



HIGH BAY CONTROLS WITH PIR OCCUPANCY SWITCHING

- Ideal for warehouses, storage aisles, factories and sports halls
- 3 lens types to maximise detection for specific areas
- Versions with manual adjustment
- Versions with remote adjustment
- Versions suitable for DALI ballasts



- Versions suitable for 1-10V ballasts
- Versions suitable for DSI ballasts
- Manufactured in the UK
- 5 YEAR WARRANTY







DANLERS

Controls for Lighting & HVAC

DANLERS High Bay Controls

The DANLERS range of HIGH BAY passive infra-red (PIR) occupancy switches is specifically designed for the automatic control of lighting loads in areas with demanding mounting heights such as factories, storage aisles, entrance halls and sports halls. The products are straightforward to install and generally can make use of existing wiring, making them suitable for either retrofit or new installations. As with all DANLERS PIR occupancy switches, these products include a relay with special high surge contact material, so they are suitable for use with high bay LED lamps.

3 Detection patterns

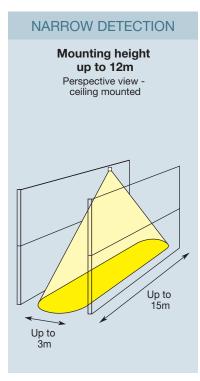
The high bay controls detect the movement of people within the detection zone and control the lights accordingly.

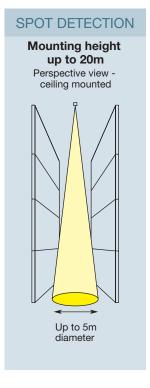
The high bay controls are available in three types - each with a particular detection pattern which is optimised for particular applications.

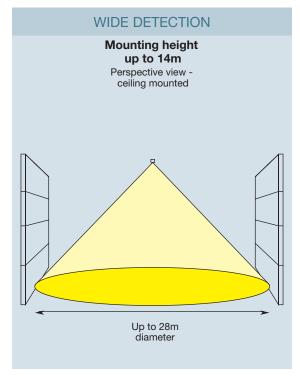
The Narrow Detection versions are ideal for covering storage aisles.

The **Spot Detection** versions are ideal for smaller areas, such as the entrances to storage aisles.

The Wide Detection versions are ideal for large open areas, such as factories, sports halls and entrance halls.



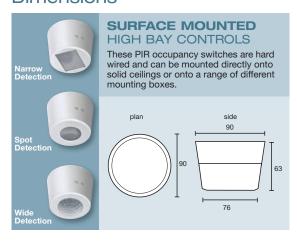


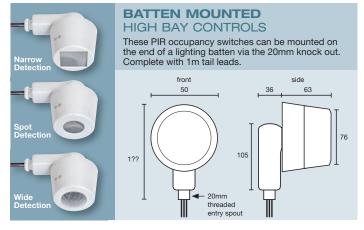


Time lag function

There is a time lag function on all high bay controls. The time lag is the time that must elapse with no movement detected before the PIR occupancy switch will switch off. On the manually configured products the time lag is adjustable from 10 seconds to 40 minutes in 9 steps. On the remotely programmable EasyZAPP and ControlZAPP products the time lag is adjustable from 10 seconds to 24 hours in 1 second increments.

Dimensions





INTRODUCTION TO HIGH BAY CONTROLS FOR SWITCHING ONLY



"SWITCHING ONLY" PIR OCCUPANCY SWITCHES

These products are designed for automatically switching the lighting load on or off. For details on the dimming versions, please see overleaf on page 4.

ADJUSTABLE PHOTOCELL OVERRIDE

All the "switching only" versions have an adjustable photocell override which can inhibit the lights from switching on if somebody enters an area which already has sufficient ambient light.

The "switching only" versions come in 5 options, according to the required function (see below). For first three options the settings adjustments are made manually via spindles on the product. The final two versions are remotely programmable via an app on an Android phone or tablet.

MANUALLY ADJUSTED VERSIONS

Presence Detection versions

These automatically switch the lights on when somebody enters the detection area, and automatically switch the lights off when no further movement is detected.



Absence Detection versions

To switch the lights on, these versions require a retractive (momentary) switch to be pressed when somebody enters the area. The lights will automatically be switched off when no further movement is detected. The lights can also be switched off manually, by pressing the retractive switch for 2 seconds.

