

# INTECH XU USB PROGRAMMING SOFTWARE

## Software Installation

To install the XU programming software, double Click XUInstall.msi

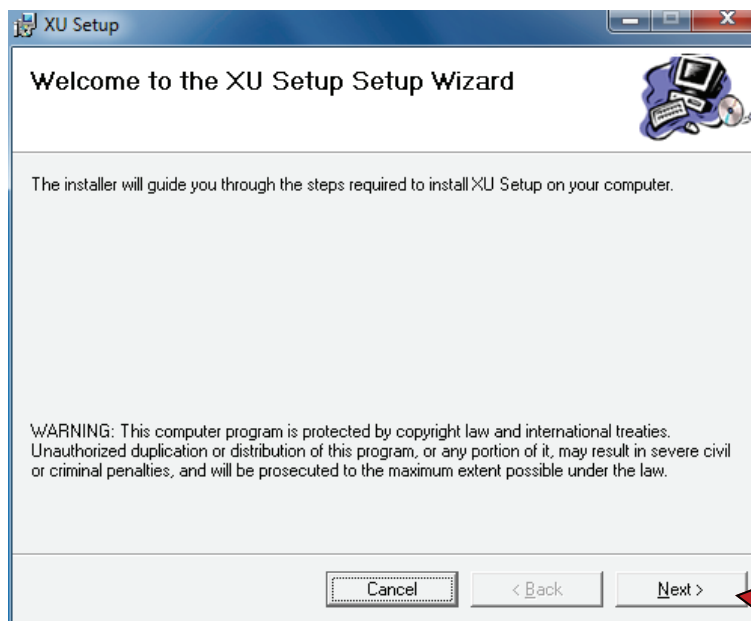
Notes: 1. Microsoft .NET 2.0 must be installed first.  
2. Check the cable between the XU Transmitter and the USB device is pushed all the way into the transmitter and the XU-USB device.

Install software before attaching XU-USB programming cable, the driver is included in the setup software and will auto install when the XU-USB is plugged in for the first time.

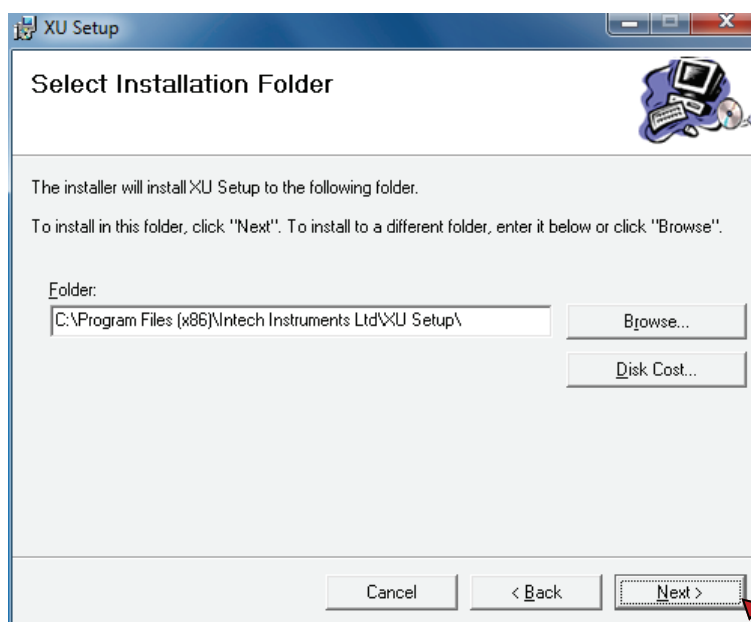
## Installing on Windows 7 / Vista:

Please install to a user with Administrator Rights.

