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NeinOhNein RIM v1.0

a DIY clone of the TR-909 Rimshot

ASSEMBLY GUIDE v1.0

HARDWARE v1.0

****TR-909 is a trademark of Roland****

Technical Notes

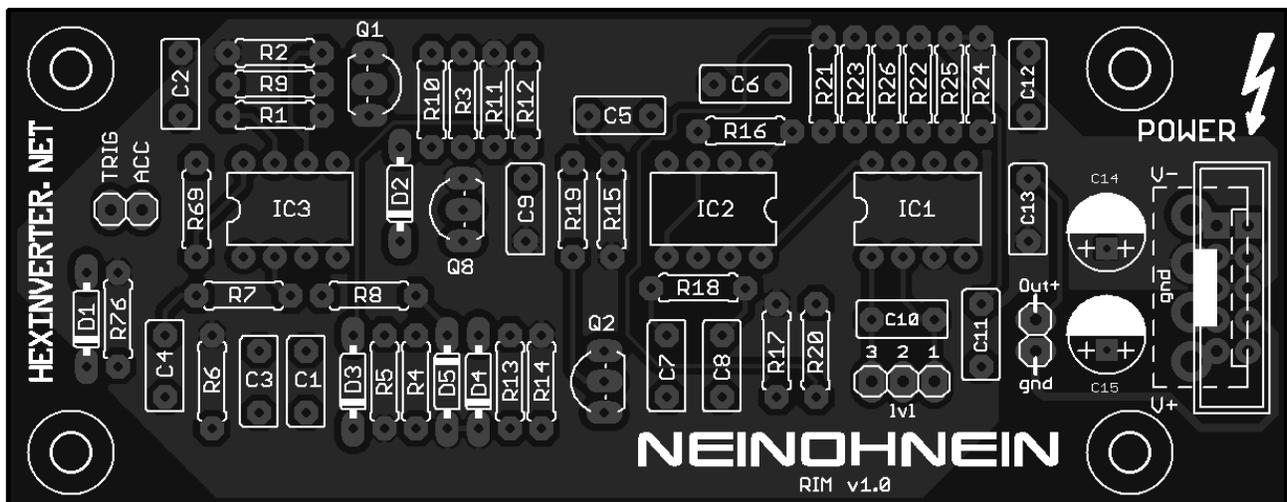
The 909 Rimshot is a fairly simple build, but, care must be taken to ensure that you install all the components in their correct places. Pay very close attention to the PCB silkscreen and you will be just fine!

The use of 2.5 or 5% tolerance film capacitors and 1% metal film resistors is recommended. This will ensure that your module performs the same way the original designers intended for it to sound, as it places component values closest to the chosen value in the schematic.

If you really care about purity with respect to the TR-909, you may want to run this module on 15V as well. I have not compared to see if there are any discernable differences as mine sound great at 12V and makes me happy as is.

You can add 3 controls to the module for manual pitch control. I recommend reading how to do these below before building the module, as the modifications require you to replace resistors with potentiometers. These pots are not included in the Bill of Materials.

Panel are/will be available at [Re:Synthesis](#) (click) for this project.



Control/Panel Descriptions

LEVEL -- This controls the volume of the rimshot sound.

Accent -- This is an analogue input that responds to approximately 5V-supply control voltage. Higher voltages mean the drum sounds punchier and louder. This input is internally tied to +V so that it will always sound the strongest possible if nothing is plugged into the jack.

Trigger/Gate -- Input either a trigger or gate around 3.5V or higher to trigger the drum module.

Output -- This is the sound output for the module.

Modifications

PITCH CONTROL can be added by replacing R6, R15 and R17 each with a 100R resistor in series with a 5k audio taper potentiometer. As you turn the resistance on the pot down, the pitch goes up. When you turn the resistance on the pot up, the pitch lowers. This creates 3 pitch controls that together make up the rimshot sound. A wiring guide that shows these mods implemented is on the next page.

(panel wiring on following page)

POTENTIOMETERS VIEWED FROM FRONT

PITCH MODS

(install INSTEAD of the resistors for these spots)

