

User Manual
BlokAlert



BlokAlert® BA2 Installation and User Manual V1.0.3
[80016 (UK/EU) 80017 (USA/AUS)]
System Number BA0093 onwards
Issue Date 19/12/2024

Contents

3	Introduction
3	The Process Explained
3	Remarks
3	What's Included
4	Technical Information
4	BA-R2 Receiver
5	60040 Fob (UK/EU) & 60041 (USA/AUS) – 4 Button Transmitter)
5	Charging the Fob
5	BA-CH1 Charger
6	Installation
6	Battery Charging Instructions
6	Operating Instruction
6	Basic Operation
7	Advanced Operation – Pairing a Fob Button
7	Advanced Operation – Erasing a Receiver

Introduction

BlokAlert® is a wireless, audio-visual warning system that can be quickly and easily deployed to the hook block of a crane. When activated by the lifting crew, the BlokAlert receiver gives out a recognisable audio-visual signal that can be seen and heard by site personnel in proximity to the hook block or load. This forewarns the workforce to the position and movements of the hook block, increases awareness, and reduces the risk of being struck by the crane's hook block, lifting accessories or load.

The Process Explained

1a, The Lifting Crew/Rigger

The handheld fob is activated by the riggers or lifting crew. When operated, the signal is transmitted to the receiver on the hook block of the crane.

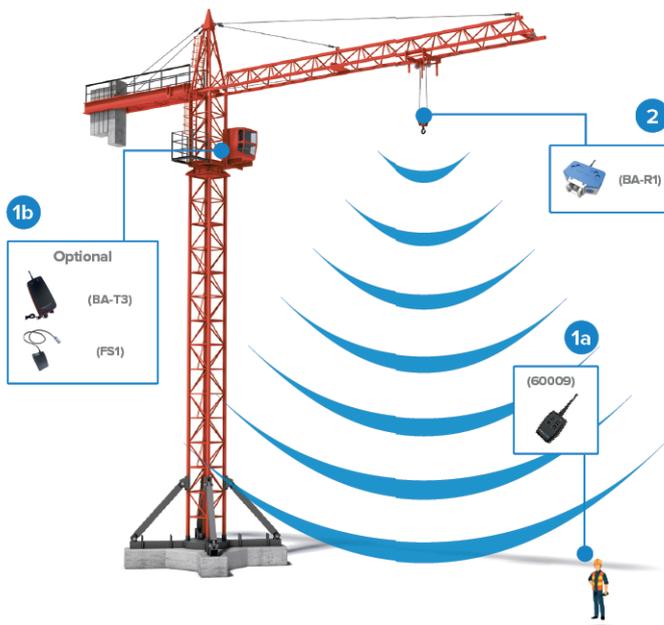
And/or

1b, In the Operator's Cab

The transmitter is activated by a footswitch in the crane cab. When operated, the signal is transmitted to the receiver on the hook block of the crane.

2, On the Hook Block

On receipt of a signal from a transmitter, the Receiver is activated, alerting the workforce to the proximity of the hook block.



* The required set up and installation are dependent on the machine and the environment. The above illustration characterises the most common installation

Remarks

1. Always adhere to the crane manufacturer's instructions.
2. All aspects of installation, removal, charging, use and fault finding should only be carried out by trained and competent persons
3. Ensure BlokAlert® parts and components do not interfere with crane manufacturers and/or third-party components, parts and systems, moving or otherwise.
4. The hook block parts and components are magnetically mounted; prior to adverse weather conditions or in any situation where the hook block may come into contact with the crane and/or third-party components, moving or otherwise remove all components from the hook block.
5. Always ensure that lanyards are connected, and Rapid Links are tightened. Consider that the hook block may change configuration, shape and size.
6. High powered magnets in use. Neodymium magnets are permanent and strong, use correct protective equipment to avoid trapping hazard.
7. Working at Height. If possible, installation work should be completed at ground level, prior to the crane erection and installation of the jib. For working at height, please refer to regional and site-specific regulations and guidelines and ensure installation team are competent and adequately trained.
8. BlokAlerts ® utilise the 868 MHz (UK/EU) & 918MHz (USA/AUS) FM Technology. For best results ensure a direct line of sight between all wireless transceivers and antennas.
9. A competent person should carry out pre-use checks prior to the commencement of work. Pre-use check sheets are available online from www.blokcam.com
10. Parts and components may differ from renders.
11. Manual subject to change without notice
12. Subject to Copyright

