GuitarPCB Presents

NostalgiTone ROCK-Q Single

ROCK-Q. One stomp. Instant Artist Q, and Boston opens the show.

Tom Scholz built the first album tone in his basement, piece by piece: a Marshall driven hard, a Power Soak he built himself to saturate it at record volume, and an MXR six band EQ in front, shaping the guitar before distortion. Mids singing, lows tight, attack cutting.

ROCK-Q is that EQ, fixed. Six bands, 100 to 3200 Hz, fixed resistor pairs, no sliders to chase, and one Level control. Stomp it on to shape what your amp distorts, stomp it off for true bypass and straight back to your amp, settings untouched.

That fixed part is the point. The original blue box had no footswitch and sliders to chase. Once in, it was always on, and mid-song changes meant external switching. Solder it once, and your curve is locked in, exactly as you built it, every stomp.

Like the original Blue Box, it is through-hole, so you can work on it yourself: solder, socket, and customize. Unlike a Rockman, which forces you to live inside its own amp model, ROCK-Q shapes the signal into your amp. Your amp stays yours. Your tone stays yours!

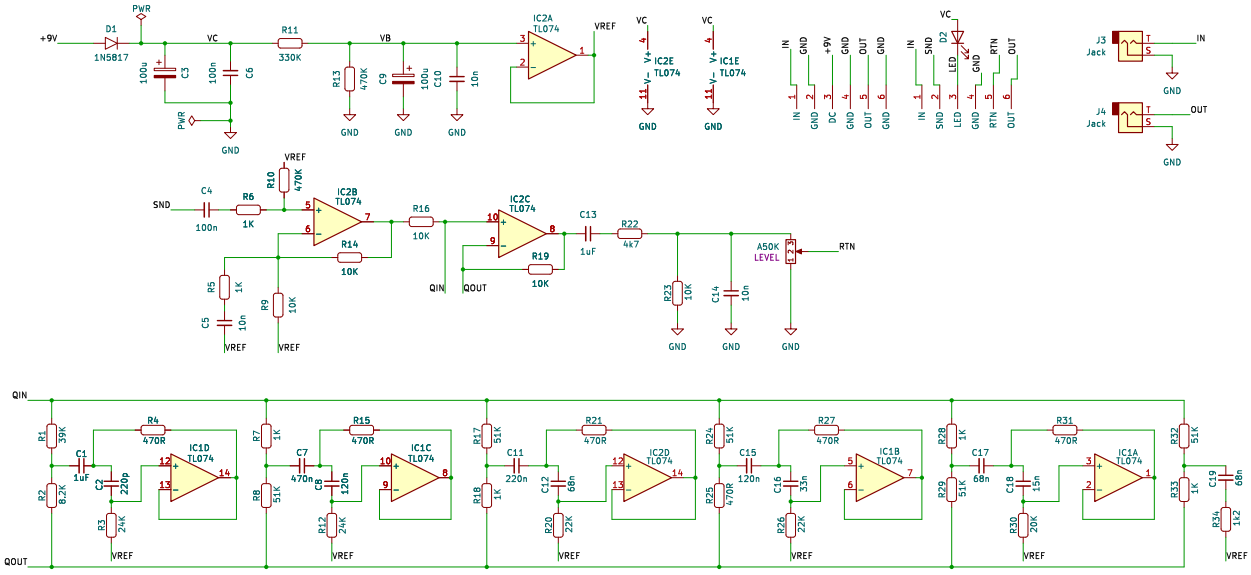
One board, five artist profiles, five different curves: Boston, Randy Rhoads, Tony Iommi in the Early Years, Kirk Hammett V Scoop, and Michael Schenker. More are coming. Modders and testers, buy a second board, socket it, and make your own mix. Pick a profile, or make your own.



Mainboard Dimensions – 2.10” x 2.44”

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

Schematic - BOSTON EDITION:



Bill of Materials - BOSTON EDITION:

PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	39K	R11	330K	R21	470R	R31	470R	C6	100n	C16	33n
R2	8.2K	R12	24K	R22	4.7K	R32	51K	C7	470n	C17	68n
R3	24K	R13	470K	R23	10K	R33	1K	C8	120n	C18	15n
R4	470R	R14	10K	R24	51K	R34	1k2	C9	100u	C19	68n
R5	1K	R15	470R	R25	470R			C10	10n	D1	1N5817
R6	1K	R16	10K	R26	22K	C1	1uF	C11	220n	D2	Status LED
R7	1K	R17	51K	R27	470R	C2	220pF	C12	68n	IC1	TL074
R8	51K	R18	1K	R28	1K	C3	100u	C13	1uF	IC2	TL074
R9	10K	R19	10K	R29	51K	C4	100n	C14	10n	LEVEL	A50K
R10	470K	R20	22K	R30	20K	C5	10n	C15	120n	CLR x1	1k8 - 4k7

The BOM above reflects the BOSTON EDITION values which are represented in Red and Blue.
Other Artist Profiles are on the next page.

