

AKSO

qualidade que se mede



INSTRUCTION MANUAL

AK90

POCKET PH METER

Version 05 - Revision 09/24 - For illustrative purposes only

1. SPECIFICATIONS

| | pH | Temperature |
|---------------------------|-------------|---------------|
| - Measuring range: | 0.0 to 14.0 | 0.0 to 50.0°C |
| - Resolution: | 0.1 | 0.1°C |
| - Accuracy: | ± 0.1 | ± 1°C |

- **Adjustment points:** pH 4.01, 7.00 and 10.01
- **Automatic temperature compensation (ATC):** 0 to 50 °C
- **IP rating:** IP54
- **Automatic shutdown:** 10 minutes
- **Operating temperature:** 0 to 50°C
- **Operating humidity:** 5 to 90%RH (non-condensing)
- **Power:** 6Vdc (4x LR44)
- **Dimensions (WxHxD):** 38 x 188 x 38mm
- **Weight:** 85g

Items sold separately:

- Electrode for AK90 AK1050
- Standard solution pH 4.01 AK4504
- Standard solution pH 7.00 AK4507
- Standard solution pH 10.01 AK4510
- KCl 3M storage solution AK4530
- Pepsin cleaning solution AK4531

IMPORTANTE: Before use, verify the AK90 carefully. If you detect any abnormalities, please contact AKSO.

MEASUREMENT

- 1) Remove the electrode protection cup;
- 2) Turn on the AK90 by pressing the **On/Off** button;
- 3) Rinse the electrode with distilled or deionized water in abundance and remove excess water using a soft paper towel;
- 4) Immerse the electrode in the pH 7.00 buffer solution, agitating it gently to homogenize it;
- 5) After the reading stabilizes, check the reading values for the sample pH and temperature on the display;
- 6) For a new measurement, repeat steps 3 to 5.

NOTE:

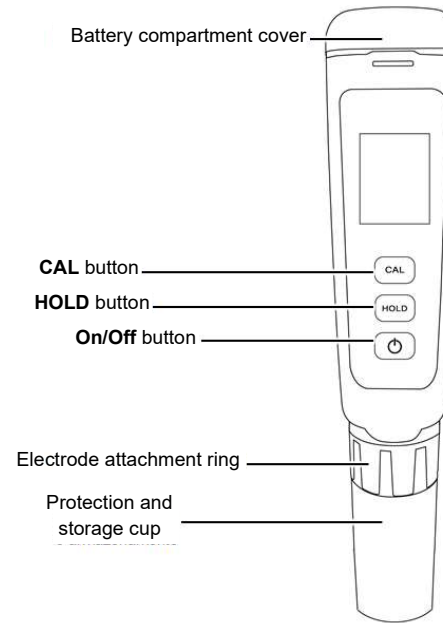
- **When immerse the instrument into the sample, NEVER let the sample go above the protective cup seal. Submersion above this limit can irreversibly damage your AK90.**
- **At the end of measurements, always rinse electrode in distilled or deionized water in abundance and store it in the protective cup with clean KCl-3M.**

4. ADDITIONAL FUNCTIONS

HOLD

To activate/deactivate Reading Freeze, press the **HOLD** button. **HOLD** will appear on the display while the function is active.

2. OVERVIEW



TEMPERATURE UNIT SELECTION - °C / °F

- 1) With the instrument turned off, keep pressing the **CAL** button and turn on the AK90. Release the **CAL** button;
- 2) Press the **CAL** button to switch between temperature measurements units °C or °F;
- 3) Press the **HOLD** button to confirm the selected unit showed on the display.

5. MAINTENANCE

ELECTRODE REPLACEMENT

- 1) Remove the electrode protection cup;
- 2) Rotate the attachment wing (on the top of the electrode) counterclockwise and remove it;
- 3) Detach the used electrode from the AK90;
- 4) Carefully install the new electrode for AK90, paying attention to its correct placement and connection;
- 5) Reattach the electrode attachment wing tightening it firmly (without applying force).

BATTERY REPLACEMENT

When "---" appears or when the characters start blinking on the display, replace the used batteries with new ones according to the procedure below:

- 1) Pull the battery compartment cover (at the top of the AK90) and remove it;
- 2) Remove the used batteries inside the compartment;
- 3) Install 4 new batteries observing their polarity;
- 4) Reattach the compartment cover by tightening it firmly.

3. INSTRUCTIONS OF USE

ON - OFF

To turn the AK90 on/off, briefly press the button **On/Off**.

ELECTRODE ACTIVATION

Before using you AK90 for the first time or after storing it dry (without KCL solution), activate the electrode according to the following procedure:

- 1) Remove the electrode protection cup;
- 2) Rinse the electrode with distilled water in abundance;
- 3) Fill approximately half of the electrode protection cup with 3 Molar potassium chloride solution (KCl-3M);
- 4) Insert the electrode into its protective cup, closing it tightly to prevent the KCl-3M solution from leaking;
- 5) Wait at least 30 minutes;
- 6) Make the adjustments to the AK90 measurement. Your instrument will be ready for measurements.

MEASUREMENT ADJUSTMENT (CALIBRATION)

The AK90 can be adjusted to the following values:

| 2 points | 3 points |
|---------------------|---------------------------|
| → pH 7.00 and 4.01 | → pH 7.00, 4.01 and 10.01 |
| → pH 7.00 and 10.01 | |


CLEANING THE ELECTRODE

Clean the electrode periodically using water. For more information, contact Technical Support or visit the AKSO website.

RESTORATION TO FACTORY DEFAULT

- 1) With the AK90 turned on in measurement mode, keep pressing the **HOLD** button until the display shows the **CLR** message. Release the button;
- 2) Perform the conductivity measurement adjustments.

DISPOSAL OF BATTERIES AND ELECTRONICS

 This product contains battery and electronic components. Do not dispose of them with other common household waste. Deliver them to the appropriate collection center in accordance with local guidelines. **Important:** The correct disposal of electronics and batteries prevents negative effects on the environment and on human health!

WARRANTY
2
YEARS

This instrument comes with a 2-year* warranty against manufacturing defects.

*Legal warranty included
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