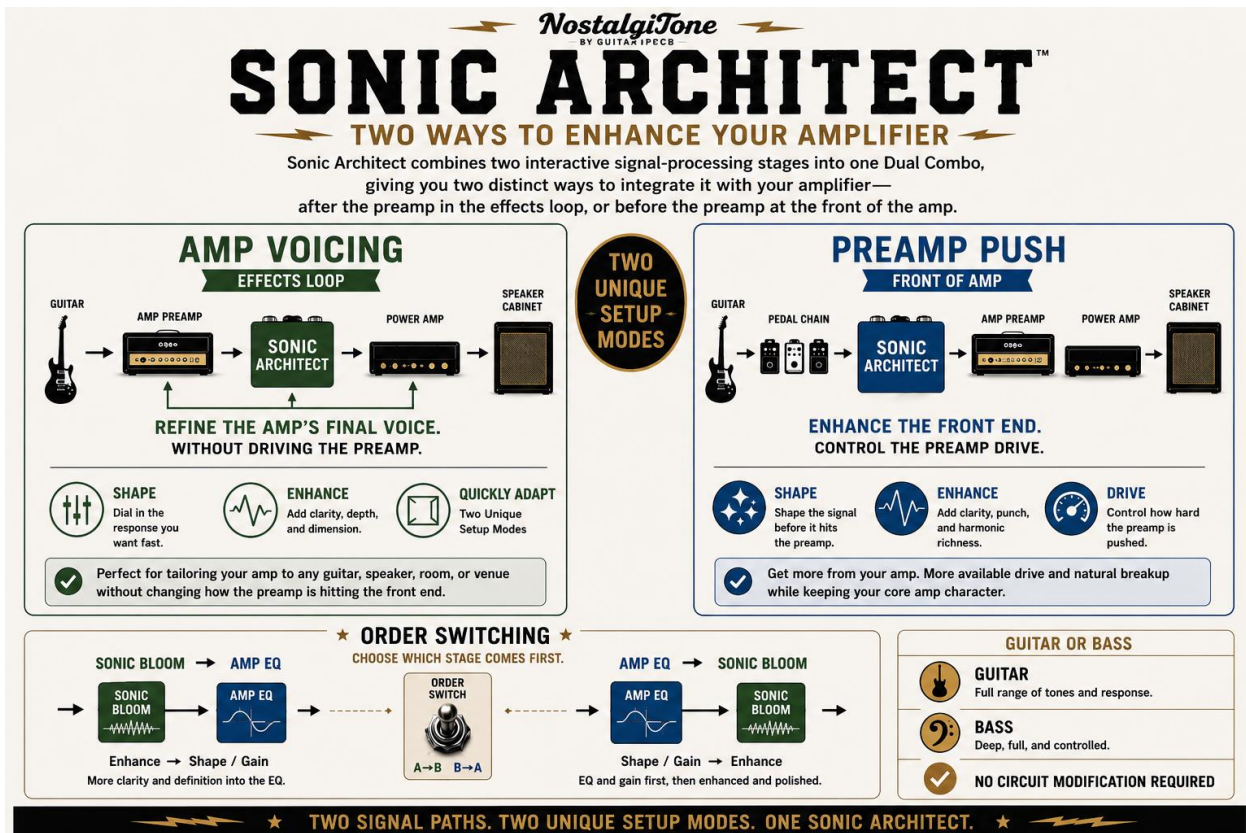


GuitarPCB Presents

Sonic Architect Dual Combo

SONIC ARCHITECT — TWO WAYS TO ENHANCE YOUR AMPLIFIER

Sonic Architect combines two interactive signal-processing stages into one Dual Combo, giving you two distinct ways to integrate it with your amplifier. After the preamp in the effects loop, or before the preamp at the Input.

