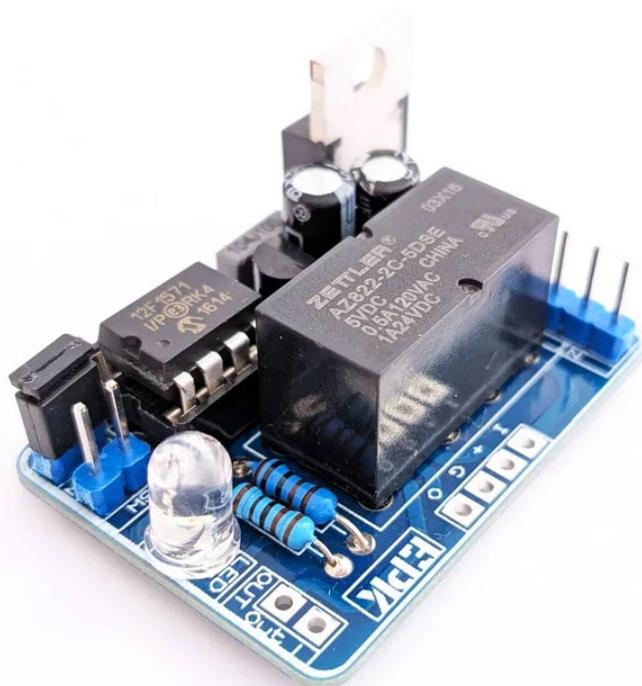


Silent Switch True Bypass Building Manual



Effect Pedal Kits: Silent Switch Board

This compact board is a direct replacement for a standard mechanical 3PDT switch and is compatible with all our kits and PCBs. Instead of a mechanical switch, the **Silent Switch** uses a processor-controlled relay, offering **silent switching**, greatly **reduced wear**, and **near-zero resistance**, while keeping the **True Bypass** sound.

The **Silent Switch** board also features **automatic power disconnection** when the input jack is unplugged, preventing unnecessary power drain. An on-board jumper allows you to select between two operating modes: **Standard** and **Hold**.

- **Standard mode** (jumper off) behaves like a traditional 3PDT: one press turns the effect on, the next turns it off—without pops or mechanical noise.
- **Hold mode** (jumper on) works the same for short presses, but holding the switch temporarily engages the effect for as long as it's pressed. This is ideal for momentary use, such as engaging an overdrive for just a few bars.

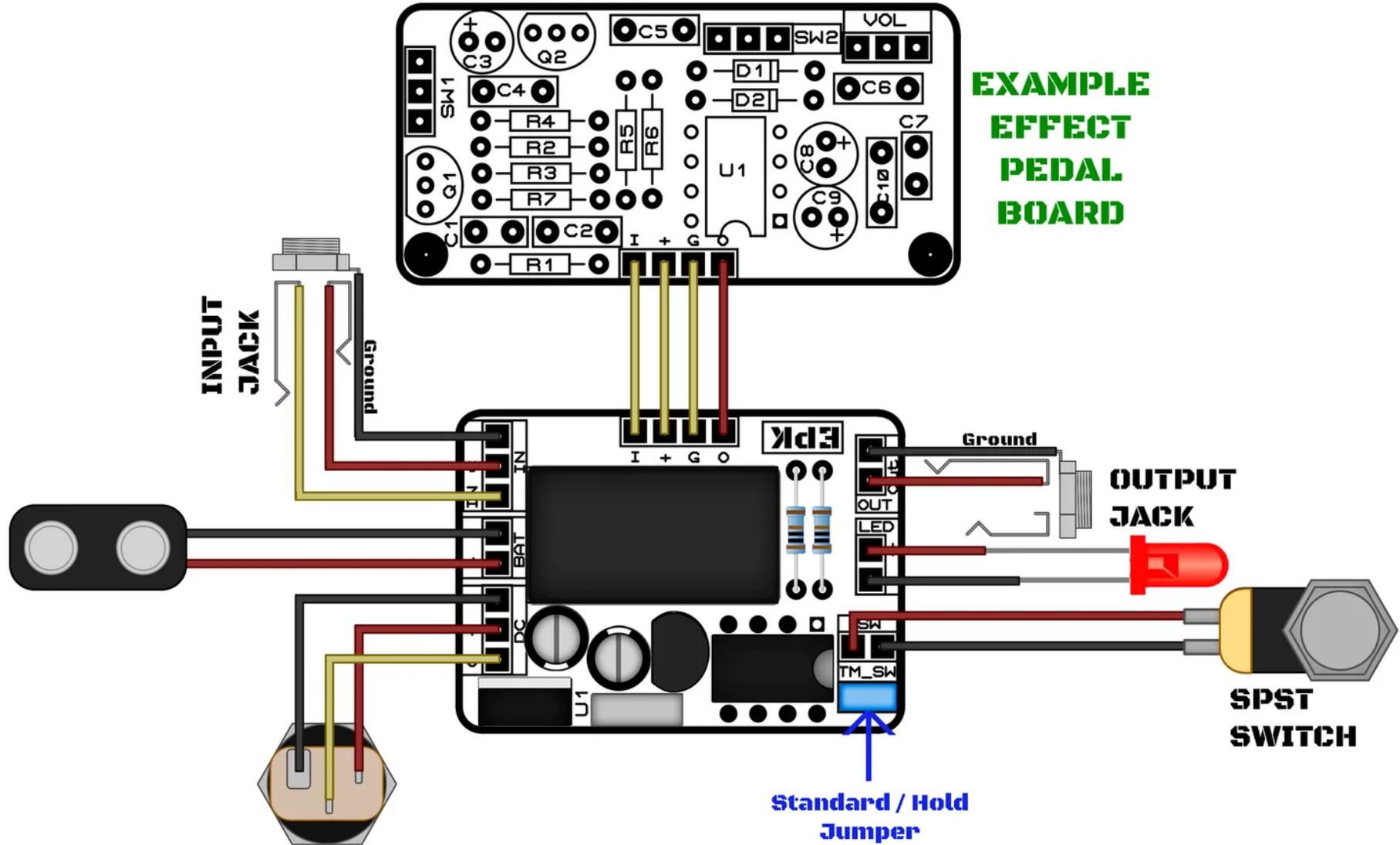
BOM (1/2)

