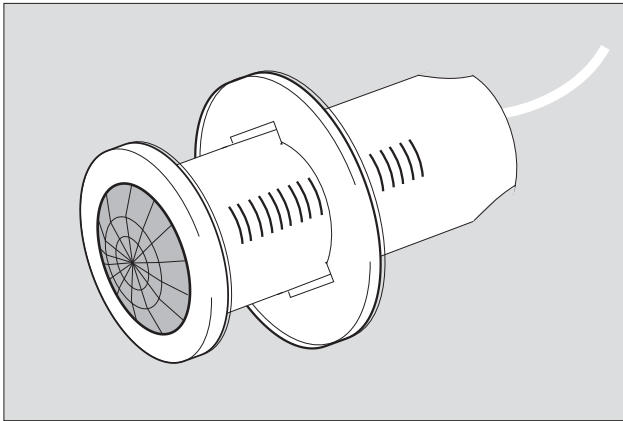




by Honeywell

**Slimline Silver Series LightSpot  
with photocell  
MS1200PF**



**Installation and Commissioning  
Instructions**

Note: HP2000 (or HP10\*/HP18\*) required for commissioning

\* Please note that the HP10 and HP18 offer different/limited programming options

User override available via HC5 or HC6 Hand-held Controllers

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At the end of their useful life  
the packaging and product  
should be disposed of via a  
suitable recycling centre.  
Do not dispose of with normal  
household waste.  
Do not burn.



W4226F

## Silver Series LightSpot with photocell - MS1200PF

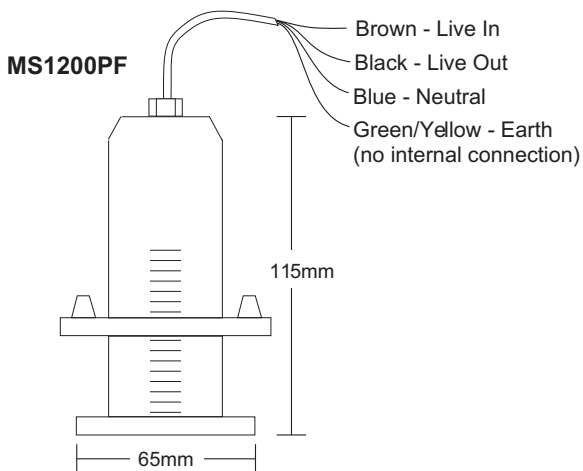
This is a high performance presence detector with photocell. In all operating modes, the photocell can hold lights off as a vacant area becomes occupied, and if the light level falls too low during the period of occupancy, the lights switch on. In 'Passive Mode' the lights do not switch off whilst the area is occupied no matter how much light is measured. In 'Active Mode' the photocell is able to switch the lights off whilst the area is occupied.

### Fixing

This detector is suitable for flush mounting in a suspended ceiling tile, maximum 54mm thick and with a minimum clearance of 125mm between the front surface of the tile and the hard ceiling behind. The detector should be mounted in the centre of the group of luminaires to be controlled. Cut a 50mm diameter (64mm if using an FR64 flush ring or PB64 plasterboard fixing kit) circular hole in the tile, feed the flying lead and detector through the hole and secure into position with the locking ring. Twisting the locking ring will release the detector should this be necessary.

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

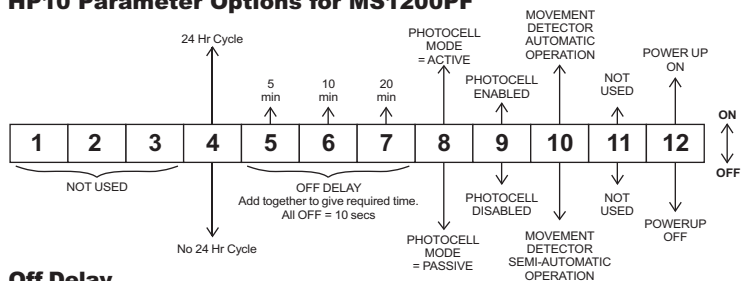
## Electrical Connections



## Important Additional Notes

1. Only suitably qualified personnel should install this equipment.
2. A means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.
3. 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 and/or a minimum on-time 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.

## HP10 Parameter Options for MS1200PF



Please note that additional parameters are available via the HP2000

### Off Delay

The Off Delay may be set between 5 and 35 minutes. A 10-second Off Delay is available for walk-testing the product. In a typical office environment a 20-minute Off Delay is usually satisfactory.

### Movement Detector Operation (Automatic / Semi-Automatic)

Where absence detection is required (ie the user manually turns lights ON if required but lights still turn off automatically once an area is vacated), semi-automatic operation can be set via the programmer.

### Power Up Setting (On/Off)

Set to ON the detector will automatically switch its outputs on when Mains is applied. If set to OFF, the detector will power up without turning its outputs on, wait for 30 seconds and THEN look for movement. Only if the area is occupied will the output switch on at this time. The detector must be set to Power Up ON when used in conjunction with semi-automatic operation.

### Photocell Operation (Passive/Active/Disabled)

This detector has an in-built photocell. The photocell has three modes of operation - Passive, Active and Disabled. Its operational behaviour is governed by the setting chosen and by the values stored in the Upper and Lower thresholds (see diagram overleaf).

