

CONVERTING 9XR TO FRSKY TELEMETRY (DJT MODULE)

The original 9XR does not support the FrSky telemetry protocol but it is easy to make a telemetry mod since the 9XR has the similar PCB with 9X. So this mod can also be done both on 9XR and 9X. Furthermore be sure you have **TAKEN OFF** the Tx module **BEFORE** flash the firmware.

For this mod, I just use the TxD of FrSky DJT module, which means **CAN NOT** change the factory alarm settings of DJT from 9XR side. I found thy (factory alarm settings) are pretty useful and no need to change. So, if you set 9XR alarm different from DJT factory setting, these two (9XR & DJT) could beep independently.

By far the most important thing is that it is being written by an end user. I am not an expert in electronics. The point is you do not need to be to make this mod! You simply need to be patient, and careful!

This is all the need:

FrSky DJT Tx module x1

500Ω resistor x1

220Ω resistor x2

Cable x 1

Heat Shrink Tubings

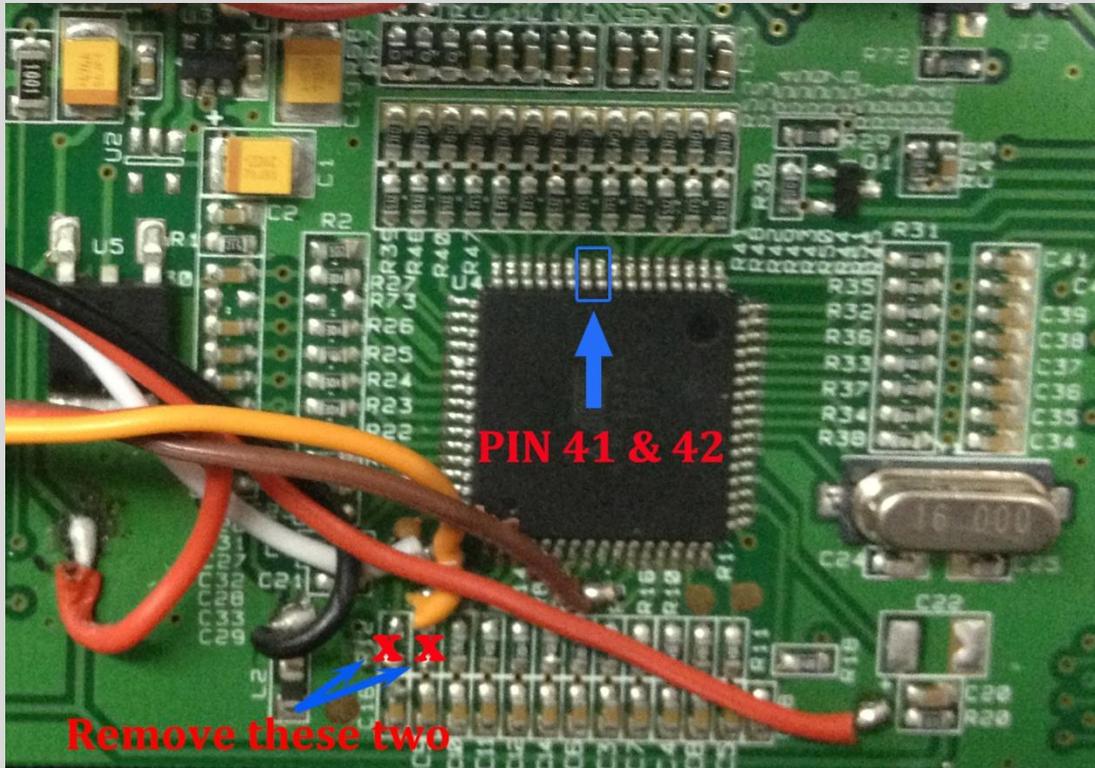


This mod need to modify both 9XR and DJT. Now we start:

