

MOD (2) GPS FOR RT3S

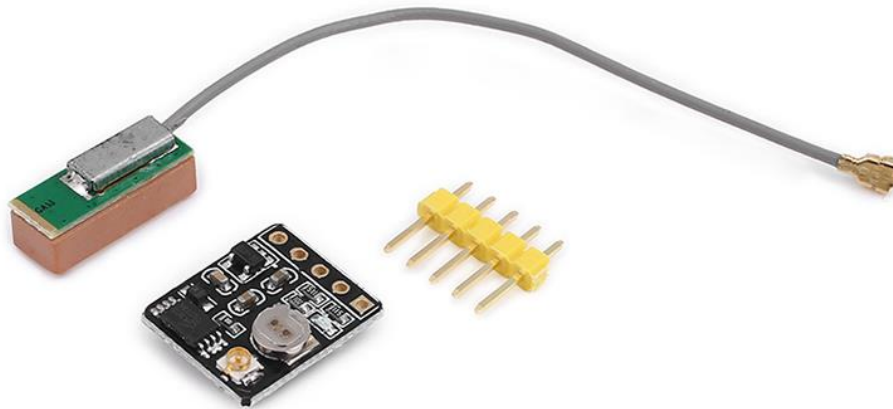
Just a sharing of my idea. I will not be responsible for any damages.

I do this for RT3S users who are not satisfied with the performance of the factory gps system.

This experiment was applied to a radio without GPS.

As the space inside the radio is very little, I advise you to buy this module

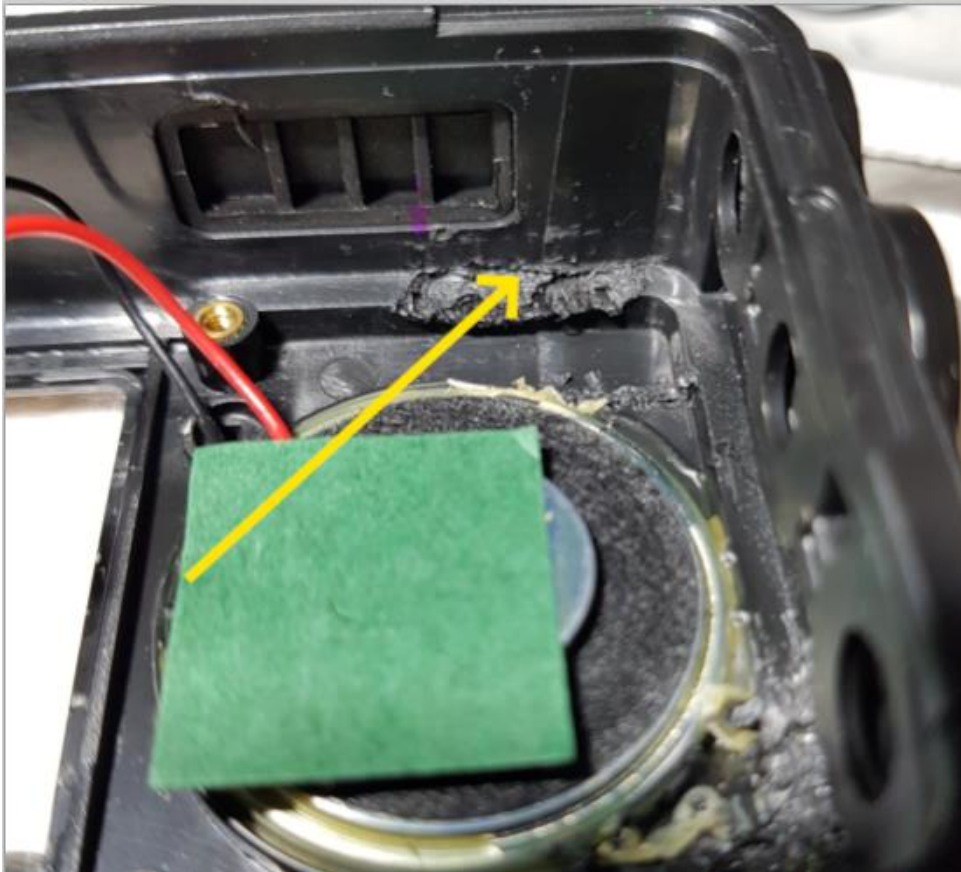
https://pt.aliexpress.com/item/1005001704030454.html?spm=a2g0o.order_list.order_list_main.4.78adcaa4XPnVA5&gatewayAdapt=glo2bra



