

QUICK START GUIDE



NEO

Photo-ionization detector

Warnings

Read Before Operating

The NEO's User's Guide must be carefully read by all individuals who have or will have the responsibility of using, maintaining or servicing this product. The product will perform as designed only if it is used, maintained and serviced in accordance with the manufacturer's instructions.



CAUTION

- Change battery only in an area known to be non-hazardous.
- Use only WatchGas battery pack PN: M011-3002-W00.



ATTENTION

- Changez la batterie uniquement dans une zone connue pour être non dangereuse.
- Utiliser uniquement la batterie WatchGas PN: M011-3002-W00.



WARNING

- Never operate the monitor when the cover is removed.
- Remove the monitor cover only in area known to be non-hazardous.
- Use only WatchGas sensor and accessories. Substitution of components will impair suitability for intrinsic safety and void warranty.
- It is recommended to bump test with a known concentration gas to confirm the instrument functions properly before use.
- For maximum safety, the accuracy of the instrument should be checked by exposing it to a known concentration calibration gas before each day's use.
- When replacing batteries, dispose of old ones properly.
- To achieve the optimal test results, it is recommended to preheat the unit for 2 minutes after entering the test interface
- Ensure that the water-trap filter is clean & replaced regularly.
- Don't remove the sensor. Zero and span calibration is required once the sensor is moved.
- Before use, ensure that the colorless ESD layer on the display is not damaged or peeling. (The blue protective film may be removed.)

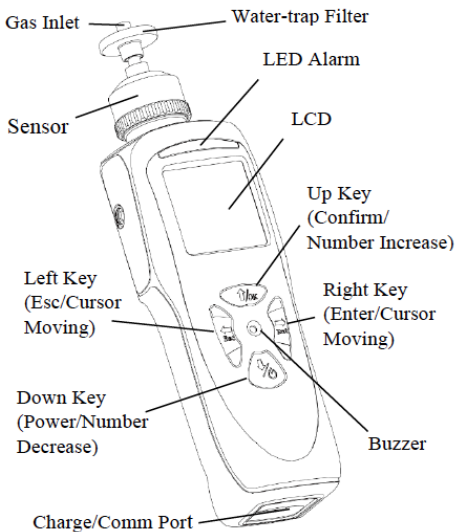


AVERTISSEMENT

- N'utilisez jamais le moniteur lorsque le couvercle est enlevé.
- Retirer le couvercle du moniteur et la batterie uniquement dans une zone connue comme non dangereuse.
- La substitution de composants compromettra l'aptitude à la sécurité intrinsèque et annulera la garantie.
- Il est recommandé de tester avec un gaz de concentration connu pour confirmer que l'instrument fonctionne correctement avant de l'utiliser.
- Avant l'utilisation, assurez-vous que la couche ESD incolore de l'écran n'est pas endommagée ou épluchée. (Le film protecteur bleu peut être enlevé.)

User Interface

The user interface has four-key operation, one big LCD with LED backlight, four red alarm LEDs, and one buzzer.



Turning the unit On

Press the Down Key for 3 seconds, until the buzzer beeps and the red LED flashes. After a warm up and self-test sequence, the unit enters normal reading mode, showing real time gas concentrations.

Turning the unit Off

In normal reading mode, press and hold the Down Key for a 5-second count down, until "Unit Off" is displayed.

Charging

Always fully charge the battery before use. Plug the charger to the bottom of NEO. The battery icon on the LCD shows the charge status. During active charging, the icon cycles from empty to full.

Charging/Comm Cable

The USB Charging/Communications cable allows charging the unit on a personal computer. A locally-purchased cable can work as well for charging, but a WatchGas cable must be used for proper data transfer when communicating with WatchGas Suite.

