Lightwave LP70 Smart Sensor Instructions

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Lightwave LP70 Smart Sensor

Preparation

Installation
If you plan to install this product yourself, please follow the instructions carefully to ensure the product is installed correctly, if in any doubt please consult our technical team.
It is important to install this product in accordance with these instructions. Failure to do so may void your warranty. LightwaveRF Technology Ltd will not be held responsible for any loss or damage resulting from not correctly following the instruction manual.

You will need

- An appropriate place to situate the Sensor
- Suitable screwdrivers
- Your Link Plus and smart phone
- When fixing the magnetic mount to a wall or ceiling, ensure you have the correct drill, drill bit, wall plug and screw.

In the box

- Lightwave Smart Sensor
- Magnetic Mount
- CR2477 Coin Cell

Overview

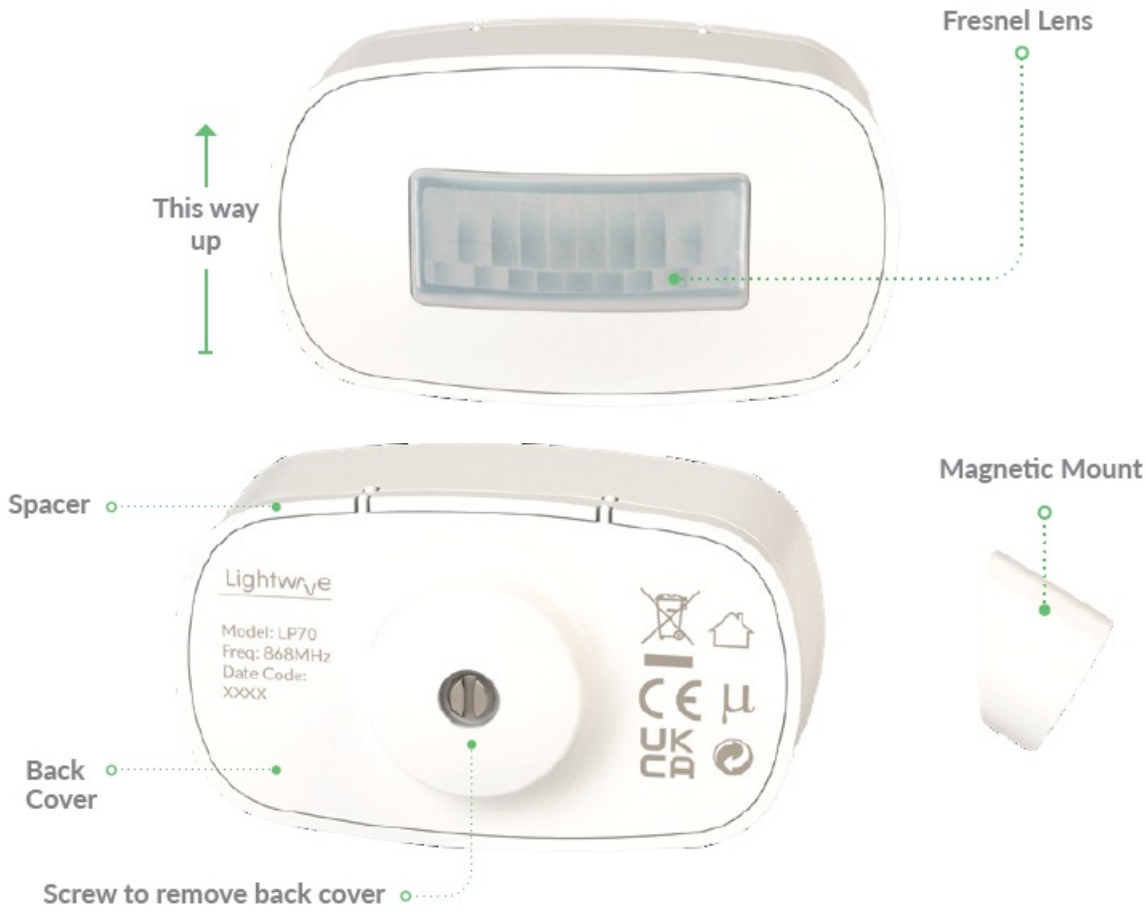
The Smart Sensor can detect movement and trigger your connected Lightwave smart devices via the Link Plus. 3V CR2477 battery operation capable of 1 year life and built in ‘battery low’ indicator.

Applications

The Smart Sensor can be used to trigger connected Lightwave smart devices in the same system. Automations can be set up for the following applications: lighting and heating when entering a room, power outlets on or off when PIR detects movement.

