

**blacklinesafety**

G6

Technical User Manual

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## WARNINGS

- ▲ **WARNING:** To ensure your device can detect gas, make sure your G6 is uncovered.
- ▲ **WARNING:** Only perform bump tests in a known clean environment. G6 does not monitor for environmental gas during a bump test.
- ▲ **WARNING:** Only perform calibrations in a known clean environment. G6 does not monitor for environmental gas during calibration.
- ▲ **WARNING:** Only zero G6's gas sensors in a known clean environment.
- ▲ **WARNING:** G6 does not monitor for environmental gas during the firmware update installation process. Updates should only take place while your device is in a safe, gas-free environment.

# 1 G6 OVERVIEW

G6 is a portable single-gas detector manufactured by Blackline Safety, providing up to one year of maintenance-free operation. G6 continuously monitors gas concentrations in the ambient environment and activates low and high urgency notifications when concentrations exceed setpoints, allowing operators to respond quickly and safely to changes in their environment.

G6 comes with the following built-in capabilities:

- Single gas detection for CO, H<sub>2</sub>S, O<sub>2</sub>, or SO<sub>2</sub>
- Direct cellular connectivity to Blackline Live
- Location services to locate people and devices quickly during incidents and synchronization
- Precise short term exposure limit (STEL) monitoring
- Precise time weighted average (TWA) monitoring
- Purpose-built single-source reporting to record compliance, gas exposure, and usage

## 1.1 SUPPORTED GASES

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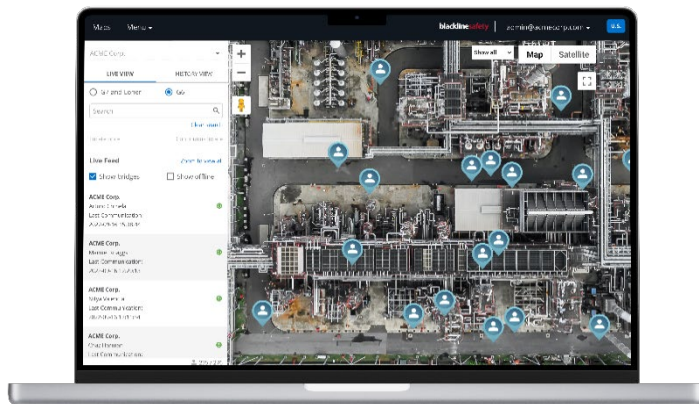
G6 supports detection of the following gases:

- Carbon monoxide (CO)
- Hydrogen Sulfide (H<sub>2</sub>S)
- Oxygen (O<sub>2</sub>)
- Sulfur dioxide (SO<sub>2</sub>)

For more information on G6 gas detection sensor capabilities, see section 13.1.

## 1.2 BLACKLINE SAFETY SERVICES

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### 1.2.1 BLACKLINE SAFETY MONITORING

G6 does not currently support Blackline Safety Monitoring services. Gas events are monitored via on-device notifications and configured in Blackline Live. If configured, gas event notifications are sent via SMS and email at the time of the event.

### 1.2.2 BLACKLINE LIVE

Blackline Live monitors your G6 devices, lets you access reports, and, depending on your plan, business analytics insights.

Blackline Live also helps you create and customize configuration profiles that determine how a device, or a group of devices, operates in the field.

G6 connects and synchronizes with Blackline Live during regular communication intervals throughout the day. Communication intervals vary from 6 hours to 5 minutes, depending on your configuration and service plan.

For more information, please see [Blackline Live](#).

### 1.2.3 BLACKLINE ANALYTICS

If enabled by your service plan, Blackline Analytics helps you review data collected from your device fleet to make decisions, follow up with your team, and ensure everything is running smoothly. Blackline Analytics provides a variety of pre-defined reports and filters to explore your data.

For more information, please see [Blackline Analytics](#).

### 1.3 COMMUNICATION INTERVALS

G6 automatically connects and synchronizes with Blackline Live during regular communication intervals and while secured in G6 Dock. The frequency of the communication intervals depends on your service plan. G6 also connects with Blackline Live when a low gas notification or high urgency notification is activated.

**NOTE:** You can identify your service plan by the network level and battery level icons on the information banner on the Home screen. For more information, see section 1.7.

Service Plan	Normal Operation	During a Low Gas Event	During a High Urgency Event
Protect	6 hours	Immediately	Immediately
Protect Plus	5 min	Immediately	Immediately

**NOTE:** More frequent connections to Blackline Live can impact G6’s battery life. For more information, see section 1.7.

If G6 cannot connect and synchronize with Blackline Live, event data is stored on the device and communicated to the Blackline Safety Cloud during the next scheduled synchronization.

**IMPORTANT:** If you want to retrieve data directly from your device, Blackline Safety recommends powering off the device when it is safe to do so. Contact [Technical Support](#) for assistance.

### 1.4 WHAT’S IN THE BAG

G6 comes with:

- G6 personal safety monitoring device
- Metal alligator clip
- Pre-installed single-gas sensor
- *G6 Getting Started Guide*
- *G6 certification card*



## 1.5 HARDWARE DETAILS



Figure 1-1: G6 Front



Figure 1-2: G6 Back

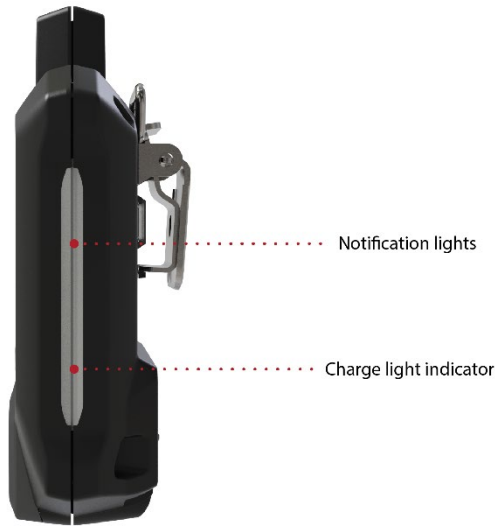


Figure 1-3: G6 Side



Figure 1-4: G6 Top



Figure 1-5: G6 Bottom

## 1.6 OPTIONAL ACCESSORIES

Optional accessories available for G6 include:

- G6 Dock (G6-DOCK-NA)
- G6 charge clip and USB charge cable (ACC-G6-CLPCAB)
- G6 calibration cap and tubing (ACC-G6-CALTUB)
- G6 5-Unit Charger (ACC-G6-CHG-05-XX)
- G6 25-Unit Charger (ACC-G6-CHG-25-XX)



## 1.7 BATTERY

G6 is equipped with a rechargeable battery.

Depending on your service plan, G6's battery level may display on the information banner.

**NOTE:** The battery level icon does not display on devices using the Protect service plan. A battery status icon displays when the device is charging, has a low battery, or is experiencing a temperature change.



The following activity impacts G6 battery life:

- Frequency of synchronization with Blackline Live
- Cellular connectivity
- GPS synchronization
- Quantity and duration of:
  - Manual bump tests and calibrations (not in G6 Dock)
  - Low and high urgency notifications
  - Manual synchronizations with Blackline Live
- Length of time to resolve notifications/Home screen banners. For more information, see section 2.4.2

Blackline Safety recommends charging the battery on a regular schedule. For information on purchasing G6 charging accessories, contact [Technical Support](#).

## 2 OPERATION

G6's LCD display and push button menu system let you easily interact with its various functions.

**NOTE:** This manual describes all available options. Your screen may be different, depending on your device's configuration.

## 2.1 G6 PUSH BUTTONS

---



### Center button

Press and hold for 3 seconds to power on G6.

Press to enter the Global Navigation menu and to confirm navigation banner selections.

### Navigation buttons

Press to navigate the current screen and confirm navigation banner selections.

## 2.2 POWERING ON G6

---

Powering on G6 initiates the device start-up sequence. The start-up sequence depends on the device's configuration and occurs any time the device is powered on.

**NOTE:** Blackline Safety recommends powering on G6 in a known clean environment.

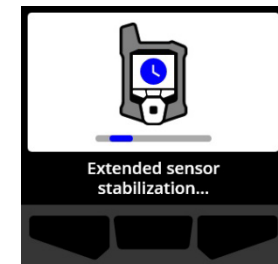
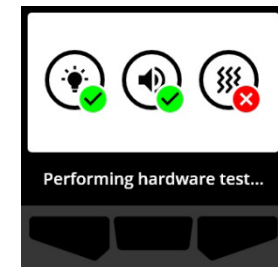
To power on G6:

1. Press and hold the center button until the Blackline Safety logo displays.

G6 connects to Blackline Live and initializes your device, performing a hardware self test of lights, sound, and vibration indicators.

**NOTE:** The G6 update complete screen only displays during the power-on sequence if your device has been restarted due to a firmware installation. See section 11.

**NOTE:** Ensure you allow adequate time for the device to complete the required updates. Initialization may take up to 30 minutes if an O<sub>2</sub> device requires an extended amount of time to stabilize its sensor.

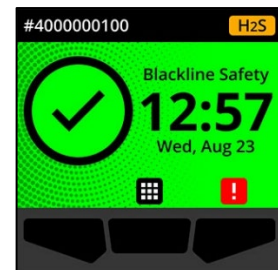


If G6 requires additional time to establish a network connection, the device enters an extended initialization sequence.

2. If G6 is configured to zero on startup, your device indicates if the operation was successful. If the zero was unsuccessful, use the Compliance menu to manually zero your device. For more information, see section 6.4.
3. When configuration is complete, the device's pre-configured organization name and Device ID information displays. The Assigned user ID may be displayed, if configured in Blackline Live.

When the Home screen opens, the detector is operational.

For more information on the Home screen, see section 2.4.1.




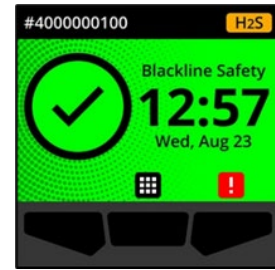
## 2.3 POWERING OFF G6


Although G6 is meant for continuous use, you can manually shut down G6 using the Global Navigation menu for troubleshooting or shipping.

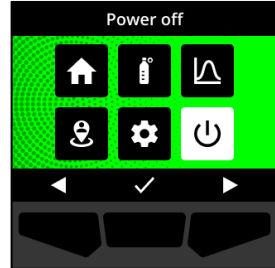
**NOTE:** If G6 powers off due to low battery, you can re-charge the device. For more information on purchasing charging accessories, contact [Technical Support](#). For more information on G6 low battery notifications, see section 1.7.


