

# GuitarPCB Presents

## ROCK ⚡ HARD - Dual Combo

Introducing the **ROCK ⚡ HARD** Dual Combo, combining the PlexAmp and Boost circuits to explore the evolution of hard rock tone from the mid-1970s through the early 1980s. Built-in order switching unlocks an impressive range of vintage tone-shaping possibilities.

The PlexAmp delivers authentic British amplifier-style crunch with exceptional touch sensitivity and dynamic guitar-volume cleanup. Used alone, it captures the open, responsive character that defined many classic hard rock recordings.

The Boost is best viewed as a gain-staging tool rather than a simple volume boost. Placed before the PlexAmp, it increases sustain, harmonic complexity, note bloom, and natural compression by driving the input stage harder. This same principle helped shape many classic hard rock tones through front-end preamps such as Angus Young's Schaffer-Vega wireless system and Ritchie Blackmore's Aiwa TP-1011 tape recorder, used on stage and in the studio for decades.


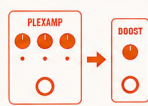

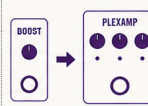
Placed after the PlexAmp, the Boost adds punch, fullness, tonal richness, and output level while preserving the core PlexAmp character. The result is a bigger, more authoritative sound with exceptional guitar-volume cleanup, allowing heavily driven tones to retain clarity, body, and impact as the guitar is rolled back.

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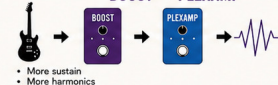

# ROCK ⚡ HARD

## DUAL COMBO


★ EXPLORE THE EVOLUTION OF HARD ROCK TONE ★

1975 ERA OPEN BRITISH CRUNCH	1976-1978 ERA THE PUSH BEGINS	1979 ERA MORE DRIVE	1980-1985 ERA THE FULL IMPACT
<b>PLEXAMP ONLY</b>	<b>PLEXAMP → BOOST (BOOST POST PLEXAMP)</b>	<b>PLEXAMP ONLY</b>	<b>BOOST → PLEXAMP (BOOST PRE PLEXAMP)</b>
 <ul style="list-style-type: none"><li>• Lower gain settings</li><li>• Dynamic response</li><li>• Guitar volume cleanup</li><li>• Raw amp character</li></ul> <p><i>Open, touch-sensitive tone with classic 70s response.</i></p>	 <ul style="list-style-type: none"><li>• Medium PlexAmp gain settings</li><li>• Increased punch, authority, and tonal richness</li><li>• Powerful cleanup from the guitar volume control</li></ul> <p><i>Bigger, more authoritative tones with clarity and dynamics intact.</i></p>	 <ul style="list-style-type: none"><li>• Higher gain settings</li><li>• Increased sustain and ampli-style drive</li><li>• Aggressive late-70s hard rock tones</li></ul> <p><i>More gain, more bite, more sustain.</i></p>	 <ul style="list-style-type: none"><li>• Additional front-end drive</li><li>• Enhanced sustain</li><li>• Increased harmonic complexity</li><li>• Natural compression</li><li>• Richer, more saturated hard rock tones</li></ul> <p><i>Greater sustain, harmonics and compression for big 80s-era tones.</i></p>

