

INDOOR LOCATION TECHNOLOGY

Setup Guide



blacklinesafety

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Warranty

Your G7 device is warranted against defects in materials and workmanship for up to two years from date of purchase. For further details regarding your Blackline warranty, please refer to your terms and conditions of service.

More information and support visit: <http://www.blacklinesafety.com>

IECEx/Atex

Intrinsically Safe

Loner Beacon
Model: 102140

Sira 16ATEX2232

IECEX SIR.YYYYX

This equipment complies with EN 60079-0:2011/A11:2013 and EN 60079-11:2012

Ex ia IIC T4 Ga



Ambient operating range -40°C to + 55°C

WARNING – USE ONLY THE FOLLOWING BATTERIES

Duracell Procell PC1400
Energizer Industrial EN 93
Rayovac UltraPro 814

WARNING – DO NOT REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT, WHEN REPLACING THE CELLS, THE USER SHALL ENSURE THAT BOTH CELLS ARE THE SAME TYPE, NEW AND UNUSED

Manufactured by:
Blackline Safety
Suite 101, 1215 – 13 St SE
Calgary, Alberta T2G 3J4 Canada

102128 R6

North America

Loner Beacon, formerly named ANThill, is certified intrinsically safe.

Intrinsically Safe

ANThill Beacon is a UL 913-certified Intrinsically Safe Apparatus for Use Class I, Division 1, Groups A, B, C, D and Class II, Division 1, Groups E, F, G in hazardous (classified) locations.

Please consult with your organization's safety professional for further information regarding the topic of intrinsic safety and any policies, procedures, facilities, or locations within facilities that may be related to intrinsic safety.

Sécurité intrinsèque

ANTHill Beacon est un appareil à sécurité intrinsèque certifié UL 913 de classe I, division 1, groupes A, B, C, D et classe II, division 1, groupes E, F, G dans les lieux classés comme dangereux.

S'il vous plaît consulter avec le professionnel de la sécurité de votre organisation pour de plus amples informations concernant le thème de la sécurité intrinsèque et les politiques, les procédures, les installations ou les lieux dans les établissements qui peuvent être liés à la sécurité intrinsèque.

Specification / Spécification

Class I, Division 1, Groups A, B, C, D and Class II Division 1, Groups E, F, G T4
Class I, Zone 0, Group IIC T4. $-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$

This product is certified for use with the following batteries / Ce produit est certifié pour une utilisation avec les piles suivantes:

Duracell PC1400
Energizer LR14DP12
Rayovac ALC-12FP

WARNING: Use only approved batteries.

AVERTISSEMENT: Utilisez uniquement des batteries homologuées.

101332_r3

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OVERVIEW



INDOOR LOCATION TECHNOLOGY

Why indoor location technology?

GPS can deliver very precise locations when used outdoors and away from large buildings.

However, when working indoors GPS signals can be degraded, resulting in a reported location that is imprecise for an efficient emergency response.

For many cases that involve commercial or industrial buildings, GPS signals are blocked by the building completely and no GPS-computed location is available at all.

Blackline Safety's indoor location technology solves this problem, making it possible to accurately locate an employee working indoors and around large buildings. Combined with custom floor plans, Blackline's Location Beacon precisely displays an employee's location on a Google™ map. The end result is the fastest possible emergency response to your employee's exact location.

What are Location Beacons?

Location Beacons are compact, wireless positioning transmitters. Installed throughout facilities, Location Beacon should be placed wherever GPS signals are unreliable or unavailable.

Each beacon broadcasts a unique identity number that is received by your Blackline device, whether that be G7c/G7x, Loner M6/M6i, Loner 900, Loner SMD or Loner IS+.

Safety monitoring devices report the identity of each beacon within range back to the Blackline Live portal. Blackline Live uses associated location information to improve the accuracy of the device user's reported location.



What are floor plans?

Floor plans greatly enhance indoor location technology, maximizing your team's capability to respond without delays. Floor plans are added to your Blackline Live account, with employee locations displayed on top of the floor plan within the Google map.

