

## Fabricated NanoVNA case from PCB material



I needed a case for the NanoVNA device I recently purchased. All I saw that was available at this time were 3D printed cases. I saw the need for a case that protected the delicate rocker input switch and the small power slide switch. I make many of my project cases from FR4 double sided pcb, so I thought I would share the details if anyone else want to try one. First off working with the material for the chassis and decals is covered in an earlier write-up that can be found at:

[https://grpguys.com/wp-content/uploads/2016/11/pcb\\_chassis\\_a.pdf](https://grpguys.com/wp-content/uploads/2016/11/pcb_chassis_a.pdf)

The drawing at the end of this document gives the details of the case shown below.



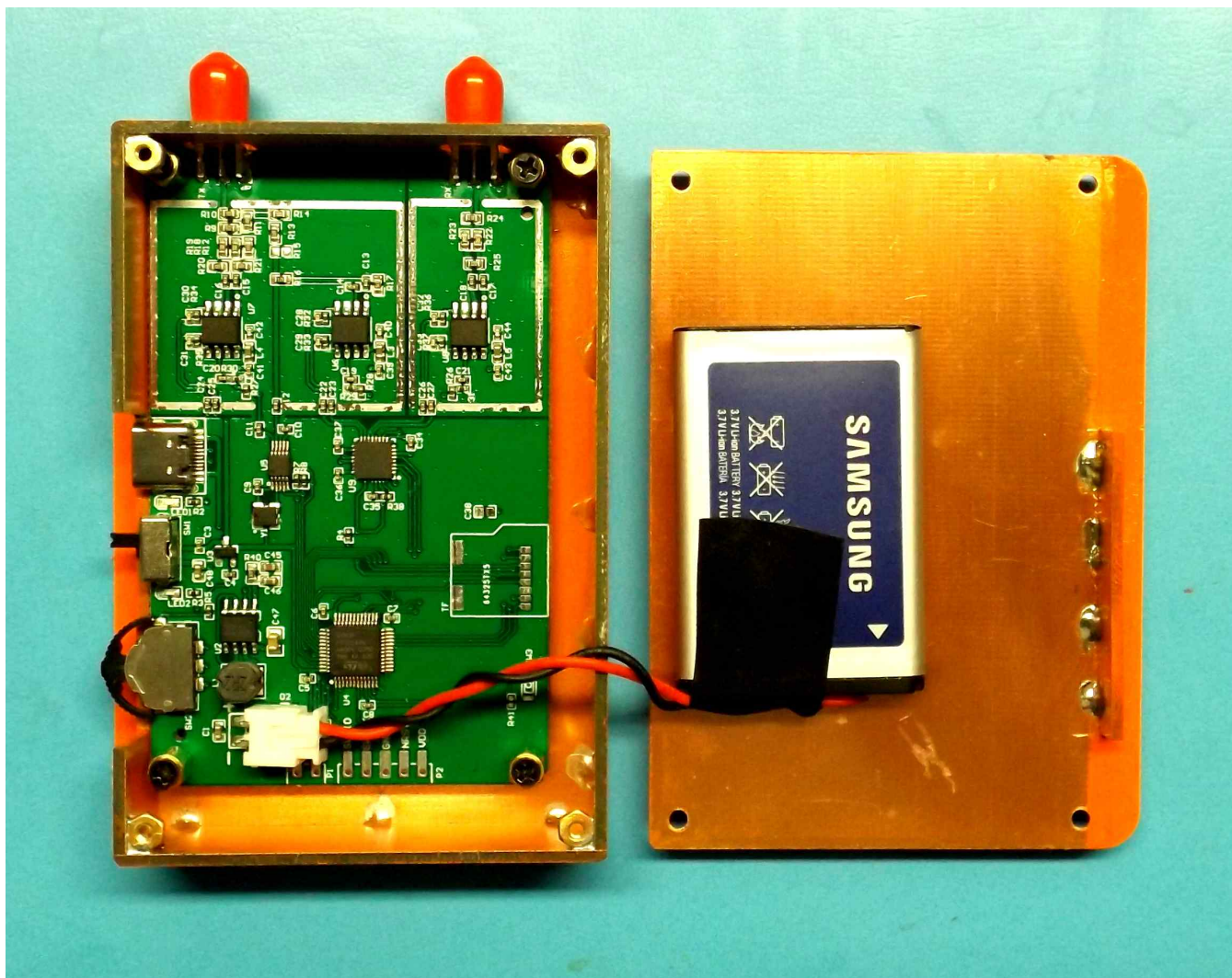
The original front plate shipped with the NanoVNA is not used. This allowed me to use the four corner screws to secure it to the new chassis. The original is removed and not used in the new setup. You may use it however if you want to transfer the hole and window locations to the new front plate.