Presence Detection with Short Visit/ Exit Mode These versions work as a regular Presence Detection version, but have a couple of extra energy saving features which are activated by using a retractive (momentary) switch.

If you are exiting an area you can press the retractive switch. This will ensure that the lights are switched off in 30 seconds - which is normally quicker than the set time lag.

Similarly, if you are entering an area for a short time, you can press the retractive switch. This brings the lights on for just 30 seconds before automatically switching off. However, any subsequent detection will keep the lights on automatically, so no one will be left in the dark.

If the retractive switch is not operated, the PIR control will function as a regular Presence Detection version, with its normal, set time lag.

REMOTELY PROGRAMMABLE VERSIONS

EasyZAPP versions

These are set up or adjusted remotely using a free app on an Android phone or tablet. These work as presence detector switches



and can be adjusted for settings such as photocell override and time lag. The phone or tablet can also be used as a remote control on/off override, or used to batch configure a number of EasyZAPP controls at the same time. The Android device communicates using Bluetooth Smart, with a signal range of up to 100m.

ControlZAPP versions

In addition to all the EasyZAPP functions, ControlZAPP products can be programmed to change state or change function according to a calender schedule.

Both EasyZAPP and ControlZAPP products include optional password protection, to avoid unwanted adjustment of the settings.

All variants available as: BATTEN MOUNT VERSIONS

All of the High Bay controls are available as Batten Mount versions.

Please contact us or visit the DANLERS website for a complete list of High Bay Batten Mount options and order codes.



Also available: VOLT FREE VARIANTS

Most of the high bay controls are available with volt free output contacts, including versions for:

Switching only (manual adjustment)

Switching only (remote adjustment)

Dimming DALI or 1-10VDC ballasts (remote adjustment).

INTRODUCTION TO HIGH BAY CONTROLS FOR DIMMABLE BALLASTS



"DIMMING" PIR OCCUPANCY SWITCHES

This range of products is designed for controlling DALI (broadcast), DSI or 1-10V dimmable ballasts. They switch the lights on when the area is occupied, and dim or brighten the lights in response to changes in the ambient light level - to maintain a chosen lux level. Each control also has a switching relay capable of switching up to 2 amps (500W) LED lamps and fittings or 6 amps (1500W) of most other types of load.

Thes 'dimming' versions come in four options, as detailed below. For the first two options the settings are adjusted manually via spindles on the product. The final two versions are remotely programmable via an app on an Android phone or tablet.

MANUALLY ADJUSTED VERSIONS







Presence Detection versions

These automatically switch the lights on when somebody enters the detection area, and automatically dim or brighten the lights to maintain a chosen lux level. They automatically switch the lights off when no further movement is detected.

Optionally the lights can also be set to return to a minimum light level when the area is not occupied. This can either be set as a permanent background light on non-occupancy, or can be set to between 1 and 30 minutes following a period of occupancy.

Absence Detection versions

Operation is as the Presence Detection versions above, however they require a retractive (momentary) switch to be operated to initially switch the lights on. The lights can also be switched off manually, by pressing the retractive switch for 2 seconds.

REMOTELY PROGRAMMABLE VERSIONS





EasyZAPP versions

These are set up or adjusted remotely using a free app on an Android phone or tablet. These work as presence detector switches with daylight linked dimming (as above), and can be adjusted for settings such as photocell and time lag. The phone or tablet can also be used as a remote control on/off override, or used to batch configure a number of EasyZAPP controls at the same time. The Android device comminicates using Bluetooth Smart, with a signal range of up to 100m.

ControlZAPP versions

In addition to all the EasyZAPP functions (above), ControlZAPP products can be programmed to change state or change function according to a calender schedule.

Both EasyZAPP and ControlZAPP products include optional password protection, to avoid unwanted adjustment of the settings.

All variants available as: BATTEN MOUNT VERSIONS

All of the
High Bay controls
are available as Batten
Mount versions.
Please contact us or visit the
DANLERS website for a
complete list of High Bay Batten
Mount options and order codes.

Also available: SWITCH/ DIM VARIANTS

Suitable for ballasts with switch/dim capability.

