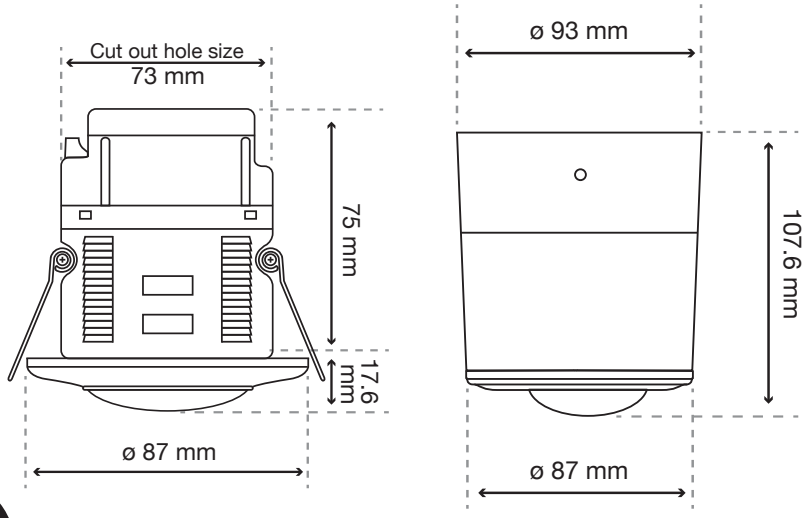
DA'SEL

PIR HIGH-BAY SENSOR



5 YEAR WARRANTY

Made in UK

INSTALLATION MANUAL

INSTALLATION INSTRUCTIONS ARE FOR THE FOLLOWING PRODUCTS:

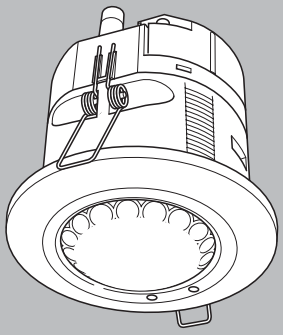
DS350xxF DA'SEL 360°
240V AC 6amp Flush Mounted

SS350xxSM DA'SEL 360°
240V AC 6amp Surface Mounted

Large open warehouses with high ceilings mean high energy costs. The DA'SEL range includes sensors that are optimised for peak performance in these spaces. Using high definition optics, precise masking and user-defined daylight linking, DA'SEL saves energy by ensuring lights are never left burning needlessly in vacant areas or where there is already enough natural light.

The range covers mounting heights up to 16m in both recessed and surface mount. Both the Mid-Bay and Hi-Bay sensors are engineered to deliver optimum presence detection.

The Mid-Bay sensor is suited to mounting heights up to 12m, while the Hi-Bay sensor is suited to mounting heights up to 16m.



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www.ecs.net.au

Only suitable qualified personnel should install this equipment

DA'SEL FEATURE AND BENEFITS

The DA'SEL also features plug and play capability for easy and safe installation. DA'SEL offers a Secure Lock-Ring (fig 13) for the use in ceiling tiles, as this will prevent damage to the tile. (Ordered separately)

The DA'SEL with its high definition lenses, performance optics and software are all optimised to provide class leading sensitivity and occupancy detection ensuring that the lights are always on when required.

All DA'SEL Switching sensors include an integral adjustable active photocell, which will hold the lights off in occupied areas or switch them off at a given light level.

SensorSpot standard mount sensors deliver a highly sensitive micro detection diameter of 7m within a 10m macro detection diameter (when installed at a mounting height of 2.5m).

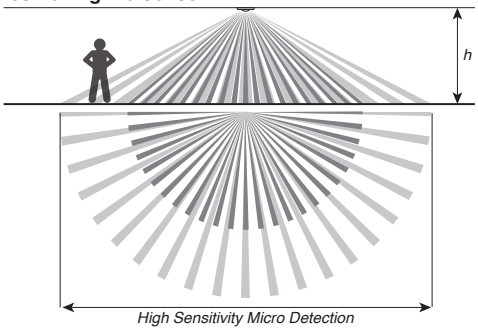
Features like colour, coded connectors make DA'SEL sensors easy to install, and flexibility is enhanced with both spring clip and locking ring mounting options.

