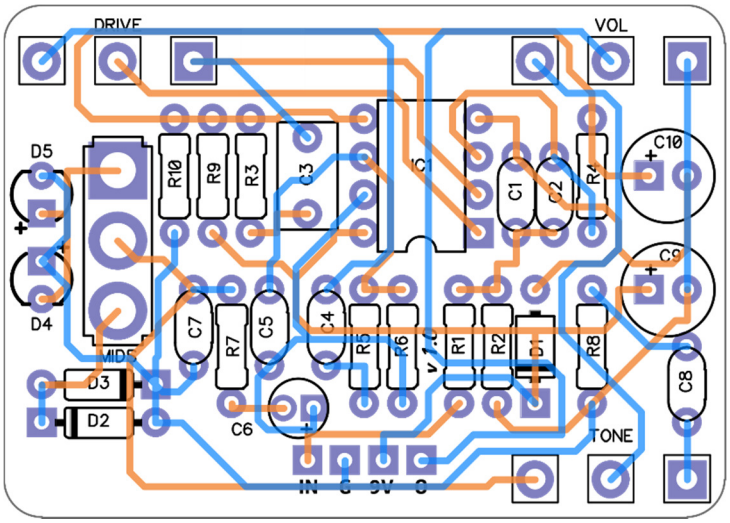
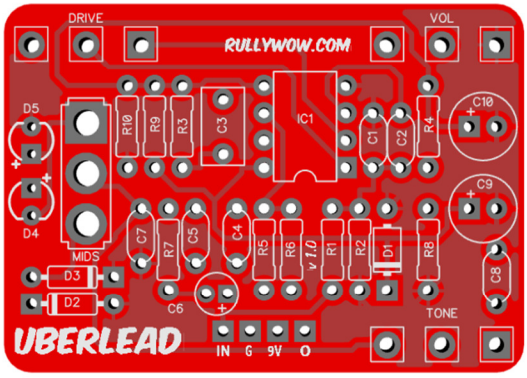
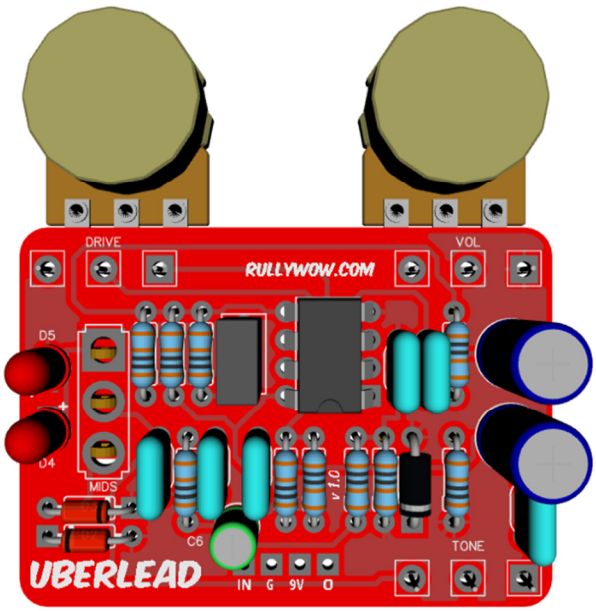






Description:

The **UBERLEAD Distortion** is inspired by the Lovepedal® Superlead pedal. The circuit uses 3MM LED and silicon diodes to achieve a great Marshall-esque tone which is owes lots of its lineage to the Marshal Guv'Nor and similar circuits. This is a simple build and should be an easy one to assemble quickly and accurately. PCB designed to fit in a standard 1590B enclosure.

Uberlead v1

Caps		
C1	3n3	film
C2	47n	film
C3	220n	film
C4	47n	film
C5	200p	ceramic
C6	10uF	electro
C7	10n	film
C8	100n	film
C9	47uF	electro
C10	47uF	electro

