

## Description:

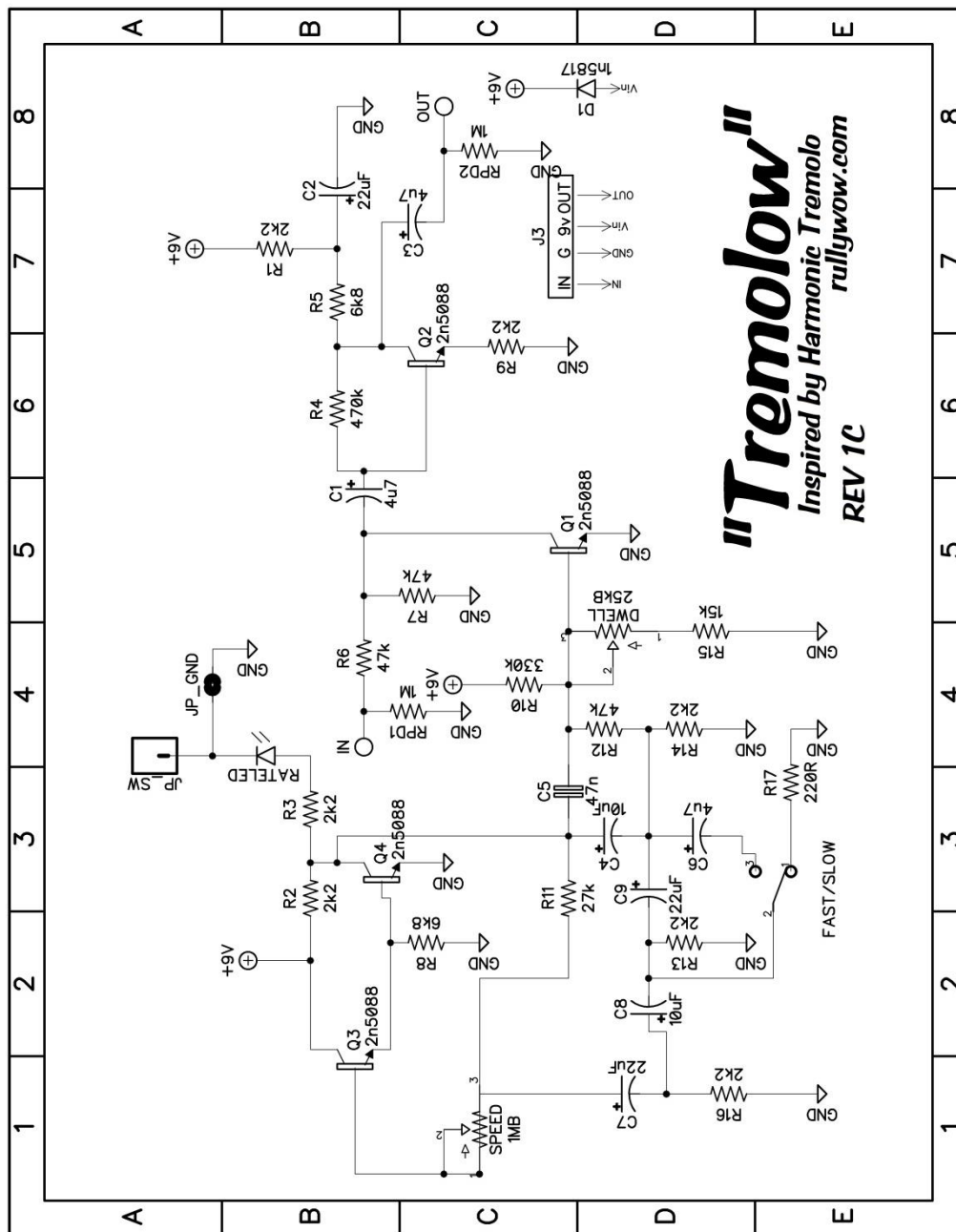
The Tremolow is based on MarkM's adaptation of the Schaller Harmonic Tremolo, with a few changes. There were some issues with popping when switching, and the addition of some pull down resistors on the input and output helps this. A great sounding, fairly easy-to-build project!

