GuitarPCB Presents:

NostalgiTone - 60's Edition

Are you ready to elevate your game? The **NostalgiTone 60s Edition** combo is here to give you the ultimate sonic experience. We have combined the best of the best, squeezing three incredible circuits into a genre-defining combo. It features expert mods like Fuzz / Overdrive order-switching and a switchable 3-circuit tone enhancer.

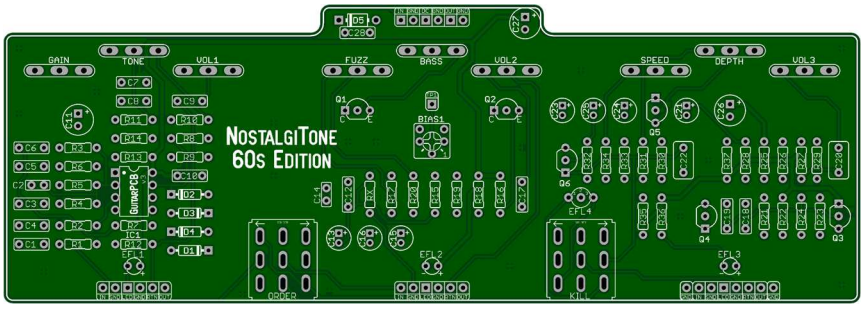
- **Overdrive**: Step back in time to an era when iconic guitar tones ruled the stage. Representative of the tones used by Cream, Alvin Lee, Stones, and Jimi Hendrix, you too can capture that sweet, creamy crunch reminiscent of the legendary guitar sounds of the 1960s.
- **Fuzz**: Dive into the lush, velvety fuzz tones reminiscent of the legendary vintage Fuzz Face. Our design integrates attainable NPN silicon transistors to bolster stability, guaranteeing that you capture that iconic tone and enjoy unwavering performance. Plus, with the convenience of an onboard trimmer, you can fine-tune your fuzz experience, from smooth, flowing tones to edgier, more gated textures.
- **Tremolo**: The Tremolo is a vital addition to the 60's tone, infusing your guitar tone with captivating pulsing waves. But that is not everything. Thanks to the onboard toggle "kill" switch, you can deactivate the tremolo pulse while keeping the tone-enhancing portion of the circuit intact. This gives you the purest tone from all three circuits directly to your amplifier, granting you complete mastery over your sound, and resulting in impeccably crisp and crystal-clear notes. Additionally, using the Volume control in tandem with the foot switch you can Boost your solos or dial in a more compressed always-on tone.

🔄 Onboard Order Switcher: Want to switch up your sound? Our onboard order switcher lets you change the sequence between Overdrive and Fuzz, so you can create your unique sonic signature.

🔌 Easy Wiring: No more daunting wiring hassles! Say hello to beauty under the hood. Enjoy all-analog tones with modern features that will slip into your gig bag, ensuring you are always ready to unleash your musical magic.