What's Included:

BA2 BlokAlert System(80016)

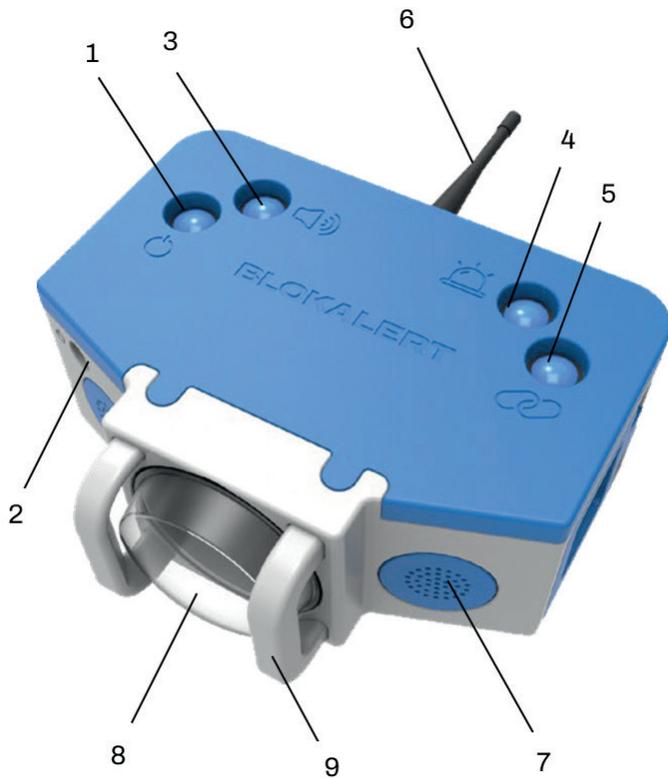
Part #	Description	Quantity
50000	6mm Rapid Links	1
50009	USB Memory Stick – 2GB	1
50012	25mm Flat Lanyard	2
60007	Lanyard c/w Retaining Magnet	1
60010	BA-CH1 Charger	1
60012	BlokAlert System Case	1
70040	BA-R2 Receiver (UK/EU)	1
60040	Fob – 4 Button(Transmitter) (UK/EU)	2
60044	Wireless Charging Pad & PSU	1

BA2 BlokAlert System(80017)

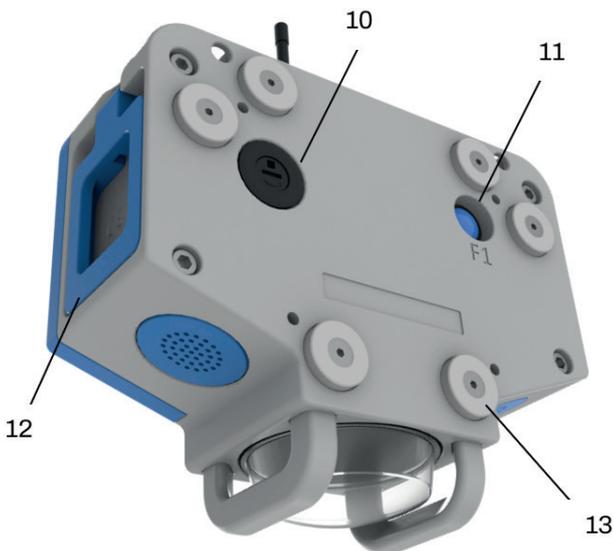
Part #	Description	Quantity
50000	6mm Rapid Links	1
50009	USB Memory Stick – 2GB	1
50012	25mm Flat Lanyard	2
60007	Lanyard c/w Retaining Magnet	1
60010	BA-CH1 Charger	1
60012	BlokAlert System Case	1
70041	BA-R2 Receiver (USA/AUS)	1
60041	Fob – 4 Button(Transmitter) (USA/AUS)	2
60044	Wireless Charging Pad & PSU	1

