

Biomechx –Force Platform



- A force platform is a device that measures the applied forces upon it, facilitating the examination of motion, equilibrium, and muscle engagement.
- In the realm of biomechanics, it plays a vital role in evaluating walking patterns, stability, athletic achievements, and recovery, providing accurate data to comprehend human movement intricacies.

BiomechX Connector Box



The Biomechx Connector Box serves as a dynamic bridge, seamlessly linking the force plate to your system, effortlessly acquiring precise data from the force platform.

Sequential Steps for BiomechX Connection

Preparation:

Have the USB cable and compatible ports ready on both the BiomechX and your device (laptop/computer).

USB Connection:

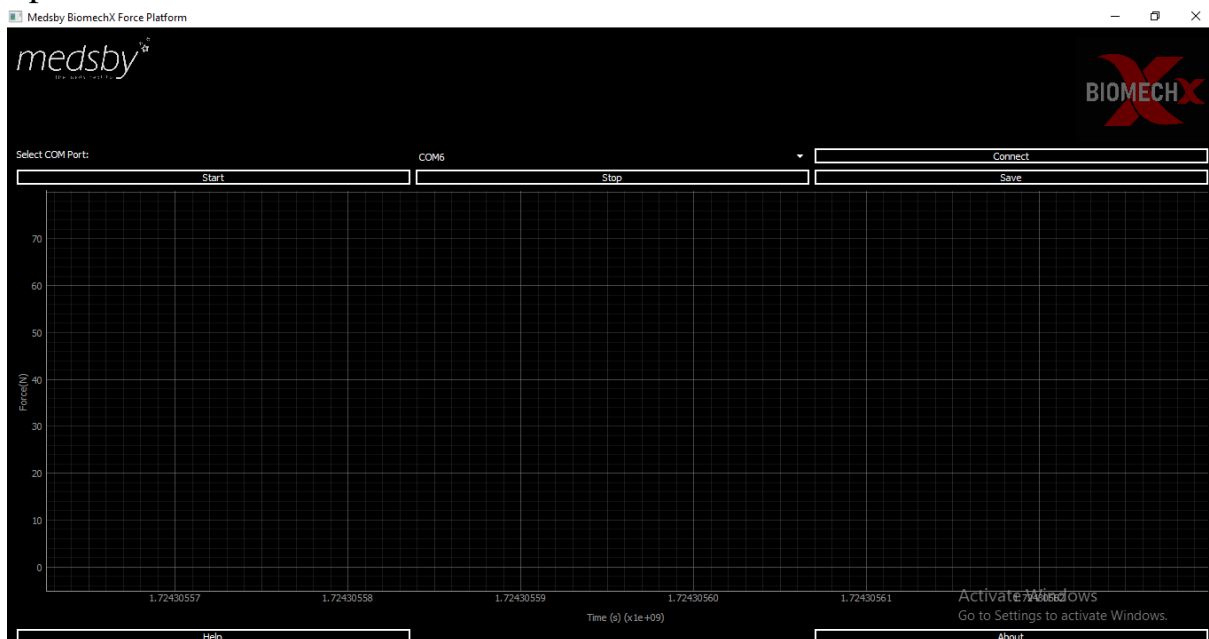
Plug one end of the USB cable into the BiomechX and the other end into an available USB port on your laptop.

Device Recognition:

