

Cooper-Atkins Multi-Function Thermometer Guide



Cooper-Atkins Multi-Function Thermometer Instructions

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  button to power-on. Press and hold the  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

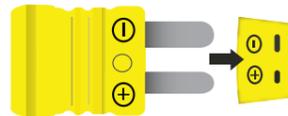
The  button on the Multi-Function Thermometer can be used to record temperatures. When connected to an app, press the  button to record the current temperature.

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.



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  or  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.

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

Blank Bluetooth Low Energy is off.

Instrument Specification
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: ±0.5°F (±0.3°C) at ambient between 68° to 86°F (20° to 30°C). Add ±0.1° 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
Instrument: Limited 5-year Warranty
Probe: Limited 1-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.

Using the Blue2 Reader App with the Multi-Function Thermometer



Using the Blue2 Reader App with the Multi-Function Thermometer

1. If you do not already have the Blue2 Reader app, go to the App Store or Google Play and download the app.
2. Before launching the Blue2 Reader app, make sure the Bluetooth for the mobile device is turned on.

Blue2 Reader functions for Multi-Function Thermometer

- a. Reflect the temperature read by the Multi-Function Thermometer
- b. Update the device firmware
- c. Use for debugging purposes



Updating the firmware on the Multi-Function Thermometer (MFT)

Download the *Blue2 Reader* app (from the App store or Google Play) and install it on your mobile device. Ensure internet access is available and follow these steps to download the firmware updates.

1. Launch *Blue2 Reader* app 
2. Tap Scan on the *Blue2 Reader* app
3. Turn on the MFT - it will begin to blink green
4. The MFT will display in the list of available devices on the *Blue2 Reader* app
5. Tap the MFT in the list of devices to connect with it - it will blink blue once connected
6. On the *Blue2 Reader* app, tap *Firmware Update*
7. On the *Firmware Update* page, tap *Check for Updates*
8. The latest available firmware will be listed
9. Tap the latest available firmware
10. The app will send the new firmware to the MFT

The MFT will beep softly and the app will return to the *Scanscreen* once the updates are complete. Verify the firmware version by connecting to the *Blue2 Reader* app (steps 2-5). The current version is displayed in the upper left corner of the screen.



Troubleshooting the Multi-Function Thermometer with the Blue2 Reader app

When experiencing issues with the Cooper-Atkins Temperature Probe, ensure the following are done before troubleshooting:

- Blue2 Reader App and OS are updated to the most recent version
 - Remove the battery for 10 seconds and then reinsert
 - Replace the battery, as it may be dead
 - Calibrate temperature probe
- Note:** When replacing or reinserting a battery, wait 6-10 seconds once you have replaced the battery before pressing the power button.

Temperature Troubleshooting

1. Open the Blue2 Reader App, and you will see Scan. Tap on Scan.
2. Remove the screw, pull out of the needle, just a little bit, so the two metal prongs are visible but still attached.
3. Using a metallic object (paperclip, coin, screwdriver blade, ect.) short the pins together.
Note: It will not shock you.
4. Look at the Blue2 Reader App, and if it displays a temperature reading then the probe is bad.

Connection Troubleshooting

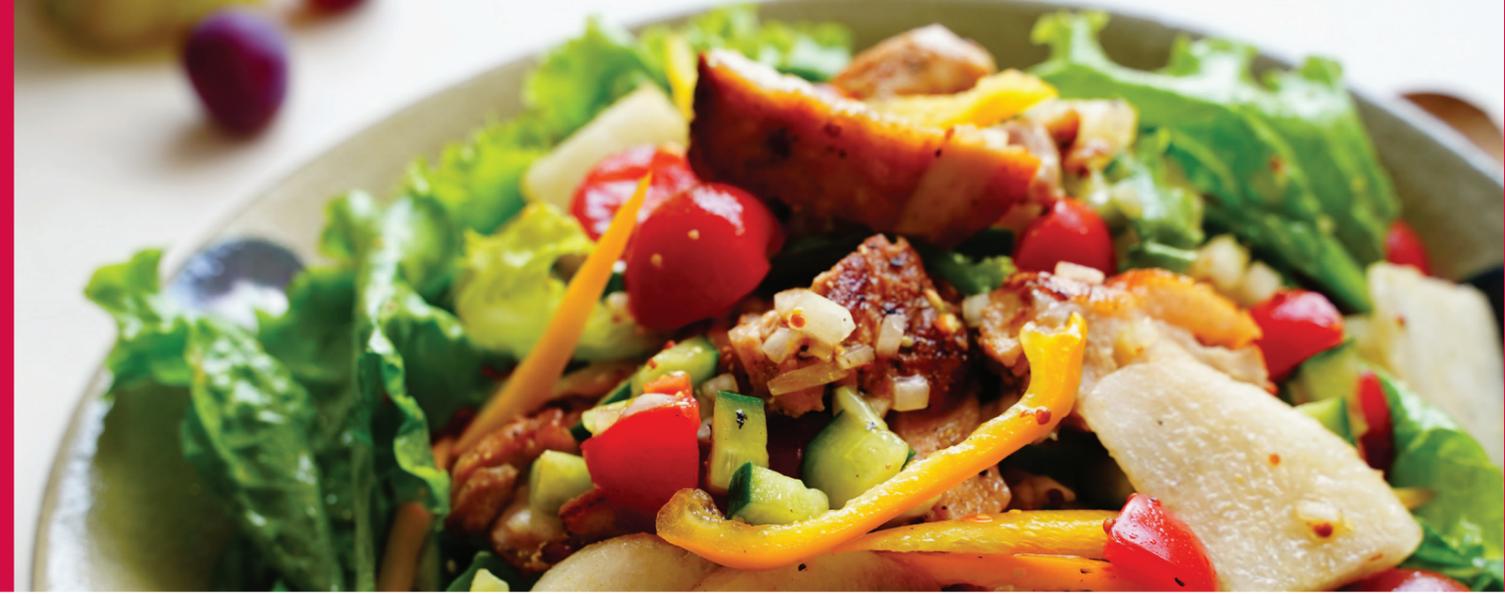
1. If the probe does not connect try testing it on another device.
2. If you have a secondary probe that is known to function properly with another instrument, try that probe. If you get a temperature reading then the other probe is bad.

