# BricoTahe Octave Kit
Building Manual
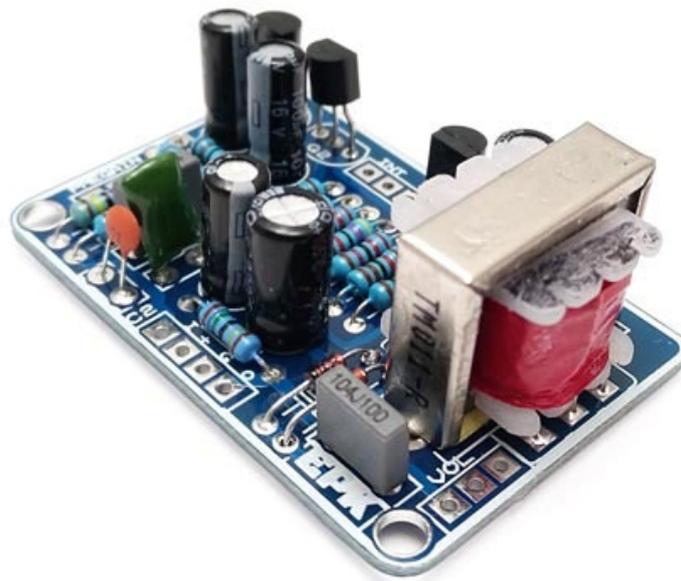
Effect Pedal Kits: BricoTahe Octave

Looking for this distinctive octave sound with some fuzz added to it à-la Jimi Hendrix? Then the BricoTahe Octave is the perfect octave pedal for you! This pedal, based on the original Tycobrahe Octavia ™, uses a signal transformer to create an octave up the one that's being played and adding it to the sound on one hand, and produces some rich and fat fuzz tones on the other. And the best part: you can mix the octave and the fuzz together as you want!

The amount of octave is set with the Intensity potentiometer, going from just your original sound to a clear and distinct upper octave added to the sound. With the Pre knob allows you to adjust how much of the input signal is being fed to the circuit. The more signal gets into the circuit, the higher the gain will be: set it to low levels if you only want to get a clear and clean octave, and crank it up to set some crazy fuzz tones!

BOM (1/2)

	Resistors (12)		
1	R1	4.7M	
1	R2	680k	
1	R3	820k	
1	R4	180k	
1	R5	220k	
1	R6	220	
1	R7	1k	
1	R8	47k	
1	R9	22k	
1	R10	470	
1	R11	1.2k	
1	R12	1.5M	

	Capacitors (9)	
2	C1, C9	100n
1	C2	150p (ceramic)
2	C3, C8	33u (electrolytic)
2	C4, C6	100u (electrolytic)
1	C5	1n
1	C7	220u (electrolytic)

BOM (2/2)

Diodes, Transistors and ICs				Generic Parts and Potentiometers		
1	Q1	2N5087		1	Battery clip	
2	Q2, Q3	2N5088		1	DC Jack	
2	D1, D2	1N4148		1	RLED	1k LED resistor
1	X1	Transformer		1	LED Bezel	
				1	3PDT	
				2	IN, OUT	6.35mm Jacks
				1	1k Linear (B) Potentiometer	Int
				1	500k Logarithmic (A) Potentiometer	Vol
				1	50k Linear (B) Potentiometer	Pregain

