



Ninox Camera

Quick Start Guide

Welcome from Noraxon

Congratulations on acquiring your new Ninox Camera 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.

Let's begin by walking through how to install your new hardware.

Note: This is not meant to be a complete manual, but a guide to help you get started with your system. For more detailed instructions on operating the Ninox Camera System and its features please refer to the complete **Ninox User Manual**, also included with your system.

1 System Unboxing

The Ninox camera system is packed within a reinforced padded box for storage and protection during transport. Upon arrival, carefully remove all contents and verify the following components are present. *Contents will vary depending on the purchased package.*



Figure 1 - Ninox camera
Ninox 125 (part #140)
Ninox 300C (part #143)



Figure 2 - USB3.0 cable with sync (part #CBL31)



Figure 3 - MyoSync station (part #262)



Figure 4 - USB cable for MyoSync station (CBL2)

Optional contents not illustrated:
Accessory lens (Ninox 300c only)
15m USB3.0 extension
Tripod

2 Hardware Installation

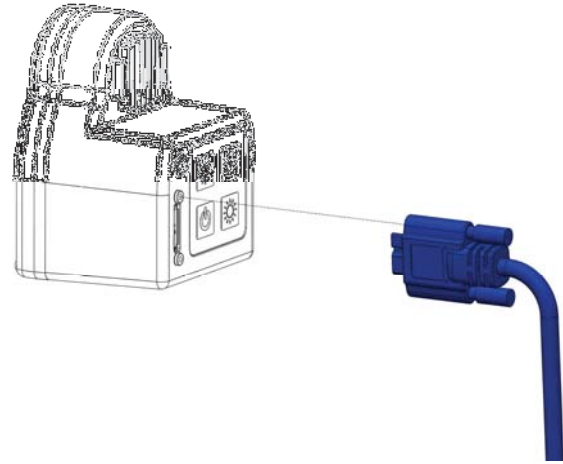
2.1 Hardware Setup Instructions

Step 1

Insert CBL31 USB connector (USB3.0 micro b) into the USB3.0 receptacle on the camera.

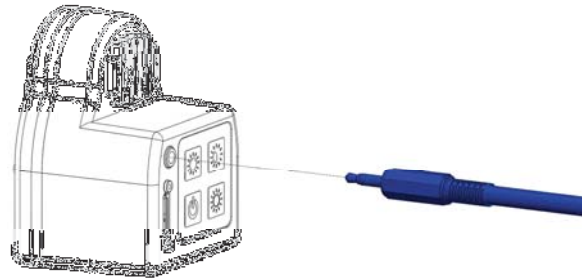
Tighten BOTH thumb screws to the secure CBL31 to the camera.

Note: Failure to connect CBL31 to the camera with BOTH thumb screws can result in damage to the USB3.0 receptacle on the camera.



Step 2

Insert the stereo jack portion of CLB31 into the receptacle on the camera.



Step 3

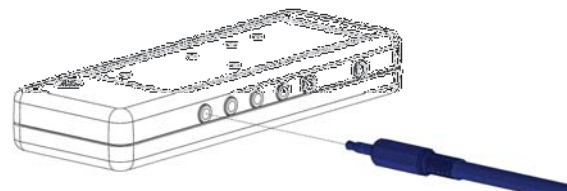
Insert the USB Type A end of CBL31 into a USB3.0 port on the host computer.

Note: ONLY two cameras per USB controller or USB hub are supported.



Step 4

Insert the stereo jack portion of CBL31 into any of the "Sync Out" ports of the MyoSync station.



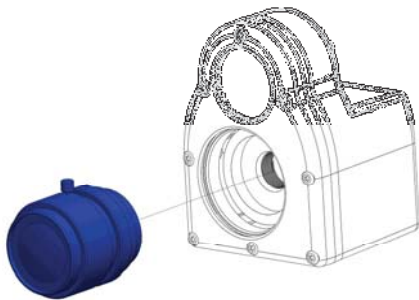
2.2 Select and attach your lens (300C only)

Select a lens based upon the field of view that is needed for your specific use-case. Refer to the Section 11.3 of the hardware manual for details on selecting the appropriate lens.

