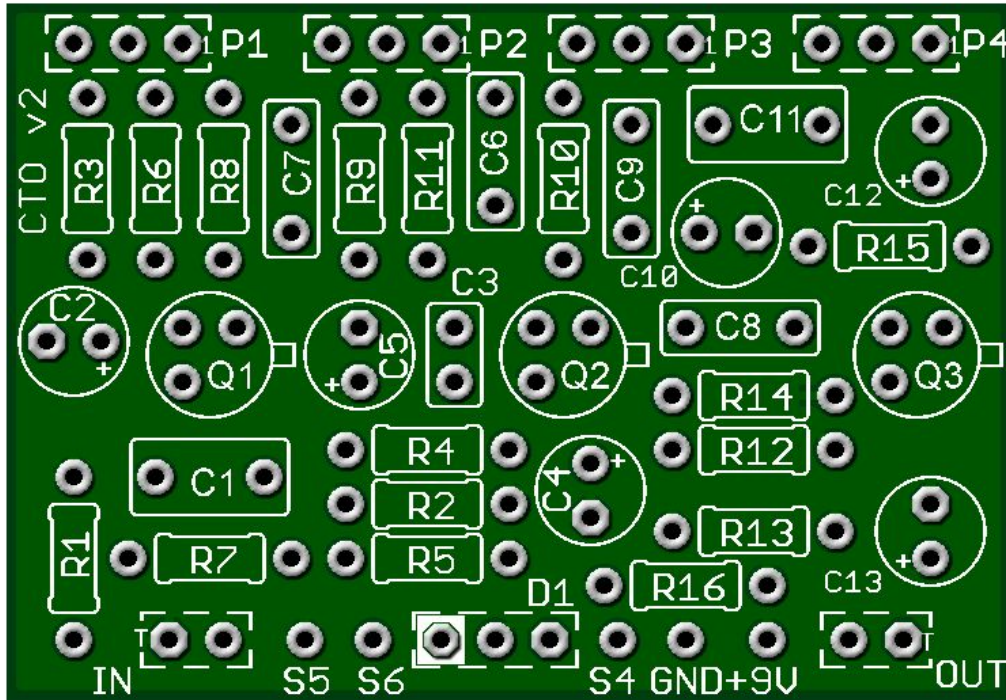
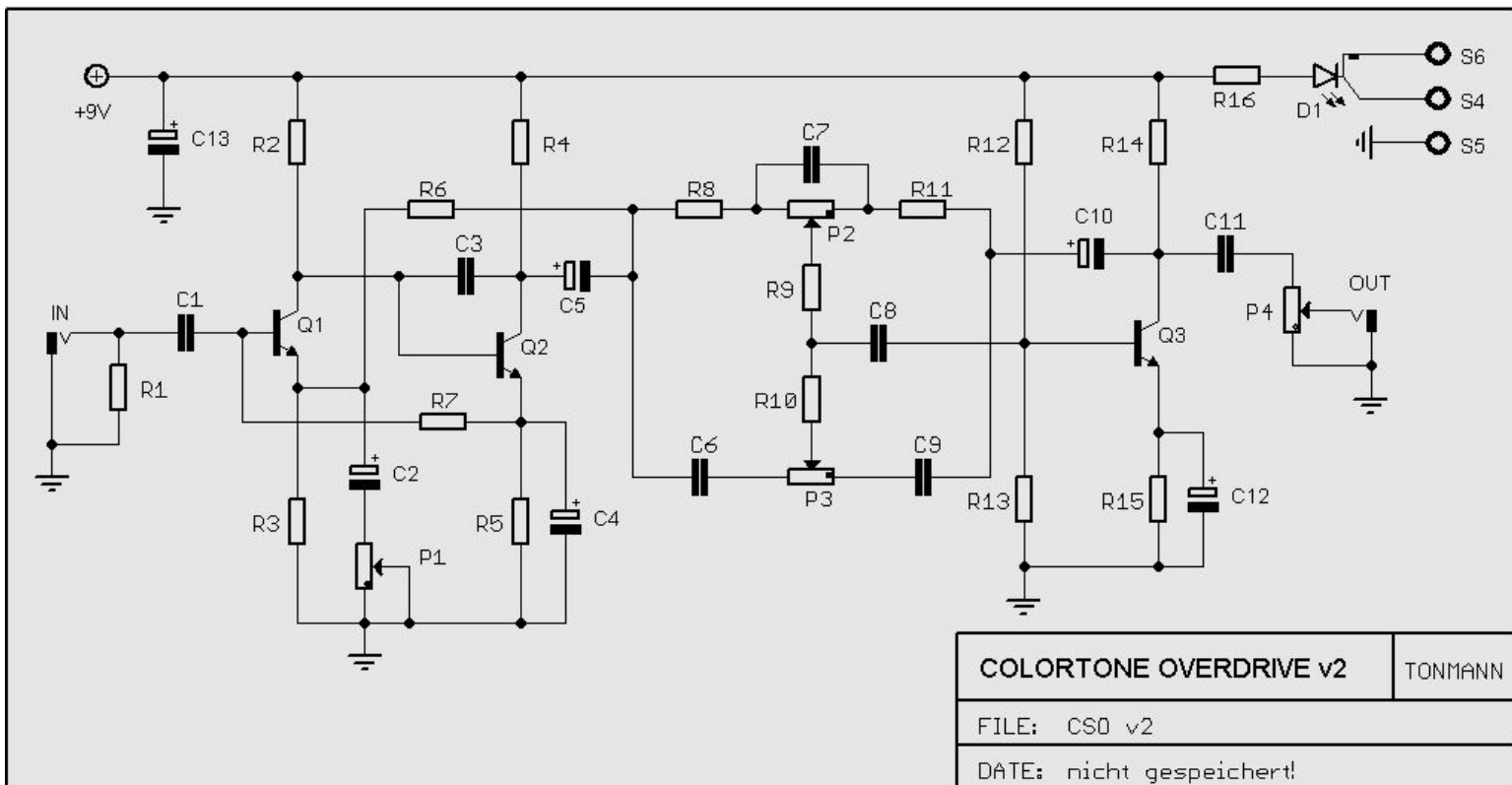