Component Placement

Board Layouts

3PDT PCB

IN + - Out
OUT -
IN
C
IN
+
BAT
-
DC
+
C
LED
-
+
RLED

Effect PCB

Q1
Q2
INT
Q3
C8
+
C3
+
C4
+
SEC
PRM
R7 R5 R6 R8 R9 R11 R10
R4
R3
X1
PREGAIN
R1 R2 C1
C5
C6
+
C7
+
Effect
Pedal
Kits
D1 D2
VOL
R12
C2
I + G O
C9
EPK
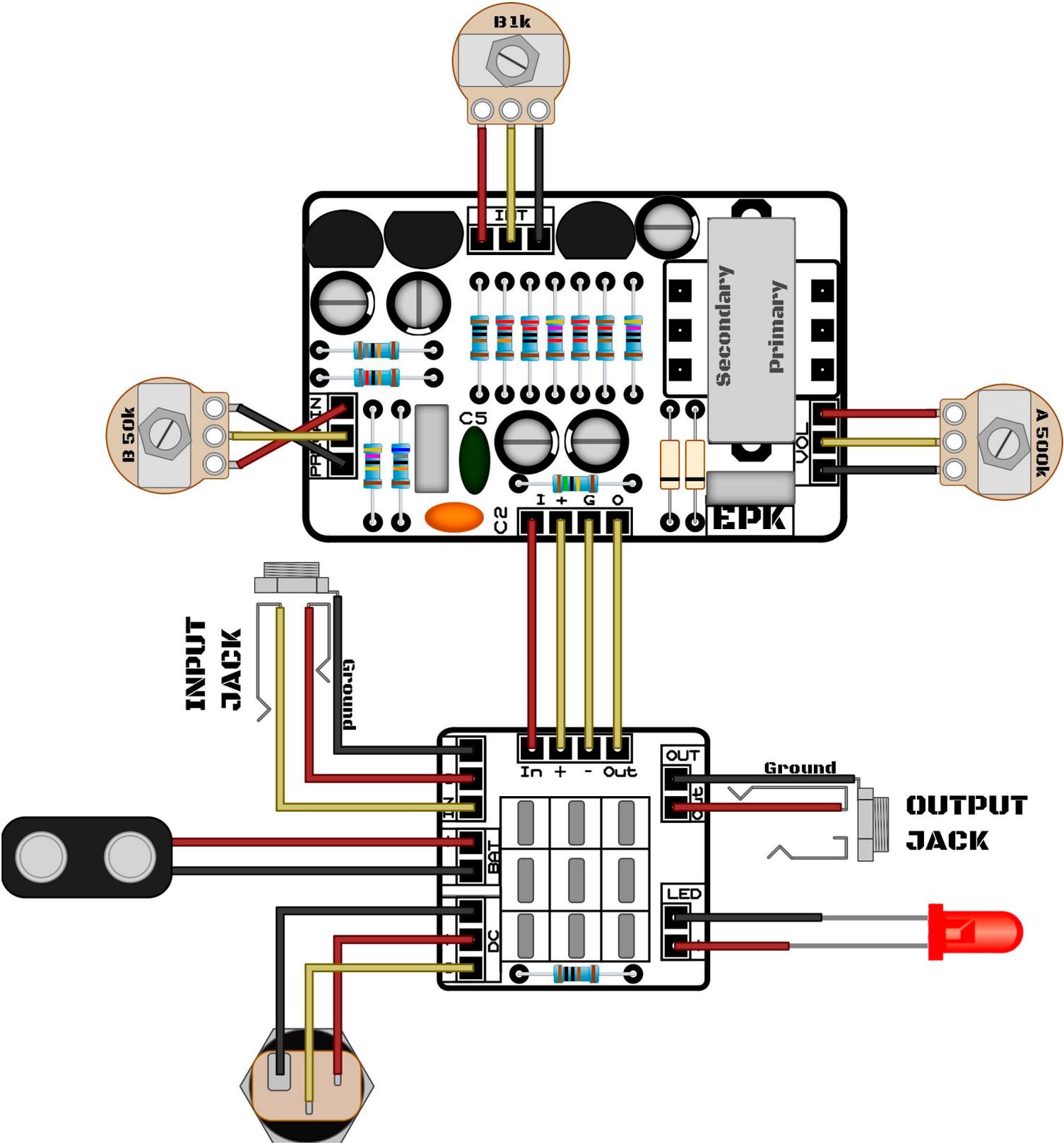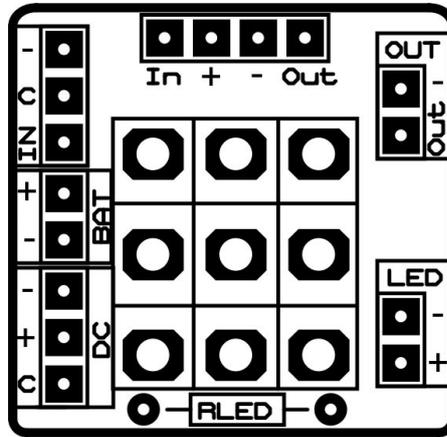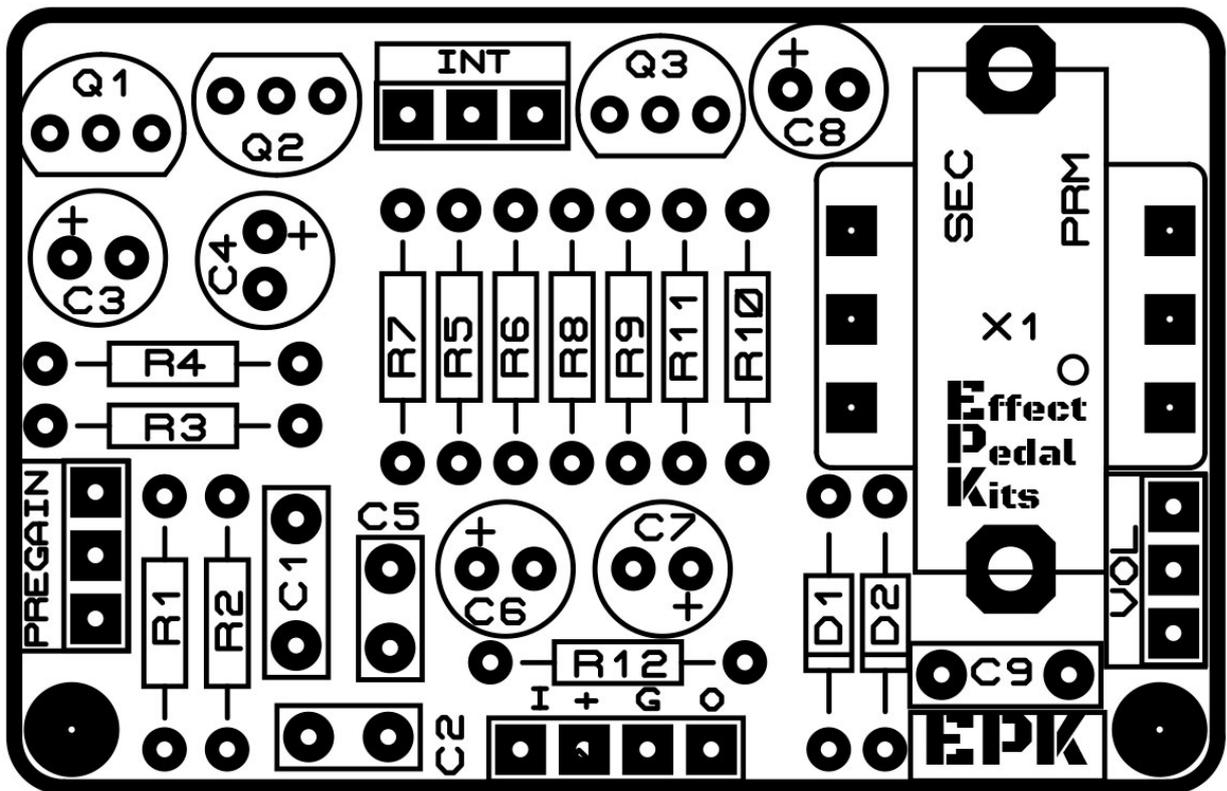
Building Tips

