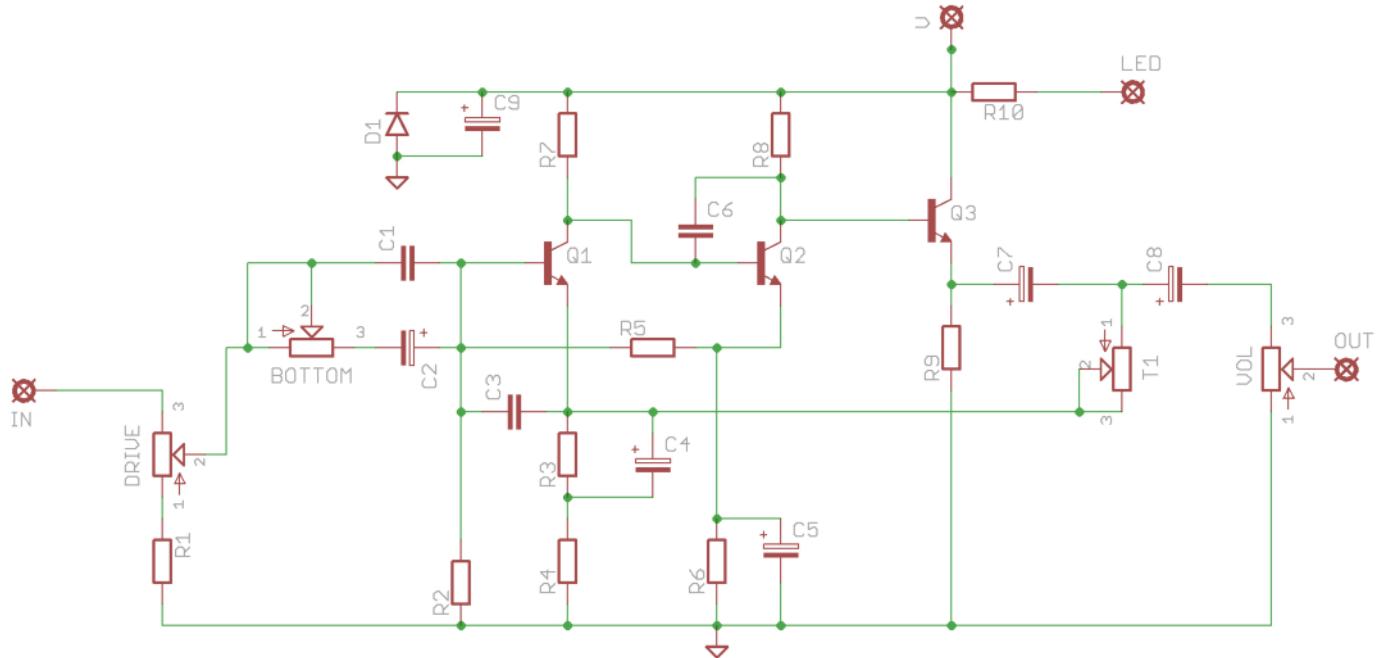


Gloomy Drive

Boutique update of the
classic Univox Uni-Drive



Schematic



BOM

R1	1K	C1	4n7	Q1,2	2N5089*
R2	150K	C2	10u elec	Q3	MPSA18*
R3	1K8	C3	1n	D1	1N4001
R4	100R	C4	47u elec	T1	47K TRIM
R5	100K	C5	10u elec	BOTTOM	250KB
R6	3K9	C6	39p	DRIVE	100KB
R7	100K	C7	10u elec	VOL	10KA
R8	10K	C8	10u elec		
R9	3K3	C9	100u elec		
R10	2K2 (CLR)				

Original unit, and indeed the boutique version this circuit is based on, use NOS 2SC859 transistors, which are hard to get hold of now. The transistors supplied are a good substitute, but you could try just about any BJTs in there. If you are sourcing 2SC859, check your pinout. There are extra pads on the PCB to accommodate non-standard pinouts.

Supplied transistors should go in as per the silk screen shown on the board, and as per the image on page 1. The extra 'E' pads are there to accommodate non-standard pinout transistors.

The power and signal pads on the PCB conform to the FuzzDog Direct Connection format, so can be paired with the appropriate daughterboard for quick and easy offboard wiring.

Be very careful when soldering the diode, LED and transistors. 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).

The striped leg (cathode) of the diode go into the square pad.

The long leg (anode) of the electrolytic capacitors go into the square pads. The large 100u capacitor should lay flat as shown in the image on the first page. This will give you plenty of clearance in the enclosure.

