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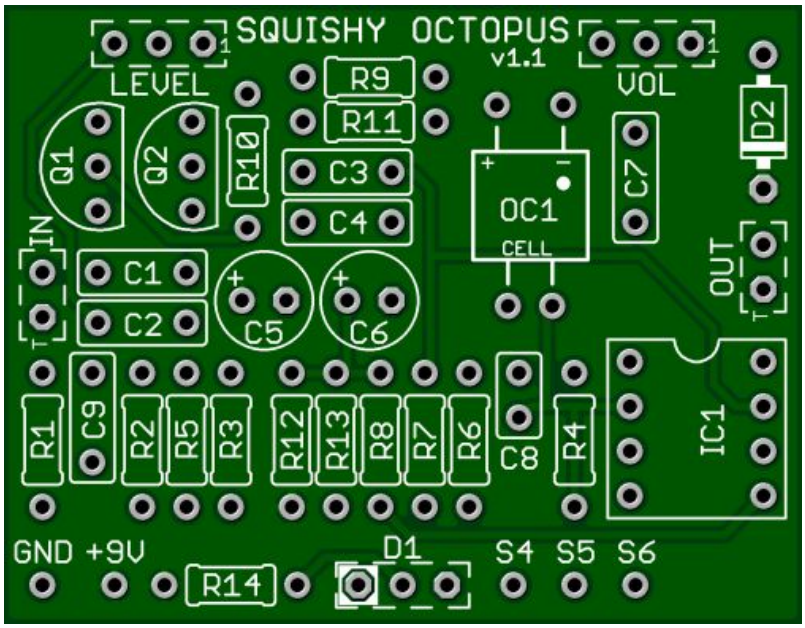
Squishy Octopus Build Instructions

This is based on the DOD® 280™ style circuit. A classic compressor for Guitar or Bass noted for both transparency and “squish”.



Board Dimensions (W x H) 1.82 x 1.4 inches.

