

API Axxis / Kreon Arm (7 DOF)



Prerequisites

Note: You must have the proper calibration file for the arm (manufacturer-supplied). The file name will contain the arm serial number and will end with ...Arm.tab. You will be prompted to browse for the path to this file when the interface starts.

1. Copy Calibration files (calibration files are supplied with arm and scanner and are placed in the **C:\ProgramData\Kreon Technologies\Calibration** by default but you can browse to any location).
2. Download `Plugin_SpatialAnalyzerXXXX.zip` from <ftp://ftp.kinematics.com/pub/SA/Install/Driver%20Downloads/Scanners/Kreon%20Scanner%20Plugin/>. Check the SA Readme file for the appropriate version.

As an example, SA version 2019.04.09 requires Plugin 3.3.2.3.

Starting in SA version 2020.12.01 you need Plugin v.20.0.0.0

3. Unzip the file to your hard drive, and run `Setup.exe`. The installer will guide you through the process of installing the scanner and the HASP dongle driver.

Part of the installation process copies necessary files into the SA install directory. For that reason the Kreon plugin will need to be run again with each new SA installation.

Note: You must have the proper calibration file for the scanner. The Kreon install will prompt you for the file. It will be named [scanner serial number].cal.

4. Configure your network connection as needed for your scanner. The **SkylineConfig.exe** utility is part of the current (Plugin-SpatialAnalyzerXXX) install and will be placed in your SA install directory). Run this utility from the SA install directory to verify and configure your network.
5. Once configuration is complete a reboot may be necessary.

Finally, the Kreon arm uses an additional external USB License dongle. This dongle must be in place on the machine for the arm to be used in SA.

Running the Instrument in SA


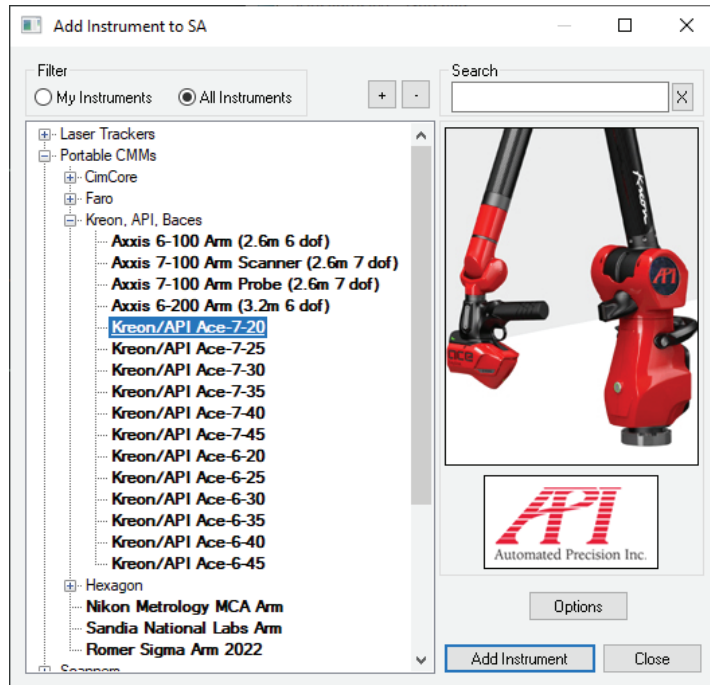
1. Add an instrument using the menu item **Instrument>Add Instrument** or use the  icon.
2. Select the API Axxis or Kreon 7DOF arm ([Figure 4-45](#)).

Figure 4-45. Adding a 7-DOF Kreon arm.




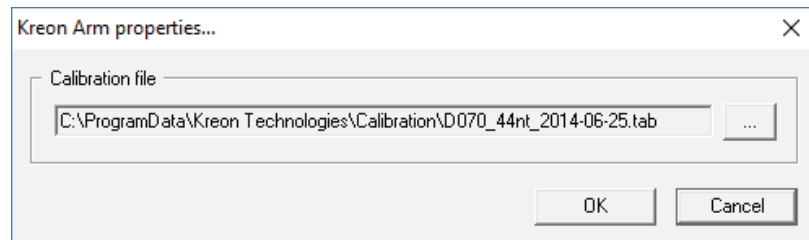
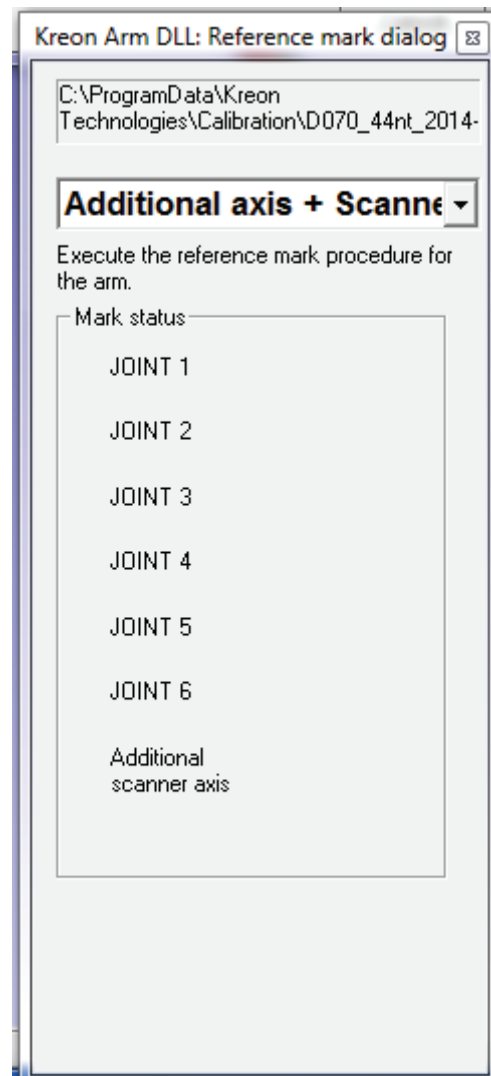
3. With the new instrument added run the arm interface module. Simply click the  icon.
4. You will be asked to choose a communication method and a parameter file. This parameter file should be supplied with the arm ([Figure 4-46](#)).

