Volt Tattler 2 Case

A 3D Printable Case

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Introduction

The Volt Tattler 2 is a very useful tool for watching a DC voltage and announcing that it has gone awry. The VT2 is sold as a kit from QRPKITS.COM and fits nicely into an Altoids tin type of enclosure. He problem with using an Altoids tin is that it conducts. Unless we are careful we can cause the VT2 to malfunction and it might even get damaged due to shorts between the traces on the back of the PC board.

I have designed and posted a small plastic enclosure to Thingiverse. For those of us with access to a 3D printer, these files can allow us to create a small generic case for any project that might benefit from them. The design files are all supplied including the FreeCAD files so that a user might modify the model to suit their purpose.

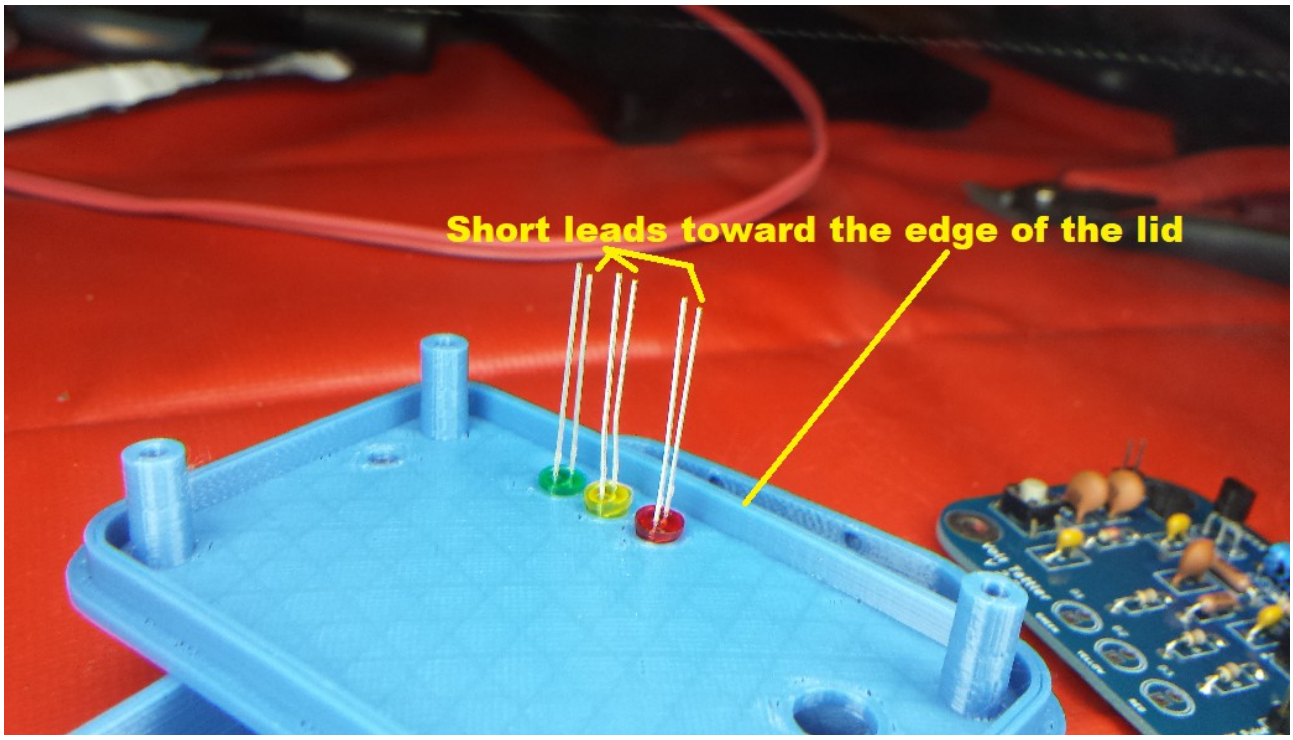
The example of a modified project is for the Volt Tattler 2. It is a fairly easy to print model and I have used a variety of PLA filaments that all seem to work just fine. The lid simply snaps on and off with pressure making changes to the project inside fairly easy with no tools needed.

