MiniTiouner Pro Box according to a circuit from F6DZP

created by Rolf -DJ7TH-

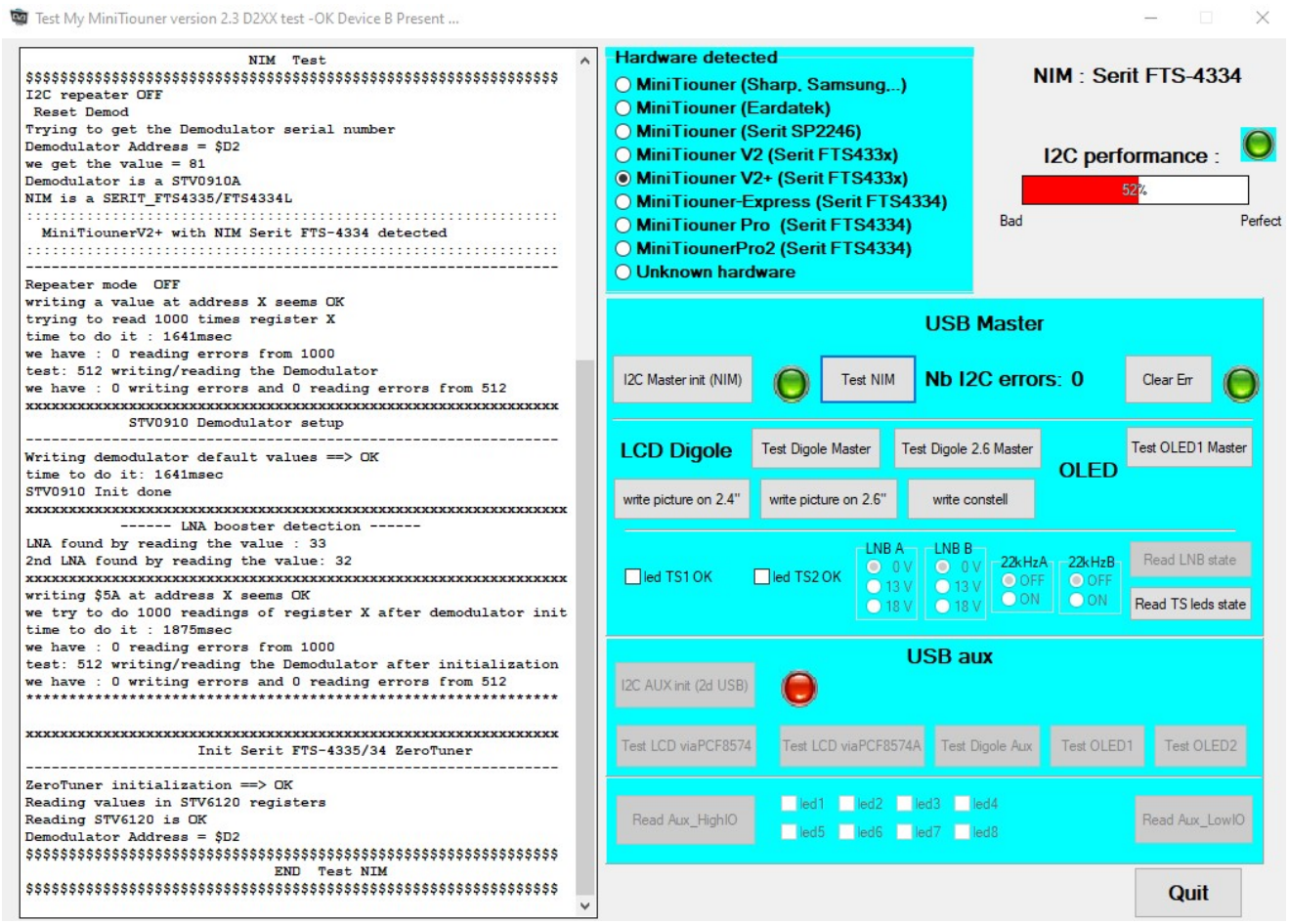
please read before installation

Download and install the F6DZP programs, the drivers for the FT2232 USB module and the LAV filter on the PC (see www.download.dj7th.de)

Do not connect the LNB yet. Connect the Master-USB port to the PC. The PC should now recognize the FT2232 module, which is acknowledged from Windows by a sequence of tones.

Connect the box to the DC power supply (8..20V) and switch it on. The green LEDs "+ 12V" and "+ 18V" should now light up.