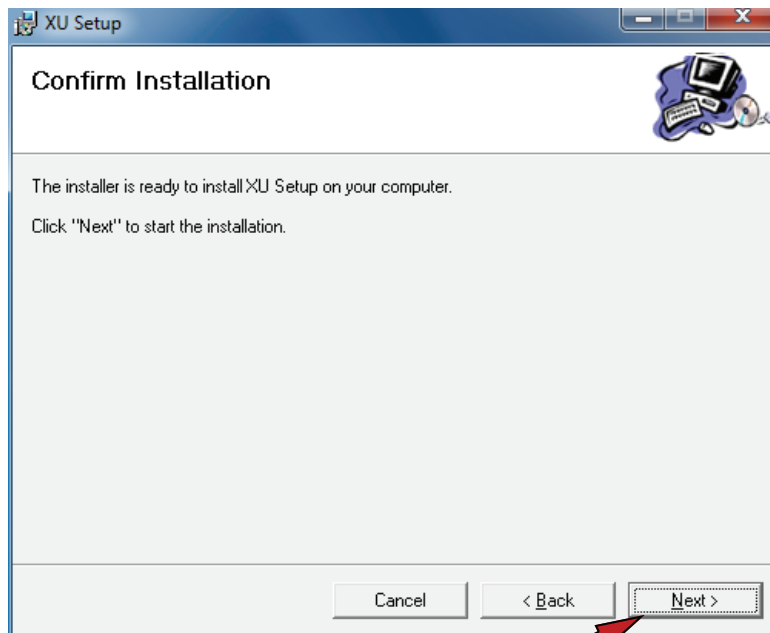
## Start Screen



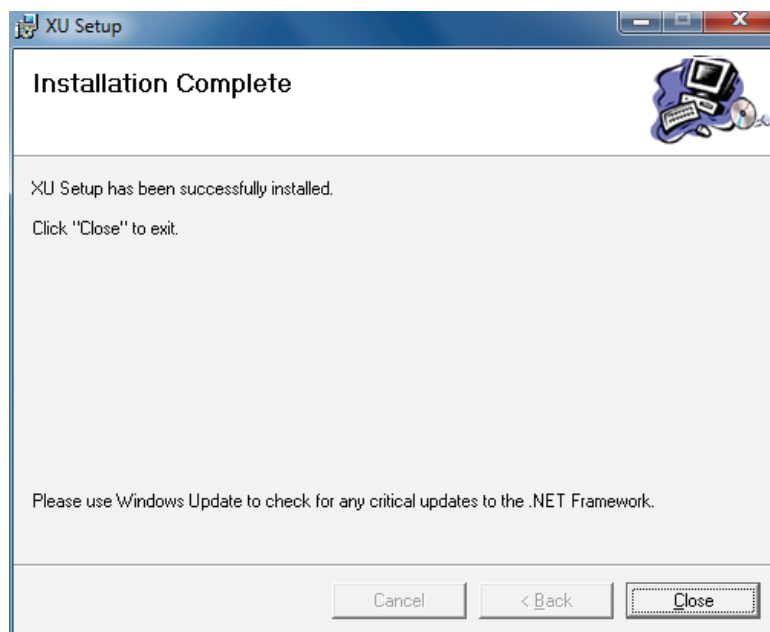
Click Next



Select Install folder,  
click Next




All options have been set, click Next to begin installation.



Installation completed.

*Note:* some time may be required for windows to install the XU-USB drivers.

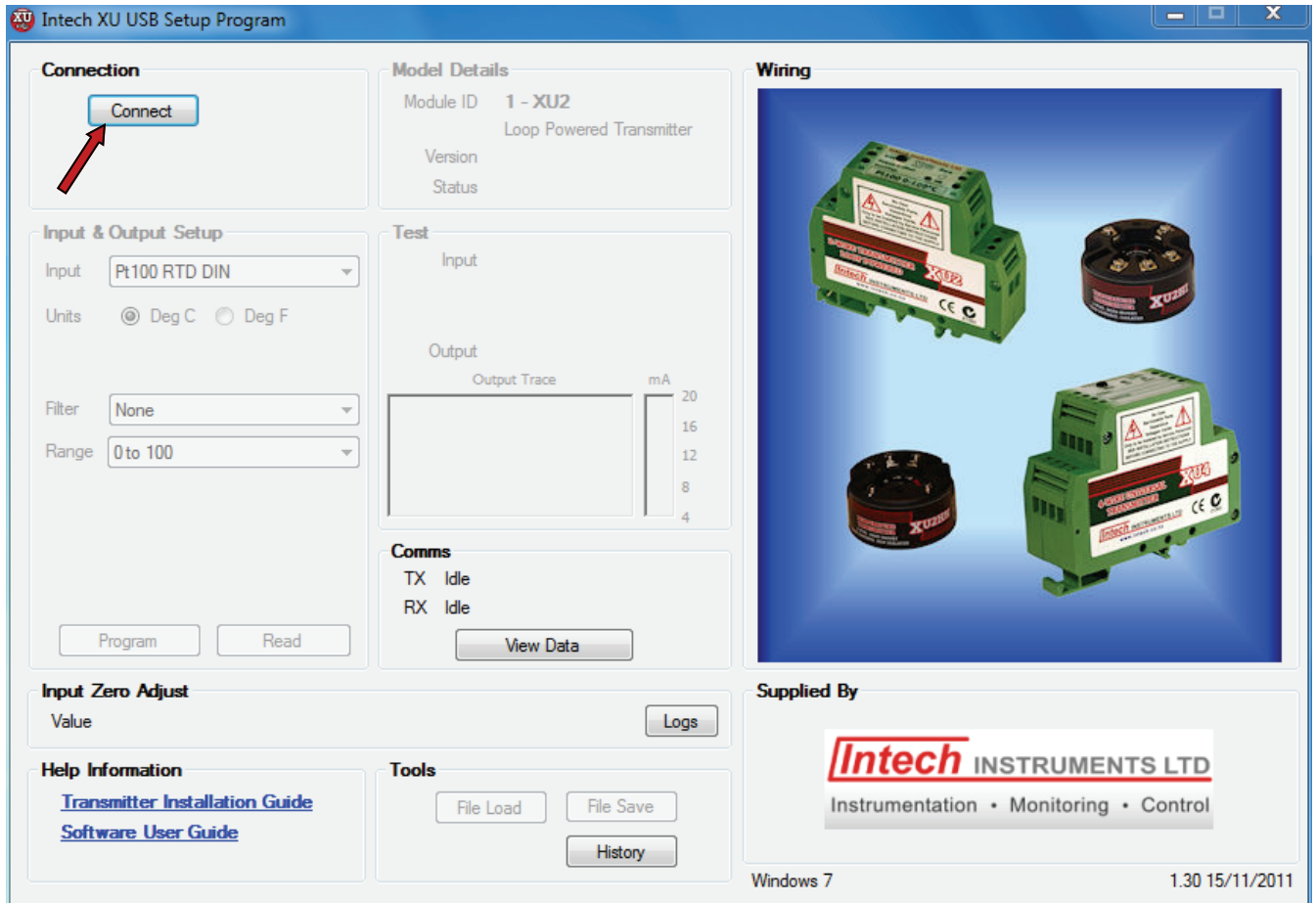
Double click the XU Setup icon  on your desktop to begin using the software.

