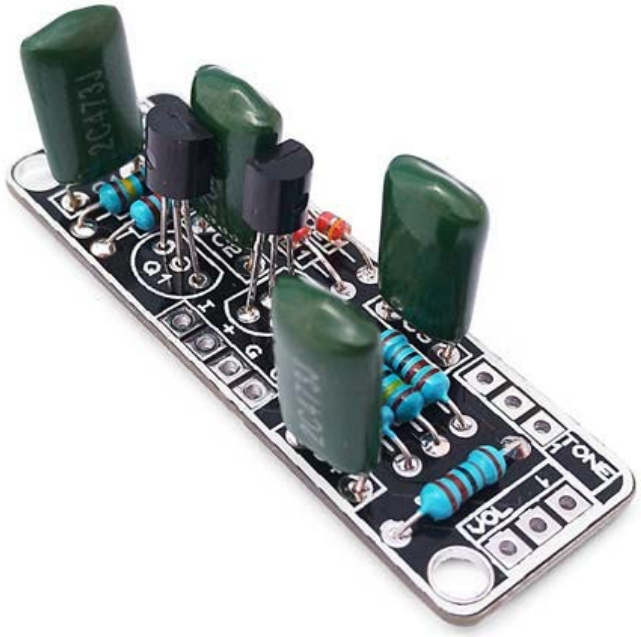
Astrotone Fuzz Kit
Building Manual



Effect Pedal Kits: Astrotone Fuzz

This pedal is identical to the Sam Ash Fuzz, and is a very rare (and expensive!) fuzz effect pedal. Now, with the Astrotone Fuzz Kit you can build your own one! This fuzz pedal is all silicon: forget about maintenance or temperature changes affecting your tone. The Astrotone Fuzz allows you to mimic almost any fuzz tones you can think of!

The Tone knob sets the form of the distortion and allows to change the tone color of the output. The Attack knob sets the amount of distortion produced, while keeping the color. Dial it to the maximum for a clear and distorted signal, and turn it to a lower setting to soften the sound. The Astrotone Fuzz is really sensitive to the input volume, so you can drastically change the sound just by rolling off your instrument's volume knob.

BOM (1/2)

