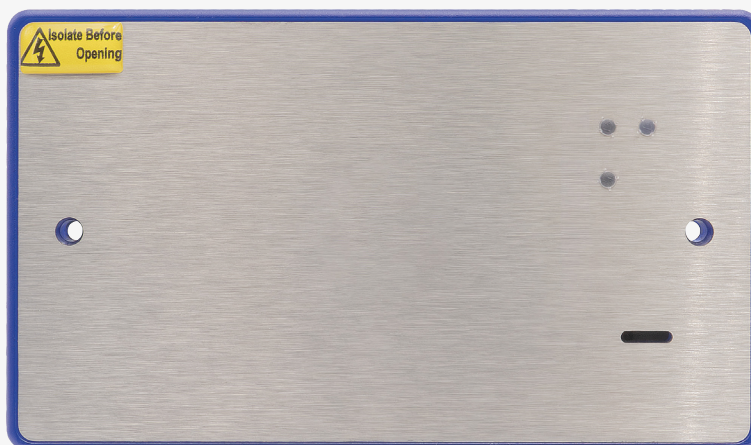




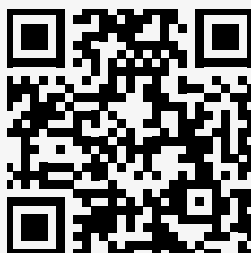
Beacon

B1A4ZMPS

Beacon Assist Call 4 Zone Module Power Supply Unit



Installation Instructions



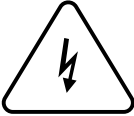
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1. Overview

The B1A4ZMPS is a power module which is used in conjunction with the Assist Call Network range. It supplies 12 volts DC and is compatible with B1A4ZM 4 zone control modules.

2. Important Safety Information

This Equipment must only be installed and maintained by a suitably skilled and competent person.
This Equipment is defined as Class 1 in EN IEC62368-1:2020+A11:2020 (Low Voltage Directive) and must be EARTHED.



Caution



Indoor Use Only



CE



Warning



UKCA

Warning

Warning

Warning

Warning

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

Each 4 zone control module requires a 3A switched fuse spur.

3. 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. Unpacking the B1A4ZMPS

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

- B1A4ZMPS Power Module
- Installation and operation manual
- Accessory pack with the following contents:
 - 2 x Mounting Screws

5. Installation Power Module

The B1A4ZMPS control module mounts onto a 35mm UK double gang back box.

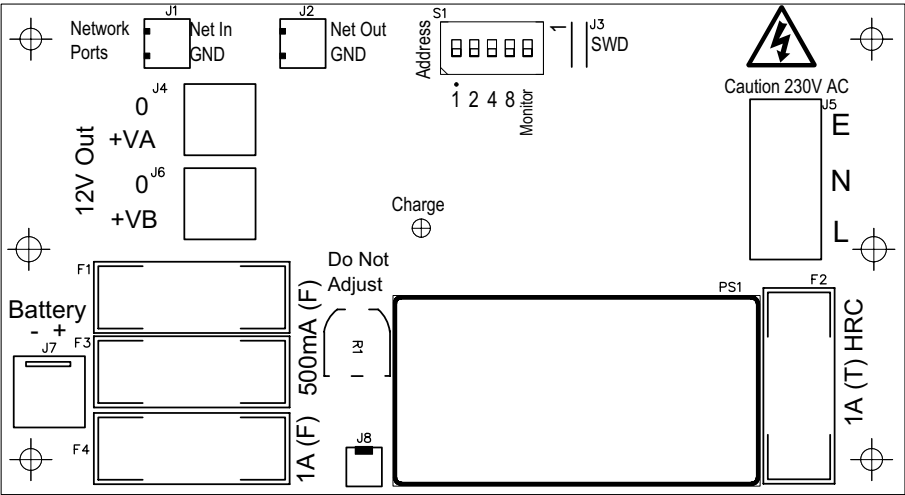


Figure 1 B1A4ZMPS Rear View

5.1. Module Cabling

Cabling between control and PSU modules requires data and power, please see table below for information.

System Type	Cable Type	Max length (m) between PSU module to Control Module		
		Power Pair Single	Data Pair Single	Power Pair Twin twisted
1 x PSU & 4ZM	CAT5/6	50	100	100
1 x PSU & 2 x 4ZM	CAT5/6	50	100	100

Table 1 - Module Cabling Information

5.2. Fused Outputs A & B

There are 2 x 12 volt fused outputs available, each is rated at 500mA. It is possible to power up to 2 x control modules from each output. We would recommend control modules being locally powered from a power module for ease of indication and fault finding, volts drop should be considered.

5.3. Required Equipment

Where a simple master repeater set up is required, 2 x B1A4ZM control modules will be required and 1 x B1A4ZMPS power supply module.

5.4. Cabling

The cabling required is 1 pair (2 core) for Data and 2 pair (4 core) for 12VDC power, a suitable cable would be a CAT5/6. Please see Table 1 – Module Cabling Information. The recommendation is to use the Brown and Blue pairs of the CAT5/6 cable for the positive and negative power terminals respectively, and the Orange pair for the data terminal, with the white-orange wire being used for ground. The green pair can also be used for the data instead of the orange pair. Whichever pair is unused must be isolated. An example of how the ends of the CAT5/6 cable should be terminated can be seen in Figure 4 – CAT5 Terminations.

