OPERATING MANUAL

BAGJUMP Pressure Alarm Gen2

Read the operating manual before starting work!

BAGJUMP Action Sports GmbH

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1. General

1.1 Information about this manual

These instructions enable the safe and efficient use of this device. The manual is part of the device and must be kept in the immediate vicinity of the device.

The personnel must have carefully read and understood these instructions before starting work. The basic prerequisite for safe working is compliance with the safety instructions and handling instructions in this manual.

In addition, the local accident prevention regulations and general safety regulations for the area of application of the machine apply.

Illustrations in these instructions are for basic understanding and may deviate from the actual design.

Note

If the device is handed over or resold to a third party, the following documents must be passed on to the new owner!

- This operating manual
- Proof of the maintenance work

1.2 Modification history and applicable documents

Date	Modification	Name
30.09.2024	REV-00 Pressure Alarm operating manual	TH

1.3 Obligations of operator and operating personnel

This technical documentation has been prepared in accordance with EN 82079-1.

The operator or an authorized person ensures that

- only adequately trained operating personnel, who have read and understood the operating manual and in particular the chapter
- determines the competences and responsibilities of the operating personnel for the device,
- checks the safety-conscious work of the operating personnel at regular intervals,
- is responsible for the safety condition of the device,
- immediately takes the device out of operation or initiates necessary steps for its elimination, if defects occur that affect safety,
- performs the nationally required inspections in addition to the device inspections recommended by BAGJUMP Action Sports GmbH in a timely manner,
- verifies the proper performance of the required and prescribed inspections,
- Reports any accident involving the device that results in serious injury or major property damage.

The operating personnel:

- checks the device for obvious defects before each start-up,
- is responsible for the safe operation of the device,
- operates the device as intended within the limits,
- reports any changes to the device that affect safety to the responsible supervisor or the operator,
- stops operation immediately if safe operation is no longer possible.

1.4 Explanation of the conventions

1.4.1 Hazard classes

Safety instructions are reproduced in this document with standardized representation and symbols. Depending on the probability of occurrence and the severity of the consequences, the following hazard classes are used.

Danger

Indicates an immediate danger to humans!

Will lead to irreversible injuries or death if not followed!

Warning

Indicates a recognizable danger to humans!

Can lead to irreversible injuries or death if not followed!

Caution

Indicates a recognizable danger to humans!

Can lead to reversible injuries if not followed!

Caution

Can or will lead to damage to property if not followed!

Note

Application tips and particularly useful information!

1.4.2 Warning pictograms

Caution	Electrical voltage
	

1.4.3 Command pictograms

General info sign	Read instruction manual
	

2. Safety

2.1 Liability disclaimer and warranty

Bagjump shall not be held liable for any damages or injuries arising from the following circumstances:

- Non-compliance with these instructions
- Use that deviates from the intended purpose
- Operation by inadequately qualified personnel
- Unauthorized modifications
- Technical alterations
- Use of non-approved spare parts
- Any damages resulting from negligence, including but not limited to improper maintenance or failure to inspect the device regularly
- Damages resulting from actions taken by third parties or external factors beyond the control of BAGJUMP Action Sports GmbH

Limitations of Liability: Bagjump's liability, whether in contract, warranty, tort (including negligence), or any other legal theory, shall not exceed the purchase price of the product. Under no circumstances shall BAGJUMP Action Sports GmbH be liable for any indirect, incidental, consequential, or punitive damages, including loss of profits, data, or use, arising out of or in connection with the use or inability to use the product.

Indemnification: The user agrees to indemnify and hold harmless Bagjump, its affiliates, officers, directors, employees, and agents from any claims, damages, losses, liabilities, costs, or expenses (including reasonable attorney's fees) arising out of or related to the user's failure to comply with this disclaimer, misuse of the product, or violation of any rights of another party.

Governing Law: This disclaimer shall be governed by and construed in accordance with the laws of Austria. Any disputes arising out of or related to this disclaimer shall be resolved in the competent courts of Austria.

2.2 Requirements for the operating personnel

Warning

Risk of injury in case of insufficient qualification!

- Improper handling can lead to considerable personal injury and material damage!

Only persons who can be expected to carry out this work reliably are permitted for all work.

Safety-conscious work is only guaranteed if:

- The device is operated by trained, competent, authorized and instructed operating personnel,
- the responsibilities for operation by several operators are clearly defined and followed,
- from the point of view of safety, there are no ambiguities concerning the competences of operators working with the device,
- unauthorized persons are kept away from the working area,
- the safety and hazard-conscious work is regularly checked in compliance with the operating manual and the supplier documentation.