<i><b>Tremolow v1C</b></i>				
<i><b>Caps</b></i>			<i><b>Resistors</b></i>	
<i><b>C1</b></i>	<i><b>4u7</b></i>	<i><b>electro</b></i>	<i><b>R1</b></i>	<i><b>2k2</b></i>
<i><b>C2</b></i>	<i><b>22uF</b></i>	<i><b>electro</b></i>	<i><b>R2</b></i>	<i><b>2k2</b></i>
<i><b>C3</b></i>	<i><b>4u7</b></i>	<i><b>electro</b></i>	<i><b>R3</b></i>	<i><b>2k2</b></i>
<i><b>C4</b></i>	<i><b>10uF</b></i>	<i><b>electro</b></i>	<i><b>R4</b></i>	<i><b>470k</b></i>
<i><b>C5</b></i>	<i><b>47n</b></i>	<i><b>film</b></i>	<i><b>R5</b></i>	<i><b>6k8</b></i>
<i><b>C6</b></i>	<i><b>4u7</b></i>	<i><b>electro</b></i>	<i><b>R6</b></i>	<i><b>47k</b></i>
<i><b>C7</b></i>	<i><b>22uF</b></i>	<i><b>electro</b></i>	<i><b>R7</b></i>	<i><b>47k</b></i>
<i><b>C8</b></i>	<i><b>10uF</b></i>	<i><b>electro</b></i>	<i><b>R8</b></i>	<i><b>6k8</b></i>
<i><b>C9</b></i>	<i><b>22uF</b></i>	<i><b>electro</b></i>	<i><b>R9</b></i>	<i><b>2k2</b></i>
<i><b>Diode</b></i>			<i><b>R10</b></i>	<i><b>330k</b></i>
<i><b>D1</b></i>	<i><b>1n5817</b></i>		<i><b>R11</b></i>	<i><b>27k</b></i>
<i><b>Pots</b></i>			<i><b>R12</b></i>	<i><b>47k</b></i>
<i><b>DWELL</b></i>	<i><b>25kB</b></i>		<i><b>R13</b></i>	<i><b>2k2</b></i>
<i><b>SPEED</b></i>	<i><b>1MB</b></i>		<i><b>R14</b></i>	<i><b>2k2</b></i>
<i><b>Switch</b></i>			<i><b>R15</b></i>	<i><b>15k</b></i>
<i><b>FAST/SLOW</b></i>	<i><b>SPDT</b></i>		<i><b>R16</b></i>	<i><b>2k2</b></i>
<i><b>Transistors</b></i>			<i><b>R17</b></i>	<i><b>220R</b></i>
<i><b>Q1-Q4</b></i>	<i><b>2n5088</b></i>		<i><b>RPD1</b></i>	<i><b>1M</b></i>
			<i><b>RPD2</b></i>	<i><b>1M</b></i>

