

Specification

Operating temperature	-10 to +50°C
Storage temperature	-20 to +60°C
Humidity	0% to 95% non-condensing
IP rating	IP54
Operating voltage	18 to 22V loop powered
Typical operating current	26mA loop powered
Max operating current	77mA loop powered
Operating frequencies	868 MHz
Output transmitter power	Variable 0-14 dBm
Dimensions	270mm (W) 205mm (H) 75mm (D)
Weight	0.95kg

Data required to conduct tests as specified in EN54-17:2005

Parameter	Description	Value
V _{max}	The maximum line voltage.	22V
V _{min}	The minimum line voltage.	16V
I _C max	The maximum rated continuous current with the switch closed.	0.8A
I _S max	The maximum rated switching current (e.g under short circuit conditions).	3A
I _L max	The maximum leakage current with the switch open (isolated state).	0.2A
Z _C max	The maximum series impedance with the switch closed	0.8 Ohm

Regulatory information

Manufacturer	EMS Radio Fire & Security Systems Ltd. Technology House, Sea Street, Herne Bay, Kent, CT6 8JZ, United Kingdom
Year of manufacture	See serial number label inside unit
Certification	CE
Certification body	0359
CPR certificate	0359-CPR-0224
Approved to	EN54-17 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	1999/5/EC (R&TTE directive): Hereby EMS Radio Fire & Security Systems declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.



2002/96/EC (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

Contact information

For contact information, see www.utcfireandsecurity.com



Radio Loop Module Installation Guide

General

The Ziton Radio Loop Module (RLM) is available under the following part number:

PART NO	VARIANT TYPE
ZPR868	Ziton Radio Loop Module

The address of the unit is set using the onboard 8 way switches – see supplied table. The installation must conform to BS5839:Part 1 (or applicable local codes). This Ziton Radio Loop Module is suitable for indoor use only.

Loop design

The Ziton Radio Loop Module is powered from the loop; the unit draws a typical current of 26mA. A maximum of two loop modules can be connected to a loop. The current drawn from the module should be taken into consideration when calculating the total load of a loop.

Address setting

It is recommended that the loop address number is allocated prior to the unit being installed. The address number is set using the onboard 8 way switch.

Available selections are shown in the Table 1.

Table 1

DIL SWITCH SETTING		DIL SWITCH SETTING	
ADDRESS	1.....8	ADDRESS	1.....8
1	10000000	64	00000010
2	01000000	65	10000010
3	11000000	66	01000010
4	00100000	67	11000010
5	10100000	68	00100010
6	01100000	69	10100010
7	11100000	70	01100010
8	00010000	71	11100010
9	10010000	72	00010010
10	01010000	73	10010010
11	11010000	74	01010010
12	00110000	75	11010010
13	10110000	76	00110010
14	01110000	77	10110010
15	11110000	78	01110010
16	00001000	79	11110010
17	10001000	80	00001010
18	01001000	81	10001010
19	11001000	82	01001010
20	00101000	83	11001010
21	10101000	84	00101010
22	01101000	85	10101010
23	11101000	86	01101010
24	00011000	87	11101010
25	10011000	88	00011010
26	01011000	89	10011010
27	11011000	90	01011010
28	00111000	91	11011010
29	10111000	92	00111010
30	01111000	93	10111010
31	11111000	94	01111010
32	00000100	95	11111010
33	10000100	96	00000110
34	01000100	97	10000110
35	11000100	98	01000110
36	00100100	99	11000110
37	10100100	100	00100110
38	01100100	101	10100110
39	11100100	102	01100110
40	00010100	103	11100110
41	10010100	104	00010110
42	01010100	105	10010110
43	11010100	106	01010110
44	00110100	107	11010110
45	10110100	108	00110110
46	01110100	109	10110110
47	11110100	110	01110110
48	00001100	111	11110110
49	10001100	112	00001110
50	01001100	113	10001110
51	11001100	114	01001110
52	00101100	115	11001110
53	10101100	116	00101110
54	01101100	117	10101110
55	11101100	118	01101110
56	00011100	119	11101110
57	10011100	120	00011110
58	01011100	121	10011110
59	11011100	122	01011110
60	00111100	123	11011110
61	10111100	124	00111110
62	01111100	125	10111110
63	11111100	126	01111110
		127	11111110



Installation

Ensure that the Ziton Radio Loop Module is sited in accordance with the survey and design details. The recommended minimum distance between metal objects from the aerial is 600mm. The recommended minimum distance to any other electrical equipment is 2 metres.

To allow access to the mounting points, remove the four corner covers and screws. Removing the front plate will expose the Ziton Radio Loop Module PCB.

Care must be taken to ensure the PCB is not damaged in the installation process. See the 'Removing/Inserting the Ziton RLM PCB' section for more details.

Retain the four corner covers and screws for re-assembly when installation completed.

Remove required cable entry knockouts for loop in & out wiring connections. **DO NOT USE** cable access points in the shaded area for loop wiring. Available cable access points are shown in Figure 1.

