

AMTI with MyoForce *System Setup Guide*

Welcome from Noraxon

Congratulations on acquiring your new force plate system!

This guide will provide you with step by step instructions on how to install your new hardware and software, adjust device settings, and record your first data set. First, you need to determine whether you have the hardware for digital or analog integration. Refer to sections 1 and 2 below to determine your hardware configuration before proceeding.

1 System Unboxing

1.1 Digital Integration



Figure 1: AMTI force plate



Figure 2: Optima or Gen5 Amplifier



Figure 3: 9615-030-6-6 cable



Figure 4: USB A to B Cable (Part# CBL2)

1.2 Analog Integration



Figure 1: AMTI force plate



Figure 3: Analog Input System (Part# 222B)



Figure 3: USB A to B Cable (Part# CBL2)



Figure 4: AIS connection cable (Part# 222K)



Junction Box PJB-101



Figure 6: 9VDC Power Supply



RJ11 (14ft) cables

Other hardware that may be included:

- Powered USB hub (if using 2 or more force plates with Gen5 or Optima amp)

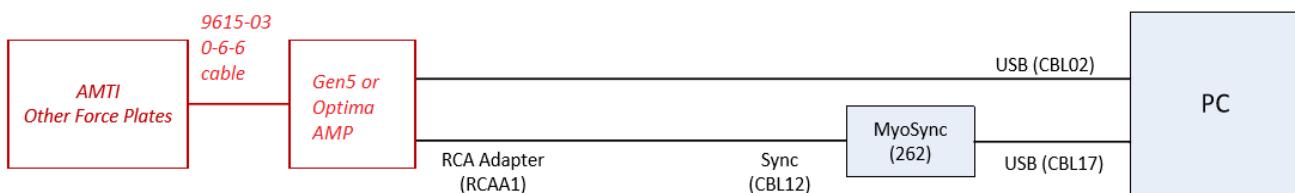
If you are synchronizing with other hardware in MR3:

- Noraxon MyoSync Master Station
- USB A to B Cable (Part# CBL17)
- 3.5 mm stereo cable (Part# CBL12)

2 Installing the Hardware

2.1 Digital Integration

Please reference the diagram below to ensure proper connections.



Note: If using 2 or more force plates, they should be connected to the PC through the provided, powered USB hub.

Step 1 -

Plug the AMTI force plate into the Gen5 or Optima amplifier.

Step 2 -

Attach the power supply to the Optima Amplifier.

Step 3 -

Insert the USB A to B cable to the Digital Output port on the amplifier.
Connect the other end to and USB port on the PC.

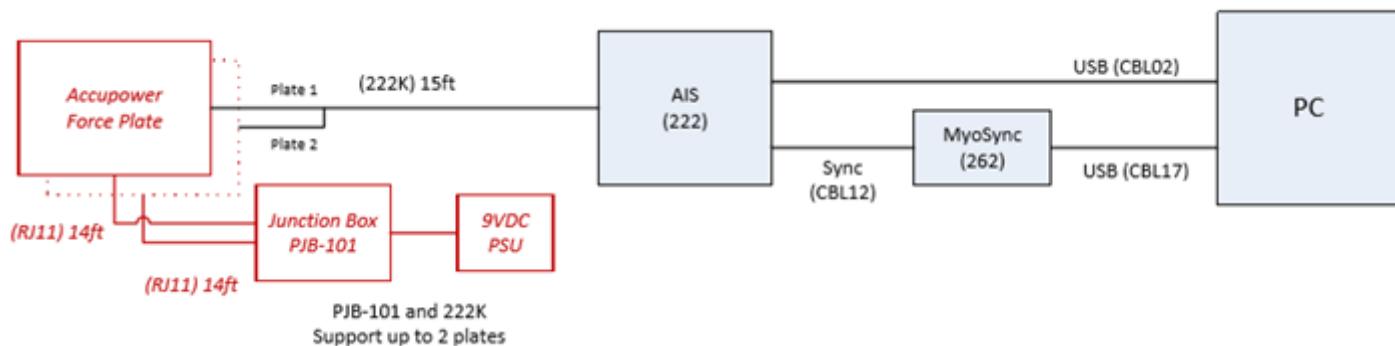


Step 4 (optional) -

Connect the RCA adapter to the Sync cable (CBL12). The RCA cable will connect to the Gen5 or Optima amplifier.
Insert the other end of the Sync cable into any Sync out port on your *Noraxon MyoSync Station*.

