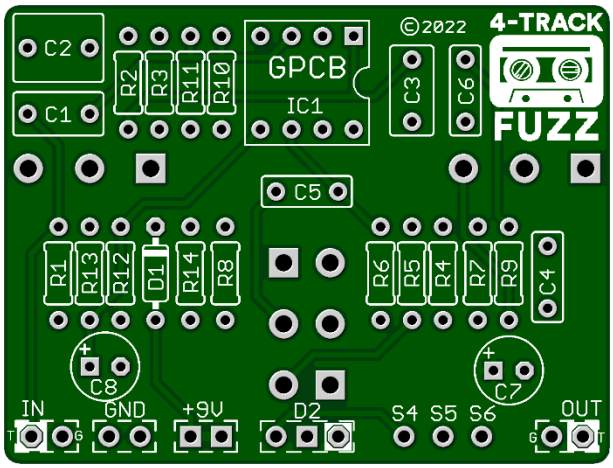
4 Track Fuzz 2022

I remember when we used to plug our guitars into old tape recorders to get this unique saturation by simply cranking the channel! There was nothing else like it! Add a little reverb or delay and it sounded awesome. Well, I 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"

Part	Value
R1	1M
R2	470k
R3	470R
R4	10k
R5	3k6
R6	10k
R7	10k
R8	3k6
R9	100k
R10	100k

Part	Value
R11	100k
R12	10k
R13	10k
R14	1k8*
C1	220n
C2	1u
C3	220n
C4	47n
C5	4n7
C6	47n

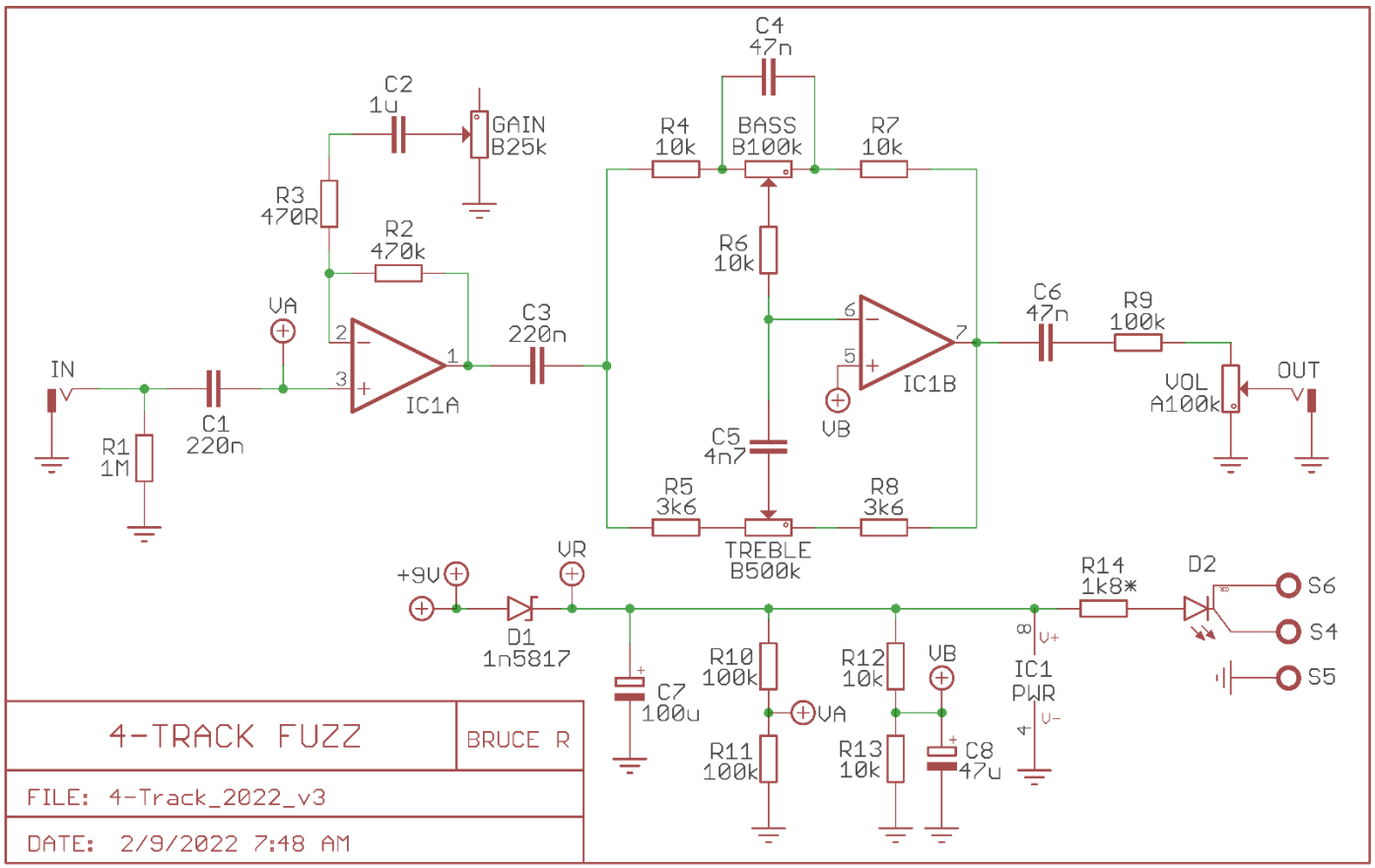
Part	Value
C7	100u
C8	47u
D1	1N5817
D2	Status LED
IC1	4558
BASS	B100k
GAIN	B25k
TREBLE	B500k
VOL	A100k

