

WTW 2AA312

WTW pH 3310 ProfiLine Meter Kit with SenTix 41 pH Electrode User Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the proper use, setup, operation, and maintenance of the WTW pH 3310 ProfiLine Meter Kit, which includes the SenTix 41 pH Electrode. The WTW pH 3310 is a robust and reliable instrument designed for accurate pH measurements in various applications, from laboratory to field use. Please read this manual thoroughly before operating the device to ensure optimal performance and longevity.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Durable and Waterproof Design:** The meter features a 100% waterproof keypad and housing, making it suitable for demanding environments.
- **Clear Display:** A large graphic LCD ensures excellent readability under various lighting conditions.
- **Extended Data Memory:** Capable of logging up to 5000 compliant data sets.
- **Time-Controlled Datalogging:** Adjustable data collection intervals for long-term monitoring.
- **Power Saving Mode:** A special "sleep" mode extends battery life during prolonged monitoring.
- **Non-Volatile Memory:** All stored data is retained even if battery power is lost.
- **USB Interface:** Waterproof mini-USB for simple data transfer to a PC.
- **Broad Buffer Recognition:** Supports DIN, NIST, and USA pH buffer standards for calibration.

2.2 Kit Components

The WTW pH 3310 ProfiLine Meter Kit includes the following items:

- WTW pH 3310 ProfiLine Meter
- SenTix 41 pH Electrode
- Calibration Solutions
- Hard Carrying Case
- Four (4) AA Batteries



Figure 1: The WTW pH 3310 ProfiLine Meter, a handheld device with a large LCD screen showing a pH reading of 6.973 and a temperature of 25.0°C. The keypad features buttons for functions such as 'STO' (Store), 'CAL' (Calibration), 'AR' (AutoRead), 'RCL' (Recall), and 'ENTER', along with navigation arrows. The model name 'pH 3310' is visible on the lower left of the device.

3. SETUP

3.1 Battery Installation

1. Locate the battery compartment on the back of the meter.
2. Open the compartment cover.
3. Insert four (4) AA batteries, ensuring correct polarity as indicated inside the compartment.
4. Close the battery compartment cover securely to maintain the waterproof seal.

3.2 Electrode Connection

1. Carefully remove the protective cap from the SenTix 41 pH Electrode.
2. Connect the electrode cable to the designated port on the WTW pH 3310 meter. Ensure the connection is firm and secure.
3. Rinse the electrode with distilled water before initial use.

3.3 Initial Power-On

Press the **ON/OFF** button to power on the meter. The display will illuminate, and the device will perform a self-test before entering measurement mode.

4. OPERATING INSTRUCTIONS

4.1 Calibration

Regular calibration is essential for accurate pH measurements. The WTW pH 3310 supports up to 5-point calibration using DIN, NIST, or USA buffer recognition.

1. Prepare fresh calibration buffer solutions (e.g., pH 4.01, 7.00, 10.00).
2. Press the **CAL** button to enter calibration mode.
3. Rinse the electrode with distilled water and immerse it in the first buffer solution.
4. Wait for the reading to stabilize, then confirm the calibration point as prompted by the meter.
5. Repeat for subsequent buffer solutions.
6. The meter will automatically recognize the buffer and store the calibration data.

4.2 Measurement

1. Ensure the meter is calibrated.
2. Rinse the electrode with distilled water and immerse it in the sample solution.
3. Wait for the reading to stabilize on the LCD. The AutoRead (AR) function can assist in determining when the reading is stable.
4. Record the pH and temperature values displayed.

4.3 Data Logging

The pH 3310 meter offers advanced data logging capabilities:

- **Manual Storage:** Press the **STO** button to manually store the current measurement. The meter can store up to 5000 data sets.
- **Time-Controlled Datalogging:** Access the menu to set adjustable intervals for automatic data collection. This is ideal for long-term field monitoring.
- **Sleep Mode:** During long-term monitoring, the special "sleep" mode conserves battery power.
- **Non-Volatile Memory:** All logged data is saved permanently, even if the batteries are depleted or removed.