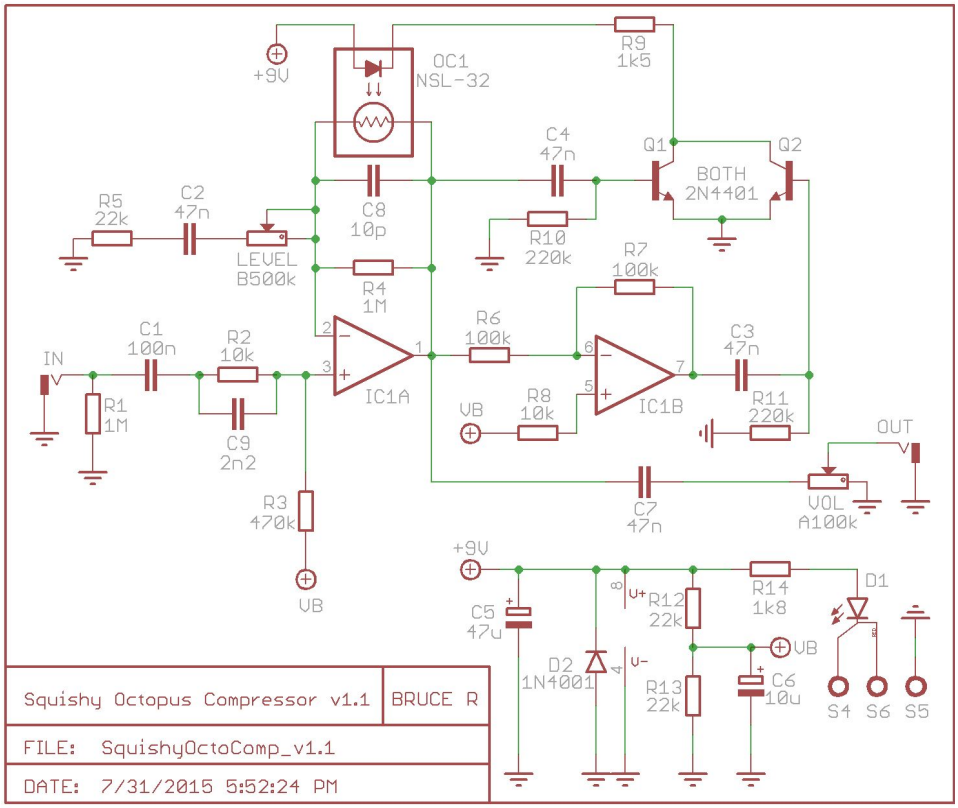
PARTS LIST

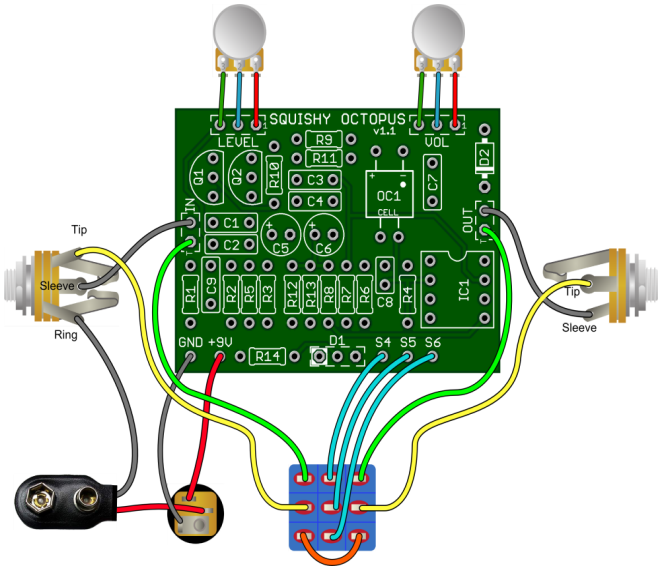
Part	Value	Part	Value	Part	Value	Part	Value
R1	1M*	R9	1k5	C3	47n	D1	BiColor LED CA
R2	10k	R10	220k	C4	47n	D2	1N4001
R3	470k	R11	220k	C5	47u	IC1	*TL072
R4	1M	R12	22k	C6	10u	Q1	2N4401
R5	22k	R13	22k	C7	47n	Q2	2N4401
R6	100k	R14	1k8	C8	*10p	VOL	A100k
R7	100k	C1	10n	C9	220n	LEVEL	B500k
R8	10k	C2	47n	OC1	NSL-32		

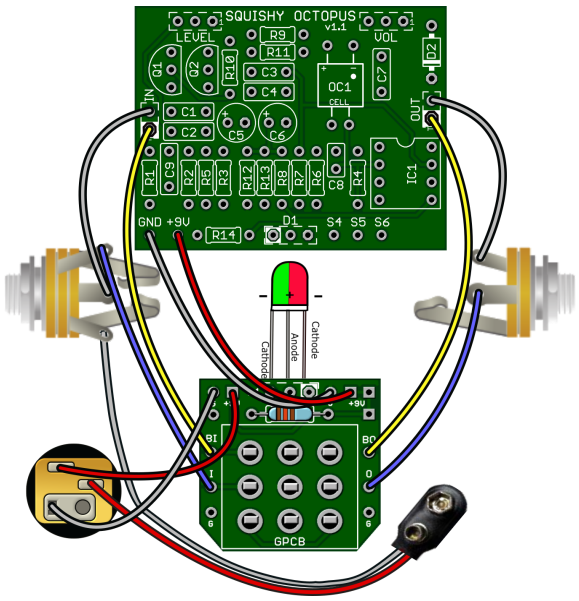
Build Tips

- R1 is a tie-down resistor. A 1M, 2M, or 2M2 will have the exact same effect. Use what you have.
- Keep power wires away from or running parallel with audio wires inside your enclosure.
- **Use only the NSL-32** and not any variant. Check Datasheets.
- The Level Control is also known as the Comp control for adding more compression.
- For more headroom you may use a 12v as long as your components are rated 16v or higher.

