

Tek-Flex 4100C


Programmable Two-wire TDR Level Transmitter With Hart & Display



Quick Start Guide

1. Before You Begin

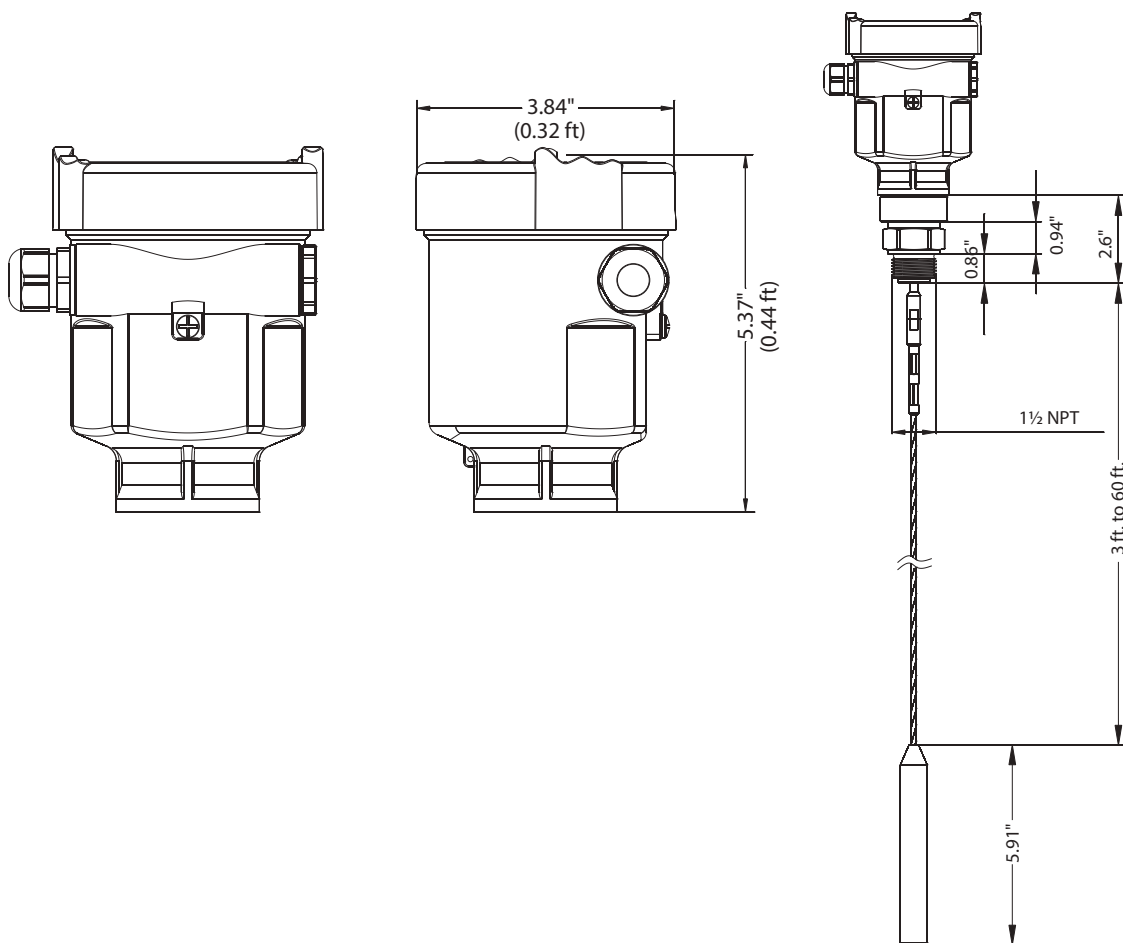
This guide provides basic guidelines to assist you in quickly getting started. Go to our website to download the full User Guide for detailed installation, maintenance, troubleshooting and safety precautions.

