

# Puzzle Sounds

## GREEN RINGER



# **GREEN RINGER**

**We hope you enjoy your new GREEN RINGER! In this manual, you will find documentation and guidelines helpful to put it together.**

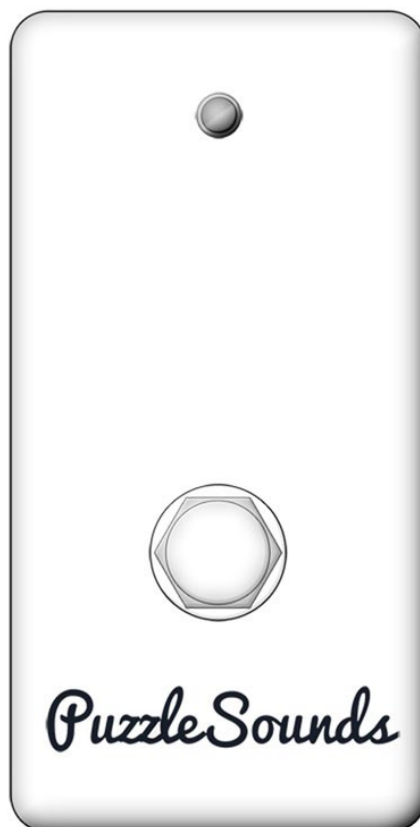
Here we have put together a few links that detail some of the aspects explained in this manual and that we think you can find helpful:

[Kit & PuzzleKit general manual](#)

[Reading resistor and capacitor values](#)

Also, in our blog you can find multiple articles regarding tips for soldering, more in-depth posts about resistors and capacitors...










[Check it out!](#)



# GREEN RINGER

## Bill Of Materials

### Resistors (13)

1	R1	1.5M	
1	R2	560k	
1	R3	160k	
1	R4	18k	
1	R5	6.2k	
3	R6, R9, R12	10k	
2	R7, R8	68k	
2	R10, R11	22k	
1	R13	47k	

### Capacitors (5)

3	C1, C2, C3	47n	
1	C4	100n	
1	C5	100u (electrolytic)	

### Transistors (3)

2	Q1, Q2	2N5088
1	Q3	2N3906

### Diodes (2)

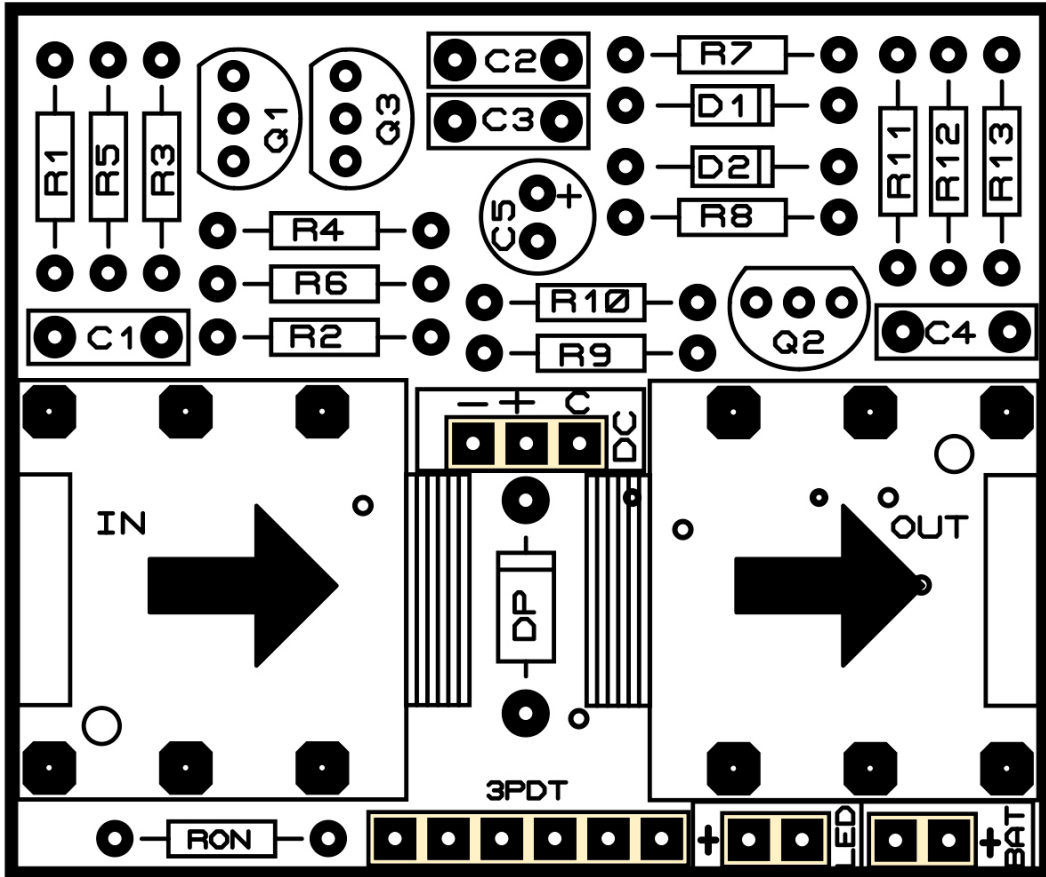
2	D1, D2	1N914/1N4148
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### Other (2)