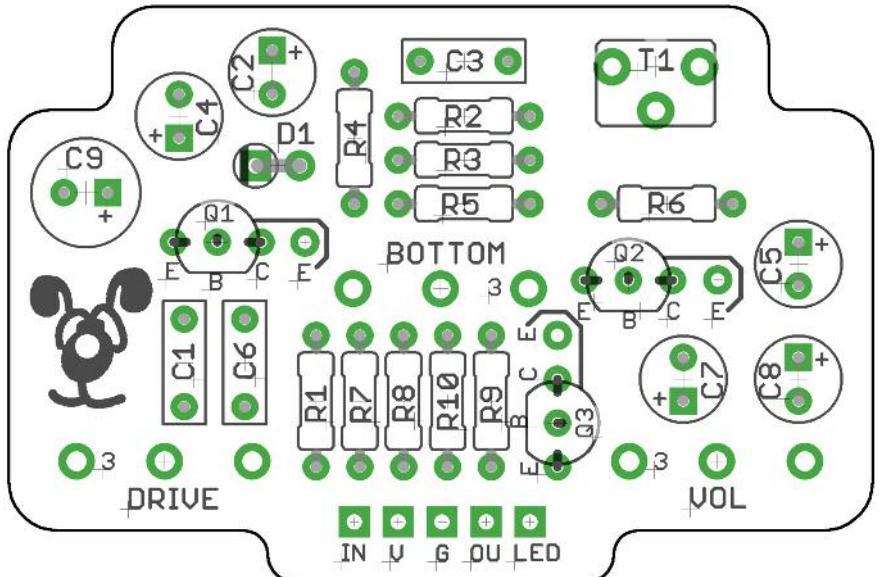
Snap the small metal tag off the pots so they can be mounted flush in the box.

Pot mounts on the back side of the board. You can use vertical-mount pots or just wire up 'normal' ones. It's a good idea to place the pots in their holes in the enclosure when you're soldering them in place on the PCB. That way you know they're going to line up ok. Best way to do it is to solder a single pin of each pot in place, then do a visual check to see that they're all sitting at the same height. If not, melt the joints and readjust any that are off.

If your pots don't have protective plastic covers you should place a strip of thick card between them and the board when soldering to keep them a good distance from the pcb to avoid shorting other components.

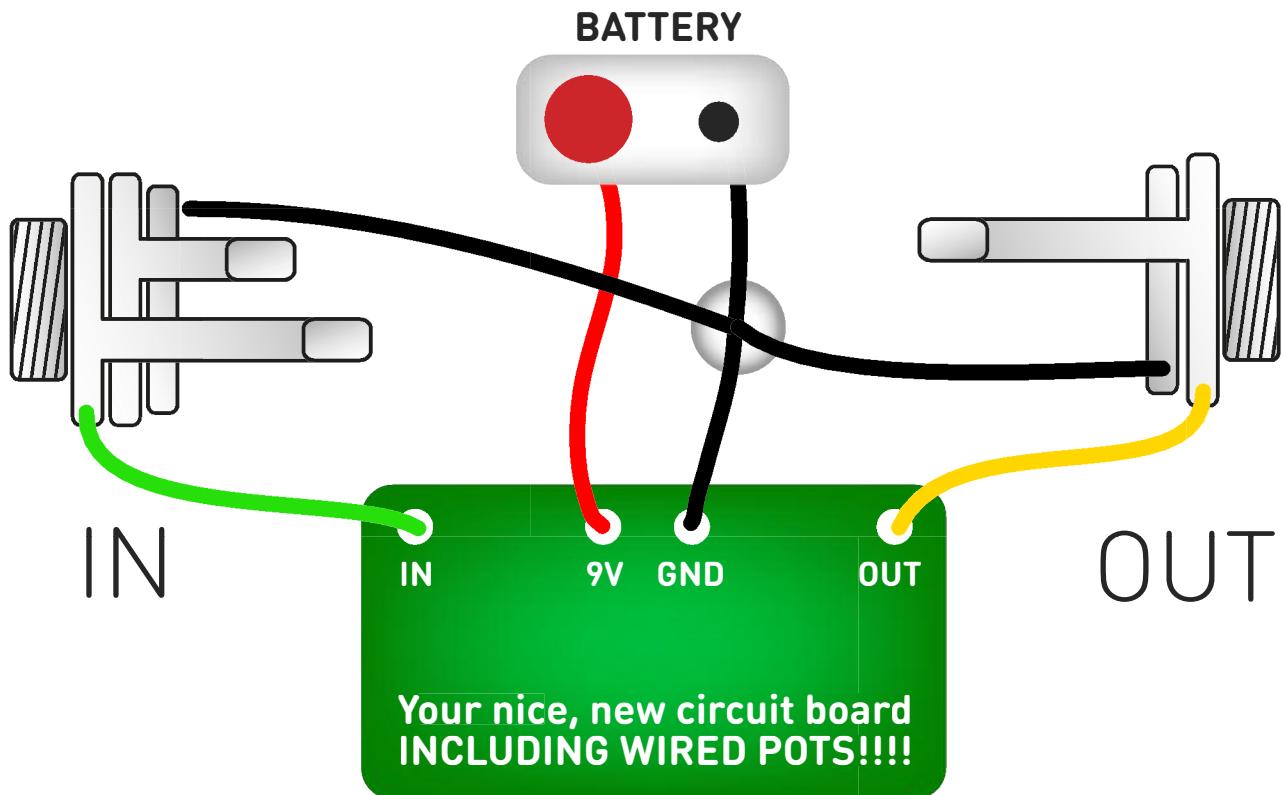
You should solder all other board-mounted components before you solder the pots. Once they're in place you'll have no access to much of the underside of the board.

