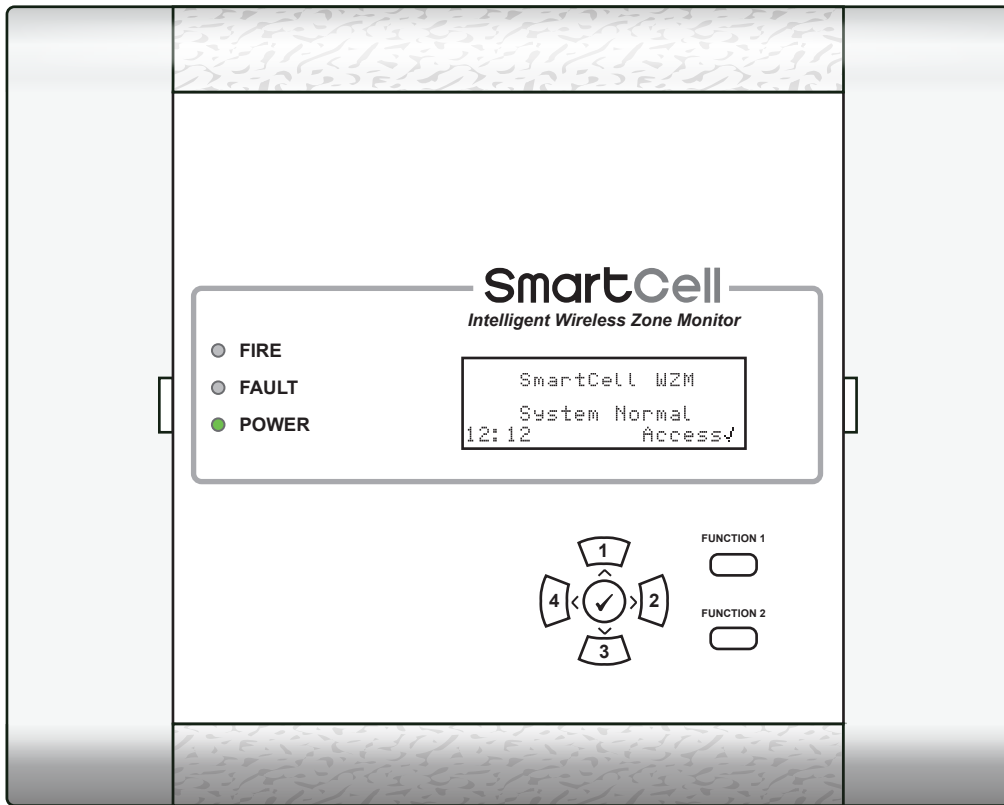


SmartCell



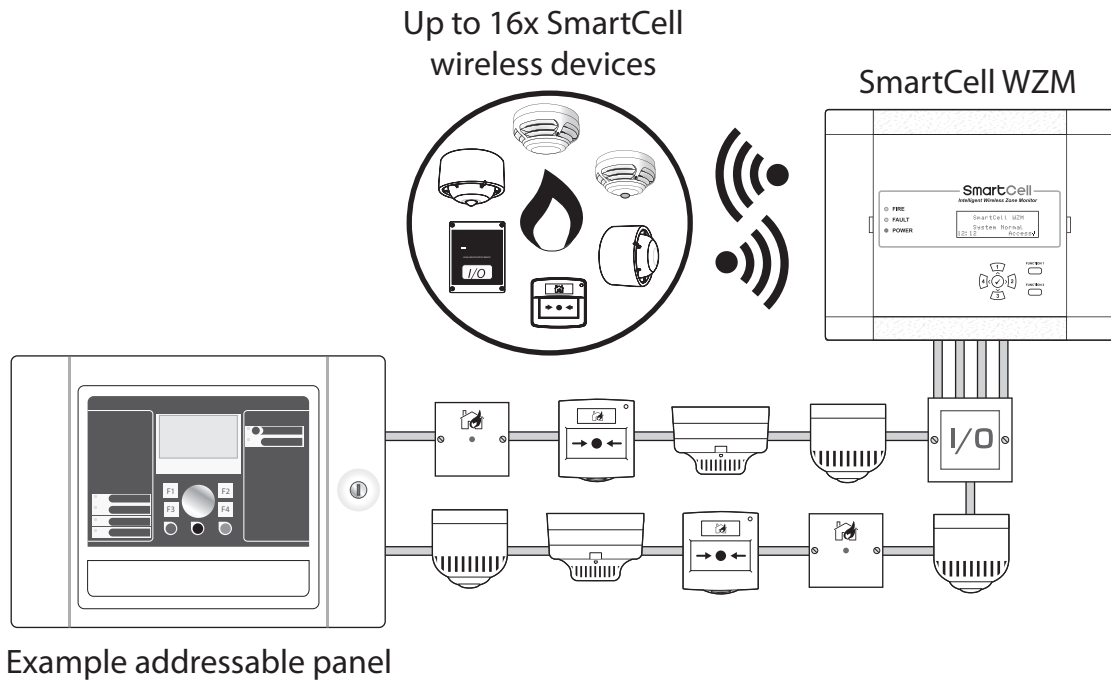
Wireless Control Panel Installation Guide

Part No	Product description
SC-13-1100-0001-99	Intelligent Wireless Zone Monitor (230 VAC Version)
SC-13-2100-0001-99	Intelligent Wireless Zone Monitor (24 VDC Version)