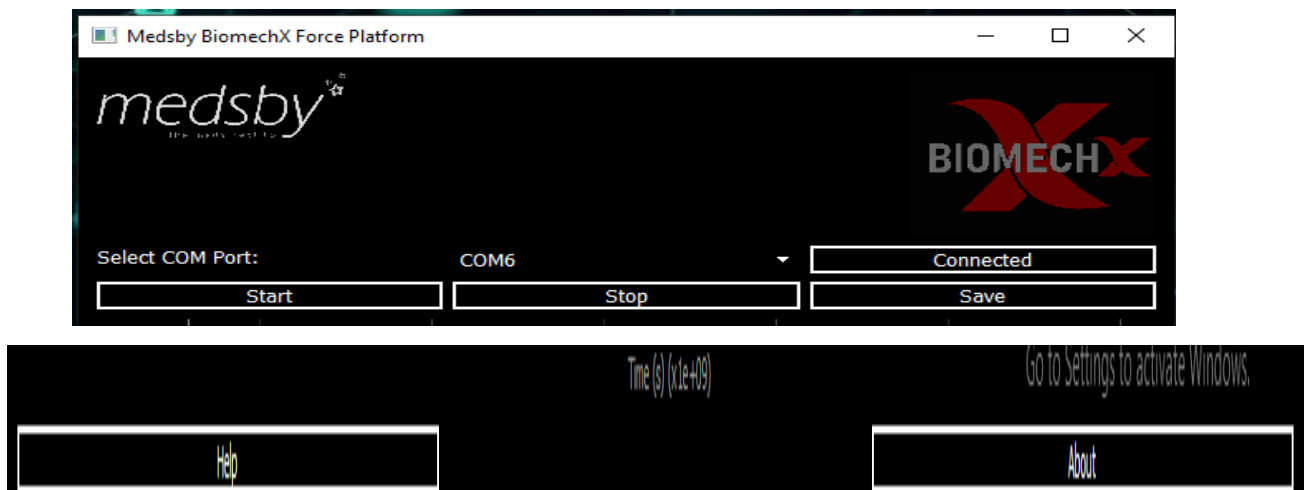
Allow a few moments for your laptop to recognize the BiomechX com port .

BiomechX_V4 Software

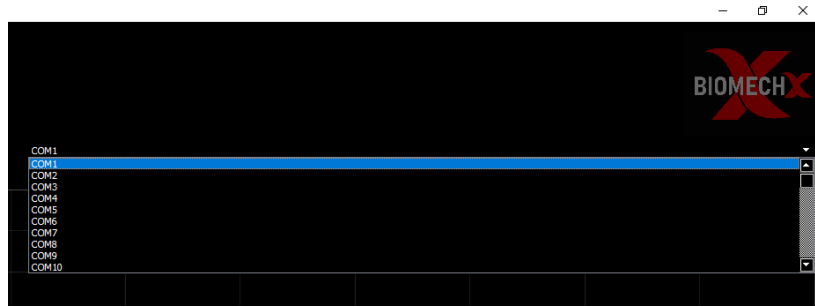
Medsby BiomechX_V4 software tailored for biomechanical force plate applications is specifically designed to interact with and analyze data from force platforms



Tools For BiomechX_V4 application



Select COM Port:



- The 'Select COM Port' button is employed to designate the communication port by clicking on the dropdown box.
- This selection establishes the connection through which the Biomechx platform interfaces with the laptop or system, ensuring smooth and seamless data acquisition.

Start and Stop

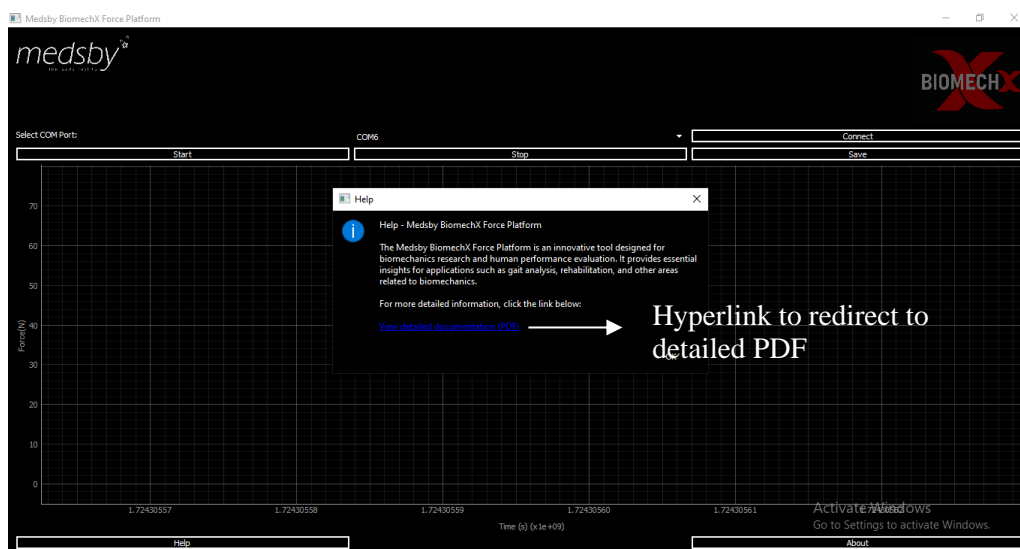
- The 'Start' button initiates the data acquisition process,
- The 'Stop' button halts the data acquisition, providing control and flexibility in managing the data collection procedure.

