

Alarms

If **Stealth** mode is enabled, the audible and visual alarms are disabled. Only the vibrator alarm activates..

Alarm	Display	Alarm	Display
Low Alarm Slow siren Slow alternating flash ALARM and gas bar flash Vibrator alarm activates		TWA Alarm Slow siren Slow alternating flash ALARM and gas bar flash Vibrator alarm activates	
High Alarm Fast siren Fast alternating flash ALARM and gas bar flash Vibrator alarm activates		STEL Alarm Fast siren Fast alternating flash ALARM and gas bar flash Vibrator alarm activates	
Multi-Gas Alarm Alternating low and high alarm siren and flash ALARM and gas bars flash Vibrator alarm activates		Over Limit (OL) Alarm Fast siren and alternating flash ALARM and gas bar flash Vibrator alarm activates OL displays	

Alarm	Display	Alarm	Display
Sensor Alarm During startup Error [sensor name] displays • During normal operation Err displays		Confidence Beep and IntelliFlash One beep and flash every second Note: Confidence Beep and IntelliFlash automatically deactivate during low battery alarm, self-test fail, calibration fail, bump test fail, or an alarm event.	
Low Battery Alarm Sequence of 10 rapid sirens and alternating flashes with 7 seconds of silence in between (continues for 15 minutes) ALARM and ALARM flash, LOW BAT displays, and the vibrator alarm activates After 15 minutes of the Low Battery alarm, the Automatic Shutdown Alarm sequence begins OFF displays before deactivating		Automatic Shutdown Alarm Sequence of 10 rapid sirens and alternating flashes with 1 second of silence in between (sequence reactivates seven times) LOW BAT and ALARM display, and vibrator alarm activates OFF displays before deactivating	

Note: Alarms can be set to latching or non-latching. To enable/disable latching, select/deselect **Latching Alarms** in Fleet Manager II. Local regulations may require a latching alarm.
 If Low Alarm Acknowledge is enabled and a low alarm occurs, press to disable the audible alarm. The visual and vibrator alarms remain activated. If the alarm escalates to a high, STEL, or TWA alarm, the audible alarm reactivates.

User Options Menu

To modify the user options, connect the detector to the IR Link adapter and open Fleet Manager II. Refer to the *Fleet Manager II Operator's Manual* for complete instructions.

1. **Sensors** (H₂S, CO, LEL, and O₂)

- Sensor Disabled:** Disables the sensor.
- Calibration Gas (ppm) / (%LEL) / (%O₂):** Defines the calibration gas concentration for each sensor.
- Calibration Interval (days):** Defines how often a calibration should be performed.
- Bump Interval (days):** Defines how often a bump test should be performed.
- Low Alarm (ppm) / (%LEL) / (%O₂):** Defines the low alarm setpoint.
- High Alarm (ppm) / (%LEL) / (%O₂):** Defines the high alarm setpoint.
- TWA Alarm (ppm):** Defines the time-weighted average (TWA) alarm setpoint. H₂S and CO sensors only.
- STEL Alarm (ppm):** Defines the short-term exposure limit (STEL) alarm setpoint. H₂S and CO sensors only.
- STEL Interval (minutes):** Defines the short-term exposure limit (5-15 minutes). H₂S and CO sensors only.
- Auto-Zero Startup:** When enabled, the detector automatically zeros the H₂S, CO, and LEL sensors during the startup self-test.

LEL By Volume CH4: When enabled, the LEL reading is displayed as %vol., assuming a methane environment.
O₂ Auto-Calibration on Startup: When enabled, the O₂ sensor is automatically calibrated during startup.

2. **User Options**

- Confidence Beep:** When enabled, the detector beeps once every second to verify the battery has sufficient power to detect hazardous gas and emit an alarm. Detector is shipped with Confidence Beep disabled.
- Latching Alarms:** When enabled, the audible, visual, and vibrator alarms persist during a high or low alarm until the gas concentration is below the low alarm setpoint and has been acknowledged by pressing .
- Safe Mode:** When enabled, **SAFE** continuously displays on the LCD when all gas concentrations are normal or below the alarm setpoints.
- Stealth Mode:** When enabled, the audible alarm, LEDs and backlight are disabled. displays on the LCD.
- Low Alarm Acknowledge:** When enabled, the audible alarm can be disabled during a low alarm. The vibrator, LEDs, and LCD remain enabled. For H₂S, CO, and LEL sensors only.
- Datalog Interval (seconds):** Enter a value (1-120 seconds).
- Force Calibration When Overdue:** When enabled, the detector automatically enters calibration during startup for overdue sensors. If the sensors are not calibrated immediately, the detector will deactivate.

Cal Lock: When enabled, the sensors can only be calibrated using an IR device (IR Link with Fleet Manager II or the MicroDock II base station).

Force Bump When Overdue: When enabled, a bump test is required if the sensor has exceeded its bump test interval. If a successful bump test is not performed the detector will deactivate.

IntelliFlash: When enabled, the green LED flashes to provide continuous visual confirmation that the detector is operating correctly.

IntelliFlash automatically deactivates during a low battery alarm, a self-test fail, a calibration fail, a bump test fail, or during an alarm event. To define how often IntelliFlash occurs (1-60 seconds), refer to Confidence Beep and IntelliFlash Interval. Default setting is 1 second. Detector is shipped with IntelliFlash enabled.

Confidence Beep and IntelliFlash Interval: Enter a value (1-60 seconds) to define how often IntelliFlash occurs and the detector beeps. IntelliFlash and/or Confidence Beep must be enabled in order to define Confidence Beep and IntelliFlash Interval.

Language: Select the language to display on the LCD: **English**, **Français** (French), **Deutsch** (German), **Español** (Spanish), or **Português** (Portuguese).

