

Tone King (or Bluesbreaker)

Components

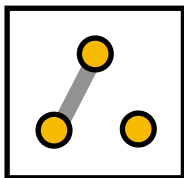
To build the original Bluesbreaker effect, use the component values in brackets and follow the instructions below for where to solder jumper wires.

C1	10nF	R1	1M	GAIN	100K Linear
C2	100pF (47pF)	R2	27K (4K7)	VOLUME	100K Log
C3	10nF	R3	33K (3K3)	STONE	25K Linear
C4	10nF	R4	1M	PRESENCE	50K Trimmer (none)
C6	100nF	R5	10K (Jumper)		
C7	10nF	R6	10K (4K7)	D1-4	MA856 (1N4148)
C8	10nF	R8	6K8	D5-6	1S1588 (none)
C9	1uF Poly/Ceramic (100nF)	R9	220K	D7	1N4001
C10	100uF Electrolytic	R10	6K8		
C11	100uF Electrolytic	R11	1K	IC1	JRC4580D (TL072)
C12	1uF Electrolytic (none)	R12	1M		
		R13	47K	DIODES SWITCH	2 way DIP switch
		R14	47K		

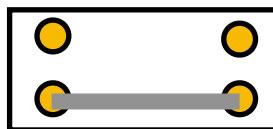
Note: there is no C5 or R7

Jumpers

Where a component is listed as jumper, solder a piece of wire between the pads to make a connection. Where the treble trimmer is not used, you should put a jumper between pins 2 and 3 like the diagram below. If you're building the Bluesbreaker, put a jumper between the bottom two pads of the DIP switch



Treble



Diodes

Adjust the presence trimmer to your preference, or it can be wired to an external 50K pot if you want to have it available to change. The DIP switch can be used to turn the different clipping sections on or off. See which sound you like best.

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Board Connections

The PCB connections are labelled as the following:

I - Input, O - Output, V - 9V DC in, G - Ground

Potentiometers are connected from pin 1 to the square pad on the PCB. This board was designed so you can use right-angle board mount potentiometers on it if desired, otherwise you will need to solder wires from the pads to the correct pin/lug. Jack sleeves and DC centre pin should be connected to ground. V and LED+ should be connected to the positive pin of the DC connector.

