GuitarPCB Presents

“SKYN TONE” - Dual Combo

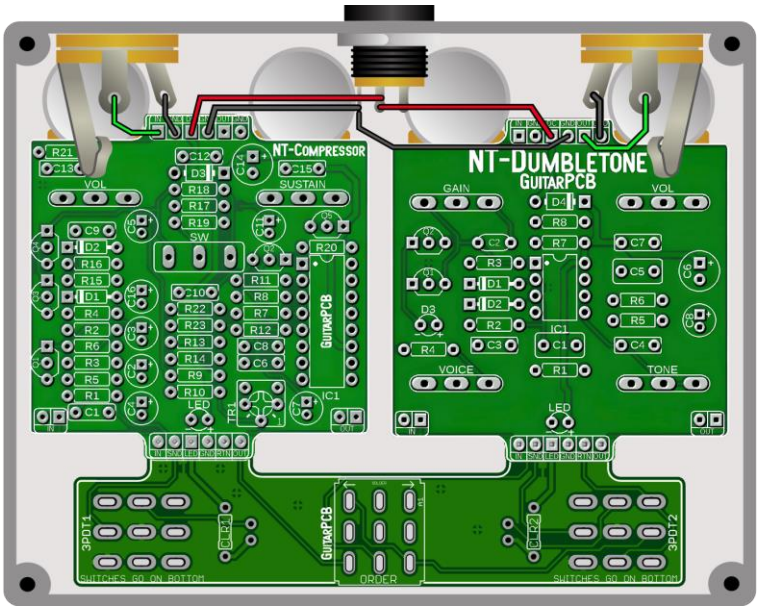
Introducing the “SKYN TONE” Dual Combo that combines two iconic circuits to capture the legendary sound of Lynyrd Skynyrd. This Combo features the "Compressor" and "Dumbletone" circuits, designed to work in harmony to recreate the tones of Lynyrd Skynyrd.

The Compressor is a versatile tool, offering both subtle tone smoothing and heavy compression. The Volume knob adjusts the overall output, allowing for unity gain or a boost. The Sustain knob controls the compression level, ranging from light compression for tap solos and arpeggios to a satisfying squash, perfect for country, blues, and Southern Fried rock. The Attack switch (SW1) fine-tunes the compression’s response to match your playing style. (see page 3 for Compressor Attack explanation).

Dumbletone: To achieve authentic Lynyrd Skynyrd style tones, you need a preamp that is clear, transparent, and punchy, and nothing does this better than the Dumbletone Single. With four knobs to control Volume, Gain, Tone, and Voicing, it offers light overdrive at lower settings reminiscent of tube amps at the "sweet spot." Higher settings boost gain and sustain for rich overdrive.

Key Feature:

- **Built-in order switching for endless tonal possibilities, to easily reverse the signal path. Use a “Stubby” or short bat switch. Try starting with the Compressor set to be first in the order for a traditional tone.**