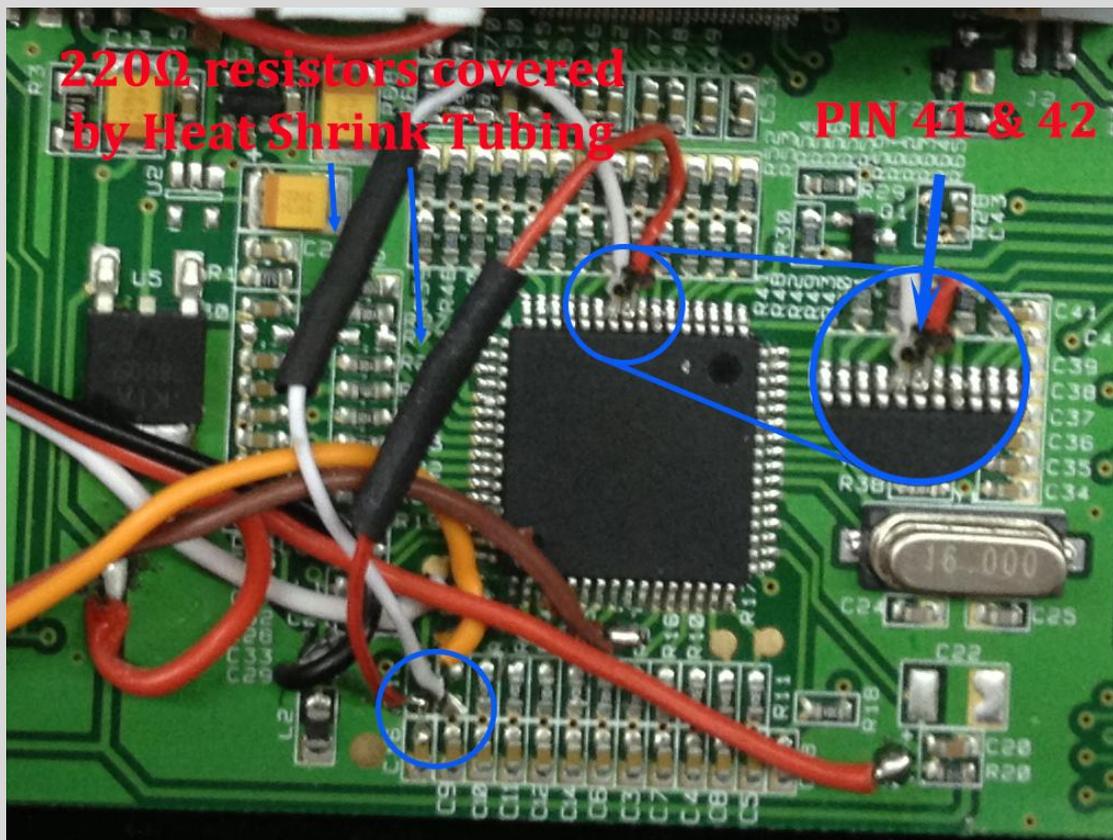
9XR PART

Remove the backside of 9XR then you can see the PCB with ATmega on it.

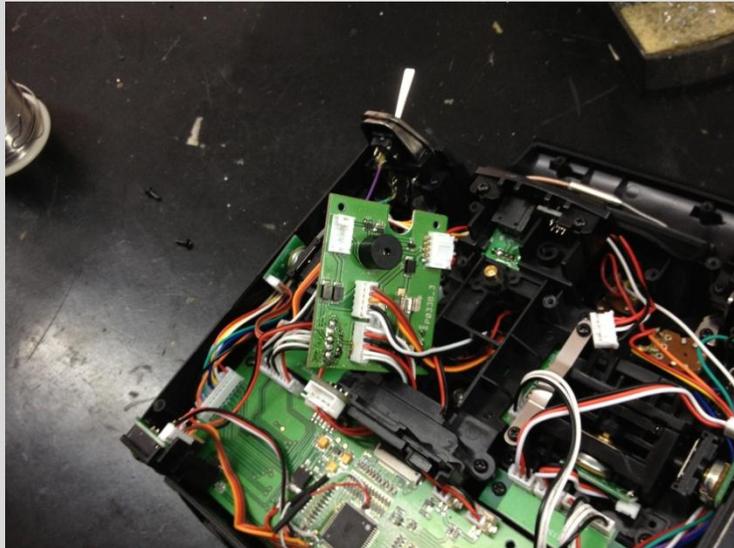
- Remove the two left-hand-most resistors as indicated in **RED**.



