



**JEATROM**

## **Software Installation**

Refer to the folder / directory of the installation file , whose name is:

Install Disk JEATROM

In it there is a file with the name :

USB FTDI driver installation.pdf

Open it and follow the prompts to install the USB drivers needed to operate the equipment.  
The folder FTDI drivers contains the setup or the driver.

After installation of the driver, run the installation file of the application, located in the same folder:

**JEATROMSetup.exe**

This folder will be created in C drive (default ): JEATROM Dolang , with inside the application file, with the name: JEATROM.exe .

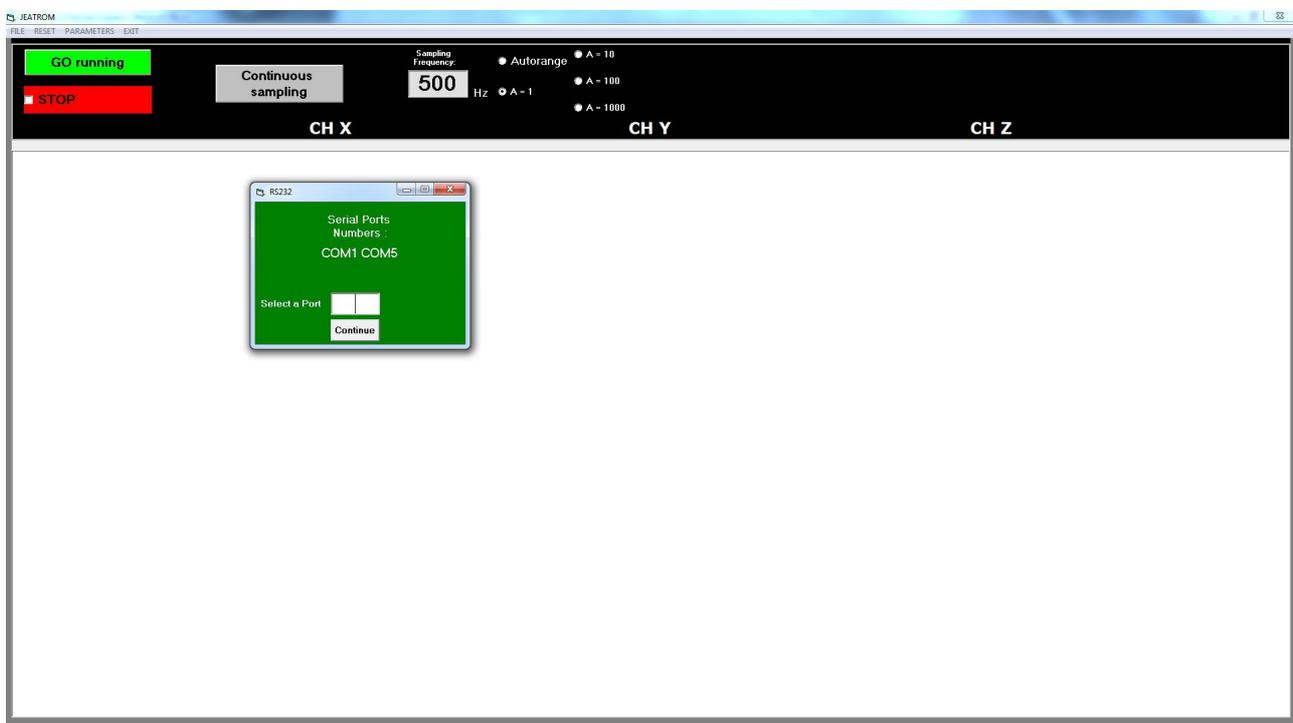
# Running the application

## Verify port number

If you have properly installed USB driver, following instructions located in folder << Install disk JEATROM>> of installation software, you are able to lunch the application: JEATROM.exe.

It will appear a window asking what port number to set for data reception and transmission.

This number corresponds to a virtual RS232 port, whose number ranges from 1 to 16.



In the case shown, available ports are number 1 and number 5.

To know what is the port dedicated to the JEATROM instrument, you may unplug the instrument and then lunch the software again.

If the only number you will see is number 3, number 5 is the port number of your device.

It may happens that the Windows system reserves automatically a number outside the range 1 → 16; JEATROM application shows only numers in the range 1 → 16 so nothing will appear in the serial port number box.

To know and change the number, plug the device to the USB port and then go to system tray and investigate the System icon, and then Hardware.

On the line: COM and LPT it will appear the number of the port.

To change it, click on Properties and then to Advanced; you will be able to set a new number in the range 1/16.

## **GO Running**

If you press <<GO running>> the device will begin to acquire signals from the 3 channels: X, Y, Z.

On the right at the top of the screen, you can change the gain.

In the top box the sampling frequency is shown, in Hz.

The inverse of the sampling frequency is the sampling time, in seconds.

Referring to the picture shown, sampling frequency is 500Hz and sampling time is 1/500, 0.002 seconds or 2 msec.