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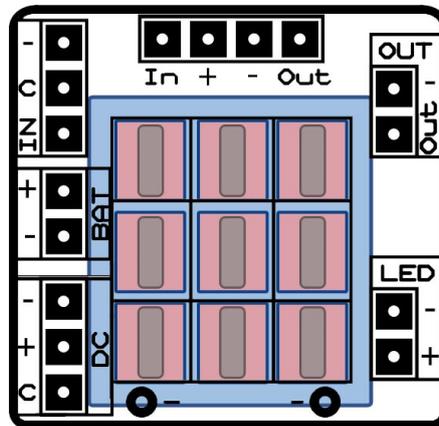
2- For a proper soldering you just have to apply the **right amount of solder wire**. A right solder joint should have a concave shape around the joint and look like this:


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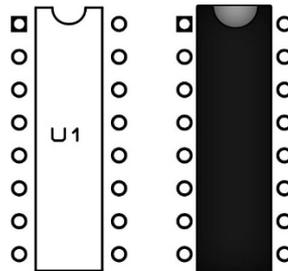
- **Electrolytic capacitors** (longer pin is connected to the "+" hole):

- **Diodes** (check for the mark and make it fit with the one in the PCB):
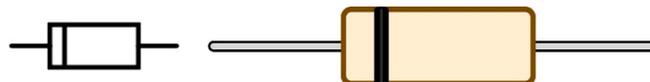
- **Leds** (longer pin is connected to the "+" hole)

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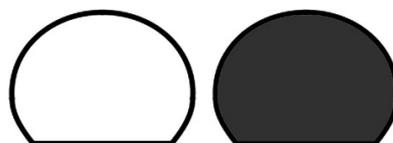
Building Tips

6- With the kit we include plastic PCB supports with an adhesive bottom. You can use them to anchor the PCB to your enclosure for a better stability. Just insert the PCB support tip into the 3.5mm holes and remove the adhesive protective film.
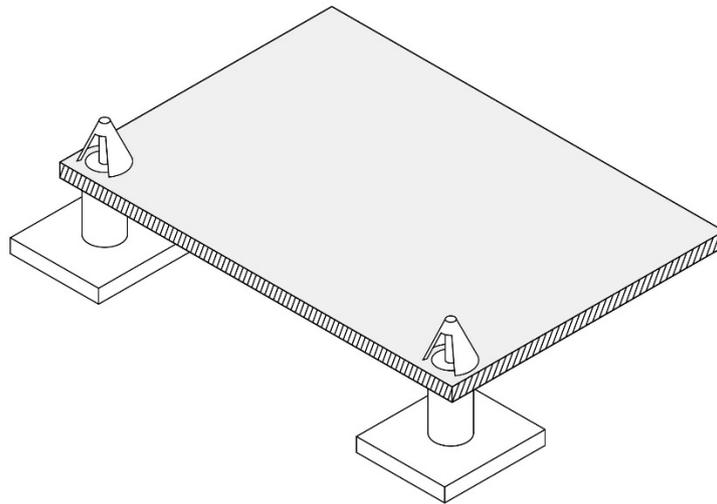
To avoid any issue always check the latest building manual. Use the pictures only as a reference! Colors/shapes of wires, PCB or parts can change slightly, this doesn't affect their functionality in any way.

Always double check part polarity, resistor and capacitor values, potentiometer placement, IC orientation… before soldering.

Schematic