To power off your device:

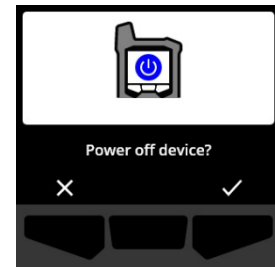
1. From the Home screen, press the center button to select . The Global Navigation menu opens.



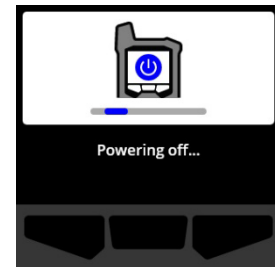
2. Using the navigation buttons, scroll through the Global Navigation menu, then select **Power off** by pressing the center button ().



3. To power off your device, select  by pressing the right button.



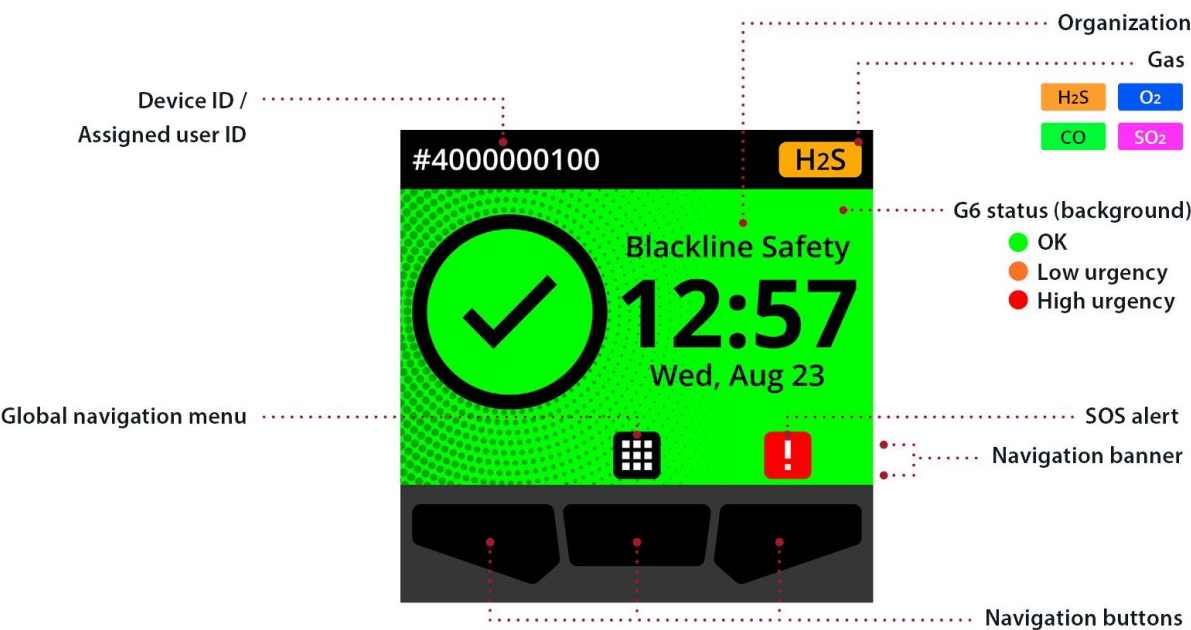
**NOTE:** To cancel the shutdown, select  by pressing the left button.



## 2.4 G6 LCD DISPLAY

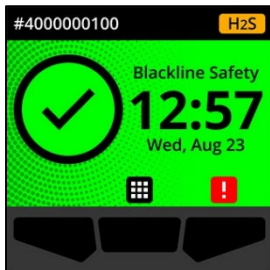
### 2.4.1 HOME SCREEN

The Home screen conveys the current device (event) status, and information about the type of event (if present) through screen status and banner messages.





G6 has three Home screen statuses:



## OK status

G6 has no active notifications that require your attention.



## Low urgency status

G6 has active low urgency or operational notifications that require your attention. Monitor the message banner for more information.

For more information on G6 low urgency and operational notifications, see sections 3 and 4.



## High urgency status

G6 has active high urgency notifications that require your immediate attention/interaction. Monitor the message banner for more information.

For more information on G6 high urgency notifications, see section 5.

**IMPORTANT:** If G6 has more than one notification simultaneously active, the Home screen status displays the status of the highest urgency event until the event is resolved. If your organization has the Protect Plus service plan, the Home screen cycles through each active event banner every 2 seconds.

## 2.4.2 BANNER

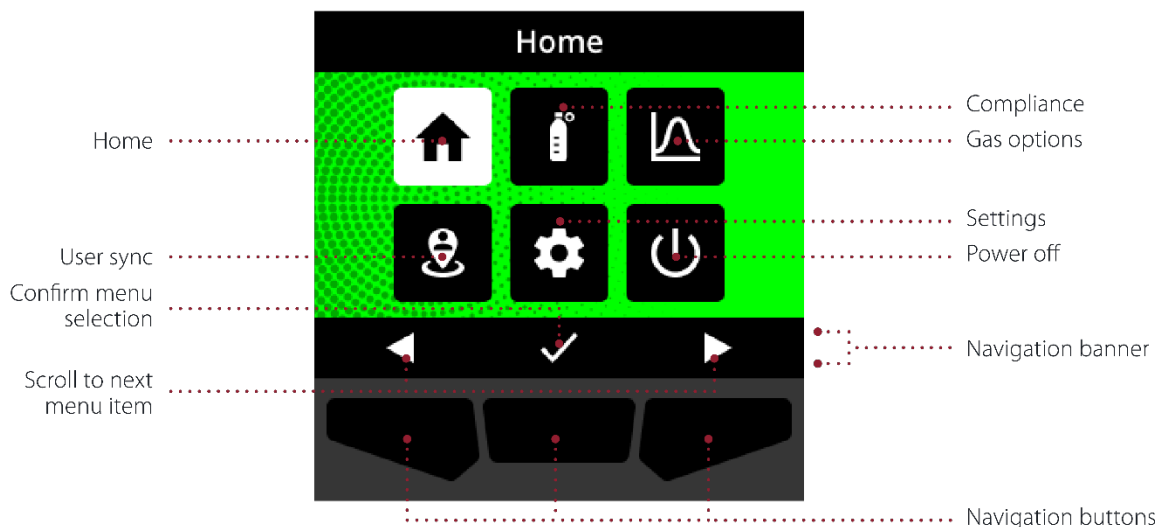
The banner at the top of the Home screen provides more information about low urgency and high urgency notifications, battery life, and connectivity.

If you mute a low urgency or high urgency notification, G6's Home screen and banner will continue to reflect the status until the event is resolved, which can impact G6's battery. For more information, see section 1.7.

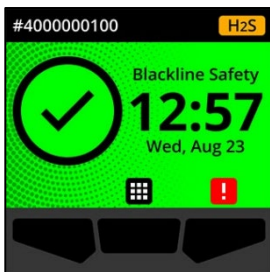
## 2.4.3 GLOBAL NAVIGATION MENU


The Global Navigation menu provides access to your available G6 features.

**NOTE:** The available items in the Global Navigation menu depend on how G6 is configured in Blackline Live.

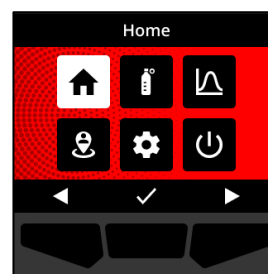
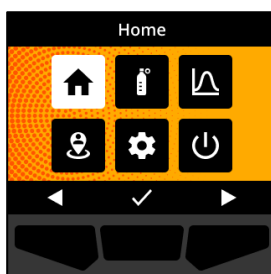
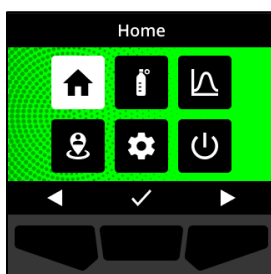


To launch the Global Navigation menu:



1. From the Home screen, press the center button to select . The Global Navigation menu opens.

The Global Navigation menu background reflects G6's current event status. The last menu item you navigated from is highlighted.



The available Global Navigation menu items are:



## Home

Select Home to return to the Home screen.



## Compliance

Select Compliance to access information and features related to G6 bump testing, calibration, and zeroing.

For more information, see section 6.

---

### Gas options

Select Gas options to view information about logged gas readings. Use the Gas options feature to reset a device's gas reading values. View and manage information related to the following gas readings:

**Peak gas** — Peak gas is not a live reading; it is the highest registered gas reading a device has experienced through one or more gas events in a 24-hour period. The reading and the time and date when it occurred, are displayed.

**Short Term Exposure Limit (STEL)** — STEL is the acceptable exposure limit to a toxic or an irritant substance over a short interval of time, usually 15 minutes. STEL is the rolling average of a live gas reading over the duration of the time interval. The time interval can be configured in Blackline Live.

**Time weighted average (TWA)** —TWA is the average allowable amount of gas exposure over an interval of time. The time interval can be configured in Blackline Live.

For more information, see section 6.

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### User sync

Select User sync to manually sync G6 to Blackline Live immediately.

---



### Settings

Select Settings to access device information and overwrite configuration profile defaults.

---



### Power off

Select Power off to power off G6.

---

## To navigate the Global Navigation menu:

1. Use the G6 push buttons to navigate and confirm selections on the G6 display.

For more information, see section 2.1.

---

## 2.5 WEARING G6

G6 monitors you best when clipped to your belt or chest pocket. G6 is equipped with a spring-loaded metal alligator clip that temporarily secures the device in place.

To attach and fasten G6 in place using the metal alligator clip:

1. At the back of the device, open the metal alligator clip.
2. Place the clip over the top of the fabric edge or belt.
3. Snap the clip closed, testing the attachment to ensure the clip is secure.

▲ **WARNING:** To ensure your device can detect gas, make sure the G6 is uncovered.

## 2.6 USING G6 IN EXTREME WEATHER

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G6 is rated to operate in weather conditions as low as -20°C (-4°F) and as high as 55°C (131°F). G6 functions in temperatures colder than -20°C (-4°F) for short periods of time, but Blackline Safety does not recommend letting the device's internal temperature drop below -20°C (-4°F).

For more details, see [Operating Devices in Extreme Weather](#) on the Blackline Support site.

## 3 OPERATIONAL NOTIFICATIONS

Operational notifications communicate events that are triggered by routine and expected device operations. Operational notifications provide you with information or prompt you to take action.

An operational notification includes yellow flashing lights, sound, vibration (if enabled), and an on-screen message specific to the event.

**NOTE:** Operational notification lights, sound, and vibration automatically mute if unacknowledged after two minutes.

Operational notifications are local to your device. Event data related to operational notifications is uploaded to Blackline Live during the scheduled communication interval for your device.



