

**LightSpot HD Switching PIR Sensors System**

Only suitably qualified personnel should install this equipment

32.301.995-001\_REV.F

Part Number	Flush Mount	Surface Mount	Switching (6A)	Switching (10A)	Manual 'OneSwitch'	Programmable Manual Switch Input	IP55	Office	Mid-Bay	Hi-Bay
LS3100RF	•							•		
LS3100RSM		•								
LS3100RMBF	•									
LS3100RBSM		•								
LS3100RHBF	•									
LS3100RHBSM		•								
LS3200RF	•							•		
LS3200RSM		•								
LS3200RIPF	•							•		
LS3200RMBF	•									
LS3200BSM		•								
LS3200RHBF	•									
LS3200RHBSM		•								

**Security**

For details of securing the product and system see the General Security Best Practice for Ex-Or Products Information Sheet - D6004.

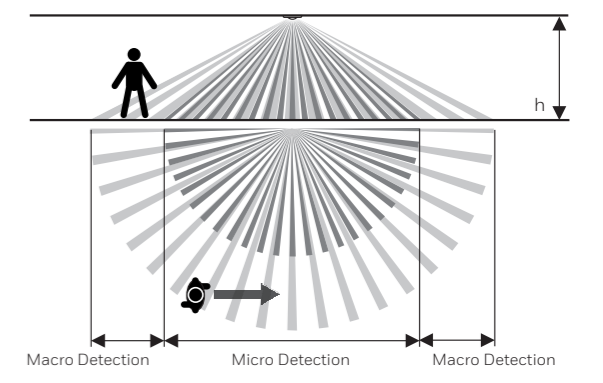
**1) Determine Position**

The unit should be positioned on the ceiling in the centre of the occupied space either flush mounted or surface mounted (e.g on a BESA box). Avoid exceeding maximum recommended mounting height.

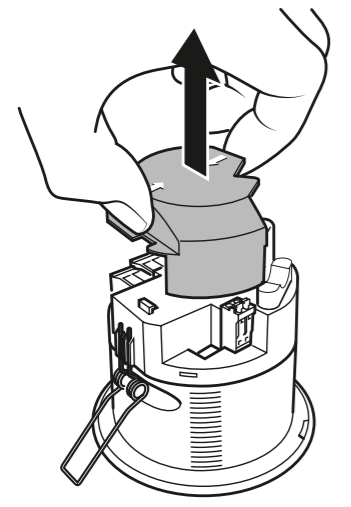
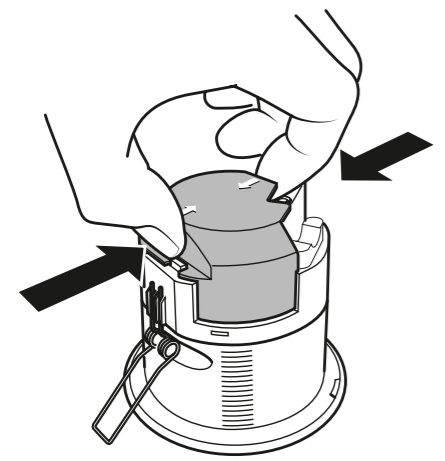
	Aspect Ratio (diameter : height)		Max recommended mounting height (h)
	Micro Detection - High Sensitivity	Macro Detection - Standard Sensitivity	
Office	2.8:1 7m diameter @2.5m height	4:1 10m diameter @2.5m height	3.5m
Mid-Bay	N/A	2:1 20m diameter @10m height	12m
High-Bay	N/A	1.9:1 27m diameter @14m height	16m

The unit is more sensitive to movement when direction of travel is along the vertical and horizontal planes. To achieve optimal occupancy detection the sensor must be orientated as shown.

