Quick Steps in Getting Started with the SITK® for LabView™ 64 bit Software

For Princeton Instrument Cameras

Version 5.0.x.x

1.) Install the SITK® software from your CD or from download by running the file Setup_SITKLV_XXX.exe (where XXX is the SITK version). By the time you are reading this, you have most likely already installed the software but here are some things that you should (or perhaps should not) have done.
   a. Select support only for the cameras that you actually are going to be using.
   b. Make sure that your LabVIEW software is installed **before** installing the SITK since the installer will look for LabVIEW registry entries and copy files to the LabVIEW folder(s).
   c. Select support **only** for the LabVIEW versions that are currently installed.
2.) On first running the SITK software, it will automatically generate a 45 day trial license. If you have a serial number for your copy of the SITK, you should register your software in order to receive a permanent license. To register, run the program LVReg.exe that has been installed to your LabVIEW folder. The serial number is on the CD label and usually begins with "SITKLV-" (do not use the camera serial number or software part number).
3.) Verify that you have a installed the latest version of the Princeton Instruments PICam software. This is available from their website (www.princetoninstruments.com). This may also have been installed as part of another Princeton Instruments software package such as Lightfield.
4.) The low level SITK vis are in user libraries and are available through the LabVIEW Functions toolbar. Each vi has a standard LabVIEW style help (right click on icon, select Help). Note that the help files are currently in .hlp format and Windows 7 does not automatically support this unless the option for this is present. This may be automatically installed by Windows 7 and, if not, is available from Microsoft. This is a link to a Microsoft Knowledge Base article: http://support.microsoft.com/kb/917607 that gives a solution.
5.) There are many examples of how to use the SITK software which are usually installed to *C:\Users\Public\Public Documents\SIToolkit/LabVIEW/ExamplesXX_v_v_v_v* (where "XX" is the LabVIEW version and "v_v_v_v" is the SITK version). This is designated as <Examples> below.
   a. First open and run the vi <Examples>\Diagnostics\DiagnosticsToolKittest.vi. If there are any licensing issues, they should appear as error messages here. After running successfully, there should be some number greater than 0 in the "Total Number of Devices" box and the SITK version. The SITK considers a "device" to be any object it can support. This can be one or more cameras, spectrometers, file handles, etc. If the number of devices is 0 or

a low number, it may indicate that not all of the SITK files have been loaded correctly.

b. Next, open and run DiagnosticsCameratest.vi (make sure your camera is connected and powered on). This file is found in the <Examples>\Fast Examples sub folders "Cameras", Pixis" or "Pulser Systems", depending on which camera you have installed. This vi should display the Camera Interface Driver (CID) version (PICam.dll) of the CID that is being used by the SITK plus other camera version information as available. If the CID version is not displayed, it usually means either the CID is not present (PICam has not been installed) or there is a problem loading the file or one of its sub dlls. First verify that PICam has been installed. If you still are not running correctly please email support@rcubedsw.com.

6.) For information on Camera/Detector examples, see the document "Quick Start for Cameras.pdf"

7.) If you have an Acton spectrometer
   a. First setup a spectrometer ini file, please refer to the file"SISpectroActon ini Setup.pdf" for information on how to set this up.
   b. Run <Examples>\Spectroscopy\ExMoveSpectro.vi to make sure the spectrometer is setup correctly.
   c. Run the spectrometer and the camera together with <Examples>\Spectroscopy\ExCenterStripSpec.vi
   d. If you have Slits run <Examples>\Spectroscopy\ExSpectGetSlitInfo.vi
   e. If you have Mirrors run <Examples>\Spectroscopy\ExSpectGetMirrorInfo.vi

8.) If you have a Acton Filter wheel
   a. First setup a filter wheel ini file, please refer to the "SIFilterWheel Ini setup.pdf".
   b. Run <Examples>\Spectroscopy\ExFilterWheel.VI

If you have any questions or problems please email support@rcubedsw.com.