### 3.1 ACKNOWLEDGING OPERATIONAL NOTIFICATIONS

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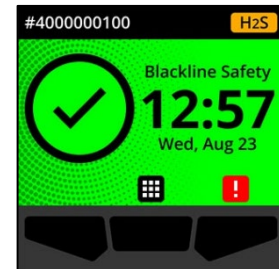
Operational notifications are activated when G6 requires your attention. Operational notifications continue until you acknowledge them, or they time out after two minutes.

**NOTE:** To allow you to read and understand notifications, and to avoid accidentally muting the notification, you cannot acknowledge the notification for 2-seconds after it is initially activated.

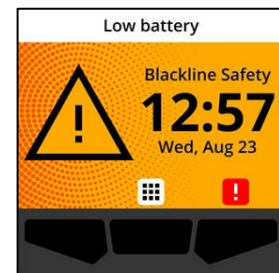
To acknowledge and mute an operational notification:

1. Select  by pressing the center button.

If G6 is within compliance (e.g., a bump test or calibration is due, but not overdue) and free of any gas-related abnormalities, low-battery warnings, or device errors, G6's Home screen displays an OK status (green).



If G6 is not in compliance (e.g., a bump test or calibration is overdue), or if gas-related abnormalities, low-battery warnings, or device errors are active, G6's Home screen displays the notification status.



2. To ensure G6 continues to operate correctly, take the action indicated by the device to address the notification.

## 3.2 OPERATIONAL NOTIFICATION TYPES

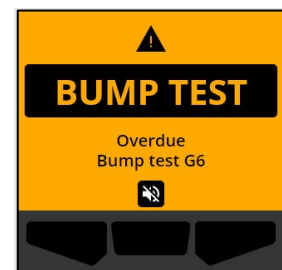
Operational notifications are:

- Bump test overdue (optional)
- Calibration overdue (optional)
- Low battery

### Bump test overdue (optional)

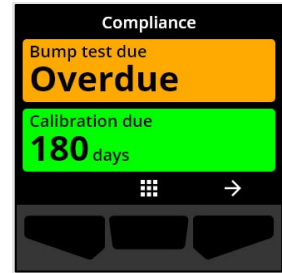
The Bump test overdue notification is activated when G6 is overdue for a bump test.

The bump test overdue notification is optional, and the notification interval can be configured in Blackline Live.



When you acknowledge the notification, G6's Home screen and banner reflect the bump test overdue status until the event is resolved.

Following the bump test overdue notification, the Compliance screen indicates that a bump test is overdue (orange). The screen also displays a Bump test due date of **Overdue**.



For more information on manually bump testing your device, see section 6.2.

### Calibration overdue (optional)

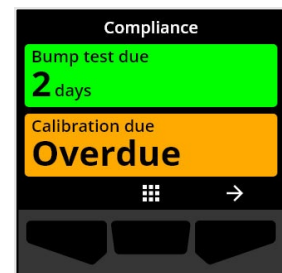
The calibration overdue notification is activated when G6 is overdue for calibration.

The calibration overdue notification is optional, and the notification interval can be configured in Blackline Live.



When you acknowledge the notification, G6's Home screen and banner reflect the calibration overdue status until the event is resolved.

Following the calibration overdue notification, the Compliance screen displays a calibration is overdue (orange) message. The screen also displays a Calibration due date of **Overdue**.

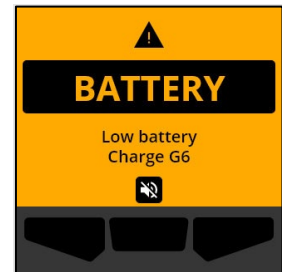


For more information on manually calibrating your device, see section 6.3.

## Low battery

The low battery notification is activated when G6 detects that it is operating below the configured low battery threshold.

The low battery notification interval can be configured in Blackline Live.

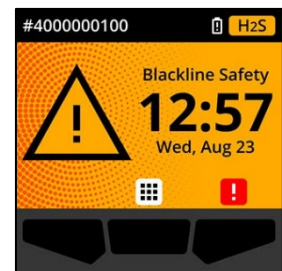


When you acknowledge the notification, G6's Home screen and banner reflect the low battery status until the event is resolved.



**NOTE:** G6 cannot charge at temperatures below 0°C (32°F) or above 45°C (113°F).

For information on charging G6 outside of this temperature range, contact [Technical Support](#).



## 4 LOW URGENCY NOTIFICATIONS

Low urgency notifications communicate events that require your attention. A low urgency notification includes yellow flashing lights, sound, vibration (if enabled), and an on-screen message specific to the event.

**NOTE:** Non-gas related low urgency notification lights, sound, and vibration automatically mute after two minutes. Gas related low urgency notifications continue until they are acknowledged or resolved.



Most low urgency notifications are local to your device. Event data related to low urgency notifications is uploaded to Blackline Live during the scheduled communication interval for your device.

**NOTE:** During low gas notifications, G6 connects to and communicates device location with Blackline Live.

## 4.1 ACKNOWLEDGING LOW URGENCY NOTIFICATIONS

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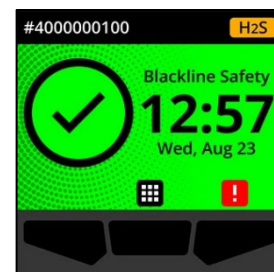
Low urgency notifications are activated when G6 requires your attention.

**NOTE:** To give time for you to read and understand the low urgency notification, and to avoid accidentally muting the notification, you cannot acknowledge the notification for 2 seconds after it is initially activated.

To acknowledge and mute a low urgency notification:

1. Select  by pressing the center button.

If G6 is within compliance (e.g., a bump test or calibration is due, but not overdue) and free of any gas related abnormalities, low battery warnings, or device errors, G6's Home screen displays an OK status (green).



If G6 is not in compliance (e.g., a bump test or calibration is overdue), or if gas related abnormalities, low battery warnings, or device errors are active, G6's Home screen displays the notification status.



2. To ensure G6 continues to operate correctly, take the action indicated by the device to address the notification.

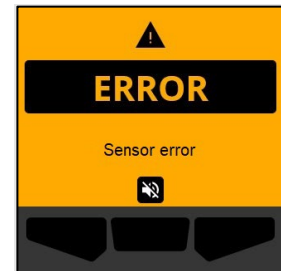
## 4.2 LOW URGENCY NOTIFICATION TYPES

Low urgency notifications are:

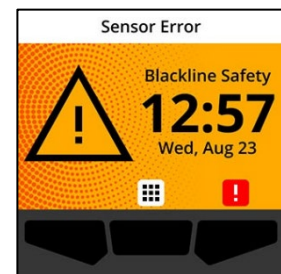
- Device error
- Low gas
- Sensor under limit (UL)

### Device error

The device error notification is activated when G6 detects a component (sensor, hardware, firmware, communication, UI) that is not operating correctly.



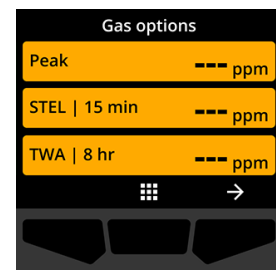
When you acknowledge the notification, G6's Home screen and banner reflect the error status.



**IMPORTANT:** If G6 has a device error that directly affects its ability to display data, the screen impacted turns orange and displays three dashes (---) as the reading.

In the example shown on the right, the device is displaying a sensor reading failure where there is no historical/logged peak value, future values cannot be logged, and STEL cannot be calculated.

For assistance troubleshooting device errors, contact your distributor or Blackline Safety [Technical Support](#).



## Low gas

The low gas notification is activated when G6 detects a low gas event. If Live gas display is enabled, the live gas value is also displayed.

When the notification is activated, G6 immediately connects to Blackline Live and if configured, sends an email or SMS message to the notification profile identified contacts in Blackline Live.

When you acknowledge the notification, G6's Home screen and banner reflect the low gas status until the low gas event is resolved.

**NOTE:** The device's yellow light pattern persists after you acknowledge/mute the low gas notification. If the muted low gas event conditions persist past 120 seconds, the low gas notification is reactivated with lights, sounds, and vibration.

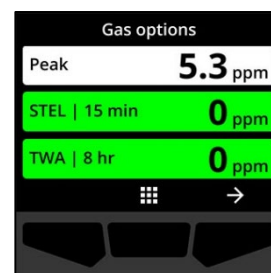
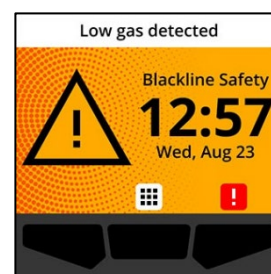
Following the low gas notification, the logged peak gas value of the low gas event displays on the Gas options screen.

The screen shows the peak value recorded and the time it occurred until a new peak is reached, the peak value is manually reset, or the peak value automatically resets.

For more information on viewing and resetting gas readings, see section 6.1.

## Sensor under limit (UL)

The sensor under limit (UL) notification is activated when G6 detects a UL gas event.



When you acknowledge the notification, G6's Home screen, banner, and yellow light pattern reflect the UL status.

If the muted UL event conditions persist past 120 seconds, the low gas notification reactivates.

**IMPORTANT:** Following a UL notification, no peak is logged as the UL event type is closely related to a device or sensor error.

To resolve the UL event, Blackline Safety recommends that you calibrate G6. For more information, see section 6.3.



## 5 HIGH URGENCY NOTIFICATIONS

High urgency notifications communicate events that require your immediate attention and action. A G6 high urgency notification includes red flashing lights, sound, vibration, and an on-screen message specific to the event.

For high urgency notifications, G6 immediately connects to Blackline Live and if configured, sends an email or SMS message to the notification profile identified contacts in Blackline Live.

If connectivity is unavailable, event data is stored and uploaded to Blackline Live during the next scheduled synchronization for your device.


**NOTE:** Email and SMS message notifications are configured in Blackline Live. For more information, contact your Blackline Live administrator.



### 5.1 ACKNOWLEDGING A HIGH URGENCY NOTIFICATION

---

When you receive a high urgency notification:

1. Immediately evacuate the area and follow your emergency safety protocol.
2. Once you are in a safe location, read the information on G6's screen.
3. Acknowledge and mute  the notification by pressing the center button. This does not cancel your device's connection to Blackline Live.

**NOTE:** To allow you to read and understand high urgency notifications, there is a 2-second delay on your ability to acknowledge full screen notifications.

### 5.2 HIGH URGENCY NOTIFICATION TYPES

---

High urgency notifications include:

- High gas
- Sensor over limit (OL)
- Short term exposure limit (STEL)
- Time weighted average (TWA)
- SOS alert

High gas

The high gas notification is activated when G6 detects gas levels above the high gas concentration threshold configured in Blackline Live. If Live gas display is enabled, the live gas value also displays.

