

User Guide

Löner DUO

A Mobile Worker Safety Device
Complementing Löner Mobile



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Warranty

Your Löner Duo powered by Blackline is warranted against defects in materials and workmanship for up to one year 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://blacklinesafety.com> for more information.

Declaration of Conformity

Blackline Safety hereby declares that this product incorporating Radio and Telecommunications Terminal Equipment functionality is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the original Declaration of Conformity is available at: www.blacklinesafety.com/ce

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.

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. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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.

Industry Canada Compliance / Notification d'Industrie Canada

This device complies with Industry Canada licence-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. / 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.

RF Exposure Statement / Déclaration d'exposition RF

For body worn operation, Löner Duo has been assessed for RF exposure and meets the requirements of FCC KDB447498 and IC RSS-102. / Pour utilisation sur le corps, Löner Duo a été évalué pour l'exposition aux RF et répond aux exigences de la FCC KDB447498 et IC RSS-102.

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Safety Precautions

Blackline takes your safety and the safety of those around you very seriously. It is important for you to be aware of the following precautions.



DANGER

Do not place a Blackline Product in or near an open flame or in the presence of flammable gases or fumes.

Operation of any electrical equipment in potentially explosive atmospheres can constitute a safety hazard.



WARNING

When in a hospital or other health care facility, observe the restrictions on the use of mobile devices, such as cellular phones. Do not operate Blackline products where you are not able to operate your mobile/cellular phone.

Switch Blackline products off before boarding an aircraft and make sure that it cannot be inadvertently turned on. The operation of wireless appliances, including Blackline products is forbidden aboard aircraft to prevent interference with communication systems.

Road safety comes first. Do not operate a Blackline product while you are driving a vehicle. Park your vehicle before operating a Blackline product, or using your mobile phone to interface to the Blackline service.

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 Blackline products outside their specified operating temperature. Consult the specifications section.
- **Do Not** store Blackline products outside their specified storage temperature. Consult the specifications section.
- **Do Not** operate Blackline products outside their specified humidity rating. Consult the specifications section.
- **Do Not** dispose of Blackline products in your household trash. Seek advice from your local electronics recycling authority. Blackline products may contain an internal lithium-ion battery pack.

Getting Started

Service Activation

Your Loner® Duo requires a valid Loner Mobile safety monitoring application service plan operating on a supported smart phone. Contact your company's safety coordinator or Blackline Safety Customer Care at support@blacklinesafety.com to activate the application and live monitoring service.

North America (Between the hours of 8am-5pm Mountain Time)

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

United Kingdom (Between the hours of 8am-5pm Greenwich Mean Time)

+44 1787 222684 | eusupport@blacklinesafety.com

International (Between the hours of 8am-5pm Mountain Time)

+1 403 451 0327 | support@blacklinesafety.com

Website

support.blacklinesafety.com

Overview

The Blackline Loner Duo communications provides multi-layered safety for you as a mobile worker when it is connected via Bluetooth® to a smartphone operating the Loner Mobile safety monitoring app. This guide provides information that you will find helpful to comfortably operate your Loner Duo. The unit contains the following internal components:

- Bluetooth Smart v4.0 Radio
- 350 mAh rechargeable battery
- Tri-axis accelerometers
- Gyroscope
- Vibration motor
- Emergency latch
- Power button and indicator light
- Indicator light array
- Alarm beeper
- USB interface for charging
- Smart Integrated weather proof and dust proof case

Requirements

Loner Duo promotes a safe work environment for you when:

- Bluetooth communication has been established with the smartphone running Loner Mobile.
- Loner Duo and the smartphone both have sufficient battery capacity to operate.
- You are wearing the device and keep the associated smartphone within Bluetooth range.

The Loner Mobile safety monitoring application must be activated in a Loner Portal account. For complete protection Loner Mobile must have a cellular connection and good GPS and/or WiFi signal strength.

