Intech®
Instruments

Intech XU Programming Software

Installation Guide.

Software Download

Download the latest version of XU Programming Software from Intech Instruments website:
www.intech.co.nz/downloads/software-installation/xu-programming-software

XU Programming Software Supports (Ver 1.50):

- XU2.
- XU4.
- XU2HN.
- XU2HI.
- Z-2400-A2I.
- Z-2400-Sleeper.

Installation Notes:

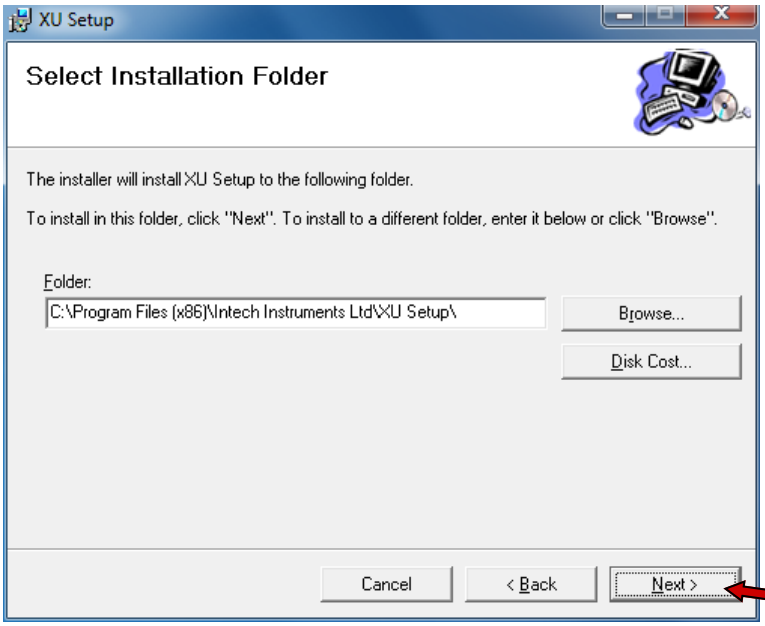
- Install software before attaching XU-USB programming cable, the driver is included in the setup software and will auto install when the XU-USB is plugged in for the first time.
- The XU-USB plugs into a Standard size computer USB port.
- The XU software requires Microsoft .NET Framework 2.0 to be installed first (Microsoft .NET 3.5 SP1, which includes .NET 2.0, can be downloaded free).
  Note: Windows 10/8.1/8 require Internet access to install .NET Framework 3.5/2.0
- **Windows users:**
  - ◊ Installation requires the user to be an administrator.
  - ◊ Desktop shortcut icon will only be installed to the currently logged on user.
  - ◊ Extract all files to a folder.
  - ◊ Right click on setup.exe and click 'run as administrator'.

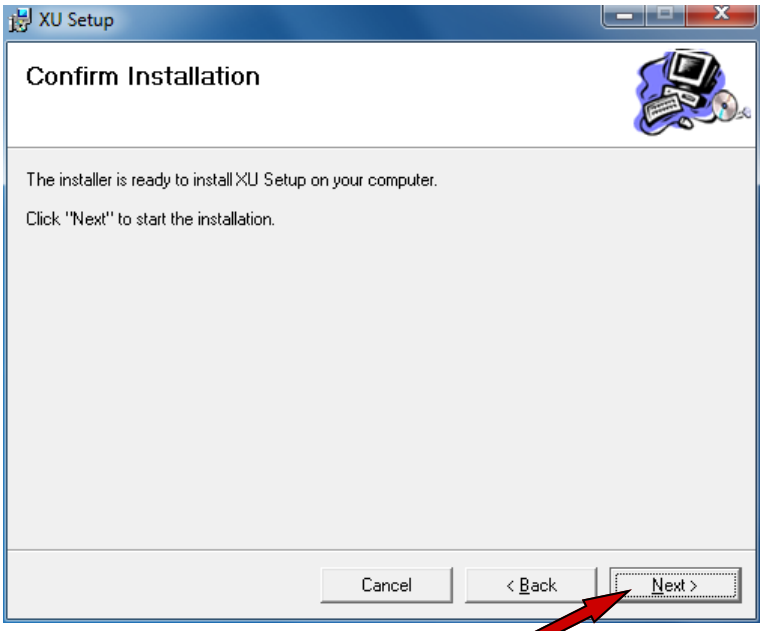
WARNING: Ensure that all programming is carried out BEFORE any wiring takes place!