STATUS LED

***D2** is a Status LED that can use either Bi-Color Common Anode or a Standard On/Off LED.

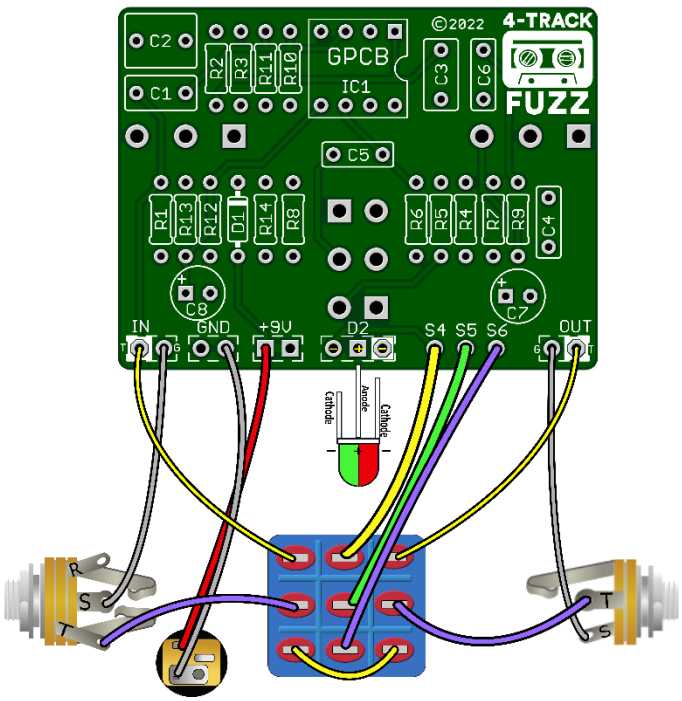
New in this GuitarPCB 2021 version release:

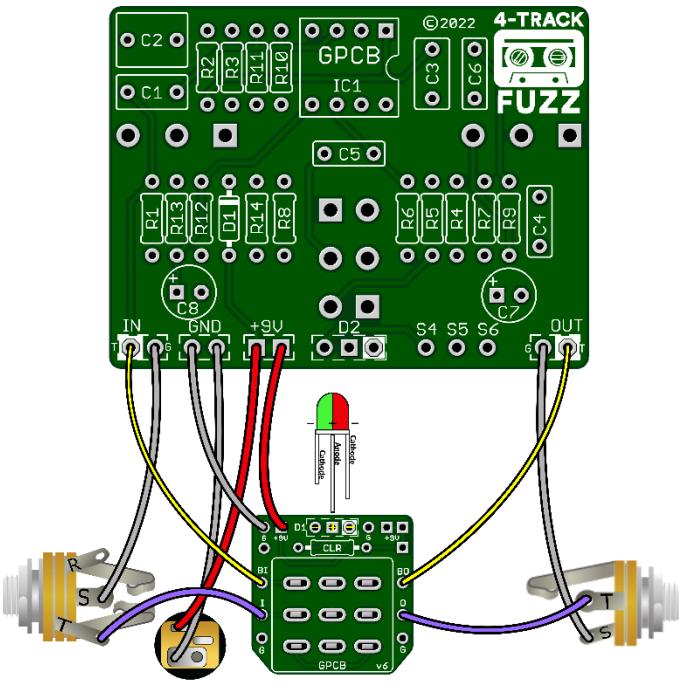
- Larger off-board wiring pads
- Incorporated a 1N5817 protection diode
- Other minor cosmetic changes



Build Notes:

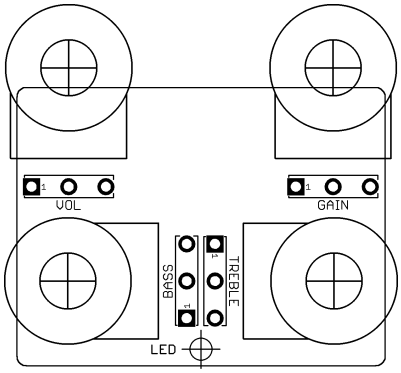
- **4558 is the Opamp of choice although you may wish to try a TL072, Burr Brown or NE5532.**
- **This build uses both a 470K and 470 R resistor.**
- **Likewise, do not confuse C5 being a 4n7 as opposed to C4 and C6 which are 47n.**
- **A 3k3 (3.3k) may also be used in place of a 3k6 at both R5 and R8**
- **While there is plenty of space for a Film capacitor at C2 you can always use an MLCC capacitor.**





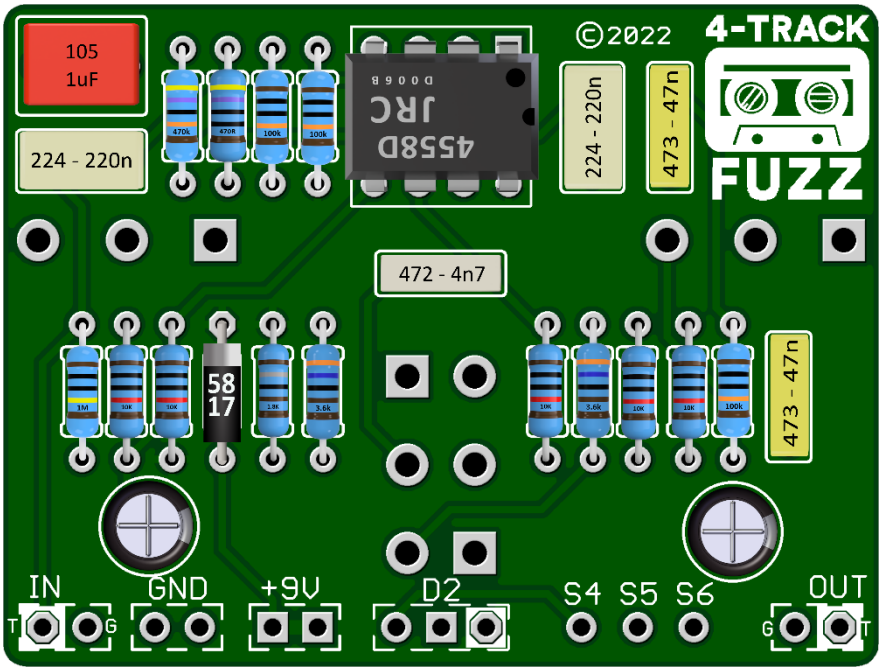
STATUS LED

Note: If you are using our 3PDT board, you should omit wires and parts from S4, S5 & S6, D2 and R14 (CLR). The CLR and LED will be populated on the 3PDT board instead.



