

Jerome 471 Quick Guide

I. Instrument Start Up

- Turn the 471 ON and let warm up for 20minutes
 - Flip black toggle switch on top of unit (A red light on the switch indicates the unit is on.)








You MUST start the 471 program for the instrument to warm up!



- Push the button on top of the Pocket PC to turn it on.
 - Start the program by pressing the **START** menu in top left corner of screen.
 - Select **Jerome471** from the drop down menu.
 - If the program is already running, stop it and restart it or it will not synchronize with the internal board. (see “Turning the Unit Off”)

II. Changing the settings

- Press the “Settings” button to get to the SETTINGS screen to make changes.
- Single Cycle or Continuous mode can be selected by pressing on the Single Cycle/Continuous text at top of the screen.
- Industrial limit, Residential limit, and Averaging time
 - If “Industrial” limit, “Residential” limit or “Averaging” time needs to be changed, select the lock in the upper right corner of screen . If already unlocked , the values can be changed without entering a password.
 - The default password is “AZI” (all caps)
 - If letters are not visible in the pop-up keypad, select the **(123)** key in top left corner of on screen keypad.
 - Make sure you press inside the “Enter the Password” box so the password is typed in the correct place.
 - Press the **OK** button (**NOT** the “ENTER” key ) after entering the password.
 - Once unlocked , the “Industrial” limit, “Residential” limit and “Averaging Time” can be changed.
 - Touch inside the box containing the value to be changed and a keypad will pop-up.
 - If numbers are not visible in the pop-up keypad, select the **(123)** key in top left corner of on screen keypad.
 - After the values have been changed, press the **ENTER** key , which is a left pointing arrow on the bottom right of on screen keypad.

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II. Changing the settings(con't)

- Location and User Name
 - Location and User can be changed without entering the password.
 - Touch inside the edit box for Location or User and a keypad will pop-up.
 - If letters are not visible in the pop-up keypad, select the **(123)** key in top left corner of on screen keypad.
 - After making the changes, press the ENTER key ←|, which is a left pointing arrow on the bottom right of on screen keypad.
- Units
 - You can toggle between $\mu\text{g}/\text{m}^3$ or ppb by touching inside the box that displays either $\mu\text{g}/\text{m}^3$ or ppb.
- Use Mode: 2 modes are provided based on the user needs.
 - Field Use Mode is for users that are only interested in compliance to regulatory requirements. In this mode a threshold level is set and values significantly below this limit will not be displayed.
 - Scientific Use Mode is for users that want to have all the values displayed. All the values below the alarm limit are displayed. This would be of value for clean up purposes by finding the exact spot of Mercury spill as well as evaluating instrument capabilities.
 - To choose between Field or Scientific Use Mode touch the arrow at the right side of the box next to “Use Mode:” and a drop-down box will appear with the two choices. Touch the choice you want and the drop-down box will disappear and your choice will be shown in the box.
- Alarm Mode: 2 modes are provided and are used based on the environment being tested. Each alarm can be set independently and according to Regulatory requirements. The limits for each can be set as described in the settings section above.
 - To choose between Residential or Industrial Alarm Mode touch the arrow at the right side of the box next to “Alarm Mode:” and a drop-down box will appear with the two choices. Touch the choice you want and the drop-down box will disappear and your choice will be shown in the box.

III. Single Cycle Instructions

- Press the “START” button to start testing.
 - While sampling, “SAMPLING” will blink at the bottom of the screen.
 - While running, the concentration of Mercury will be displayed to the right of Result.
 - Test time:
 - Actual Test Times from start of test to finish are calculated by adding 55 to the Averaging Time.
 - Ex: Averaging time = 30 seconds
 - Actual Test Time = 55 + 30sec = 85 seconds

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IV. Continuous Mode Instructions

- Continuous Mode Characteristics
 - Continuous sampling will continue until the “Stop Sampling” button is pressed.
 - After filling the sample cell with clean air and zeroing with the reference cell, which takes about 40 seconds, the instrument will take a new reading once every second and update the average reading according to the value entered in the “Averaging Time” box.
- Sampling
 - Press the “START” button to start testing.
 - While sampling, “SAMPLING” will blink at the bottom of the screen.
 - A sample is taken every second and the concentration of Mercury will be displayed to the right of Result.
 - A new average will be displayed repeatedly, spaced by the averaging time.
 - Press the “STOP” button to stop testing.

V. Retrieving Data

- Press the Windows Flag Icon in the upper left corner of screen.
 - Retrieving data should not be done while in the middle of a test or continuous sampling.
 - Select “471 DATA” from the drop down menu.
 - Or, select “Programs” and “File Explorer” and go to the “Storage Card” folder and select the zMercury file.
- Take the USB cable out of the back of the instrument and plug it into a Computer equipped with ActiveSync and copy the file from \Storage Card\zMercury.txt and paste it on your hard drive in a folder of your choice.
- The first line in the data file is the serial number. The subsequent lines are comma delineated in the sequence of ‘date-time, result data, reserved, calibration data, verify data, alarm level, units of measure, location, user name’.

VI. Turning the unit off

- Press the X in the upper right corner of the sampling window. Not the X all the way at the top of the screen. A message window will pop up confirming if you want to shutdown the program. Press the ‘YES’ button and the program will close. Press the on/off button at the top of the PDA. Flip the black toggle switch at the left side of the screen. Plug the charger into the back of the unit for charging over night. If the unit is to be stored for a long period of time (a week or more) plug the charger in and leave the black toggle switch on and the PDA off. That way the PDA will stay charged.

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VII. Handling Precautions

- When transporting the X471 it must be contained in its original case. Secure case from sliding or tipping.
- Keep fluids from entering the instrument. Avoid humid or dusty environments.
- Avoid dropping or impacting instrument during testing or transporting. If the instrument is subjected to any shock it must be recalibrated to insure accuracy.