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

Integral Luminaire Controllers

LightSpot Luminaire Controllers are high-performance presence detectors with photocells for integration within luminaires and infill panels. There are two types of controller: the single unit MS1200D/DALI and the two-part MSM2000D/DALI/A control module with DHW/S mini detector head (only the ultra discreet detector head is visible).

Ballast Compatibility

LightSpot Luminaire Controllers are available for DSI/DALI ballasts or Analogue 1-10V and fixed-output electronic high-frequency ballasts.

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

Regulating photocell ensures a minimum maintained light level, taking account of the contribution from adjacent luminaires and daylight

Passive photocell holds lights off in bright ambient conditions. The choice of regulating, passive or none is available via QuickSet Pro on Analogue version.

Off delay: Period following the last observed movement after which the lights switch off (via QuickSet Pro - options differ on HP18).

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

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

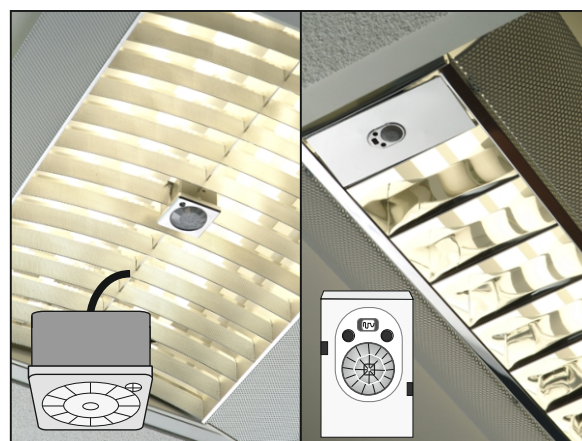Hand-held Controller provides local user override.

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

OneSwitch Dimming. Manual input to adjust light level or turn luminaires on or off. Available on Two-part Controllers.

100-hour Burn-in. Inhibits dimming functions to allow new lamps to burn in. Available on MS1200D/DALI Single-unit Controllers.

Ancillary Items

QuickSet Pro Digital 2-way Programming Tool

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

HP18 LightSpot Programmer

User-friendly override/programming remote controller. Note: HP18 is not compatible with analogue detectors.

HC5A Universal Hand-held Controller

Allows manual override. Supplied with wall bracket.

DHFK Flush-mounting Kit for Mini Detector Head

Allows for installation via a 30mm hole in the panel. Available in black, silver or white.

Please check www.ex-or.com to ensure this is the most recent issue - Ref: D4069M

Electrical Connections

Two-part Luminaire Controller

DHW/DHS Mini Detector Head

18.8mm 17.5mm 21.3mm
SIDE VIEW

32mm
21.5mm
21.5mm 14.9mm

800mm Flying Lead

RJ12 Plug

MSM2000DALI/MSM2000D Digital Control Module

(Height = 21mm)
30mm

- Polarity-free Digital Output
- Neutral
- OneSwitch™ Input
- N/C
- Live IN

0.5 - 1.5

Control Module Part No
MSM2000D ☐
MSM2000DALI ☐

Operating voltage 230V 50Hz ±10%
Control output: Digital
Max 4 x DSI or DALI Ballast
Power consumption: <2W to 70°C
Please read instructions prior to installation
Made in the EC

CE ☐ Ex-Or

Detector Connection

Ex-Or

147.5mm
135mm

MSM2000A Analogue 1-10V Control Module

(Height = 22mm)

0.5 - 1.5

- 1-10V Analogue Control
- Neutral
- OneSwitch™ Input
- Live OUT
- Live IN

Control Module Part No
MSM2000A ☐

Operating voltage 230V 50Hz ±10%
Power consumption: <2W to 70°C
Max Load (Live OUT): 2 Amps
Max Number of Ballasts: 4
For use only with electronic, high-frequency ballasts
Please read instructions prior to installation

CE

Detector Connection

Ex-Or

Made in EC

Single-unit Luminaire Controller

For DSI ballasts: MS1200DIS & MS1200DIW
For DALI ballasts: MS1200DALIS & MS1200DALIW

750mm lead

Red - Live
Blue - Neutral
Yellow
Green } Polarity-free digital output. Connection to ballast only. Do not connect to other detectors.

