Specification

Operating temperature	-10 to +50°C
Storage temperature	-20 to +60°C
Humidity	0% to 95% non-condensing
IP rating	IP54
Operating voltage	220 to 240V AC
Current consumption	45mA (normal operation) 57.5mA (with mains disconnected)
Battery backup	1 x 6V 4Ah Yuasa NP4-6

For information on routine battery changes, refer to the Ziton Universal PSU Installation Guide (MK077)

Battery standby time	72 hours*

*Typical 5 year battery life based on normal useage. Note; if 72 hours battery standby is required, it is recommended that the battery is replaced every 3 years.

Operating frequencies	868 MHz
Output transmitter power	Variable 0-14 dBm
Dimensions	270mm (W) 205mm (H) 75mm (D)
Weight	1.8kg (including battery)

Regulatory information

Manufacturer	EMS Ltd. Technology House, Sea Street, Herne Bay, Kent, CT6 8JZ, United Kingdom
Year of manufacture	See serial number label inside unit
Certification	CE 13
Certification body	0359
CPR certificate DOP	0359-CPR-00249
Approved to	EN54-4 EN54-18 EN54-25
Application	Intended for use in fire detection and fire alarm systems in and around buildings. Indoor use only.
European Union directives	EMS declares that the radio equipment type Ziton Radio Cluster Communicator Mains is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.utcfssecurityproducts.eu/dop/

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see www.recyclethis.info
Dispose of your batteries in an environmentally friendly manner according to your local regulations.

Contact information

For contact information, see www.utcfireandsecurity.com

ZITON

RCC Mains Installation Guide

General
The Ziton Radio Cluster Communicator (RCC) Mains is available under the following part number:

PART NO	VARIANT TYPE
ZPR868 -CM	Ziton RCC Mains c/w Wire Aerials

The address of the unit is set using the menu programming structure available on the systems associated Radio Hub. Refer to the programming manual (doc ref: TSD021) for details of compatible Ziton devices and full programming details.

The installation must conform to BS5839:Part 1 (or applicable local codes). This Radio Cluster Communicator is suitable for indoor use only.

Power Requirements
The Radio Cluster Communicator is powered from a 220 to 240V AC supply. The mains supply should use cable with a minimum cross section of 1.5mm^2 and be connected through a 20mm cable entry gland incorporating cable clamp into the Radio Cluster Communicator. A recommended extra 15mm of cable should be considered for the earth connection to provide extra protection should the live or neutral wires disengage.

This equipment relies on the building installation for protection and requires a 5 Amp protection device which should be labelled "Fire Alarm – Do Not Switch Off".

A 6V 4A battery is supplied with the device which will allow 72 hours battery backup. - see the Specification section for more information.

Installation of the RCC
Ensure that the Radio Cluster Communicator is sited in accordance with the survey and design details. The recommended minimum distance between metal objects or other equipment from the aerial is 600mm. The recommended minimum distance to any electrical equipment is 2 metres.

To gain access into the unit, remove the four corner covers and screws, allowing removal of the front plate. These must be kept in a safe place for refitting once installation is complete. Housed inside the unit will be the following parts:-

1 x 868MHz Radio Cluster Communicator transceiver PCB complete with aerials.

1 x Power supply with pre-attached connection lead.

Removing / inserting the Ziton RCC PCB
Care must be taken to ensure the Ziton RCC PCB is not damaged during the installation process. The Radio Cluster Communicator PCB can be removed for additional access to mounting points if required.

If removed, care must be taken to ensure that the PCB is carefully stored, correctly re-inserted and held in place by all four PCB retaining clips. The PCB must also be further secured using all three PCB retaining screws.

The locations of the PCB retaining clips and PCB retaining screws are shown in Figure 1.
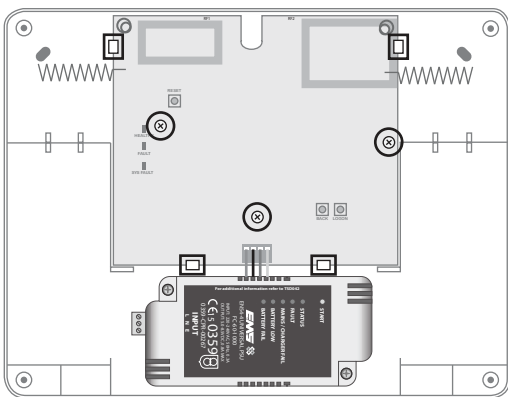
☐ = PCB retaining clips

⊗ = PCB retaining screws

Figure 1

In order to remove the PCB, firstly remove all three PCB retaining screws. Then release the top two PCB retaining clips, by gently easing them outwards. This will allow the top of the PCB to be freed. Release the bottom two PCB retaining clips by gently easing them outwards. This will release the PCB.

Having now unclipped the PCB, it must be carefully lifted away from the casework and stored in a suitable, safe location.

