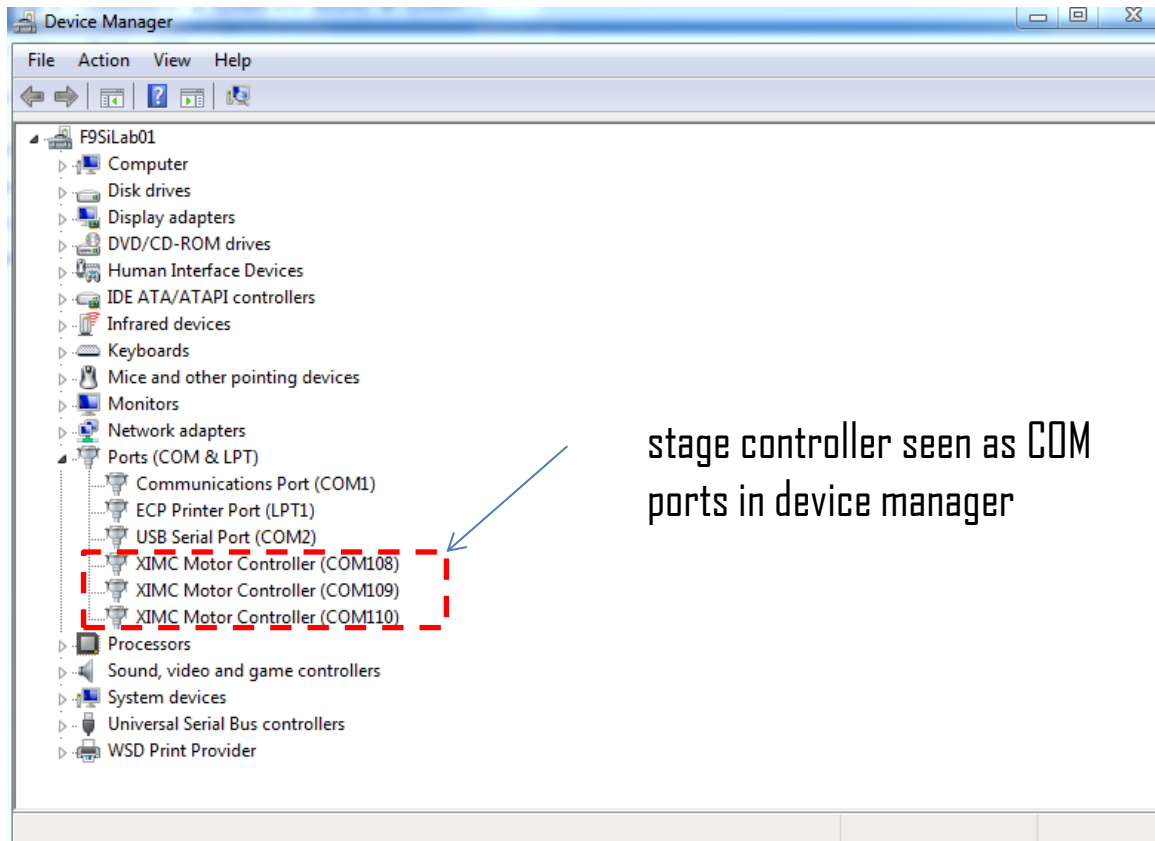


Operation of stages in PSTCT

Particulars, Advanced Measurement System Ltd.

Installation of stage driver

Install XILab stage software (after installation the stages should be seen in Device manager)



