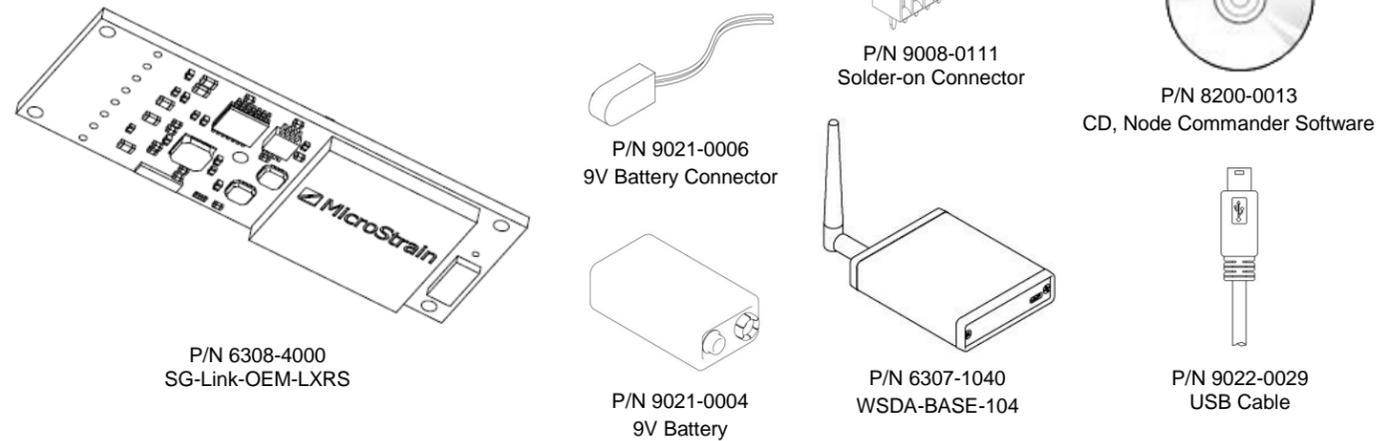


# LORD MicroStrain<sup>®</sup> SENSING SYSTEMS

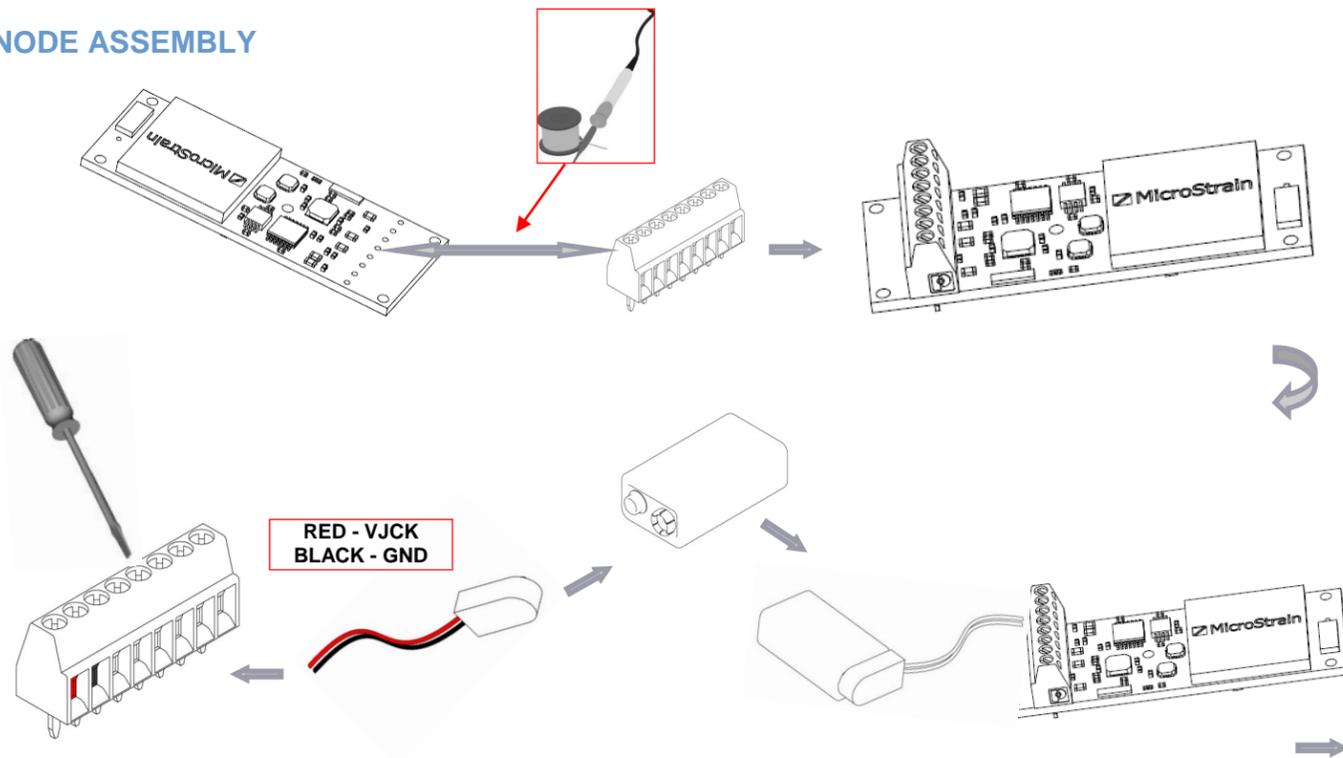
## Quick Start Guide SG-Link<sup>®</sup>-OEM-LXRS<sup>®</sup> Wireless OEM Analog Input Sensor Node - Extended Range



