LightSymphony™
for hospitality

Wireless ALL|OFF

Energy Saving Occupancy Switch

Instruction Manual

Model: LSH3055BRN

Contents

Environmental Information for Customers in the European Union European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams.

It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

INTRODUCTION

Wireless ALL|OFF effectively replaces a traditional key-card switch by automatically switching a room's power, lights and AC on when a guest arrives and ensures they are switched off when they leave. It does this by detecting occupancy using a wireless door and motion sensors.

As smart phones replace key cards, it also solves the problem of guest's not having a card to use in a key-switch.

Lastly, it can trigger welcome lighting when your guest enters the room. This effect is created simply by ensuring the desired lights are left on by cleaning staff earlier in the day! ALL|OFF will switch the lighting power off after they leave and back on when the guest opens the door.

HOW IT WORKS

ALL|OFF is mostly invisible to the guest; the controller is usually installed inside the consumer unit (fuse box) and the door sensor is fitted inside the door. The only visible part is the motion sensor fitted on the ceiling, which is silent and has no indicator lights.

The door and motion sensors 'talk' wirelessly to the controller and all have a 10 year battery life, with typical use. When the guest arrives the door sensor sends a message to the controller to switch on the lights and AC. Once in their room the guest controls the lights and AC normally using the existing light switches.

When a guest leaves, the door sensor will be triggered again and a short timer is started, typically 6-10 minutes. If no motion is detected in this time frame the room's power is switched off.

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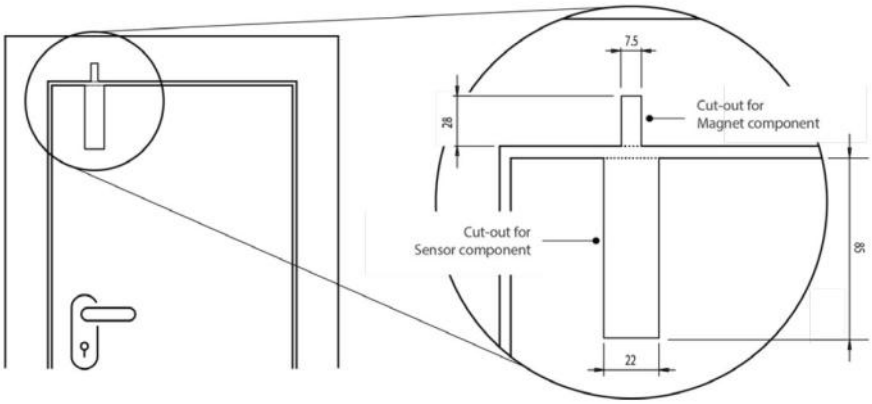
ALL|OFF Controller

Wireless Motion Sensor

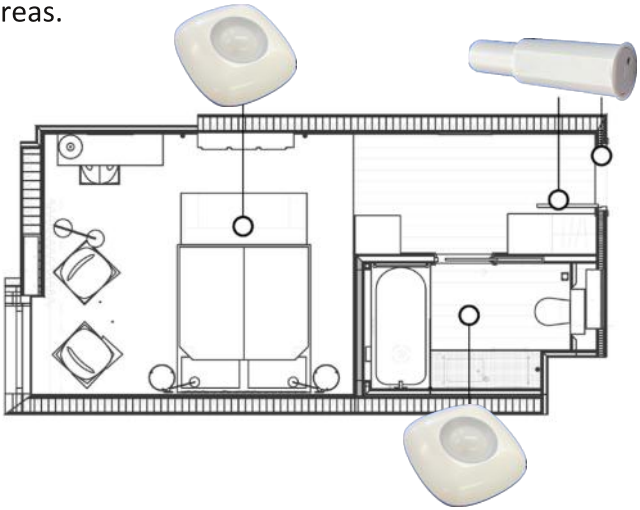
Wireless Door Sensor

INSTALLATION

The door sensor is fitted in the door leaf, on the opposite side to the hinge, as shown;