Printing the Case

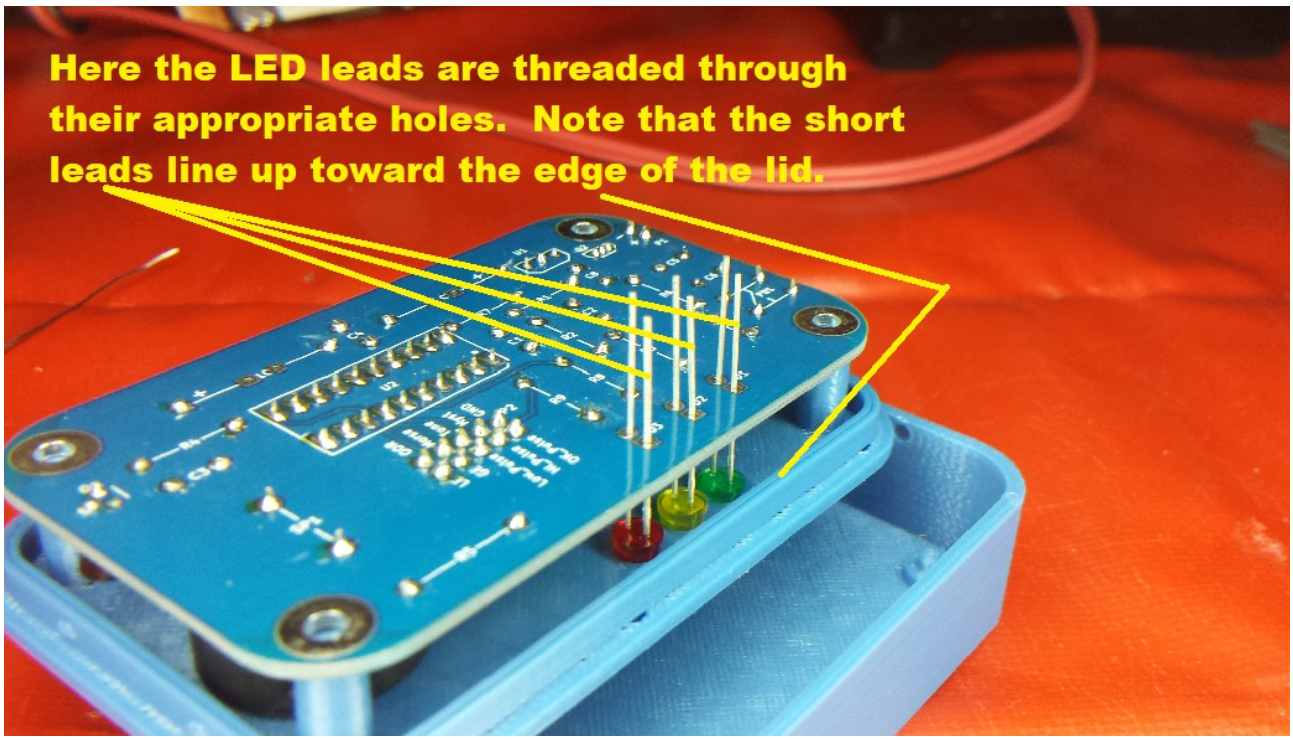
After downloading the files we see that we have a variety of .stl and .FCStd files. If we are just wanting to print a case for the Volt Tattler 2 we can simply use BaseLid_VT2.stl and BaseCase_VT2.stl. These can be loaded into your slicer (like Cura) and printed. If you want to modify the files the associated .FCStd files can be loaded into FreeCAD and modified as you wish. I used PLA as 3D printing is not my main hobby. PLA is all that I have and it works for most of what I need. You can use whatever materials and slicer settings that you find work well for you.

Building the VT2 In The Case

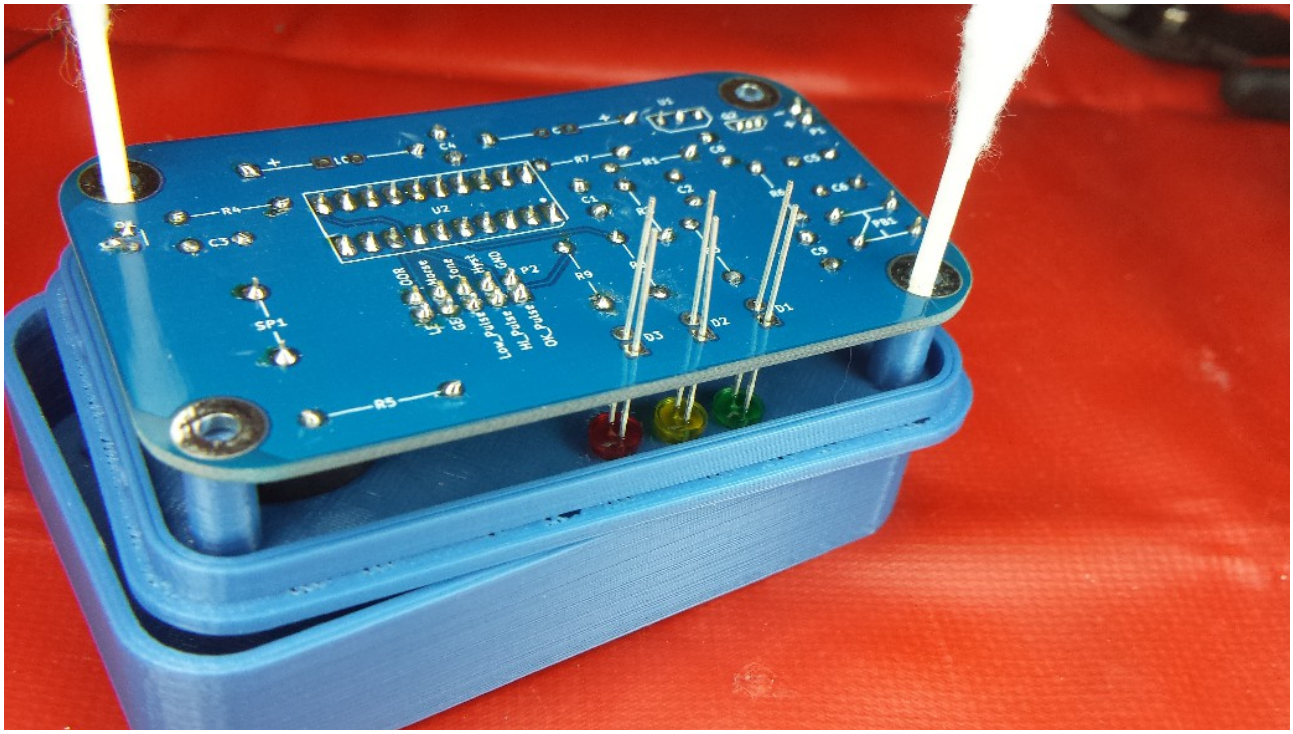
Building the Volt Tattler 2 may require some differences in the order that parts are installed. In essence we put off installing the LEDs until the last.



