

# Wireless ZEM



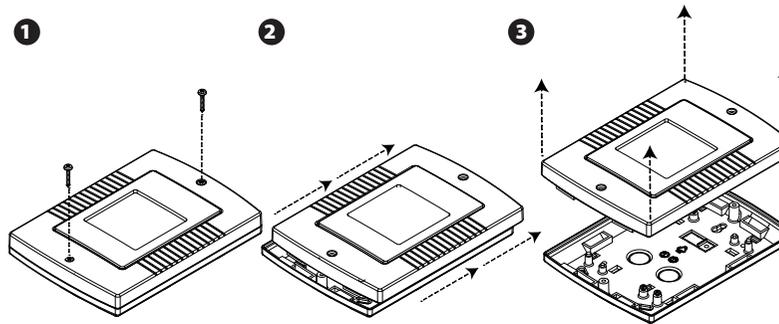
**32 Input Wireless Expander  
(EURO-ZEM32-WE)**



RINS1563-2



## 1) Opening the casing

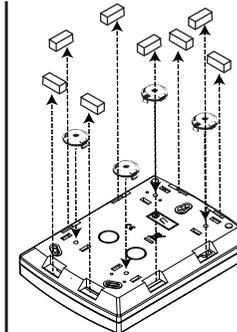


### PLEASE NOTE:

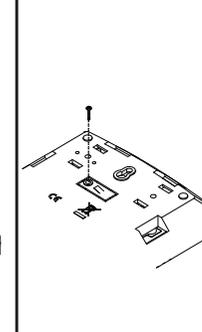
The Wireless ZEM will only operate on PCX or EURO control panels that have version 9.1 software or above, and on HomeControl+ panels, V2.1 or above. It cannot be installed on a EURO Mini.

The Wireless ZEM must be first addressed, then programmed in the 'Install RIX/ZEM' function of the control panel. See the reverse for details.

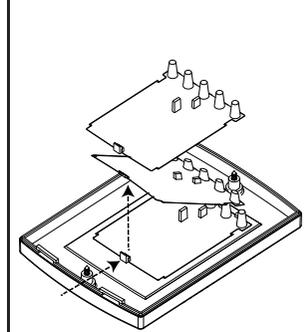
## 2) Stand Offs/Knock Outs



## 3) Rear Tamper



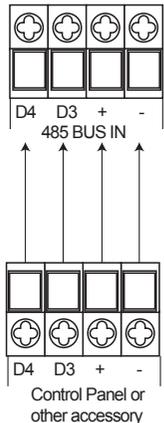
## 4) Label access



### INSTALLATION GUIDE:

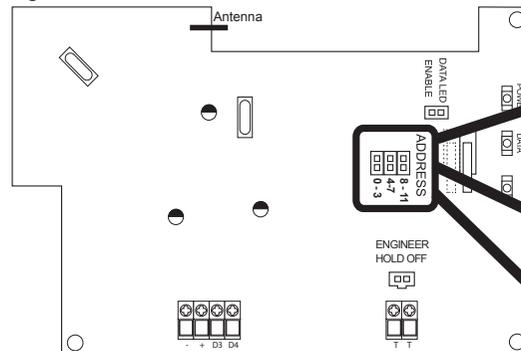
It is advised that all the wireless devices are learnt to the Wireless ZEM before installation. The signal strength function (see reverse) can then be used to choose the best location of a device.

## 5) RS485 Bus Wiring



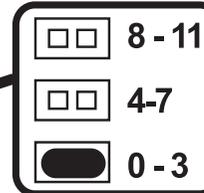
## 6) Address Mapping

Fig.1



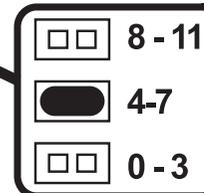
The 32 inputs available on each ZEM are divided into 4 blocks of 8 (as shown above in fig 1). Each block of 8 can be separately enabled or disabled in the Enable ZEMs/RIXs Menu on the keypad Engineer Menu (see reverse). If any block of 8 inputs is not required on the wireless ZEM, that block may be used by a wired EOL input expander. End of Line Wired input expanders can be installed on a control panel together with wireless ZEMs. Both types of ZEM are installed on the same RS485 Data BUS, and no two ZEMs of either type may share the same address number. Please refer to the control panel installation manual for details on how many ZEMs can be added, and the allocation of input numbers.