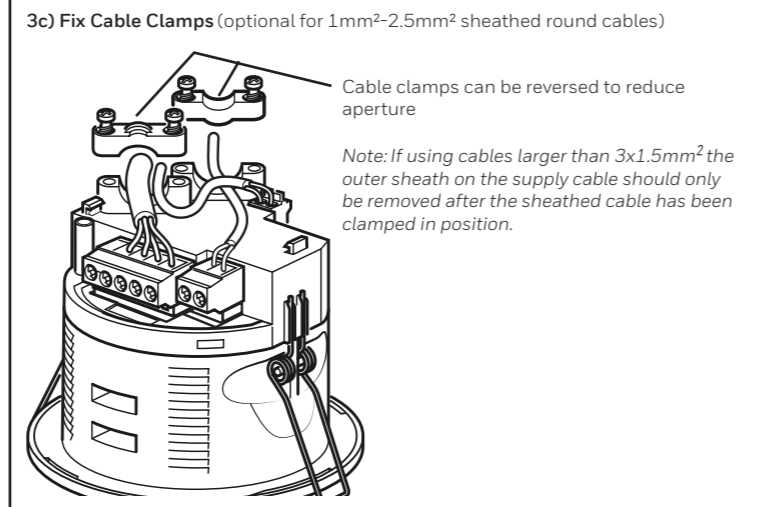
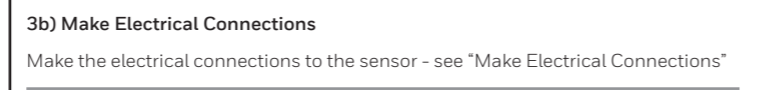
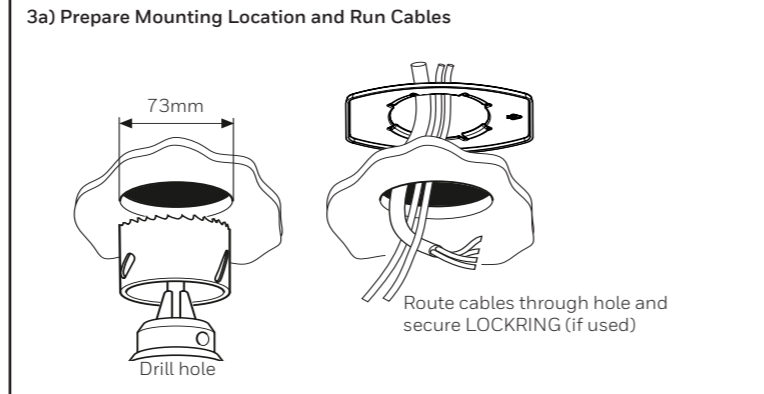
Optimum Orientation