MOD (2) GPS FOR RT3S

Remove some plastic to lower the GPS module a bit. As much as possible so that the battery does not touch on the main board.

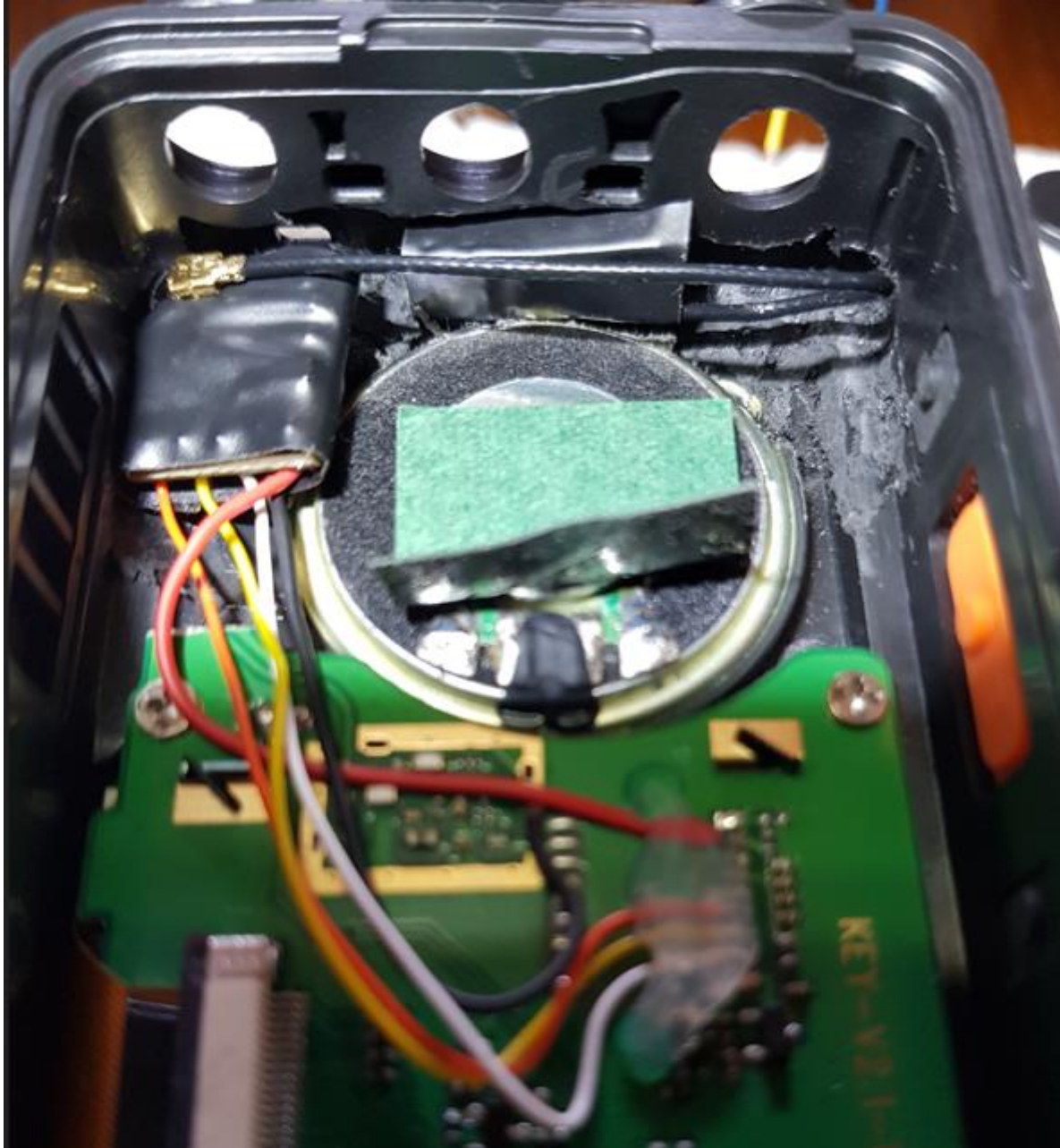
It was the best place I found for the module



