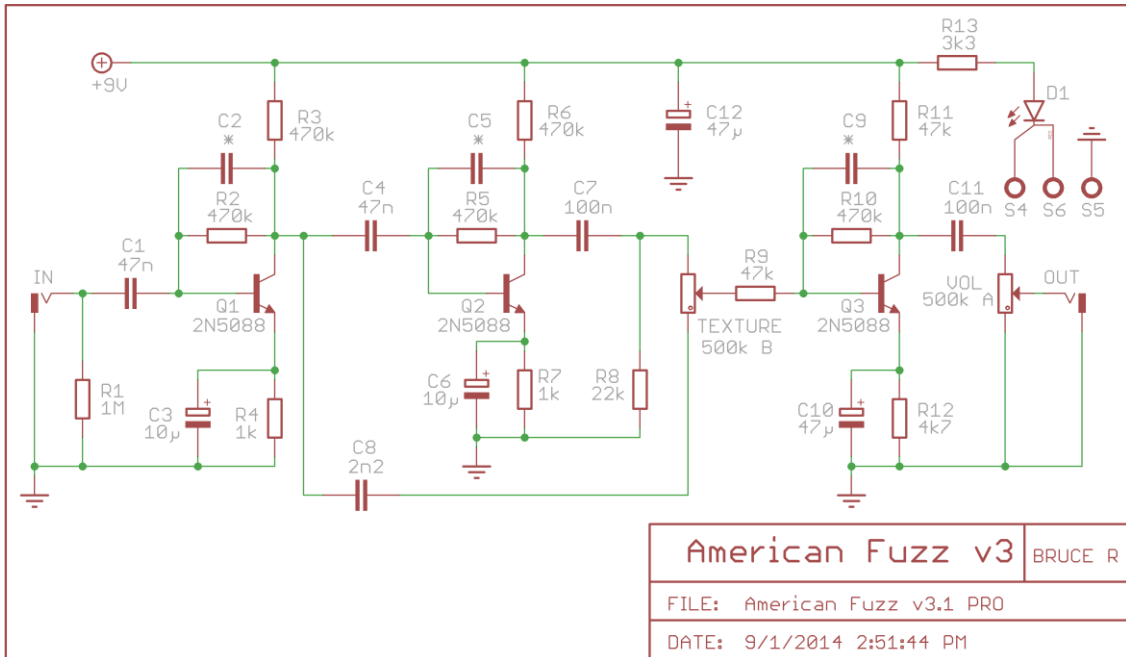
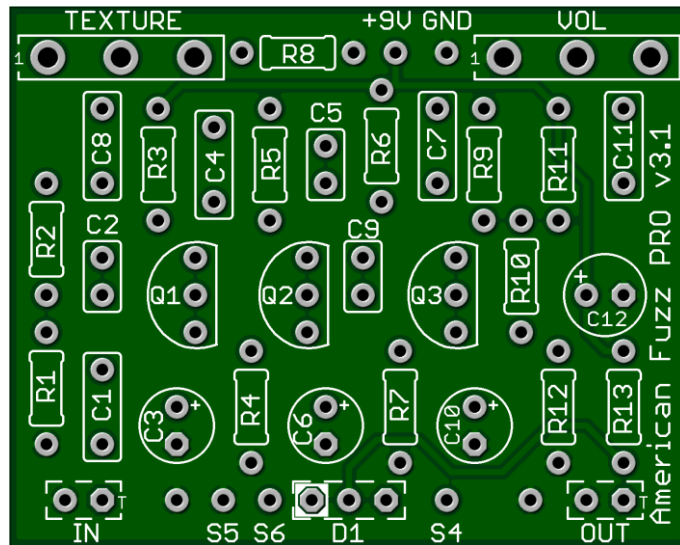


