

LightSpot - Stand-alone lighting control by presence detection and photocell

## Silver Series LightSpot

Silver LightSpot is part of a comprehensive range of presence detection systems designed to control modular luminaires with high frequency ballasts, and other lighting loads.

Silver LightSpot offers high-performance, programmable presence detection for lighting control in offices and open-plan workstations. It is available in slimline flush, flush and surface mount versions with single or dual-circuit options.

Silver LightSpot offers the following features:



Presence detection is by passive infrared, effectively enhanced to improve sensitivity to small movements.



Passive photocell holds lights off in bright ambient conditions. Active photocell has the capability to switch lights off in occupied areas.



**5-35\***

Off delay in minutes following the last observed movement after which the lights switch off.  
 \*Up to 96 hrs via HP2000; 5, 10 or 20 mins via HP18 (HP18 not suitable for MS1221P dual-circuit versions)



**6m**

Detection pattern and approx range in metres at floor level for 2.5m mounting height (detection pattern is cone shaped).



Dual-circuit option (1 x volt-free, 1 x switched-live output: MS1221PF & MS1221PSM only). Switched-live influenced by photocell, volt-free output by presence detection only. Independent time delays can be programmed via HP10 or HP2000.



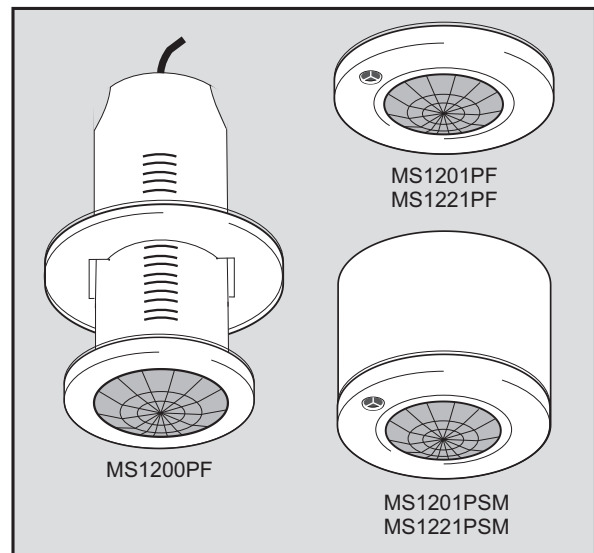
Hand-held Controllers provide local user override.



Remote programming ensures changes can be easily accommodated. Please see individual detector instructions for programmer compatibility.



Washroom mode. If no movement is detected in a 24-hour period, detector can be programmed to switch the load on for the duration of the off delay. With suitable valve unit can be used as urinal control.



### Programmable Parameters (via HP10)

**Note: Additional parameters available via HP2000 (Limited programming options also available via HP18)**

#### POWER UP

**Options: On/Off**

Sets the status of luminaires when power is applied.

**On** - lights power-up on irrespective of occupancy.

**Off** - lights respond to occupancy after 30 seconds.

**Pre-set - On**

#### MOVEMENT DETECTOR OPERATION

**Options: Auto/Semi-auto**

*Note: Only affects switched-live output.*

**Auto** - lights switch on and off automatically.

**Semi-auto** - lights are switched on by wall switch or hand-held controller and switch off automatically. **Pre-set - Auto**

#### OFF DELAY

**Options: 5-35 minutes/Walk-test Mode**

Sets the period after the last observed movement when the lights switch off. In walk-test mode, the Off Delay is 10 seconds.

**Pre-set - 20 mins**

#### PHOTOCELL

**Options: Active/Passive/Disabled**

**Passive** - holds lights off when sufficient natural light.

**Active** - lights turn on and off as required when natural light levels fluctuate and area is occupied.

**Disabled** - the photocell has no effect. **Pre-set - Disabled**

#### 24 HOUR CYCLE

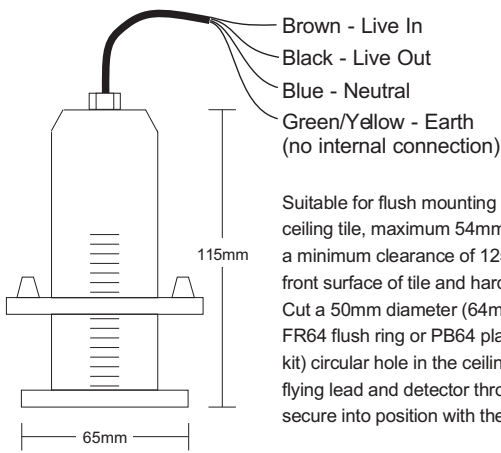
**Options: Yes/No**

For use in 'Washroom Mode' only. Provides hygiene flush if area has been unoccupied for 24 hours. **Pre-set - No**

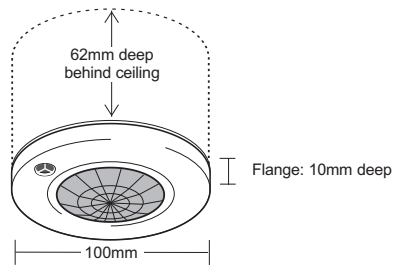
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## Dimensions and Installation Notes

### MS1200PF

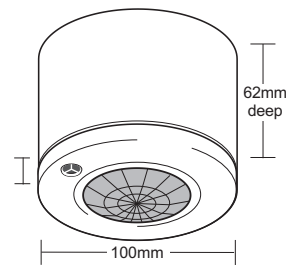


### MS1201PF/MS1221PF



Depth required behind ceiling: 62mm from front flange plus allowance for the minimum bend radius of the cable. Sinking box fits into 89mm diameter hole in ceiling tile or plasterboard ceiling. No access above the ceiling is necessary. The detector fits into sinking box with a simple bayonet action thus concealing the fixing screws.

