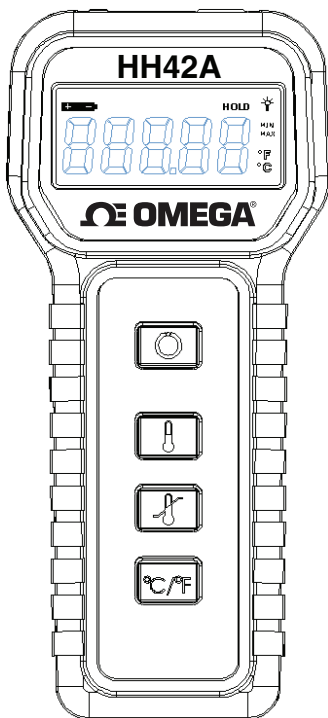


1 YEAR
WARRANTY

Ω OMEGA® User's Guide

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HH42A Thermometer



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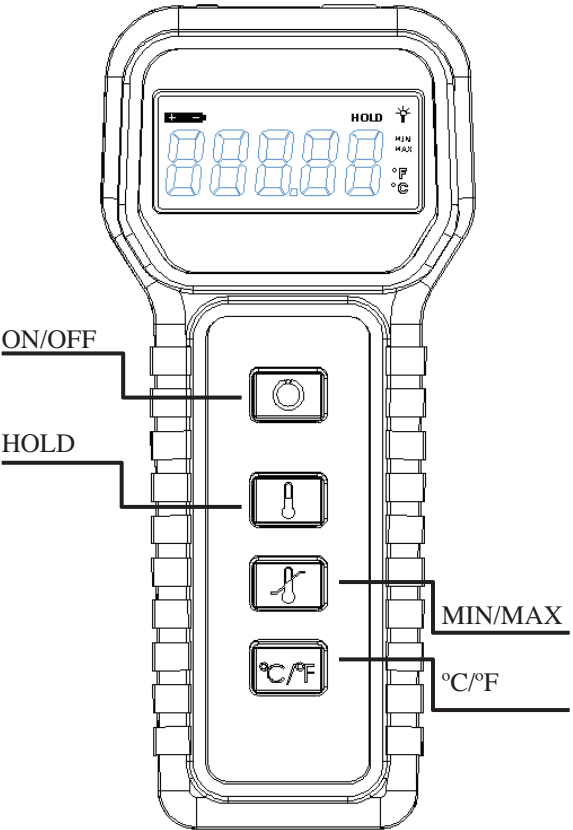
The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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

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FRONT PANEL LAYOUT



OPERATING INSTRUCTIONS

ON/OFF:

This button turns the meter ON or OFF. Press and hold this button for ~1 second to turn the meter ON. Pressing the button again will turn the meter OFF.

HOLD:

This button freezes the display at the present temperature. The "HOLD" icon will be displayed when the meter is in this mode. Press this button again to exit the HOLD mode.

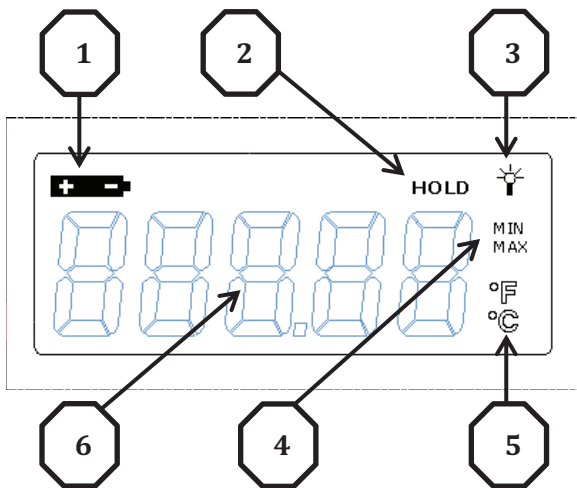
MIN/MAX:

This button starts the MIN/MAX mode. In this mode, the meter will display the temperature and will also keep track of the minimum and maximum temperatures it read since the mode was activated. To activate this mode, press and hold this button for ~3 seconds until you see both icons, "MIN" and "MAX", displayed. Press this button again to see the minimum temperature (the "MIN" icon will be displayed alone). Press this button again to see the maximum temperature (the "MAX" icon will be displayed alone). Press and hold this button until both icons, "MIN" and "MAX", disappear to disable this mode.