POSITIONING OF THE SENSOR

	Aspect ratio (diameter : height)	
Type	**Macro Detection - Standard Sensitivity**	**Max recommended mounting height**
Mid-Bay	2:1 (20m diameter @ 10m height)	12m
Hi-Bay	1.9:1 (27m diameter @ 14m height)	16m

The sensor is more sensitive to movement across the beam compared with movement towards the centre.

Positioning the Sensor



The Sensor should be positioned on the ceiling in the centre of the occupied space. Ensure that the maximum recommended mounting height is not exceeded. Avoid mounting next to Air Conditioner unit.

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OUT OF BOX BEHAVIOUR

This range of products features a rich set of adjustable parameters that may be programmed via the hand-held infrared commissioning tools in order to create a sophisticated lighting control installation. There are no physical switches or potentiometers on the product.

Out of Box Behaviour

Prior to commissioning, the default settings for each channel of the sensor will be as follows:

Time Delay: 20 minutes

Photocell Setting: Always turn lights on when occupied

Occupancy Mode: Automatic (lights Auto ON, Auto OFF)

Movement Sensitivity: Maximum

NOTE: Please go to www.ecs.net.au for a complete list of programmable parameters.

DIAGNOSTIC

During walk-test. Detectable wiring faults are always indicated by the LEDs, irrespective of whether they are enabled.

LED indication	Meaning
G G G Green in response to movement or not	Movement detected
B B 1 blue flash every 2 seconds	Light level demand – photocell striving for more light in order to reach set-point
B B B B 2 blue flashes every 2 seconds	A manual switch is being activated

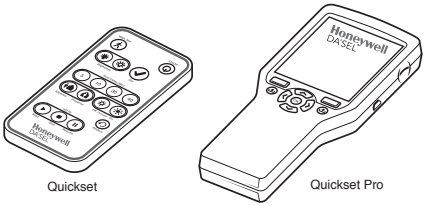
IMPORTANT NOTES

1. A means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.
2. This equipment is designed to switch lights no more frequently than normal manual operation. However, manufacturers of some particular lighting types (e.g. '2D' luminaires) may specify a maximum number of switching cycles and/or a minimum on-time in order to achieve a predicted lamp life. Please check with the manufacturer of the luminaires to ensure that they are compatible with automatic controls in this respect.
3. Due to limited space within the enclosure, it is not recommended that this product be used as a wiring junction box. System connections should be made elsewhere and wiring not looped within the product enclosure.
4. All information given in this document was correct at the time of publication.

WALKING TEST

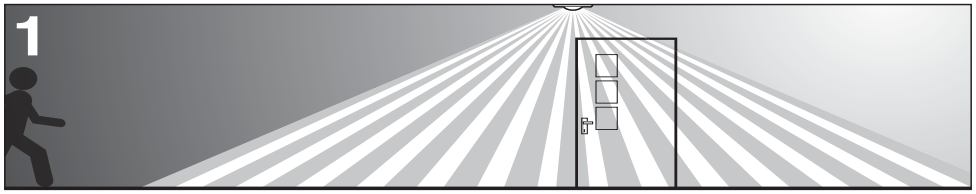
Walking Testing/ Lens Masking

In order to verify correct installation, walk-testing is recommended.An infrared commissioning tool will be required to put the detector(s) into walk-test mode. The infrared commissioning tool is the IR-M *(Sold separately)*.



Quickset Quickset Pro

Follow the instructions provided with the selected commissioning tool. While the sensor is in walk-test mode, the LEDs on the sensors are automatically enabled and it will turn on the lighting for only a few seconds each time occupancy is detected.



Stand out of the sensor's viewable footprint or remain motionless within the viewable footprint and wait for the lights to go out.

After 5 minutes, the sensor will automatically exit walk-test mode without requiring any action from the operator.

Wait a further 5 seconds for the sensor to stabilise then make a movement, the lights should come back on. Observe that the detection/non-detectionis as expected.

