## Jerome® 431-X Quick Start Guide

Remember to read the 431-X user's manual for complete details on instrument operation, maintenance, and troubleshooting, to optimize the results and extend the life of the instrument. An up-to-date electronic copy of the manual can be found at: <a href="www.azic.com/downloads.aspx">www.azic.com/downloads.aspx</a>

The Jerome<sup>®</sup> 431-X is easy to operate and ready for immediate use when you receive it. Follow these brief steps:

1) <u>UNPACK:</u> Remove the instrument from the packing material. Check for any damage and confirm receipt of all parts on your packing list.

Retain all packaging materials for future shipping needs.

2) POWER UP: Press the ON button. The display should read 000 in less than one second.

A LO BAT message appears briefly in the upper left corner. If the LO BAT message persists, recharge the battery. See the manual for details.

- 3) <u>VERIFY INPUT VOLTAGE SELECTION:</u> Check the voltage selector on the back of the instrument and verify it is set to the local voltage (110 or 220 VAC). If it is not, turn it to point to the correct voltage.
- 4) <u>SENSOR REGENERATION:</u> Perform a sensor regeneration by following these steps:
  - Plug the line cord into the back of instrument and connect it to an AC power outlet.
  - Press the REGEN button to start regeneration. Do not interrupt this process.
    - o The instrument will flash .H.H.H during the 10-minute regeneration cycle.
    - The display will change to .0.0.0 when the regeneration is complete.
    - o If any error message, such as .P.P.P appears on the display, refer to p.24-26 of the manual.
  - For maximum accuracy, wait 30 minutes after regeneration for the instrument to cool down before zeroing the sensor and beginning sampling.
- 5) <u>ZERO THE SENSOR</u> (to be performed only after regen and cool down): When regeneration and cool down are complete, zero the sensor by holding down the ZERO button and turning the zero adjust screw (located under the handle) until the display reads 0. The instrument is now ready to sample.
- 6) TAKING A SAMPLE: The instrument is designed for ambient air monitoring.
  - Press the SAMPLE button to take a sample. At the end of the 12-second sampling cycle, the
    measured mercury vapor concentration will be displayed. For maximum accuracy, wait 15 seconds
    between samples to allow the sensor to restabilize.
  - ZERO AIR FILTER Insert the Zero Air Filter in the intake of the instrument to ensure a clean sample stream, free of mercury vapor or mercaptans. Readings with the filter installed should be less than 0.003 mg/m<sup>3</sup>. Refer to the manual for complete details on using the Zero Air Filter.
  - NOTE: For maximum accuracy, ensure that the instrument temperature has equilibrated with the ambient air temperature. To speed up this process, sample repeatedly through the Zero Air Filter until readings are less than 0.003 mg/m³, then remove the Zero Air Filter and sample normally.
  - DO NOT allow the probe or the instrument's intake to come in contact with liquids.
  - DO NOT obstruct the intake or exhaust ports. Note the instrument is not explosion proof.
  - If ammonia or chlorine may be present, please contact AZI for the appropriate filters.
- 7) STORAGE: At the end of the day, before storage, perform another sensor regeneration.

Call AZI Customer Service, or your Technical Sales Representative, at 800-235-3360 or 602-470-1414 or send an email to <a href="mailto:support@azic.com">support@azic.com</a> if you have any questions.



REGEN

ZERO

Hg mg/m<sup>3</sup>

JEROME 431-X