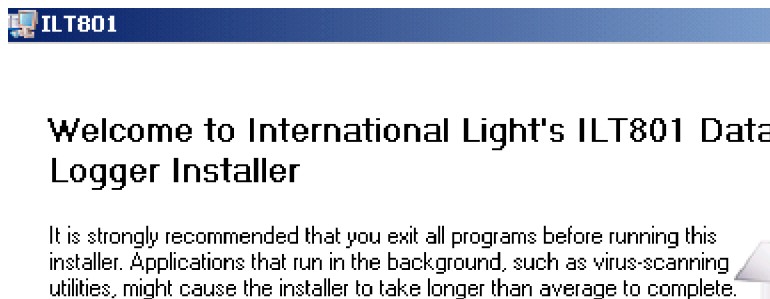## ILT801 DATA LOGGER SOFTWARE MANUAL

If this is a first time installation, you need to load the National Instruments drivers first. If you are installing or upgrading your ILT801 Data Logger software and have already installed the NI DAQmx drivers, you can skip this section.

Insert the NI-DAQmx 8.8.0. Disk1 in your CD drive and install DAQmx 8.8.0 with the features: LabView 8.5 and 8.6 Support and OPC / Variable Support. Install NI Measurement & Automation Explorer 4.5 with the features 8.5 and 8.6 Support. Go through the installation process, you only need Disk 1 and 2. You may want to restart your computer after installing the ILT801 Data Logger.

Once you have installed the NI-DAQ 8.8.0 drivers, you may proceed loading the software for the ILT801 Data Logger. Copy and paste the folder Volume v.1.0.5 from your disk to the desk top and click setup.exe. Follow the prompts until the installation is completed and restart your computer.

The Measurement & Automation Explorer:

In the Measurement & Automation Explorer (MAX), confirm the "Dev1" configuration in My System\Devices and Interfaces\NI-DAQmx Devices\NI USB-6009:"Dev1". If the ILT801 DataLogger failes to initialize, you should open MAX and go to File\Import and use the Configuration Import Wizard to import the ILT-801 DaqConfig.nce file. To locate the ILT-801 DaqConfig.nce file, you navigate to the folder C:\Program Files\International Light\ILT801.
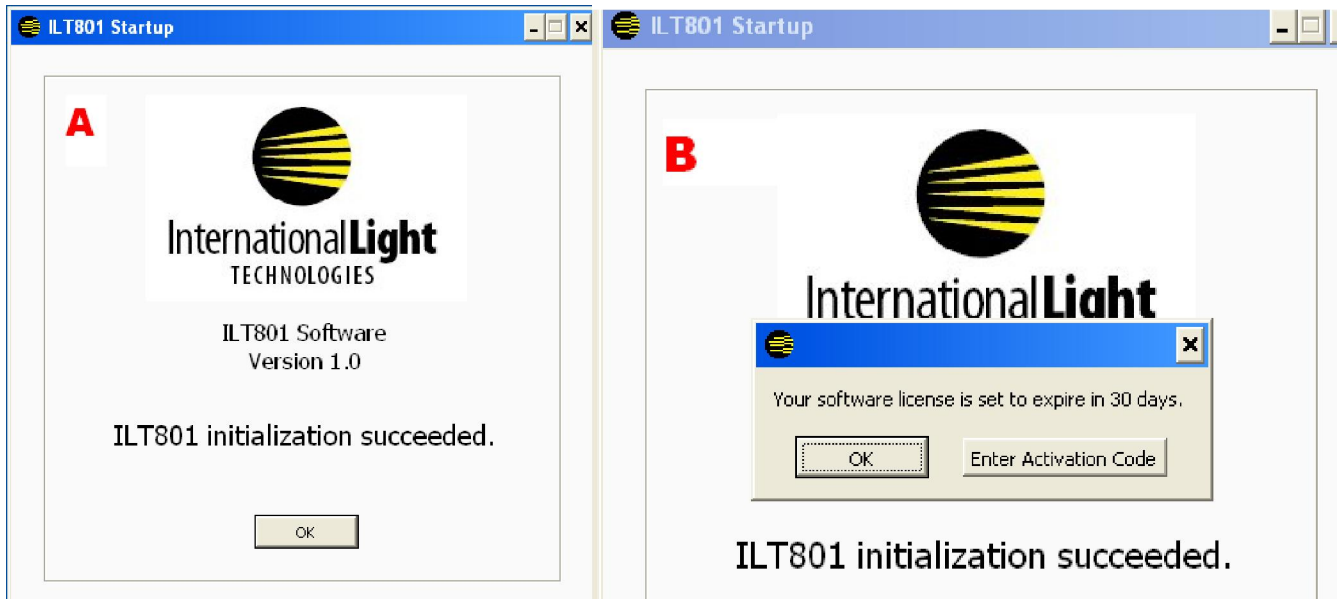
The ILT-801.ini file:

The ILT-801.ini file contains all the information for the ILT801 Data Logger to run properly. Copy and paste the ILT-801.ini file from your INI folder (disk) to the folder c:\Program Files\International Light\ILT801. When asked to replace the existing file, say YES. Now, your ILT801 Data Logger is ready to be used.

The ILT801 Data Logger:

The INI file of the ILT801 data logger comes pre-configured and its information should not be changed. The calibration factors, serial number, gain factors, samples and sampling rate are already programmed for you and your system is ready to be used.
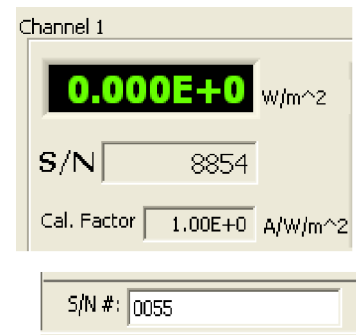
Click the ILT801 DataLogger icon to launch the software. The initialization window (Image A) is displayed, click the OK button and the activation screen will ask you to enter the Activation Code (Image B).