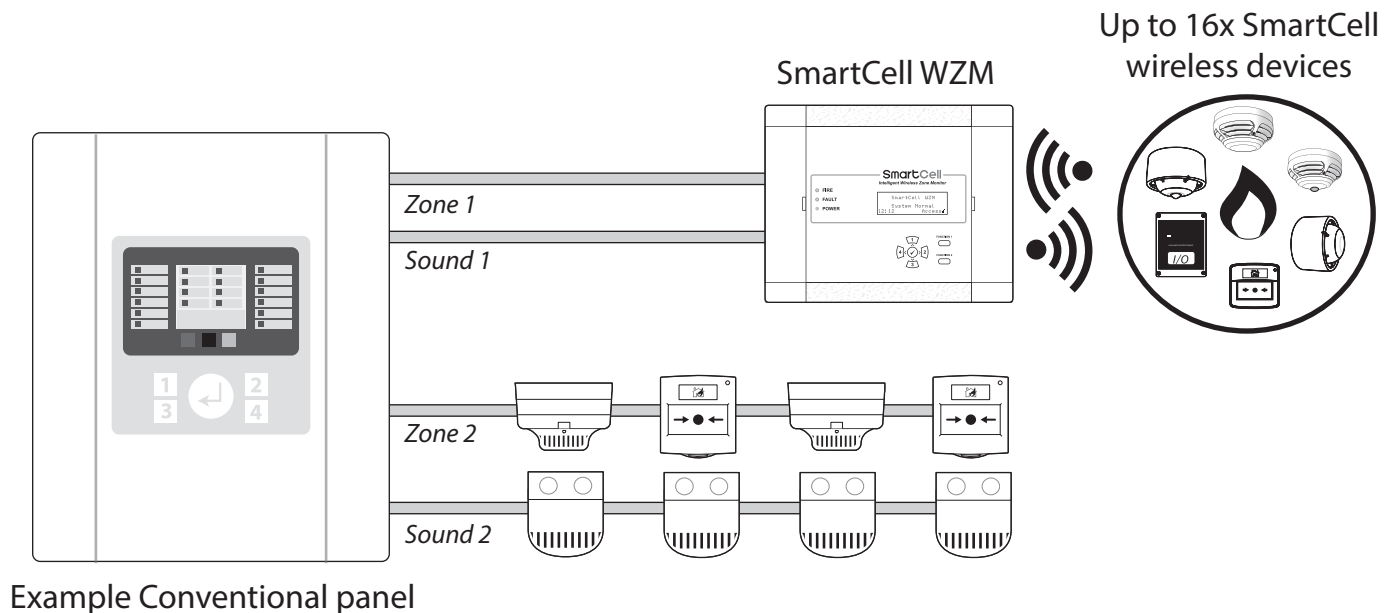
1 Introduction

The Intelligent Wireless Zone Monitor (WZM) allows for 16 wireless devices to be added to Conventional or Addressable fire systems.

Typical addressable fire system connection



Typical conventional fire system connection



2 Pre installation



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



The procedures outlined in this installation guide must be carefully followed.



The WZM includes components which are susceptible to damage from Electro Static Discharge (ESD). These components could be permanently damaged through routine handling, if precautions are not observed. Where handling is required, adequate earthing precautions should be taken, e.g. use an earthed wrist strap.



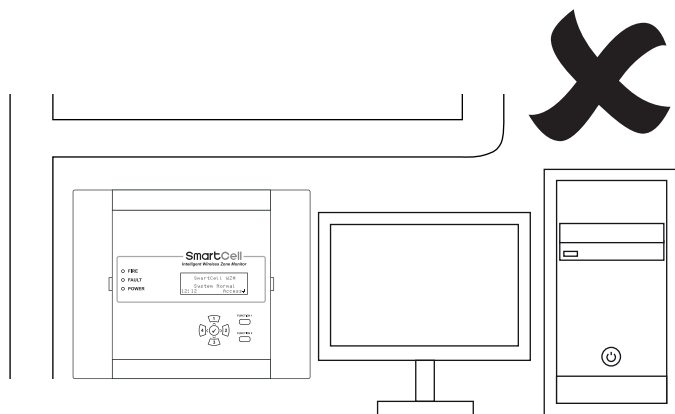
To ensure correct operation, products must be used within the specified environmental operating conditions.

3 Mounting location guidelines

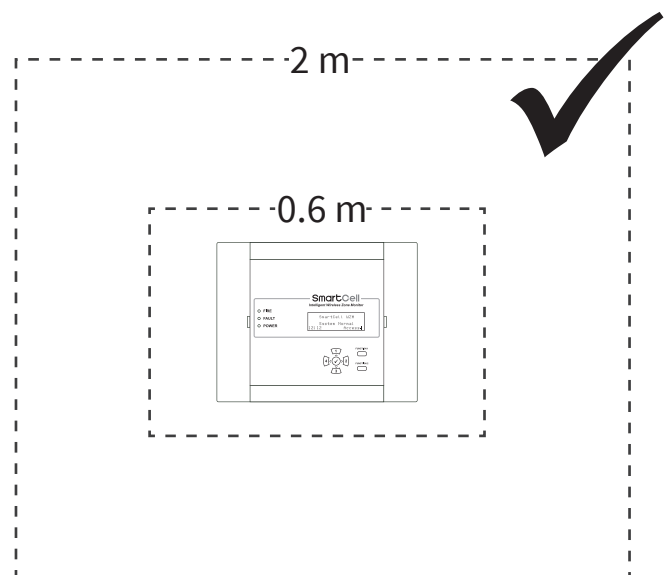


For optimum wireless performance, the following must be observed:

- Ensure the WZM is not installed within 2 m of other wireless or electrical equipment.
- Ensure the WZM is not installed within 0.6 m of any metal work.