**Passive** - The photocell will inhibit turn-on of the controlled load if sufficient natural light is available. It will not turn the load off whilst an area is occupied

**Active** - The photocell will turn the controlled load on and off as required whilst natural light levels fluctuate during a period of occupancy. This mode of operation operates in conjunction with a passing cloud timer (PCT). The PCT is asymmetrical in operation - the load will be switched on immediately that the light level falls below the lower set point, however, the load switches off only if the light level exceeds the upper threshold *continuously* for a period equal to the Off Delay.

**Disabled** - The photocell has no effect.

### 24hr Cycle (Yes/No)

For use in 'Washroom Mode' only (see overleaf). In this mode it is necessary to have a hygiene cycle (flush) if the area has been unoccupied for 24hrs. Select this feature and the output will switch on for the duration of the Off Delay once every 24hrs if the area remains unoccupied.

### Commissioning

The units are supplied with factory default settings (Power-Up On, fully Automatic operation, a 20 minute Off Delay, no 24hr Cycle, Photocell Disabled). Programme using an infrared programming tool. Please note that the full range of parameters is accessible via the HP2000; the HP10 and HP18 offer different/limited programming options.

### Walk-test Mode

Walk-test mode is used to check that the detector is operating as required. The short off-delay enables the installer to check that lights are switching on when movements are made at the edge of the detection zone. It is easier to carry out a walk-test when the photocell is not holding the lights off.

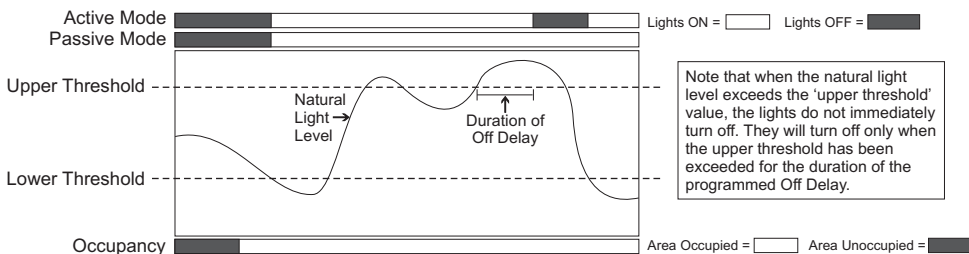
1. Change the Off Delay to 10 seconds using the HP10 or press 'TEST' (HP18) or 'Utilities/Walk Test/OK' (HP2000).
2. Move around the area that is being controlled, stopping for 10 seconds to allow the lights to switch off, before moving and triggering the lights back on. Re-programme the desired Off Delay once testing is complete. Note: If the HP2000 or HP18 was used to engage 'soft' walk test mode as described above, the programmed Off Delay will be automatically restored after 5 minutes.

## Setting the Photocell

1. If the lights are not already on, switch them on manually by pressing 'Utilities/User Remote/Luminaire+/OK' [HP2000], or 'Up' [HP10] or 'On' [HP18]. Fluorescent lights do not reach full output until up to 15 minutes after being switched on, so ensure that the lights are fully warmed up before continuing. This stage may be omitted if the intention is to operate the detector's photocell in Passive Mode only [the detector must have already been programmed to Passive Mode].
2. Wait until the time of day when the natural light level is at the point below which you *would* want the lights to be on, and above which you *would not* want the lights to be on.
3. Start the internal self-programming mechanism by pressing 'Utilities/Set Light Level/OK' [HP2000], or 'Store' [HP10] or 'Set' [HP18]. The detector takes a measurement, adds a small amount and stores the value in the Upper Threshold. Then it turns the lights off, makes another measurement and stores the value in the Lower Threshold. The lights now switch on again to acknowledge a successful programming operation.

The two switching thresholds have now been set, and the difference between them is equal to the contribution made by the electric lighting; this is the perfect amount of hysteresis to ensure that the lights will not oscillate. The thresholds may be read back and fine-tuned if necessary using the HP2000. Please note that the values are non-specific units i.e. not lux.

**Note:** The light level perceived by the detector at the moment immediately prior to a Download operation [HP2000 only] is shown momentarily on the HP2000 screen following the Download; this is a useful mechanism for troubleshooting.



## Washroom Mode

The MS1200PF may be used in conjunction with a 230V solenoid valve and a trickle valve or 'petcock' to effect a urinal flush system. Set the water flow rate by adjusting the petcock so that the cistern *just* fills within the chosen Off Delay period of the detector. Note that in this mode, the photocell should be disabled.

**Note:** The MS1200PF and the 230V solenoid valve can be ordered as a complete product, Ex-Or part no. UC1200PF.

## Technical Data

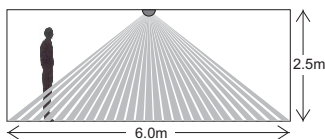
OPERATING VOLTAGE: 230V 50Hz (UK & Europe)

RECOMMENDED CIRCUIT PROTECTION: 10 Amps

MAXIMUM LOAD: 6 Amps

MAXIMUM RECOMMENDED MOUNTING HEIGHT: 3 metres

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



PHOTOCELL: Adjustable 50-5000 lux via Programmer

OFF DELAY: Adjustable via Programmer - factory pre-set to 20 minutes

Programmer options: 1 minute - 96 hours / Disabled (via HP2000); 5 - 35 minutes (via HP10); 5, 10 or 20 minutes (via HP18) - plus 10-second Walk-test Mode

COLOUR: White

MATERIAL: Flame retardant PC/ABS

WEIGHT: 70g approx (excluding cable)

IP RATING: 4X