Diodes	
D1	1n4001
D2, D3	1n4148
D4, D5	3mm red diff LED

IC	
IC1	4558 or TL072

Switch	
MIDS	ON-off-ON

Resistors	
R1	1K
R2	1M
R3	1K
R4	1M
R5	10k
R6	820k
R7	10k
R8	1k5
R9	22k
R10	22k

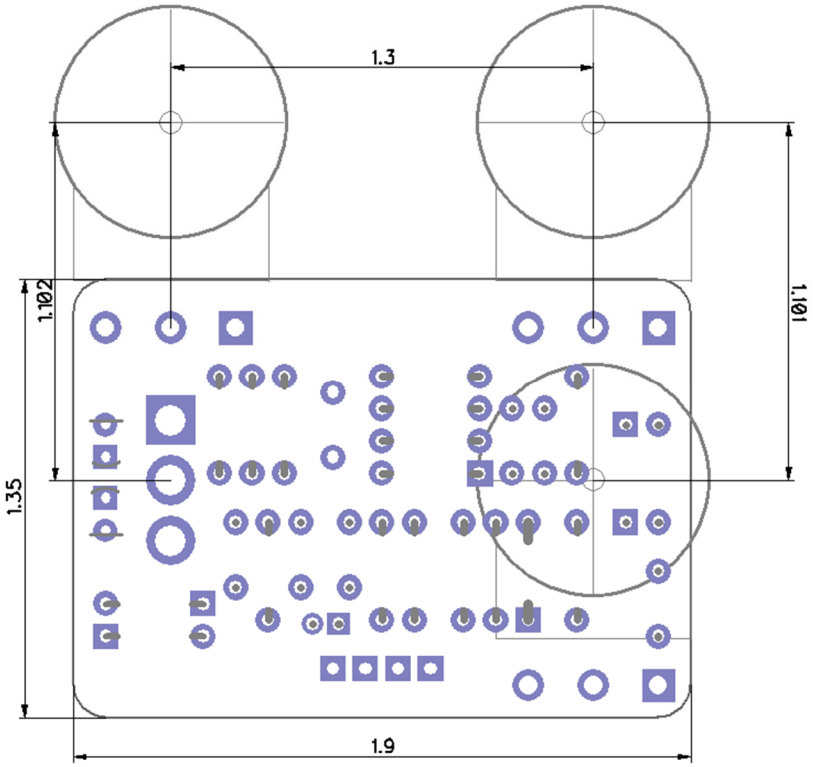
POTS	
DRIVE	100kA
TONE	25kB
VOL	100kA

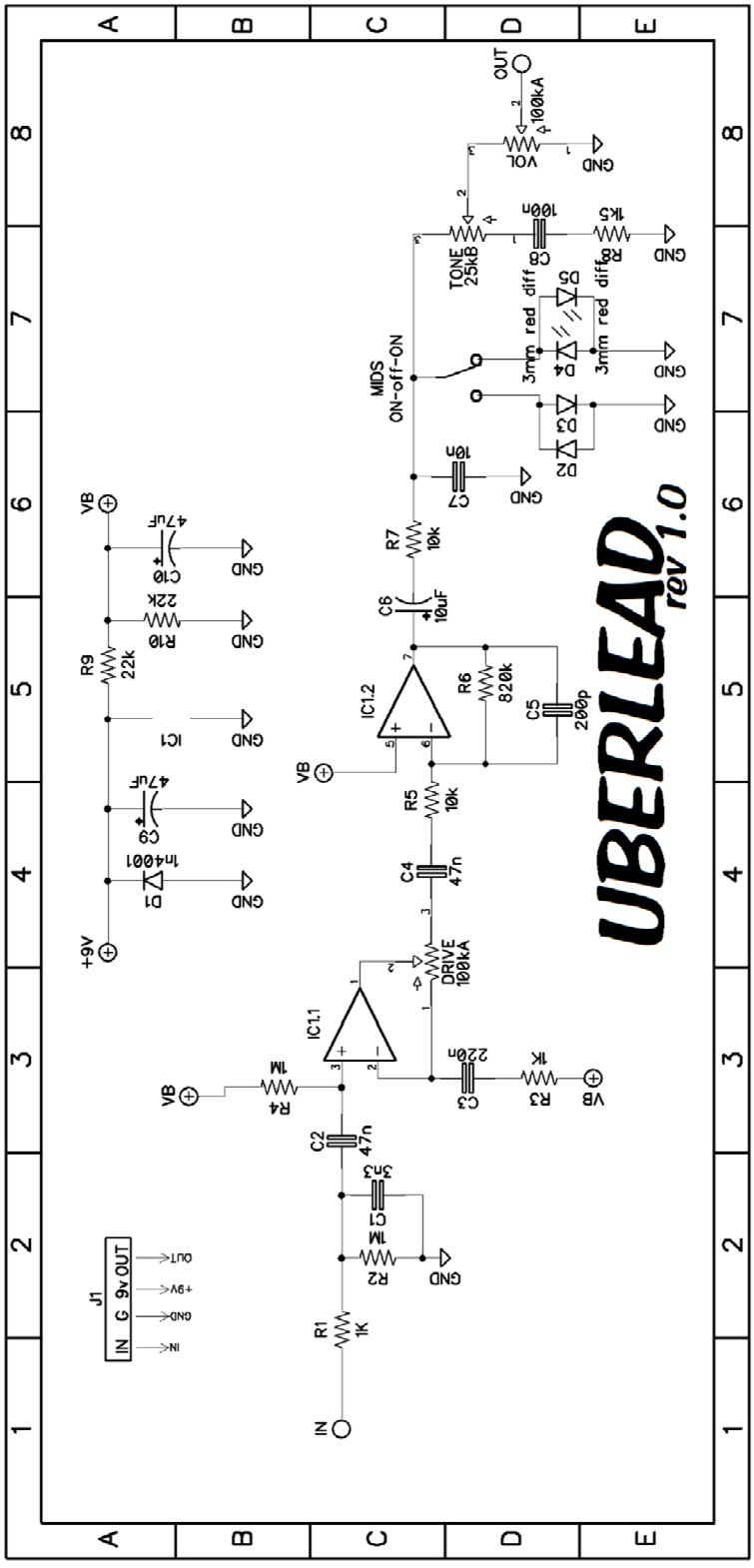
Build Tips & Tricks:

- **NEW!** The **MS Excel** version of the BOM is now available on the product page. With this you can do cool things like sort the BOM by value or possibly make notes for yourself for easier building/shopping etc.
- **Enclosure Size...** This pedal is designed to fit into a 1590B
- **Mids Switch:** is a on-off-on (center off) toggle. This can be solder lug or pin mount. Both will work. The switch actually toggles between the 1n4148 pair and the RED LED pair for clipping.
- **Diodes:** You can substitute other diodes for the 1n4148 and the RED LED. I find the RED LED work best in either difused or clear packages. It's best to keep the pairs the same type. Feel free to use SIP sockets and experiement.
- It is always a good call to solder components from shortest height to tallest. In this case, you should start with resistors, diodes, film caps, IC, and the electrolytic caps last.
- The IN/G/9V/OUT pads are a direct match to Rullywow.com 3PDT and Detour Optical Bypass PCBs..pick some of these cool PCBs up for a super-easy building experience at rullywow.com

- All pots are designed for 16mm Alpha Right Angle PCB mount. I normally grab these from Tayda Electronics, however Smalbear and Mammoth have them as well. I always suggest to drill holes in your enclosure first, and mount the pots and switch with the nuts **BEFORE** soldering the pots to the PCB. This ensures you won't put a lot of stress on the PCB and everything lines up nicely.
- Be sure to insulate the pots from shorting on the back of the PCB. There are special pot covers (like from Smallbear or Mammoth) or you may use non-conductive tape or some other insulating material like cardboard etc.
- Before putting your creation into its enclosure, you should always test it! If it doesn't work outside the enclosure, it won't work inside (I promise!)

