



## INSTRUCTION MANUAL

# AK51

## POCKET CONDUCTIVITY METER

### 1. SPECIFICATIONS:

	Conductivity	Temperature
- <b>Measuring range:</b>	0.01 to 19.99 mS/cm	0.0 to 50.0 °C
- <b>Resolution:</b>	0.01 mS/cm	0.1 °C
- <b>Accuracy:</b>	± 2% FS	± 1 °C

- **Adjustment points:** 1.41 mS/cm (1413 µS/cm) e 12.88 mS/cm
- **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
- **Additional functions:**
  - Low battery indication
  - Freeze reading on the display (HOLD)

#### Items sold separately:

- Electrode for AK51 AK1055
- Standard solution 1413 µS/cm AK4523
- Standard solution 12.88 mS/cm AK4524

#### IMPORTANT:

- Before use, verify the AK51 carefully. If you detect any abnormalities, contact AKSO.

#### NOTE:

- After completing the adjustment procedure, discard the solutions used in running water.  
**NEVER REUSE SOLUTIONS!**
- Adjust/calibrate the AK51 periodically or before measurements.

### 4. ADDITIONAL FUNCTIONS

#### HOLD

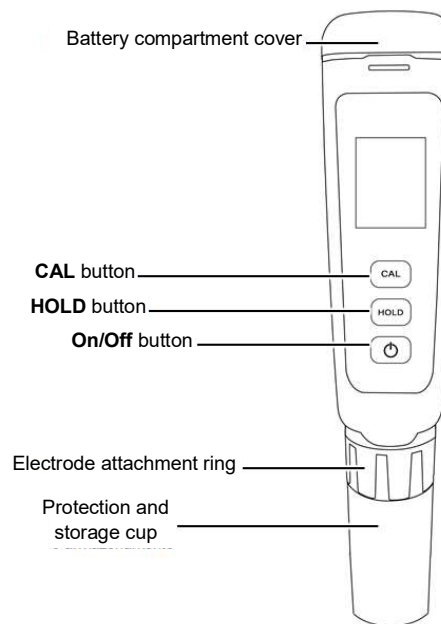
To activate/deactivate Reading Freeze, press the **HOLD** button. **HOLD** will appear on the display while the function is active.

#### TEMPERATURE UNIT SELECTION - °C / °F

To change the temperature measurement unit, turn the instrument on and briefly press the **CAL** button. By pressing the following options will appear:

- °C - degrees Celsius [°C]
- °F - degrees Fahrenheit [°F]

### 2. OVERVIEW



### 3. INSTRUCTIONS OF USE

#### ON - OFF

To turn the AK51 on/off, briefly press the button **On/Off**.

#### MEASUREMENT

- 1) Remove the electrode protection cup;
- 2) Turn on the AK51 by pressing the **On/Off** button;
- 3) Rinse the electrode with distilled water in abundance;
- 4) Remove excess water using a soft paper towel. Make sure not to leave any water residue on the tip of the electrode;
- 5) Immerse the electrode tip in the sample to be analyzed, gently agitating to homogenize it;
- 6) After the reading stabilizes, check the measured conductivity and temperature values on the display;
- 7) For a new measurement, repeat steps 3 to 6.

#### NOTE:

- During measurements, immerse only the tip of the electrode in the sample. Avoid contact of the sample with the electrode attachment ring!
- Upon finishing the measurements, always rinse the electrode with distilled water in abundance.

### 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 AK51;
- 4) Carefully install the new electrode for AK51, 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 AK51) 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.

#### 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 AK51 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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