LENS MASK

Two lens masks are provided which may be used to restrict the viewable footprint of the sensor e.g. unwanted detection through a doorway. Cut the mask segment(s) as desired and install by pushing the mask lip between the bezel and the lens on the sensor as shown in fig 12.

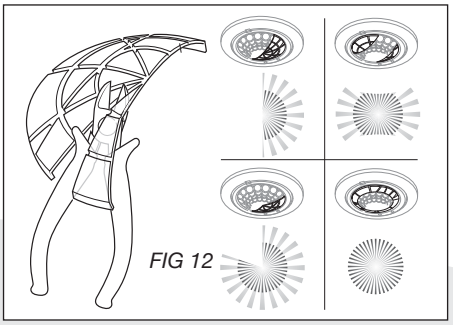


FIG 12

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INSTALLING THE SENSOR

Installing the Sensor into Ceiling Tile

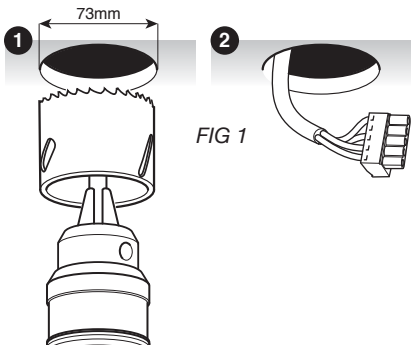


FIG 1

Removing the Terminal Cover

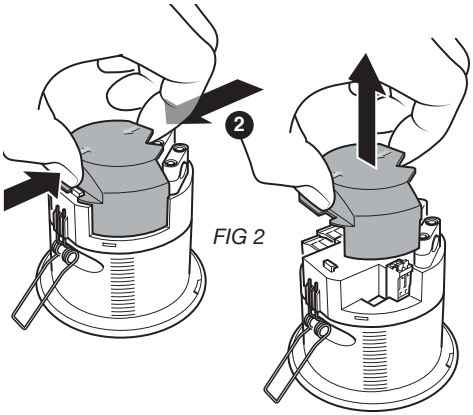


FIG 2

Fixing to Ceiling Standard Method

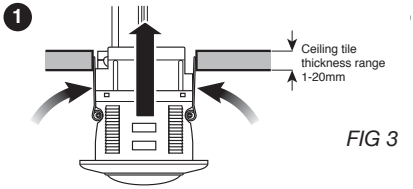
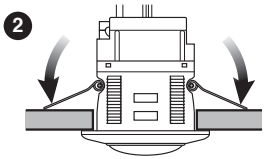


FIG 3



Fixing to Ceiling - Secure Lockring Method

(Available separately, please order lockring)

