

# INF-USB2 and SI-USB Quick Start Guide

Please follow these instructions carefully. **DO NOT** connect the INF-USB2 or SI-USB module to your computer before running the setup program.

After running Setup and then connecting the USB module, Windows will find two new pieces of hardware.

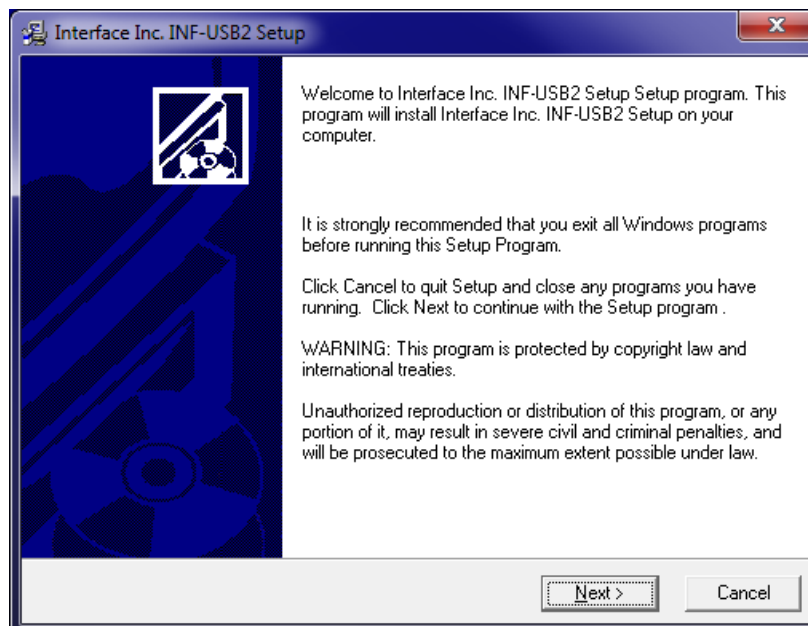
- a. Interface USB sensor Interface Device
- b. Interface USB sensor Interface Port

Windows must be allowed to install drivers for BOTH items.

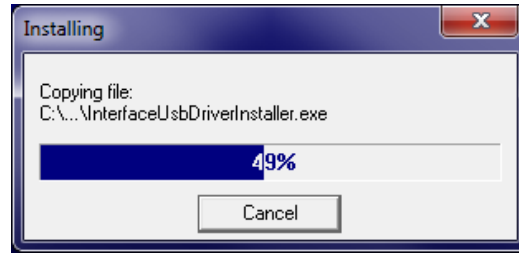
After the hardware is successfully installed, the INF-USB2 application software can be run.

## Software and Driver Installation Procedure

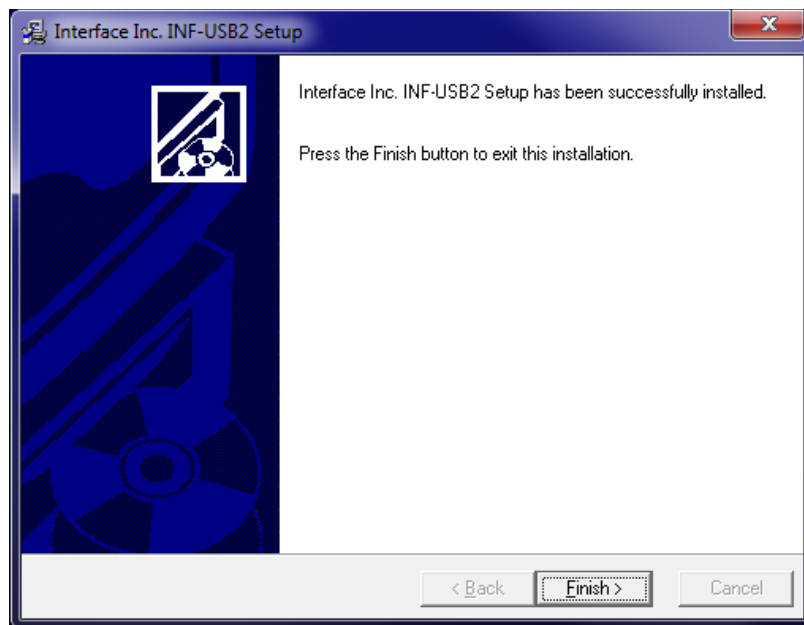
1. Download the file Setup\_INF-USB2\_SI-USB.zip from the PDFs/Downloads tab of the INF-USB2\_SI-USB product page at [www.interfaceforce.com](http://www.interfaceforce.com)
2. Open INF-USB.zip run Setup\_INF-USB2.exe.
3. During installation the full **INF-USB /SI-USB Operation Manual** will be installed on your hard drive and can be accessed in the start menu folder INF-USB2.
4. You may see a screen asking for permission to install the program or warning about unverified publishers. Click yes to continue.
5. When the INF-USB2 setup screen appears click Next.