The following fixed-focal length lenses are available for use with this camera:

- a. Navitar 3.5 mm
- b. Navitar 4.5 mm
- c. Navitar 6 mm
- d. Navitar 12 mm

Once selected, carefully screw on the lens to the Ninox camera.



2.2.1 Aperture and Focal Adjustment

The C-mount lens used with the Ninox 300C has a set aperture and an adjustable focus. By rotating the cylinder on the lens labeled 'Near --- ∞', one can manually adjust the focus of the lens for each use case.

Note: For extreme cases of bright or dark conditions, the aperture can be manually adjusted. See Section 11.5 of the User Manual for more information.

3 Adjusting your Computer Settings

All changes to the computer settings must be made by a user with **Administrator** privileges.

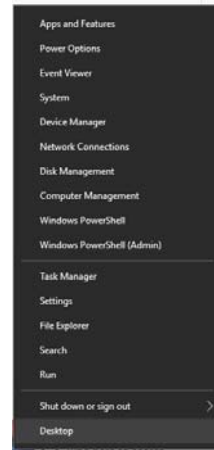
Power Options

Before using the Ninox camera, the host computer must have the correct power and performance options set. All computers may not have every **Power Option** listed below, but you can follow the steps to make the necessary changes to any option which is listed for your computer:

A note for laptop users: Be sure to change the settings for both **On Battery** and **Plugged In** modes. Be aware that the settings are all "High Performance" and will reduce the battery run-time.

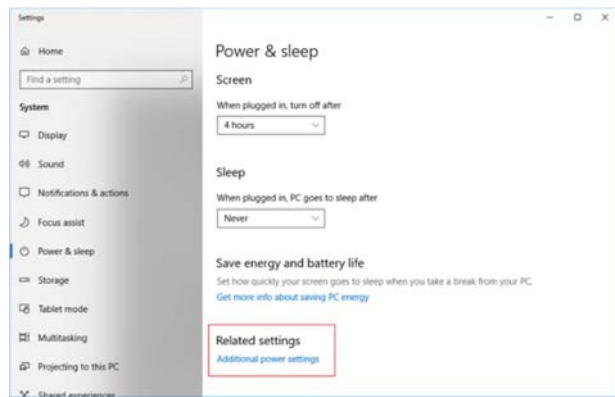
Step 1

Open the control panel by right clicking on the Start menu and clicking on **Power Options**.



