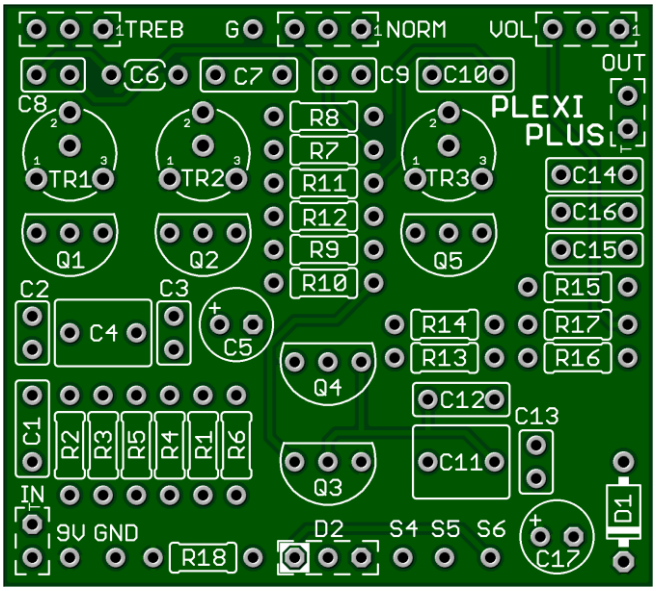
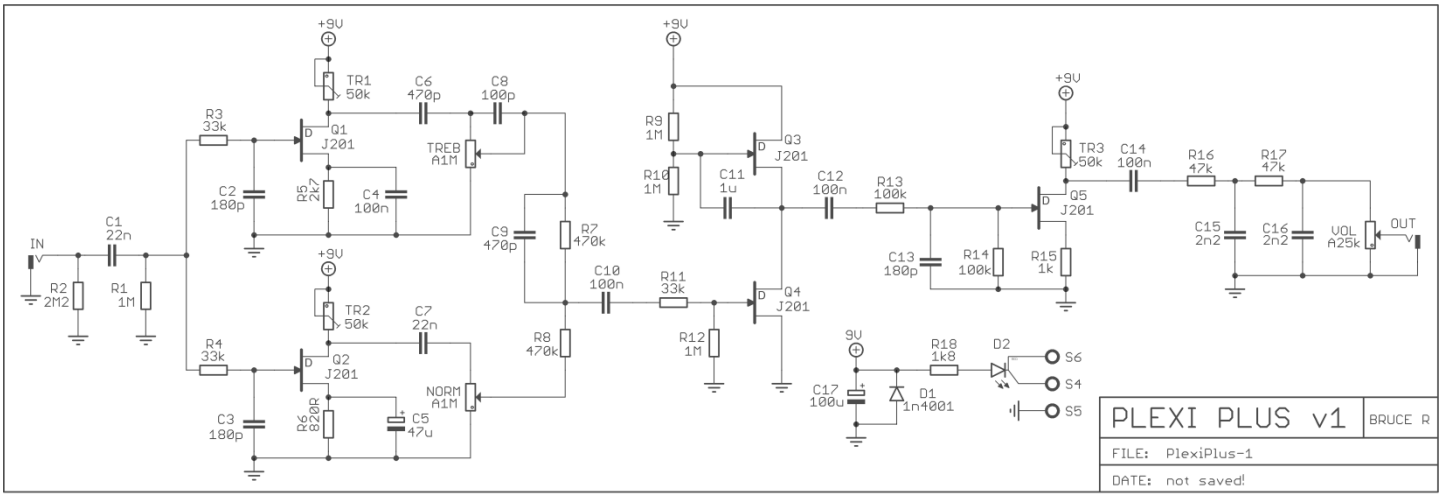
Plexi Plus

Board Dimensions (W x H) 1.96” x 1.76”





Part	Value
R1	1M
R2	2M2
R3	33k
R4	33k
R5	2k7
R6	820R
R7	470k
R8	470k
R9	1M

Part	Value
R10	1M
R11	33k
R12	1M
R13	100k
R14	100k
R15	1k
R16	47k
R17	47k
R18	1k8*

