

### Description:

Another sweet overdrive you can build yourself easily. The “VaporRay” is an overdrive circuit inspired by the Vemuram Jan Ray pedal. Looking at the schematic, the circuit is pretty similar to the Timmy overdrive, with some tweaks in the tone stack section. Clipping diodes add to the flavor of the pedal, so feel free to experiment with them by swapping them out. The internal trimmer adjusts the bass response, just as on the original pedal.

### Feature Set:

- Pads line up with rullywow.com 3PDT boards
- Internal bass trimmer
- Very easy to build!

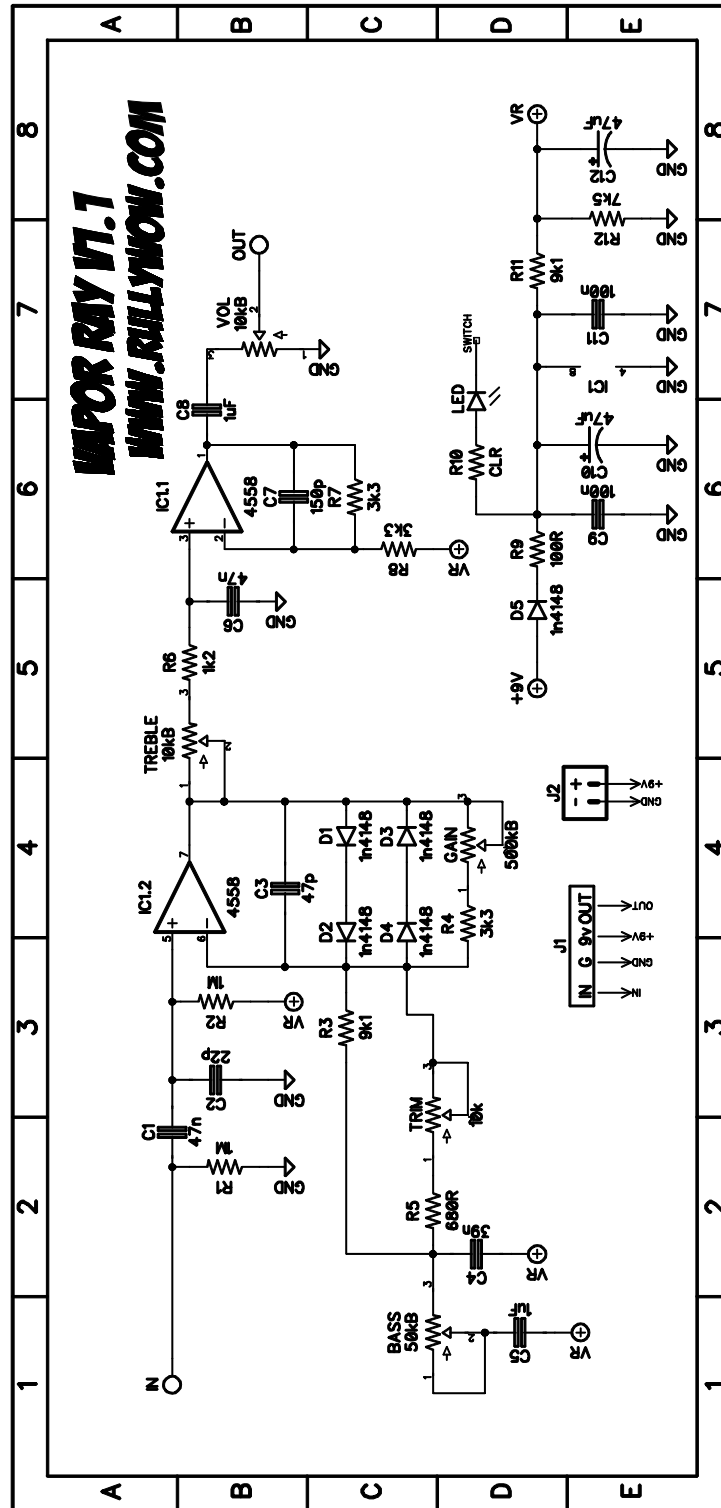
Bill of Materials:

<b>CAPACITORS</b>			<b>DIODES</b>		<b>RESISTORS</b>	
<b>C1</b>	<b>47n</b>	<b>film</b>	<b>D1-D5</b>	<b>1n4148'</b>	<b>R1</b>	<b>1M</b>
<b>C10</b>	<b>47uF</b>	<b>electro</b>	<b>POTS</b>		<b>R10</b>	<b>CLR</b>
<b>C11</b>	<b>100n</b>	<b>film</b>	<b>GAIN</b>	<b>500kB</b>	<b>R11</b>	<b>9k1</b>
<b>C12</b>	<b>47uF</b>	<b>electro</b>	<b>BASS</b>	<b>50kB</b>	<b>R12</b>	<b>7k5</b>
<b>C2</b>	<b>22p</b>	<b>ceramic</b>	<b>TREBLE</b>	<b>10kB</b>	<b>R2</b>	<b>1M</b>
<b>C3</b>	<b>47p</b>	<b>ceramic</b>	<b>TRIM</b>	<b>10k (trim)</b>	<b>R3</b>	<b>9k1</b>
<b>C4</b>	<b>39n</b>	<b>film</b>	<b>VOL</b>	<b>10kB</b>	<b>R4</b>	<b>3k3</b>
<b>C5</b>	<b>1uF</b>	<b>film</b>	<b>IC</b>		<b>R5</b>	<b>680R</b>
<b>C6</b>	<b>47n</b>	<b>film</b>	<b>IC1</b>	<b>4558</b>	<b>R6</b>	<b>1k2</b>
<b>C7</b>	<b>150p</b>	<b>ceramic</b>	<b>LED</b>		<b>R7</b>	<b>3k3</b>
<b>C8</b>	<b>1uF</b>	<b>film</b>	<b>LED</b>	<b>3mm</b>	<b>R8</b>	<b>3k3</b>
<b>C9</b>	<b>100n</b>	<b>film</b>			<b>R9</b>	<b>100R</b>

