
GuitarPCB presents

Southern Fried

NostalgiTone **Southern Fried** is the first in my “Genre Series” to deliver the ultimate sonic experience, crafted to capture the tones of Lynyrd Skynyrd, the Allman Brothers, Molly Hatchet, Little Feat, Black Crowes, and more.

Compressor: The Compressor is a versatile tool that offers both subtle tone smoothing and heavy compression. The Volume knob lets you adjust the overall output, providing unity gain or a boost. The Sustain knob controls compression levels, ranging from gentle to satisfying squash, perfect for country, blues, and Southern Fried rock. The Attack switch (SW1) fine-tunes the compression's feel and response to your playing style.

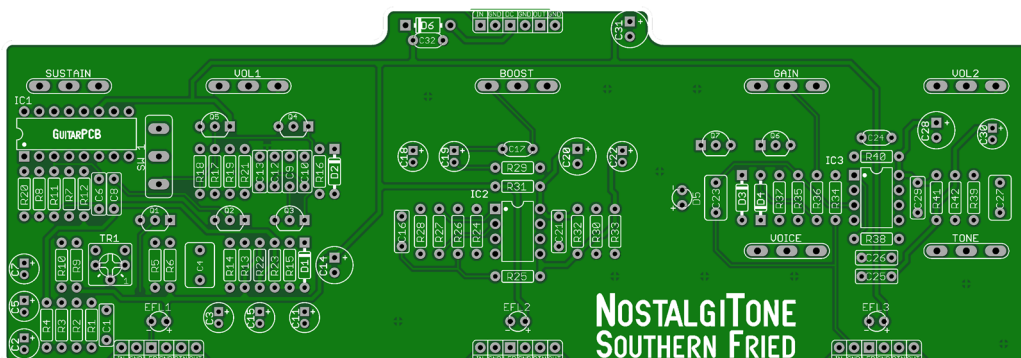
Boost: The Boost circuit provides up to +26dB of gain with a single control. It is ideal for enhancing lead work, balancing guitars with different outputs (like humbuckers and single-coils), or at lower settings using it as a buffer feeding the Dumbletone preamp, the Boost adds additional gain and saturation, offering even more tonal options.

Dumbletone: The Dumbletone preamp section is the heart of the Triple Combo. To achieve authentic Southern Fried tones, you need a preamp that is both transparent and punchy. The Dumbletone excels in delivering this sound. 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. Pair it with the Boost or Compressor for soaring lead tones that cut through the mix.

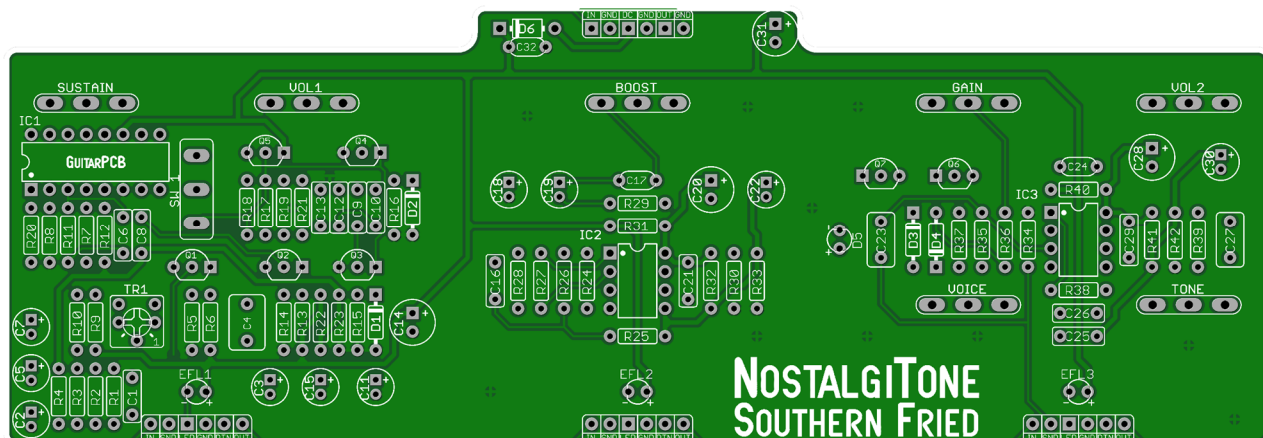
🔧 **Easy Wiring:** No more daunting wiring hassles! Say hello to beauty under the hood. Enjoy all-analog tones with modern features that will slip into your gig bag, ensuring you are always ready to unleash your musical magic.