Software Installation

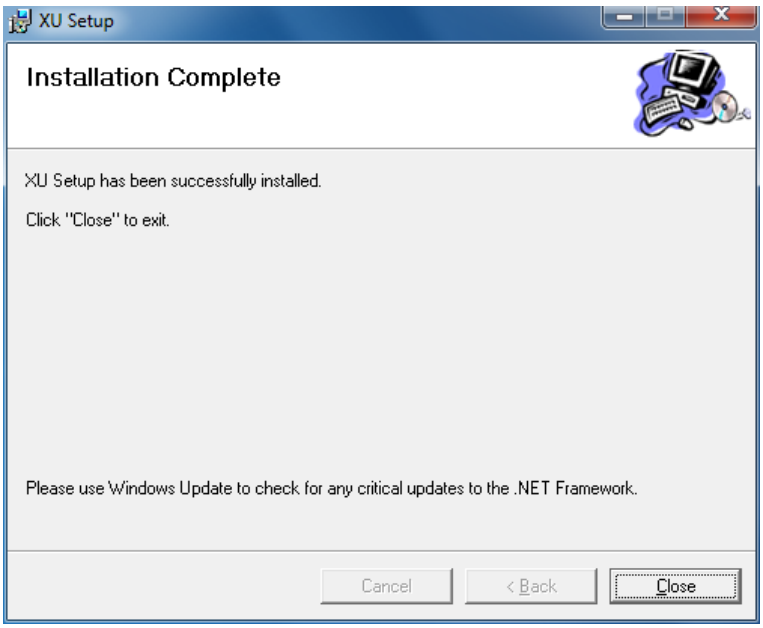
To install the XU programming software, double Click XUInstall.msi

Start Screen





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.

