

Specification

|                                                                                                                            |                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature                                                                                                      | -10 to +50 °C                                                                                                                                                           |
| Storage temperature                                                                                                        | -20 to +60 °C                                                                                                                                                           |
| Humidity                                                                                                                   | 0 to 95% noncondensing                                                                                                                                                  |
| Supply                                                                                                                     | 6x AA Alkaline (Panasonic LR6AD Powerline / Varta 4006 Industrial)                                                                                                      |
| CAUTION!<br>Fitting of an incorrect battery type invalidates the product certification and may result in poor performance. |                                                                                                                                                                         |
| IP rating                                                                                                                  | IP65                                                                                                                                                                    |
| Output rating                                                                                                              | 2 A at 24 VDC                                                                                                                                                           |
| Operating frequency                                                                                                        | 868 MHz                                                                                                                                                                 |
| Output transmitter power                                                                                                   | Auto adjusting 0 to 14 dBm (0 to 25 mW)                                                                                                                                 |
| Signalling protocol                                                                                                        | X                                                                                                                                                                       |
| Dimensions (H x W x D)                                                                                                     | 120 x 240 x 50 mm                                                                                                                                                       |
| Weight                                                                                                                     | 0.95 kg                                                                                                                                                                 |
| Location                                                                                                                   | Type A: For indoor use                                                                                                                                                  |
| Regulatory information                                                                                                     |                                                                                                                                                                         |
| Manufacturer                                                                                                               | KGS Manufacturing Poland Sp. z o.o.<br>Ul. Kolejowa 24. 39-100 Ropczyce, Poland                                                                                         |
| Year of manufacture                                                                                                        | See serial number label inside unit                                                                                                                                     |
| Certification                                                                                                              |   |
| DoP number                                                                                                                 | 0359-CPR-0171                                                                                                                                                           |
| Approved to                                                                                                                | EN54-18<br>EN54-25                                                                                                                                                      |

European Union directives



EMS declares that this device is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [firesecurityproducts.com](https://firesecurityproducts.com)

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 [recyclethis.info](https://recyclethis.info)

Dispose of your batteries in an environmentally friendly manner according to your local regulations.

Contact information and product documentation

For contact information or to download the latest product documentation, visit [firesecurityproducts.com](https://firesecurityproducts.com).

Product warnings and disclaimers

THESE PRODUCTS ARE INTENDED FOR SALE TO AND INSTALLATION BY QUALIFIED PROFESSIONALS. KGS FIRE & SECURITY CANNOT PROVIDE ANY ASSURANCE THAT ANY PERSON OR ENTITY BUYING ITS PRODUCTS, INCLUDING ANY “AUTHORIZED DEALER” OR “AUTHORIZED RESELLER”, IS PROPERLY TRAINED OR EXPERIENCED TO CORRECTLY INSTALL FIRE AND SECURITY RELATED PRODUCTS.

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Ziton I/O unit installation guide

**General**  
The Ziton input / output (I/O) unit is available under the following part numbers:

| PART NO | VARIANT TYPE                   |
|---------|--------------------------------|
| ZR451-3 | Ziton wireless single I/O unit |
| ZR452-3 | Ziton wireless dual I/O unit   |

The address of the unit is set when programming the device to the Ziton loop interface (see *programming manual for details*).

**Pre installation**  
The installation must conform to local installation codes and should only be installed by a fully trained competent person.

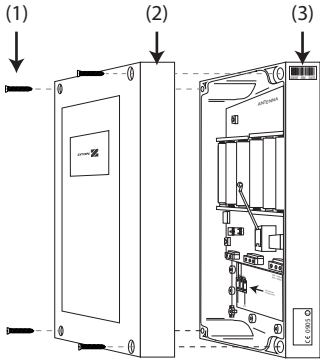
Ensure that the device is installed as per the site survey.

The use of a non-metallic spacer should be considered if mounting the device on to a metal surface.

DO NOT press the log on button on a pre-programmed device, as this will cause communication with the control panel to be lost. Should this happen, delete the device from the system and add it back on.

This device contains electronics that may be susceptible to damage from Electrostatic Discharge (ESD). Take appropriate precautions when handling electronic boards.

Components



(1) 4x lid fixing screws, (2) Front lid, (3) Back box

Figure 1

**Remove cable entry points**  
Drill the cable entry points as necessary. (Figure 2)

Cable glands should be used.

DO NOT leave excess cable in the device.

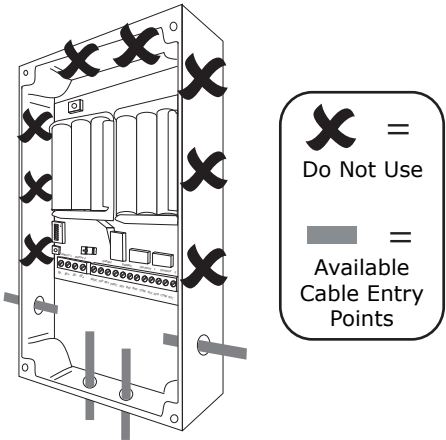


Figure 2

**Fix the device to the wall**  
Use all four circled fixing positions to ensure a firm fixing. (Figure 3)

Use suitable fasteners and fixings.

