

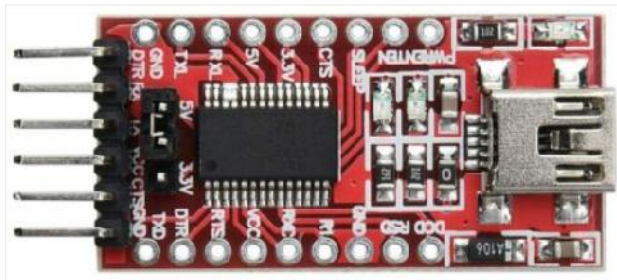
For my Es-'hail 2 QO-100 satellite station here at GU6EFB, I have now moved from my analogue setup of a Yaesu FT847 and an SG labs 13cm up converter for transmit over to a Adam Pluto in conjunction with the SDR console software by Simon Brown G4ELI.

I am not going to go over the setup of the software or the Adam Pluto as this has been covered many times, but one feature that I was missing was some form of external PTT switching rather than using the PC mouse and clicking on the TX icon. Whilst looking at my Twitter feed I came across a post from Peter 2M0SQL about using a FTDI comport with SDR Console. This was something I had read about before but had forgotten.

After a quick read of the SDR Console instructions about using an external PTT I set about making my own PTT interface which, is really simple and cheap, less than £10 to make but really enhances the user experience.

#### Items required

One FTDI 3.3V-5V FTDI FT232RL USB to UART TTL Module available for between £2 – 5 from online sites



One suitable USB lead

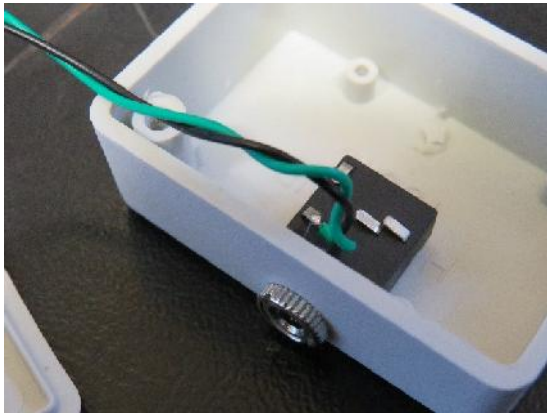
One Hammond Plastic box 1551G

One 3.5mm jack socket

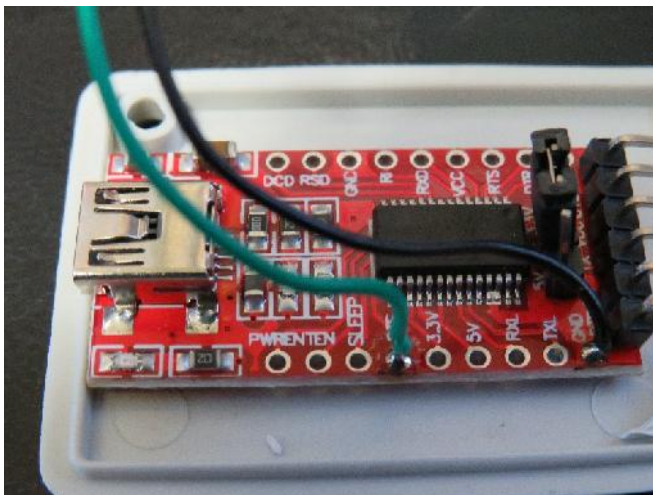
In my case I used a hot melt glue gun and fitted the FTDI board to the lid of the Hammond box.



One suitably sized hole drilled for the 3.5mm socket and the socket fitted.