MOD (2) GPS FOR RT3S

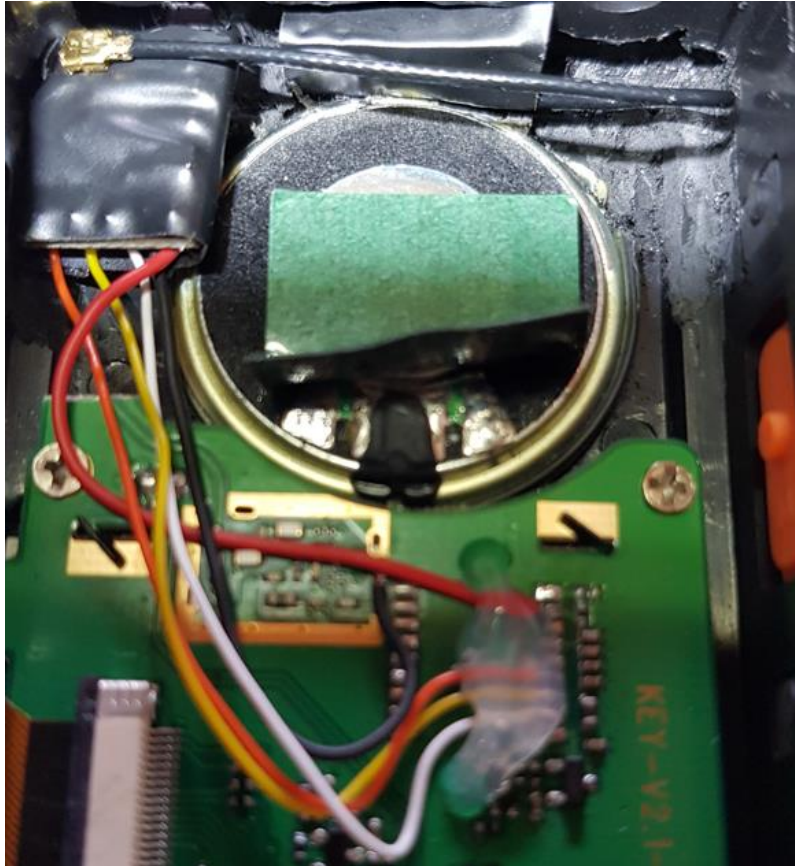
Component location

I recommend isolating the module and the antenna pcb

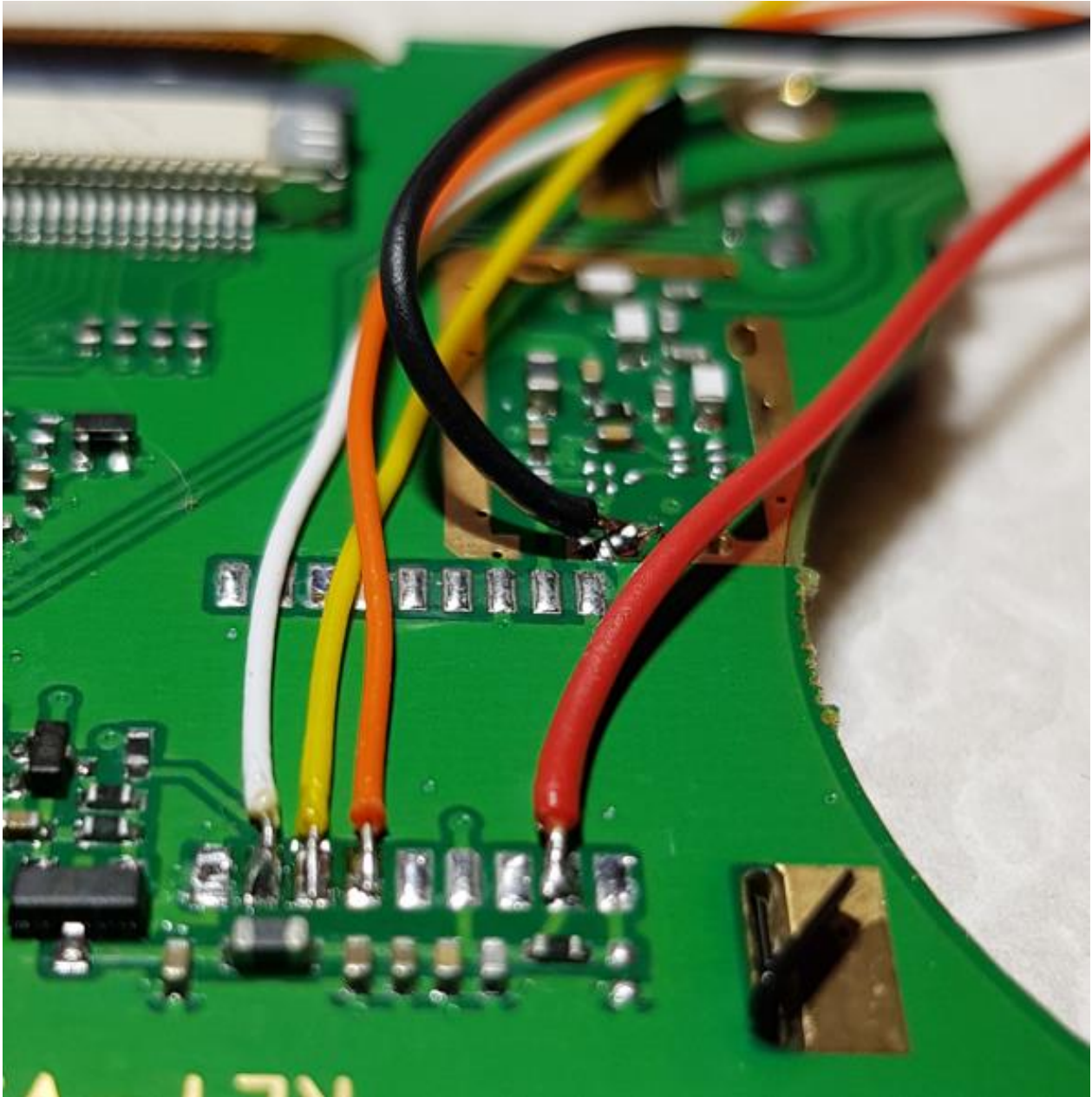


MOD (2) GPS FOR RT3S

Connections

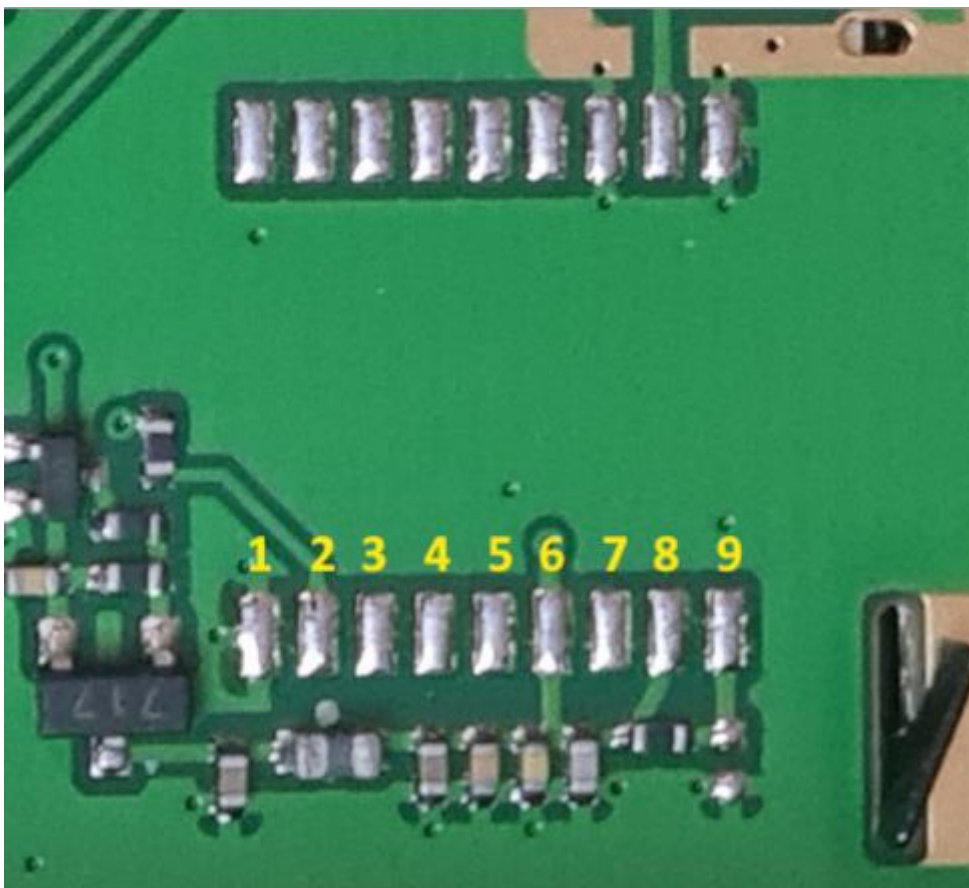


MOD (2) GPS FOR RT3S

