

## 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.

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.

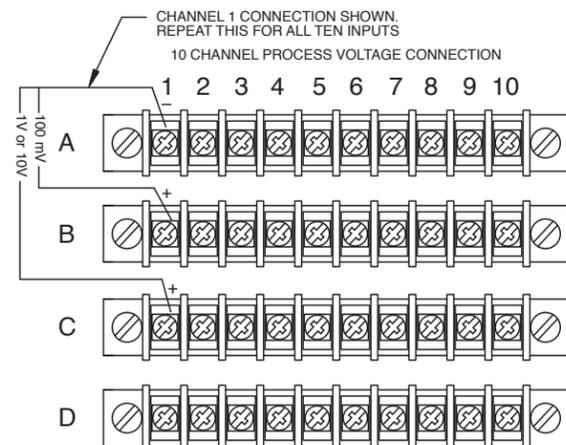
FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

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.

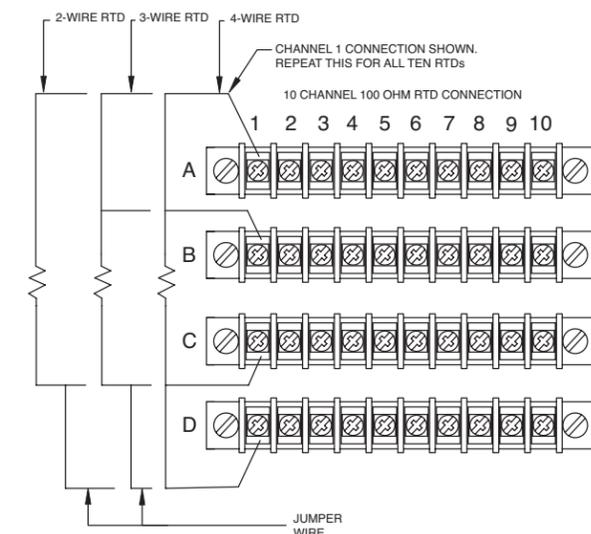
OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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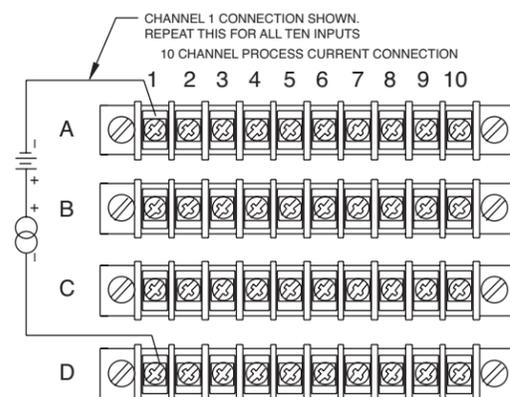
5



10-Channel Process Voltage Connection



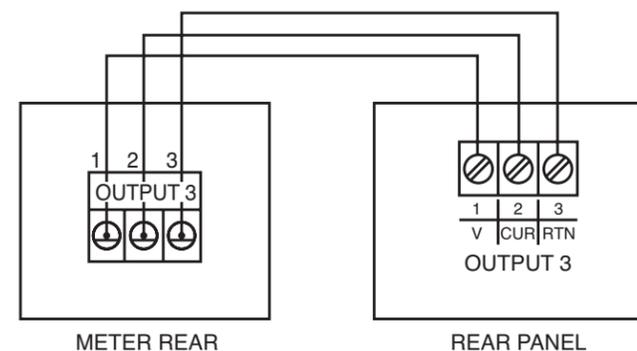
10-Channel 100 Ohm RTD Connection



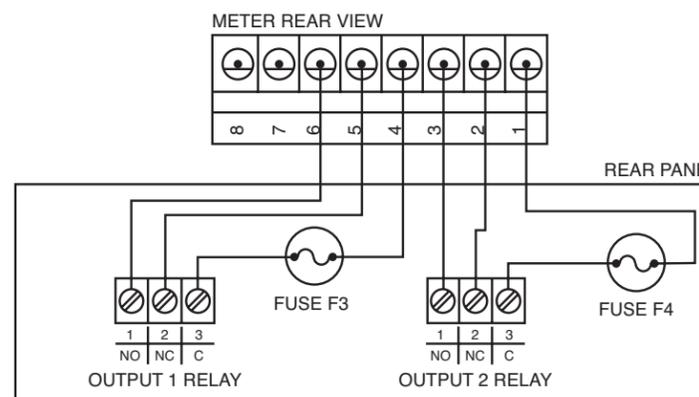
10-Channel Process Current Connection

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## Analog Output Option Connection