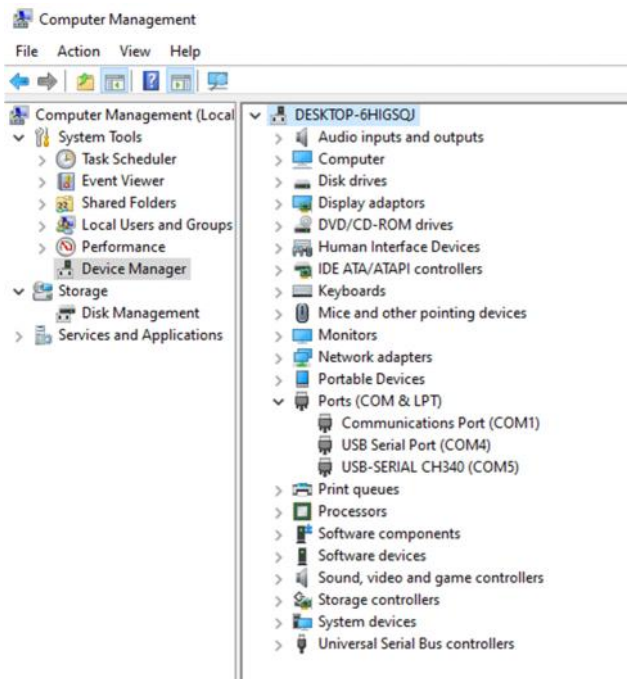
Then you will need to solder a wire from the connection point marked GND on the FTDI board to the 3.5mm socket ground and then another wire from the point marked CTS on the FTDI board to the pin on the socket for the tip of the jack plug. In operation when the CTS line is connected to ground this will cause SDR Console to go into transmit mode.



That completes the build

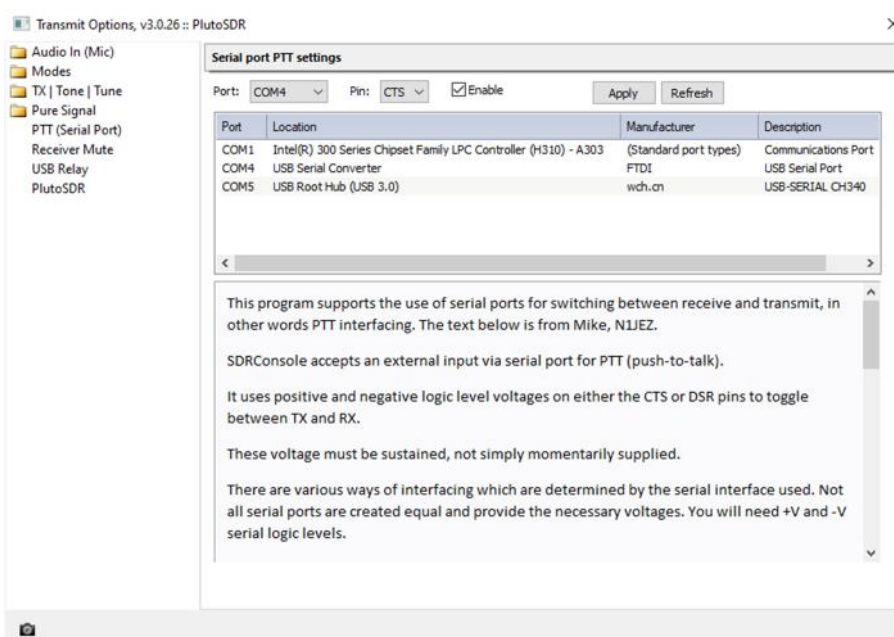


Next is to plug the unit into a spare USB port on your computer, in my case the unit was automatically found and setup as comport 4 on my PC. You can check if this unit has been setup correctly by a right mouse button click on **This PC** and selecting **Manage** from the drop down list and then selecting **Device manager** and making sure that you have no device with a warning against it. If you then click on **Com & LPT** you should see your new comport listed.



If this is not the case you will need to download and install the driver for this unit from the FTDI website.

To be able to use this interface with SDR Console, you will need to open the transmit options screen in SDR Console and select the **PTT (serial port)** option, then select the comport to use in my case **COM4** the select pin option and select **CTS** and then tick the **Enable** box **Apply** then close the window.



If you now operate your footswitch connected to this device the SDR Console will now go into transmit mode whilst the switch is made and stop transmitting when released.

I hope you find the above useful and look forward to QSO with you on QO-100

73 Keith GU6EFB