
GuitarPCB presents

NostalgiTone 70s

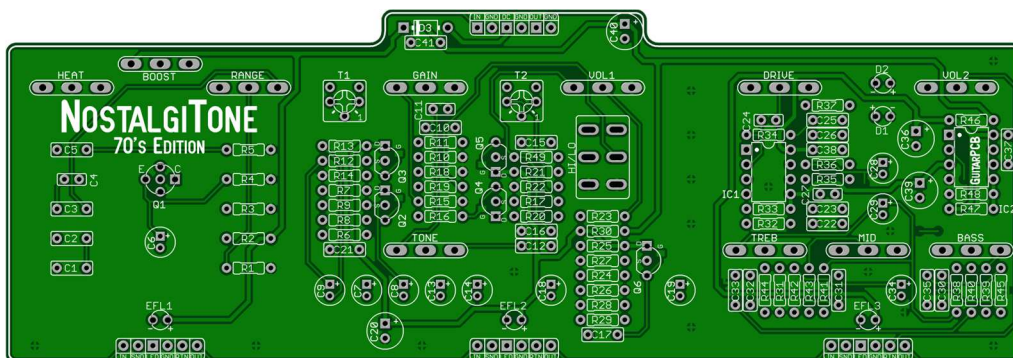
Are you ready to elevate your game? The **NostalgiTone 70s** combo is here to give you the ultimate sonic experience. We have combined the best of the best, squeezing three incredible circuits into a genre-defining combo.

- **Boost:** The Rangemaster was a cornerstone of many '70s rock sounds including guitar legends like Tony Iommi, Marc Bolan, and Brian May, as well as the pioneers of N.W.O.B.H.M. like Judas Priest and Iron Maiden. Our Boost circuit goes beyond, merging the standard output Volume control with our Range control, from classic treble-boost tone to full range or any sweet spot in between. Plus, the Heat control gives you mastery over gain level saturation, flexibility the original lacked with its fixed maximum gain. It is now your turn to redefine classic rock tones.
- **Tweed:** Unleash the authentic tones of the legendary Tweed 5E3 amp like never before. Equipped with adjustable internal trimmers and a versatile Hi/Lo switch, achieve it all—from powerful clean tones in Lo mode, Joe Walsh tones with Medium Gain, or fiery, Neil Young-worthy gain in Hi mode. When you pair Tweed with the Boost be prepared for an unprecedented sonic journey.
- **British:** Unlock genuine British tones effortlessly with our newest creation—an essential tool for your authentic sonic quest. Achieving those iconic British tones becomes second nature with a complete Marshall-style tone stack and the versatile Boost. This dynamic duo offers an array of tonal options, seamlessly transitioning from early Plexi-style tones to the revered 800 sound. Dive into an unparalleled sonic realm and sculpt your signature sound with ease.

🔧 **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!



Part	Value	Part	Value	Part	Value	Part	Value	Part	Value	Part	Value
R1	1M	R21	1M	R41	2k2	C12	4n7	C32	2n2	D1 - D2	LED
R2	220k	R22	1M	R42	2k2	C13	22uF	C33	10n	D3	1N5817
R3	68k	R23	100R	R43	15k	C14	1uF	C34	2u2	HI/LO	DPDT On/On
R4	8k2	R24	1M	R44	10k	C15	22n	C35	22n	T1 - T2	10k
R5	1M	R25	10k	R45	6k8	C16	1n	C36	100uF	Q1	2n2222
R6	1M	R26	10k	R46	47R	C17	100n	C37	100n	** Q2-Q6	J201 (see notes)
R7	1M	R27	5k6	R47	22k	C18	22uF	C38	100n		
R8	33k	R28	15k	R48	22k	C19	2u2	C39	100uF	VOL2	A100K
R9	15k	R29	100R	R49	47k	C20	100uF	C40	220uF	DRIVE	B100K
R10	56k	R30	47R	C1	1n	C21	100n	C41	100n	BASS	B25K
R11	4k7	R31	1M	C2	3n3	C22	22n			MID	B25K
R12	1k	R32	1k	C3	68n	C23	1n	IC1	LM833	TREB	B100K
R13	1M	R33	1M	C4	47pF	C24	100pF	IC2	TL072		
R14	1M	R34	1k	C5	10n	C25	220n	* CLR x3	1k8-4k7	VOL1	A250K
R15	1M	R35	10k	C6	47uF	C26	100n	EF1	6pin Ribbon	GAIN	A1M
R16	68k	R36	1M	C7	1uF	C27	100pF	EF2	6pin Ribbon	tone	B1M
R17	10k	R37	470R	C8	22uF	C28	1uF	EF3	6pin Ribbon		
R18	5k1	R38	6k8	C9	2u2	C29	1uF	EFL1	Status LED	RANGE	A500K
R19	3k9	R39	6k8	C10	33n	C30	47n	EFL2	Status LED	BOOST	B10K
R20	1k	R40	68k	C11	470pF	C31	10n	EFL3	Status LED	HEAT	B1K