Pots should be placed as shown >>>



Adjust the trimmer until you get a sound you're happy with. There's no magic voltage to aim for, just play it by ear.

Test the board!



UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

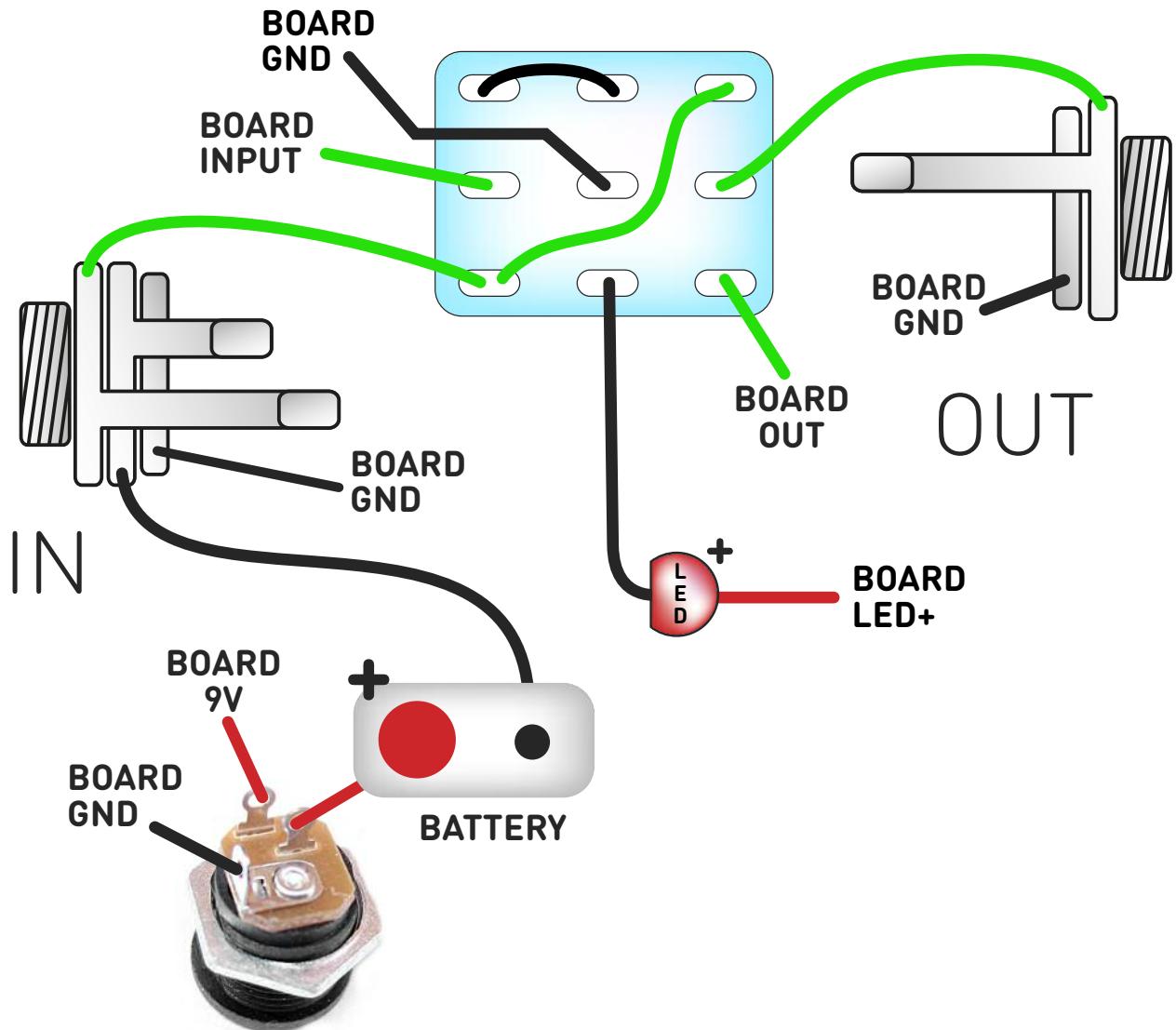
Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