Save

- The 'Save' button is employed to gather force data over time in seconds and store it in an Excel format.
- Users have the flexibility to specify the location for saving the Excel file.

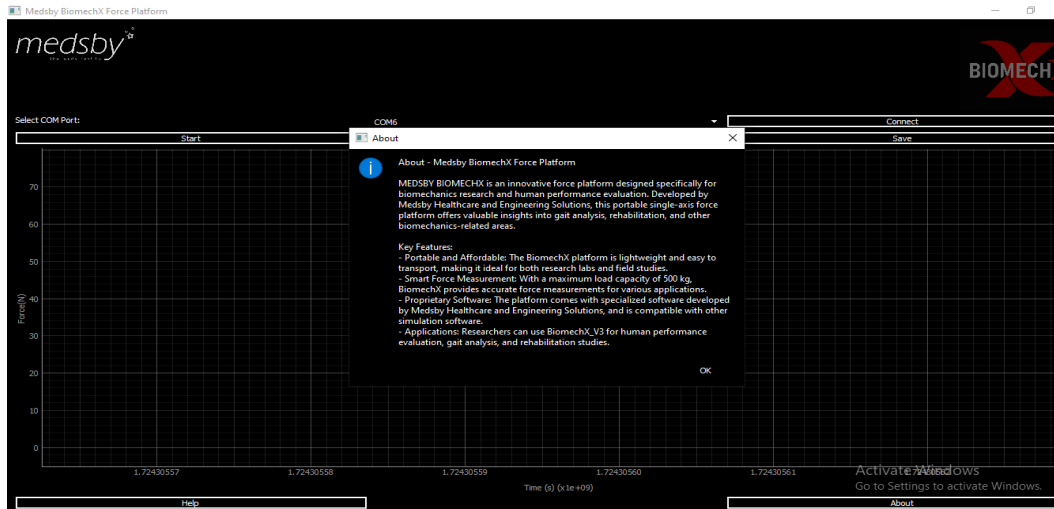
Help

- The Help button displays details about the software and includes a hyperlink that redirects to a PDF with additional information.