Floor plans are optional, but increase the effectiveness of Location Beacons. They provide an important visual layer on the Blackline Live map that can improve response time.

Clear, legible floor plans can help emergency responders determine the best entry point and route through the building are for rescue.



What are site plans?

Site plans are a great way to increase the level of detail for your entire property. There may be key features that are not included within the standard Google Maps interface, such as muster points, roadways and other details.

In areas where there is higher population density, the Google satellite imagery is often high in resolution and provides great detail. In remote areas, satellite imagery can be blurry.

With the help of site plans, custom maps or digital images of your property can be overlaid to ensure that you have the appropriate level of detail to manage emergency responses.

HOW LOCATION BEACON WORKS



Location Beacon



Safety monitoring device



Communication network



Blackline Live and monitoring personnel

Blackline Safety's indoor location technology is simple and effective. It helps you map an employee's location that cannot otherwise be determined using traditional GPS positioning technology.

When a Blackline device is within proximity of one or more beacons, it reports the strongest signal to the Blackline Safety Network as a location update.

Within the Blackline Live portal, the employees location is then mapped at the location of the reported beacon.

- Location Beacon is certified intrinsically
- safe for locations with the potential for
- explosive atmospheres due to gases,
- vapors and dusts.

GETTING STARTED

Deploying indoor location technology within a facility is designed to be quick and easy. This guide will walk you through the five steps necessary to get your facility set up with Location Beacons.



1. Select Location Beacon placement



2. Install Location Beacon



3. Prepare floor or site plans for Blackline Live



4. Add Location Beacon to Blackline Live



5. Test Location Beacon



6. Changing Batteries



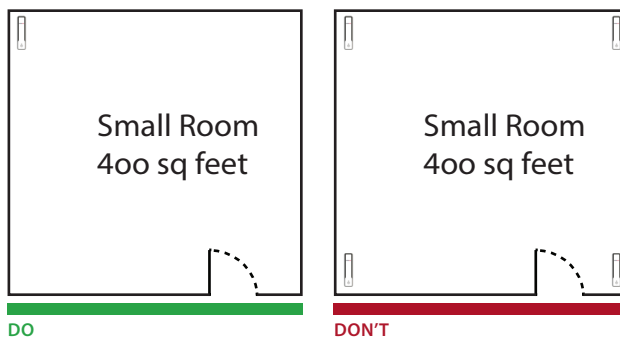
SELECT LOCATION BEACON PLACEMENT

Smaller rooms (up to 400 square feet) normally require one beacon. Larger rooms are often segmented into quadrants with four beacons.

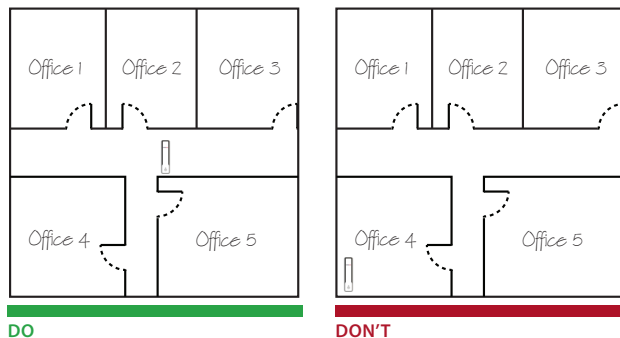
CONSIDERATIONS

Some things to consider when selecting Location Beacons installation locations:

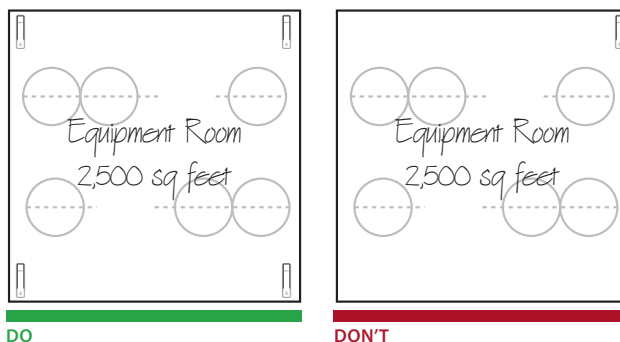
- Smaller rooms (up to 400 square feet) normally require one beacon to have adequate coverage