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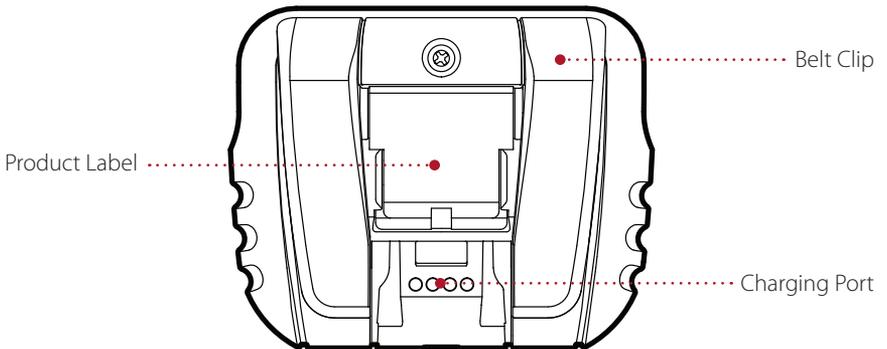
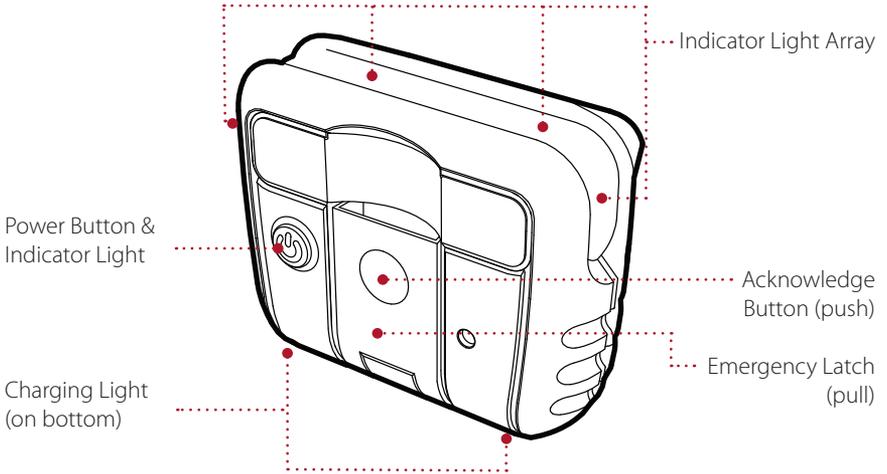
- Loner Duo
- Micro USB charging clip
- Charging cable
- Wall charger
- Loner Duo User Guide

Using the Loner Duo

Loner Duo Hardware Details

Loner Duo is rugged and purpose-built for monitoring you as a mobile worker. Physical details are outlined below.

Physical Feature	Use
SureSafe™ Power Button & Indicator Light	Powers Loner Duo and indicates the network and/or Bluetooth connection status.
Acknowledge Button	Acknowledges alert messages on Loner Duo.
Indicator Light Array	Indicates Loner Duo is in an Alarm state.
Emergency Latch	Sends an emergency alert to monitoring personnel.
Charging Light	Indicates the charging state.
Product Label	Provides device information including serial number.
Belt Clip	Attaches Loner Duo to a belt.
Charging Port	Charges Loner Duo

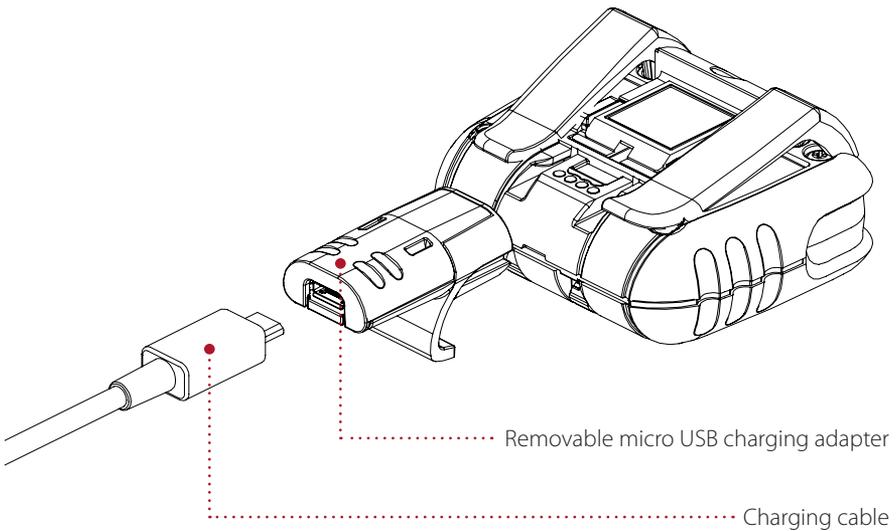


Charging Loner Duo

Plug the wall charger into an electrical outlet.

1. Insert the Micro USB Cable Plug into the corresponding Micro USB Charging Jack on the charging clip ensuring the USB symbol  on the cable faces the flat side of the charging clip.
2. Slide the charging clip onto Loner Duo using the guides to align the clip with the Charging Port on the device.
3. Completely charge Loner Duo for two hours.
4. Remove the charging clip from Loner Duo.