AMERICAN FUZZ PRO

Board Dimensions (W x H) 1.85" x 1.46" ca. 46.50 mm x 37.12 mm



Part	Value	Part	Value	Part	Value
R1	1M	R10	470k	C6	10µ
R2	470k	R11	47k	C7	100n
R3	470k	R12	4k7	C8	2n2
R4	1k	R13	3k3	C9	*See Text
R5	470k	C1	47n	C10	47µ
R6	470k	C2	*See Text	C11	100n
R7	1k	C3	10µ	C12	47µ
R8	22k	C4	47n	D1	BiColor CA LED
R9	47k	C5	*See Text	Q1-Q3	2N5088
				TEXTURE	B500k
				VOL	A500k

The original circuit uses 2N2222A transistors for Q1 – Q3. These were found to be quite noisy, so we've substituted these for 2N5088s – MPSA18s could also be used

C2, C5 and C9 only need to be added if there is a lot of noise or hiss at any of the transistor stages. Suggested values are 100pF – 220pF; larger values will reduce the high frequency content of the signal.

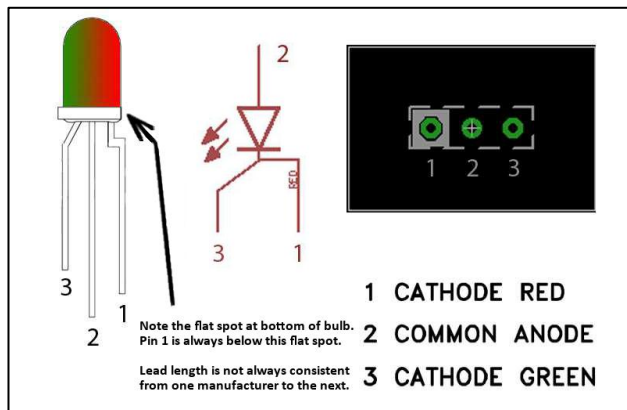
STATUS LED

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:

1st Color Cathode	Is on the "flat" side of the LED (see graphic); 90 degree bend in the lead
Common Anode	Middle lead
2nd Color Cathode	45 degree bend in the lead

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.



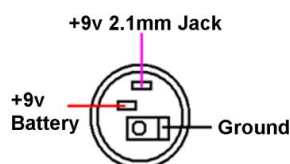
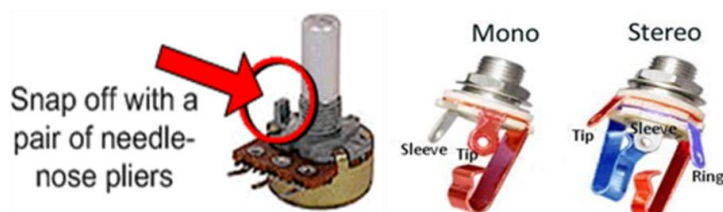
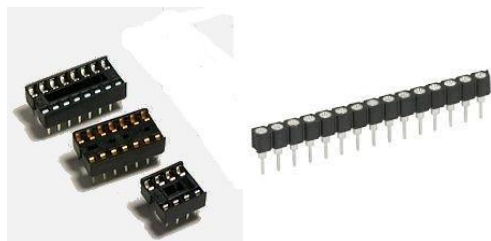
If you are using one of GuitarPCB's 3PDT Wiring Boards, pads S4, S5, S6 and D2 would be ignored and R13 would not be installed.

Other important notes:

- Socket your Transistors – You may wish to change them later and makes troubleshooting a lot easier.
- Share your finished pedal in the "[Show off your Finished Pedal](#)" section of the forum.
- R14 is the current limiting resistor. Brightness is a preference. 1k8 will yield a nice bright LED and the higher the resistance the dimmer the light. 3k or even 4.7k has been used. This is your choice.
- A [YouTube Demo](#) is available.

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.



Add-On Build Guides for all GuitarPCB Builds

[Soldering Tutorial on Youtube](#)

[Crash Course \[Basic\]](#) - Guide #1 for all things GuitarPCB.

[Crash Course \[Level 2\]](#) - Guide #2 for all things GuitarPCB.

[Tips, Tricks and Tutorials](#) - contains many innovative pedal building tips and ideas.

[Additional Details on LED and Footswitch Wiring](#)

*How to [Build a Combo Pedal Guide](#) by Playsforfun

Build Documents and Demos may be viewed in the [PCB Shop](#) without needing Free Membership.



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