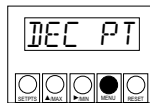
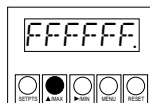


5**Set Default Decimal Point**

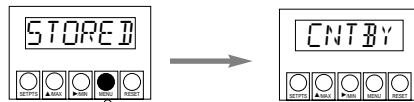
1. Press MENU. The meter displays:



2. Press ►/MIN to display the current decimal point. Change the display, if necessary, to read "FFFFFF." (Use ▲/MAX to change the decimal point position).



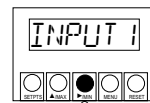
3. Press MENU. The meter stores changes (if applicable), then displays "CNT BY".



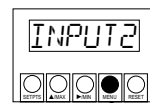
4. Press RESET twice. The meter momentarily displays "RESET 2" then returns to the run mode. The meter will now read the input signal (4mA = ≈ 000000. and 20mA = ≈ 020000.).

Measure and Record Input Values

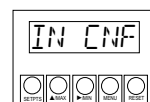
1. Apply 4mA to the input and record the display reading.
INPUT 1 = _____
Refer to this as Input One.



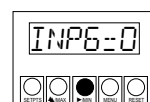
2. Apply 20mA to the input and record the display reading.
INPUT 2 = _____
Refer to this as Input Two.



3. Press MENU until the meter displays:



4. Press MENU until the meter displays:

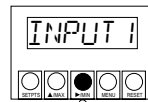


Press ►/MIN to display "INP6=0"
Change the meter to read "INP.6=1"
(Use ►/MIN to scroll through digits and ▲/MAX to change the digit's value).

5. Press MENU. The meter stores changes and displays:

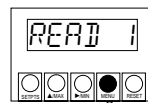
**6****Scale Input Values**

1. Press ►/MIN to display "INPUT 1":



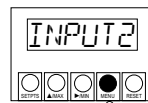
Press ►/MIN again. The meter displays "000000". Enter the INPUT 1 value recorded in step 1 of the Measure Input Values section of this quick start.

2. Press MENU. The meter displays "READ 1":



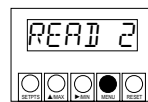
Press ►/MIN to display a six-digit number. Change the meter to read "000000". (Use ►/MIN to scroll through digits and ▲/MAX to change the digit's value.)

3. Press MENU. The meter displays "INPUT 2":



Press ►/MIN. The meter displays "000000". Enter the INPUT 2 value recorded in step 2 of the Measure Input Values section of this quick start.

4. Press MENU. The meter displays "READ 2":



Press ►/MIN to display a six digit number. Change the meter to read "001000". (Use ►/MIN to scroll through digits and ▲/MAX to change the digit's value.)

5. Press MENU. The meter stores changes and displays:

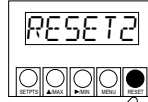


6. Press ►/MIN to display the current decimal point. Press ▲/MAX to change the decimal point location to "FFFFFF.F".

7. Press MENU. The meter stores this change, then displays "CNT BY"



8. Press RESET twice. The meter displays: "RESET 2", then returns to the run mode. The meter is now scaled to read 0 to 100.0 for a 4-20 mA input.

**WARRANTY/DISCLAIMER**

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **61 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **five (5) 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.

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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.

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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QUICK START

For complete product manual:

www.omega.com/manuals/manualpdf/M1297.pdf

5 YEAR
WARRANTY

**DP41-E****High Performance Process Indicator****OMEGA™**

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Customer Service: 1-800-622-2378
(USA & Canada only)
Engineering Service: 1-800-872-9436
(USA & Canada only)
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e-mail: info@omega.com

For Other Locations Visit omega.com/worldwide

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.

START HERE

Using This Quick Start Manual

Use this Quick Start Manual to get your High Performance Process Indicator up and running. These instructions use the factory default settings of current input and 24 Vdc sensor excitation.

