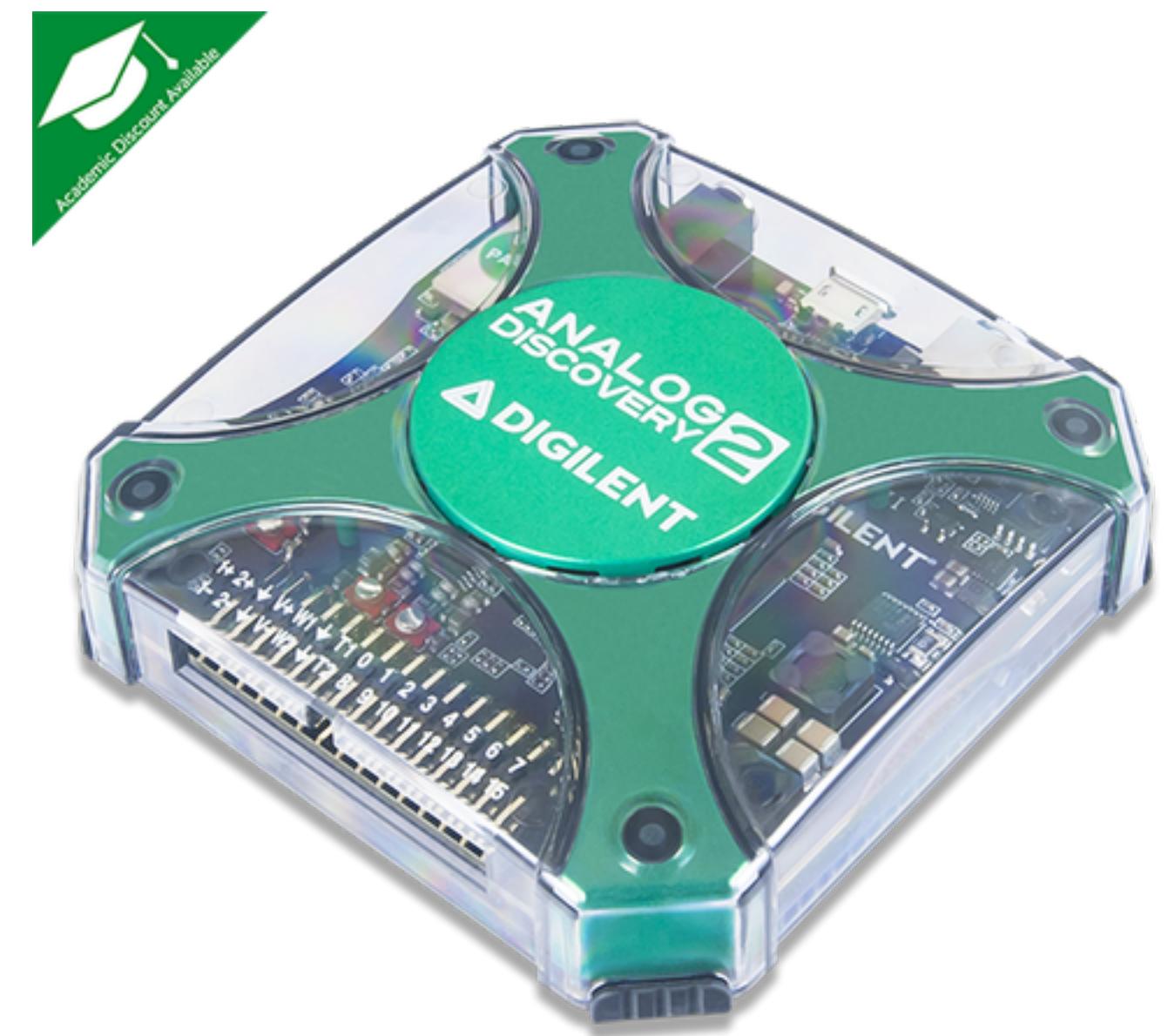


Applied Statistics

Project Preparation
– Ball on an incline –

Software installation

- For the project you will be using **Analog Discovery 2** instrument
 - Easily connected to your laptop via standard USB cable (not USB-C)
- Communication between the instrument and your laptop is provided via dedicated **WaveForms** software
 - You **need to have it installed** in your laptop **BEFORE** the lab starts
 - Available for Windows, Mac OS & Linux (dep, rpm)
 - Download it here :
<https://reference.digilentinc.com/reference/software/waveforms/waveforms-3/start>
 - Easy and straightforward installation (you do not need any special drivers/additional tools)
- Experiment setup of the incline will be prepared for you connected to the instrument
 - No need to worry about this part