Technical Information

BA-R2 - Receiver



1. Latching Push Button- Power
2. LED - Power
3. Latching Push Button – Buzzer Enable/Disable
4. Latching Push Button – Beacon Enable/Disable
5. Momentary Push Button – Pairing
6. Antenna
7. Buzzer Cover
8. Beacon
9. Beacon Guards x 2



Technical Specifications

Size and Weight:

Height: 173mm (6.82 inches)

Width: 210mm (8.27 inches)

Depth: 86mm (3.39 inches)

Weight: 3300g (7.28 pounds)

Buzzer: 2 x 78db – 107db Electronic Sounders

Beacon: Bright LED Flashing Beacon

Easy Access Fuse: 500mA

Power: Internal Battery Pack (see below)

Power Consumption: Max 0.23 W

Operating Conditions: -10 °C to 50 °C (14 °F to 122 °F)

IP Rating: IP 67 (with external ports connected)

Transmission Frequency: 868 MHz / 918MHz

Casing: Aluminium.

Internal Battery Specifications

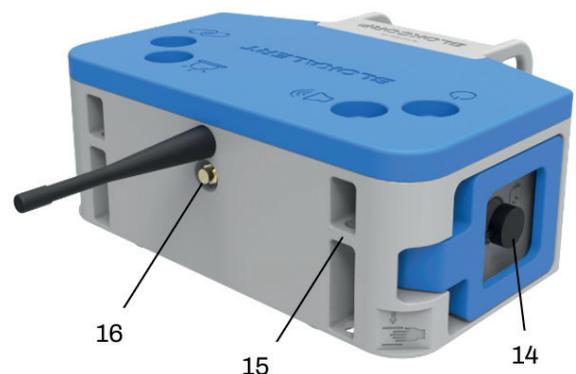
Capacity: 8 cell 14.8V/5200mAh

Watt Hours: 76.96Wh

Cell Type: Lithium Ion

Nominal Cell Voltage: 1.85V

MSDS: available from blokcam.com



60041/60042 Fob - 4 Button (Transmitter)



1. LED - Low Battery (Red)
2. LED - RF Transmit (Green)
3. LED - RF Acknowledge from Receiver (Green / Red)

Technical Specifications

Size (excluding antenna and rubber boot):
 Height: 90mm (3.54 inches)
 Width: 54mm (2.13 inches)
 Depth: 27mm (1.06 inches)
 Frequency: 868 MHz / 918 MHz
 Battery Type: 3 x AAA (supplied)
 Battery Life: 2 years @ approx. 50 x 0.5 sec presses per day
 Changing the Battery: Changing the Battery: Remove the six enclosure screws. Remove 2 battery compartment screws and replace batteries, taking care of cables and battery polarity
 Ingress Protection: IP65

Charging the Fob

1. Plug in the wireless charging pad supplied to the mains.
2. Place the fob on the wireless charging pad, voltage of charger is indicated as lower in the diagram. The charger will return to Step 1 if the battery is used. A load larger than the cut-off current will initiate a new charge cycle.