Location
The Smart Sensor can be positioned free-standing on a table or shelf, or affixed using the magnetic mounting base on ceiling or wall. Perfect for high traffic rooms in the house. The Sensor is designed for indoor use only.

Range
Lightwave devices have excellent communication range within a typical home, however, if you encounter any range issues, try to ensure that large metal objects or bodies of water (e.g. radiators) are not positioned in front of the device or in between the device and the Lightwave Link Plus.



Specification

- **RF frequency:** 868 MHz
- **Environment temperature:** 0-40°C
- **Battery required:** CR2477
- **Battery Life:** Approx. 1 year
- **RF Range:** Up to 50m indoors
- **Warranty:** 2 year standard warranty

Installing the Sensor

Carefully follow the instructions in this section in order to install the Sensor. For other advice, please contact our dedicated technical support team at www.lightwaverf. com.
The easiest way to learn how to install the Lightwave Smart Sensor is to watch our short installation video which is accessible at
www.lightwaverf.com/product-manuals

Creating Automations
This PIR can be added to the Link Plus app as a Smart Device. Once added you can then create an IF – DO or a motion automation to define which devices within your Lightwave system you want to trigger. Within this automation you can adjust the LUX (light) level and also set a delay between your actions. (Please refer to the app guide under Help & Support on the website for further information: **www.lightwaverf.com**)

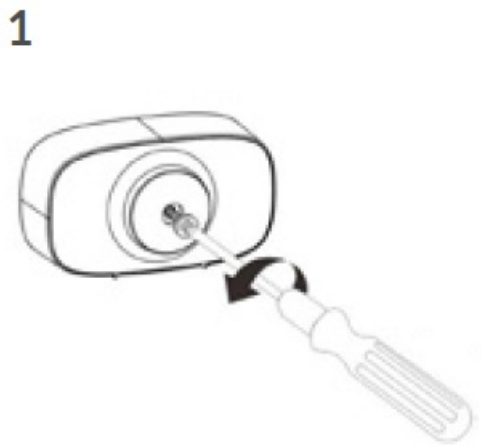
LITHIUM BATTERY CAUTION
Lithium ion batteries may explode or burn due to improper use. Using these batteries for purposes not intended by the manufacturer, may cause severe injury and damage. Keep away from Children and animals. Lightwave are not responsible for any damage or injuries caused by batteries – use at your own risk. Please check with your local authority on how to recycle batteries responsibly.

Inserting the battery and mounting

Follow the instructions below to insert the CR2477 coin cell into the device. Then follow the linking instructions to pair your device to your Link Plus. Ensure you mount the Sensor following the guidelines for optimum performance.

Inserting the battery

- To insert the CR2477 coin cell into your device, first undo the screw by turning counter clockwise to remove the back cover using a flat head screwdriver **(1)**.



- Then remove the rear plastic and the spacer to reveal the battery compartment. If replacing a battery **(2&3).**

- First remove the existing battery before inserting the new one, use a screw driver to lift the old battery out if necessary **(4)**.

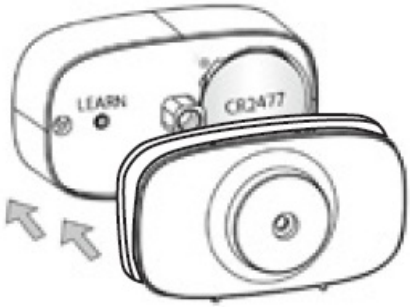
4

- To insert the battery, gently tilt at an angle towards the metal contact at the edge of the battery slot. Ensuring the positive symbol (+) is facing upwards, with very light pressure, push the battery down **(5)**.

5

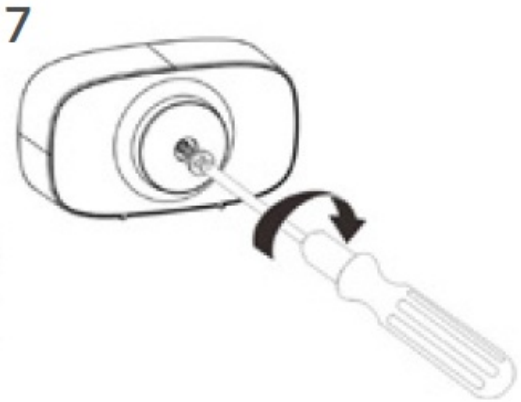
- Once the battery is inserted correctly, the LED will flash green. If installing this device for the first time, complete linking the Sensor now. Then, replace the spacer, followed by the rear plastic **(6).**

