enLighten

Infrared Commissioning Tool for Tauro™ Black Motion and Daylight Harvesting sensor

Operating Instructions

The remote commissioning tool is used to adjust settings on the high bay sensor on the Tauro Black fitting to suit various environments. To apply a setting to the fitting, point the commissioning tool at the fitting and press the button with desired setting. The fitting will flash if the setting is received successfully.

*Note: Strong sunlight may affect the programming of the sensors with the remote. If you are unable to program the fittings with the remote, try again in the early morning or late afternoon. Try pointing the remote control slightly offset to the sensor (about 0.5m - 1m). When using the **shift** button to access functions in red writing, ensure you press the shift button again to disable before continuing to program. The maximum mounting height for the motion sensor function is 12m.*
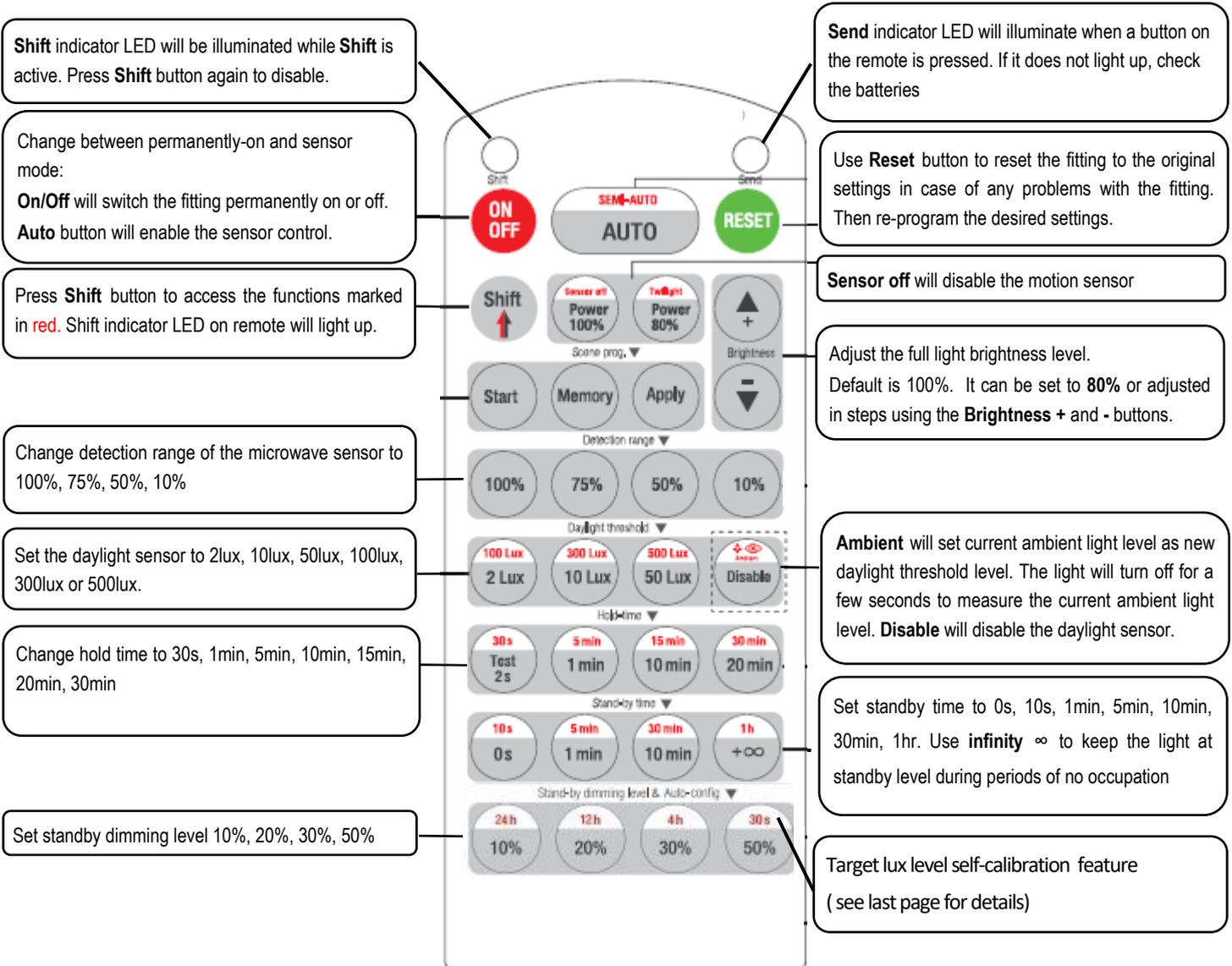
Shift indicator LED will be illuminated while **Shift** is active. Press **Shift** button again to disable.