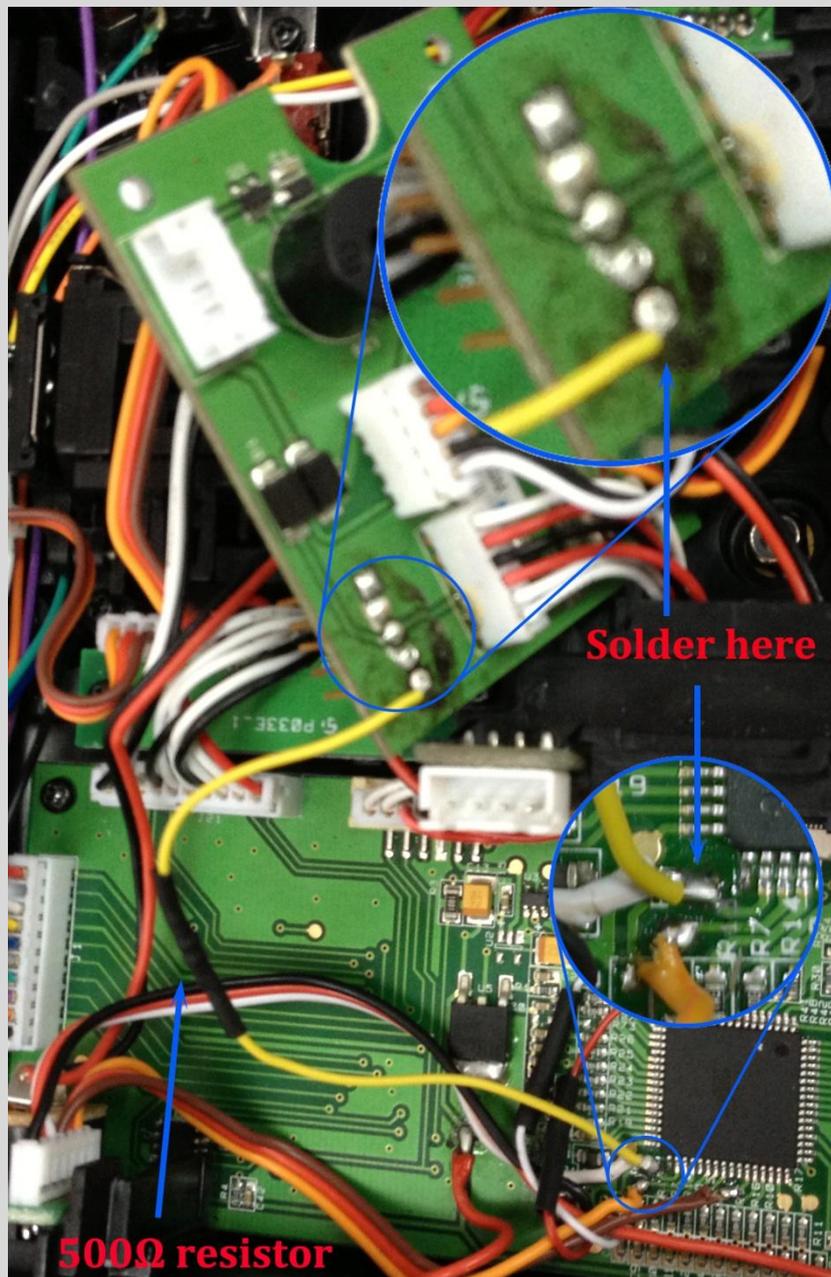
- Solder your 'super fine' wires to pins 41 and 42 of the ATmega and connect to the top end of the 220Ω resistors and covered with Heat Shrink Tubing as shown.



- Take off the RF board.



