



Assist Call BACM Emergency Assistance Kit

Installation and Operation Manual



Table of Contents

1	Introduction.....	3
1.1	What is an Emergency Assistance Alarm	3
1.2	Suitability	3
2	Product Overview	3
3	Design Guidelines.....	3
3.1	Ceiling Pull Cord location	3
3.2	Overdoor Indicator location.....	3
3.3	Cancel/reset point location.....	3
4	Important Safety Information	4
4.1	Unpacking the Beacon BACM.....	5
Installation		5
4.2	Connecting the Beacon BACM Assist Call emergency assistance alarm kit	5
4.2.1	Beacon BACM Kit connection to BA4ZM Controller	5
4.2.2	Beacon BACM Kit connection to a Beacon Master Station, System Expander Panel and Assist Call Master Station	6
4.2.3	Beacon BACM Kit connection to Beacon BTB type B Outstation.....	6
4.3	System Operation	7
4.3.1	Raising the Alarm inside the WC.....	7
4.3.2	Indication outside the WC.....	7
4.3.3	Acknowledging the alarm.....	7
4.3.4	Resound Feature.....	7
4.3.5	Resetting the system.....	7
5	Maintenance	7
Notes.....		8

1 Introduction

1.1 What is an Emergency Assistance Alarm

An emergency assistance alarm is used by disabled people to summon assistance. The system generally consists of a ceiling mounted pull cord, a cancel plate, and an overdoor indicator plate. These are connected back to an Assist Call controller or Beacon master station depending on the chosen configuration.

1.2 Suitability

An Emergency assistance alarm must be provided to all accessible toilets, accessible bathrooms, accessible bedrooms, accessible showers and accessible changing areas.

The Assist Call system is designed to fully comply with BS8300- 2018, emergency assistance alarms are called for in all new buildings other than dwellings in the following "Building Regulations Approved Document M:2020".

2 Product Overview

The Assist Call Beacon BAKIT Emergency Assistance Alarm kit is a 2 wire system consisting of a ceiling pull cord located near to the WC, cancel plate also located near to the WC and over door indicator plate located above the door outside of the WC .

The Beacon kit is intended to be utilised with a Beacon BA4ZC 4 Zone controller whereas the BAKIT kit is utilised with a Beacon Master Station either Beacon BM2/4/8, or Beacon BMNET, System expander panel Beacon BMNETEX or Assist Call Master Station should be located in a permanently staffed area.

Additional assist call devices can be connected to the circuit however this is dependent upon configuration, please see the installation section for exact details and recommended cabling. of either one additional cancel plate or overdoor indicator and up to 5 additional ceiling pull cords. All Assist call devices can be wired in any order so wiring runs can be kept to a minimum.

The Assist Call system wired from a Beacon master station or controller features BS8300 "acknowledge" function, this requires that "visual and audible feedback should be provided to indicate that, when the alarm has been operated, the emergency assistance call has been acknowledged and is being actioned. *Note an indication that assistance is on its way will reassure those in distress.*"

All Assist Call devices utilise blue halo indication so that they will not be confused with fire alarm devices.

3 Design Guidelines

Before designing an emergency assistance alarm the guidelines in BS8300:2018 and "Building Regulations Approved document M :2020" should be consulted first.

3.1 Ceiling Pull Cord location

The ceiling pull cord should be located ideally within the grab rail such that it is reachable from the WC and from the floor close to the WC

Ceiling pull cords should consist of 2 red bangles of 50mm diameter one set at a height of between 800mm and 1000mm and the other set at a height 100mm above the floor.

3.2 Overdoor Indicator location

The overdoor indicator should be located so that it is easily seen and heard by those able to give assistance.

3.3 Cancel/reset point location

The cancel point should be located such that it is reachable from the wheelchair, WC, tip up seat in a shower facility or bed within an accessible bedroom. The cancel point bottom edge should be between 800mm and 1000mm above the floor.

Please see diagram attached for more information



4 Important Safety Information

This Equipment must only be installed and maintained by a suitably skilled and competent person.

This Equipment is defined as Class 2 in EN60950 (Low Voltage Directive) and must be EARTHED.



Caution

Warning

Warning

Warning

Warning



Indoor Use Only

Shock Hazard-

Isolate Before Opening

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

THIS UNIT MUST BE EARTHED

NO USER SERVICEABLE PARTS



The Beacon 1 Zone controller requires a 3A switched fuse spur.