If it works, crack on and do your switch wiring. If not... aw man. At least you know the problem is with the circuit. Find out why, get it working, THEN worry about the switch etc.

Wire it up - with battery

(if using a daughterboard please refer to the relevant document)

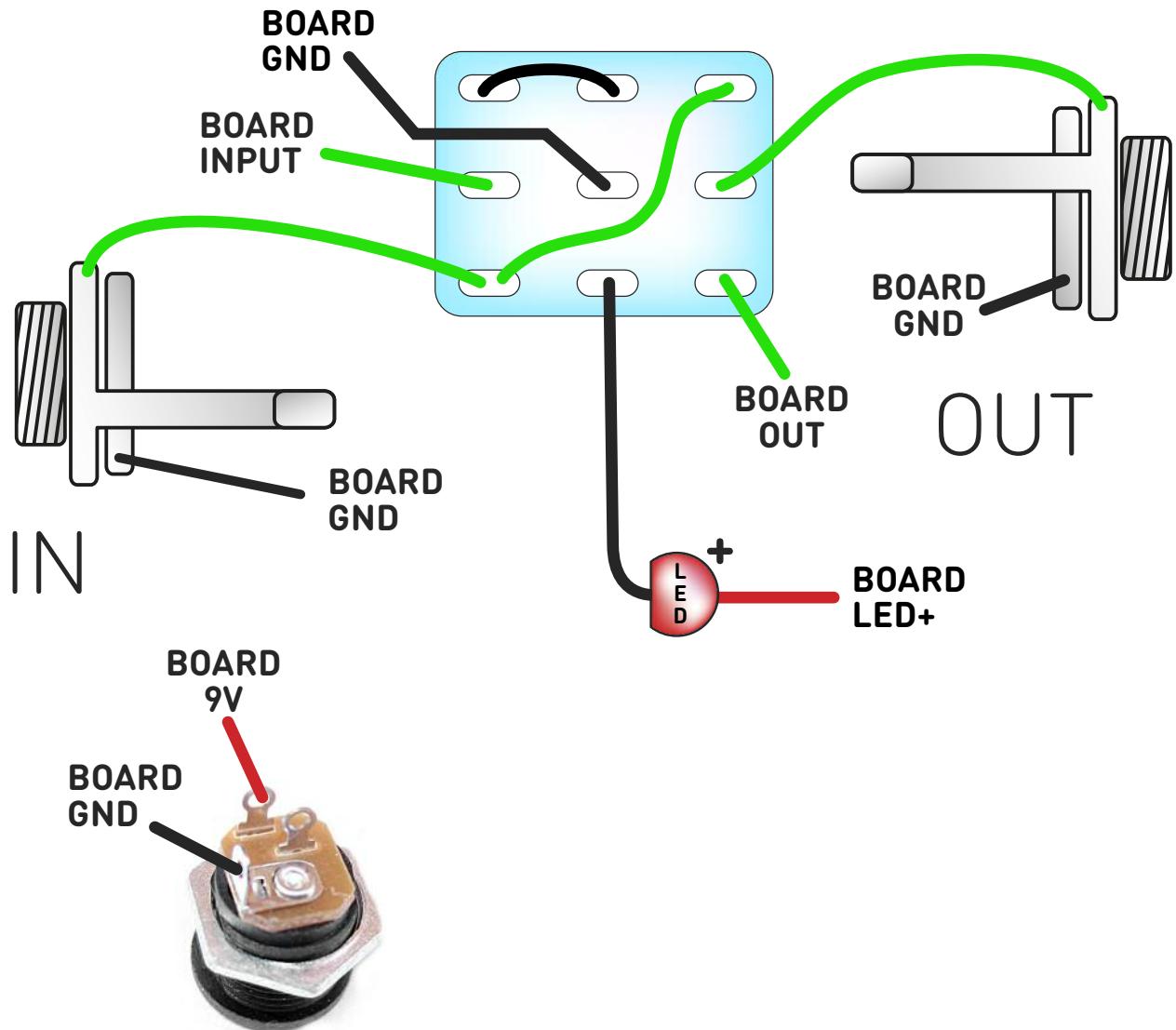


This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

The BOARD GND connections don't all have to connect to one point. They can be daisy-chained around the circuit, using larger connection points (such as jack socket lugs) for multiple connections. As long as they all connect together in some way.