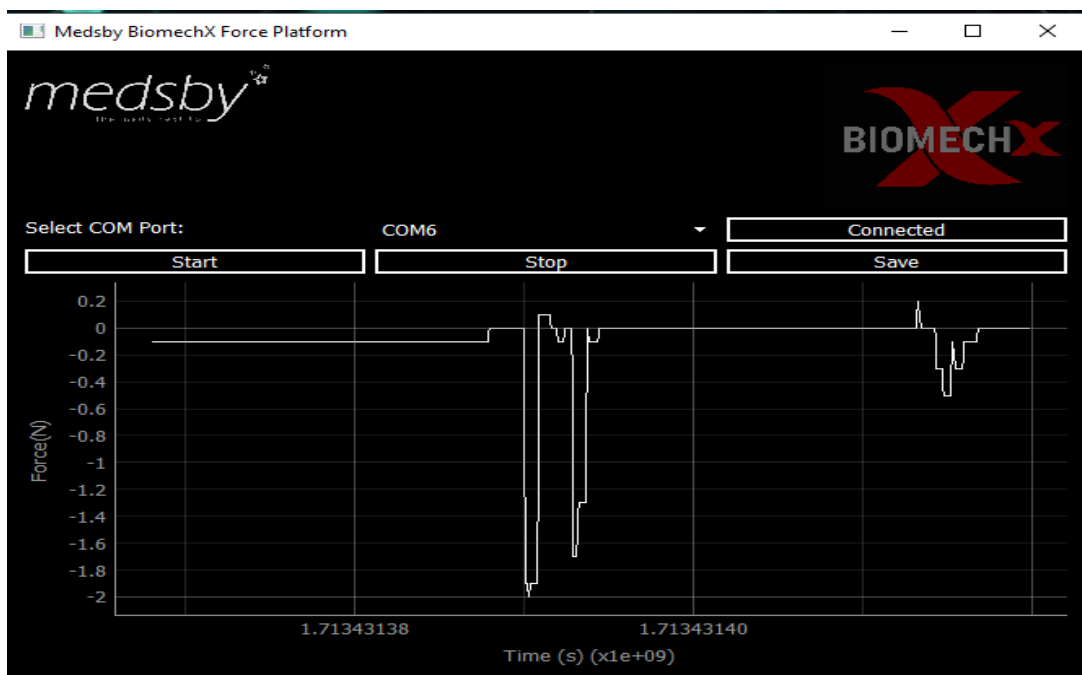


About

- The About button provides information about the BiomechX Force Platform



OUTPUT



BiomechX Experiments

CounterMovement Jump(CMJ)

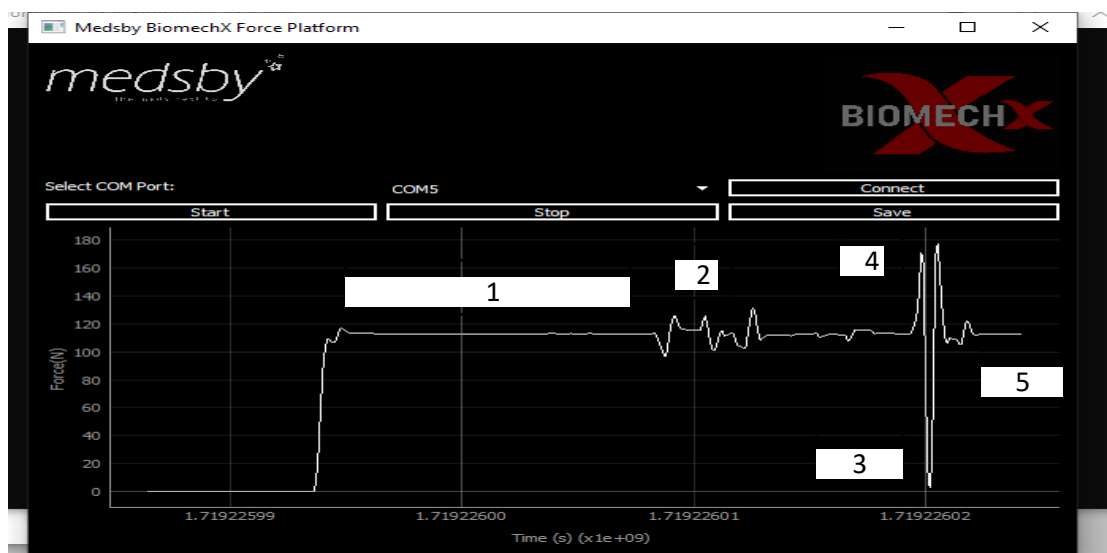
The Countermovement Jump (CMJ) is the most popular force plate test due to its wide range of applications.

The CMJ can be easily used in:

- Athlete profiling,
- Fatigue and adaptation monitoring and
- A wide range of return-to-play scenarios.

The CMJ test in ForcePlates reports information on numerous phases and offers excellent asymmetry analysis.