A momentary wall switch is pressed when a person enters the room to switch the lights ON and enable the PIR switch to control the load.

The momentary switch can also be used to switch or dim the load. The load will automatically be switched OFF when no further movement is detected.

Also available: VOLT FREE VARIANTS

Most of the high bay controls are available with volt free output contacts, including versions for:

Switching only (manual adjustment)

Switching only (remote adjustment)

Dimming DALI or 1-10VDC ballasts (remote adjustment).

4 www.danlers.co.uk

HIGH BAY CONTROL PRODUCT SELECTOR CHART



All high bay controls are available in 3 detection pattern options (see page 2): Narrow Detection (ND), Spot Detection (SP) and Wide Detection (WD)

| | Presence detection | Presence detection with short visit mode | Absence detection | Absence detection with Switch/Dim | EasyZAPP (remote programming) | ControlZAPP (remote programming and scheduling) |
|--|-----------------------|---|----------------------|---|-------------------------------------|--|
| | HB PIR ND | HB PIR ND SV | HBA PIR ND | | EZHB ND | CZHB ND |
| Switching only, mains output | HB PIR SP | HB PIR SP SV | HBA PIR SP | | EZHB SP | CZHB SP |
| | HB PIR WD | HB PIR WD SV | HBA PIR WD | | EZHB WD | CZHB WD |
| | HB PIR I | ND 10VDC | HBA PIR ND 10VDC | | EZHB ND 10VDC | CZHB ND 10VDC |
| 10VDC dimming (up to 20 ballasts max.) | HB PIR | SP 10VDC | HBA PIR SP 10VDC | | EZHB SP 10VDC | CZHB SP 10VDC |
| | HB PIR \ | VD 10VDC | HBA PIR WD 10VDC | | EZHB WD 10VDC | CZHB WD 10VDC |
| DALI broadcast | HB PIR | ND DALI | HBA PIR ND DALI | | EZHB ND DALI | CZHB ND DALI |
| dimming. External DALI power supply | HB PIR SP 10VDC | | HBA PIR SP 10VDC | | EZHB SP 10VDC | CZHB SP 10VDC |
| (up to 20 ballasts) | HB PIR WD DALI | | HBA PIR WD DALI | | EZHB WD DALI | CZHB WD DALI |
| DALI broadcast | HB PIR ND DALIP | | HBA PIR ND DALIP | | | |
| dimming. Integral DALI power supply | HB PIR SP DALIP | | HBA PIR SP DALIP | | | |
| (up to 12 ballasts max.) | HB PIR WD DALIP | | HBA PIR WD DALIP | | | |
| DSI dimming. | HB PIF | R ND DSI | HBA PIR ND DSI | | | |
| External DSI power supply | HB PIF | R SP DSI | HBA PIR SP DSI | | | |
| (up to 20 ballasts) | HB PIF | WD DSI | HBA PIR WD DSI | | | |
| DSI dimming. | HB PIR | ND DSIP | HBA PIR ND DSIP | | | |
| Integral DALI power supply | HB PIR | SP DSIP | HBA PIR SP DSIP | | | |
| (up to 12 ballasts max.) | HB PIR | WD DSIP | HBA PIR WD DSIP | | | |
| Switch Dim | _ | | | HBA PIR ND SD | | |
| Refer to ballast manufacturers data sheets for maximum | | | | HBA PIR SP SD | | |
| number of ballasts. | | | | HBA PIR WD SD | | |

BATTEN MOUNT PIR OCCUPANCY SWITCHES

PLEASE NOTE: All of the above products are also available as batten mount versions. For details please contact us or visit the DANLERS website.

VOLT FREE VARIANTS

PLEASE NOTE: Most of the above products are also available with Volt Free contacts. For details please contact us or visit the DANLERS website.



