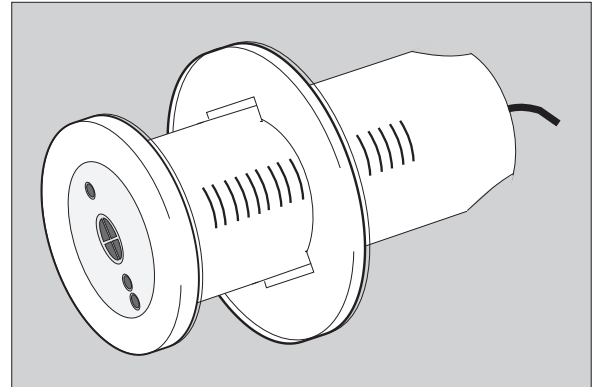


MP2000UF
Universal Photocell
for Digital DSI, Digital DALI, Analogue 1-10V
and non-dimmable ballasts



Installation and Commissioning
Instructions

Note: HP2000 required for commissioning

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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.

W4142F



Parameter	Options and Factory Defaults
Ballast Selects ballast type (referred to as 'Mode' in this document).	DSI, DALI (1, 3, 10%), 1-10V, NON DIM Default: DSI 1%
Power Up <i>Modes affected: NON DIM only</i> If set to Auto, a light measurement is taken to determine whether lights need to be switched on.	On, Auto Default: On
PCT (Passing Cloud Timer) <i>Modes affected: NON DIM, others if BRIGHT-OUT = YES</i> If the light level has been continuously higher than SET POINT H (or lower than SET POINT L) for longer than the duration of the Passing Cloud Timer the relay output will switch off (on). If the level was not continuously higher than SET POINT H (or lower than SET POINT L) then the PCT will be refreshed.	10 seconds, 5-60 minutes Default: 20 minutes
PCT In Asymmetrical mode the lights will switch on as soon as the light level drops below the lower threshold (SET POINT L) In Symmetrical mode the light level must be continually lower than the SET POINT L value for the duration of the PCT before the output will switch on.	Symmetrical, Asymmetrical Default: Asymmetrical
Start Lamps <i>Modes affected: DSI, DALI & 1-10V</i>	Max, Min Default: Max
Dimming <i>Modes affected: DSI, DALI & 1-10V</i> 100% = Regulate over the full range of the ballast's capability. Other % = Regulate within the stated percentage of the ballast's capability. (With 90% selected, the photocell will not dim the lights to less than 10% output. With 80%, lights will not be dimmed below 20% and so on.)	50-100% Default: 100%
Bright-out <i>Modes affected: DSI, DALI & 1-10V</i> If set to YES and the light level has been greater than the value stored in Set Point H for the duration of the PCT, the output will turn off. The output will turn back on immediately when the light level falls to the normal regulating level stored in Set Point L.	Yes, No Default: No
12Hr Reset <i>Modes affected: ALL</i> If set to YES and the unit is overridden using an HC6 Hand-held Controller it will return to normal operation after 12 hours or immediately if power supply interrupted.	Yes, No Default: No

Parameter	Options and Factory Defaults
Set Point L <i>Modes affected: ALL</i> This is the regulating set point. In NON DIM mode it is the lower threshold. This is not a Lux value - it is a representation of the Lux level at the time of programming.	0 - 1023 Default: 1000
Set Point H <i>Modes affected: ALL</i> This is the upper threshold. In regulating mode with BRIGHT OUT set to YES, this is the value at which the output will turn off. This is not a Lux value - it is a representation of the Lux level at the time of programming.	0 - 1023 Default: 1023
Set Light Level <i>Modes affected: ALL</i> See Commissioning	Up, Down, Send
Request Download Following a successful download, the number of perceived light level units prior to the lights being turned off is shown on the display. If the lights were already off then the perceived level is the ambient light level.	