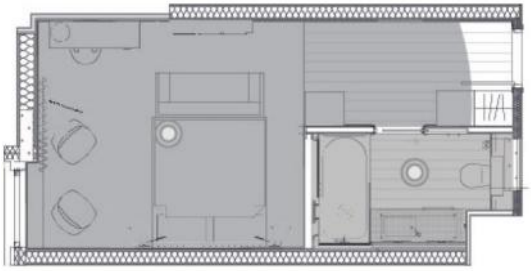
The motion sensors must be fitted in central locations in order to provide good ‘coverage’ of the room. Sensors CANNOT see through walls or glass so additional units may be required in bathrooms or lounge areas.



MOTION SENSOR POSITIONING

It is important that the PIR sensor is positioned with a full view of the guest room, bed and entrance corridor. In the bathroom it is recommended that the sensor is positioned so it has a full view of the bathroom.

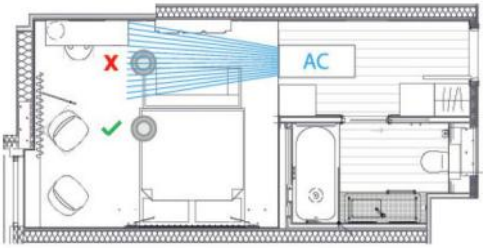
NOTE: The sensor cannot detect through walls or glass.



AIR CONDITIONING AIR FLOW

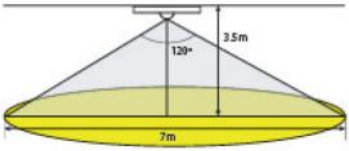
Motion sensors should be mounted away from the air flow created from air conditioning units. AC units create hot and cold air flows which in turn can create false triggers .

Position the guest room sesnsor as far away from the AC unit but as close to the middle of the room as possible.



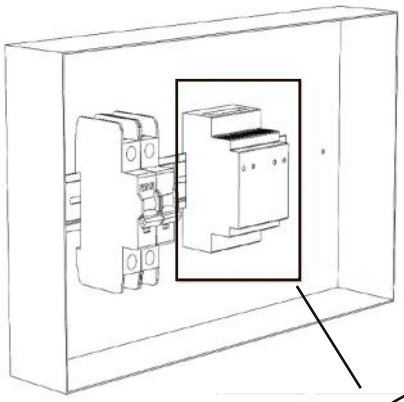
PIR DETECTION

Max mount height:
3.5m, for up to 38m² coverage

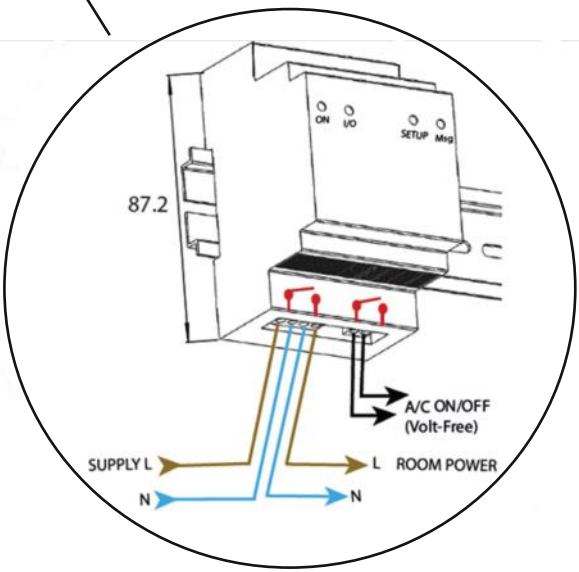


ELECTRICAL WIRING

The controller is DIN mountable. Where space permits it can be installed inside the consumer unit or in a separate DIN enclosure. Note, fully enclosed metal housings will significantly reduce the wireless range, please confirm by testing the range is sufficient for each application. The 'Low Signal' LED will blink if a weak signal is received from any sensor.



Typically, the unit is installed in-line with the lighting circuit. It is powered from the lighting MCB and provides a switched live to the room's lighting. A separate, volt-free interface is available for the AC/HVAC, which is CLOSED when occupied. The Neutral in/out are common and not switched.