HIGH BAY PIR OCCUPANCY SWITCHES



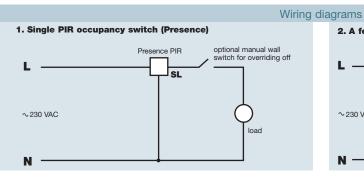
High Bay PIR Occupancy switches with manual adjustment - Switching only

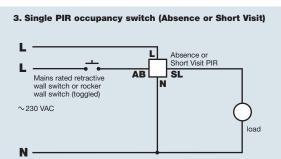
The time lag and photocell override can be adjusted via spindles on the side of the products.

| DANLERS PRODUCT ORDER CODE | Detection type | Detection pattern | Short Visit/ Exit Mode | Wiring diagrams |
|-------------------------------|-------------------|----------------------|------------------------------|--------------------|
| HB PIR ND | Presence | Narrow | X | 1, 2 |
| HB PIR SP | Presence | Spot | X | 1, 2 |
| HB PIR WD | Presence | Wide | X | 1, 2 |
| HBA PIR ND | Absence | Narrow | X | 3, 4 |
| HBA PIR SP | Absence | Spot | X | 3, 4 |
| HBA PIR WD | Absence | Wide | X | 3, 4 |
| HB PIR NDSV | Presence | Narrow | 1 | 3, 4 |
| HB PIR SPSV | Presence | Spot | 1 | 3, 4 |
| HB PIR WDSV | Presence | Wide | 1 | 3, 4 |

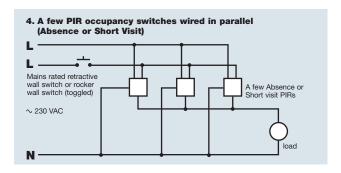
Specification

| Detection ranges: | See page 2 |
|-------------------|---|
| Time lag range: | 10 seconds to 40 minutes in 9 steps |
| Photocell range: | 30 to 1000 lux and inactive |
| LED Loading: | 2 amps (500W) of LED Drivers and LED lamps and fittings. |
| Other Loading: | 6 amps (1500W) of resistive loads. 6 amps (1500W) of fluorescent loads. 3 amps (750W) of electronic or wire wound transformer loads. 2 amps (500W) of CFL or 2D lamps. 1 amp (250W) of fans. |
| Minimum Load: | 2W resistive. |





2. A few PIR occupancy switches wired in parallel (Presence) A few Presence PIRs optional manual wall switch for overriding off load



6 www.danlers.co.uk

HIGH BAY PIR OCCUPANCY SWITCHES WITH REMOTE PROGRAMMING



High Bay controls with remote programming - Switching only

Programmable by Android (4.3 or later) phone or tablet via Bluetooth Smart.

EasyZAPP (EZ): These PIR occupancy switches have an adjustable time lag and an adjustable photocell override. The

time lag and photocell settings can be adjusted and programmed remotely using the free to download

EasyZAPP app on an Android phone or tablet.

The phone or tablet can also be used as a remote control ON/OFF override.

ControlZAPP (CZ): In addition to the EasyZAPP features, these controls also benefit from "to the second" calendar

scheduling, enabling changes of state or function in real time.

One example is switching lights ON during the evening for security. Another example is setting shorter time lag for occupancy switching outside working hours. Special exception can also be scheduled, such as holidays.

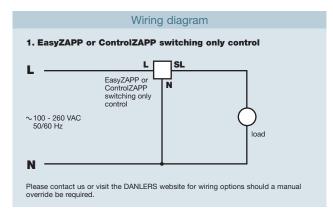
The ControlZAPP app is also free to download.

Both EasyZAPP and ControlZAPP products include optional password protection, to avoid unwanted adjustment of the settings.

| DANLERS PRODUCT ORDER CODE | DETECTION PATTERN | PIR OCCUPANCY SWITCHING: (PRESENCE DETECTION) | ADJUSTABLE PHOTOCELL SETTINGS: 30-1000 lux and inactive | ADJUSTABLE TIME LAG SETTINGS: From 10 seconds to 24 hours | ADJUSTABLE SHORT VISIT TIME LAG: From 10 seconds to 24 hours | SCHEDULING: Day/ Week/ Year | SENSITIVITY ADJUSTMENT: Reduces height of detection zone | LOAD ON / LOAD OFF OVERRIDE | LOCATION BASED SUNSET SUNRISE PREDICTION | SUMMER/ WINTER TIME DAYLIGHT SAVINGS ADJUSTMENT |
|-------------------------------|----------------------|---|---|--|---|--------------------------------------|---|-----------------------------------|--|---|
| EasyZAPP | | | | | | | | | | |
| EZHB ND | Narrow | ✓ | √ | 1 | X | X | X | / | X | X |
| EZHB SP | Spot | 1 | 1 | 1 | X | X | X | ✓ | X | X |
| EZHB WD | Wide | 1 | 1 | 1 | X | X | X | 1 | X | X |
| ControlZAPP | | | | | | | | | | |
| CZHB ND | Narrow | 1 | 1 | 1 | 1 | 1 | √ | 1 | 1 | ✓ |
| CZHB SP | Spot | 1 | 1 | 1 | 1 | 1 | √ | 1 | 1 | 1 |
| CZHB WD | Wide | ✓ | 1 | √ | √ | √ | 1 | / | ✓ | / |

