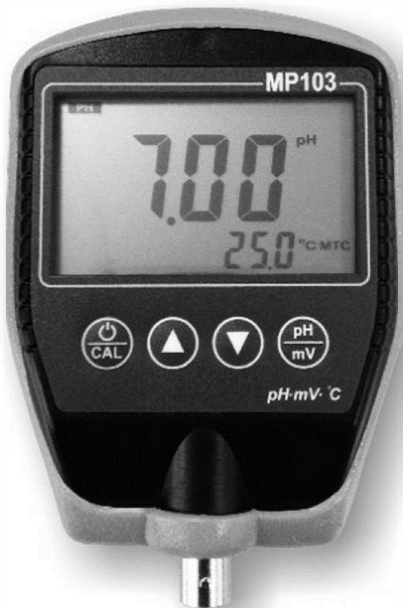


Mode Opérateur

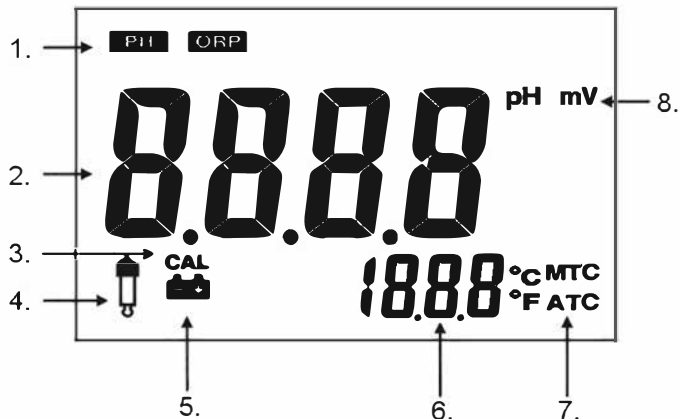
MP-103

pH - mV - Temperature



CE

Affichage LCD:







1. Paramètre
2. Lecture
3. Calibration
4. Icône d'erreur lors de la calibration
5. Etat des piles
6. Température
7. Compensation température Auto(ATC) ou Manuelle(MTC)
8. Unités

Instrument :



Clavier:

| | |
|--|---|
|  | Bouton Marche/Arrêt. Appuyer 3 sec. pour entrer en mode Calibration |
|  | Régler la température en mode manuel MTC. |
|  | |
|  | Choisir le paramètre ou l'unité. Presser 3 sec. pour changer entre °C/°F ou entre pH/mV |


Préparation:

1. insérer la pile 9 Volts dans le compartiment à piles
2. Connecter la sonde de pH et la sonde de Température
3. Mettre l'instrument en marche
4. Rincer la sonde pH avec de l'eau déminée et l'essuyer

Calibration:

<pH>


1. Vérifier que la sonde pH et de température sont connectées.
2. Plonger les 2 sondes dans le tampon pH 7.00.

Remuer doucement jusqu'à obtenir une lecture stable. Appuyer sur “” pendant 3 sec. pour entrer en mode calibration. L'écran affiche **CAL** et 7.00 clignote, puis stoppe et indique “**SA**” et “**End**”

La calibration est alors enregistrée sur pH 7.00

3. Rincer la sonde pH et l'essuyer et poursuivre à l'identique la calibration sur pH 4.01 ou/et sur pH 10.01.
 4. Après la calibration sur 2 points, l'affichage indique la pente (PTS) et donc l'état de l'électrode. Si le PTS est < 70% ou > 130%, la sonde doit être remplacée.
1. L'icône d'erreur de calibration et “**Err**” à la place de “**SA**” s'affichent si la calibration a échoué.
 2. Toujours commencer la calibration avec pH 7.00 avant de poursuivre avec pH 4 et pH 10.

Lecture: <pH>

1. Appuyer sur “” pour choisir le paramètre pH
2. Plonger les 2 sondes dans l'eau à tester.

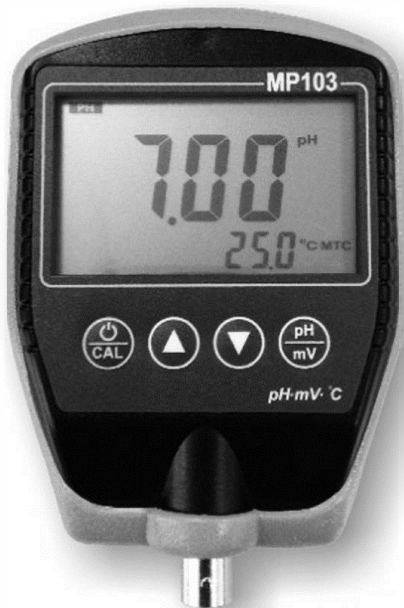
Remuer doucement jusqu'à obtenir une lecture stable

Note:

1. l'affichage indique “----” si la lecture est hors gamme.
2. Après la lecture, ranger la sonde pH dans son capuchon rempli de KCL.

User's Guide

MP-103 pH/ORP/Temperature Meter



CE

Introduction:

We thank you for having purchased MP-103 portable pH/mV/Temp meter.