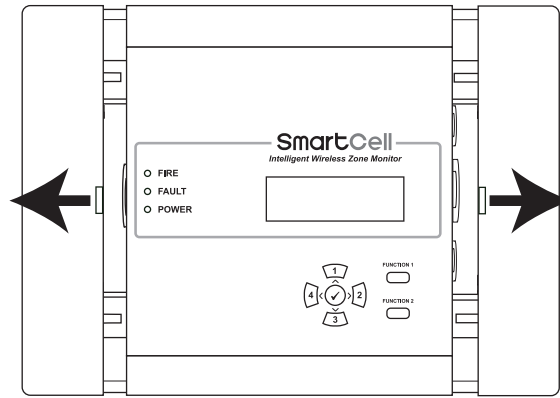


Never site the WZM near metal work or electrical equipment

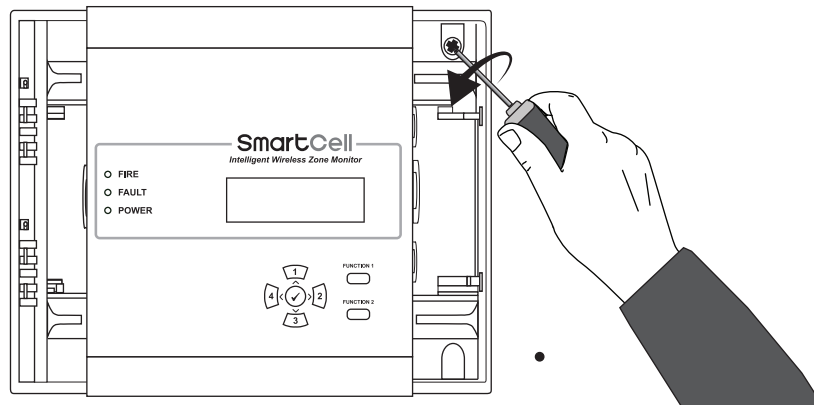


4 Open the WZM

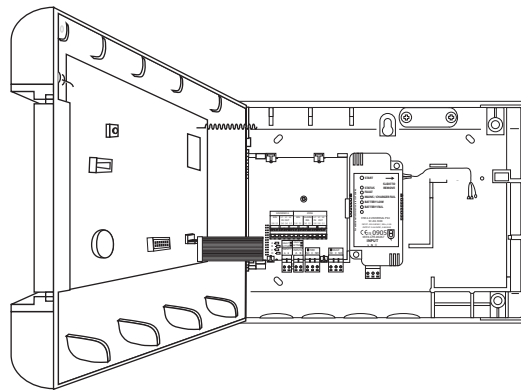
- Unclip the side panels.



- Loosen the two screws.



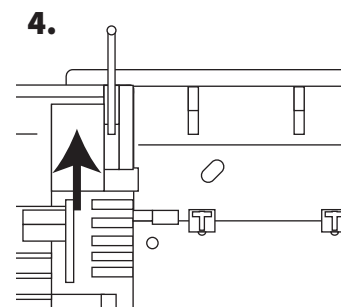
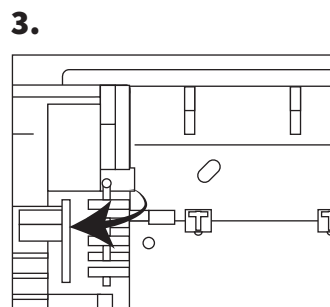
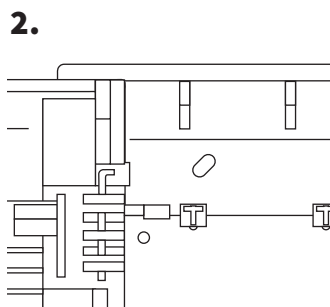
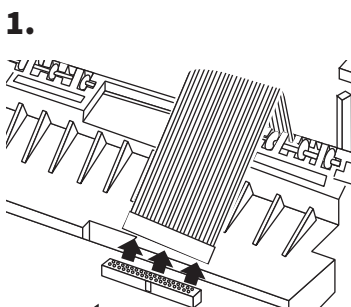
- Open the door.



230 VAC variant shown

5 Optional door removal

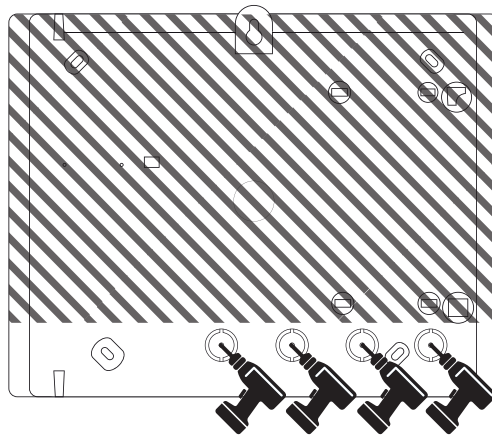
- Disconnect the ribbon cable.
- Turn and release the door hinges.



6 Remove cable access points

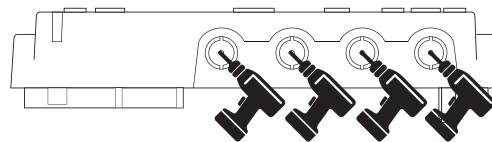
- Drill the cable entry points as necessary.


Rear side view



NO CABLE ACCESS AT THE TOP OF THE UNIT!

