

Measure what you see.

BYK t200 IR Thermometer



Manual



IR Thermometer

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CAUTION!

Read Instruction Manual before using this instrument.



WARNING!

This manual cannot address all of the safety considerations associated with its use. It is the responsibility of the user to consult this manual and establish appropriate safety practices for use with this equipment and the individual material being tested.



WARNING!

The BYK t200 IR Thermometer is designed and intended for the use described in this manual. Using the IR Thermometer for other purposes for which it was not designed may reduce or eliminate the protection offered by the features of the instrument. Serious injury may result.



WARNING!

Ultimate disposal of this product should be handled according to all national laws and regulations.



SAFETY!

- Use extreme caution when the laser beam is 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 strike your eye.
- Do not aim the laser light beam at or through any gas that can explode.



Please note the following points:

- Familiarize yourself with the layout and operation of the controls.

2 Preparations

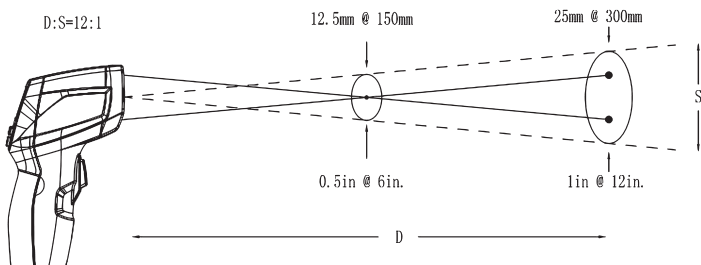
The BYK t200 IR Thermometer is capable of non-contact, infrared temperature measurement. By depressing the trigger button, a dual-beam laser pointer illuminates the target area and measures the surface temperature. The non-contact Infrared Thermometer measures surfaces that are difficult to reach or not possible to measure by contact measurement devices.

FEATURES

- Rapid detection function
- Precise measurements
- Dual laser targeting
- Ergonomic housing design
- Automatic data hold
- Illuminated display screen
- MAX/MIN function

DISTANCE & SPOT SIZE

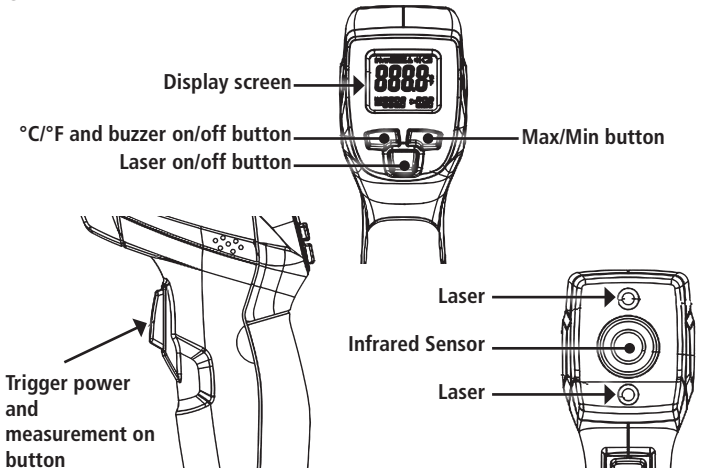
As the distance (D) from the object increases, the spot size (S) of the area measured by the unit becomes larger. The relationship between distance and spot size is shown below. The focal point for the unit is 914 mm (36"). The spot sizes shown indicate 90% encircled energy.



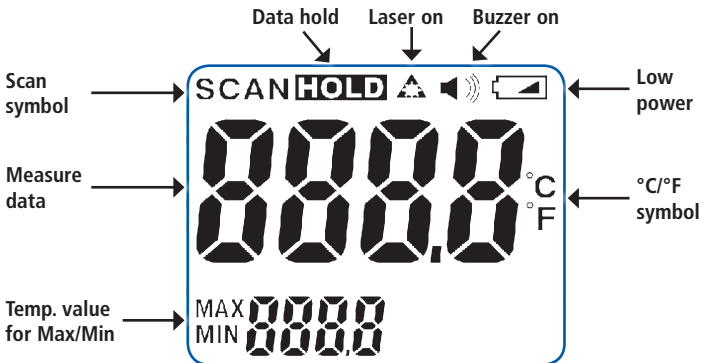
FIELD OF VIEW

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.

OVERVIEW



LCD INTERFACE INSTRUCTIONS



4 Operation

MEASUREMENT OPERATIONS

1. Hold the meter by its Handle Grip and point it toward the surface to be measured.
2. Pull 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. Release the Trigger and the HOLD display icon will appear on the LCD indicating that the reading is being held. In HOLD status, press the laser button to turn on or off the laser. Press the buzzer button to turn on or off the buzzer. Press the MIN/MAX button to display the minimum and maximum temperatures.
- 4 The meter will automatically power down about 10 seconds after the trigger is released.

Switching °C/°F

Press the °C/°F button two seconds until the °C/°F symbol changes.

Switching Max/Min

Press the Max/Min button.

Switch on/off laser

Press the laser button

Switch on/off buzzer

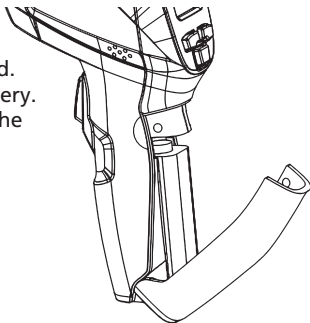
Short press the °C/°F button

Find Max/Min

If the buzzer is turned on, when BYK t200 finds the Max/Min value, the buzzer will beep.

BATTERY REPLACEMENT

If battery power is not sufficient, the low power symbol will be displayed. Replace with one new 9V alkaline battery. Open the battery cover by squeezing the rubber grip below the display and pull forward.



SPECIFICATIONS

| | |
|----------------------------------|---|
| Temperature range | -50 to 380°C (-58 to 716°F) |
| Temperature accuracy | -50 to 20°C (-58 to 68°F) $\pm 2.5^{\circ}\text{C}$ (4.5°F) 20 to 380°C (68 to 716°F) $\pm 1.0\%$ +1°C (1.8°F) |
| Temperature repeatability | $\pm 1^{\circ}\text{C}$ (1.8°F) |
| Response time | 150 ms |
| D:S Ratio | 12:1 |
| Spectral response | 8-14 microns |
| Over range indications | Display will show "----" |
| Diode Laser | 630-670 nm Wavelength <1 mW output Class 2 laser |
| Operating temperature | 0 to 50°C (32 to 122°F) |
| Operating humidity range | 10% to 90% RH |
| Storage temperature | -10 to 60°C (14 to 140°F) |
| Power supply | 9V alkaline battery |
| Display resolution | 0.1°C (0.1°F) |
| Emissivity | Fixed at 0.95 |

All technical data is subject to change.

EC – Declaration of Conformity



We BYK-Gardner USA
9104 Guilford Road
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herewith declare the product:

Type: **BYK t200 IR Thermometer**

comply with the requirements of the following EC directives:

Electromagnetic Compatibility 2014/30/EU

The following harmonized standards were applied:

EN 61326-1:2013
EN 61326-2-1:2013

Columbia, MD, August 30, 2019

Technical documentation is available

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