FIG 13

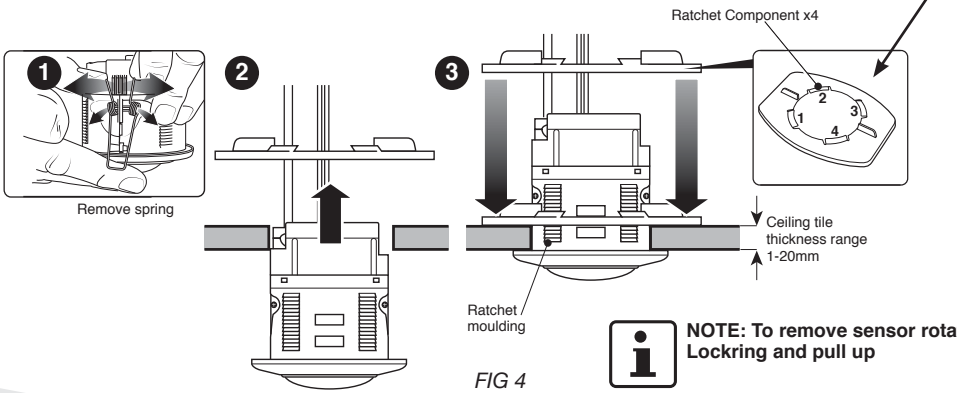


FIG 4

NOTE: To remove sensor rota Lockring and pull up

WIRING DIAGRAMS

Electrical Connections

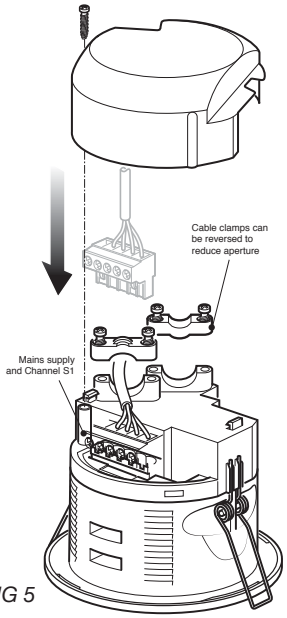


FIG 5

Simple Retro-Fit Application Retaining the Original Wall Switch

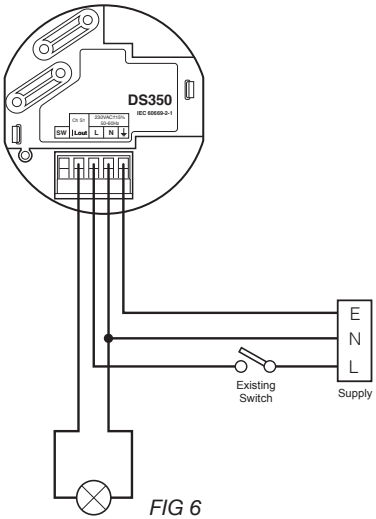


FIG 6

Application With Multi-way Switch for Multiple Loads

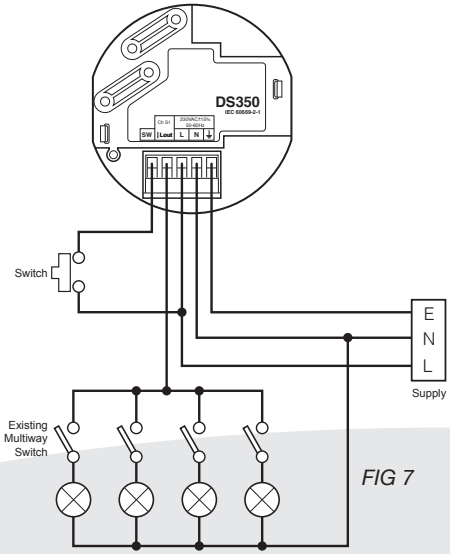


FIG 7

Two-way Switching

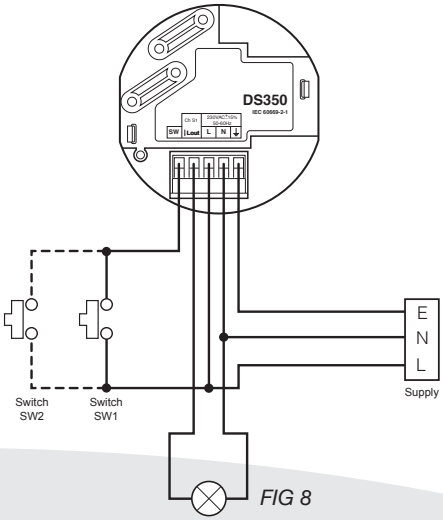


FIG 8

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INSTALLING SENSOR FIXING TO CEILING

Fixing to Ceiling - Surface Mounting (optional)

Product variants with "S" suffix on the part number are supplied with the surface fitting kit as standard. The surface mount kit is available as a separate part, please order Surfmt. The sensor may be mounted to any suitable surface, but is most commonly fixed to a conduit box or bushed to trunking.

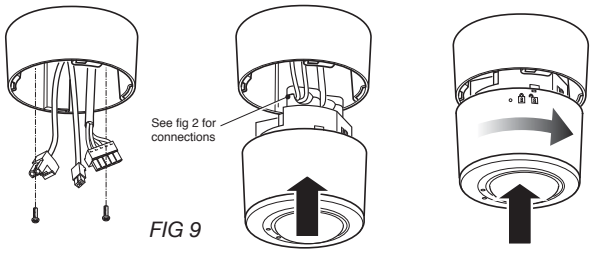


FIG 9

Uninstalling and Repositioning

Insert a flat headed screwdriver into the slot as shown and twist the collar anti-clockwise to release, fig 10. To separate the sensor from the surface mount casing, push a flat headed screwdriver onto the tab via the inside void of the casing and pull the sensor upwards, fig 11.