Change between permanently-on and sensor mode:
On/Off will switch the fitting permanently on or off.
Auto button will enable the sensor control.

Press **Shift** button to access the functions marked in red. Shift indicator LED on remote will light up.

Change detection range of the microwave sensor to 100%, 75%, 50%, 10%

Set the daylight sensor to 2lux, 10lux, 50lux, 100lux, 300lux or 500lux.

Change hold time to 30s, 1min, 5min, 10min, 15min, 20min, 30min

Set standby dimming level 10%, 20%, 30%, 50%

Send indicator LED will illuminate when a button on the remote is pressed. If it does not light up, check the batteries

Use **Reset** button to reset the fitting to the original settings in case of any problems with the fitting. Then re-program the desired settings.

Sensor off will disable the motion sensor

Adjust the full light brightness level.
Default is 100%. It can be set to **80%** or adjusted in steps using the **Brightness +** and **-** buttons.

Ambient will set current ambient light level as new daylight threshold level. The light will turn off for a few seconds to measure the current ambient light level. **Disable** will disable the daylight sensor.

Set standby time to 0s, 10s, 1min, 5min, 10min, 30min, 1hr. Use **infinity** ∞ to keep the light at standby level during periods of no occupation

Target lux level self-calibration feature (see last page for details)

## Operating modes of the high bay sensor

- Motion detection and daylight harvesting

- Motion detection only (no daylight harvesting)

- Daylight harvesting only (no motion detection)

The setup of these modes is outlined on the next page

Daylight harvesting only (no motion detection)

Point the remote tool at the light fitting and press the following buttons

> AUTO
>
> Daylight threshold
>
> Select a value from the lux option OR
>
> Press "Ambient" to measure the current lux level and set it as new threshold
>
> Shift button, then press "sensor off"
>
> Standby level 10%
>
> Standby time infinity will set the minimum dimming level to 10%. Light will never turn off
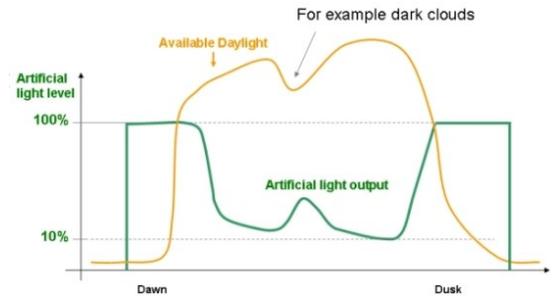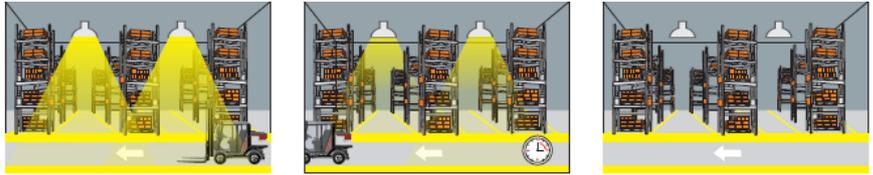
Example:

Workshop with constant movement and natural light available. Want to maintain a lux level of 300 lux. Press AUTO, (Shift) 300lux, (Shift) Sensor off, Standby time infinity, standby level 10%

Motion sensing only (no daylight harvesting)