**NOTE:** A G6 with an O<sub>2</sub> sensor triggers high gas notifications in both oxygen-deficient and oxygen-enriched environments.



When you acknowledge the high urgency notification, G6’s Home screen and banner reflect the high gas status until the gas conditions dissipate and the high gas event is resolved.

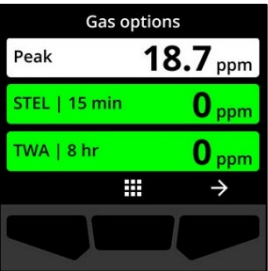


The device’s red-light pattern persists after you acknowledge/mute the notification. If muted high gas event conditions persist past 60 seconds, the high gas notification reactivates with lights, sound, and vibration.

Following the high gas notification, the logged peak value of the high gas event displays on the Gas options screen.

The screen shows the peak value recorded until a new peak is reached, the peak value is manually reset, or the peak value automatically resets.

For more information on viewing and manually resetting gas readings, see section 6.1.



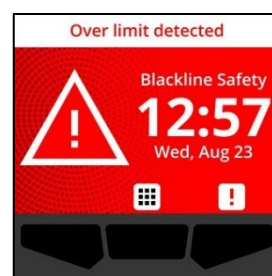
## Sensor over limit (OL)

The sensor over limit (OL) notification is activated when your G6 detects that the gas reading has exceeded the range of its sensor.



When you acknowledge the high urgency notification, G6's Home screen and banner reflect the OL status until the OL event is resolved.

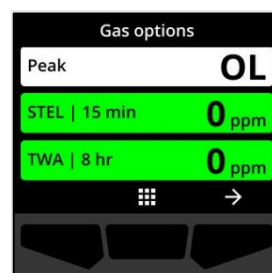
The device's red-light pattern persists after you acknowledge/mute the notification. If muted OL event conditions persist past 60 seconds, the OL notification reactivates with lights, sound, and vibration.



Following the OL gas notification, the logged peak value of the OL gas event displays on the Gas options screen.

The screen shows the peak value recorded until a new peak is reached, the peak value is manually reset, or the peak value automatically resets.

For more information on viewing and resetting gas readings, see section 6.1.



## Short term exposure limit (STEL)

The sensor short term exposure limit (STEL) notification is activated when G6 detects the STEL threshold configured in Blackline Live is reached.

If a STEL notification is activated, immediately evacuate the area and follow your emergency safety protocol. Once you are in a safe location, read the information on G6's screen.



When you acknowledge the high urgency notification, G6's Home screen and banner reflect the STEL status until the gas conditions dissipate and the STEL event is resolved.

The device's red-light pattern persists after you acknowledge/mute the notification. If muted event conditions persist past 60 seconds, the STEL notification reactivates with lights, sound, and vibration.

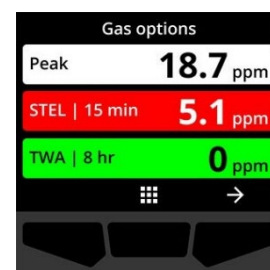
Following the STEL gas notification, the notification remains active until the STEL value drops below the configured time and concentration setpoints, or the STEL value is manually reset.



**NOTE:** You can reset the STEL while your device is experiencing a high urgency STEL notification to clear the STEL notification. If gas is still present, the corresponding high or low gas notification remains active.

**IMPORTANT:** STEL does not accumulate while G6 is docked or during compliance operations.

For more information on viewing and resetting gas readings, see section 6.1.





## Time weighted average (TWA)

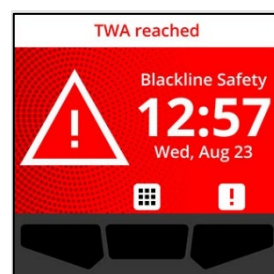
The time weighted average (TWA) notification is activated when G6 detects that the average allowable amount of gas exposure during a configurable interval (default: 8 hours) is exceeded.

If a TWA notification is activated, immediately evacuate the area and follow your emergency safety protocol. Once you are in a safe location, read the information on G6's screen.



When you acknowledge the notification, your device's banner and lights reflect the TWA status until the gas conditions dissipate and the TWA event is resolved.

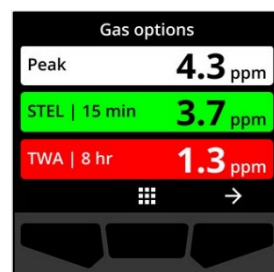
The device's red-light pattern persists after you acknowledge/mute the notification. If muted event conditions persist past 60 seconds, the TWA notification reactivates with lights, sound, and vibration.



Following the TWA notification, the device shows the accumulation reading recorded until a until the TWA value drops below the configured time and concentration setpoints, or the TWA value is manually reset.

**IMPORTANT:** TWA does not accumulate while G6 is docked or during compliance operations.

For more information on viewing and resetting gas readings, refer to see section 6.1.



## SOS alert

If you require immediate assistance, you can manually initiate an SOS alert. From the Home screen, press and hold the right button for the 3 second SOS countdown sequence.

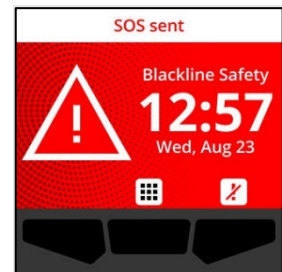


Once the countdown sequence is completed, the device manually sends an SOS to the emergency contact (s) configured in your company's Blackline Live response protocol and requests immediate help to your location.

The device's red-light pattern persists after you acknowledge/mute the notification. If muted event conditions persist past 5 minutes, the SOS notification reactivates with lights, sound, and vibration.

When you acknowledge the notification, your device's banner and lights reflect the SOS status until you manually cancel the SOS event.

During an ongoing SOS notification, if the emergency condition has been resolved, you can press and hold the right button for 3 seconds to manually cancel the SOS alert. An SOS cancellation message is sent to Blackline Live.



## 6 GAS DETECTION

### 6.1 VIEWING AND RESETTING GAS READINGS

---

Use the Gas options feature to view and reset the following gas readings for your device:

- Peak gas reading

**NOTE:** If unchanged for 24 hours, G6's peak gas readings automatically reset.



- Short term exposure limit (STEL) reading

**NOTE:** STEL is applicable to H<sub>2</sub>S, CO, or SO<sub>2</sub> devices only. STEL is not applicable to O<sub>2</sub> devices.

- Time weighted average (TWA) reading

**NOTE:** TWA is applicable to H<sub>2</sub>S, CO, or SO<sub>2</sub> devices only. TWA is not applicable to O<sub>2</sub> devices. If the TWA is unchanged for configured time interval (default: 8 hours), G6's TWA reading automatically resets.

To view and manually reset the peak gas reading:

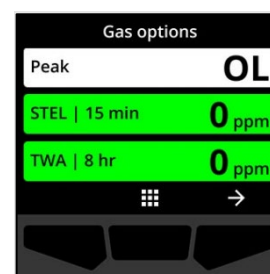
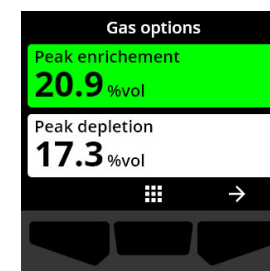
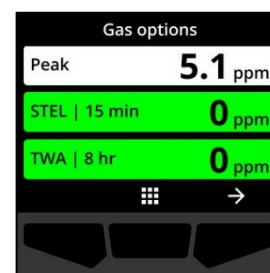
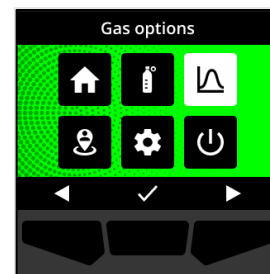
1. From the Home screen, select  by pressing the center button.
2. Using the navigation buttons, scroll through the Global Navigation menu, then select **Gas options** by pressing the center button ().

The Gas options screen opens, displaying the most recent peak reading, TWA reading, and STEL reading recorded by G6.

**NOTE:** For O<sub>2</sub> devices, the peak enrichment and peak depletion gas readings display.

**NOTE:** Gas readings above the sensor maximum result in an over limit (OL) reading.

3. To reset the peak reading, select  by pressing the right button.



4. Using the navigation buttons, scroll through the menu, then select **Reset peak** by pressing the center button (✓).

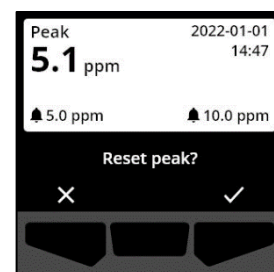
The Reset peak screen opens, displaying:

- Most recently logged peak reading
- Low/high urgency gas setpoints

5. For H<sub>2</sub>S, CO, or SO<sub>2</sub> devices: To reset the peak gas value to zero, select → by pressing the right button.

**NOTE:** To cancel the procedure and exit at any time, select ✕ by pressing the left button.

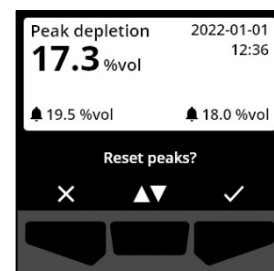
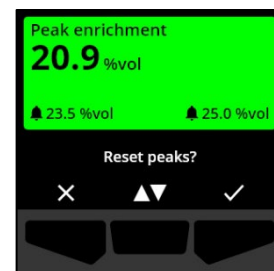
G6 resets the peak gas value.



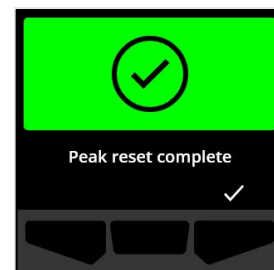
6. For O<sub>2</sub> devices: To reset the peak enrichment and depletion values to zero, select → by pressing the right button.

**NOTE:** Scroll between the peak enrichment and depletion readings by pressing the center button (▲▼).









G6 resets the peak enrichment and depletion values to zero.

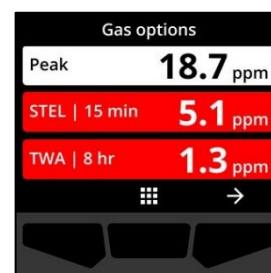
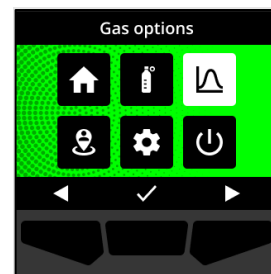


7. Once the value is successfully reset, select ✓ by pressing the right button to return to the Gas options screen.



To view and manually reset STEL and TWA:

1. From the Home screen, select  by pressing the center button.
2. Using the navigation buttons, scroll through the Global Navigation menu, then select **Gas options** by pressing the center button ().
3. To reset the STEL/TWA reading, select  by pressing the right button.
4. Using the navigation buttons, select **Reset STEL/TWA** by pressing the center button ().  
The STEL and TWA screen opens.
5. To reset the STEL and TWA, press the  button.  
Scroll between the peak enrichment and depletion readings by pressing the center button ().  
**NOTE:** To cancel the procedure and exit at any time, select  by pressing the left button.
6. Once the value is successfully reset, select  by pressing the right button to return to the Gas options screen.