🔧 **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 **NostalgiaTone** series combo builds from GuitarPCB. Get yours today and discover a world of sonic possibilities like never before!



Part	Value	Part	Value	Part	Value	Part	Value	Part	Value
R1	1M	R21	10k	R41	10k	C18	4u7	Q1 - Q5	2N5088
R2	10k	R22	56k	R42	10k	C19	10uF	Q6 - Q7	2N7000
R3	470k	R23	27k			C20	100uF		
R4	470k	R24	10M	C1	10n	C21	100n	VOL1	A100K
R5	10k	R25	10M	C2	1uF	C22	1uF	SUSTAIN	C500K
R6	10k	R26	1k	C3	1uF	C23	470n	SW1	SPDT On/Off/On
R7	1M	R27	56k	C4	1uF	C24	100pF	BOOST	C500K
R8	1M	R28	2k7	C5	1uF	C25	100n	VOL2	A100K
R9	220k	R29	470R	C6	10n	C26	3n3	GAIN	B500K
R10	220k	R30	10k	C7	1uF	C27	470n	TONE	B10K
R11	15k	R31	47R	C8	1n	C28	100uF	VOICE	B10K
R12	150k	R32	100k	C9	10n	C29	100n	TR1	2K
R13	10k	R33	100k	C10	10n	C30	47uF		
R14	10k	R34	2M2	C11	10uF	C31	220uF	D1 - D4	1N4148
R15	1M	R35	470k	C12	22n	C32	100n	D5	Red LED
R16	1M	R36	1k	C13	2n2			D6	1N5817
R17	150k	R37	1k	C14	100uF	IC1	LM13700		
R18	39k	R38	10k	C15	1uF	IC2	TL072		
R19	10k	R39	1k	C16	100n	IC3	TL072	EF1 - 3	6PIN Ribbon
R20	27k	R40	47R	C17	47pF			EFL1 - 3	Status LED



Build Notes:

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

* **CLR x3** - Each wiring board needs an onboard current limiting resistor (CLR) for the main board status LEDs. You can use a resistor value between 1k8 (bright) and 4k7 (dim). Solder the 3PDT foot switches to the underside of the wiring boards, opposite the CLR side.

Solder the wiring boards (correct side) to your preferred 3PDT footswitch, attach one end of the ribbon cable to the wiring board, and then proceed to solder the three assembled footswitches to the main board. Utilize the top center pads for connecting power and the In/Out jacks.

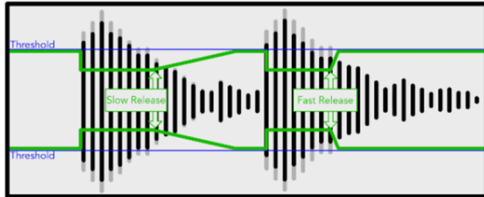
TIPS:

- **TR1** - Set the Compressor trim pot, TR1, to its exact midpoint. For greater accuracy, measure the resistance between leads 1 and 2, and between leads 2 and 3. Both values should be approximately equal.
- **IC2 and IC3** – TL072 was selected for their low noise properties, price, and availability. Try NE5532, LF353, OPA2134, as well.
- **D3 – D4** uses 1N4148 diodes in the Dumbtone preamp, including D5 with a red LED for asymmetrical clipping, to achieve a tube amp tone. A Yellow LED works similarly. The forward voltage of a Violet or Blue LED is noticeably different if you wish to experiment.
- Avoid changing the values of resistors, capacitors, or potentiometer tapers, as they play a crucial role in both the functionality and the creation of the desired feel. All the values used are readily available.