Note: The sync cable and the Noraxon MyoSync Station are not required for normal function. If you are synchronizing the force plates with other hardware within your software, you will need the MyoSync Station.

2.2 Analog Integration



Step 1-

Connect the Accupower Force Plate to the PJB-101 Junction box using the RJ11 cables. Connect the power supply.

Step 2-

Connect the 222K cable to each force plate (if applicable) and connect the single end to the Noraxon AIS.

Step 3-

Connect the AIS to the PC using the USB A to B cable (CBL02).

Step 4 (optional) –

Connect the AIS to the Noraxon MyoSync using 3.5 mm stereo cable. Connect the MyoSync to the PC using the USB A to B cable.

3 Installing the Companion Software - myoResearch™ 3

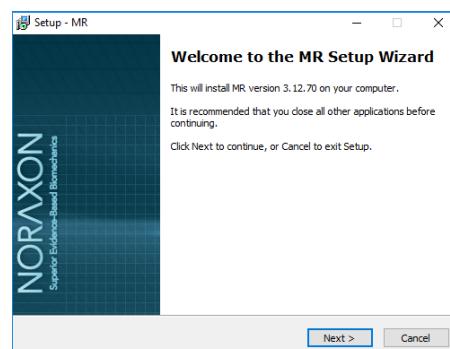
To utilize the full functionality of the AMTI force plate system, ensure the system has updated drivers. Noraxon's *myoResearch 3* needs to be installed on the computer.

If integrating digitally with an Optima or Gen5 amplifier, Gen5/Optima drivers are required, which are pre-installed by the MR3 software installation.

Software Installation

Within the package the *myoMOTION* System was shipped in, there is a USB flash drive containing the latest *myoResearch 3* software.

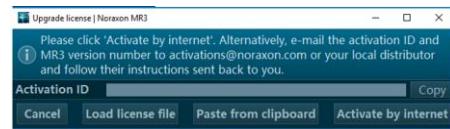
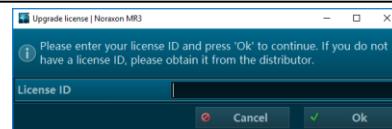
1. Insert the MR3 USB flash drive into the PC
2. A menu will automatically pop up
3. Click on the Noraxon installation file and follow the Wizard's instructions



Activating the Software

The installed companion software must be *activated* before unrestricted use is possible.

1. Open MR3
2. A dialog box will indicate how many more times MR3 can be opened
3. Click on “Activate”
4. Enter the License ID provided on your USB flash drive and press “OK”
5. If you have an internet connection, click Activate by Internet for immediate activation
6. Alternatively, email the provided activation ID to activation@Noraxon.com. Noraxon Support will email or respond by phone with the Activation Code. Enter the provided Activation Code to remove any restrictions on use.



4 Configuring the Hardware

4.1 Digital Integration

Before the AMTI system can be used, the device software settings must be configured to recognize the different components that make up the system. Follow the below instructions to update the plate settings.

Step 1

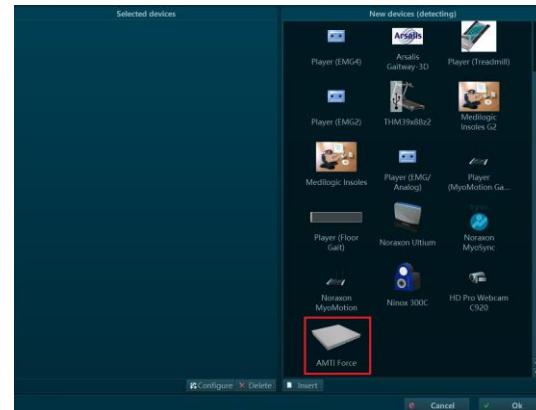
Open MR3, typically listed under Noraxon -> MR3

Click on the **Hardware Setup** button in the upper right-hand corner



Step 2

Select the AMTI icon, within the ‘New Device’ column, and click on the Insert button.

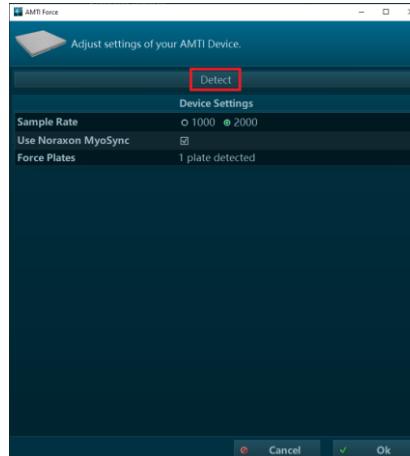


AMTI Force Plate System Setup Guide

Step 3

The AMTI settings dialog will be shown. Choose **Detect** to detect the connected force plate(s). Here you can also choose the desired sample rate.