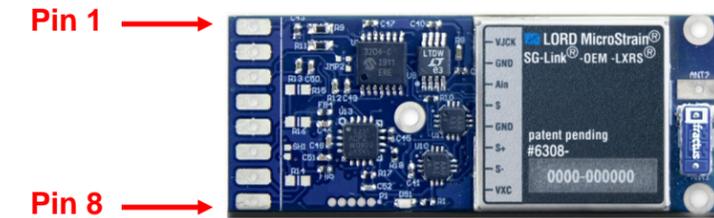
### 1 WHAT YOU NEED



### 2a ASSEMBLE AND CONNECT NODE ASSEMBLY

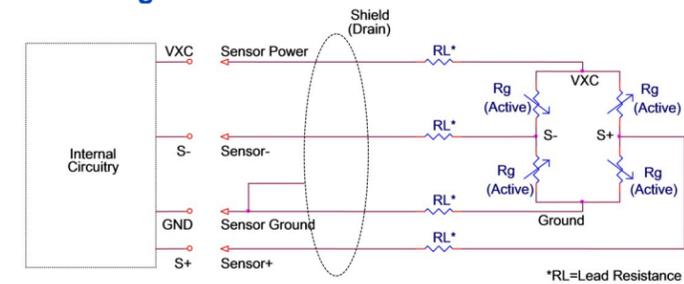


### 2b ASSEMBLE AND CONNECT STRAIN GAUGE ASSEMBLY



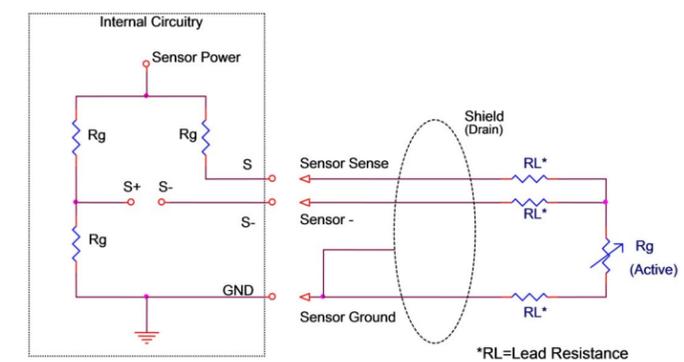
1	VJCK	Input power positive (3.1-12.0 volts DC).
2	GND	Input power ground (common with pin 5).
3	Ain	Analogue 0-3.0 volt input.
4	S	Input for three wire mode on quarter bridge strain gauges. Leave unconnected for full and half bridge strain gauge applications.
5	GND	Signal ground (common with pin 2).
6	S+	Positive input to the differential amplifier.
7	S-	Negative input to the differential amplifier.
8	VXC	3.0 volt sensor excitation.

