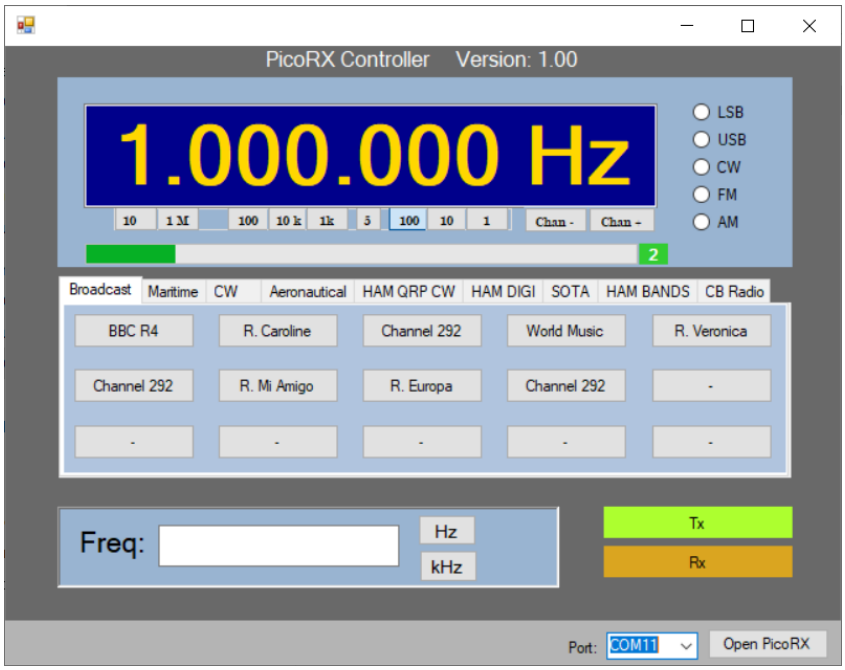
Pi Pico RX Control Program Author : Gil ONL12523 Documentation : Luc ON7DQ

This program only works with the Windows operating system.
There is nothing to install, just download the zip file from github and unzip to any folder of your choice.

PicoRX.exe is the main program.
Presets.ini contains the settings, it may be edited with Notepad, but everything can also be changed from within the program.

Connect the Pi Pico RX to a USB port, and find the COM port number via the Device Manager.
Start the program, select the COM port and click the button in the bottom right corner
"Open PicoRX".

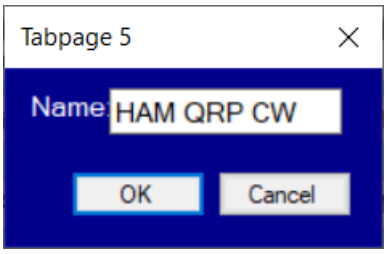


The top panel shows the frequency and mode, and a row of buttons to select some standard frequency steps. These steps are used for tuning with the mouse wheel (rotate it UP or DOWN), when the mouse pointer hovers over the blue area of the frequency display.

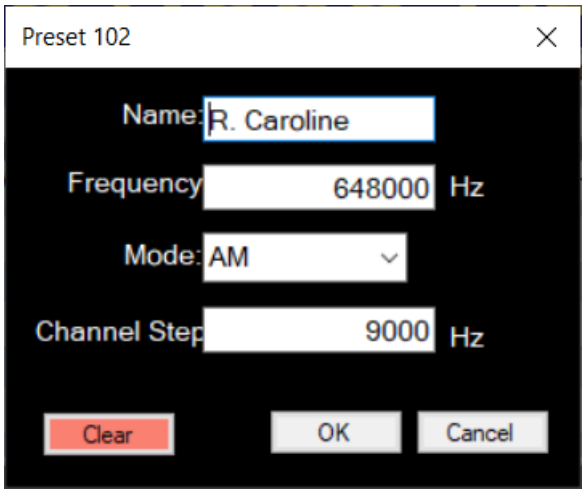
The frequency can also be tuned with the **Chan-** and **Chan+** buttons, with the step from the chosen preset (or 1 kHz if no preset was clicked yet). Below the buttons is a simple S-meter (bargraph), but it is rather slow.

In the middle panel are **9 tabs** with each up to **15 presets**.
All info is stored in the Presets.ini file. The file is updated after each change.

Click a panel to select it, right click it to edit the name of the panel.

