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. It was conceived to bridge the gap between the Standard Series LightSpot and the Long Range equipment. It is ideal for larger classrooms, conference rooms, longer storage aisles etc. It is a self-contained unit, making installation very simple and straightforward.

- **MR1500P / MR1500PF**
  Mid Range LightSpot

  Mid Range LightSpot utilises microwave technology and is capable of effective presence detection in rooms of up to 20m x 20m.

  The unit is self-contained, featuring a movement detector, photocell and 10 Amp (load switching) element in one, easily deployed housing. The detector may be surface or semi-flush mounted.

- **Adjustment controls**

  Available for commissioning purposes, these are accessed via the side door. The availability of two independent sensitivity controls makes the LightSpot supremely flexible in use.

  **ON Range** is the normal range control which may be adjusted according to the needs of the space being monitored.

  **OFF Range** sets the detector range once lights have been switched off and may, in some instances, require a lower setting. A good example is a library or storage aisle which requires a higher range when the aisle is occupied but a much lower range when the area becomes unoccupied so that traffic passing across the ends of an aisle will not activate the lights.

**OFF Delay** sets the time delay (after last detected movement) before lights are switched off. The off delay is adjustable up to 20 minutes. A set-up time of 10 seconds is provided to assist rapid commissioning.

**Photocell** The LightSpot photocell observes the controlled space, not just ambient daylight, and takes account of all light contributions - even from adjacent zones. Photocell operation is extremely user-friendly: although the photocell takes into account light from the controlled luminaires themselves, it is configured never to switch lights off when anyone is present. It will, however, hold lights off as people enter an already adequately lit area and bring lights on if lighting levels fall in an occupied area.

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OPERA TING  VOL TAGE:  230V  50Hz  (UK  &  Europe)
SWITCH  CAP ACITY : 10  Amps max
Incandescent  lamp s:  1500W  max  (at  230V)
MAX  RECOMMENDED  MOUNTING  HEIGHT : 3.5m
RANGE:  Adjust able  up  to  20m
OFF  DELA Y : 10  seconds  to  20  minutes
WEIGHT : 250g
COLOUR:  White
HOUSING  MA TERIAL:  Flame-ret ardant  ABS
IP RA TING:  43  when  ceiling  mounted
4X  when  wall  mounted

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.

Detection Pattern
Mid Range LightSpots utilise microwave radar to monitor a space for movement. This involves transmitting a very low power microwave signal and examining the reflected signal for frequency variations called “doppler shifts”. The microwave system is extremely sensitive to small body movements and provides effective presence detection in rooms up to 20m x 20m. Please note that this extreme sensitivity makes it essential that the detector be installed on a rigid surface that will not itself be subject to movement or vibration. Please note also that microwave technology is not recommended for applications where there are large areas of metal, e.g. metal ceiling or floor tiles, as unpredictable sensitivity may result.

Electrical connection diagram
Controlling a load with one switch circuit.
Controlling two or three way circuits.
Controlling a load with several switch circuits.

Notes
1. Any number of LightSpot detectors may be connected in parallel.
2. A Mid Range LightSpot may be configured for volt-free output by omission of an external wire link.
3. Do not mount within 0.5m of a luminaire.

Technical Data
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RANGE: Adjustable up to 20m
OFF DELAY: 10 seconds to 20 minutes
WEIGHT: 250g
COLOUR: White
HOUSING MATERIAL: Flame-retardant ABS
IP RATING: 43 when ceiling mounted
4X when wall mounted

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

MR1500PF - Semi-flush version
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.

Accessories
WMK  Wall-mounting kit for MR1500P
(supplied assembled)
HC6  Two-button Hand-held Controller

Examples of MR1500P and WMK application

Part Numbers
MR1500P  Mid Range LightSpot with photocell - surface
MR1500PF  Mid Range LightSpot with photocell - semi-flush
WMK  Wall-mounting Kit for MR1500P
HC6  Two-button Hand-held Controller

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