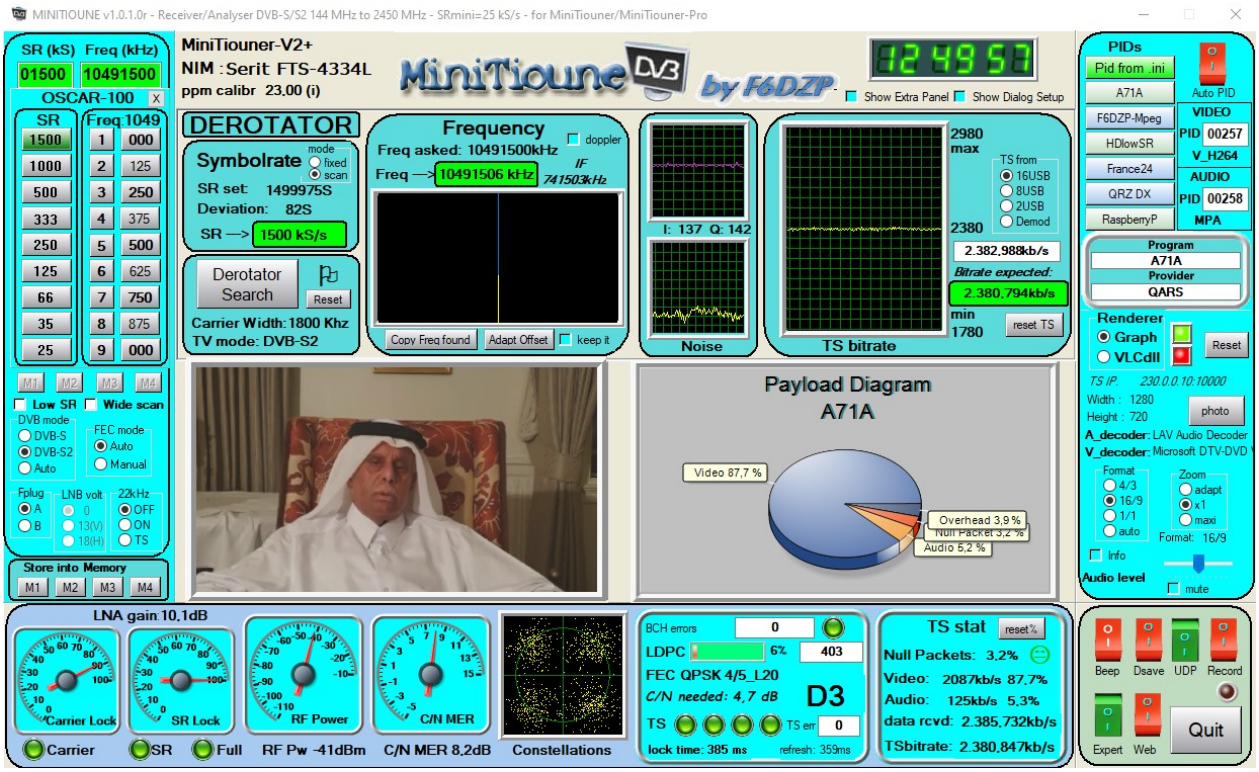
Use the “MiniTioune Test” program from F6DZP to check all functions. Click on “Test Nim”. "I2C performance" can result in values of 20% -70% depending on the PC and USB cable length. It should end up looking something like this:



1. Switch off the box and connect the LNB line to LNB2. Set the LNB2 toggle switch to the middle position (0V**).**
Caution: A short circuit current on the LNB line can damage the SERIT tuner in the box!

2. Switch on the box and use the LNB2 toggle switch to set the correct voltage of the LNB, provided that the LNB is not already being supplied externally, which can be seen in the position “0V” and the red "LNB2" LED lights up. Diodes on the board prevent a possible reverse current into the board.

3. Start the MiniTioune software. The preset DATV beacon at 10,491,500 kHz should now be received automatically. The yellow "SDA" LED should flash and the "TS2" LED should light up continuously. Notice: the wideband QO-100 transponder uses a different polarization for DATV in contrast of the narrow band transponder.



With the program "QO-100 WB Live Tune.exe" you can click on one of the displayed DATV signals, to send the data to the MiniTioune program via UDP. After a few seconds of leveling you can receive the selected DATV signal, provided the field strength is sufficient. With Fplug "A" and "B" you can switch between LNB2 and LNB1 connectors and thus also control your own DATV signal directly on 2.4GHz, with a small antenna put on LNB1. The SERIT NIM tuner covers this area. To do this, the offset value must be set to "0".

Additional information and pictures can be found under "Projects": http://www.dj7th.de
or on https://www.qrz.com/db/dj7th

vy 73 de Rolf -DJ7TH-