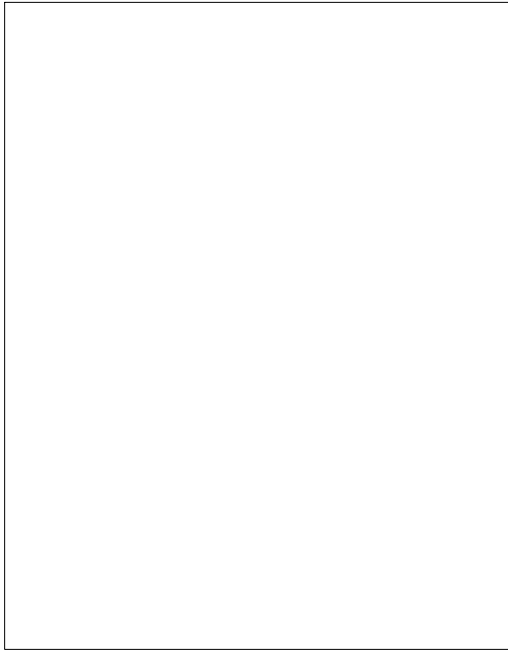


# CONDUCTIVITY METER

**Model : CD-4302**



## TABLE OF CONTENTS

1. FEATURES.....	1
2. SPECIFICATIONS.....	1
3. FRONT PANEL DESCRIPTION.....	3
3-1 Display.....	3
3-2 Off/On Switch.....	3
3-3 Range Switch.....	3
3-4 Electrode Handle.....	3
3-5 Conductivity Electrode.....	3
3-6 Battery Compartment/Cover.....	3
3-7 Calibration Adjust VR(VR 3).....	3
4. MEASURING PROCEDURE.....	4
5. CALIBRATION PROCEDURE.....	4
6. REPLACEMENT of BATTERY.....	5

## 1. FEATURES

- \* Pocket size, easy to carry out.
- \* Separate electrode, easy operation.
- \* The portable conductivity meter provides fast, accurate readings, with digital readability and the convenience of a remote probe separately.
- \* Multi measuring ranges: 1.999 mS, 19.99 mS.
- \* LCD display for low power consumption & clear read-out even in bright ambient light condition.
- \* 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	13 mm (0.5") LCD, 3 1/2 digits. 3 1/2 digits, max. display 1999.
Measurement & Range	2 ranges, 1.999 mS, 19.99 mS.
Resolution	0.001 mS for 1.999 mS range. 0.01 mS for 19.99 mS range. * mS - milli Simens
Accuracy (235 标准)	( 2% F.S. + 1 d ) * F.S. - Full scale
Sampling Time	Approx. 0.4 second.
Over Range Indicator	Display shows " 1 ".

Temperature Compensation	Automatic, 0 蚌 to 50 蚌 (32 蚌 to 122 蚌).
Operating Temp.	0 蛭 to 50 蛭 (32 蚌 to 122 蚌).
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	220 g/0.48 LB ( w/battery & electrode ).
Dimension	<i>Meter :</i> 131 x 70 x 25 mm ( 5.2 x 2.8 x 1.0 inch ). <i>Electrode :</i> Round, 22 mm Dia. x 120 mm length.
Accessories Included	Instruction Manual..... 1 PC. Conductivity electrode..... 1 PC.
Optional Accessories	1.413 mS calibration solution... CD-14 Carrying Case..... CA-03

### 3. FRONT PANEL DESCRIPTION

Fig. 1

3-1 Display

3-5 Conductivity Electrode

3-2 Off/On Switch

3-6 Battery Compartment/Cover

3-3 Range Switch

3-7 Calibration Adj. VR(VR 3)

3-4 Electrode Handle

#### 4. MEASURING PROCEDURE

- 1) Slide the " Off/On Switch " ( 3-2, Fig. 1 ) to the " On " position.
- 2) Slide the " Range Switch " ( 3-3, Fig. 1 ) to the " 1.999 mS ", or " 19.99 mS " according the measurement requirement.
- 3) Hold the " Electrode Handle " ( 3-4, Fig. 1 ) by hand & let the Conductivity Electrode ( 3-5, Fig. 1 ) is immersed wholly into the measured solution, then the Display will show the conductivity mS 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 PROCEDURE

When recalibrate the instrument, please according the following procedures :

- 1) Prepare a " 1.413 mS Calibration Solution " ( CD-14, optional ).
- 2) Slide the " Range Switch " ( 3-3, Fig. 1 ) to the " 1.999 mS " position.
- 3) Hold the " Electrode Handle " ( 3-4, Fig. 1 ) by hand & let the " Conductivity Electrode " ( 3-5, Fig. 1 ) is immersed wholly into the above " 1.413 mS Calibration Solution ", then adjust the " Calibration Adj. VR " ( VR3, ref. 3-7, Fig. 1 ) until display show the value same as 1.413 mS exactly.

## **6. REPLACEMENT OF BATTERY**

- 1) When the left corner of LCD display show " LO BAT ", it indicate a normal battery output of less than 6.5 V - 7.5 V. 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 " ( 3-6, 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.