6. The installation will proceed.

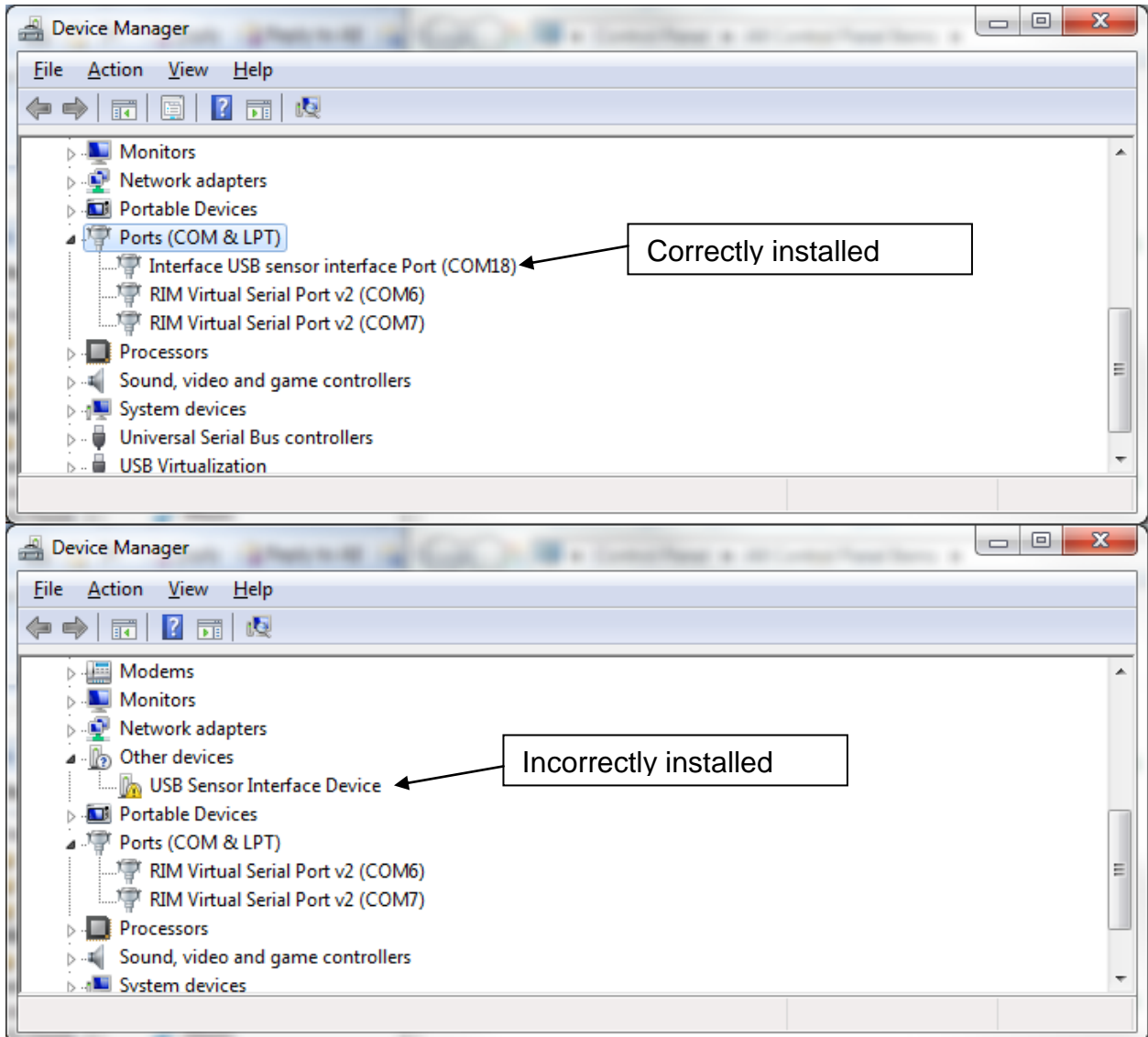


7. Click finish to complete the installation



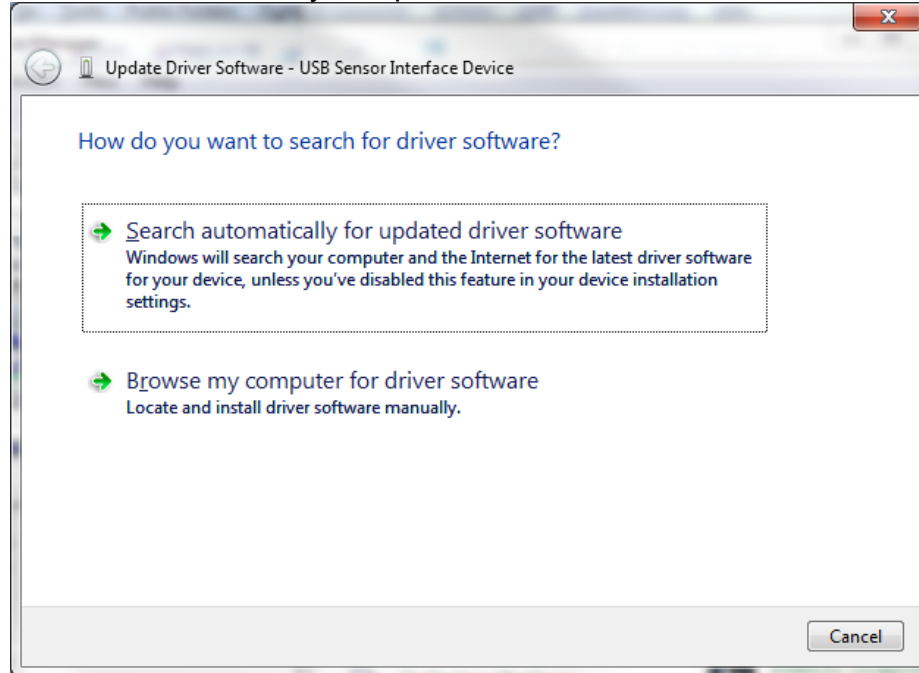
8. Connect USB module to an available USB port on PC.
9. Windows will find new hardware called Interface USB sensor Interface Device. Select "Install the software automatically" and click Next.
10. You may get a warning that the software has not passed Windows Logo Testing. If so, Continue Anyway.
11. Once the installation is complete, click Finish.
12. Windows will then find the second new piece of hardware, Interface USB Sensor Interface Port. Select "Install the software automatically" and click Next. Again, if you get a warning about Windows Logo Testing, just click Continue Anyway.
13. Software and Driver installation is now complete. There will be an icon on your desktop labeled INF-USB2-VS and a folder in your Start Menu labeled INF-USB2.