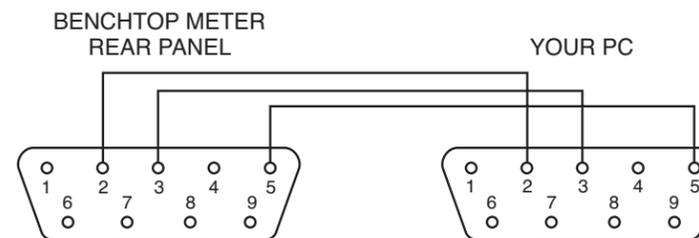


## Alarm Output Option Connection



## RS232/485 Communications

Your meter has been factory pre-wired and configured for ease of use with a standard DB9 female connector on the rear panel. Page 6 of your Communication Manual #M3397 shows how your rear panel connector has been wired. Connections to your PC should be straight through wiring as shown below.



RS232/485 Wiring Diagram

QUICK START

For complete product manual:  
[www.omega.com/manuals/manualpdf/M3944.pdf](http://www.omega.com/manuals/manualpdf/M3944.pdf)



230 VAC Model Only

## MDSi8/MDSSi8 SERIES Benchtop Indicators



[omega.com](http://omega.com) [info@omega.com](mailto:info@omega.com)

### Servicing North America:

U.S.A.: OMEGA Engineering, Inc., One Omega Dr.  
P.O. Box 4047, Stamford, CT 06905-0047 USA  
Toll-Free: 1-800-826-6342 (USA & Canada Only)  
Customer Service: 1-800-622-2378 (USA & Canada Only)  
Engineering Service: 1-800-872-9436 (USA & Canada Only)  
Tel: (203) 359-1660 Fax: (203) 359-7700  
e-mail: [info@omega.com](mailto:info@omega.com)

For Other Locations Visit [omega.com/worldwide](http://omega.com/worldwide)

It is the policy of OMEGA Engineering, Inc. 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 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.

**Using This Quick Start Manual**

Use this Quick Start Manual with your MDS/ MDSSi8 Benchtop Indicator for quick installation and basic operation. For detailed information, refer to the User's Guide (Manual #M3944) or the accompanying manuals included with your unit.

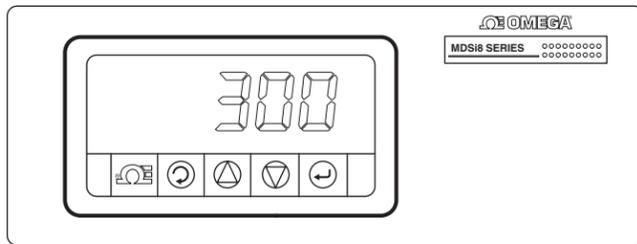
**Included Reference Material:**

- MDSi8/MDSSi8 Series Meter Manuals #M3355 and #MQS3355
- MDSi8A Series Meter Manual #M3565 (with Isolated Analog Output models only)
- Communications Manual #M3629 (with Ethernet models only)
- Communications Manual #M3397 (with RS232/485 models only)

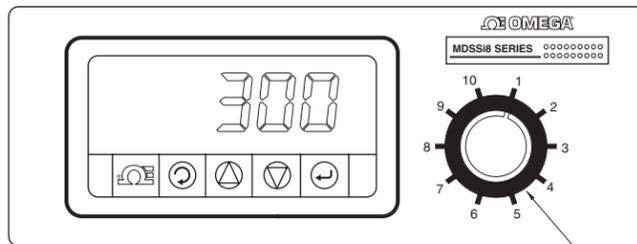
**General Description**

Your MDSi8 Series Benchtop Meter is ideal for laboratory use and applications requiring portable temperature measurement. There are two basic models, a single-channel and a ten-channel unit. The single-channel model features a universal input that can be reconfigured by you for use with a thermocouple, RTD or Voltage/Current signal. The ten-channel model is a dedicated input type of either 10 thermocouples, RTDs, or Voltage/Current signals. These meters are factory configured and calibrated.