If you would like to synchronize with other devices, check the box that says “Use Noraxon MyoSync.”



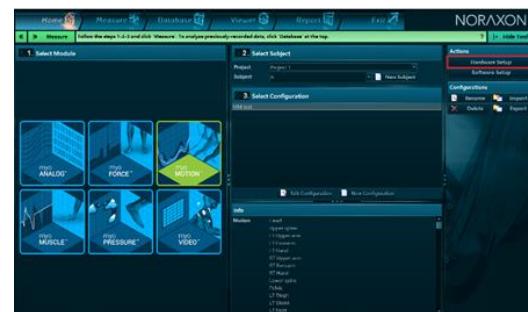
4.2 Analog Integration

Before the AMTI system can be used, the device software settings must be configured to recognize the different components that make up the system. Follow the instructions below to recognize the AMTI plates through the AIS and configure the force plate and calibration settings.

Step 1

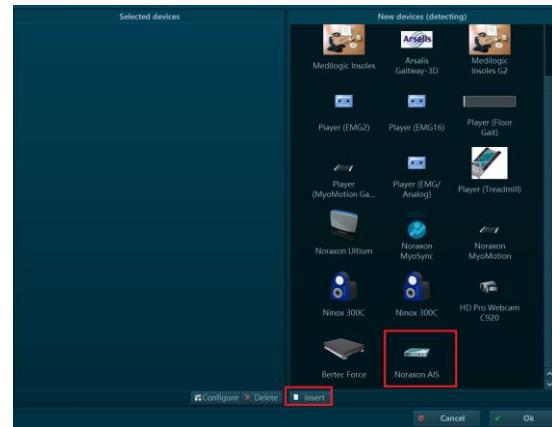
Open MR3, typically listed under *Noraxon -> MR3*

Click on the **Hardware Setup** button in the upper right-hand corner.



Step 2

Select the AIS icon, within the ‘**New Device**’ column, and click on the **Insert** button.



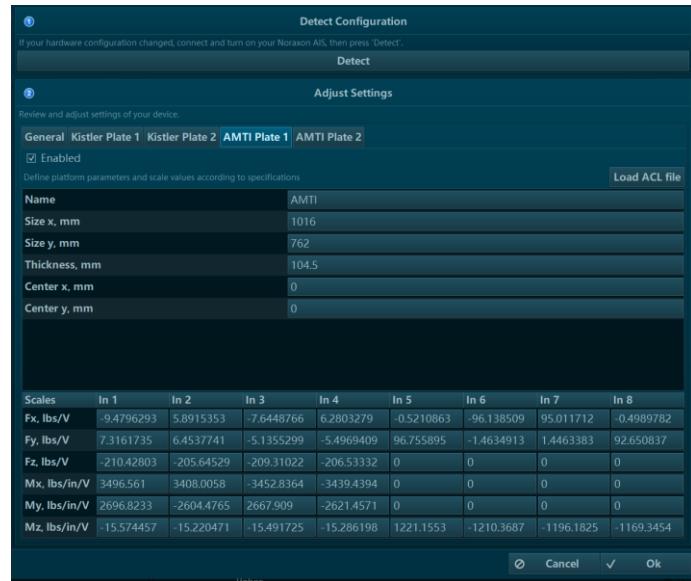
Step 3

If you are using the Noraxon MyoSync to synchronize your data with another device, configure the sync setting here.

Check the box that says **'Enabled.'**

Navigate to the '**AMTI plate 1**' tab. Choose "Load" ACL file to load the *.acl file that should have come with your AMTI force plates.

Note: If your force plate does not come with an .acl file, please contact Noraxon Support (support@noraxon.com) to discuss other integration options.



Step 4

Repeat Step 3 with your second force plate (if applicable). Select **Ok** to exit the Hardware Setup Dialog

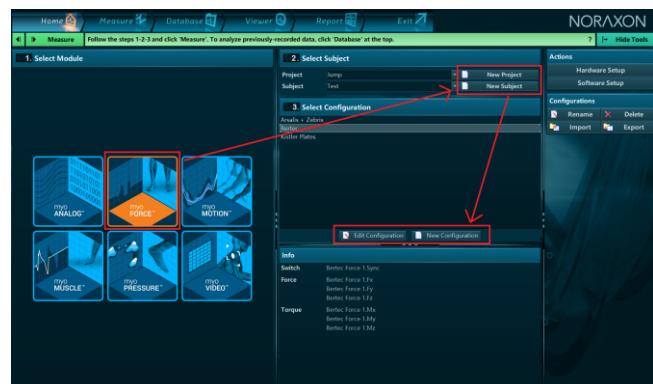
5 Recording a Measurement

Step 1

Within the **Home** screen click the myoFORCE module icon.