14. Click on the INF-USB2-VS icon to launch the software. The software will open and find an attached device. If the software fails to find a device then the drivers loaded incorrectly. In this case:
  - a. Go to device manager
  - b. Find ports

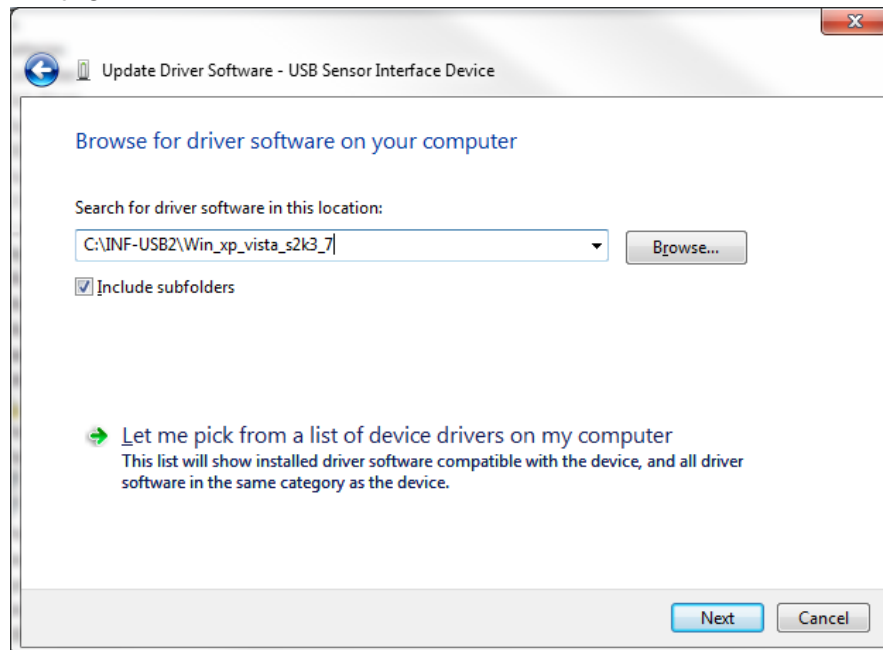


- c. Right click on USB Sensor Interface Device and click “update driver software...”

d. Select “Browse my computer for driver software”



e. Navigate to the C:\INF-USB2\Win\_xp\_vista\_s2k3\_7, click OK and then NEXT.



f. Device driver software should now install correctly.

## SOFTWARE QUICK START

When the software is first started it will search for a connected USB module. If a supported device is not found please make sure the USB module is connected properly.

## SOFTWARE LAYOUT

### Navigation Bar

Used for configuring software and saving data. If at any time the Navigation disappears, it can be re-instated in the View menu.

The screenshot shows the software interface with the following callout boxes:

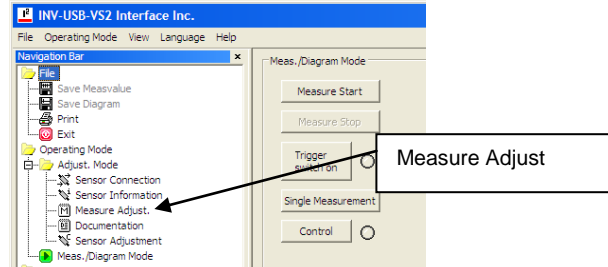
- Navigation Bar:** Used for configuring software and saving data. If at any time the Navigation disappears, it can be re-instated in the View menu.
- Measuring Control Area:** Used for starting and stopping the measurement. Configuration changes can only be made in "Stopped" mode. Clicking the "Control" box engages the installed shunt resistor.
- Meas./Diagram Mode:** Click here to enter measuring and diagram mode. This mode is where all measurements are made.
- Display Area:** Displays current value, as well as Min and Max data, Min and Max Reset, and Tare. Data is "LIVE" only after clicking "Measure Start" button.
- Diagram Area:** Visualization of data. Diagram auto scales to fit data range.

The interface includes a menu bar (File, Operating Mode, View, Language, Help), a navigation tree on the left, a central control panel with buttons like 'Measure Start', 'Measure Stop', and 'Control', and a main display area showing a live force reading of 0.317 lbf and a graph of force over time.