**NOTE: Please make sure that you address the Wireless ZEM while the tamper switch is open. The address will then be assigned to the ZEM when the tamper is closed.**



### First Wireless ZEM (place jumper on 0-3)

ZEM Address 0: Inputs 9-16  
ZEM Address 1: Inputs 17-24  
ZEM Address 2: Inputs 25-32  
ZEM Address 3: Inputs 33-40



### HomeControl+ panels MUST have the jumper in THIS position (4-7)

### Second Wireless ZEM (place jumper on 4-7)

ZEM Address 4: Inputs 41-48  
ZEM Address 5: Inputs 49-56  
ZEM Address 6: Inputs 57-64  
ZEM Address 7: Inputs 65-72



### Third Wireless ZEM (place jumper on 8-11)

ZEM Address 8: Inputs 73-80  
ZEM Address 9: Inputs 81-88  
ZEM Address 10: Inputs 89-96  
ZEM Address 11: Inputs 97-104

## 7) Wireless ZEM Overview

<b>FIRST WIRELESS ZEM</b>	Max Devices: 32 Wireless Inputs 32 Wireless Keyfobs 2 Wireless Bells
<b>SECOND WIRELESS ZEM</b>	Max Devices: 32 Wireless Inputs
<b>THIRD WIRELESS ZEM</b>	Max Devices: 32 Wireless Inputs

Depending which control panel the Wireless ZEM is connected to, a maximum of 96 wireless inputs may be connected.

**IMPORTANT: All wireless keyfobs and wireless wireless bells will be learnt to the Wireless ZEM addressed as ADDRESS 0 ONLY.**

### 8) LEDs

#### POWER LED (RED)

Shows that +12V is at the ZEM.

#### DATA LED (GREEN)

Shows communication to the control panel.

**NOTE:** All LEDs are disabled. They will become active after a tamper switch is open.

## 9) Wireless Peripherals

There are many wireless peripherals available that can be learnt to the Wireless ZEM. For more information please refer to either the Pyronix or Castle website.

**KX12DT-WE:** 12m Dual technology

**KX12DQ-WE:** 12m Wireless PIR

**KX10DP-WE:** 10m Wireless pet immune PIR

**SMOKE-WE:** Wireless smoke sensor

**CO-WE:** Wireless CO sensor

**SHOCK-WE:** Wireless shock sensor

**MC2-WE:** Wireless door contact

**KF4-WE:** Wireless keyfob

**DELTEBELL-WE:** Wireless external sounder

**MC1/SHOCK-WE:** Wireless shock sensor with door contact - **IMPORTANT: The Shock sensor and the door contact must both be learnt to one ZEM or the panel (not one to each or across multiple ZEMs).**

## 10) Operations

**Engineer Hold Off:**  
Overrides the tamper switch and terminals



**Data LED Enable:**  
Disables the Data LED



### Engineer Keypad:

An engineer keypad can be connected here giving immediate access to the engineers mode. **NOTE:** The keypad must be addressed before use.



## 11) Compliance

For electrical products sold within the European Community. At the end of the electrical products useful life, it should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice in your country.



**Suitable for use in systems installed to**  
**EN50131-1:2006+A1:2009, EN50131-3:2009,**  
**EN50131-6:2008, EN50131-5-3:2005+A1:2008,**  
**at Security Grade 2, Environmental Class II.**  
**Subject to the grading of the overall system.**

## 12) Technical Specification

<b>Input Voltages</b>	9V.d.c -14V.d.c
<b>Current Consumption</b>	60mA quiescent 115mA during transmission
<b>Radio Frequency</b>	868MHz, FM Transceiver Narrow Band
<b>Dimensions</b>	173 x 125 x 32mm
<b>Operational</b>	-10°C to +40°C
<b>Storage</b>	-40°C to +80°C
<b>Humidity</b>	85% @ 25°C
<b>Weight</b>	0.24kg

## 13) Warranty

This product is sold subject to our standard warranty against defects in workmanship for a period of two years. In the interest of continuing improvement of quality, customer care and design, Pyronix Ltd reserve the right to amend specifications without giving prior notice. Visit [www.pyronix.com/warranty](http://www.pyronix.com/warranty) for more information.

## 14) Customer Support

Customer Support Line: 0845 6434 999 (local rate)  
or call +44(0)1709 535225  
Hours: 8.00am - 6.30pm, Monday to Friday  
customer.support@pyronix.com  
marketing@pyronix.com  
www.pyronix.com  
www.castle-caretech.com  
Pyronix Ltd, Secure House, Braithwell Way, Hellaby,  
Rotherham, S66 8QY, UK

## Assigning the Wireless ZEM

On the control panel, enter the engineer's menu and using the [B] and [NO] keys, scroll to 'INSTALL ZEM?'. Press the [YES] key.

NOTE: On the PCX it will be displayed as 'INSTALL RIX?'.  
 Use the [B] and [D] keys to select the relevant address, press the [YES] key.

Press [2] to install a wireless ZEM, and press the [YES] key.