NOTE: Use an external contactor for loads >10A e.g. power-sockets

WIRELESS 'PAIRING'

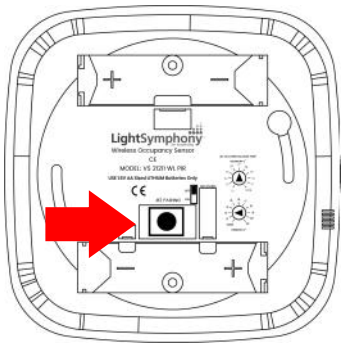
Each wireless sensor must be 'paired' with the controller before it will work. This is a simple 2-step process.

1. Press the SETUP button. The LED indicates the memory is OPEN;

2. Within 30 seconds, press the SETUP button on the sensor
   The controller will 'BEEP' to confirm the sensor is 'paired'.
   Repeat the above process for all sensors.

Door Sensor's 'Pairing' button

Motion sensor's 'pairing' button



ELECTRICAL TESTING

The ALL|OFF can be overridden manually for electrical test purposes. Each press of the ON/OFF button will toggle the room power on/off. The red status LED indicates the room's state. It is safe to toggle the power at any time, the sensors will still operate the controller, as normal.`

SIGNAL STRENGTH

Each time the controller receives a signal from a wireless sensor the 'SETUP' LED will blink, e.g when the door is opened or closed. If the 'low signal' LED blinks too then the signal is too weak and may be unreliable, consider moving the controller's location or adding an external aerial to improve reception.

BATTERY STATUS

If any sensor's battery is failing the 'Low Battery' LED will blink on the controller. To determine which sensor needs a new battery watch the 'low battery' LED while triggering the sensor. Replace batteries with LITHIUM types only for maximum operational life, do NOT use Alkaline or Carbon batteries because they will leak after a few years.

EXIT TIMER

The controller includes an exit-timer which starts whenever a guest leaves the room. The timer is factory set to 6 minutes but can be adjusted from 1 to 30 minutes, as required.

To change the exit-time hold the SETUP button for 3 seconds, until a short double-beep is heard. Next, press the SETUP button to set the time, where each press is 1 minutes. i.e. press 8 times to set 8 minutes. A short Beep will be heard with each press.

After a few seconds the controller will beep the minute-count back, count the beeps to confirm the new setting.

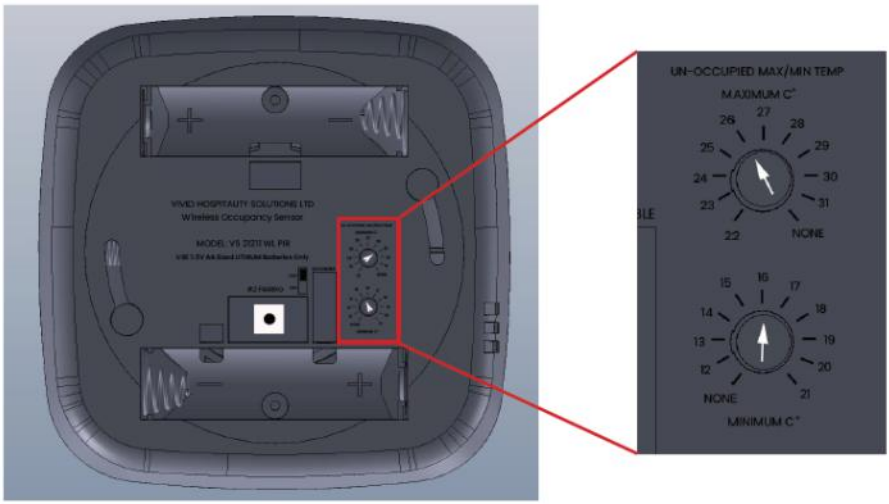
NOTE:
To check the current setting without making any changes, press and hold the SETUP button until a double-beep is heard then release. After a few seconds the controller will beep a number of times to indicate the exit-time E.g. 6 beeps for 6 minutes

UN-OCCUPIED TEMPERATURE CONTROL

ALL|OFF can monitor the room temperature using sensors inside each motion sensor. When the room is occupied the guest has full control of the HVAC and the sensors are not used. However, when the room is un-occupied, ALL|OFF will switch the HVAC to set-back mode or competely off, to save energy.