4.4 Data Transfer to PC

To transfer stored data to a computer:

1. Connect the WTW pH 3310 meter to a PC using a mini-USB cable.
2. The meter's waterproof USB interface ensures reliable connection.
3. Follow the instructions in the accompanying software (if applicable) or the meter's menu to initiate data transfer.

5. MAINTENANCE

5.1 Meter Care

- Clean the meter's keypad and housing with a damp cloth. Avoid abrasive cleaners.
- Ensure the battery compartment and USB port covers are securely closed when not in use to maintain waterproofing.
- Store the meter in its hard carrying case when not in use to protect it from damage.

5.2 Electrode Care (SenTix 41 pH Electrode)

- Always keep the electrode tip moist. Store it in its protective cap filled with appropriate storage solution (e.g., 3 mol/L KCl solution) when not in use. Never store in distilled water.

- Rinse the electrode with distilled water before and after each measurement.
- If the electrode becomes sluggish or readings are unstable, refer to the electrode's specific manual for cleaning and regeneration procedures.
- Replace the electrode when it no longer calibrates correctly or provides stable readings.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your WTW pH 3310 meter. For more detailed troubleshooting, refer to the full product manual or contact customer support.

Problem	Possible Cause	Solution
Meter does not power on.	Dead or incorrectly installed batteries.	Check battery polarity; replace with new AA batteries.
Unstable pH readings.	Dirty or damaged electrode; insufficient sample immersion; air bubbles.	Clean electrode; ensure proper immersion; gently stir to remove bubbles; recalibrate.
Calibration fails or is inaccurate.	Expired or contaminated buffer solutions; dirty electrode; incorrect buffer recognition setting.	Use fresh buffer solutions; clean electrode; check buffer recognition settings in the menu.
Data transfer to PC not working.	Loose USB connection; driver issues; incorrect software settings.	Ensure USB cable is securely connected; check PC device manager for drivers; consult software manual.

7. SPECIFICATIONS

- **Model:** WTW pH 3310 ProfiLine Meter (Model Number: 2AA312)
- **pH Electrode:** SenTix 41
- **Power Supply:** 4 x AA batteries (included)
- **Buffer Recognition:** DIN, NIST, and USA
- **Calibration Points:** Up to 5 points
- **Display Type:** LCD (Graphic)
- **Interface:** Waterproof Mini-USB
- **Data Memory:** Up to 5000 data sets
- **Dimensions (Package):** Approximately 16.2 x 14.4 x 7 inches
- **Weight (Package):** Approximately 6.2 Pounds
- **Manufacturer:** Cole-Parmer (for distribution/packaging)

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your WTW pH 3310 ProfiLine Meter Kit, please refer to the documentation provided with your purchase or contact WTW customer service directly. Contact details can typically be found on the manufacturer's official website or on the product packaging.

For additional resources and product information, visit the official WTW website: www.wtw.com

Related Documents - 2AA312

	<p>WTW SenTix® 950 / 980 / Micro 900(-P) pH Electrode Operating Manual</p> <p>This operating manual provides comprehensive instructions for the WTW SenTix® 950, 980, and Micro 900(-P) pH electrodes with liquid electrolyte. It covers essential topics including automatic sensor recognition, commissioning, calibration procedures, measurement guidelines, proper storage, maintenance and cleaning, detailed technical specifications, available accessories, and disposal information.</p>
	<p>WTW pH 3310 Quick Start Guide - pH Measurement</p> <p>Quick start guide for the WTW pH 3310 pH meter. Learn about its features, keypad, display, and connections for fast and reliable pH measurements. Visit www.wtw.com for the full manual.</p>
	<p>WTW-PDRP4620EASD3 / 4630ESD3</p> <p>WTW-PDRP4620EASD3 WTW-PDRP4630ESD3 OSD</p>
	<p>WTW Camera OSD Menu and Connection Guide</p> <p>Comprehensive guide to connecting WTW surveillance cameras and configuring their On-Screen Display (OSD) menu settings, covering video modes, exposure, day/night settings, and more. Includes detailed connection diagrams and setup instructions.</p>
	<p>WTW</p> <p>WTW OSD</p>
	<p>WTW-WSP12-BM / WSP18-BM / WSP21-BM IP</p> <p>WTW-WSP12-BM, WTW-WSP18-BM, WTW-WSP21-BM IP</p>