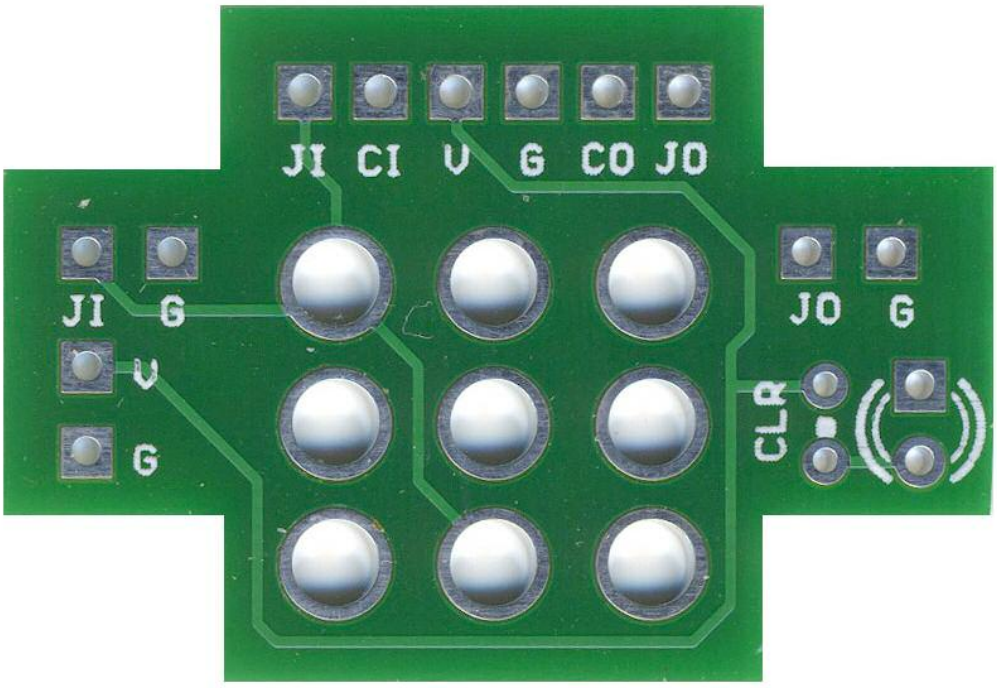


FuzzD's 3PDT 'Direct Connect' DaughterBoard

Minimising your wiring woes

First things first..

DO NOT SOLDER YOUR 2K2 CURRENT LIMITING RESISTOR (CLR) TO THE MAIN PCB OF THE PROJECT.

It should be soldered on to the footswitch daughterboard. It isn't the end of the world if you've not bothered to read this document before starting and have used it, but it means running wire where there shouldn't be any. See the bold paragraph on the next page.

Second things first...

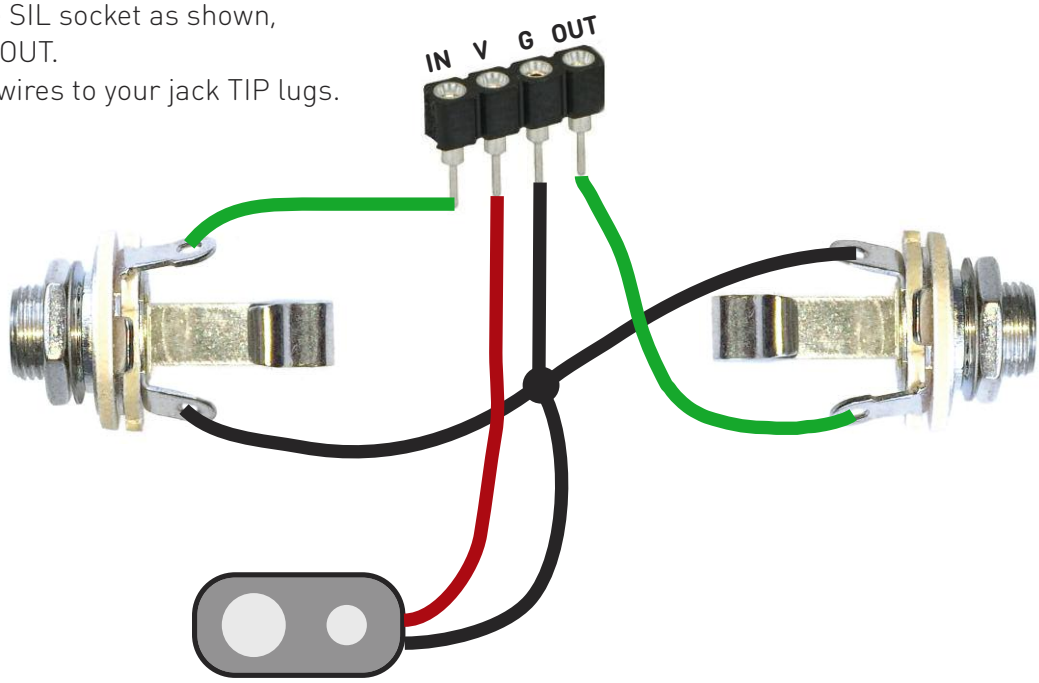
Using daughterboards for the switch wiring simplifies things, and if used with a Direct Connect compatible main circuit board and ribbon connector you'll be hard pressed to find a neater finish.