Note The latest complete Communication and Operational Manual as well as free Software are available at www.omega.com

To start your unit you:

- connect ac power
- wire the sensor
- configure the meter, using the front panel buttons and the configuration menus

Before You Begin

Check the serial label on the top of the meter case. The model number's last 3 digits indicate if the meter is set up for voltage or current. C1 - C2 are current ranges and DG1 - DG10 are voltage ranges. This quick start manual uses the C2 (4 - 20mA) range. If your meter is setup for a range other than C2, consult the Operator's manual.

In addition to the unit and related parts, you will need the following items to set up your unit:

- ac power, as listed on meter's Product/ID
- 4-20mA input (eg: load cell, calibrator)
- 1/8" Phillips head screwdriver
- 1/8" flat blade screwdriver



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!

Safety Consideration

This device is marked with the international Caution symbol.

The instrument is a device protected in accordance with IEC 61010:2010 Electrical Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory. The device has no power-on switch. Installations must include a switch or circuit breaker that is compliant to IEC 947-1 and 947-3. It must be suitably located to be easily reached and marked as the disconnecting device for the equipment. Use copper conductors only, minimum 20 AWG, UL Rated, for power connection. Insulation must be rated for at least 85C and 600V.

SAFETY:

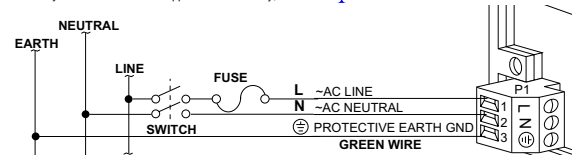
- Do not exceed voltage rating on the label located on the top of the instrument housing.
- Always disconnect power before changing signal and power connections.
- Do not use this instrument on a work bench without its case for safety reasons.
- Do not operate this instrument in flammable or explosive atmospheres.
- Do not expose this instrument to rain or moisture.

EMC:

- Whenever EMC is an issue, always use shielded cables.
- Never run signal and power wires in the same conduit.
- Use signal wire connections with twisted-pair cables.
- Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

Connect AC Power

1. Remove the rear protective cover and set it aside. The cover is secured with a Phillips-head screw.
 2. Locate connector P1 on the bottom-left-rear of the unit.
 3. The connector has three screw-down terminals.
- Insert the correct wire in each terminal and tighten the lockdown screw. Tug gently on each wire to verify the connection. Use copper conductors only, minimum #14 AWG



Check for proper Earth grounding in the power distribution system (single phase).

EXTERNAL FUSE WIRED

115 Vac IEC127-2/III, 125mA, 250V (Time-Lag)
or UL Slow-Blow, 125mA, 250V
230 Vac IEC127-2/III, 63mA, 250V (Time-Lag)
or UL Slow-Blow, 63mA, 250V

Caution: Use only provided terminal. Torque all connections 0.4 to 0.5 Nm.

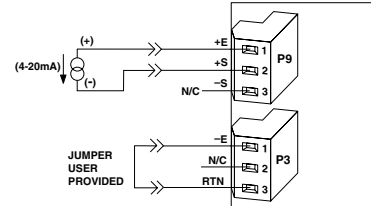
2

Wiring a Current Transmitter

Follow these steps to wire a current input sensor with sensor excitation.

1. Locate connectors P3 & P9 on the right-side-rear of the unit.
2. Attach the wires and tighten the retaining screws. Tug gently on the wires to verify the connection.

Wiring Example: Current Input with Sensor Excitation



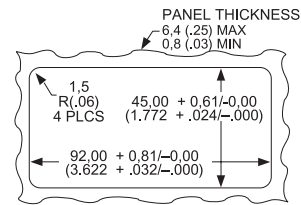
- a. Apply ac power. The front panel of the unit flashes R. If it does not:
 - i. Remove ac power.
 - ii. Verify the P1 power and P3 and P9 input connections.
 - iii. Check your power source.
 - iv. Check your signal source.

4. Replace the rear cover. Thread the sensor wires through the slots on the side of the cover. Replace the rear cover screw.