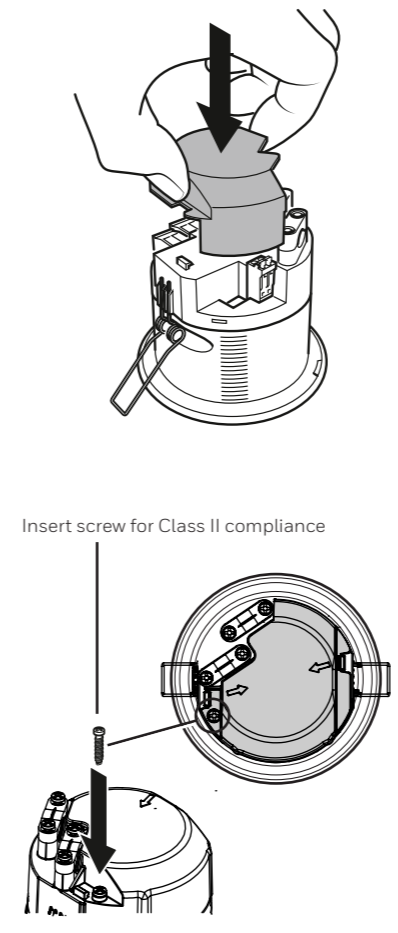
**2) Remove Terminal Cover**



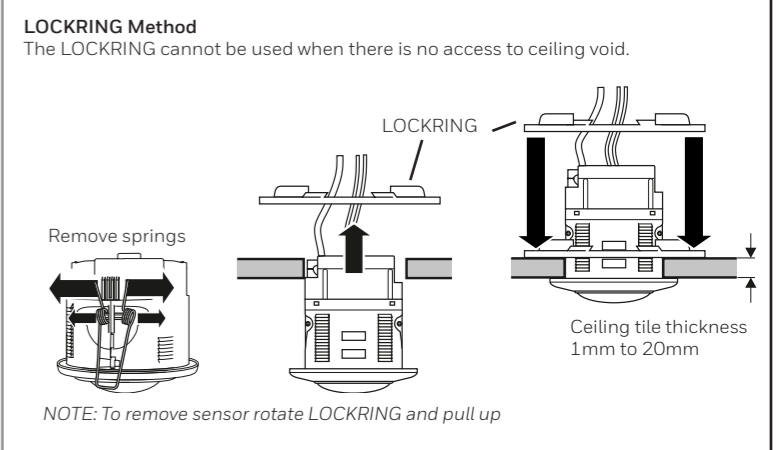
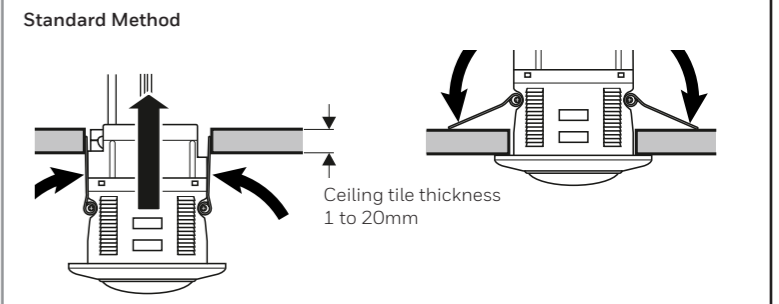
**3) Fit Flush Mount Version**



**3d) Replace the Terminal Cover**

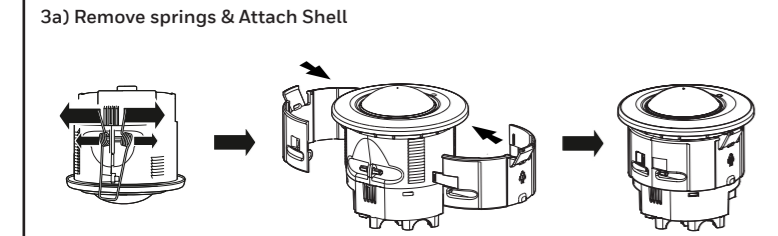


**3e) Fix to Ceiling**

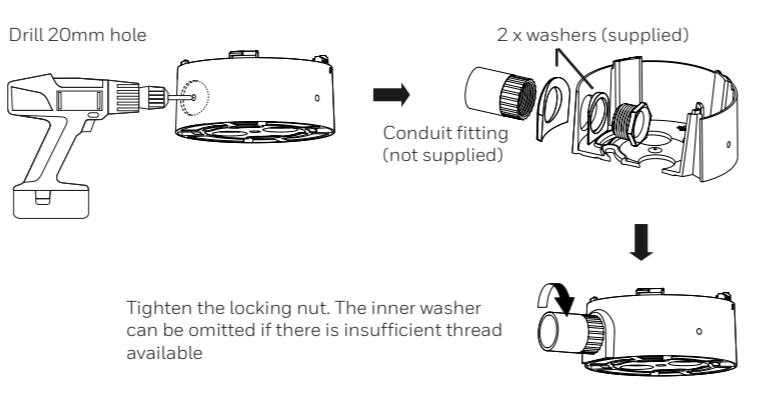


**4) Fit Surface Mount Version**

Note: If a surface mount version has been ordered a flush mount version and a surface mount kit will be provided.

