GuitarPCB Presents

NostalgiTone Rock Candy Single

Rock Candy is built around a multi-stage gain structure designed to deliver the open, dynamic character of classic '70s hard rock and blues. A transistor input stage feeds a high-gain op-amp section, with symmetrical diode clipping adding natural compression and harmonic character as the gain is increased.

Rock Candy moves from clean, gritty overdrive into a fuller, more sustained drive as the Gain control is advanced. Its open, full-range response retains the character of the guitar while adding crunch and sustain, rather than narrowing the sound into a pronounced midrange focus. The Tone control works within the gain circuit, providing a range from warm, muscular crunch to brighter, more cutting lead tones.

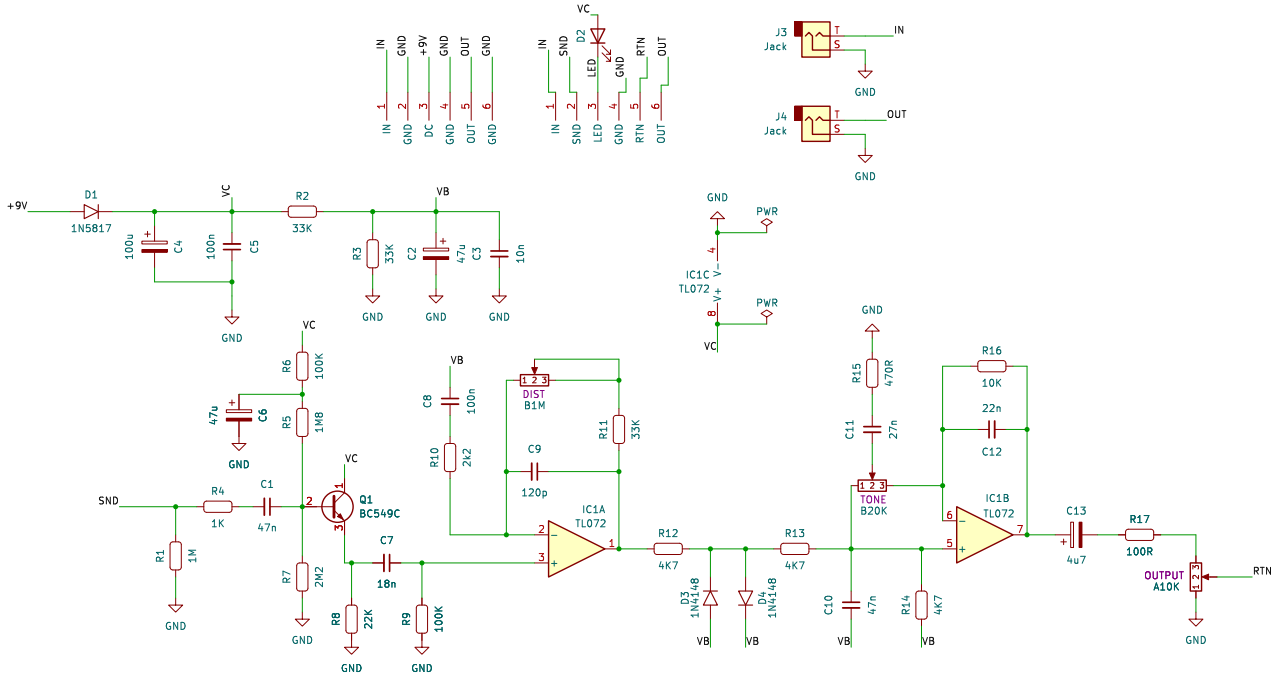
The result is a straightforward, amp-like overdrive with plenty of output to push a clean amplifier into its own sweet spot. Whether you're after crunchy rhythm tones, bluesy overdrive, or singing lead sustain, Rock Candy delivers the responsive, harmonically rich character associated with classic '70s hard rock and blues.



Mainboard Dimensions – 2.10” x 2.12”

Included with each PCB purchase. – (1) Mainboard, (1) wiring board, and (1) ribbon cable.