Charging status can be determined by observing the Charging Light. See the section Loner Duo Light Behaviour for more detailed information.



Pairing Loner Duo with a Smartphone

Before You Begin

1. Make sure you have your activation code ready. If you do not have an activation code, contact your company's safety coordinator or Blackline Safety customer care at support@blacklinesafety.com to activate the application and live monitoring service.
2. Enable Bluetooth on your smartphone.

Pairing Loner Duo with Your Smartphone

1. Press the SureSafe power button. Loner Duo will turn on, the SureSafe Indicator Light will blink and the beeper, Indicator Light Array and vibration motor will announce the chirp pattern.
2. If you have not downloaded the Loner Mobile app, search for "Loner Mobile" in the App Store, Google Play or App World on your smartphone and download the app.



3. Launch the Loner Mobile app and log in.
4. Select "Settings" and under "Loner Duo Devices", select "Available devices".
5. Select the "Scan for Loner Duo Devices Now" button. Once the app has finished searching for devices, select the Loner Duo from the list that corresponds to the Unit ID on the Product Label on the back of the device.
6. Once you have selected your device, press Done.
7. Once a Bluetooth connection has been established between your Loner Duo and Loner Mobile application, the SureSafe Indicator Light will glow solid green temporarily and then begin flashing until a connection with the Blackline Safety Network has been established. When your safety is monitored, the SureSafe light will glow continuously.
8. Navigate to the Loner Mobile home screen and select "Start Monitoring". The SureSafe Indicator Light will glow solid green to indicate connection with the Safety Network.

Loner Duo does NOT monitor your safety when the SureSafe light is flashing. It will flash green when the app is not monitoring, or when Loner Duo is not connected to the app.

Using Your Loner Duo (previously paired)

If Loner Duo has been previously paired, follow the steps below for turning on and using the device:

1. Press the SureSafe Power Button to turn Loner Duo on.
2. The beeper, alarm status light and vibrator will activate briefly.
3. Navigate to the Loner Mobile app on your smartphone and launch. Once in the app select "Start Monitoring". Once paired, the SureSafe Indicator Light will glow solid green ONLY when connected to Loner Mobile via Bluetooth and the Blackline Safety Monitoring Infrastructure. It will flash green when the app is not monitoring, or when Loner Duo is not connected to the app.
4. Wear Loner Duo on your belt at your hip at all times that you require safety monitoring.
5. Perform your work duties as you normally would. Loner Duo automates remote monitoring of your safety.

When remote monitoring of your safety is no longer required, access the Loner Mobile app, then press and hold the "Stop Monitoring" button until the countdown sequence is complete.

Turning the Loner Duo Off

If Loner Duo operation is no longer required, follow these steps for turning off the device:

1. Press and hold the SureSafe Power Button for three seconds to power the unit off.
2. The beeper sounds for three long beeps during the time the Power Button is pressed.
3. Loner Duo vibrates for three long pulses.
4. At the end of the three seconds the beeper, vibrator and SureSafe Power Button Light turn off.

Loner Duo Light Behaviour

Loner Duo features a SureSafe Indicator Light and a Red Charging Light. Please see below for the light behaviour.

Light Behaviour	SureSafe Indicator Light	Red Charging Light
Light Flashing	Indicates Loner Duo is powered and not connected to the smartphone or Blackline Safety Network	Indicates Loner Duo is charging.
Light On	Indicates that Loner Duo is powered and connected to the smartphone and Blackline Safety Network	Indicates that Loner Duo is fully charged.
Light Off	Indicates that Loner Duo is powered off or the battery is depleted.	Indicates that Loner Duo is not charging.

Loner Duo Annunciation Patterns

Loner Duo features audible, tactile and visual indicators for annunciating different types of messages. Please see below for these patterns.

Type	Beeper	Vibration Motor	Indicator Light Array
Low Alarm	Slow alarm Pattern	Single repeating vibrate	Slow flash
High Alarm	Fast alarm pattern	Double repeating vibrate	Fast flash
Low Battery	Single beep once every 5 sec	Single vibrate once every 5 sec	Single flash once every 5 sec

About Bluetooth

Bluetooth is a low power communication protocol that requires the Loner Duo and the smartphone to be within proximity of each other. To ensure constant communication between Loner Duo and your smartphone, the separation between both services should not exceed 10 meters or 30 feet.