Resistors (2)				Capacitors (3)		
2	R1, R2	1k		1	C1	47u (electrolytic)
				1	C2	10u (electrolytic)
				1	C3	100n

BOM (2/2)

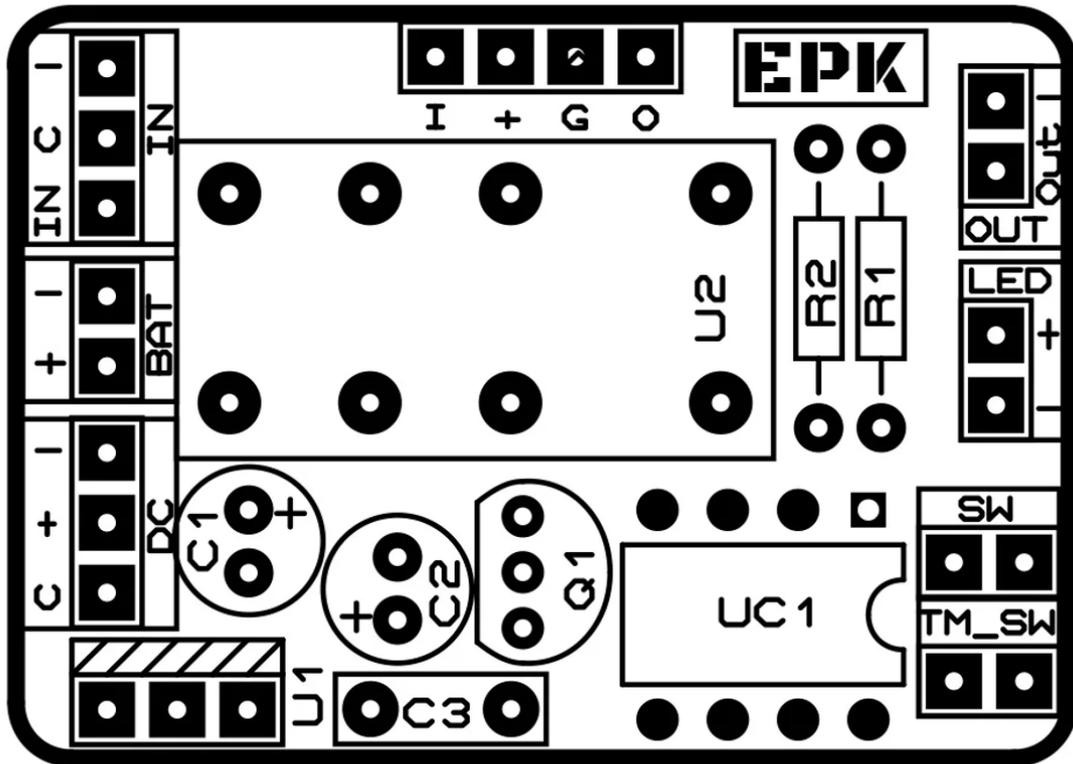
Diodes, Transistors and ICs			Generic Parts and Potentiometers		
1	U1	LM7805	1	Battery clip	
1	U2	Relay	1	DC Jack	
			1	RLED	1k LED resistor
			2	IN, OUT	6.35mm Jacks
			1	Jumper 2 pins + 2 pin header	
			1	SPST Momentary Switch	

Component Placement



Board Layouts

Silent Switch PCB



Building Tips

- 1- 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:

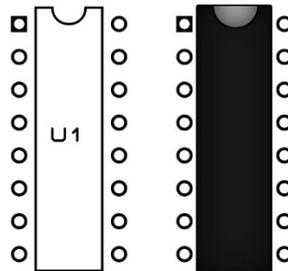


- 2- Don't apply too much heat! When soldering, the time you hold the solder iron against the joint should be **as short as possible** to avoid damaging any part (a few seconds should be enough). If you can't get a solder joint right, **let it cool** a bit before trying again.
- 3- If having troubles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

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

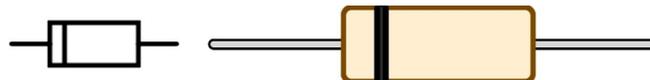
- **ICs** (they have a small dot or indication that must fit the indication in the board)



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



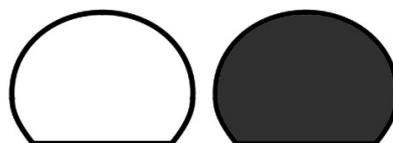
- **Diodes** (check for the mark and make it fit with the one in the PCB):



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



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



Schematic