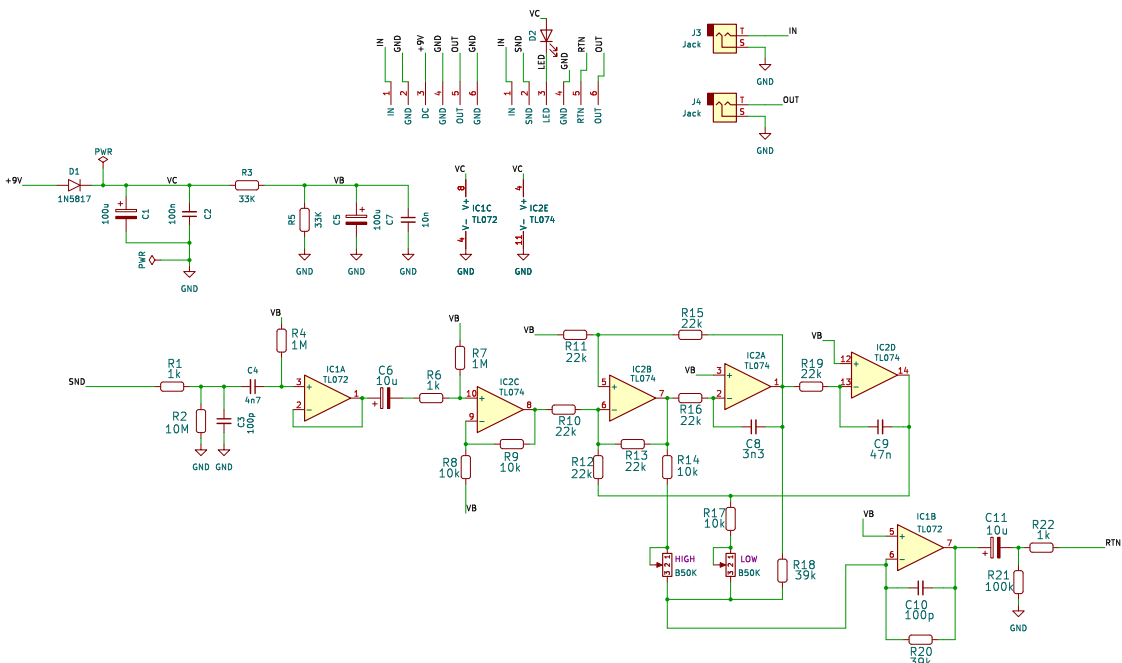


This build combines the NostalgITone Sonic Bloom and AmpEQ into a single Dual Combo with built-in order switching. The order switch lets you choose which stage comes first, providing two different signal paths and additional control over how **Sonic Architect** interacts with your amplifier.

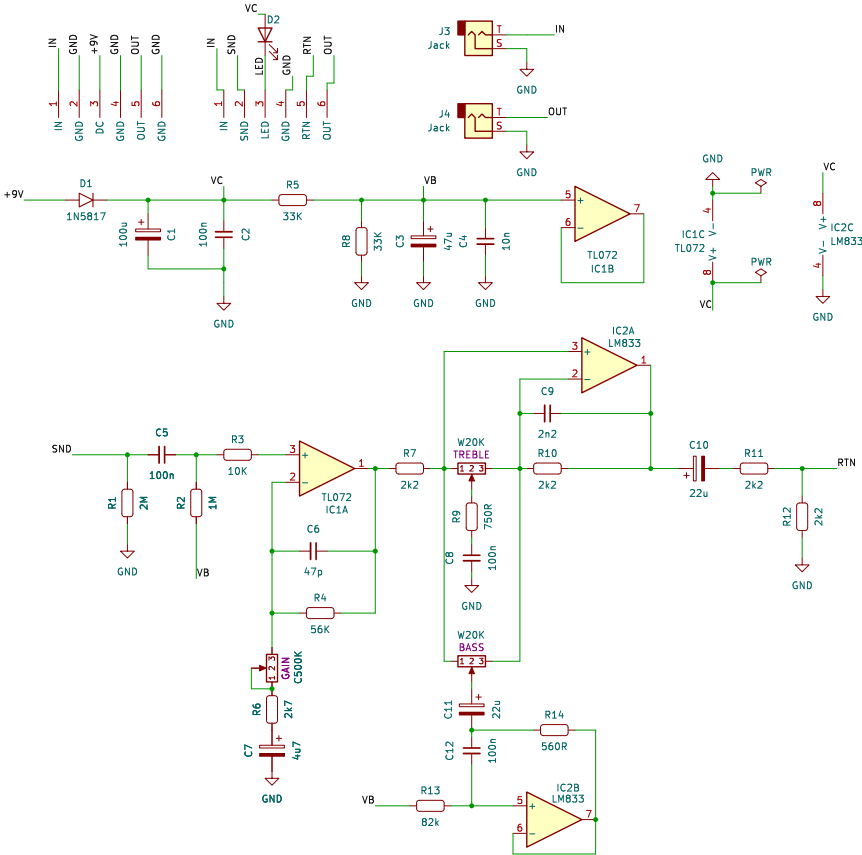
Order switching is built-in, with pin header connections making wiring a breeze.