stage controller seen as COM ports in device manager

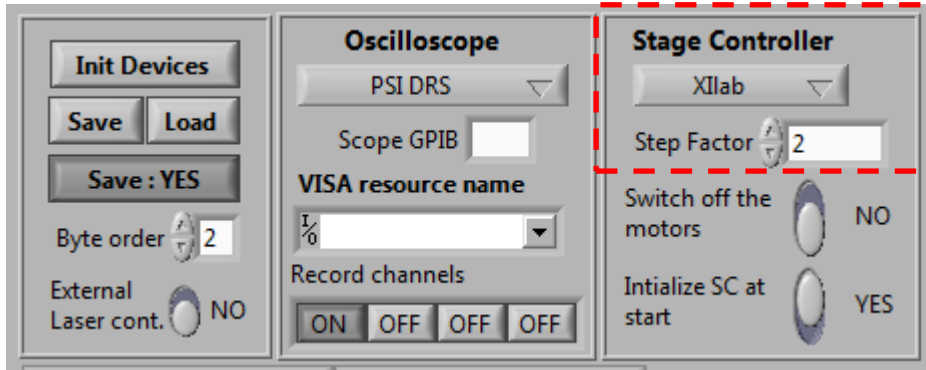


Open XILab or PSTCT applications only after the stages appear in device manager

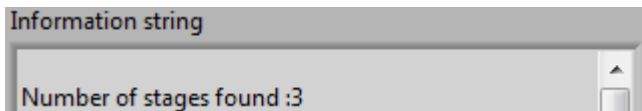
Communication with Stages in PSTCT

- XILab stages communicate through NI-VISA interface in the DAQ software. Therefore NI-VISA should be installed. We recommend using NI-VISA 5.2 which was tested also for communication with oscilloscopes and power sources.
- NI-VISA 5.2 can be downloaded from Particulars web page.
- PSTCT and dedicated XILab software for moving stages can not be used together.

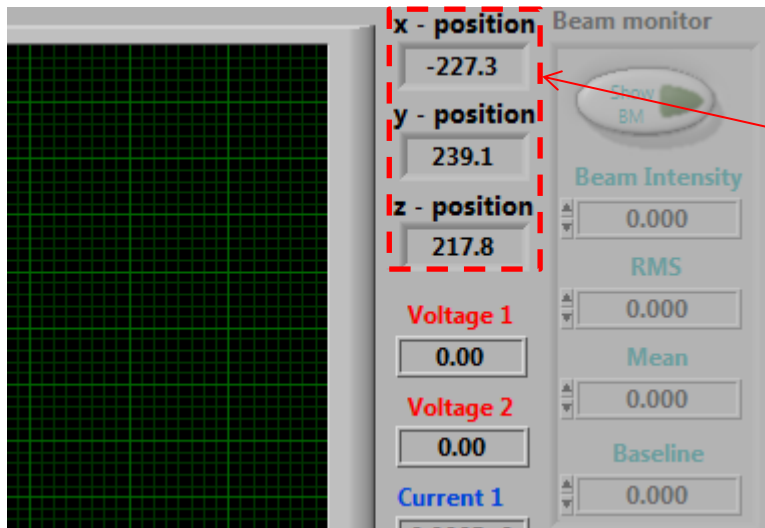
The proper stage controller should be chosen before initialization



Xllab should be selected
Step factor should be:
1 - for Scanning TCT
2 - for Larger Scanning TCT



You should get a message about stages successfully initialized in the Information string



You should see current positions of the stages upon initialization.

In "Stage Control" tab the stage status should be green -> if so the stages are ready to use

The screenshot displays the "Stage Control" tab of a software interface. At the top, there are several tabs: "General", "Movement Param.", "Voltage Sour. 1", "Voltage Sour. 2", "Stage Control" (selected), "Oscilloscope", "BeamMon", "Time DAQ", "Laser", and "Info".

The main interface is divided into several sections:

- Status:** On the left, there are three rows for "StageX ON/OFF", "StageY ON/OFF", and "StageZ ON/OFF". Each row has a green indicator light, signifying that the stages are ready.
- Positioning parameters:** This section is divided into three rows for X, Y, and Z axes. Each row includes:
 - A "Step" selector (currently set to 1/8).
 - A "Speed" selector (currently set to 0.78 mm/s).
 - Two green "Limit SW" indicator lights.
- Positioning control:** This section allows for manual movement. It includes:
 - Directional buttons (< and >) for each axis.
 - Input fields for "Set pos.X" (-227.263), "Set pos.Y" (239.129), and "Set pos.Z" (217.756).
 - Input fields for "Step move X", "Step move Y", and "Step move Z", all set to 2.
- Reset:** This section contains three buttons labeled "reset pos. X", "reset pos. Y", and "reset pos. Z", each with a green play icon.
- Swap Axis:** A dropdown menu currently set to "X <--> Y".
- Other controls:** Buttons for "Default speed", "Refresh scope", "Set As Start", "Read Position", and a "Stage Move" section with a "MOVE" button.