2.3 Intended use

The BAGJUMP pressure alarm system (Pressure Alarm) is used to monitor the differential pressure in inflatable structures. If the differential pressure exceeds or falls below certain limits and/or no current voltage is applied to the device, an audio-visual alarm is triggered.

The device must not be opened!

Other uses may destroy the device, cause considerable damage, as well as unforeseeable accident hazards and operating hazards.

The device has been built according to the state of the art and recognized safety regulations. Nevertheless, its use may cause danger to life and limb of the user or third parties or impairment of the device and other material assets.

The operator must ensure that the device is only operated in a technically faultless condition and in accordance with its intended use, following the operating manual. In particular, faults that could impair safety must be rectified immediately.

The device may only be used by operating personnel who are familiar with it and have been informed about the dangers.

2.4 Non-intended use

Warning

Danger due to improper use!

- Any use beyond the intended use and/or use beyond the intended use can lead to dangerous situations!
- Use only as intended!

2.5 Safety labels on the device

Warning

Risk of injury due to illegible safety labels!

- In the course of time, safety labels may become soiled or otherwise unrecognizable!
- Always keep all safety labels in a legible condition!
- Replace damaged safety labels immediately

All safety labels on the device must always be kept complete, in legible condition and followed, such as:

- Warnings,
- Commands,
- Prohibitions.

All safety labels must be replaced in case of:

- Damage,
- Soiling

3. Technical data / EC Declaration of Conformity

3.1 Technical data

Dimensions

Specification	Value	Unit
Length	150	mm
Width	110	mm
Height	40	mm

Weight

Specification	Value	Unit
Weight	307	g

Operating conditions

Specification	Value	Unit
Ambient temperature	-10 to +35	°C
Humidity max.	75	%

Emissions - noise

Specification	Value	Unit
Continuous sound pressure level at alarm (1m)	105	dB (A)

Electrical connection values

Specification	Value	Unit
Voltage	5	V DC
Power consumption max.	20	W

Storage conditions

Specification	Value	Unit
Ambient temperature	- 10 to +30	°C
Humidity	5 to 60	%

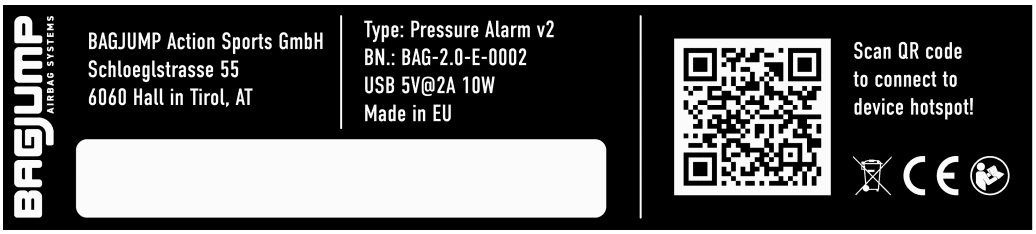
M12 cable

Specification	Value	Unit
Length	10	m
Ambient temperature	- 20 to +70	°C
Humidity	15 to 75	%

Hose

Specification	Value	Unit
Length	3	m
Ambient temperature	- 10 to +30	°C
Humidity	5 to 90	%

3.2 Type plate



3.3 EC Declaration of Conformity

The manufacturer: BAGJUMP Action Sports GmbH
Schlöglstrasse 55
A-6060 Hall in Tirol, Austria

hereby declares that the following device:

BAGJUMP Pressure Alarm System (BAG-A)

- complies with the Essential Requirements of the **CE**, **FCC** and **RoHS** Directives
- complies with all relevant provisions of the **Electrical Equipment Directive** (2014/35/EU).