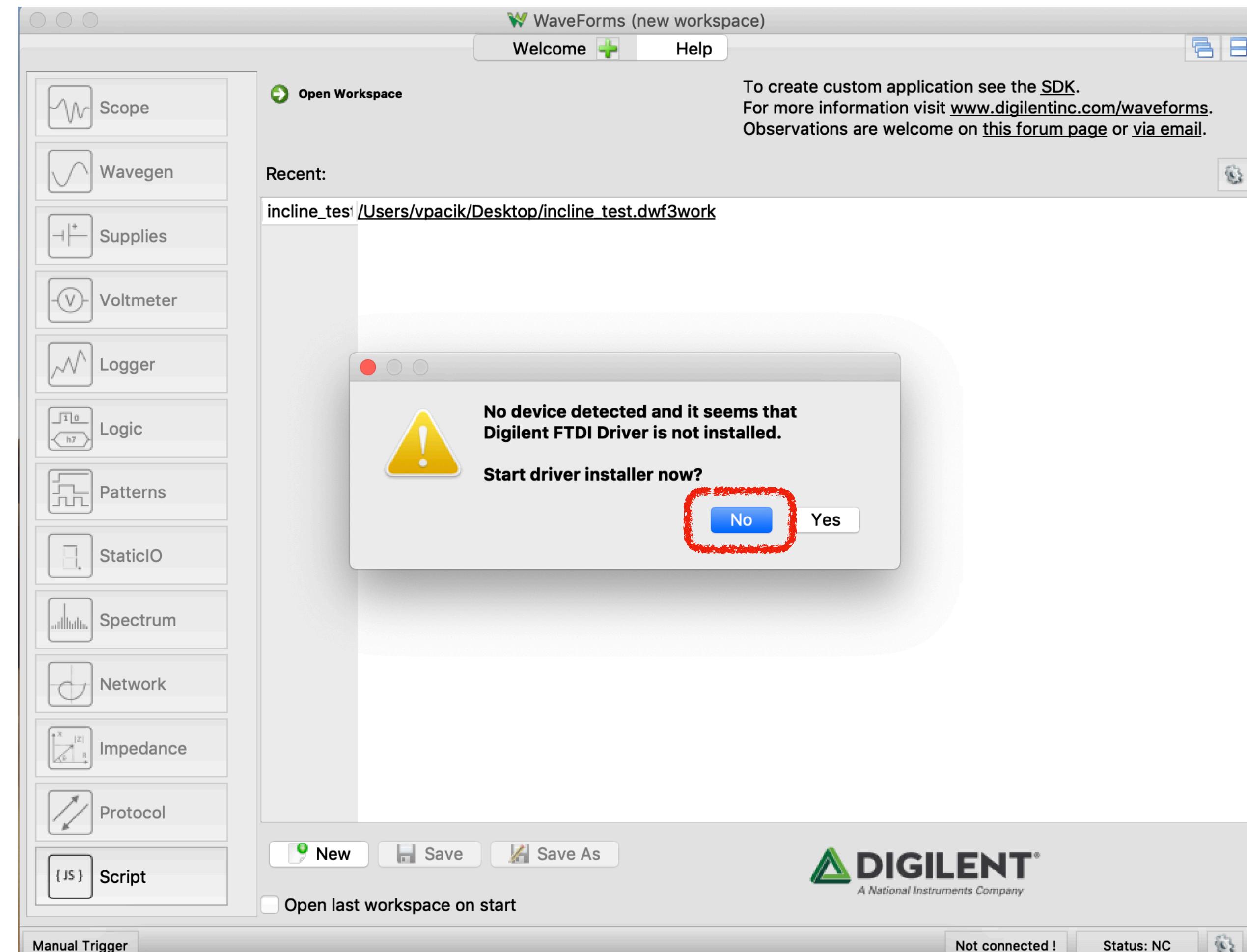


Step-by-step preparation

(illustrated on MacOS)