**VERY IMPORTANT!** Before you plug anything into your PC USB port, ensure that all cables and adaptors are securely connected to both the USB programmer and the transmitter. Always use the windows 'Safely remove hardware' function before unplugging from your PC. Failure to follow these instructions may result in damage to your PC!

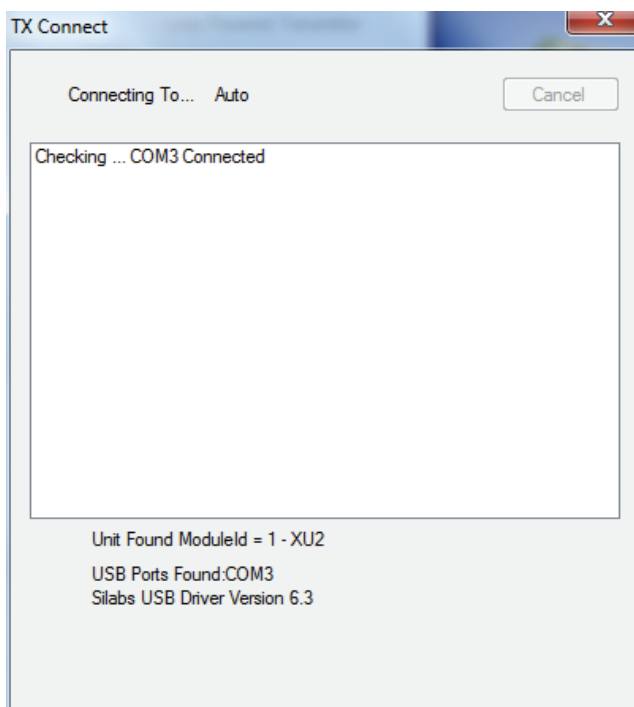
## XU Setup Software

First, attach XU-USB programming cable and wait for windows to auto install the USB driver. Double click the XU Setup icon.

Note: To setup the Transmitter, only the USB connection is required (i.e. power via 4~20mA output loop is not required).



