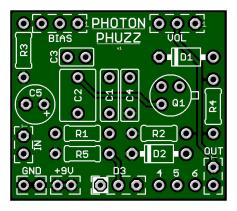
# **PHOTON PHUZZ**

#### Words of wisdom

I think it was Alfred E. Neuman (of Mad Magazine fame), that once said "You can never have enough fuzz pedals on your boards." Just when you thought you had a good fuzz in your gear, along comes another one that we a calling a "MUST HAVE!" From the creative genius of the great **PINKJIMIPHOTON**, a renowned master of the fuzz, GUITARPCB has collaborated to offer the **PHOTON PHUZZ**.

When testing this circuit, we were shocked at how buttery smooth and silky it sounded. Not harsh or raunchy at all! This dynamically responsive beauty deserves a place on your board! You might even want to switch between this fuzz and another one to provide an artistic tonal change-up to your rendition. It is magical when used in tandem with natural amp saturation or perhaps in tandem with another Dirt or Fuzz pedal.

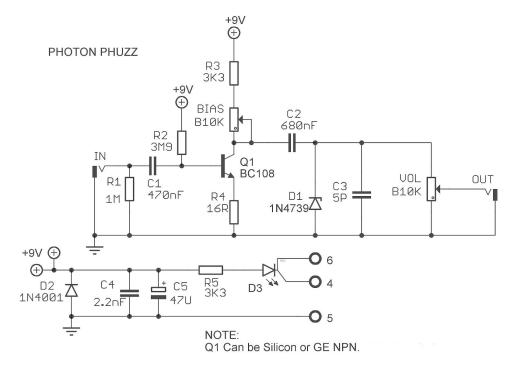
Are you just getting started in pedal building? Well, this just might be an excellent first project since it has so few components. But, even the master builders here at GuitarPCB will love the different tonal response this circuit provides. Don't worry about the components either. You can try different NPN transistors without wrecking this baby. You may find one that you prefer. If so, let our community know what worked best for you.



# Board Dimensions (W x H) 1.20" x 1.07"

Part	Value	Part	Value
rare	value	rare	value
R1	1M	C1	470nF
R2	*3M9	C2	680nF
R3	3K3	C3	5P
R4	*16R	C4	2.2nF
R5	3K3	<b>C</b> 5	47uF
VOL	B10K	D1	1N4739
BIAS	B10K	D2	1N4001
			CA BiColor
		D3	LED
Q1	*BC109		

Build Notes: **R2** can be anything from 3M9 to 4M7. **R4** is only Ohms so anything from 16R to 39R is fine. As for the Transistor we through a lot at this and found favorable results with any **Silicon or GE NPN** with an hFE from 100 to 400. We suggest you use a **BC108 or BC109** which both sounded great. Use a SIP socket to test. When using capacitors we like to use **MLCC** as they are affordable, small and sound great. In regards to **C3** anything close to 5pF is fine. Search for cheap capacitor kits on eBay etc...



CONCEPT BY DCOUNTRY13. DESIGN BY PINKJIMIPHOTON. LAYOUT BY WILKIE1 1/4/2018

# **Controls:**

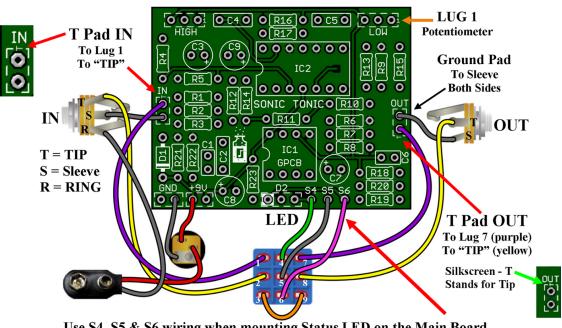
**Volume:** Pretty simple really. Turn it up to where you like it based depending on your usage.

**BIAS:** This is one of the few times we agree that a BIAS control should be mounted on the outside of the enclosure because in this case it sounds great in any position and also has a tonal effect on the circuit.

If you really want to make this circuit scream with harmonic overtones put a Treble Booster in front of it!

One size fits all wiring guide. More Guides available **here:** 

https://guitarpcb.com/forums/topic/pedal-building-guides-mandatory-reading/

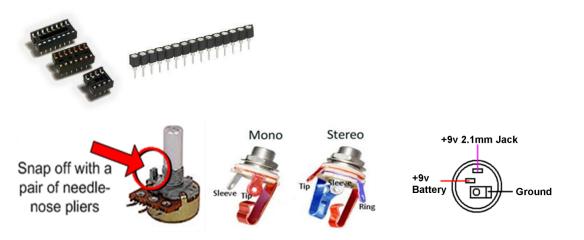


Use S4, S5 & S6 wiring when mounting Status LED on the Main Board.

## **Other important notes:**

Mod idea: Run two of these in series for an extraordinary tone!

**ICs and transistors can be damaged by heat from soldering and should not be directly soldered to the PCB.** For transistors, diodes, and LED's, use SIP (Single inline package) sockets. You simply cut the number of sockets required with a utility knife or by gripping and rocking with pliers. This allows for easy changes and troubleshooting.



## **Soldering Tutorial on Youtube**

Need a kit? Check out our authorized worldwide distributors:

USA – Check out <u>PedalPartsAndKits</u> for all your GuitarPCB kit needs in the USA.

Europe – <u>Das Musikding</u> Order either boards or kits direct from Europe.

PedalPartsAustralia - Order either boards or kits direct from Australia

If they do not have a KIT listed send them a note asking if they can help you out.



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