If you venture beyond the reach of Bluetooth communications, your safety will no longer be monitored. Ensure you keep the associated smartphone within Bluetooth range.

Alerts

Alert messages are configured for Loner Mobile and Loner Duo through the Loner Portal web application. Alerts are displayed in Loner Portal and can be sent via email and SMS to safety monitoring personnel.

Alerts

An alert is a message that communicates a device or system level event such as an Emergency Alert or a Low Battery Alert. Depending on the priority level of the Alert, different action must be taken by safety-monitoring personnel.

All alerts are configurable. Speak to your safety team to learn what features have been implemented for your Loner Duo.

Alert	Details
Emergency Alert	Loner Duo sends an Emergency Alert if the Emergency Latch has been opened
Silent Alert	Loner Duo sends a Silent Emergency Alarm if the Acknowledge button has been pressed and held for two vibrations.
No-motion Alert	Loner Duo sends a No-motion Alert when the device does not detect motion based on your configuration <i>and</i> you have not canceled the pending alert within 30 seconds.
Missed Check-in Alert	Loner Duo initiates the pending Missed Check-in Alert when you have not checked in with Loner Mobile. You have 30 seconds to cancel before a Missed Check-in Alert is sent.
Low Battery	Loner Duo will send a Low Battery Alert if the internal battery level falls below 20%.

Initiating an Emergency Alert (Emergency Latch Use)

If you are in an emergency situation, perform the following:

1. Open the Emergency Latch.
2. Loner Duo will annunciate the high alarm pattern to notify others nearby of the event.
3. Loner Duo will instantly send an Emergency Message to Loner Mobile.
4. Loner Mobile will acknowledge the message and instantly send the Emergency Message to monitoring personnel, through the Blackline Loner Web Portal.
5. Loner Mobile (your smartphone) will annunciate the Emergency Alarm pattern.
6. The alarm pattern on Loner Duo and Loner Mobile will continue until the Emergency Alert has been silenced on Loner Duo, or in the Loner Mobile application, or the battery is depleted.

Silencing an Emergency Alert (Emergency Latch Use):

1. Return the Emergency Latch to the closed position.
2. Press and hold the Acknowledge Button for 3 seconds.
3. Acknowledge the alert in Loner Mobile.

After three seconds, the alarm pattern will stop and Loner Duo will return to regular operation.

If the user silences an Emergency Alert, this does not clear the alert within the Loner Portal user account. If you are a Blackline Safety Monitoring customer, Monitoring personnel are required to address the safety incident.

Initiating a Silent Emergency Alert

If you are in an emergency situation, where you prefer to NOT alert others in the area (a silent emergency), perform the following:

1. Push and hold the Acknowledge Button for 10 seconds.
2. Loner Duo will vibrate for 5 seconds, pause and then vibrate for 5 more seconds.
3. A Silent Emergency Message will be sent to Loner Mobile.
4. Loner Duo will NOT annunciate the alarm pattern (it will remain silent).
5. Loner Mobile will acknowledge the message and instantly send the Emergency Message to monitoring personnel.
6. Loner Mobile will NOT annunciate the Emergency Alarm pattern (it will remain silent).
7. The Silent Alarm can be acknowledged in Loner Mobile at any time. This does not clear the alert within the Loner Portal user account. Monitoring personnel are required to address the safety incident.

If you have not cancelled the alert within 30 seconds, the No-motion Alert is sent, initiating the alert escalation process. Loner Duo will annunciate the high alarm pattern until the alert is silenced or the battery is depleted.

About Activity/Motion Monitoring

Loner Duo is constantly monitoring your motion. If Loner Duo has not detected motion as per your configuration, it will enter the alarm mode and annunciate the low alarm pattern to indicate a pending No-motion alert. If you do not require assistance, you have 30 seconds to cancel the alert.

Canceling a pending No-motion Alert:

Press the Acknowledge Button for 1 second. After one second, the alarm pattern will stop and Loner Duo will return to regular operation. An alert will NOT be sent.

If you have not cancelled the alert within 30 seconds, the No-motion Alert is sent, initiating the alert escalation process. Loner Duo will annunciate the high alarm pattern until the alert is silenced or the battery is depleted.

Silencing a No-motion Alert:

Press and hold the Acknowledge Button for 3 seconds. After three seconds, the alarm pattern will be silenced and Loner Duo will return to regular operation.