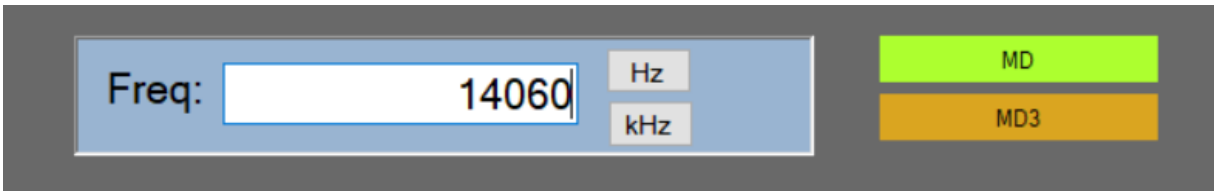


Click any of the presets to tune to that station. Right click a preset to edit the information.



Right clicking on an empty preset will copy the actual frequency and mode from the Pi Pico RX.

The bottom panels can be used for direct frequency input in **Hz** or **kHz**, click the appropriate button after entering the wanted frequency. The frequency is limited to **4 kHz – 30 MHz**.



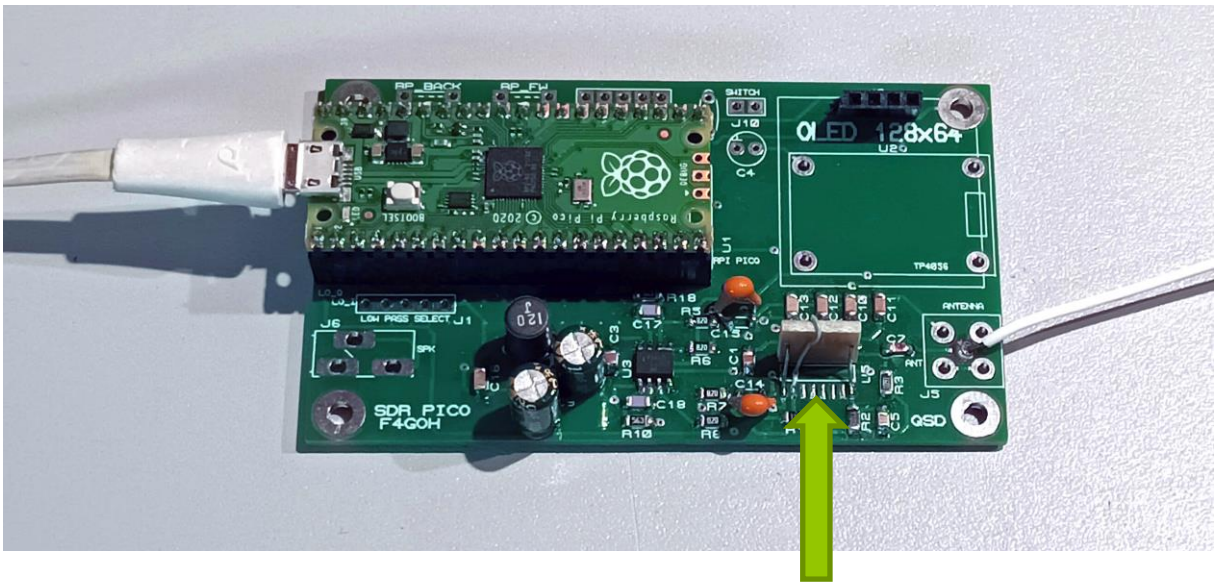
The two boxes to the right show the sent CAT commands, and the received replies.
The Pi Pico RX really has only three commands available:

- FA; FA001000000; Read/Set frequency
- MD; MD3; Read/Set mode
  - 1 = LSB
  - 2 = USB
  - 3 = CW
  - 4 = FM
  - 5 = AM
- SM; Read the S-meter, but it is very slow

Extra use for this program : headless Pi Pico Receiver

When a Pi Pico RX **without display or buttons** is connected to the PC, you can operate it as a "headless" receiver. The audio is played through the PC speakers, and can also be used to decode digital modes (e.g. WSJT-X, FLDIGI, etc).

Here an example of such a setup, built by Gil.
Look Ma … no buttons, no display !



Fun fact : the wrong model of the FST3253 chip was delivered by Ali Express, but Gil found a solution to use those chips anyway: he devised a small PCB "adapter" board, mounted it upright, and soldered all connections to the board with fine wires, and it worked !

Have fun with the program, and let me know your comments (good or bad).
My e-mail address is good on QRZ.com .

73 de Luc – ON7DQ