

### Reference Information

#### **Meter Modes**

Run Mode - The meter is in the run mode when the display is actively showing a process.

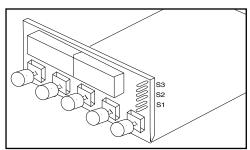
Configuration Mode - The meter is in the configuration mode when you press the MENU button to enable meter configurations.

### **Jumpers**

The following table gives you information about iumpers. Refer to the illustration below for exact jumper location. Refer to the Operator's Manual for additional jumper information.

Jumper	Description
S1	Installed: 10 V excitation Removed: 24 V excitation
S2	Installed: Front-panel buttons locked out Removed: All buttons operable
S3	Installed: PEAK shows when ▲/MAX button is pushed. PrsT (Peak Reset) is active when RESET is pushed. Press ▲/MAX to show PEAK value.* Removed: VALLEY shows when ▲/MAX button is pushed. VrST (Valley Reset) is active when RESET is pushed. Press ▲/MAX to show VALLEY value.*

<sup>\*</sup>Shows in run mode only



S1 - S3 Jumpers

### **Configuration Mode**

The following table lists display prompts that appear when the meter is in the configuration mode.

MENU	►/TARE	<b>▲/MAX</b>
InP	0-10 4-20 20-4 0-5 1-5	
dEc.P	FFF.F FFFF. FFFF FF.FF	
ScAL	int LivE	rd1* XXXX
		rd 2* *XXXX

<sup>\*</sup> Shows only if you press the ▲/MAX button.

#### Tare

The following buttons enable tare functions in the run mode:

### T-RST

Clears tare value

### ►/TARE

Tares display value to zero.

#### **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 if 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:

- Purchase Order number under which the product was PURCHASED
- 2. Model and serial number of
- the product under warranty, and 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:

- Purchase Order number to cover the COST of the repair or calibration.
- Model and serial number of the product, and
- 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 trademark of OMEGA ENGINEERING, INC.

© Copyright 2018 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.

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.

12172ML-99 Rev. E MQS1866/0818





# **Process Meter**

### **○**E OMEGA™

omega.com info@omega.com

#### **Servicing North America:**

U.S.A.

Omega Engineering, Inc. Headquarters: 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 e-mail: info@omega.com Fax: (203) 359-7700

For Other Locations Visit omega.com/worldwide



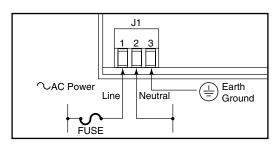
### **Using This Quick Start Manual**

Use this Quick Start manual with your meter to power up, configure and scale your meter. For detailed instructions, refer to the appropriate section in the Operator's Manual.

### Wiring

Warning: Do not connect AC power to your device until you have completed all input and output connections. This device must only be installed by a specially trained electrician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!

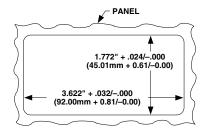
- 1. Locate the J1 connector.
- Insert the correct wire in each terminal as shown in the following figure and tighten the lockdown screws.
- 3. Tug gently on the wires to verify the connections.



Main Power Connections - ac

### **Mount the Meter**

 Cut a hole in your panel, as shown in the figure below.

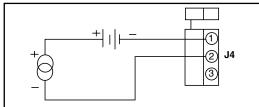


Insert the meter into the hole. Be sure the front bezel is flush to the panel.

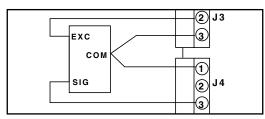
# 2

### **Connect the Sensor Input**

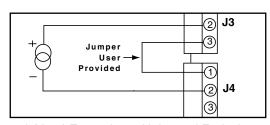
Depending upon sensor input type, connect your sensors according to one of the following figures. If your sensor type is not shown, refer to Section 3 of the Operator's Manual.



4 -20 mA Input with External Excitation



3-Wire dc Voltage Input with Internal Excitation



4-20 mA Transmitter with Internal Excitation

### **Apply Power**

Plug in the meter. There is no power switch, so the meter will be active as soon as you apply power. The meter shows the following:

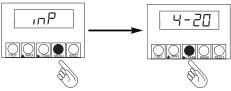


<sup>\*</sup> Represents the revision code. Write this number down. You will need this number if you call Customer Service for assistance.

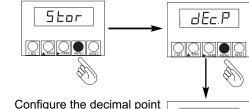
## 3

### **Configuring and Scaling Your Meter**

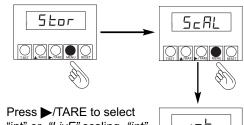
. Press MENU. The meter momentarily shows "InP", then shows last saved input range.



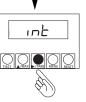
- Configure the input range by pressing ►/TARE to select from the following:
   4-20mA, 20-4mA, 0-5V, 1-5V and 0-10V.
- Press MENU to store range. The meter momentarily shows "Stor", "dEc.P", and then shows the last saved decimal point location.



- Configure the decimal point location by pressing 
  ▶/TARE to select from the following: FFF.F, FFFF., FFFF.
- Press MENU to store decimal point. The meter momentarily shows "Stor", "ScAL", and then shows the last saved scaling method.



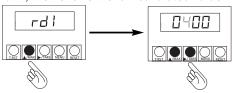
 Press ►/TARE to select "int" or "LivE" scaling. "int" is internal scaling, or scaling without known loads. "LivE" is applying known loads to a sensor.



FF FF

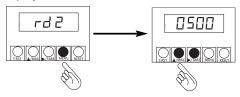


7. Press **A**/MAX. The display momentarily flashes "rd 1", then shows the low calibrated value.



- a. If you selected "int," enter the desired display corresponding to low input. (OVdc, 1Vdc, 4mA)
  - b. If you selected "LivE", apply low load to sensor and enter desired display.

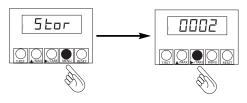
Press ▲/MAX and ▶/TARE to enter desired display.



- 9. Press MENU. The display momentarily flashes "rd 2", then shows the high calibrated value.
- a. If you selected "int", enter the desired display corresponding to high input. (10Vdc, 5Vdc, 20mA)
  - b. If you selected "LivE", apply full scale or 3/4 full scale load to sensor and enter desired display.

Press ▲/MAX and ▶/TARE to enter the desired display.

 Press MENU to store new scale factor and return to the run mode.



 If the display is not zero, with no load on your sensor, press ►/TARE. Scaling is now complete.