



## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **25 months** from date of purchase of the **base unit** and **13 months** from date of purchase on **Laser Sight Module**. 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 are not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

## 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.

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 or calibration,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2007 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

5

### Functional Flow Chart when the Trigger is Pulled (Real Time Mode)

Real Time Modes	Press [FUNC] to...	Press [LOCK] to...	Display shows:
E	Go to E.Fd.M	Lock or unlock Trigger	Emissivity Current temperature
E.Fd.M	Go to LSR	Set laser to Flashing or On	Distance (feet or meter) Current temperature
LSR	Go to MAX	Reset Maximum, Minimum, Diff. Average temps	Laser status Current temperature
MAX	Go to MIN	Enable/Disable HAL	Maximum temperature Current temperature
MIN	Go to DIF	Enable/Disable LAL	Minimum temperature Current temperature
DIF	Go to AVG	Enable/Disable ATC	Differential temp Current temperature
AVG	Go to HAL	Enable/Disable PRN	Average temperature Current temperature
HAL	Go to TC	Store temp data	High alarm set point Current temperature
TC	Go to LAL	Turn on/off Logging	Thermocouple temp Current temperature
LAL	Go to AMB		Low alarm set point Current temperature
AMB	Go to PRN		Ambient target temp Current temperature
PRN	Go to MEM		Data Trans. Interval Current temperature
MEM	Go to LOG		Memory location Current temperature
LOG	Go to E		Logging Current temperature

OS530LE, OS530HRE  
OS532E  
OS533E  
OS534E, OS523E, OS524E

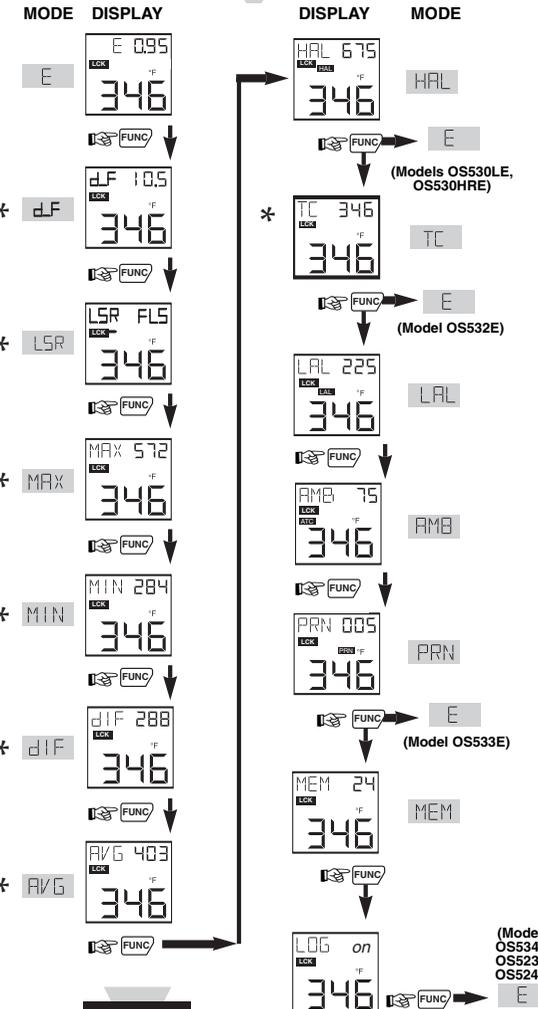
It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

**WARNING:** These products are not designed for use in, and should not be used for, patient connected applications.

PATENT NOTICE This product may be protected by one or more of the following patents: U.S. PAT. D357,194; B1 5,368,392; 5,524,984; 5,727,880; 5,465,838; 5,823,678; 5,823,679; 6,123,453; 6,267,500 B1; 6,341,891 B1; 6,377,400 B1; 6,540,398 B2; 6,614,830 B1; 6,633,434 B2; 6,659,639; / Canada 2,114,806; 2,116,055; 75811 © OMEGA ENGINEERING, INC./ Czech Republic 25372/ France 2756 920; 2 767 921; 2,773,213; 0378411 to 0378446; 2 773 213 B1 / Germany M 94 06 478.4; G 94 22 197.9; G 94 22 203.7/ Italy RM940000913/ Japan 988,378/Holland 1007752; 25009-00/ Spain mod. ut. 0133292/ Slovak Republic 24565/ U.K. Registered 2041153; 9726133.3/ EPO O 644,408 B2; EP 1 085 307 A1. Other U.S. and Foreign Patents Pending. Other U.S. and International Patents Pending.

