

## N.E.W. – TTTSNB EQ PCB Build guide

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The N.E.W. TTTSNB is an ambitious project intended to replicate the Master of Puppets guitar tone using entirely solid state components. It's split between two PCB's, a preamp and an EQ section, each of which can be built as stand-alone pedals or together as a pair. This build guide covers the EQ PCB which contains both the graphic EQ of a Mark IIC+ amp and a semi-parametric EQF-1. Note that each EQ section has its own separate input and output and can be switched independently if so desired.

This guide is intended for people who are very experienced building pedals. Component sourcing, component identification, assembly techniques, wiring stomp switches, etc. is not covered. Build some other N.E.W. DIY projects before attempting this build as it's quite time consuming and complicated.

Don't forget to connect the ground pad of the PCB to the ground lug of the input, output, and DC power jacks!

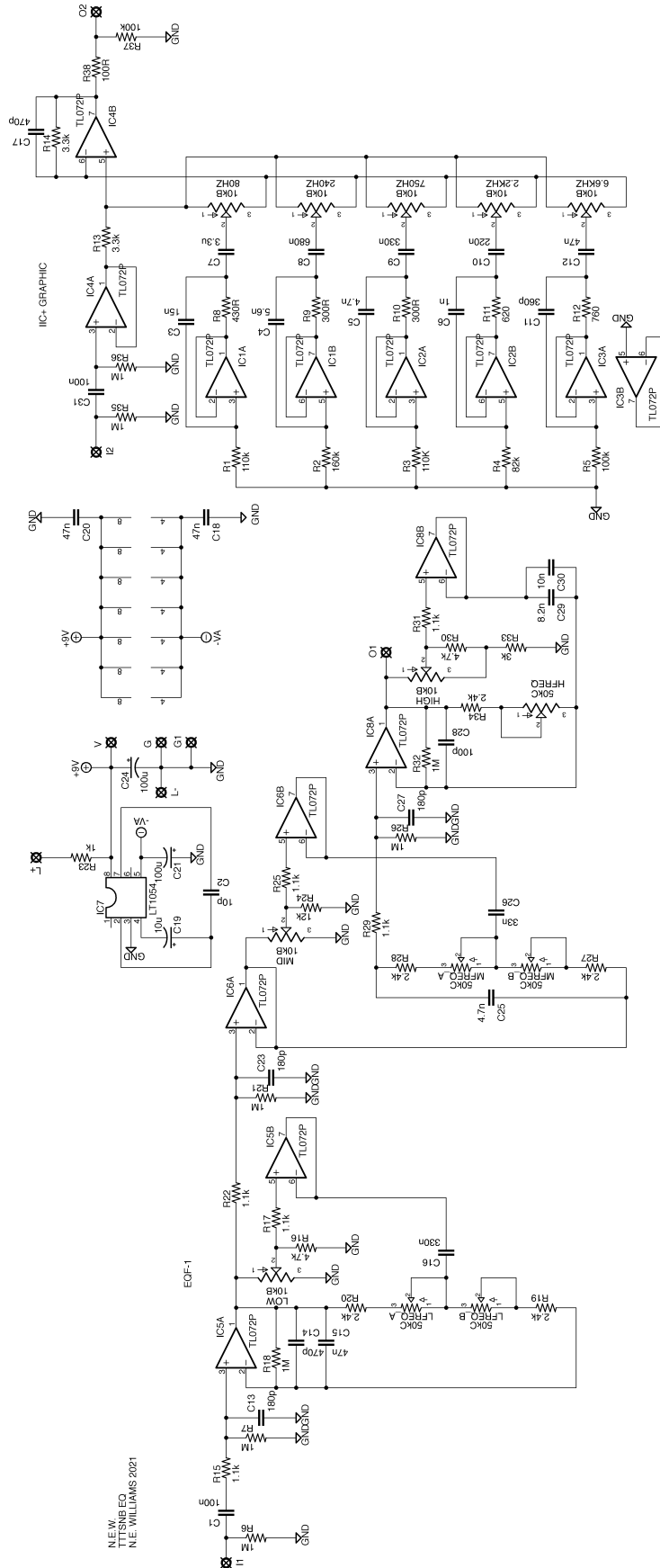
Due to the scope of this project, technical support is not available. However, consider joining the GCI DIY PCB Builders group on Facebook to get advice from and share your work with other builders. We require that all group members agree to the rules before being accepted into the group.

<https://www.facebook.com/groups/2454786551255317/>

Component values for the PCB as well as some alternate values are listed below. This is a BOM for the PCB only. Resistors and diodes are 6.3mm leg spacing, film and ceramic capacitors are 5.08mm leg spacing, and electrolytic capacitors are 2.54mm leg spacing. I/O jacks, DC jack, switches, enclosure, and knobs are not listed. Due to the variety of ways the builder may decide to house these circuits, a detailed drill template is not included, however, a PDF suggested layout is.

