Auxiliary Temperature Sensor

The auxiliary temperature sensor allows the Model 8552 Q-TRAK™ Plus IAQ Monitor to make and record a second temperature measurement. You may attach the auxiliary temperature sensor at any time during the Survey mode and the Q-TRAK Plus monitor will display the parameter instantly. The auxiliary temperature sensor data can be logged and sampled and viewed via TRAKPRO™ Data Analysis Software just like any other parameter on the Q-TRAK Plus monitor.

Attaching the Auxiliary Temperature Sensor

1. Grasp the connector on the auxiliary sensor.
2. Align the black release button with the back of the instrument.
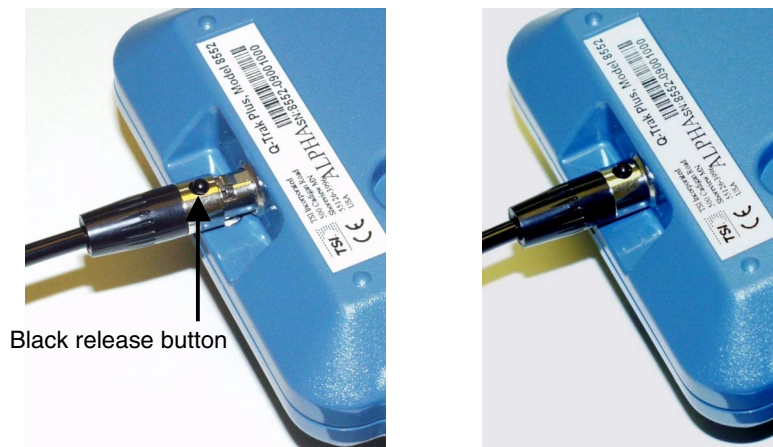3. Press the connector into place.

Figure 1: Attaching/Removing Auxiliary Temperature Sensor

Removing the Auxiliary Temperature Sensor

1. Grasp the connector on the auxiliary temperature sensor.
2. Press the black release button.
3. Pull the connector away from the instrument.

Calibrating the Auxiliary Temperature Sensor

To perform a temperature calibration on the auxiliary temperature sensor you will need a reference temperature device, one that is more accurate than the auxiliary temperature sensor. To obtain the best accuracy, care must be taken so that both the auxiliary temperature sensor and the reference device are able to sense the same air. Also, it's best to calibrate the temperature that is near the range you typically measure. In most cases this will be room temperature.

1. Locate auxiliary temperature sensor and the reference device so that they sense the same air conditions.
2. Put the Q-TRAK Plus monitor into calibration mode by selecting **TEMP2** in the Calibration Menu by using the ▲ or ▼ key and press the ↵ key (refer to Figure 3).
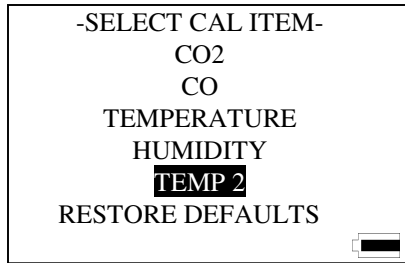
```
        -SELECT CAL ITEM-
              CO2
              CO
          TEMPERATURE
           HUMIDITY
            TEMP 2
        RESTORE DEFAULTS
                         ▂▂▂▂
```

Figure 2: Calibration Submenu Screen

3. A reminder appears to ensure that the environmental conditions are stable before continuing with the calibration.

4. Compare the reading on the Q-TRAK Plus monitor with the reading from the reference device. If they differ, use the ▲ or ▼ key to adjust the Q-TRAK Plus display as needed so that the displayed measurement matches the measurement indicated by the reference device. Press the ↵ key to accept and continue.
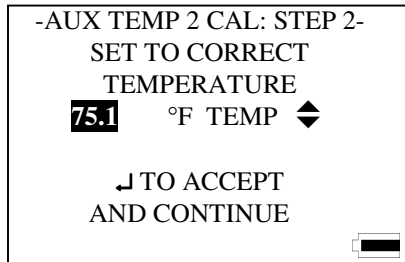
```
      -AUX TEMP 2 CAL: STEP 2-
          SET TO CORRECT
           TEMPERATURE
        75.1    °F  TEMP  ⬍

            ↵ TO ACCEPT
          AND CONTINUE
                         ▂▂▂▂
```

Figure 3: Auxiliary Temperature Calibration Screen

Note: *If the two readings are the same, there is no need to proceed with the calibration. Press the ↥ key to terminate the calibration procedure.*

5. The Q-TRAK Plus monitor will check to see if the measured parameter is stable. The screen displays the parameter in real time to show any fluctuations.
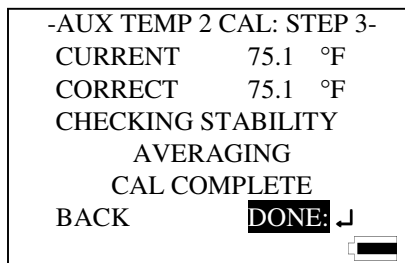
```
      -AUX TEMP 2 CAL: STEP 3-
      CURRENT      75.1   °F
      CORRECT      75.1   °F
      CHECKING STABILITY
           AVERAGING
          CAL COMPLETE
      BACK          DONE: ↵
                         ▂▂▂▂
```

Figure 4: Auxiliary Temperature Calibration Step 3

6. At the successful conclusion of the calibration, the screen will highlight "CAL COMPLETE". Press the ↵ key to continue.

If an error is detected during the calibration process, an error message will be displayed. The previous calibration values are kept. Press the ↥ or ↵ key to return to the User Calibration Menu.
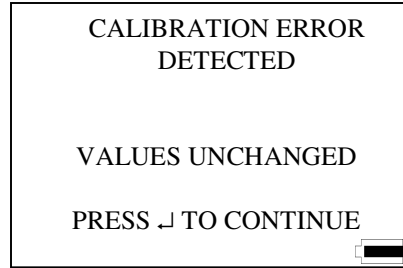
```
┌─────────────────────────────────┐
│        CALIBRATION ERROR         │
│           DETECTED               │
│                                  │
│                                  │
│         VALUES UNCHANGED         │
│                                  │
│        PRESS ↵ TO CONTINUE       │
│                              ▬▬  │
└─────────────────────────────────┘
```

Figure 5: Error Detected or Process Aborted Screen

Specifications

Type ....Thermistor
Range ....0 to 50°C (32 to 122°F)
Accuracy ....±0.6°C (1.0°F)
Resolution ....0.1°C (0.1°F)
Response time ....30 seconds (90% of final value, air velocity at 2 m/s)
Display units ....°C or °F (user selectable)