Car Park Entrance Control System (CECS)

Installation Instructions

⚠️ **NOTE: All electrical work must be carried out by a licensed electrician as per the latest AS 3000 wiring regulations. No user serviceable parts.**

Fail-Safe operation: The Tauro Black luminaires will automatically operate at 100% power if communication with the CECS controller is lost for >1min (e.g. if the CECS controller is damaged or disconnected from power). Once the communication is re-established, the system will revert to normal operation.

Installation

For optimal operation of the wireless system, ensure all Tauro Black luminaires are mounted at the same mounting height.

The CECS controller should be mounted at about the same mounting height as the Tauro Black luminaires to ensure optimal signal transmission.

Once the Tauro Black lights and the CECS controller are connected to mains power, the wireless mesh network is established automatically.

1

Daylight sensor

Mount CECS unit to surface using 4 screws. Ideally mounted underneath the concrete slab or on the wall of the car park entrance. **Ensure the daylight sensor faces the environment outside the car park.**

2

Connect the CECS controller to mains power using the mains cable supplied.

Adjusting settings on the daylight sensor

The daylight sensor has been pre-set in the workshop and will work without adjustments in most circumstances.

If adjustments are necessary to customize to local conditions, follow the steps below.

1
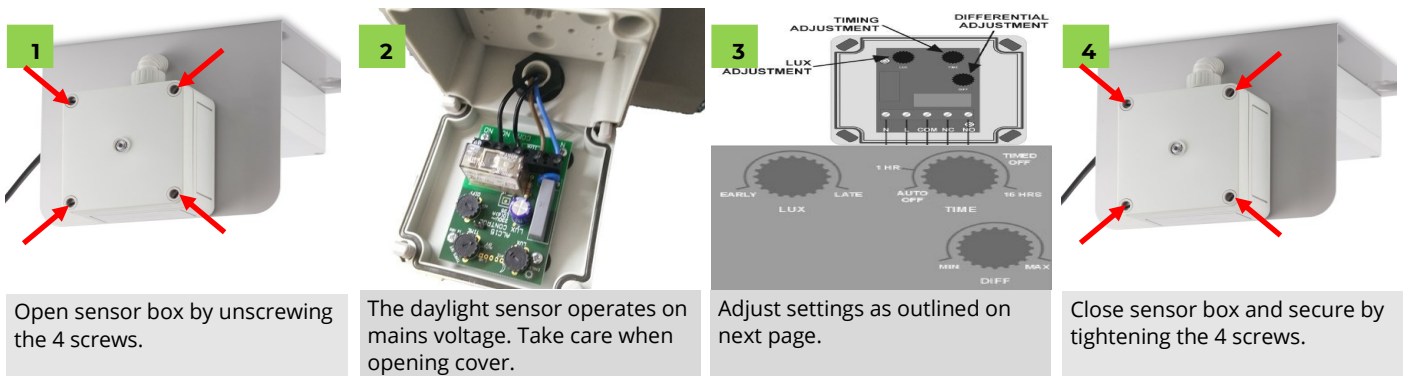
Open sensor box by unscrewing the 4 screws.

2

The daylight sensor operates on mains voltage. Take care when opening cover.

3

Adjust settings as outlined on next page.

4

Close sensor box and secure by tightening the 4 screws.

Confirming correct operation

To check correct operation of the wireless network, during the daytime, cover the sensor with black tape. After 2min, all Tauro Black fittings should slowly start to dim. Remove the tape and observe all fittings ramping up to full brightness after 2min.

Adjusting the light level at which the unit switches between day & night mode

The best time of day to set the **LUX** level is when you wish to have it switch from **day-mode** to **night-mode.**

Leave the **TIME** and **DIFF** thumbwheels set as factory settings (*TIME set* to AUTO OFF and *DIFF* to minimum).

Turn the **LUX** thumbwheel very slowly anti-clockwise towards the EARLY position until you hear the relay in the unit switch. Leave at that setting.
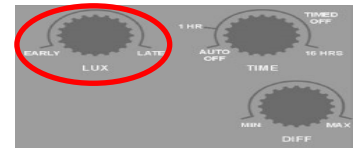
Please note: There is a 2 minute time delay to prevent nuisance switching. This is automatically disabled whenever the LUX thumbwheel is turned, and then re-instated automatically after a further 2 minutes.
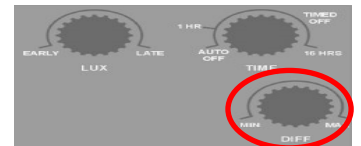
Switch from 800lux to 160lux
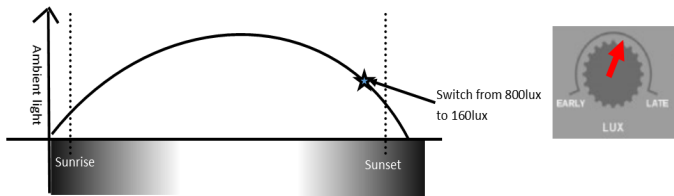
When the **LUX** Wheel is turned to the mid position it modifies the time of transition to **night-mode**. Turning the dial towards **EARLY** means the transition is made at dusk rather than when the sun has set.

Switch from 800lux to 160lux
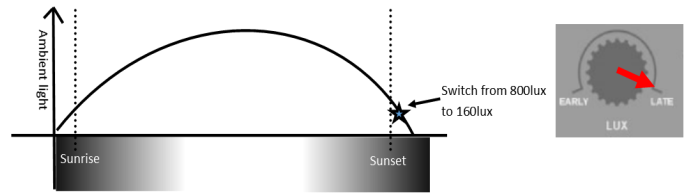
LUX Wheel turned to **LATE** means the lights only dim to **night-mode** when the sun has well and truly set.

Adjusting the differential

After the unit has switched over to either **day** or **night-mode,** the differential (**DIFF**) is used to determine at what level of measured light the fittings should switch back again. Increasing the differential ensures that when the light levels are at the threshold of change (i.e. dusk/external PE sensor/clouds) constant switching is prevented. It has been pre-set to **minimum**.

Dimensions

255 mm
205 mm
155 mm
60 mm

Control Box with Xbee module

Twilight sensor

Width 190mm
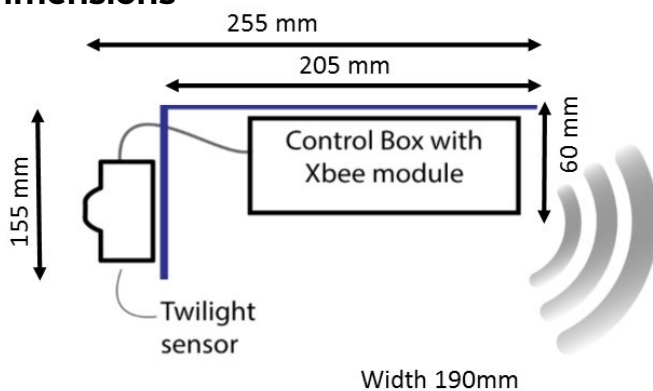
Key Specifications	
Power consumption	2.5W
Operating voltage range	220 - 240V AC, 50 Hz
IP rating	IP65
Ambient operating temperature range	-10°C to +35°C
Switching threshold range (adjustable)	10lux to 1,000lux
Wireless module	XBee Pro Digimesh 2.4 S1
Maximum number of luminaires controlled by one sensor	200
Transmission power	10mW
Transmission range	20m (indoor)
Transmission frequency	2.4GHz

February 2021 E&OE

enLighten

1800 365 444

enlighten.com.au