-  The user must take note of the safety instructions in this operating instructions manual, the country specific installation standards as well as all prevailing safety regulations and accident prevention rules. The instrument must only be operated in a technically flawless and reliable condition. The operator is responsible for trouble-free operation of the instrument. During the entire duration of use, the user is obliged to determine the compliance of the required occupational safety measures with the current valid rules and regulations and also take note of new regulations.

2. Unpack

One Tek-Flex 4100C Programmable Two-wire TDR Level Transmitter With Hart & Display

3. Dimensional Drawing



4. Mounting Requirement

Basic Requirement for Installation

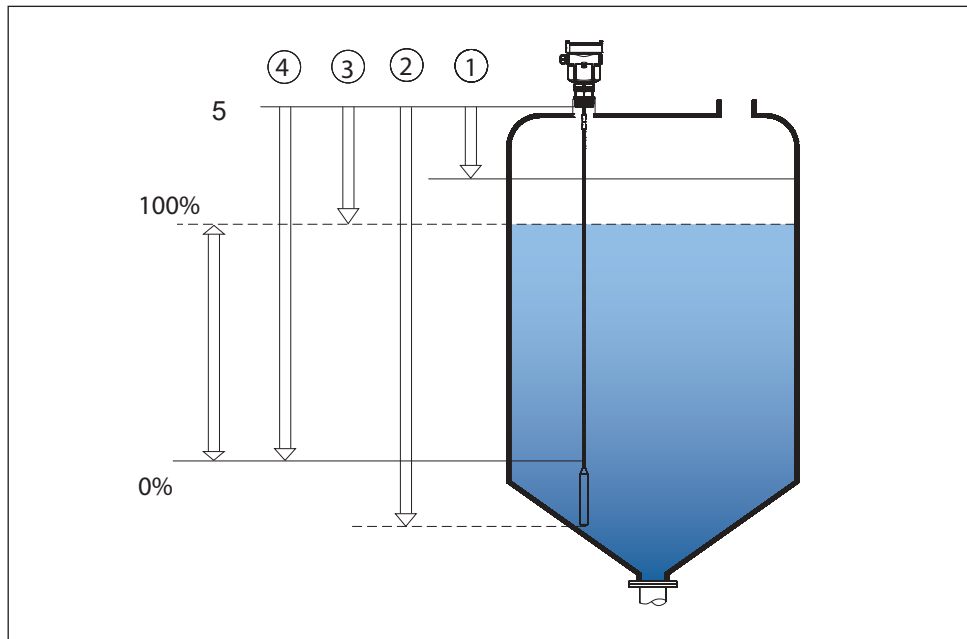
Keep in mind that the cable/rod is kept away from obstructions within vessel. The obstructions like: ladders, limit switches, heating spirals, struts and etc. Further more, rope or rods must not intersect the filling streams.

Be cautious during the installation: the level of the measured cable medium must not be in the blanking zone the mounting location must keep a min distance to the vessel wall, the cable or rod is perpendicular to the surface of the measured medium.

Illustration

The reference plane is the thread or flange surface

- 1 Blanking Zone
- 2 Length
- 3 Max. Measurement Range
- 4 Min. Measurement Range
- 5 Reference plane



