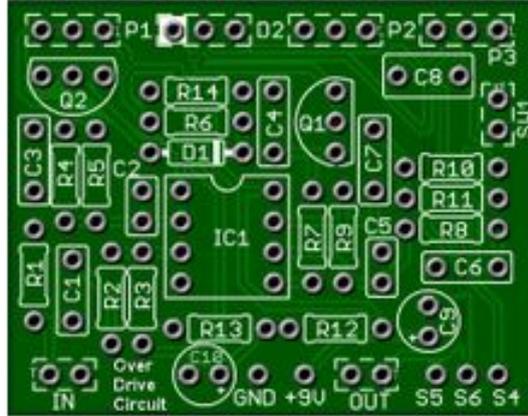


## Over Drive Circuit

If you are looking for similarities found in other Tubescreamer™ style circuits but want something different that does not use diode clipping but instead it is using Mosfets and some interesting changes to enhance the Tone section we call the Tone Centralizer Mod then look no further. Using our unique GuitarPCB Mod Boards (see PCB Shop) you may further modify this Over Drive Circuit to suit any playing style or guitar/amp rig.



Board Dimensions (W x H) 1.72" x 1.36" ca. 43.5 mm x 34.7 mm.

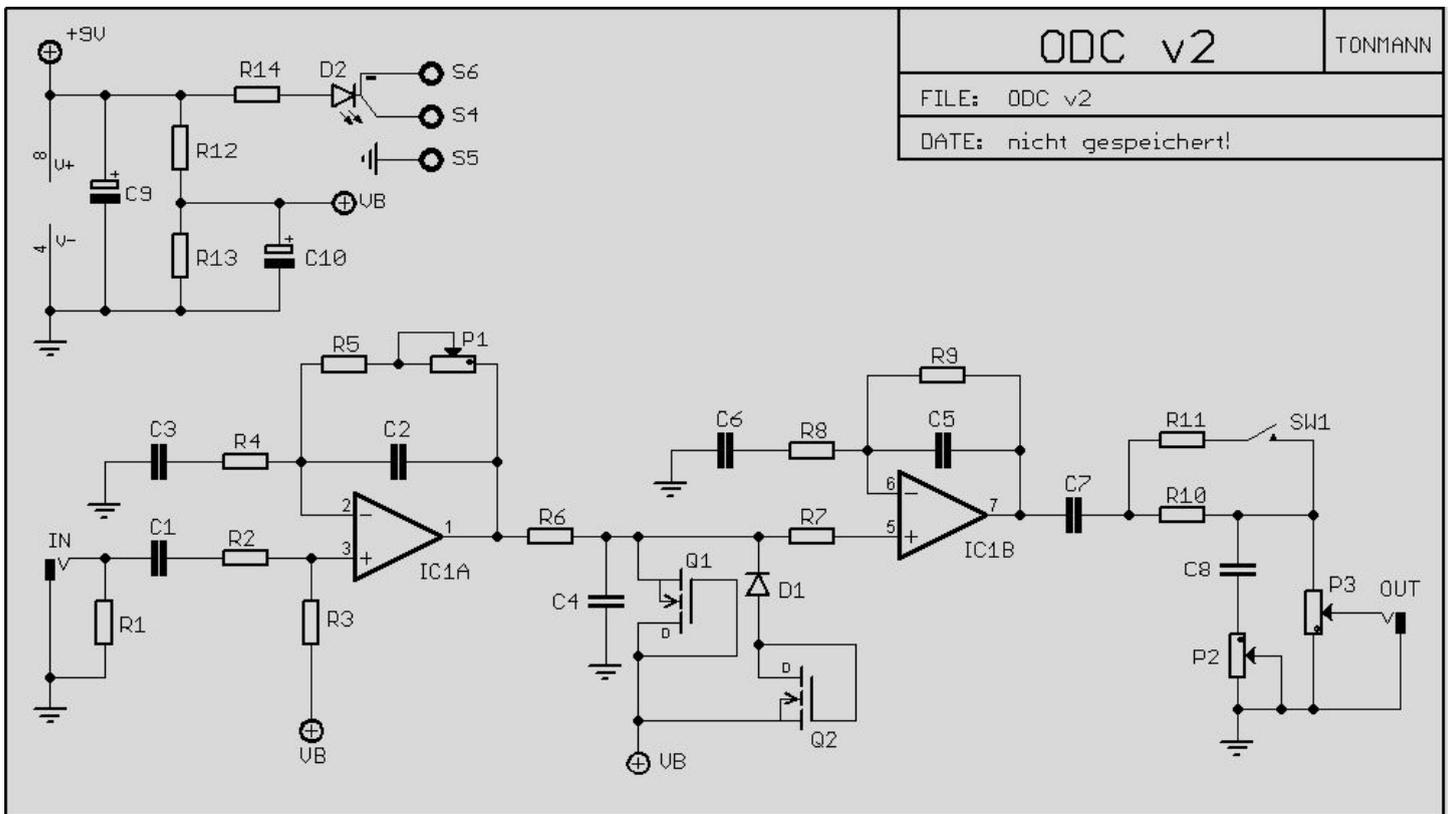
R1	1M	C1	10n	63V	IC1	TL072
R2	10k	C2	220p			
R3	470k	C3	100n	63V	Q1	2N7000
R4	2k2	C4	1n	63V	Q2	2N7000
R5	22k	C5	220p			
R6	10k	C6	100n	63V	D1	1N34A *
R7	10k	C7	100n	63V	D2	CA Bi-colour LED
R8	22k	C8	220n	63V		
R9	100k	C9	47μ	16V	P1 GAIN	1M Log
R10	22k	C10	10μ	16V	P2 TONE	10k Lin
R11	1k				P3 VOL	500k Log
R12	22k					
R13	22k				SW1	SPST
R14	2k2					