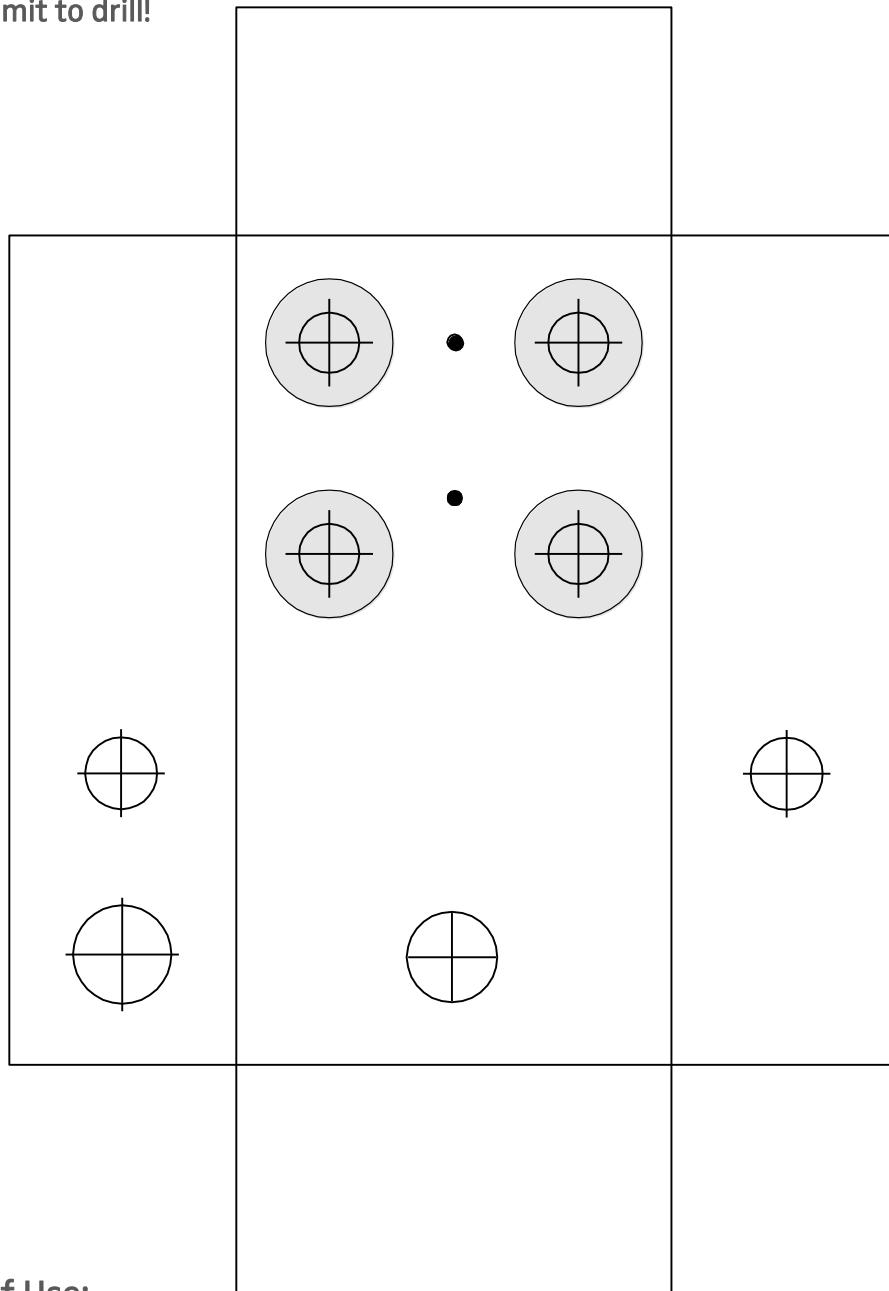
Build Tips:

- It is a good idea to solder components from shortest height to tallest. In this case, you should start with resistors, diodes, film caps, electrolytic caps, and IC/sockets.
- 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!)
- The clipping diodes in the original (D1-D4) are suggested to be 1n4148. You may want to socket these and try different types of diodes. You could use anything from green leds, to 1n4148, etc. Red seems to have the most "EL34 type" crunch. 1s1588 are also pretty tasty

Schematic:



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



### 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!). Rock on.