The following harmonized standards have been applied:

EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction
EN 61000-6-1:2019	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments
EN 61000-6-3:2007 + A1:2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments
EN 61000-3-2: 2005 + A1:2008 + A2:2009	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase
EN 61000-3-3: 2008	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection

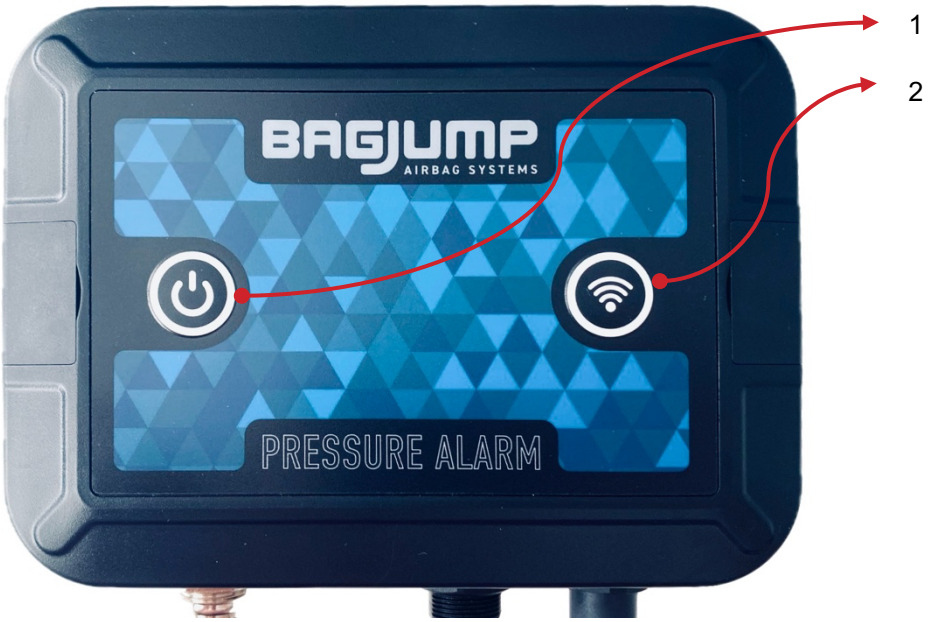
4. The Device

4.1 Included Parts

- BAGJUMP Pressure Alarm Gen2 base unit
- Audio-visual signal light
- 10m / 33ft M12 cable
- 3m / 10ft pressure probe hose
- 3m / 10ft USB-C cable
- USB-C charger

4.2 Parts Description

4.2.1 Base unit – Front view



1 Power button

- 3 sec press = power off / reboot
- 10 sec press = factory reset

2 Wi-Fi / Hotspot button

- Flashing button = Hotspot on
- Glowing button = Connected to Wi-Fi

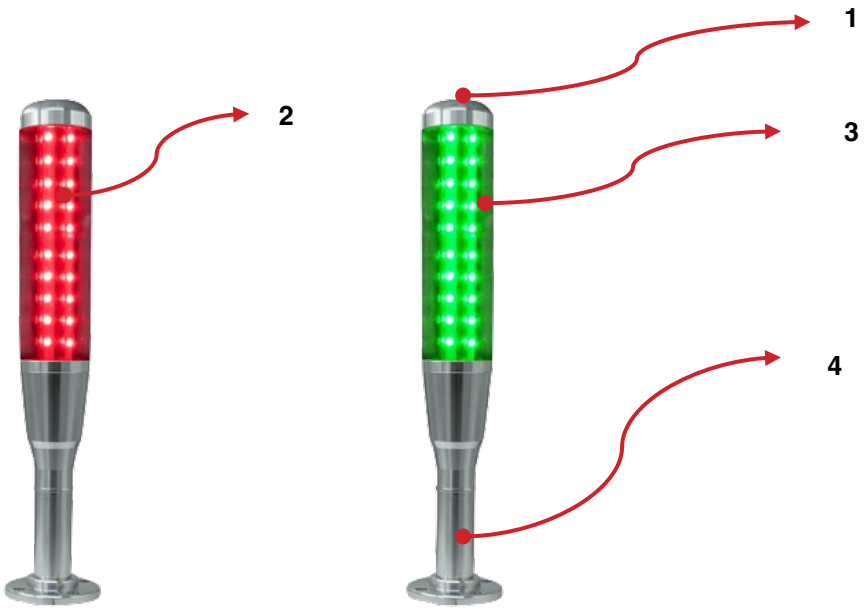
4.2.2 Base unit - Connections

1 Pressure probe hose clip connection

2 USB-Port

3 Signal light cable connection

4.2.3 Signal light



1 Buzzer

2 Red signal light

3 Green signal light

4 Angle adjustment mechanism

5. Operation

5.1 Safety

Note

Before starting the installation process, read chapter “2 Safety"!

The instructions contained therein must be followed!

Warning

Danger due to improper operation!

Improper operation can lead to serious injuries and damages.

Carry out all operating steps in accordance with the information and notes in this operating manual!

Never disable or bypass safety devices during operation.