Charging the Rechargeable Battery

⚠ Warning

Only the manufacturer can replace the rechargeable battery. Failure to adhere to this caution can lead to fire and/or explosion.

Charge only in a safe area that is free of hazardous gas and within temperatures of 32°F to 113°F (0°C to 45°C).

The charging adapter is specific to your region. Use of the charging adapter outside your region will damage the charger and the detector.

Do not calibrate during or immediately after charging.

1. Deactivate the detector. Insert the charging adapter plug into an AC outlet.

XT, XL and X3 Safety Information - Read First

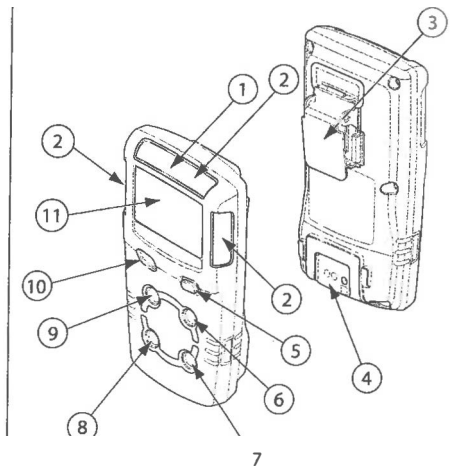
Use the detector only as specified in this manual and the reference guide, otherwise the protection provided by the detector may be impaired. Read the following cautions before using the detector.

⚠ Cautions

- **Warning:** Substitution of components may impair Intrinsic Safety.
- **Caution:** For safety reasons, this equipment must be operated and serviced by qualified personnel only. Read and understand the user manual completely before operating or servicing.
- Charge the detector before first time use. BW recommends the detector be charged after every workday.
- Before using the detector, refer to **Sensor Poisons and Contaminants**.
- Calibrate the detector before first-time use and then on a regular schedule, depending on use and sensor exposure to poisons and contaminants. BW recommends calibrating at least once every 180 days (6 months).
- The combustible sensor is factory calibrated to 50% LEL methane. If monitoring a different combustible gas in the %LEL range, calibrate the sensor using the appropriate gas.
- Only the combustible gas detection portion of this instrument has been assessed for performance by CSA International.
- Calibrate only in a safe area that is free of hazardous gas and in an atmosphere of 20.9% oxygen.

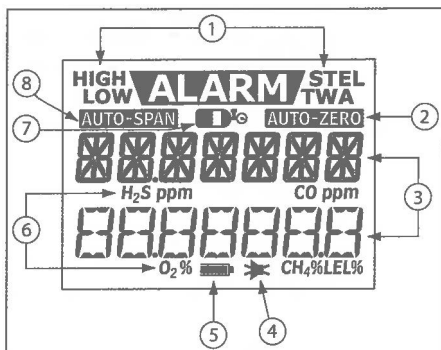
- It is recommended that the combustible sensor be checked with a known concentration of calibration gas after any exposure to contaminants/poisons such as, sulfur compounds, silicon vapors, halogenated compounds, etc.
- BW recommends to bump test the sensors before each day's use to confirm their ability to respond to gas by exposing the detector to a gas concentration that exceeds the alarm setpoints. Manually verify that the audible and visual alarms are activated. Calibrate if the readings are not within the specified limits.
- **Caution:** High off-scale readings may indicate an explosive concentration.
- Any rapid up scaling reading followed by a declining or erratic reading may indicate a gas concentration beyond the upper scale limit, which can be hazardous.
- Extended exposure of the GasAlertMicroClip to certain concentrations of combustible gases and air may stress a detector element that can seriously affect its performance. If an alarm occurs due to a high concentration of combustible gases, calibrate the detector. If necessary, replace the sensor.
- Protect the combustible sensor from exposure to lead compounds, silicones, and chlorinated hydrocarbons.
- Sensor exposure to certain organic vapors (such as leaded gasoline and halogenated hydrocarbons) may temporarily inhibit sensor performance. After exposure, a bump test or calibration is recommended.
- For use only in potentially explosive atmospheres where oxygen concentrations do not exceed 20.9% (v/v).
- Products may contain materials that are regulated for transportation under domestic and international dangerous goods regulations. Return product in compliance with appropriate dangerous goods regulations. Contact freight carrier for further instructions.

Parts of the GasAlertMicroClip



Item	Description
1	IntelliFlash
2	Visual alarm indicators (LEDs)
3	Alligator clip
4	Charging connector / IR interface
5	Pushbutton
6	Carbon monoxide (CO) sensor
7	Hydrogen sulfide (H ₂ S) sensor
8	Oxygen (O ₂) sensor
9	Combustible (LEL) sensor
10	Audible alarm
11	Liquid crystal display (LCD)

Display Elements



Item	Description
1	Alarm condition
2	Automatically zero sensor
3	Numeric value
4	Stealth mode
5	Battery life indicator
6	Gas identifier bars
7	Gas cylinder
8	Automatically span sensor

Pushbutton

- To activate the detector, press ○.
- To deactivate the detector, press and hold ○ until the OFF countdown is complete and the LCD deactivates.
- To view the TWA, STEL, and MAX (maximum) readings, press ○ twice. To clear the TWA, STEL, and MAX readings, press ○ when the LCD displays **RESET**.
- To initiate calibration, deactivate the detector. Press and hold ○ while the detector performs the OFF countdown. Continue holding ○ while the LCD briefly deactivates and then begins the CAL countdown. Release ○ when the CAL countdown is complete.
- To activate the backlight while in normal operation, press ○.
- To acknowledge latched alarms, press ○.
- To acknowledge a low alarm and disable the audible alarm, press ○ (if the Low Alarm Acknowledge option is enabled).