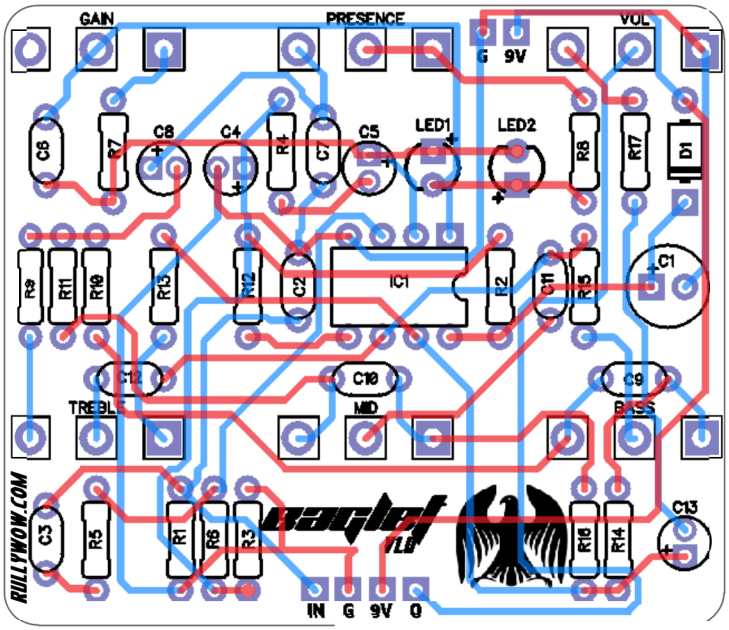
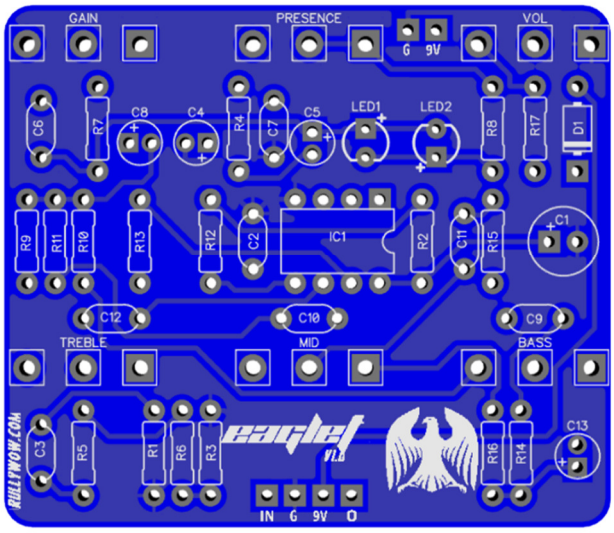
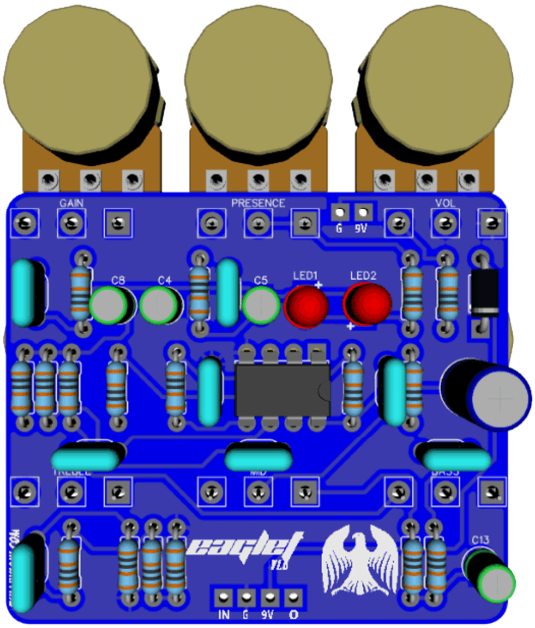






Description:

The **Eaglet Overdrive** is inspired by the Earthquaker Devices® Talons pedal. They make great stuff. The circuit uses LED clipping to create a warm overdrive tone. The three-control EQ allows further shaping of the sound. This overdrive is extremely versatile and can even moonlight as a distortion pedal due to the large amount of gain on tap. An extremely satisfying build!