MP2000UF Universal Photocell

Specification

Operating Voltage: 230V 50Hz
 Power Consumption: <10W
 Volt-free Contact: 6 Amps max. Any type of lighting load
 Ambient Temperature Range: 0 - 40° C
 Ballast Control Type: Single master; no other masters to be connected
 Ballast Control Capacity: 25 max (1-10V, DSI, DALI Ballasts - select via HP2)
 Photocell Sensitivity: 0 - 5000 Lux (with a 20% reflective workplane)
 Recommended Mounting Height: 2.4m
 Maximum Mounting Height: 6.0m
 Material: Flame Retardant PC/ABS
 IP Rating: 4X
 Weight: 350g
 Compatible with optional HC5 or HC6 Hand-held Controller

Installation

This photocell is suitable for flush fitting to a suspended ceiling of thickness up to 54mm. If it is to be fitted into a plasterboard ceiling, a PB64 (Plasterboard Fixing Kit) should be used - contact Ex-Or for details.

A minimum clearance of 125mm is required between the front surface of the ceiling tile/plasterboard and the end of the ceiling void.

Choose a suitable mounting location; ideally this would be within the area of the controlled lighting at the furthest point from all sources of natural light.

Note: Do not mount within 0.25m of a luminaire.

To mount in a suspended ceiling, cut a hole in the ceiling tile using a 50mm hole saw. Feed the MP2000UF into the hole and secure in position with the locking ring.

For plasterboard mounting please refer to the dedicated PB64 installation instructions.

Connection

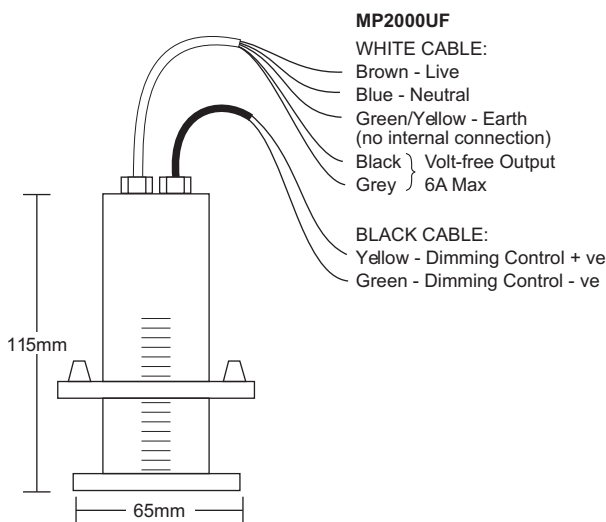
Connect the MP2000UF in accordance with the diagram below observing the following:

This equipment must be installed only by a suitably qualified person.

A means for disconnection must be incorporated in the fixed wiring in accordance with the current wiring regulations.

Although nominally 12V, the dimming output is not SELV, and as such, should be treated with the same respect as mains with regard to wiring practice. The 0V line of the dimming output is connected internally to the Neutral supply.

Electrical Connections



Important Additional Notes

- The dimming control output should be connected only to the control input of the ballasts - never to other detectors.
- This equipment should be used to control only those ballasts powered from the same phase as the detector.
- 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 - Dimming Photocell

The light level should be set using an HP2000. Select the 'Set Light Level' menu item and adjust the light output of the luminaire to the approximate required lux value using 'Up' and 'Down' as necessary. Once the correct light level is achieved press 'Send' to store that level. See flow-chart.

Commissioning - Switching Photocell

Commissioning should be carried out at the time of day when the ambient light level is near the desired switching level. If this is not practical, the desired light level can be created by opening/closing curtains/blinds and by turning uncontrolled luminaires on or off as required. Pressing SEND on the HP2000 will store a snapshot of the light level.

There is a green LED on the front bezel to aid commissioning in Non-Dim mode. The LED will be on when the MP2000UF requires more light. This is useful because the relay may not be responding instantly to light level requirements due to the passing cloud timer.

Note

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 different extent. Therefore, products of this type should be regarded as being capable of maintaining an APPROXIMATE light level only.

Light levels should be measured using a lux meter and commissioned at table height, preferably without daylight contribution (i.e. at night).

After commissioning has taken place, the values stored in Set Point L and Set Point H can be adjusted using the HP2000 if required. Please refer to the flow-chart below and the default parameter values overleaf for further commissioning information.

Photocell Commissioning Flow-chart

