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## VICON INTERFACE PLUG-IN OVERVIEW

Noraxon's new Vicon Interface (plug-in) for acquiring data eliminates analog to digital connections that have complicated and noise prone cabling. Simply connect the USB cable of your Noraxon EMG device to your workstation.

Software setup is just as easy, just do a three click install of the plug-in and run Nexus. Your Noraxon EMG device will automatically be recognized; set a few parameters for using sync and you are up and running.

At Noraxon we realize just how important synchronization is for many applications. That is why we have gone the extra mile to ensure that not only are our signals in sync with the video recording, but that it is easy to verify this for every second (frame) of the recording. Our hardware sync is so accurate, that any possible latency present is not measureable using Nexus. The sync achieved is well within the resolution achievable based on the frame rate of the cameras. When recording at 240 fps each frame is only about 0.00417 seconds long, and the sync is perfect in Nexus. How do we know this? Because we expose our sync channel for examination, and we offer our Noraxon Sync Light that can be used to put a sync "marker" in the image with each sync pulse. When a recording is made you can choose to have a pulse train running for the entire duration of the recording if desired; at the end of the recording it is easy to compare the pulse as it appears on the Noraxon sync channel and the sync "marker" image in the video to ensure perfect sync.

For long recordings drift becomes a consideration. Simply enable drift correction to adjust for drift. This option helps correct for clock drift between devices. When enabled, Vicon Nexus will correct for drift by continuously measuring sample delivery times in order to estimate a sample rate to adjust to. This option can be configured to use the nearest sample or to interpolate between samples when making corrections. Even if you choose not to use hardware sync, our Vicon plug-in offers software sync to adjust for even the largest of latency, in real time! When using our Sync Light, as described above, the inherent latency for a particular session can be measured and adjusted for by setting our latency parameter to achieve a perfect sync.

Measuring for excellence,

Your Noraxon Support Team