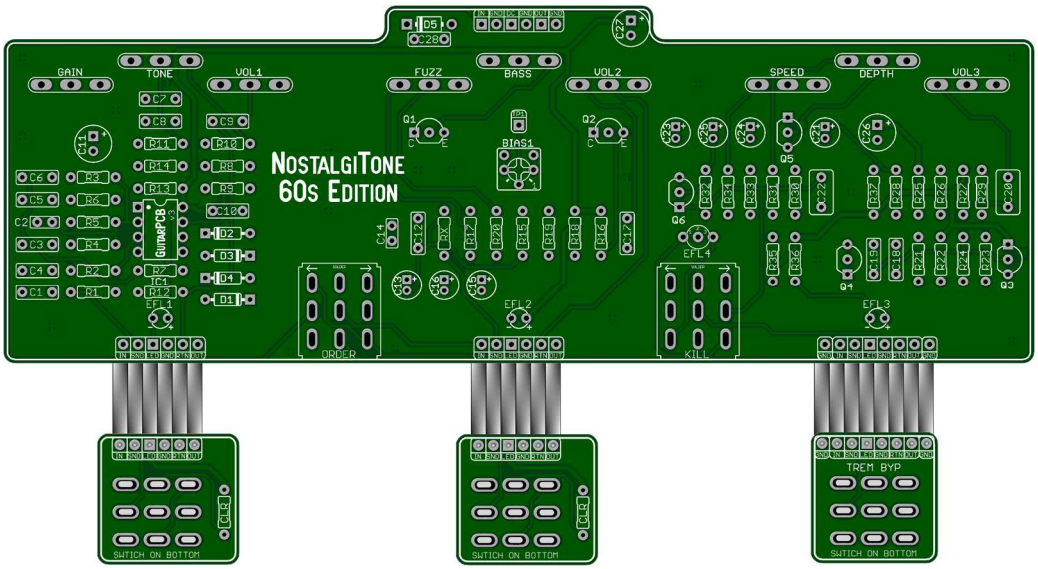
🛠️ Available Components: We recognize the hurdles of component availability. Rest assured, we've carefully selected components for the **NostalgiaTone** series that are currently available from today's popular vendors.

Do not settle for the ordinary when you can have extraordinary. Elevate your tone with the **NostalgiTone** series combo builds from GuitarPCB. Get yours today and discover a world of sonic possibilities like never before!



Mainboard Dimensions - 6.90” x 2.40” – Perfectly sized for a 1590DD enclosure

Included with each PCB purchase. – (1) Mainboard, (3) wiring boards, and (3) ribbon cables.



Part	Value	Part	Value	Part	Value	Part	Value	Part	Value	Part	Value
R1	2M2	R18	330R	R35	1k8	C14	27pF	VOL1	A100K	Q1	BC183A
R2	1M	R19	6k2	R36	6k8	C15	10uF	TONE	B25K	Q2	BC183B
R3	10k	R20	27R	R37	47R	C16	4u7	GAIN	B100K	Q3	J113 / 2N5457
R4	4k7	R21	1M	RX	1K	C17	10n	VOL2	C500K	Q4	2N5088
R5	3k3	R22	1M	C1	10n	C18	47n	FUZZ	C1K	Q5	J113 / 2N5457
R6	4k7	R23	1M	C2	47pF	C19	220n	BASS	C100K	Q6	2N5088
R7	4k7	R24	10k	C3	10n	C20	470n	SPEED	C100K		
R8	220k	R25	560k	C4	10n	C21	22uF	VOL3	A25K	IC1	TL072
R9	6k8	R26	150k	C5	220n	C22	470n	DEPTH	B250K		
R10	1k	R27	4k7	C6	220n	C23	1uF			KILL switch	3PDT Toggle
R11	6k8	R28	180R	C7	10n	C24	1uF	* CLR x2	1k8 - 4k7	ORDER switch	3PDT Toggle
R12	1M	R29	1k2	C8	10n	C25	1uF	** D1 - D4	1N914		
R13	47k	R30	120k	C9	100n	C26	100uF	D5	1N5817	EFL1	Status LED
R14	47k	R31	68k	C10	100n	C27	220uF			EFL2	Status LED
R15	2M2	R32	2M2	C11	100uF	C28	100n	EF1	6pin Ribbon	EFL3	Status LED
R16	39k	R33	15k	C12	4n7	BIAS1	5k Trimmer	EF2	6pin Ribbon	EFL4	Bicolor LED
R17	120k	R34	1k	C13	1uF	TP1	Bias Test Pad	EF3	8pin Ribbon		(Common Anode)

Build Notes:

Included with the purchase of the main PCB board will be (2) standard foot switch wiring boards (6 pins), (1) Tremolo effect foot switch wiring board (8 pins), as well as (3) pieces of ribbon connector. This simplifies the wiring process while keeping troubleshooting to a minimum.