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 requires an onboard (CLR) current limiting resistor. This is for the main board status LEDs. A value of 1k8 (Bright) to 4k7 (Dim) may be used.

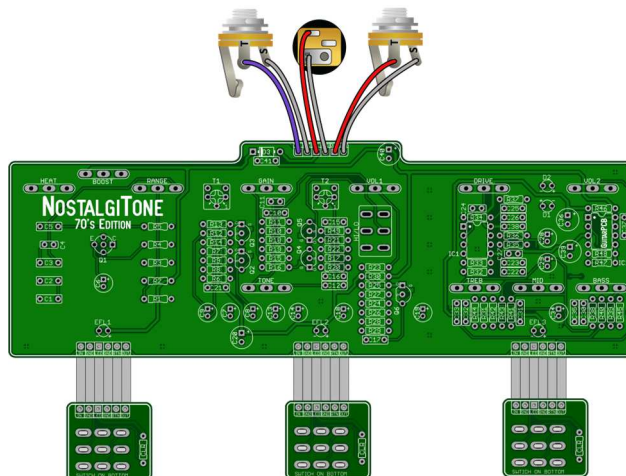
****Q2 and Q6** (5 total) are JFETs. You may use J201, J113, 2N5457, or MPF102 with similar results. Please use JFETs from a reputable source.

