XT-SOFT Configuration Software

Help File

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ProSense XT-SOFT Configuration Software

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Please include the Manual Number and the Manual Issue, both shown below, when communicating with Technical Support regarding this publication.

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Publication History		
Issue	**Date**	**Description of Changes**
1st Edition	10/12	Original

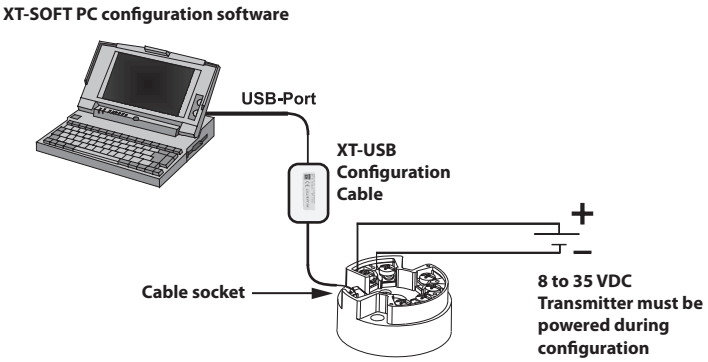
Table of Contents

1. General

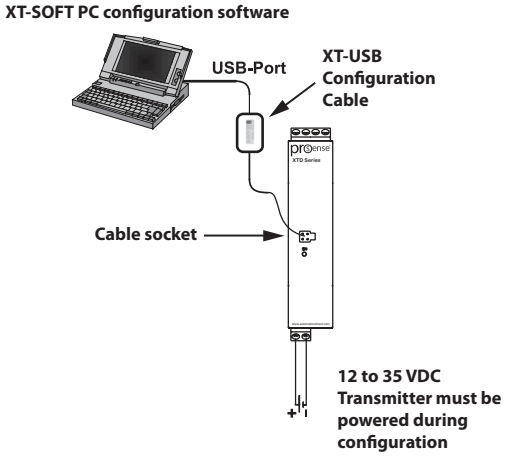
ProSense XT-SOFT PC software is a utility program that allows users to easily configure ProSense XTH-0-UNV and XTD-0-UNV temperature transmitters. Download your free copy of XT-SOFT at www.AutomationDirect.com and connect your transmitter through an XT-USB configuration cable (purchased separately).

Connection Examples

XTH-0-UNV Connection



XTD-0-UNV Connection



2. Operation

2.1 Basic Settings

After ProSense XT-SOFT has been installed and started the following start window appears:

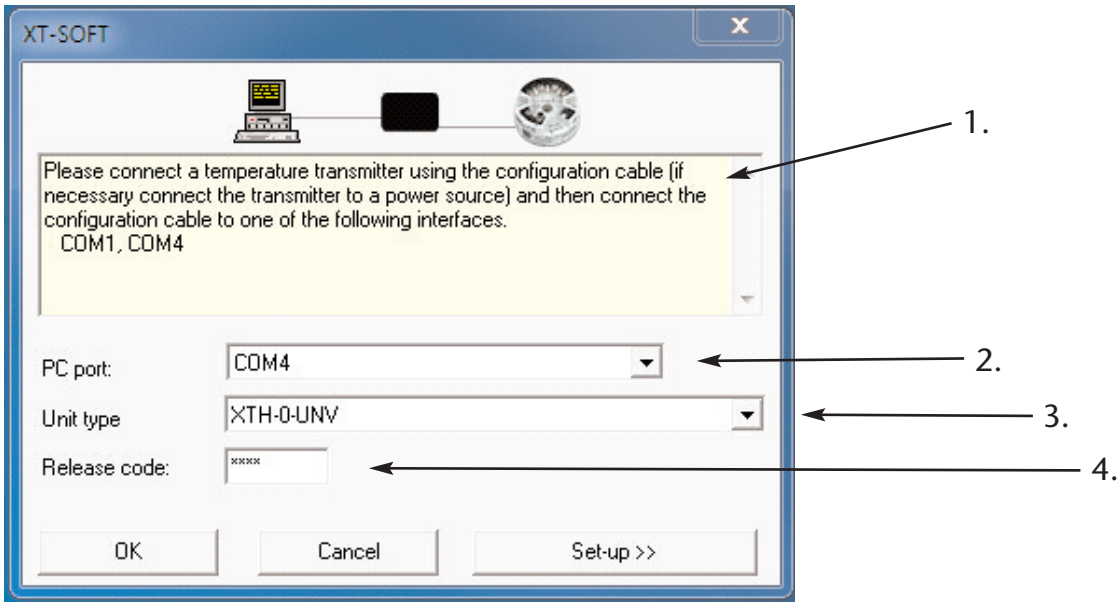


Figure 1

The first time XT-SOFT is started the operating language is requested. On all subsequent starts the last language set-up is used.