Schematic:



Bill of Materials:

PART	VALUE
R1	1M
R2	33K
R3	33K
R4	1K
R5	1M8
R6	100K
R7	2M2
R8	22K
R9	100K
R10	2k2
R11	33K

PART	VALUE
R12	4K7
R13	4K7
R14	4K7
R15	470R
R16	10K
R17	100R
C1	47n
C2	47u
C3	10n
C4	100u

PART	VALUE
C5	100n
C6	47u
C7	18n
C8	100n
C9	120p
C10	47n
C11	27n
C12	22n
C13	4u7
* Q1	BC549C

PART	VALUE
D1	1N5817
D2	Status LED
D3	1N4148
D4	1N4148
IC1	TL072
DISTORTION	B1M
TONE	B20K
OUTPUT	A10K
* CLR x1	1k8 - 4k7

Build Notes:

***Q1: BC549C installed as shown. MPSA13 may also be used with similar results if installed rotated 180° to the silkscreen marking.**

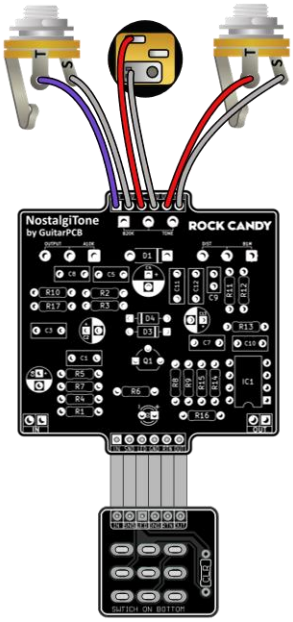
Included with the purchase of the main PCB board will be (1) standard foot switch wiring board (6 pins), and (1) 6 pin ribbon cable. This simplifies the wiring process while keeping troubleshooting and noise to a minimum.

Note the extra IN / Out pads located at the bottom of the PCB which are conveniently placed if you wish to use side jacks.

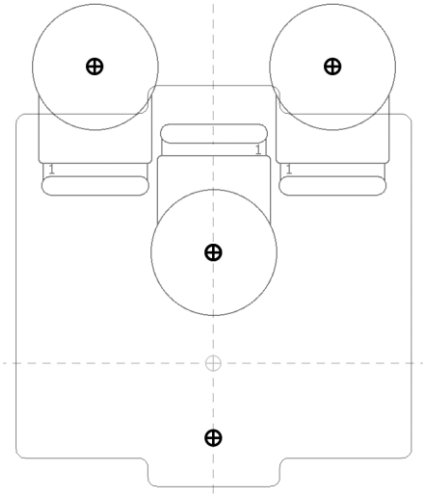
Use a standard 6-pin ribbon cable to connect the foot switch wiring board with the main board. The 3PDT wiring board contains an onboard (CLR) current limiting resistor. This is to protect and adjust the brightness of their corresponding main board status LEDs. A value of 1k8 to 4k7 may be used.

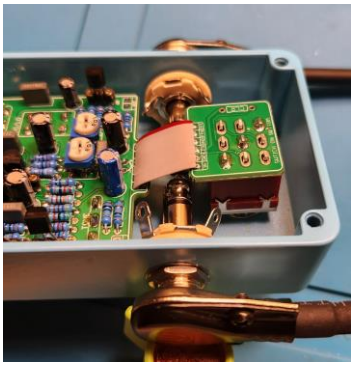
*** CLR x1** - Each wiring board requires an onboard (CLR) current limiting resistor. This is for the main board status LEDs. A 1k8 (Bright) value to 4k7 (Dim) may be used. A main Status LED is to show the active status.