Anti-static handling guidelines

Make sure that electrostatic handling precautions are taken immediately before handling PCBs and other static sensitive components.

Before handling any static-sensitive items, operators should get rid of any electrostatic charge by touching a sound safety earth. Always handle PCBs by their sides and avoid touching any components.

4.1 Unpacking the Beacon BAKIT

Remove the equipment from its packing, and check the contents against the following list:

- BAPCM Ceiling Pull Cord.
- BAM Overdoor Indicator Plate.
- BACM Cancel Plate
- Accessible WC Sticker.
- Instruction Sticker (to be located within the WC).
- Installation and operation manual.
- Accessory pack with the following contents:-
 - 6 no device 2 part terminals.
 - 6 no device mounting screws.

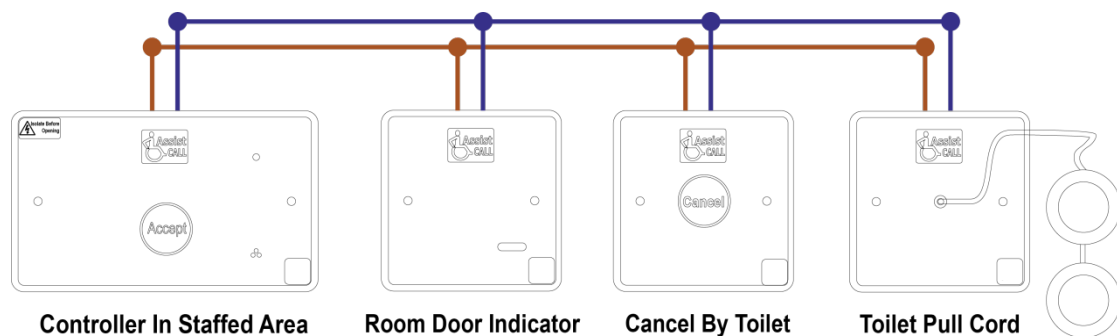
Installation

4.2 Connecting the BAKIT Assist Call emergency assistance alarm kit

The BAPCM, BAM and BACM device plates mount onto a 25mm UK single gang back box.

4.2.1 BAKIT Kit connection to BA4ZM Controller

The devices are wired to the terminals marked 0 and +, the devices are polarity sensitive, however there are no in or out terminals and devices can be wired in any order. The cabling between the controller and the devices is 2 core 1 mm csa flex, wired in a radial circuit up to 150 m length. The circuit is fully monitored for open and short circuit and a 10K EOL resistor should be fitted across the terminals in the last device.



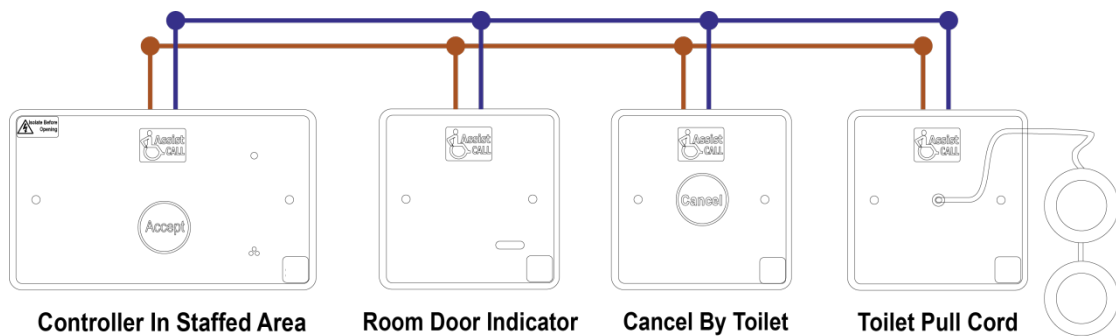
Additional assist call devices can be connected to the circuit of either one additional cancel plate or overdoor indicator and up to 5 additional ceiling pull cords.

All system wiring should be installed to meet the appropriate parts of BS 7671 (Wiring Regulations). Other national standards of installation should be adhered to where applicable.
 Extra Low Voltage (ELV) Wiring:- Always segregate low voltage wiring from the main wiring.

