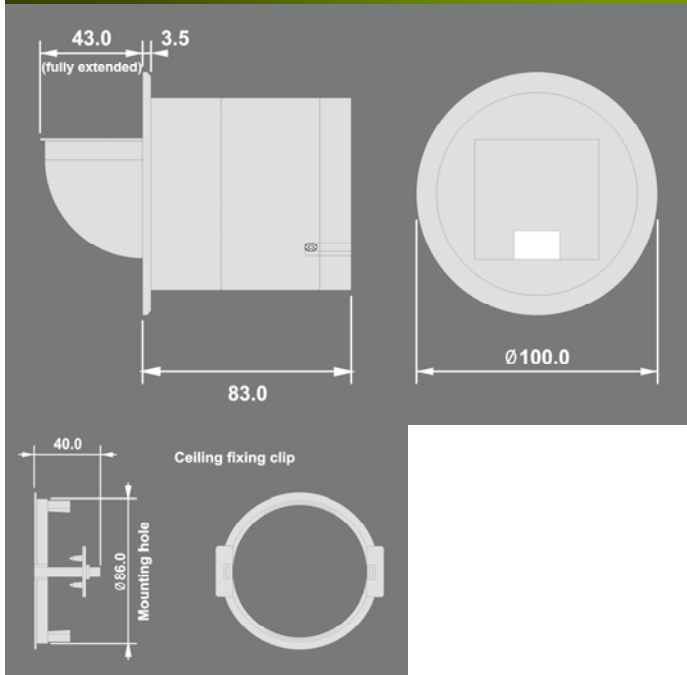


ALC45-D, DSI CEILING MOUNTED DIMMING PHOTOCELL



DESCRIPTION AND OPERATION

The ALC45 dimming photocell automatically adjusts the light output of the luminaire depending on the amount of natural light available to maintain constant brightness (maintained illuminance). To enhance user comfort an adjustable time period determines how quickly the output reacts to changing light levels.

The unit is available with either a 1-10V analogue output or a DSI output. Note that this unit only works with fluorescent fittings that have either 1-10V or DSI ballasts.

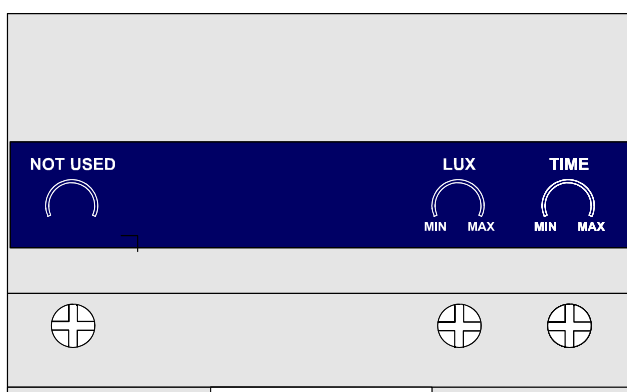
The ALC45 can be mounted flush or surface on a ceiling. Its unique adjustable sensor head allows sensing of lux level to be directed to the exact part of the working plane required.

An integral IR sensor in the unit allows the unit to be used in conjunction with a remote control handset (part no: UHS) to change the lux settings and allow the unit to act as a conventional dimmer.

INSTALLATION

Warning. This device works at mains potential. Be sure to take care when working with electricity.

1. Make sure the load is connected and in working order.
2. Isolate the mains supply to the circuit at the main consumer unit.
3. Connect the controller via the terminal block. Live supply to the L terminal, Neutral to the N terminal, and dimming ballast to the DIM- and DIM+ terminals.
4. Use a small screwdriver to set the *TIME* thumbwheel to minimum.
5. Use a small screwdriver to set the *LUX* thumbwheel to minimum.
6. Power the unit up.
7. Slowly adjust the *LUX* thumbwheel to achieve the desired lux level at the working plane.
8. The *TIME* setting changes the response time of the sensor. At minimum the lux level changes rapidly, at maximum it changes slowly. It is recommended to use the minimum timing for setup purposes and then to leave it midway.



WIRING & FIXING

Wire the products as in the diagram below. This product provides a dimming signal for the control of suitable fluorescent ballasts. It does not provide a switching signal.

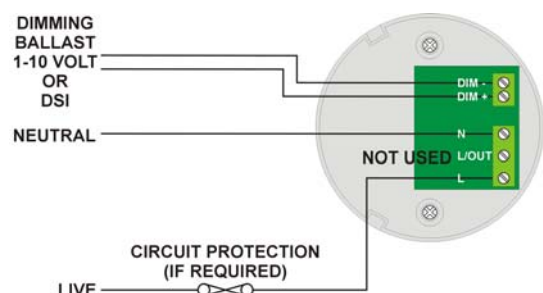
- For best results the unit should look towards working plane.
- Do not angle the sensor to point directly at the sun.
- Site the sensor so that it does not look directly at the light that it is controlling.

To flush mount:

- Cut a 86mm hole in the ceiling
- Insert the mounting clip into the hole and carefully push the two fixings on the arms downwards until they grip firmly to the ceiling
- Unscrew the back plate, connect (see below) and re-fix the back plate
- Push the unit into the clip and setup as instructed

To surface mount:

- Unscrew the back plate and fix straight to the ceiling or to a BESA box
- Connect and re-fix the back plate
- Setup as instructed



USER HANDSET

USING AS A DIMMER

Set the level using the LUX UP and LUX DOWN buttons.

To revert to maintained illuminance press CANCEL.

If maintained illuminance is disabled by turning the LUX to maximum then the unit will act only as a dimmer.

SETTING THE LUX LEVEL

The maintained illuminance target lux level can be set as overleaf or using the handset. To set the level press the SET button. Then press the LUX UP or LUX DOWN buttons to obtain the desired lux level. For easiest setup, turn the *TIME* preset to minimum whilst carrying out the adjustment.

OVERRIDING ON

To turn on to full press the ON button. To return to automatic operation press cancel.

In this mode the LED will flash.

FAULT FINDING

LIGHT DO NOT DIM

Make sure the dimming connections are made correctly and that the ballasts are in working order.

If the *LUX* preset is turned to maximum, then maintained illuminance is disabled.

SPECIFICATION

LOAD

Up to 10 dimming ballasts

| | |
|--------------------------|---|
| SUPPLY VOLTAGE | 220-240 Volts AC 50 Hz |
| TIME PERIOD | Adjustable up to 15 seconds |
| LIGHT MEASUREMENT | Adjustment 100 LUX to 800 LUX approx. |
| FIXING METHOD | Flush fixing in 86mm hole using clip provided Surface fixing using integral back plate |

| | |
|--------------------------|--|
| TERMINAL CAPACITY | 1.5 mm ² |
| MATERIAL | Flame retardant ABS, fixing clip polypropylene |
| TYPE | Class 2 |
| TEMPERATURE | -10°C to 35°C |
| CONFORMITY | EMC-89/336/EEC LVD-73/23/EEC |



PART NUMBERS

| | |
|-----------|---|
| ALC45-D | Ceiling mounted dimming photocell with 1-10V output |
| ALC45-DSI | Ceiling mounted dimming photocell with DSI output |
| UHS | User handset |

IMPORTANT NOTICE!

This device should be installed by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.

Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.

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