**Front Panel Controls & Indicators**

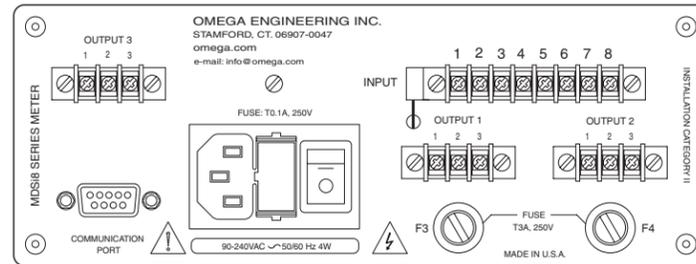


MDSi8 - Single Channel Model

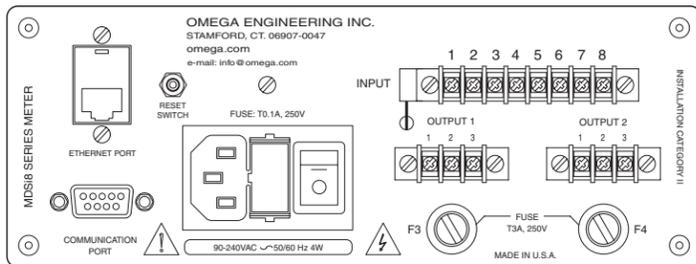


MDSSi8 - Ten-Channel Model

**Rear Panel Connections  
MDSi8 (Single-Channel)**

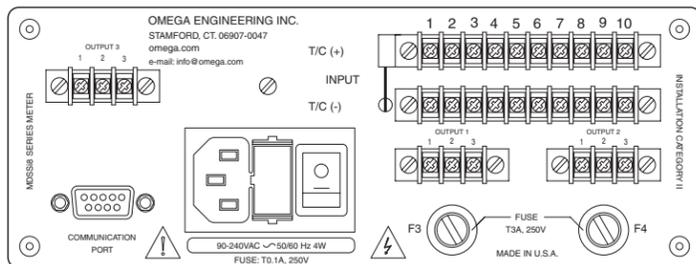


Single-Channel (Universal Input) - Model With Analog Output, RS-232, and Two Alarm Outputs

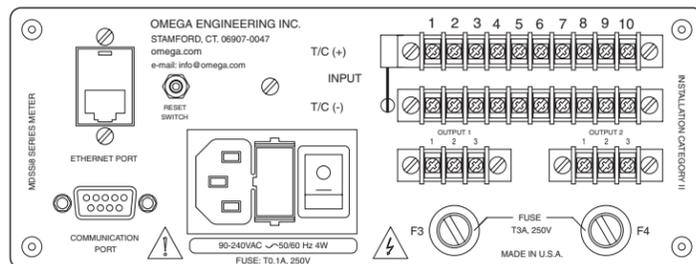


Single-Channel (Universal Input) - Model With Ethernet, RS-232, and Two Alarm Outputs

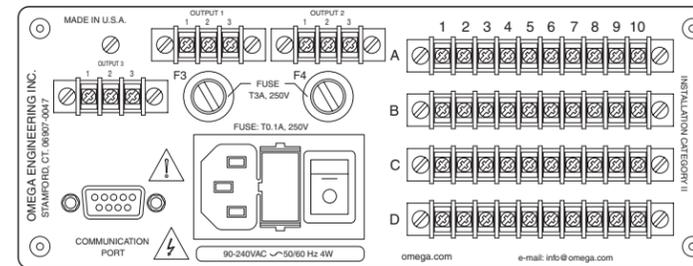
**MDSSi8 (Ten-Channel)**



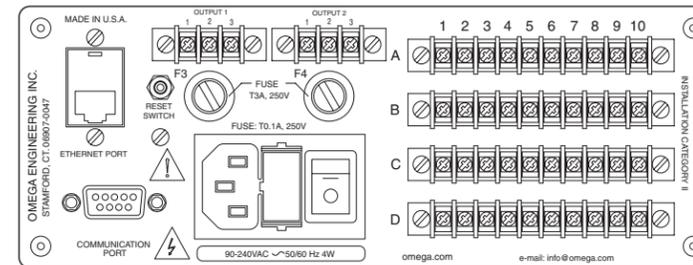
Ten-Channel (Thermocouple Input) - Model With Analog Output, RS-232, and Two Alarm Outputs



