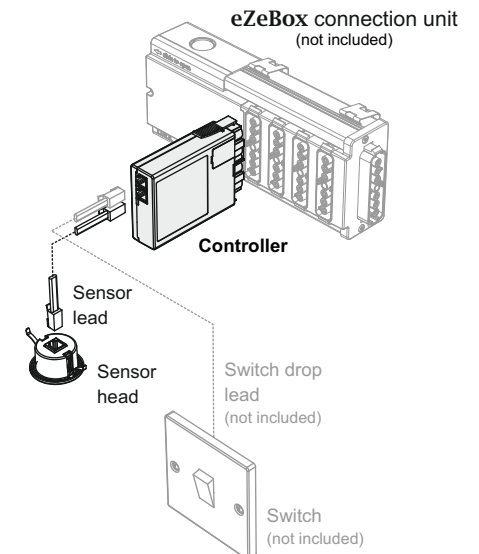# fns1200 Sensor Kit B

The **fns1200** sensor kit plugs directly into any of the **eZeBox** range of connection units or a 7-pole single socket outlet to provide control of the connected mains rated luminaires. Control is ON/OFF dependent on occupancy detection
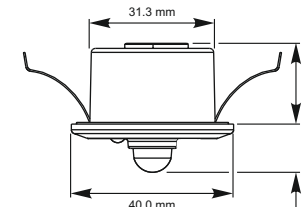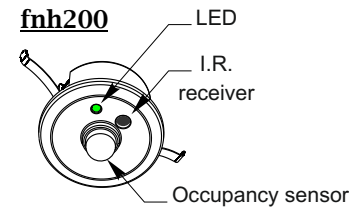
The kit comprises a controller, a sensor head and a sensor link lead.

This product should only be installed by a qualified electrician.

eZeBox connection unit
(not included)

Controller

Sensor lead

Sensor head

Switch drop lead
(not included)

Switch
(not included)

Sensor head and occupancy detection performance

fnh200
LED
I.R. receiver
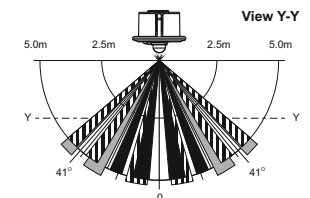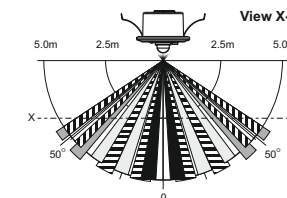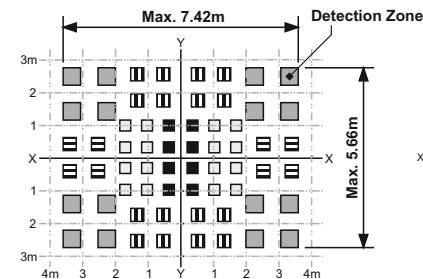Occupancy sensor

31.3 mm
19.5 mm
12.3 mm
40.0 mm

The sensor head fits into a 32mm diameter hole, with clips which can grip ceiling panels down to 1.5mm thick.

The sensor head has a rectangular occupancy detection range broadly 7.4m x 5.6m at a ceiling height of 2.5m (Longest length of detection aligning with the spring clips). As the ceiling height increases so will the overall detection area but sensitivity to small movements will decrease.

**Note:** Make sure that the sensor is not adjacent to circulating air, heaters or lamps.

Detection Zone

Max. 7.42m
Detection Zone
Max. 5.66m

3m
2
1
X — X
1
2
3m
4m   3   2   1   Y   1   2   3   4m

View X-X
5.0m   2.5m   2.5m   5.0m
X --- X
50°   50°
0

**View Y-Y**
5.0m   2.5m   2.5m   5.0m
Y --- Y
41°   41°
0

The X-Y cross-sectional diagram shows the detection area. The differences in the detection zone patterns indicate the projections of the 16 lenses with a single focal point. Movement of an object with higher than background temperature, between the detection zones, will be detected.