Water-trap Filter

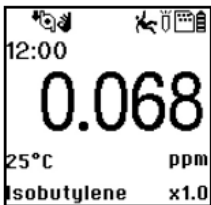
Water-trap filters (P/N: M490-0004-W10) are used to protect the sensor from dust and aerosols in dirty environments. The filter should be twisted on to the gas inlet before the instrument is used and replaced once its surface is dirty.

Testing the alarms

Important! Test the alarms prior to performing a bump or span calibration test. If any alarm does not respond, check the Alarm Settings in Config Mode to make sure all alarms are enabled (Config Mode › Alm Setting › Alarm Settings › Both Enabled). If any alarms are enabled but are not functional, do not use the instrument. Under normal operation mode and non-alarm conditions, the buzzer, LED and backlight can be tested anytime by pressing the Right Key once.

Normal Mode

After warm-up is complete, the unit enters normal reading mode and displays the instantaneous gas concentration continuously.



Other values like STEL, TWA, and temperature, etc. can be checked by pressing the Up/Down Key to cycle through these screens one by one.

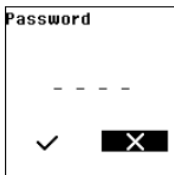
Configuration Mode

In Config Mode, the user can perform a sensor calibration, change the alarm limits and set up other parameters.

Enter/Exit Config Mode

Press and hold the Up and Down Keys together for 3 seconds, to enter Config Mode.

- The Config Mode is password protected.
- The default password is "0000".
- After all four digits are entered, move the cursor to $\sqrt{\quad}$ and press the Up Key to enter config mode.
- Press the Left Key to exit Config Mode.



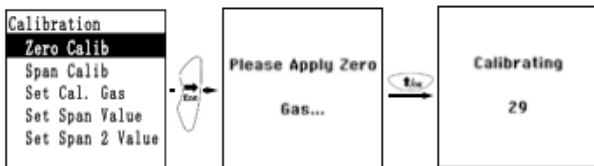
Config Mode Menu

- Calibration:
 - Zero Calib, Span Calib, Set Cal.Gas, Set Span Value, Set Span 2 Value
- Meas.:
 - Measurement Unit, Measurement Gas
- Alm Setting:
 - Alarm Limits, Alarm Mode, Alarm Settings, Comfort Beep, Man Down Alarm
- Datalog:
 - Clear Datalog, Interval
- Mnt (Monitor) Setup:
 - Data & Time, Display, Pump Speed, Pump Stall, 3-Point Cal., Rolling Graph, Real Time Data, Language, Self-Zeroing
- Wireless:
 - Radio On/Off

Zero Calibration

Zero calibration sets the baseline for the sensor and is done in normal fresh air or other clean air source.

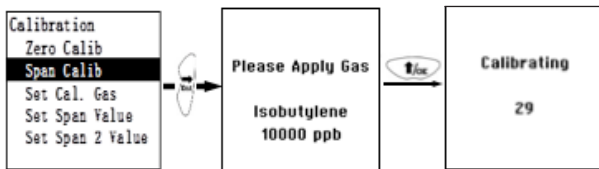
- To enter fresh air calibration:
Config Mode › Calibration › Zero Calib.
- To start fresh air calibration:
Press the Right Key and a count-down timer starts. When the count-down is finished, “Pass” or “Fail” will be displayed. To abort the zero calibration use the Left Key during count down.



Span Calibration

Span calibration defines the response of the sensor to the gas. It is done with a known concentration gas.

- To enter span calibration:
Config Mode › Calibration › Span Calib
- To start span calibration:
Apply Gas › Start Calibration › Wait Count-down
Finish › Get Result.



Gas Selection

Span calibration is usually done with isobutylene. To correct the response to be accurate for another gas:

Config Mode › Measure › Gas Library

Scroll the gas list and select the desired gas, then press Left to save and exit.

Maintenance and Service

Replace the inlet water trap filter on a regular basis, especially when used in dusty environments. For battery, lamp, or sensor replacement and other maintenance refer to the User Manual or contact the service department of WatchGas.