Ten-Channel (Thermocouple Input) - Model With Ethernet, RS-232/485, and Two Alarm Outputs

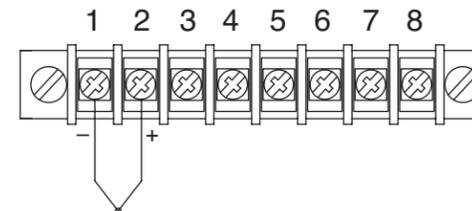


Ten-Channel (RTD or PV Input) - Model With Analog Output, RS-232, and Two Alarm Outputs

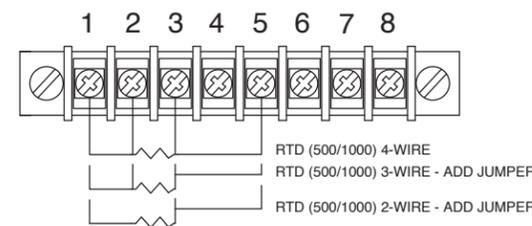


Ten-Channel (RTD or PV Input) - Model With Ethernet, RS-232, and Two Alarm Outputs

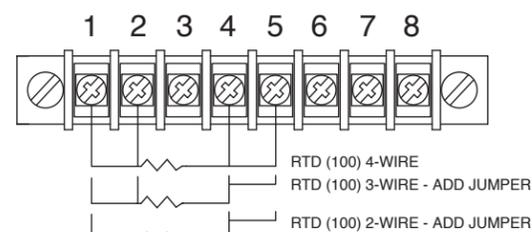
**MDSi8 (Single-Channel)**



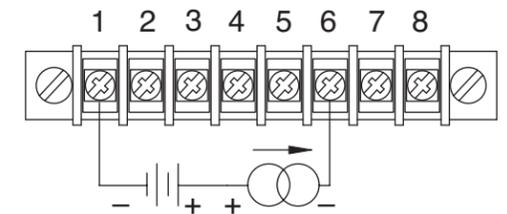
Thermocouple Connection



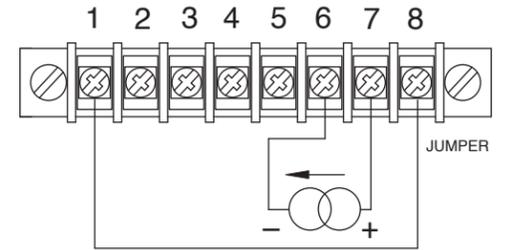
500/1000 Ohm RTD Connection



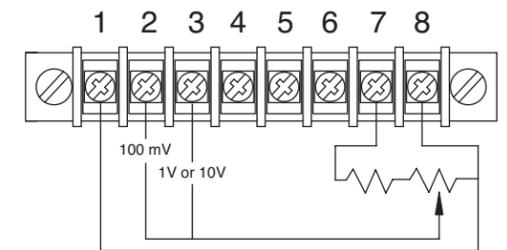
100 Ohm RTD Connection



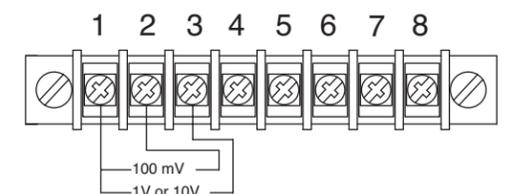
Process Current Input (External Excitation)



Process Current Input (Internal Excitation)

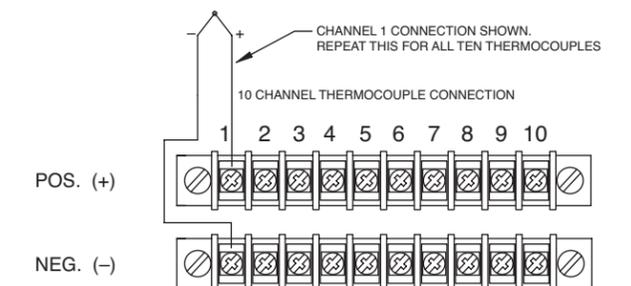


Process Voltage Input (With Internal Excitation)



Process Voltage Input (With OUT Internal Excitation)

**MDSSi8 (Ten-Channel)**



10-Channel Thermocouple Connection