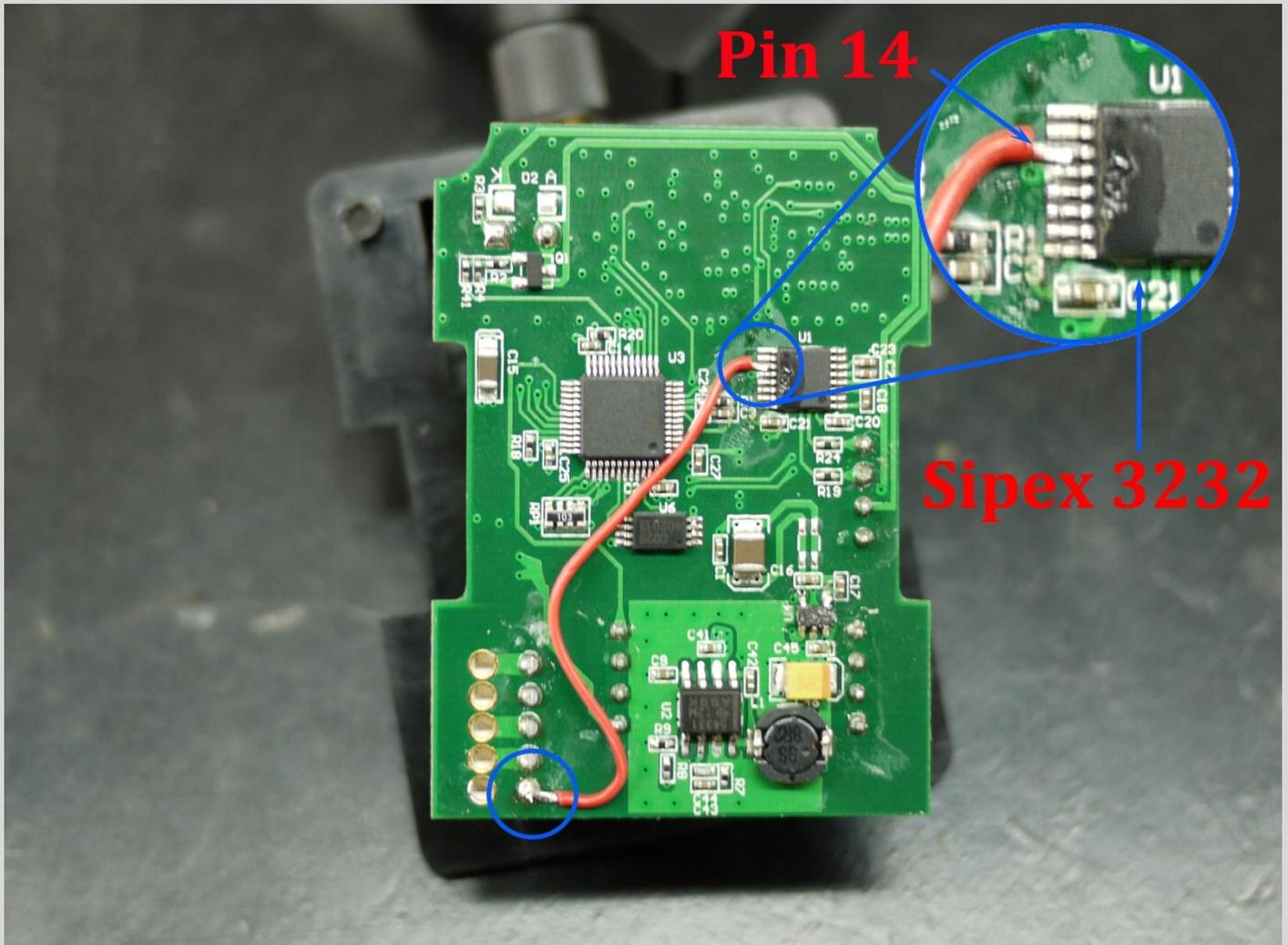
- Connect the **last** Pin (which will connect to Rx pin of DJT) of RF board and the second Pin of the ATmega with **500 Ω** resistors and covered with Heat Shrink Tubing as shown.



The process on the 9XR is down.

DJT PART

- Open the DJT and connect the Pin 14 (the third from top on the left side) of Sipex 3232



The DJT part is down.

Put everything back and power the transmitter. Flash the 9XR to er9X. Be sure **TAKE OFF Tx module when you flashing your radio.**

http://9xforums.com/wiki/index.php/Flashing_your_9x

The telemetry data is displayed as below.





MODEL 01 11.5V

Lat=00000.0099
Lon=00000.0099
Alt= 0
Spd= 0 kts Max= 0
V1= U2= U3=
V4= U5= U6=

9XR DIGITAL PROPORTIONAL RADIO CONTROL SYSTEM

TURNIGY®

9XR

MENU

EXIT