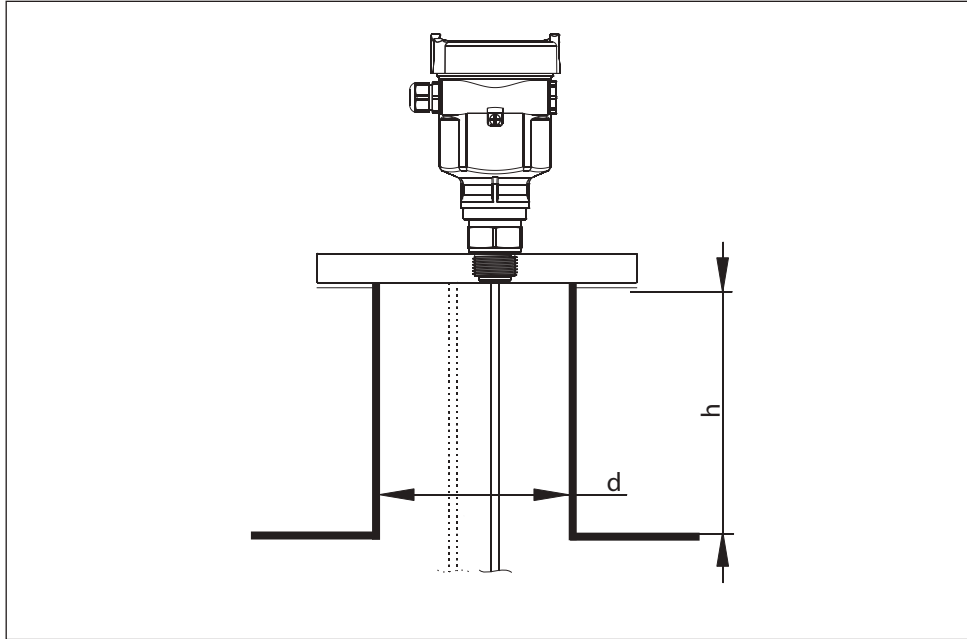
Note: The level of the measured medium must not be in either the blanking zone.

The best mounting location for a conical vessel with flat top is the centre of the vessel's top, as the effective measurement can reach the bottom of vessel.

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Stand Pipe

Avoid installation with socket if possible, otherwise try to minimize the length of socket. In case of long stand pipe, small vessel or medium with low dielectric constant.

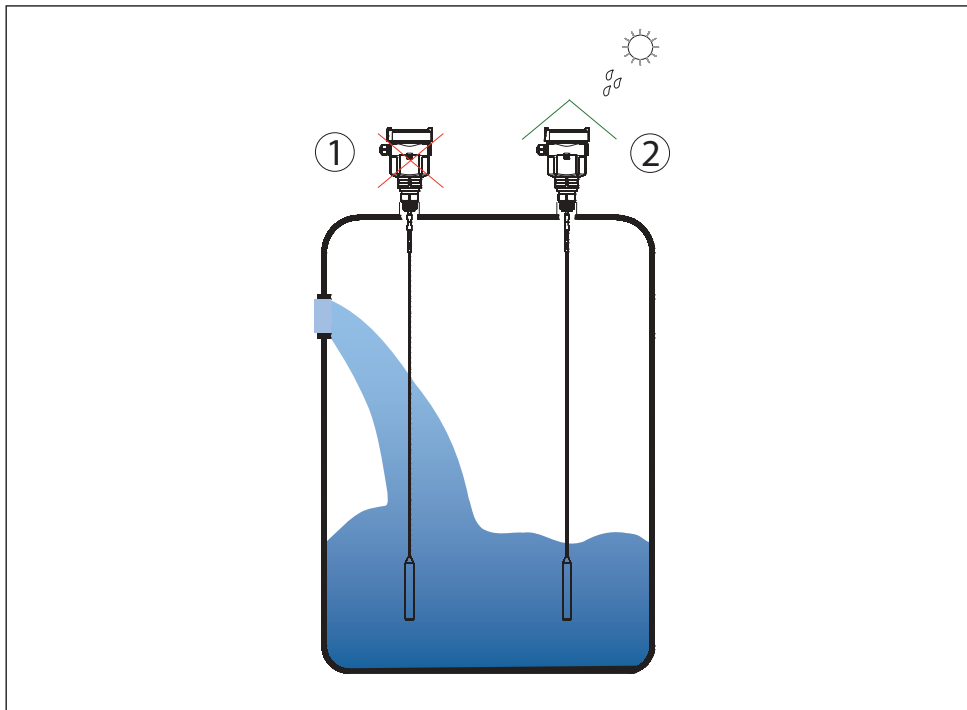


Mounting

1 Wrong: The rod/rope is in/above filling stream, which results in the measurement of filling stream not the target medium.