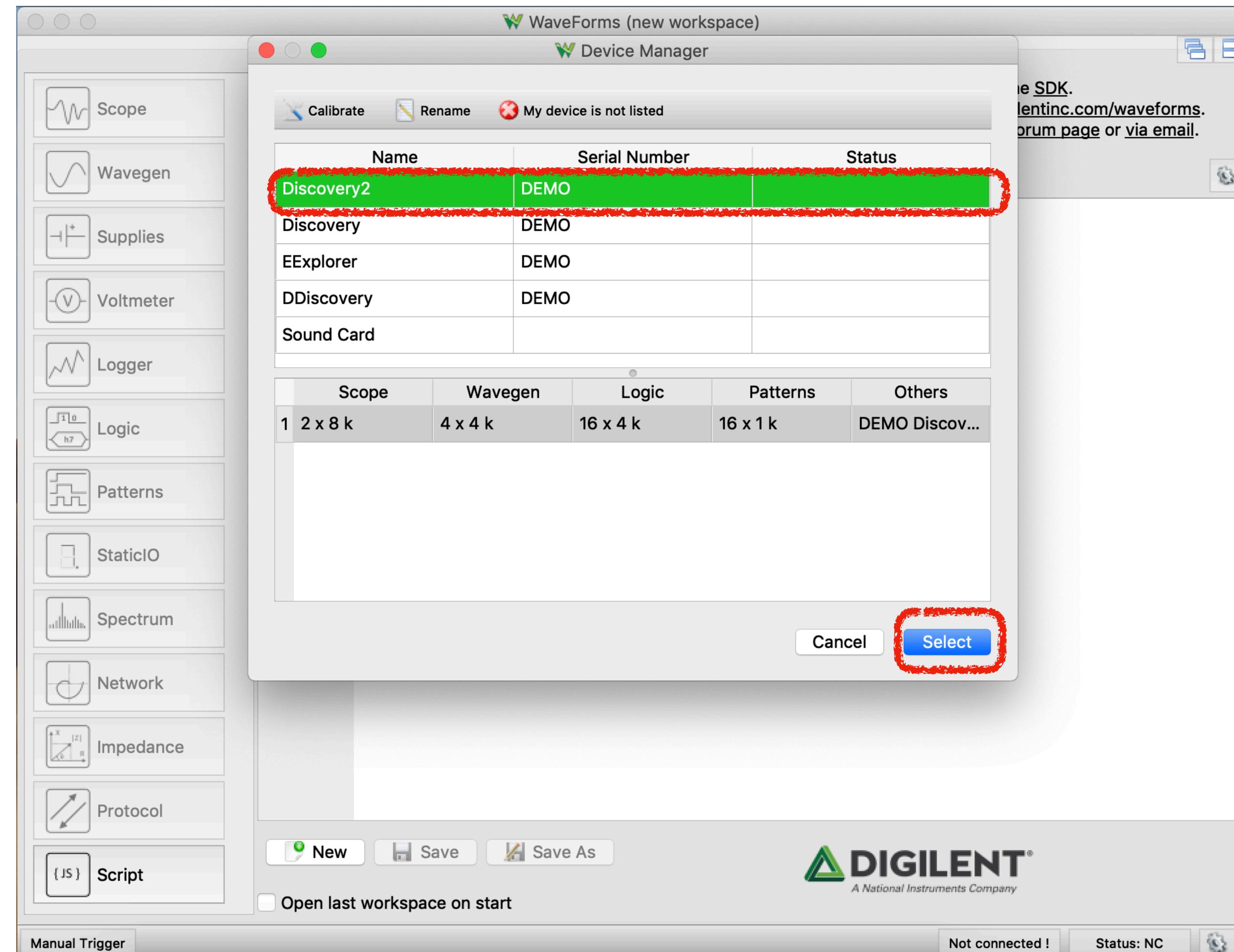
Launch WaveForms

- Launch WaveForms. It should complain that it does not detect any device. Click **No**
- **In the lab, you will plug USB cable first**



