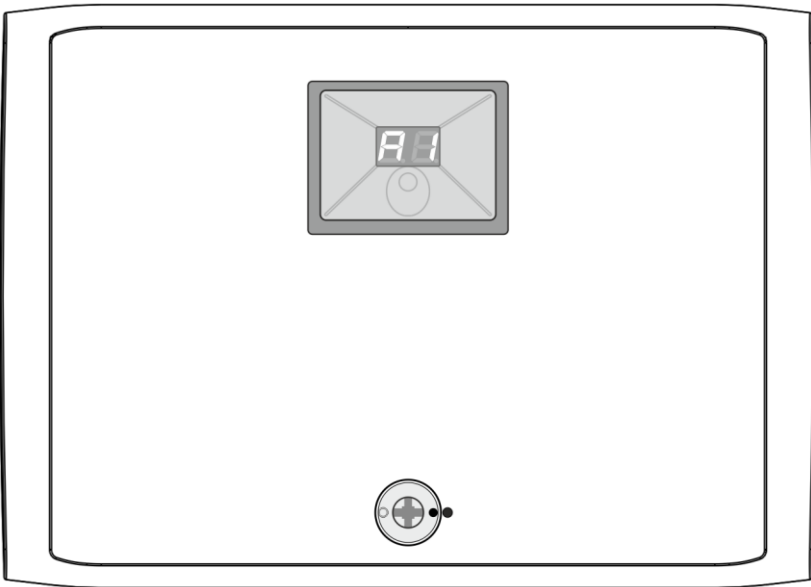




W-XP Wireless 2-Way Expander

Installation Manual



Designed and Manufactured
in the United Kingdom

www.orisec.co.uk

Introduction

The W-XP is compatible with all Orisec control panels.

Key Features

- ▶ 2 Way Wireless Communications
- ▶ Dual Diversity Antennae
- ▶ Supports up to 100 Wireless Devices*
- ▶ 2 Outputs
- ▶ Frequency Hopping Technology
- ▶ Onboard Piezo
- ▶ 7 Segment Display
- ▶ RJ45 Support for Network In/Out
- ▶ 16 Ohm Loudspeaker Driver/Output
- ▶ Programmable Volume Levels
- ▶ Screw Tamper Protection
- ▶ Address Noise Notification
- ▶ Tamper Return Terminal for External Sounders
- ▶ Digital Thermometer
- ▶ Light Sensor

* Determined by the control panel.

1. Installation

Choosing a location

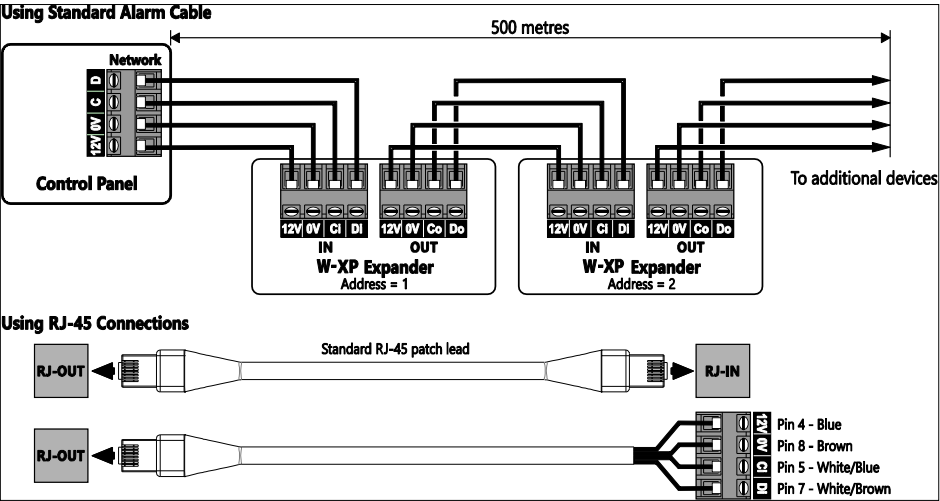
As with all wireless devices it is important to choose a suitable location away from metal objects, structures or other RF systems which may cause interference.