If the user silences a No-motion Alert, this does not clear the alert within the Loner Portal user account. Monitoring personnel are required to manage the safety alert through to resolution

Missed Check-in Alert

Loner Duo will receive a Missed Check-in Alert if Loner Mobile application is configured to have you periodically check in. If Loner Duo receives a Missed Check-in Alert, it will enter the alarm mode and annunciate the low alarm pattern to indicate a pending Missed Check-in Alert. If you do not require assistance, you have 30 seconds to cancel the alert.

Canceling a pending Missed Check-in Alert:

Press the acknowledge button for 1 second. After 1 second, the pending alarm pattern will be cancelled and Loner Duo will return to regular operation.

If you have not cancelled the alert within 30 seconds, the Missed Check-in alert is sent, initiating the alert escalation process. Loner Duo will annunciate the high alarm pattern until the alert is silenced or the battery is depleted.

Silencing a Missed Check-in Alert

Press and hold the acknowledge button for 3 seconds. After 3 seconds, the alarm pattern will be silenced and Loner Duo will return to regular operation.

If the user silences a Missed Check-in Alert, this does not clear the alert within the Loner Portal user account. Monitoring personnel are required to address the safety incident.

About Low Battery Detection

Loner Duo monitors its battery level of the device. If the battery level drops below 20% of battery capacity, a Low Battery Alert will be sent to monitoring personnel and Loner Duo will annunciate the low battery alarm pattern. This feature is configurable in Loner Portal.

Loner Duo will continue all of the alarms until one of the following occurs:

- Loner Duo is powered off.
- Loner Duo automatically shuts down with a depleted battery.
- Loner Duo is plugged in for recharging.

Specifications

Specifications for Löner Duo

Software Compatibility

Löner Mobile Version 1.2 or higher for iOS, Android and Blackberry

Size & Weight

Size: 51 mm W x 32 mm H x 62 mm L (2.01" W x 1.26" H x 2.44" L)

Weight: 75 g (2.65 oz)

Safety Features

Emergency latch: Release latch to trigger alert

Silent emergency: Press and hold Acknowledge Button to trigger alert

Worker motion monitoring: Configurable time window (1 – 30 min or off)

Worker check-in (optional): Required check-in period (5 – 180 min)

Buttons & Indicator Lights

Power button: Power on/off

Acknowledge button: Check-in/Silent emergency/cancel pending alerts/acknowledge alerts

Emergency latch: Send emergency alert

Red indicator light array plus vibration & buzzer: Safety alert triggered

Green indicator light: Blinking (powered), continuous (connected)

User Notification

Indicators: Acoustic buzzer, LEDs, and vibration motor

Acoustic buzzer sound pressure level: 90 dB @ 10 cm (90 dB @ 3.94")

Wireless Communication

Bluetooth Smart v4.0

Alert Capabilities

Emergency

No-motion

Missed check-in

Low battery

Power off

Silent

Power & Battery

Rechargeable Li-ion battery: 350 mAh capacity

Battery life: 20 hours continuous operation

Charging connector: 4-pin sealed connection

Environmental

Storage temperature: -30° C to 75° C (-22° F to 167° F)

Operating temperature: -20° C to 55° C (-4° F to 131° F)

Charging temperature: 0 to 45° C (32 to 113° F)

Ingress protection: Designed to meet IP65

Approvals

FCC Part 15 Subpart B, FCC ID: W77LNRDUO,
Industry Canada 8255A-LNRDUO

Device Requirements

Bluetooth communication must be paired to smartphone

Löner Mobile must be installed on smartphone

Löner Mobile must be activated within Löner Portal web application

An active Löner Web Portal Account

Warranty

One year limited factory warranty

Löner Portal Web Application

Features include: Alarm banner, event history, device location mapping, device management, alert & notification settings and more.

Loner Duo Care

Considerations Regarding Use and Storage of Loner Duo

Loner Duo meets IP65 ingress protection ensuring that under normal operation no dirt or water can enter the device.

Storage temperature range of: -30 to 75°C (-22 to 167°F).

Operating temperature range of: -20 to 55°C (-4 to 131°F).

Charging temperature: 0 to 45° C (32 to 113° F).

Customer Care

Customer Care for Loner Duo

North America (Between the hours of 8am-5pm Mountain Time)

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

United Kingdom (Between the hours of 8am-5pm Greenwich Mean Time)

+44 1787 222684 | eusupport@blacklinesafety.com

International (Between the hours of 8am-5pm Mountain Time)

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Alert. Locate. Respond.

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