Work in connection with the operation of this device must be carried out in accordance with the provisions of this chapter and the local work safety regulations.

Installing the device too close to accessible areas can cause hearing damage!

Danger

All work performed by persons without the appropriate authorization is prohibited.

5.2 Device Installation

5.2.1 Mount Pressure Alarm base unit

1 Choose location to mount the device considering power cable length and length of pressure probe hose

2 Mount the Pressure Alarm device using suitable screws for the mounting surface.

3 Mount the Pressure Alarm device using suitable screws for the mounting surface. Connect the hose:

4 Plug hose into hose clip connector on the device

5 Plug hose into twist-lock valve on airbag or insert hose into the airbag, at any opening

6 Hose must be inserted at least one meter into the airbag if twist-lock valve is not used!

5.2.2 Mount and connect signal lamp

1 Screw the signal lamp to a suitable surface and in a clearly visible place. In any case the signal lamp shall be positioned in a way that a minimum distance of 1m / 6ft is kept to people

2 Lead the cable through the cable gland at the base

3 Connect 10 meter extension cable to plug marked ‘Alarm’

4 Connect the plug of the signal lamp to the extension cable

5.2.3 Connect USB-C cable:

1 Plug the USB-C charger into the same circuit as the blower(s) for monitoring an inflatable.

- ✓ Ensure that both the blower and the monitoring device are connected to outlets on the same electrical circuit.
- ✓ If there's only one outlet available, you can use a power strip or splitter to connect both devices.
- ✓ Ensure the total power draw (blower + monitoring device) does not exceed the circuit's amperage limit to avoid tripping the breaker.
- ✓ The current differential pressure is displayed

2 Device will automatically power on

- ✓ ‘Power’ button lit → device is powered on
- ✓ ‘Wi-Fi button flashes → Hotspot enabled

5.3 Network Setup

The Bagjump Pressure Alarm Gen2 can be operated in 'Hotspot Mode' or can connect to your local Wi-Fi. The table below outlines the restrictions / advantages of both modes.

Hotspot Mode	Connected to local Wi-Fi
Monitor one device at a time	Monitor multiple devices at once
A short-term connection to prevent unauthorized access. The Hotspot session must be manually initiated on the device to reconnect.	Steady connection to device via Wi-Fi

5.3.1 Operate Pressure Alarm in Hotspot Mode

1 Connect a client device (desktop computer, laptop, tablet or phone) with the Wi-Fi hotspot of the pressure alarm device. To do so either scan the QR code on the type plate or connect manually to the 'pressure alarm' Wi-Fi hotspot

2 Wait for captive portal browser to pop up or manually go to 'pressure-alarm.local' in your preferred web browser

3 Follow chapter '5.4 Settings' to complete setup

5.3.2 Operate Pressure Alarm in Wi-Fi Network Mode (optional)

Note

When setting up multiple devices on the same Wi-Fi network, the following process must be completed **individually** for each device.

Attempting to set up multiple devices simultaneously may result in unexpected behavior and setup failures.

Wi-Fi network needs to have mDNS enabled to

Follow /repeat the steps below to connect the Pressure Alarm to your local network

1 Connect a client device (desktop computer, laptop, tablet or phone) with the Wi-Fi hotspot of the pressure alarm device. To do so either scan the QR code on the type plate or connect manually to the 'pressure alarm' Wi-Fi hotspot

2 Wait for captive portal browser to pop up or manually go to 'pressure-alarm.local' in your preferred web browser

3 Open the menu and choose 'Wi-Fi settings'

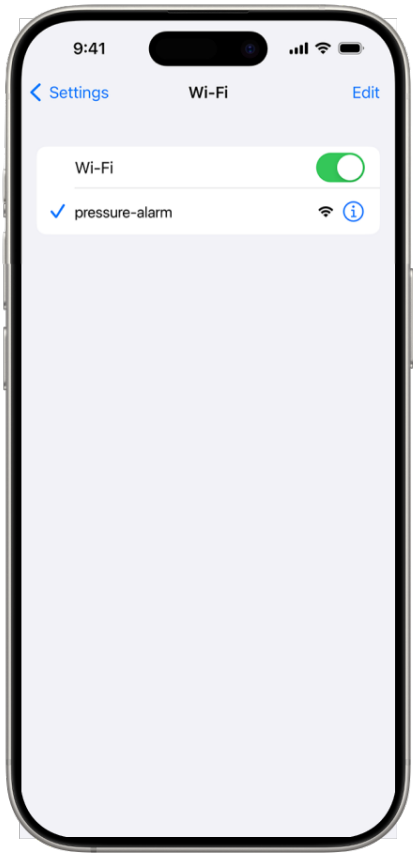
4 Select your network, enter the password and click 'Connect'

