Optional Extras

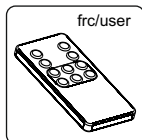### User Remote Control - frc/user

frc/user

The frc/user remote control is a convenient method for the 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.
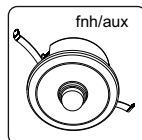
Increasing Occupancy Coverage - fnh/aux

fnh/aux

Occupancy coverage can be increased by adding up to a maximum of five aux sensor heads (fnh/aux) to your existing sensor head. The fnh/aux can be ordered separately and comes complete with a 'Y' adaptor to facilitate connection.

A connecting lead may also be required, part number fslXX (XX = length /5m).

Sensor head and occupancy detection performance

fnh400

LED
I.R. receiver
Light cell
Occupancy sensor

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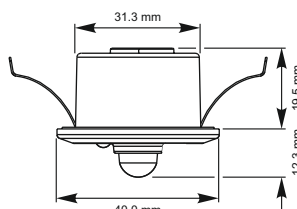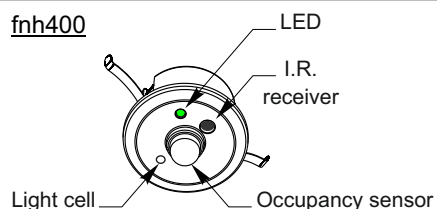
The sensor head fits into a 32mm diameter hole, with clips which can grip ceiling panels down to 1.5mm thick.

The sensor head has a rectangular occupancy detection range broadly 9m x 7m 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.
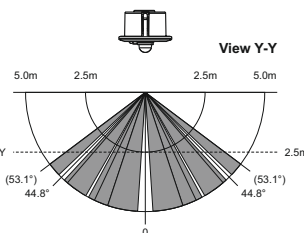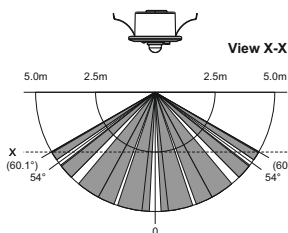
Note: Make sure that the sensor is not adjacent to circulating air, heaters or lamps.
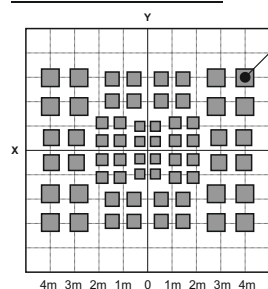
Detection Zone

Note: For safe operation it is advisable to extend occupancy coverage to cover the wall switch. In this way, operating the switch to 'SENSOR' position ensures the lights turn ON.

Y
Detection Zone
3m 2m 1m 0 1m 2m 3m
X
4m 3m 2m 1m 0 1m 2m 3m 4m

View X-X
5.0m 2.5m 2.5m 5.0m
X (60.1°) 54° 2.5m (60.1°) 54°
0

View Y-Y
5.0m 2.5m 2.5m 5.0m
Y (53.1°) 44.8° 2.5m (53.1°) 44.8°
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.

Supply Voltage	:12V DC	Operating range	:-10°C to 40°C
Material	:White PA6 UL94 V-0 rated, Non-halogen	IP Rating	:IP20
		Compliance	:2014/35/EU :2014/30/EU

FNH400 Occupancy sensor head

Working in conjunction with fnc type controllers, the fnh400 sensor head provides additional sensory data from the room. This takes the form of occupancy, light level and received instructions from a remote control such as the frc/user remote control.

connection unit
Switch drop lead
Optional switch
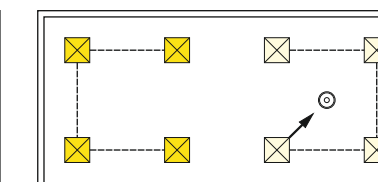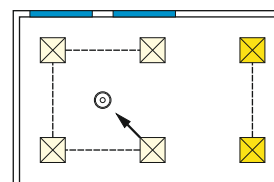Sensor head fnh400
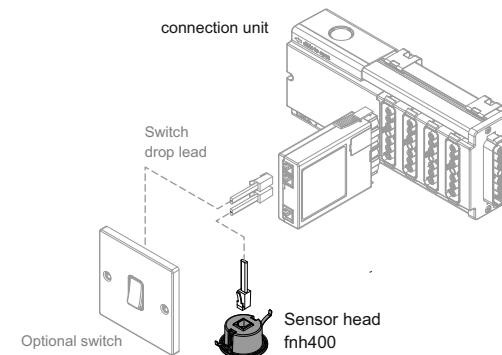
Considerations before installation

The fnh400 sensor head detects both occupancy and light level. However, conditions for optimum light sensing should always have priority over those for occupancy coverage. To achieve effective light level control, select only an area where the daylight contribution, though changeable, is significant and remains consistent across the area.

✗ As lamp output across the circuit must be common, it is not possible to provide the 'optimal' luminosity for all areas when some receive more daylight than others.
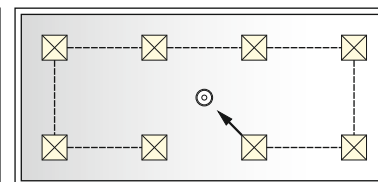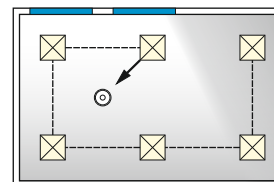

✓ Try to split into zones where the changes in daylight are reasonably consistent. Darker areas may then be controlled via alternative means such as on/off without consideration to light level. You may even consider sufficient natural light reaches these areas to justify a second light level sensing circuit.

Note: Make sure that the sensor is not adjacent to circulating air, heaters or lamps. Always fit the sensor head as close as possible to the centre of the group of lights under its control.

Setting Up
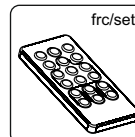
Setup Remote Control - frc/set

frc/set

The sensor can only be setup by using an frc/set remote control - ordered separately. Full instructions for setting up the sensor are supplied with the frc/set remote control.