Specification

| opecincation | |
|-------------------|---|
| Detection ranges: | See page 2 |
| Time lag range: | 10 seconds - 24 hours |
| Photocell range: | 30 to 1000 lux and inactive |
| LED Loading: | 2 amps (500W) of LED Drivers and LED lamps and fittings. |
| Other Loading: | 10 amps (2500W) of resistive loads. 6 amps (1500W) of fluorescent loads. 3 amps (750W) of electronic or wire wound transformer loads. 2 amps (500W) of CFL, 2D lamps, LED Drivers and LED lamps and fittings. 1 amp (250W) of fans. |
| Minimum Load: | 2W resistive. |



HIGH BAY PIR SWITCHES FOR DALI BALLASTS



High Bay PIR Occupancy switches with manual adjustment - for DALI broadcast ballasts



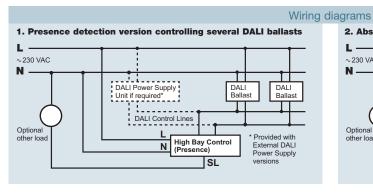
These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. Then they automatically switch the lights off when no further movement is detected.

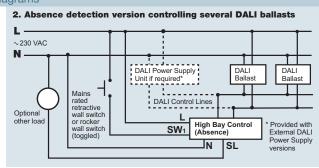
There is also an adjustable "Run-on" timer, which allows the light to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

| DANLERS PRODUCT ORDER CODE | Detection type | Detection pattern | Maximum number of Ballasts | Wiring diagram | | | | | |
|--|-------------------|----------------------|----------------------------------|-------------------|--|--|--|--|--|
| VERSIONS WITH INTERNAL DALI POWER SUPPLY | | | | | | | | | |
| HB PIR ND DALIP Presence Narrow 12 1 | | | | | | | | | |
| HB PIR SP DALIP | Presence | Spot | 12 | 1 | | | | | |
| HB PIR WD DALIP | Presence | Wide | 12 | 1 | | | | | |
| HBA PIR ND DALIP | Absence | Narrow | 12 | 2 | | | | | |
| HBA PIR SP DALIP | Absence | Spot | 12 | 2 | | | | | |
| HBA PIR WD DALIP | Absence | Wide | 12 | 2 | | | | | |
| VERSIONS WITH EXT | TERNAL D | ali powe | R SUPPL | Y UNIT | | | | | |
| HB PIR ND DALI | Presence | Narrow | 20 | 1 | | | | | |
| HB PIR SP DALI | Presence | Spot | 20 | 1 | | | | | |
| HB PIR WD DALI | Presence | Wide | 20 | 1 | | | | | |
| HBA PIR ND DALI | Absence | Narrow | 20 | 2 | | | | | |
| HBA PIR SP DALI | Absence | Spot | 20 | 2 | | | | | |
| HBA PIR WD DALI | Absence | Wide | 20 | 2 | | | | | |

Specification

| Detection ranges: | See page 2 |
|-------------------------|--|
| Time lag range: | 10 seconds to 40 minutes in 9 steps |
| Run-on time: | 0, 1, 2, 5, 10, 15, 20, 30 minutes or infinite (always ON at minimum) |
| Photocell range: | 30 to 1000 lux and inactive |
| Loading: | Suitable for switching and dimming DALI ballasts (broadcast only). |
| ' DALIP ' range: | INTERNAL DALI POWER SUPPLY: The integral DALI power supply can control up to 24mA, eg. 12 ballasts at 2mA (varies according to make and mode of ballasts. |
| ' DALI' range: | EXTERNAL DALI POWER SUPPLY UNIT: The external DALI power supply provided can control up to 40mA, eg. 20 ballasts at 2mA (varies according to make and mode of ballasts. For greater numbers of ballasts (64 max.) additional external DALI Power supply units can be purchased (DANLERS order code: DBPSU). |





HIGH BAY PIR SWITCHES FOR DALI BALLASTS WITH REMOTE PROGRAMMING



High Bay controls with remote programming - for DALI broadcast dimmable ballasts

Programmable by Android (4.3 or later) phone or tablet via Bluetooth Smart.