Build Notes:

- **Included**: main PCB purchase includes (1) standard foot switch wiring board (6-pins), and (1) standard 6-pin ribbon cable. This simplifies wiring, and keeps troubleshooting and noise to a minimum.
- **Wiring**: use a standard 6-pin ribbon cable to connect the foot switch wiring board to the main board. Each 3PDT wiring board includes an onboard CLR to control and protect the brightness of the main board status LED. CLR: 1k8 brighter, 4k7 dimmer, depending on your preferred LED brightness.
- **470R vs 470K**: five 470R resistors and two 470K resistors. Don't mix them up. 470R is 470 ohms. 470K is 470,000 ohms, 1000X larger.
- **C2**: silkscreen footprint is for a 5mm film capacitor version of the 220pF value. A ceramic 220pF capacitor is perfectly acceptable.
- **LEVEL**: attenuator, not a gain control. Start fully up. Turn down only if it is too hot for the next pedal or amp, especially with hot pickups like the DiMarzio Super Distortion in Scholz's bridge position.
- **Placement**: place ROCK-Q before a high gain pedal or amp, not after it, so the EQ shapes the gain stage.
- **Values**: stated values are important. Do not substitute.

Bill of Materials - RANDY RHOADS EDITION:

PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	3K	R11	330K	R21	470R	R31	470R	C6	100n	C16	33n
R2	47K	R12	24K	R22	4.7K	R32	24K	C7	470n	C17	68n
R3	24K	R13	470K	R23	10K	R33	27K	C8	120n	C18	15n
R4	470R	R14	10K	R24	47K	R34	1k2	C9	100u	C19	68n
R5	1K	R15	470R	R25	3.9K			C10	10n	D1	1N5817
R6	1K	R16	10K	R26	22K	C1	1uF	C11	220n	D2	Status LED
R7	47K	R17	51K	R27	470R	C2	220pF	C12	68n	IC1	TL074
R8	3.9K	R18	470R	R28	47K	C3	100u	C13	1uF	IC2	TL074
R9	10K	R19	10K	R29	3.9K	C4	100n	C14	10n	LEVEL	A50K
R10	470K	R20	22K	R30	20K	C5	10n	C15	120n	CLR x1	1k8 - 4k7

Bill of Materials - TONY IOMMI EDITION - THE EARLY YEARS:

PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	2.7K	R11	330K	R21	470R	R31	470R	C6	100n	C16	33n
R2	47K	R12	24K	R22	4.7K	R32	43K	C7	470n	C17	68n
R3	24K	R13	470K	R23	10K	R33	8.2K	C8	120n	C18	15n
R4	470R	R14	10K	R24	47K	R34	1k2	C9	100u	C19	68n
R5	1K	R15	470R	R25	3.9K			C10	10n	D1	1N5817
R6	1K	R16	10K	R26	22K	C1	1uF	C11	220n	D2	Status LED
R7	43K	R17	47K	R27	470R	C2	220pF	C12	68n	IC1	TL074
R8	8.2K	R18	3.9K	R28	51K	C3	100u	C13	1uF	IC2	TL074
R9	10K	R19	10K	R29	470R	C4	100n	C14	10n	LEVEL	A50K
R10	470K	R20	22K	R30	20K	C5	10n	C15	120n	CLR x1	1k8 - 4k7

Bill of Materials - KIRK HAMMETT V SCOOP EDITION:

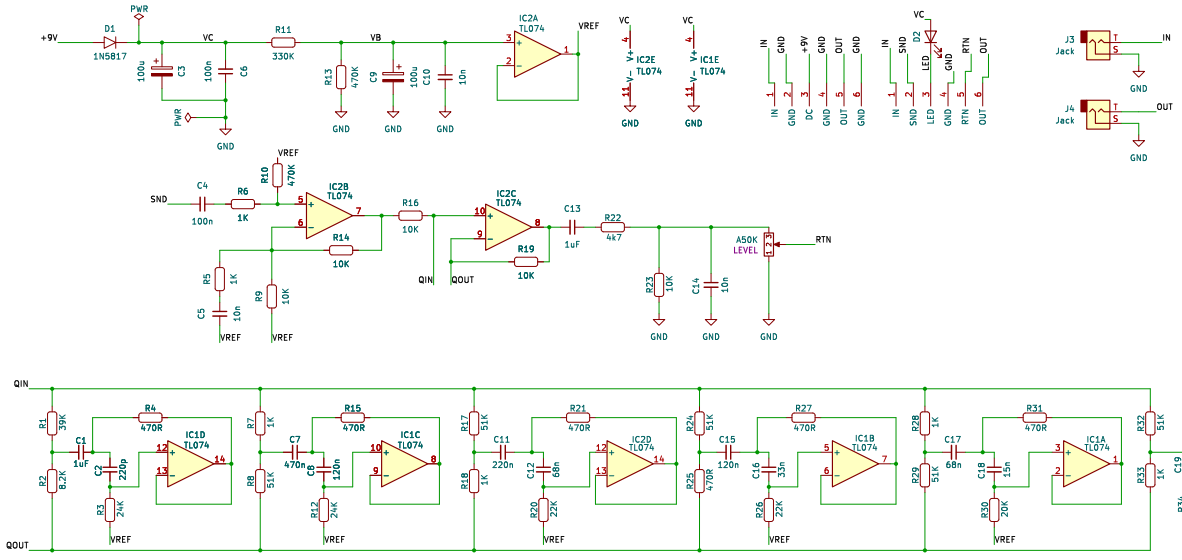
PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	47K	R11	330K	R21	470R	R31	470R	C6	100n	C16	33n
R2	3.9K	R12	24K	R22	4.7K	R32	47K	C7	470n	C17	68n
R3	24K	R13	470K	R23	10K	R33	3.9K	C8	120n	C18	15n
R4	470R	R14	10K	R24	470R	R34	1k2	C9	100u	C19	68n
R5	1K	R15	470R	R25	51K			C10	10n	D1	1N5817
R6	1K	R16	10K	R26	22K	C1	1uF	C11	220n	D2	Status LED
R7	47K	R17	1K	R27	470R	C2	220pF	C12	68n	IC1	TL074
R8	3.9K	R18	51K	R28	47K	C3	100u	C13	1uF	IC2	TL074
R9	10K	R19	10K	R29	3.9K	C4	100n	C14	10n	LEVEL	A50K
R10	470K	R20	22K	R30	20K	C5	10n	C15	120n	CLR x1	1k8 - 4k7

Bill of Materials - MICHAEL SCHENKER EDITION:

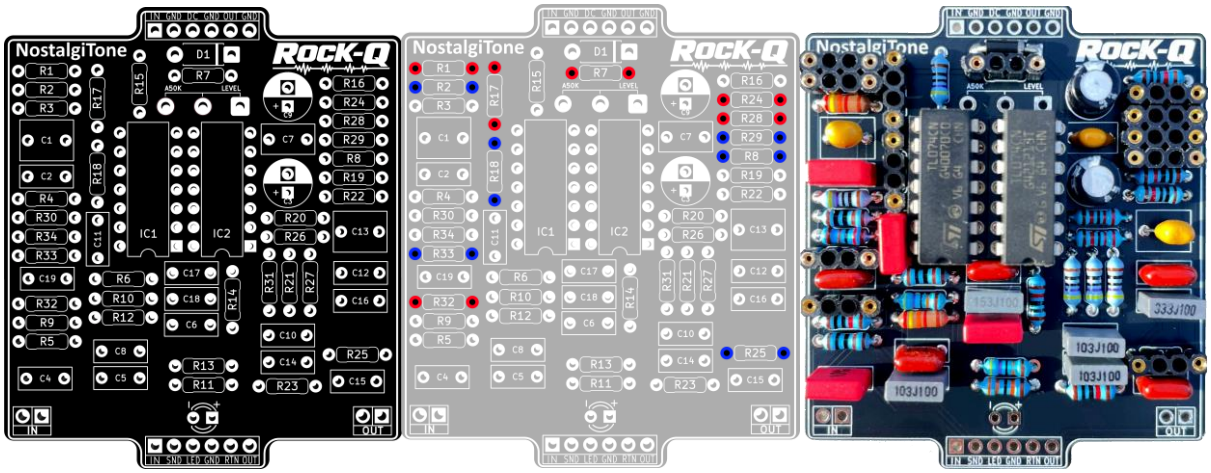
PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE	PART	VALUE
R1	4.3K	R11	330K	R21	470R	R31	470R	C6	100n	C16	33n
R2	47K	R12	24K	R22	4.7K	R32	24K	C7	470n	C17	68n
R3	24K	R13	470K	R23	10K	R33	27K	C8	120n	C18	15n
R4	470R	R14	10K	R24	51K	R34	1k2	C9	100u	C19	68n
R5	1K	R15	470R	R25	470R			C10	10n	D1	1N5817
R6	1K	R16	10K	R26	22K	C1	1uF	C11	220n	D2	Status LED
R7	6.2K	R17	43K	R27	470R	C2	220pF	C12	68n	IC1	TL074
R8	43K	R18	8.2K	R28	43K	C3	100u	C13	1uF	IC2	TL074
R9	10K	R19	10K	R29	8.2K	C4	100n	C14	10n	LEVEL	A50K
R10	470K	R20	22K	R30	20K	C5	10n	C15	120n	CLR x1	1k8 - 4k7