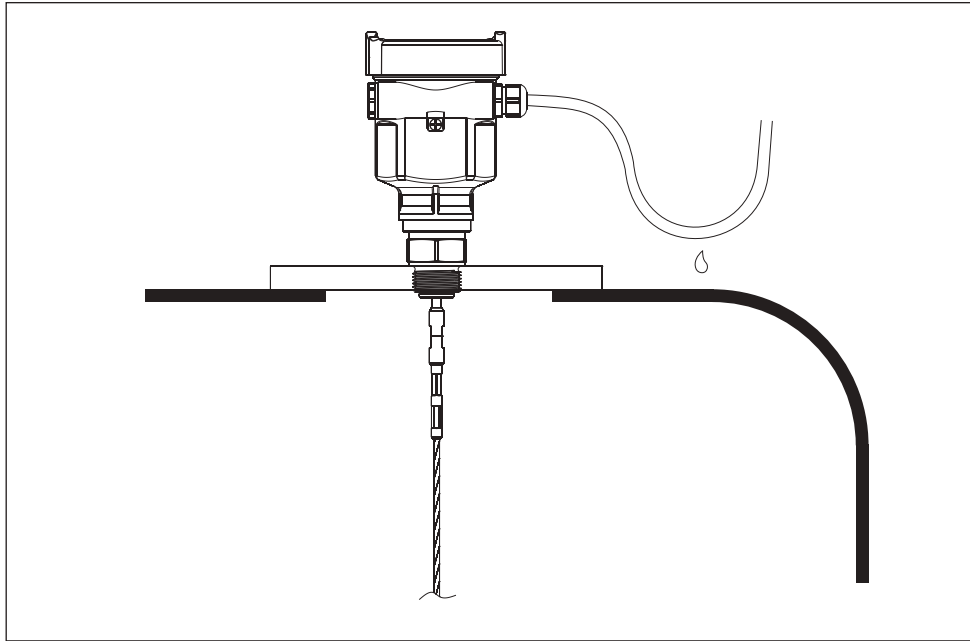
2 Correct

Note: Sun shield or rain-proof is suggested for outdoor mounting.



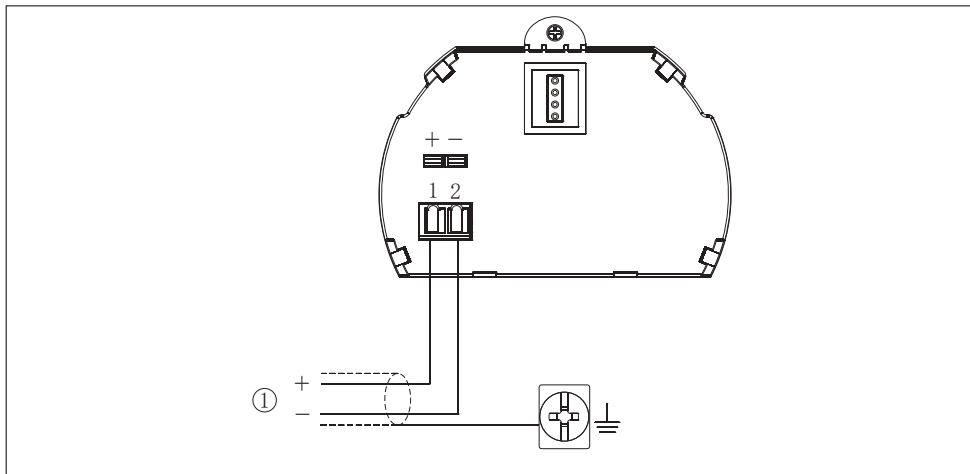
Horizontal and Vertical Installation

When mounting outdoors, humid indoors or on cooling/heating vessels, in order to avoid damp seal rings used on cables should be screwed tight, and the cable must be bended downward outside cable entry, as indicated on the diagram below:



5. Power Supply

Power supply and current signal are carried by the same two-wire connection cable. See the Technical Specifications of this guide for detailed requirement on power supply.