Part	Value
C1	22n
C2	180p
C3	180p
C4	100n
C5	47u
C6	470p
C7	22n
C8	100p
C9	470p

Part	Value
C10	100n
C11	1u
C12	100n
C13	180p
C14	100n
C15	2n2
C16	2n2
C17	100u

Part	Value
D1	1n4001
D2	Bi-Color CA LED
Q1 - Q5	J201
TR1	50k
TR2	50k
TR3	50k
NORM	A1M
TREB	A1M
VOL	*A50k

***While the original schematic calls for a 25k Volume we much prefer the A50k per the B.O.M. above.**

What makes the Plexi-Plus so exciting and unique compared to any other circuit available:

- It uses individual JFET gain stages to create the ultimate variety in a distortion pedal. No op-amps or clipping diodes are being used.
- It was common for Plexi Owners to use a patch cable to connect 2 of the inputs together.
- This is what Plexi-Plus recreates. It uses 2 JFET gain stages in parallel, one for the bright channel, and one that ties in the thunder of a full stack. Together you can come up with your own unique tones.
- Easily dial in Hendrix, Zeppelin, AC/DC & more. Even plug in a bass and it's **Bass Ready**.

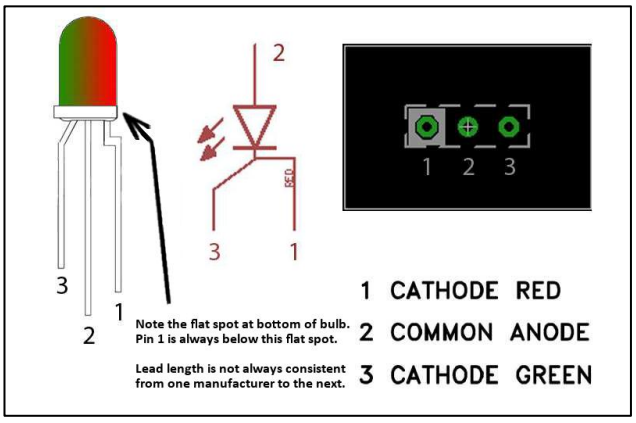
Important Bias Info: Important Bias Info: There are three (3) 50k trimmers (bias pots) used to bias Q1, Q2 and Q5. Using a DMM, set the voltage at the Drain leg of each transistor to roughly 5v using TR1/Q1, TR2/Q2 and TR3/Q5. *Do not try to set these by ear, u*se a Digital Multimeter. DMM's are affordable and every DIY pedal hobbyist needs one. To know which is the Drain leg please Google the Datasheet for a J201.

***Do not us alternate values. Please use all the recommended values for best results.**

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:

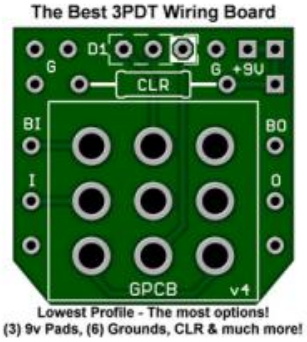
1st Color Cathode	Is on the "flat" side of the LED (see graphic); 90 degree bend in the lead
Common Anode	Middle lead
2nd Color Cathode	45 degree bend in the lead