EasyZAPP (EZ): These controls will automatically switch the lights ON to a regulated

(maintained) lux level when a person enters the area. They include an adjustable time lag and an adjustable photocell. The time lag and photocell settings can

be adjusted and programmed remotely using the free to download EasyZAPP app on an Android phone or

ablet.

The phone or tablet can also be used as a remote control ON/OFF override.

ControlZAPP (CZ): In addition to the EasyZAPP features, these controls also benefit from "to the second" calendar

scheduling, enabling changes of state or function in real time.

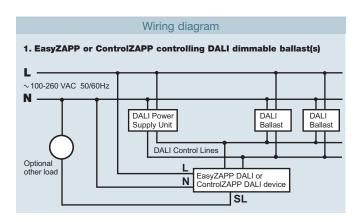
For example, regulating a higher maintained light level at peak work times but reducing the maintained level (or changing to occupancy switching only) at non peak times. Special exceptions can also be scheduled such as holidays.

The ControlZAPP app is also free to download.

Both EasyZAPP and ControlZAPP include optional password protection, to avoid unwanted adjustment of the settings.

| DANLERS PRODUCT ORDER CODE | DETECTION PATTERN | PIR OCCUPANCY SWITCHING: (PRESENCE DETECTION) | ADJUSTABLE PHOTOCELL SETTINGS: 30-1000 lux and inactive | ADJUSTABLE TIME LAG SETTINGS: From 10 seconds to 24 hours | ADJUSTABLE SHORT VISIT TIME LAG: From 10 seconds to 24 hours | SCHEDULING: Day/ Week/ Year | SENSITIVITY ADJUSTMENT: Reduces height of detection zone | LOAD ON / LOAD OFF OVERRIDE | LOCATION BASED SUNSET SUNRISE PREDICTION | SUMMER/ WINTER TIME DAYLIGHT SAVINGS ADJUSTMENT: |
|-------------------------------|----------------------|---|---|--|---|--------------------------------------|---|-----------------------------------|--|--|
| EasyZAPP | | | | | | | | | | |
| EZHB ND DALI | Narrow | 1 | 1 | √ | X | X | X | 1 | X | X |
| EZHB SP DALI | Spot | 1 | 1 | 1 | X | X | X | 1 | X | X |
| EZHB WD DALI | Wide | 1 | 1 | 1 | X | X | X | 1 | X | X |
| ControlZAPP | | | | | | | | | | |
| CZHB ND DALI | Narrow | 1 | 1 | √ | 1 | 1 | 1 | 1 | 1 | 1 |
| CZHB SP DALI | Spot | √ | ✓ | √ | 1 | 1 | / | / | √ | / |
| CZHB WD DALI | Wide | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| Specification | |
|-------------------|--|
| Detection ranges: | See page 2 |
| Time lag range: | 10 seconds - 24 hours |
| Photocell range: | 30 to 1000 lux and inactive |
| Loading: | Suitable for switching and dimming DALI ballasts (broadcast only). Can control up to 40mA, eg. 20 ballasts at 2mA (varies according to make and model of ballasts). DALI Power Supply Unit included. |



HIGH BAY PIR SWITCHES FOR 1-10VDC BALLASTS



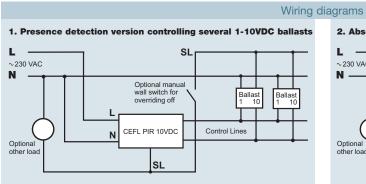
High Bay PIR Occupancy switches with manual adjustment - for 1-10VDC ballasts

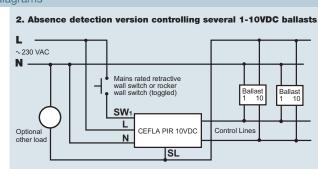
These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. Then they automatically switch the lights off when no further movement is detected.