Wiring Diagram

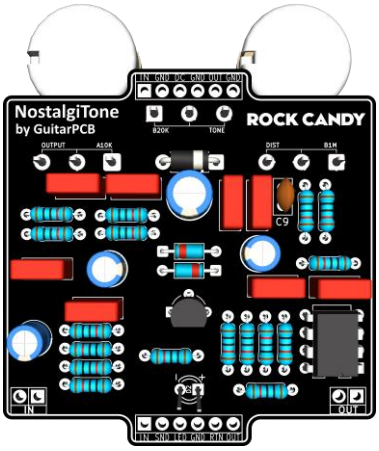


Generic Drill Template



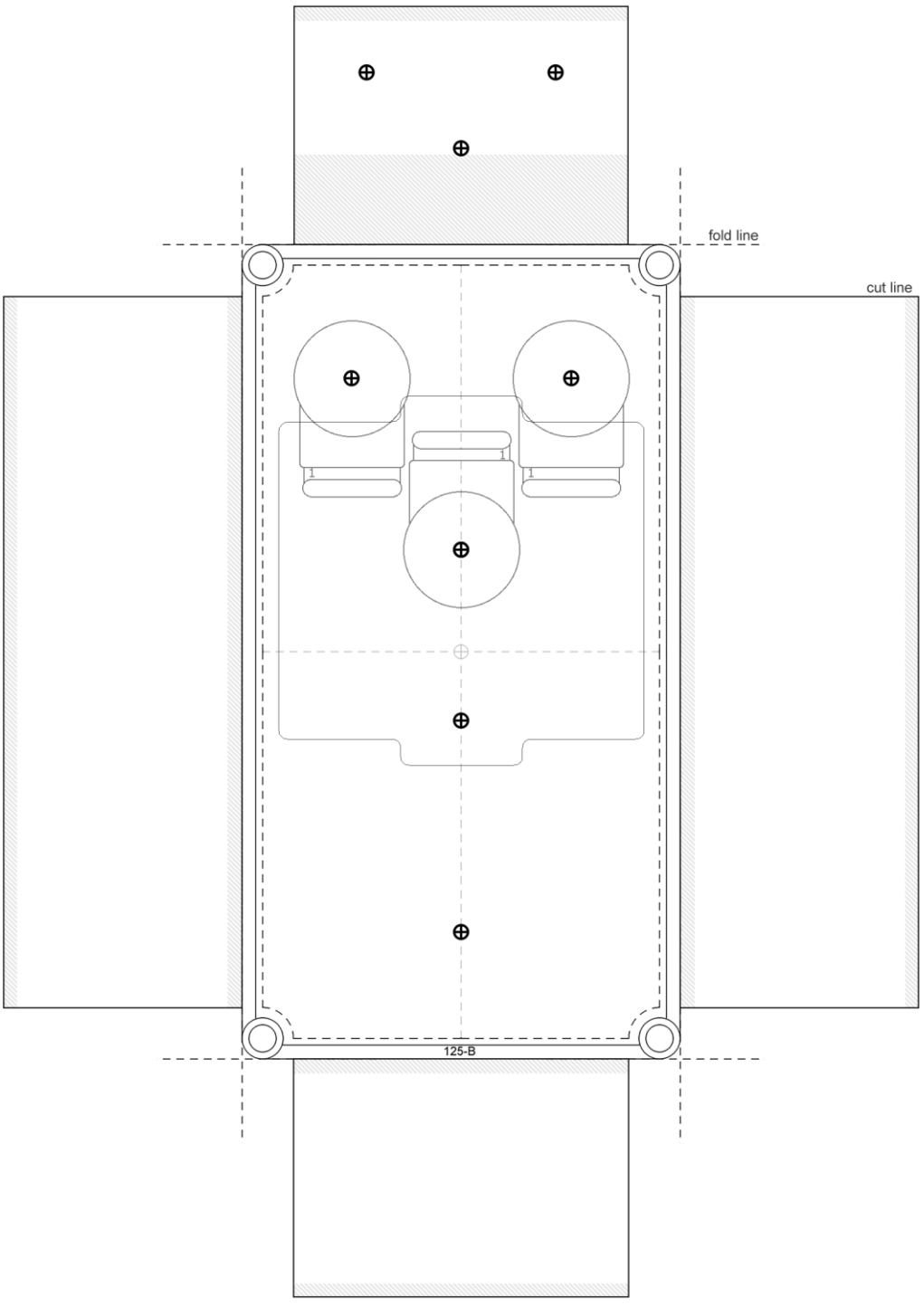


When using 1590B enclosures, it is best to mount the ribbon cable on top of the main board/3PDT wiring board instead of underneath. This is because the enclosure's compact size restricts space for the side jack Input and Output plugs.