★ TWO WAYS TO STACK – TWO DISTINCT FEELS ★

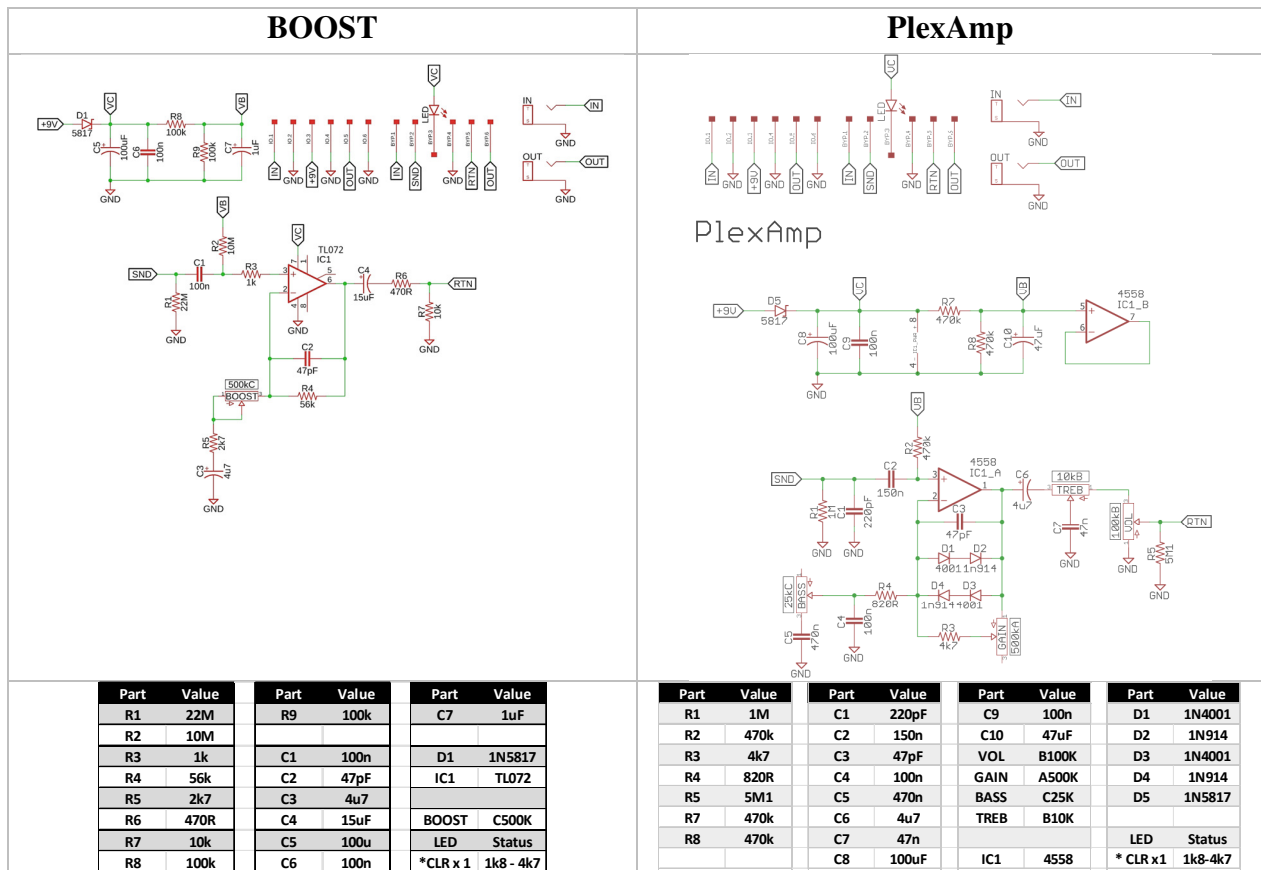
BOOST → PLEXAMP	PLEXAMP → BOOST
 <p><i>Pushes the front end harder for more gain, sustain and harmonic richness.</i></p> <ul style="list-style-type: none"><li>• More sustain</li><li>• More harmonics</li><li>• Natural compression</li><li>• Richer overtones</li></ul>	 <p><i>Adds punch, fullness and output while preserving cleanup and core tone.</i></p> <ul style="list-style-type: none"><li>• More punch</li><li>• More fullness</li><li>• More output level</li><li>• Excellent volume cleanup</li></ul>

ORDER SWITCH



3PDT ON/ON STUBBY SWITCH

ONE PEDAL. TWO PROVEN CIRCUITS. FOUR ERA TONES.



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

Note: R1 (22MΩ): The boost circuit uses a 22MΩ carbon film resistor. If unavailable, substitute two 10MΩ resistors in series (20MΩ) with no noticeable difference in performance. Original KOA Speer CF1/4C226J 22MΩ carbon film resistors are available from Mouser and DigiKey.