1	DP	1N4007	
1	RON	1k	

# GREEN RINGER

## Part Placement

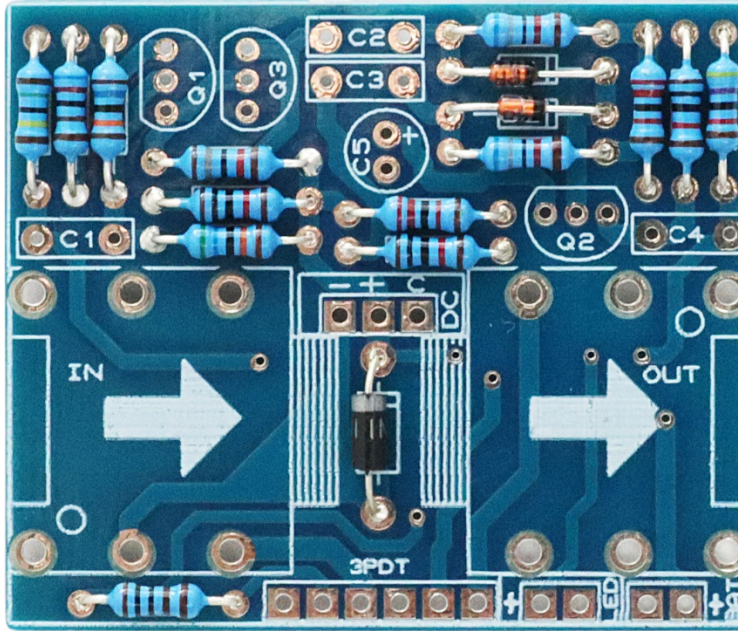


# GREEN RINGER

## STEP BY STEP GUIDE












## STEP 1 - Resistors and diodes



Place the resistors and diodes. If you have troubles reading the values, check out our ["Reading Part Values"](#) tutorial.

