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

Mid Range Regulating LightSpot

Mid Range Regulating LightSpot is a high- performance, directional presence detector with built-in photocell for use in almost any internal space. 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 Regulating LightSpot offers the following features:

MR2500DF
MR2500DALIF

MR2500D
MR2500DALI

Active presence detection by microwave technology.

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

Regulating photocell actively monitors ambient light levels and adjusts the light output accordingly (dimmable control gear only).

Incorporates simple scene-setting - up to six scenes can be set via user remote.

Off delay - period following the last observed movement after which the lights switch off.

Detection pattern and range in metres under normal operating conditions.

Dual circuit control. Digital output always influenced by photocell, relay output can be influenced by photocell if configured.
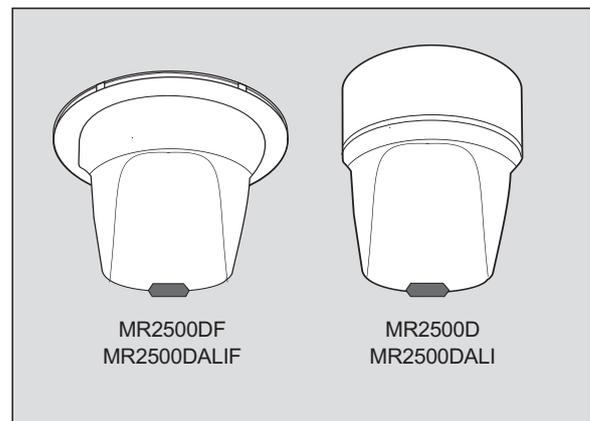
Hand-held Controllers provide local user override.

Remote programming with the HP2000 (operates at 5m range) ensures changes can be easily accommodated.

OneSwitch Dimming. Manual input to adjust light level or turn luminaires on or off.

Scene-setting

Users can set up to six lighting scenes by infrared remote control and recall them with the single press of a button.

Entry and Exit Scenes

The entry scene is automatically selected when the area becomes occupied. Similarly, there is an option to select an Exit Scene for when an area is vacated.

Ballast Compatibility

Mid Range Regulating LightSpot is available for fixed-output high-frequency ballasts and dimmable DSI and DALI ballasts.
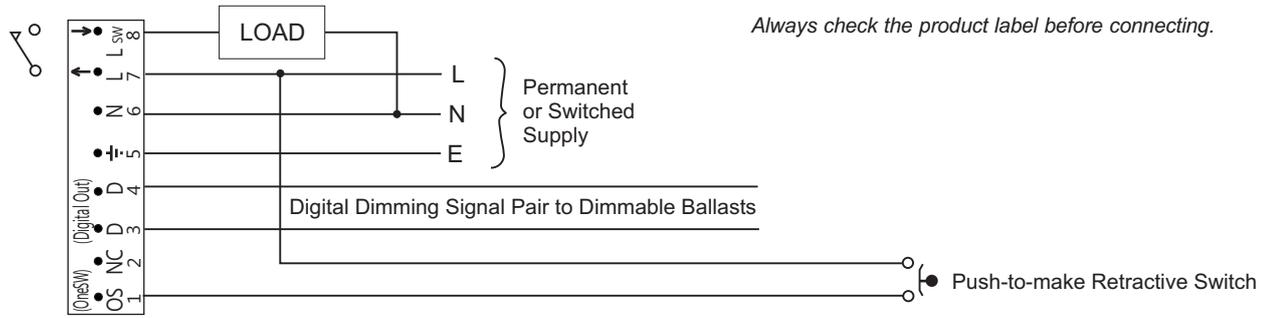
Dual Output

Manual control of digital and relay outputs with OneSwitch dimming or hand-held controller.

Commissioning and Programmable Parameters

Operation is determined by how the unit is commissioned. Commissioning and re-commissioning are carried out using a menu-driven, infrared remote programmer (HP2000) with virtually no disturbance to the building's occupants. As the programmer has a range of 5 metres, ladders or platforms are seldom required.

Please check www.ex-or.com to ensure this is the most recent issue - Ref: D4074D

Wiring Diagram

Always check the product label before connecting.

8	SW	→
7	L	←
6	N	
5	⏚	
4	D (Digital Out)	
3	D	
2	NC (OneSW)	
1	OS	

LOAD

L
N
E — Permanent or Switched Supply

Digital Dimming Signal Pair to Dimmable Ballasts
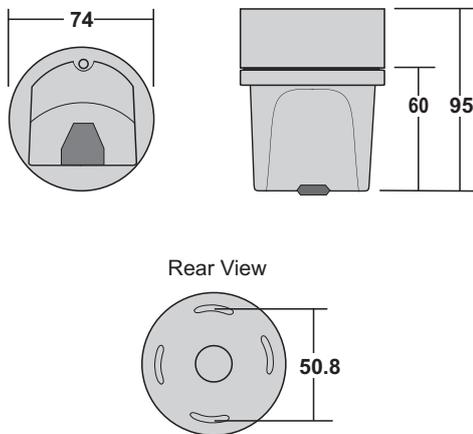
Push-to-make Retractive Switch

Relay outputs may be connected in parallel to cover larger areas with multiple detectors but the total load switched by the parallel combination should not exceed 10 Amps.

Digital Dimming Signal Outputs MUST NOT be connected, in parallel or in series, to those of another detector.

The diagram above shows a fully utilised unit, controlling both dimmable and non-dimmable luminaires. In the simplest installation, controlling only non-dimmable loads, just the mains supply and the switched live output would be required.

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

Dimensions

74

60   95

Rear View

50.8

Installation

Surface version (MR2500D/MR2500DALI)
The back-box can be secured directly to a hard surface or to a conduit stop end box.

Semi-flush version (MR2500DF/MR2500DALIF)
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.
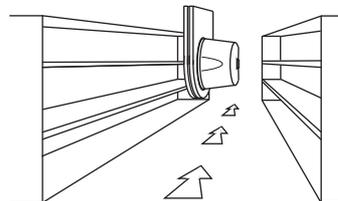
Note: For wall mounting, use the WMK
Examples of MR2500D/DALI and WMK application:

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.

Ancillary Items

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

HC6 Two-button Hand-held Controller
Note: The HC5 Universal Hand-held Controller is also suitable for use with these detectors.

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 LOAD (DSI/DALI): 25 Ballasts
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/Regulating adjustable 50-5000 lux
MATERIAL: Flame retardant PC/ABS
COLOUR: White
WEIGHT: 160g
IP RATING: 4X
OPERATING TEMPERATURE: 0°C to 40°C

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

	Mid Range Regulating LightSpot with photocell:
MR2500D	for DSI ballasts - surface mounted
MR2500DF	for DSI ballasts - semi-flush mounted
MR2500DALI	for DALI ballasts - surface mounted
MR2500DALIF	for DALI ballasts - semi-flush mounted
	Ancillary Items
HP2000	MLS Digital Programmer
HC6	Two-button Hand-held Controller c/w wall bracket
HC5	Universal Hand-held Controller c/w wall bracket
WMK	Wall-mounting Kit
MRFK	Semi-flush Mounting Kit