# Lightwrve RF Electric

# Basic Plug-in Socket Kit Model No. LW381

## Instruction Manual



## **Connect Series**

## www.lightwaverf.house

#### EC DECLARATION OF CONFORMITY

#### Responsible Authority:

LightwaveRF PLC, Innovation Campus Birmingham Faraday Wharf Holt Street Birmingham B7 4BB

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Model Number(s): Description: Directives this equipment Complies with: JSJSLW381 Basic Plug-in Socket Kit

2006/95/EC The Low Voltage Directive N/A 2004/108/EEC The Electromagnetic Compatibility Directive 1999/5/EC R&ITE Directive 93/68/EEC CE Marking Directive

Standards Applied in order to verify compliance

Safety: BS EN 60730-1: 2011

#### Health:

R&TTE: EN 301 489-1 V1.9.2: (2011-09), EN 301 489-3 V1.4.1: (2002-08) EN 300 220-1 V2.1.1: 2006, EN 300 220-2 V2.1.2: 2007 EMC: EN 301 489-1 V1.9.2: (2011-09), EN 301 489-3 V1.4.1: (2002-08), EN 55022: 2010, EN 61000-3-2: 2006 +A1: 2009 +A2: 2009 Class A, EN 61000-3-3: 2008, EN 61000-4-2: 2009, EN 61000-4-3: 2006 +A1: 2008 +A2: 2010, EN 61000-4-4: 2012, EN 61000-4-5: 2006, EN 61000-4-6: 2009, EN 61000-4-1: 2004

For and on behalf of LightwaveRF PLC

Name J Shermer Position Managing Director

#### Get Started

#### How do I get started?

Refer to the setup guide on the following pages to get going. No specialist knowledge or tools are required as these sockets are 'plug and play'. However, always remember to take care when dealing with mains electricity.

#### How does it work?

The Plug-in On/Off Socket is designed to plug into any standard 13A socket. It allows any connected lamp (up to 3000W) to be turned on and off and dimmed using the remote control included in this pack, or by using a smartphone / tablet (requires the Lightwave Link).

#### 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** 







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**IMPORTANT:** Please retain these instructions for guidance on how to link Remote Handsets and other LightwaveRF Controllers. For additional guidance please visit the support section on **www.lightwaverf.com** 

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#### Linking the Plug-in to LightwaveRF controllers

LightwaveRF Basic Plug-ins each have **3 unique memory slots** which means they can link with up to 3 LightwaveRF controllers in total.

**NOTE:** If you are using a smartphone/tablet/PC to control the Plug-in via the Lightwave Link, this will always count as **ONE** controller and take up one memory slot even if you are using multiple smartphones/tablets.

**1.** Insert the Basic Plug-in into a standard 13A socket and turn the 13A socket on. The Plug-in should now enter **linking mode** illustrated by a flashing red LED.

**2.** On the controller press the button that you intend to link. If using the Smartphone or Web App, press the 'connect' button (the App instructions will guide you through this). The LED will stop flashing and a double click should be heard to confirm that the remote is now linked.





**NOTE:** Linking mode lasts for 8 seconds; if no signal is received from a controller during this time then the Plug-in will automatically exit linking mode without linking the device.

If the Plug-in fails to link to the intended controller, it is possible that the memory has used up its 3 allocations and is full. In this instance, the memory slots need to be cleared in order to create space to link the new device.

# Unlinking remotes and clearing the Plug-in memory

Removing a single device:

**1.** Insert the Basic Plug-in into a standard 13A socket and turn the 13A socket on. The Plug-in should now enter **linking mode** illustrated by a flashing red LED.

2. Press the button on the controller or App intended to be unlinked; the LED will stop flashing and a double click should be heard to confirm that the remote is now unlinked.



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Clearing the memory (will remove all linked remotes):

• If you are using the Basic Plug-ins via the LightwaveRF Smartphone App and Lightwave Link, or are in possession of a LightwaveRF controller with an 'all off' command (e.g. Remote Handset / Mood Remote), it is possible to clear the memory with one button press.

• Whilst the Plug-in is in linking mode, send an 'all off' command from the App or suitable LightwaveRF controller. This should totally clear the memory.

**NOTE:** Reliable range of operation is around 15 metres indoors and up to 100m outdoors using the Lightwave Link. This figure may vary depending upon the environment; very thick walls, bodies of water or large metal objects may interfere with radio range.

If the distance between the transmitter and receiver is too great to achieve reliable operation, the LightwaveRF **Signal Booster** may be used in conjunction with this product to increase the range.

#### Remote operation

# Control with a LightwaveRF controller or smartphone

• Press the 'on' button on the controller, Smartphone or Web App once to switch the Plug-in Socket on (a 'click' sound will be heard).