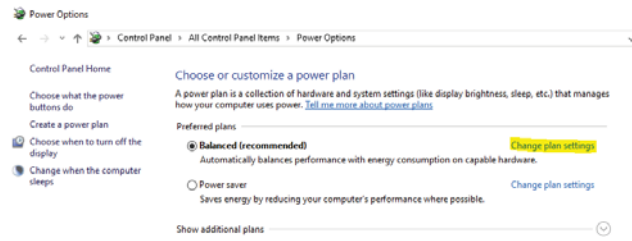
Step 2

Navigate to the **Additional power settings**



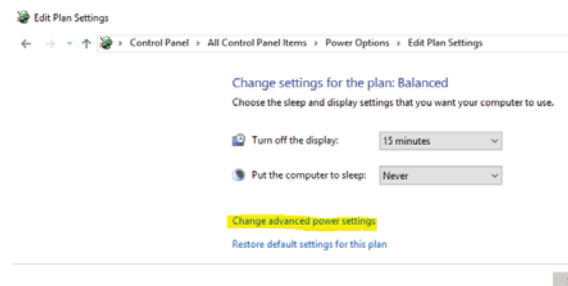
Step 3

Click on **Change Plan Settings** to make further changes



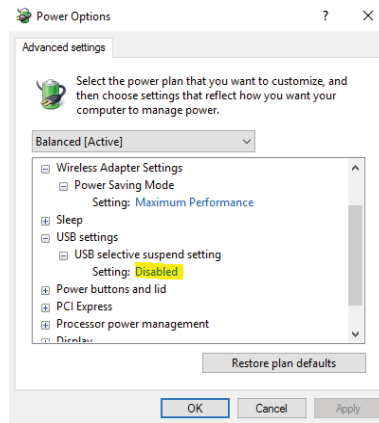
Step 4

Click on **Change Advanced Power Settings**



Step 5

Find the **USB Settings -> USB Selective Suspend** menu and select **Disabled**



Step 6

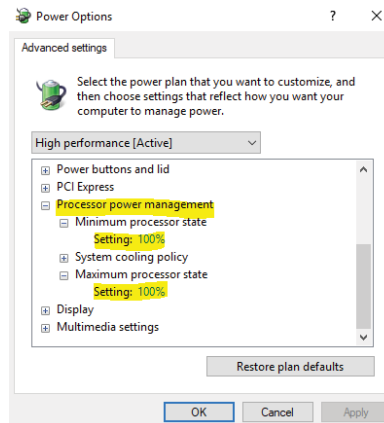
Find the **Intel (R) Graphics Settings**

Expand the **Intel (R) Graphics Power Plan** and change the setting to **Maximum Performance**

Step 7

Find the **Processor Power Management**

Change both the **Minimum** and **Maximum Processor State** to 100%

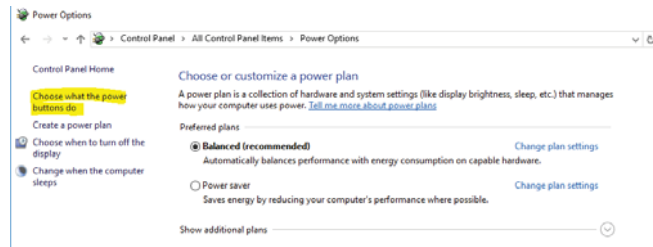


Step 8

Disable fast startup:

Open Control Panel\Power Options and click **Choose what the power buttons do** on the left-hand side.

If there is a checkbox labeled **Turn on fast startup**, uncheck this box. (If this option is gray or disabled, click the text at the top labeled "Change settings that are currently unavailable.")

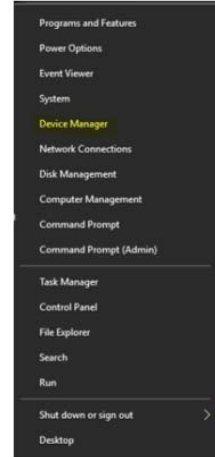


Graphics Card Driver

The latest graphics card drivers need to be installed on the host computer to ensure proper function with the 3D graphics and video in MR3.

Step 1

Open the Device Manager by right clicking the start menu and select **Device Manager**

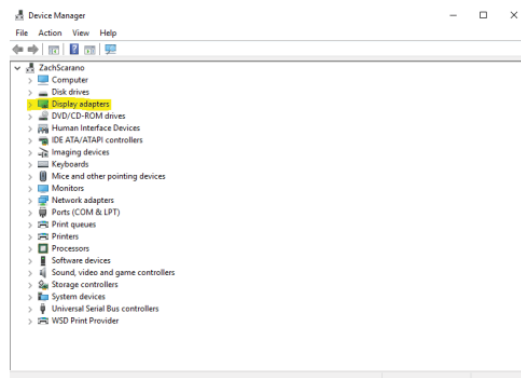


Step 2

In the Device Manager expand the tab labeled **Display Adapters**.

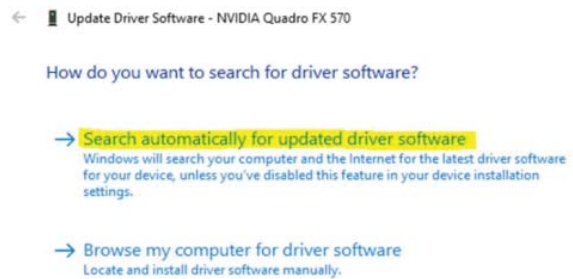
Force each display adapter (graphics card) that is listed the driver should be updated to the latest version available.

Right click on the display adapter and select **Update Driver Software**.



Step 3

Select the option to **Search automatically for updated driver software**.



Step 4

If the latest drive is already installed, you will receive the message "The best driver software for your device is already installed".



4 Installing the Companion Software - myoResearch™ 3

To utilize the full functionality of the Ninox camera system, and ensure the system has updated drivers, Noraxon's myoResearch 3 (MR3) needs to be installed on the computer.