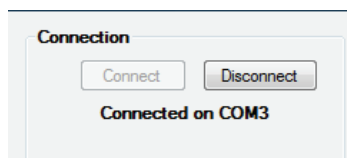
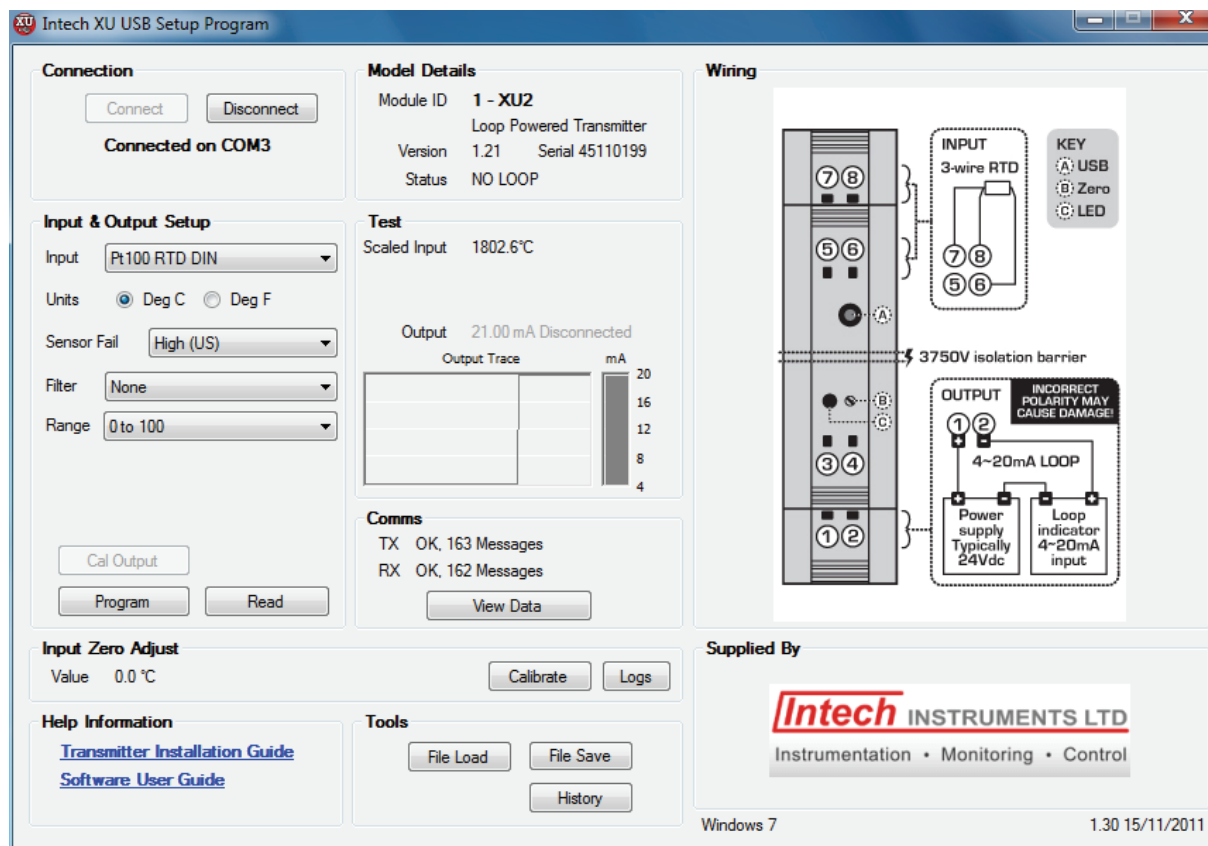
Connect the XU transmitter to the USB plug and click Connect. Wait for the software to establish a connection.



The settings will then be read from the transmitter and displayed.

## Connection Panel

Depending of the transmitter connected, you can get different connection panels, this example shows the **XU2**:



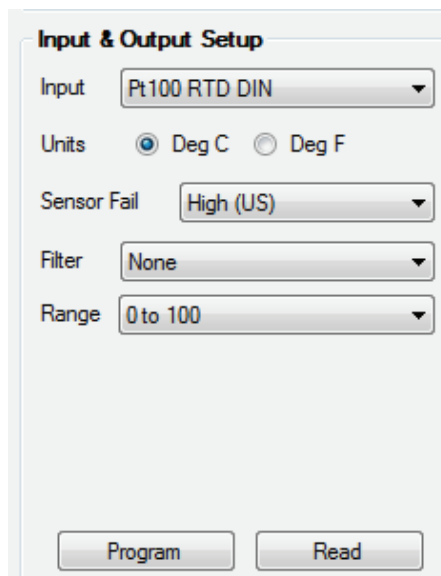
Click Connect to connect to a Transmitter, or disconnect to stop communications.

Click Disconnect to stop the communications to the transmitter.

If you disconnect the transmitter from the XU-USB, the connection will timeout and close automatically. If you connect another transmitter before the timeout period expires the settings will be read out of the new transmitter and communications will start again.

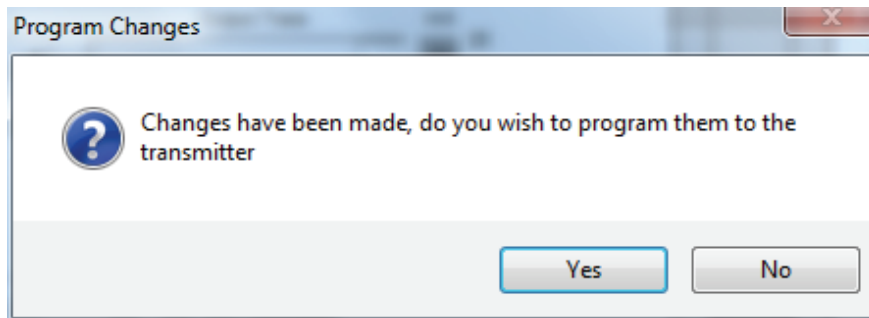
## Input & Output Setup

For input type and range selection.