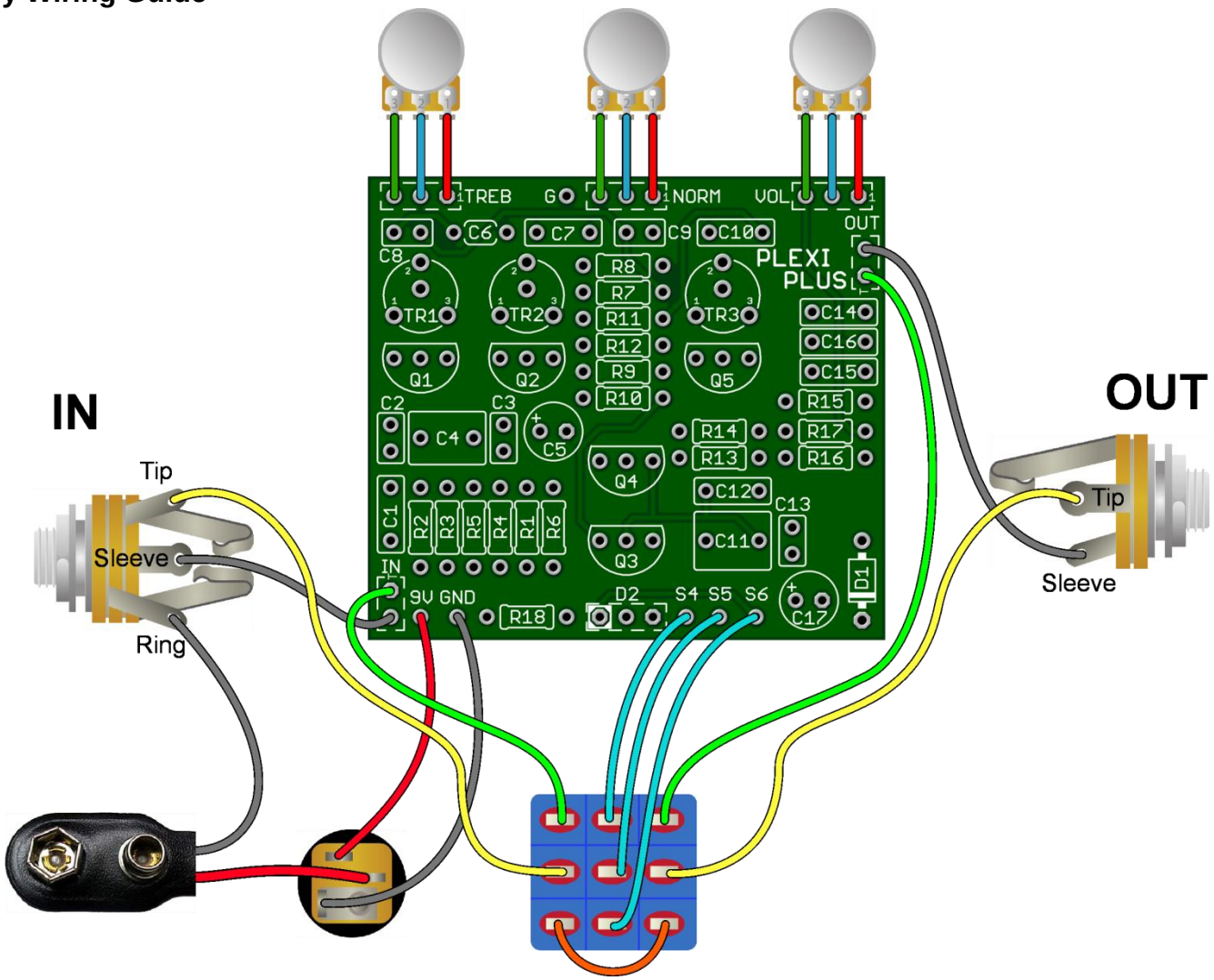
The lead 1 pad on the circuit board is marked with a white box.

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 handy [3PDT wiring boards], pads S4, S5, S6 and D2 would be ignored and R18 would not be installed. See wiring guide below for reference.



Easy Wiring Guide



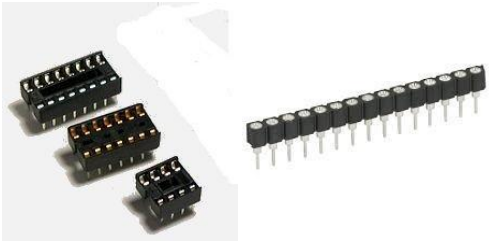
Other important notes:

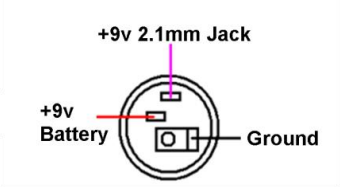
- Socket your Transistors – You may wish to change them later and makes troubleshooting a lot easier.
- Share your finished pedal in the "Show off your Finished Pedal" section of the forum.
- R18 is the current limiting resistor. Brightness is a preference. 1k8 will yield a very bright LED and the higher the resistance the dimmer the light. 3k or even 4.7k has been used. This is your choice.
- A YouTube Demo is available.
- Modders check out our **After Blaster** for an extra stage of Hot Rod modding fun.
- Another Modders delight is the **Tone TwEQ** circuit. Create your own unique circuit.

Highly recommended: **J201 (5) Pack** **50k Bias Trimmer**

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.