Note: The Ninox camera system requires the IDS uEYE device driver which is pre-installed by the MR3 software installation. It is also available in the [Downloads Section](#) of the Noraxon website.

4.1 Software Installation

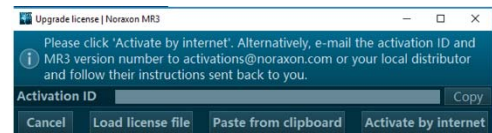
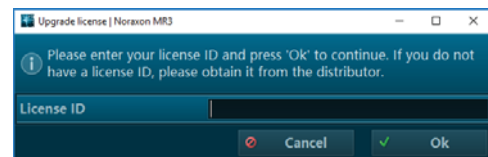
Within the package the Ninox camera system was shipped in, there is a USB flash drive containing the latest *myoResearch 3* software.

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
4. After installation, an icon will be created on the desktop

4.2 Companion Software Activation

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"
- *Continued on next page* -
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.

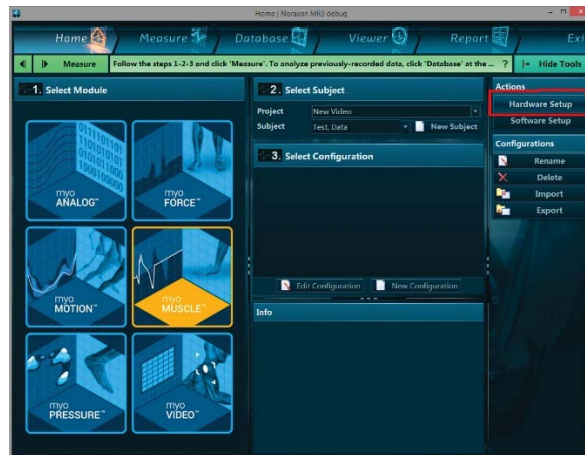


5 Configuring the Hardware

Step 1

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

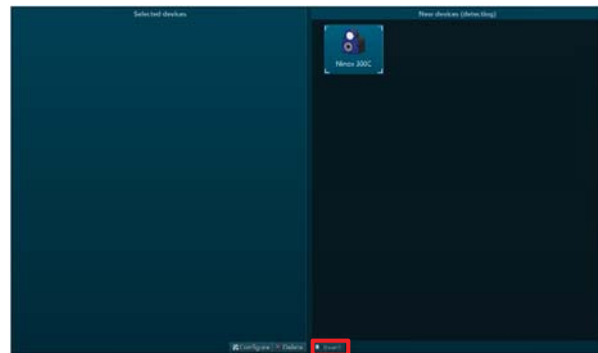
Click on the **Hardware Setup** button in the upper right-hand corner.



Step 2

Select the Ninox icon, within the 'New Device' column, and click on the **Insert** button.

Note: Make sure the Ninox camera is attached to the USB port of the computer.



Step 3

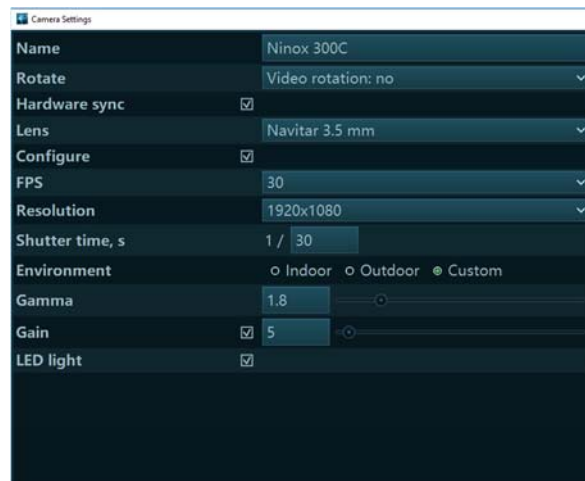
The Ninox Settings dialog will appear as shown. A preview of the image will also be shown here.

Within the "Settings" tab, select the desired collection frame rate (FPS).

Select a Resolution for recording. The recommended resolution will show up based on chosen FPS.