Connecting

The W-XP may be connected in any combination of star or daisy chain through the network and can also be connected to the RJ45 connections on Orisec control panel and expansion modules.

Ensure the system is powered down and the battery is disconnected before connecting the W-XP.

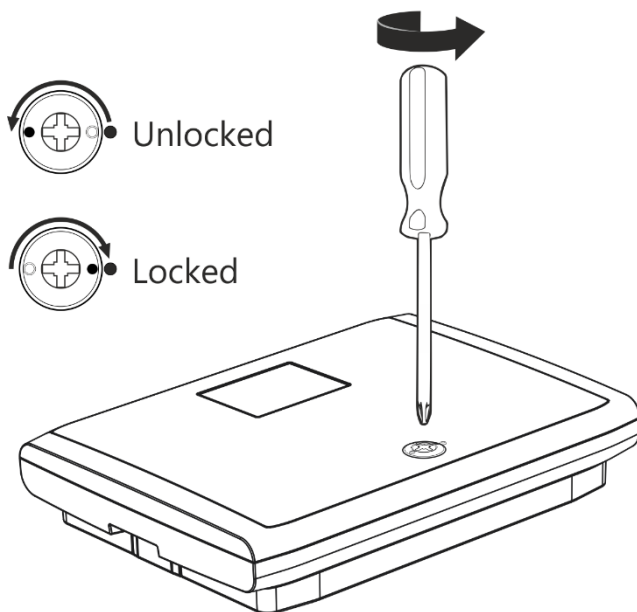
The network terminals are made up of four terminals integrating power and data. To ensure correct operation, all terminals must be connected to the corresponding terminals on the control panel or previous device:



IMPORTANT: Ensure that any cables within the unit are routed well away from both antennas.

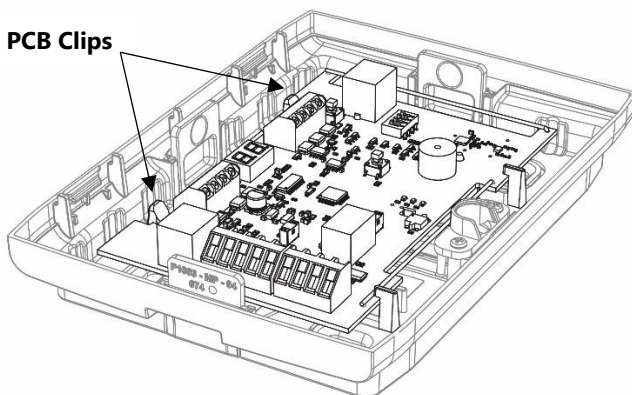
Removing the front cover

Simply turn the front cover locking cam half a turn to the left (anti-clockwise) to unlock the front cover. Now remove the cover from the back, lifting from the bottom first:

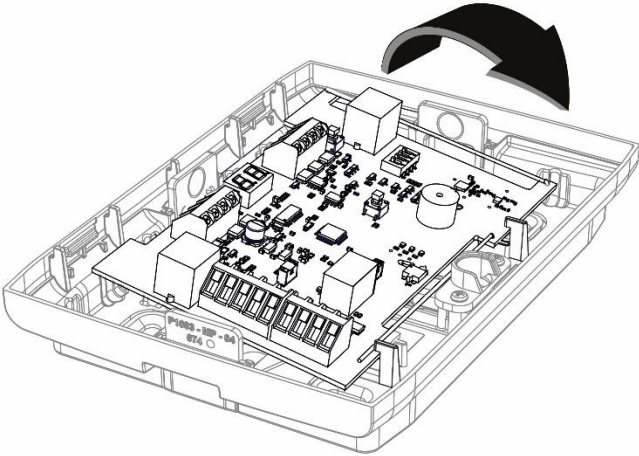


Removing the PCB

The PCB is held in the back by two flexible clips on the top edge.