- Offices or spaces divided with walls should have a beacon in a central location (like a hallway) or one per room



- Large spaces with obstructions may need to be divided up into quadrants to allow for adequate coverage



ADDITIONAL CONSIDERATIONS

- Consider placing Location Beacons near circulation pinch points like doorways, catwalks or gates
- Obstructions made of metal or concrete will reduce signals more than wooden structures
- Beacons can be placed in elevators, but should not be placed on moving vehicles or objects
- Beacons can be mounted on walls, corners, pillars or beams

IMPORTANT: Before moving on to the next step, review your Location Beacon placement. For each location, consider how long it could take for a responder to locate an employee within proximity of the beacon. If the time is longer than 30 seconds, consider the possibility of dividing the area into two or more zones with one beacon in each.



INSTALLATION

The following worksheet is available to help you organize this information. See page 12 of this guide or download a digital copy from support.BlacklineSafety.com

[illegible]

TRANSMIT POWER SETTINGS

Green Transmit Power Lights – Sets of flashes

Level 2 Level 3 Level 4 Level 5

Lowest Level to Highest Level

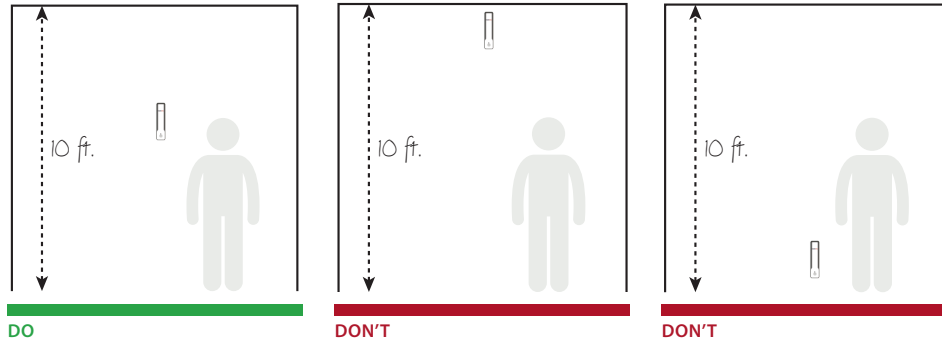
1. Press and hold the power/status button. The status light will turn on and then off. Continue to hold the button, and the status light will begin to blink in sets of flashes that indicate the power level.
2. Release the button during the desired set of flashes to program your desired power level. The status light will repeat the selected power setting 3 times before returning to normal operating mode.



CONSIDERATIONS

Some things to consider when installing Location Beacons:

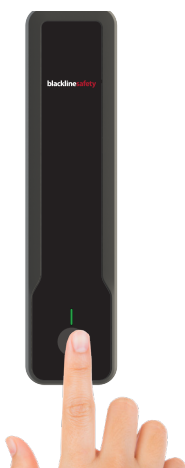
- Height of Location Beacons should be as high as practical, with minimal obstructions interfering with the signal



- Beacons should always be orientated upright upon installation



TURNING LOCATION BEACON ON



After you have completed installation, turn Location Beacon on by pressing the power/status button.

The green status light will turn on when powered. It will automatically turn off after a short period to conserve power, but will continue to function when the green light is sleeping. Pressing the white button again will wake the green light up.



