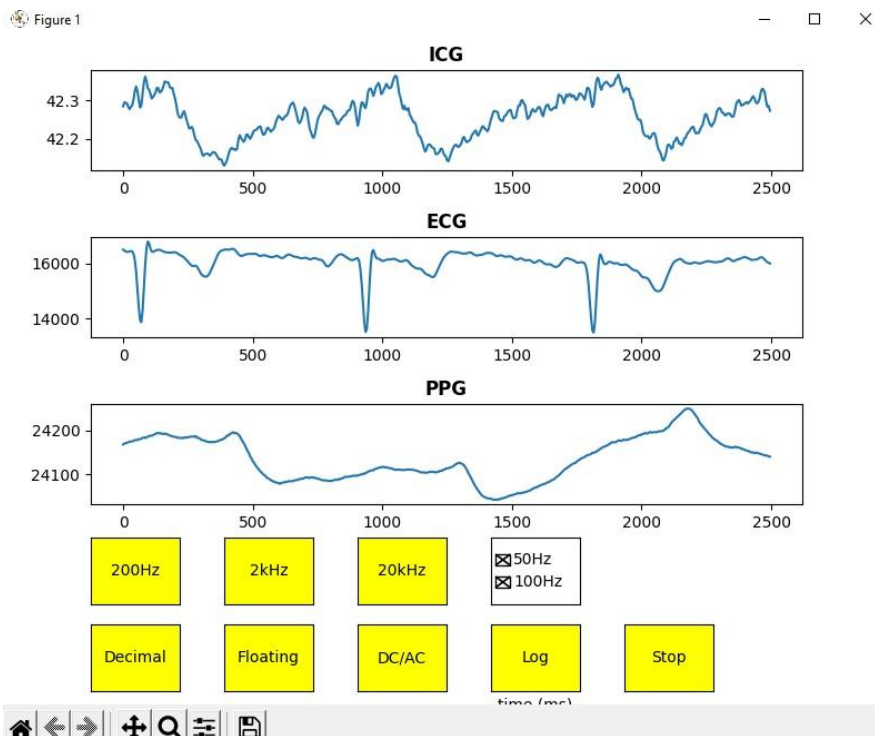


How to operate ICG, ECG, PPG measurement device:

1. Connect PPG sensor (It is important to connect PPG before powering device up, because device programs PPG only once, when it is powered up)
2. Install batteries (not working over USB power)
3. Turn on battery power switch
4. Connect USB to your computer. (In this point you need to have a driver for XDS100V2 USB JTAG and for this you have to install Code Composer Studio)
5. Now, you can open GUI. There are two alternatives (different file format) for the same GUI , one is executable (GUI_Vxx.exe) and the other is Python script (GUI_Vxx.py). You can run executable without any installations, in Windows machines.
6. (Optional) If you want to run python script instead, you must install python and dependencies (pyserial, keyboard, scipy, matplotlib). After installing Python, you can use “pip install pyserial” command on Windows terminal to install pyserial module, for example (also same for other dependencies)
7. When GUI is opened you will see similar screen below. Sometimes GUI does not open in the first try, in this case try once again.



8.
 - 200Hz, 2kHz, 20kHz buttons set excitation frequency for ICG measurement. 20kHz is default
 - Decimal, Floating is calculation mode for ICG signals, default is Floating
 - 50Hz, 100Hz check buttons apply band stop filters to ICG and ECG signals.

- Note that GUI is slow and not reacting immediately to the mouse clicks, but it is actually taking input and responding in few seconds.
- Once you connect all the electrodes and put your finger on PPG sensor (apply constant and light pressure) you can press Log button to save the data stream. Note that, the program starts taking log only after you press the Log button, so that initially you can make any changes to the settings and then you can start taking log. Log file contains both filtered and unfiltered ICG, ECG data, and PPG data.