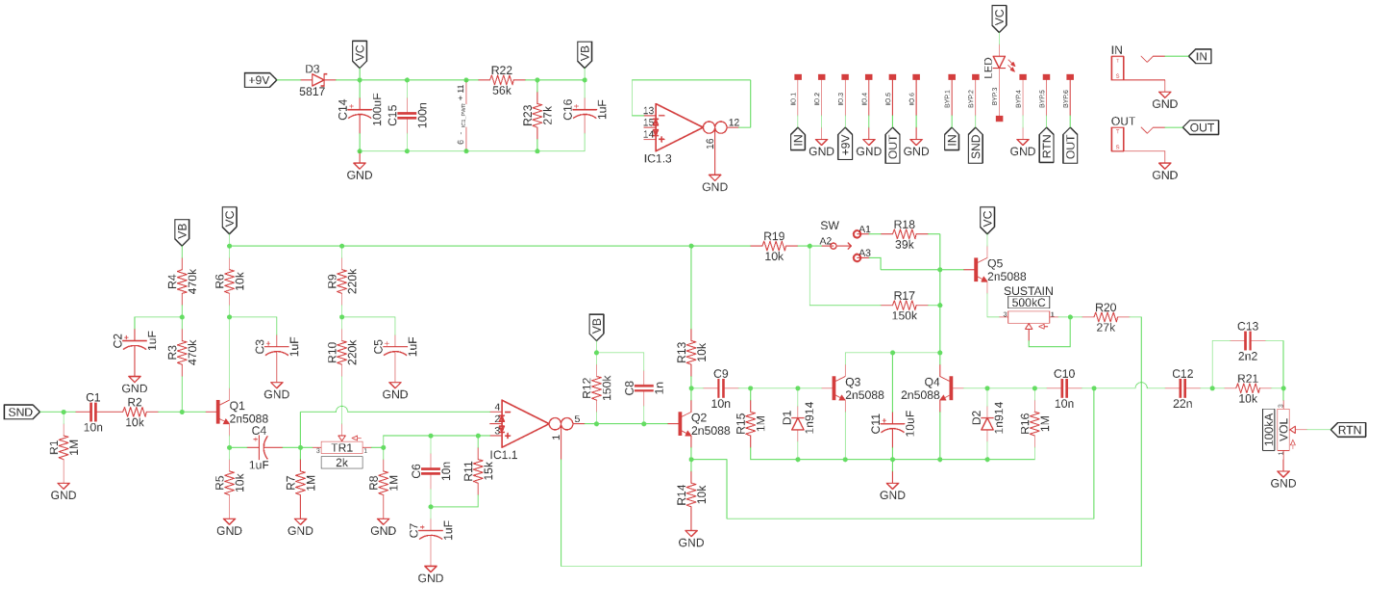


Order switching is built-in, with pin header connections making wiring a breeze.

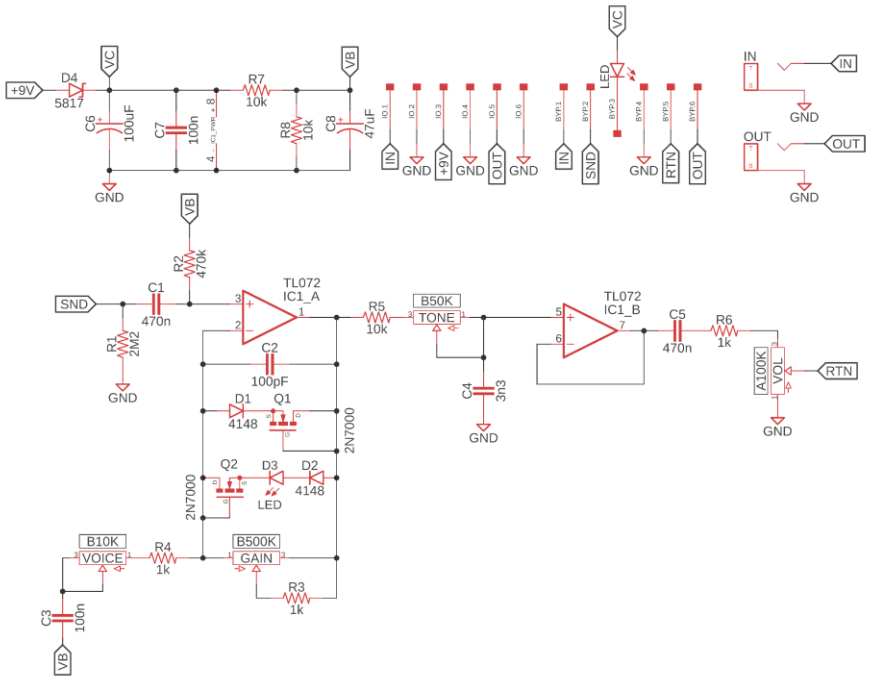
Ideal for a 1590BB2 enclosure, featuring the same dimensions as a 1590BB but with 125B clearance for jacks.

Included with each Dual Combo purchase. – (2) Mainboards, (2) pin headers, (1) Dual wiring board.

Schematic Compressor:



Schematic Dumbletone:



Bill of Materials Compressor:

Part	Value	Part	Value	Part	Value	Part	Value
R1	1M	R15	1M	C5	1uF	Volume	A100K
R2	10k	R16	1M	C6	10n	Sustain	C500K
R3	470k	R17	150k	C7	1uF		
R4	470k	R18	39k	C8	1n	SW - SPDT	On-Off_On
R5	10k	R19	10k	C9	10n	TR1	2k
R6	10k	R20	27k	C10	10n		
R7	1M	R21	10k	C11	10uF	D1 - D2	1N914
R8	1M	R22	56k	C12	22n	D3	1N5817
R9	220k	R23	27k	C13	2n2		
R10	220k			C14	100uF	IC1	LM13700
R11	15k	C1	10n	C15	100n		
R12	150k	C2	1uF	C16	1uF	Q1 - Q5	2N5088
R13	10k	C3	1uF			LED	Status
R14	10k	C4	1uF			*CLR x 1	1k8 - 4k7