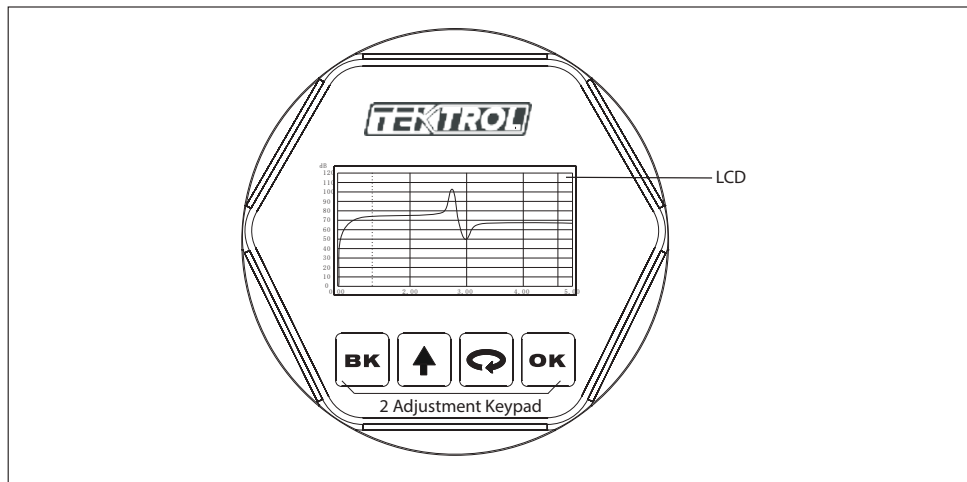
2 Wire

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6. Adjustment Instructions

Use the operation panel of the transmitter to set the configuration parameters such as the zero calibration, cut-off value of low flow and output range of current frequency, etc.

Display/Adjustment Module



[OK] Keypad

- Enter programming mode
- Confirm programming options
- Confirm modifications to parameters

[↻] Keypad

- Choose programming options
- Choose the digit of parameters to edit
- Display the contents of parameters