• Press the 'off' button on the Controller, Smartphone or Web App to switch the Plug-in Socket off (a 'click' sound will be heard).

#### **Using the Basic Remote**

This kit comes with a Basic Remote Control. The remote can be linked to one or more Plug-in Sockets using the method previously described. The Handheld remote has 3 independent channels. Any number of Plug-ins can be linked to a single channel on the Remote.









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### 1. (Easy): Family Safety

#### Products Required: Plug-in Socket, PIR Motion Sensor

Here we have a LightwaveRF Plug-in Socket linked to a PIR Motion Sensor. When somebody is detected by the sensor, it triggers the Plug-in automatically and turns a lamp on. So, when one of the kids needs to use the bathroom in the middle of the night, the path is safely lit for them. The light is then set to turn off once no movement has been detected for a period of time. So, when the little one is safely back in bed, the sensor will turn off that light that is always normally left on!

#### Creative ideas









### 2. (Advanced): Simulated Occupancy

#### Required: Plug-in Sockets(s), Power Sockets or Plug-ins, Link

This setup gives you control over your devices from anywhere in the world. Here we have ceiling lights controlled by dimmers and lamps plugged into Lightwave sockets or Plug-in Sockets. Via the Lightwave Link, every light can be controlled using a smartphone wherever you are. So, when you're away on holiday, you can turn on lights to make it look like someone's home. You can even set them to come on automatically at different times each evening enough to fool even the most watchful of intruders!

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#### Problem: The Plug-in will not consistently operate remotely.

**Solution:** The controller/Lightwave Link may be encountering interference or may be at the edge of its reliable range of operation. First, ensure that there are no large pieces of metal or bodies of water in the path of the transmission. If the problem persists, try moving the controller/Link closer to the Plug-in, or consider using a LightwaveRF Signal Booster to extend the range by relaying the signal between controller and Plug-in.

Positioning 2 or more Plug-ins directly next to each other (e.g. in a multiblock) may also cause some radio conflict between the units. Try to place the units 30cm or more apart if possible.

#### Problem: The Plug-in will not respond to mood commands.

**Solution:** The Basic Plug-in is not capable of responding to LightwaveRF mood commands. For this feature, Plug-in On/Off Sockets or Plug-in Dimmers are required.

#### Problem: The Plug-in will not link to a controller.

**Solution:** The memory may be full. Refer to the previous instructions to learn how to unlink existing controllers.

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# **Problem:** The Plug-in is powered (LED is on), but it will not link to a LightwaveRF handset or controller.

**Solution:** Check the controller battery strength: if the battery strength is low, it will not produce enough power to drive the RF radio signal. Tap any 'on' button on the controller to transmit a signal. A strong battery signal is indicated by the LED light on the controller remaining lit for 1-2 seconds after releasing the button. A low battery is indicated if the LED light turns off immediately. If this happens, please replace the battery.

#### Problem: The Plug-in is stuck on/off and will not operate manually.

**Solution:** It is possible for the Plug-in to be overloaded if the maximum rating of 3000W is exceeded. This can cause the unit to fail or the software to behave erratically. If this happens please contact technical support via www.lightwaverf.com.



#### Q. Does the Plug-in work manually as a standalone unit?

**A.** No, a LightwaveRF Controller is required in order to operate the Plug-in.

#### Q. Does the Plug-in have a 'standby' power consumption

**A.** The Plug-in has a standby power consumption of approx. 0.5W. This is because the in-built radio receiver requires power in order to receive commands. This rate is low & well within government energy guidelines.

#### **Q.** Can I use the Plug-in in a multiblock?

**A.** Yes. However, make sure that Plug-ins are not positioned directly next to each other as this could cause radio conflict. Try to ensure that the Plug-ins are positioned 30cm apart for optimum performance.

#### **Q.** Is it possible to overload the Plug-in?

**A.** Yes. There is a limit of 3000W; exceeding this could damage the unit.

#### Q. How many devices can I have on the Lightwave system?

**A.** Each device has 6 memory slots for up 6 controllers. Note: The Lightwave Link allows a number of different smartphones to control the Plug-in independently, however it only uses one memory slot.



#### Q. Can I incorporate a Plug-in into a mood?

A. No. Basic Plug-ins cannot be incorporated into a mood.

#### **Q.** Can I turn off the LED indicator light?

**A.** No it is not possible to turn off the LED as it is necessary to signify the Plug-in's status.

#### Q. Can I lock the Plug-in?

A. No. The Basic Plug-ins cannot be locked on or off.

#### **Q.** Can I use the Plug-in with lamps?

**A.** Yes. You can also use a LightwaveRF Plug-in Dimmer if you wish to dim your lamps.



## Specification

RF frequency: 433.92 MHz Output rating: 3000W Max. Standby Energy Use: Less than 1W Warranty: 2 year standard warranty BS 1363 Certified



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