PHILIPS
dynalite

DUS704W
Ceiling Mount Universal Sensor Installation Manual

The DUS704 series combine motion detection (PIR), infra red remote control reception (IR) and ambient light level detection (PE) in the one device. In applications such as homes, lecture theatres and office towers, DUS704 universal sensors can be utilised to detect motion and switch on the lights.

When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The same sensor provides IR remote control reception to give full control over lights, audio-visual equipment and blinds. A range of hand held infra-red transmitters to complement DUS704 series universal sensors.

In situations where it is critical to maintain precise lighting control for individual workspaces, such as a flight control tower or office workstation, the DUS704 facilitates light compensation. The DUS704 can be placed in an automatic "Daylight Harvesting" mode for energy savings.

installation steps

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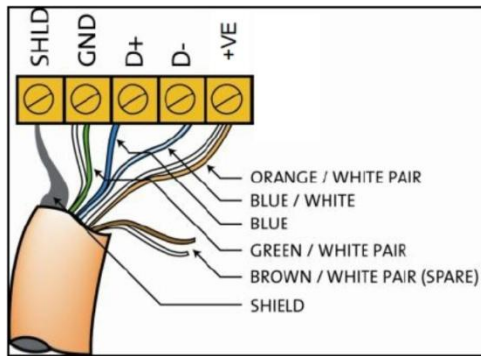
1. * WARNING * Do not touch the Pyro Sensor with your fingers. For indoor use only.

2. Select an appropriate indoor mounting location, as detailed in the location guidelines on the following pages. Note that this product has three functions, and the optimum mounting location for each individual function may conflict with each other, and may require the use of multiple sensors.

3. Remove the cover from the base unit by un-clipping the bottom of the cover and hinging it upwards.

4. Screw the base unit to the wall, ensuring the unit is mounted vertically. Pass the data cable through the cable entry hole.

5. Terminate the data cable as shown below.

6. Use silicon sealant to seal any cable entry and screw holes to prevent air draughts, dust and insects from entering the enclosure.

7. Replace the cover onto the base unit by locating it in the top clip position then hinging it downwards. Remove the screw cap at the bottom of the housing, insert and loosely tighten the supplied screw, then replace the screw cap.
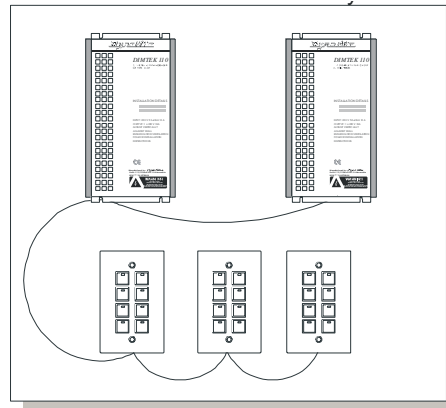

internal view

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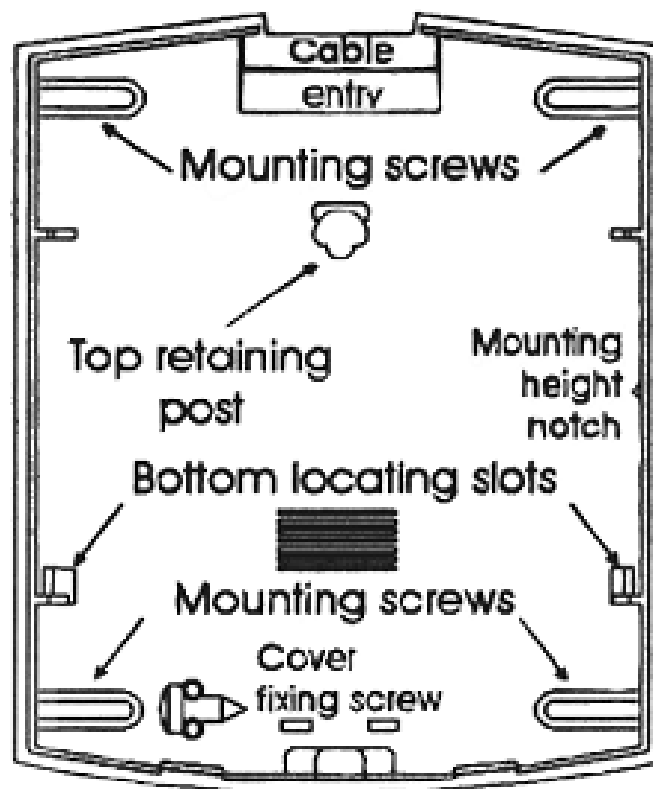
connecting data cable