<b>Part</b>	<b>Value</b>	<b>Device</b>	<b>Package</b>	<b>Description</b>
R1	110k	6MM.3	R0207/3	6mm Resistors
R2	160k	6MM.3	R0207/3	6mm Resistors
R3	110K	6MM.3	R0207/3	6mm Resistors
R4	82k	6MM.3	R0207/3	6mm Resistors
R5	100k	6MM.3	R0207/3	6mm Resistors
R6	1M	6MM.3	R0207/3	6mm Resistors
R7	1M	6MM.3	R0207/3	6mm Resistors
R8	430R	6MM.3	R0207/3	6mm Resistors
R9	300R	6MM.3	R0207/3	6mm Resistors
R10	300R	6MM.3	R0207/3	6mm Resistors
R11	620R	6MM.3	R0207/3	6mm Resistors
R12	760R	6MM.3	R0207/3	6mm Resistors
R13	3.3k	6MM.3	R0207/3	6mm Resistors
R14	3.3k	6MM.3	R0207/3	6mm Resistors
R15	1.1k	6MM.3	R0207/3	6mm Resistors
R16	4.7k	6MM.3	R0207/3	6mm Resistors
R17	1.1k	6MM.3	R0207/3	6mm Resistors
R18	1M	6MM.3	R0207/3	6mm Resistors
R19	2.4k	6MM.3	R0207/3	6mm Resistors
R20	2.4k	6MM.3	R0207/3	6mm Resistors
R21	1M	6MM.3	R0207/3	6mm Resistors
R22	1.1k	6MM.3	R0207/3	6mm Resistors
R23	1k	6MM.3	R0207/3	6mm Resistors
R24	12k	6MM.3	R0207/3	6mm Resistors
R25	1.1k	6MM.3	R0207/3	6mm Resistors
R26	1M	6MM.3	R0207/3	6mm Resistors
R27	2.4k	6MM.3	R0207/3	6mm Resistors
R28	2.4k	6MM.3	R0207/3	6mm Resistors
R29	1.1k	6MM.3	R0207/3	6mm Resistors
R30	4.7k	6MM.3	R0207/3	6mm Resistors
R31	1.1k	6MM.3	R0207/3	6mm Resistors
R32	1M	6MM.3	R0207/3	6mm Resistors
R33	3k	6MM.3	R0207/3	6mm Resistors
R34	2.4k	6MM.3	R0207/3	6mm Resistors
R35	1M	6MM.3	R0207/3	6mm Resistors
R36	1M	6MM.3	R0207/3	6mm Resistors
R37	100k	6MM.3	R0207/3	6mm Resistors
R38	100R	6MM.3	R0207/3	6mm Resistors
C1	100n	072X0252	072X025	Film cap
C2	10p	072X0252	072X025	Ceramic cap
C3	15n	072X0252	072X025	Film cap
C4	5.6n	072X0252	072X025	Film cap
C5	4.7n	072X0252	072X025	Film cap
C6	1n	072X0252	072X025	Film cap
C7	3.3u	072X0352	072X035	Film cap
C8	680n	072X0352	072X035	Film cap
C9	330n	072X0252	072X025	Film cap
C10	220n	072X0252	072X025	Film cap
C11	360p	072X0252	072X025	Ceramic cap
C12	47n	072X0252	072X025	Film cap
C13	180p	072X0252	072X025	Ceramic cap

C14	470p	072X0252	072X025	Ceramic cap
C15	47n	072X0252	072X025	Film cap
C16	330n	072X0352	072X035	Film cap
C17	470p	072X0252	072X025	Ceramic cap
C18	47n	072X0252	072X025	Film cap
C19	10u	5mm	050_020_1	Electrolytic cap
C20	47n	072X0252	072X025	Film cap
C21	100u	5mm	050_020_1	Electrolytic cap
C23	180p	072X0252	072X025	Ceramic cap
C24	100u	5mm	050_020_1	Electrolytic cap
C25	4.7n	072X0252	072X025	Film cap
C26	33n	072X0252	072X025	Film cap
C27	180p	072X0252	072X025	Ceramic cap
C28	100p	072X0252	072X025	Ceramic cap
C29	8.2n	072X0252	072X025	Film cap
C30	10n	072X0252	072X025	Film cap
C31	100n	072X0252	072X025	Film cap
IC1	TL072P	TL072P	DIP08	OP AMP
IC2	TL072P	TL072P	DIP08	OP AMP
IC3	TL072P	TL072P	DIP08	OP AMP
IC4	TL072P	TL072P	DIP08	OP AMP
IC5	TL072P	TL072P	DIP08	OP AMP
IC6	TL072P	TL072P	DIP08	OP AMP
IC7	LT1054	MAX1044	DIP08	Voltage Regulator
IC8	TL072P	TL072P	DIP08	OP AMP
2.2KHZ	10kB	POT16MM	16MM	Potentiometers
6.6KHZ	10kB	POT16MM	16MM	Potentiometers
80HZ	10kB	POT16MM	16MM	Potentiometers
240HZ	10kB	POT16MM	16MM	Potentiometers
750HZ	10kB	POT16MM	16MM	Potentiometers
HFREQ	50kC	POT16MM	16MM	Potentiometers
HIGH	10kB	POT16MM	16MM	Potentiometers
LFREQ	50kC	DUALGANG16MM_DUAL	16MM_DUAL	Potentiometers
LOW	10kB	POT16MM	16MM	Potentiometers
MFREQ	50kC	DUALGANG16MM_DUAL	16MM_DUAL	Potentiometers
MID	10kB	POT16MM	16MM	Potentiometers
V	PAD	PAD	PAD	PAD
G	PAD	PAD	PAD	PAD
G1	PAD	PAD	PAD	PAD
I1	PAD	PAD	PAD	PAD
I2	PAD	PAD	PAD	PAD
L+	PAD	PAD	PAD	PAD
L-	PAD	PAD	PAD	PAD
O1	PAD	PAD	PAD	PAD
O2	PAD	PAD	PAD	PAD





# DUAL SWITCH WIRING