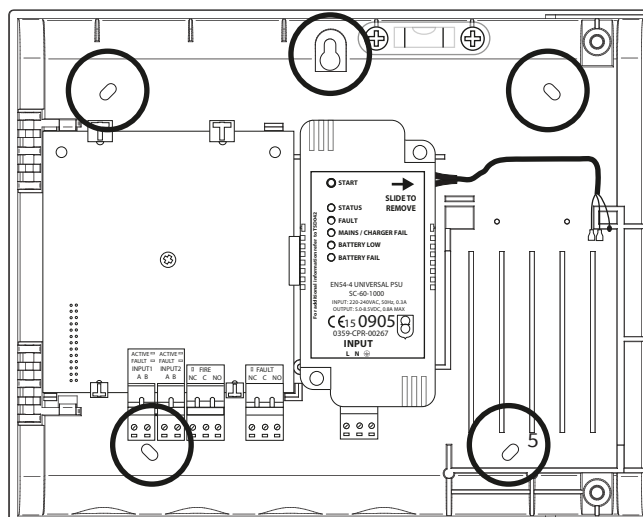
Under side view



 = Available entry point

7 Fix to the wall

- All five circled fixing positions are available for use as required.

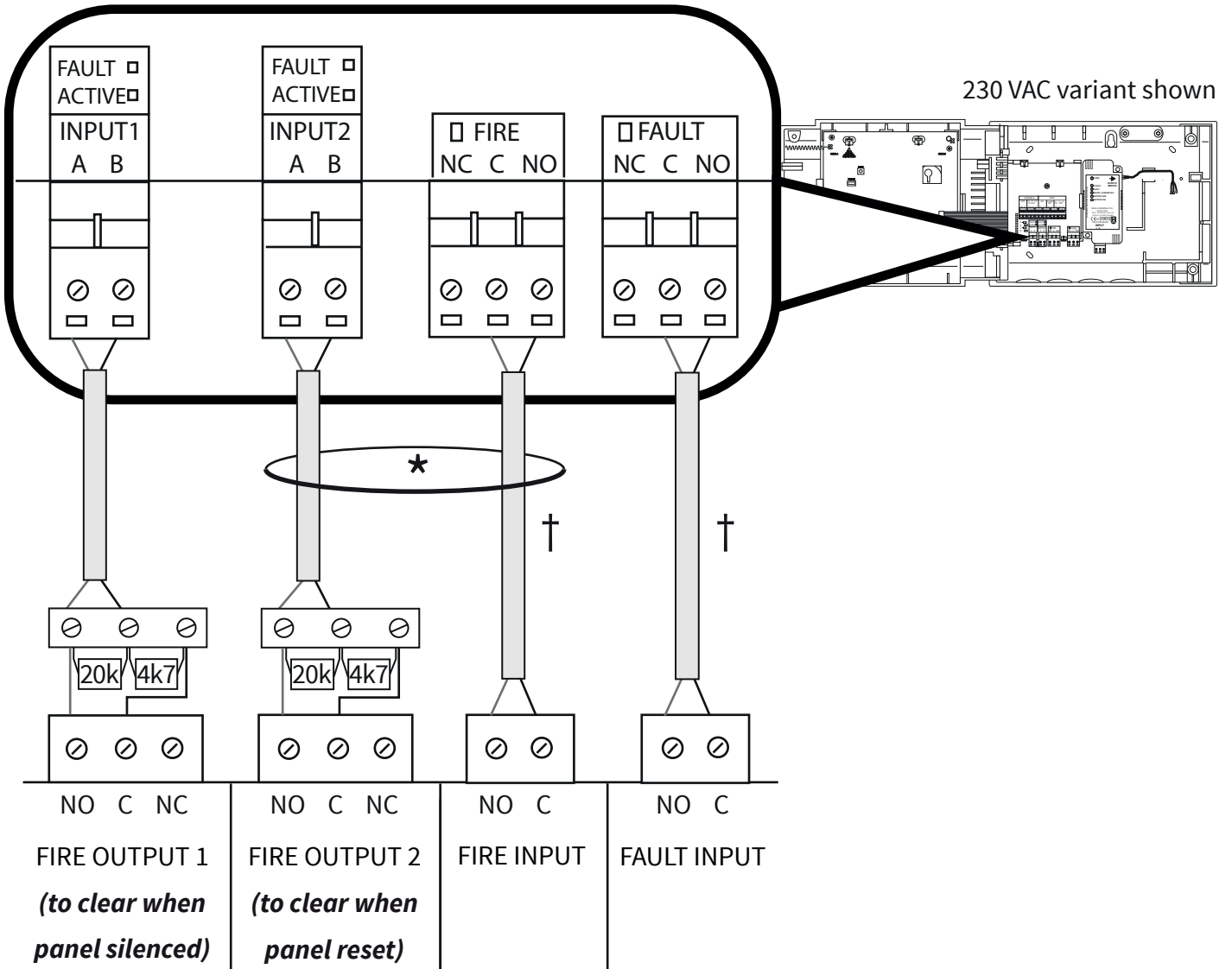


Note: the supplied back box mounting template can be used to drill the fixing positions, if required.

8 Wiring to an addressable fire system

SKIP THIS STEP IF CONNECTING TO A CONVENTIONAL FIRE SYSTEM.

- Wire the inputs as shown below, using the resistor pack provided.
- If an input is not being used, leave the 20 kΩ resistor as factory fitted.
- Both outputs are voltage free and rated 30 V @ 1 A.
- The maximum cable length to connected devices is 10 m.