## Build Tips & Tricks:

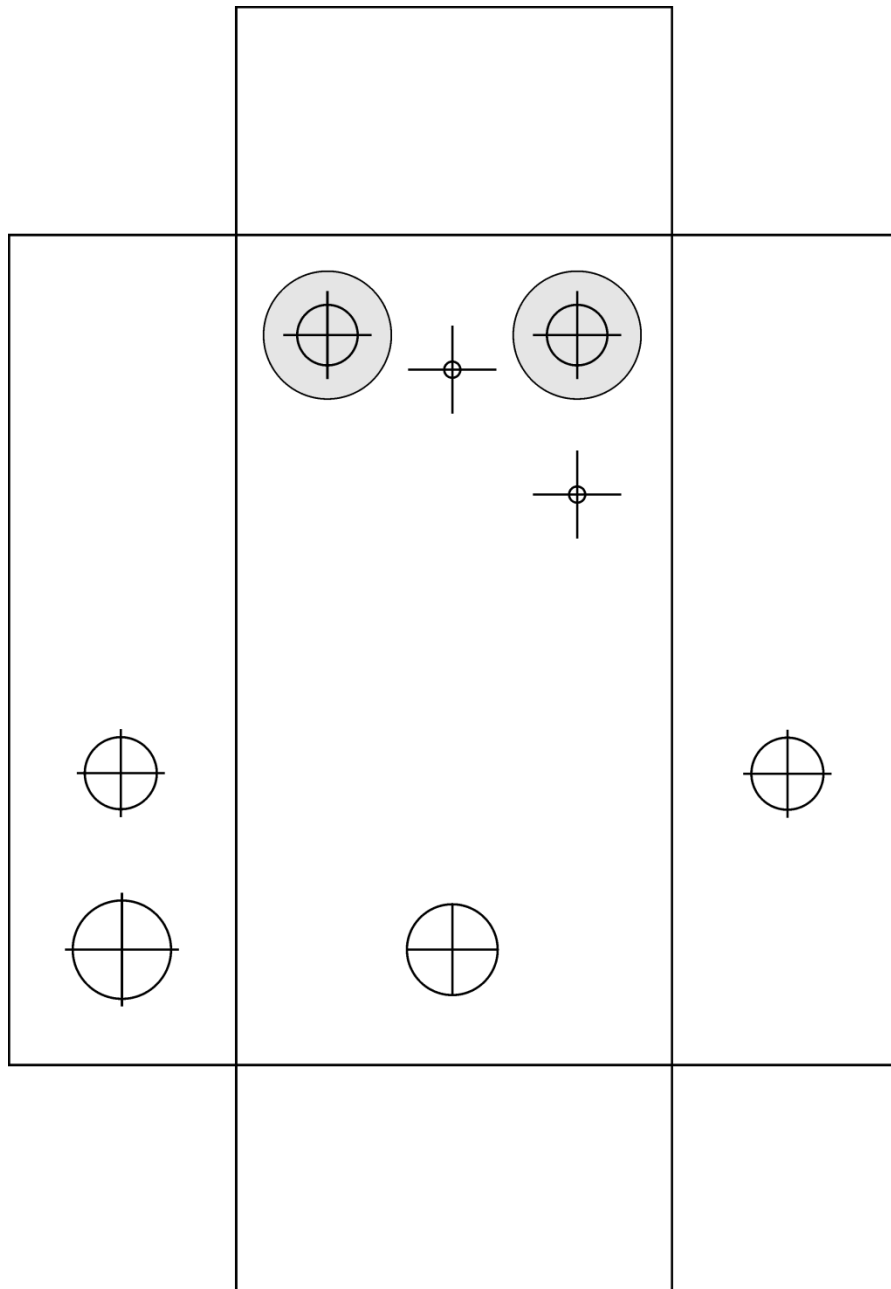
- The **RATELED** blinks in time to the LFO. To have it blink all the time when powered, solder the **JP\_GND** with a blob of solder. If you wish to switch the rate LED on/off...don't solder the jumper. Instead connect a switched ground wire to **JP\_SW**.
- It is a good call to solder components from shortest height to tallest. In this case, you should start with resistors, diodes, film caps, IC, and the electrolytic caps last.
- The RPD1 and RPD2 resistors are pull down resistors. They may not be required, however it is recommended you add them if there is any popping when switching.
- The IN/G/9V/OUT pads are a direct match to Rullywow.com 3PDT and Optical Bypass PCBs

- All pots are 16mm Alpha PCB mount. It is a very good idea to drill holes in your enclosure first, and mount the pots with the nuts **BEFORE** soldering the pots to the PCB. This ensures you won't put a lot of stress on the PCB.
- Be sure to insulate the pots from shorting on the back of the PCB. There are special pot covers or you may use tape or some other insulating material.
- Before putting your creation into its enclosure, you should always test it! If it doesn't work outside the enclosure, it won't work inside (I promise!)