## 6.2 BUMP TESTING G6

If configured for your device, bump testing verifies that your device's gas sensors and notification indicators (lights, sound, and vibration) are functioning correctly. During a bump test, you apply a known concentration and amount of gas to confirm the sensor triggers a notification due to the gas exposure.

Your bump test schedule should be informed by your company's safety policy and is configurable in Blackline Live.

G6 automatically communicates bump test data to Blackline Live at the device's next scheduled synchronization and reminds you when a bump test is overdue.



For more information on G6 bump testing notifications, see section 3.

To manually bump test G6, you need a calibration cap (ACC-G6-CAL) and tube (ACC-G6-T2). Alternatively, you can bump test using G6 Dock.


For more information on bump testing with G6 Dock, see the G6 Dock Technical User Manual on the [Blackline Support](#) site.

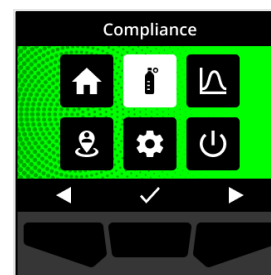
**▲ WARNING:** Only perform bump tests in a known clean environment. G6 does not monitor for environmental gas during a bump test.

To manually bump test G6 using a calibration cap and tube:

1. Attach the tubing to the calibration cap.
2. Ensure the other end of the tubing is attached to a fixed flow regulator on the gas tank.

**IMPORTANT:** Do not turn on the gas cylinder until G6 indicates you should do so.

3. From the Home screen, select  by pressing the center button.



- Using the navigation buttons, scroll through the Global Navigation menu, then select **Compliance** by pressing the center button (✓).

The Compliance screen opens, displaying when your device's next bump test and calibration are due.

- To access the available **Compliance** procedures, select →

The available Compliance procedures display.

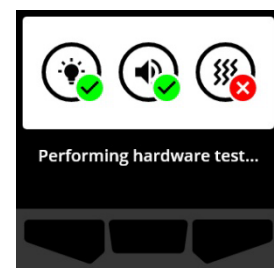
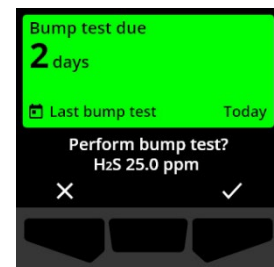
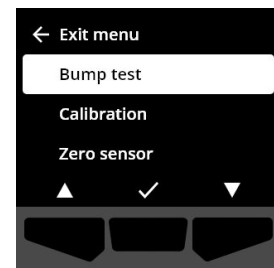
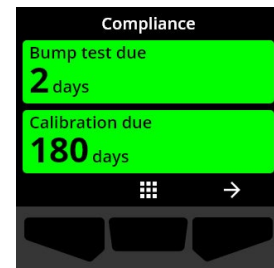
- Using the navigation buttons, scroll to and select **Bump test** by pressing the center button (✓).

The Bump test screen opens.

- To start the bump test, select ✓ by pressing the right button.


**NOTE:** To cancel the bump test and exit the workflow at any time, select ✕ by pressing the left button.

G6 performs a hardware self test of your device's lights, sound, and vibration.



8. Attach the calibration cap to G6, then turn on the gas.

Your device automatically detects the gas and starts the bump test.

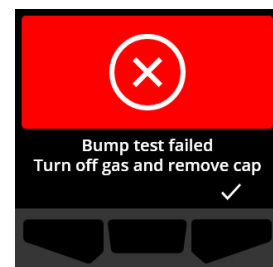
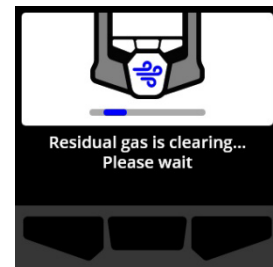
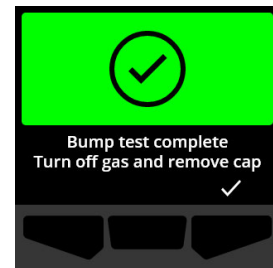
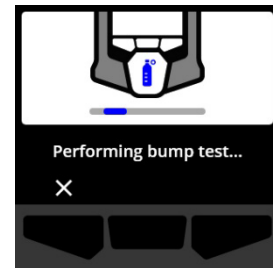
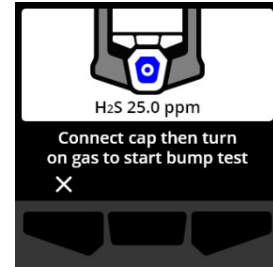
9. Once the bump test is successfully completed, turn off the gas, then disconnect the calibration cap from your G6.
10. Select  by pressing the right button.

G6 stays in the bump test maintenance state while any residual gas clears.

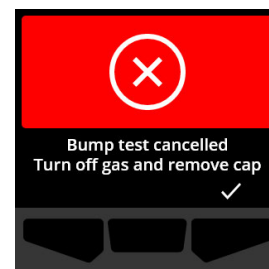
**IMPORTANT:** If you cancel the bump test or if the bump test fails, you must turn off the gas and allow any excess gas to clear prior to disconnecting your device.

If the bump test fails, the device updates to a bump test overdue status.

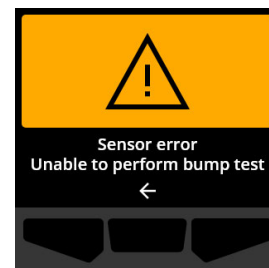
If the bump test is canceled, the device remains in the status it was prior to the canceled bump test.







**IMPORTANT:** If G6 is experiencing a sensor error, you cannot perform a bump test until the sensor error is resolved.



If a bump test fail message displays on your LCD screen, try the bump test again. If the error persists, please contact Blackline Safety [Technical Support](#).

## 6.3 CALIBRATING G6

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If configured for your device, you can manually calibrate your gas sensor by applying a known concentration of gas for a set amount of time.

This procedure ensures the gas sensor can accurately detect gas levels throughout its operating life. The calibration schedule should be based on your company's safety policy.

For more information on G6 calibration notifications, see section 3.

To manually calibrate G6, you need a calibration cap (ACC-G6-CAL) and tube (ACC-G6-T2). You can also calibrate using G6 Dock.





For more information on calibrating your device with G6 Dock, see the G6 Dock Technical User Manual on the [Blackline Support](#) site.

**▲ WARNING:** Only perform calibrations in a known clean environment. G6 does not monitor for environmental gas during calibration.

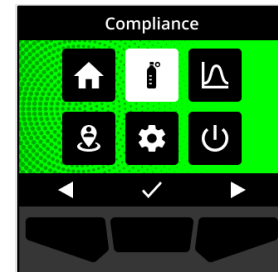
To manually calibrate G6 using a calibration cap and tube:

1. Attach the tubing to the calibration cap.
2. Ensure the other end of the tubing is attached to a fixed flow regulator on the gas tank.

**IMPORTANT:** Do not open the gas cylinder until G6 instructs you to.

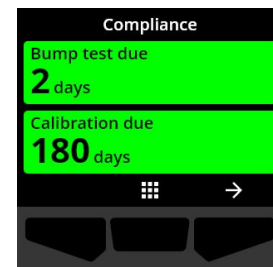
3. From the Home screen, select  by pressing the center button.
4. Using the navigation buttons, scroll through the Global Navigation menu, then select **Compliance** by pressing the center button ().


The Compliance screen opens, displaying when your device's next bump test and calibration are due.




5. To access the available Compliance procedures, select  by pressing the right button.

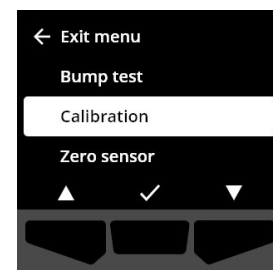
The available Compliance procedures display.




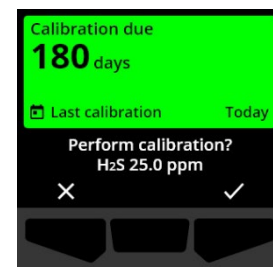
6. Using the navigation buttons, scroll through the procedure options, then select **Calibration** by pressing the center button ().

The Calibration screen opens.

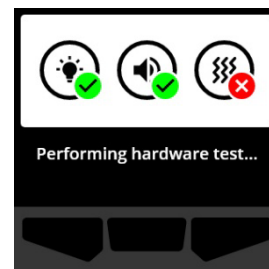
**NOTE:** To cancel the calibration and exit the workflow, at any time, select  by pressing the left button.



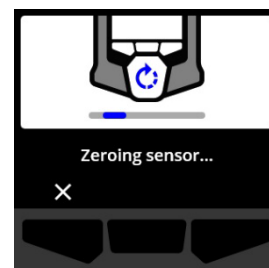
7. To start the calibration workflow, select  by pressing the right button.



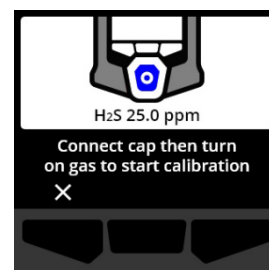
G6 performs a hardware self test of your device's lights, sound, and vibration.



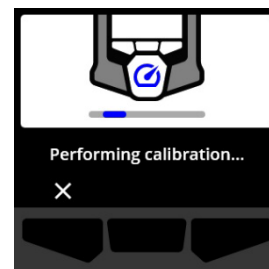
G6 zeros the sensor before calibration starts.




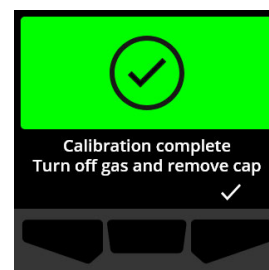
8. Attach the calibration cap to G6, then turn on the gas.



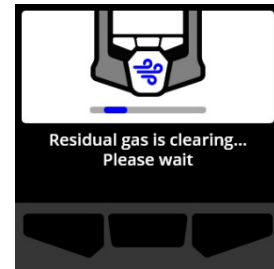
G6 automatically detects the gas and starts the calibration.



9. Once the calibration successfully completes, turn off the gas, then disconnect the cap from your G6.
10. Select  by pressing the right button.