### Resistors (13)

1	R1	1.5M	
1	R2	560k	
1	R3	160k	
1	R4	18k	
1	R5	6.2k	
3	R6, R9, R12	10k	
2	R7, R8	68k	
2	R10, R11	22k	
1	R13	47k	

### Diodes (2)

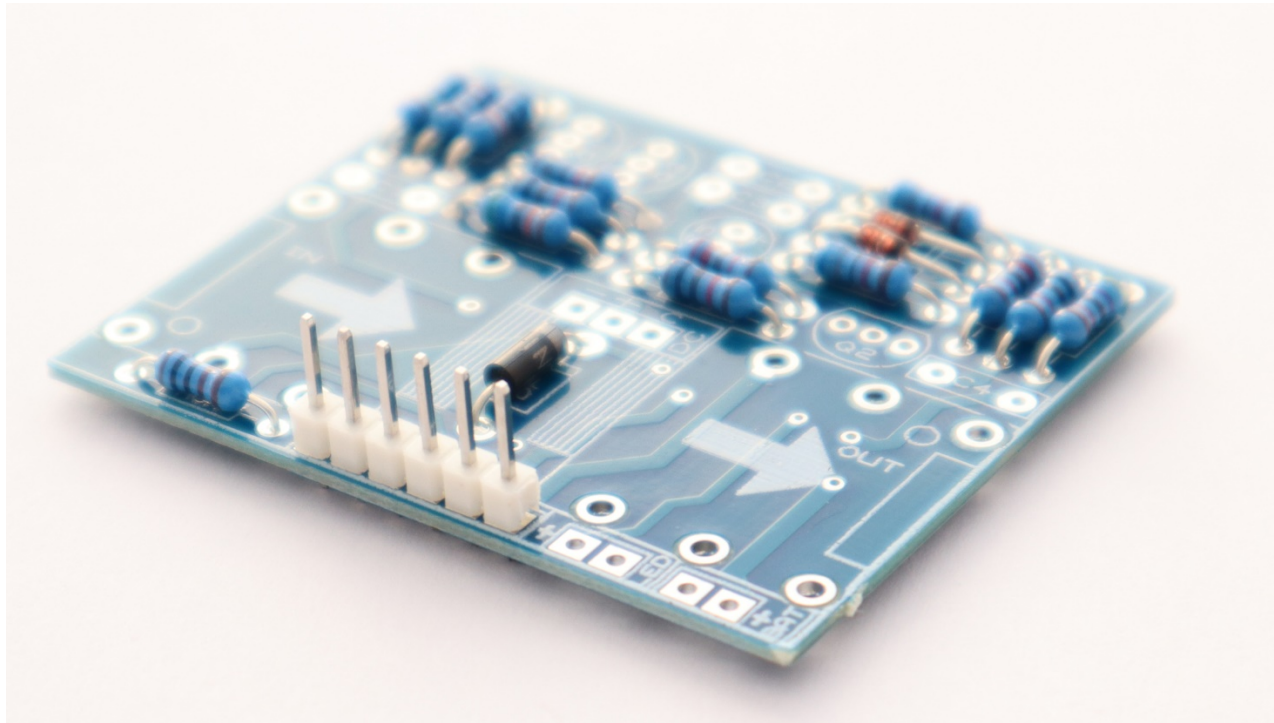
2	D1, D2	1N914/1N4148
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### Other (2)

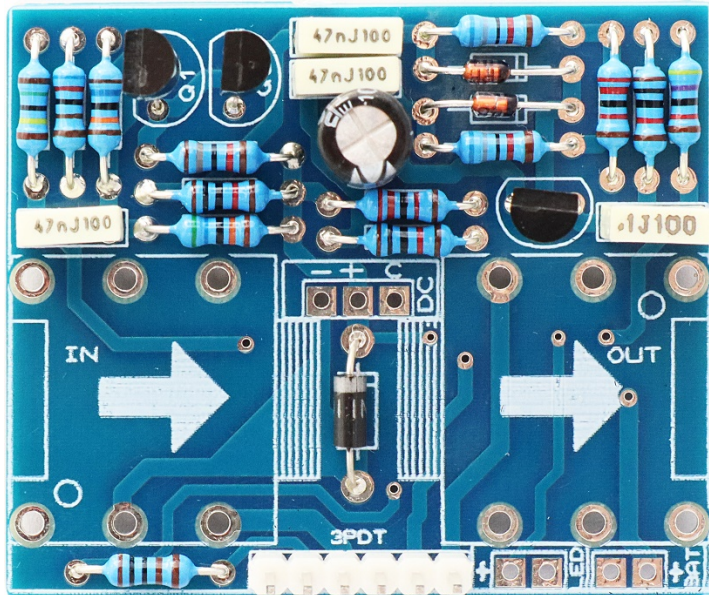
1	DP	1N4007	
1	RON	1k	

## STEP 2 - Pin header

Then, connect the 6 pin header:



## STEP 3 - Capacitors and Transistors



Solder the capacitors and transistors. If you have troubles reading the values, check out our [“Reading Part Values”](#) tutorial. Pay attention to the orientation, as well as to the polarity for electrolytic capacitors.