FOOTNOTES

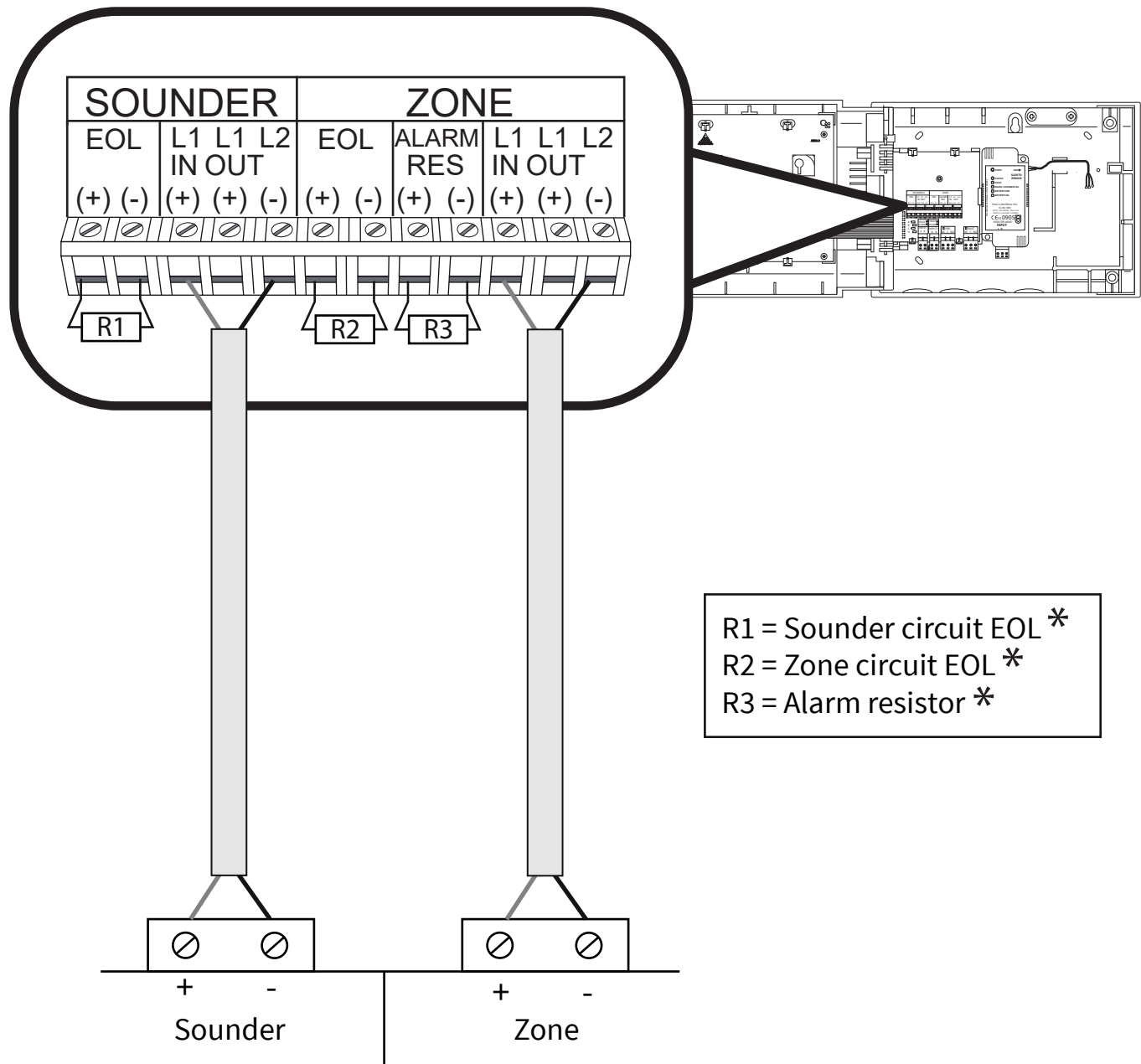
★ Optional cabling, required only when the following SmartCell devices are added to the WZM; detectors, call points and I/O units (*I/O units when set to 'Off When Reset'*) - see the SmartCell WZM Programming Guide (MK067) for more details on this feature.

† Wiring can be normally open or normally closed operation as required.

9 Wiring to a conventional fire system

SKIP THIS STEP IF CONNECTING TO AN ADDRESSABLE FIRE SYSTEM.

- The WZM must be connected to dedicated zone and sounder output.
- The maximum cable length to connected devices is 10 m.



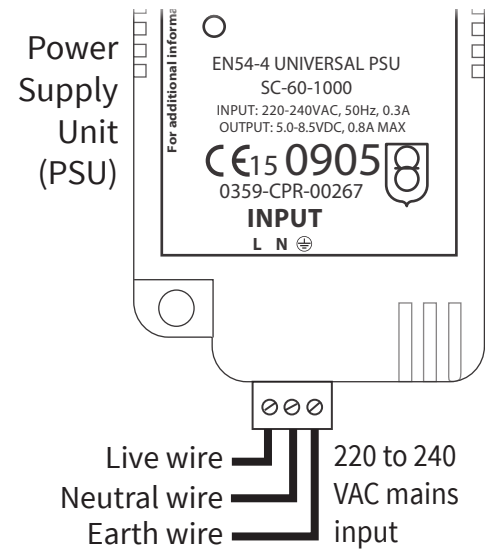
Conventional fire system connections

FOOTNOTES

- ★ Ensure that the manufacturer's specified end of line components and triggering resistors are fitted. See the control panel's instructions for more information.