4.2.2 BAKIT Kit connection to a Beacon Master Station, System Expander Panel and Assist Call Master Station

The devices are wired to the terminals marked 0 and +, the devices are polarity sensitive, however there are no in or out terminals and devices can be wired in any order. The cabling between the controller and the devices is 2 core 1 mm csa flex, wired in a radial circuit up to 150 m length. The circuit is fully monitored for open and short circuit and a 10K EOL resistor should be fitted across the terminals in the last device.

ACS Change Diagram please



Additional assist call devices can be connected to the circuit of either one additional cancel plate or overdoor indicator and up to 5 additional ceiling pull cords.

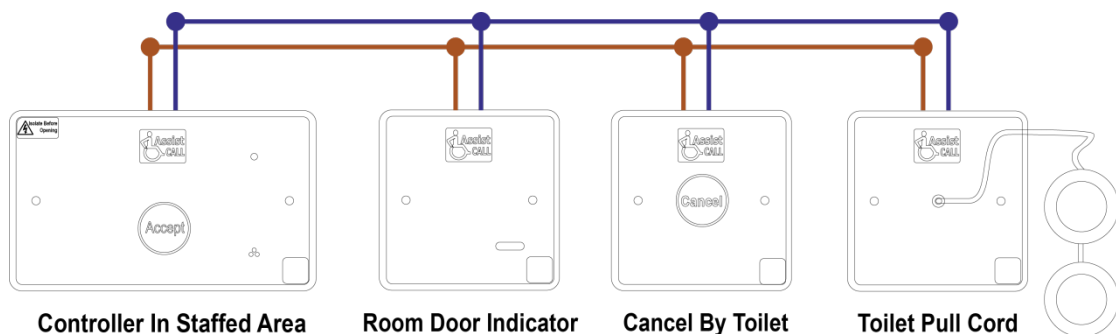
All system wiring should be installed to meet the appropriate parts of BS 7671 (Wiring Regulations). Other national standards of installation should be adhered to where applicable.
 Extra Low Voltage (ELV) Wiring:- Always segregate low voltage wiring from the main wiring.

4.2.3 BAKIT Kit connection to BTB type B Outstation

as the wiring details are different from those previously mentioned.

The devices are wired to the terminals marked 0 and +, the devices are polarity sensitive, however there are no in or out terminals and devices can be wired in any order. The cabling between the controller and the devices is **2 core 1.5 mm csa fire resistant cable** to match that of the type B outstation circuit. The circuit is extended from the terminals marked EOL Out in the type B outstation.

ACS To Alter diagram



The circuit is fully monitored for open and short circuit and a 10K EOL resistor should be fitted across the terminals in the last device.

Please note only additional pull cords can be added in this configuration up to 5.

All system wiring should be installed to meet the appropriate parts of BS 7671 (Wiring Regulations). Other national standards of installation should be adhered to where applicable.
Extra Low Voltage (ELV) Wiring:- Always segregate low voltage wiring from the main wiring.

4.3 System Operation

4.3.1 Raising the Alarm inside the WC

The person in distress raises the alarm by pulling on one of the red pull cord bangles, the blue indicator on the ceiling plate will indicate steady blue and the blue indicator flash and sounder will activate on the cancel plate.

4.3.2 Indication outside the WC

The overdoor indicator plate will flash and sounder will activate to show the location of the alarm, the ViAC-1ZC controller should be located within a permanently staffed area. The blue indicator will flash and the sounder will activate on the controller to alert staff of an alarm.

4.3.3 Acknowledging the alarm

A member of staff acknowledges the alarm by pressing the button adjacent blue indicator on the controller, the blue indicator will change state from flashing to steady and the internal sounder will sound intermittently every 15 seconds. The ceiling pull cord indication will extinguish, the blue indicator on the cancel plate and the overdoor indicator changes state from flashing to steady with intermittent sounder operation every 15 seconds to confirm to the occupant that help is on the way.

4.3.4 Resound Feature

If the assist call alarm is not reset within 2 minutes of being acknowledged it will automatically resound causing the master station and all of the devices within the alarm circuit to flash and sound mentioned above.

4.3.5 Resetting the system

When the call has been attended to the alarm is reset by pressing the cancel button within the WC.

5 Maintenance

It is a requirement of BS 5839-9:2021 that a maintenance agreement be in place for the EVCS. The maintenance schedule should be as follows:

Frequency	Test
Monthly	Test the system monthly by operating a pull cord, acknowledge the call using the controller, check all indicators and reset from the cancel plate within the WC . Record these results in the site log.

Notes



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