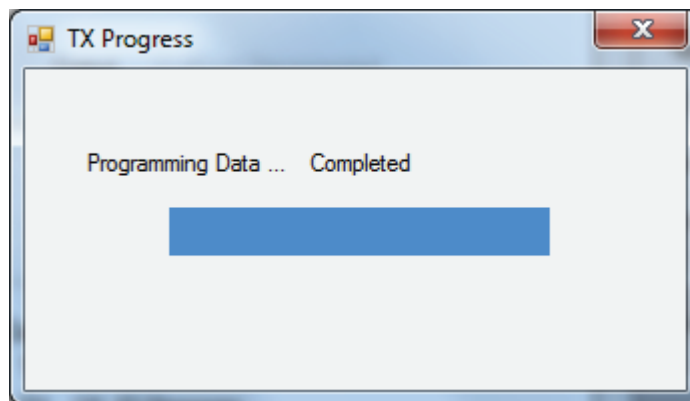
Select the options required and click Program to write changes to the transmitter.  
The Program button will change to Bold text if changes need to be written to the controller.

If you close the software or click the Disconnect button with unwritten changes, the following will be displayed:



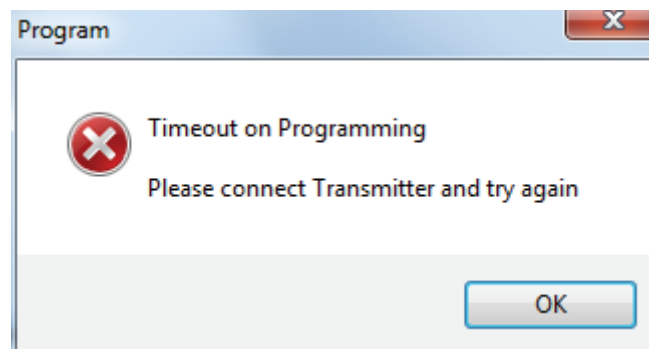
Click Yes to program changes to the TX. The software will program the changes and then close.

### ***Programming status***



When the programming is complete, the Test and Wiring panels will be updated to reflect the new changes.

**WARNING!** Do not disconnect the transmitter while programming is taking place.  
If you do so, the transmitter will be left in an unknown state and may not operate properly. The following display appears to show comms errors during programming:



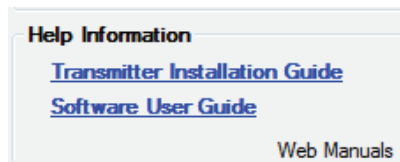
The software closes the connection, connect the transmitter to the computer again then click Connect and do the programming operation again.

### **Output:**

Adjusting the Zero pot on the transmitter will affect factory output calibration.

Adjusting the Zero pot does NOT affect Test Panel values - Input and Output values and output trace.

## Help Information



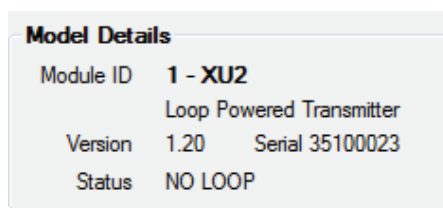
If the computer is connected to the internet, the Help links will look for the help manuals from the web locations giving you the most up to date information. If an internet connection cannot be found, the latest manuals production at time of software update will be shown. Once a link is clicked "Web Manuals" or "Local Manuals" will be shown to indicate the source of the manual.

Click **Transmitter Installation Guide** to view the installation guide for the attached transmitter. If no transmitter is attached a page will display in your web browser with links to each XU transmitter Installation Guide.

Click **Software User Guide** to view this manual.

These files are in Adobe® PDF format.

## Model Details

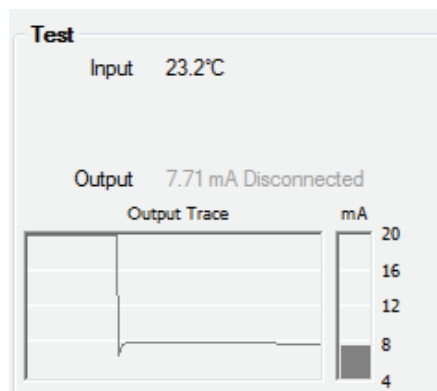


Shows a panel giving transmitter name, software version and status.