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 the 150k) 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.

Usage Guide:

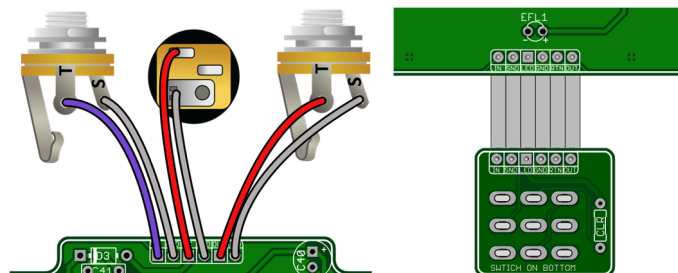
Gain Mapping: Effective gain mapping is vital for optimizing your combo pedal setup. Avoid the inclination to turn all knobs to 10, as this rapidly leads to unwanted noise and feedback. Instead, explore the intricacies of control mapping to unlock a diverse range of tones. Consider that each of the three circuits contributes a substantial level of Gain, and when used together, they combine.

1. **Compressor:** The Compressor is a versatile tool that offers both subtle tone smoothing and heavy compression. Start by adjusting the Volume for a mild boost. Set the Sustain knob to noon for a transparent sustain, or turn it up fully for a Southern Fried squash. This modified circuit provides an even tone that is not overly bass-heavy, ensuring your sound cuts through the mix. Adjust the attack switch to match your picking style for optimal feel. For a more obvious compression effect, set the SW1 switch up or down; for more transparent compression, set it in the middle.
2. **Boost:** While a solo boost is obvious, using the Boost at slightly lower settings as a buffer for the Dumbletone preamp may not be as readily apparent. Its flat frequency response preserves your tone while adding extra sparkle, making it perfect for this scenario.
3. **Dumbletone:** Start with all four knobs set to noon. You have complete control over Volume, Gain, Tone, and Voice. The Voice control serves two functions: Grit and Bass content. Full clockwise gives you less Grit with more Bass. Start in the middle.
4. **Power Supply:** Always use a 9-volt power supply (nothing higher) with a 2.1mm plug and a negative tip.