**\* Can be replaced with a jumper**

### Mods by Tonmann:

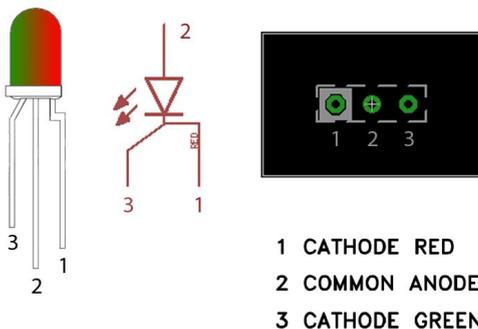
If you would like an even brighter tone (darker rig) here are some options:  
 Socket and decrease the value of C4, down to 10nF should be enough. (Socket and see)  
 You could also try increasing C8 to 470nF and making the Tone pot a 10k Log.

You can even try omitting C4 from the circuit to give maximum frequency response.  
 Make sure you have the Tone pot wired correctly, you should be getting a cut in high frequencies as you turn the pot down. If you are getting the opposite effect simply reverse the wires going to lugs 1 and 3.



## STATUS LED

D2 is a common anode bi-colour LED



The diagram above shows the pin-out, schematic symbol and pad connection for a common anode LED. The pin-out for the bi-colour LED is as follows:

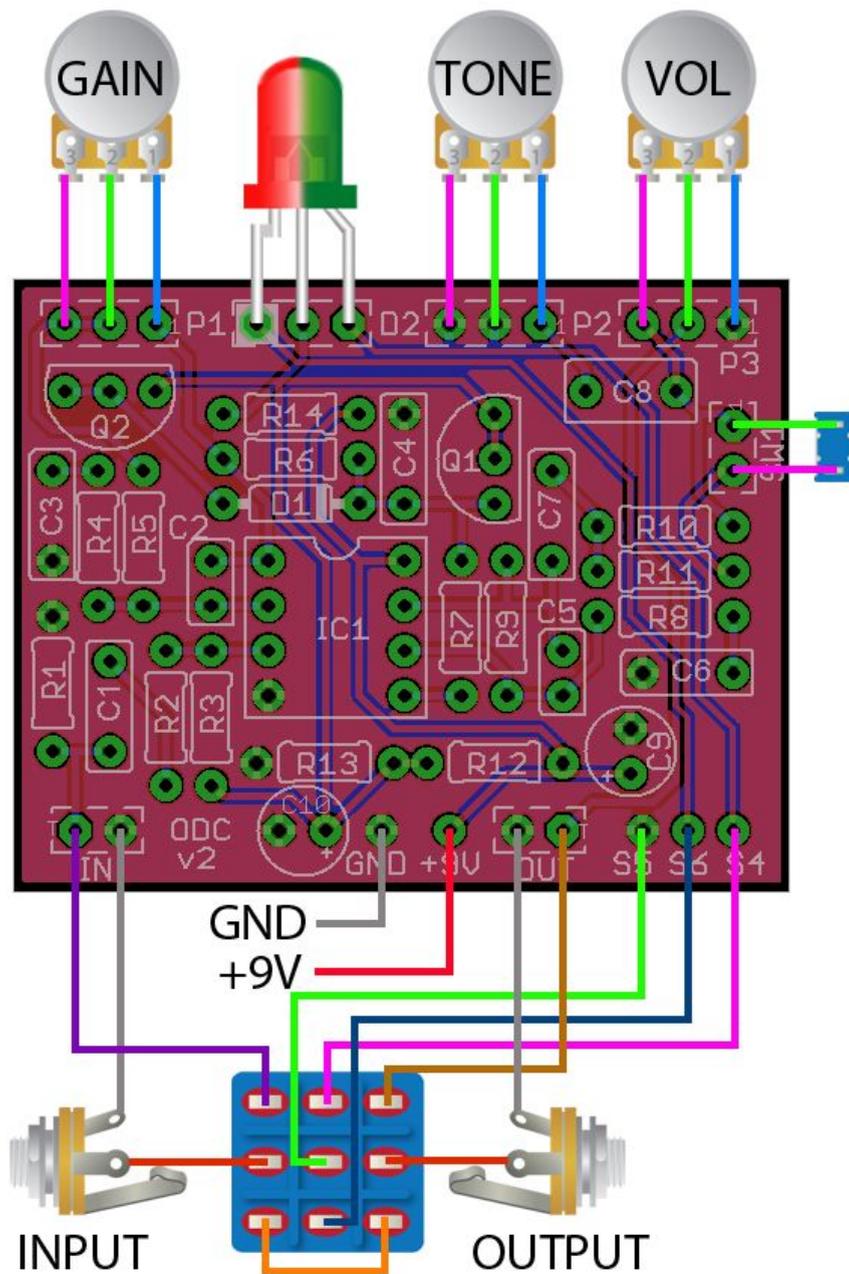
1 <sup>st</sup> Colour Cathode	90 degree bend in the lead
Common Anode	Middle lead
2 <sup>nd</sup> Colour Cathode	45 degree bend in the lead

The pad for lead 1 on the circuit board is marked with a white box.

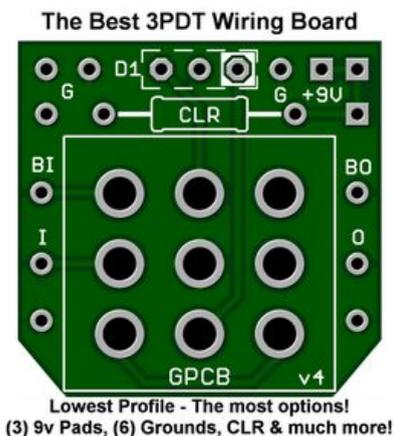
When connected correctly the LED will light red when power is applied and the circuit is in bypass mode. The LED will light green when in effects mode.

**If you wish to use a standard LED, connect the anode to the middle pad and the cathode to the right (non-white) pad (pad 3) to show the circuit in effects mode.**

# WIRING



If you are using one of GuitarPCB's 3PDT Wiring Boards, pads S4, S5, S6 and D2 would be ignored and R14 would not be installed.



### Other important notes:

- Socket your Transistors – You may wish to change them later and makes troubleshooting a lot easier.
- R8 is the current limiting resistor. Brightness is a preference. 1k8 will yield a very bright LED and the higher the resistance the dimmer the light. 3k or even 4.7k has been used. This is your choice.
- A [YouTube Demo](#) is available.

**IC's and transistors are easily damaged by heat from soldering and should never 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 an Exacto / Stanley 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 [PedalPartsAndKits](#) for all your GuitarPCB kit needs in the USA.

Europe – [Das Musikding](#) 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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