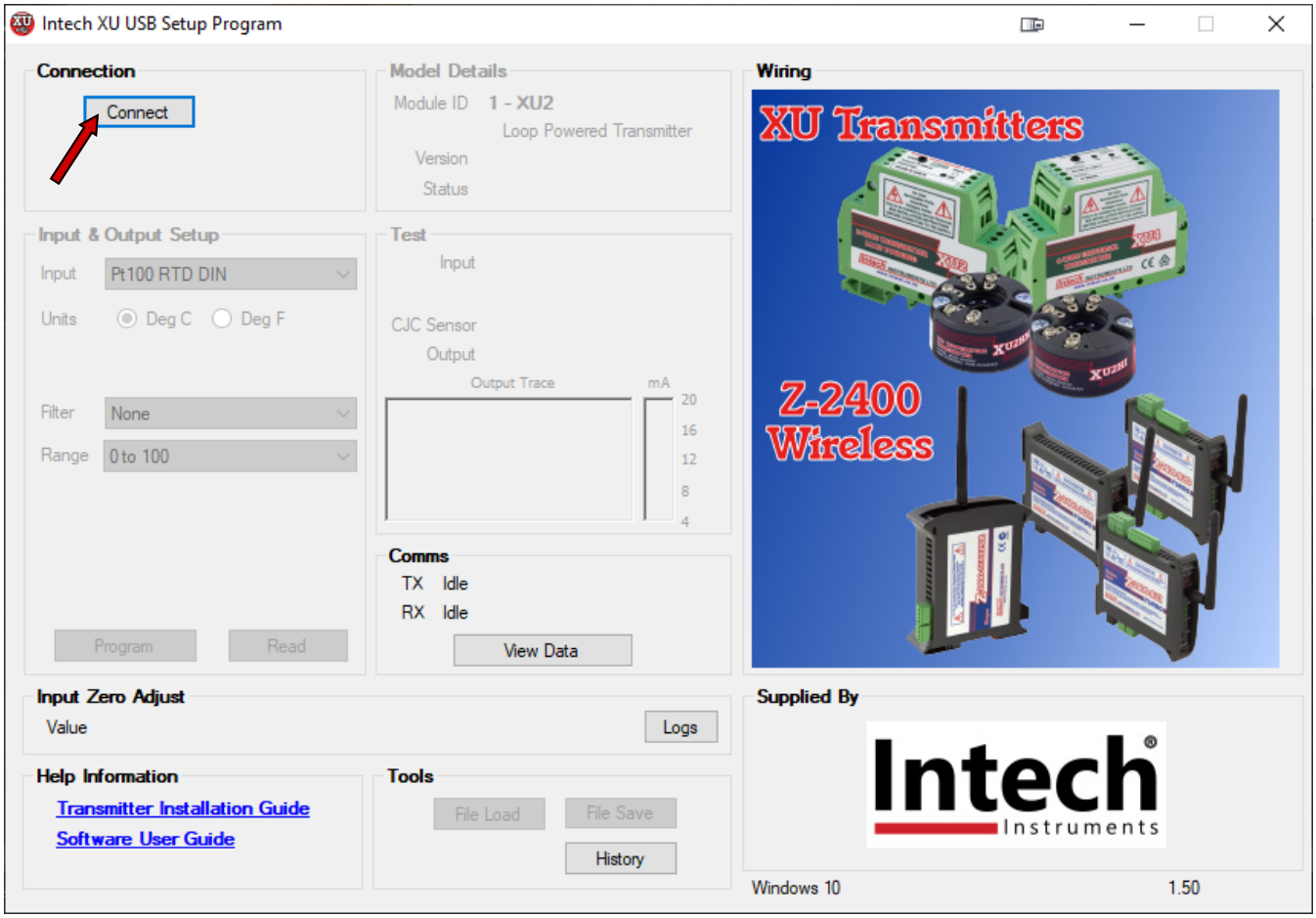
Double click the XU Setup icon on your desktop to begin using the software.

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!

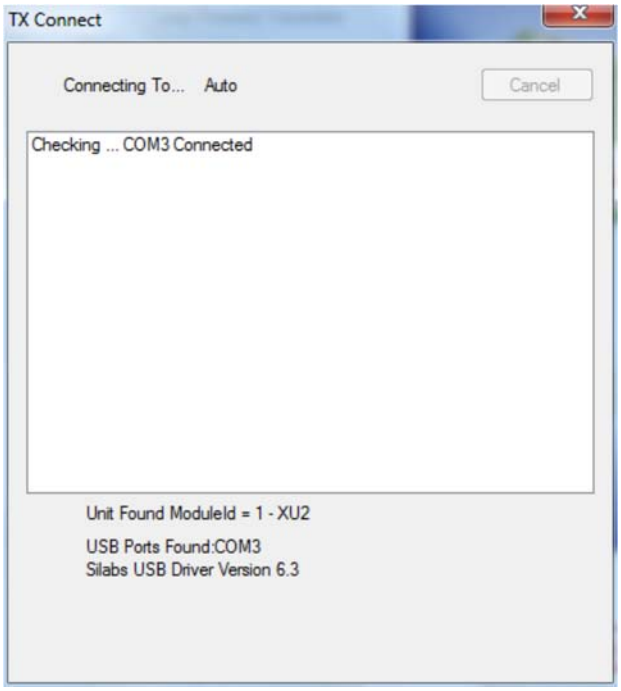
XU Setup Software

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).