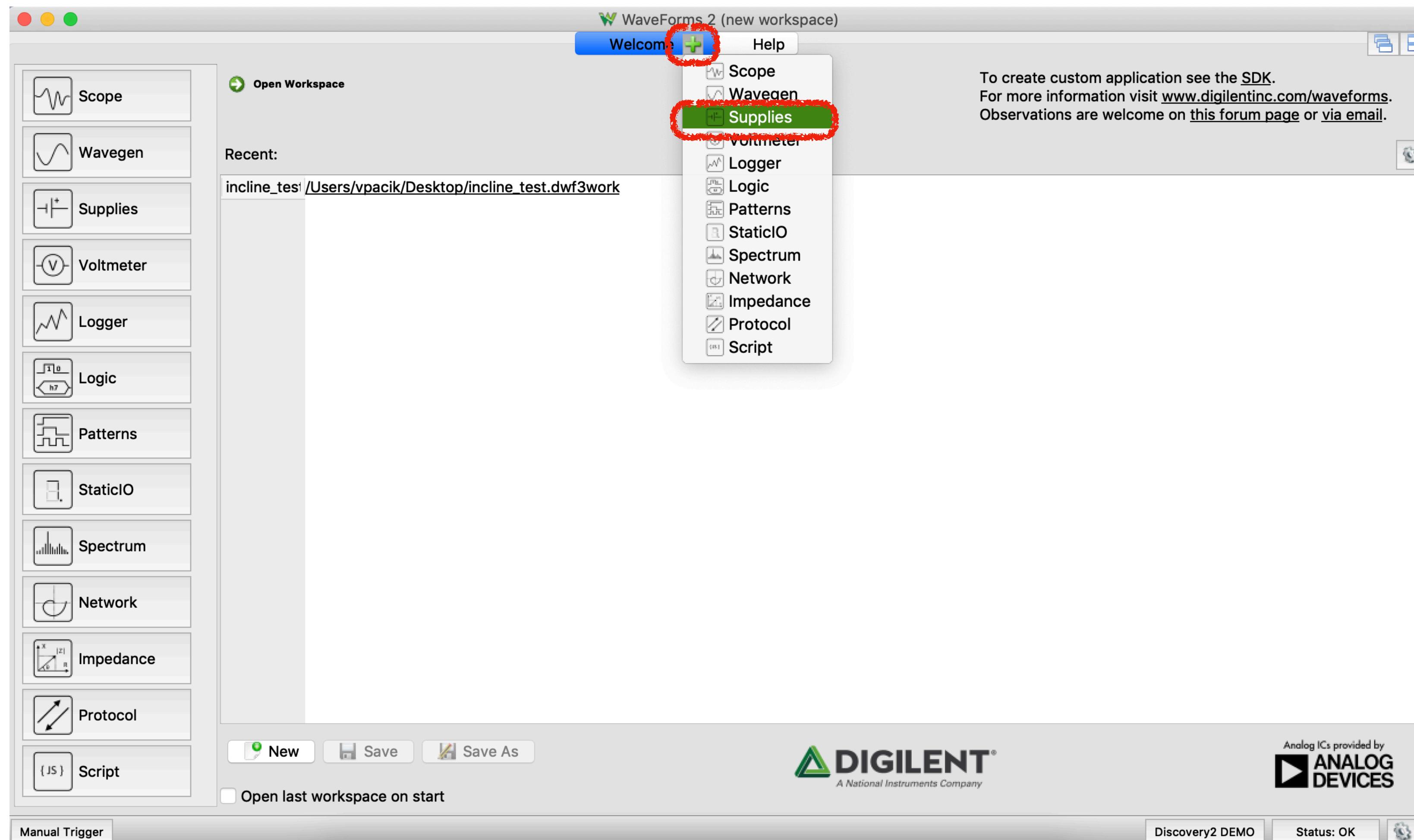
Select (DEMO) device

- Select Discovery2 DEMO and click **Select**



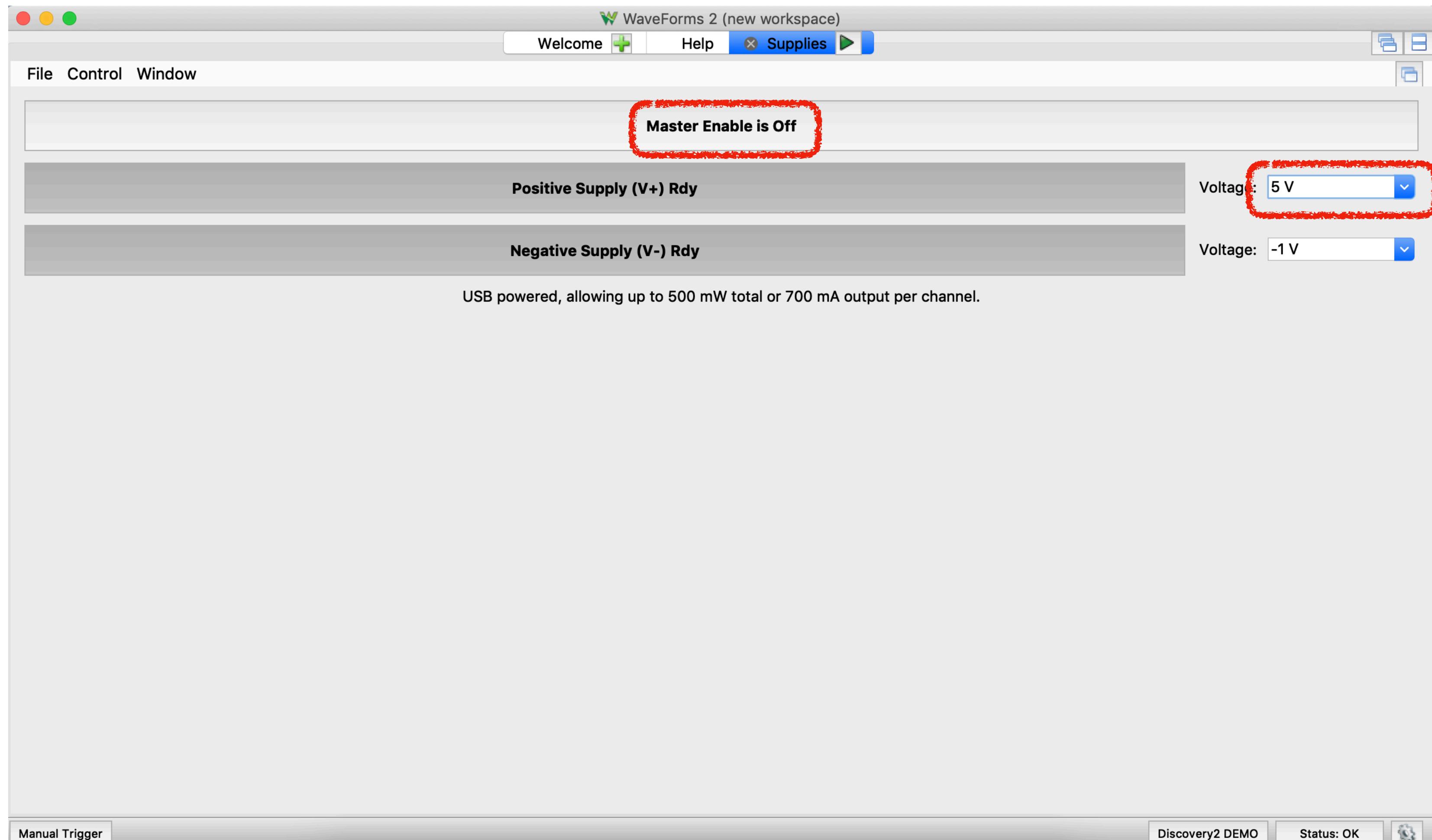