serial cable permanent connectors

- ORANGE / WHITE PAIR
- BLUE / WHITE
- BLUE
- GREEN / WHITE PAIR
- BROWN / WHITE PAIR (SPARE)
- SHIELD

Recommended Cable Colours

Green/White Pair	paralleled for GND
Orange/White Pair	paralleled for +VE
Blue/White Pair	Blue for DATA
	White for DATA-

connect data cable in a "daisy chain"

Recommended Cable Types

Belden:	9503
Garland:	MCP3S
Hartland:	HCK603
M&M Cable:	B2003CS
Dynalite:	DYNET-STP-CABLE

motion detection mounting location

- Fix the sensor to a firm section of wall
- Position the sensor so it is between 1.1 and 3.1 metres from the floor. Optimum height for the sensor is 2.1 metres.
- Slide the circuit board up or down so the marker on the housing matches up with the installed height on the scale provided on the right hand side of the circuit board.
- Position the sensor so it is at least 2 metres away from electrical lighting such as neon and fluorescent lights.
- Position the sensor as to avoid exposing it to direct sunlight and heating / cooling sources.
- Keep data cables away from electrical wiring.
- Select a location where persons are more likely to walk across the detection "fingers" rather than into them (see diagram below).
- For programming instructions refer to Dynalite Tech Note – Setting up Motion Detection functions.
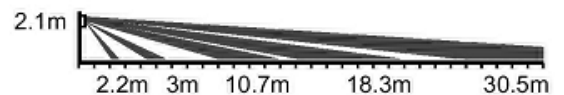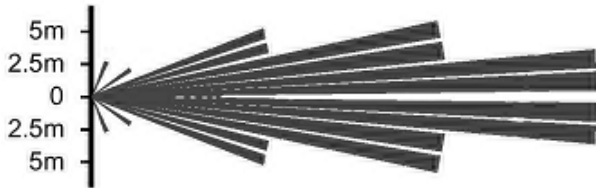
motion detection lens pattern

Top view

Side view
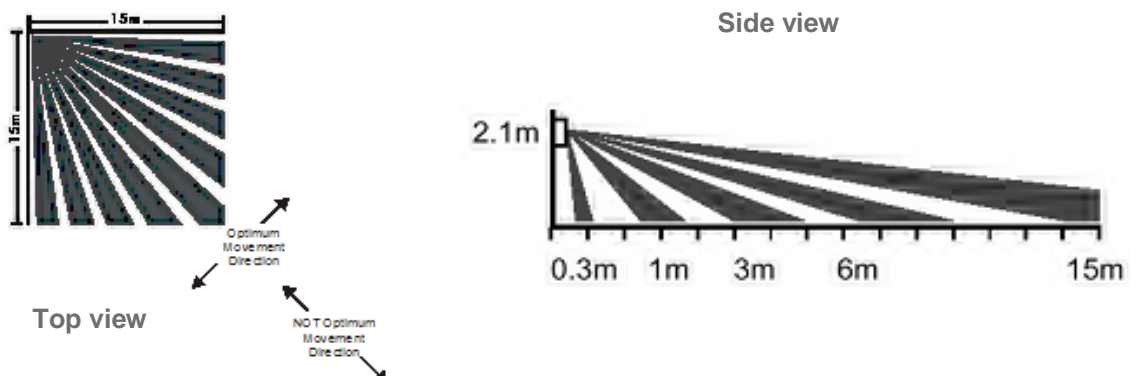
optional motion detector lens

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In addition to the supplied Wide Angle lens, An option for a long range lens is available for corridor applications:
• DUS704W Long Range – Useful for monitoring a long thin space such as a corridor.
Contact your local supplier for more details

