Cooper-Atkins™ Multi-Function Thermometer Instructions

20200

Overview

The 20200 Multi-Function Thermometer transmits temperatures wirelessly to your mobile device via *Bluetooth*® Low Energy technology. It can utilize any Cooper-Atkins' type-K thermocouple temperature probe, making it versatile for insertion, air, or surface temperature measurement.

Turning the Instrument On and Off

Press the **(U)** button to power-on. Press and hold the **(U)** button for two seconds to power-off.

Turning Bluetooth Wireless Technology On and Off

When the Multi-Function Thermometer is first turned on, Bluetooth is also turned on and the instrument is ready to connect to a mobile device. The LED will flash green and a Bluetooth symbol 🕏 will show on the display. Press the 😈 button to turn Bluetooth off. When Bluetooth is off, press the 😈 button to turn it back on again. Bluetooth will remain on for 20 seconds while waiting to connect to a mobile device.



Once the Multi-Function Thermometer is connected to an app running on a mobile device, the LED will flash blue and the Bluetooth Connected symbol 🕏 will show on the display. When Bluetooth is connected, press and hold the 😈 button to disconnect and power-off the Multi-Function Thermometer.

Recording Temperatures

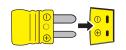
The button on the Multi-Function Thermometer can be used to record temperatures. When connected to an app, press the button to record the current temperature.

Changing the Temperature Scale

Press and hold the button for three seconds to toggle between Fahrenheit and Celsius. The display on the Multi-Function Thermometer will show temperature in tenths of a degree in both Fahrenheit and Celsius.

Connecting a Type K Probe

Any Type K thermocouple temperature probe can be used with the Multi-Function Thermometer. Be sure you insert the probe connectors positive (+) and negative (-) polarity correctly into the Type K connector.



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Turning the Instrument On and Off

Press the **(b)** button to power-on. Press and hold the **(b)** button for two seconds to power-off.

Turning Bluetooth Wireless Technology On and Off

When the Multi-Function Thermometer is first turned on, Bluetooth is also turned on and the instrument is ready to connect to a mobile device. The LED will flash green and a Bluetooth symbol ≯ will show on the display. Press the ⋃ button to turn Bluetooth off. When Bluetooth is off, press the ⋃ button to turn it back on again. Bluetooth will remain on for 20 seconds while waiting to connect to a mobile device.



Once the Multi-Function Thermometer is connected to an app running on a mobile device, the LED will flash blue and the Bluetooth Connected symbol will show on the display. When Bluetooth is connected, press and hold the button to disconnect and power-off the Multi-Function Thermometer.

Recording Temperatures

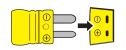
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Icons

The Multi-Function Thermometer uses international icons in lieu of messages on the display screen.

Error Icons



When the temperature cannot be read for any reason, the temperature reading will be replaced with the warning triangle icon. The reason for the failure will be depicted above the warning triangle in the status area.



The thermometer with adjustment bars icon indicates that there was a problem reading the factory-set calibration constants in the instrument. The unit is most likely damaged and may need to be replaced.



The up-arrow icon indicates the current probe temperature is greater than the temperature range of the Multi-Function Thermometer. Cool the probe tip temperature below 1000°F (538°C) before proceeding.



The down-arrow icon indicates the current temperature is lower than the temperature range of the Multi-Function Thermometer. Warm the probe tip temperature above -100°F (-73°C) before proceeding.



The no probe icon indicates the probe is missing or damaged. Replace the missing or damaged probe.



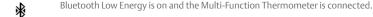
The sleeping icon indicates the Multi-Function Thermometer is in light sleep mode. Press \bigcirc or \equiv button to wake the thermometer up.



The battery warning icon indicates the battery level is too low to get an accurate reading. Replace the 1.5V AA alkaline battery.

Bluetooth Low Energy Icons

Bluetooth Low Energy is on. The Multi-Function Thermometer is "advertising" and ready to connect.



Blank Bluetooth Low Energy is off.

Instrument Specifications
Temperature Range: -100° to 1000°F (-73° to 538°C)
Ambient Operating Range: 4° to 122°F (-20° to 50°C). 10% to 90% RH, non-condensing
Resolution: 1°F/0.1°C
Accuracy: $\pm 0.5^{\circ}$ F ($\pm 0.3^{\circ}$ C) at ambient between 68° to 86°F (20° to 30°C). Add $\pm 0.1^{\circ}$ to accuracy spec per 1° change to ambient temperature outside of 68° to 86°F.
RF Range: 100 ft open-field range
IPX7 waterproof rated
Altitude up to 2000 meters
Pollution Degree 2
Battery Life: 500 hours
5-year Warranty











Note: EMC Compliance: The instrument may record temperature measurements beyond the stated accuracy when exposed to radio frequency disturbances between 250 Mhz and 1000 Mhz with a field strength in excess of 3.0V/m. This deviation is temporary and the device will recover when the disturbance is removed.

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Error Icons



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Bluetooth Low Energy Icons

Bluetooth Low Energy is on. The Multi-Function Thermometer is "advertising" and ready to connect.



Bluetooth Low Energy is on and the Multi-Function Thermometer is connected.

Blank Bluetooth Low Energy is off.

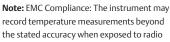
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