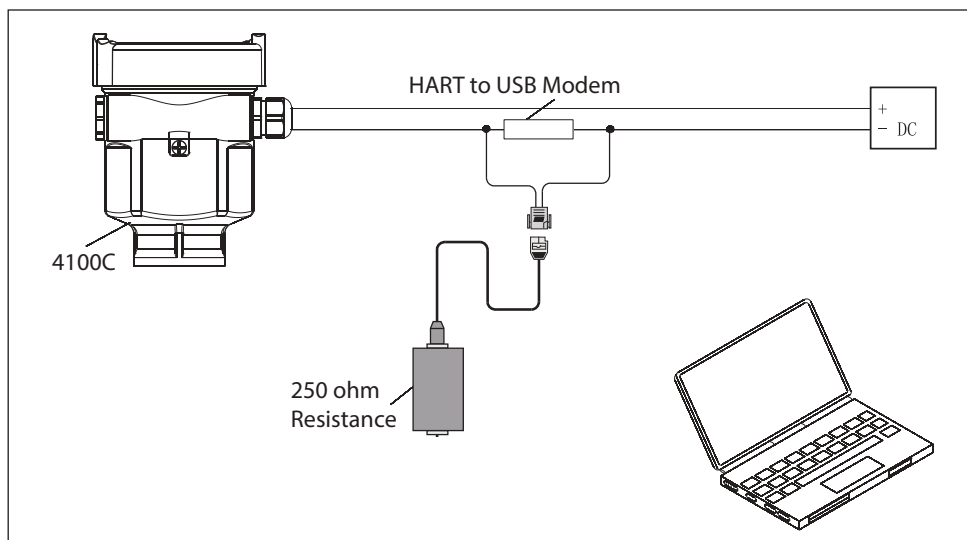
[↑] Keypad

- Modify parameter values

[BK] Keypad

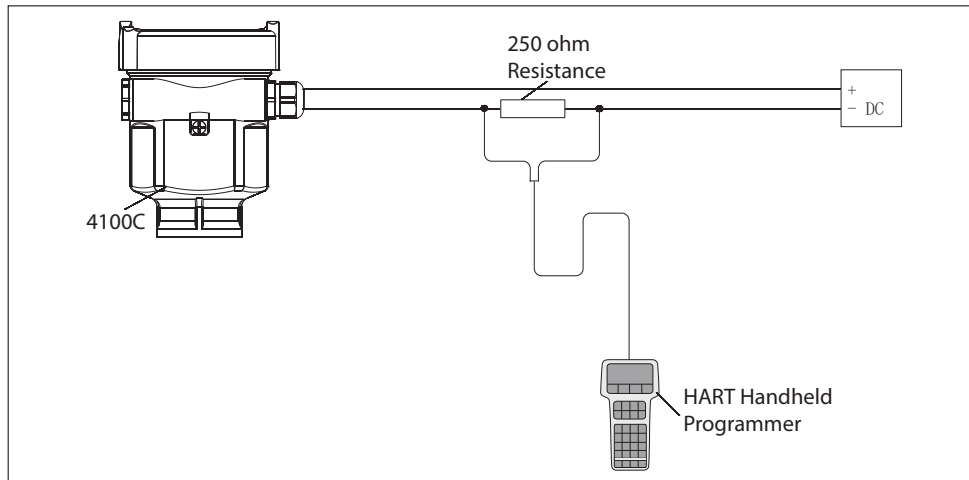
- Programming mode exit
- Return to higher menu level