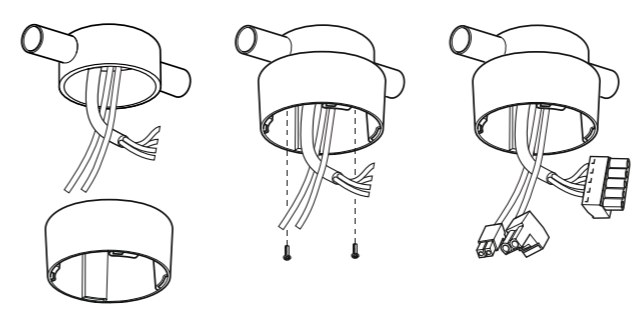


**4b) Attach Conduit Fittings & Cable Glands to Lower Housing** (if required)



**4c) Prepare Mounting Location and Run Cables**

The sensor may be mounted to any suitable surface, but is most commonly fixed to a conduit stop-end (BESA) box or bushed to trunking.

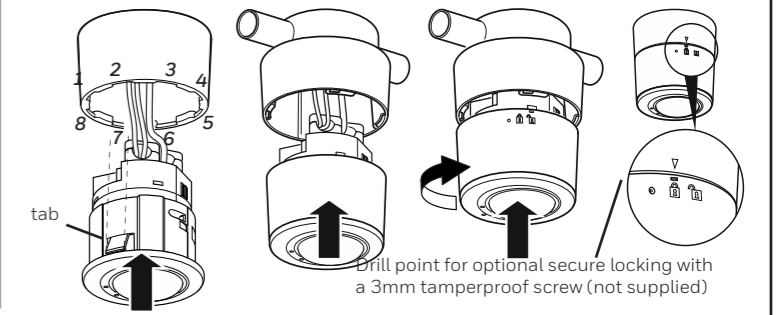


**4d) Make Electrical Connections**

Make the electrical connections to the sensor - see "Make Electrical Connections"

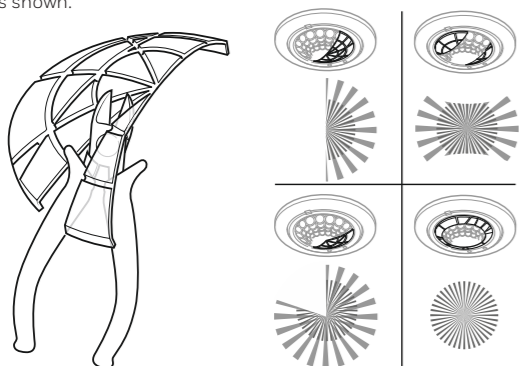
**4e) Fix to Ceiling**

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



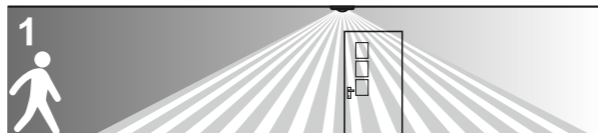
### 5) Mask Lens (if required)

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.



### 6) Perform Walk Test

Follow the instructions provided with the QSP. 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 unit's viewable footprint or remain motionless within the viewable footprint and wait for the lights to go out.



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

### 7) 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.

Time Delay	20 Minutes
Photocell Setting	Always turn on when occupied
Occupancy Mode	Automatic (lights Auto On, Auto OFF)
Movement Sensitivity	Maximum
LED Indication	Disabled

### 8) Configuration

Once installed the unit must be configured using the QSP to create the required lighting control installation - see the Quickset Pro Engineering Manual - W6001.

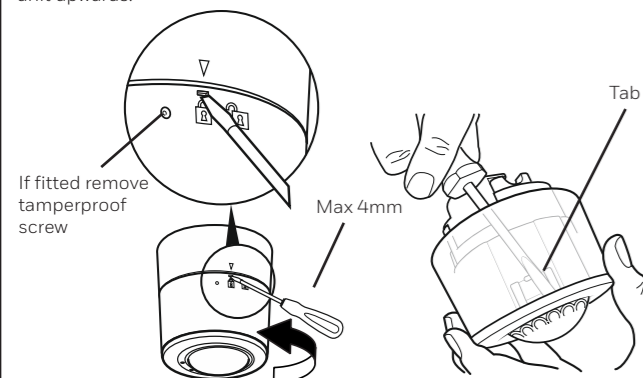
### 9) Diagnostics

LED indications are provided to help with fault-finding.