In the yellow information field (1) in the Fig. 1 the communication ports available at the time of starting the program are listed. In the PC Port pull-down box (2) select the port where the XT-USB cable is connected or select the Autodetect option to try to detect the connected port. Please note that Autodetect will take longer than manually selecting the communication port, possibly up to two minutes or more.

Next select the transmitter model from the Unit Type pull-down box (3) or select the Autodetect PC-programmable option (available only when PC Port Autodetect is selected) to try to detect the connected transmitter.

Enter the Release Code (4) for the connected transmitters if it has previously been changed from the default of 0000.

Changing the release code can prevent the user from accessing the transmitter configuration and should only be done with caution. The transmitter CAN NOT be accessed without the release code and care should be used to document all changes.

The OK button will establish connection with the temperature transmitter.

2.2 Settings

The Set-up button (3) Fig. 2 expands the main window to show additional set-up possibilities.

2.2.1 Language

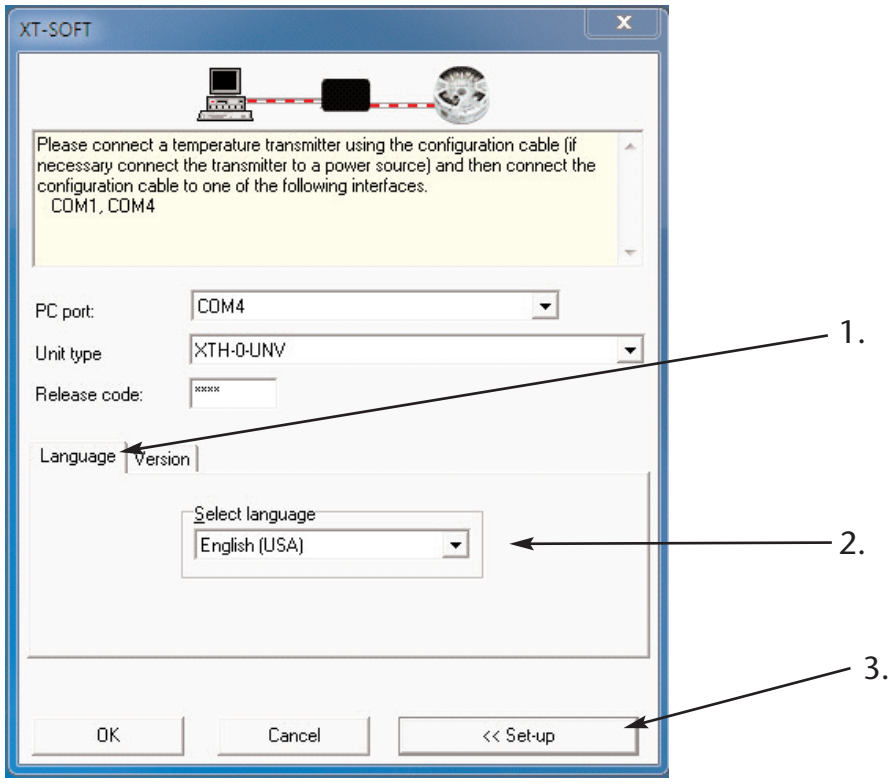


Figure 2

Under the Language tab (1) in Fig. 2 use the Select Language (2) pull-down box to select the desired language.

