

### Non-contact Forehead IR Thermometer

Model IR200



Additional User Manual Translations available at [www.extech.com](http://www.extech.com)

## **Introduction**

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Congratulations on your purchase of the Model IR200 IR Thermometer. This thermometer is intended for scanning groups of individuals or monitoring an individual for elevated temperatures. It is not a substitute for a clinical thermometer. Always use a clinical thermometer when high accuracy body temperature measurements are required.

### **Considerations and Warnings**



Read all instructions before using this product.



For the most accurate results, make reading with an ambient (room) temperature of 73 to 82°F (23 to 27°C)



Make sure the skin is dry and that no hair interferes with the measurement.



Do not immerse the meter in water.



Avoid touching and/or scratching the infrared sensor lens.



Always use a clinical thermometer to verify any abnormal temperature measurements.



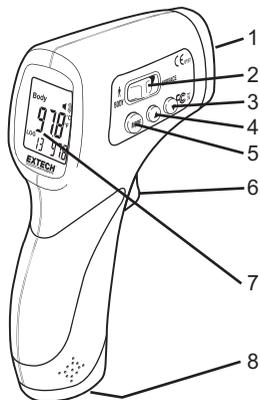
Clean the lens area by gently blowing with compressed air and use a damp swab to wipe the lens. Do not use any solvents to clean the lens.

### **Measurement Notes**

1. If the meter has been stored in a cold or hot environment, allow it at least 20 minutes to acclimate to room temperature before making measurements.
2. To prevent transmission of disease, avoid direct contact with the skin.
3. After heavy exercise always wait at least 10 minutes before taking forehead temperature readings.

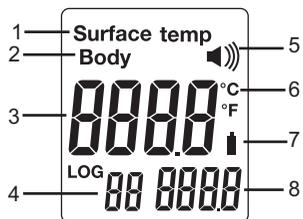
## Meter Description

1. IR sensor
2. Body – Surface switch
3. ▼ button
4. ▲ button
5. MODE button
6. Measurement trigger
7. LCD display
8. Battery compartment



## DISPLAY

1. Surface mode
2. Body mode
3. Temperature display
4. Memory location
5. Alarm active
6. Temperature units
7. Low battery icon
8. Memory temperature display



# ***Operating Instructions***

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## **Body Temperature Measurements**

1. Set the Body-Surface- switch for “Body” for accurate measurements in the range of 89.6.0 to 108.5°F (32.0 to 42.5°C).
2. Hold the meter by its handle and point it toward the surface to be measured. Measurement distance should be 2 to 6” (5 to 15cm).
3. Press the trigger to turn the meter on and take a temperature reading. The temperature reading appears in the large display and the logged data number and value appear in the smaller display.
4. Release the Trigger and the reading will hold for approximately 7 seconds after which the meter will automatically shut off. Trigger presses can occur up to a rate of one a second to quickly log samples.
5. If the temperature goes above 109°F or 43°C, Hi will appear in the display. If the temperature goes below 86°F or 30°C, Lo will appear in the display.

## **Body Temperature Mode settings**

1. With the meter OFF, press the MODE button once to set the C/F temperature units. The temperature units will flash. Press the ▲ or ▼ buttons to change the units.
2. Press the MODE button a second time to set the alarm temperature limit. Press the ▲ or ▼ buttons to change the value.
3. Press the MODE button a third time to enter the long term calibration drift correction mode. On entering the mode, the previous temperature correction factor will appear on the display. To make a correction, measure a known, fixed temperature source. Enter the correction mode and press the ▲ or ▼ buttons to change the correction value and minimize the difference in readings. Repeat and adjust the correction value as needed until the measurement on the IR200 matches the known temperature.
4. Press the MODE button a fourth time to set the alarm buzzer status. Press the ▲ or ▼ buttons to switch from ON to OFF.

## **Surface Temperature Measurements**

1. Set the Body-Surface- switch for “Surface” for wide range surface measurements of most materials.
2. Hold the meter by its handle and point it toward the surface to be measured.
3. Press the trigger to turn the meter on and take a temperature reading. The temperature reading appears in the large display and the logged data number and value appear in the smaller display.
4. Release the Trigger and the reading will hold for approximately 7 seconds after which the meter will automatically shut off. Trigger presses can occur up to a rate of one a second to quickly log samples.
5. If the temperature goes above 140°F or 60°C, “Hi” will appear in the display. If the temperature goes below 32°F or 0°C, “Lo” will appear in the display.

