Taranis QX7 Bluetooth mod with OpenTX
By Marty Kriton

To enable OpenTX BT functionality in cheap Q X7 you need to add "Horus X10S BT" module to un-populated space on transmitter PCB. Be aware, that soldering of this module requires some skill. You can easily bridge those tiny pins and short circuit something on transmitter board!

Attached pictures show my old BT solution with reading directly CRSF stream over inverter and final solution with Horus BT module soldered to PCB. My module came without antenna, so I used 2.4GHz frsky receiver antena with compatible connector (imho IPEX).

After instalation you need to update OpenTX to version 2.3.0 or higher and set up BT functionality in HW config menu. Telemetry mode equals "smartport mirror" known from X9D.

With this set up, you can connect your HM-10 or another BT4.0 compatible module to address displayed in config menu. Pairing PIN is "000000".

That is all :-) Tracker communication is correct and reliable.

My original link to transmitter BT module is not working, but you can search for this spare part anywhere or buy it directly from https://www.horusrc.com/en/frsky-transmitter-horus-x12s-bluetooth-module.html

For tracker side I used some AT09 module, but it was big pain to get it working and I had to reflash it to HM10 firmware. Try to get original HM10 if possible.