Before using the instrument, please note that the operation instructions should be read carefully, which will help you to operate and maintain the instrument, as well as to avoid trouble caused by unsuitable operation and maintenance.

MP-103 portable meter employs leading edge technology with integrated microprocessor, which is suitable for measurement in water solutions for institutes, industrial labs and production fields.

The information presented in this manual is subject to change without notice as improvements are made.

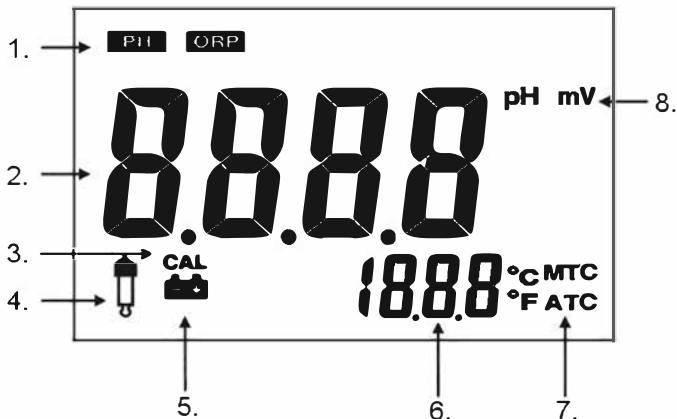
Features:

1. Microprocessor based designed.
2. Large LCD displays pH and Temperature simultaneously.
3. Splash proof housing and rubber protective holster.
4. Automatic Temperature Compensation(ATC) or Manual Temperature Compensation(MTC)
5. Simple to calibrate by one keyboard for 5 points buffer.
6. Indicate percentage of slope (PTS) after calibration
7. Auto shut off after 10 minutes of non use.

Specifications:

| | pH | ORP | Temp. |
|--------------|----------------|---|--------------|
| Range | -2.00~16.00 pH | -1999 ~ -200 mV -199.9 ~ 499.9 mV 500 ~ 2000 mV | 0~110 °C |
| Accuracy | ±0.01+1 digit | ±2+1 digit | ±0.2+1 digit |
| Resolution | 0.01 pH | 0.1/1 mV | 0.1 °C |
| Compensation | ATC: 0~100 °C | N/A | |

Display Description:







1. Function Mode
2. Measuring Value
3. Calibration Mode
4. Calibration error indicator
5. Battery power low Indicator
6. Temperature Indicator
7. Auto/Manual Temperature Compensation
8. Unit

Device Description:



Functions of Keyboard:


| | |
|--|---|
|  | Turn on or off power. Press 3 sec. to enter calibration mode |
|  | Adjust the temperature reading in MTC mode. |
|  | |
|  | Choose different function mode. Press 3 sec. to switch °C/°F, or switch pH-mV or ORP-mV (in ORP mode) |

Preparation:

1. Open the battery compartment and connect the 9V battery.
2. Connect the electrode and T/probe to meter,
3. Remove the protection cap from the electrode. Press button to turn the meter power on.
4. Rinse the electrode and T/probe with clean water and wipe it dry.

Calibration:

<pH>

1. Make sure the sensor is pH electrode.
2. Dip the electrode and the temperature probe into the buffer solution pH 7.00. Stir gently and wait until the reading is stable. Press and hold “” for 3 sec. to enter calibration mode. The display will appear **CAL** and flashing 7.00. When the display stops flashing and indicates “**SA**”, then “**End**” while calibration ends, and will return to measurement mode.
3. Rinse the electrode and the probe with clean water and wipe it dry. Dip the electrode and the probe into the buffer solution pH 4.01 as previous steps.
4. After slope calibration, pH 4.01 or pH 10.01, the display will indicate the percentage of slope (PTS) to show the status of the electrode. If the PTS is below 70% or above 130%, the electrode must be replaced. A slope of 100% is ideal.

Note:


1. Calibration error indicator icon will appear, and “**Err**” instead of “**SA**”, if calibration fails.
2. When doing a 2 or 3 point calibration, Calibrate with buffer pH 7 first, and then follow with buffer pH 4 or pH 10.

<ORP>


Calibration is not necessary for ORP. However, it could be tested with specific ORP standard solution to check whether the electrode is good.

Measurement:

<pH>

1. Press “” to choose pH mode.
2. After calibration, rinse the pH electrode and the temperature probe with clean water and wipe it dry. Dip the electrode and the temperature probe into the sample solution which is going to be measured. Stir gently and wait until a stable reading can be obtained.

<ORP>

1. Insert ORP electrode, and press “” to choose ORP mode.
2. Rinse the ORP electrode with clean water and wipe it dry. Dip the electrode into the sample solution which is going to be measured. Stir gently and wait until a stable reading can be obtained.

Note:

1. The display will appear “----” when it is over measuring range.
2. After measurement, rinse the electrode with clean water. Replace the soaking bottle. The soaking bottle should be always filled with soaking solution (4M KCL).