Connect with Another Unit Through HART

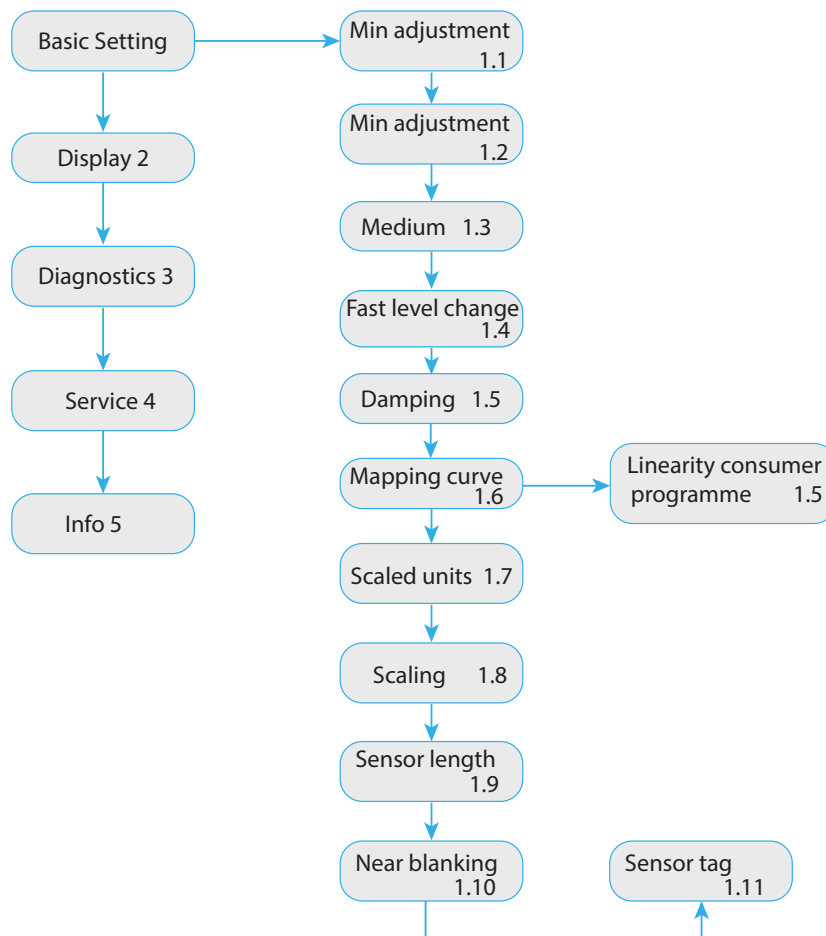


HART Handheld Programmer

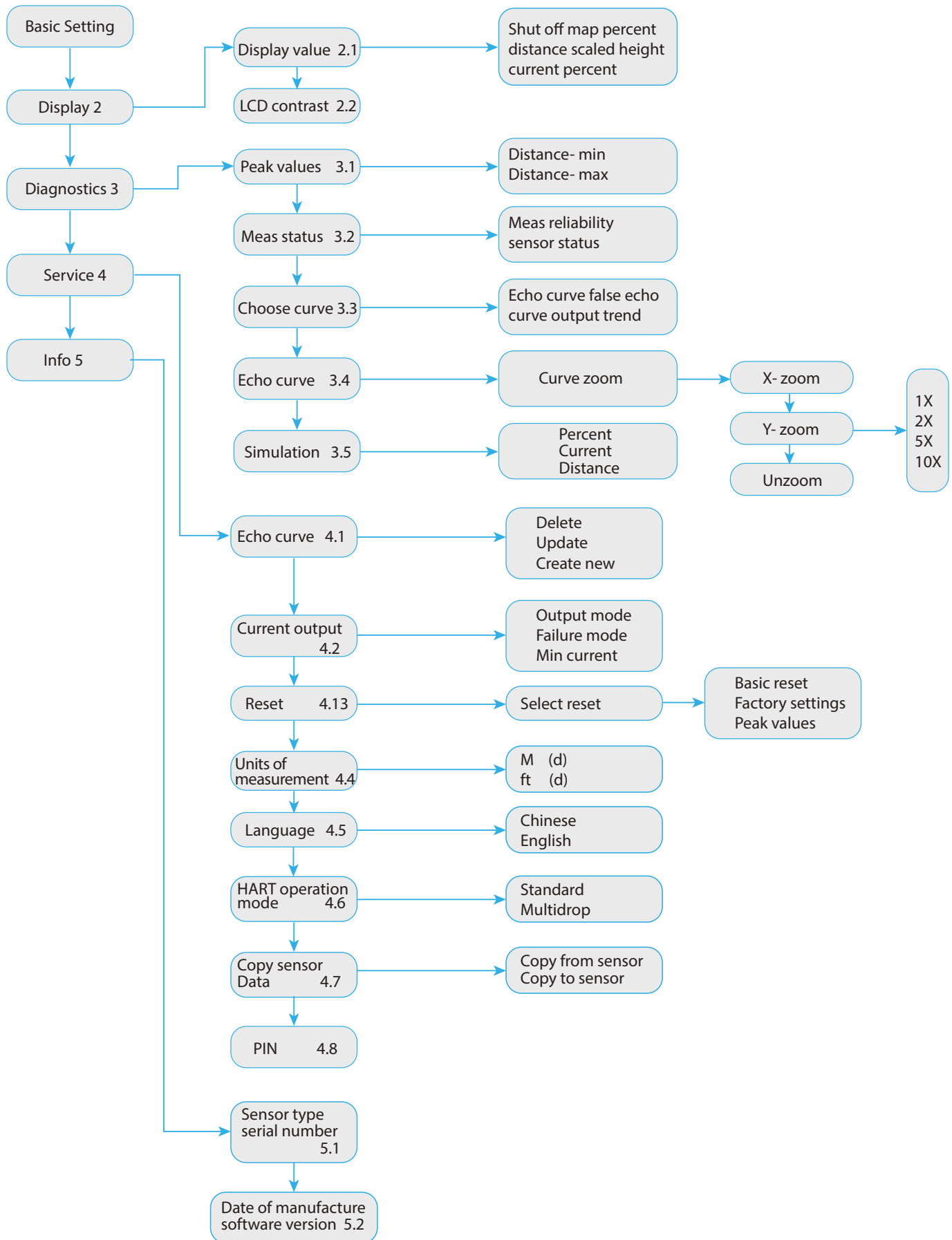
Adjust 4100C with HART Handheld Programmer