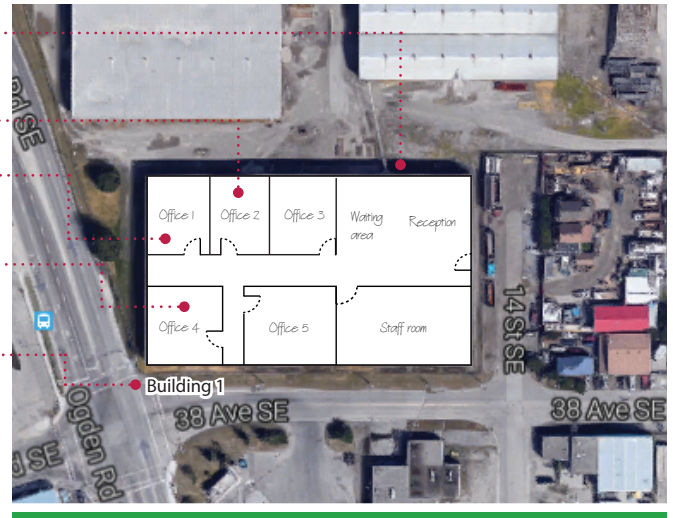
PREPARE FLOOR PLANS

Blackline Safety's Customer Engagement team manages the import of floor or site plans into your Blackline Live account.

To ensure the most successful version of your floor or site plan, consider the following:

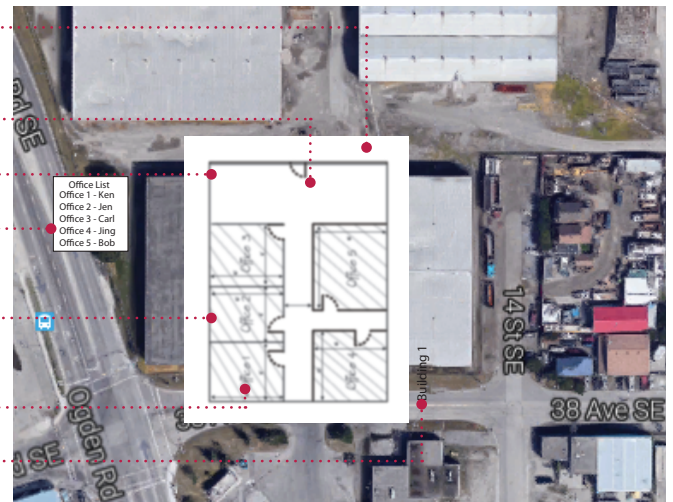
- Use an editable PDF, AI or EPS image format with a transparent background
- Ensure floating text is outlined in white
- Use high resolution maps
- Remove non-essential imagery
- Ensure your maps are accurate and current
- Ensure your map is oriented north up, or north is indicated on the file
- Use uncluttered, legible maps
- Ensure files are labeled clearly

Transparent background
High resolution
Accurate and current
Oriented north up
Floating text is outlined



DO

Not transparent background
Low resolution
Outdated
Non-essential imagery
Not oriented north up
Cluttered
Floating text is not outlined



DON'T

When your floor plans meet the above criteria, send them to your Customer Engagement representative for upload into your Blackline Live account.

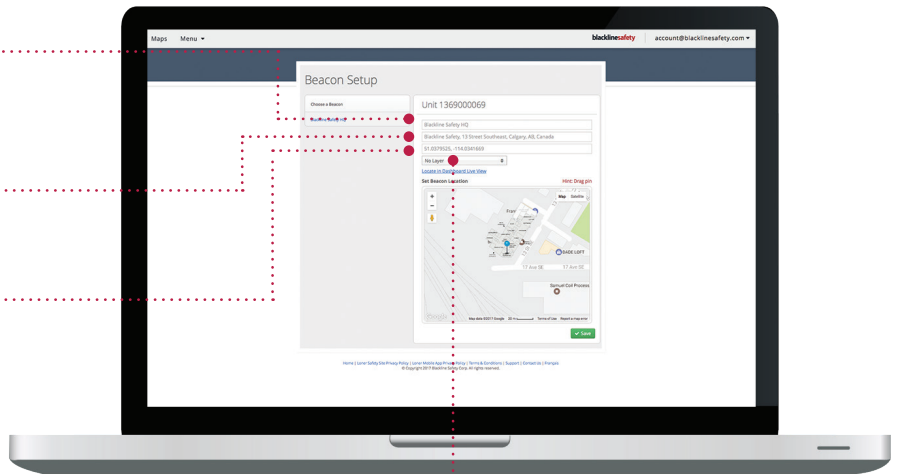


ADD LOCATION BEACON INFORMATION TO BLACKLINE LIVE

Our Customer Engagement team will make sure Location Beacons have been placed into your Blackline Live account. However, it is your responsibility to update beacon information after they have been installed in your facility.