Add power supplies

- Click green plus and select **Supplies**



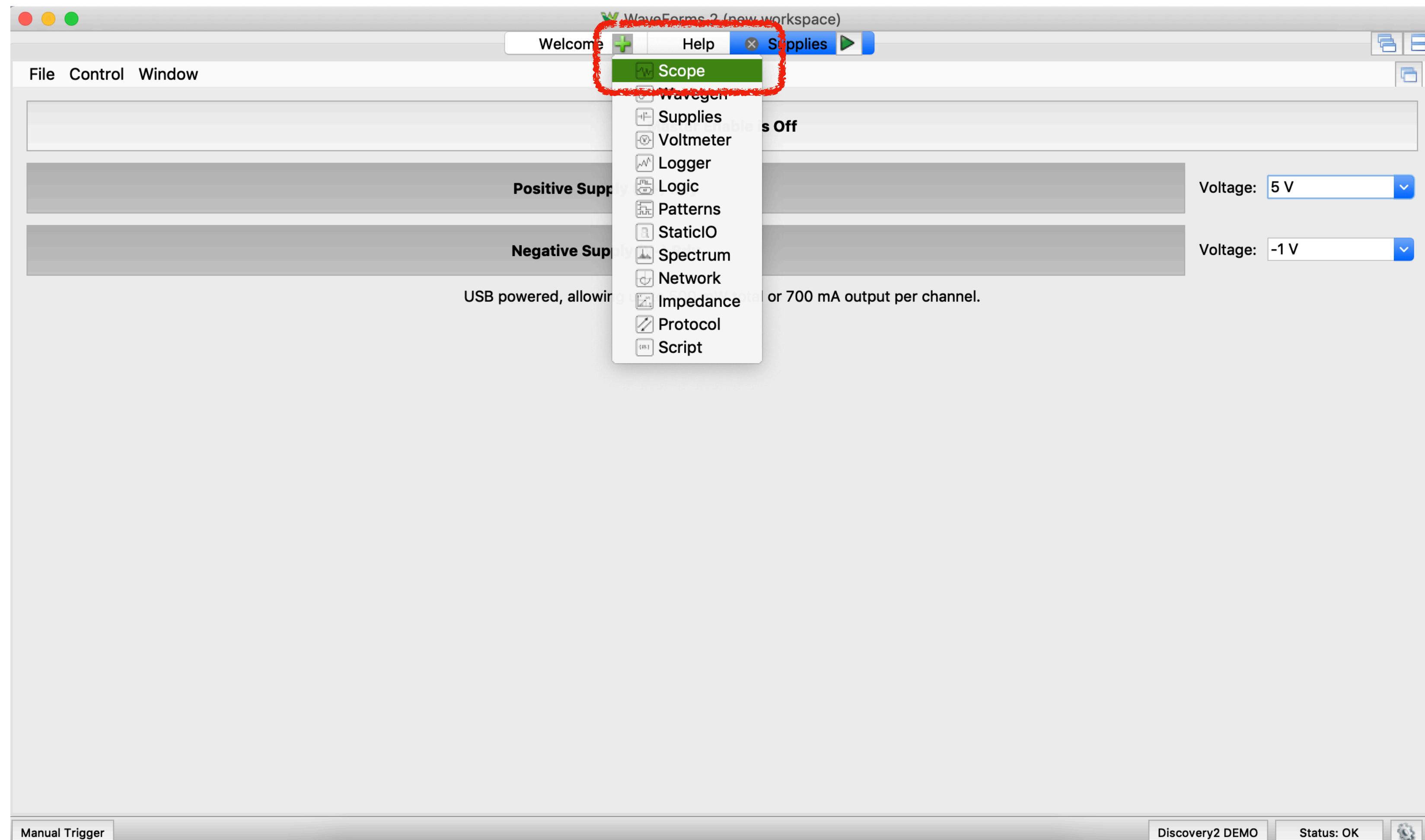
Power supply

- Set Positive Supply (V+) **Voltage to 5V**
- By clicking on **Master Enable is OFF** you turn-on power supply for the instrument