BA-CH1 - Charger



1. Charge Indicator Plate
2. LED - Status Indicator
3. Socket - Power input
4. Plug - Charge Output

Technical Specifications

Input: 100-240VAC
 Frequency: 50-60Hz
 Amps: Max 0.9A

Charge Indicator Plate

Led	Mode	Output
Orange	Fast Charge	2.0A 16.8V
Yellow	Top-off Charge	<0.85A 16.8V
Green	Charged	<0.1A
Green	Ready / Standby	N/A

Charging method

Step 1 - Constant Current Charge



To start a charge cycle; connect the charger to the mains. The charger is in constant current mode, charging with the maximum current indicated on the charger, the LED-indication on the charger is ORANGE. This step allows rapid charging of your battery until the battery voltage has increased to a certain set level

Step 2 - Constant Voltage Charge



When the battery voltage has increased to a certain set level the charger enters constant voltage mode, charging with a decreasing current until the current is below the chargers charge termination level (indicated on the charger). The LED indication on the charger is ORANGE. When the battery has reached typically 90 - 95% of its full capacity the charge current has dropped below a set level and the LED-indication on the charger changes to YELLOW to indicate that the battery is almost fully charged and may be ready for use. The constant voltage charge continues and the battery reaches its full capacity at the end of this step

Step 3 - Charge Complete



The LED-indication on the charger is GREEN and the battery is fully charged. For Li-Ion batteries the charge current is zero and the battery has been charged to its full capacity. After end of charge battery voltage will remain at "Step 2" level even if output voltage of charger is indicated as lower in the diagram. The charger will return to Step 1 if the battery is used. A load larger than the cut-off current will initiate a new charge cycle.

Installation

Mount & Secure the Receiver

Pre-empt the position of the Receiver and consider:

- a. the remarks on page 3
- b. the lanyard length and distance to a secure point
- c. the visibility of the Beacon

1. Magnetically mount the Receiver to a clean and flat surface.
2. Fit Rapid Link to Transmitter anchor point.
3. Choke and secure a lanyard to a fixed and secure point.
4. Attach the loose end of Lanyard to the Rapid Link.
5. Firmly tighten the Rapid Link.

When necessary reverse the above steps for removal.



Battery Charging Instructions

Foreword

Updates and language specific user manuals for Li-Ion Battery

Chargers are available on www.mascot.no/downloads/usermanuals

1. Connect the charger to the mains and to the Receiver ChargePort.
2. Disconnect the Charger when the charge LED is green and replace Charge Port Cover/Boot.



Operating Instructions

Foreword

Operation is reliant on correct installation, a charged Receiver and Fob.

Basic Operation

1. First, using the F1 button on the back of the Receiver, choose your preferred mode of operation.

- a. With the F1 button disabled (out) the Receiver will operate as long as the Fob is operated.
- b. With the F1 button enabled (in) the Receiver will toggle ON/OFF on each Fob button press.



2. Press the Power Button and check power LED



3. To enable the Buzzers, push this button



4. To enable the Beacon, push this button



Advanced Operation: Pairing a Fob Button and/or Foot Switch

Foreword

With BlokAlert®, you can pair Fobs and Receivers without opening either enclosure. Each receiver has a maximum memory for up to 28 pairings, these can be from any switch/button on any Fob or Foot switch connected to BA-T3 (Transmitter)

1. Ensure the Receiver is powered up.
2. On the Receiver, push and release the Pairing Button.
The Receiver will buzz once
3. Push and release the pairing button again. The Receiver will buzz twice.
4. Push and release the pairing button for a third time. The Receiver will buzz three times, indicating the unit is ready to allocate a Fob button or Foot switch
5. Press the Fob button or Foot switch that you wish to pair.
6. The Receiver will buzz twice to confirm pairing.
7. Repeat for any additional Fobs and buttons or Foot switches.



Advanced operation: Erasing a Receiver

1. Press and hold the Pairing Button approx. 10 seconds.
2. The Receiver will sound a long buzz to confirm all Fobs (Transmitters) are erased.



Crosby BlokCam
123 Proxima Park, Houghton Avenue
Waterlooville, Hants, PO7 3DU

+44 (0) 23 9248 4491
sales.sp@kitocrosby.com