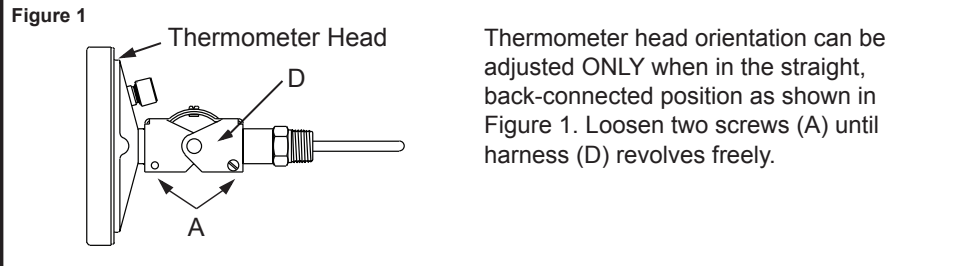
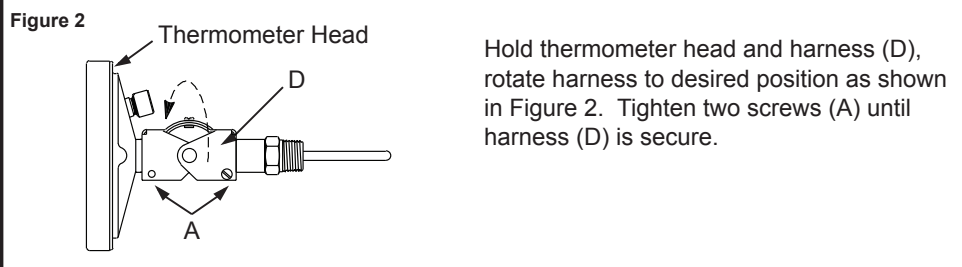


INSTRUCTIONS FOR REPOSITIONING AND INSTALLING ADJUSTABLE ANGLE THERMOMETERS

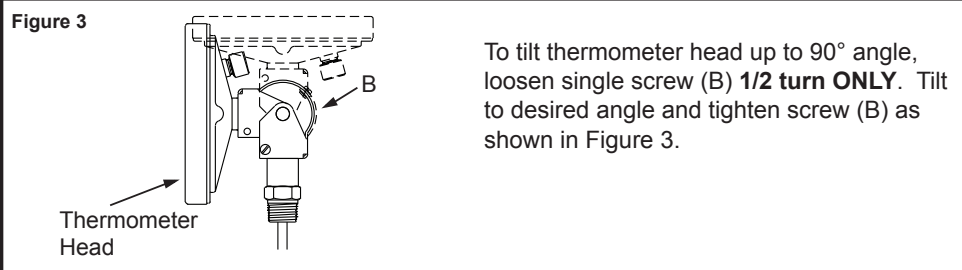
Thermometer head orientation can be adjusted by rotating the harness assembly up to 360°.



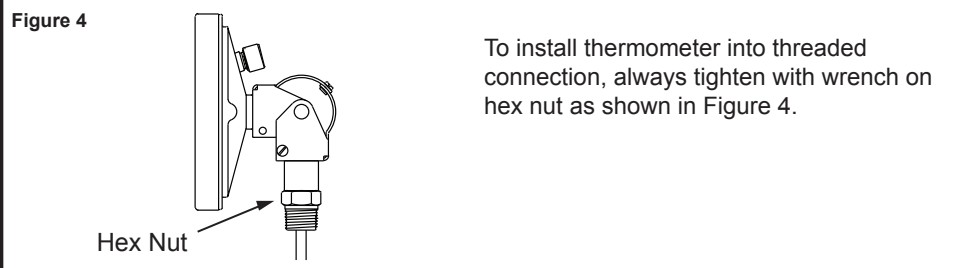
Thermometer head orientation can be adjusted **ONLY** when in the straight, back-connected position as shown in Figure 1. Loosen two screws (A) until harness (D) revolves freely.



Hold thermometer head and harness (D), rotate harness to desired position as shown in Figure 2. Tighten two screws (A) until harness (D) is secure.



To tilt thermometer head up to 90° angle, loosen single screw (B) **1/2 turn ONLY**. Tilt to desired angle and tighten screw (B) as shown in Figure 3.



To install thermometer into threaded connection, always tighten with wrench on hex nut as shown in Figure 4.

CAUTION: NEVER use head of thermometer or adjustment harness as a handle for tightening, **SEVERE DAMAGE** to thermometer will result.