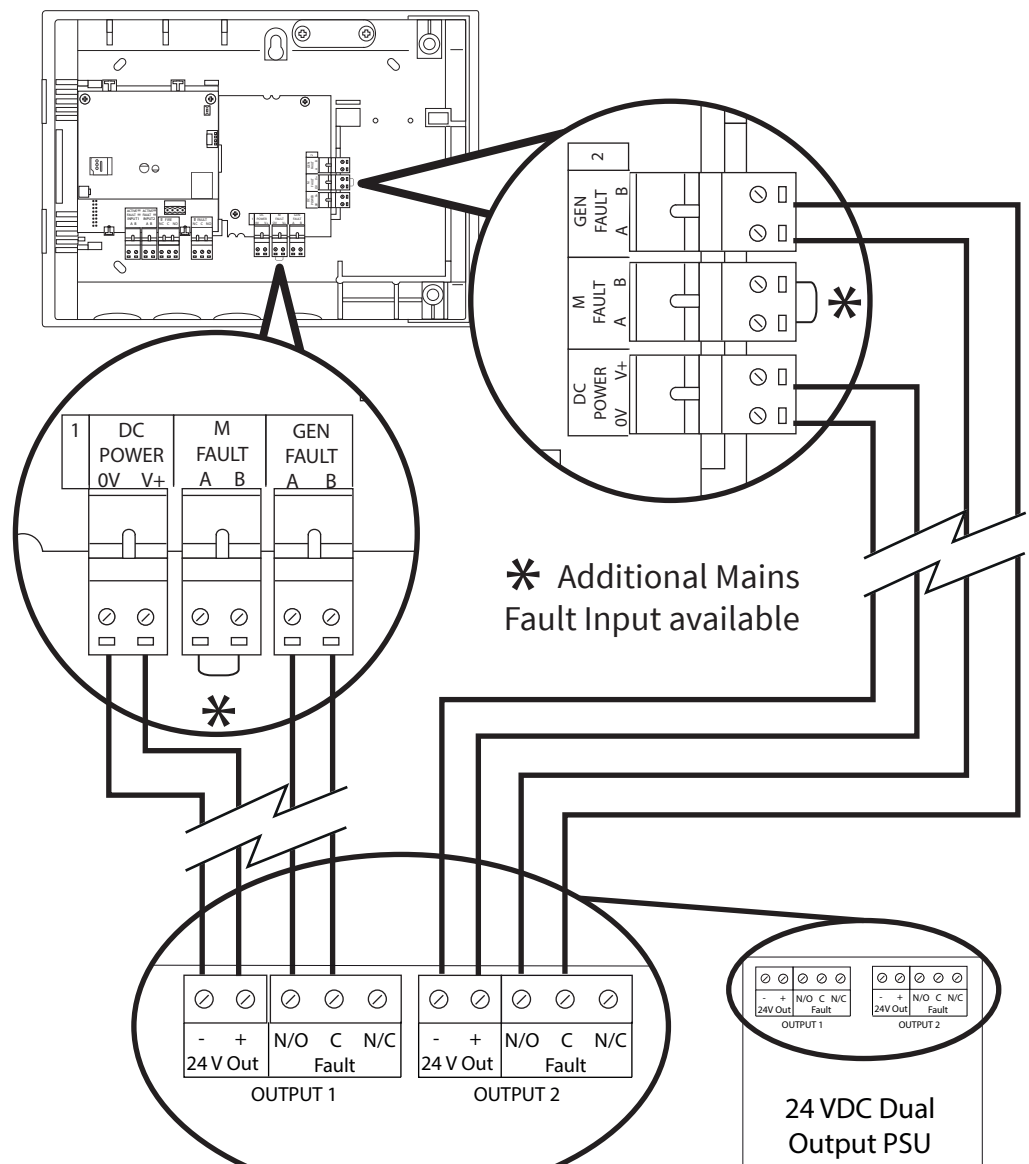
10 Connection wiring (230 VAC version only)

- **SKIP IF INSTALLING A 24 VDC VARIANT.**
- A 220 to 240 VAC supply is required.
- Use cable with a minimum cross section of 1.5 mm²
- Connections must be made through a 20 mm cable entry gland, incorporating cable clamp into the WZM.
- An additional 15 mm 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 A protection device which should be labelled "Fire Alarm – Do Not Switch."
- An all-pole mains switch should be provided as part of the building installation.



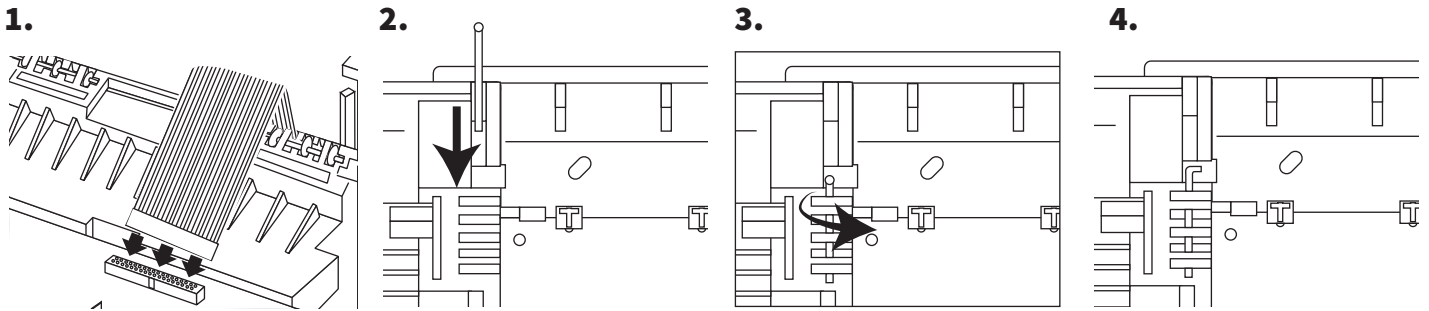
10b Connection wiring (24 VDC version only)

- **SKIP IF INSTALLING A 230 VAC VARIANT.**
- Cable glands should be used.
- DO NOT leave excess cable in the control panel.
- Two fault inputs are also available (black terminal blocks). They are labeled M Fault (mains fault) and Gen Fault (general / battery fault).
- If a fault input (GEN FAULT or M FAULT) is not being used, leave the link as factory fitted.