Add scope

- Now add **Scope** by clicking on green plus again



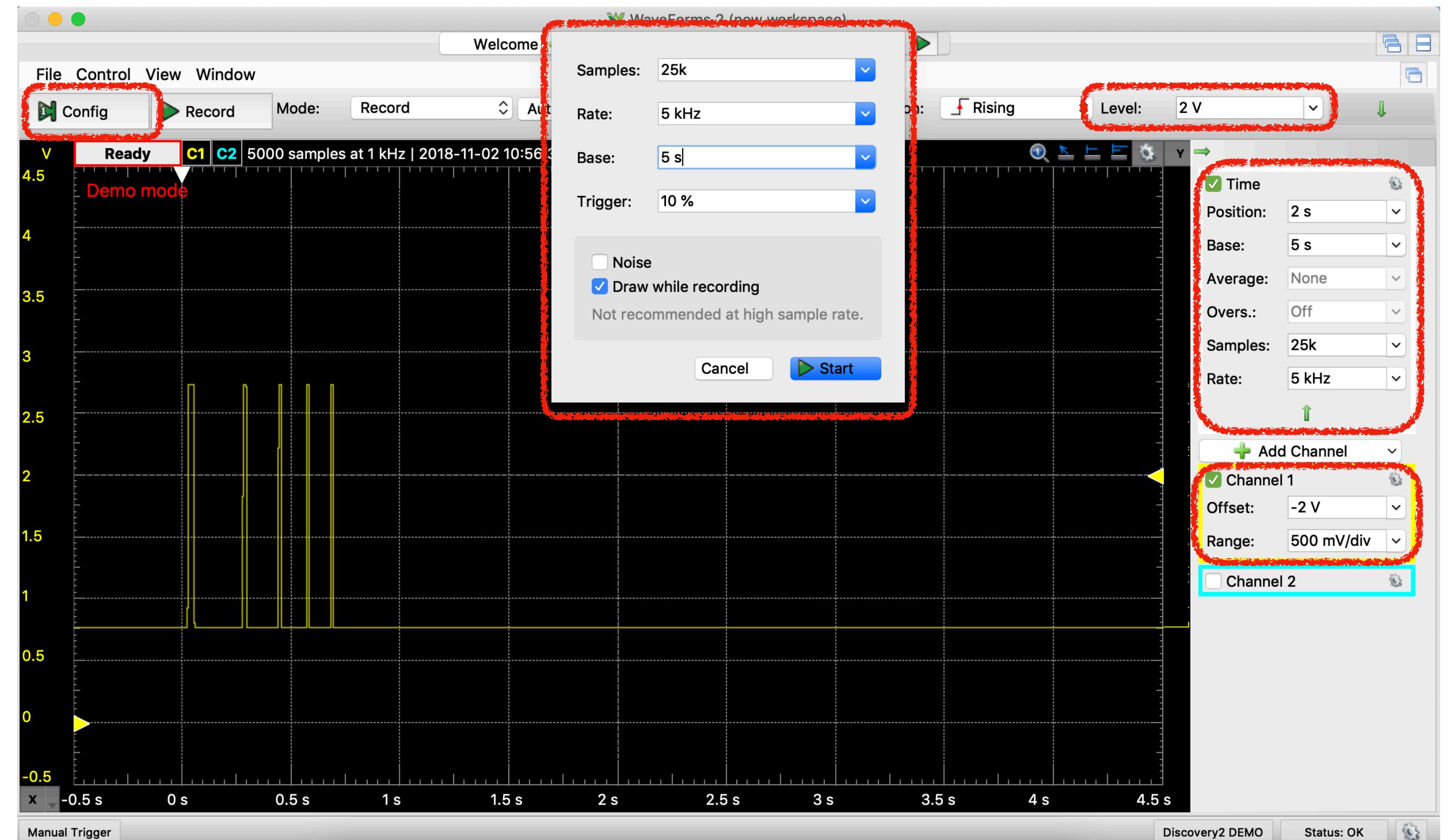
Setup for oscilloscope

- Oscilloscope display will appear
- Tick-off Channel 2
- Select trigger mode Record



Configure your measurement

- Click on Config and set the the values according to picture
- Do not forget tick-off Noise and tick-on Draw while recording
- Set Level to 2 V
- Adjust Time and Channel 1



Now you are ready to measure !