Resistors (6)			
2	R1, R3	1M	
1	R2	22k	
1	R4	470k	
2	R5, R6	1.8k	

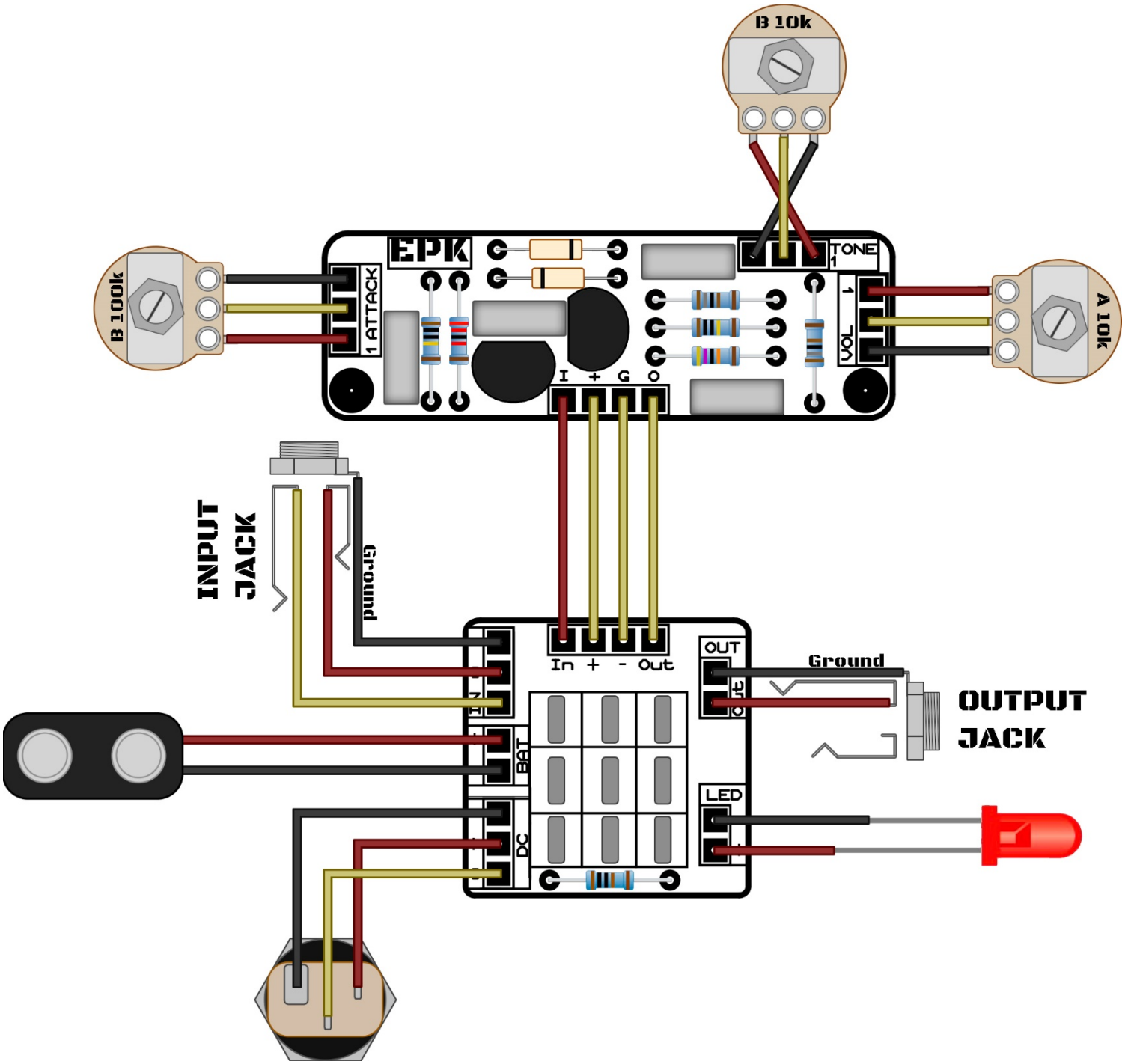
Capacitors (4)		
4	C1, C2, C3, C4	47n

BOM (2/2)

Diodes, Transistors and ICs		
1	Q1	PN3565
1	Q2	2N3904
2	D1, D2	1N914

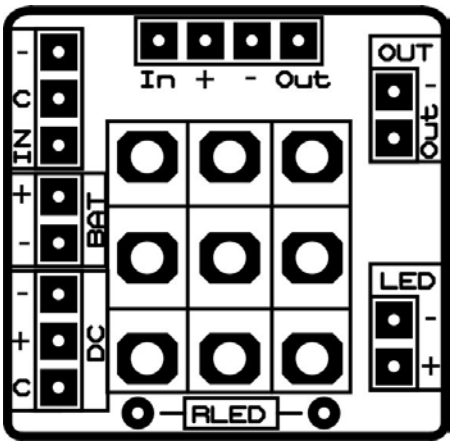
Generic Parts and Potentiometers		
1	Battery clip	
1	DC Jack	
1	RLED	1k LED resistor
1	LED Bezel	
1	3PDT	
2	IN, OUT	6.35mm Jacks
1	10k Linear (B) Potentiometer	Tone
1	10k Logarithmic (A) Potentiometer	Vol
1	100k Linear (B) Potentiometer	Attack

Component Placement

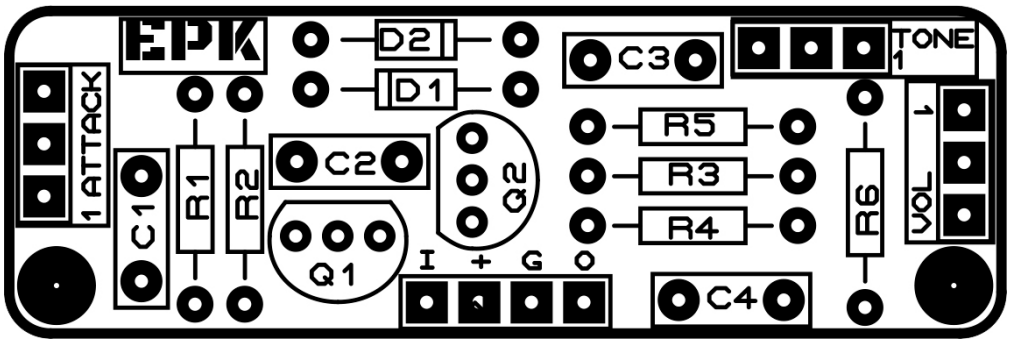


Board Layouts

3PDT PCB

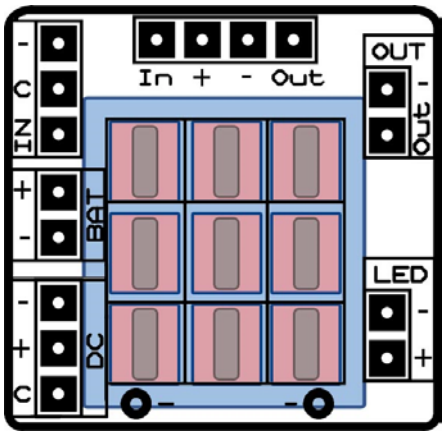


Effect PCB



Building Tips

1- Pay attention to the **orientation of the 3PDT**! In the following picture you can see how the 3PDT pins should be positioned (inserting the pins in the holes can be a bit tight to avoid movement while soldering):



2- For a proper soldering you just have to apply the **right amount of solder wire**. A right solder joint should have a concave shape around the joint and look like this:

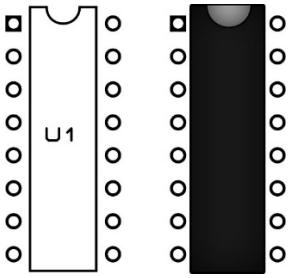
3- Don't apply too much heat! When soldering, the time you hold the solder iron against the joint should be **as short as posible** to avoid damaging any part (a few seconds should be enough). If you can't get a solder joint right, **let it cool** a bit before trying again.