5. Apply ac power once again.

Mount the Unit

1. Cut a panel opening using the dimensions shown to the right.
2. Position the unit in the opening, making sure the front bezel/gasket is flush with the panel.
3. From the rear of the panel, slide the sleeve forward over the case and up to the panel surface.
4. The panel should now be sandwiched between the bezel-gasket in front and the sleeve in back.
5. Replace the thumbnuts that secure the sleeve tabs to the case.



NOTE: Dimensions in Millimeters (Inches)

Configure the Meter

Use the front panel buttons to access the configuration menus, to either verify or set the unit values. The function of each button is described below:

Meter Button Descriptions

Press This Button To:

- | | |
|--|--|
| | sequentially recall previous setpoint settings (run mode only), store new setpoint values. |
| | access the configuration program menus and move from one menu to the next. |
| | enter and scroll through a submenu. |
| | change the value of a submenu. |
| | move backward one menu (press once) or exit the configuration menus (press twice). |

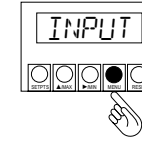
3

Quick Start Setup

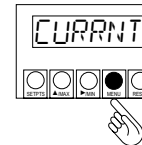
Quick Start Setup scales your meter to read 0 to 100.0 for a 4 - 20mA input. This setup procedure is actually a series of short tasks. To complete Quick Start Setup successfully, it is important to perform all tasks in the order outlined in the Quick Start Setup.

Select Input Range

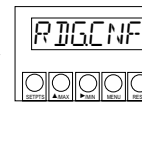
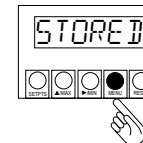
1. Press MENU until the meter displays:



2. Press MIN until the meter flashes. Press MENU and "CURRNT" stops flashing. Press MIN to display a flashing input range of 4-20mA or 0-20 mA. Press MAX until the meter displays "4-20mA."

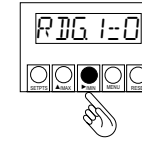


3. Press MENU. The meter stores changes (if applicable), then displays "RDG.CNF":

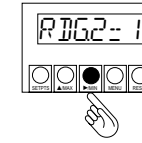


Set Up Reading Configuration

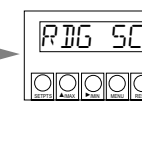
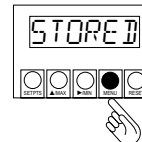
1. Press MIN to display "RDG.1". Press MAX until the meter displays "RDG.1=0". Selecting "RDG.1=0" enables direct formatting.



2. Press MIN to display "RDG.2". Press MAX until the meter displays "RDG.2=1". Selecting "RDG.2=1" enables an active decimal point.



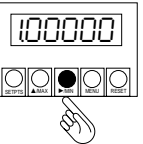
3. Press MENU. The meter stores changes (if applicable), then displays "RDG SC":



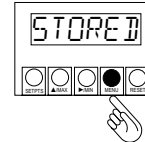
4

Set Reading Scale Factor and Reading Offset

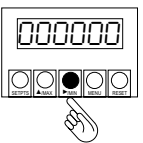
1. Press MIN to display the scale factor value. Change the value, if necessary, to read "1.00000" (Use MIN to scroll through digits and MAX to change the digit's value).



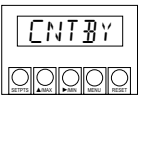
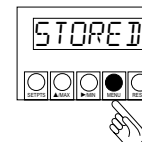
2. Press MENU. The meter stores changes (if applicable) then displays "RDG.OF":



3. Press MIN to display the offset value. Change the value, if necessary, to read "000000" (Use MIN to scroll through digits and MAX to change the digit's value).

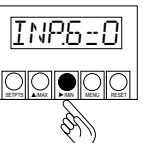


4. Press MENU. The meter stores change, if applicable, then displays "IN CNF".



Set Default Input Scale and Offset

1. Press MIN until the meter flashes. Change the value, if necessary, to read "INP.6=0" (Use MIN to scroll through INP submenu choices and MAX to select 0 as the value). Setting "INP.6=0" disables input scale and offset.



2. Press MENU. The meter stores changes, if applicable, then displays "IN.SC.OF".