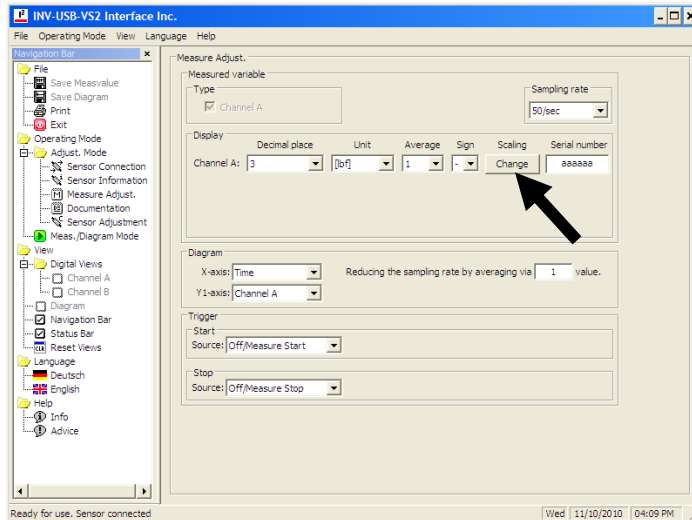
## SOFTWARE CONFIGURATION

If the USB Module and Transducer were purchased as a set, the software will automatically recognize the sensor and display in engineering units such as lbf, N, NM or lb-in. Otherwise, the display will read in units of sensor output, such as mV/V or V.

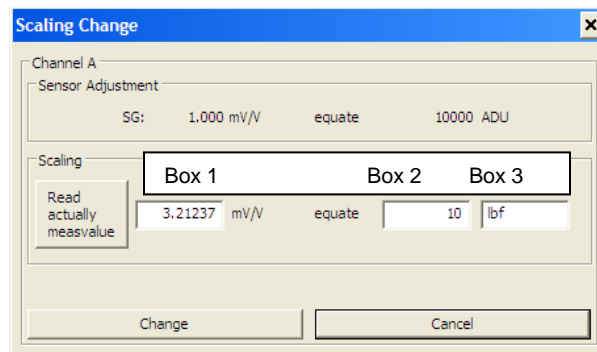
To change the units of measure, click on Measure Adjust folder in the Adjust Mode folder



First click on the Change box under Scaling.



A Scaling Change dialog box will appear containing 3 input boxes.



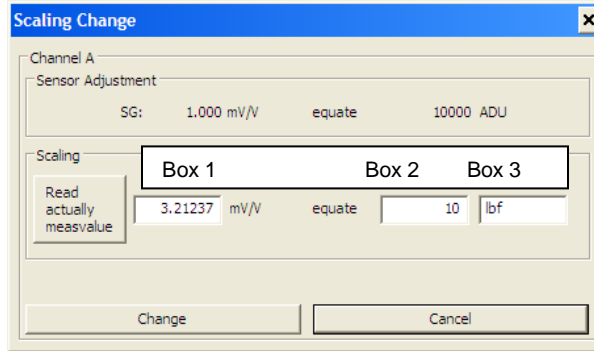
## Scaling Using Values from the Sensor’s Calibration Certificate

Now enter the Sensor Output in the first box, the Sensor Capacity in the second box, and the Unit of Measure in the 3rd box. These items can be found on your sensor calibration certificate. If the calibration certificate is not available, see the next section, Scaling Using a Known Load. For example, if you have a 10 lbf capacity load cell with 3.21237 mV/V output you would enter the following values:

1. 3.21237
2. 10
3. lbf

In this example you could also configure the software to display in N by entering