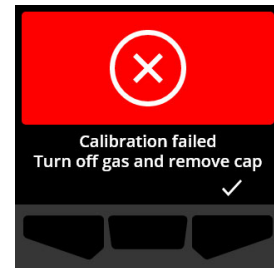
G6 stays in the calibration maintenance state while any residual gas clears.



**IMPORTANT:** If you cancel the calibration or if the calibration fails, you must turn off the gas and allow any excess gas to clear prior to disconnecting your device.

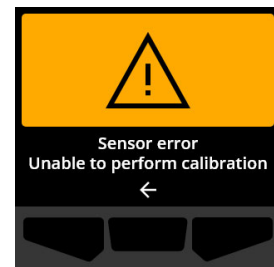
If the calibration fails, the device updates to a calibration overdue status.

If the calibration is canceled, the device remains in the status it was prior to the canceled calibration.



**IMPORTANT:** If G6 is experiencing a sensor error, you cannot perform a calibration until the sensor error is resolved.

Contact your organization's safety professional or Blackline Safety [Technical Support](#) for assistance troubleshooting your device.



## 6.4 ZEROING G6



If configured for your device, you can manually zero your sensors to reset the baseline if G6 is not reading zero and you know you are in an atmosphere with no gas.

**IMPORTANT:** If G6's baseline appears to have shifted, it is best to calibrate your sensor. If you cannot perform a calibration, zero your device.

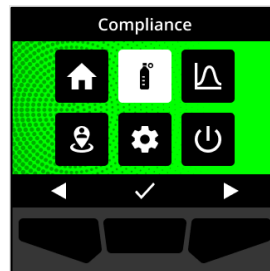
**NOTE:** The baseline reading for oxygen (O<sub>2</sub>) is 20.9 %vol.


▲ **WARNING:** Only zero G6's gas sensor in a known clean environment.

To manually zero G6:

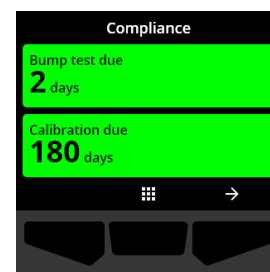
1. From the Home screen, select  by pressing the center button.
2. Using the navigation buttons, scroll through the Global Navigation menu, then select **Compliance** by pressing the center button ().


The Compliance screen opens, displaying when your device's next bump test and calibration are due.

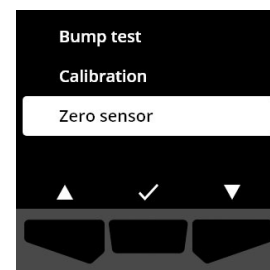



3. To access the available Compliance procedures, select  by pressing the right button.


The available Compliance procedures display.

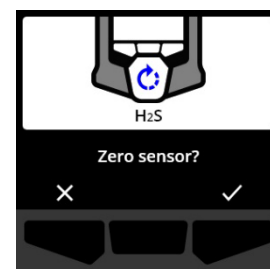


4. Using the navigation buttons, select **Zero sensor** by pressing the center button ().




5. To start the zero workflow, select  by pressing the right button.

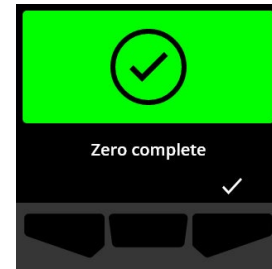
**NOTE:** To cancel and exit the workflow, select  by pressing the left button.



G6 zeros the sensor.

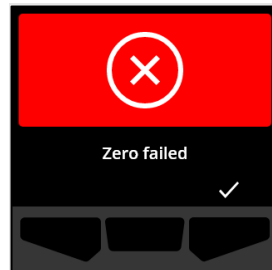



6. Once the zeroing successfully completes, select  by pressing the right button to return to the Compliance screen.



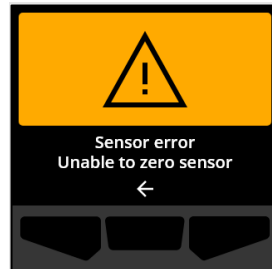
**IMPORTANT:** If the zero fails, acknowledge the event to exit the current workflow and retry the operation.

Contact your organization's safety professional or Blackline Safety [Technical Support](#) for assistance troubleshooting your device.



**NOTE:** If G6 is currently experiencing a sensor error alarm event, you cannot zero your device. Select  to exit the workflow.

Contact your organization's safety professional or Blackline Safety [Technical Support](#) for assistance troubleshooting your device.



## 7 FEATURES

### 7.1 FIND MY G6

---

Your Blackline Live administrator can use Find my G6 to locate missing devices. After the regularly scheduled synchronization with Blackline Live, devices with this feature toggled on communicate their locations to Blackline Live every 30 minutes for 2.5 hours.

For detailed information on Find my G6, refer to the Blackline Live Technical User Manual on the [Blackline Support](#) site.

## 8 SETTINGS

The G6 Settings menu helps you access device information and overwrite configuration profile defaults, such as language or time zone configuration.


### 8.1 LANGUAGES

---

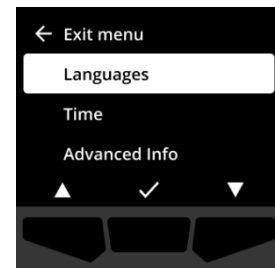
Use the Languages option to view and update your device's language settings. Available languages include:

- English
- Français
- Español
- Deutsch
- Italiano
- Nederlands
- Português



To view and update your device's language:

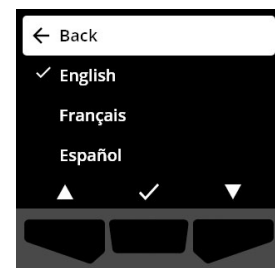
1. Using the navigation buttons, scroll through the Settings menu, then select **Languages** by pressing the center button (  ).

The Languages screen opens, displaying your device's available language settings.



**NOTE:** Your device's active language is flagged with a check mark.

2. Using the navigation buttons, scroll through the language options, then select a new primary language for your device by pressing the center button (  ).
3. To return to the Device settings menu, scroll to **Back**, then select it by pressing the center button (  ).



### 8.2 TIME

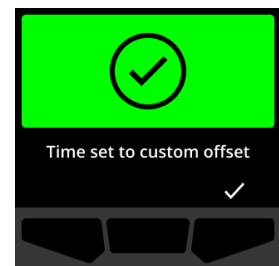
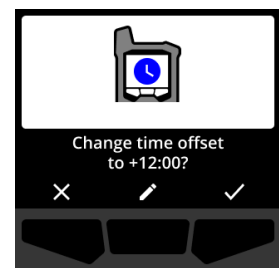
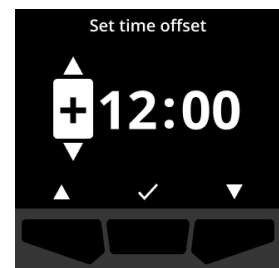
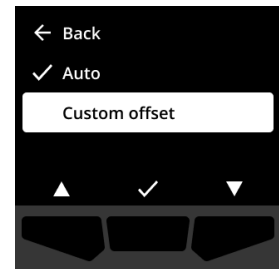
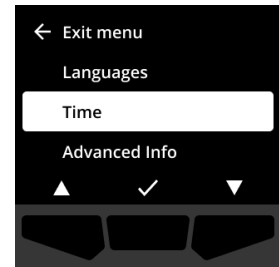
---

Use the Time option to view and update your device's time setting. By default, G6 uses information gathered from nearby cell towers to determine the time zone and current time based on location.

If a cellular connection is unavailable or your physical location is on the border between time zones, the default settings may provide inconsistent time zone information, and you may need to manually enter a time zone.

To manually enter a time zone:

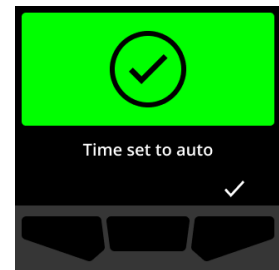
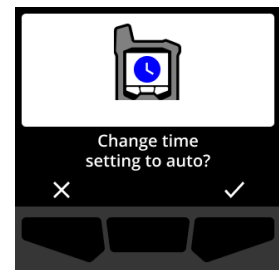
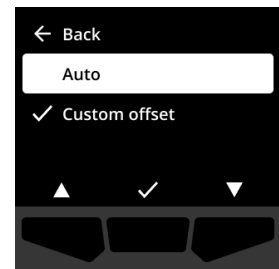
1. Using the navigation buttons, scroll through the Settings menu, then select **Time** by pressing the center button (✓). The Time screen opens.
  2. Using the up and down arrow buttons, scroll through the menu, then select **Custom offset** by pressing the center button (✓).
  3. On the Set time offset screen, use the up and down arrow buttons to set the offset relative to GMT, pressing the center button (✓) to navigate between fields:
    - Enter **+** or **-**
    - Enter the **hour**
    - Enter the **minutes** (if applicable)
  4. Select the right button (✓) to confirm the change. Select the center button (✎) to make changes to the time offset entered. Select the left button (✕) to cancel the workflow and return to the Time settings menu.
  5. Select the right button (✓) to confirm the custom offset setting.
- The time displays, including the offset, on G6's Home screen.





To stop using a manual time zone offset:

1. Using the navigation buttons, scroll through the Settings menu, then select **Time** by pressing the center button (✓). The Time screen opens.
2. Using the up and down arrow buttons, scroll through the menu, then select **Auto** by pressing the center button (✓).
3. Select the right button (✓) to confirm the change. Select the left button (✕) to cancel the change and return to the Time settings menu.
4. Select the right button (✓) to confirm the auto time setting. G6's Home screen displays the local time using cellular information.



## 8.3 ADVANCED INFO MENU

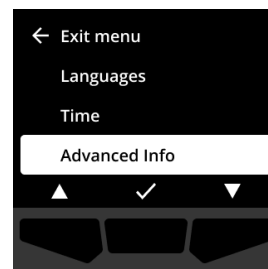
The Advanced information menus provide detailed information (read only) that can be used for quickly troubleshooting your device, including:

- Gas Info
- Device Info
- Communication Info
- GPS Location Info

To view advanced information:

1. Using the navigation buttons, scroll through the Settings menu, then select **Advanced info** by pressing the center button (✓).

The Advanced info menu opens.