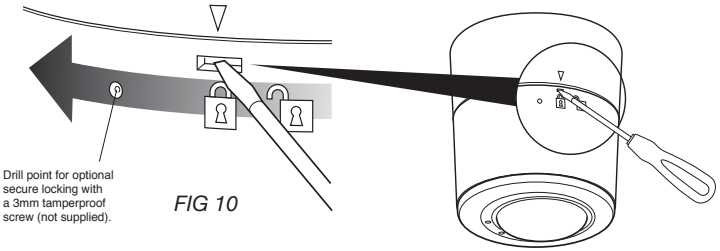


FIG 10

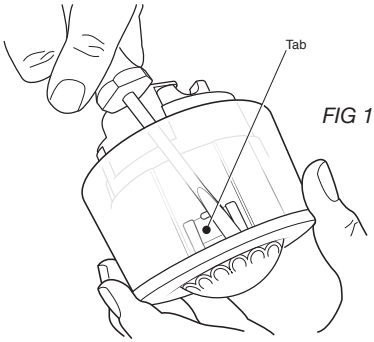
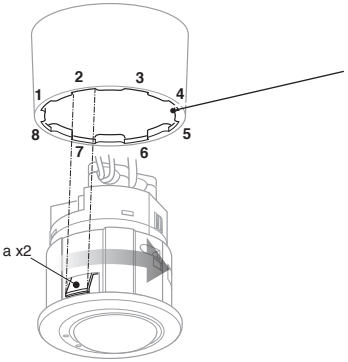


FIG 11



Eight segments on the collar allow up to four different rotational positions for the sensor, when inserting tabs (a) into slots (1-8). See positioning the sensor.

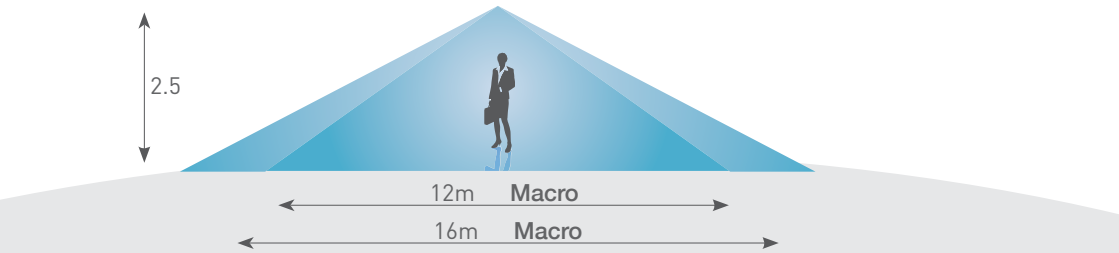
NOTE: Setting the correct position is important when using products with tilting lenses

TECHNICAL DATA

Technology	PIR
Coverage	360°
Detection range **Mid-Bay** **Hi-Bay**	12m diamter at 2.5m mounting height 16m diamter at 2.5m mounting height
Operating voltage	230V +/- 15% 50/60 Hz
Delay time	5, 10, 20, 40 minutes
Walk test	10 seconds
Load rating	6A
Lux level adjustment	100 – 1000 lux
Fascia colour	White
Material	Flame retardant PC/ABS
IP Rating	IP4X
Programming	Via Quickset

TECHNICAL DATA

	DS300	Defaults
Occupancy timeout	5, 10, 20, 40 minutes	20 minutes
Photocell operation	Off/On	On
Photocell turn ON level	100 – 1000 lux	200 lux
Photocell turn OFF level	100 – 1000 lux	800 lux
Walk test		10 seconds
Trigger mode	Presence/Absence	Presence



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