Drill Tips: Measure your components before selecting a drill bit. We recommend drilling the pot holes, mounting the pots in the enclosure, and then soldering the pots to the board. This approach should resolve the issue of the pots not fitting through the holes after soldering. We also recommend you make the holes for the pots a little larger than the threads in case you decide to remove the board and put it back in during the build, to avoid problems. Use this guide at your own risk. Make sure page scaling is turned off when you print this PDF, or the image above may be smaller than expected. Verify everything before drilling.

Populated Board Image and Resistor Chart for Troubleshooting

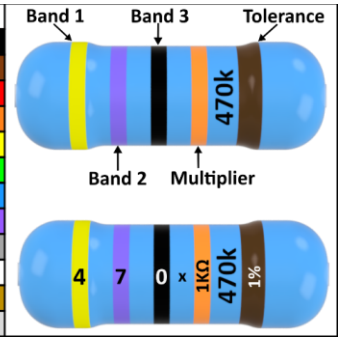


For more build guides and tutorials please visit the Guides Page at GuitarPCB.com
For specific build support please visit our dedicated Support Forum
Soldering Tutorial on YouTube

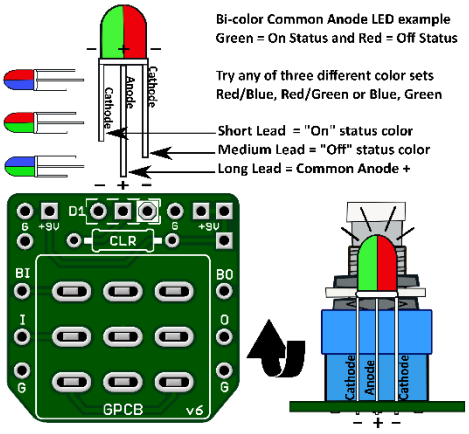
Need Kits - Check out our authorized worldwide distributors:

- **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**

COLOR	1st Band	2nd Band	3rd Band	Multiplier	Tolerance
BLACK	0	0	0	1Ω	
BROWN	1	1	1	10Ω	±1%
RED	2	2	2	100Ω	±2%
ORANGE	3	3	3	1KΩ	
YELLOW	4	4	4	10KΩ	
GREEN	5	5	5	100KΩ	±0.5%
BLUE	6	6	6	1MΩ	±0.25%
VIOLET	7	7	7	10MΩ	±0.10%
GREY	8	8	8	100MΩ	±0.05%
WHITE	9	9	9	1GΩ	
GOLD				0.1Ω	±5%
SILVER				0.01Ω	±10%



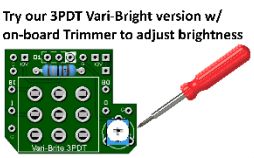
GuitarPCB Tip Sheet



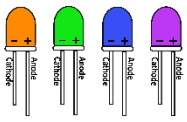
Bi-color Common Anode LED example
Green = On Status and Red = Off Status

Try any of three different color sets
Red/Blue, Red/Green or Blue, Green

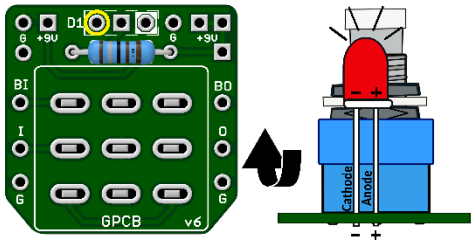
Short Lead = "On" status color
Medium Lead = "Off" status color
Long Lead = Common Anode +



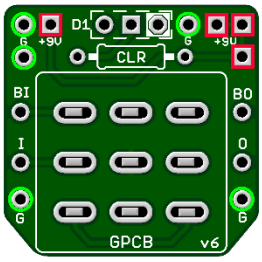
Try our 3PDT Vari-Bright version w/ on-board Trimmer to adjust brightness



