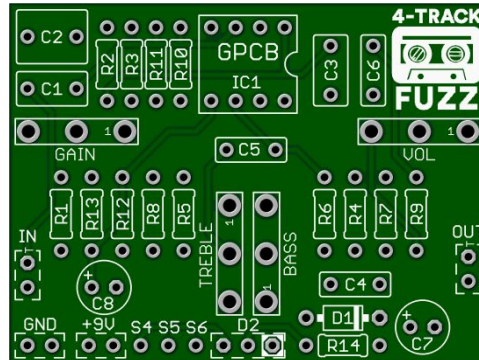


4 Track Fuzz

It hit me really bad when I started longing for that fantastic sound produced when us “Old Timers” used to plug their guitars into old tape recorders (you DO know what those were?) and get this huge SMOOTH distortion that really rocked by simply cranking the channel! **There was nothing else like it!** Well, we found a cure for my nostalgia.

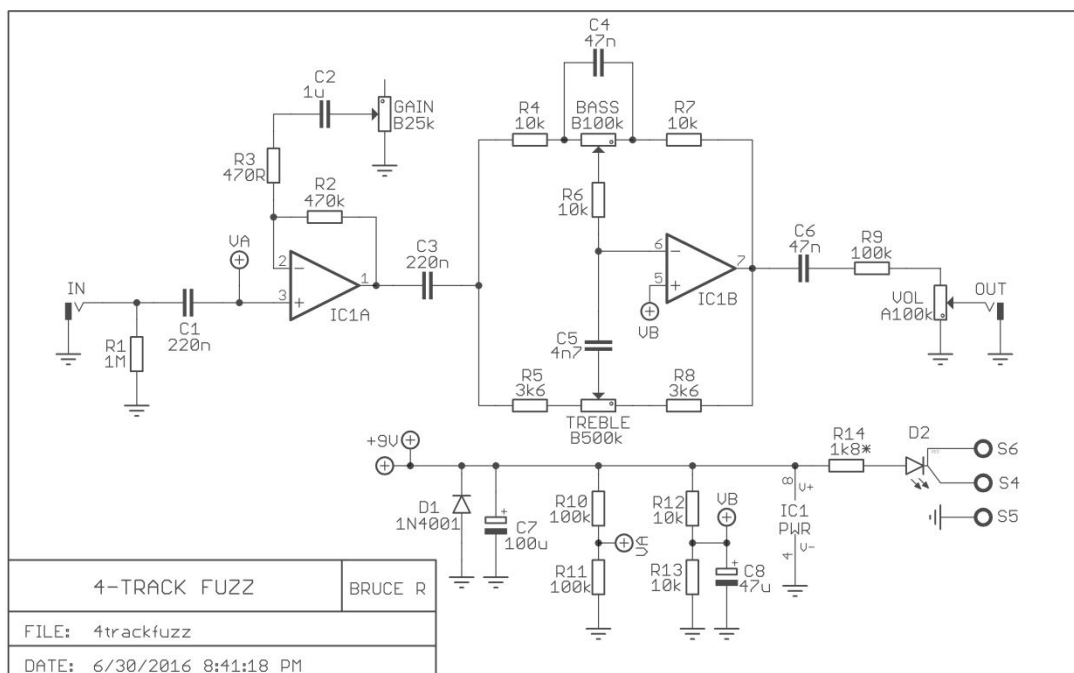
It's the new version of an old tone. We call it the “**4 Track Fuzz**”. This fantastic circuit recreates that same tone in a modern pedal that everyone can enjoy!



Board Dimensions (W x H) 1.95" x 1.48"

Board and Schematic designed by Bruce R.

Additional help & circuit testing by Wilkie1.



Part	Value		Part	Value		Part	Value
R1	1M		R11	100k		C7	100u
R2	470k		R12	10k		C8	47u
R3	470R		R13	10k		D1	1N4001
R4	10k		R14	1k8*		D2	BiColor CA LED
R5	3k6		C1	220n		IC1	TL072**
R6	10k		C2	1u			
R7	10k		C3	220n		BASS	B100k
R8	3k6		C4	47n		GAIN	B25k
R9	100k		C5	4n7		TREBLE	B500k
R10	100k		C6	47n		VOL	A100k

Build Notes:

- *R14 is shown as 1k8 or (1.8k) and is an optional value being used as a current limiting resistor. A higher value may be used for a dimmer LED such as 3k or 4k7.
- **TL072 is the Dual Opamp of choice although you may wish to try a 4558, Burr Brown, NE5532.
- You may use right angle on-board potentiometers and will be a tight fit into a 1590B however we recommend a 125B for most builders as this will be much more forgiving enclosure size.