*** CLR x2** the two standard 6-pin foot switch wiring boards contain an onboard (CLR) current limiting resistor. This is for the Overdrive and Fuzz main board status LEDs. The CLR for the Tremolo status LED is already on the main board at R34. A 1k8 value will be brighter than 4k7.

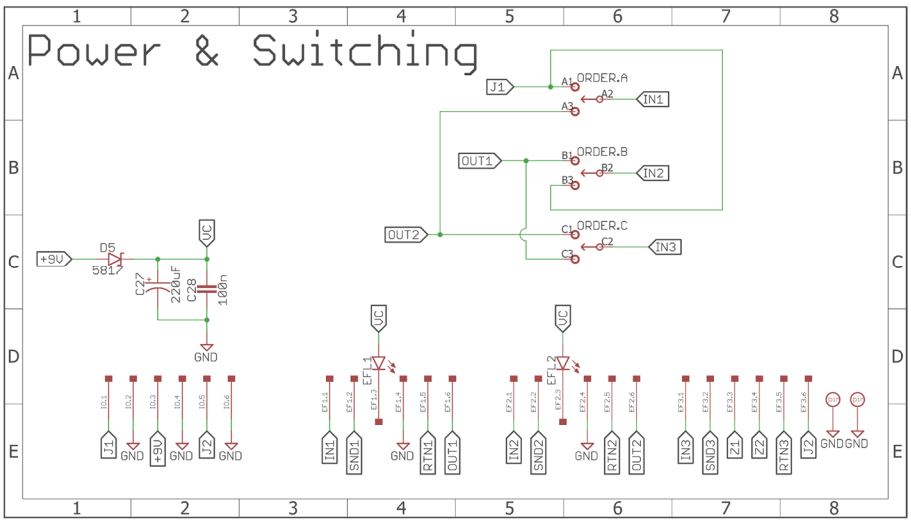
Status LED mounting: EFL1 – EFL3 are the main Status LEDs. ELF4 is a Bi-color **Common Anode** LED to show Tremolo “Kill” status. Disengaging the Tremolo “LFO” by toggle switch instead of the 3PDT foot switch will leave the tone-enhancing buffer. All four LEDs are mounted from the backside of the board along with potentiometers, and toggle switches. Use **5mm LEDs** if you order a predrilled 1590DD enclosure from Tayda.

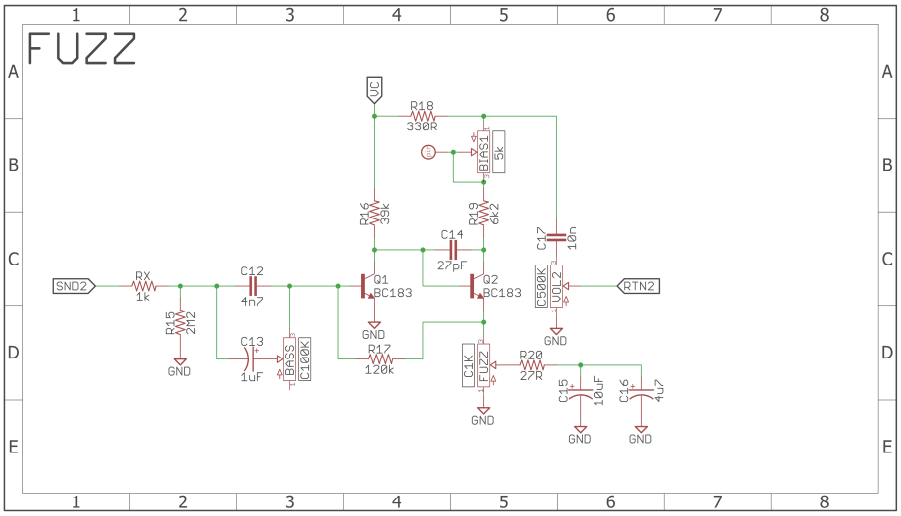
**** D1 – D4:** You may use 1N914, or 1N4148. If you want even more volume from the Overdrive (Bluesbreaker) circuit install a Blue LED in place of any of the silicon diodes. 1N4148, or 1N914 has a forward voltage of 0.72 while the Blue, or Violet LED has a 2.90 to 3.10 forward voltage.