Bill of Materials Dumbletone:

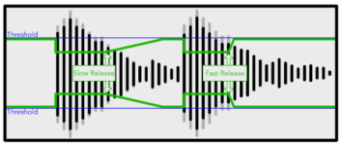
Part	Value	Part	Value	Part	Value	Part	Value
R1	2M2	C1	470n	Q1	2N7000	D1	1N4148
R2	470k	C2	100pF	Q2	2N7000	D2	1N4148
R3	1k	C3	100n			D3	Red LED
R4	1k	C4	3n3	VOL	A100K	D4	1N5817
R5	10k	C5	470n	GAIN	B500K		
R6	1k	C6	100uF	VOICE	B10K	IC1	TL072
R7	10k	C7	100n	TONE	B50K	LED	Status
R8	10k	C8	47uF			*CLR x 1	1k8 - 4k7

*** You'll need a 3PDT toggle switch On/On (solder lug version) with a short shaft (stubby) for order switching on the dual wiring board PCB.**

Compressor Attack explained:

The speed at which Q5 turns on depends on how fast C11 changes from a discharged to a charged state; this is controlled by the resistance value of R17-R19, smaller resistance - faster capacitor charging - quicker turn-on time for Q5.

- SW1 UP: 10k (150k shorted). This is the fastest release time.
- SW1 MIDDLE: 10k + 150k in series which is the longest release.
- SW1 DOWN: 10k + 39k (which is in parallel to the150k) is medium attack.

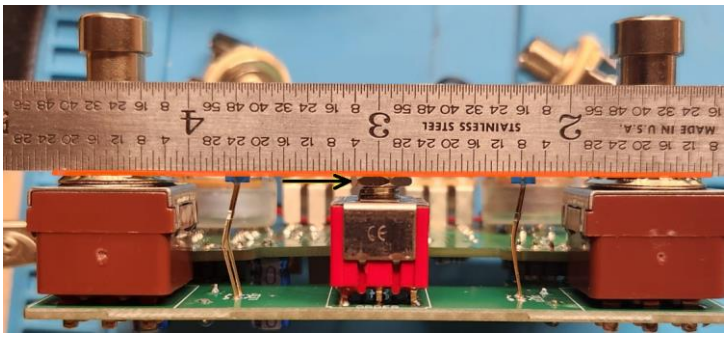


While it does not affect the overall tone a fast attack setting will reduce the volume of the initial pick strike, and depending on the amount of sustain, this can sound dramatic. For a natural, transparent effect, a slower attack time will let the initial pick or finger attack through.

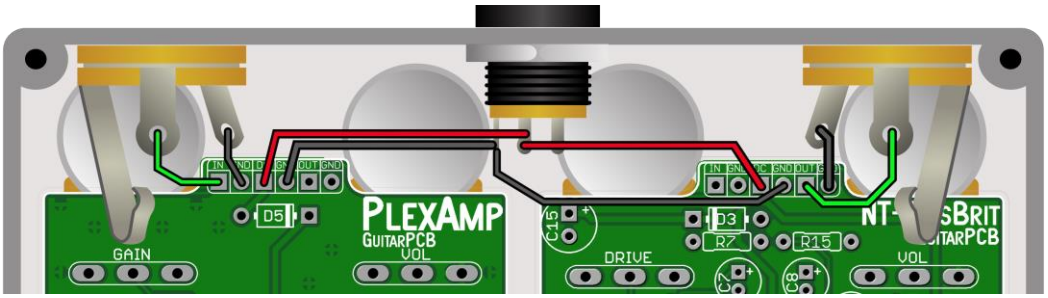
Build Notes:

1. **Solder the short side of both pin headers to the top of each main board, pointing upward. Next, solder all three switches, and (CLRs), to the dual wiring board. Dry hang the LEDs (optional) if mounting to the dual wiring board.**
2. **Since the dual wiring board offers an additional LED location for each circuit, you can choose your preferred setup. Whichever option you pick, solder a small jumper on the unused LED pads. (CLRs) are essential regardless of the location choice.**
3. **If you order the Tayda drilled enclosure with my link (see shop page) you must install the Status LEDs on the wiring board.**
4. **Remove both nuts on each of the 3PDT foot switches for the best height match. Adjust the height of the inner Order Switch adjustment nut so it is level with the foot switches' height relative to the enclosure. Do not over-tighten the outer Switch nut.**
5. **Install the wiring board by sliding it over both pin headers. Once the foot switches and toggle switch are tightened within the enclosure, proceed to solder the long side of the pin header to the dual wiring board.**
6. *** There are two (CLR) Current Limiting Resistors crucial to protect and adjust the brightness of their corresponding status LED. You may use a value of 1k8 (Bright) to 4k7 (Dim).**