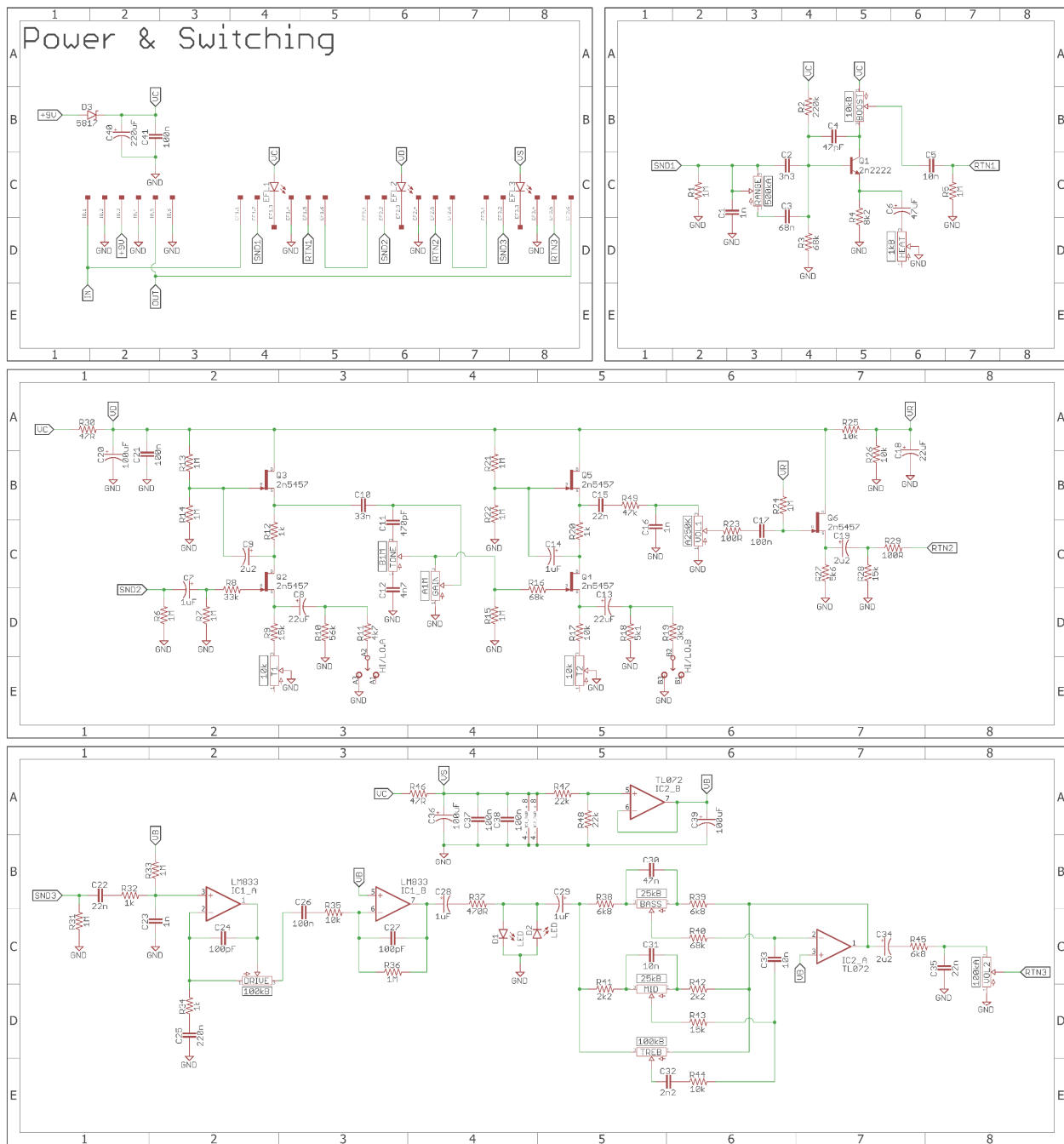
T1 and T2 are to add gain to suit different gear, pickup types, and outputs. If you use single-coil, low-output pickups, you can increase the gain. The “stock setting” is minimal for both, but you can adjust each one slowly and incrementally with small turns as needed. Experiment to find your preferred level, or stick with the minimal stock setting.

Treble, Mid, & Bass pots – Remove covers and use pedal bumpers or 1” Foam tape circles instead for protection and easy enclosure installation.

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, through strategic control mapping.

- British section - Begin by setting the main Volume to midway and the Drive as well. If you desire the full amount of available distortion, remember that when engaging the Boost, it should be reasonably set so as not to create noise or squeal.
- Tweed section. This is a powerful and versatile circuit. Keep your tone centered and the Hi/Lo switch to low while setting the Volume and Drive settings to your liking. Typically, the Volume only needs to be at 10:00. When using the switch to increase the gain you will need to adjust the Volume. There are many amazing tones to be found here.
- Boost section: The Boost will do everything a Rangemaster will and much more. Use gain mapping when operating the Boost in tandem with other circuits. For example, if you wish to achieve some “Rust Tones” try the Boost with full range and heavy on the Heat in tandem with the Tweed circuit. To easily achieve some early Metal tones, use the Boost in tandem with the British.