#### Full Bridge Strain

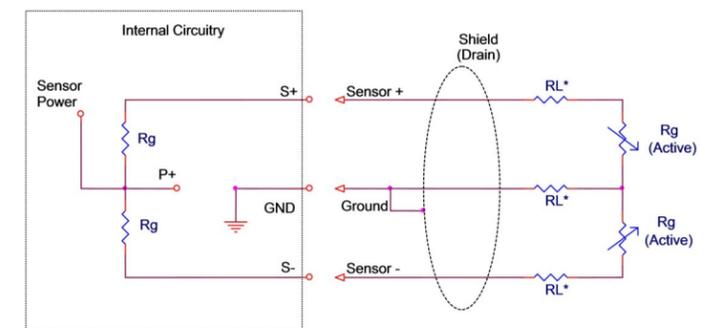


SG-Link-OEM-LXRS comes pre-configured from the factory with full-bridge completion. Half and quarter bridge completions are available options at time of purchase.

#### Quarter Bridge Strain Gauge

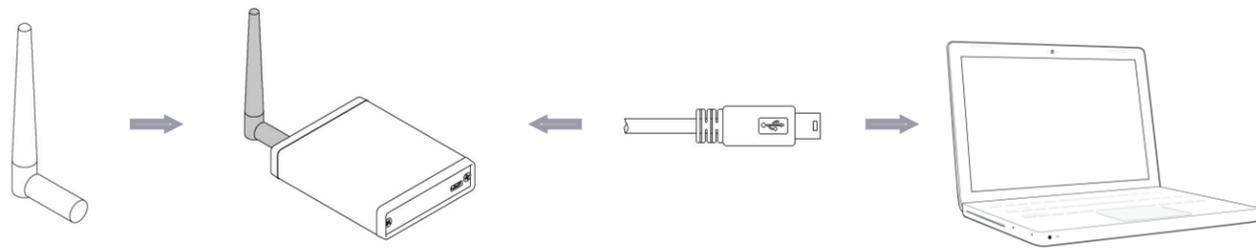


#### Half Bridge Strain



### 2c ASSEMBLE AND CONNECT

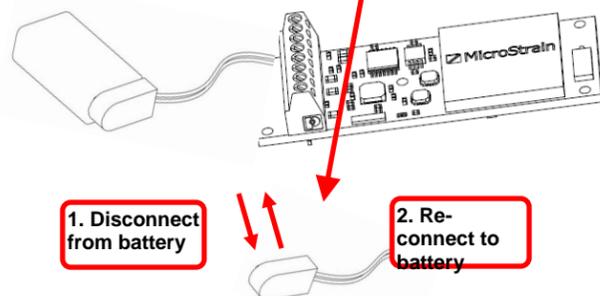
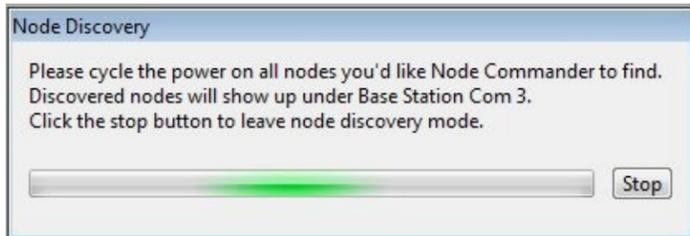
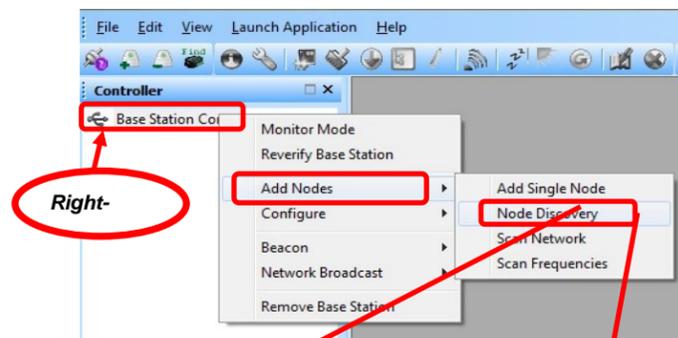
#### BASE UNIT ASSEMBLY



