

Item Code 73010

Infrared Thermometer B

with Laser Pointer



Easy-to-use simple design
Hygienic non-contact measurement



Measurement
Range

Temperature $-60^{\circ}\text{C} \leftrightarrow 500^{\circ}\text{C}$

Standard
type

■Part Names

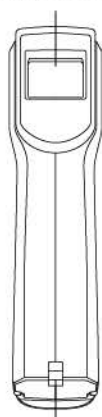
●Main body

LCD panel

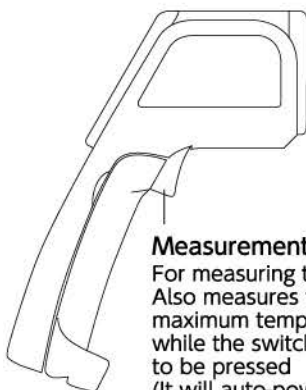
Displays the temperature measured as well as other related information

Infrared lens (detects infrared rays)

Detects the infrared rays emitted by the object being measured



Hole for strap



Measurement switch

For measuring temperature
Also measures the maximum temperature while the switch continues to be pressed
(It will auto-power-off about 15 seconds after releasing the switch)



Laser light-emitting port
Irradiates a red laser point approximately 2cm from the center of the measurement range

Battery cover

●Liquid crystal display

Backlight icon

Turns on while temperature is displayed

Laser icon

Turns on while temperature is displayed, blinks while temperature is measured

Hold icon

Displays the temperature for about 15 seconds after measuring

Measuring icon

Blinks while temperature is measured

Battery icon

Displays the amount of battery power remaining



Temperature display

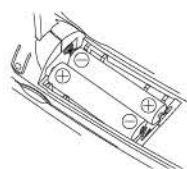
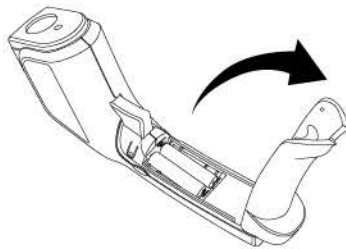
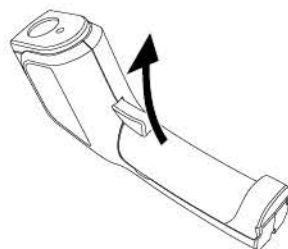
Displays every 0.1°C from -9.9°C up to less than 200°C, while no decimal points will be displayed for other measurement values

Maximum temperature display

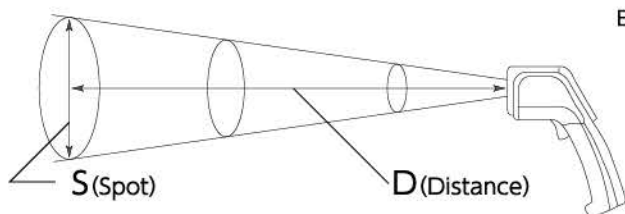
Displays the maximum temperature while the measurement switch is continuously pushed

■Installing the Batteries

Open the battery cover on the back of the device, and properly install 2 AAA alkaline batteries.



■Measurement Distance and Range



Example: 36cm distance to the object being measured
→ 3cm spot

6m distance to the object being measured
→ 50cm spot

※Measuring range
minimum diameter: 20mm

$$D(\text{Distance}):S(\text{Spot})=12:1$$

■Use

- For measuring various temperatures.

■Features

- Infrared thermometer that measures temperature instantaneously without contacting the object being measured.
- With laser point function to find the measuring spot at a glance.
- Equipped with a backlight for viewing LCD panel in dark areas.

