Non-contact Infrared Thermometer
OS-820D
User Manual

Features:
- Two measurement modes: Human body temperature and object surface temperature
- Data storage up to 34 temperature records
- 3-color alarm backlight display: green, orange and red

Product Introduction:
This product is a handheld non-contact infrared thermometer, with two possible measurement modes: human body temperature measurement and object surface temperature measurement modes. It features: temperature data storage up to 34 records, high temperature alarming, temperature range indication based on different backlighting color, and auto shut-off.

Product Description:

1. LCD Display: indicate measured temperature
2. Backlight/Laser button: turn on/off backlight or laser
3. Left Button: during the measurement mode, page up the stored temperature data records; Activate the parameter setting mode; Or during the parameter setting mode, navigate the settings menu
4. Right Button: during the measurement mode, page down the stored temperature data records; or during the parameter setting mode, adjust parameters.
5. Mode button: switch between measurement modes or switch between English and Chinese display.
6. Laser pointer
7. IR sensor: point to the measuring object during measurement
8. Trigger: start measurement
9. Battery cover: open to change battery

Product Information:

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Product Storage Temperature</td>
<td>-10-60°C (14-140°F)</td>
</tr>
<tr>
<td>Application Ambient Temperature</td>
<td>10-40°C (50-104°F)</td>
</tr>
<tr>
<td>Battery Voltage</td>
<td>9V or 2x AA(3V) Batteries not included</td>
</tr>
<tr>
<td>Product Weight</td>
<td>122g</td>
</tr>
<tr>
<td>Product Dimension</td>
<td>145 x 50 x 40 mm</td>
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</tbody>
</table>
Technical Specification:

| Human Body Temperature Measurement Range     | 32-43°C (90-109°F) |
| Human Body Temperature Measurement Accuracy  | ±0.4°C (±0.7°F)    |
| Object Surface Temperature Measurement Range | 0-100°C (32-212°F) |
| Object Surface Temperature Measurement Accuracy | ±1°C (±1.8°F)   |
| Resolution                                  | 0.1°C (0.1°F)     |
| Response Time                               | 0.5s              |
| Distance to Measuring object                | 5-15cm            |
| Auto shut-off                               | 7s                |

Function Settings:

Press and hold «SET (left button) until you see “F1” appear in bottom right corner of screen. Press «SET (left button) to navigate between the following setting menus: F1 (Unit) → F2 (Temperature Offset) → F3 (Audio On/Off) → Exit Setting Menu. See each setting section for more details:

Unit setting (F1)

Press and hold «SET (left button) until you see “F1” appear in bottom right corner of screen. While showing F1 Symbol in bottom right corner of the display, press »ADJ to switch between °C and °F.

Temperature Offset Setting (F2)

With F2 Symbol showing in bottom right corner of the display, press »ADJ (to increase) and MODE (to decrease) to adjust the temperature offset within the range of ±5 °C (±9°F).

Audio ON/OFF Setting (F3)

With F3 Symbol showing in bottom right corner of the display, press »ADJ to turn on/off audio. During the parameter setting mode, press the trigger to directly exit from the setting mode.

Mode Switch

Press MODE button to switch between Human Body Temperature measurement and Surface Temperature Measurement modes.

Press and hold MODE button to switch between Chinese and English display language.
Temperature Measurement

Point to the measuring object at a range of 5-15 cm and press the trigger to begin the measurement. The display screen will display the temperature immediately within the response time.

Surface temperature measurement mode:
Keeping the trigger pressed, the display will indicate the object surface temperature live with green backlight.

Body temperature measurement mode:
Press the trigger button once to take one measurement. The number on the button left corner shows the record number. The backlight color indicates the different temperature range as follows:

- Green: Below 37.5°C (99.5°F)
- Orange: 37.5°C-38°C (99.5-100.4°F)
- Red: Above 38°C (100.4°F)

Data Record Management:

View Data Record
Press `SET (left button)` and use `»ADJ (right button)` to page up and down among the data records.

Current record    one record before    no record

Delete Data Record
Press and hold `»ADJ (right button)` to delete the current data record. If the audio is on, the device will beep once.

Battery installation and replacement

When the battery is running low, the screen will display a battery symbol at bottom left corner.

![battery symbol]
Precautions before first use

1. Install batteries before use
2. Before first use, warm up the device for about 10 minutes before installing the battery.
3. When using it for body temperature measurement point thermometer at the forehead. This is a non-contact thermometer and the suggested measuring distance to the forehead is 5cm (2in). Press the trigger once to take one temperature measurement. Tip: temperature can also be measured at an earlobe.
4. When measuring body temperature, please make sure there are no obstacles between the IR sensor and forehead skin, e.g., move hair or sweat if obstructing measurement.

Warnings

- The glass protector in front of the IR sensor is a critical but very fragile element of the device.
- Use cotton and 70% rubbing alcohol for cleaning.
- Please only use qualified battery. Do not charge batteries that are not rechargeable.
- Do not use the thermometer under the sun or under water.

Maintenance

- Please follow the instruction manual for troubleshooting. If the issue is not listed in the manual, please contact our customer support.
- Warning sign “HI”
- When using the thermometer for measuring body temperature, the “HI” warning sign may come on. The warning sign indicates the temperature measured exceeds the maximum allowed threshold 43°C (109.4°F).
- Warning sign “LO”
- When using the thermometer for measuring body temperature, the “LO” warning sign may come one. The warning sign indicates the temperature measured exceeds the minimum allowed threshold 32°C (90°F).