Order Switch Height Adjustment



Easy Wiring Diagram



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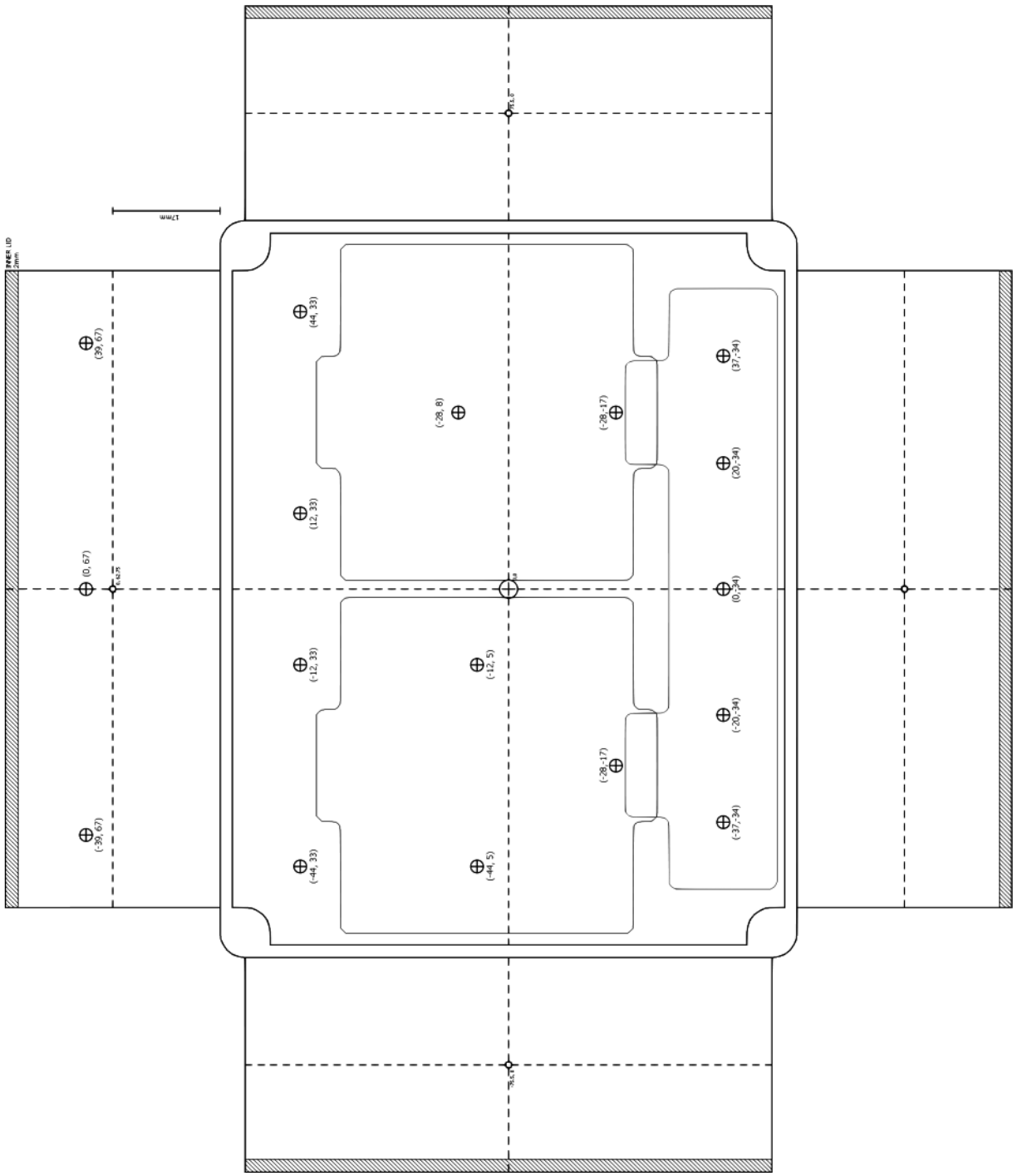

1590BB2 Drill Template

Drill only the holes required for your chosen project. LED holes can be located on either the wiring board or the main boards, giving you flexibility in how you lay out your build.

A link to a Tayda-drilled enclosure is available on the GuitarPCB Shop page. If you use the Tayda-drilled enclosure, both status LEDs must be installed on the dual wiring board.