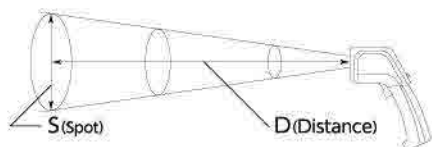
■Specifications

Accuracy	0~500°C:±2% or ±2°C (higher value) -60~0°C:±(-2°C+(displayed value X 0.05)) °C
Measuring Range	-60~500°C
Resolution	-9.9~199.9°C:0.1°C Others:1°C
Sampling Interval	1second
Operating Temperature	0~50°C
Emissivity	0.95(Fixed)
Auto Power Off	After 15 seconds without operation
Battery Life	14 hours (continuous use)
Power Source	Two (2) 'AAA' alkaline batteries (Batteries included are for trial use only and may not last as long)
Laser Wavelength	650nm(average)
Output	1mW or less(JIS Class2)
Body Size	185×46×143mm
Weight	240g(including battery)
Material	Body:ABS resin

Laser point
illustration



Laser point is approximately 2cm from center of measurement range



$$D(\text{Distance}):S(\text{Spot})=12:1$$

Example: 36cm distance to the object being measured → 3cm spot

6m distance to the object being measured → 50cm spot

※Measuring range minimum diameter: 20mm

About This Device and Emissivity

- This device is a non-contact thermometer which reads the infrared rays emitted from an object, converts them to temperature, and displays them on the LCD panel.
- The emissivity of infrared rays will differ depending on the object. To take an accurate measurement of temperature, it is necessary to match this device with the emissivity of the object.
- The emissivity of this product is fixed at 0.95. When measuring objects with an emissivity other than 0.95, measure after first affixing black-body tape or coating with a black-body paint.
- The emissivity of a mirrored surface or an object through which light passes will be strongly affected by reflectivity and transmittance. To take an accurate measurement of temperature, please measure after first affixing black-body tape or coating with a black-body paint.

■ Troubleshooting

H₁

Outside measurement range (higher than 500°C)

Measure a temperature cooler than 500°C.

Lo

Outside measurement range (lower than -60°C)

Measure a temperature that is warmer than -60°C.

Er-2

Rapid change in temperature

Measure after more than 30 minutes when the device has adjusted to the ambient temperature.

Er-3

Outside operating temperature range (lower than 0°C or greater than 50°C)

Measure after more than 30 minutes when the device is within range of its operating temperature.

Er

Other error messages

After turning the device off, remove the battery and reinsert it after 1 minute, then turn the device on and try measuring again.

Warning

- Never look at the laser source directly or point the laser at others. The laser light could cause vision loss if it directly enters the eye.
- Keep the thermometer out of the reach of children.

Caution

- Do not use the thermometer as a clinical thermometer.
- The device is not resistant against water. Do not use in an area where it could get wet, as this could damage it.
- Do not disassemble or alter the device, as this may lead to malfunctioning.
- Do not drop or subject to strong impact as this may cause the device to operate incorrectly.
- Steam, dust, and smoke can affect the accuracy of the temperature measurement.
- Remove the battery before storing the device when not being used for a long period.
- This is a non-contact infrared thermometer. Do not allow it to touch the object being measured. Contact with an object at a very high temperature may cause a mistaken measurement to be displayed or cause the device to break down.
- See the ■ Specifications section for details about the accuracy of this device. For temperature control that requires greater accuracy, please purchase a precision thermometer.
- Measurement differences may occur depending on factors such as material, luster, thickness, color and emissivity of the object.
- When using the device in an environment with electronic noise, the display could become unstable or there may be significant errors. Also, do not bring the thermometer close to electrified objects.
- Do not wash or wipe the device with alcohol, thinner, or any other organic solvent. To wipe dirt away, soak a gauze or similar fabric with neutral detergent in lukewarm water and wipe only after thoroughly wringing out the cloth.
- Keep the measuring window (the part that detects infrared rays) clean. To clean it, wipe with a soft cloth or cotton fabric dampened in water or alcohol for medicinal use (ethyl alcohol). Measurements taken while the device is wet could cause malfunction, so make sure that it is dry before using.
- A rapid change in the ambient temperature may affect the accuracy. Use the device after it has sufficiently adjusted to the ambient temperature. In the case that the ambient temperature changes by more than 10°C, it will take the device more than 30 minutes to adjust to it.
- Do not use or store this product outside of its operating temperature.
- We shall not be liable for any consequential, incidental, or indirect damages such as losses and lost profits to the customer as well as a third party resulting from the operation of this product, regardless of whether or not they were foreseeable or the possibility was reasonably foreseeable. However, this shall not apply in the case where there is willful or gross negligence or when the customer is a consumer according to the Consumer Contract Act. In the event that we are liable for the use of this product, we shall be liable for damages limited to an amount equal to the price of the product.