### Capacitors (5)

3	C1, C2, C3	47n
1	C4	100n
1	C5	100u (electrolytic)

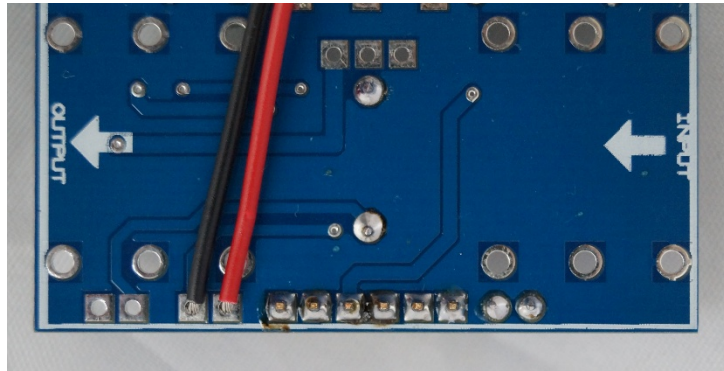
### Transistors (3)

2	Q1, Q2	2N5088
1	Q3	2N3906

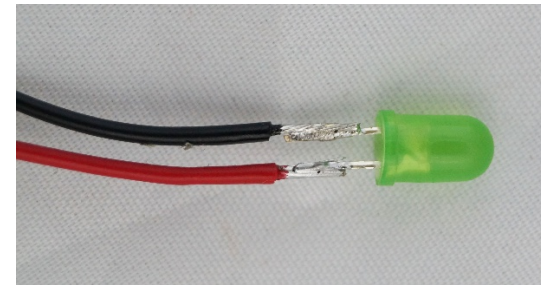


## STEP 4 - LED and Battery Clip

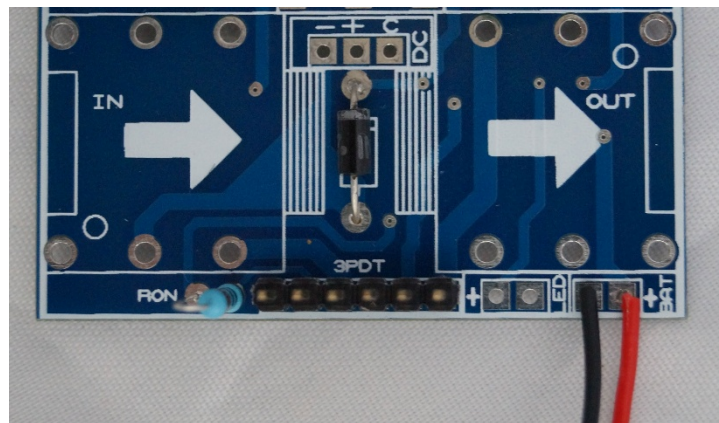
Solder two wires to the LED connection (red to the “+” sign).



Then, solder them to the LED (the red wire is connected to the longer pin).