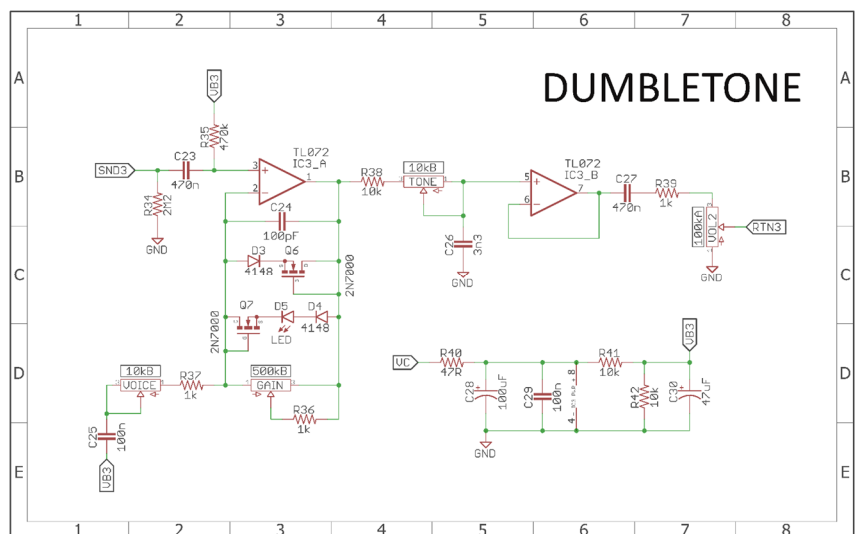
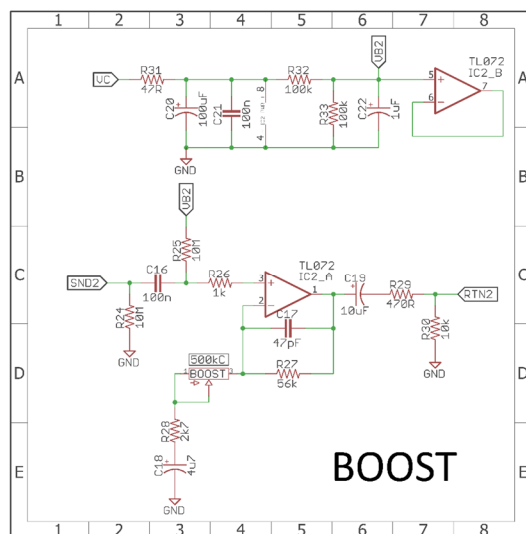
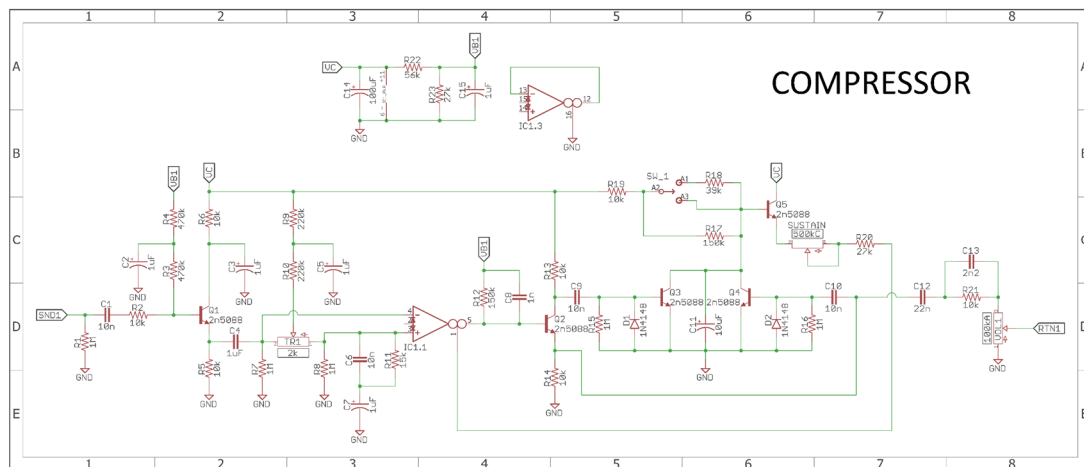
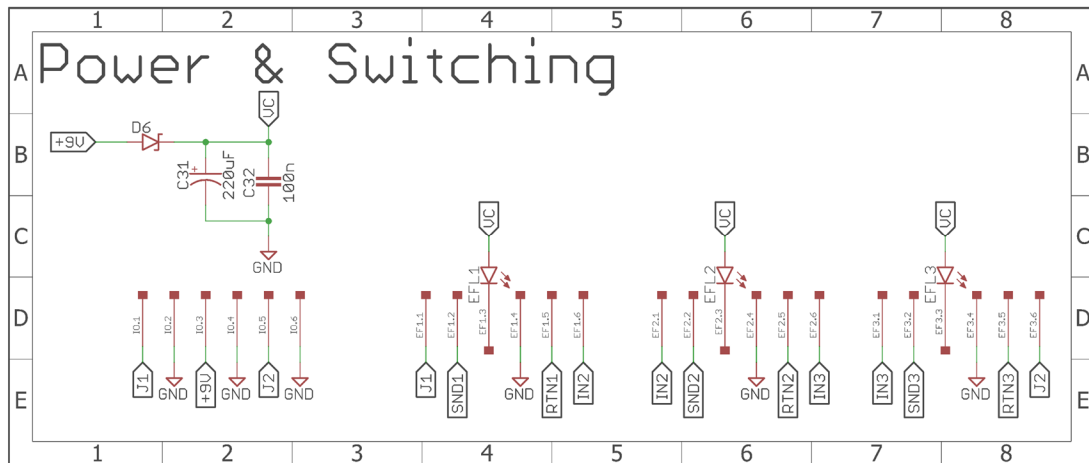
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A link for a Tayda Pre-drilled enclosure is on the Shop page at GuitarPCB.com