## Surface Temperature Mode settings

1. With the meter OFF, press the MODE button once to set the C/F temperature units. The temperature units will flash. Press the ▲ or ▼ buttons to change the units.
2. Press the MODE button a second time to set the alarm temperature limit. Press the ▲ or ▼ buttons to change the value.
3. Press the MODE button a third time to set the alarm buzzer status. Press the ▲ or ▼ buttons to switch from ON to OFF.

## Data memory

The meter can store up to 32 readings in the memory. To review the logged data points, press both the ▲ and ▼ buttons while the unit is OFF. Use the ▲ or ▼ buttons to scroll through the memory locations. To clear logged data, select the "0" memory location and press the MODE button. The unit will beep twice to indicate memory has been cleared.

## Battery Replacement

When the low battery symbol appears on the display, replace the meter's battery. The battery compartment is located on the bottom of the handle. Open the compartment by removing one screw and sliding the cover off. Replace the (2) "AA" batteries and close the battery compartment cover.

Never dispose of used batteries or rechargeable batteries in household waste.



As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.

Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

## IR Measurement Notes

1. Before measuring, be sure to clean surfaces that are covered with frost, oil, grime, etc.
2. If an object's surface is highly reflective, apply masking tape or flat black paint to the surface before measuring. Allow time for the paint or tape to adjust to the temperature of the surface it is covering.
3. Measurements through transparent surfaces such as glass may not be accurate.
4. Steam, dust, smoke, etc. can obscure measurements.
5. The meter automatically compensates for deviations in ambient temperature. However, it can take up to 30 minutes for the meter to adjust to extremely wide changes.

## ***IR200 Thermometer Cleaning Instructions***

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The IR200 Non-Contact Forehead IR Thermometer is a non-critical Reusable Medical Equipment (RME) device.

Please clean and disinfect the housing and lens of this device before and after each use. To clean and disinfect this device please read and understand these instructions.

### **Equipment Required**

Please obtain Isopropyl Alcohol or a mild antiseptic solution (70% alcohol concentration or higher) and low-lint soft cloths or cotton swabs.

### **Housing cleaning**

Germicidal wipe products may be used to clean the housing if they contain at least a 55% alcohol concentration and a 2-minute contact time rule is followed.

### **Lens cleaning**

For lens cleaning please use 70% alcohol concentration only.

### **Procedure and Notes**

1. To clean the meter housing, moisten a cotton swab, cotton tissue, or cotton cloth lightly with alcohol and gently wipe the device. Alternatively, use a germicidal wipe as described in the 'Equipment Required' section above
2. Do not use an excessive amount of alcohol while cleaning; do not allow moisture to seep through the button access areas
3. To clean the IR lens, lightly moisten a cotton swab with a 70% Isopropyl alcohol based solution and swab the lens. Please allow 10 to 15 minutes drying time before use after cleaning the lens
4. Never submerge the device in liquid, or place it in an autoclave device, or subject it to harsh solvents or abrasives
5. Allow the device to dry for at least 10 to 15 minutes after cleaning before use

## Specifications

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	Range	Accuracy
Body Temp	32.0 to 42.5°C (89.6 to 108.5°F)	±0.3°C/0.5°F
Surface Temp	0 to 60°C (32.0 to 140°F)	±0.8°C/1.5°F

Emissivity	0.95 fixed
Field of View	D/S = Approx. 8:1 ratio (D = distance; S = spot or target)
IR Spectral response	6 to 14 µm (wavelength)
Display	Backlit LCD display with function indicators
Memory	store up to 32 readings
Response time	500ms
Over range indication	Hi or Lo
Operating Temperature	0°C to 50°C (32°F to 122°F)
Relative Humidity	10% to 90%RH operating: <80%RH storage.
Storage Temperature	-20 to 60°C (-4 to 140°F)
Power Supply	(2) AA <sup>+</sup> Batteries
Automatic Power Off	7 seconds (approx.),
Weight	177g (6.24oz.)
Dimensions	160 x 82 x 42mm (6.3 x 3.2 x 1.7")

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