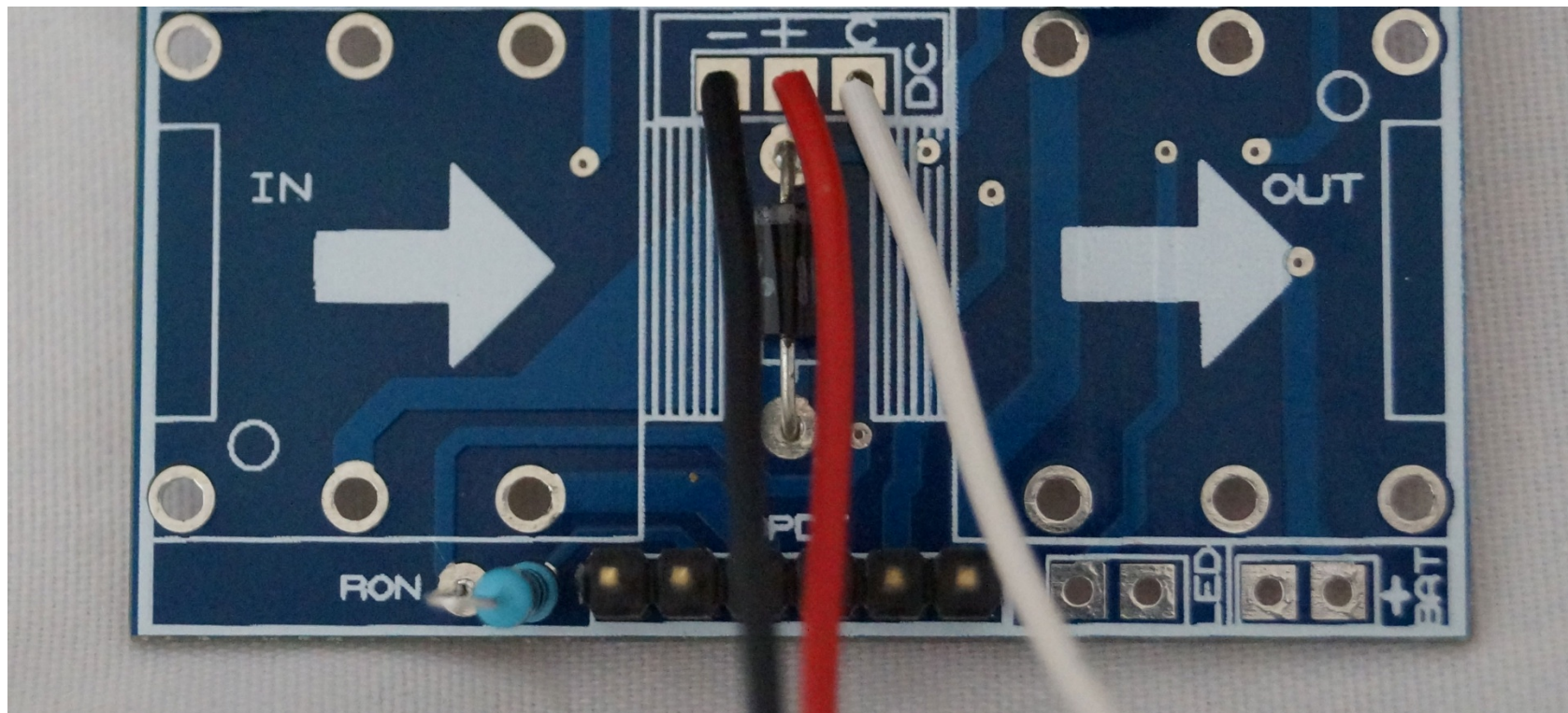


Solder the battery clip, connecting the red wire to the “+” sign:



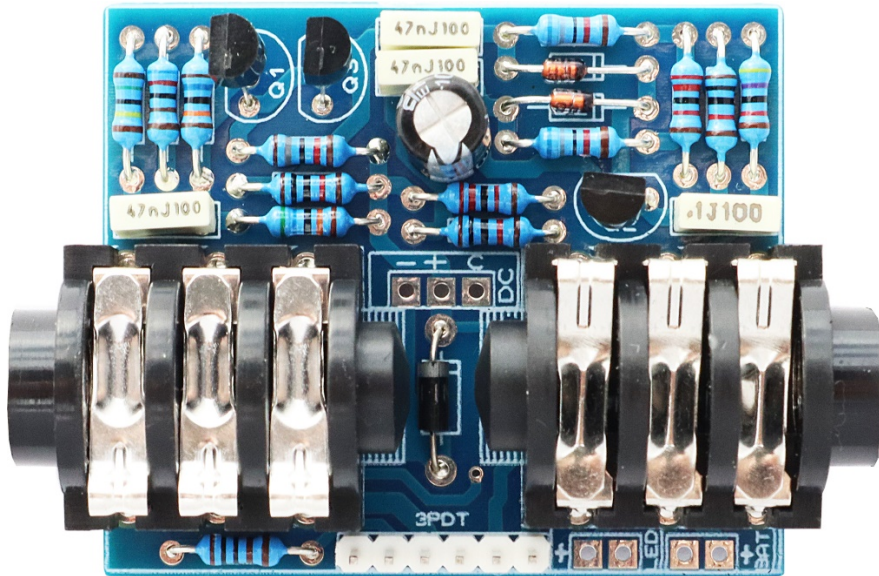
## **STEP 5 - DC Power Jack wires**

Solder three wires (about 5cm each) to the DC connection as shown (don't solder anything to the other end yet!):

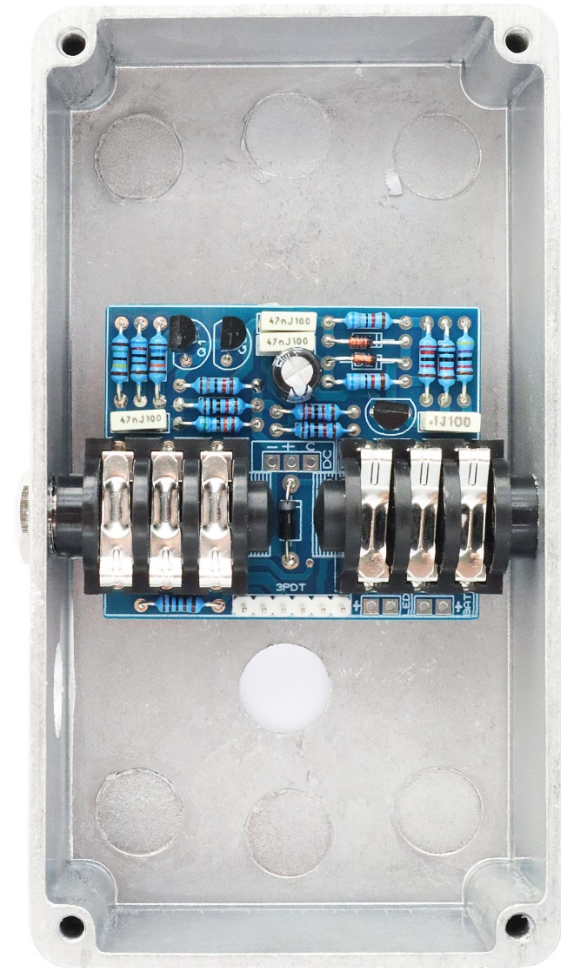


## STEP 6 – Audio Jacks

Now, solder the audio jacks to the board (DC, battery and led wires are not present to make it clearer):



Then place the board inside the enclosure:

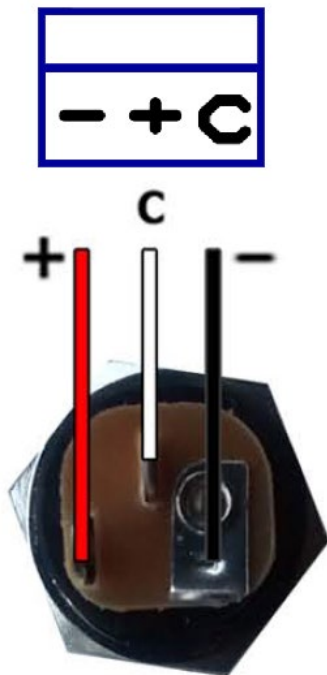


## **STEP 7 – DC Power Jack**

First of all, insert the DC jack in the enclosure and tighten the nut:



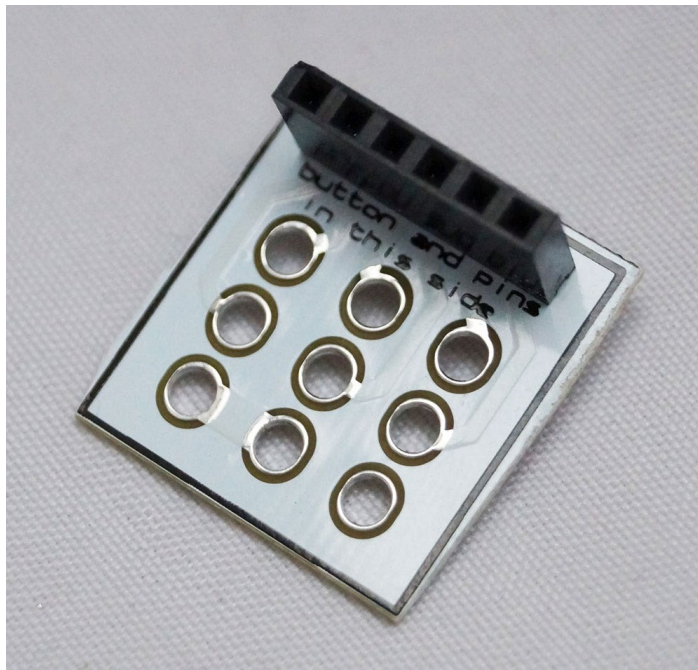
Then, solder the three wires from the DC connector in the board to the DC jack as follows:



## STEP 8 - 3PDT

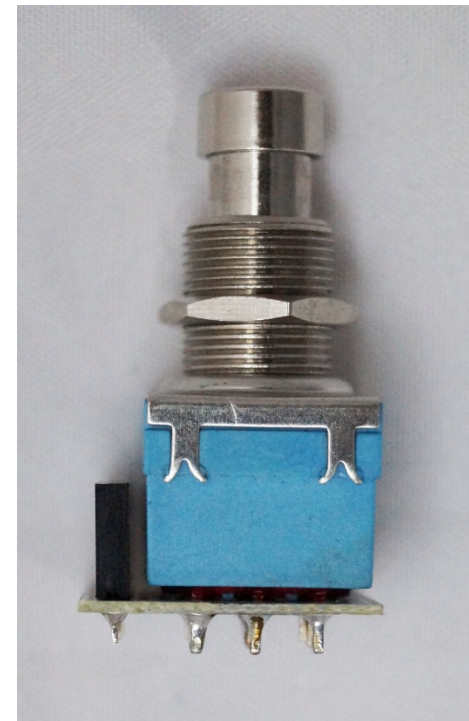
### A - Solder the pin to the adapter

Pay attention, the pins and the 3PDT must be soldered to the same side of the PCB adapter (the one labeled "buttons and 3PDT on this side").

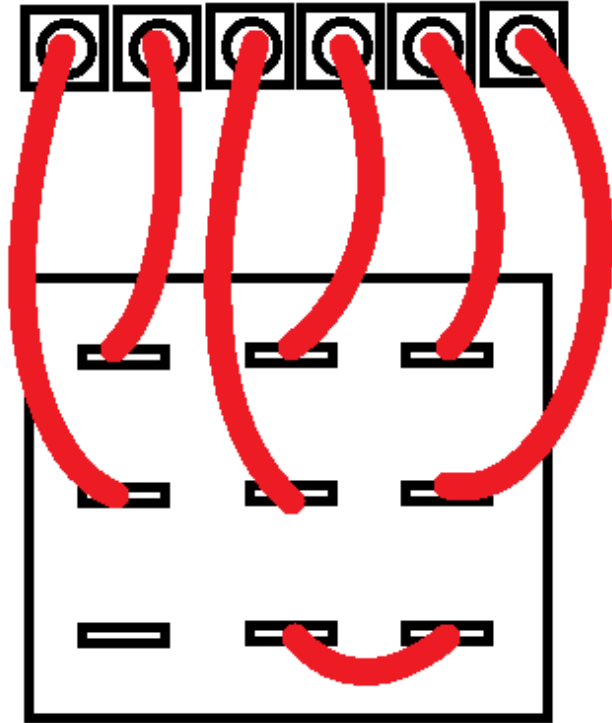


### B - Solder the 3PDT

Now solder the 3PDT to the PCB and remove all the nuts but one, that should be set at a middle height:

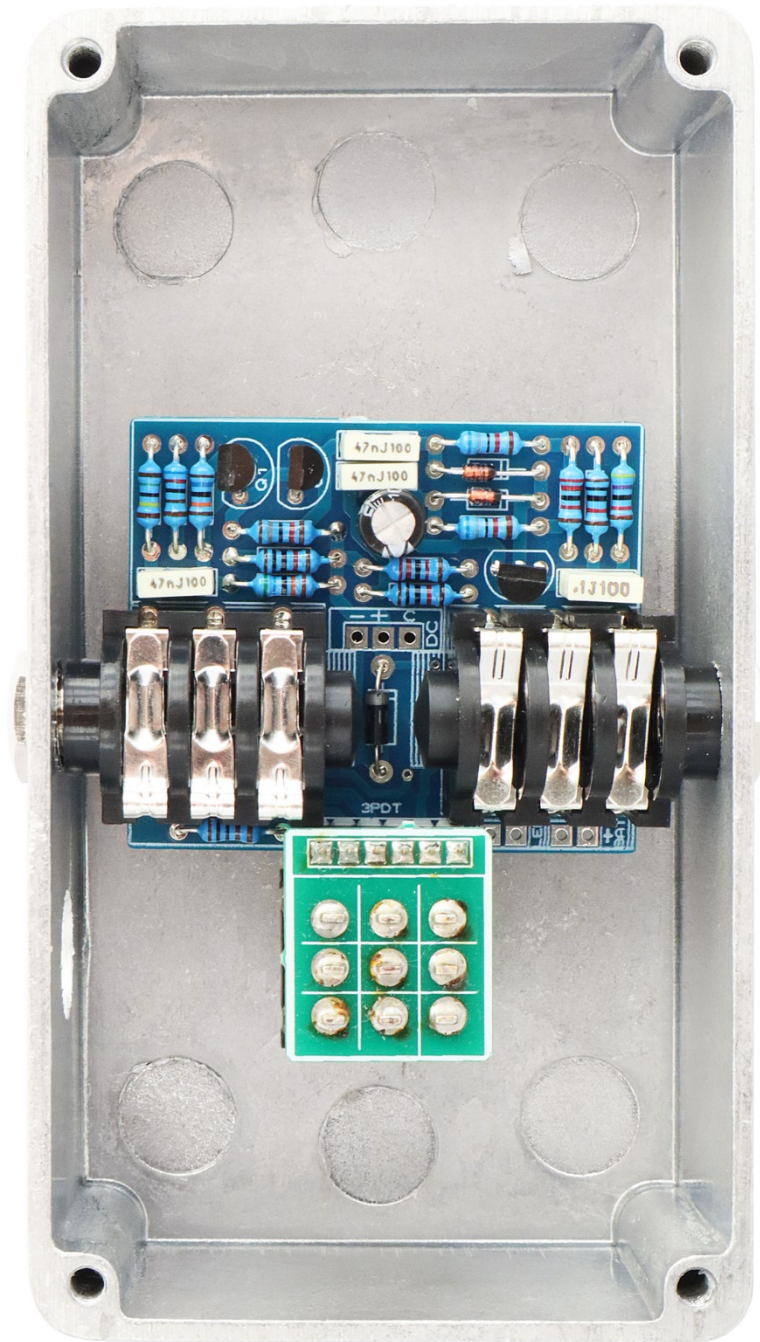


## C – Solder the 3PDT directly to the board (optional)



If you prefer to solder the 3PDT directly to the board, you can wire it as shown in the schematic. We recommend to use the **provided 3PDT PCB adapter** to make the soldering easier.

## **STEP 9 - Connect the 3PDT**



## **STEP 10 - Your pedal is finished!**

By now you should have a fully functional effect pedal, we hope you enjoy it!