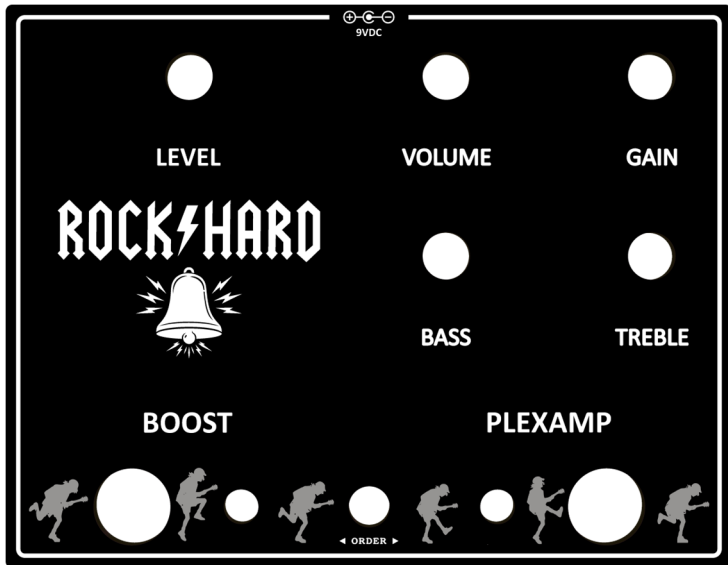
BASS POT: In place of the C25K pot, a C20K pot may be used since potentiometers have a wide tolerance. A W taper is also suitable, as it combines C taper behavior for the first half of its rotation and A taper for the second.

### Build Notes:

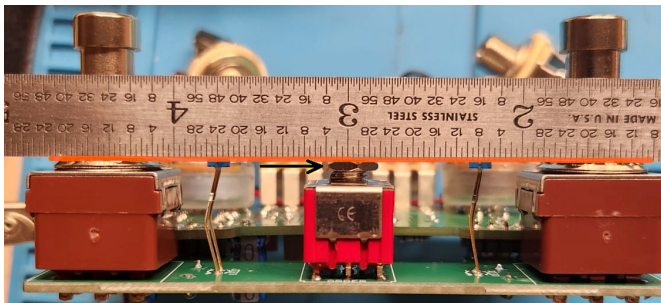
1. Solder the short side of both pin headers to the top of each main board, pointing upward. Next, solder all three switches, and (CLRs), to the dual wiring board. Dry hang the LEDs (optional) if mounting to the dual wiring board.
2. Since the dual wiring board offers an additional LED location for each 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).
7. Remove pot protectors for the side-by-side 3x tone section. Use non-conductive backing instead to save space between pots.

Need help or inspiration? Visit the GuitarPCB Community Forum to see other members build examples, ask questions, and share your results. Also check out the Guides Page for additional articles, build tips, and troubleshooting information.

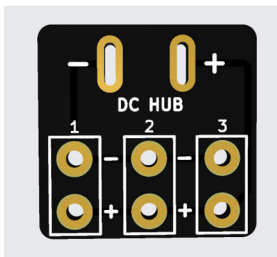
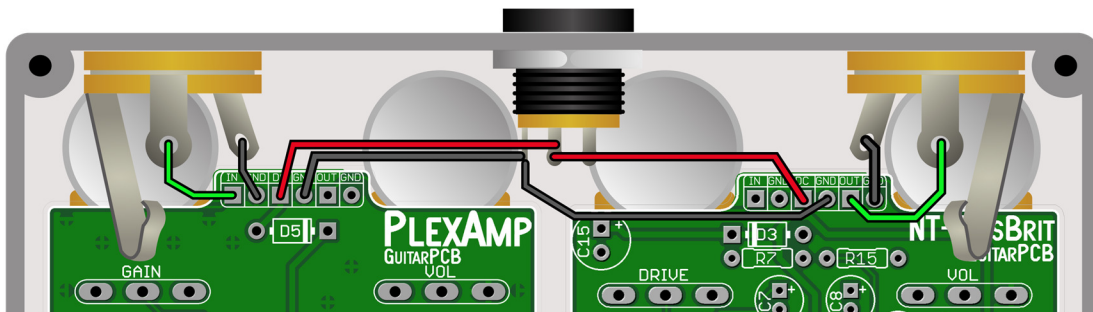
<https://guitarpcb.com/community>