Eaglet v1

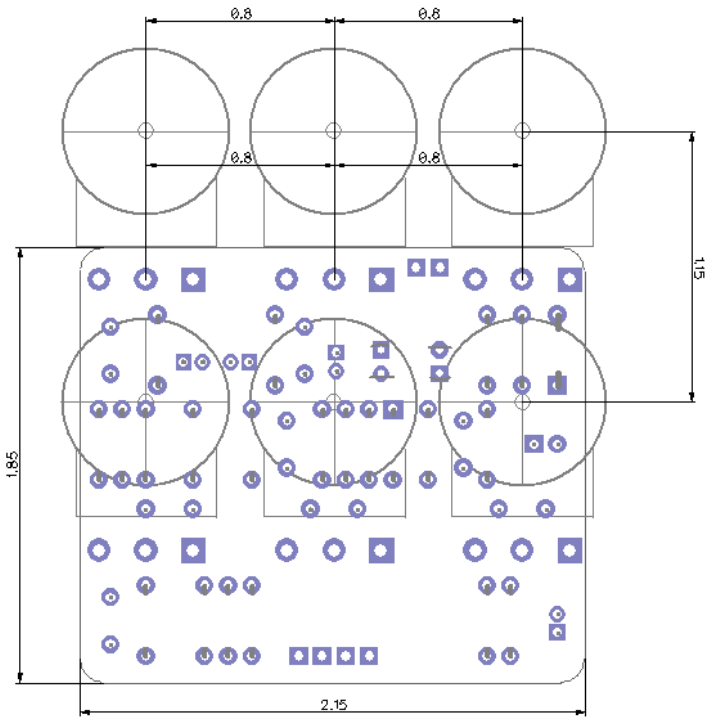
Caps			Diodes		Resistors	
C1	100uF	electro	D1	1n5817	R1	3M2 (pull down 1M or 2M2 is OK)
C2	100pF	ceramic	LED1	RED CLEAR 3mm	R2	10k
C3	100n	film	LED2	RED CLEAR 3mm	R3	10k
C4	10uF	electro	**Pots**		R4	1k
C5	1uF	electro	MID	50kB	R5	1k
C6	100pF	ceramic	PRESENCE	5KB	R6	220k
C7	3n3	film	GAIN	500kA	R7	4k6-4k7
C8	1uF	electro	BASS	50kB	R8	1k
C9	47n	film	TREBLE	100kB	R9	2k2
C10	4n7	film	VOL	100kA	R10	10k
C11	22n	film	**IC**		R11	3k3
C12	4n7	film	IC1	4558 or TL072	R12	10k
C13	2u2	film			R13	2k2
					R14	10k
					R15	10k
					R16	3k3
					R17	1k