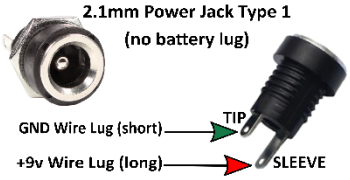
Standard On/Off Status LED
D1 Circle Pad connects to LED Cathode



Green = Ground Pads (5)
Red = + 9v Power Pads (4)
D1 = LED Pads
CLR = Current Limiting Resistor
BI = From Main Board IN
BO = From Main Board OUT
I = To Jack Tip IN
O = To Jack Tip OUT



2.1mm Power Jack Type 1
(no battery lug)

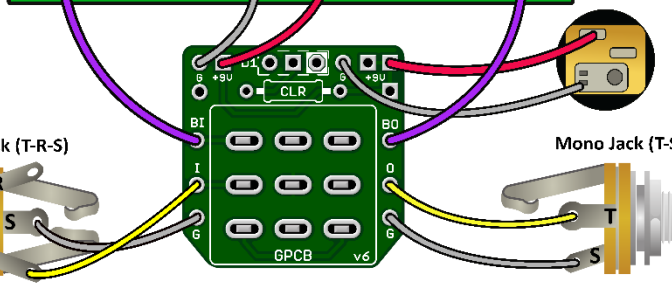


GND Wire Lug (short) → TIP
+9v Wire Lug (long) → SLEEVE

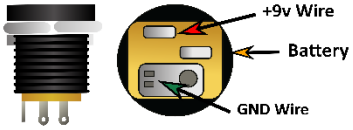
Do not over-tighten (hand tight)

GuitarPCB for any XYZ Company Primary Circuit Board

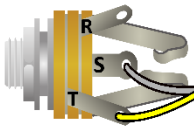
IN — Ground — Power — OUT



2.1mm Power Jack Type 2



Stereo Jack (T-R-S)

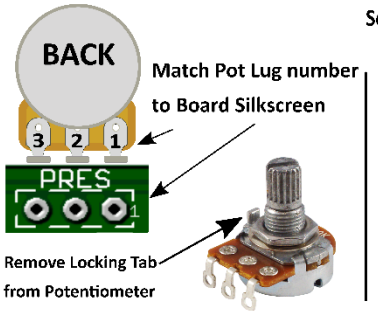


Mono Jack (T-S)

T = Tip
R = Ring
S = Sleeve

T = Tip
S = Sleeve

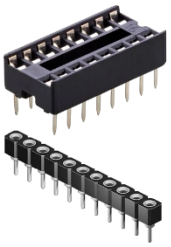
Multiple +9v and Ground Pads are convenient hookup points for additional circuits within the same enclosure. This also allows for diverse wiring schemes to suit indiviual needs.

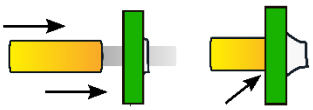


Match Pot Lug number to Board Silkscreen

Remove Locking Tab from Potentiometer

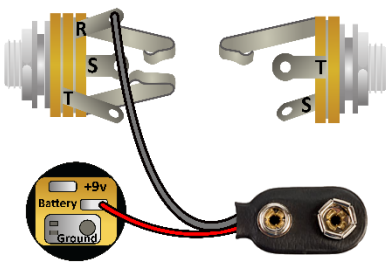
Sockets make troubleshooting easier





When soldering wire to a PCB push the protective PVC jacket flush with the board and pad.

Main Board IN/OUT Pads



Input/Output Jack Wiring

T = Tip | R = Ring | S = Sleeve

A Stereo Jack is only needed if using a Battery. Otherwise use a Mono Jack
Battery Strap RED wire is connected to Power Jack
Battery Strap Black wire is connected to RING (stereo jack)
If wiring an LED to our 3PDT Wiring Board then S4, S5 & S6 are not needed