LED indication	Meaning
G G G	Movement detected
B B	Light level demand – photocell striving for more light in order to reach set-point
1 blue flash every 2 seconds	
B B B B	A manual switch is being activated
2 blue flashes every 2 seconds	

### Uninstall (Surface mount)

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

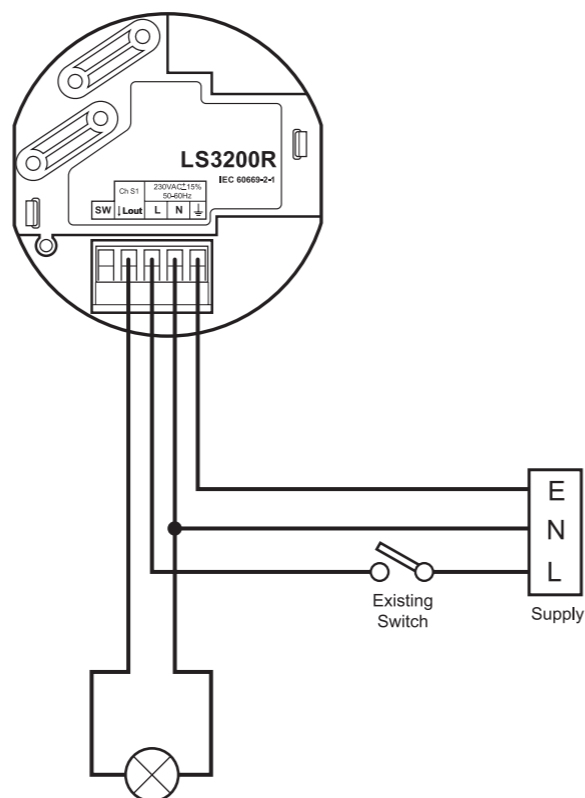


### IMPORTANT NOTES

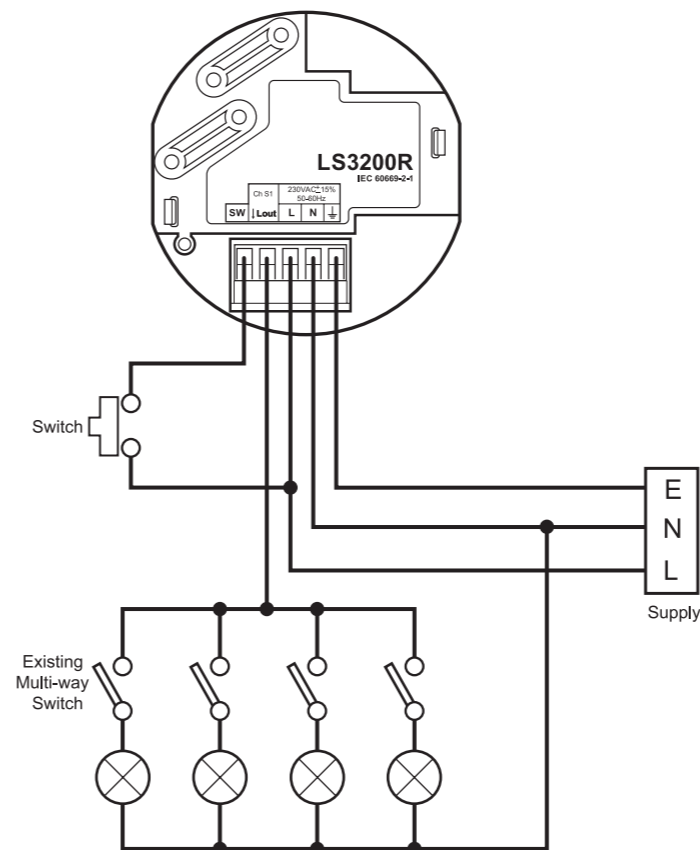
- A means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.
- This equipment is designed to switch lights no more frequently than normal manual operation. However, manufacturers of some particular lighting types (e.g. '2D' luminaires) may specify 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.
- 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.
- All information given in this document was correct at the time of publication.

