# LightwaveRF..... CONNECt

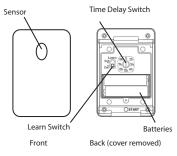
# Dusk to Dawn Sensor Operation Manual

## Model No: JSJS LW801

It is important to install this product in accordance with the fitting instructions below. Failure to do so may render your guarantee void.

IMPORTANT: PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE AND FOR GUIDANCE ON THE ASSOCIATION OF REMOTE HANDSETS. FOR HELP AND SETUP GUIDANCE PLEASE VISIT www.lightwaverf.com

### **OVERVIEW:**



The Dusk to Dawn Sensor is designed to automatically turn on any LightwaveRF receiver, such as a bulb or dimmer, at dusk. The sensor will then automatically turn off devices again at dawn or after a specified delay period.

## FITTING & INSTALLATION:

The device may be operated indoors or outdoors and is IP-56 approved (waterproof). It can be wall mounted or stood on a flat surface using the rear stand.

Using the device for any purpose other than what is described in this operating manual does not fall within the scope of intended use and shall invalidate any warranty or liability. This also applies to any conversion or modification work. This device is intended for domestic use only.

#### Removing Back Cover

In order to setup the Dusk to Dawn Sensor, and to insert/replace the batteries, the back cover must first be removed.

Firstly, gently unhook the rear stand using a screwdriver.



Unscrew the back cover. When reassembling, it is important that the back cover is screwed in securely in order to retain the Dusk to Dawn Sensor's waterproof quality.



#### Changing the Battery

When the battery is low, the sensor light will flash every 3 seconds. Insert to fresh AAA batteries into the compartment as shown. Once the batteries have been replaced, the 'start' button must be pushed to continue operation.



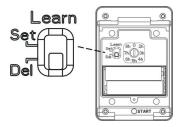
## SETUP:

#### Pairing the unit to Receivers

Select the receiver/s that you want the sensor to turn on/off at dawn and dusk.

1. Place the receiver device (e.g. dimmer switch or socket) in learning mode (see instructions for that particular device for information on how to do this).

2. Whilst the receiver is in learning mode, switch the 'learn' slider on the sensor to the 'set' or 'del' position. This will send out a command instructing the sensor to either pair to the receiver (set) or delete the link to a receiver that is already paired (del).



3. The led on the receiver should flash to indicate that the pairing/unpairing has been successful.

#### Setting the Light Level

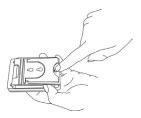
It is possible to select the light level at which the sensor will automatically turn on/off receiver devices such as bulbs, and dimmers. There are two ways in which to set the level of light at which the sensor will trigger devices.

Pressing the start button will activate the sensor.

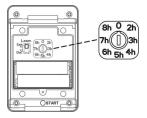
 Pressing the start button for one second will instruct the sensor to send out an on or off command when light levels reach the factory preset (10 lux).

 Holding the 'start' button for 3 seconds will cause the sensor to learn the current light level in its immediate environment and use this level to trigger devices.

Within 20 seconds of the 'start' button being pressed, the sensor will flash to indicate that the new light levels have been learned.



#### Setting the Time Delay



The time delay function consists of a rotary switch with preset hour marks.

If the switch is set to '0', then there is no time delay set. The sensor will turn on any receiver once the light level has gone below that setup by the user and off once the light is above this level (see previous section).

If the delay switch is set to one of the hour marks, then the receiver will still be turned on at the preset light level; however, once the specified amount time has elapsed, the sensor will automatically send an 'off' command, and the receiver will turn off. NOTE: If the RF range between the transmitter and receiver is too great to achieve reliable operation, the LightwaveRF Connect SIGNAL BOOSTER may be used in conjunction with this product to increase the signal strength over greater distances.

**IMPORTANT:** To promote reliable operation, try to ensure that the Dusk to Dawn Sensor is positioned where it will not be affected directly by bright artificial lights that will interfere with the sensor.

## SPECIFICATION:

Batteries: Transmission frequency: Range (open field): IP-56 Approved 2x AAA 1.5v battery 433.92 MHz 30m

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# Lighting Compatibility Information

If you are going to use LightwaveRF equipment in your house, please read the information below to ensure you will get the most out of your hardware.

# Loading

Our one and two gang dimmers can handle a maximum of 250W of load on *each gang* of the switch. The three and four gang switches have a maximum load of 210W on *each gang*. If you exceed this load, the switches may overheat and cease to work correctly.

Each gang requires a minimum load to function. This is generally 40w but can be lower with some lamps. This is generally the case with LEDs where a load of 14W can be enough to have the switch operating.

# Bulbs

LightwaveRF switches can be used with standard incandescent bulbs, halogen bulbs (including low energy halogens) and dimmable LED bulbs (see below).

Fluorescent tube lighting, including CFL bulbs cannot be used with LightwaveRF equipment. This includes the LightwaveRF CFR bulb.

# LEDs

As there is no standard set for LEDs at present, we cannot state that every dimmable LED will work with LightwaveRF equipment. Even if exceeding the minimum load, certain LEDs will not function on their own. In these situations wiring a dummy load\* in parallel across the circuit will correct the issue.

The following LEDs have been tested and do work when at least 2 lamps are in a circuit:

- AuraLED AL-GU10 PRO 5W
- AuraLED AU-GU10 5x1W
- Auralux AU-5W LED Globe 5x1W
- IstoriaLED G9 DL Flood
- IstoriaLED G9 WW Flood
- TCP Dimmable Energy Saver LED 5W
- Truelux 230-5W-DIM
- Toshiba LDRC0627MU1EUD 6.5W 270lm LED

Please check www.lightwaverf.com for up-to-date information on compatibility.

LightwaveRF dimmer switches use trailing edge technology.