6



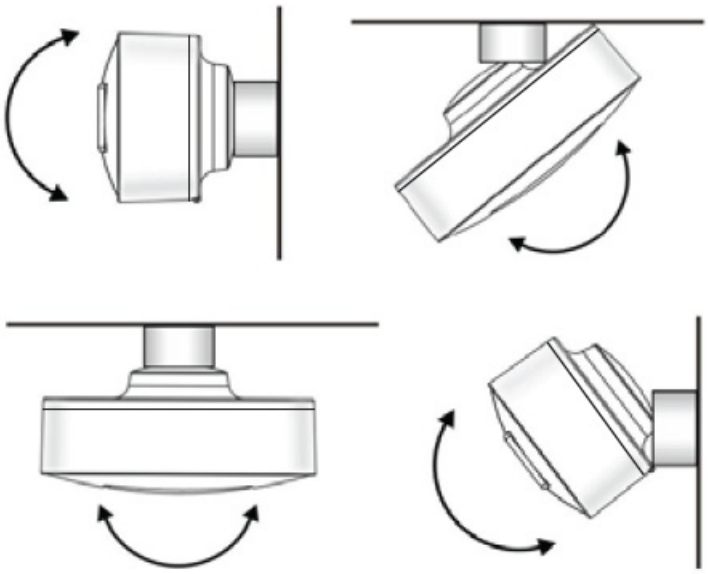
- And affix by turning the screw clockwise using a flat head screwdriver **(7)**.When the Smart Sensor starts for the first time, please allow at least 15 seconds to allow the Sensor run it's initial set up to allow for motion detection.

7



Mounting on a vertical surface
Using a cross head screw driver, mount the magnetic base on a flat surface. Gently attach the Sensor to the

magnetic mount ensuring the Fresnel lens is not upside down. (Looking closely at the Fresnel lens, the larger rectangular boxes are at the top, orientation indicated on previous image). Adjust the viewing angle to suit the environment you wish to detect movement within.

