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

Mid Range Series LightSpot

Mid Range LightSpot is a high-performance, directional presence detector with built-in photocell for use in almost any internal space. With a range of up to 20m by 20m, it is ideal for larger classrooms, conference rooms, longer storage aisles etc. It is a self-contained unit, making installation simple and straightforward.

Mid Range LightSpot offers the following features:

Active presence detection by microwave technology.

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

1 min-96 hrs Off delay - period following the last observed movement after which the lights switch off.
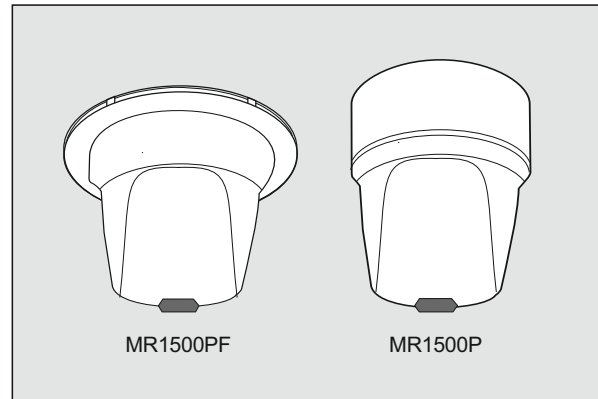
20m Detection pattern and range in metres under normal operating conditions.

Hand-held Controllers provide local user override.

Remote programming with the QUICKSET PRO or HP2000 (operate at 5m range) ensures changes can be easily accommodated.

MR1500PF   MR1500P

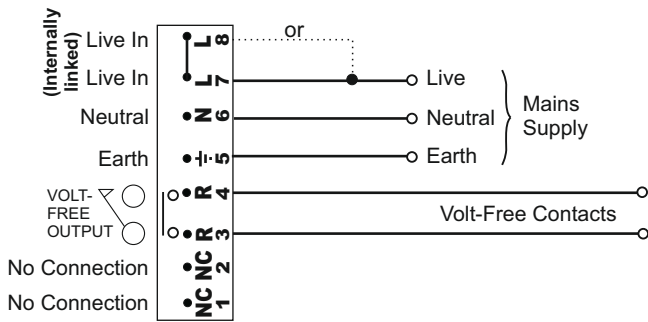**Programmable Parameters**

Sensors will operate to the factory default settings (as shown below) unless customised by using an infrared programmer.

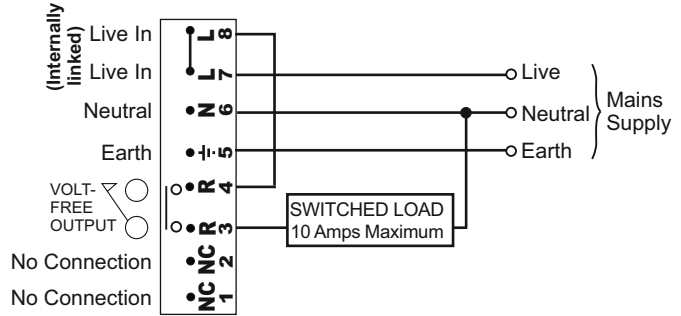|	
POWER UP	**Options: On/Off**
Sets the status of luminaires when power is applied. **On** - lights power-up on irrespective of occupancy. **Off** - lights respond to occupancy after 15 seconds.	**Pre-set - On**
RESPONSE	**Options: Auto/Semi-auto**
Auto - lights switch on and off automatically. **Semi-auto** - lights are switched on by wall switch or hand-held controller and switch off automatically.	**Pre-set - Auto**
OFF DELAY	**1 minute - 96 hours**
Sets the period after the last observed movement when the lights switch off. (A set-up time of 10 seconds is provided to assist rapid commissioning.)	**Pre-set - 20 mins**
ON SENSITIVITY	**Options: 0-100**
Sensitivity required while area is occupied (i.e. lights on).	**Pre-set - 20**
OFF SENSITIVITY	**Options: 100-10% in 10% increments**
Sets the sensitivity once lights have been switched off as in some instances a lower setting may be required, e.g. a library or storage aisle which requires a higher sensitivity when the aisle is occupied but a lower one when the area becomes unoccupied so that passing traffic across the ends of an aisle will not activate the lights.	**Pre-set - 100%**
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**
SET-POINT LOW/HIGH	**Options: 0-1023**
The photocell set-points can be programmed between 1 (darkest) and 1023 (brightest).	**Pre-set - Low 409, High 512**

