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CE



User's Guide



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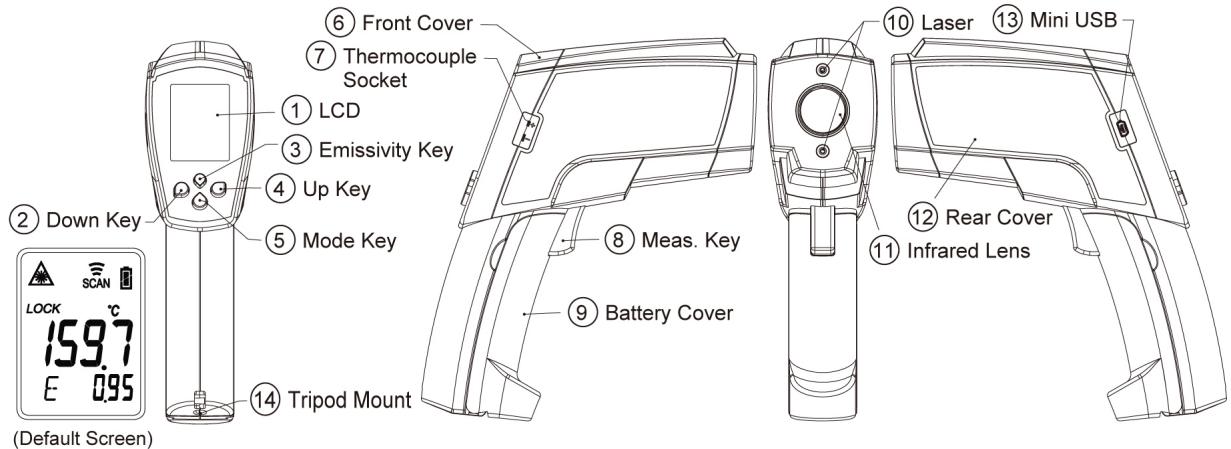
OS768-LS
Non-contact
Infrared Thermometer

OS768-LS Thermometer Operating Instructions

For Model with thermocouple socket

The non-contact infrared thermometer is the ultimate tool for temperature measurements. It can measure from 100 to 1800 °C (212~3272 °F) in the distance of 75:1 DS (Distance to Spot) ratio. Furthermore, the memory mode can record and display the specific measurement with emissivity. There are many mathematical modes for the Infrared function.

* Please remember to keep away from children and don't use it for safety related applications.



Simply aim the thermometer at the measure target with Lens (⑪) and press Meas. key (⑧) to display the surface temperature. The Distance:Spot is 75:1. The two laser points are the reference for the target spot size. Please make sure the target area is within the field of view.

FUNCTION

Press Emissivity key (③) for setting the emissivity



Press Emissivity key (③), then press Up key (④) or Down key (②) to set the emissivity, then press Mode key (⑤) to confirm it. The emissivity can be changed from 0.10 (10E) to 1 (100E).

Press Mode key (⑤) for scrolling more display function as follows.

| | |
|------------|--|
| E | Here will show the emissivity data. (The default emissivity is 0.95.) |
| MAX | Press Mode key (⑤) for the Maximum (MAX), Minimum (MIN), Different between MAX and MIN (DIF) and Average (AVG) modes. During the measurement, the special modes reading will be displayed beside the mode icon. |
| MIN | |
| DIF | |
| AVG | |
| HAL | Press Up key (④) or Down key (②) to change the High Alarm (HAL) or Lo Alarm (LAL), then press Meas. key (⑧) to confirm it. When the reading is outside the High Alarm (HAL) or Lo Alarm (LAL) limit. The High or Low icon will flash and you will hear a beep sound. |
| LAL | |
| PRB | Connect the thermocouple with Thermocouple socket (⑦) and put the probe in/on the target, the thermometer will display the temperature automatically without pressing any button. To see the minimum or maximum data during the probe measurement, please hold down the Up key (④) or Down key (②). |
| M00 | ⚠ After measure high temp, the probe may remain HOT for a while. After taking the temperature, press Mode key (⑤) for the Memory (M00), then press Meas. key (⑧) to save the measurement. Under the Memory (M00), press Up key (④) or Down key (②) key to display the record up to 24 sets. In "Memory" mode, press and hold the Up key (④), then press the Down key (②) for 2 seconds to clear the records. |

** The thermometer will automatically shut off if left idle for more than 60sec, unless in PRB mode. (In PRB mode, it will shut off if left idle for more than 12 minutes.)

