



# IDS X64 Zone Expander

## Installer Manual





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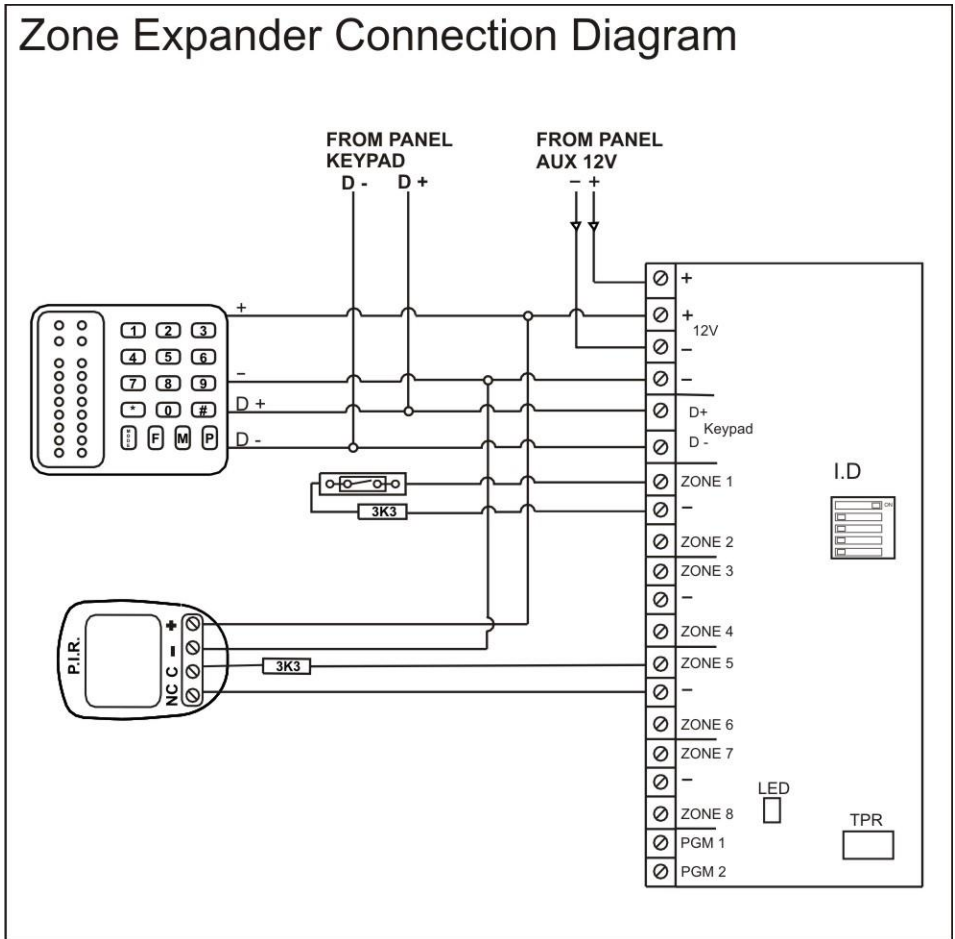
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# 1. Features of the IDS X64 Zone Expander

- 8 Wired, End-of-line supervised zone inputs.
- Optional tamper per zone using double End-of-Line resistors.
- 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

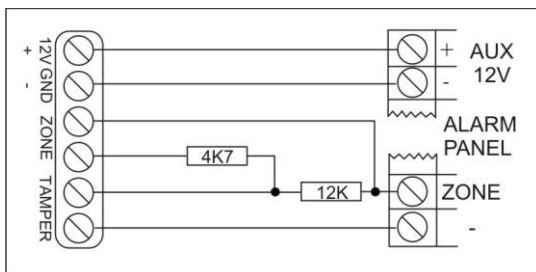
Figure 1: Zone Expander Connection Diagram



### 3. End-of-Line Resistors / Tamper by Zone

- All zones must be end-of-line supervised. Any unused zones must be terminated with a 3K3 resistor.
- The end of line resistor must be placed inside or as close to the sensor as possible.
- For tamper per zone, the 4K7 and 12K end-of-line resistors must be connected as per Figure 2 below.

**Figure 2: Tamper per Zone Connection**



Tamper operation is as follows:

- If the panel is unarmed and a tamper condition occurs, the siren will not sound but a tamper condition will be reported.
- If the panel is armed and a tamper condition occurs, an audible alarm will register and a tamper condition will be reported.
- Panic zones always register panic and tamper conditions.

### 4. Box Tamper Input

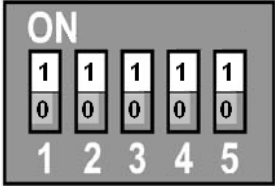
The box tamper input does not require an end-of-line resistor. Only use a normally closed contact. The box tamper input cannot be disabled. If it is not used, it must be terminated with a jumper.

## 5. Addressing via Dipswitches

If all Dipswitches are in the off mode, then automatic addressing has been selected. To select manual addressing, set the Dipswitches as per Figure 3.

Depending on what address is used on the zone expander, the starting zone number of the expander will be as per Figure 3.

**Figure 3: Addressing via Dipswitches**

| Binary value on switch  | Expander's zones |
|---|------------------|
|  |                  |
| Dipswitch 1 up  | 17 - 24          |
| Dipswitch 2 up  | 25 - 32          |
| Dipswitches 1 + 2 up  | 33 - 40          |
| Dipswitch 3 up  | 41 - 48          |
| Dipswitches 1 + 3 up  | 49 - 56          |
| Dipswitches 2 + 3 up  | 57 - 64          |

## 6. Resetting via Dipswitches

To reset the Zone Expander to the factory defaults, set the Dipswitches to ALL ON before the power is turned on. 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.

## 7. 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.

## 8. Status LED

| LED           | Condition   |
|---------------|---|
| On            | Expander module is communicating with the panel.  |
| Slow Flashing | Communication Failure:<br>No communication received from the panel in the past 2 minutes. |
| Fast Flashing | Voltage is below 10.5V.   |

## 9. 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.

## 10. 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:

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

| 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 **IDS X64 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 labelled permitted or certified.**