4- If having troubles with the building, checking the schematic in the last page will help you find **where the audio signal stops**. When you find the spot, check out that **everything around that joint is ok** (components placed at their right place, solder joints…).

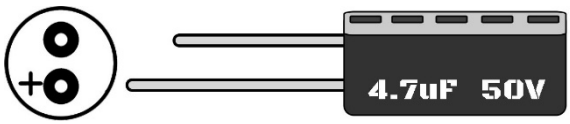
Building Tips

5- Pay attention to the **parts that have a polarity** and make sure they are connected as in the component placement picture:

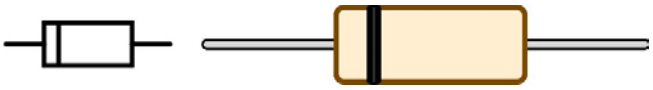
- **ICs** (they have a small dot or indication that must fit the indication in the board



- **Electrolytic capacitors** (longer pin is connected to the "+" hole):



- **Diodes** (check for the mark and make it fit with the one in the PCB):

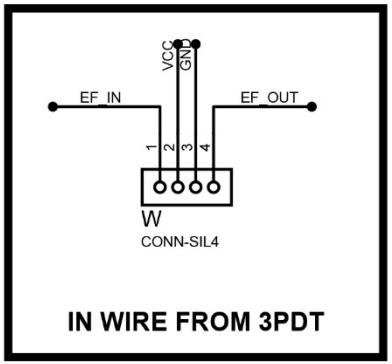


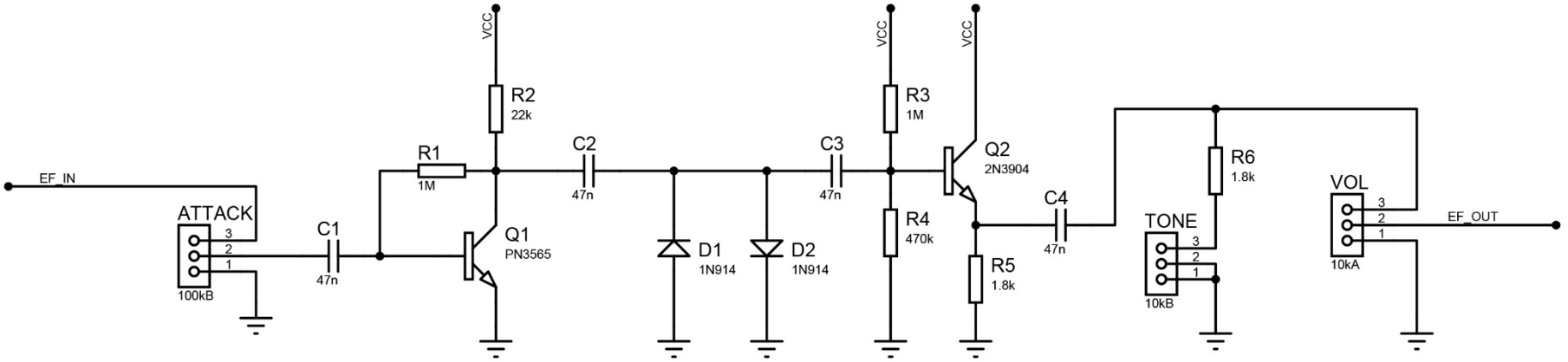
- **Leds** (longer pin is connected to the "+" hole)

- **Transistors** (inserted to fit the drawing in the PCB)

To avoid any issue, check the latest building manual. Use the pictures only as a reference! Colors/shapes can change slightly, always check the part polarity, resistor values, potentiometer placement… before soldering.

Schematic


VCC
GND
EF_IN
EF_OUT
1
2
3
4
W
CONN-SIL4
IN WIRE FROM 3PDT


EF_IN
ATTACK
3
2
1
100kB
C1
47n
R1
1M
VCC
R2
22k
Q1
PN3565
C2
47n
D1
1N914
D2
1N914
C3
47n
VCC
R3
1M
R4
470k
VCC
Q2
2N3904
R5
1.8k
C4
47n
R6
1.8k
TONE
3
2
1
10kB
VOL
3
2
1
10kA
EF_OUT