To remove the PCB bend the clips upwards and pull the PCB forward:

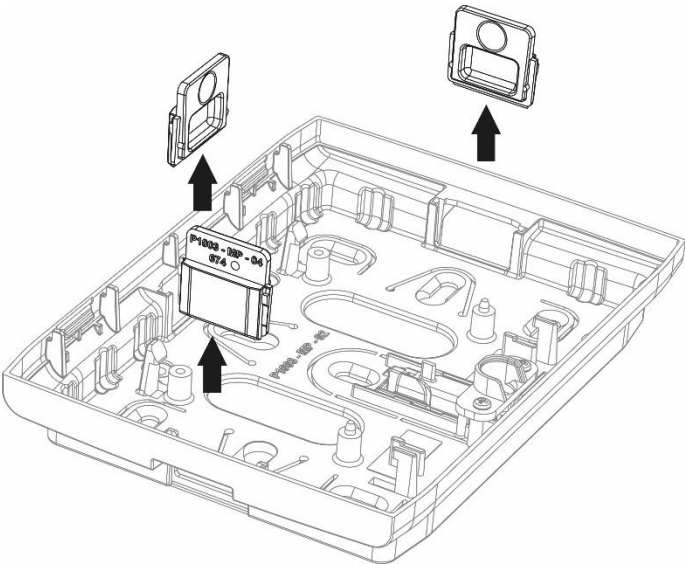


Follow the reverse procedure to fit the PCB and secure the front cover.

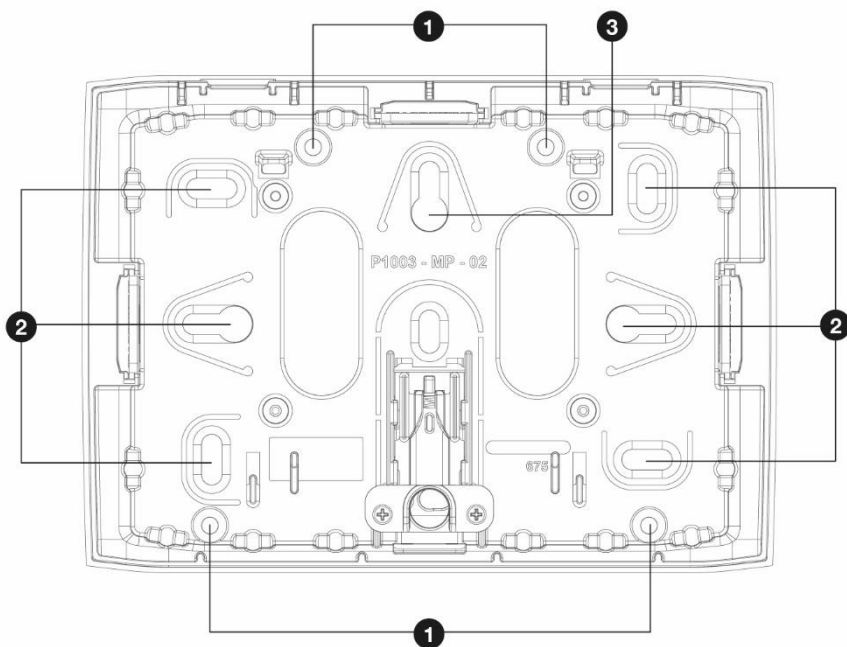
Note: The PCB may also be secured to the back using the enclosed screws.

Removing tabs for cable trunking

The W-XP has three tabs which may be removed to provide access for cable trunking:

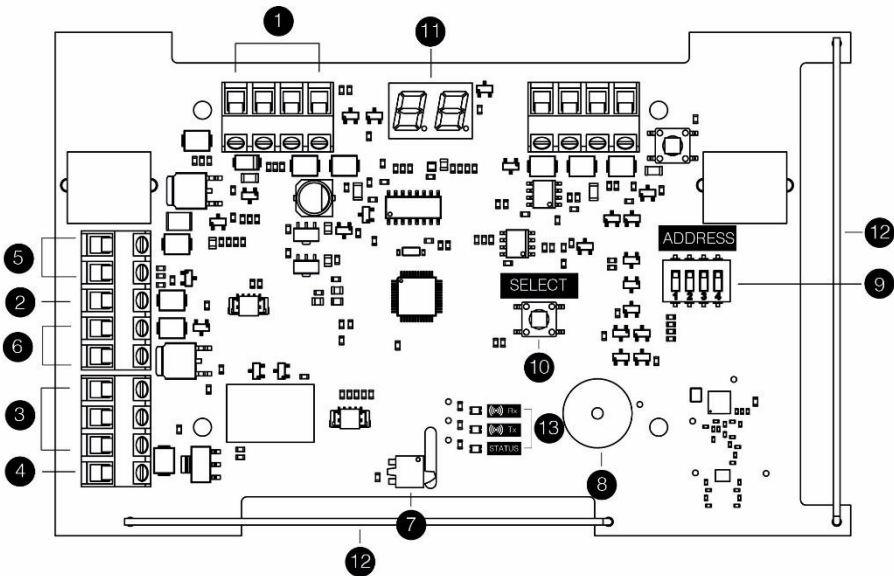


Fitting the W-XP to the wall



1. Additional mounting holes
2. Mounting holes
3. Keyhole

2. PCB Layout



1. Network Connections

The W-XP has Network In and Network Out connections both accessible via conventional terminal blocks and RJ-45 sockets. Any additional network devices connected to the W-XP should be connected to the Network Out connections.

2. Tamper Return

Tamper return for external sounder connections. Link to 0V if not used.

3. W-XP outputs 1

3 Amp relay. For full specifications, please Section 4.

4. W-XP output 2

100mA transistorized output. For full specifications, please Section 4.

5. Auxiliary 12V

Used for powering detection devices, the output is protected by a self-resetting fuse (500mA PTC).

6. Speaker

Used for driving 16 Ohm extension speakers. Each type of tone can be enabled or disabled per each W-XP.

7. Tamper Switch

The patented combined lid, screw and wall tamper switch will signal a tamper condition if the front cover locking bolt is undone or if the front cover is removed.

8. Piezo Sounder

The piezo sounder generates low level alarm, key press, and warning tones. Each type of tone can be enabled or disabled per each W-XP.

9. Address DIP Switch

Each W-XP must be assigned a different address using the Address DIP switch. Set the DIP switch to the required position. If addressed as 0, the address is defined by software utilising the ‘SELECT’ button, See Section 3 for more details.



Address 0
(Software address)



Address 1



Address 2



Address 3



Address 4



Address 5



Address 6



Address 7



Address 8



Address 9



Address 10

10. Select button

The local select button allows for local programming and addressing of the W-XP through the on-board 7-segment display. The 7-segment display will show the following, which are toggled via the select button; Address, Current, Zone Status, Outputs, Sounders Test, CRC Errors and Lost Packets.

11. Dual 7-Segment Display

The 7-segment display will show the expander address when the control panel is in engineer’s mode and scroll through the outer segments when operating normally. The display is also used in conjunction the select button to perform local programming and diagnostics, see Section 3 for more details.

12. Dual Diversity Antenna

The W-XP features 2 antennas at 90 degrees to ensure maximum signal strength wherever wireless devices are located.

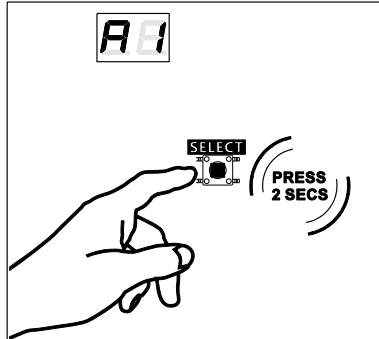
13. Wireless Status LEDs

Wireless status LEDs indicate when the W-XP is transmitting or receiving information from the wireless peripherals.