## 8.4 GAS INFO

---

Use the Gas info option to view your device's gas settings, including:

### O<sub>2</sub> Devices

- Gas sensor (O<sub>2</sub>)
- High enrichment setpoint (%vol)
- Low enrichment setpoint (%vol)
- Baseline (%vol)
- Low depletion (%vol)
- High depletion (%vol)
- Peak enrichment (%vol)
- Peak depletion (%vol)
- Last bump test (date)
- Last calibration (date)
- Calibration gas concentration (from your device's configuration profile) (%vol)

### H<sub>2</sub>S, SO<sub>2</sub>, CO Devices

- Gas sensor (H<sub>2</sub>S, SO<sub>2</sub>, or CO)
- High gas setpoint (ppm)
- Low gas setpoint (ppm)
- Peak gas reading (ppm)
- STEL calculation (ppm/15 min)
- TWA calculation (ppm/8 hrs)
- Last bump test (date)
- Last calibration (date)
- Calibration gas concentration (from your device's configuration profile) (ppm)

**NOTE:** G6 setpoints are configured in Blackline Live. G6's default high and low setpoint ranges are described in Table 8-1. For more information on configuring high and low gas setpoints, contact your Blackline Live administrator.

Table 8-1: G6 Default Gas Setpoint Ranges

Gas	Default Setpoint Range	Increments
H <sub>2</sub> S	0.5 – 50 ppm	0.1 ppm
SO <sub>2</sub>	0.5 – 100 ppm	0.1 ppm
CO	5 – 500 ppm	1 ppm
O <sub>2</sub>	0.1 – 25 %vol	0.1 %vol

G6 gas sensor display ranges are from 0 ppm/%vol to the sensor maximum. Gas readings above sensor maximums result in over limit (OL) values. For detailed information about G6 gas sensor ranges, see section 13.2.

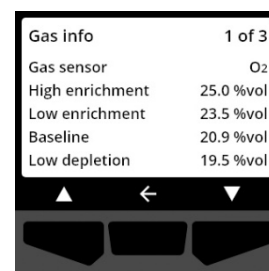
To view gas information:

1. Using the navigation buttons, scroll through the Advanced info menu, then select **Gas info** by pressing the center button (✓).

The Gas info screen opens.



2. Use the navigation buttons to scroll through the Gas info screen.
3. To return to the Device settings menu, select (←) by pressing the center button.



## 8.5 DEVICE INFO

Use the Device info option to view your device's hardware and activation records, including:

- Unit ID
- Activation code
- Firmware version and build
- Region
- Battery level

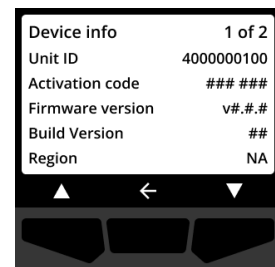
The device information provides advanced information that can be used for quickly troubleshooting your device.

To view device information:

1. Using the navigation buttons, scroll through the Advanced info menu, then select **Device info** by pressing the center button (✓).

The Device info screen opens, displaying your device's settings.

2. Use the navigation buttons to scroll through the Device info screen.
3. To return to the Device settings menu, select ⬅ by pressing the center button.



## 8.6 COMMUNICATION INFO

Use the Communication info option to view information related to your device's cellular communications, including:

- Last sync date/time (UTC)

**NOTE:** Last sync date/time information is only displayed on devices with the Protect service plan.

- Status (last sync)
- Signal level (last sync)

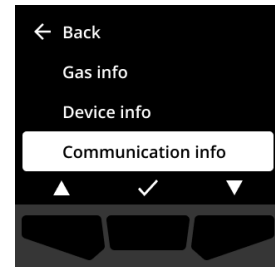
- Cell provider (last sync)
- Network (last sync)
- Next sync date/time (UTC)

**NOTE:** Last sync date/time information is only displayed on devices with the Protect service plan.

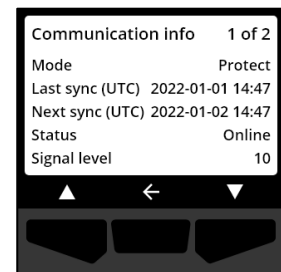
## To view communication information:

1. Using the navigation buttons, scroll through the Advanced info menu, then select **Communication info** by pressing the center button (✓).

The Communication info screen opens, displaying your device's communication settings



2. Use the navigation buttons to scroll through the device info screen.
3. To return to the Device settings menu, select ← by pressing the center button.



## 8.7 GPS LOCATION INFO

Use the GPS location info option to view information related to your device's recorded GPS location, including:

- Time (UTC)
- Lat
- Long
- Satellites
- SNR (dB)

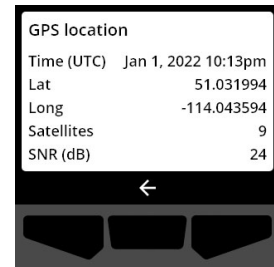
To view GPS location information:

1. Using the navigation buttons, scroll through the Advanced info menu, then select **GPS location info** by pressing the center button (✓).

The GPS location info screen opens.



2. To return to the Device settings menu, select ← by pressing the center button.



## 9 DEVICE SETTINGS

### 9.1 ACCESSING DEVICE SETTINGS FOR G6

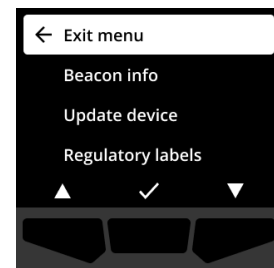
The G6 Device settings menu helps you access advanced device information (read only) and overwrite configuration profile defaults (e.g., live gas menu).

To access the Device settings menu:

1. Press and hold the left button for 5 seconds.

The Device settings menu opens.

**IMPORTANT:** You cannot open the Device settings menu if there is an active unmuted notification on your device. Once you mute the notification, you can access the menu.



## 9.2 BEACON INFO

---

Use the Beacon info option to view the beacon information that your device has received.

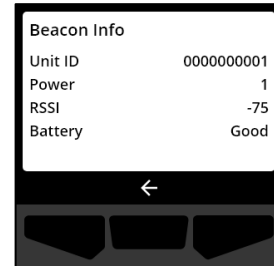
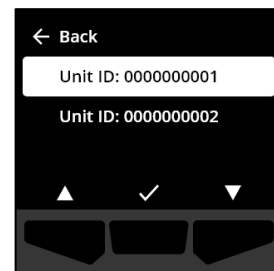
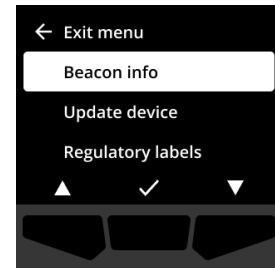
To view beacon information:

1. Using the navigation buttons, scroll through the Device settings menu, then select **Beacon info** by pressing the center button (✓).

The Beacon info screen opens.

2. Using the navigation buttons, scroll through the list, then select a Beacon Unit ID by pressing the center button (✓).

3. To return to the Device settings menu, select ← by pressing the center button.



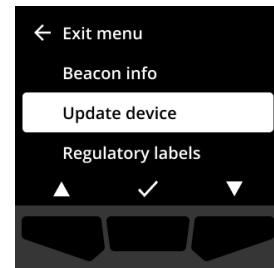
## 9.3 UPDATE DEVICE


Use the Update device option to manually verify and update your device's firmware. For detailed information on firmware download and installation for G6, see section 11.

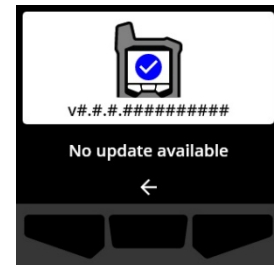
To update the firmware version:

1. Using the navigation buttons, scroll through the Device settings menu, then select **Update device** by pressing the center button (✓).

G6 indicates if your device's firmware is up to date.



If your device is up to date, select  by pressing the center button to return to the Device settings menu.



2. If a firmware update is available, start the firmware update by pressing the right button (✓).

**NOTE:** To cancel the firmware update and exit the workflow, select **X** by pressing the left button.





G6 updates the firmware, then restarts.

Following the restart, your G6 lights, sound, and vibration notify you that the device's start-up sequence is in progress.



G6 notifies you when the firmware installation completes.



## 9.4 REGULATORY LABELS

---

Use the Regulatory labels option to access regulatory certification information. This helps you review that your device is compliant with your regional regulatory requirements including:

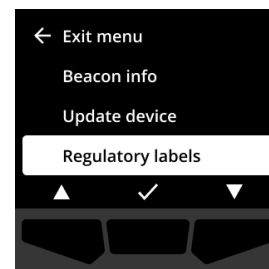
- FCC (USA)
- IC (Canada)
- UKCA (UK)
- CE (EU)


To view your device's regulatory labels:

1. Using the navigation buttons, scroll through the Device settings menu, then select **Regulatory labels** by pressing the center button (✓).

The Regulatory labels screen for your region opens.

Use the navigation buttons to view the certification information associated with your device.



2. To return to the Device settings menu, select  by pressing the center button.




## 9.5 LIVE GAS DISPLAY

Use the Live gas display option to display live gas readings on G6's Home screen. The live gas display is configurable in Blackline Live.

**NOTE:** Displaying live gas readings may impact G6's battery life. For more information, see section 1.7.

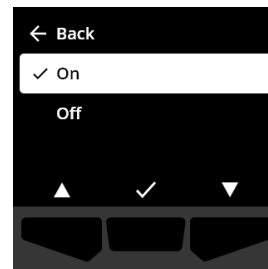
To view live gas readings:

1. Using the navigation buttons, scroll through the Device settings menu, then select **Live gas display** by pressing the center button (.

The Live gas display screen opens.



- Using the navigation buttons, scroll through the list, then choose whether to turn the live gas display **On** or **Off** by pressing the center button (✓).



Live gas readings display on the Home screen.



## 10 MAINTENANCE

### 10.1 CHANGING THE G6 GAS SENSOR FILTER

You must replace the G6 filter when it becomes visibly soiled, or if bump test and calibrations fail repeatedly. You need:

- Flathead screwdriver
- Replacement filter (ACC-G6-FILT10)

**IMPORTANT:** Always perform maintenance procedures in a clean, dust-free environment. When handling G6, ensure that your hands are free from any hand sanitizer or cleaning product. For more information, see [Cleaning Devices and Accessories](#) on the Support site.

To replace the G6 gas sensor filter:

- Using a flathead screwdriver, gently detach the gas sensor faceplate by inserting the screwdriver head between the faceplate and the bottom edge of G6, then twist the screwdriver to loosen the sensor cap.



2. Remove the sensor cap, then set aside.



3. Remove and discard the old filter, making sure to avoid contact with the gas sensor surface.



4. Place the new filter over the sensor, ensuring that the filter gasket is facing toward the device and correctly aligned within the gas sensor socket.



5. Reattach the gas sensor cap to the G6, inserting the cap brackets at an angle with the top of G6 and pressing the bottom of the cap until it clicks into place.



