

Infrared Thermometer

Item 96451

AWARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.



When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

Visit our website at: http://www.harborfreight.com

Email our technical support at: tech@harborfreight.com

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Specifications

Measurement Range	-4°F to 968°F (-20°C to 520°C)
Accuracy	± 4°F below 212°F ± 2% reading above 212°F
Response Time	500 mSec
Spot Size Ratio	8:1 (Distance : Spot size)
Needed Battery	9V



Save This Manual

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

Important Safety Information

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

A DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

AWARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

ACAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

General Power Tool Safety Warnings



WARNING Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in serious injury.

Save all warnings and instructions for future reference.

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Keep children and bystanders away while operating the tool. Distractions can cause you to lose control.
- Do not expose the tool to rain or wet conditions.
- Stay alert, watch what you are doing and use common sense when operating the tool. Do not use while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention may result in serious personal injury.

- Do not use the tool if the Trigger does not turn it on and off. Any tool that cannot be controlled with the Trigger is dangerous and must be repaired.
- Disconnect the battery before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of activating the Laser accidentally.
- Maintain the tool. Check for misalignment or binding of parts, breakage of parts and any other condition that may affect the tool's operation. If damaged, have the tool repaired before use. Many accidents are caused by poorly maintained tools.
- 8. Use the tool in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the tool for operations different from those intended could result in a hazardous situation
- Have your tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the tool is maintained.

- 10. Do not open the housing other than battery compartment.
- 11. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- This product is not a toy. Keep it out of reach of children.
- 13. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



Controls



Installing the Battery

Remove the battery cover and insert a 9V battery into the unit, paying attention to polarity. Replace the battery cover.

Operating Instructions

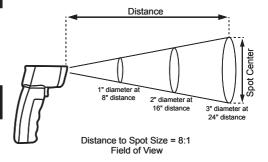


Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Note: Do not expose this product to strong electromagnetic fields, such as those generated by an arc welder, induction heater, etc.

Note: When moving the Thermometer to an area with significantly different ambient temperature, allow the unit to adjust to the new ambient temperature for 30 minutes before use.

- Push the Laser ON/OFF button to toggle the Laser.
- 2. Push the °F/°C button to toggle from Fahrenheit to Celsius.
- 3. Squeeze the Trigger and move the laser to see a constant temperature reading.
- 4. Release the Trigger to display the most recent temperature reading.
- 5. Non-reflective surfaces will yield a more accurate reading than reflective surfaces. Duct tape (sold separately) can be applied to reflective surfaces in order to get a better measurement. Allow sufficient time for the tape to match the temperature of the surface it is applied to before trying to get a reading.
- The maximum range for the Infrared Thermometer is approximately 8 feet. The object being tested should be larger than the size calculated by the Field of View diagram, below.



- 7. When finished, release the Trigger.
- Clean the lens with dry compressed air and wipe the rest of the unit down with a soft, damp cloth, then store the product indoors out of children's reach.

Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Release the Trigger and remove the Battery before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
Do not use damaged equipment.

If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- BEFORE EACH USE, inspect the general condition of the Thermometer. Check for loose hardware, misalignment or binding of parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
- 2. **AFTER USE**, wipe external surfaces of the tool with clean cloth.

Parts List and Assembly Diagram

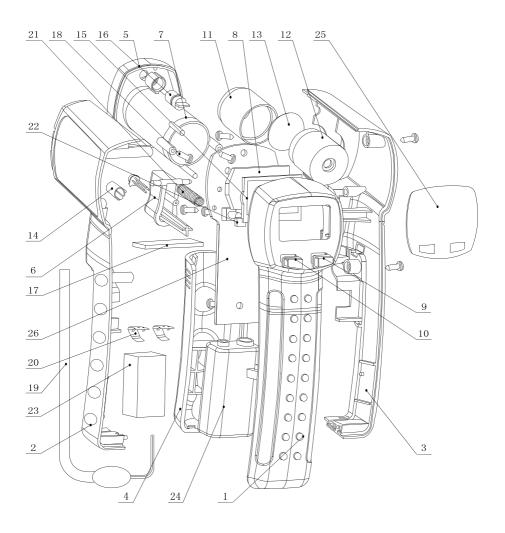
Parts List

Part	Description
1	Handle Case
2	Left Cover
3	Right Cover
4	Battery Cover
5	Opening Hood
6	Trigger
7	Receiving Tube
8	Backlight Board
9	°F/°C Button
10	Laser ON/Off Button
11	Aluminum Receiving Tube
12	Aluminum Lens Tube
13	Sensor Lens

Part	Description
14	Receiving Housing
15	LCD
16	Laser Set
17	Insulator
18	Screw
19	Tape
20	Battery Connector
21	Spring
22	Black Rubber
23	Cushion
24	9V Battery
25	Display Panel
26	PCB

Record Product's Serial Number Here:

Assembly Diagram



Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

