



**0213-A500  
INFRARED THERMOMETER  
OPERATION MANUAL**

PLEASE SCAN QR CODE TO  
WATCH THE OPERATION  
VIDEO OF PRODUCTS.



## 1. Description

- Thank you for purchase of the IR Thermometer.
- This is capable of non-contact (infrared) temperature measurements at the touch of a button.
- The built-in laser pointer increases target accuracy while handy push-buttons combine for convenient, ergonomic operation.
- The Non-contact Infrared Thermometer can be used to measure the temperature of objects' surface that is improper to be measured by traditional (contact) thermometer (such as moving object, the surface with electricity current or the objects which are uneasy to be touched).
- Proper use and care of this meter will provide years of reliable service.

## 2. Feature

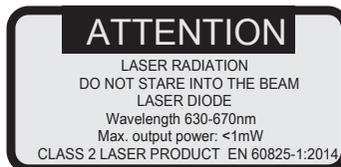
- Rapid detection function
- Precise non-contact measurements
- Dual laser sighting
- Automatic Data Hold
- Negative display screen
- Looking for " MAX/MIN " function
- Unit: °C, °F

## 3. Wide Range Application

- |                              |                                     |
|------------------------------|-------------------------------------|
| • Food preparation           | • Asphalt, Marine                   |
| • Safety and Fire inspectors | • Screen Printing                   |
| • Plastic molding            | • Measure Ink and Dryer Temperature |
| • HVAC/R                     | • Diesel and Fleet Maintenance      |

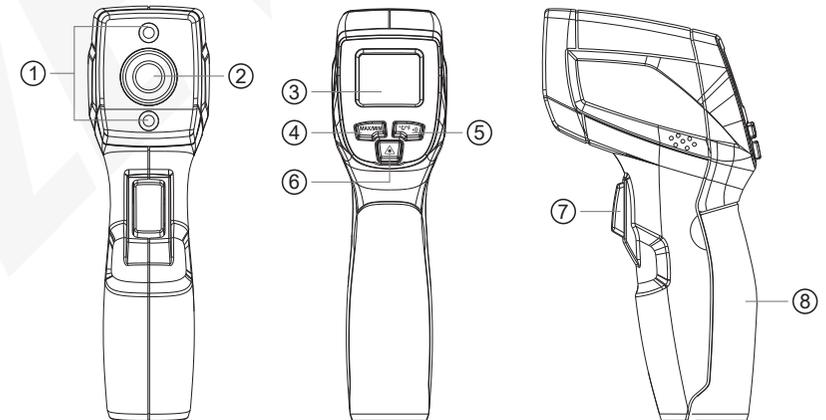
## 4. Safety

- Use extreme caution when the laser beam is turned on.
- Do not let the beam enter your eye, another person's eye.
- Be careful not to let the beam on a reflective surface strike your eye.
- Do not allow the laser light beam impinge on any gas which can explode.



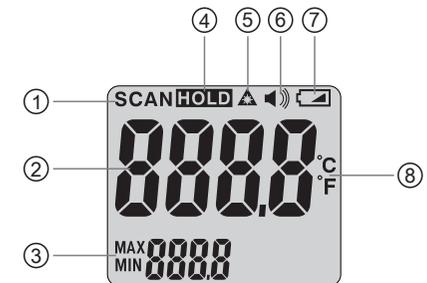
## 5. Panel Description

- 1-Laser
- 2-Infrared Sensor
- 3-Display Screen
- 4-Max/Min Button
- 5-°C/°F and Buzzer On/Off Button
- 6-Laser Button
- 7-Switch Button (Automotive switch off about 10 seconds)
- 8-Battery Cover



## 6. LCD Interface Instruction

- 1-Scan Symbol
- 2-Measure Data
- 3-Temperature Value for Max/Min
- 4-Data Hold Symbol
- 5-Laser On Symbol
- 6-Buzzer On Symbol
- 7-Lower Power Symbol
- 8-°C/°F Symbol



## 7. Measurement Operation

- Hold the meter by its Handle Grip and point it toward the surface to be measured.
- 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.
- 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.
- The meter will automatically power down after approximately 10 seconds after the trigger is released.

### Switching °C/°F

Press the °C/°F Button two seconds until the °C/°F symbol changed.

### Switching MAX/MIN

Press the MAX/MIN Button.

### Switch On/Off Laser

Press the Laser Button.

### Switch On/Off Buzzer

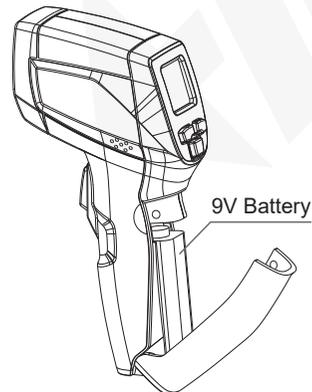
Short press the °C/°F Button.

### Find Max/Min

If the buzzer is switch on, when it find the Max/Min value, the buzzer will beep sound.

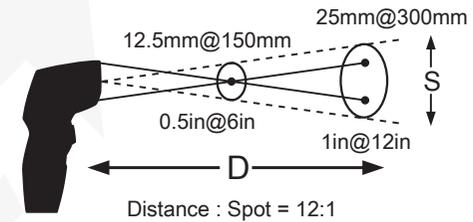
## 8. Battery Replacement

- As battery power is not sufficient, LCD will display the lower power symbol, replacement with one new battery type 9V is required.
- Open battery cover, then take out the battery from instrument and replace with a new 9-Volt battery and place the battery cover back.



## 9. 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 for each unit is listed below.
- The focal point for each unit is 914mm (36").
- The spot sizes indicate 90% encircled energy



## 10. Specification

Temperature range	-20°C~380°C/-4°F~716°F
Temperature accuracy	±2.5°C (at -20°C~20°C), ±2% or ±2.0°C (at 20°C~380°C) ±4.5°F (at -4°F~68°F), ±2% or ±3.6°F (at 68°F~716°F)
Temperature resolution	0.1°C/0.1°F
Distance to spot size (D:S)	12:1
Emissivity	0.95 (fixed)
Repeatability	±1°C/1.8°F
Response time	150ms
Spectral response	8~14µm
Diode laser	output<1mW, wavelength 630~670nm class 2 laser product
Operation temperature	0°C~50°C/32°F~122°F
Operation humidity	10%RH~90%RH
Storage temperature	-10°C~60°C/14°F~140°F
Storage humidity	<80%RH
Power supply	9V Battery, NEDA 1604A or IEC 6LR61 or equivalent
Dimension	137×73×38mm
Weight	135g

### Note:

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.