

# INFRARED THERMOMETER

Item Number W89722

## MANUAL



Performance Tool®

### PRODUCT SPECIFICATIONS

Temperature Range:.....-58 - 626°F (-50 - 330°C)  
Accuracy:.....±1.5°C  
Resolution:.....0.1°F (0.1°C)  
Response Time:.....500 ms  
Emissivity:.....0.95 Fixed  
Distance to Spot Ratio:.....12:1  
Spectral Response:.....8:14µm  
Storage Temperature:.....0~40°C (32~104°F)  
Operating Temperature:.....-20~60°C (-4~140°F)  
Power: .....2 AAA

### INTRODUCTION

Compact rugged and easy to use. Just aim and push the button, it reads current surface temperatures in less than a second. Safely measure surface temperatures of hot, hazardous or hard-to-reach objects without contact.

### HOW IT WORKS

Infrared thermometer measures the surface temperature of an object. The unit's optical sensor emitted, reflected, and transmitted energy which is collected and focused onto a detector. The unit's electronics translate the information into a temperature reading which is displayed on the unit. The laser makes aiming and measurement even more precise.

#### WARNING:

**LASER RADIATION**-Do not stare into beam or view directly with optical instruments. Do not point laser directly or indirectly (through reflective surfaces) at eye.

#### FOR YOUR SAFETY,

please read these instructions carefully and retain them for future use.

## READ AND UNDERSTAND ALL IMPORTANT SAFETY INSTRUCTIONS

Failure to follow all instructions detailed in this manual may result in serious personal injury. **SAVE THESE INSTRUCTIONS**

## CAUTIONS

Infrared thermometer should be protected from the following:

- **EMF** (electro-magnetic fields). From arc welders and induction heaters.
- **Thermal shock** (caused by large or abrupt ambient temperature changes). Please allow 30 minutes for unit to stabilize before use.
- **High Temperature**. Do not leave the unit on or near objects of high temperature.

**DANGER: LASER RADIATION** - avoid direct or indirect (through reflective surfaces) eye contact with user(s), bystanders or other parties, including pets, children or animals as eye damage may occur.

## QUICK START INSTRUCTIONS

1. **Battery installation:** Push forward on the top of the black handle grip (battery door) and install batteries correctly. Press the trigger, LCD display will turn on and show temperature reading. Release the trigger and the temp reading will hold for 10 seconds.
2. **Locating a hot spot:** To find a hot spot, aim the thermometer outside the area of interest, then scan across with an up and down motion until you locate the hot spot. (Turn on the laser pointer for accurate measuring).

## MAINTENANCE

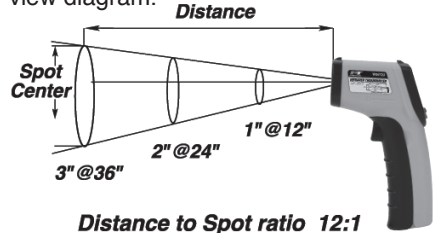
*Do not attempt to repair or disassemble the laser level. If unqualified persons attempt to repair this laser product, serious injury may result. Any repair required on this laser product should be performed by authorized service center personnel.*

1. **Lens cleaning:** Use clean compressed air to blow off loose particles. Use a clean soft brush to remove any debris away. If necessary clean with a clean damp cotton cloth.
2. **Case cleaning:** Clean the case with a damp sponge/cloth and mild soap.

**Note:** Do not use solvent to clean lens. Do not submerge the unit in water.

## OPERATING INSTRUCTIONS

1. When taking a measurement point thermometer toward the object to be measured and hold the trigger. The object under test should be larger than the spot size calculated by the field of view diagram.



### Distance to Spot ratio 12:1

2. **Distance & spot size:** As the distance from the object increases, the spot size of measuring area becomes larger.
3. **Field of view:** Make sure that the target is larger than the unit's spot size. The smaller the target the closer the measuring distance. When accuracy is critical, make sure the target is at least twice as large as the spot size.
4. **Emissivity:** Most organic materials, painted or oxidized surfaces have an emissivity of 0.95 (pre-set in the unit). Inaccurate readings will result from measuring shiny or polished metal surfaces. To compensate, cover part of the surface to be measured with masking tape. Measure the temperature of the taped surface once it reaches the same temperature as the original surface.

## PARTS IDENTIFICATION

- |                        |                       |
|------------------------|-----------------------|
| 1 - LCD                | 10 - Data Hold Icon   |
| 2 - Back Light Key     | 11 - Laser Icon       |
| 3 - °C/°F Key          | 12 - °C/°F Symbol     |
| 4 - Laser Key          | 13 - Temp. Reading    |
| 5 - Battery Cover      | 14 - Low Battery Icon |
| 6 - Trigger            |                       |
| 7 - Laser              |                       |
| 8 - Infrared Lens      |                       |
| 9 - Back Light On Icon |                       |



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