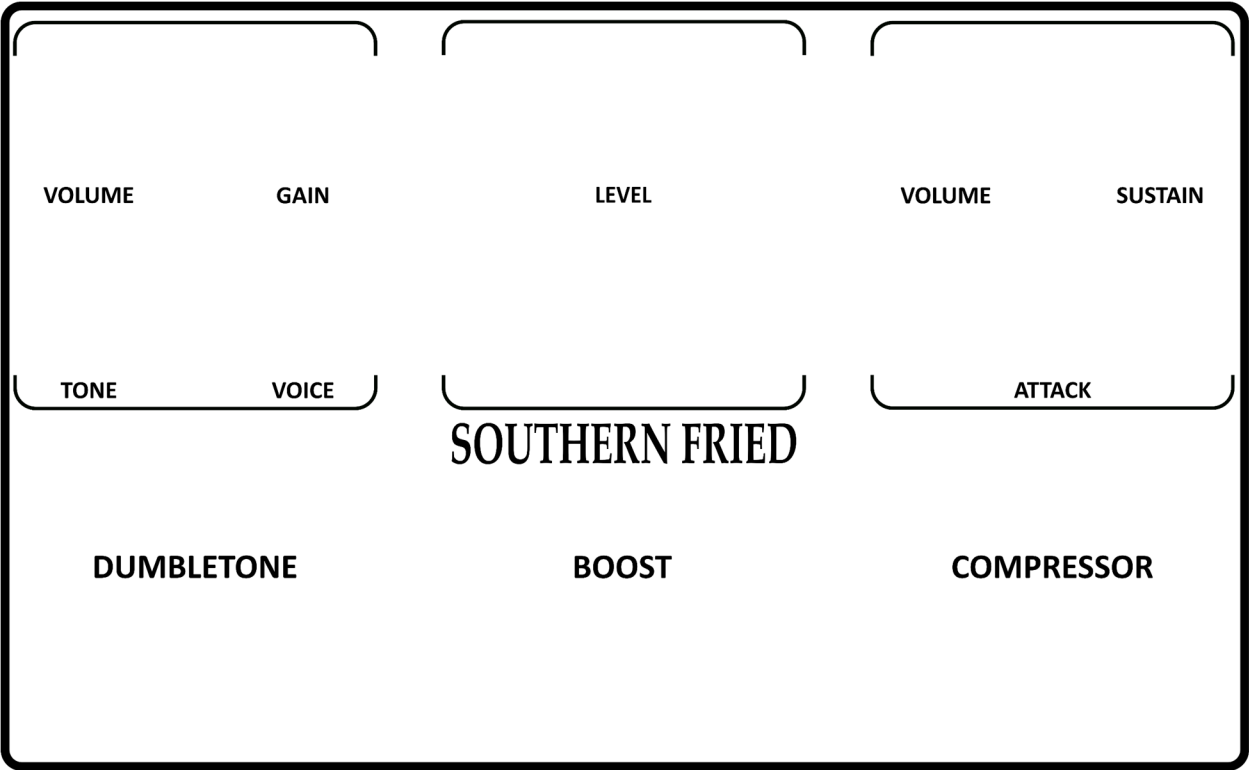


Easy Wiring Guide – Install the 3PDT switch on the bottom. CLR is the Top.

Schematics:



Decal Image: Obtain a High-Resolution version at the Shop Page where you purchased this PCB.



An example of a finished enclosure is below.