1. 3.21237
2. 44.4822
3. N

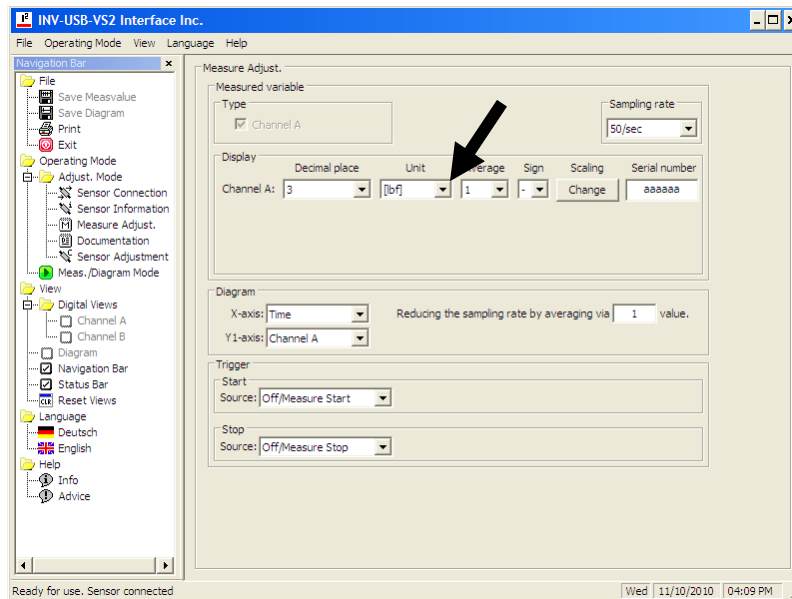


After entering the values, click Change to save. The scaling is stored in non-volatile memory on the USB module.

## Scaling Using a Known Load

If the sensor calibration certificate is unavailable, you can use an applied load to scale the software. **CAUTION:** Do not use the “Read actually measvalue” box. Instead, follow the procedure below.

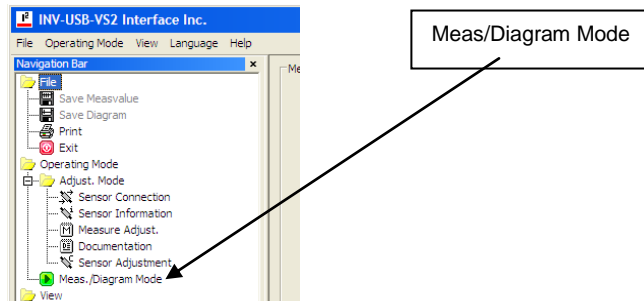
1. Set the software to display in units of mV/V. This can be done by clicking in the Units drop-down menu and selecting mV/V.



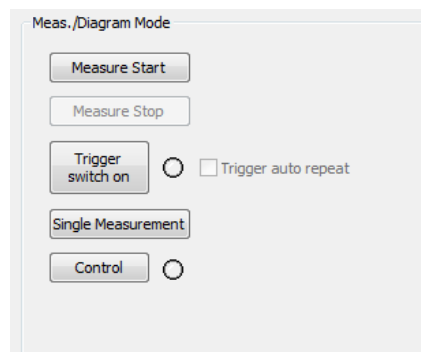
2. Start with the unloaded transducer. Some tare weight is ok, but do not apply the known load.
3. In measuring mode
  - a. click start measure
  - b. click tare until the display reads 0 mV/V
  - c. apply known load
  - d. record the displayed mV/V value
  - e. remove known load and make sure the display returns to 0 mV/V. If not, repeat steps a thru e.
4. You will now have a recorded mV/V value equal to your known load. Now go to the section above titled Scaling Using Values from the Sensor's Calibration Certificate.
  - a. Enter your recorded mV/V value in Box 1
  - b. Enter the value of the applied load in Box 2
  - c. Enter the unit of measure in Box 3.

## MEASURING MODE

To start a measuring cycle, you must be in Measuring/Diagram Mode. To enter Measuring/Diagram mode, click the green arrow.

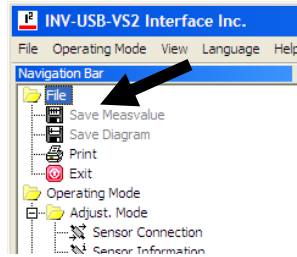


Clicking on Measure Start begins a measurement.





After the measurement is complete, click Measure Stop. You can then save the data to a .csv file by selecting Save Measvalue in the File folder. The Diagram can also be saved as a .jpg file by clicking Save Diagram.



The software can also be configured to save the measured values and diagrams automatically. For further detail, please refer to the full INF-USB2 SI-USB Operation Manual installed in your start menu folder during Setup. The start menu folder is labeled INF-USB2.