5 The Pressure Alarm is now registered within your network

6 If your client device doesn't automatically reconnect, switch back to your local Wi-Fi network. Then, open pressure-alarm.local in your browser to access the Pressure Alarm device within your local network

7 Repeat steps 1-6 for every Pressure Alarm device that should be added to the network

1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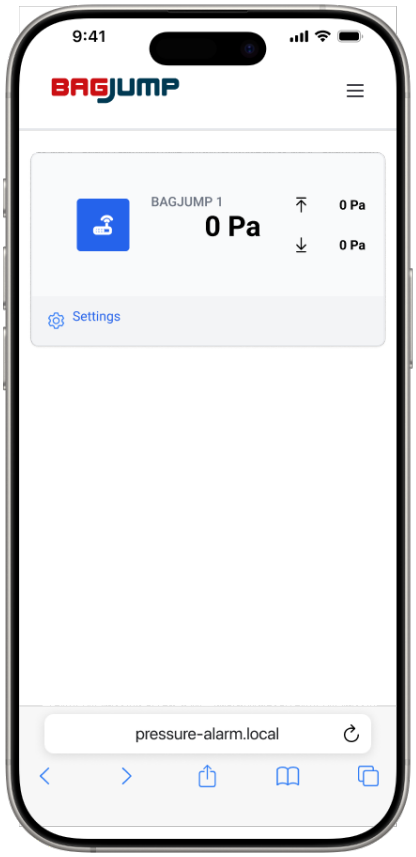
Settings
Wi-Fi
Edit
Wi-Fi
pressure-alarm

2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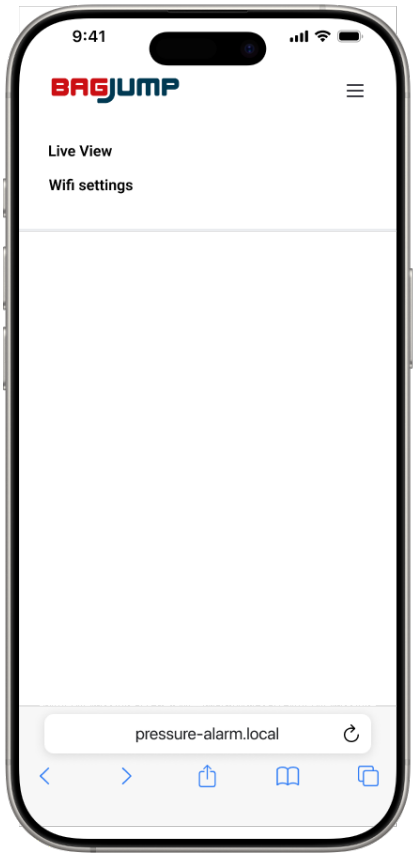
BAGJUMP
BAGJUMP 1
0 Pa
0 Pa
0 Pa
Settings
pressure-alarm.local

3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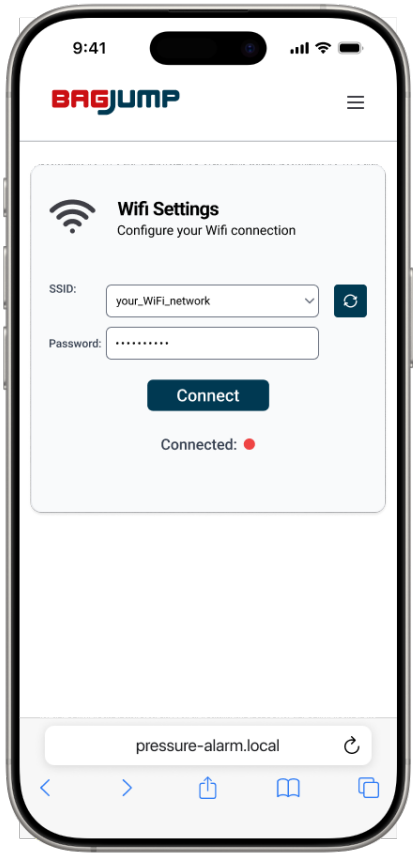
BAGJUMP
Live View
Wifi settings
pressure-alarm.local