### Example Status Values

OK	Input and Output OK
NO LOOP	No 4~20mA output connected
SENS	Input sensor High or Low
INIT, BUSY	Internal Error Codes, please advise.
FLASH ERR	

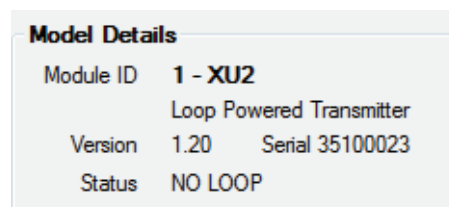
## Test



Shows a panel giving current input and output value, and a short duration trend graph of the output. This panel will show a live input reading when the transmitter is only powered by the USB connection.

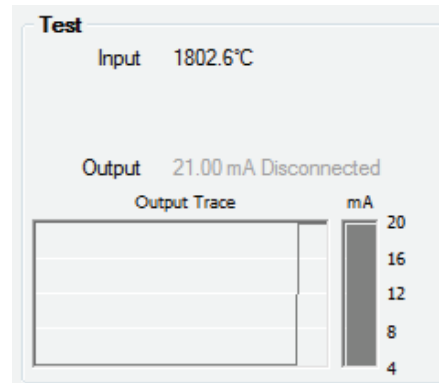
## Model Details indicating No 4~20mA output connected

Status shows "NO LOOP".

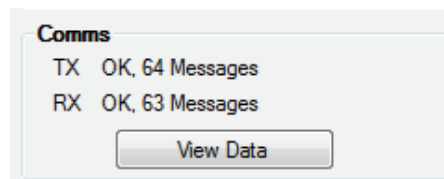


### Test Panel indicating No 4~20mA output connected

Output Value shows in gray text, with "Disconnected" text added.



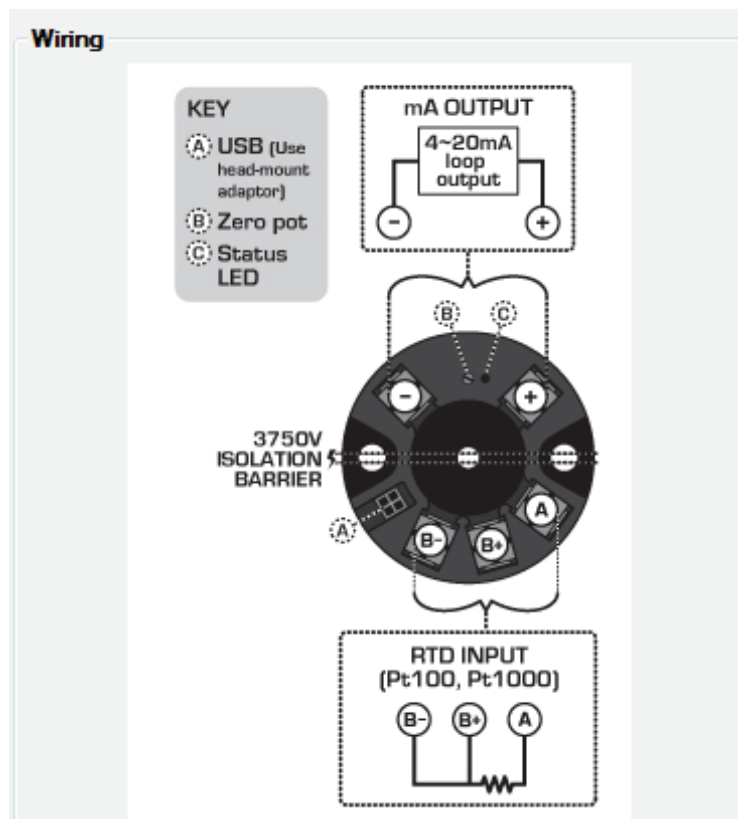
### Comms



Shows TX and RX message counts, indicating good communications to the unit.

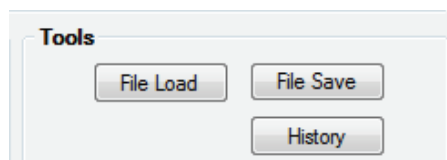
### Wiring

Example showing **XU2HI**:



This panel shows the connections to the Transmitter required for the input type selected.