HVAC systems that include a set-back mode will automatically re-enable if the un-occupied room temperature exceeds an upper or lower limit, to prevent the room becoming uncomfortable.

Where the HVAC system does not have a built in set-back mode ALL|OFF can provide it. On the rear of the motion sensor are two adjustments that allow a maximum and minimum un-occupied temperature to be set. When un-occupied, if the room temperature exceeds these limits the HVAC output will be re-enabled until the temperature returns to within two degrees Celsious of these settings. If the Upper or Lower adjustment is set to 'NONE' the respective set-back mode will be disabled.



FACTORY RESET

To reset the controller completely, press and hold BOTH the ON\OFF and SETUP buttons together for 6 seconds, until a long beep is heard. This procedure will set the Exit-Time to 6 minutes and erase all sensors from the controller's memory, meaning the sensor pairing process must be repeated (see page 7).

QUICK ROOM TEST (Commissioning)

1. Ensure the room is empty of people and the door is closed for at least 30 seconds.
2. Set the room to OFF using the On\Off button on the controller.
3. Open the door slightly, to avoid triggering the motion sensor(s). Check the lights are triggered by the door sensor. This confirms the door sensor is OK.
4. Leave the door open. Switch off the room using the On\Off button again. Enter the room and check the motion sensor triggers the lights.
5. Repeat as required for all sensors.

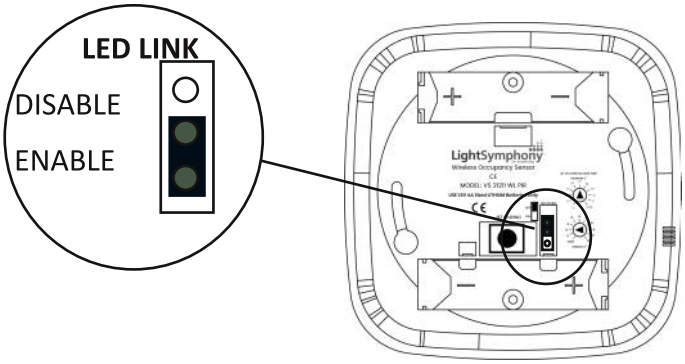
NOTES Where multiple motion sensors are installed, it is usually clearer to test one at a time by removing batteries from all others.

In order to conserve power, motion sensors will sleep for 30 seconds after each trigger. Therefore, when testing, **wait at least 30 seconds between motion tests**.

MOTION SENSOR 'WALK TEST'

To confirm the motion sensor is providing adequate coverage of the room a ‘walk test’ should be performed. This is most easily achieved with two people, where one person manually switches off the lights at the controller, using the ON\OFF button and the second person confirms motion re-triggering them.

NOTE: In order to save power the motion sensor is very slow! It will only send a trigger once each 30 seconds, so allow 30 seconds between walk-tests, remaining very still in-between.
If it is not convenient to test with 2 people the motion sensor’s status LED can be enabled, which blinks very briefly when triggered.
Move the link as shown to ENABLE the LED



When enabled, the motion sensor's LED will blink briefly when triggered. NOTE: Triggers will be at least 30 seconds apart and the blink is very quick (to save power).

IMPORTANT:
Ensure LED is disabled after testing.