Once beacon has been installed:

1. Sign in to your Blackline Live account
2. From the main menu, select beacon setup
3. Add the following information for each activated beacon:
 - **Name of Location Beacon**
A friendly name that identifies the location of beacon (i.e. Main Floor Entrance)
 - **Site address**
The street address of the site where beacon is located
 - **Latitude and Longitude**
The actual location of where Location Beacon is installed. The map pin can be dragged to automatically update the latitude and longitude.
 - **Layer**
The layer that corresponds with the floor plan this beacon is placed on. If you are not using floor plans, select no layer.
4. Select save





TEST LOCATION BEACON

After Location Beacons have been installed and placed in Blackline Live, a quick test is recommended to ensure that each installed Location Beacon is in working order.

To test beacon you will need:

- An installed Location Beacon, turned on
- A Blackline safety monitoring device
- A mobile phone with an Internet connection, such as an iPhone or Android
- A pre-existing Blackline Live account

To test that Location Beacon is in working order:

1. Sign in to your Blackline Live account on your mobile phone
2. Proceed to each beacon with your safety monitoring device and mobile phone
3. Wait five seconds to ensure your device has heard the new beacon
4. Select the monitoring device's map pin from the main map page
5. From the info box that appears, ensure the beacon information seen corresponds with the beacon at the location
6. Repeat steps two through five for all installed beacons

NOTE: A Location Beacon signal tester device is available to provide an audible and visual indication of beacon signals. To learn more, contact our Customer Care team.

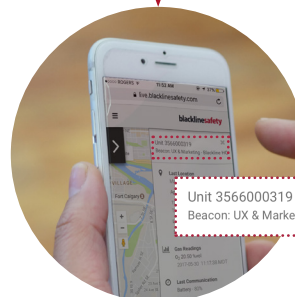


USING G7?

G7 devices are capable of letting you know which beacon you are hearing and the signal strength.

To test beacons with G7:

1. Press OK to navigate to the menu
2. Select advanced info
3. Select beacons
4. Select the first beacon in the list to reveal ID, power and battery. This is the most recent beacon G7 has heard.





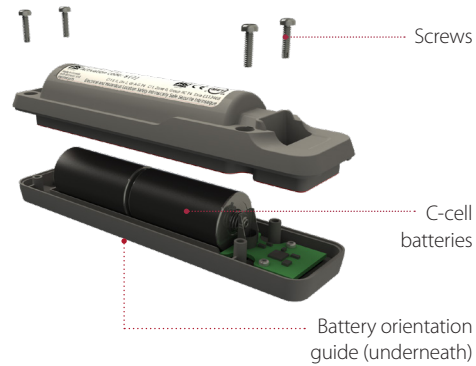
CHANGING BATTERIES

Location Beacon's two C-cell batteries last up to five years at the highest transmit power setting. When replacing beacon's batteries, use only approved batteries to maintain intrinsic safety certification.

To replace beacon's batteries:

1. Remove the mounting bracket and the four screws on the back of Location Beacon
2. Install new batteries and reassemble beacon

IMPORTANT: Return Location Beacon to the same location that it was removed from to ensure the correct location information is maintained in Blackline Live.



SUPPORT

LEARN MORE

Visit support.BlacklineSafety.com to find support and training materials for Location Beacon.

CUSTOMER CARE

For technical support, please contact our Customer Care team.

North America (24 hours)

Toll Free: 1-877-869-7212 | support@blacklinesafety.com

United Kingdom (8am-5pm GMT)

+44 1787 222684 | eusupport@blacklinesafety.com

International (24 hours)

+1-403-4451-0327 | support@blacklinesafety.com

LOCATION BEACON INFORMATION

BUILDING NAME

PHYSICAL ADDRESS

[illegible]



www.BlacklineSafety.com