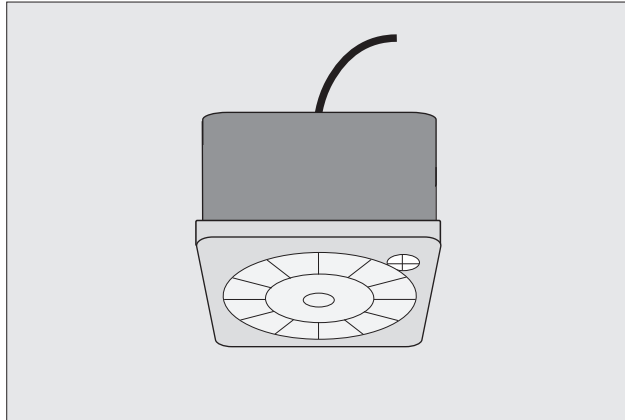




MLS Digital Luminaire Controllers
MLS2000DIS & MLS2000DIW for DSI ballasts
MLS2000DALIS & MLS2000DALIW for DALI ballasts



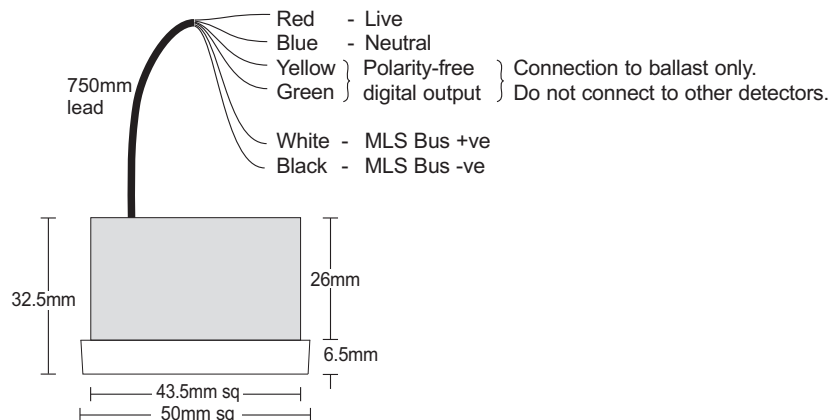
Installation and Commissioning
Instructions

Note: HP2000 required for commissioning
HC5 or HC6 required for testing

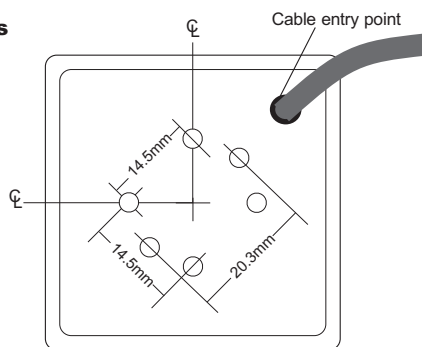
MLS Digital Luminaire Controllers: MLS2000DIS / MLS2000DIW for DSI ballasts
MLS2000DALIS / MLS2000DALIW for DALI ballasts

Only suitably qualified personnel should install this equipment.

Electrical Connections



Mounting Details



Installation

Snap-in to infill panel (max 0.7mm/ 22 SWG) or use any combination of fixing holes on rear. Use only No 4 type B ¼ inch self-tapping screws. Ensure that projection of screws into pilot holes does not exceed 4.5mm.

The recommended position for the detector is in the middle of the luminaire. Where this is not possible and the detector is fitted near one end of the lamps, please ensure that the detector is at the 'cold' end of the lamps.

In order to achieve satisfactory light-level regulating operation, a detector must observe a substantially greater proportion of artificial light from the luminaire(s) under its control than from neighbouring luminaires not under its control. This is particularly important when planning the installed layout of linear luminaires that have an integral detector positioned at one end.

To Test with HC5 or HC6

Once the MLS Digital Luminaire Controllers have been installed within the luminaires, the HC5 or HC6 may be used to switch luminaires ON and OFF. Luminaires with regulating ballasts will also dim and brighten.

Commissioning Detectors using the HP2000

It is important that the HP2000 be held perpendicular and at a distance of between 0.5m and 2m from the detector.