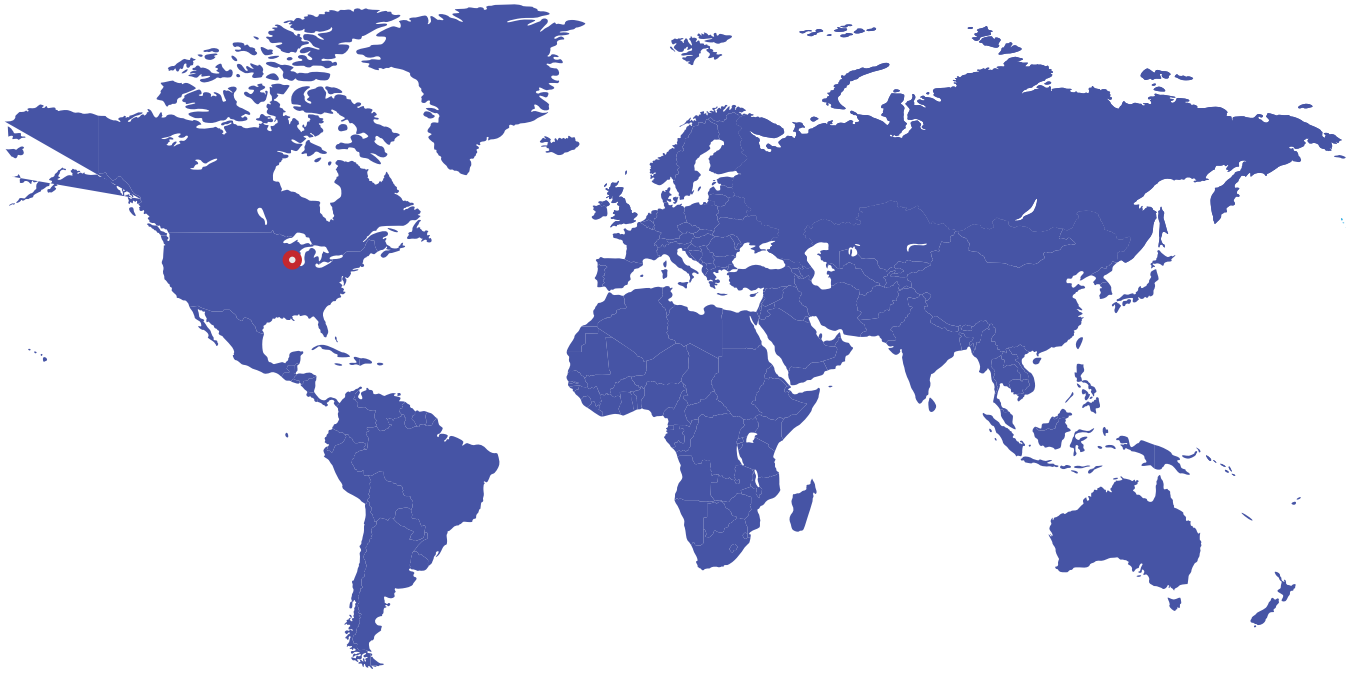


7. Menu Tree



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796 Tek Drive
Crystal Lake, IL 60014
USA

Tel: +1 847 857 6076

Fax: +1 847 655 6147

Email: tektrol@tek-trol.com

www.tek-trol.com