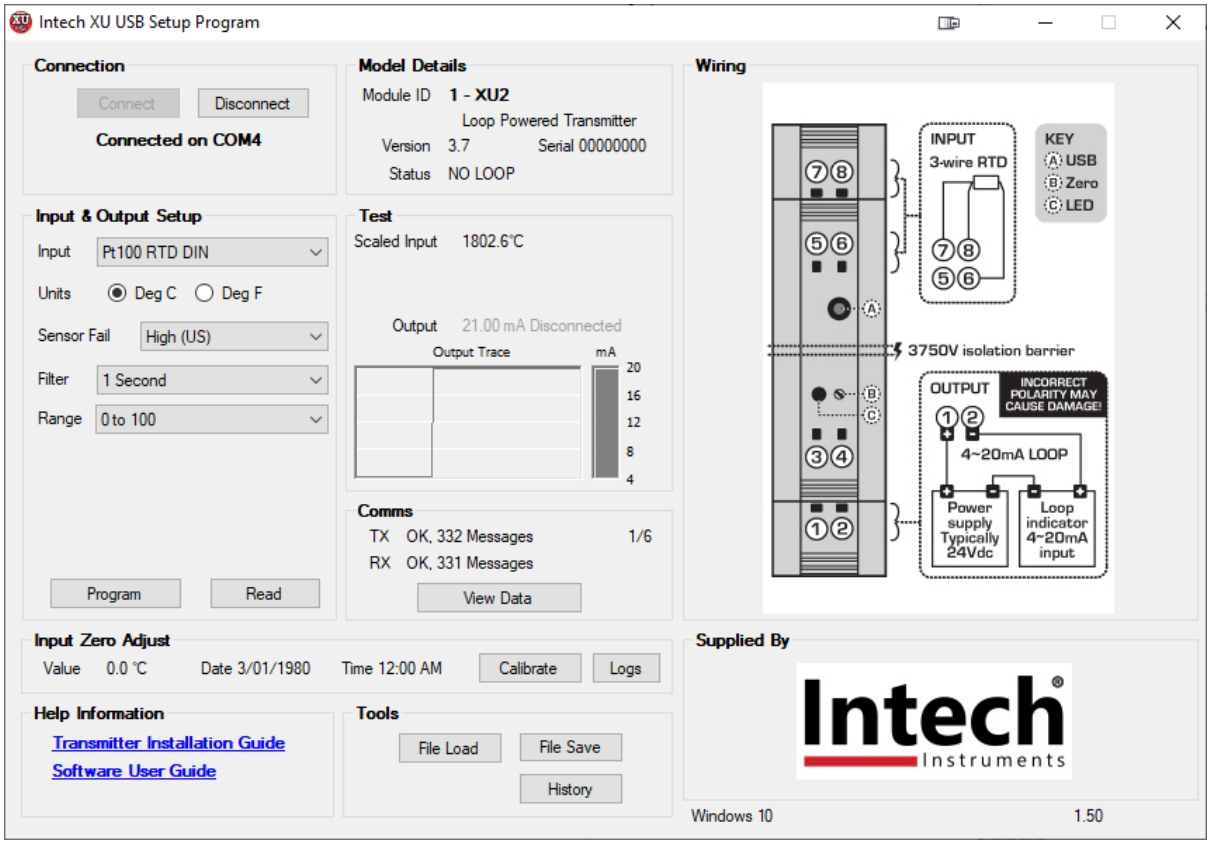
Connect the XU transmitter to the USB plug and click Connect. Wait for the software to establish a connection.

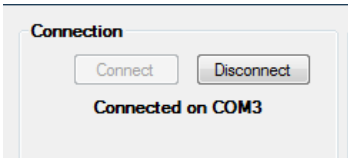


The settings will then be read from the transmitter and displayed.

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.

