

CE



User's Guide



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Current Loop Simulator CL603

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Servicing North America:

USA:
ISO 9001 Certified

One Omega Drive, Box 4047
Stamford CT 06907-0047
Tel: (203) 359-1660
e-mail: info@omega.com

FAX: (203) 359-7700

Canada:

976 Bergar
Laval (Quebec) H7L 5A1
Tel: (514) 856-6928
e-mail: info@omega.ca

FAX: (514) 856-6886

For immediate technical or application assistance:

USA and Canada:

Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA®
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Mexico:

En Español: (001) 203-359-7803
FAX: (001) 203-359-7807
TEL: (203) 359-1660

e-mail: espanol@omega.com
info@omega.com.mx

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Servicing Europe:

Benelux: Postbus 8034, 1180 LA Amstelveen, The Netherlands
Tel: +31 (0)20 3472121 FAX: +31 (0)20 6434643
Toll Free in Benelux: 0800 0993344
e-mail: sales@omegaeng.nl

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

France: 9, rue Denis Papin, 78190 Trappes
Tel: +33 (0)130 621 400 FAX: +33 (0)130 699 120
Toll Free in France: 0800-4-06342
e-mail: sales@omega.fr

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: info@omega.dl , patient-connected applications.

United Kingdom: One Omega Drive, River Bend Technology Centre
ISO 9002 Certified Northbank, Irlam, Manchester
M44 5BD 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

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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

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1.0 INTRODUCTION

The CL630 Current loop Simulator is a device used mainly for checking calibration of a current loop measuring device and for checking to see if a current loop measuring device is working correctly.

1.1 General Description

- It is pocket-sized (very compact).
- It simulates output ranges 4mA, 12mA and 20mA.
- It is ideal for checking the calibration of current source for indicators and controller setup.
- It can be used for to set up engineering units on process indicators and controllers.
- It can be used for a precision source of general purpose signal injection.
- It has a push button range selector which can be operated using only one hand.
- It has a bright red LEDs that indicate which simulation output range is being used and the status of the battery. (the status of the battery is only shown once the power of the battery has dropped down to a certain level.

1.2 Accessories

- A 0.61 m (2 ft.) calibration cable terminated with spade lugs.
- A 9V alkaline battery.

2.0 GETTING STARTED

2.1 Unpacking

Remove the packing list and verify that you have received all equipment.

Upon receiving the shipment, inspect the container and equipment for any signs of damage.

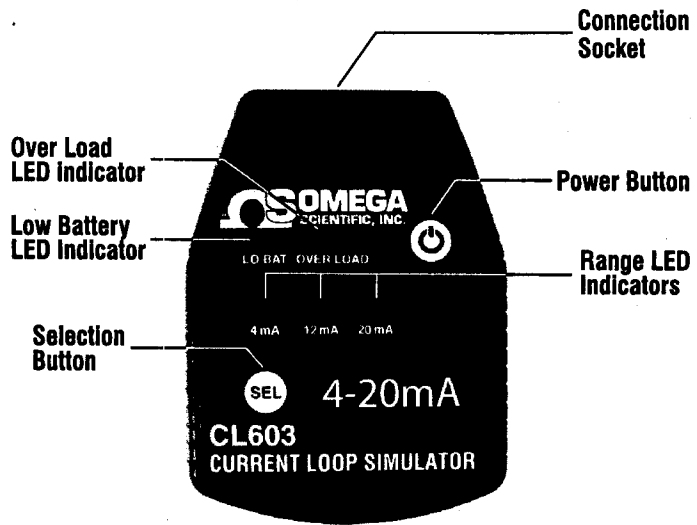
Note: If there is any evidence of rough handling in transit, immediately report any damage to the shipping agent.

Note: The carrier will not honor any claims unless all shipping material is saved for their examination. After examining and removing contents, save packing materials and carton in the event reshipment is necessary.

3.0 SAFETY CONSIDERATIONS

This device is marked with the international Caution symbol. It is important to read this manual before installing or commissioning this device as it contains important information relating to Safety and EMC (Electromagnetic Compatibility).

4.0 FRONT PANEL DISPLAY



OVER LOAD : When this red LED lights up it is indicating that the load has exceeded 240 Ohm and that it is no longer safe to continue using the device.

LO BAT : When this red LED lights up it is indicating that the battery power is very low and that the device may turn off unexpectedly if you continue to use the device.

SEL : This button is used for selecting a range in which you wish to simulate/calibrate.

Range (4mA, 12mA, 20mA) : These red LEDs indicate which range you are currently using to simulate/calibrate a device.

⏻ : By pushing this button you can turn the device on or off.

CONNECTION SOCKET : This is where you attach the current loop simulator to a current loop measuring device of some sort via the cable that came with the device. The socket is configured in a way so that the negative side of the socket is little bit larger than the positive side of the socket. This makes it physically impossible for you to mix up the negative and positive charges when attaching the cable to the device.

5.0 OPERATION INSTRUCTIONS

1. Open the battery compartment and connect the 9V battery to the current loop checker.
2. Connect the calibration lead from the device that you are checking to the checker on your device.
3. Turn the power switch on.
4. Push the SEL button to choose your desired range. Once you have done this the results will appear on the LED.

NOTE : If the display value is the same as the checker value then your device is in calibration.

NOTE : The device will go into overload protection "mode" when the load exceeds 240 Ohm

6.0 SPECIFICATIONS

Range : 4 mA, 12 mA and 20 mA

Accuracy : ± 0.2 mA

Power : 9V DC

Dimensions : 75 x 100 x 30 mm

Weight : 85 grams (3 oz.)

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 which wear are not warranted, including but not limited to contact points, fuses, and triacs. Product(s) in such a manner.

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 it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS 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.

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. ENGINEERING, INC.

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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