Wire it up - DC only version

(if using a daughterboard please refer to the relevant document)



This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

The BOARD GND connections don't all have to connect to one point. They can be daisy-chained around the circuit, using larger connection points (such as jack socket lugs) for multiple connections. As long as they all connect together in some way.

Drilling template

Gloomy Drive

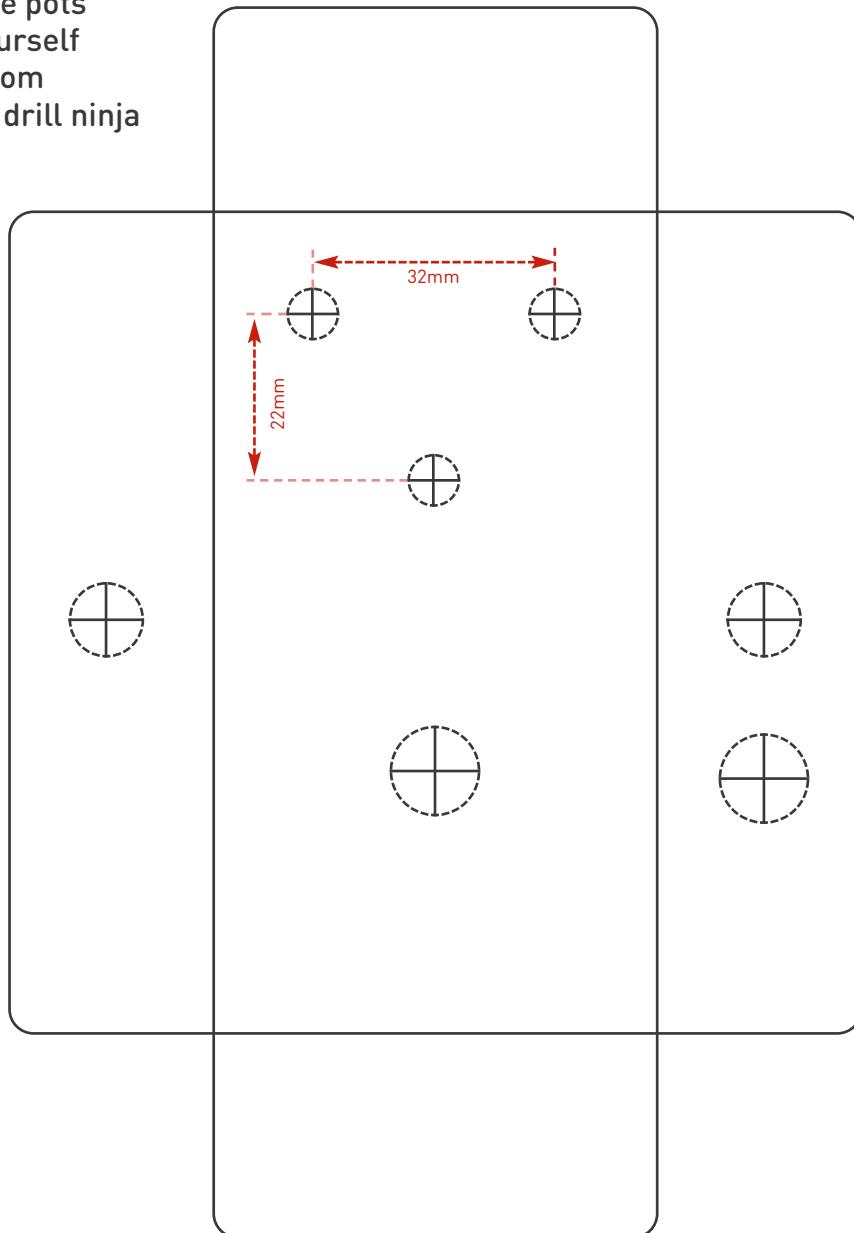
Hammond 1590B

60 x 111 x 31mm

It's a good idea to drill
the holes for the pots
8mm to give yourself
some wiggle room
unless you're a drill ninja

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm



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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