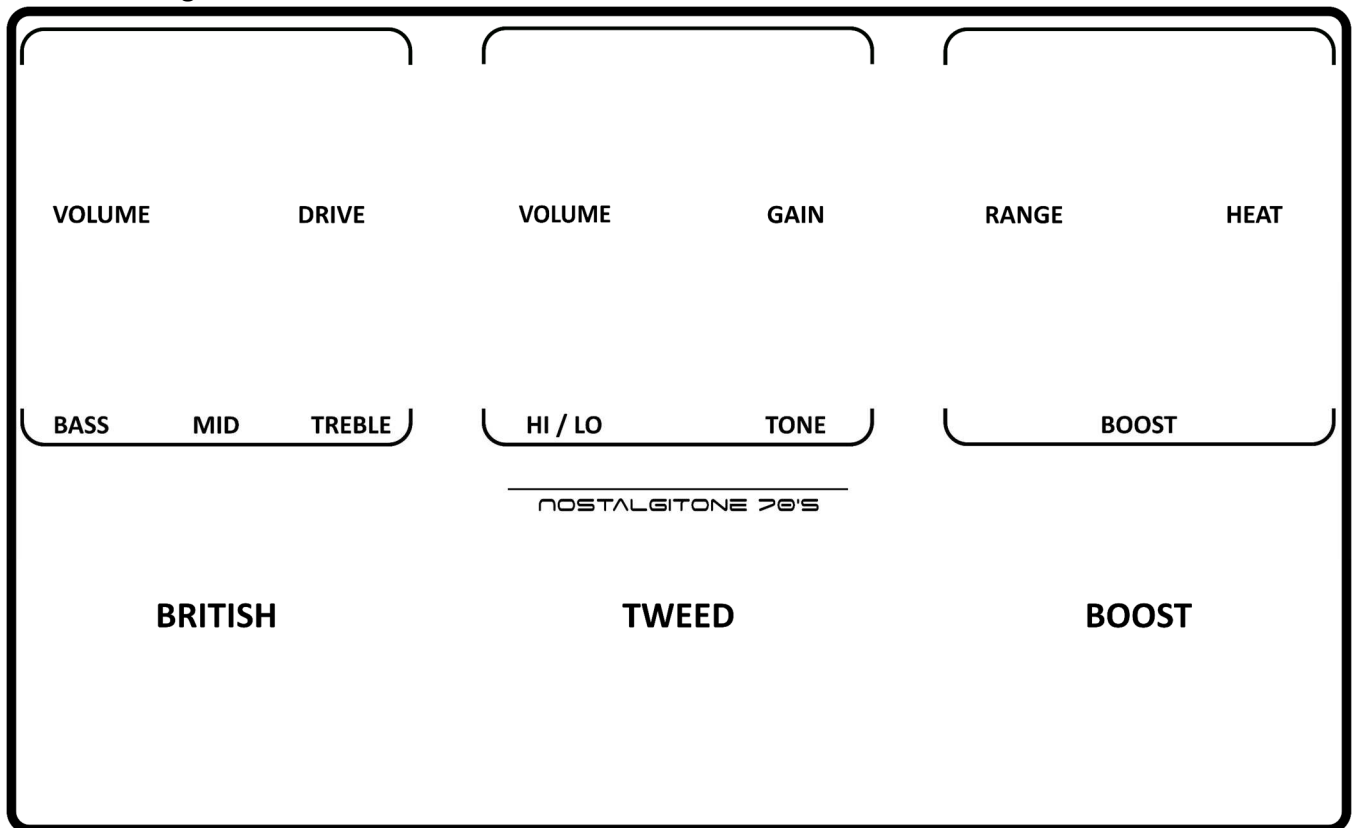
This Build Document, PCB, Artwork and Schematic image are property of ©GuitarPCB.com
 All copyrights, trademarks and artworks remain the property of their owners.
 Any company or product names used are for identification and educational purposes only.
 GuitarPCB is in no way affiliated with any said companies and are not to be misrepresented.

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

TIPS:

- Remove the plastic backs from the three potentiometers lined up in a row. Then, use non-conductive material to keep them from touching the solder side. This ensures easier fitting into the enclosure drill holes. Protect only the backs of the pots, not the sides. Small pedal bumpers would suffice, or consider using some 3M cushioned stickies, etc.
- 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 values are readily available.
- Enclosure Installation: Ensure every single nut and washer is removed from all pots, 3PDTs, and switches. Remove all metal tabs on pots. Use a Hobby Pick Tool for moving things around in those tight spots. Loosely fit LEDs, bending only the ends of the leads to prevent them from slipping through the pads. Finally, solder LEDs after proper fitting.

Silkscreen Image



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.

