

Prerequisites:

Vicon Nexus 2.x and Delsys Trigno Wireless System

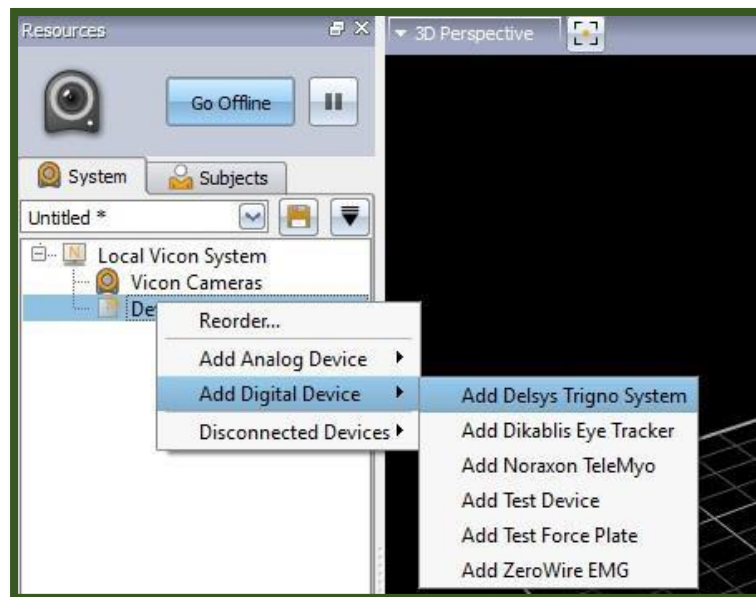
Installation Instructions:

- 1) Update to **EMGworks 4.7.6**, which can be found [here](#). Before installing this version, [uninstall](#) any previous versions of EMGworks and/or the Trigno SDK Server.
- 2) Through the [Software Update Tool](#), make sure that your firmware [matches the required versions for 4.7.6](#).
- 3) Obtain the [Delsys-Vicon Plugin 2.0.2](#).
- 4) Place this file in the location:
C:\Users\Public\Documents\Vicon\Nexus2.x\DigitalDevices

Create the directory if it does not already exist.

- 4) Launch the *Trigno Control Utility* (open the Start menu and search for "Trigno Control Utility").
- 5) Launch Vicon Nexus. Add the Delsys plug-in to the device list within Nexus, as seen below.

***Important Note*:** This will need to be done every time Nexus is opened.



Hardware Synchronization Requirements:

Not Triggered:

There is no precise hardware synchronization in this mode, but also no additional hardware required. The level of synchronization that can be achieved in this mode will depend on the variability in the latency of data delivery for both the Vicon system and the Trigno device. In practice the synchronization is typically within about 20 ms.

Triggered (recommended):

In this mode, the **Delsys Trigger Module** is connected to the **Vicon Lock Lab** to ensure strict synchronization between the EMG and the motion data that are collected. Nexus will send a start trigger pulse to the Trigno device that is synchronized with a known frame number from the Vicon system.

To use the triggered mode, connect one of the Lock Lab's Sync Out ports to the Start In connector of the Delsys Trigger Module. In the device's parameters in Nexus, select the **Triggered** mode and the index of the Lock Lab that is connected. The images to the right show examples of the software and hardware connection between the Vicon hardware and the Delsys Trigger Module.

***Important Note*:** The Vicon Lock Lab utilizes RCA connectors, while the Delsys Trigger Module utilizes BNC connectors. You will require a BNC-to-RCA converter + BNC cable to properly connect the two devices.