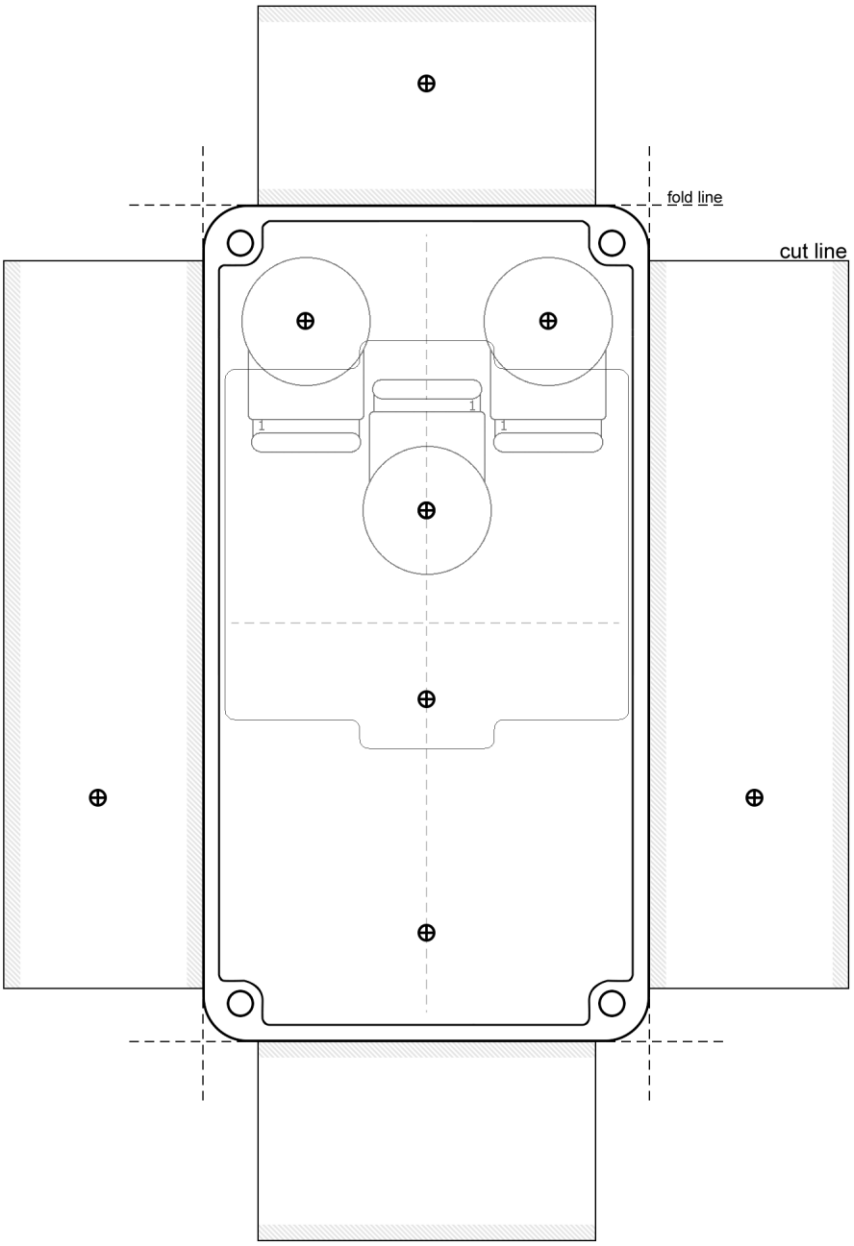


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The full-size drill templates for 125B and 1590B enclosures can be found on the following two pages. Additionally, you can find a link to Tayda's pre-drilled enclosures on the shop page at GuitarPCB.com.



125B Drill Template



1590B Drill Template