

## SPECIFICATIONS

<b>Range</b>	0.0 to 14.0 pH
<b>Resolution</b>	0.1 pH
<b>Accuracy (@20°C)</b>	±0.1 pH
<b>Typical EMC Deviation</b>	±0.1 pH
<b>Calibration</b>	Manual, at 2 points through trimmers
<b>pH electrode (replaceable)</b>	<b>MA73600 or MA73600-S</b>
<b>Environment</b>	0 to 50°C; 100% RH
<b>Battery type</b>	3 x 1.5V, alkaline
<b>Battery life</b>	more than 1500 hours of continuous use
<b>Dimensions</b>	165 x 30 x 30 mm
<b>Weight</b>	80 g

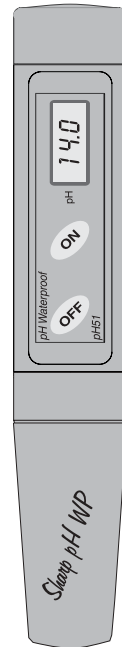
## ACCESSORIES

<b>MA73600</b>	Replaceable pH electrode
<b>MA73600-S</b>	Replaceable pH long electrode
<b>M10007B</b>	pH 7.01 buffer solution, 20 mL sachet (25 pcs)
<b>M10004B</b>	pH 4.01 buffer solution, 20 mL sachet (25 pcs)
<b>M10010B</b>	pH 10.01 buffer solution, 20 mL sachet (25 pcs)
<b>M10000B</b>	Electrode rinse solution, 20 mL sachet (25 pcs)
<b>MA9015</b>	Electrode storage solution, 220 mL bottle
<b>MA9016</b>	Electrode cleaning solution, 220 mL bottle



## USER MANUAL

# *pH51* *Waterproof pH-meter*



## Contact :

**EASTERN ENERGY CO.,LTD. (HEAD OFFICE)**

40/4 Vitoondumri Rd., Banbueng, Banbueng, Chonburi

Tel: 0-3844-6117 Fax: 0-3844-6200

Email: [info@ete.co.th](mailto:info@ete.co.th)

[www.ete.co.th](http://www.ete.co.th)

*This meter is in compliance with the CE directives.*

## CONDITIONING:

Remove the cap and immerse the **pH51** in **MA9015** storage solution for 2 hours to activate the electrode.

## CALIBRATION:

Unscrew the battery compartment cap on the top of the meter and perform one of the following two-point calibration procedure, according to the required application:

### Acid calibration for measurements below pH7:

- Immerse the electrode in pH7.01 (**M10007**) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "7" calibration trimmer inside the battery compartment until the display shows "7.0".
- Rinse the electrode with tap water and immerse it in pH4.01 (**M10004**) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "4" calibration trimmer until the display shows "4.0".



### Alkaline calibration for measurements above pH7:

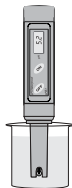
- Immerse the electrode in pH7.01 (**M10007**) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "7" calibration trimmer until the display shows "7.0".
- Rinse the electrode with tap water and immerse it in pH10.01 (**M10010**) buffer solution.
- Allow the reading to stabilize and with a small screwdriver turn the "4" calibration trimmer until the display shows "10.0".

Replace the battery compartment cap.

## OPERATION:

- Remove the protective cap.
- Turn the **pH51** on by pressing the ON key.
- Immerse the electrode in the solution to be tested.

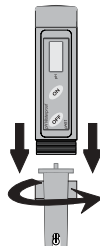
- Stir gently and wait for the reading to stabilize.
  - After use, rinse the electrode with water to minimize contamination.
  - Store the electrode with a few drops of storage (**MA9015**) or pH7 (**M10007**) solution in the protective cap.
  - Always replace the protective cap after use.
- NEVER USE DISTILLED OR DEIONIZED WATER FOR STORAGE PURPOSES.**



## ELECTRODE REPLACEMENT:

The electrode can be easily replaced in the following way:

- Remove the protective cap.
- Unscrew the plastic ring on the top of the electrode.
- Pull out the **MA73600** (or **MA73600-S**) pH electrode and replace it with a new one (aligning the colored pin towards the LCD side).
- Make sure the gaskets are in place before screwing back the ring.



## BATTERY REPLACEMENT:

**pH51** is supplied with BEPS (Battery Error Preventing System) which avoids any erroneous reading due to low battery level, by switching the meter off. To replace the batteries unscrew the battery compartment cap and replace all three 1.5V batteries while paying attention to their polarity. Make sure the gasket is in place before screwing back the cap.

Batteries should only be replaced in a nonhazardous area using the battery type specified in this instruction manual.

## WARRANTY:

This meter is warranted from all defects in materials and manufacturing for a period of **two years**. The **electrode is warranted for a period of one year**. During this period, the required repair or replacement of parts, where the damage is not due to negligence or erroneous operation by the user, will be effected free of charge.