Optional Lens – DUS704W Long Range

infrared receiver mounting location

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• Position the sensor so it is within 6 meters of the intended operating positions of the infrared transmitter

• Position the sensor so it is not directly exposed to light, especially incandescent and sunlight, both of which can substantially reduce IR range

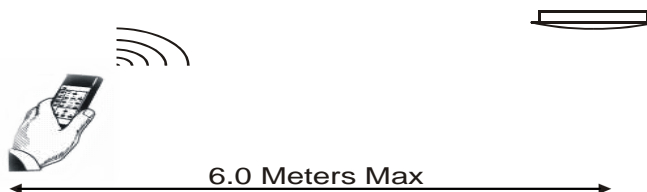• Keep data cables away from electrical wiring

6.0 Meters Max

photo electric cell mounting location

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• Position the sensor so it "sees" a combination of artificial light and natural
 light

• Position the sensor so it is not directly exposed to artificial light or sunlight

• Keep data cables away from electrical wiring

• For programming instructions refer to Dynalite Tech Note - Setting up PE functions

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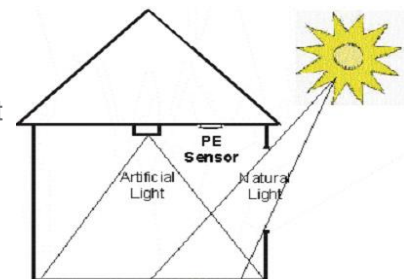
Motion Detector
Wide Angle Wall Mount PIR Detector
Range 12m x 90O (standard lens)
Mounting height: 1.1m to 3.1m
LED activation indicator
Adjustable Pulse Count & Sensitivity
Detection zones: 20 dual element zones
Sensor: Dual element pyro-electric
R.F.I. Immunity: >15V/m @ 10- 1000MHz
Optional lens:
* 30m x 30O Long Range

PE Cell
Dynamic range < 5 lux to > 5000 lux
Automatic "Daylight Harvesting" mode
Can be used for light measurement

Installation Position
Wall mount, indoor use only

Infra Red Remote Control Receiver
Range > 6m
LED activation indicator
Can be used with DTK500 series
Infra Red remotes or other learning
IR Remote controls

Dimensions
H 85mm x W 66mm x D 45mm

Control IO
Serial Port – RS485 DyNet

DyNet DC Load
20mA

Setup
All functions remotely
programmable

Weight
0.1Kg Packed

warranty policy

Dynalite warrant to the original purchaser for a period of twenty four (24) months from the date of shipment ex-factory of the equipment that should the equipment prove defective by reason of improper workmanship or material, Dynalite will repair or replace the same without charge provided the equipment has not been improperly installed, operated, repaired, damaged or abused. The warranty granted herein is limited to repair or replacement only. Dynalite has the right to substitute any warranty item not on the current price/equipment list. As far as the law permits, Dynalite shall not be liable for any loss or damage caused to property or persons arising from any cause whatsoever. This warranty is subject to the return of the equipment to Dynalite, or the Dynalite authorised distributor who supplied the equipment (the 'Supplier'), by prepaid freight within the twenty four (24) month warranty period. Where Dynalite, or the Supplier, agree to a site visit during the warranty period and it is found to be an operational problem, and not subject to warranty in that event, then a field service call out charge will apply. Contact Dynalite or the Supplier for details.

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