

QUICKSTART GUIDE



NEO High-End Photo-Ionization Detector

WARNINGS

Read Before Operating

The NEO BENZ'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 unit is functioning 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.
- Ensure that the gas inlet is not blocked.
- When replacing batteries, dispose of old ones properly.

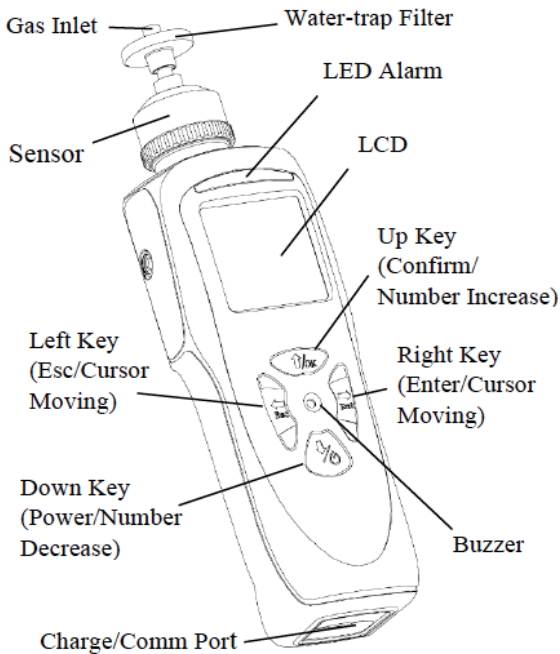
- For optimal test results, it is recommended to allow the unit 2 minutes to warm up before taking measurements
- Ensure that the water-trap filter is clean & replaced regularly.
- Do not operate with a benzene filter tube in the holder for more than 15 min. or corrosive liquids may be drawn in and damage the unit.
- Remove the sensor only for service. 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.

CHECKING THE ALARMS

IMPORTANT! Test the alarms before performing a bump test or calibration. If any of the alarms are not responding, check the alarm settings in Configuration Mode to make sure all alarms are enabled (Config Mode › Alm Setting › Alarm Settings › Both Enabled). If the alarms are enabled but not working, do not use the device. In normal operating mode and under non-alarm conditions, the sounder, LED and backlight can be tested at any time by pressing the right button once.

NORMAL MEASUREMENT MODE



After warming up, the device will enter the normal measurement mode and display the measured gas concentration. Other values such as STEL, TWA, temperature, etc. can be checked one by one by pressing the Up or Down button.

CONFIG MODE

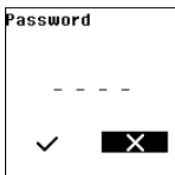
In Config Mode, the user can perform calibrations, change alarm limits, and adjust other parameters.

ENTERING AND EXITING CONFIG MODE

Press and hold the Up and Down buttons simultaneously for 3 seconds to enter Config Mode.

Config Mode is password protected.

- The default password is "0000".
- Enter all four digits, move the cursor to ✓ and press the Up button to enter Config Mode.
- Press the Left button to exit Config Mode.



MENU OVERVIEW IN CONFIGURATION MODE (CONFIG MODE MENU)

- **Calibration:** Zero Calibration, Span Calib, Set Cal. Gas, Set Span Value, Set Span 2 Value
- **Measurement:** Measurement Unit, Measurement Gas
- **Alarm Settings:** Alarm Limits, Alarm Mode, Alarm Settings, Comfort Beep, Man-Down Alarm
- **Data Logger:** Clear Datalog, Set Interval

- **Mnt (Monitor) Setup:** Date & Time, Display, Pump Speed, Pump Stall, 3-Point Cal., Rolling Graph, Real-Time Data Time Data), Language, Self-Zeroing
- **Wireless:** Wireless data transmission on/off To access standard gas calibration: Config Mode > Calibration > Standard Gas Calibration (Span Calib)
To start standard gas calibration:
Apply Gas > Start Calibration > Wait for countdown > Receive result.

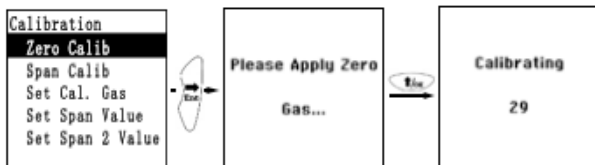
ZERO POINT CALIBRATION

Zero Calibration sets the baseline for the sensor and is performed in normal fresh air or another clean air source.

- To enter fresh air calibration:
- Config Mode > Calibration > Zero Calib.

To start fresh air calibration:

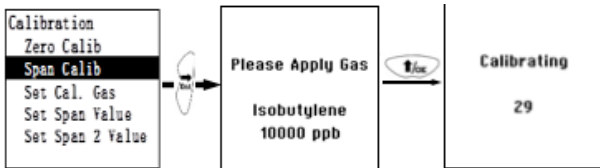
Pressing the Right button starts a countdown timer. When the countdown is complete, “Pass” or “Fail” is displayed. To abort zero calibration, press the Left button during the countdown.



STANDARD GAS CALIBRATION

Calibration determines the sensor's response to the gas. Calibration is performed using a known gas concentration.

- To access standard gas calibration: Config Mode > Calibration > Standard Gas Calibration (Span Calib)
- To start standard gas calibration:
Apply Gas > Start Calibration > Wait for countdown > Receive result.



GAS SELECTION

Calibration is typically performed using isobutylene, but any gas can be used. To adjust the response to match a different measurement gas, follow these steps:

Config Mode > Measure > Gas Library

Scroll through the gas list and select the desired gas to calibrate with, then press the Left button to save and exit.

Maintenance and Service

Replace the dust/water block filter regularly, especially when used in dusty environments. For information on replacing batteries, lamps, or sensors, or other maintenance, refer to the User Manual or contact WatchGas..