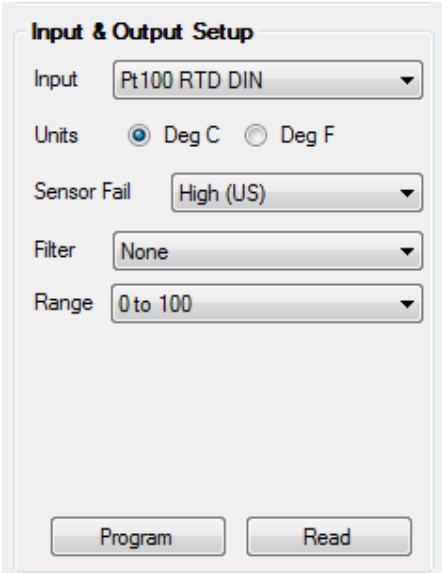
Click Disconnect to stop the communications to the transmitter.

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.

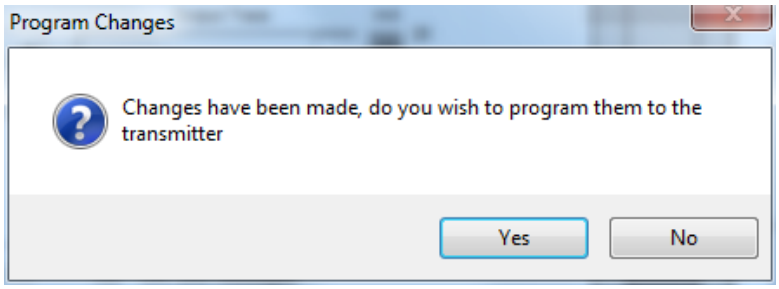
Input & Output Setup

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.

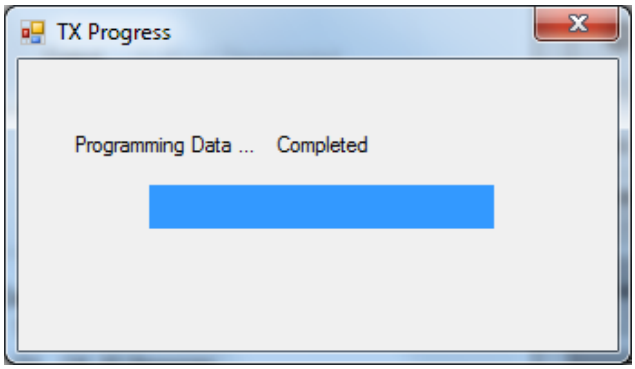


If you close the software or click the Disconnect button with unwritten changes, the following will be displayed:



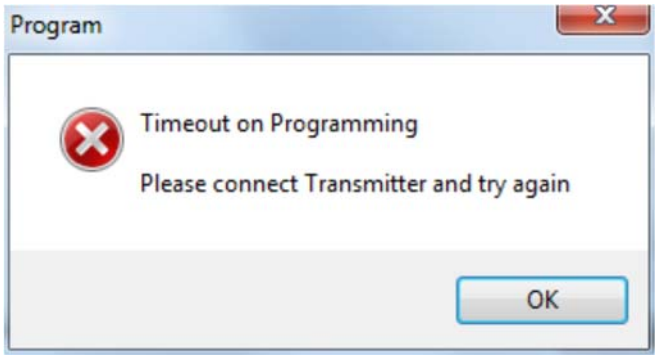
Click Yes to program changes to the TX. The software will program the changes and then close.

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:



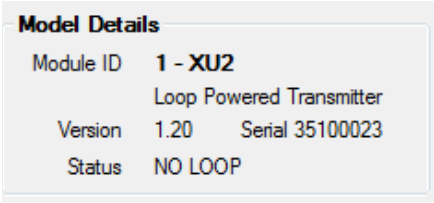
The software closes the connection, connect the transmitter to the computer again then click Connect and do the programming operation again.