GO running is only used to see if all is ok.

Continuous Sampling is the command to use to get a file on the field, to be eventually elaborated.

## **Setting acquisition parameters**

You can change acquisition parameters through menu command <<PARAMETERS>>.

The only parameter you can set is the sampling rate.

You can set a value of 2 msec (sampling frequency = 500 Hz) or 1 msec (sampling frequency = 250 Hz).

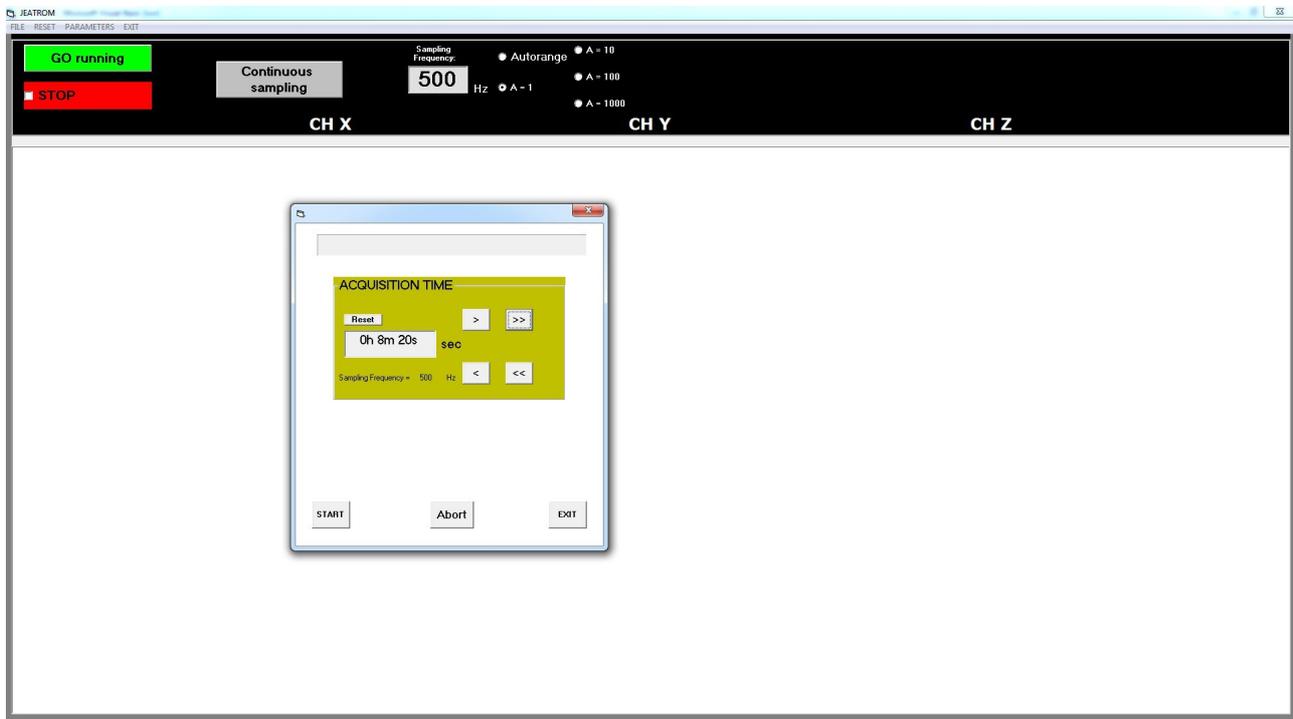
Remember that Nyquist theorem states that every correct acquisition must have a sampling frequency of at least twice the maximum frequency of the signal to be acquired.

With JEATROM system there is no danger, because the real sampling frequency is 32000Hz and the lower values are obtained from averaging.

## Continuous Sampling

Use this command to get a file in .saf format, suitable to successive elaboration.

Acting on Continuous Sampling it will appear:



In this example a time of 8 minutes and 20 seconds has been set.

Then press START and a blue progression line will indicate the prosecution of the sampling process.

In any case pressing ABORT you will stop the acquisition.

When acquisition is terminated, you will be prompted to save the file with your name.

# JEATROM SPECIFICATIONS

Connection	USB 1.1
Number of channels	3 (x,y,z)
Input impedance	47000 ohm
Signal/Noise	124db at 1KHz
Max analog input	+/- 1 volt
A/D conversion	24bit sigma-delta
Frequency response	0 → 800Hz
Sampling frequency	250Hz, 500Hz
Oversampling frequency	32KHz
Sampling rates	1/Sampling frequency
Data Storage	Hard disk of PC
Recording capacity	2 hours
Recording format	SAF
Power supply	From Notebook Usb
Power autonomy	PC battery
Housing	Plastik case Yellow-white color
Size	
Weight	
Level	
Environment operating condition	
Humidity	
Impermeability	IP65
Operative system required	Windows XP, 7, 8