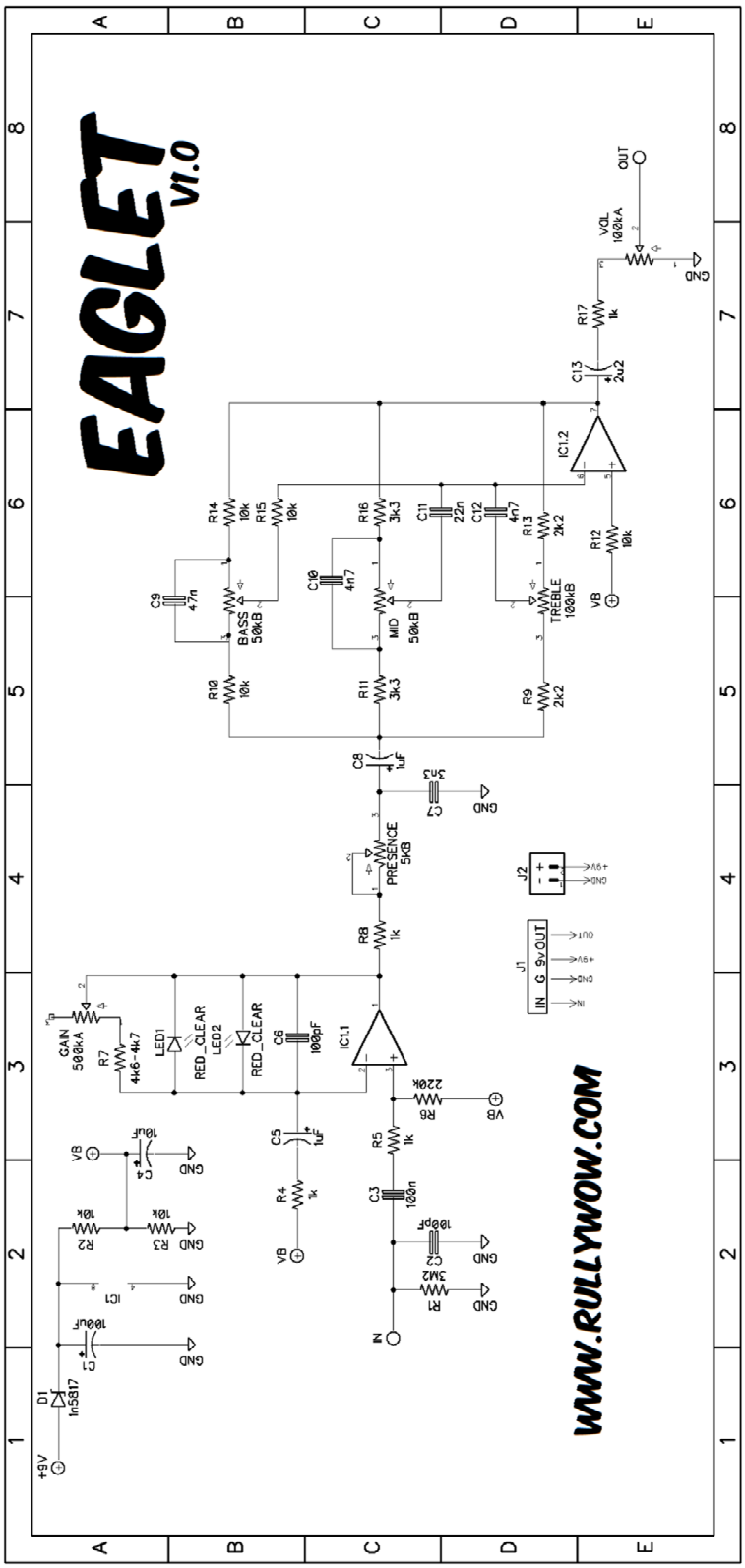
Build Tips & Tricks:

- **NEW!** The **MS Excel** version of the BOM is now available on the landing 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 125B style enclosure which is slightly larger than the common 1590B.
- **R1:** is the pull down resistor. 3M2 (an unusual value) is specified in the original however you can use a 2M2 or 1M2
- 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!)