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

Schematic Sonic Bloom:



Schematic AmpEQ



Bill of Materials Sonic Bloom:

PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	1k	R12	22k	C1	100u	D1	1N5817
R2	10M	R13	22k	C2	100n	D2	Status LED
R3	33K	R14	10k	C3	100p		
R4	1M	R15	22k	C4	4n7	IC1	TL072
R5	33K	R16	22k	C5	100u	IC2	TL074
R6	1k	R17	10k	C6	10u		
R7	1M	R18	39k	C7	10n	HIGH	B50K
R8	10k	R19	22k	C8	3n3	LOW	B50K
R9	10k	R20	39k	C9	47n		
R10	22k	R21	100k	C10	100p	* CLR x 1	1k8 - 4k7
R11	22k	R22	1k	C11	10u		

Bill of Materials AmpEQ:

PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	2M	R8	33K	C1	100u	C8	100n	D2	Status LED
R2	1M	R9	750R	C2	100n	C9	2n2	IC1	TL072
R3	10K	R10	2k2	C3	47u	C10	22u	IC2	LM833
R4	56K	R11	2k2	C4	10n	C11	22u	GAIN	C500K
R5	33K	R12	2k2	C5	100n	C12	100n	BASS	W20K
R6	2k7	R13	82k	C6	47p			TREBLE	W20K
R7	2k2	R14	560R	C7	4u7	D1	1N5817	* CLR x1	1k8 - 4k7

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

Build Notes:

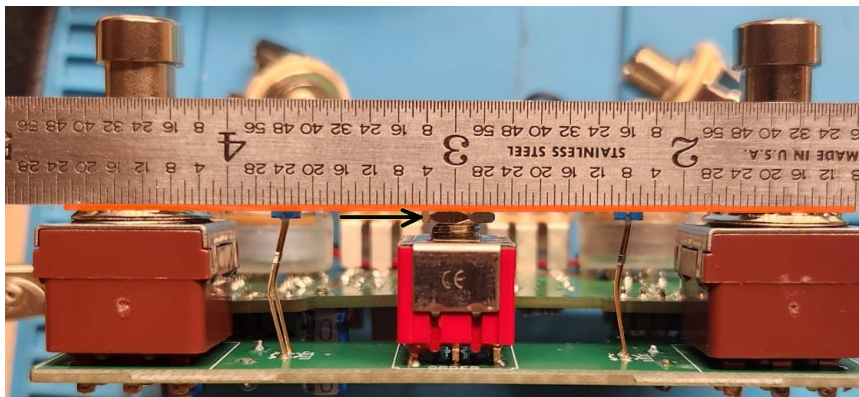
1. Solder the short side of both pin headers to the top of each main board, pointing upward. Next, solder all three switches, and (CLRs), to the dual wiring board. Crimp hang the LEDs (optional) if mounting to the dual wiring board.
2. Since the Dual PCB offers an additional LED Status location, you can choose your preferred setup. Whichever option you pick, solder a small jumper on the unused LED pads. (CLRs) are essential regardless of the installation choice.
3. Remove both nuts on each of the 3PDT foot switches for the best height match. Adjust the height of the Order Switch height adjustment nut so it is level with the foot switches (see photo next page). Do not over-tighten.
4. Install the Dual PCB by sliding it over both pin headers. Once the foot switches and toggle switch are secured correctly within the enclosure, proceed to solder the long side of the pin header to the dual wiring board.
5. 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).

Preferred setting for ENHANCE: Start with both controls at 12:00 and then fine tune your overall enhancement from there.

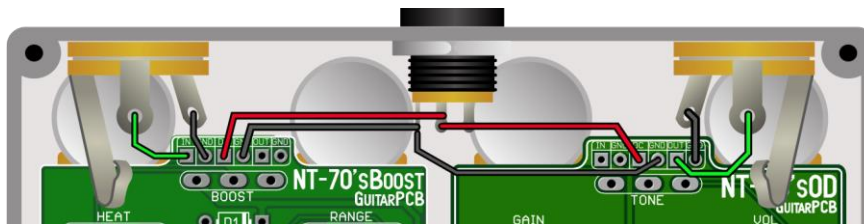
Preferred setting for Active EQ: Start with all controls set to noon 12:00. Since the Bass and Treble controls are Active you can Boost or Cut from there as needed. Adjust Level (Gain) to unity to start with. For additional PUSH increase LEVEL to your desired setting. Remember that this is an Active EQ so the Bass and Treble controls are each capable of Boost as well starting from the 12:00 position.