However.... that gives us a small problem when it comes to testing the main circuit board. We don't want to solder wires onto that, which will then have to be desoldered so we can then use the ribbon cable. Nor do we want to solder in the ribbon cable, then attach wires to the ends of that, which then have to be removed, etc etc.

So, here's a solution. You could set this up as a permanent wired test rig, or just keep the 4-way connector and wires together, desoldering the jacks and battery as you use them. Of course the best thing to do if you're building a lot is to have one of our test rigs, but that's up to you.

You'll need a 4-way SIL connecter (we sell them, how about that?) and some wire.

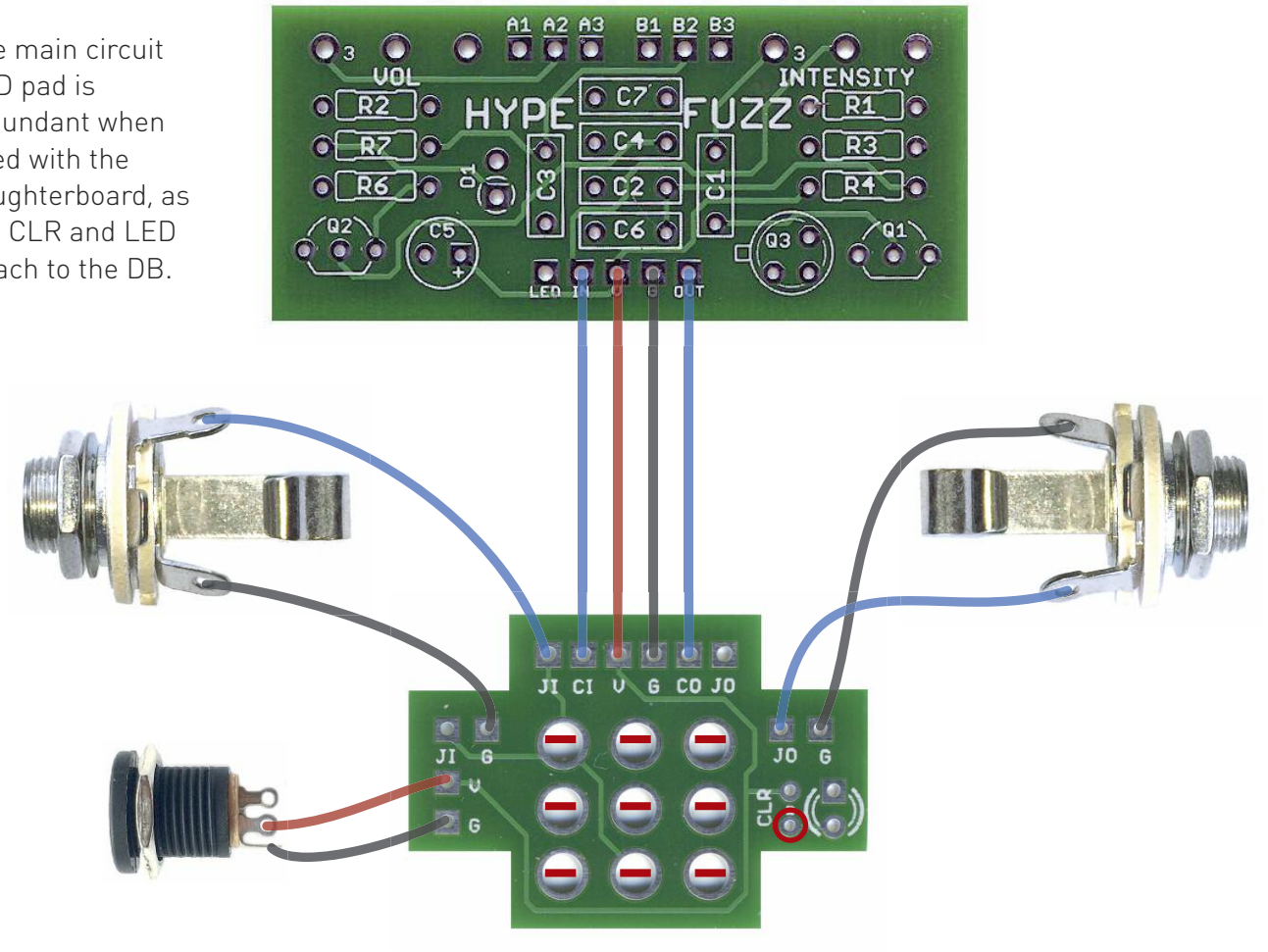
Connect four wires to the SIL socket as shown,
one each for IN, V, G and OUT.
Connect the IN and OUT wires to your jack TIP lugs.