°C/°F:

This button selects either degrees Celsius or Fahrenheit as the unit for the displayed temperature.

LCD DISPLAY AND ICONS



1. Low Battery Icon: Battery should be replaced when this icon is displayed.
2. HOLD Mode Icon: Meter is in HOLD mode when this icon is displayed.
3. External Power Icon: Meter is powered through the USB connection when this icon is displayed. Battery power will not be drained when this icon is displayed.
4. MIN/MAX Mode Icons: Meter is in MIN/MAX mode when either or both icons are displayed.
5. Temperature Unit Icon: Displayed temperature is in degrees Celsius when the °C icon is displayed. Displayed temperature is in degrees Fahrenheit when the °F icon is displayed.
6. HI/LO Displayed in the Digits Area:
 - a. Toggling HI/LO indicates a bad or a missing probe.
 - b. "HI" indicates temperature that is above the maximum rated for a probe.
 - c. "LO" indicates temperature that is below the minimum rated for a probe.

USB INTERFACE



WARNING - The Thermometer must be turned OFF before connecting / disconnecting a personal computer or a power supply through the Micro-USB port.

The OMEGA[®] HH42A has a Micro -USB port. The USB port serves two purposes:

- It allows a personal computer to communicate with the thermometer.
- It provides external power to the thermometer.

The HH42A comes with a powerful software program called t-View. This software communicates with the thermometer, displays real-time data and graphs, and allows for data logging and exporting to Excel[®] file format.

The USB port is also used to provide external power to the thermometer. Anytime the thermometer is connected to a personal computer or a 5V USB power supply, it is powered through the USB port. During this time, battery power will not be drained.

BATTERY REPLACEMENT



Only use 9V alkaline battery, Duracell MN 1604 or equivalent.

When replacing the battery, do the following:

1. Place the thermometer onto its face and remove the battery door at the bottom of the case.
2. Carefully tilt the thermometer to one side until the battery exits the battery compartment.
3. Using your thumb and index fingers, carefully squeeze around the middle of the battery connector to disconnect the old battery.
4. Be sure to line up the terminals of the new battery with those of the connector. Then, firmly snap the two together.
5. Push the connected new battery into the battery compartment. Ensure connector wires will not block the battery door by pushing them to the side of the battery.
6. Replace the battery door into original position.

CARE AND CLEANING

Extensive testing has proven the case of the thermometer to be rugged and reliable. It is splash resistant but not water proof. The case may not be submerged! Liquid will flow in and damage or ruin the thermometer.

DO NOT AUTOCLAVE THE UNIT!! If it is necessary to decontaminate the thermometer, a weak chlorine solution may be gently wiped on to the case by a well rung out soft cloth. Do not let any liquid go into the jacks.

The clear plastic LCD lens can be easily scratched and/or fogged by inappropriate cleaning products. Use only plastic approved lens cleaners. Alcohol, acetone, lacquer thinners, and other harsh chemicals will fog the lens and damage the case and rubber keypad.

EITHER OF THE BELOW ACTIONS CAN VOID OMEGA ENGINEERING WARRANTY:



WARNING – Never use alcohol or thinners as these will damage the instrument.



WARNING – Do not use outside of specified operating ranges and conditions, or outside of normal laboratory environments or applications.

RECALIBRATION

The HH42A thermometer should be recalibrated at least once a year. Check the Certificate of Calibration, which came with the thermometer, or the recalibration label on the back of the unit to determine the next recalibration due date.

SPECIFICATIONS

ENVIRONMENTAL CONDITIONS:

Operating:

Temperature 10 - 40°C

Humidity 0 - 85%

Storage:

Temperature 10 - 60°C

Humidity 0 - 70%

RESOLUTION: 0.01°C

ACCURACY:

Depends on the configuration of the thermometer. Please see the Certificate of Calibration for more details.

MEASUREMENT RANGE:

Depends on the configuration of the thermometer. Please see the Certificate of Calibration for more details.

CALIBRATION PERIOD: 1 Year

POWER: 9V alkaline battery

BATTERY LIFE: ~100 hours

External Power Supply (optional):

5V USB Power Supply connects to the Micro-USB port available on the thermometer.

NOTES

WARRANTY/DISCLAIMER

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.

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.

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.

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.

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