INSTALL ZEMS?  
 ZEM Address [0]  
 ZEM Installed No [0]  
 ZEM Installed ZEM32WE [2]

## Learning Wireless Inputs and Bells

On the control panel, enter the engineer's menu and using the [B] and [NO] keys, scroll to 'WIRELESS DEVICE CONTROL?'. Press the [YES] key.

To learn/delete inputs, press the [YES] key, or press [NO] to learn/delete bells.

To learn a new wireless device to the wireless ZEM, press the [YES] key. Press the [NO] key to delete inputs.

Use the [B] and [D] keys to select the relevant input that is to be learnt and press the [YES] key.

During the learning process the 'LEARN' button must be held until the LED's on the device sequence. Release the button and the display will show 'Input Learnt'.

Wireless door contacts are learnt the same way.

If smoke or carbon monoxide sensors are being learnt, they will just include one learn button and one LED.

If the GREEN LED on the wireless device is illuminated and the display shows 'Input Learnt' the device has been learnt successfully. Press the [✓] key. Press the [NO] key.

To delete inputs, press the [YES] key, or press [NO] to learn/delete bells.

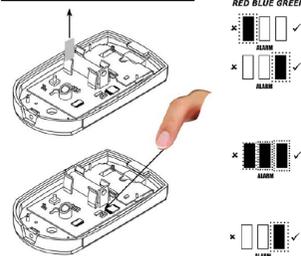
Inputs can either be deleted individually or all at once. To delete all wireless devices press the [YES] key (the code 2000 will need to be entered if deleting ALL devices). Or press the [NO] key to delete individually.

To learn/delete bells, press the [YES] key, or press [NO] to program keyfob buttons.

To program keyfob buttons, press the [YES] key, or press [NO] to exit. NOTE: Any keyfob must be learnt in the Master Manager Menu before this function is enabled. See the User Manual for more information.

Use the [B] and [D] keys to select the button or select the button below. Press the [YES] key. Select the action and press the [YES] key.

WIRELESS DEVICE CONTROL?  
 Control Inputs?  
 Learn Devices?  
 Input 001 Available [001]  
 Learning...



Input Learnt  
 Delete Devices  
 Control Bells?  
 Program Keyfob Buttons?  
 Select Button Button Lock [1]

## Viewing the Signal Strength

On the control panel, enter the engineers menu and using the [B] and [NO] keys, scroll to 'DIAGNOSTICS?'. Press the [YES] key.

Press the [NO] key.

To view the signal strength and battery levels of each wireless device, press the [YES] key.

Press the [YES] key to view the signal strength.

Press the [YES] key to view the input signal strength, for bells press the [NO] key

Use the [B] and [D] keys to select the wireless ZEM address (each contains 8 wireless inputs) and press [YES].

The control panel will then begin analysing the wireless devices.

Once all devices have been found, numbers will be displayed on the screen, indicating the signal strength for each of the 8 available inputs:

- 3 = Excellent
- 2 = Good install position
- 1 = Weak install position (reposition and retest)
- 0 = Missing (reposition and retest) ? = Waiting for information

The signal strength can also be viewed on the wireless device via the LEDs (GREEN = GOOD. RED = BAD). press the [YES] key for more information. Press the [NO] key to view the bells.

Follow the previous steps to view the signal strength for the bells.

To view the battery level on each wireless device press the [YES] key

The battery levels shown on the display will be as follows:

- Good = At least 1 month of battery life remaining
- Replace = Battery will need replacing immediately
- Testing = Waiting for the battery result Each input and bell is tested every 15 seconds.

## Learning Keyfobs

On the control panel, enter the master manager menu and using the [B] and [NO] keys, scroll to 'CHANGE CODES?'. Press the [YES] key.

To add a new user to the control panel. Press the [YES] key, or to edit/delete, press the [NO] key.

Use the [B] and [D] keys to select the user number that the keyfob is to be assigned to, and press the [YES] key.

Press and hold any button on the keyfob until the GREEN LED starts flashing and then release. Asterisks will appear on the display.

Enter a user name and press the [YES] key.

Use the [B] and [D] keys to select the button, and once the [YES] key is pressed, select the action of the button. Press the [YES] key.

DIAGNOSTICS?  
 View PSUs?  
 View Wireless Device Status?  
 Signal Strength?  
 Inputs?  
 Wirless ZEM Addr [00]  
 Please Wait 300  
 3333210-  
 Input [08] Not Learnt [---]  
 Battery?  
 Input [09] Testing [---]  
 CHANGE CODES?  
 Add New User?  
 Empty [002]  
 Enter User Code [\*\*\*\*\*]  
 User Name \_  
 Select Button Lock [1]