4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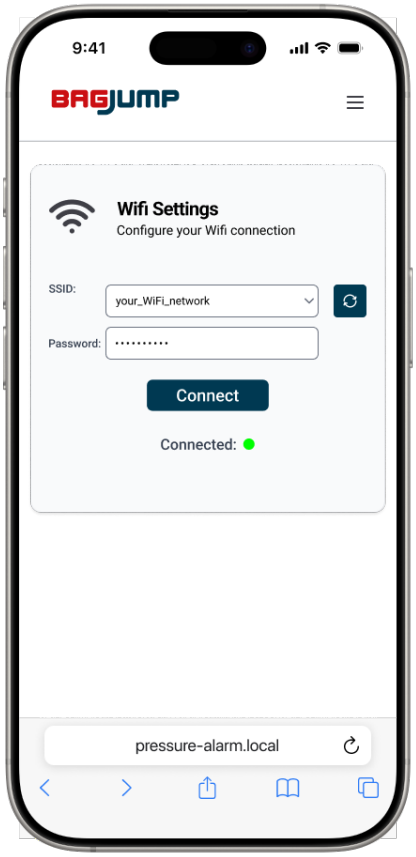
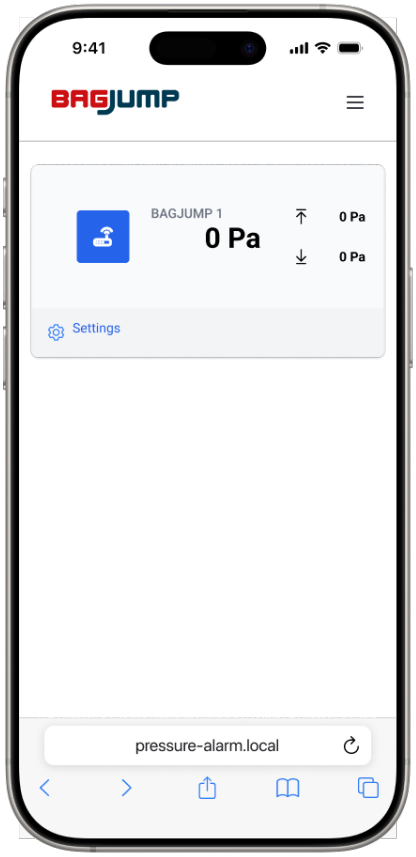
BAGJUMP
Wifi Settings
Configure your Wifi connection
SSID:
your_WiFi_network
Password:
Connect
Connected:
pressure-alarm.local

5


9:41
BAGJUMP
Wifi Settings
Configure your Wifi connection
SSID:
your_WiFi_network
Password:
Connect
Connected:
pressure-alarm.local

6


9:41
BAGJUMP
BAGJUMP 1
0 Pa
0 Pa
0 Pa
Settings
pressure-alarm.local

5.4 Settings

To view the settings page click the gear icon ⚙ on the ‘Live View’ dashboard.