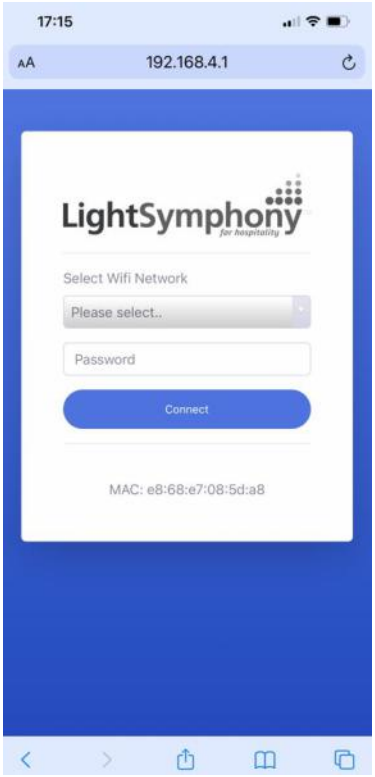
CLOUD / WIFI SETUP

If the controller is connected to the internet it provides a live, web-app overview of all rooms. This requires a WiFi internet connection.

To connect the Wifi double-click the SETUP button, the LED will blink to indicate the WiFi setup page is active.

Go to the WiFi setup page on your phone or laptop and connect to the network "WAO-Gateway' with password "WAOPASSWORD" (upper-case).

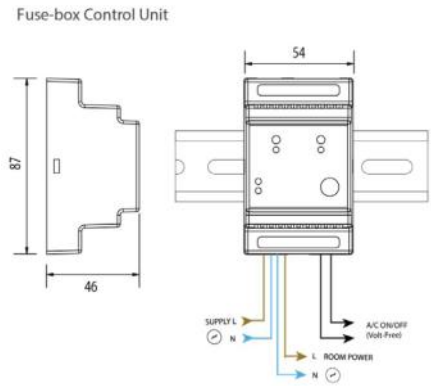
Next, open a browser and enter "192.168.4.1" in the address bar. This config page will be displayed. Select the WiFI network required, enter its password and click 'Connect'.

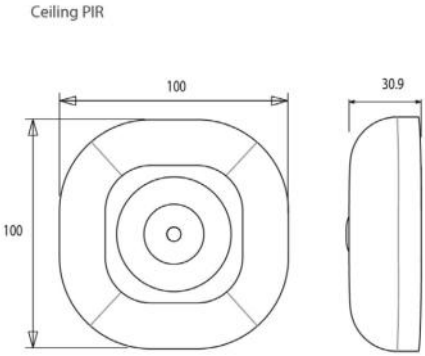


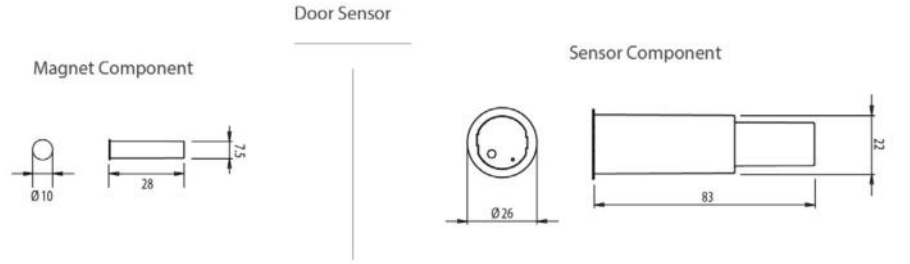
IMPORTANT:
For security, shut-down the WiFi config page as soon as you are finished, by either clicking the SETUP button or hitting the EXIT key in the app. The SETUP LED will stop blinking when its closed.

To avoid confusion, only open the WiFi config on one device at a time.

TECHNICAL SPECIFICATION







SPECIFICATION

Supply:	110 – 230VAC, 1W	Environment:	IP44 0˚ to 40˚C
Output 1:	110-230V output at 10A	Antenna:	Built-in or external (via SMA)
Output 2:	2 Amp volt-free	Electrical:	Double-insulated device
Indicators:	Low Battery and Signal	EMC:	EN50081 – 1 / to EN 50082 -1
Memory:	Up to 10 sensors		EN 300-220
RF:	434MHz, multi-channel	Protocol:	EcoWave (434MHz)
Battery :	10+ yrs, with typical use	WiFi:	802.11 b/n/g (2.4GHz)