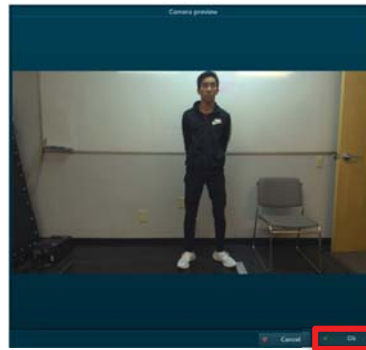
You may change the shutter time, environment, and settings such as gain and gamma here. Refer to the Ninox User Manual to learn more about these settings.

Note: If the camera image appears blurry (especially with a Ninox 300C), the focus on the lens may need to be adjusted. To do this, turn the lens in the camera until the image appears clear.



Step 4

Click on OK (in the bottom of the dialog box) when done.



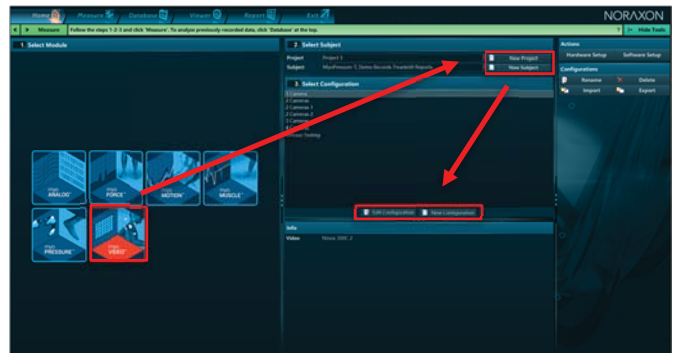
6 Recording a Measurement

Step 1

Within the Home screen, click on the myoVIDEO module icon.

Create a New Subject

Select **New Configuration**.

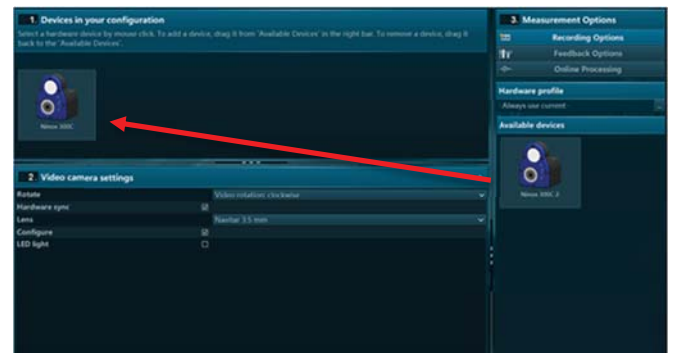


Step 2

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

You may configure lens correction, image quality, resolution, video speed, and other settings here. Refer to the Ninox User Manual for information on these settings.

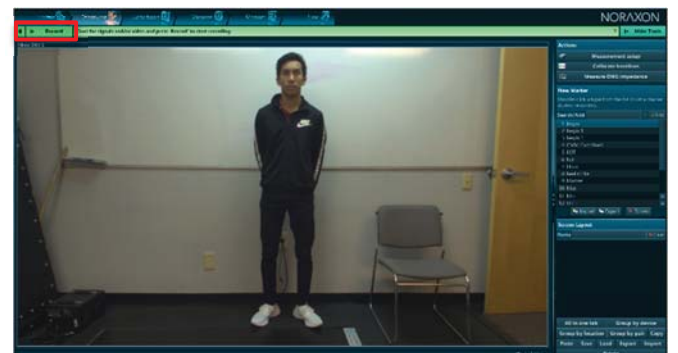
Continue to the next step by selecting **Measure**.



Step 3

After checking for normal video display, you are ready to record a measurement. Select **Record** at the top left of the screen and begin your protocol.

After completing your record, select **Stop** and **Save**. Save the record as the name of your configuration, or type in a new name. After this, save your record or **Discard & measure again**.



7 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 interested to open the record in the **Viewer** tab.

8 Further Use Features of MR3

There are many additional features built within MR3. Such as:

- 2D video analysis
- Slow motion playback
- Customized reporting
- Exporting (and importing) of data

To learn more about the features available to you through the system(s) you have purchased, refer to the MyoResearch User Manual and the corresponding Hardware User Manual for this device. If for any reason you find our support content to be insufficient for your needs, please reach out to our support team directly by submitting a support request on our website.