SCHEMATIC



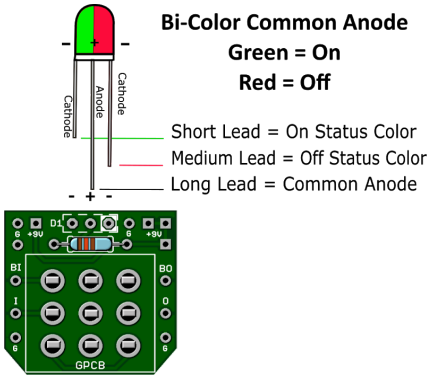


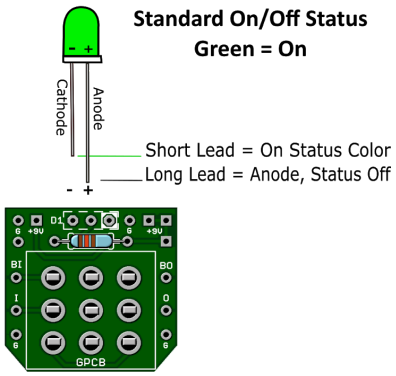


Be sure your In/Out Jack wiring is correct. A Stereo Jack (for battery use only) has a RING lug which is used to connect to the battery ground. If you do not intend to use a battery there is no need for a Stereo Jack. If using Stereo then only use the Tip and Sleeve lugs. S4, S5 & S6 is only needed when the LED is wired to the Main Board.

If using our convenient 3PDT Wiring Boards (below) here is an LED wiring guide. You may use Common Anode Bi-Color or Standard On/Off. The wiring boards use the same symmetrical layout as if wiring straight to the switch.

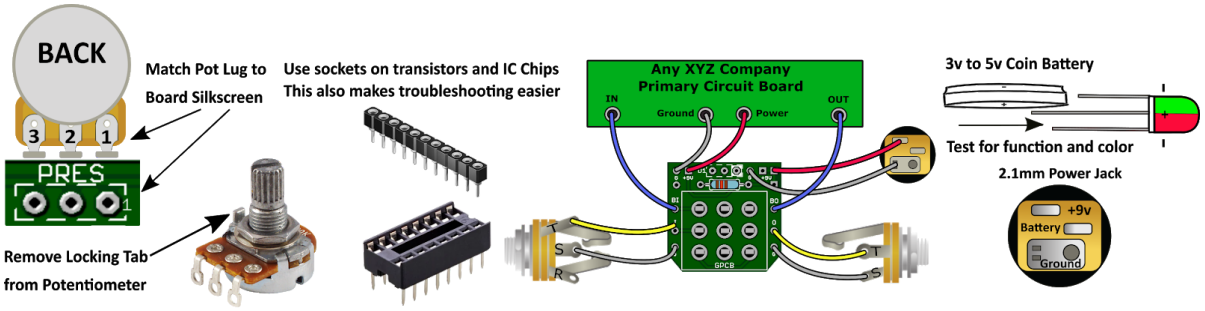
STATUS LED





Note: If wiring the LED to our 3PDT board no need to connect S4, S5 & S6 or populate D1 or R14 (CLR) on the main board since you are wiring your LED directly to our board.

Direct Online Link: [3PDT Wiring Board Build Document]



Additional tips and considerations using compression:

Here is a basic article by Guru [Craig Anderton]

From the above article Craig states: *"The reduced transient response caused by the pickups being further away from the strings is helpful when feeding compressors, as large transients tend to "grab" the gain control mechanism to turn the signal down, which can create a **"pop"** as the compression kicks in.* With the pickups further away, the compressor action is smoother. *So the end result is that if you've set your pickups close to the strings, try increasing the distance. You might find this gives you an overall more consistent sound, as well as better sustain."*

[Soldering Tutorial on Youtube]

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