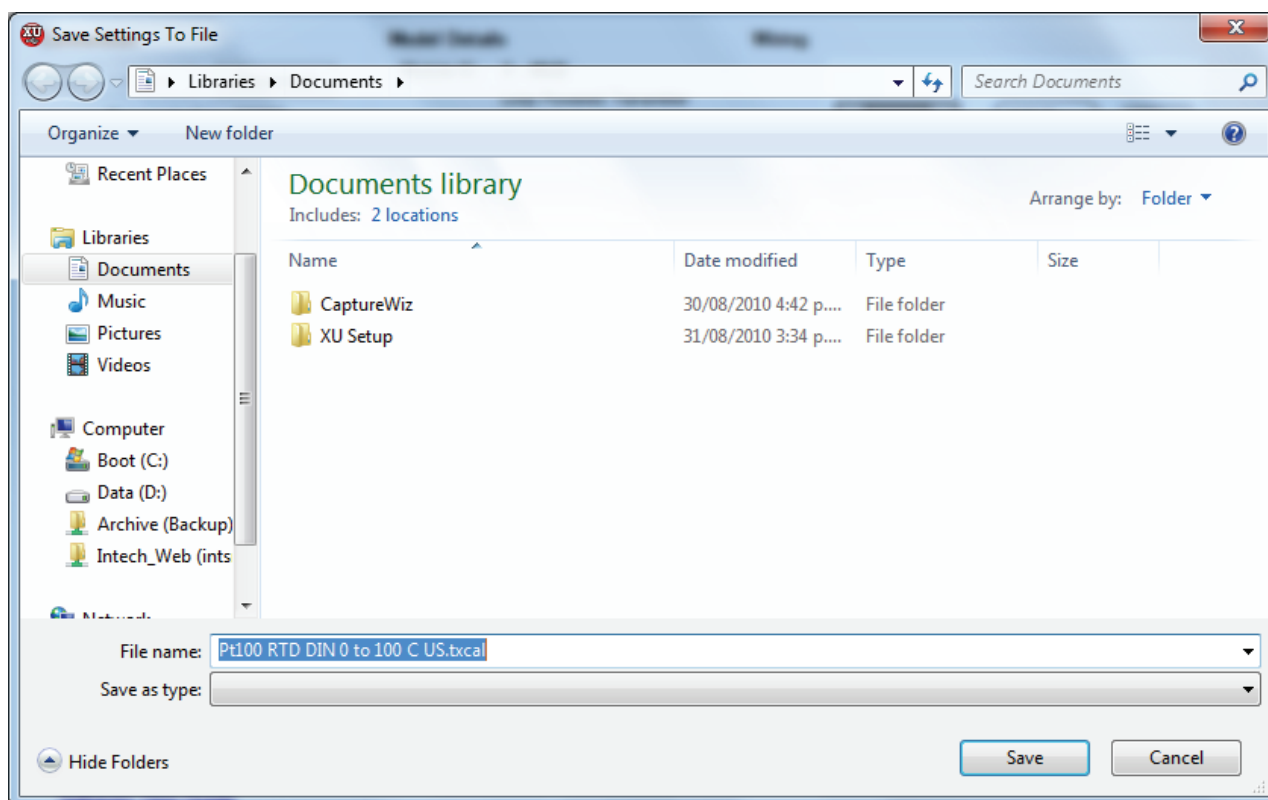
## Tools



Click File Load to load a txcal file into the TX.

Click File Save to save current settings to a txcal file.

Click History button to see a text file history of all transmitters programmed so far. This can be used to review the settings of transmitters programmed on this computer (File name txhistory.txt)



When saving, the file name will be auto named based on the current range settings from the example above

Pt100 RTD DIN	Input Type
0	Zero Value
100	Span Value
C	Centigrade (or F Fahrenheit)
US	Upscale Sensor Break.

*Note:* Once a txcal file has been saved, this can be used to auto program transmitters to the same settings as follows:

Close XU Setup program.

Attach new XU Transmitter to the computer.

Double click on the txcal file. The XU Setup program will auto start, connect and then program the XU Transmitter and then close again.

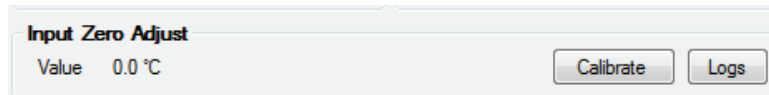
To repeat program several transmitters with the same ranges:

1. Connect to the first transmitter, make the range selections and click Program.
2. Click File Save and save the file. Close the XU setup program.
3. Attach the new transmitter to the computer, locate the txcal file and double click on it.
4. Repeat step 3 for each transmitter required.



## Input Zero Adjust

The Input Zero Adjust allows you to apply an offset calibration value to the input.