Now for your power. ALL the ground connections have to join together. Twist together a bare end of all the GND wires - one from the SIL socket, one from each jack, and your battery negative lead. Solder that clump all together. Connect your battery positive lead to the V lead from the socket. You now have a Direct Connect tester.

You can now safely connect your ribbon cable to your main circuit board (see the following pages), and test your circuit by plugging the free end of the ribbon into the SIL socket. Make sure you get it the right way around. You don't want to reverse the power connections!

The main circuit LED pad is redundant when used with the daughterboard, as the CLR and LED attach to the DB.



The daughterboards (DB) are wired for true-bypass and will ground the circuit input when bypassed.

They can be used with any circuit, but will be neatest when paired with a FuzzDog PCB which has the pads in the matching configuration, enabling perfectly straight wire runs, or even 2.5mm pitch ribbon cable.

It's easiest to fit your footswitch in the enclosure and tighten it up before doing the rest of the wiring. The footswitch lugs should be horizontal as shown in red above.

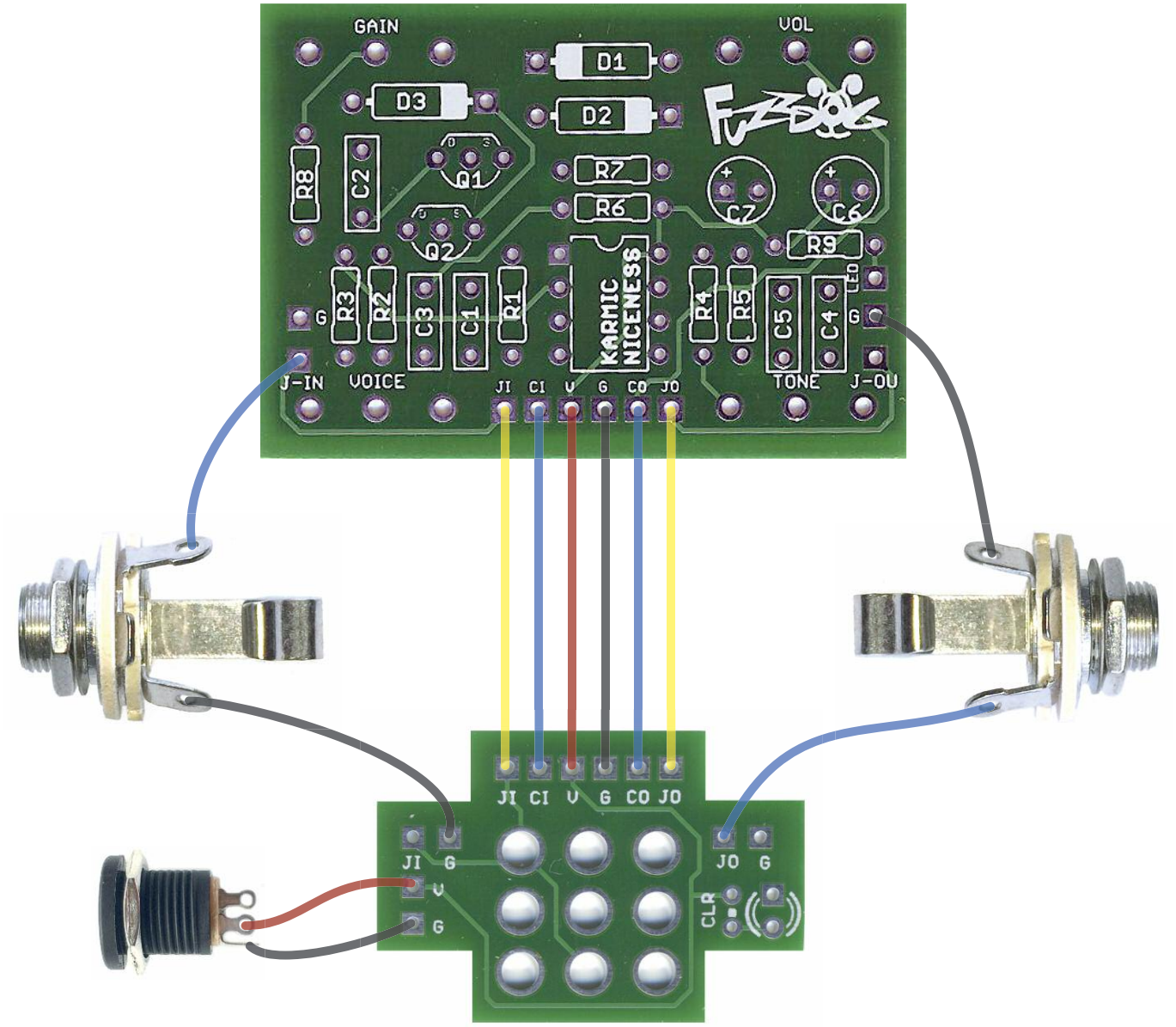
If the main circuit board has a space for a Current Limiting Resistor and an LED+ pad, ignore these and use the ones on the daughterboard instead. The LED should be fitted upright on the underside of the PCB (same side the footswitch will mount).

If you've already soldered your CLR into your main circuit and don't have another, not to worry. Just run a wire from the LED+ pad on your main board to the bottom CLR pad on the daughterboard shown above.

To mount the LED flush in the box without a bezel, push the legs through the board (from the bottom side) and hold while you place the board on the footswitch. The cathode (shorter) leg should go in the square pad. Now push your LED down into the hole in the enclosure. It doesn't matter if it doesn't line up exactly - just manoeuvre it into place. Once its there, get to work soldering the footswitch lugs. Once that's done, check the LED is still sitting correctly and solder it in. That ain't moving!

Notice there are two lots of Jack In (JI) and Jack Out (JO) pads. You can use either to connect to the jacks. Some PCBs will have corresponding pads on them to enable multiple connection points for jacks, as shown on the next page.

NOTE: If you have one of these mini DC sockets with only two pins, >>> the short one is the tip, so normally the GND connection.



In the case above the Enlightned MkII PCB has six corresponding pads with the daughterboard, including Jack In and Jack Out. It can be connected with 6 wires or ribbon cable. You then have the choice of taking the Jack Signal and GND connections from either board which can make your wiring shorter and neater.