1. Switch on HP2000 by pressing the red power button.
2. Point HP2000 at detector and press the DOWNLOAD button. The HP2000 will confirm the product's identity, and call up the correct menu of parameters and their current settings. It will also show the ballast type and the duration (shown in hours) remaining on the 100-hour burn-in.
3. Use a combination of UP, DOWN, FORWARD and BACK buttons to navigate the parameter menu, selecting options for each shown. (See Tips below.)
4. When options for all parameters have been selected, point the HP2000 at the detector and press the UPLOAD button. The luminaire(s) will switch off briefly during the programming process and the HP2000 shows DATA OK to confirm operation.
5. After a short period of inactivity (default 5 minutes), the HP2000 hibernates retaining the most recent settings.

Tips

- i) Where there are only two options such as ON/OFF, a double click of the OK button toggles between them.
- ii) Where there are multiple options, a double click of the OK button recalls a list of all options for that parameter. Use the UP, DOWN and OK buttons to select.
- iii) Use the OK button to go forward (through the menus) without displaying help pages.
- iv) Press UPLOAD at any time to transfer all current settings from the handset to the product.

Please refer to HP2000 instructions for comprehensive commissioning details.

Factory Default Settings

These are the settings to which the units have been programmed before they leave the factory:

Parameter	Options	Default
Power Up	On / Off	On
Response	Auto, Manual/Bus, Manual	Auto
Off Delay	1 min - 96 hrs, 10-sec (walk-test), Disabled	20 mins
On Sensitivity	0-100	100
Bus Connect	Yes / No	Yes
Zones 1-4	Address 1-100	-- (no zone)
Corridor 1-2: Begin	1-100 Building Address Span	-- (no zone)
Corridor 1-2: End	1-100 Building Address Span	-- (no zone)
Global 1-2 Rx	Yes / No	No
Start Lamps	Max / Min	Max
Entry Scene	1-6	1
Bright Out	Yes / No	No
Dimming	Reg 50%-Reg100%	Reg 100%
Lamp Max	10%-100%	100%
Fade to Off	Yes / No	No
When Vacant	10 Exit Scenes	Off
Set-Point High	0-1023	1023
Set-Point Low	0-1023	1023

Additional feature accessible under Utilities:

100 Hour Burn-In	See Application Note: AN4028	0 hr
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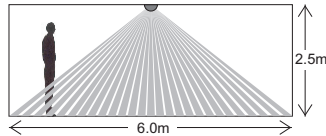
W4087G

Technical Data

MLS CABLE: 1.5mm² unscreened twisted pair : see Application Note AN4001

MOUNTING HEIGHT: 3.0m max

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



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

CAPACITY: Digital DSI - 4 ballasts max

DALI - 1 ballast max

WEIGHT: 50g

COLOUR: Silver (part numbers with suffix 'S') or White (part numbers with suffix 'W')

MATERIAL: Flame retardant PC/ABS

IP RATING: 4X

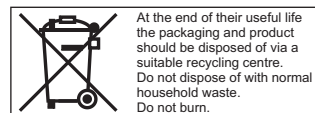
OPERATING TEMPERATURE: 0°C to 55°C

Important Additional Notes

1. A means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.
2. Although nominally 12V, the dimming output is not SELV and therefore should be treated with the same respect as mains with regard to wiring practice. The 0V line of the dimming output is almost at Neutral potential.
3. The dimming control output should be connected only to the control input of the ballasts - never to other detectors.
4. This equipment should be used to control only those ballasts powered from the same phase as the detector.
5. Do not connect mains to the MLS bus.
6. It is imperative that the MLS bus is wired with the correct type of cable; normally it should be 1.5mm² unscreened twisted pair. Please read Application Note AN4001 for more details.
7. Due to the fact that the photocell is on the ceiling looking down, it is not possible for measurements made with a lux meter on the working plane to remain constant when daylight illuminates the ceiling and the working plane to a differing extent. Therefore, products of this type should be regarded as capable of maintaining an APPROXIMATE light level only.
8. This equipment switches lights no more frequently than would a responsible human occupant. However, manufacturers of some particular lighting types (e.g. '2D' luminaires) may specify a maximum number of switching cycles in order to achieve a predicted lamp life. Please check with the manufacturer of the luminaires to ensure that they are compatible with automatic controls in this respect.
9. Some devices in this product range feature a silvered surface finish; this is intended for decorative purposes only. Care should be taken to avoid accidental separation of the silvered coating from the product. If the unit is built into a luminaire that is subsequently wrapped in film having adhesive properties, it is recommended that a layer of suitable packaging material be used to protect the silvered area.

Ex-Or

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