Figure 4-46. The Axxis connection settings dialog.




Once the connection is established the arm must be initialized. This includes first selecting a profile from the drop down list and then initializing the encoders. To do so, simply exercise the arm until all encoders have a green status ([Figure 4-47](#)). Once complete, SA arm interface will then appear.

Figure 4-47. Exercising the encoders on the arm.



Scanner Calibration and Controls:

In order to scan be sure to set a scanning profile in the Kreon Arm Probe Management utility (see “[Kreon Arm Specific Settings](#)” on page 191). To access the Scanner calibration routine press the **Calibration**  button in the arm interface. Perform a scanner calibration with a certified Sphere and accept the results or repeat as needed following the direction in the dialog ([Figure 4-48](#)).

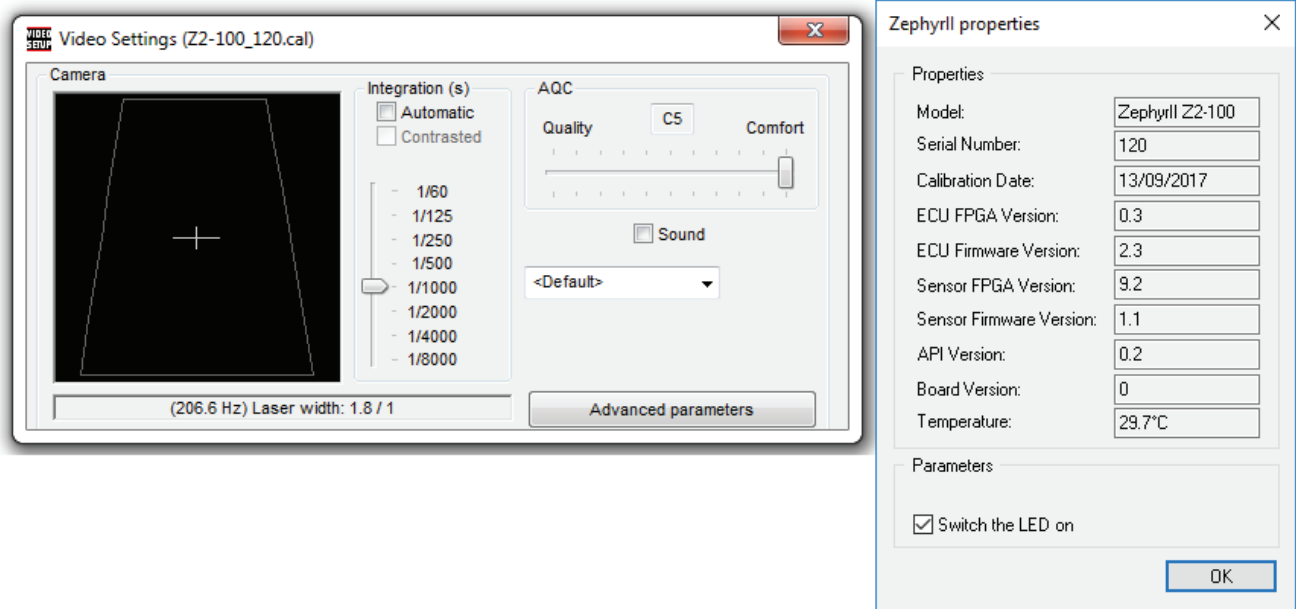


Figure 4-50. Scanner Properties and Video Setup

Kreon Arm Specific Settings

The Arm configuration profile is first selected when you connect to SA through the Encoder Initialization dialog. However, the Arm configuration can be changed during operation through the Kreon Arm Probes Management tool located in the task bar (Figure 4-51).

Its important to note that the profile must be changed from a probing configuration to a scanning profile in order to change modes of operation.

The probes Management tool also provides calibration access.

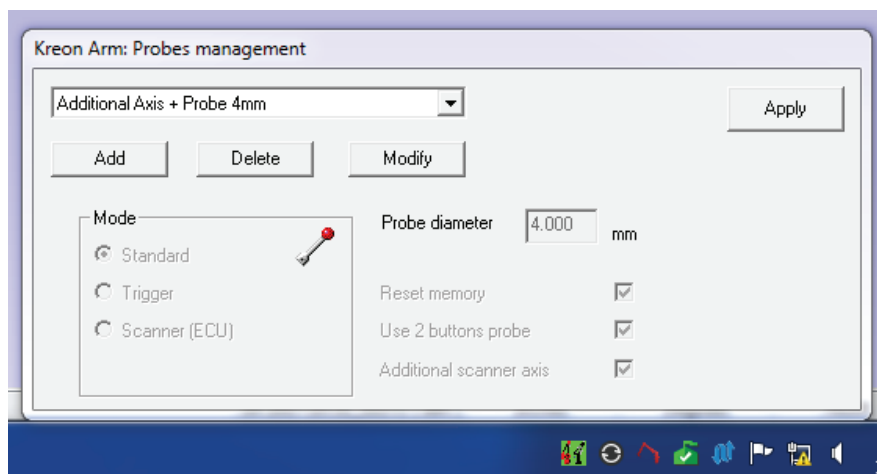


Figure 4-51. Calibrating the touch probe.

With a satisfactory calibration the arm is ready to measure. Simply use the buttons on the arm to trigger measurements, change measurements, etc.