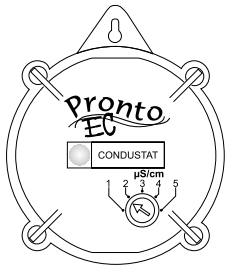


## Instruction Manual

# HI 983305 On-line, Waterproof EC meter with Alarm



**HANNA**  
instruments

<http://www.hannainst.com>

**CE**

This Instrument is in  
Compliance with the CE Directives

Dear Customer,

Thank you for choosing a Hanna product. This manual will provide you with the necessary information for the correct operation of the meter. Please read it carefully before using the meter. If you need additional technical information, do not hesitate to e-mail us at [tech@hannainst.com](mailto:tech@hannainst.com).

This instrument is in compliance with CE directives EN 50081-1 and EN 50082-1.

### PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully. If any damage has occurred during shipment, immediately notify your Dealer or the nearest Hanna Customer Service Center.

The meter is supplied with:

- HI 7631/2;
- 12 VDC power adapter.

Note: Conserve all packing material until the instrument has been observed to function correctly. Any defective item must be returned in its original packing.

Hanna Instruments reserves the right to modify the design, construction and appearance of its products without advance notice.

### GENERAL DESCRIPTION

HI 983305 is an instrument specially designed to meet the needs of simple continuous monitoring of conductivity.

The housing has been completely sealed against vapors and humidity with IP54 rating.

You can simply hang the meter right above the sample to be tested for continuous measurement.

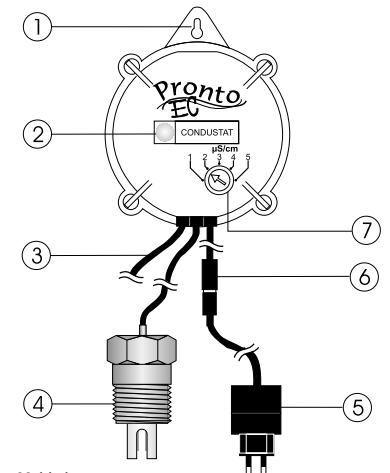
The meter comes with a probe that compensates for the temperature variation automatically. The probe is easy to clean and requires little maintenance.

You can even select your own setpoint and be alerted of an abnormal situation with a flashing LED alarm.

An output relay is provided for controlling an external device (e.g. pump).

You no longer need to worry about battery changes either: the unit runs without interruption on 12 VDC power supply.

### FUNCTIONAL DESCRIPTION



1. Molded eye
2. Alarm LED
3. Relay cable
4. EC probe
5. 12 VDC power adapter
6. Power supply connector
7. Setpoint knob

## SPECIFICATIONS

Range	0 to 20 $\mu\text{S}/\text{cm}$ (EC)
Accuracy (@ 25°C/77°F)	$\pm 2\%$ f.s.
Typical EMC Deviation	$\pm 2\%$ f.s.
Temperature Compensation	Automatic from 5 to 50°C (41 to 122°F) with $\beta = 2.4\%$
Setpoint	1 to 5 $\mu\text{S}/\text{cm}$
Hysteresis	1 $\mu\text{S}/\text{cm}$ over setpoint
Alarm	LED blinks and relay is activated when EC value is 1 $\mu\text{S}/\text{cm}$ higher than setpoint
Relay	SPST NC contact output, 0.5A 30VDC/48VAC max, resistive load, 100,000 strokes
Probe	HI 7631/2 EC probe (included)
Casing	IP54
Power supply	External 12 VDC (included)
Dimensions	86 x 94 x 33 mm (3.4 x 3.7 x 1.3")
Weight	150 g (5.3 oz.)

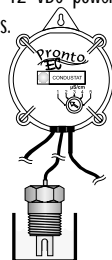
## OPERATIONAL GUIDE

- Turn the meter on by connecting the 12 VDC power adapter to the meter and to the mains.
- Immerse the EC probe in the solution, making sure that metal pins are completely submerged.

Note: In order not to affect the accuracy of measurements, it is important that the probe body does not touch nor stand close to the side walls of the vessel. The tip may lay on the bottom of the beaker.

- Adjust the setpoint knob to the desired value in the range 1 to 5  $\mu\text{S}/\text{cm}$ .
- When the EC reading becomes 1  $\mu\text{S}/\text{cm}$  higher than setpoint, the red alarm LED will blink and output relay is activated.

Note: During alarm condition the relay is de-energized (the alarm contacts are open). When not in alarm condition, the relay is energized (the alarm contacts close). If the power supply is interrupted, the relay is de-energized as



if in alarm condition to alert the operator.

## PROBE MAINTENANCE

This meter does not need probe cleaning when used in pure water applications. If the probe needs to be cleaned, the following procedure should be performed.

- Immerse the tip of the electrode in HI 7061 Cleaning Solution for one hour.
- If a more thorough cleaning is required, brush the metal pins with very fine sandpaper.
- After cleaning or when not in use, rinse the probe with tap water.

## ACCESSORIES

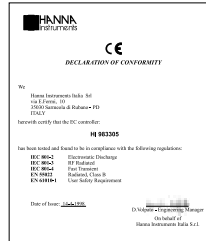
- HI 7631/2 EC "flow thru" probe with 1/2"NPT thread, ATC and 2 m (6.6') cable
- HI 7061L Electrode cleaning solution, 460 mL bottle
- HI 710005 12 VDC power adapter, US plug
- HI 710006 12 VDC power adapter, European plug
- HI 710012 12 VDC power adapter, Australian plug
- HI 710013 12 VDC power adapter, Southern Africa plug
- HI 710014 12 VDC power adapter, UK plug

## CE DECLARATION OF CONFORMITY

Recommendations for Users

Before using these products, make sure that they are entirely suitable for the environment in which they are used. Operation of these instruments in residential areas could cause unacceptable interferences to radio and TV equipment. The metal band at the end of the probe is sensitive to electrostatic discharges. Avoid touching this metal band at all times.

During operation, ESD wrist straps should be worn to avoid possible damage to the probe by electrostatic discharges. Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance. To avoid electrical shock, do not use these instruments when voltages at the measurement surface exceed 24 VAC or 60 VDC. Use plastic beakers to minimize any EMC interferences. To avoid damages or burns, do not perform any measurement in microwave ovens.



## WARRANTY

HI983305 is warranted for two years against defects in workmanship and materials when used for its intended purpose and maintained according to instructions. The probe is warranted for a period of one year. This warranty is limited to repair or replacement free of charge.

Damages due to accident, misuse, tampering or lack of prescribed maintenance are not covered. If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection. To validate your warranty, fill out and return the enclosed warranty card within 14 days from the date of purchase.

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