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



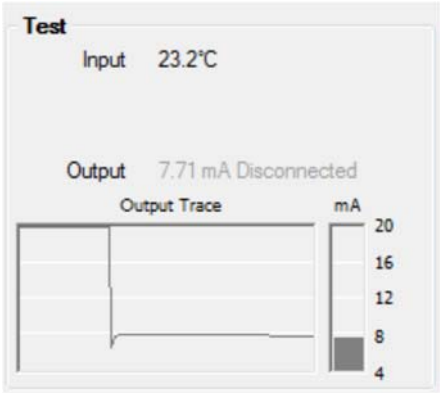
Shows a panel giving transmitter name, software version and status.

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	

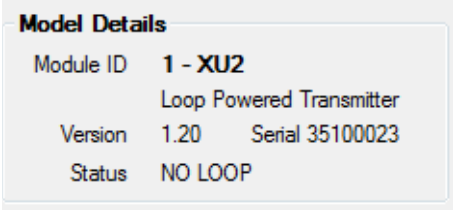
Test

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.



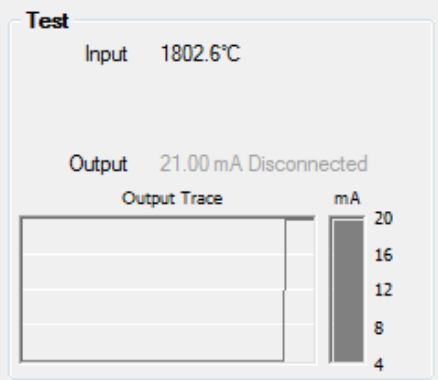
Model Details indicating No 4~20mA output connected

Status shows "NO LOOP".



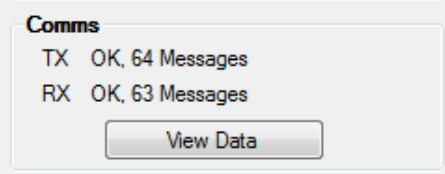
Test Panel indicating No 4~20mA output connected

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



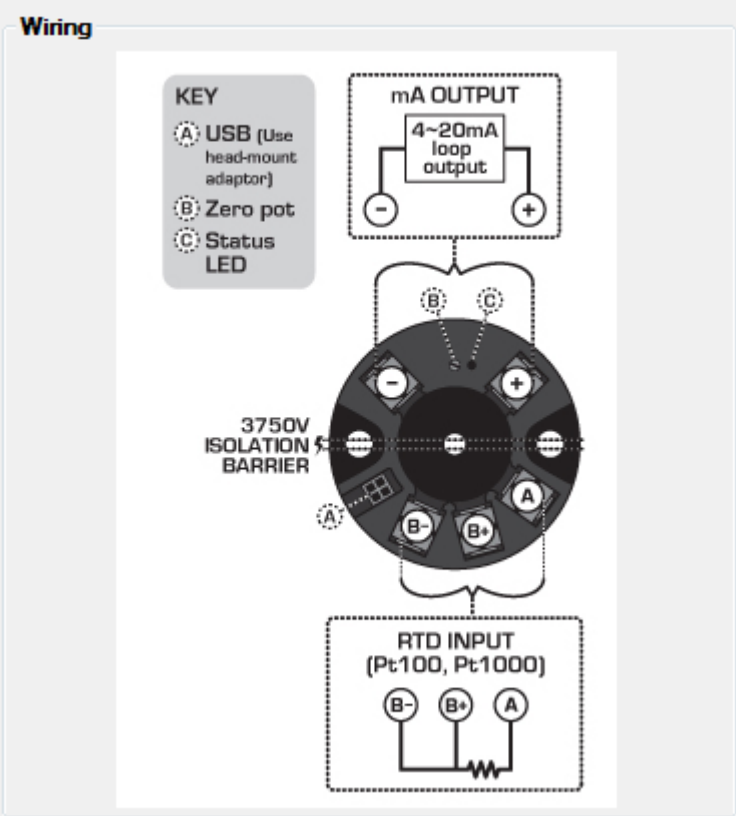
Comms

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



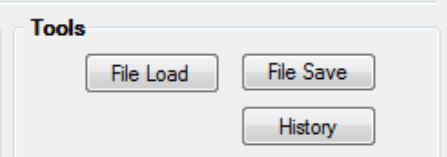
Wiring

Example showing **XU2HI**:

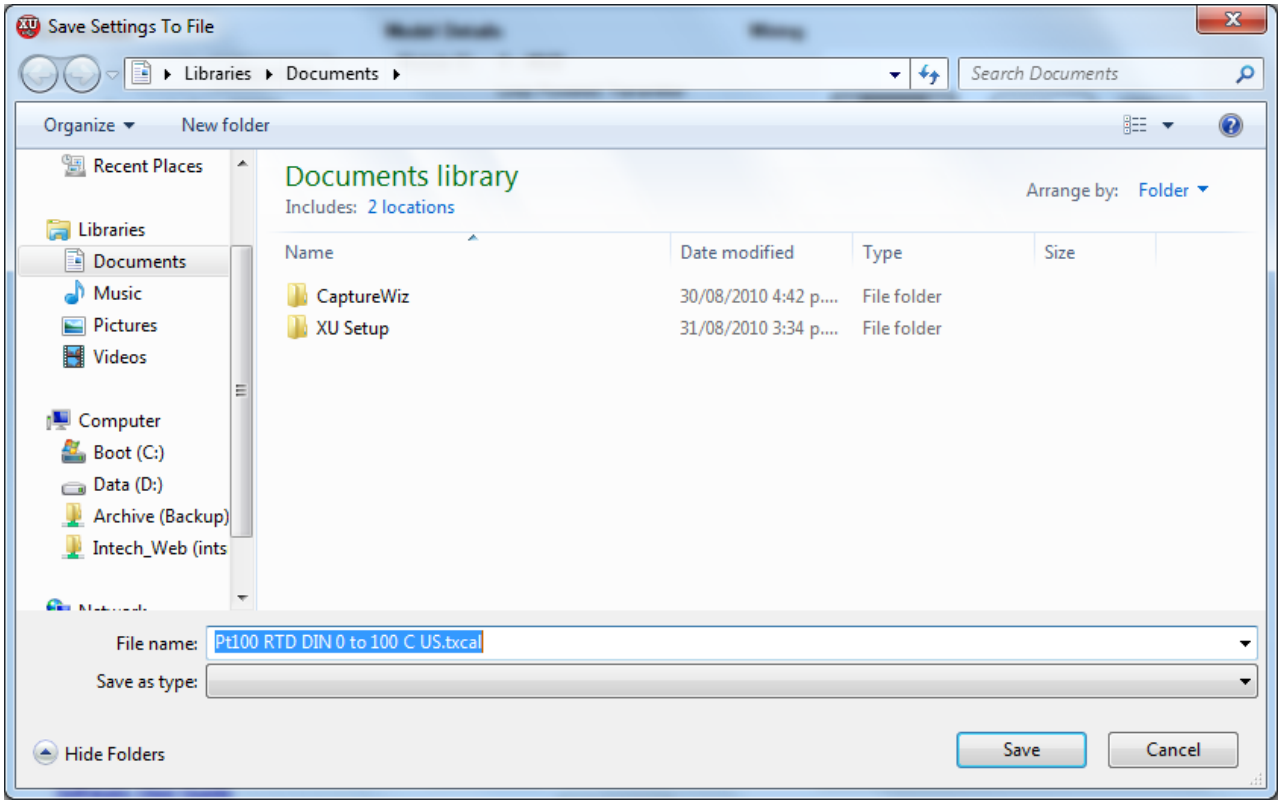


This panel shows the connections to the Transmitter required for the input type selected.