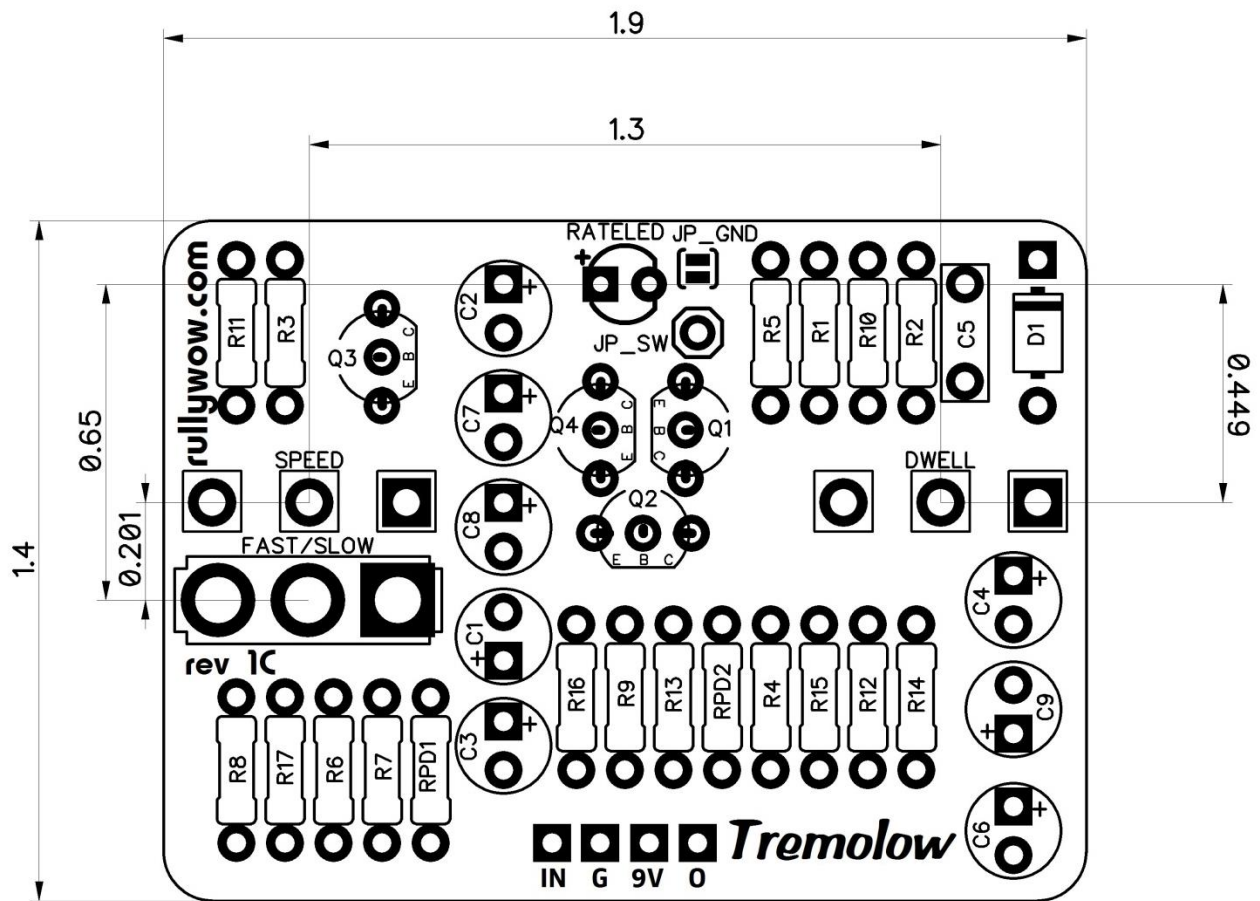


## Drill Guide (1590B) :

This is an *APPROXIMATE* drill guide. Enclosures differ in size so be sure to measure before your commit to drill!



**PCB Dimensions = 1.9" w x 1.4" h**



## Terms of Use:

- PCBs from [www.rullywow.com](http://www.rullywow.com) are intended for DIY use and are not allowed for commercial resale. It is OK to build (and sell) a few pedals for your friends, bandmates, yourself (that is what the DIY guitar pedal community is all about!)