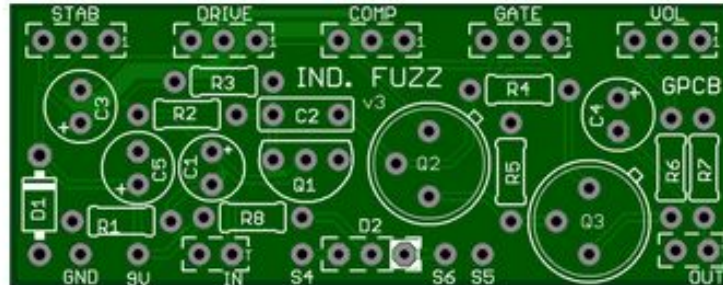


Industrial Fuzz

This is a wild and flexible fuzz circuit board from GuitarPCB.com. It can produce classic fuzz face tones, self-oscillating sounds, octave fuzz, and a variety of normal and weird sounds using 5 knobs. This new layout is designed to be flexible to fit into a 1590B/1290NS horizontally, or in a 125B enclosure horizontally or vertically.



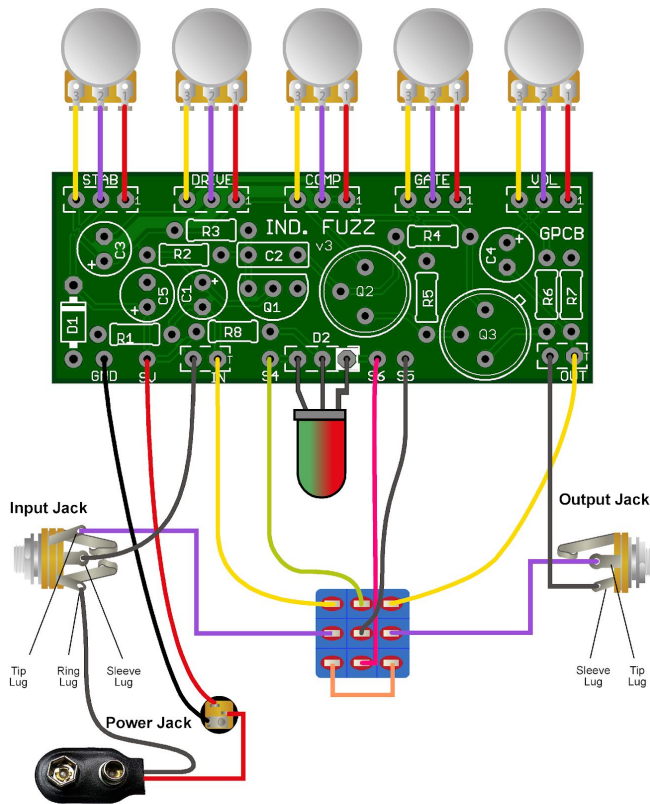
Board size: 2.2 by .86 inches or 56 by 22 millimeters.

Part	Value
D1	1n4001
D2	Bi-Color CA LED
R1	1M
R2	220K
R3	10K
R4	47K
R5	470R
R6	5K1
R7	220K
C1	10u
C2	100n

Part	Value
C3	10u
C4	10u
C5	47u
COM	
P	B10K
DRIV	
E	B10K
GATE	B10K
STAB	B5K
VOL	B5K
Q1	2N3904
Q2	PNP Germanium
Q3	PNP Germanium

Notes about this build:

- The PNP Germanium Transistors should be of relatively low leakage (less than .3mA). Transistor gain values of the commercial pedal on which this circuit is based uses fuzz face values, that is, either 2 ~100 hFE or 1 low (~70 hFE) and 1 high (~110-120 hFE), but many DIY builders prefer higher-gain germanium transistors, such as 150 – 225 hFE.
- The stab knob is a voltage sag, and for most “normal” sounds should be cranked all the way up.
- The gate control is designed to make the notes cut off at certain levels to give the fuzz a certain effect, and is not intended as a traditional noise gate. Turn to the left to open the gate.
- On the board “In” and “Out” sections, the “T” pad will be the audio signal going to or from your 3PDT switch/board, which can be traced through the switch back to the “Tip” lug of the audio jack. The “S” pad is to be provided to be connected the “Sleeve” of the audio jacks.

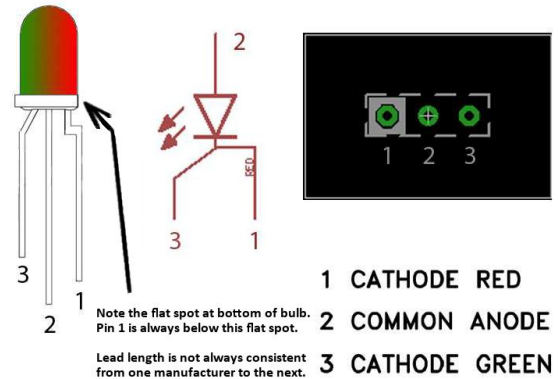


STATUS LED

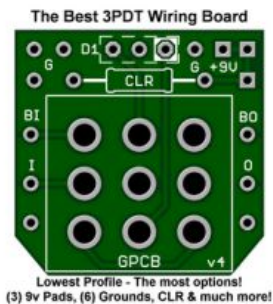
D3 is a common anode bi-color LED. The diagram at right shows the pin-out, schematic symbol and pad connection for a common anode LED. The pin-out for the bi-color LED is typically (but not always) as follows:

The lead 1 pad on the circuit board is marked with a white box.

When connected correctly, the LED will light red when power is applied and the circuit is in bypass mode. The LED will light green when in effects mode. **If you wish to use a standard LED, connect the anode to the middle pad and the cathode to the right pad to show the circuit in effects mode.** If you use a 3PDT wiring board that includes an LED, you can omit this LED and R13. *R13 is the LED's Current Limiting Resistor (CLR). If you use a different LED, you may want to change this value to adjust LED brightness.

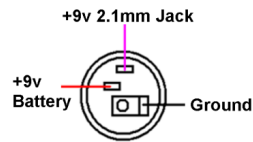


If you're using a GuitarPCB 3PDT wiring board, pads S4, S5, S6 and D2 would be ignored and R13 would not be installed.



IC's and transistors are easily damaged by heat from soldering and should never be directly soldered to the PCB.

For transistors, diodes, and LED's, use SIP (Single inline package) sockets. You simply cut the number of sockets required with an Exacto / Stanley knife or by gripping and rocking with pliers. This allows for easy changes and troubleshooting.



[Soldering Tutorial on Youtube](#)

Need a kit? Check out our authorized worldwide distributors:

USA – Check out [PedalPartsAndKits](#) for all your GuitarPCB kit needs in the USA.

Europe – [Das Musikding](#) Order either boards or kits direct from Europe.

[PedalPartsAustralia](#) - Order either boards or kits direct from Australia

If they do not have a KIT listed send them a note asking if they can help you out.



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