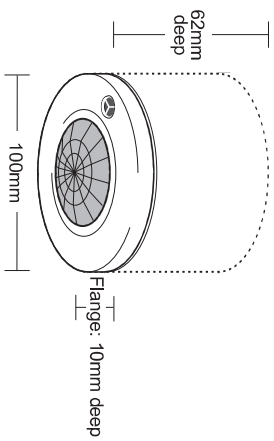
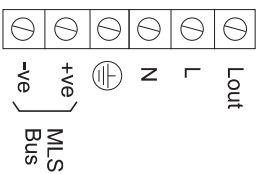


Dimensions

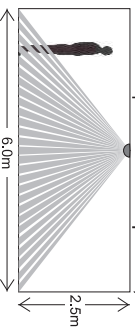


Electrical Connections



Technical Data

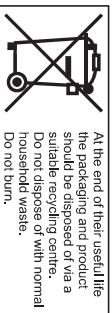
MLS CABLE: 1.5mm² unscreened twisted-pair : see Application Note AN4001
 MAXIMUM RECOMMENDED MOUNTING HEIGHT: 3.0m
 RANGE: Cone-shaped detection pattern, diameter (at floor level) = 2.4 x mounting height



OPERATING VOLTAGE: 230V 50Hz (UK & Europe)
 PRODUCT RATING & RECOMMENDED CIRCUIT PROTECTION: 10 Amps
 CAPACITY: Maximum load 6 Amps
 OUTPUT: Switching
 PHOTOCELL: Passive
 OFF DELAY: 1 minute - 96 hours plus 10-second walk-test
 DEPTH REQUIRED BEHIND CEILING (MLS2001PF): 62mm from front flange plus allowance for minimum bend radius of cable
 WEIGHT: 210g approx
 COLOUR: White
 MATERIAL: Flame retardant PC/ABS
 IP RATING: 3X

Ex-Or

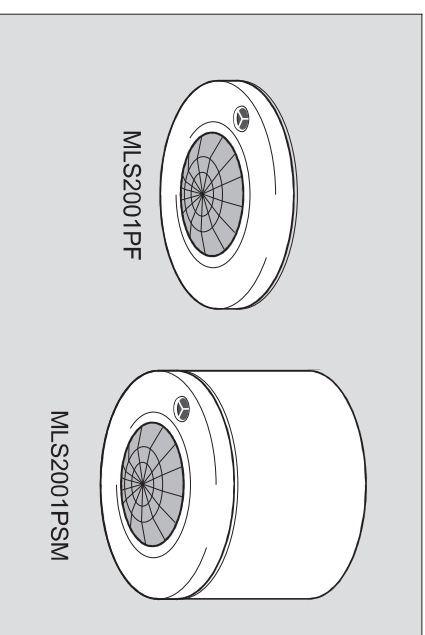
Novar ED&S Limited
 Haydock Lane, Haydock, Merseyside WA11 9UJ
 Tel: +44 (0)1942 719229
 Fax: +44 (0)1942 272767
 Email: technicalsales.ex-or@honeywell.com
 www.ex-or.com



W4143H



MLS2001PF & MLS2001PSM
MLS Digital Detector
with photocell



Installation and Commissioning Instructions

Note: HP2000 required for commissioning

MLS2001PF & MLS2001PSM MLS Digital Detector with photocell

Only suitably qualified personnel should install this equipment.

MLS Digital Detectors are the high-performance, communicating, presence detectors at the heart of the advanced lighting management system known as The Ex-Or MLS Digital. The detector is equipped with a passive photocell designed to hold lights off when areas become occupied if the daylight contribution is high and to switch lights on in occupied areas as the daylight contribution falls. Please note that the photocell will not switch lights off in occupied areas.

Fixing

MLS2001PSM - The housing may be secured to a hard surface or a BEESA box. The unit fits into the housing with a simple bayonet action.

MLS2001PF - Depth required behind ceiling: 62mm from front flange plus an allowance for the minimum bend radius of the cable. The sinking box fits into an 89mm diameter hole in ceiling tile or plasterboard ceiling. To avoid damage to ceiling tile, do not overtighten. No access above the ceiling is necessary.

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

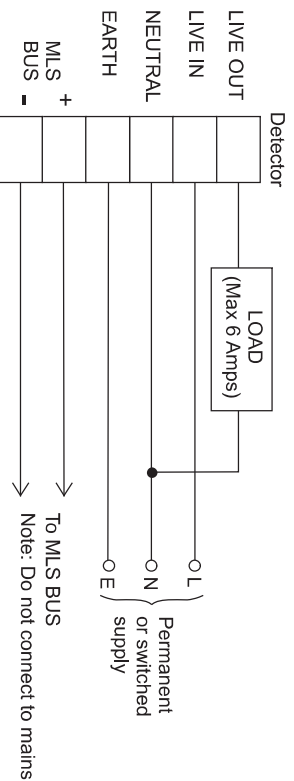
Connection

Important: All terminals on this product are provided for final connections. It is not intended that the product be used as a junction box for looping cables.

The MLS Bus must be connected to the MLS Bus wiring network. An MLS Bus Power Supply is required for each network of up to 200 MLS Detectors. Please refer to Bus Power Supply installation instructions prior to commencement of any bus wiring.

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.

Do not connect mains to the MLS bus.



Important Additional Notes

- All terminals on this product are provided for final connections. It is not intended that the product be used as a junction box for looping cables.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.
- This equipment switches lights no more frequently than would a responsible human occupant. However, manufacturers of some 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.

Commissioning

The detector is supplied factory pre-set which ensures the lighting will switch on automatically as soon as power is applied. Final commissioning of the detectors, including assigning to zones, requires the use of the HP2000 Programmer. Please refer to HP2000 instructions for comprehensive commissioning details.

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.

- Switch on HP2000 by pressing the red power button.
 - 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.
 - Use a combination of UP, DOWN, FORWARD and BACK buttons to navigate the parameter menu, selecting options for each shown. (See Tips below.)
 - 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 DATAOK to confirm operation.
 - After a short period of inactivity (default 5 minutes), the HP2000 hibernates retaining the most recent settings.
- ### Tips
- Where there are only two options such as ON/OFF, a double click of the OK button toggles between them.
 - 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.
 - Use the OK button to go forward (through the menus) without displaying help pages.
 - Press UPLoad at any time to transfer all current settings from the handset to the product.

Setting the Photocell

The light level should be set at a time when the ambient light level is equal to the level at which it would be desirable for the photocell to become active. This can be achieved in the following ways:

- Wait until the appropriate time of day.
- Create the desired level by turning lights on or off as required and/or opening or closing window blinds etc. At this point the photocell can be commissioned correctly.

Setting the photocell using an HP10

- Point the HP10 at the detector from a distance of about 1m and press the 'Store' button.
- The lights will acknowledge the command - i.e. turn on if they were previously off or briefly turn off, then back on, if they were on at the start of programming.

Setting the photocell using an HP2000

- 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.
- Select UTILITIES, then USER REMOTE.
- Select SCENE 1 in the display while pointing the HP2000 at the detector (as in any programming operation). Press and hold the OK button until the lights acknowledge the command - i.e. they either turn on if they were previously off or briefly turn off, then back on, if they were on at the start of programming.

Setting the photocell using an HCS

- Point the HCS at the detector.
- Press and hold the '1' button until the lights acknowledge the command, i.e. they either turn on if they were previously off or briefly turn off, then back on, if they were on at the start of programming.

Note: In all cases the photocell will make its measurement and store it in non-volatile memory (i.e. the set-point will be retained in the event of power loss).