

# Xv-ave Wireless Zone Expander

### THANK YOU FOR CHOOSING IDS

Thank you for purchasing an IDS Xwave Wireless Expander. The IDS X-Series Wireless Expander offers additional 16 wireless supervised zones. Two programmable or pre-set outputs.

For more information on IDS products please visit: <a href="www.idsprotect.com">www.idsprotect.com</a>
<a href="https://www.idsprotect.com">Note:</a>

Read the entire manual before attempting to install the Wireless Zone Expander.

#### **Features**

- 16 Wireless Zones with supervision.
- · Optional tamper per zone
- · Dedicated Box Tamper Input.
- Excellent protection against lightning
- Supply Voltage Monitoring.
- Battery monitoring

### Installation

### Communication Bus wiring

The wireless zone expander <u>must</u> receive its 12V power from the X-Series alarm panel to remove any chance of ground loops on the keypad bus which will cause communication errors.

Figure 1: Wireless Zone Expander Bus Connection

Output

Outpu

### Addressing via Dipswitch

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 the table below

Binary value on switch	Expander's zones	
ON 0 0 0 0 0 0 0 1 2 3 4 5 6		
Dipswitch 1 up	1-16	
Dipswitch 2 up	17 - 32	
Dipswitches 1 + 2 up	33 – 48 49 - 64	
Dipswitch 3 up		
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	

#### Note:

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



### Starting up the Zone Expander

# Figure 2: Wireless Zone Expander LED Status Indicators

MODE

RF RX

STATUS

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

STATUS: LED that will indicate whether it is connected to the X64 properly. If the receiver notices X64 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 1 sec pause with the LED OFF.

### Pulse error number:

- 1. Receiver Not Responding
- No activity on the X64 Serial bus
- No X64 messages detected
- No messages for this peripheral detected from X64
- 5. Not used
- Expander not yet registered on the X64
- 7. Expander tamper violated
- Unsupported DIP address configured

## **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

### **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

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

