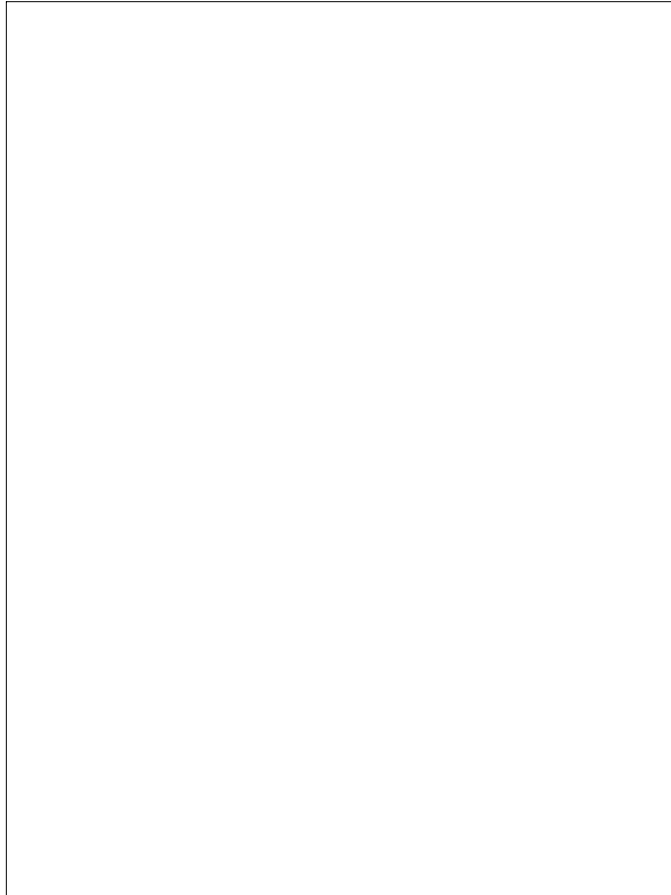


*4 ranges, 4 rings probe*

# CONDUCTIVITY METER

Model : CD-4306



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## 1. FEATURES

- \* 4 rings conductivity probe, high performance, wide range, professional.
- \* 4 ranges : 200  $\mu$ S, 2 mS, 20 mS, 200 mS.
- \* Separate electrode, easy operation.
- \* The portable conductivity meter provides fast, accurate readings, with digital readability and the convenience of a remote probe separately.
- \* LCD display for low power consumption & clear read-out even in bright ambient light condition.
- \* Water resistance on the front panel.
- \* All function keys are used the rubber button.
- \* Data hold.
- \* Used the durable, long-lasting components, including a strong, light weight ABS-plastic housing case.
- \* Built-in Low battery indicator.
- \* Wide applications: water conditioning, aquariums, beverage, fish hatcheries, food processing, photography, laboratory, paper industry, plating industry, quality control, school & college.

## 2. SPECIFICATIONS

Display	Large LCD display, 21.5 mm digit height.
Measurement & Range	4 ranges : 200 $\mu$ S, 2 mS, 20 mS, 200 mS.
Resolution	0.1 $\mu$ S for 200 $\mu$ S range. 0.001 mS for 2 mS range. 0.01 mS for 20 mS range. 0.1 mS for 200 mS range. <i>* <math>\mu</math>S - micro Simens</i> <i>* mS - milli Simens</i>

Accuracy ( 23.5 ȳ )	( 1% F.S. + 1 d ) * F.S. - Full scale
Sampling Time	Approx. 0.4 second.
Over Range Indicator	Display shows " 1 ".
Data Hold	To freeze the measured value on the display.
Temperature Compensation	Automatic, 0 ȳ to 50 ȳ (32 ȳ to 122 ȳ) with temperature compensation factor fix on 2.0% per ȳ
Calibration VR	Build in external calibration VR.
Operating Temp.	0 ȳ to 50 ȳ (32 ȳ to 122 ȳ).
Operating Humidity	Max. 80% RH.
Power Supply	DC 9V battery ( heavy duty type ). 006P, MN1604(PP3) or equivalent.
Power Current	Approx. DC 5 mA.
Weight	270 g/0.60 LB ( w/battery & electrode ).
Dimension	<i>Meter :</i> 200 x 68 x 30 mm
	<i>Electrode :</i> Round, 20 mm Dia. x 124 mm length.
Accessories Included	Instruction Manual..... 1 PC. 4 rings Conductivity electrode..... 1 PC. Hard Carrying Case..... 1 PC.
Optional Accessory	1.413 mS calibration solution..... 1 PC.

### 3. FRONT PANEL DESCRIPTION

Fig. 1

3-1 Display	3-9 Battery Compartment/Cover
3-2 Power ON Button	3-10 Probe Socket
3-3 Power OFF Button	3-11 Probe Plug
3-4 Hold Button	3-12 Conductivity Probe
3-5 200 uS Range Button	3-13 VR 2 ( 200 uS calibration VR )
3-6 2 mS Range Button	3-14 VR 3 ( 2 mS calibration VR )
3-7 20 mS Range Button	3-15 VR 4 ( 20 mS calibration VR )
3-8 200 mS Range Button	3-16 VR 5 ( 200 mS calibration VR )

#### 4. MEASURING PROCEDURE

- 1) Power ON the meter by pushing the " Power ON Button " ( 3-2, Fig. 1 ).
- 2) Slide the " Range Switch " ( 3-3, Fig. 1 ) to the " 1.999 mS ", or " 19.99 mS " according the measurement requirement.

Select the convenient range by pushing the

*200 uS Range Button, 3-5, Fig. 1*

*2 mS Range Button, 3-6, Fig. 1*

*20 mS Range Button, 3-7, Fig. 1*

*200 mS Range Button, 3-8, Fig. 1*

- 3) Hold the " Electrode Handle " by hand & let the Conductivity Probe ( 3-12, Fig. 1 ) is immersed wholly into the measured solution, then the Display will show the conductivity values.

#### ***Measuring Consideration :***

*If display show "1", it indicate on out-of-range measurement. If the display indicates one or more leading zeros, shift to the next lower range scale to improve the measurement.*

#### 5. CALIBRATION

- 1) Each meter along the probe had been fully calibrated before shipment, general speaking the further calibration are not necessary before measurement.
- 2) Be reminded that only process above calibration procedures with reliable and qualified people.

3) Each range have its own calibration VR as :

- VR 2 ( 200 uS calibration VR ), ref. 3-13, Fig. 1
- VR 3 ( 2 mS calibration VR ), ref. 3-13, Fig. 1.
- VR 4 ( 20 mS calibration VR ), ref. 3-13, Fig. 1.
- VR 5 ( 200 mS calibration VR ), ref. 3-13, Fig. 1.

## **6. REPLACEMENT OF BATTERY**

- 1) When the left corner of LCD display show " ", It is necessary to replace the battery. However, in-spec measurement may still be made for several hours after low battery indicator appears before the instrument become inaccurate.
- 2) Slide the " Battery Cover " ( 3-9, Fig. 1 ) away from the instrument and remove the battery.
- 3) Replace with 9V battery, heavy duty type, 006P, MN1604 ( PP3 ) or equivalent. and restate the cover.
- 4) Make sure the battery cover is secured after change the battery.