Configuring the controller and wiring the connection unit

Prise open lid '**C**' using a screw driver. Position link as required.
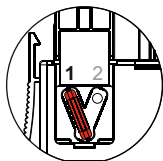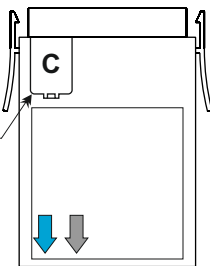
Link in position 1
Lights can remain ON during an emergency test. Wire connection unit as shown in option A. See below for details.
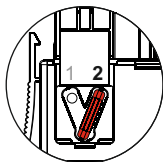
Link in position 2
Lights will switch OFF during an emergency test. Wire connection unit as shown in option A or B. See below for details.
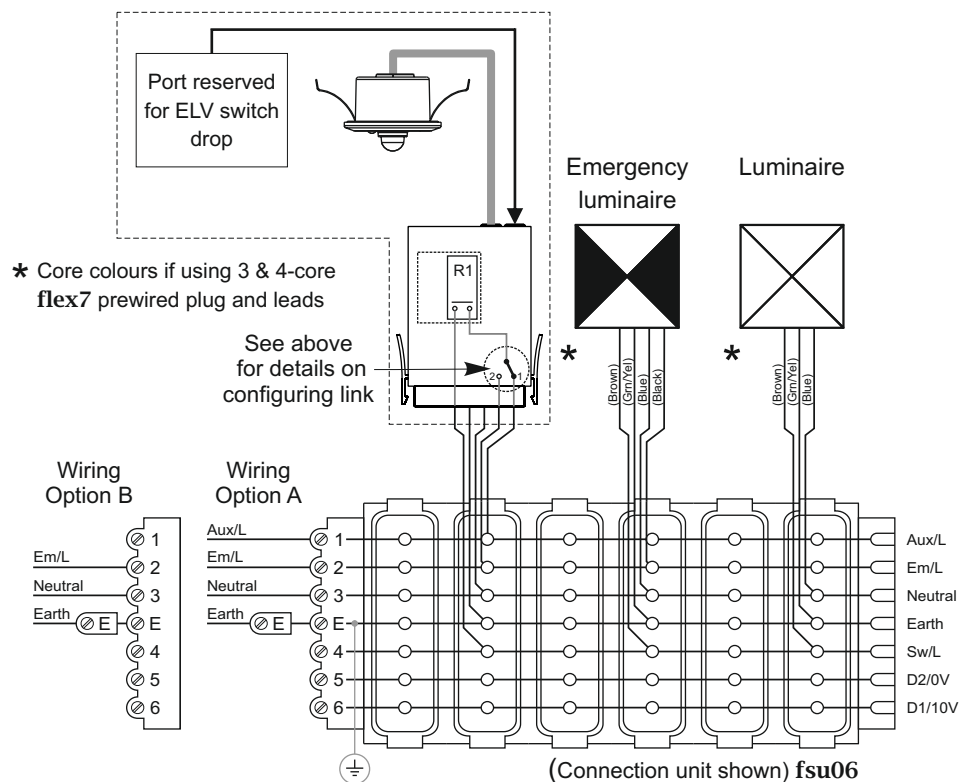
Rating
Supply Voltage : 230V~ 50Hz
Load
Fluorescent & Incandescent Lighting : 6A
Compact Fluorescent Lighting : 3A

Wiring diagram

Port reserved for ELV switch drop

* Core colours if using 3 & 4-core **flex7** prewired plug and leads

See above for details on configuring link

Emergency luminaire
(Brown) (Grn/Yel) (Blue) (Black)

Luminaire
(Brown) (Grn/Yel) (Blue)

R1

Wiring Option B

	⊘ 1
Em/L	⊘ 2
Neutral	⊘ 3
Earth	⊘ E
	⊘ 4
	⊘ 5
	⊘ 6

Wiring Option A

Aux/L	⊘ 1		Aux/L
Em/L	⊘ 2		Em/L
Neutral	⊘ 3		Neutral
Earth	⊘ E		Earth
	⊘ 4		Sw/L
	⊘ 5		D2/0V
	⊘ 6		D1/10V

(Connection unit shown) **fsu06**

Occupancy Sensing

Port reserved for ELV switch drop

FslXX

fnh200   **fnc1000**

Operation
Occupancy detection: Lights will switch ON whenever there is occupancy detected by the sensor head. When occupancy is no longer detected, lights will switch OFF after a pre-selected *time-out* period.
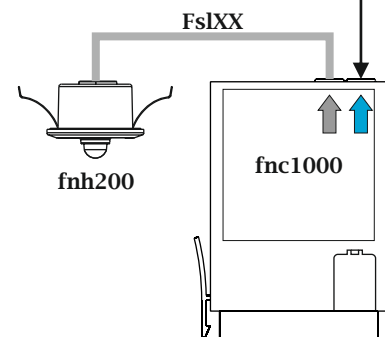
Setting Up
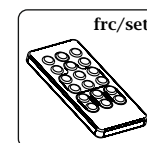
frc/set

Setup Remote Control - frc/set
The sensor comes factory set with default operational parameters including a standard 20 minutes occupancy time-out. If another time-out period (2, 5, 10, 20 and 40 minutes) or alternative operational parameters are desired, then an **frc/set** remote control will be required - ordered separately.
Full instructions for setting up the sensor are supplied with the **frc/set** remote control.

Optional Extras
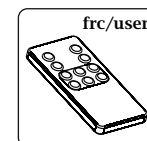
frc/user

User Remote Control - frc/user
The **frc/user** remote control is a convenient method for the end user to control the lighting remotely. Lights can be temporarily overridden ON or OFF and in cases where the lighting control is dimmable, dimmed UP or DOWN. In addition, up to six preset light levels can be stored and recalled.
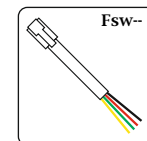Note: Unlike the **frc/set** remote control the **frc/user** remote control can not be used to setup or change occupancy time-out settings.
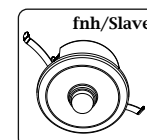
fnh/Slave

Increasing Occupancy Coverage - fnh/slave
Occupancy coverage can be increased by adding up to a maximum of five slave sensor heads (**fnh/slave**) to your existing sensor head. The **fnh/slave** comes complete with a 'Y' adaptor to facilitate connection.
A connecting lead may also be required, part number **fslXX** (**XX** = length /5m).

Fsw--

PELV - Switch Drop
Adding a PELV switch drop allows you to override your occupancy sensor off (fig 1) OR convert your occupancy sensor to absence control (fig 2)

For fsw--
-- = length in meters in multiples of 5m i.e. Fsw05, Fsw10, fsw15 etc.

Switch wiring (fig 1)
Override OFF
Cut back & insulate unwanted cores.

Switch Wiring (fig 2)
Toggle
(Switch not supplied)