6



CAUTION

- There should be a clean, open line of sight from the distance device to the target, otherwise an erroneous reading will result.
- For accurate distance measurement readings, the surface must be hard, flat, and reflective to ultrasonic pulse.
- Distance measurement can not be taken through glass, or off of soft and padded surfaces, or through smoke or fog.
- The distance measurement unit must be held perpendicular to the target surface.
- The distance measurement unit is designed for indoor use only.
- Accuracy of the distance measurement unit will vary depending on environmental conditions.
- Do not aim the distance measurement unit.



Warning and Certification Label

## QUICK START

OS530LE  
OS532E  
OS533E  
OS534E  
OS530HRE  
OS53x-CF  
OS523E  
OS524E



OMEGASCOPE®  
Handheld Infrared Thermometer



For latest product manuals: [omegamanual.info](http://omegamanual.info)

OMEGAnet™ On-Line Service <a href="http://omega.com">omega.com</a>	Internet e-mail <a href="mailto:info@omega.com">info@omega.com</a>
---	---

### Servicing North America:

USA: One Omega Drive, P.O. Box 4047  
Stamford CT 06907-0047  
Tel: (203) 359-1660  
Tel: (203) 359-7700  
e-mail: [info@omega.com](mailto:info@omega.com)

Canada: 976 Bergar  
Laval (Quebec) H7L 5A1  
Tel: (514) 856-6928  
FAX: (514) 856-6886  
e-mail: [info@omega.ca](mailto:info@omega.ca)

### For immediate technical or application assistance:

USA and Canada: Sales Service: 1-800-826-6342/1-800-TC-OMEGA®  
Customer Service: 1-800-622-2378/1-800-622-BEST®  
Engineering Service: 1-800-872-9436/1-800-USA-WHEN®

Mexico: En Español: (001) 203-359-7803  
e-mail: [espanol@omega.com](mailto:espanol@omega.com)  
FAX: (001) 203-359-7807  
[info@omega.com.mx](mailto:info@omega.com.mx)

### Servicing Europe:

Czech Republic: Rudé armády 1868, 733 01 Karviná 8  
Tel: +420 (0)69 6311899  
FAX: +420 (0)69 6311114  
Toll Free: 0800-1-66342  
e-mail: [czech@omega.com](mailto:czech@omega.com)

Germany/Austria: Daimlerstrasse 26, D-75392 Deckenpfronn, Germany  
Tel: +49 (0)7056 9398-0  
FAX: +49 (0)7056 9398-29  
Toll Free in Germany: 0800 639 7678  
e-mail: [germany@omega.com](mailto:germany@omega.com)

United Kingdom: One Omega Drive, River Bend Technology Centre  
Northbank, Irlam, Manchester  
M44 5EX United Kingdom  
Tel: +44 (0)161 777 6611  
FAX: +44 (0)161 777 6622  
Toll Free in United Kingdom: 0800-488-488  
e-mail: [sales@omega.co.uk](mailto:sales@omega.co.uk)

**START HERE**

## Using this Quick Start Manual

Use this Quick Start Manual with your OS530E/ OS520E series Handheld Infrared Thermometer to set up and perform basic operations. These tasks are:

- Installing the Batteries
- Operating the Laser Sight
- Taking Temperature Readings
- Measuring Distance

For detailed information, refer to the User's Guide (M4088).