The power supply module should be located next to either the controller or repeater modules.

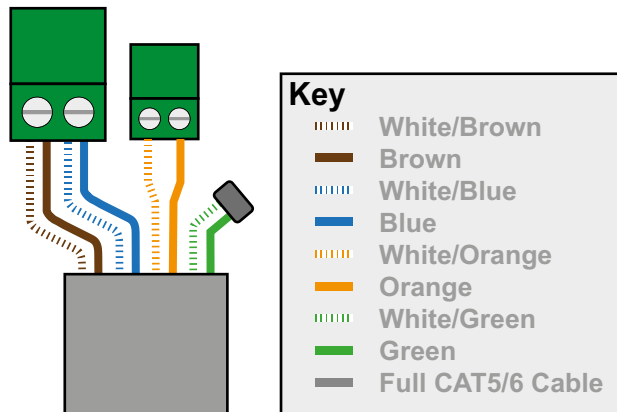


Figure 4 – CAT5 Terminations

5.5. Network Terminals

There are 2 x network terminals marked 'GND & Net In' and 'GND & Net Out',

The data pair should be connected from the previous module Net Out to the Net In on the power module then from Net Out to Net In on the next module. This can be seen in Figure 5 – Master-Repeater Wiring Example below.

5.6. Address DIP Switch

This will be set on address 1 as a factory default, for a simple master repeater set up, the address should be left as address 1 in the Power module. The address switch is shown in Figure 1 B1A4ZMPS Rear View. The addressing of modules always start at 1, power modules are then consecutively addressed, If there are 3 power modules they will be addressed 1, 2, 3 The addressing should be ignored unless forming part of a larger 'Assist Call Network' system, if so consult 'Assist Call Network' Installation and Commissioning manual for guidance.

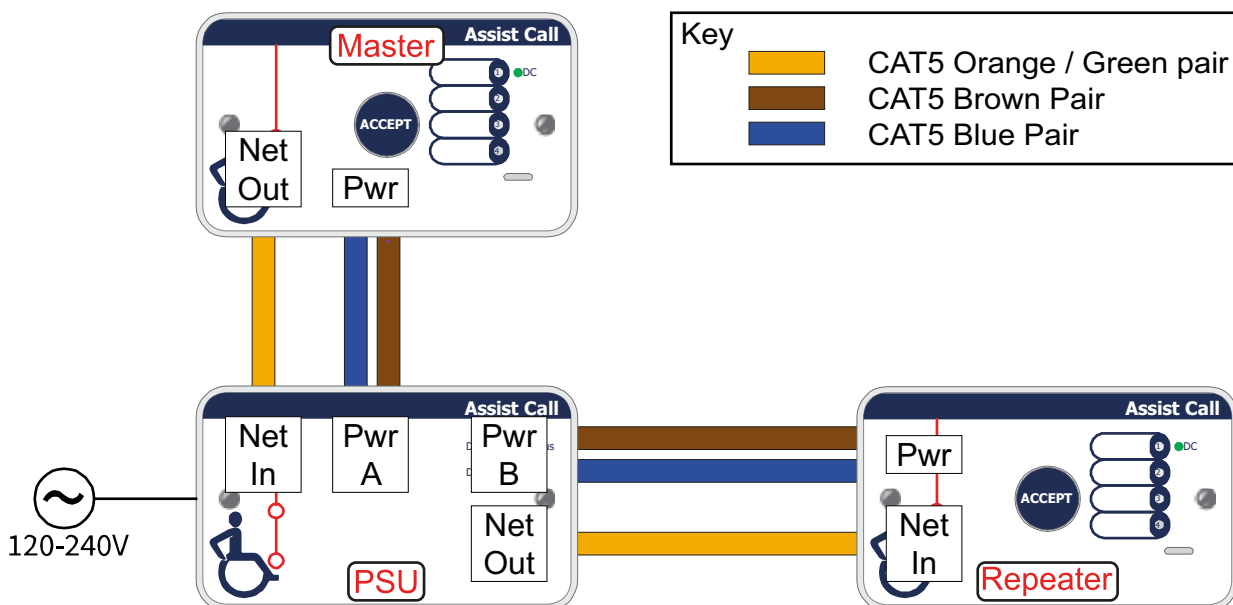


Figure 5 – Master Repeater Wiring Example

6. Commissioning

For commissioning see manual for B1A4ZM or Assist Call Network manual.

7. Status Indication

The status indicator is located on the top right hand of the fascia and indicates as follows:-

Status	Output A	Output B	Description
			Mains and battery healthy
			Mains failure, PSU running on battery backup
			Battery open circuit fault
			Battery short circuit / charger fault
			Output A fuse fault
			Output B fuse fault
			PSU powered down. Modules connected to PSU will have also powered down

Table 3 - B1A4ZMPS Status indication

8. Maintenance

The maintenance schedule should be as follows:

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