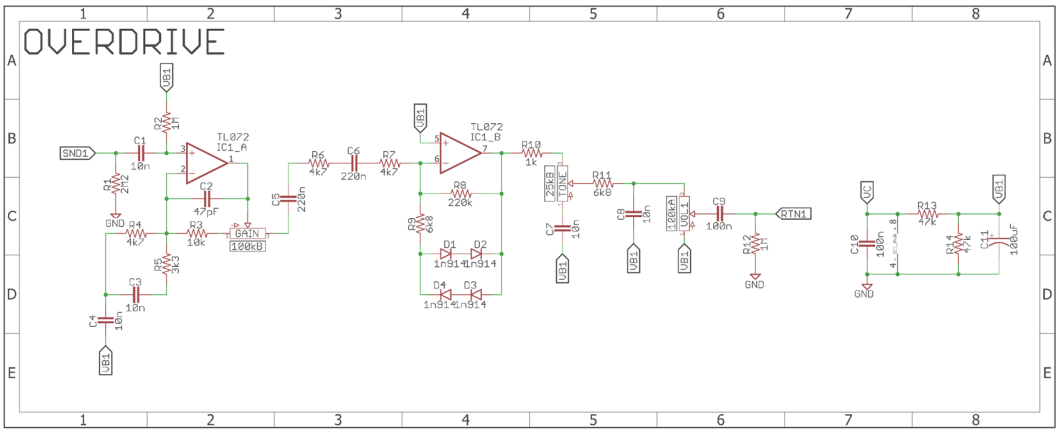
BIAS1 is a 5k Trimmer. Extra pads are to accommodate several trimmer packages. Adjust till it sounds right for you. Choose between smooth or more gated tones. Use a DMM and test your voltage more accurately using TP1 (test pad + ground). Try for 4-5 volts.

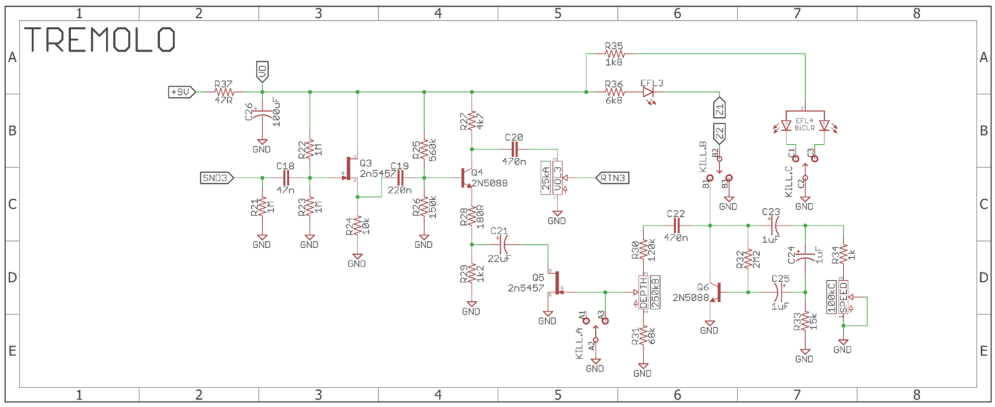
Q3 and Q5 are JFETs. Use J113, 2N5457 CEN brand, or MPF102, and must be genuine. Do not use J201. If the Tremolo has issues check Q3, and Q5 first. **Q1 and Q2** transistors have a lower hFE perfect for this Fuzz, and a unique pinout. Note the pinout orientation per the PCB silkscreen.

