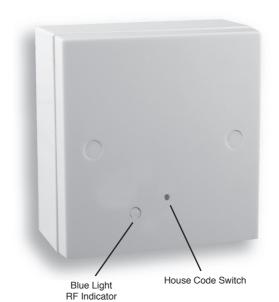
# **Ei Electronics**<sup>®</sup> Fire + gas detection **RADIOLINK PANEL MODULE** Model: Ei413



RadioLINK Smoke Alarms & Accessories can be connected wirelessly to Security & Fire Panels

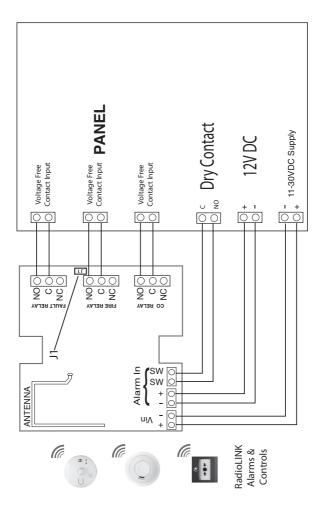
- · Powered by 11 30VDC from panel
- · Can be mounted internally or externally to the panel
- · Provides relay outputs (NC, C, NO) from
  - Smoke Alarms sensing fire
  - Alarm fault (Low Battery or Contaminated Chamber)
  - CO Alarm sensing CO
- · Panel can trigger all smoke / CO alarms to sound
- · Unique house coding feature
- Blue LED to facilitate house coding and visual RF transmission indication
- RF performance to EN300 220-1 in accordance with EN300 220-2
- · EMC performance to EN301 489-1 referencing EN301 489-3
- 5 year guarantee

# **Security Panel Installation**

The Ei413 can be installed in or next to the panel. If the panel is in a metal case, then the module should be located on the outside of the panel.

### CAUTION!

Before connecting the Ei413 to a fire or security panel please check with the panel manufacturer to determine the correct End of Line (EOL) device(s) to use and how and where they should be fitted.



Security Panel Wiring Diagram

Check with the panel manufacturers installation manual for wiring and termination details before proceeding:

- 1. Each relay of the Ei413 panel module, where used, is wired to a corresponding contact input in the panel.
- 2. Check that the sliding jumper link J1 (yellow) is in the off position. This is the factory default setting.
- Locate the auxiliary power output in the panel and wire it to the Vin connector on the Ei413 panel module, being careful to ensure the polarity of the auxiliary power supply has been wired correctly.
- 4. The "Alarm in" signal is optional and can be triggered by an 11 - 30V DC or a dry contact signal from the panel. When this signal is activated the Ei413 will send out an RF Fire signal which will activate any RadioLINK alarms or devices that it is house coded to.

## Fire Panel Installation

### CAUTION!

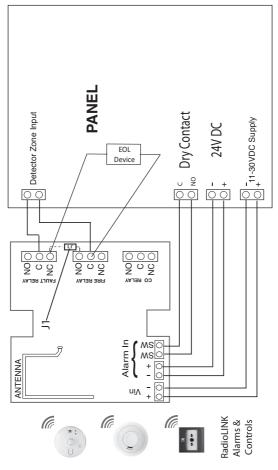
In this application the Fire and Fault relays are being configured to allow the fire panel to indicate a fire or fault condition. The wiring details and end of line (EOL) termination details will change for different fire panels so it is imperative that you check the panel manufacturers installation manual before proceeding.

#### Operation

- When the Ei413 receives a fire signal it will create a short circuit across the Detector Zone Input, resulting in a fire indication on the panel. A current limiting resistor may be required so check the panel manufacturers installation manual.
- 2. When the Ei413 receives a fault signal it will open circuit the connection to the Detector Zone Input, resulting in a fault indication on the panel.
- 3. A fire signal will override a fault signal .

## **Installation**

- 1. Slide the jumper link J1 (yellow) to the on position. The factory default setting is off.
- 2. Locate the auxiliary power output in the panel and wire it to the Vin connector on the Ei413 panel module.
- 3. Check that the polarity of the auxiliary power supply has been wired correctly.
- Wire the Fault Relay common (C) terminal and the Fire Relay common (C) terminal to a detector circuit in the panel.
- 5. Wire the manufacturers End of Line (EOL) device according to the fire panel installation manual.
- Power up the fire panel and the Ei413 panel module and follow the manufacturers instructions to set up the fire panel system.



Fire Panel Wiring Diagram

#### **House Code Procedure**

After the system is installed and connected to the panel do the following:

- 1. Press the house code switch through the narrow hole in the case until the blue light turns on and then release.
- 2. Press the house code switch on all the other RadioLINK devices to place them in house code.
- 3. Check that the number of flashes from the units corresponds to the number of devices / alarms in your system.
- Remove all devices from house code by repeating step 1 above. Check the house code flashing indicators have stopped on all units.
- 5. Button test each alarm to check your system.
- 6. Check the panel triggers with each alarm.

# **Technical Specification**

Power Required: 12 V (range 11 to 30V)

Current Required: 15mA (Standby max.) 60mA (Alarm max.)

RF Range\*: Over 100 metres in free space

RF Frequency: 868.499 MHz

**RF Multi-repeater Function:** The module acts as an RF repeater to extend the range and reliability of the system.

Dimensions: 88mm X 88mm X 28mm

Weight: 125 grams

\* Obstructions will result in a reduction of range from the free space specification. The actual range will vary considerably depending on installation.

**Outputs to Panel:** Fire Relay - NC, NO, Contacts rating 30V, 1 amp (NO contact closes when an alarm / test message is received from a house coded smoke alarm or other device).

**Fault Relay** - NC, NO, Contacts rating 30V, 1 amp (NO contact closes when a low battery or fault message is received from a house coded smoke alarm or other device).

**CO Relay** - NC, NO, Contacts rating 30V, 1 amp (NO contact closes when an alarm / test message is received from a house coded CO alarm).

Note 1: after the fault condition has been cleared it will take up to 5 hours for the relay to reset. The fault condition is cleared by fixing the fault but it is also cleared by receiving an alarm / test message.

**Inputs from Panel:** Alarm:- Shorting the inputs of the SW terminals will put all the smoke / CO alarms into alarm. When this short circuit is removed it will send a "cancel alarm" message.

Alarm: - applying 11 - 30VDC to the '+' and '- ' terminals will put all the smoke / CO alarms into alarm. When this voltage is removed it will send a "cancel alarm" message.

Temperature Range: 0°C to 40°C

Humidity Range: 15% to 95% Relative Humidity (non-condensing)

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