**Order Switch Height Adjustment**



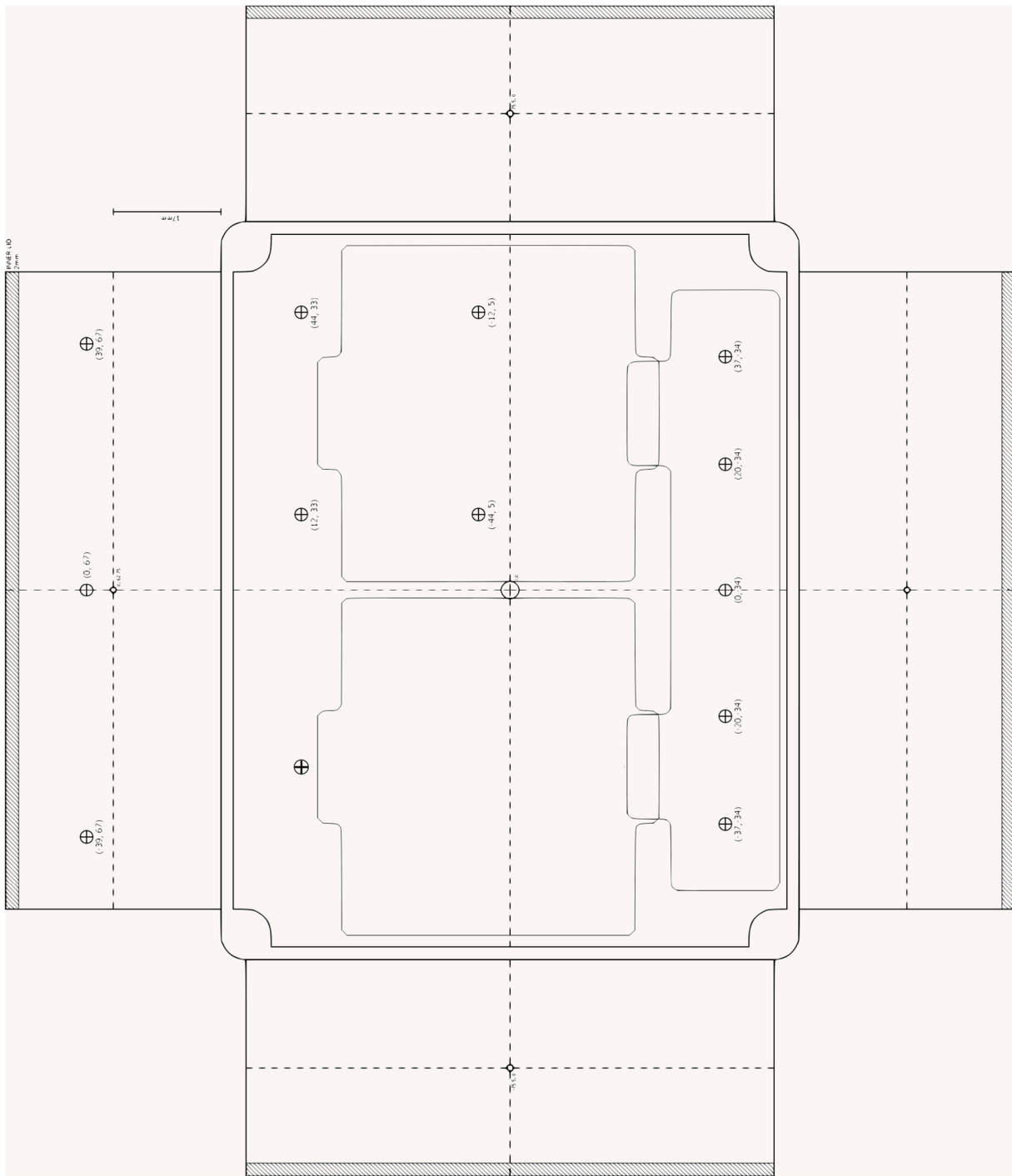
**Easy Wiring Diagram**



**New DC Hub available now for easier DC routing to both circuits.**

**Designed for the 2.1mm low profile jack.**





### 1590BB2 Drill Template

**Note:** The left section features drill holes for a five-knob and the right side is a three-knob circuit.

**Study the template** and drill only the holes you need for your project.

You can find a link to a Tayda Drilled enclosure on the GuitarPCB shop page. You must install both status LEDs on the dual wiring board only if you order the Tayda drilled enclosure.