5.4.1 Pressure Settings

1 Set "Lower pressure limit" to nominal pressure -10Pa

2 Set "Upper Limit" to nominal pressure + 50Pa.

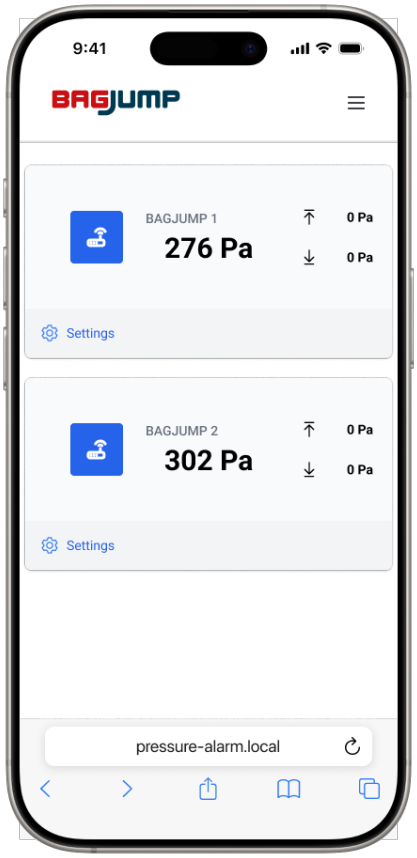
3 Select "Alarm Delay" setting

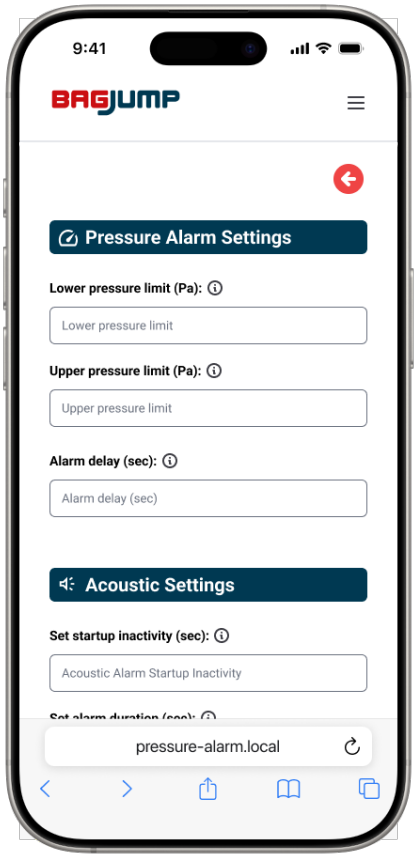
4 Default setting of the alarm delay = 2 seconds.

In case of frequent false alarms, follow the procedure below:

a) Verify if the "Lower Pressure Limit" can be further decreased by -10Pa. Conduct the necessary tests as outlined in the airbag manual. If it can be reduced, lower the "Lower Limit" value by an additional -10Pa.

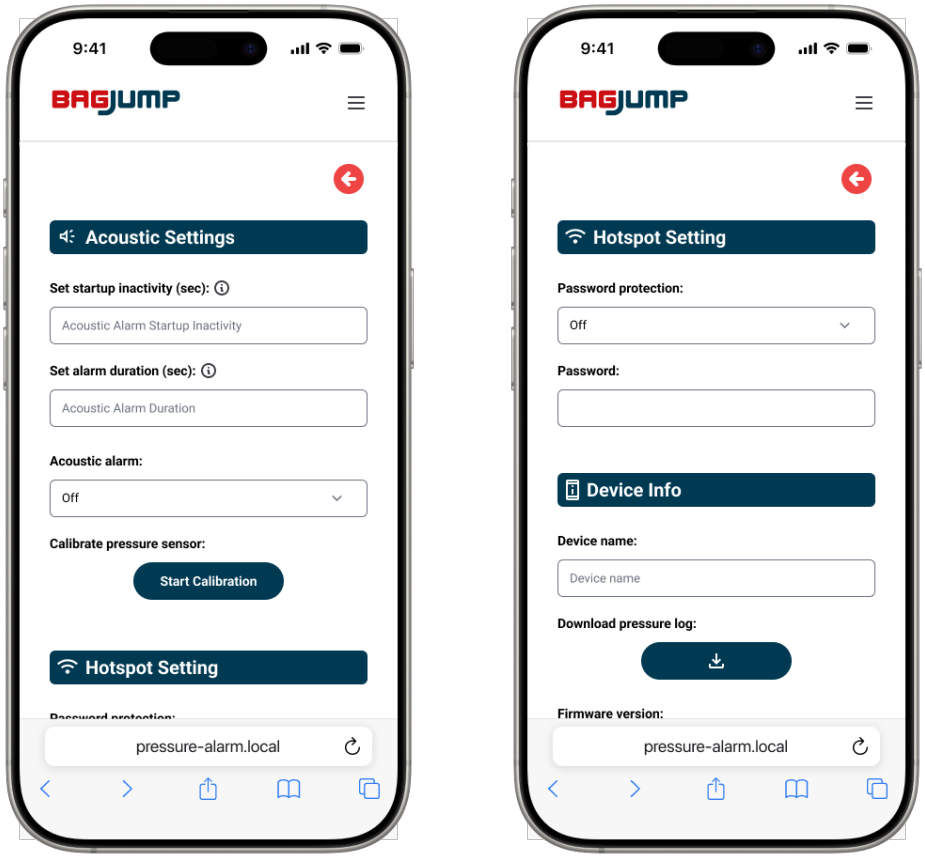
b) If not, gradually increase the "Alarm Delay" value by +1 second, up to a maximum of 5 seconds. If false alarms persist, revisit step a) above. If false alarms do not continue, refer to chapter "**Fehler! Verweisquelle konnte nicht gefunden werden.** - **Fehler! Verweisquelle konnte nicht gefunden werden.**”.