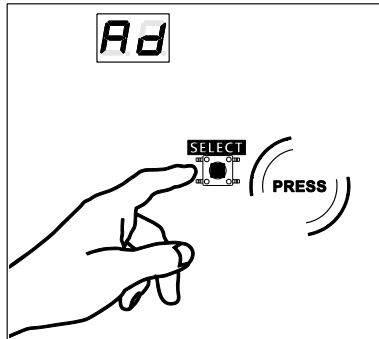
3. 7-Segment display & Select button

The 7-segment display shows the W-XP network address when the control panel is in engineer's mode and scrolls through the outer segments when operating normally.

1. With the system is in engineer's mode press and hold the 'SELECT' button' for 2 seconds for the main menu.



2. To scroll through the menu options, press the 'SELECT' button.



3. To select the displayed option, press the 'SELECT' button' for 2 seconds.

The menus are as follows;



Ad - (Address)

This menu allows for the expanders address to be set via software as opposed to hard addressed by DIP switches (Dip switches MUST be set as 0 to software address)



Cu - (Current)

This menu will show the current being drawn through the expander in mA (milliamp's) i.e. 460 mA will show as 46.

Please note the expander is not a calibrated meter for standards and regulations. Only take these readings as an indication.



Op - (Outputs)

This menu will allow for the outputs on the expander to be inverted for testing purposes. To scroll to the required output, select the output that is required for testing. This will then show one of two states; N (Normal) or I (Inverted).



St - (Sounder Test)

This menu is for testing the on-board piezo and speaker terminals.

There are two different stages, F (Off) or O (On). When ON the piezo and speaker will be activated until switched OFF.



Er - (CRC Errors)

This menu will show the current CRC errors on the expander. Errors can be caused by voltage fluctuations, high resistance and disconnections.



LP - (Lost Packet)

This menu will show the number times that communication with the control panel has been lost.

4. Specifications

Electrical

Input Voltage:	10 – 15Vdc
Current Consumption:	49mA
Outputs:	2 fully programmable; 1x Transistorized 100ma Output 1x 3 Amp Relay
Loudspeaker Output:	Minimum load of 16 Ohm
Auxiliary 12V:	Protected by 500mA electronic fuse (PTC)

Environmental

Operating Temperature:	-10°C to +55°C
Storage Temperature:	-20°C to +60°C
Max. Humidity:	95% non-condensing
EMC:	Residential, Commercial, Light Industrial & Industrial

Physical

Dimensions:	185mm x 132mm x 37mm
Housing:	3mm Acrylonitrile Styrene Acrylate (ASA)
Packed Weight:	400g



5. Standards

Security

PD 6662:2017

EN 50131-1:2006+A1:2009

EN 50131-3:2009

EN50131-5-3:2017

Grade 2, Class II

EMC

Conforms to European Union (EU) Electro-Magnetic Compatibility (EMC) Directive 2014/30/EU and EN 50130-4:2011+A1:2014

Conforms to RE Directive 2014/53/EU

EMC Environment: Residential / Commercial / Light Industrial / Industrial



CE: You can view the product EC Declaration of Conformity here:
www.orisec.co.uk/compliance



WEEE Directive: 2012/19/EU Compliant: This symbol indicates that according to local laws and regulations, this product should not be disposed of as municipal/household waste. Instead, it should be disposed of at the appropriate collection points designated for the recycling of electrical and electronic equipment, or returned to Orisec upon purchase of new replacement products. This will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

RoHS

RoHS Directive: 2011/65/EU Compliant:

Orisec declares that this product complies with and conforms to RoHS legislation that it does not contain more than the agreed levels of: Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent chromium (Cr6+), Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE)

Manufacturer: Orisec Ltd, 1 St Crispin Way, Haslingden, Lancashire. BB4 4PW. United Kingdom.

Warranty

The Orisec W-XP is guaranteed against defects in material or faulty workmanship for a period of 2 years from the date of purchase.

Disclaimer: Orisec will not accept any liability based on a claim that the zone expander failed to perform correctly as it is a component part of an installation and not a complete intruder alarm system.

Notes

Notes

www.orisec.co.uk

UK Based Technical Support

t: +44 (0) 1706 398740

e: support@orisec.co.uk

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