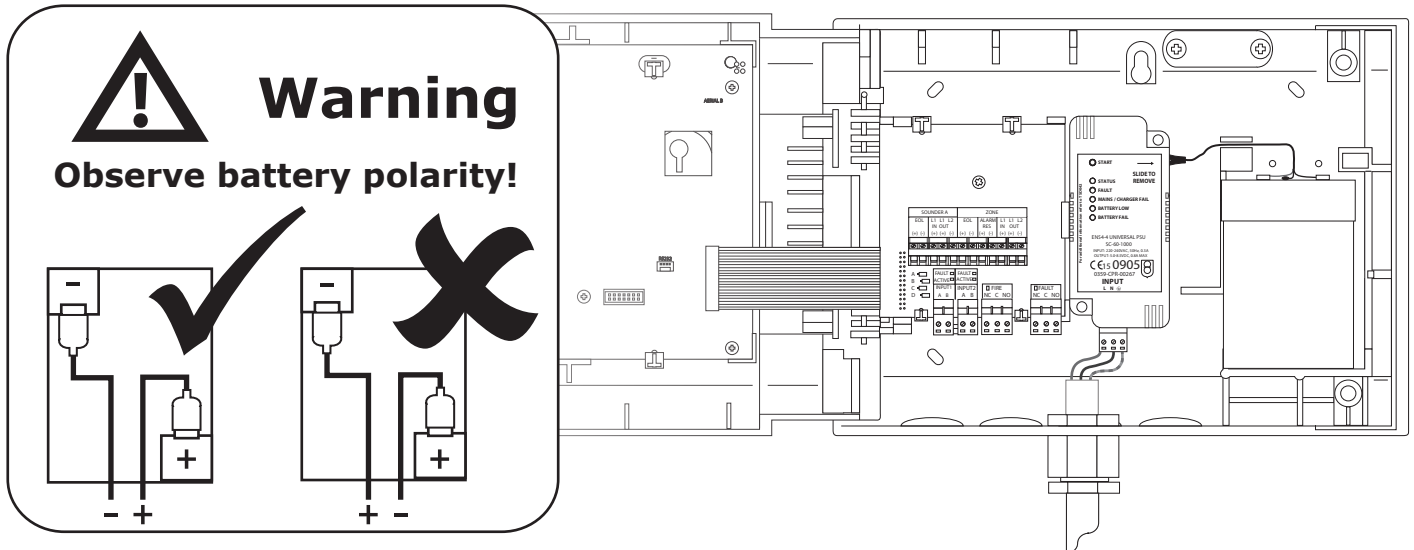
11 Refit the door

- Refit the door.
- Ensure the ribbon cable and the doors hinges are securely fitted.



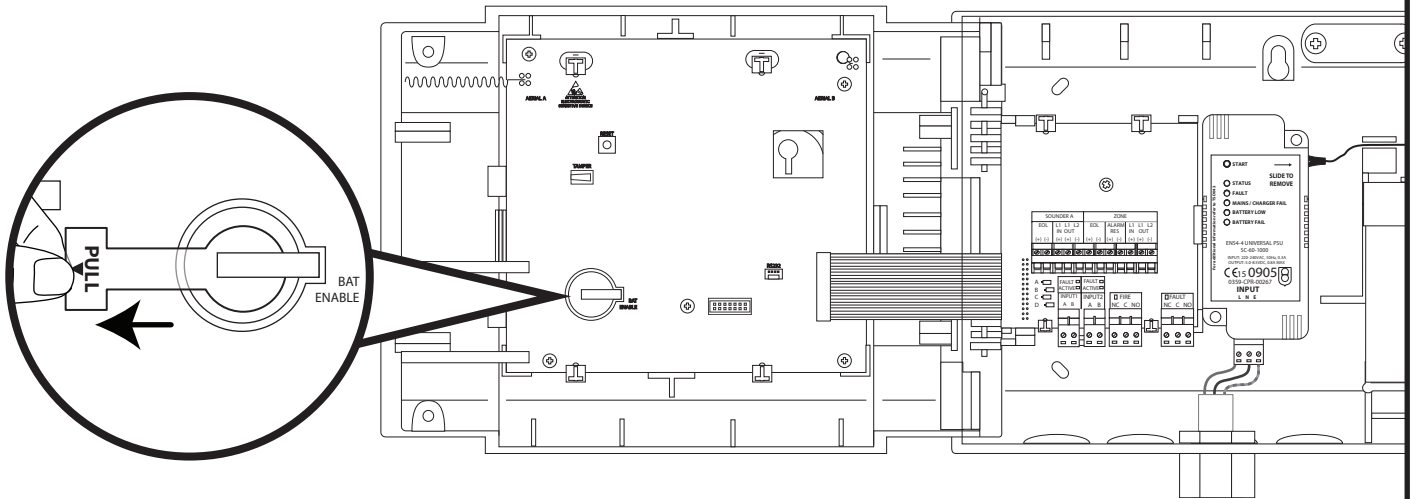
12 Fit back-up battery (230 VAC version only)

- Fit the WZM battery, observing correct polarity.



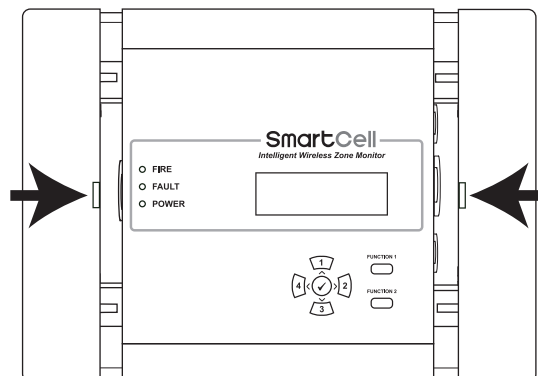
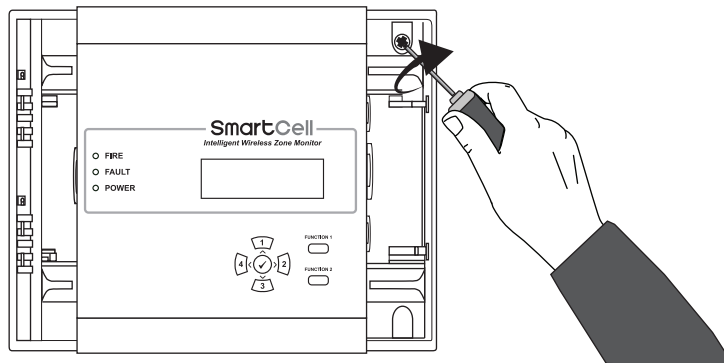
13 Remove 3 V battery tab

- The 3 V battery tab located on the back of the door must now be removed.