Schematics:

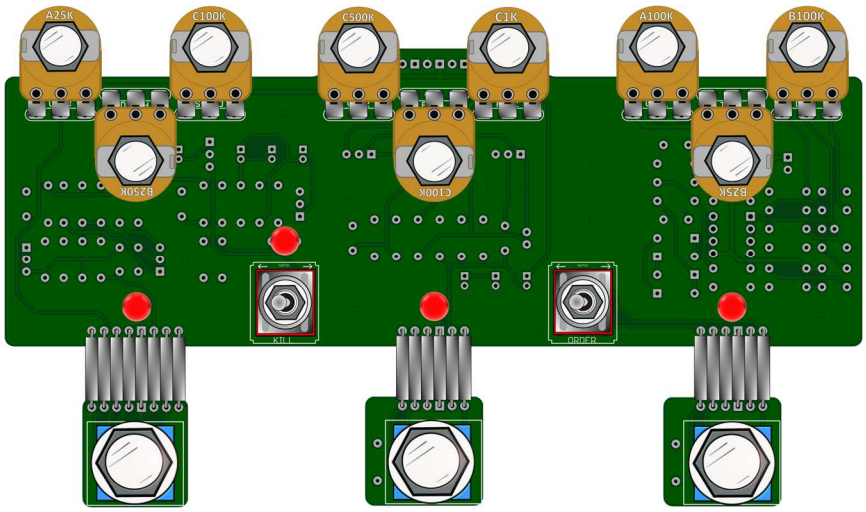

Power & Switching
J1
ORDER.A
IN1
OUT1
ORDER.B
IN2
OUT2
ORDER.C
IN3
+9V
D5
5817
VC
C27
220uF
C28
100n
GND
EFL1
EFL2
IN1
SND1
RTN1
OUT1
IN2
SND2
RTN2
OUT2
IN3
SND3
Z1
Z2
RTN3
J2

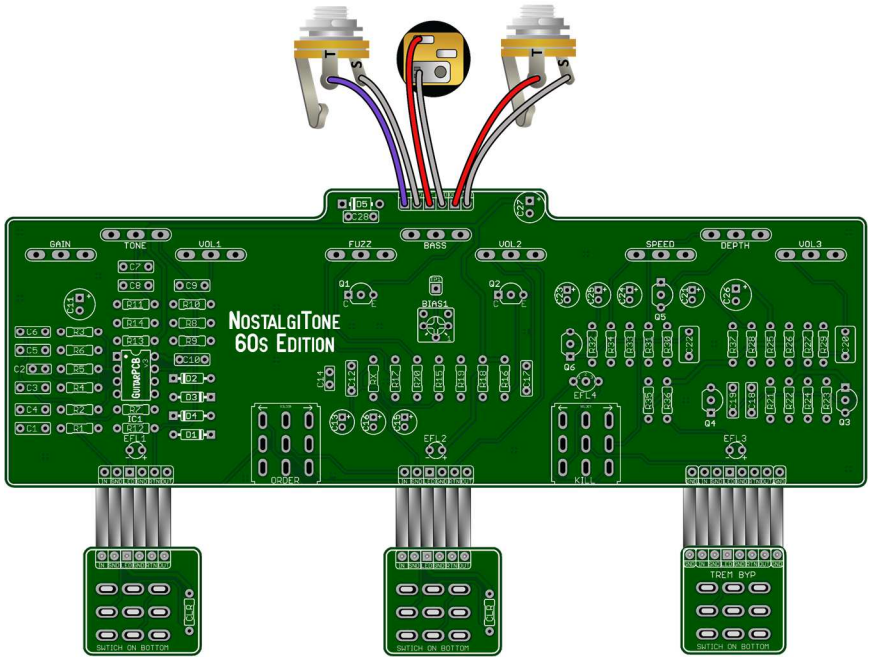

FUZZ
VC
R18
330R
BIAS1
5k
R16
39k
R19
6k2
C14
27pF
C17
10n
SND2
RX
1k
C12
4n7
Q1
BC183
Q2
BC183
RTN2
C500K
VOL2
R15
2M2
C13
1uF
BASS
C100K
R17
120k
C4K
FUZZ
R20
27R
C15
10uF
C16
4u7
GND