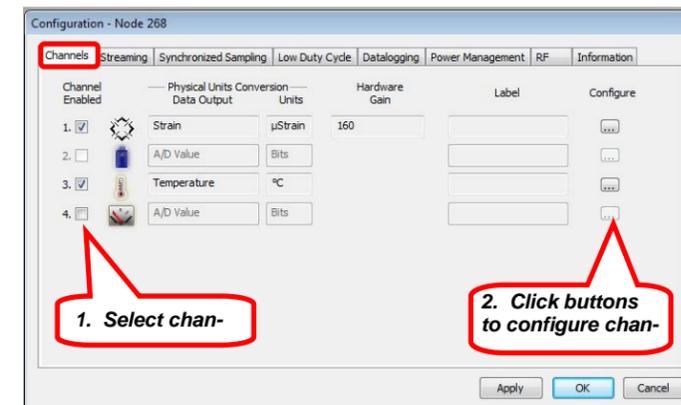
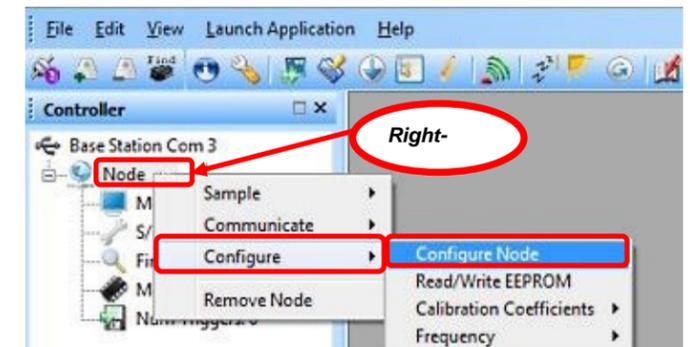
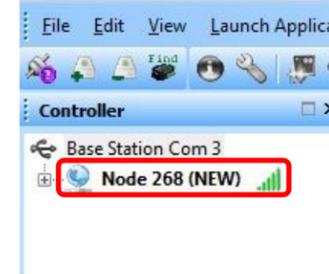
### 3a INSTALL AND CONFIGURE



Double-click Node Commander icon on the Desktop

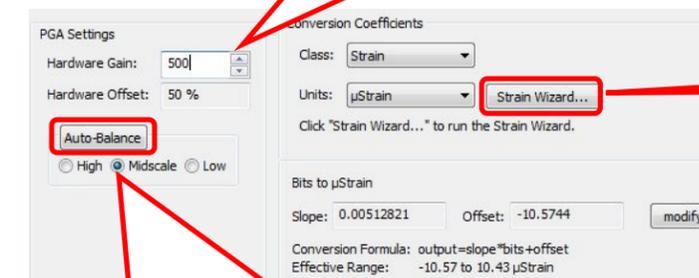


### 3b INSTALL AND CONFIGURE



### STRAIN SETTINGS

1. Set the gain to 500 initially; if sampled signal exceeds scale limits, lower this value. To improve signal-to-noise ratio, raise this value



2. Select Midscale, click Auto-Balance. The scale level determines the position of the zero level for the signal. For example:

- Midscale is used for signals that are expected to run both positive and negative
- Low is used for signals that are expected to run mainly positive
- High is used for signals that are expected to run mainly negative