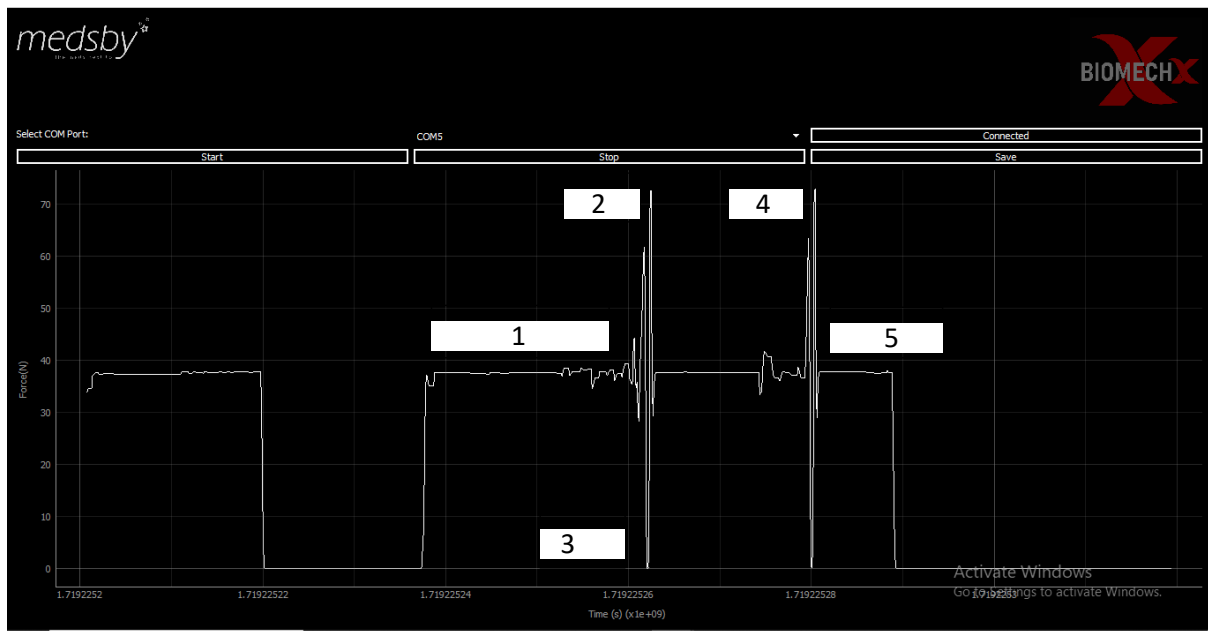
The goal of the CMJ is to jump as high as possible.



Squat Jump(SJ)

The Squat Jump (SJ) test is used to evaluate triple extension performance by isolating the concentric phase of a jump.

The SJ is a highly effective test to determine an athlete's reliance on eccentric loading (ie: the stretch shorten cycle) to achieve maximal performance output. The goal of the SJ is to jump as high as possible.

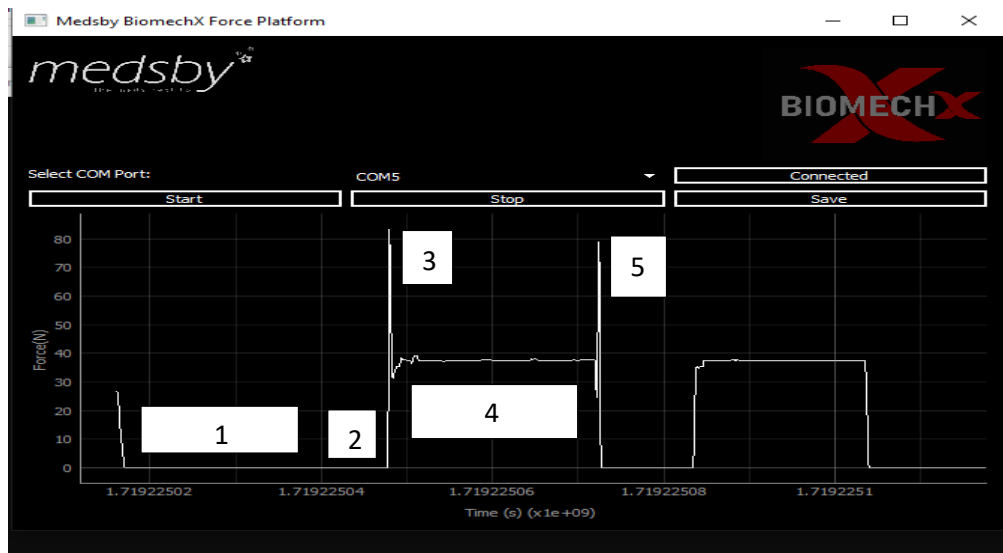


Drop Jump (DJ)

The Drop Jump (DJ) test evaluates reactive ability and an athlete's stretch-shorten cycle capacity.

The test has many similarities with repeat jumping and cutting manoeuvres in athletics.

The goal of the DJ is to jump as high as possible but after minimal ground contact time.



medsby
the meds next to