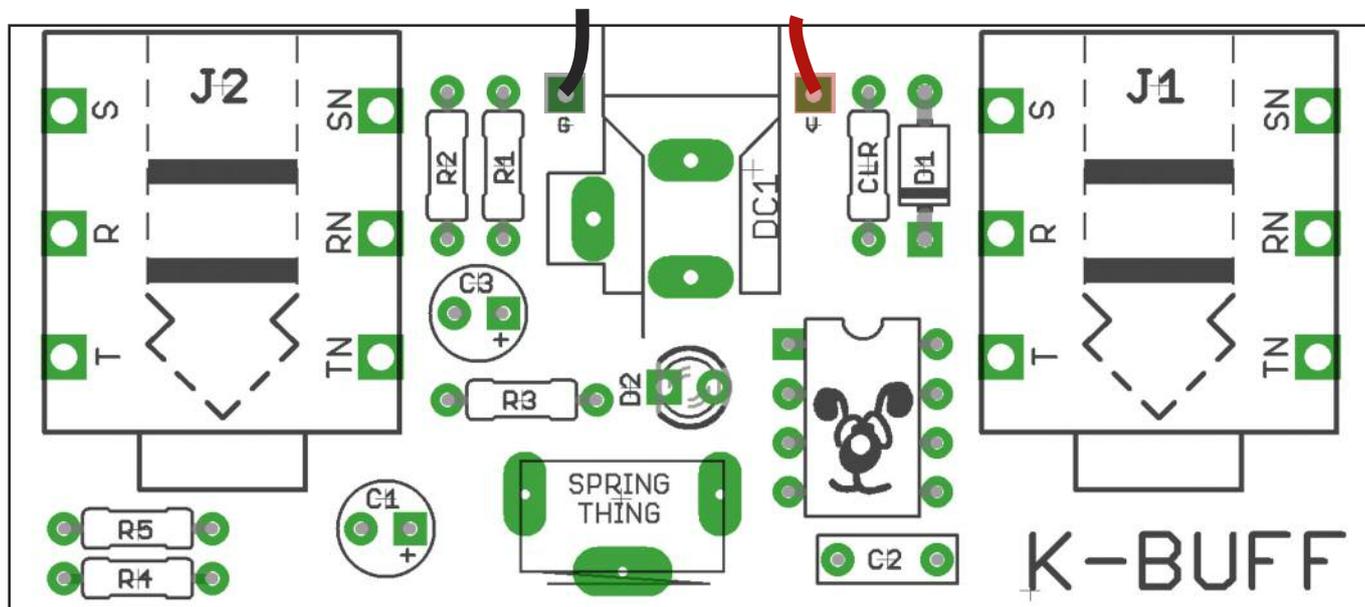
C1	47u elec
C2	100n
C3	1u elec

IC TL072

D1	1N4001
D2	LED

*Or whatever value you prefer.
Lower value = brighter LED.





Be very careful when soldering the diode and IC. 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 to avoid woe.

The long leg of the LED goes into the round pad. Leave the LED until last. Solder in everything else - components first, then DC and jack sockets. Check it all fits the enclosure OK. Now push your LED legs into their pads and leave it loose. Get your circuit into the enclosure and fasten up the jack sockets. Once in place, position your LED through the hole in the enclosure and solder it in.

The 'spring thing' grounds the circuit and jacks to the enclosure, so no worries about RF shielding. Part number is: Keystone 629.

If you've opted for a wired DC socket you can use that to trap the wire against the enclosure instead. To wire this socket take wires from the V and G pads at the front of the PCB near the DC space (shown above). The long pin of the mini DC socket is the +V.

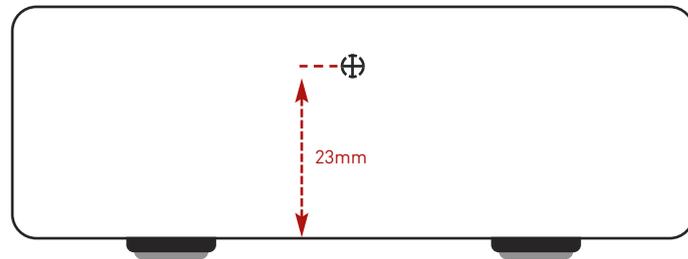
The kit is designed to go sockets-down in the enclosure, with the PCB facing the open side.

Drilling template

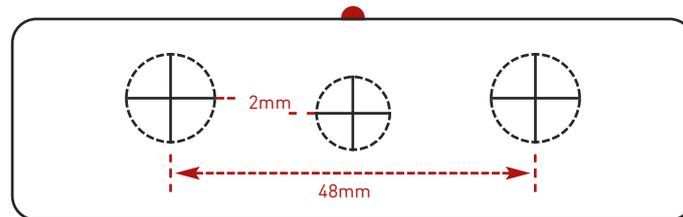
Hammond 1590A
31 x 90 x 27 mm

Recommended drill sizes:

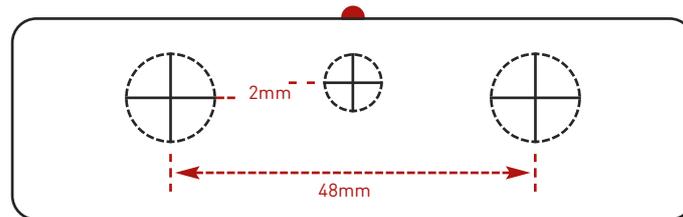
Jacks	12mm
DC Socket	8-10mm



Top



Side
Board-mounted DC



Side
Wired DC

The wired mini DC sockets require an 8mm hole.

If you're using a board-mounted DC socket you need to have a hole big enough so that the sleeve of the plug doesn't touch the enclosure. 10mm should suffice.

This template is a rough guide only. You should ensure correct marking of your enclosure before drilling. You use this template at your own risk. Pedal Parts Ltd can accept no responsibility for incorrect drilling of enclosures.

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