### 3c INSTALL AND CONFIGURE

4. Select correct Bridge Type to match the node factory

5. Click Next

6. Select the number of active gauges:  
• 4=Full Bridge  
• 2=Half Bridge

7. Enter strain gauge factor from strain gauge certificate

8. Set the gauge resistance to match the node

9. Set shunt resistance to 499000 Ω

10. Click Calibrate

Offset →

Base- →

1. Window will be blank upon opening; click Calibrate twice to begin calibration

2. Adjust Baseline and Offset to achieve best fit for the lines

3. Click Accept when finished

To accept calibration, click Accept

Baseline: 2035 Offset: 3011

Stop Calibrate Accept Cancel

### 3d INSTALL AND CONFIGURE

#### TEMPERATURE SETTINGS

Choose

OK

**NOTE: Analog input 0-3V maximum**

#### VOLTAGE SETTINGS

Choose

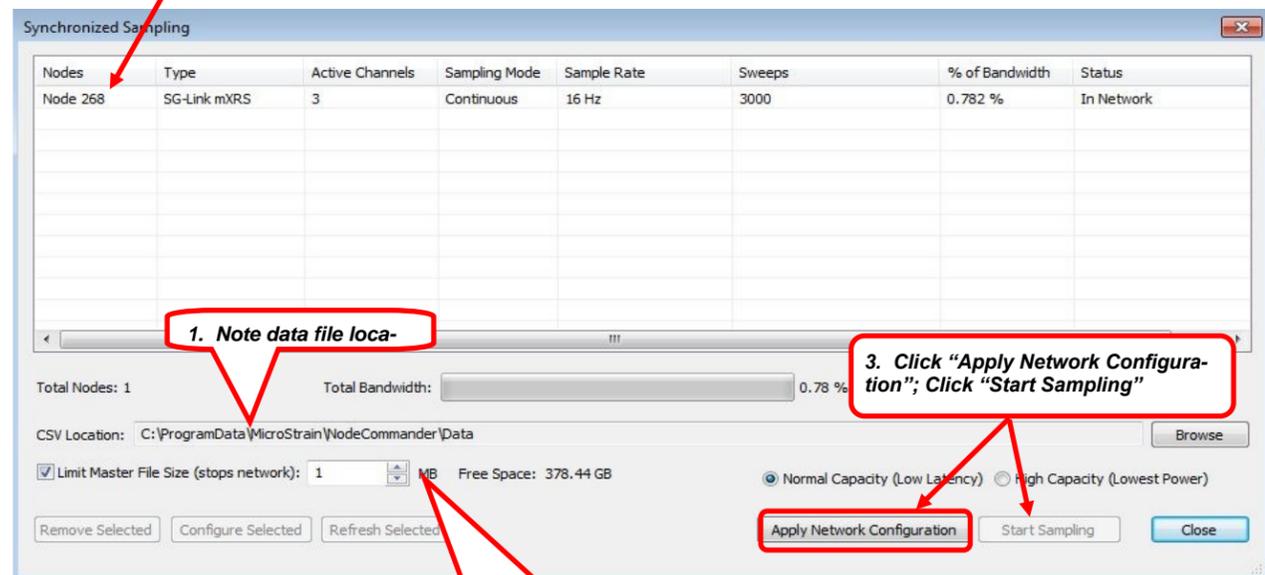
OK

4a ACQUIRE DATA



Right-click

NOTE: Select a node on the following screen and choose "Configure Selected" then the "Synchronized Sampling" tab to select sample rate and duration