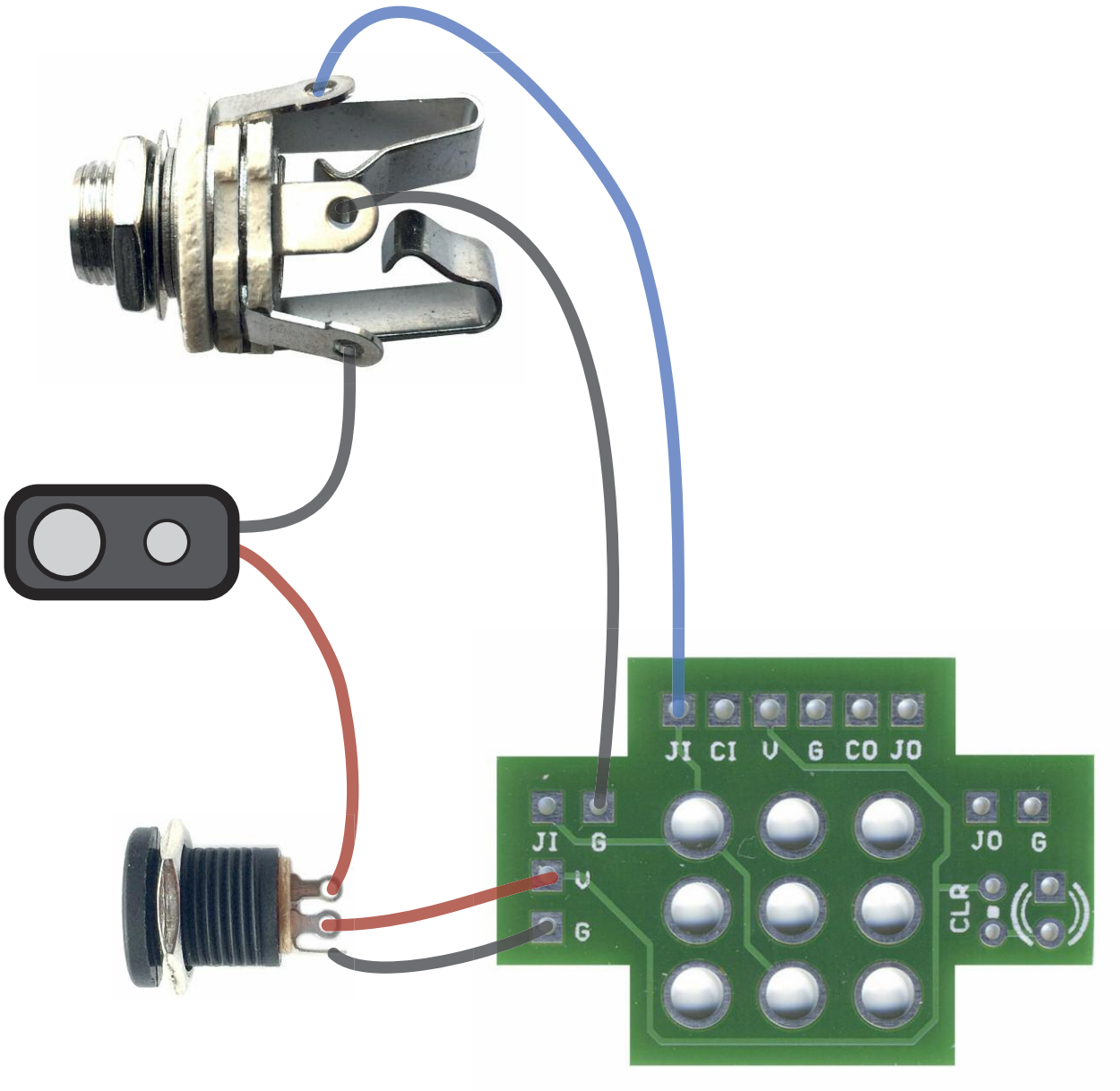
Notice there are unused Jack and GND connections on both boards, as the closest ones have been used in each case.

It could still be wired as on the previous page, using only four connections between the boards and taking the Jack connections from the DB.

POSITIVE GROUND EFFECTS

Simply reverse the connections from the DC socket to the DB and ensure V on the daughterboard connects to -V on the main circuit board. Don't forget to also reverse the LED - long leg to square pad.

DO NOT daisychain the power supply with standard polarity effects if doing this.



BATTERY

There's no provision for adding a battery on the DB. Simply wire it as shown, connecting to the RING lug of a stereo jack, and the switched + lug of the DC socket.