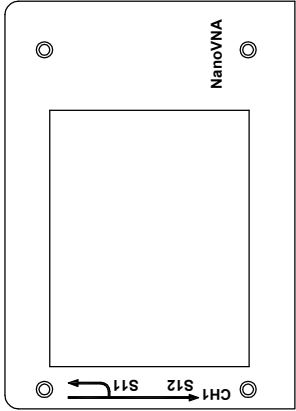


From the pictures above and below you can see there is about a 1/4" extra space on two sides to allow room to get the device into the new chassis. Also, you can see how the back panel and the same size cover will protect the rocker switch and slide switch. There is also more room in the overall thickness to replace the LiPo battery to one of more capacity.

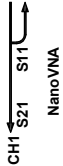


Went from 400mAh to 1000mAh with an old cell phone battery.



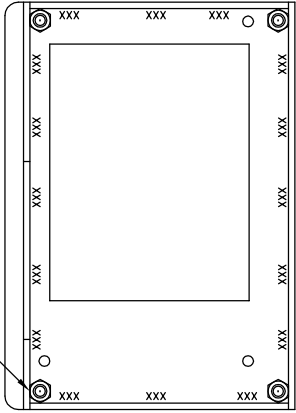


CASE DECALS

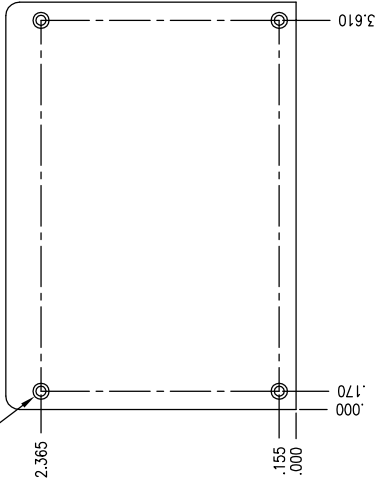


SCALE PRINTING TO THIS DIMENSION

SOLDER 2-56 BRASS  
NUT, 4PL. AS SHOWN

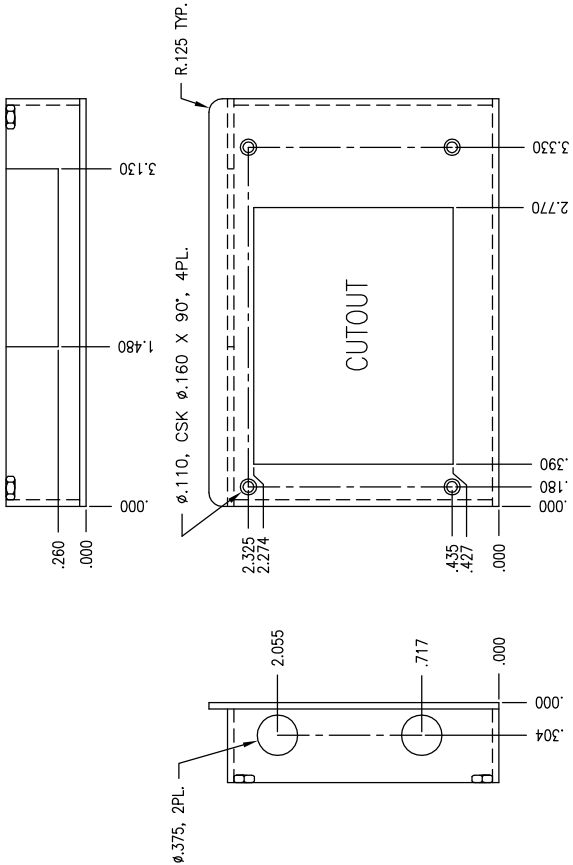


$\phi$  .093, CSK  $\phi$ .150 X .82', 4PL.



CHASSIS COVER

1PC. - 2.690 X 3.780



CHASSIS BASE

1PC. - 2.690 X 3.780  
2PCS. - 3.660 X .682  
2PCS. 2.250 X .682

MATERIAL - 1/16" THK. DOUBLE SIDED FR4 PCB

USE CONSTRUCTION TECHNIQUES DETAILED IN:

[https://qrpguys.com/wp-content/uploads/2016/11/pcb\\_chassis\\_a.pdf](https://qrpguys.com/wp-content/uploads/2016/11/pcb_chassis_a.pdf)

QRPGuys

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
FRACTIONS DECIMALS ANGLES  
 $\pm 1/32$  .XX  $\pm .015$   $\pm 1^\circ$   
XXX  $\pm .005$   
SURFACE FINISH  $\sqrt{\text{ }}$   
BREAK EDGES .005-.020  
RADIUS OR CHAMFER

TITLE PCB FABRICATED CHASSIS - NanoVNA

DRAWN WA4MNT SCALE FULL DATE 10/14/19

SHEET OF REF. DWG.# NanoVNA-01