There is also an adjustable "Run-on" timer, which allows the light to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

| DANLERS PRODUCT ORDER CODE | Detection type | Detection pattern | Maximum number of Ballasts | Wiring diagram |
|-------------------------------|-------------------|----------------------|-------------------------------------|-------------------|
| HB PIR ND 10VDC | Presence | Narrow | 20 | 1 |
| HB PIR SP 10VDC | Presence | Spot | 20 | 1 |
| HB PIR WD 10VDC | Presence | Wide | 20 | 1 |
| HBA PIR ND 10VDC | Absence | Narrow | 20 | 2 |
| HBA PIR SP 10VDC | Absence | Spot | 20 | 2 |
| HBA PIR WD 10VDC | Absence | Wide | 20 | 2 |

| Specification | |
|-------------------|--|
| Detection ranges: | See page 2 |
| Time lag range: | 10 seconds to 40 minutes in 9 steps |
| Run-on time: | 0, 1, 2, 5, 10, 15, 20, 30 minutes or infinite (always ON at minimum) |
| Photocell range: | 30 to 1000 lux and inactive |
| Loading: | Suitable for switching and dimming 1-10VDC ballasts. Can control up to 20mA, eg. 20 ballasts at 1mA (varies according to make and model of ballasts). Minimum load 2W. |





HIGH BAY PIR SWITCHES FOR 1-10VDC BALLASTS WITH REMOTE PROGRAMMING



High Bay controls with remote programming - for 1-10VDC dimmable ballasts

Programmable by Android (4.3 or later) phone or tablet via Bluetooth Smart.

EasyZAPP (EZ):

These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. They include an adjustable time lag and an adjustable photocel. The time lag and photocell settings can be adjusted and programmed remotely using the free to download EasyZAPP app on an Android phone or tablet.

The phone or tablet can also be used as a remote control ON/OFF override.

ControlZAPP (CZ): In addition to the EasyZAPP features, these controls also benefit from "to the second" calendar scheduling, enabling changes of state or function in real time.

> For example, regulating a higher maintained light level at peak work times but reducing the maintained level (or changing to occupancy switching only) at non peak times. Special exceptions can also be

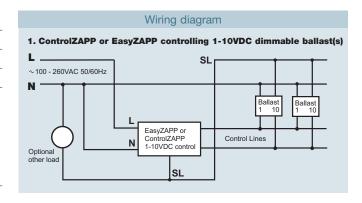
scheduled such as holidays.

The ControlZAPP app is also free to download.

Both EasyZAPP and ControlZAPP include optional password protection, to avoid unwanted adjustment of the settings.

| DANLERS PRODUCT ORDER CODE | DETECTION PATTERN | PIR OCCUPANCY SWITCHING: (PRESENCE DETECTION) | ADJUSTABLE PHOTOCELL SETTINGS: 30-1000 lux and inactive | ADJUSTABLE TIME LAG SETTINGS: From 10 seconds to 24 hours | ADJUSTABLE SHORT VISIT TIME LAG: From 10 seconds to 24 hours | SCHEDULING: Day/ Week/ Year | SENSITIVITY ADJUSTMENT: Reduces height of detection zone | LOAD ON / LOAD OFF OVERRIDE | LOCATION BASED SUNSET SUNRISE PREDICTION | SUMMER/ WINTER TIME DAYLIGHT SAVINGS ADJUSTMENT: |
|-------------------------------|----------------------|---|---|--|---|--------------------------------------|---|-----------------------------------|--|--|
| EasyZAPP | | | | | | | | | | |
| EZHB ND 10VDC | Narrow | 1 | 1 | 1 | X | X | X | 1 | X | X |
| EZHB SP 10VDC | Spot | 1 | 1 | 1 | X | X | X | 1 | X | X |
| EZHB WD 10VDC | Wide | 1 | 1 | 1 | X | X | X | 1 | X | X |
| ControlZAPP | | | | | | | | | | |
| CZHB ND 10VDC | Narrow | ✓ | 1 | √ | ✓ | √ | ✓ | / | √ | / |
| CZHB SP 10VDC | Spot | 1 | √ | 1 | 1 | √ | 1 | 1 | 1 | / |
| CZHB WD 10VDC | Wide | ✓ | 1 | 1 | 1 | 1 | 1 | / | 1 | 1 |

