

Datasheet

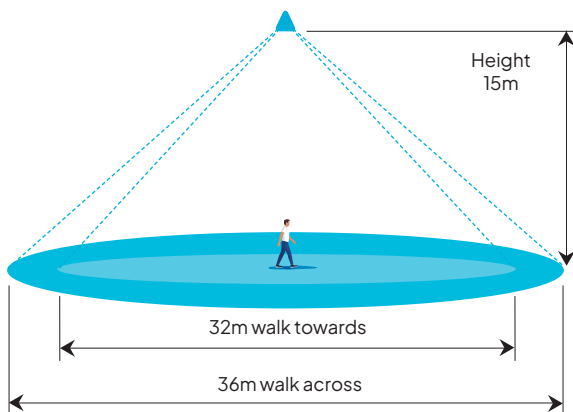
High Bay DALI DIMMING – DALI POWERED Sensor Range

Innovative lighting control sensors for industry professionals, by industry professionals.

Out of the box sensors work in standalone mode and can be set up using our free Cucumber Controls app on either Android or iOS devices. Need to network devices together? Then not a problem as wireless networking is included as standard. Using the same free app users can set groups of detectors to work together to provide tailor made solutions.

- 2 part modular construction
- Colour coded housings = yellow for switching; green for dimming; blue for DALI powered
- Suitable for either surface or flush mounting
- Large wiring compartment with pluggable connectors
- Quick setup menu reducing time on-site for programming
- Over the air software updates

Detection range



PIRDALIHBR
Range



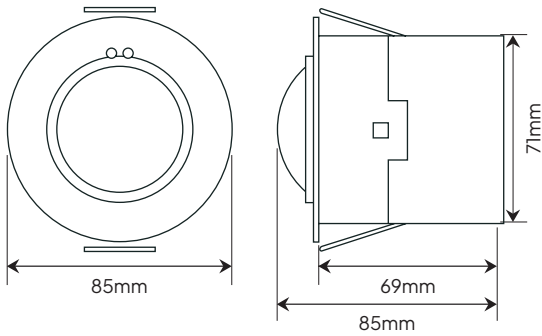
Specifications

Supply Voltage	Via DALI PSU (9.5VDC to 22VDC)
No of DALI Drivers	64 max.
Parasitic Power Consumption	221mW
Terminal Capacity	0.5mm ² to 1.5mm ²
Time Out Period	1 second to 240 minutes
Working Temperature	-10 to +35°C
Impact Resistance	IK04
IP Rating (flush mounted)	Standard versions: IP20 IP versions: IP65
Unit Weight	0.104kg
Material (Casing)	ABS Dev962 UL 94 VO
Compliance	2014/35/EU Low Voltage Directive 2014/30/EU Electromagnetic Compatibility Directive 2014/53/EU Radio Equipment Directive 2011/65/EU Restriction of Hazardous Substances (RoHS) Directive

BLE (Bluetooth) Transceiver

Protocol	Bluetooth
Operation frequency	2.4 GHz
Transmission Power	10 dBm
Typical Range (indoor)	10 to 30m max. in free air with direct line of sight

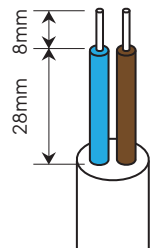
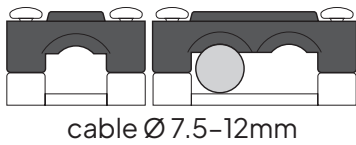
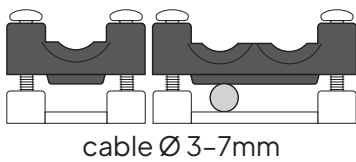
Dimensions



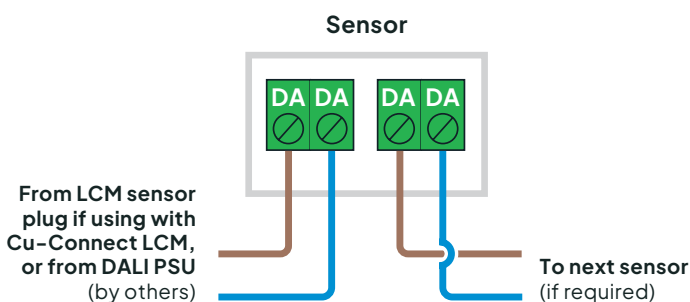
Wiring

Terminate cables into connections as per wiring diagram below and fit wiring cover.

Secure the cable/bar clamp using 14mm screws (supplied). Do not overtighten.



Typical cable preparation.

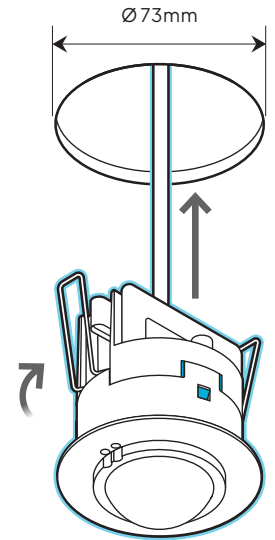


The pluggable green connectors can be removed from the sensor if needed to make wiring easier.