More artist profiles will be made available when they are completed. Always check the Guides Page for the latest build document.

Advanced Section for Modders:



Common Red and Blue modifier resistors for creating your own testing board by socketing these locations.



MODDER STEPS AND CURVES

Socket the 12 modifier pairs - Test one band at a time

BAND MAP - WHERE TO SOCKET

Band	Red (Top)	Blue (Bottom)
100 Hz	R1	R2
200 Hz	R7	R8
400 Hz	R17	R18
800 Hz	R24	R25
1600 Hz	R28	R29
3200 Hz	R32	R33

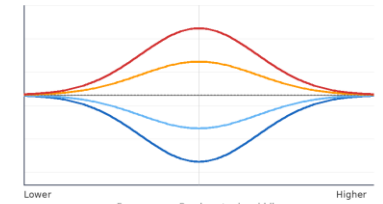
Red dots on the PCB diagram show Red locations. Blue dots show Blue locations.

STEPS TO TRY

Step	Red	Blue
More cut	1K	51K
Cut	12K	39K
Flat	25K	25K
Boost	39K	12K
More boost	51K	1K

These 5 are starting points.
Any Red + Blue pair totaling about 51K works.
Make your own mix.

ONE BAND, FIVE STEPS

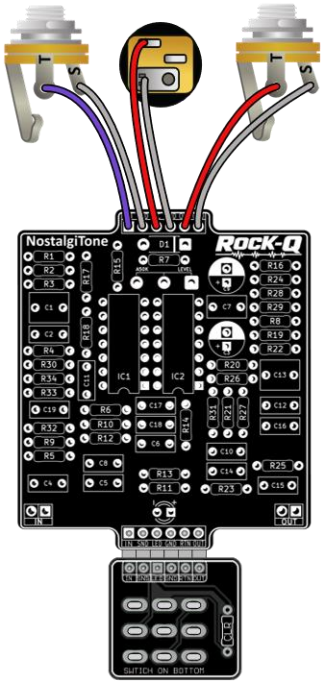


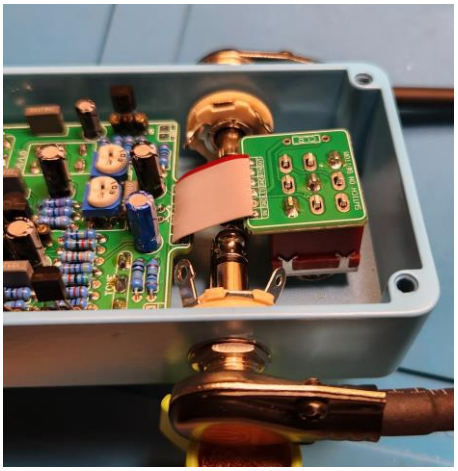
Every curve between these works too.

SOCKET ONLY THESE 12 - LEAVE THE REST SOLDERED

Leave R30 20K, C2 220pF, R22 4.7K, and R16 / R19 10K soldered.
Start from Flat, change one band at a time, listen, note it.
Red = Top - Blue = Bottom - Top and Bottom are the two resistors in each band pair, not the two sides of the board.