| Specification | | | | |
|-------------------|---|--|--|--|
| Detection ranges: | See page 2 | | | |
| Time lag range: | 10 seconds - 24 hours. | | | |
| Photocell range: | 30 to 1000 lux and inactive | | | |
| Loading: | Suitable for switching and dimming 1-10VDC ballasts. Can control up to 20mA, eg. 20 ballasts at 1mA (varies according to make and model of ballasts). Minimum load 2W | | | |



HIGH BAY PIR SWITCHES FOR DSI BALLASTS

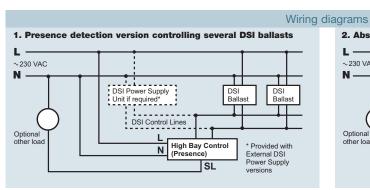


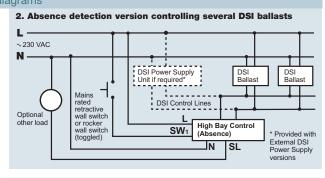
High Bay PIR Occupancy switches with manual adjustment - for DSI ballasts

These controls will automatically switch the lights ON to a regulated (maintained) lux level when a person enters the area. Then they automatically switch the lights off when no further movement is detected. There is also an adjustable "Run-on" timer, which allows the lightys to be returned to a minimum background level following a period of occupancy. This can either be for a chosen time period, or as a permanent background light.

| DANLERS PRODUCT ORDER CODE | Detection type | Detection pattern | Maximum number of Ballasts | Wiring diagram | |
|--|-------------------|----------------------|----------------------------------|-------------------|--|
| VERSIONS WITH INTERNAL DSI POWER SUPPLY UNIT | | | | | |
| HB PIR ND DSIP | Presence | Narrow | 12 | 1 | |
| HB PIR SP DSIP | Presence | Spot | 12 | 1 | |
| HB PIR WD DSIP | Presence | Wide | 12 | 1 | |
| HBA PIR ND DSIP | Absence | Narrow | 12 | 2 | |
| HBA PIR SP DSIP | Absence | Spot | 12 | 2 | |
| HBA PIR WD DSIP | Absence | Wide | 12 | 2 | |
| VERSIONS WITH EXTERNAL DSI POWER SUPPLY UNIT | | | | | |
| HB PIR ND DSI | Presence | Narrow | 20 | 1 | |
| HB PIR SP DSI | Presence | Spot | 20 | 1 | |
| HB PIR WD DSI | Presence | Wide | 20 | 1 | |
| HBA PIR ND DSI | Absence | Narrow | 20 | 2 | |
| HBA PIR SP DSI | Absence | Spot | 20 | 2 | |
| HBA PIR WD DSI | Absence | Wide | 20 | 2 | |

| Specification | |
|-----------------------|--|
| Detection ranges: | See page 2 |
| Time lag range: | 10 seconds to 40 minutes in 9 steps |
| Run-on time: | 0, 1, 2, 5, 10, 15, 20, 30 minutes or infinite (always ON at minimum) |
| Photocell range: | 30 to 1000 lux and inactive |
| Loading: | Suitable for switching and dimming DSI ballasts. |
| 'DSIP' range: | INTERNAL DSI POWER SUPPLY: The integral DSI power supply can control up to 24mA, eg. 12 ballasts at 2mA (varies according to make and model of ballasts. |
| ' DSI ' range: | EXTERNAL DSI POWER SUPPLY UNIT: The external DSI power supply provided can control up to 40mA, eg. 20 ballasts at 2mA (varies according to make and model of ballasts. For greater numbers of ballasts (64 max.) additional external DSI Power supplies can be purchased (DANLERS order code: DBPSU). |





When installing any DANLERS products, please ensure that the most recent edition of the appropriate local wiring regulations has been observed and that appropriate protective measures have been applied.

DANLERS Limited has a policy of continuous development. The right is reserved to change specifications without prior notification or public announcement.



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