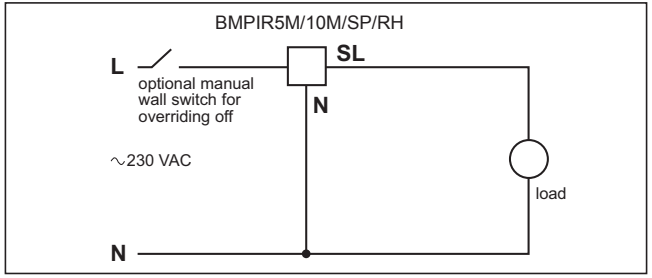
Wiring diagram



Trouble shooting

The PIR does not detect
- Person is too far from the PIR switch, see detection diagram.
- Person is moving unusually slowly (perhaps when testing).

The PIR false triggers
- Detector is placed too close to heat or moving air sources.

Batten Mount PIR occupancy switches

BMPIR5M BMPIR10M BMPIRSP BMPIRRH

DANLERS Batten mount passive infra-red occupancy switches (PIR) can be mounted onto the end of lighting battens via the 20mm knock out. The switch includes the connection 20mm thread and 1m of wire tails to connect to the lighting ballast.

The PIRs incorporate a passive infra-red quad sensor to detect movement of a warm body within the detection zone and include a photocell to monitor the ambient light level.

On detecting movement, if the ambient light is dark enough, the PIR will switch the load on. The ambient threshold can be set by the user to between approximately 100 and 3000 lux (on the working plane) via the LUX adjuster.

BMPIR5M has a 5m diameter range, 5m max height, see diag. B.
BMPIR10M has a 10m diameter range, 5m max height, see diag. B.
BMPIRSP has a 1.5m diameter range, 5m max height, see diag. B.
BMPIRRH has a 2.5m diameter range, 2.5m max height, see diag. B.

A 'real time' photocell status indicator glows green when the photocell is active and glows red when the photocell is inactive.

If no more movement is detected within a certain time, then the PIR will switch off the load. The time can be set via the internal TIME adjuster to between 10seconds and 40 minutes (diagram D).

Loading

These PIRs should only be connected to a 230V 50Hz ac supply. They can switch the following type of loads:

- 10 amps (2500W) resistive loads and tungsten
- 6 amps (1500W) fluorescent (switch start) / mains halogen lamps (recommended with integral safety fuse)
- 3 amps (750W)
  Electronic or wire wound transformers.
  Compact fluorescent or LED lamps.

Normally OPEN contacts.

Installation procedure

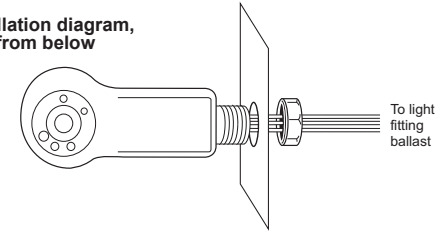
1. Please read these notes carefully before commencing work.
   In case of doubt please consult a qualified electrician.
   Make sure the power is isolated from the circuit.
2. Remove the 20mm knockout from the end of the lighting batten.
3. Making reference to diagram A: Remove the 20mm thread from the PIR and insert it through the 20mm knockout hole with the thread facing outwards
4. Feed the trailing wires through the thread and with the PIR facing downwards tighten the 20mm thread.
5. The trailing wires should be connected to the ballast as:
   Brown - Live supply. Blue - Neutral supply. White - Switched Line to ballast.
6. Once the wiring has been completed and verified, switch on the supply and test the operation.

Set-up

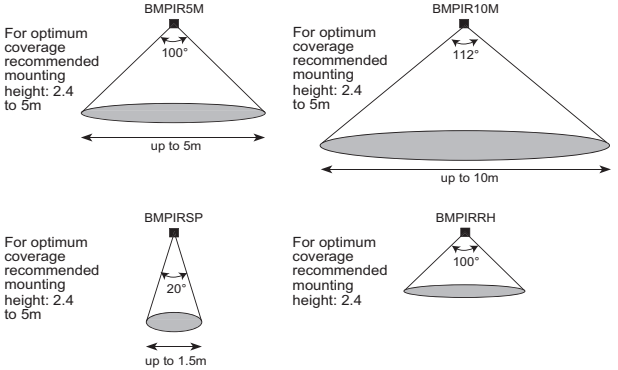
7. When powered up, (after 1 minute stabilisation time) turn lux pot fully clockwise and time pot fully anticlockwise.
8. Press the button for approximately 0.5s. The LED will go green indicating the LUX cell is active. (Or press and hold button for approx. 4 seconds – LED goes RED indicating Lux cell INACTIVE). Repeating these steps will toggle the functionality.
9. If lux cell active, vacate area until PIR switch switches the load off (should be after 10 seconds).
10. With the LUX as desired on desktop from daylight ONLY (no artificial light), wind the lux pot anticlockwise whilst waving your hand in front of the PIR cell. When the PIR switches the load ON, stop turning the pot. The Lux inhibit level is now set.
11. Turn the PIR time to the desired timeout.

Precondition	Power-up Condition
Lux Cell Inactive Relay OFF	Lux Cell Inactive Relay comes ON for 1 Min. After 1 min. ready for detection.
Lux Cell Active Relay ON	Lux Cell Active Relay stays ON for 1 Min. After 1 min. ready for detection.
Lux Cell Active Relay OFF	Lux Cell Active Relay comes ON for 1 Min. After 1 min. ready for detection.
Lux Cell Inactive Relay ON	Lux Cell Inactive Relay stays ON for 1 Min. After 1 min. ready for detection.

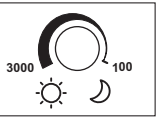
A: Installation diagram, viewed from below



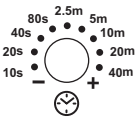
B: Detection range



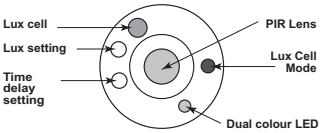
C: Lux adjustment



D: Time adjustment



PIR head - key components



RED - PIR active, Photocell inactive

GREEN - PIR and Photocell override ON (passive LUX)