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Electrical Connections

Volt-Free Operation

(Internally linked)

Terminal		
Live In	L 8	
Live In	L 7	○ Live
Neutral	N 6	○ Neutral
Earth	⏚ 5	○ Earth
VOLT-FREE OUTPUT	R 4	
	R 3	
No Connection	NC 2	
No Connection	NC 1	

Mains Supply

Volt-Free Contacts

Live-Out Operation

(Internally linked)

Terminal		
Live In	L 8	
Live In	L 7	○ Live
Neutral	N 6	○ Neutral
Earth	⏚ 5	○ Earth
VOLT-FREE OUTPUT	R 4	
	R 3	
No Connection	NC 2	
No Connection	NC 1	

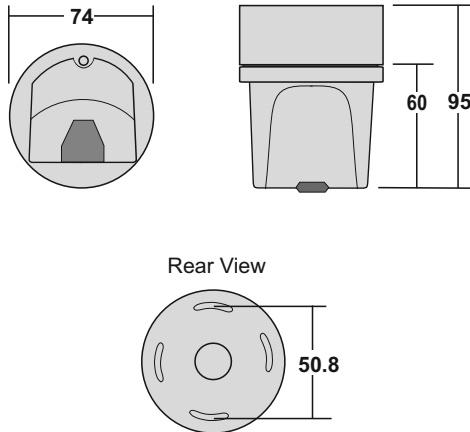Mains Supply

SWITCHED LOAD
10 Amps Maximum

Always check product label before wiring

Note: A means of disconnection must be incorporated into the fixed wiring in accordance with the current wiring regulations.

Mid Range LightSpot should be connected in accordance with the diagrams above. It is designed to control a switched load of up to 10 Amps.

When switching via the relay output, multiple MR1500Ps' relay outputs may be connected in parallel provided the controlled load does not exceed 10 Amps.

Dimensions

74

60 95

Rear View

50.8

Ancillary Items

QUICKSET PRO Digital 2-Way Programmer
Menu-driven LCD Programmer with automatic equipment recognition and parameter download facilities.

HP2000 MLS Programmer
Menu-driven LCD Programmer with automatic equipment recognition and parameter download facilities.

HC5A Universal Hand-held Controller

Installation
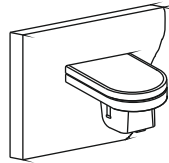
Surface version (MR1500P)
The back-box can be secured directly to a hard surface or to a conduit stop end box.

Semi-flush version (MR1500PF)
Use a hole saw to drill a 76mm hole into the ceiling tile. The flush ring is designed to clamp the tile between its two halves.
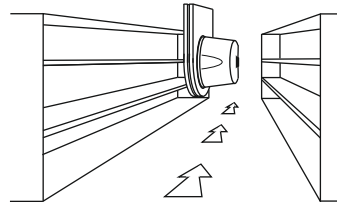
Note: For wall mounting, use the WMK
Examples of MR1500P and WMK application:

Horizontal installation
For general applications where ceiling mounting is not convenient and wide angle coverage in the horizontal plane is desirable. The WMK can be screwed to a hard surface or the lid of a conduit stop-end box.

Vertical installation
Use this method of mounting for racking aisle applications and where adjustment in the vertical plane will give improved control over the precise point of entry detection.

Technical Data

OPERATING VOLTAGE: 230V ~ 50Hz (UK & Europe)
SWITCH CAPACITY: 10 Amps max any lighting load except incandescent lamps: 1500W max (at 230V~)
MAXIMUM RECOMMENDED MOUNTING HEIGHT: 3.5m
RANGE: Adjustable up to 20m
OFF DELAY: 1 min - 96 hours plus 10-second walk-test mode
PHOTOCELL: Passive/Active/Disabled adjustable 50-5000 lux
MATERIAL: Flame retardant PC/ABS
COLOUR: White
WEIGHT: 160g
IP RATING: 4X
OPERATING TEMPERATURE: 0℃ to 40℃

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

Part Numbers

MR1500P	Mid Range LightSpot with photocell - surface mounted
MR1500PF	Mid Range LightSpot with photocell - semi-flush mounted
QUICKSET PRO	Digital 2-way Programming Tool
HP2000	MLS Digital Programmer
HC5A	Ten-button Universal Hand-held Controller c/w wall bracket
WMK	Wall-mounting Kit
MRFK	Semi-flush Mounting Kit