



X-Series Wireless Zone Expander
User Manual



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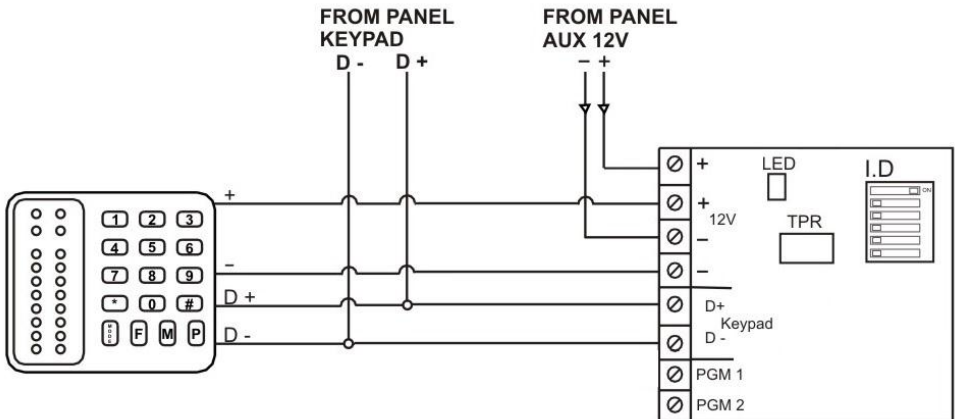
1. Features of the IDS X-series Zone Expander

- 16 Wireless, supervised zone inputs.
- Optional tamper per zone
- Programmable loop response time.
- Dedicated Box Tamper Input.
- Excellent protection against lightning (provided by specialist “Zap Tracking” and transient suppressors).
- Expander Supply Voltage Monitoring.

2. Installation and Wiring

Figure 1: Zone Expander Connection Diagram

Zone Expander Connection Diagram



3. Box Tamper Input

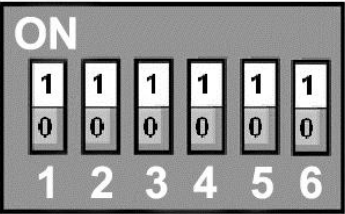
The box tamper input cannot be disabled. The enclosed spring must be used to depress button when closing the receiver unit.

4. Addressing via Dipswitches

To address the expander, set the Dipswitches as per Figure 2 below. Depending on what address is used on the zone expander, the starting zone number of the expander will be as per Figure 2.

Note: Wireless zones take president over wired zones, if you learn a detector replacing a wired zone; the wired zone will be ignored. If a detector is allocated to a zone, and the expander corresponding to that zone as addressed in the table below is not installed, the panel will not communicate with that detector.

Figure 2: Addressing via Dipswitches

Binary value on switch	Expander's zones
	
Dipswitch 1 up	1 -16
Dipswitch 2 up	17 - 32
Dipswitches 1 + 2 up	33 - 48
Dipswitch 3 up	49 - 64
Dipswitch 4	Not used
Dipswitch 5 off (down)	PGM1 will mimic PGM1 output on bus wired expander with the same ID
Dipswitch 5 up	PGM1 will set on RF Jam, and clear on RF Jam clear for the zones allocated to the receiver
Dipswitch 6 off (down)	PGM2 will mimic PGM2 output on bus wired expander with the same ID
Dipswitch 6 up	PGM2 will set on ANY Supervision fail, and clear on ALL supervisions restored for the zones allocated to the receiver

5. Resetting via Dipswitches

To reset the Zone Expander to the factory defaults, set the Dipswitches to ALL ON before the power is turned on, turn power on for 3 seconds and off again. After you have reset the Zone Expander, you can select the required address with the Dipswitches.

NOTE:

The operation will not start until either:

1. The power has been removed and then restored, or
2. There has been a change in the tamper status

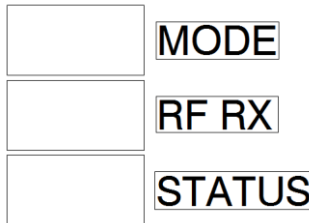
6. Starting up the Zone Expander

If the address saved to the Alarm Panel agrees with the Dipswitch settings, then the Zone Expander will start up and function correctly.

If the address saved to the Alarm Panel does not agree with the Dipswitch settings, then the Zone Expander will negotiate the addressing issue with the panel. If the addressing had previously been set to automatic, a new address will be assigned. If the addressing had previously been set to manual, the new Dipswitch address will be used instead. (Do not understand)

7. Status LED's

Figure 3:: Status LED's



There are 3 LEDs on the board marked "MODE", "RF RX" and "STATUS".

STATUS: LED that will indicate whether it is connected to the X-series panel properly. If the receiver notices X-series panel communications then it will stay ON.

RF RX: LED that will indicate when the receiver received a message from a learnt detector.

MODE: LED that indicates current operating errors. Errors are indicated much the same as the wired expander. If the LED is ON continuously then there are no errors. However if there are errors it will start pulsing the error number. These error pulses will be separated by a 1sec pause with the LED OFF.

Pulse error number:

1. Receiver Not Responding
2. No activity on the X-series Serial bus
3. No X-series messages detected
4. No messages for this peripheral detected from X-series panel
5. Not used
6. Expander not yet registered on the X-series panel
7. Expander tamper violated
8. Unsupported DIP address configured

8. Supply Monitoring

If the supply voltage to the expander module drops below 10.5V for a period of 1 second, the zone expander module will report a low voltage condition to the alarm panel. It will shut off if the voltage drops to below 7V. It will stop scanning zones until its supply voltage rises above 10.5V for a period of 1 second.

On receiving a low voltage condition, the alarm panel will report a low battery condition, if programmed to do so. It will log the expander module low voltage condition in the event log

9. Fault Indication

If operation of the Zone Expander is functioning normally, then the LED on the PCB will be continuously lit. If a fault does occur, the LED will flash the number of times assigned to the fault, pause, and then repeat. If multiple faults exist, the LED flashes the number of each fault, separated by a pause. For example, if the battery is low and the expander box has been tampered with, the flashing LED will flash as follows:

000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000

Zone Expander Faults and Their Numbers		
1	Low Battery	000
2	Dead Serial Bus	000 000
3	No Messages Received	000 000 000
4	No Panel Messages Received	000 000 000 000
5	Awaiting Tamper Change	000 000 000 000 000
6	Zone Expander Unregistered	000 000 000 000 000 000
7	Zone Expander Tamper	000 000 000 000 000 000 000



Warranty

Inhep Electronics Holdings (Pty) Ltd guarantees all IDS Control Panels against defective parts and workmanship for 24 months from date of purchase. Inhep Electronics Holdings shall, at its option, repair or replace the defective equipment upon the return of such equipment to any Inhep Electronics Holdings branch. This warranty applies ONLY to defects in components and workmanship and NOT to damage due to causes beyond the control of Inhep Electronics Holdings, such as incorrect voltage, lightning damage, mechanical shock, water damage, fire damage, or damage arising out of abuse and improper application of the equipment.

NOTE: Wherever possible, return only the PCB to Inhep Electronics Holdings Service Centres.

DO NOT return the metal enclosure.

The X-Series Wireless Zone Expander is a product of IDS (Inhep Digital Security) and is manufactured by Inhep Electronics Holdings (Pty) Ltd

WARNING

For safety reasons, only connect equipment with a telecommunications compliance label. This includes customer equipment previously labeled permitted or certified.

This is a professional product, and due to the nature of the product, should only be installed by an accredited professional Alarm Installer.

Help Desk Number: 0860 705137*

*Please note that this is NOT a toll free number