2.2.2 Version

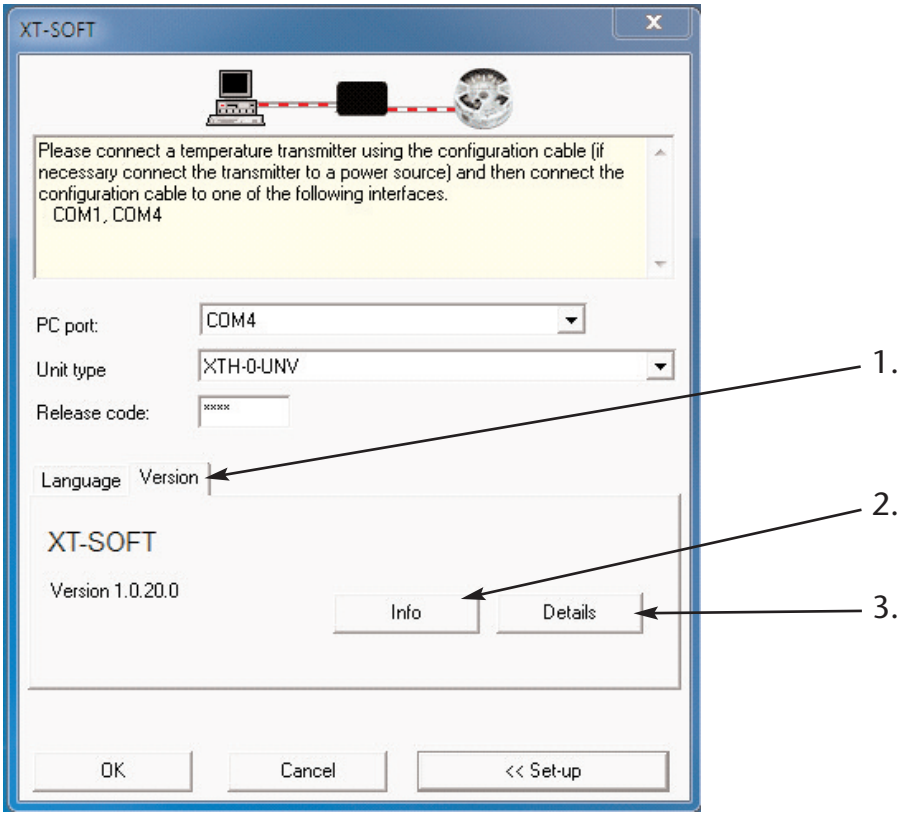


Figure 3

Under the Version tab (1) in Fig. 3 the program name and version is displayed. Use the Info button (2) to open this Help File document in .pdf format. The Details button (3) will open a new window and display information regarding XT-SOFT program components.

2.3 Configuration Window

After connection has been made with the transmitter the Configuration Window (Fig. 4) will open. The actual parameters are read from the connected transmitter and displayed.

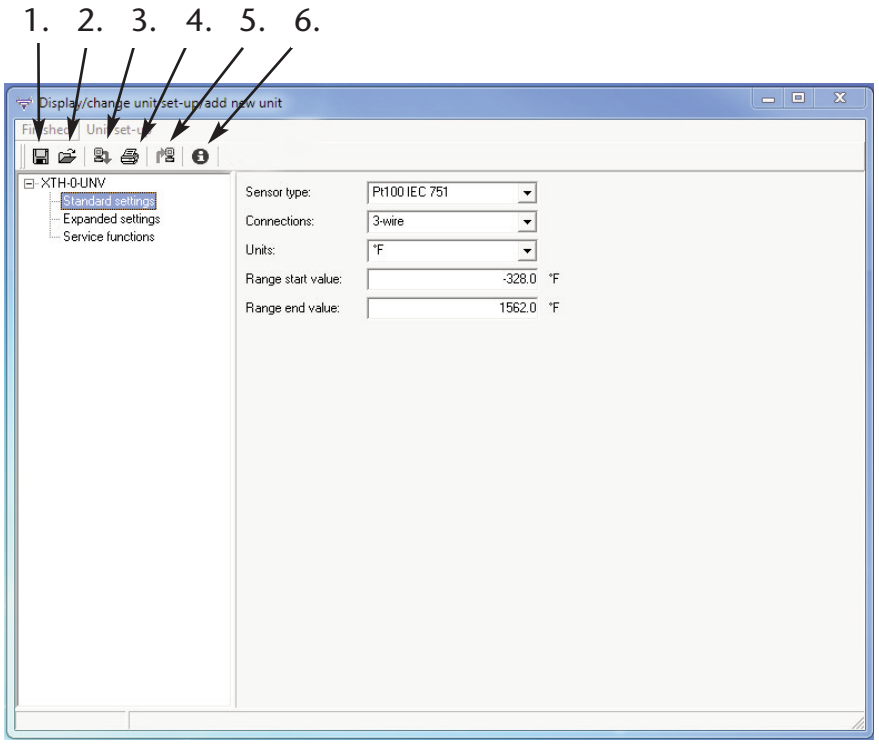


Figure 4

2.3.1 Export of unit set-up

Button (1) in Fig. 4 will open a Save As window allowing the current configuration parameters to be exported (saved) to a file.