Point the remote tool at the light fitting and press the following buttons

> AUTO
>
> Daylight disable
>
> HOLD time: set your desired time on full light
>
> STANDBY time: use any of the settings or select **infinity** if you want the light to remain on standby during periods of no occupation
>
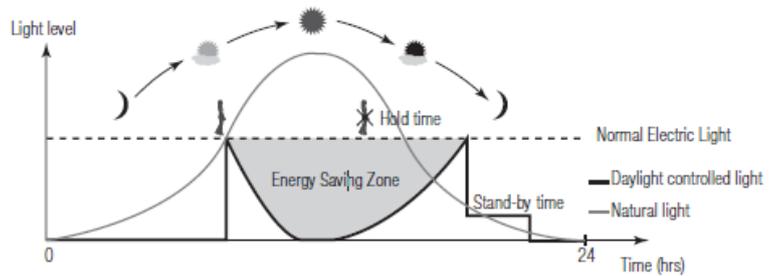> STANDBY level: Choose from 10%, 20%, 30%, 50%

Example:

Low occupancy storage racking without natural light: When motion detected, light should switch on at 100%. After motion ceases, light to remain on for 5min before dimming to 10% standby level. If no motion detected for a further 1min, the light to switch off. Press AUTO, Lux sensor disable, HOLD time 5min, standby time 1min, standby level 10%.

Motion and daylight sensing

Point the remote tool at the light fitting and press the following buttons

> AUTO
>
> DETECTION RANGE
>
> DAYLIGHT THRESHOLD
>
> HOLD TIME: set your desired hold time
>
> STANDBY TIME: use any time or select infinity if you want the light to always remain in standby
>
> Set standby dimming level

Example:

Storage racking with low usage **with** natural light: When motion detected, light should switch on at 100%. After motion ceases, light to remain on for 5min before dimming to 10% standby level. If no motion detected for a further 1min, the light to switch off. Press AUTO, Lux sensor disable, HOLD time 5min, standby time 1min, standby level 10%

Target lux level self-calibration feature

The Tauro Black motion and daylight sensor features an intelligent target lux level self-calibration feature. This enables the user to easily set the target lux level for a specific area.

Background info

When lighting designers specify a luminaire for a certain application (e.g. lighting up a workshop area to a specific lux level) it means the space will be lit up to a certain lux level when the luminaire is operating at full light output. If using a daylight harvesting sensor in this area, it is important that the daylight harvesting system recognises additional light and dims the luminaire if the specified lux level is exceeded. Traditionally, the user would commission the daylight harvesting system by setting it to a pre-defined lux level (e.g. 100lux, 300lux, 500lux). In some situations a more precise lux setting is required.

The solution

The sensor built into the Tauro Black has the ability to automatically self-calibrate itself to the designed lux level.

While the light is operating at full output the software in the sensor will continually monitor the light conditions underneath the light for a certain period. It will take samples of the light level to determine the minimum lux level (which would typically occur during the night time when there is no natural light available). Once the system has found the minimum lux level, it will save this level as the new target lux level.

If the light levels in the area exceed this target level, the sensor will start to reduce the output of the luminaire. If the light levels drop, it will increase the output of the luminaire again to compensate for the reduced amount of natural light.

How to use the self-calibration feature

Aim the remote at the luminaire. Press the **SHIFT** button on the remote. A red indicator will light up above the ON/OFF button on the remote. Then press a button with the auto-configuration time (**24h, 12h, 4h or 30s**). The measured time period needs to include night time so that the sensor can measure the minimum light level in the area. If you are programming the sensor at e.g. 7am, you should select the **24h** period. If you are programming the sensor at e.g. 6pm you can select the **12h** period. The light will operate at full brightness during the time selected. After this time the sensor will resume the operating mode that was set before the self-calibration started.

Do not turn the luminaires off during this calibration period.

Red indicator illuminates when the **SHIFT** button is pressed

SHIFT button. Press this button to access functions in red letters

Stand-by dimming level & Auto-config

24 h	12 h	4 h	30 s
10%	20%	30%	50%