Additional Build Notes:

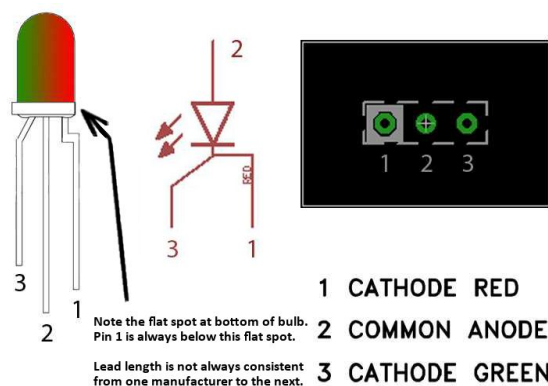
1. Please note that R2 is a 470k ohm resistor and R3 is a 470 ohm resistor. That is a big difference.
2. Likewise do not mix-up C5 being a 4n7 (4.7n) capacitor with C4 or C6 which are 47n.
3. A 3k3 (3.3k) may be used in place of a 3k6 at both R5 and R8
4. While there is plenty of space for a Film capacitor at C2 you can always use an MLCC capacitor.

I carry **TL072** and in my **Shop** most of the time.

STATUS LED

D2 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:

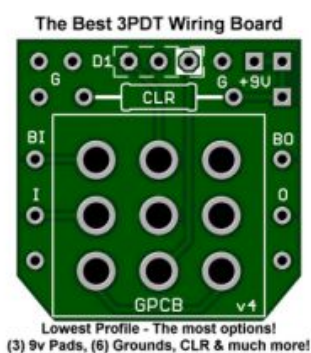
1st Color Cathode	Is on the "f" LED (see gr bend in the
Common Anode	Middle lead
2nd Color Cathode	45 degree l



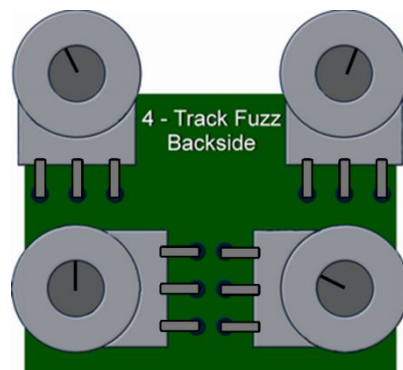
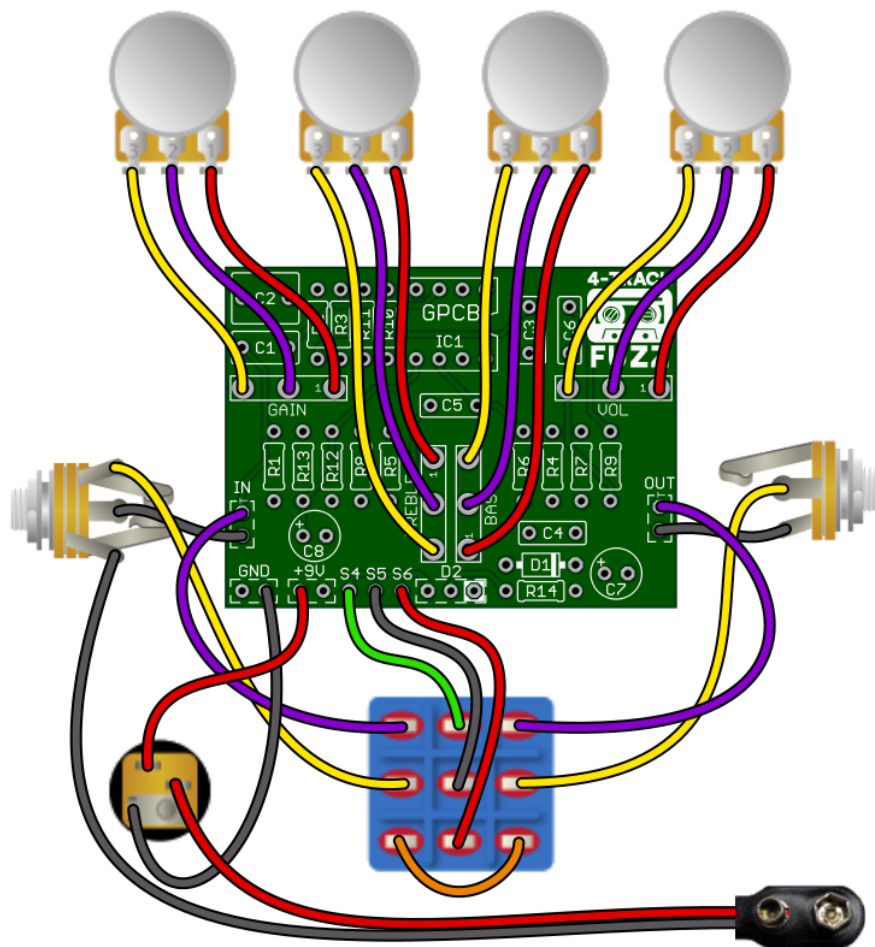
The lead 1 pad on the circuit board is marked with a white box.

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 R14. *R14 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 are using one of GuitarPCB's handy 3PDT wiring boards, pads S4, S5, S6 and D2 would be ignored and R14 would not be installed. See wiring guide and photos below for reference.



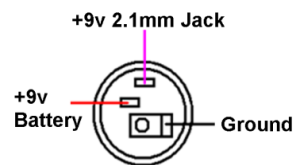
The Wiring Diagram below shows optional hand wired potentiometers so you may place them wherever you wish inside an enclosure. You may of course also use right angle on-board potentiometers



Cut out for drill template (Be sure to match with your board):

- A [YouTube Demo](#) is available

IC's 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](#)

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



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