2.3.2 Import of unit set-up

Button (2) in Fig. 4 will allow a previously exported (saved) parameter configuration file to be selected and imported into the XT-SOFT program.

2.3.3 Transmit set-up to unit

Button (3) in Fig. 4 will transmit (save) the currently displayed parameter settings to the transmitter unit.

2.3.4 Printout of unit set-up

Button (4) in Fig. 4 will open a print dialog box allowing a print out of all operating parameters currently displayed in XT-SOFT.

2.3.5 New readout of the connected transmitter

Button (5) in Fig. 4 will read the saved configuration parameters in the connected transmitter and display them in XT-SOFT.

2.3.6 Info

Button (6) in Fig. 4 will open this Help File document in .pdf format.

2.4 Configuration Parameters

The available configuration parameters are divided into three file tree selections: Standard Settings (1) in Fig. 5, Expanded Settings (2), Service Functions(3). The availability of some parameters is dependent on the selection of other parameters (for example, the Cold Junction Compensation parameter is only available when a Thermocouple input type is previously selected).

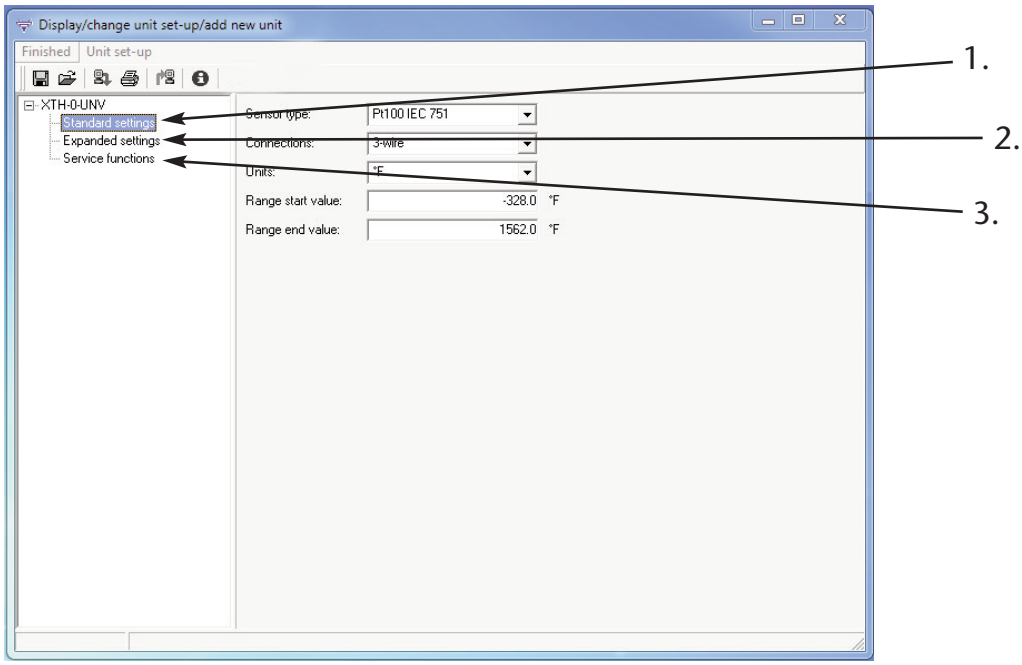


Figure 5

Standard Settings

Sensor Type:

Sensor Type	*Range Start Value*	*Range End Value*	*Min. Span*
Pt100	-328°F (-200°C)	1562°F (850°C)	18°F (10°C)
Pt500	-328°F (-200°C)	482°F (250°C)	18°F (10°C)
Pt1000	-328°F (-200°C)	482°F (250°C)	18°F (10°C)
Ni100	-76°F (-60°C)	356°F (850°C)	18°F (10°C)
Ni500	-76°F (-60°C)	302°F (150°C)	18°F (10°C)
Ni1000	-76°F (-60°C)	302°F (150°C)	18°F (10°C)
TC Type B	32°F (0°C)	3308°F (1820°C)	900°F (500°C)
TC Type C	32°F (0°C)	4208°F (2320°C)	900°F (500°C)
TC Type D	32°F (0°C)	4523°F (2495°C)	900°F (500°C)
TC Type E	-328°F (-200°C)	1679°F (915°C)	90°F (50°C)
TC Type J	-328°F (-200°C)	2192°F (1200°C)	90°F (50°C)
TC Type K	-328°F (-200°C)	2501°F (1372°C)	90°F (50°C)
TC Type L	-328°F (-200°C)	1652°F (900°C)	90°F (50°C)
TC Type N	-454°F (-270°C)	2372°F (1300°C)	90°F (50°C)
TC Type R	32°F (0°C)	3214°F (1768°C)	900°F (500°C)
TC Type S	32°F (0°C)	3214°F (1768°C)	900°F (500°C)
TC Type T	-328°F (-200°C)	752°F (400°C)	90°F (50°C)
TC Type U	-328°F (-200°C)	1112°F (600°C)	90°F (50°C)
10 to 400 Ω	10 Ω	400 Ω	10 Ω
10 to 2000 Ω	10 Ω	2000 Ω	100 Ω
-10 to 100 mV	-10 mV	100 mV	5 mV
Polynom RTD	20°F (°C)	2000°F (°C)	18°F (10°C)
Pt50 (GOST)	-328°F (-200°C)	2012°F (1100°C)	18°F (10°C)
Pt100 (GOST)	-328°F (-200°C)	1562°F (850°C)	18°F (10°C)
Cu50 (GOST)	-328°F (-200°C)	392°F (200°C)	18°F (10°C)
Cu100 (GOST)	-328°F (-200°C)	392°F (200°C)	18°F (10°C)

Standard Settings Continued

Connections: RTD wiring connection (only available when an RTD Sensor type is selected)

. . . . . .2-wire

. . . . . .3-wire

. . . . . .4-wire

Units: Temperature engineering units

. . . . . .°C

. . . . . .°F

Measurement Range Start Value: Input the low end of the desired temperature range (4mA value).

. . . . . .Limited to the range start value for the Sensor Type selected

Measurement Range End Value: Input the high end of the desired temperature range (20mA value).

. . . . . .Limited to the Range end value for the Sensor Type selected.

Coefficient X0 to X4:

. . . . . .Only available when Polynom RTD Sensor type is selected. Enter coefficients for custom linearization of an RTD sensor

Expanded Settings

Cold Junction: Selection of the internal cold junction compensation or external comparison to a temperature value. (only available when a Thermocouple Sensor type is selected).

. . . . . .Internal

. . . . . .External

External Temperature: Input of the external temperature comparison value when external cold junction is selected

. . . . . .-40 to 80°C or -40 to 176°F (depending on the range limits of the Sensor type selected)

Cable Resistance: Input of cable resistance compensation (only available when a RTD Sensor type with 2-wire connection is selected)

. . . . . .0.0 to 20.0 ohms

Fault Condition: Input the desired output current value on a sensor break or short circuit

. . . . . .Up scale ≥21.0 mA

. . . . . .Down scale ≤3.6 mA

Output: Select the action of the output current signal

. . . . . .4 to 20 mA

. . . . . .20 to 4 mA

Filter: Selection of the digital filter time constant

. . . . . .0 to 8 seconds

Offset: Input of desired zero point correction

. . . . . .-10.00 to 10.00°C (-18.00 to 18.00°F)

Measuring point identification: Custom identification name for this transmitter

. . . . . .Up to 8 characters

Service Functions

Output Simulation: Enable simulation mode to drive transmitter output current to a fixed value (parameters must be transmitted to the unit to activate the simulation mode)

. . . . . .On

. . . . . .Off

Output Current: Enter the output current fixed value for Output Simulation Mode

. . . . . .3.8 to 20.5 mA

Password: Enter a custom Release Code for this transmitter that must be entered before XT-SOFT can connect to the transmitter.

. . . . . .4-digit numeric code (default is 0000)

Changing the release code can prevent the user from accessing the transmitter configuration and should only be done with caution. The transmitter CAN NOT be accessed without the release code and care should be used to document all changes.