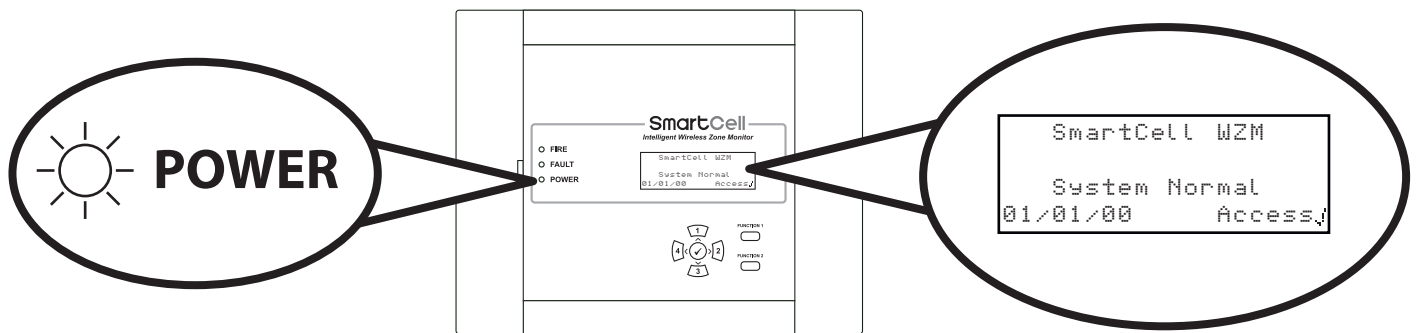
14 Close the WZM

- Reassemble the WZM.



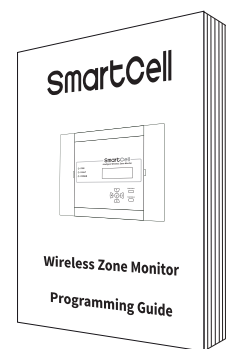
15 Apply power

- Apply power to the WZM.
- The green power LED will illuminate.
- The other LEDs should be extinguished.
- The screen should also display 'System Normal'.



16 Configuration

- The system can now be programmed.
- Refer to the WZM programming Guide (MK067) for details of compatible SmartCell devices and full programming information.



NOTE: This product contains relays which when subjected to mechanical shock may cause momentary transitions from the currently active state. The transitions will be less than 1 second and any equipment connected must not respond to such momentary changes of the relay. This product should be fixed to a stable and secure structure that is not subject to severe mechanical shock.

Specification

Operating temperature	-5 °C to +45 °C
Storage temperature	0 °C to 30 °C
Humidity	95 % non-condensing max.
Location	Type A: for indoor use
IP rating	IP30
Power requirements	230 VAC version: 220 to 240 VAC 24 VDC version: 19.2 to 28.8 VDC
Min/max electrical ratings	230 VAC version: 220 to 240 VAC, 50 Hz, 0.3 A 24 VDC version: N/A
Input / output fuse ratings	230 VAC version: Input - 3.15 A (non replaceable) Output - 300 mA & 750 mA (resettable) 24 VDC version: F1 - 60 V 1.2 A (resettable) F2 - 60 V 1.2 A (resettable)
Operating current	24 VDC version: 0.030 A (quiescent) and 0.042 A (alarm)
Battery backup	230 VAC version: 1 x 6V 4 Ah Yuasa NP4-6 24 VDC version: N/A For information on routine battery changes, refer to the Universal PSU Instructions (TSD032)
Battery standby time	230 VAC version: 72 hours 24 VDC version: N/A
Maximum battery internal resistance	230 VAC version: 0.7 Ohms 24 VDC version: N/A
Max current drawn from the battery by the pse with mains disconnected	230 VAC version: 5 mA (PSU), plus 100 mA from WZM 24 VDC version: N/A
Fire/fault relay ratings	1 A at 30 VDC
Maximum USB flash drive	128 GB, FAT32
Operating frequency	868 to 870 MHz
Output transmitter power	14 dBm
Signalling protocol	X5
Maximum cable lengths	Inputs 1 & 2 = 30 m
Dimensions (W x H x D)	275 x 220 x 80 mm

Regulatory Information

Manufacturer	EMS Ltd. Technology House, Herne Bay, Kent, CT6 8JZ United Kingdom
Year of manufacture	See devices serial number label
Certification	CE19
Certification body	0905
CPR Certificate DOP	0359-CPR-00427
Approved to	EN54-13:2005. Fire detection and fire alarm systems. Part 13: Compatibility assessment of system components. EN54-18:2005. Fire detection and fire alarm systems. Part 18: Input/output devices. EN54-25:2008. Incorporating corrigenda September 2010 and March 2012. Fire detection and fire alarm systems. Part 25: Components using radio links.
European Union directives	EMS declares that the radio equipment type Intelligent WZM 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.emsgroup.co.uk



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.

SmartCell

www.mysmartcell.co.uk