ADD VALUE

| | |
|---|--|
| In MAX, MIN, DIF, AVG mode: | Press Up key (④) for LOCK mode ON/OFF. The lock mode is particularly useful for continuous monitoring of temperatures for up to 60 minutes. Press Down key (②) for °C or °F transferred . |
| In all modes: First hold on the Meas. key (⑧) | and press Up key (④) for backlight function ON/OFF and press Down key (②) for laser function ON/OFF. (With flash light be turned on in the same time as laser) ⚠ |

⚠ CAUTION

1. WHEN DEVICE IS IN USE, DO NOT LOOK DIRECTLY INTO THE TWO LASER BEAMS—PERMANENT EYE DAMAGE MAY RESULT.
2. USE EXTREME CAUTION WHEN OPERATING THE LASER.
3. NEVER POINT THE DEVICE TOWARDS ANYONE'S EYES.
4. KEEP OUT OF REACH OF ALL CHILDREN.

STORAGE & CLEANING

It should be stored at room temperature. The sensor lens is the most delicate part of the thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol. Allowing the lens to fully dry before using the thermometer. Do not submerge any part of the thermometer.

LCD ERROR MESSAGES

The thermometer incorporates visual diagnostic messages as follows:



'Hi' or 'Lo' is displayed when the temperature being measured is outside of the settings of HAL and LAL.



'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature exceeds 0°C (32°F) or +50°C (122°F). The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilize to the working/room temperature.



Error 5~9, for all other error messages it is necessary to reset the thermometer. To reset it, wait for auto power off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. If the error message remains please contact the Service Department for further assistance.



'Hi' or 'Lo' is displayed when the temperature being measured is outside of the measurement range.

BATTERIES

The thermometer incorporates visual low battery indication as follows:



'Battery OK':
measurements are possible



'Battery Low': battery needs to be
replaced, measurements are still possible



'Battery Exhausted':
measurements are not possible

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with AAA x 2 batteries.

Please note: It is important to turn the instrument off before replacing the battery otherwise the thermometer may malfunction.

⚠ Dispose of used battery promptly and keep away from children.

SPECIFICATION

| | | |
|------------------------|---|--|
| Item | Non-contact Infrared Scan function | Thermocouple Probe Scan function (K type; a bead wire included.) |
| Measurement Range | 100 to +1800 °C (212 to +3272 °F) | K Type: -64 to +1400°C (-83.2 to +2552°F) Bead : -50 to +250°C(-58 to +482°F) |
| Operating Range | 0 to +50°C (32 to +122°F) | |
| Accuracy (Tamb=23±3°C) | ±2% of reading | ±1% of reading or 1°C (1.8°F) whichever is greater (Test under Tamb=23±6°C) |
| Emissivity Range | 0.95 default – adjustable 0.1 to 1 step .01 | |
| Resolution | 0.1°C/0.1°F at -83.2 to 999.9(°C/F), otherwise 1°C/1°F | |
| Response Time (90%) | 1 sec. | |
| Distance:Spot | 75:1 | |
| Memory | Detailed 24 Memories with Temperature & Emissivity | |
| USB Function | Please download the program from CD (enclosed with the package) | |
| Battery Life | Typ.100, min70 hours continuous use (Alkaline, without Laser and Back Light.) | |
| Dimensions | 204.14*179.19*58.40 mm (8.04×7.05×2.30 inch) | |
| Weight | 355 grams(12.52 oz) including batteries (AAA*2pcs) | |

⚠ EMC/RFI: Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.



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OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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