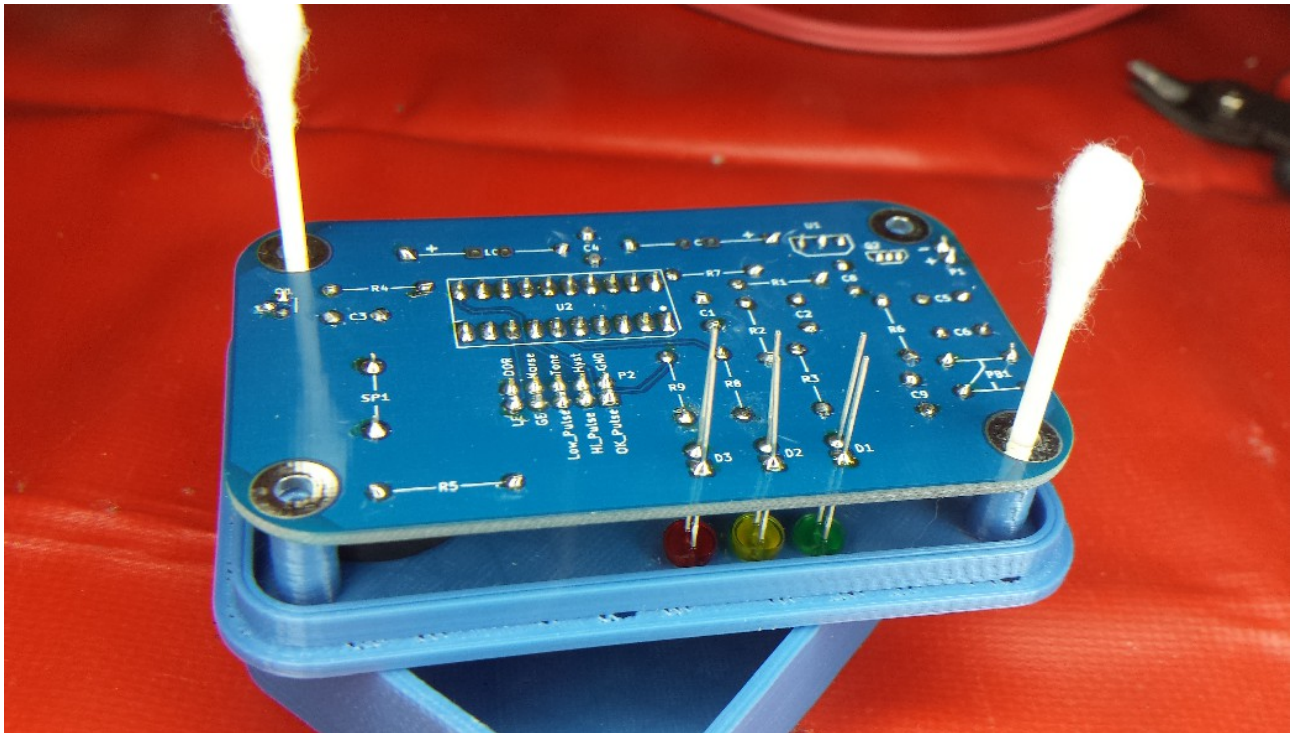
Tip the lid upside down and insert the LEDs in the holes as shown. Do not mix up the colors, red going near the center of the lid. Put the leads so that the short lead (and the flat side of the diode) is toward the side of the lid as shown.



Use something like skewers or cotton swabs cut off to center the board properly over the mounting holes.



Next solder in the LEDs. Solder all 6 leads.



Then simply remove the centering tools (swabs in this case). There are no screws holding the board into the case. It is held by posts printed into the lid and base. He lid simply snaps on.

I have not added holes for the power leads, leaving them to be drilled by the user. We each may have our own requirements for connecting to the VT2. A little hot glue as a strain relief for the wires coming into the case may be a good idea.

Enjoy.