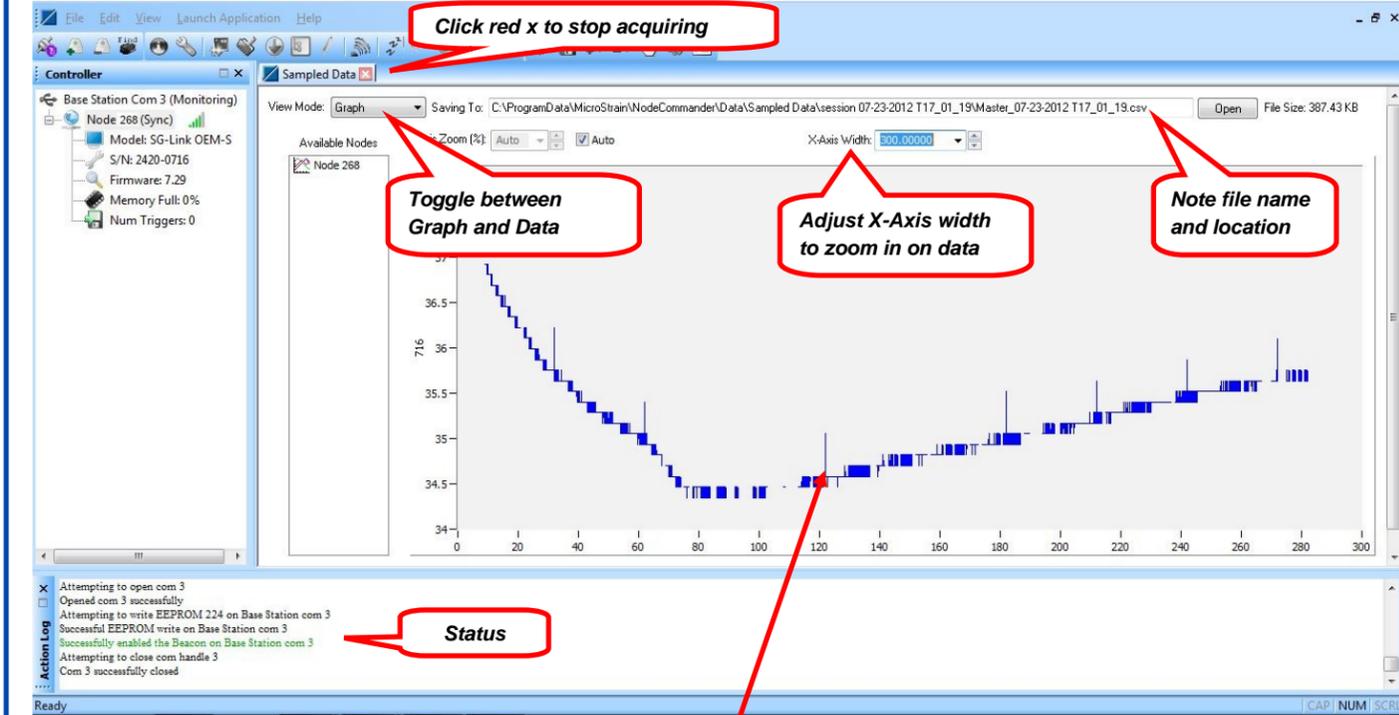


1. Note data file loca-

2. Limit file size here - note free space available above

3. Click "Apply Network Configuration"; Click "Start Sampling"

4b ACQUIRE DATA



Click red x to stop acquiring

Toggle between Graph and Data

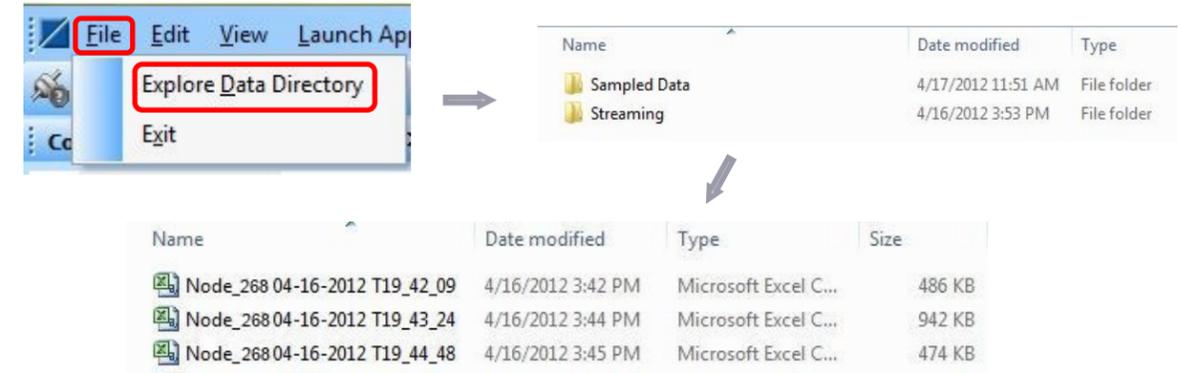
Adjust X-Axis width to zoom in on data

Note file name and location

Status

NOTE: Adjust the Hardware Gain and Auto-Balance settings (see Page 2) if data is being clipped (railing) on either the high or low ends of the signal

5 VIEW STORED DATA



CONTACT LORD MICROSTRAIN®

SG-Link-OEM-LXRS Wireless OEM Analog input Sensor Node - Extended Range  
 See <http://www.microstrain.com/wireless/sg-link-oem-lxrs> for more information.  
 Support: [sensing\\_support@lord.com](mailto:sensing_support@lord.com) Sales: [sensing\\_sales@lord.com](mailto:sensing_sales@lord.com)

LORD Corporation  
 MicroStrain® Sensing Systems  
 459 Hurricane Lane, Suite 102  
 Williston, VT 05495 USA  
 Phone: 800-449-3878  
 Fax: 802-863-4093