5.4.2 Acoustic Settings

1. **Startup Inactivity Period:** Configure the duration during which the alarm remains inactive after the device is powered on, allowing the inflatable to build pressure without triggering an alarm. Activate (ON) or deactivate (OFF) "Acoustic Alarm
2. **Acoustic Signal Duration:** Specify the length of time the acoustic signal will sound.
3. **Acoustic Alarm Activation:** Toggle the "Acoustic Alarm" to activate (ON) or deactivate (OFF) as needed..



5.4.3 Calibrate Pressure Sensor

> **Note**
>
> The pressure reading of a deflated inflatable must be 0 Pa (± 5 Pa). Initiate a sensor calibration when the pressure reading exceeds these limits for a deflated inflatable. This ensures that the system accurately reflects the correct pressure levels. The sensor calibration applies an offset to reset the currently measured pressure to 0 Pa.

1. **Deflate the Inflatable:** Ensure the inflatable is completely deflated. Select "Calibrate Pressure Sensor" menu
2. **Perform Calibration:** Click ‘Start Calibration’

5.5 Signal light

Signal light	Status Description
Red (constant)	Initialization - air cushion not yet ready for operation (see 5.4.2 Acoustic Settings)
Green	Normal Operation: The air cushion is ready for operation.
Red (flashing) **+ pulsing acoustic signal**	Alert: The differential pressure in the cushion is outside the set limits, or there is a power source failure. The red light and acoustic signal alternate every 500 ms. After the set alarm duration, the acoustic signal turns off, and the red light continues to flash.
Red **+ constant acoustic signal**	Device error A continuous acoustic signal sounds for 15 seconds and the red light lights up continuously until the error has been rectified.

5.6 Decommissioning

1 Pull the plug out of the socket

2 Device switches off after 15 minutes

6. Troubleshooting

6.1 Behavior in case of Error

- Determine cause of error → refer to table below.
- Immediately inform the person responsible at the place of operation about the error.
- Depending on the type of error, have it rectified by authorized specialists or contact customer service.

6.2 Error table

If errors occur which are not listed in the fault table, please contact the customer service.

Error Message	Cause	Recommended Action
Wait until device completes startup inactivity period	Device is still in the startup inactivity phase.	Allow the device to finish the startup process before use.
No connection to signal lamp	Signal lamp not connected or defective	Connect signal lamp Check plug connections
Pressure outside of limits	Pressure of inflatable outside of limits	Check blower and inflatable for damages
Power interruption	Power interruption	Check power source (circuit breaker, etc.)
Low battery! Wait for battery to charge!	Battery is low after an extended period of not being connected to power.	Plug the device into a power source to begin recharging the battery.
Device Error	Internal device error	Contact customer service

6.3 Rebooting / Resetting the device

Device reboot

- Press and hold power button for 3 seconds until power button flashes
    - The device will power off instead of reboot when it's not connected to a power source

Factory reset

- Press and hold power button for 10 seconds

7. Maintenance and repair

7.1 Safety instructions

7.1.1 Maintenance personnel

Warning

Risk of injury in case of insufficient qualification!

- Improper handling can lead to considerable personal injury and material damage!
- Maintenance work must only be carried out by qualified personnel!

7.1.2 Requirements

Note

Before starting the installation, read chapter 2 ‘Safety’.

The instructions contained therein must be followed!

Maintenance work may only be carried out when the device has been disconnected from the mains.

7.1.3 Handling of electrical energy

important

Relevant regulations and other generally accepted rules must be followed!

Always follow the local safety and accident prevention regulations.

A qualified person in the sense of the accident prevention regulations is a person who, on the basis of his technical training, knowledge and experience as well as knowledge of the relevant regulations, can judge the work assigned to him and recognize possible dangers.

7.2 Maintenance

The following section describes the maintenance work required for optimum and trouble-free operation.

Safety components must not be dismantled, moved or bridged. The intervals specified in the maintenance table for checking their functionality must be followed.

7.2.1 Maintenance schedule

Ongoing maintenance is based on the regular performance of the following maintenance tasks:

Interval	Maintenance work
daily	- Verify that the pressure displayed matches the specified nominal pressure after the inflatable is fully inflated. - Check for error messages in the web app.
annually	- Verify the measured pressure using an appropriate differential pressure measuring device. - Check device, signal lamp, hose and all cables for wear and defects. Repair or create customer service request according to 7.3 - Check settings

7.3 Repair

Note

The device should only be repaired by the manufacturer or by authorized specialist workshops.

7.4 Customer Support

To receive support, please visit our website and submit the customer service request form online:

https://bagjump.com/csr-requests/