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 re-view 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

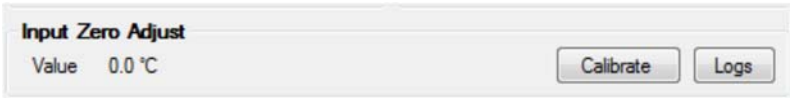
Pt100 RTD DIN	Input Type
0	Zero Value
100	Span Value
C	Centigrade (or F Fahrenheit)
US	Upscale Sensor Break.

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.

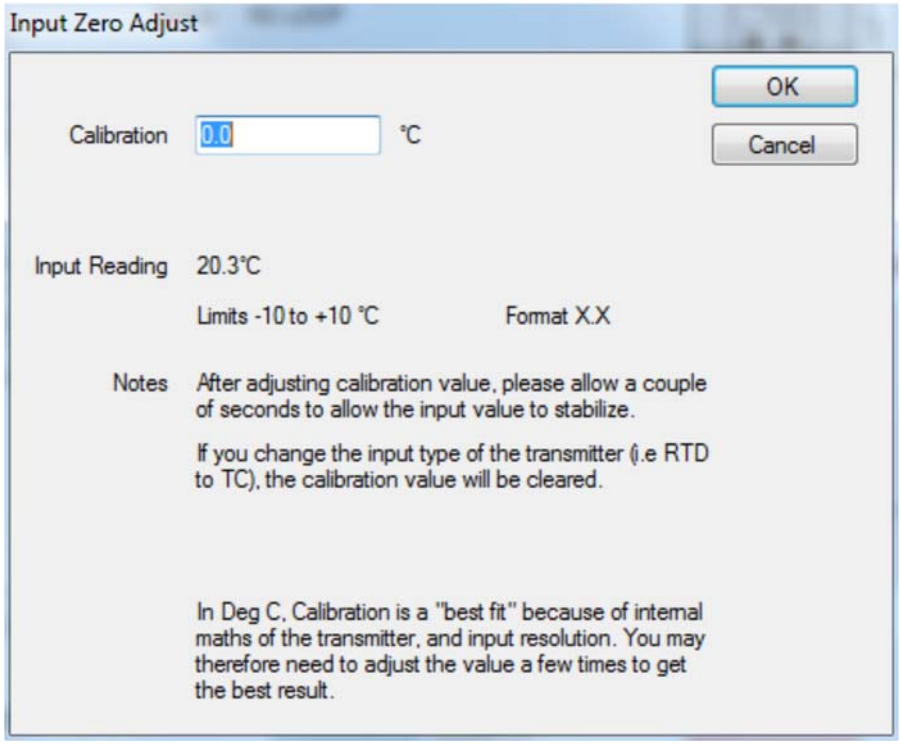
To repeat program several transmitters with the same ranges:
1. Connect to the first transmitter, make the range selections and click Program.
2. Click File Save and save the file. Close the XU setup program.
3. Attach the new transmitter to the computer, locate the txcal file an double click on it.
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.



Click the Calibrate button to begin calibration.



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.

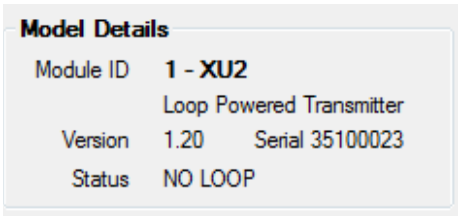
Limits are shown for the range of figures that can be entered, also the data format is shown (i.e. in Deg C a 0.1 degree offset is the smallest offset that can be entered; trying to enter 0.05 as an offset will not work).

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.

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)



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

If you desire this feature, you must obtain a replacement transmitter. It is not possible to upgrade the software for older transmitters.

Intech Instruments
www.intech.co.nz
Christchurch Ph: +64 3 343 0646
Auckland Ph: 09 827 1930
Email: sales@intech.co.nz