## 10.2 CLEANING G6

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To clean G6, wipe down with a damp cloth. Do not use pressure spray or cleaning solvents. When handling G6, ensure that your hands are free from any hand sanitizer or cleaning product. For more information, see [Cleaning Devices and Accessories](#) on the Support site.

When not in use, store G6 in a dry and dust-free environment.

## 11 FIRMWARE UPDATES

To offer new features, Blackline Safety releases firmware updates at regularly scheduled intervals. Firmware updates have two steps:

- Download
- Installation

Specific information about new updates can be found on the [Blackline Support](#) site's Notifications page. If you have any questions, please contact Blackline Safety [Technical Support](#).

### 11.1 DOWNLOAD

---

If a new version of firmware is available for download, G6 downloads it during the regularly scheduled synchronization. This operation takes place automatically and cannot be declined by the device user. Once the download is complete, G6 is ready to install the firmware update.

### 11.2 INSTALLATION

---

Once the device has downloaded a new version of firmware, it must be installed on your G6. Installation of a new version of firmware takes place automatically by restarting G6 or manually through the Device settings menu.

Once the firmware install completes, G6 continues to monitor as usual.

- ▲ **WARNING:** G6 does not monitor for gas during the firmware update installation process. Updates should only take place while your device is in a safe, gas-free environment.

### 11.2.1 AUTOMATIC FIRMWARE INSTALLATION

Automatic firmware installs take place exclusively when a G6 is removed from G6 Dock or when a manual bump test, manual calibration, or manual sensor zero are performed, as the device is assumed to be in gas-free environment where maintenance operations can be performed.

**IMPORTANT:** While docked, G6 has a continuous network connection. After a docked bump test or calibration, G6 automatically verifies if a new version of firmware has been downloaded onto the device. If so, G6 initiates the firmware install process after the device is removed from G6 Dock.

### 11.2.2 MANUAL FIRMWARE INSTALLATION

You can manually verify and update your firmware through the Device settings menu. Use the manual update procedure when you are out of range of a G6 Dock and need to install a new firmware version immediately, or do not have a dock for automatic firmware installs.

**NOTE:** Manual installs are only available if a new version of firmware has been downloaded to your device and is not yet installed.

For more information on manually updating your device, see section 9.3.

## 12 SUPPORT

### 12.1 LEARN MORE

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Visit [support.blacklinesafety.com](https://support.blacklinesafety.com) to find support and training materials for G6.

### 12.2 TECHNICAL SUPPORT

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Please contact us for assistance.

**North America (24 hours)**

Toll Free: 1-877-869-7212 | [support@blacklinesafety.com](mailto:support@blacklinesafety.com)

**United Kingdom (8am-5pm GMT)**

+44 1787 222684 | [eusupport@blacklinesafety.com](mailto:eusupport@blacklinesafety.com)

**International (24 hours)**

+1-403-451-0327 | [support@blacklinesafety.com](mailto:support@blacklinesafety.com)

## 13 SPECIFICATIONS

### 13.1 DETAILED SPECIFICATIONS

#### Standard features

Emergency SOS  
Find My G6  
Over-the-air configurations  
Automatic over-the-air firmware updates  
Integrated GPS location technology  
Automatic bump tests and calibrations through G6 Dock  
Location Beacon support

#### Gas monitoring features

Single-gas monitoring – CO, H<sub>2</sub>S, O<sub>2</sub>, or SO<sub>2</sub>  
High gas notification  
Low gas notification  
Live gas on display  
Sensor over limit (OL) notification  
Short-term exposure limit (STEL) notification  
Time weighted average (TWA) notification  
Bump test and calibration notification  
Bump test and calibration failure notification

#### Size & weight

Size: 71 mm x 110 mm x 37 mm (2.8" x 4.3" x 1.5")  
Weight: 146 g (5.2 oz)

#### User interface

240 x 320 pixel graphical, high contrast, 6-bit color liquid crystal display  
Menu system and power-on driven by three-button keypad  
Multi-language support: EN, FR, ES, DE, IT, NL, PT

#### User notification

Visual: Color display and multi-color lights on top and side  
Sensory: Vibrating  
Audible: ~95 dB @ 30 cm (11.8")

#### Power & battery

Rechargeable Li-ion battery: 1200 mAh  
Battery life: Up to 12 months at 20°C (68°F), depending on configuration, service plan and use  
Charge time: 4 hours

#### Approvals

SAR, RoHS, CE, RCM  
Contains  
FCC ID: W77BLG6C1,  
IC: 8255A-BLG6C1  
FCC ID: XF6-B001P4V2P1,  
IC: 8407A-B001P4V2P1  
Canada & USA: Class I Division 1 Group A,B,C,D T4; Class I Zone 0 AEx ia IIC T4;  
Ex ia IIC T4 Ga  
IECEx: Ex ia IIC T4 Ga  
ATEX: Ex ia IIC T4 Ga

#### Location technology

GPS Radio: 48-channel high sensitivity  
Assisted-GPS: Yes  
GPS Accuracy: ~5 m (16 ft) outdoors  
Location update frequency: During high urgency events and every 5 minutes to 6 hours, depending on configuration and service plan

#### Cellular Communication

LTE-M and NB-IoT

#### Environmental

Storage temperature: -30°C to 60°C (-22°F to 140°F)  
Operating temperature: -20°C to 55°C (-4°F to 131°F)  
Charging temperature: 0°C to 45°C (32°F to 113°F)  
Ingress Protection: Designed to meet IP67

#### Warranty

CO, H<sub>2</sub>S, O<sub>2</sub>: Four-year limited warranty  
SO<sub>2</sub>: Two-year limited warranty

#### Blackline Live web application

Cloud-hosted safety monitoring web application is customizable for every customer requirement.

Includes compliance dashboard, map, user roles, device configurations, notification setups, and essential reporting.

### 13.2 GAS SENSOR SPECIFICATIONS

Gas	Sensor type	Range	Resolution
CARBON MONOXIDE (CO)	Electrochemical	0–500 ppm	1 ppm
HYDROGEN SULFIDE (H <sub>2</sub> S)	Electrochemical	0–100 ppm	0.1 ppm
OXYGEN (O <sub>2</sub> )	Electrochemical	0–25 %vol	0.1 %vol
SULFUR DIOXIDE (SO <sub>2</sub> )	Electrochemical	0–100 ppm	0.1 ppm

# 14 LEGAL NOTICES AND CERTIFICATIONS

## 14.1 LEGAL NOTICES

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The Blackline, Alert, Locate, Respond, families of related marks, images, and symbols, including Blackline, G6, G7, G7c, G7x, LiveResponse, Loner, Loner IS, Loner IS+, Loner M6, Loner M6i, Loner Mobile, Loner 900, and SureSafe are the exclusive properties and trademarks of Blackline Safety Corp. All other brands, product names, company names, trademarks and service marks are the properties of their respective owners.

### Warranty

G6 is warranted against defects in materials and workmanship for up to four years from the date of purchase. For further details regarding your Blackline warranty, please refer to your terms and conditions of service.

### FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for further assistance.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

RF exposure was tested with the supplied belt clip. Use of third-party accessories may result in non-compliant exposure.

### Industry Canada Compliance

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

RF exposure was tested with the supplied belt clip. Use of third-party accessories may result in non-compliant exposure.

### Notification d'Industrie Canada

Ce dispositif est conforme au(x) format(s) RSS libre(s) d'Industrie Canada. Son fonctionnement est assujéti aux deux conditions suivantes: (1) Cet appareil ne peut causer d'interférences nuisibles, et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant provoquer un mauvais fonctionnement du dispositif.

L'exposition RF a été testée avec le clip de ceinture fourni. L'utilisation d'accessoires tiers peut entraîner une exposition non conforme.

### Warning

Do not operate Blackline Safety products where you are not able to safely operate your mobile/cellular phone.

Electrical equipment may be hazardous if misused. Operation of this product, or similar products, must always be supervised by an adult. Do not allow children access to the interior of any electrical product and do not permit them to handle any cables.

Do not operate or store Blackline products outside their specified operating or storage temperatures. Consult the specifications section for more information.

Blackline products contain a non-replaceable internal lithium-ion battery pack. Seek advice from your local electronics recycling authority regarding the disposal of your device. Do not dispose Blackline products in your household trash.



14.2 INTRINSICALLY SAFE CERTIFICATION


Intrinsically Safe

This device is certified Intrinsically Safe gas detector for use in Class I Division 1 Groups A,B,C,D T4; Ex ia IIC T4 Ga; Class I Zone 0 AEx ia IIC T4 Ga hazardous (classified) locations. Improper use of device may impair protection provided by the device.

CSA23CA80191458  
IECEX CSA 23.0047  
CSANe 23ATEX1211  
MC267256



CI I Div 1 Grp A,B,C,D T4  
CI I Zn 0 AEx ia IIC T4 Ga  
Ex ia IIC T4 Ga                      -20°C ≤ Ta ≤ +55°C

 **WARNING:** Charge only in a nonhazardous location.


This equipment may only be charged by a power supply unit with a limited energy electric circuit in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or Class 2 as defined in the Canadian Electrical Code C22.1, Section 16-200 and/or National Electrical Code (NFPA 70), article 725.121. The maximum voltage and current from the charger shall not exceed 5.625Vdc and 2A respectively.

Sécurité intrinsèque

Ce dispositif est un détecteur de gaz certifié intrinsèquement sûr pour une utilisation dans les endroits (classés) dangereux de Classe I Division 1 Groupes A,B,C,D T4 ; Ex ia IIC T4 Ga ; Classe I Zone 0 AEx ia Groupe IIC T4 Ga. Une utilisation inappropriée du dispositif est susceptible d'altérer la protection qu'il fournit.

Standards:

CAN/CSA C22.2 No. 60079-0:	EN 60079-0: 2018
2019	EN 60079-11: 2012
CAN/CSA C22.2 No. 60079-11:	IEC 60079-0: 2019 7th Edition
2014	IEC 60079-11: 2011 6th Edition
UL 913, Eighth Edition	
UL 60079-0: Seventh Edition	
UL 60079-11: Sixth Edition	

 **AVERTISSEMENT:** Chargez uniquement dans un endroit non dangereux.

Cet équipement ne doit être chargé qu'avec une alimentation utilisant un circuit électrique à énergie limitée conformément aux normes CAN/CSA C22.2 N°. 61010-1-12 et ANSI/UL 61010-1, ou à la Classe 2 telle que définie dans le Code canadien de l'électricité C22.1, Section 16-200 et/ou le Code national de l'électricité (NFPA 70), article 725.121. La tension et l'intensité maximales du chargeur ne doivent pas dépasser 5,625 V CC et 2 A respectivement.

Blackline Safety | Unit 100, 803 24 Ave SE | T2G 1P5 | Canada