### Make Electrical Connections

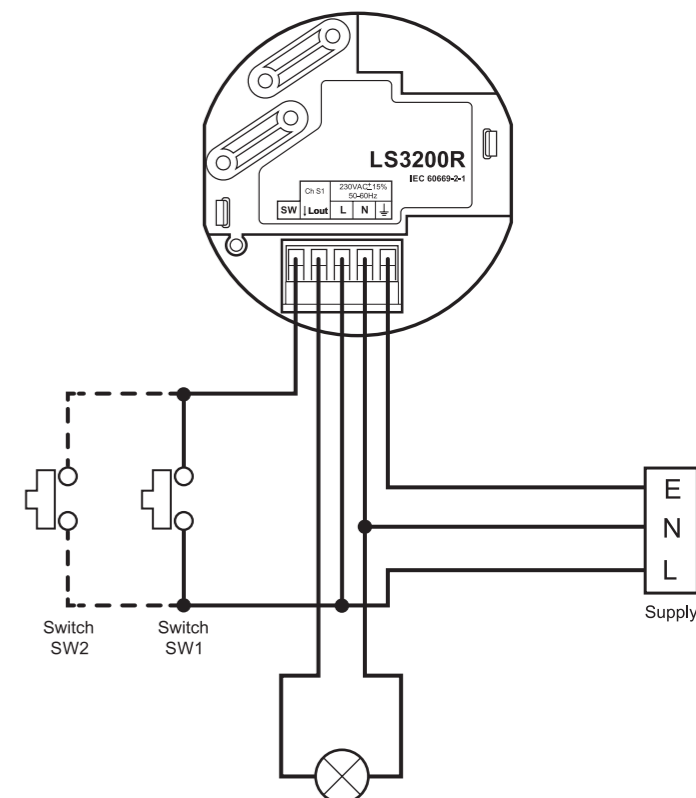
#### Switch



### Application with Multi-way Switch for Multiple Loads



### Two-way Switching



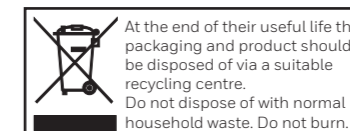
### Technical Data

Marking	Manual Switch	Live Output (ChS1)	Power Supply		
	SW	Lout	L	N	E
Colour		Black			
Terminal type		Pluggable rising cage clamp			
Terminal Capacity		1 x 0.5-2.5mm sq solid or stranded			
Recommended cable	0.75mm sq	Derive from appropriate wiring regulations			
Maximum length	10m	Derive from appropriate wiring regulations			
Function	Input	Output			Input
Operating voltage		230VAC +/-15% 50-60Hz			
		Recommended circuit protection: 16A MCB			
Power consumption	Negligible	N/A	150mW [relay off]		500mW [relay on]
Maximum load current	N/A	10A (maximum inrush 200A)			N/A
		LS3100R: 6A			
Permissible load types/connections	N/A	Magnetic-ballasted fluorescent, Compact fluorescent, Electronic-ballasted fluorescent, LED (maximum inrush 200A), Tungsten lamps (Max 6A)			N/A
IP Ratings	LS3200RIPF only	IP20			
	All other variants:	IP55			

TECHNICAL SUPPORT

+44 (0)1942 719229

EX-ORTECHNICAL@HONEYWELL.COM



Honeywell  
St Marks Court, North Street  
Horsham, West Sussex RH12 1BW  
Tel: +44 (0)1942 719229  
Web: www.ex-or.com