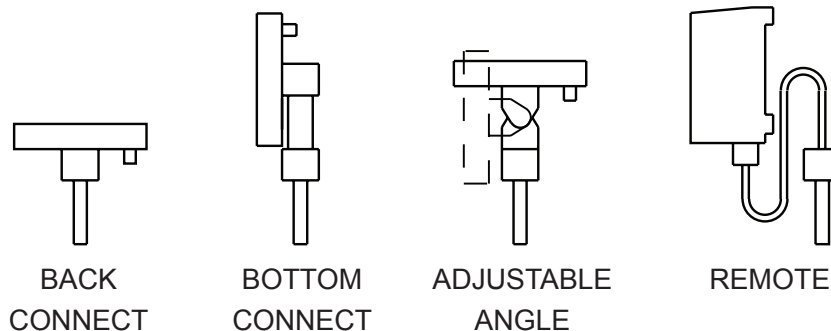
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**TEL-TRU
MANUFACTURING CO.**
Temperature + Pressure Instruments

01204010 Rev1216

DIGI-TEL™ THERMOMETERS Operating and Calibrating Instructions



GENERAL INFORMATION

- For accurate reading, thermometer must be immersed at least one inch into an agitated liquid or certified reference device.
- Integrated diagnostic routines continually check the validity of the sensor output.
- The battery model has an expected service life of five years. Loop powered models do not use batteries.
- Certificate of calibration included with each thermometer.
- Services are available including battery replacement (on models with factory replaceable batteries).

CAUTION

- Any severe shock to the thermometer, dropping, bending of the stem or head, etc., can possibly impair its accuracy.
- When installing thermometer into threaded connection, always tighten with wrench on hex nut (NEVER use the head of the thermometer for tightening).

CALIBRATING INSTRUCTIONS

- 1) A master thermometer with a high degree of accuracy should be used for calibrating.
- 2) Place thermometer to be calibrated alongside a master thermometer. Immerse both thermometers into an agitated liquid for at least three minutes. Compare temperatures.
IMPORTANT: For accurate reading, thermometer must be immersed at least one inch into an agitated liquid or certified reference device, such as a Check-Set® Thermometer Calibrator.
- 3) Refer to the Tel-Tru Digi-Tel Configuration software for calibration instructions.
- 4) An M12 connection is used with the Tel-Tru Digi-Tel Configuration software.

DISPLAY ERROR CODES

- Display "Err 1" if the RTD is open.
- Display "Err 2" if the RTD is shorted.
- Display "Err 3" if an error is detected on the board.
- Display "LO" if there is a valid reading, but it is too low to be displayed, due to decimal place setting.
- Display "HI" if there is a valid reading, but it is too high to be displayed, due to decimal place setting.
- Display toggles between "bATT" and actual reading if the battery voltage drops below 3.2 volts.

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Digi-Tel D4RB Battery Replacement Instructions



1. Place thermometer face down and remove screw from back of case.



2. Carefully pry off back of case.

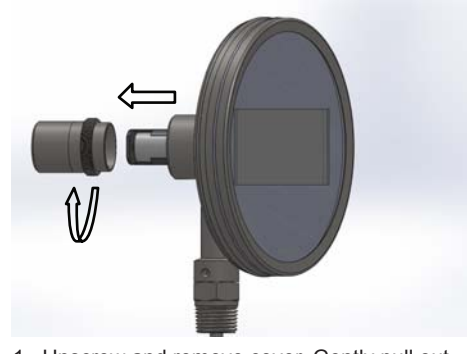


3. Remove battery from battery holder.



4. Replace battery with a 3.6V 1/2 AA Lithium battery (Saft LS 14250 or equivalent), with “-” terminal at spring end of battery holder. Reinstall back of case and secure with screw.

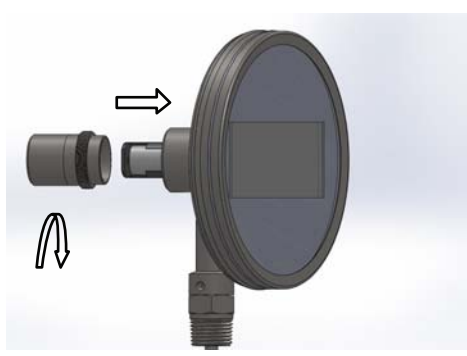
Digi-Tel D5xB Battery Replacement Instructions



1. Unscrew and remove cover. Gently pull out battery holder from body.



2. Remove battery and replace with a 3.6V 1/2 AA Lithium battery (Saft LS 14250 or equivalent), with “-” terminal at spring end of battery holder.

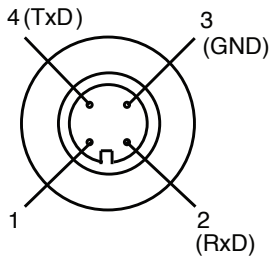


3. Gently push battery holder into body. Replace and screw on cover until fully sealed.

M12 Connector

for battery powered models:

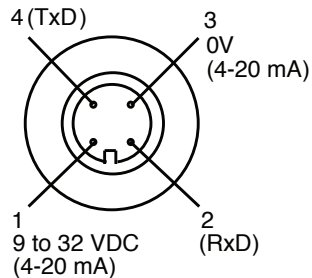
- Calibration use only



M12 Connector

for loop powered models:

- Power (see grounding instructions)
- Calibration
- Resetting output range



Grounding Instructions for loop powered 4-20mA transmitter output models:

- Option 1: Ground via Process Connection
- Install thermometer with process connection in direct mechanical contact with building/chassis ground
 - Do NOT ground M12 cable shield
- Option 2: Ground via M12 Cable
- Use shielded M12 cable
 - Connect one end of shield to M12 collar
 - Connect other end of shield to building/chassis ground
 - Do NOT install thermometer with process connection in direct mechanical contact with building/chassis ground