If supplying your own cable for sensor connections, please use 2-core 0.75mm² (min.) Mains rated cable. The working voltage of the sensor is 16V approx, but as DALI Connections are not defined as Safety Extra Low Voltage (SELV), Mains-rated cable must be used for connections.

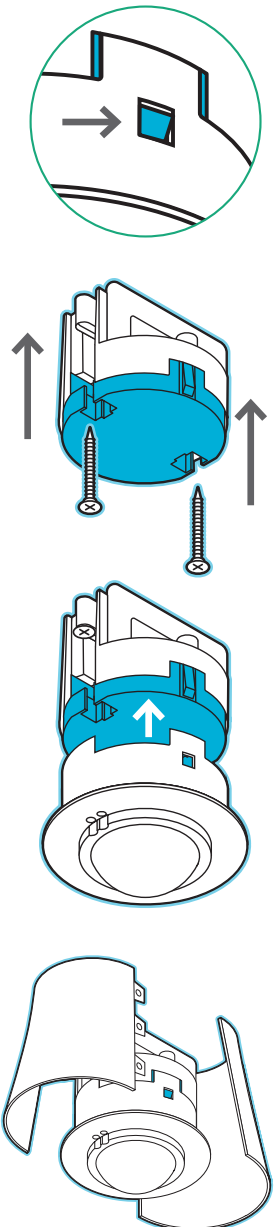
Flush fixing

- 1) Drill a Ø 73mm hole in the ceiling.
- 2) Wire connections as shown opposite, and fit wiring cover.
- 3) Push springs upwards and insert the sensor into the hole.



Surface fixing

- 1) Separate head and power supply by pressing the blue release lug.
- 2) Remove springs by pressing spring legs together, and unhook them from the power supply body.
- 3) Wire connections as shown opposite, and fit wiring cover.
- 4) Fix to Besa box or direct to surface using suitable 3.5mm or No.6 screws (not supplied).
- 5) Refit head to power supply.
- 6) Attach the surface mounting sleeves (SMSLW (White) or SMSLB (Black) sold separately) to the sensor.



WARNING: This device should be installed by a qualified electrician in accordance with the latest edition of the UK Wiring regulations.

Installation precautions:

- Do not fix the sensor to an unstable or vibrating surface.
- Do not position unit within 1m of any ventilation or forced heating.
- Avoid sunlight directly entering the photocell on the front of the sensor.
- Flush-mounting Bluetooth Low Energy (BLE) devices inside metal enclosures is not recommended.
- BLE networking (“meshing”) between devices: Although BLE range between devices can be up to 30m in direct line of sight, this distance can be affected by other external factors such as building fabric / materials and 3rd party technology. Therefore we would normally recommend BLE devices to be mounted a maximum of 10m to 20m apart (or closer if possible). If further distance between devices is required, please contact us.
- If possible, please check on quality of mesh network between devices before proceeding with project.
- Please contact us for further design considerations if you are planning to mesh more than 50 BLE sensors and/or devices into the same network.
- If you have any queries with regards to above points please contact us for further details.

Functionality and programming

The sensor can be programmed using the Cucumber Controls app via Bluetooth on your smart device. Please use the QR code below to download our app on either iOS or Android to set up the product. Basic functionality using sensor(s) as a non-networked product can be programmed using the ‘Quick Start’ menu option – please see list of basic parameters below:

Quick Start menu default parameter settings

Presence/absence detection	Presence
Time out period	10 min
Maintained illuminance (MI target level)	1000 Lux approx
Lux switching	Off
Master override	Off
Temporary dim output level	100%
Sensor sensitivity	Optimised
Walk test	On for 24 hours after power up

If further configuration is required, including advanced dimming functionality and/or Bluetooth networking (meshing) between multiple sensors, please use the ‘Network setup’ option in the app. Further information for using the ‘Network setup’ can be found on our website.



Download our free Cucumber Controls app to set up the product



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Optional Directional Shield

For altering the detection pattern to prevent triggering such as at the end of a racking aisle.



HBSW (White)
or HBSB (Black)
(not supplied).








Simply clip the shield's alignment lugs into the bezel.



Adjustable aperture.

Product Codes

Product Code		Description
PIRDALIHBRW		PIR DALI Dimming High Bay Sensor Recessed White RAL9010 - DALI Powered
PIRDALIHBRWIP		PIR DALI Dimming High Bay Sensor Recessed White RAL9010 IP65 - DALI Powered
PIRDALIHBRB		PIR DALI Dimming High Bay Sensor Recessed Black RAL9005 - DALI Powered
PIRDALIHBRBIP		PIR DALI Dimming High Bay Sensor Recessed Black RAL9005 IP65 - DALI Powered
HBSW		Directional Shield - White
HBSB		Surface Mount Kit - Black
SMSLW		Surface Mount Sleeves - White
SMSLB		Surface Mount Sleeves - Black

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www.cucumberlc.co.uk/resources.

For our Standard Terms & Conditions and Guarantee Policies please refer to our website at

www.cucumberlc.co.uk.



Blackhill Dr, Wolverton Mill,
Wolverton, Milton Keynes, MK12 5TS

03330 347799

enquiries@cucumberlc.co.uk

www.cucumberlc.co.uk