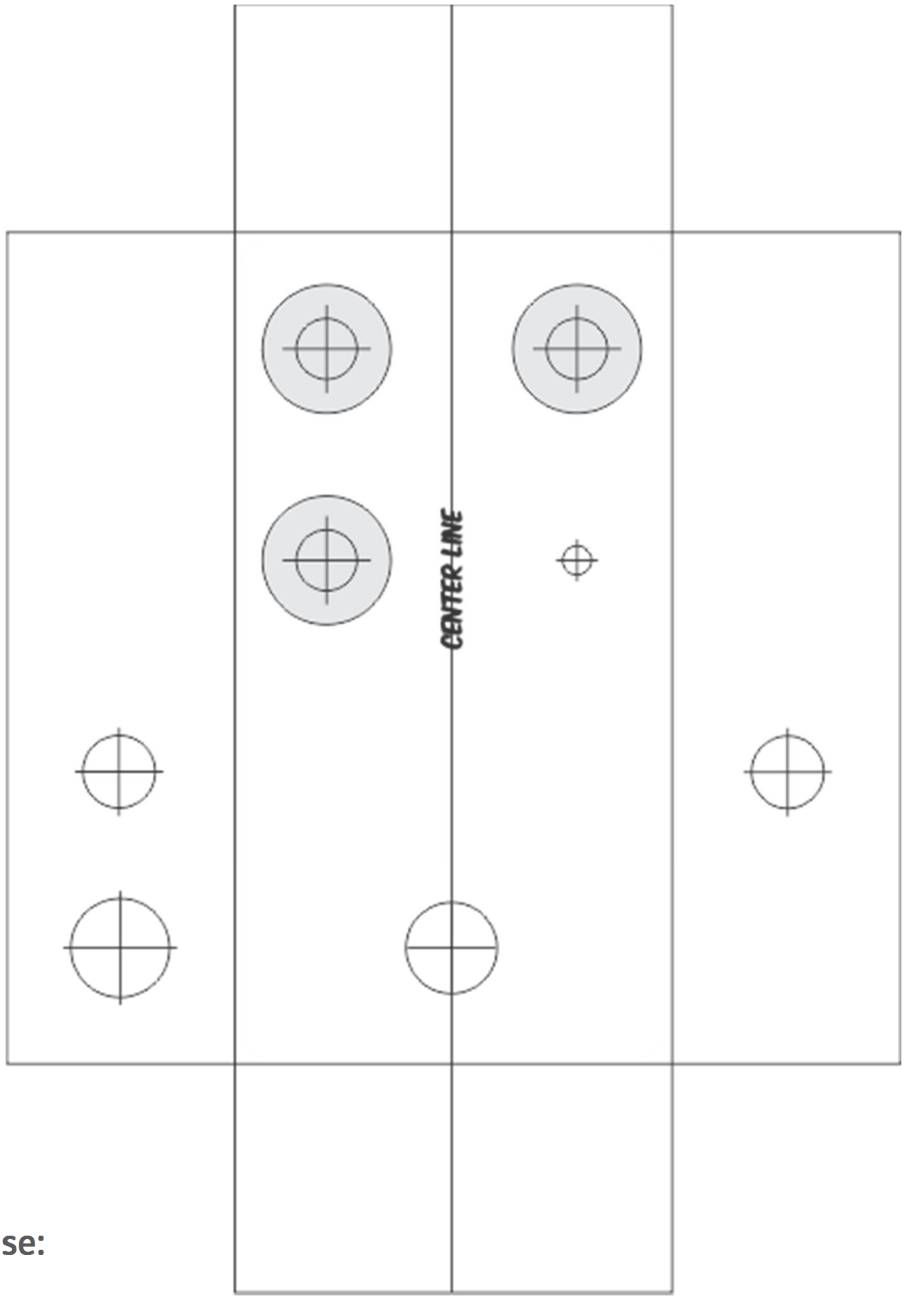
PCB DIMENSIONS = 1.9"W X 1.35"H




UBERLEAD
rev 1.0
OUT
100kA
VOL
GND
TONE
25kB
100n
1k5
C8
R8
D5
3mm red diff
D4
3mm red diff
D3
D2
MIDS
ON-off-ON
C7
10n
R7
10k
C6
10uF
IC1.2
R6
820k
C5
200p
VB
R5
10k
C4
47n
DRIVE
100kA
IC1.1
220n
C3
1K
R3
1M
R4
C2
47n
3n3
C1
1M
R2
R1
1K
IN
J1
IN G 9v OUT
C10
47uF
22k
R10
R9
22k
IC1
C9
47uF
1n4001
D1
+9V

Drill Guide (1590B) :

This is an *APPROXIMATE* drill guide and is untested. Enclosures differ in size so be sure to measure before your commit to drill!



Terms of Use:

- PCBs from www.rullywow.com are intended for DIY use and are prohibited for commercial resale. It is OK to build (and sell) a few pedals for your friends, bandmates, yourself (that is what the DIY guitar pedal community is all about!). *Don't be a tool* and goop over the name on the PCB in an attempt to hide where it came from. Thank you.