- By clicking on Record, you will start measuring (in the lab) which will last for 5 seconds (a single run)



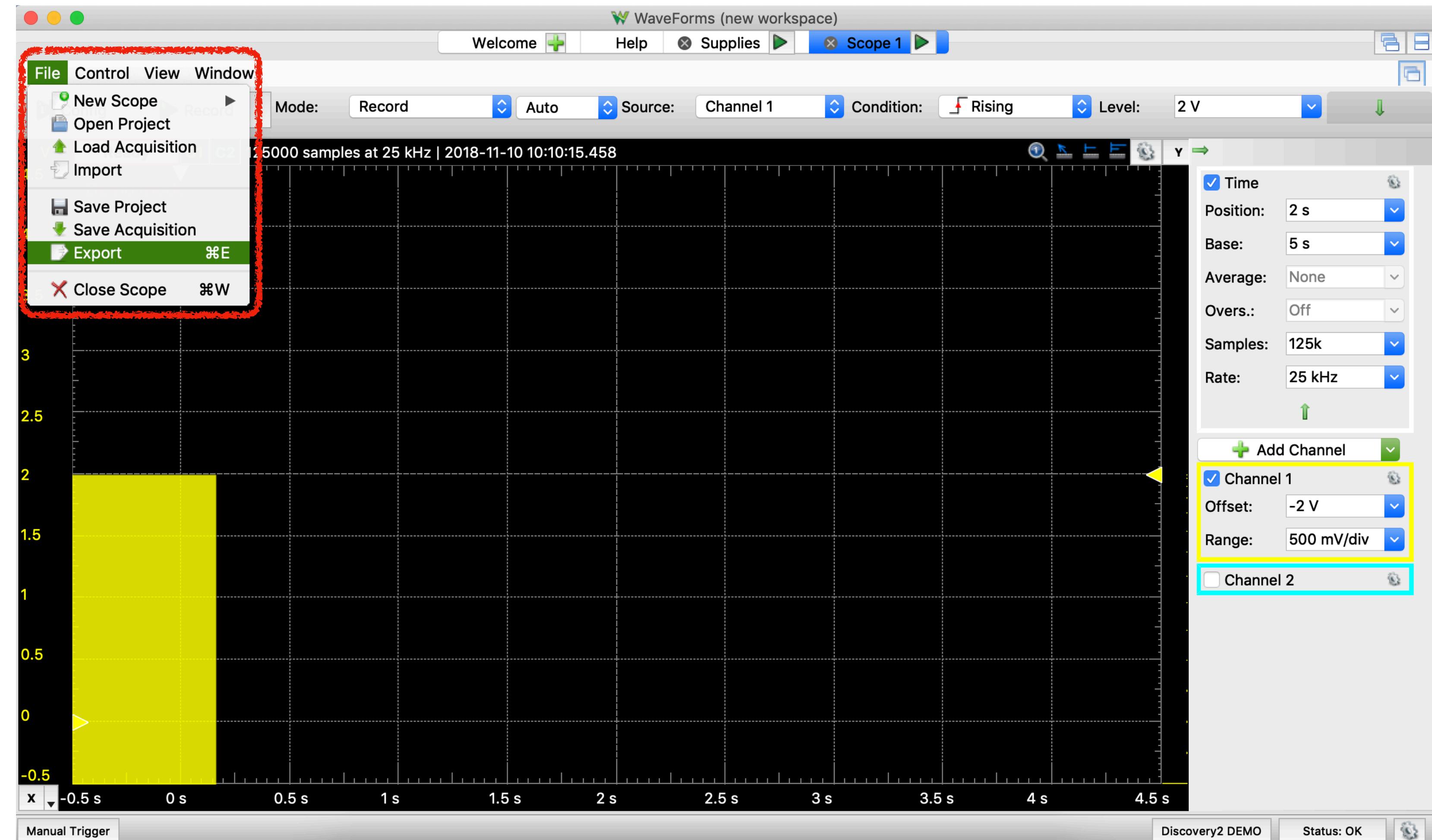
Save your workspace !!

- Save your settings by clicking on **Workspace->Save As** so you can open it during lab and start working



Export your data !!!

- After the measurement (in the lab), export your data as CSV file by clicking at File->Export



Now you are prepared!

Looking forward to seeing you in the lab!