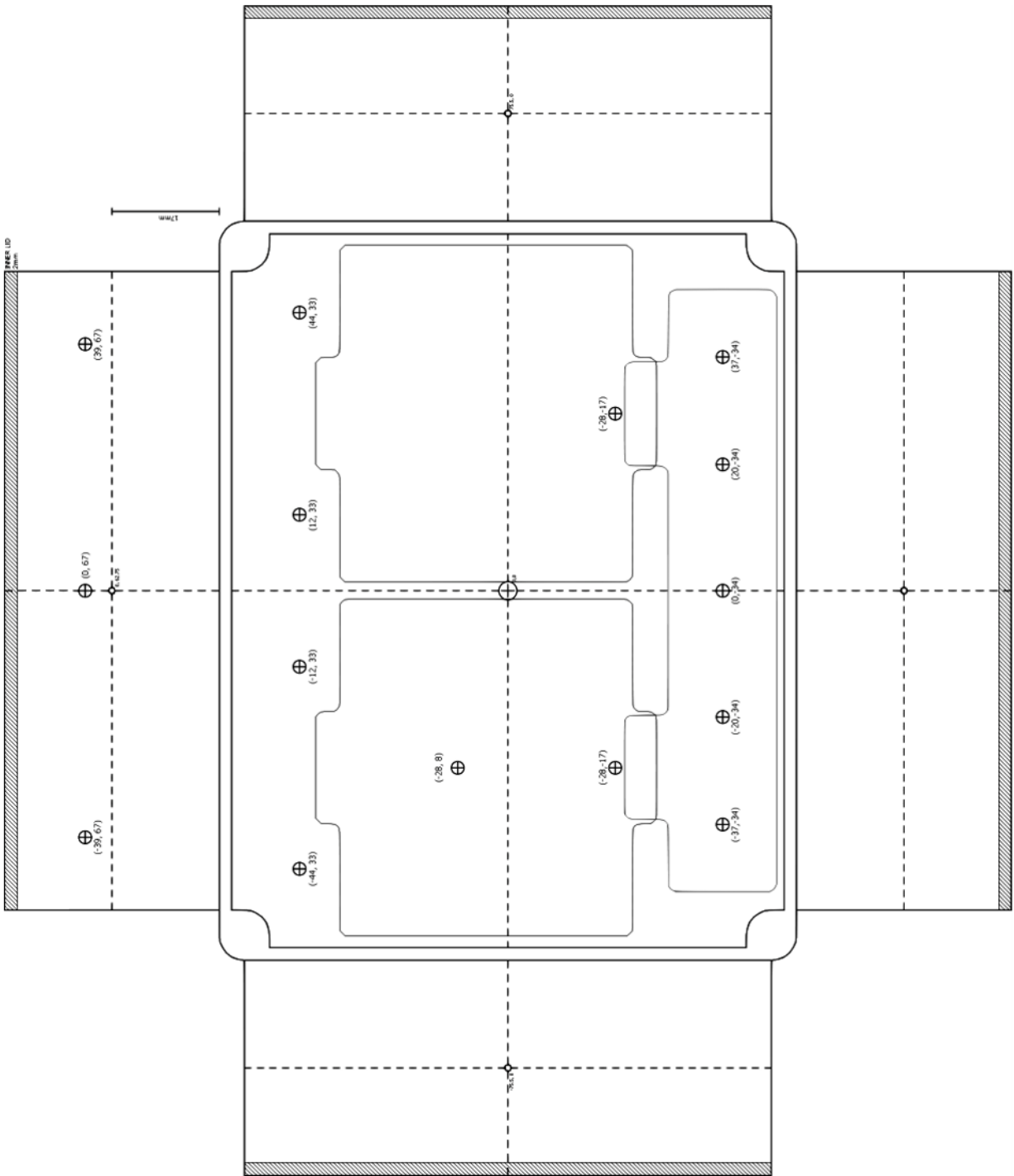
Pre-installation Height Adjustment – Remove both 3PDT nuts and adjust DPDT height nut accordingly.



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.