Click Enter Activation Code and enter the code 12ILT. Click OK and then click OK again.

The data acquisition display screen will load. The size of the window is preset and can not be changed.
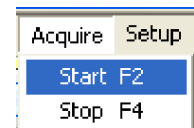
The display contains eight channels and you can see the channel numbers and serial numbers of each detector. Take a moment to verify that each detector is correctly installed in the appropriate channel number on the rear of the ILT801. The serial number shown for each channel is the particular serial number of the detector. The calibration factor for each detector can be retrieved from the calibration certificate.
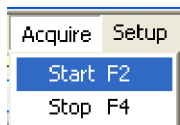

You may also wish to verify the serial number of the ILT801 meter in the lower left corner of the information bar.

  The acquisition screen opens in pause mode and no readings are being taken. There are 3 ways to start the data logging: You can use the command bar- click the play button, or use the short cut key - F2, or use the menu bar and press Acquire\Start.
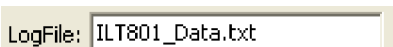

Once you start logging data, the red and green LED's in the information bar will flash alternately and the readings will be shown in the display box.

  To stop the data logger you can press F4, the Stop Button , or by using the menu.

By default, the data are saved in the log file c:\ILT801_Data.txt shown at the bottom of the information bar. The file can be opened by any text editor or can be imported by Excel.

The Zeroing of the Channels:

To zero the channel readings, start the data acquisition and cover the detector. Then, press for 1 to 2 seconds for example the Zero 1 button until the Channel 1 indicator shows 0.000E+00, then release the button. The button changes to Disable when being released. If you decide to disable the zeroing, press the Disable button.
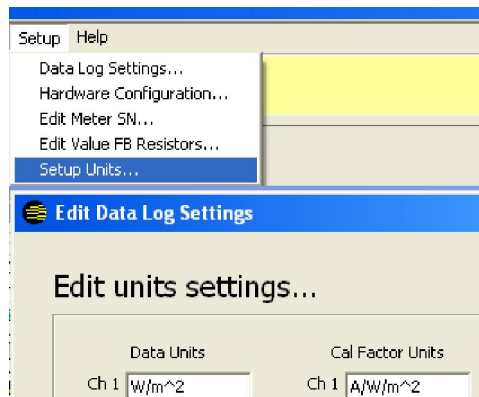
The Calibration Factors or Cal-Factors:

The ILT801 comes pre-configured and there should be no need to change the S/N of the detectors or the CalFactors. Using Setup\Data Log Settings, you can see a list of the serial numbers of the detectors and their calibration factors. For convenience, you can use the command button DLS in the command bar.

The Data Units:

The ILT801 comes pre-configured and there should be no need to change the Units.
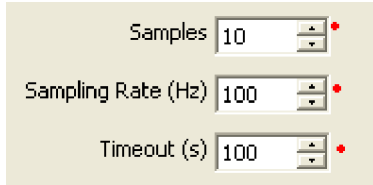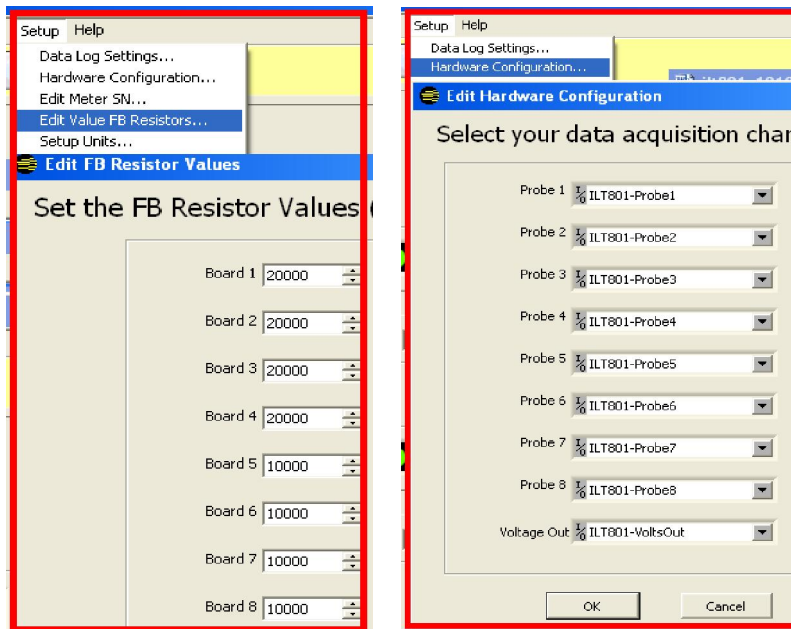
The ILT801 Serial Number:

The serial number of the meter is already pre-entered in the ILT-801.ini file and can be found on the back of the ILT801. You should not change the S/N number.

The Samples and Sampling Rate:

The system comes with Samples set at 10 and a Sampling Rate of 100. The Time Out is set at 100 s. The number of samples, the sampling rate and the Time Out can be changed in Setup\Data Log Settings. For convenience, you can use the command button DLS in the command bar.

Do not change output voltage of 1.5 volts or any of the Gain Conversion values. In addition, do not change the Feedback Resistor values under Setup\Edit FB Resistors or edit the hardware configuration under Setup\Hardware Configuration.

Output Voltage (V) 1.5

Gain Conversion
AVA 2.00E+4
AVB 1.00E+4
ZFA 0.00E+0
ZFB 0.00E+0

END

Update: 10.21.2009