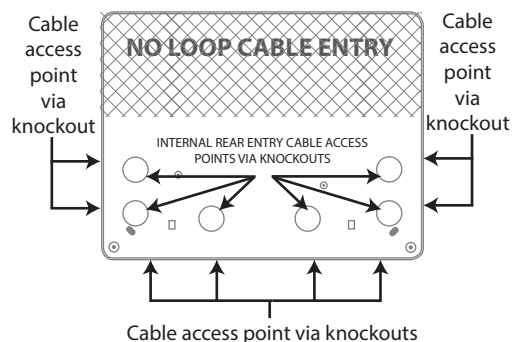


Figure 1

Position the Ziton Radio Loop Module in the required location and mark the four fixing positions. These are shown in Figure 2.

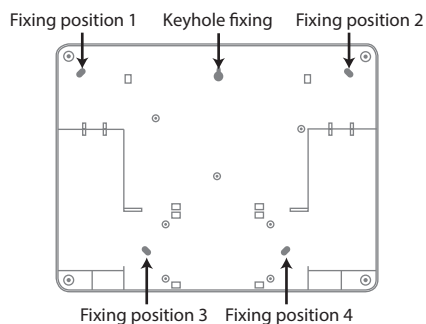


Figure 2

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 fixing positions 3 and 4. Additional fixing positions 1 and 2 are available if required.

Removing / inserting the Ziton RLM PCB

The Ziton Radio Loop Module 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 and correctly re-inserted and secured by the PCB retaining clips (shown in Figure 3).

In order to remove the PCB, firstly remove the PCBs central retaining screw then release the top two retaining clips, by gently easing them outwards. This will allow the top of the board to be freed. Release the bottom two 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.

To re-insert the PCB, firstly lower into place and slide the lower edge of the board under the bottom two retaining clips. Then ease the top two retaining clips outwards and secure it into place. The PCB should now be correctly affixed into position. Secure the PCB in the housing by fitting the PCBs central retaining screw.

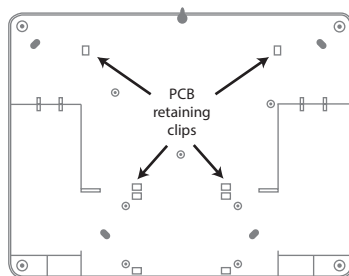


Figure 3

Wiring

The Ziton Radio Loop Module has six connections: LOOP IN; +, - and SCREEN, and LOOP OUT; +, - and SCREEN. The connections are accessed by removing the front plate of the interface module. The cable is to be passed through the knockouts provided. See Figure 4 for connection diagram.

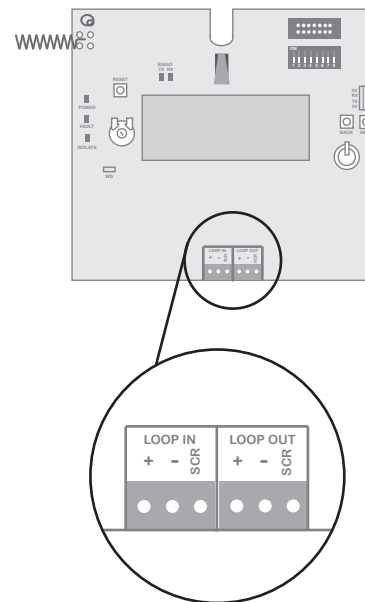


Figure 4

Note: Loop connections must be made using strain relief cable glands with a V-0 flammability rating.

Functional testing

When polled by a compatible panel, the Ziton Radio Loop Module, in its normal condition will return analogue values of 90 (slot 5) and 244 (slot 6).

Radio Loop Module PCB.

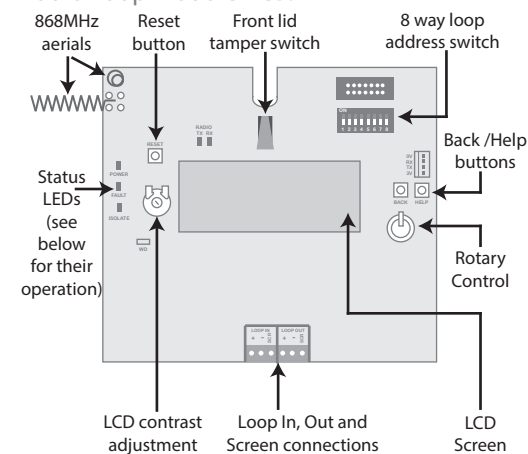


Figure 5

Status LED operation

Power LED: A Green LED will be visible whilst an operating voltage is present.

Fault LED: A Yellow LED will be visible whilst a tamper is present on the Radio Loop Module. This could consist of an aerial tamper short or open circuit or a front lid tamper.

Note: This LED will be illuminated whilst the front lid is removed (tamper switch is open).

Isolate LED: A Yellow LED will flash to indicate when the loop input has a short circuit present

Rotary Control operation

The Rotary Control is used to scroll through and enter menu options for programming purposes.