### MS1201PSM/MS1221PSM

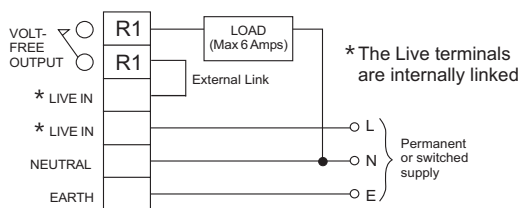


The housing may be secured to a hard surface or a BESA box. The detector fits into the housing with a simple bayonet action.

**Note: Do not mount these detectors within 25cm of a luminaire.**

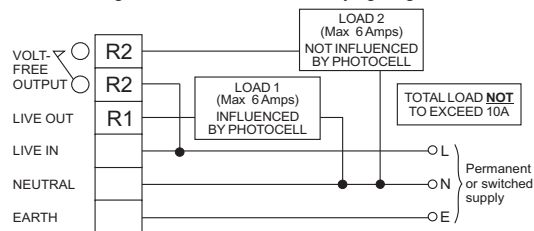
## Example Wiring Diagrams

### MS1201PF or MS1201PSM



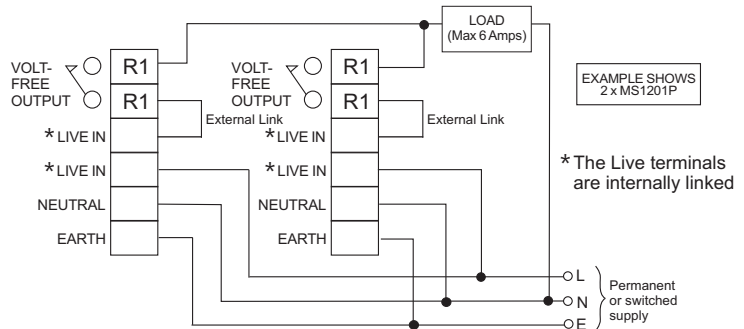
### MS1221PF or MS1221PSM

The MS1221 has two outputs, one influenced by the photocell (R1), the other not (R2). This is useful in applications where a fan or water is being controlled in addition to any lighting.



### Multiple Units

Larger areas can be covered by connecting extra units in parallel. The total load current must not exceed 6 Amps in case only one unit is activated.



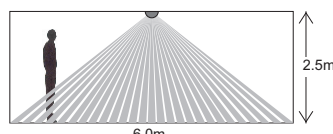
**MS1200PF** - Connection principle is the same but the output is switched live rather than volt-free.

Always check the product label before connecting

## Technical Data

**MAXIMUM RECOMMENDED MOUNTING HEIGHT: 3.0m**

**RANGE:** Cone-shaped detection pattern, diameter (at floor level) = 2.4 x mounting height



**OFF DELAY:** Adjustable: 1 min-96 hours / Disabled (via HP2000); 5-35 mins in 5-min increments (via HP10); 5, 10 or 20 mins (via HP18) - plus 10-second Walk-test Mode (OFF DELAY 1 & 2 on MS1221PF/SM are independently adjustable via HP10/HP2000.)

**PHOTOCELL:** Adjustable 50-5000 lux via infrared programmer

**OPERATING VOLTAGE:** 230V 50Hz (UK & Europe)

**RECOMMENDED CIRCUIT PROTECTION:** 10 Amps

**MAX LOAD:** 6 Amps per output (not exceeding 10A in total)

**COLOUR:** White

**MATERIAL:** Flame retardant PC/ABS

**WEIGHT:** Slimline flush - 70g approx (excluding cable); Flush & surface - 200g approx

**IP RATING:** Slimline flush - 4X; Flush & surface - 3X

**OPERATING TEMPERATURE:** 0°C to 40°C

## Ancillary Items



### HP2000 MLS Digital Programmer

Menu-driven LCD Programmer with automatic equipment recognition and parameter download facilities.



### HP10 LightSpot Programmer

Infrared programming tool with 12 diode switches for the setting of individual parameters.



### HP18 LightSpot Programmer

User-friendly override/programming remote controller.

*Please note that the HP10 and HP18 do not give access to the full range of parameters.*



### HC6 Two-button Hand-held Controller

Note: The HC5 Universal Hand-held Controller is also suitable for use with these detectors

Ex-Or operates a genuine policy of continuous improvement. You may expect the specification to be regularly enhanced. For latest technical information, please visit [www.ex-or.com](http://www.ex-or.com)

## Part Numbers

<b>MS1200PF</b>	Silver LightSpot with photocell - slimline flush
<b>MS1201PF</b>	Silver LightSpot with photocell - flush
<b>MS1201PSM</b>	Silver LightSpot with photocell - surface
<b>MS1221PF</b>	Two-circuit Silver LightSpot with photocell - flush
<b>MS1221PSM</b>	Two-circuit Silver LightSpot with photocell - surface

<b>HP2000</b>	MLS Digital Programmer
<b>HP10</b>	LightSpot Programmer
<b>HP18</b>	LightSpot Programmer
<b>HC6</b>	Two-button Hand-held Controller c/w wall bracket
<b>HC5</b>	Universal Hand-held Controller c/w wall bracket