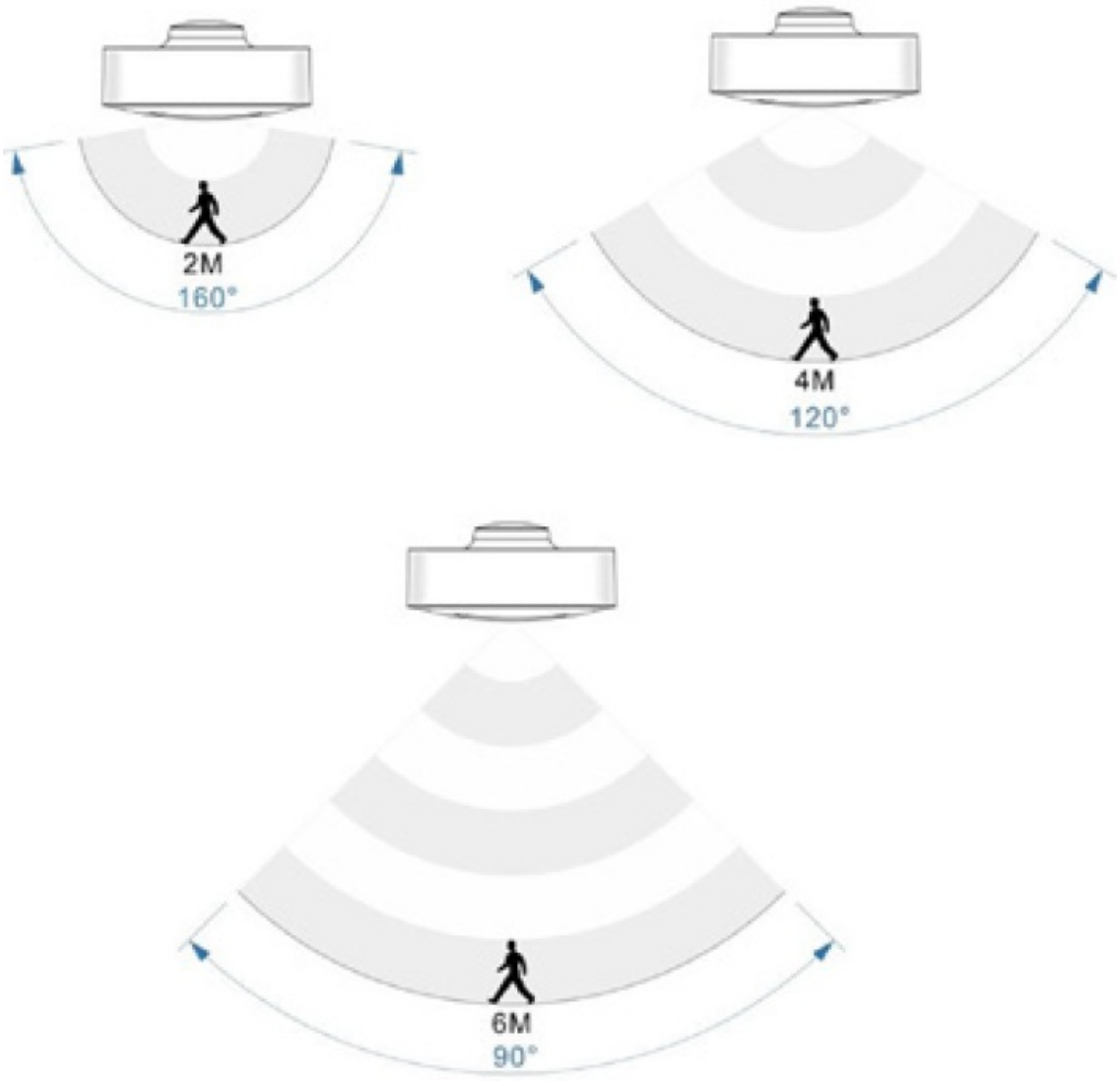


Detecting Range and Viewing Angle

Recommendation for optimum performance at 6 meters with a 90 degree viewing angle is for the Sensor to be mounted at 1.5 meter height.

The sensitivity of the Sensor can be adjusted in the Lightwave app. Please be aware that when you ‘save’ your settings, the device will then be updated with the new sensitivity setting when next triggered.

The Lightwave app now has a motion automation to allow for easier set-up. The ‘IF – DO’ automation can also still be used.



Linking the Sensor & other functions

Linking
To be able to command the Sensor, you will need to link it to the Link Plus.

1. Follow the in-app instructions which will explain how to link devices.
2. Remove the back cover of the Smart Sensor using a screwdriver. Open the Lightwave app on your smart device and select '+' to add a new device and follow the instructions.
3. Press the 'Learn' button on the Smart Sensor until the LED flashes blue then red on the front of the product. Then press the green 'Link' button on the app screen. The LED will then rapidly flash blue to indicate successful linking.

Unlinking the Sensor (clear memory)
To unlink the Smart Sensor, delete any automations you have set-up and delete the device from the app under the device settings in the Lightwave app. Remove the back cover of the device, press the 'Learn' button once and let go, then press and hold the 'Learn' button again until the LED on the front of the device flashes red rapidly. The memory of the device is cleared.

Firmware updates
Firmware updates are over-the-air software improvements that keep your device up to date as well as providing new features. Updates can be approved from the App before being implemented, and generally take 2-5 minutes. The LED will flash cyan in color to indicate the update has been initiated but will remain off for the remainder of the

process. Please do not interrupt the process during this time, it can take up to an hour.

Support

If any issues are encountered once set-up and installation is completed, please contact Lightwave support via **www.lightwaverf.com/support**.

Help video & further guidance
For additional guidance, and to watch a video that will help guide you through the installation process, please visit the support section on **www.lightwaverf.com**.

Environmentally friendly disposal

Old electrical appliances must not be disposed of together with residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.

EU Declaration of Conformity

- **Product:** Smart Sensor
- **Model/Type:** LP70
- **Manufacturer:** LightwaveRF
- **Address:** The Assay Office, 1 Moreton Street, Birmingham, B1 3AX

This declaration is issued under the sole responsibility of the LightwaveRF. The object of the declaration described above is in conformity with the relevant union harmonization legislation.
Directive 2011/65/EU ROHS,
Directive 2014/53/EU: (The Radio Equipment Directive)
Conformity is shown by compliance with the applicable requirements of the following documents:
Reference and date:
IEC 62368-1:2018, EN 50663:2017,
EN 62479:2010, ETSI EN 301 489-1 V2.2.3 (2019-11), ETSI EN 301 489-3 V2.1.1 (2019-03), ETSI EN 300 220-1 V3.1.1 (2017-02), ETSI EN 300 220-2 V3.2.1
(2018-06)
Signed for and on behalf of:

- Place of Issue: Birmingham
- Date of Issue: August 2022
- Name: John Shermer
- Position: CTO

Documents / Resources

	Lightwave LP70 Smart Sensor [pdf] Instructions LP70 Smart Sensor, LP70, LP70 Sensor, Smart Sensor, Sensor

References

- Lightwave – Smart Home & Home Automation with Lightwave