## Getting Started

### Parts of the Thermometer

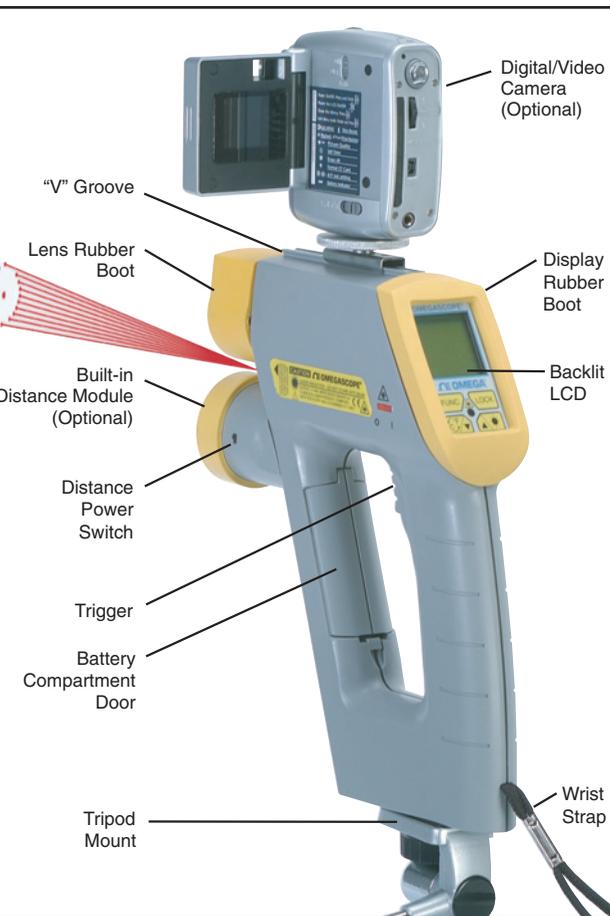


Figure 1. OS530E/OS520E Series Handheld Infrared Thermometer Front View



Figure 2. OS530E/OS520E Series Handheld Infrared Thermometer Various Views

**2**

**3**

**4**

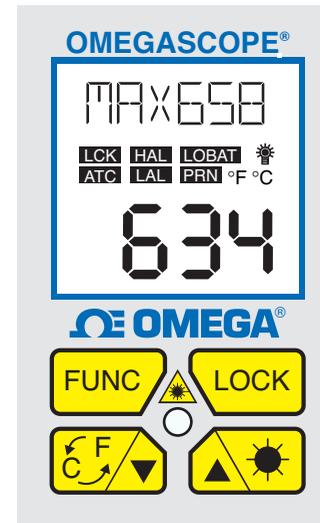


Figure 3. Display and Keypad View

### Installing the Batteries

Invert the unit and install 4 fresh AA size batteries as shown in Figure 4.

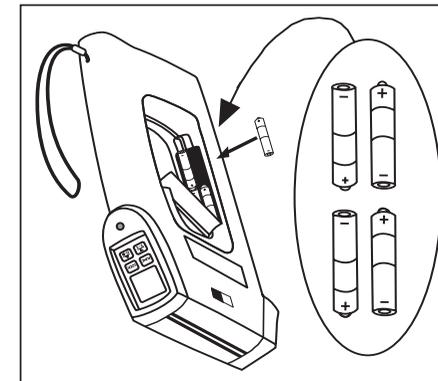


Figure 4. Installing the Batteries

### Operating the Laser Sight Function

**WARNING: DO NOT AIM THE LASER BEAM AT ANYONE'S EYES.**

**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified here may result in hazardous radiation exposure. Refer to the Operator's Manual for complete warnings and cautions.

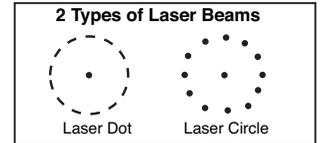


Figure 5. Two Laser Configurations  
The thermometer is ready for operation.

### Taking Temperature Readings

1. Aim at the target. If you are not using the Laser Sighting, use the "V" groove on top of the thermometer to align the target to the thermometer's field of view.

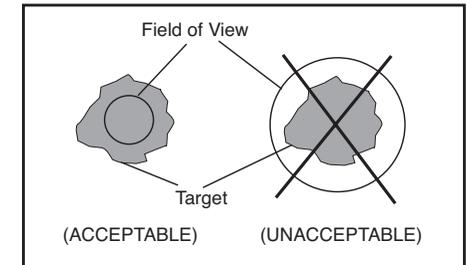


Figure 6. Field of View Positions

2. Pull and hold the trigger. To use the laser sighting, set the laser power switch to the ON position. The Power Indicator LED and the laser beam will turn on. The laser beam will stay on as long as the trigger is pulled. The target temperature and emissivity (E) will be displayed on the LCD. You can press the and key to increment or decrement the target emissivity. The laser beam is switchable between dot and circle using the switch on the right side.

### Measuring Distance

Distance measurement is offered either as field mountable or built-in. The field mountable version (HH-DM) is a stand alone device. Press the key to measure distance. The built-in version (-DM) is an integral part of the thermometer. Go to the d\_F or d\_M display menu. Set the power switch on the distance module to the ON position. Pull the trigger for about 2 seconds. The upper display will show the distance in feet or meters. Releasing the trigger will turn off distance measurement.