32.5mm
26mm
6.5mm

43.5mm sq
50mm sq

NB: Always check product label before connecting.

Programmable Parameters	Selectable Options (Factory pre-set shown in bold)
Power up	**On** / Off
Response	**Auto** / Semi-Auto
Off Delay	1 min-96 hrs / Disabled / 10-sec Walk-test via QuickSet Pro 5, 10, 20 mins / 10-sec Walk-test via Hp18
On Sensitivity*	**20 mins**
Start lamps	0-100 **100**
Entry Scene	**Max** / Min
Bright-out	Select Scenes 1 - 6. **Scene 1**
Dimming	Yes / **No** Reg 100-50% **Reg 100%** Sets the regulating range of the ballast in daylight conditions, i.e. at 100% the ballast can regulate over its full range, at 70% the ballast will not dim below 30% output. Manual override is not affected.
Lamp Max*	Manual override is not affected.
Fade to Off	10%-100% **100%**
When Vacant	Yes / **No**

	Switch Off after Off Delay	
	Go to Minimum	and do not switch off
	Regulate up to 25%	for 3 hours then switch off
Photocell†	Go to Scene 6	until building is vacated then switch off
	Regulating / Passive / None	

Programmable Parameters	Selectable Options
Threshold	See 'Dimming' above for details of regulating range. 0-254 In Passive photocell mode, this number represents the light
Set-Point High*	level below which lights will be triggered when occupancy is detected
Set-Point Low*	0-1023 Aiming point as photocell adjusts ballast output. **1023** 0-1023 Level above which photocell switches its output off (only if Bright-out = Yes). **1023**

Additional feature accessible under Utilities on QuickSet Pro:

100-hr Burn-in*	Inhibits dimming functions during burning-in of new lamps. **0hr**

NOTE: The parameters differ slightly between products.
† Denotes parameters for Analogue version only.
* These parameters are available on Single-unit Luminaire Controller only.

Technical Data

All types:

MAXIMUM RECOMMENDED MOUNTING HEIGHT: 3.0m
RANGE: Cone-shaped detection pattern,
diameter (at floor level) =
2.4 x mounting height

2.5m
6.0m

OPERATING VOLTAGE: 230V 50Hz (UK & Europe)
COLOUR: White (RAL9010) or silver bezel
OPERATING TEMPERATURE: 0°C to 55°C

Single-unit Controller MS1200DIS/W & MS1200DALIS/W:
CAPACITY: DSI Digital - 4 ballasts max
DALI - 1 ballast max
MATERIAL: Flame retardant PC/ABS
IP RATING: 4X
WEIGHT: 51g incl. 0.8m cable

Two-part Controller MSM2000D/DALI/A:
CAPACITY: DSI Digital - 4 ballasts max
DALI - 4 ballasts max
Analogue 1-10V & Fixed-output - Total load must not exceed 2 Amps, up to 4 ballasts max - electronic, high-frequency ballasts ONLY
INTERCONNECT CABLE TEMPERATURE RATING: 60°C
MATERIAL: Detector Head - UV stabilised polycarbonate
Control Module - Flame retardant PC/ABS
IP RATING: 20
WEIGHT: Detector Head - 32g incl. 0.8m cable
Control Module - 48g

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

MSM2000D	Control Module for DSI ballasts	**MS1200DIS**	Single-unit Controller for DSI ballasts - silver bezel
MSM2000DALI	Control Module for DALI ballasts	**MS1200DIW**	Single-unit Controller for DSI ballasts - white bezel
MSM2000A	Control Module for Analogue 1-10V and Fixed-output ballasts	**MS1200DALIS**	Single-unit Controller for DALI ballasts - silver bezel
DHW	Mini Head - white bezel	**MS1200DALIW**	Single-unit Controller for DALI ballasts - white bezel
DHS	Mini Head - silver bezel	**QUICKSET PRO**	QuickSet Pro Digital 2-Way Programmer
DHFK-W	Flush-mounting Kit for Mini Detector Head - white	**HP18**	LightSpot Programmer
DHFK-S	Flush-mounting Kit for Mini Detector Head - silver	**HC5A**	Universal Hand-held Controller c/w wall bracket
DHFK-B	Flush-mounting Kit for Mini Detector Head - black		