Wiring Diagram



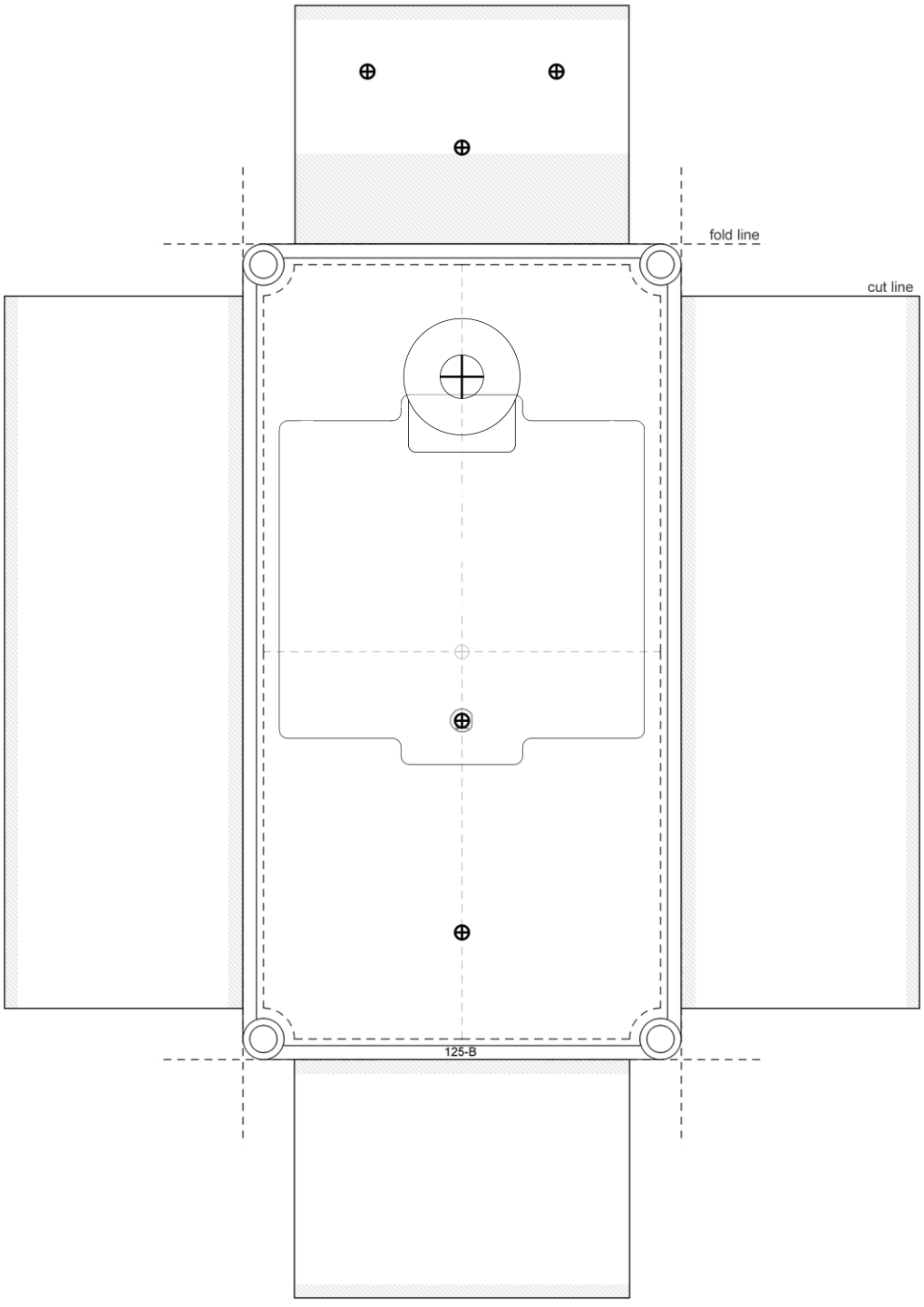


Note: Extra IN/OUT pads are located at the bottom of the PCB for convenient side jack wiring. The square pad connects the audio signal (Tip), and the round pad connects the ground.

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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Drill Template for 125B is on the next page.



125B Drill Template

Note: It is likely possible to fit the ROCK-Q into a 1590B enclosure but it is tight and would require all top mounted In, Out, and Power jacks.