CE

User's Guide

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pH Simulator
PHCL602

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FIGURES AND DIAGRAMS

1.0 INTRODUCTION

The PHCL-602 pH checker is a pocket-size simulator used for pH 4.0, 7.0, and 10.0. The main function of this device is to check the performance of any pH measuring devices to ensure that they are working correctly.

1.1 General Description

- **It is pocket-sized (very compact).**
- **It simulates values for pH 4.00, 7.00, and 10.00**
- **It is able to simulate an electrode**
- **It has a push button range selector that can be operated using only one hand.**
- **It has a bright red LED display which shows simulation range and an alarm light which appears once the battery power has dropped down to a certain level.**

1.2 Accessories

- **A 0.61 m (2 ft.) Cable with a BNC Connector.**
- **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.

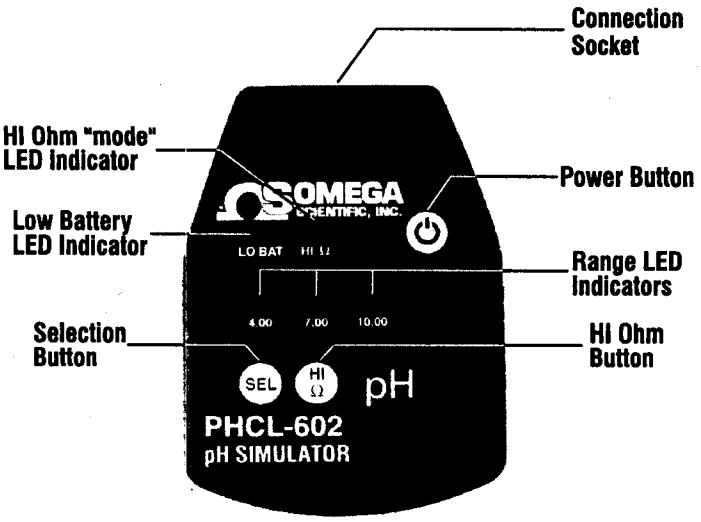
Note: If there is any evidence of rough handling in transit, immediately report any damage to the shipping agent.

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



HIΩ : This red LED indicates when the device is set to simulate and electrode.

LO BAT : This red LED indicates when the battery power is low. If you continue to use the device when this light is lit, it is possible that the device may unexpectedly turn off.

SEL : This button enables you to choose which range you desire to simulate/calibrate a pH measuring device with.

HIΩ : This button enables you to set the device so that it can simulate and electrode.

Range(4.00, 7.00, 10.00) : 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 pH simulator to a pH 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 pH checker.
2. Connect the calibration lead from the pH tester you are checking to the checker on pH checker.
3. Turn on the power switch.
4. Press the SEL button to select your desired range. Once you have done this the results will appear on the LED indicator.

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

NOTE : To simulate an electrode push the button labeled "HI Ω"

6.0 SPECIFICATIONS

Range: pH 4.0, pH 7.0 and pH 10.0
Accuracy: ± 0.1% FS
Power: 9V DC
Dimensions: 75 x 100 x 30 mm
Weight: 85 grams (3 oz.)

WARRANTY/DISCLAMER

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 tocontact points, fuses, and triacs. oduct(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.

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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.

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