3. If the instrument connects to the Blue2 Reader app, there is nothing wrong with the device. Contact the 3rd party app provider and tell them there is an issue syncing the device with the app.



Cooper-Atkins Multi-Function Thermometer Instrument and Probe Warranty Program

Cooper-Atkins' handheld instruments and probes are covered by the industry's most comprehensive warranty. It is specifically designed to withstand the rigors of a foodservice or industrial application. This warranty program, combined with Cooper-Atkins' 135+ years of equipment experience, assures your instrument will provide many years of reliable service.



The quality, features and benefits built into your Multi-Function Thermometer offer you the protection of knowing a critical piece of your food safety plan is highly reliable and guaranteed.

When you purchase from Cooper-Atkins, you are receiving the highest quality products available and the best overall value for your investment. Each probe is designed by Cooper-Atkins engineers. Probes are designed and built to the highest standards allowing for probe interchangeability with minimal impact on total system accuracy.

Multi-Function Instrument Warranty

5-year Limited warranty against manufacturing or material defect. The instrument has a 18-digit code on the bottom label, followed by the model number.

The first two digits represent the month of manufacture, the second two digits represent the day of manufacture, and the third two digits are the year of manufacture.

Probe Warranty

1-year Limited warranty against manufacturing or material defect. You can identify when your probe was manufactured by the 4-digit serial number. On your direct connect probe, the serial number is located on the label fastened just above the mini-connector. The first two digits represent the week of the year of manufacture and the second two digits represent the year of manufacture. (E.g. serial number 31-19 was manufactured in the 31st week of 2019)

Troubleshooting / Repair / Replacement

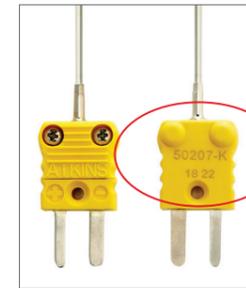
When you call our Instrument Repair/Warranty Department, a knowledgeable representative will attempt to resolve the problem, and if unable to do so, they will ask you to return the instrument or probe.

If this is the case you will:

- Be given a Return Goods Authorization (RGA) number.
- Be asked to send the instrument or probe to our facility (prepaid) for evaluation.



Once evaluated by our engineers, if the unit is:



- Under warranty, we will repair or replace it free of charge and ship it back to you.
- NOT under warranty, we will contact you with further information.

Multi-Function Thermometer Care and Cleaning

Instrument Care Guidelines

Do not clean with abrasives or solvents, use only mild detergents. Avoid contact with corrosive materials such as alcohol or other caustic cleaning agents. Wipe with a soft damp cloth to avoid scratching. If the unit is not waterproof, do not submerge or use excessive liquids when cleaning. Refer to our website or product specifications and waterproof ratings. Avoid exposing the instrument to severe shock. After the instrument is cleaned and sanitized, dry and store. Do not use or store in excessively hot or cold areas.

Probe Sanitation

To avoid cross-contamination, always clean thermometer stems thoroughly before and after each use. Do not allow the probe tip to remain in sanitizing solution for an extended period of time. Remove stubborn grease from the stem with a scouring pad or fine steel wool. Cooper-Atkins probe wipes help meet HACCP guidelines and are an ideal way of cleaning and sanitizing probe shafts between temperature checks. Avoid exposing the probe / thermometer to extreme temperatures.

If the problem is covered under our warranty terms, the handheld instrument or probe will be repaired/replaced and returned in 3-5 business days. If the problem is clearly isolated as a probe issue, and it was manufactured within the past 12 months, you will have the opportunity to order a replacement probe free of charge. If the problem is not covered by our warranty terms, the Cooper-Atkins Instrument Repair/Warranty Department will call you within 3-5 days of receipt of your instrument or probe to offer the option of repair at the repair price, or ordering a new unit at a discounted price. Based upon your approval, Cooper-Atkins will ship the repaired or replacement instruments/probes to you.

Instrument Repair/Warranty Department
ca.warrantysupport@copeland.com





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