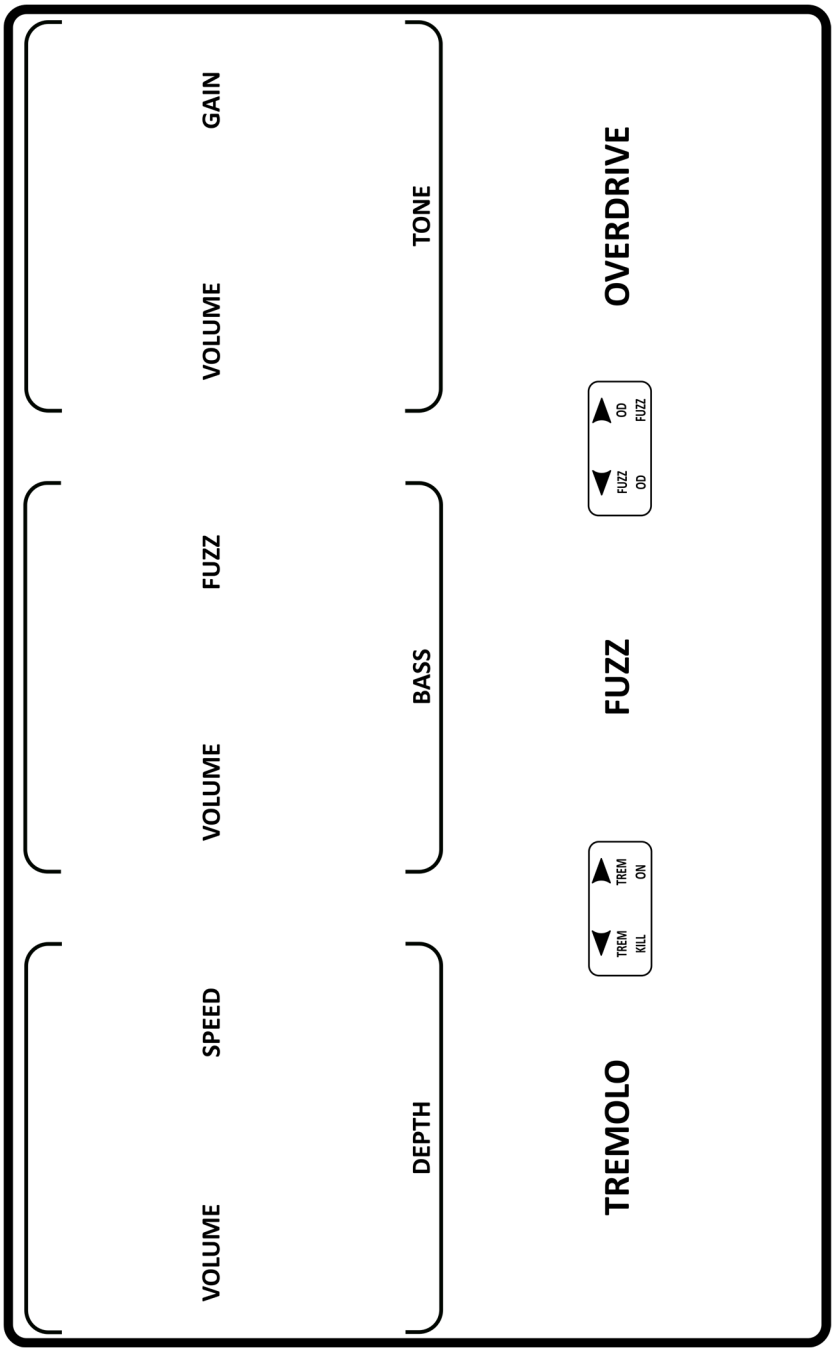

OVERDRIVE
VB1
SND1
R1
2M2
C1
10n
R2
1M
TL072
IC1_A
C2
47pF
R3
10k
GAIN
100kB
R4
4k7
R5
3k3
C3
10n
C4
10n
C5
220n
R6
4k7
C6
220n
R7
4k7
TL072
IC1_B
R8
220k
R9
6k8
D1
1n914
D2
1n914
D3
1n914
D4
1n914
R10
1k
25kB
TONE
C7
10n
R11
6k8
C8
10n
120kA
VOL1
C9
100n
RTN1
R12
1M
VC
C10
100n
R13
47k
R14
47k
C11
100uF
GND



Wiring Diagrams







Enclosure Art for finished pedal.

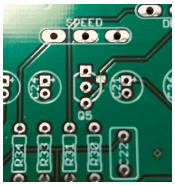
Other Art links are available on the GuitarPCB Shop page.

Printing Tip:
The drill template on the last page is designed to scale and may extend into the page margins. For best results, set your PDF viewer or printer settings to “Actual Size” or “100%” (not “Fit to Page”) before printing. If needed, adjust your printer’s margin settings or use “Borderless” printing to ensure accurate sizing.

SMD Pads:

NostalgiTone PCBs requiring JFETs also have a pad for SMD components usage. This enables you to future-proof your builds and ensures the authenticity of components. Utilizing solder paste makes handling SMD components feasible. NostalgiTone 60's as well as the Tremolo "Single" require use of an authentic 2N5457, J113, or MPF102 for comprehensive Depth control. J201 is not a suitable substitute due to its distinct characteristics. J113 is more easily procurable from trustworthy sources. The SMD equivalents for 2N5457 and J113 are MMBF5457 and MMBFJ113, respectively.

see Q5 pads in the image below (SMD will lay nicely on the top 3 pads which include the square pad = Gate)



Usage tips (Things to consider):

1. **Efficient Gain Mapping:** Achieving the best results with your combo pedal setup involves mastering the art of gain mapping. Avoid maxing out all knobs at 10 to prevent unwanted noise and feedback. Instead, explore the spectrum of tones, from clean power to intense fuzz, through strategic control mapping.