# COLORTONE OVERDRIVE v2

The classic Colorsound Overdriver™ bridged the gap between Boost & Overdrive recreating many of those popular, but hard to get tones of the 70's. Now you can build a similar style circuit without overpaying. A favorite of Mr. Gilmour and Jan Akkerman of Focus among many. We have added some modifications to the original by adding a Master Volume Control and a simple mod to smooth out the Gain Control mapping. A must have for vintage tones!



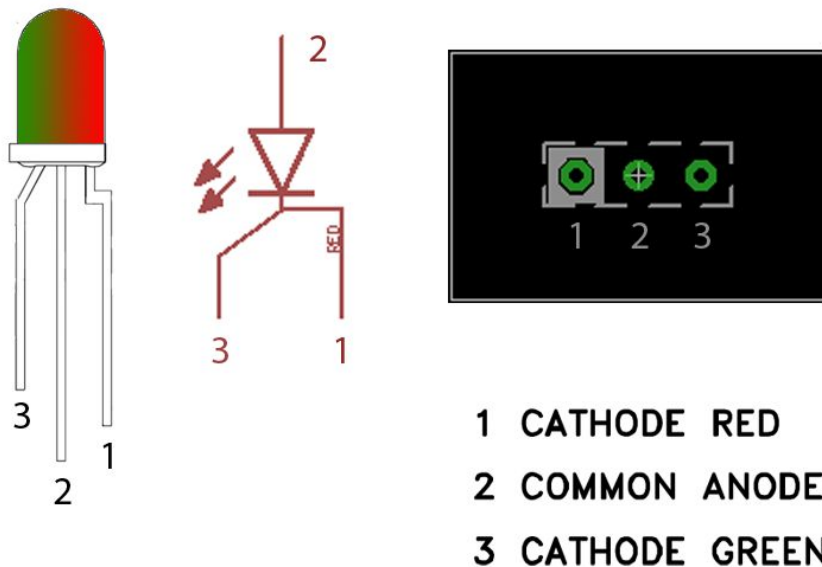
Board Dimensions (W x H) 1.85" x 1.29" ca. 47mm x 33mm



R1	1M	C1	220n	63v	Q1	BC109
R2	120k	C2	22μ	63v	Q2	BC109
R3	6k8	C3	220p	63v	Q3	BC109
R4	1k8	C4	22μ	63v		
R5	470R	C5	4μ7	63v	P1	GAIN 10k Lin
R6	12k	C6	10n	16V	P2	BASS 100k Lin
R7	150k	C7	100n		P3	TREBLE 100k Lin
R8	4k7	C8	100n		P4	VOLUME 100k Log
R9	39k	C9	10n			
R10	5k6	C10	4μ7		D1	CA Bi-colour LED
R11	4k7	C11	220n			
R12	150k	C12	22μ			
R13	33k	C13	22μ			
R14	1k8					
R15	470R					
R16	1k8					

## STATUS LED

D1 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:

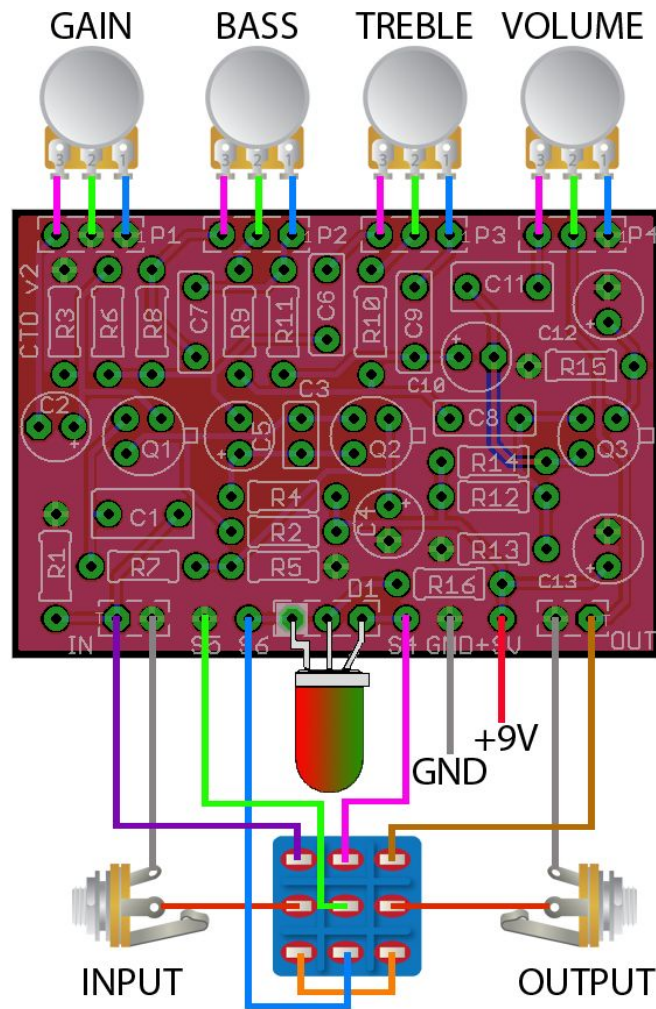
- 1<sup>st</sup> Colour Cathode 90 degree bend in the lead
- Common Anode Middle lead
- 2<sup>nd</sup> Colour Cathode 45 degree bend in the lead

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 pad to show the circuit in effects mode.

## WIRING



If you are using one of GuitarPCB's 3PDT Wiring Boards and choose to mount the LED to the wiring board instead, pads S4, S5, S6 and D1 would be ignored and R16 would not be installed.

### Gain Mapping Mod

It is in the nature of the "original circuit" (see photo below) to have the Gain all bunched up at one end of the pedal. **Note: Mods are not included in kits. You must purchase any accessories.**

You adjust this to taste this by reducing the stock gain pot from 10kΩ Linear Taper to a 5kΩ aka; reverse taper or perhaps even try a 2k. You can approximate a 2k by placing a 5k resistor across the outer lugs (1&3) of the gain pot. Or perhaps somewhere in between depending on what you like.



## Mod #2

If there seems to be any fizziness or too much high end with your particular rig try a higher value for the 220pf. I like 560pf, but 470pf should not only get rid of the fizziness, but possibly help with any RF, plus this can also help add some apparent Bass response.

Also please be sure you verify the Pinouts on the Transistors you use by Googling the datasheets for them.

400-450 is a good HFE to shoot for in this build.

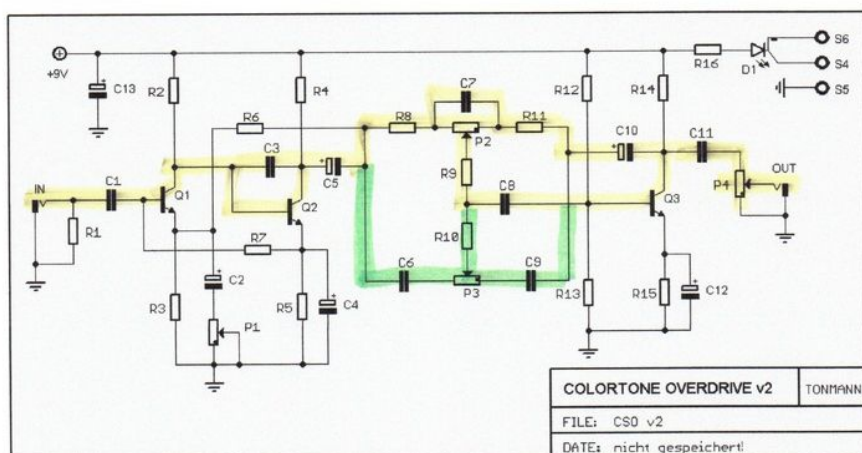
This is a good resource for understand Fuzz Pedals: [The Technology of the Fuzz Face](#)

Here are some sample Voltage Readings from a properly working ColorTone Overdrive:

Q1 - E-.39, B- .94, c- 1.62

Q2 - E-.99, B- .1.62, c- 4.65

Q3 - E-.69, B- 1.32, c- 5.75



## Audio Path

### [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.



This document, PCB Artwork and Schematic Artwork © GuitarPCB.com. Schematic, PCB and this document by Bruce R. All copyrights, trademarks, and artworks remain the property of their owners. Distribution of this document is prohibited without written consent from GuitarPCB.com. GuitarPCB.com claims no rights or affiliation to those names or owners.