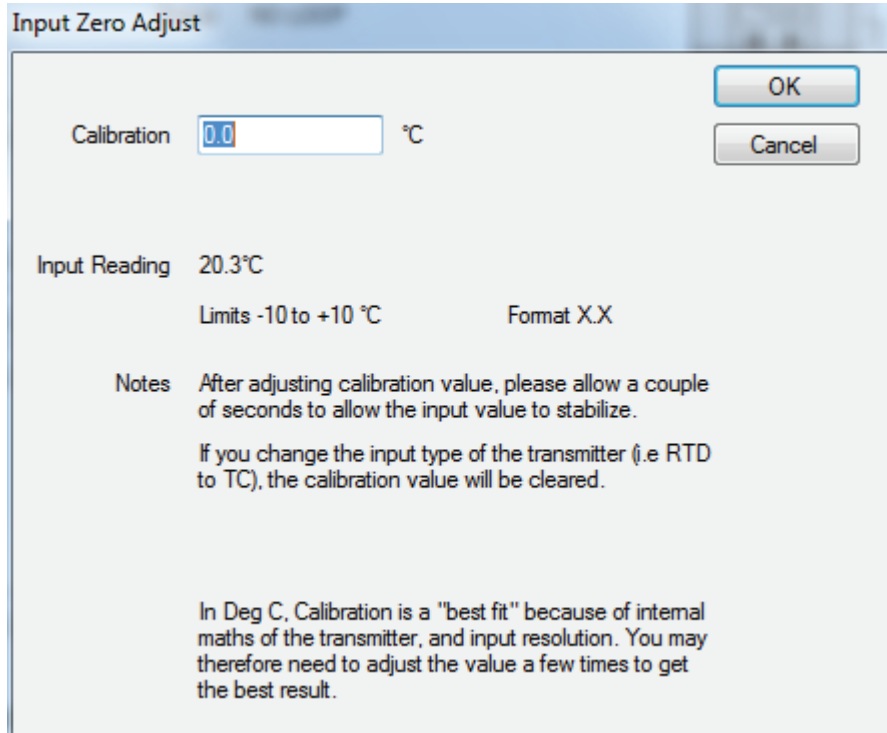


Input Zero Adjust

Value 0.0 °C

Calibrate Logs

Click the Calibrate button to begin calibration.



Input Zero Adjust

Calibration 0.0 °C

OK Cancel

Input Reading 20.3°C

Limits -10 to +10 °C Format X.X

Notes After adjusting calibration value, please allow a couple of seconds to allow the input value to stabilize.

If you change the input type of the transmitter (i.e RTD to TC), the calibration value will be cleared.

In Deg C, Calibration is a "best fit" because of internal maths of the transmitter, and input resolution. You may therefore need to adjust the value a few times to get the best result.

To make the input reading go up, enter a positive value.

To make the input reading go down, enter a negative value.

**Input can only be Calibrated when a correct input signal is applied.**

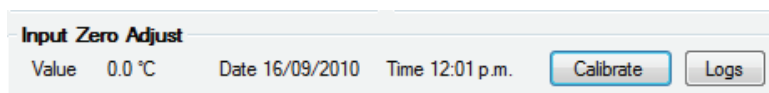
Click OK to write the change to the transmitter and wait for the display to show Waiting, and then Input Updated.

Limits are shown for the range of figures that can be entered, also the data format is shown (i.e. in Deg C a 0.1 degree offset is the smallest offset that can be entered; trying to enter 0.05 as an offset will not work).

Click Close to exit the calibration screen.

It is not necessary to program changes to the transmitter after calibration, as this panel does the whole operation for you.

At the time of calibration, a date and time stamp is recorded to the transmitter, and you can see this in the Input Zero Adjust panel.



Input Zero Adjust

Value 0.0 °C Date 16/09/2010 Time 12:01 p.m.

Calibrate Logs

The Calibration information is also stored to a text file on the computer doing the calibration using the file name "cal serialnumber.txt". Click Logs to view this file.

If no transmitter is connected, a folder will be shown with all calibration logs calibrated so far. These files are located in "My Documents\XU Setup" folder.

When you change the Input Type of the transmitter (i.e. from RTD to TC etc) the calibration value is cleared as the transmitter uses the same offset for all ranges in the transmitter. Changing the Range Scaling does not clear the calibration information.

\*This software requires transmitter software 1.20 or later (as shown in the Model Details Panel)

Model Details		
Module ID	1 - XU2	
	Loop Powered Transmitter	
Version	1.20	Serial 35100023
Status	NO LOOP	

If the transmitter does not have the correct software installed, the following will be shown:

Model Details		
Module ID	3 - XU2HI	
	In Head Transmitter Iso	
Version	1.13	Serial 24100061
Status	NO LOOP	

Input Zero Adjust	
Calibration Not Available in this transmitter version	

If you desire this feature, you must obtain a replacement transmitter, no software upgrade is available for the transmitters. At the time of release for this feature, the XU Setup software is changed to 1.20 and the transmitters as they have new software added set to the same version number.

**Product Liability.** This information describes our products. It does not constitute guaranteed properties and is not intended to affirm the suitability of a product for a particular application. Due to ongoing research and development, designs, specifications, and documentation are subject to change without notification. Regrettably, omissions and exceptions cannot be completely ruled out. No liability will be accepted for errors, omissions or amendments to this specification. Technical data are always specified by their average values and are based on Standard Calibration Units at 25C, unless otherwise specified. Each product is subject to the 'Conditions of Sale'.

**Warning:** These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.