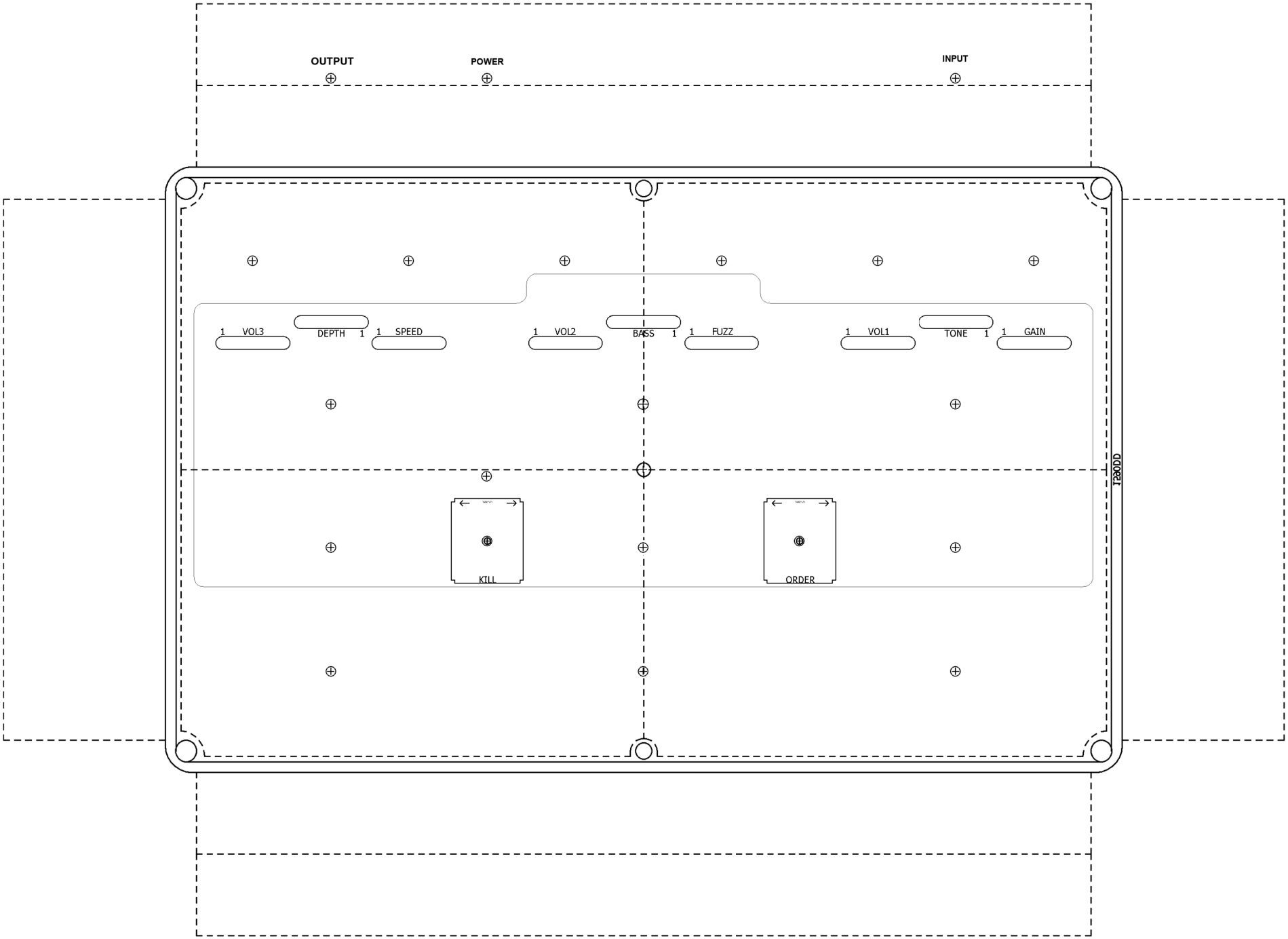
2. **OD Section - Bluesbreaker Amp Inspired:** The OD section draws inspiration from the real Bluesbreaker amp. Begin by setting the main Volume to full and fine-tuning the Drive for your desired clean power to crunchy "Beano" tones. If you desire the full amount of available crunch then reduce the Main volume slightly for full crunch. If you want even more volume, try the LED/diode mod Page 2.

3. **Gain Mapping with Tremolo's Boost/Enhance Feature:** Combine the gain mapping technique with the Tremolo's boost/enhance function for even more added clean volume. Simply utilize the "kill switch" on the Tremolo, activate the foot switch, and adjust the Tremolo Volume to achieve your preferred boost/enhancement level. Depending on the loudness, adjust the OD volume accordingly.

4. **Fuzz Voltage Adjustment:** While this is subjective, I prefer the Fuzz voltage set to about 8.3v; however, feel free to customize it to your preference. Lower the voltage using the trimmer, DMM, and test pad for a more gated fuzz, or raise it to 9v for a smoother effect. Place the DMM red probe on the test pad and the other on the ground.

5. **Power Supply:** Always use a standard 9-volt (nothing higher), and 2.1mm power supply with a negative tip.

6. **Tandem Usage of Fuzz:** Experiment using the Fuzz in tandem, considering the importance of "Gain Mapping" for a well-balanced and dynamic sound.


OUTPUT
POWER
INPUT
1 VOL3
DEPTH 1
1 SPEED
1 VOL2
BASS 1
1 FUZZ
1 VOL1
TONE 1
1 GAIN
KILL
ORDER
125000