INFRARED THERMOMETER

OPERATION MANUAL

Features:
- Precise non-contact measurements
- Built-in laser pointer
- Automatic selection 0.1°C/1°C
- °C/°F switchable button
- Automatic Data Hold & Auto power off
- The thermometer at 12 inches away measure 1 inch target
- Backlit LCD display

Useful Applications
This thermometer is perfect for checking the temperature of pizza stones to know when you are ready to cook. You can also use it to scan your grill surface and identify hot and cold spots for better grilling.

Field of View
Thermometer's field of view is 12:1, meaning that if the thermometer is 12 inches from the target, the diameter of the object under test must be at least 1 inch. Other distances are shown below in the field of view diagram. Refer to the chart printed on the thermometer for more information.

1. SAFETY
- Be careful when the laser beam is turned on.
- Do not let the beam enter your eye, another person's eye or the eye of an animal.
- Be careful not to let the beam on a reflective surface in case of reflecting the beam to eyes.
- Do not allow the laser light beam impinging on any gas or area which can explode.

2. SPECIFICATIONS
- General specifications

<table>
<thead>
<tr>
<th>DISPLAY</th>
<th>LCD with backlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature range</td>
<td>-50°C to 380°C (-58°F to 716°F)</td>
</tr>
<tr>
<td>POLARITY</td>
<td>Automatic (no indication for positive polarity); Minus sign for negative polarity.</td>
</tr>
<tr>
<td>EMISSIVITY</td>
<td>0.95 fixed value</td>
</tr>
<tr>
<td>FIELD OF VIEW</td>
<td>0.5/Approx. 12:1 ratio (D=distance, S=spot)</td>
</tr>
<tr>
<td>DIODE LASER</td>
<td>Output: 1nW; Wavelength 630–670nm, class 2 (IL) laser product</td>
</tr>
<tr>
<td>SPECTRAL RESPONSE</td>
<td>5–14μm</td>
</tr>
<tr>
<td>POWER OFF</td>
<td>Automatic shut off after 7 seconds, approx.</td>
</tr>
<tr>
<td>OPERATING TEMP</td>
<td>0°C to 50°C (32°F to 122°F)</td>
</tr>
<tr>
<td>STORAGE TEMP</td>
<td>-20°C to 60°C (-4°F to 140°F)</td>
</tr>
<tr>
<td>RELATIVE HUMIDITY</td>
<td>10%–90%RH operating, &lt;80%RH storage</td>
</tr>
<tr>
<td>POWER SUPPLY</td>
<td>9V battery, NEDA 1864A or IEC 8L61 or equivalent</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>168g</td>
</tr>
<tr>
<td>SIZE</td>
<td>82x41.6x190mm</td>
</tr>
</tbody>
</table>

For troubleshooting, FAQs or Customer Service, please visit us at www.cuisinartgrilling.com, email us at grilling@thefulhamgroup.com, or contact us at 1-866-994-6390.
• Infrared thermometer specifications

<table>
<thead>
<tr>
<th>Range (Automatic selection 0.1°C/1°C)</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>-60.0°C to 380°C</td>
<td>0.1°C/1°C</td>
<td>±5°C</td>
</tr>
<tr>
<td>-20.0°C to 380°C</td>
<td>0.1°C/1°C</td>
<td>±5°C/2%</td>
</tr>
<tr>
<td>0.0°F to 716°F</td>
<td>0.1°C/1°C</td>
<td>±9°F</td>
</tr>
<tr>
<td>-58.0°F to 4.0°F</td>
<td>0.1°C/1°C</td>
<td>±9°F/2%</td>
</tr>
<tr>
<td>-4.0°F to 716°F</td>
<td>0.1°C/1°C</td>
<td>±9°F/2%</td>
</tr>
</tbody>
</table>

Note: Accuracy is given at 18°C to 28°C (64°F to 82°F), less than 80%RH.

3. FRONT PANEL DESCRIPTION

1. IR sensor
2. Laser pointer beam
3. LCD Display
4. Laser select key
5. Backlight
6. Max/Min Temperature
7. °C/F
8. Measurement Trigger
9. Battery Cover
10. Handle Grip

4. INDICATOR

1. Digital readout
2. Temperature C (Celsius)
3. Temperature F (Fahrenheit)
4. Measuring indication
5. Data Hold
6. LOW battery indicator
7. Laser Point
8. Fixed emissivity (0.95)

5. MEASUREMENT OPERATION

1. Hold the meter by its Handle Grip and point it toward the surface to be measured.
2. Press and hold the Trigger to turn the meter on and begin testing. The display will light if the battery is good. Replace the battery if the display does not light.
3. While measuring, the SCAN display icon will appear in the upper left hand corner of the LCD.
4. Press the Laser button to turn on the laser pointer. When the laser turns on, the laser icon will appear on the LCD over the temperature. Aim at the red beam approximately a half inch above the point of test (pressing the Laser button again turns the laser off).
5. Select the temperature units (°C or °F) using the °C and °F buttons.
6. Press the Backlight key to turn on the LCD backlight function.
7. Press "Mode" button to change Max/Min Value.
8. The meter will automatically power down after approximately 7 seconds after the trigger is released.

Note: Measurement considerations

Holding the thermometer by its handle, point the IR Sensor toward the object whose temperature is to be measured. The thermometer automatically compensates for temperature deviations from ambient temperature. Keep in mind that it will take up to 30 minutes to adjust to if wide ambient temperature is to be measured following high temperature measurements, several minutes is required after the low temperature measurements are made. This is a result of the cooling process which must take place for the IR sensor.

6. Battery Replacement

1. When the battery is low, the LCD will display "LOB"
2. Open battery cover and replace with a new 9-Volt battery.

7. NOTES:

• How it works
  Infrared thermometers measure the surface temperature of an object. The unit's optics sense emitted, reflected, and transmitted energy, which is collected and focused onto a detector. The unit's electronics translate the information into a temperature reading which is displayed on the unit. In units with a laser, the laser is used for aiming purposes only.

• Field of View
  Make sure that the target is larger than the unit's spot size. The smaller the target, the closer you should be to it. When accuracy is critical, make sure the target is at least twice as large as the spot size.

• Distance & Spot Size
  As the distance (d) from the object increases, the spot size (s) of the area measured by the unit becomes larger. See: Fig 1.

• Locating a hot Spot
  To find a hot spot aim the thermometer outside the area of interest, then scan across with an up and down motion until you locate hot spot.

• Reminders
  1. Not recommended for use in measuring shiny or polished metal surfaces (stainless steel, aluminum, etc.). See Emissivity
  2. The unit cannot measure through transparent surfaces. It will measure the surface temperature of the glass instead.
  3. Steam, dust, smoke, etc., can prevent accurate measurement by obstructing the unit's optics.

• Emissivity
  Most (90% of typical applications) organic materials and painted or oxidized surfaces have an emissivity of 0.95 (pre-set in the unit). Inaccurate readings will result from measuring shiny or polished metal surfaces. To compensate, cover the surface to be measured with masking tape or flat black paint. Allow time for the tape to reach the same temperature as the material underneath it. Measure the temperature of the tape or painted surface.