



INSTRUCTION MANUAL

1. SPECIFICATIONS

- **Measuring range:** 0.00 to 5.00 ppm
- **Resolution:** 0.01ppm
- **Accuracy:** $\pm (0.10\text{ppm} + 5\% \text{ of reading})$
- **Adjustment:** 4 points (0, 1, 3, 5 ppm)
- **Sample temperature:** 15 to 35 °C
- **Volume for analysis:** 10mL
- **Light source:** Light emitting diode
- **Wavelength:** 470nm
- **Measuring cell:** Glass cuvette
- **Automatic shutdown:** After 2 minutes
- **Display:** Oled
- **Languages:** English, Spanish, Italian and Portuguese
- **Operating temperature:** 0 to 50 °C
- **Operating humidity:** 10 to 90 %UR (non-condensing)
- **Power:** 9Vdc (1x 9v battery)
- **Dimensions (WxHxD):** 73 x 77 x 40 mm
- **Weight:** 120g (with battery)
- **Method:** Adaptation to the Nessler Method

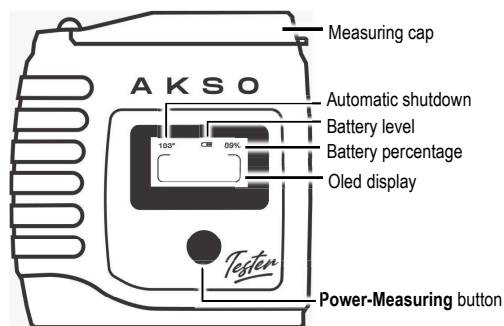
2. ACCESSORIES

- Items included with the Ammonia Tester:**
- 2 glass cuvettes with lid (Ø18.8 mm x 68mm) AK4551
 - 1 flannel cloth
 - 1 plastic carrying case
 - 1 instruction manual

- Items sold separately:**
- Liquid reagent for ammonia (50 tests) AK4043
 - Verification standard solution kit (0, 3 ppm) AK4205

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

3. OVERVIEW



4. INSTRUÇÕES DE OPERAÇÃO

MEDIÇÃO

Zeramento

- 1) Press the **Power-Measurement** button to turn on the instrument. The display will show **Insert reference**;
- 2) Rinse the cuvette 3 to 4 times with the water sample that you wish to analyze, to acclimate the cuvette and prevent reading deviations;
- 3) Fill the cuvette with 10mL of your sample monitoring the line indicated on the glass;
- 4) Close cuvette with the lid;
- 5) Clean and dry the cuvette's exterior using the flannel cloth or a soft paper towel to eliminate residue, oil or humidity that may interfere with the measurement;
- 6) Insert the cuvette in the measurement compartment;
- 7) **Measurement alignment:** for better precision, insert the cuvette with the volume indicator facing forward;
- 8) Close the measurement cover over the glass cuvette to prevent interference during reading;
- 9) With the instrument in the VERTICAL position, briefly press the button. The display will show the message **Analyzing reference**;
- 10) Wait until the screen displays the message **Insert sample**;

Reading - Ammonia

While **Insert sample** is on the display:

- 11) Open the measurement cover and remove the cuvette from the compartment;
- 12) Remove the lid of the cuvette and add 4 drops of reagent A, followed by 4 drops of reagent B;
- 13) Close the cuvette with its lid;
- 14) Thoroughly agitate to dissolve the reagent into the sample;
- 15) Clean and dry the cuvette's exterior using the flannel cloth or a soft paper towel;
- 16) Insert the cuvette in the measurement compartment;
- 17) For better precision, always insert the cuvette in the same position and close the measurement cover;
- 18) Keep pressing the **Power-Measurement** button until the screen shows a countdown of 210 seconds;
- 19) The display will show the message **Analyzing sample** when end of the countdown followed by the measurement result in ppm;
- 20) To perform the automatic conversion of NH3-N to NH3, keep the **Power-Measurement** button pressed until the display shows NH3 and the result;
- 21) At the end of the measurement, discard the analyzed sample and immediately wash the glass cuvette with water, distilled or deionized.

5. CONFIGURATION

ACCESS AND NAVIGATION

- To access the instrument's configurable parameters menu, with the instrument off, briefly press the **Power-Measuring** button during the start-screen display, hold the **Power-Measuring** button, the display will display **CONFIGS** and options;
- To navigate between parameters that can be configured, briefly press the button;
- To access a parameter, hold down the **Power-Measuring** button;
- To confirm a setting. Hold down the button and the instrument will return to parameter selection;
- To return to a previous level or measurement mode, select **Back**, and hold down the button.

SETTINGS

ADJUSTMENT – measurement adjustment

- **Manual** – adjustment of the reading curve at the points (0, 1, 3, 5 ppm)
Note: You must adjust at all points.
- **Factory Standard** – restore the adjustment of the factory reading curve

LANGUAGE – language selection

PORTUGUESE, ENGLISH, SPANISH and ITALIAN.

6. MAINTENANCE

BATTERY INSTALLATION/REPLACEMENT

When the display displays Dead Battery, replace the battery as described below:

- 1) Switch off the instrument by holding down the **Power-Measuring** button until the display is switched off;
- 2) Remove the base clamping screw at the bottom of the instrument using a *Phillips* wrench;
- 3) Undock the base of the meter by pulling it carefully;
- 4) Remove the used battery from the compartment and disconnect it from the clip;
- 5) Connect the new battery in the clip and snap it into the compartment;
- 6) Replace the base of the instrument, observing its correct position;
- 7) Replace the *Phillips* screw by tightening it without forcing it.

BATTERY AND ELECTRONICS DISPOSAL



This product contains a battery and electronic components. Do not dispose of them with other common household waste. Please deliver them to the designated collection point as per local guidelines.

Important: Proper disposal of electronics and batteries prevents negative consequences for the environment and, consequently, for human health!

For more information about the service and/or waste disposal location, please contact your municipal government.

ERROR MESSAGES

MESSAGE	CAUSE	SOLUTION
Discharged battery	Battery without charge	Replace the battery
Low battery		
Concentration exceeded	Sample outside the measuring range of the instrument.	Perform a new reading within the measuring range of the instrument.
Inverted samples	Error in the measurement procedure.	Perform a new reading following the measurement procedure.
Damaged sensor	Failure to communicate with the sensor.	Contact Akso Technical Support.

Go to the product page on the Akso website and make sure your manual version is up to date.



This instrument comes with a 2-year* warranty against manufacturing defects and a 6-month* warranty for the sensor/electrode/probe

*Legal warranty included
garantia@akso.com.br