Gaining cable access

Remove required cable entry knockout for mains wire connections. DO NOT USE knockouts located at the bottom of the unit or in the shaded area for mains wiring. Available knockouts are shown in Figure 2.
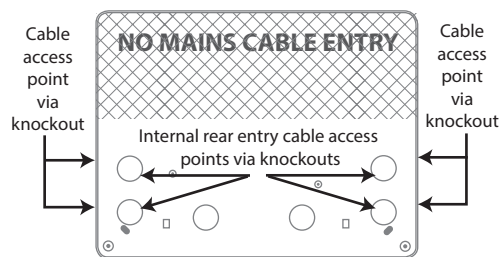

Cable access point via knockout

Cable access point via knockout

NO MAINS CABLE ENTRY

Internal rear entry cable access points via knockouts

Figure 2

Back box mounting

Position the Radio Cluster Communicator in the required location and mark the required fixing positions. These are shown in Figure 3.
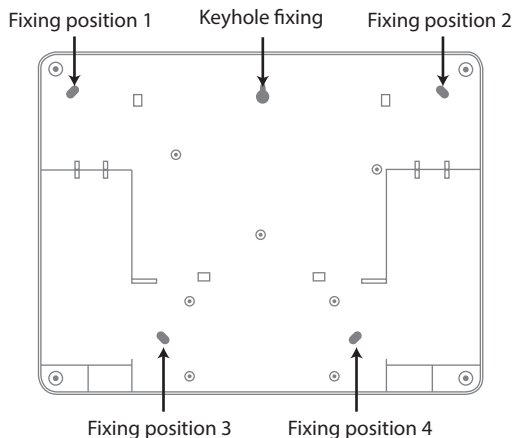

Fixing position 1   Keyhole fixing   Fixing position 2

Fixing position 3   Fixing position 4

Figure 3

Using suitable screws and fixings install the top screw and locate over the keyhole slot provided. Ensure the screw does not protrude too far from the wall so a secure mounting can be achieved. Install the remaining two screws in the bottom left and right hand positions provided. Additional fixings are available if required in the top left and right hand positions provided.

Re-Inserting the Ziton RCC PCB

To re-insert the PCB, firstly lower into place and slide the lower edge of the PCB under the bottom two PCB retaining clips (see Figure 1). Then ease the top two PCB retaining clips outwards and secure it into place. The PCB should now be correctly affixed into position. Secure the PCB in the housing by refitting all three PCB retaining screws.
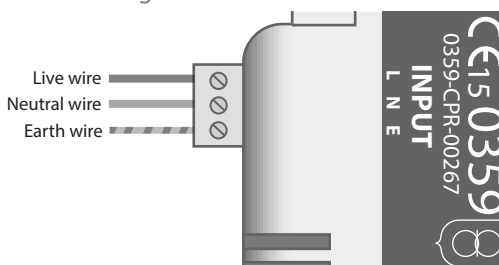
Mains wiring

Live wire
Neutral wire
Earth wire

Figure 4

Power supply orientation

It is possible to fit the backup battery on either side of the unit and this, accompanied with rotation of the power supply allows maximum installation flexibility. If the power supply is required to be rotated, the following procedure must be followed. DISCONNECT MAINS SUPPLY. Remove the two fixing screws (screw fixing positions shown in Figure 5).
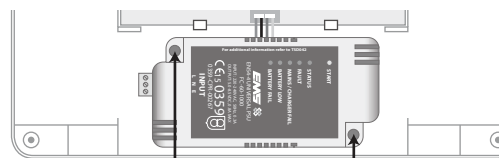

Screw fixing positions

Figure 5

Rotate the power supply and place it into position, aligning the power supply with the two screw fixing positions. Re fit the two fixing screws to hold the power supply securely into position. Ensure battery and thermistor wiring is routed as shown in Figure 6.
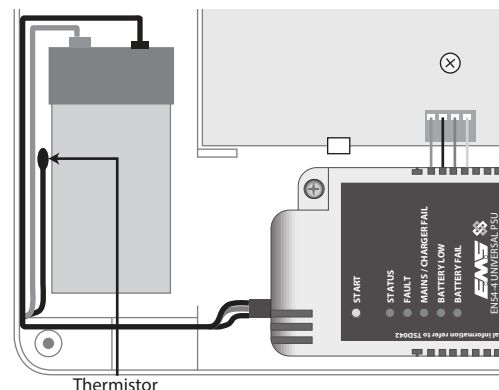

Thermistor

Figure 6

Overview of RCC PCB

The names and functions of the RCC PCB are shown below in Figure 7.

Status LEDs (see below for their operation)
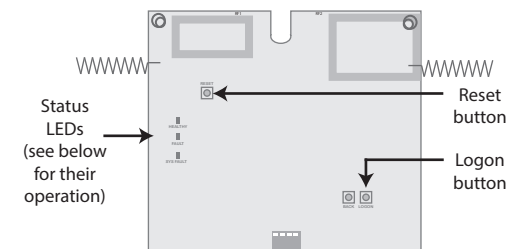
Reset button

Logon button

Figure 7

Status LED operation

Power LED - A green LED will be visible on the front plate of the Radio Cluster Communicator and will illuminate constantly whilst sufficient power to the Radio Cluster Communicator is present from either the mains supply or the back up battery.

Fault LED - A yellow LED will be visible on the front plate of the Radio Cluster Communicator and will illuminate constantly in the event of a mains fail, battery fail or aerial tamper.

Sys Fault LED - A yellow LED will illuminate constantly if a checksum error is detected in either the software program or configuration data.

Reset button

The Reset Button is used to reset the RCC.

Logon button

The Logon Button is used to log the RCC on to the Radio Hub. See programming manual for more information.

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