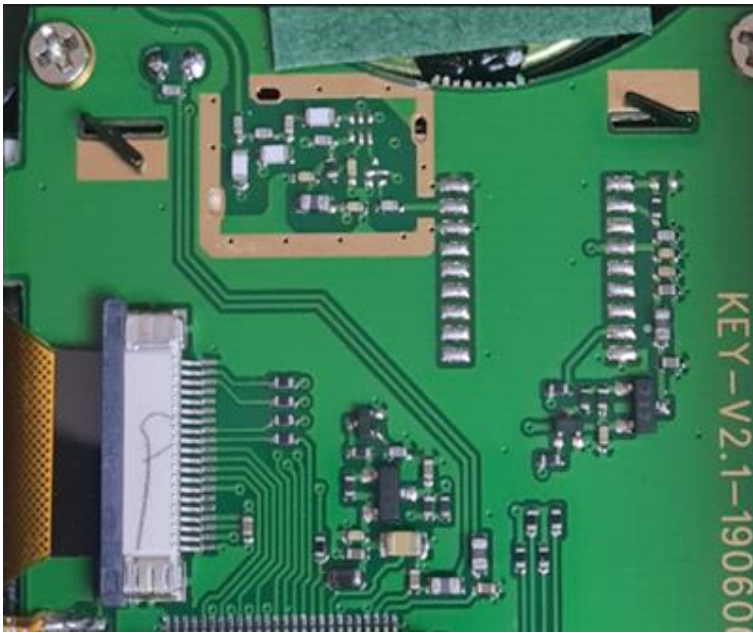


MOD (2) GPS FOR RT3S

10	GND	nRESET	9
11	RF_IN	VCC	8
12	GND	NC	7
13	NC	VBAT	6
14	VCC_RF	ON/OFF	5
15	Reserved	1PPS	4
16	SDA	RXD	3
17	SCL	TXD	2
18	Reserved	GND	1



MOD (2) GPS FOR RT3S



I am very happy with the results, it was worth the hours of research and implementation.

The backup battery in the module makes the difference, the start-up is much faster and the acquisition of satellites.

Hope this helps

73s to All

CU7AAZ

Special thanks to Colin - G4EML (important tip for RX and TX connections)