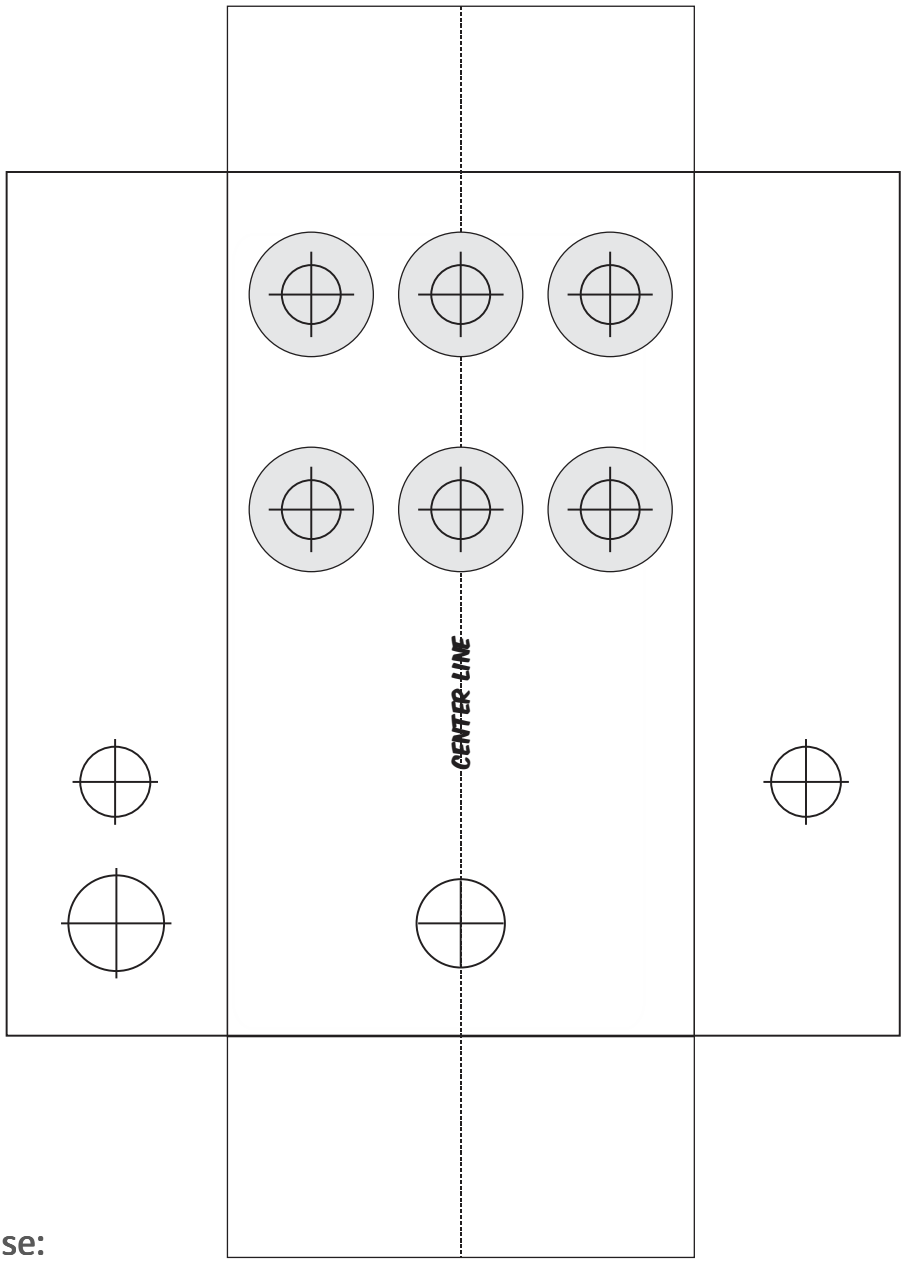
PCB DIMENSIONS = 2.15"W X 1.85"H




EAGLET
V1.0
WWW.RULLYWOW.COM
+9V
D1
1N5817
C1
100uF
IC1
GND
R2
10k
R3
10k
C4
10uF
VB
GAIN
500kA
R7
4k6-4k7
LED1
RED_CLEAR
LED2
RED_CLEAR
C6
100pF
IC1.1
C5
1uF
R4
1k
R5
1k
R6
220k
C3
100n
C2
100pF
R1
3M2
IN
R8
1k
PRESENCE
5KB
C7
33n
C8
1uF
R10
10k
R11
3k3
R9
2k2
C9
47n
BASS
50kB
C10
4n7
MID
50kB
R14
10k
R15
10k
R16
3k3
C11
22n
C12
4n7
R13
2k2
TREBLE
100kB
R12
10k
IC1.2
C13
2u2
R17
1k
VOL
100kA
OUT
J1
IN G 9v OUT
J2
+9V
GND

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 not allowed 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.