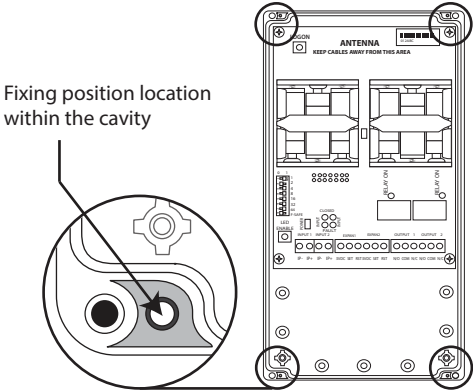


Figure 3

Input connection wiring

The location of the Ziton I/O unit's input connections are shown. (Figure 4)

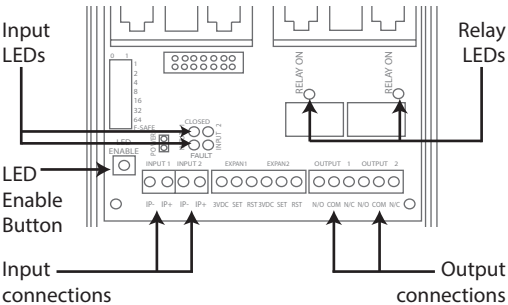


Figure 4

Connection details are shown. (Figure 5)

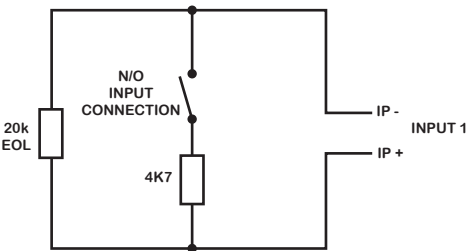


Figure 5

- 20K = normal condition
- 3K8 = alarm condition
- Open circuit = tamper condition
- Short circuit = tamper condition

Input Fault LEDs:-

Each input contact has a yellow fault LED associated with it. If the input is in a fault condition the LED will be illuminated.

Input Switch Closed LEDs:-

Each input contact has a red switch closed LED associated with it. If the input is closed the LED will be illuminated.

Output connection Wiring

The Ziton I/O unit has clean contact relay outputs capable of switching 2 A at 24 VDC. The location of the output connections are shown. (Figure 4)

| Output bit state | Relay State                          |
|------------------|--------------------------------------|
| 0                | Common and normally closed connected |
| 1                | Common and normally open connected   |

On power up the relay outputs will be reset to output bit state 0.

Output fail to safe mode

This function is enabled/disabled by loop address switch 8. Switch 8 to the 1 position enables this mode of operation and switch 8 to the 0 position disables the mode. As default this mode is disabled.

When the function is enabled, the relay outputs will assume the output bit state 0 in the event of:-

- Communication loss to the Ziton loop interface
- Failure of any battery pack

Note: Switches 1 to 7 are not used

Power device

When fitting / replacing batteries; observe correct polarity, using only specified batteries.

Connect the power jumper across the PIN header. (Figure 6)

Once powered, reassemble the device.

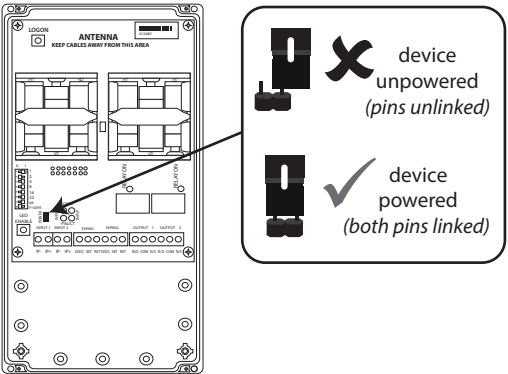
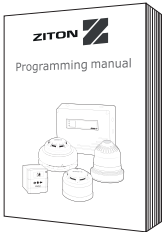


Figure 6

Configuration

The device's loop address is configured within the user interface's menu structure.

Refer to the programming manual for full details.



Functional testing

When polled by a compatible panel, the Ziton I/O unit, in its normal condition will return an analogue value of 90\*.

| Fault condition                | Analogue value |        | Input status |
|--------------------------------|----------------|--------|--------------|
|                                | Slot 5         | Slot 6 |              |
| Input open (normal condition)  | 90*            | N/A    | 0            |
| Input closed (alarm condition) | 213            | N/A    | 1            |
| Open circuit                   | N/A            | 118    | N/A          |
| Short circuit                  | N/A            | 118    | N/A          |
| Tamper                         | N/A            | 181    | N/A          |

\* The Slot 5 analogue value for the open input conditions are shown in relation to the device's signal strength. Therefore these can vary between analogue value 90, 85, 80 or 75.

Notes