Create a **New Subject**.

Select **New Configuration**.



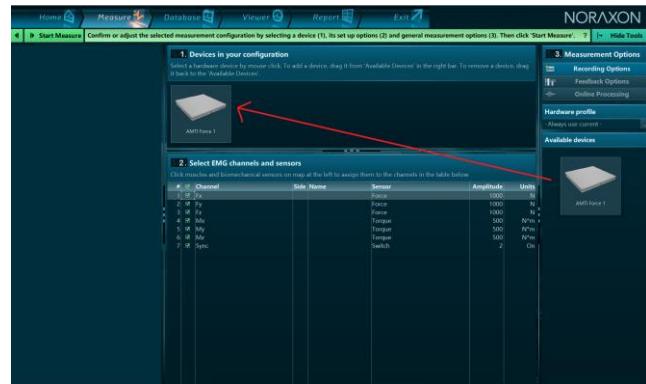
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Step 2

Insert the devices to be used for the measurement into the configuration by dragging a device in the list of **Available Devices** to the **Devices in your configuration** window.

Select the desired signals to include in the measurement configuration. 3D force and moment signals are available.

Note: If you are using 2 force plates for force analysis, designate each force plate as RT or LT under the **Side** option.

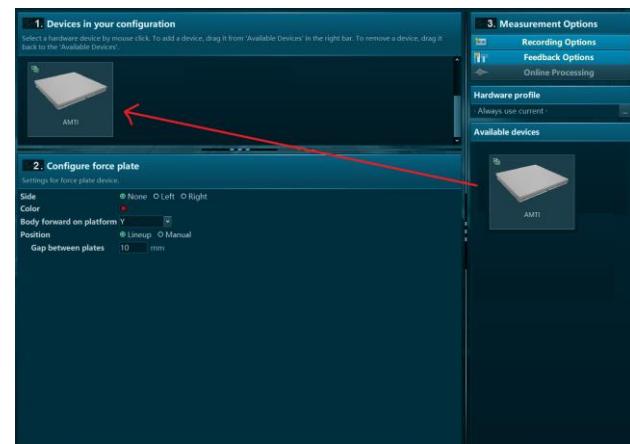


Step 2 (Versions 3.16 and later)

Follow Step 2 like above. Instead of seeing channels to select, you will see the radio buttons to designate the side of the plate and other options to configure COP tracing relative to body position.

Measure the gap between your two force plates with a ruler to estimate the most accurate “Gap between plates.”

Note: For more information on how to configure these settings, please view our video tutorials on our website: <https://www.noraxon.com/video-tutorials/>



Step 3

Continue to the next step by selecting **Measure**.



Step 4

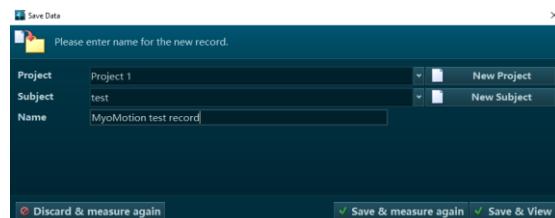
If you are using *MR 3.14 or earlier*, calibrate the force plate baseline values by choosing ‘Calibrate baselines’.

If you are using *MR 3.16 or newer*, the force plates are calibrated automatically upon activation. They do not need to be calibrated before measuring.

Select **Record**.

Record your signal based on predetermined protocols. After performing desired movements in the record, click **Stop** and **Save**.

Chose **Discard & measure again** or **Save** after typing your chosen record name.



6 Viewing a Record

To view a previously recorded record, select the **Database** tab. Records are organized by **Project** and **Subject** name. Double click on the record of interest to open the record.

7 Analysis and Reporting

There are several features available for force plates that require further setup. Some examples include:

- Jump Analysis
- Force Vector Overlay
- Center of Pressure tracing

For more information on how to access these features, please see the tutorials available on our website.

<https://www.noraxon.com/video-tutorials/>

If you have any other questions not addressed by these resources, please contact support@noraxon.com for more information.