# ESR-1v2 Easyswitch MAINS ON/OFF RECEIVER

Installation and operating instructions

# FORWARD

Please read and understand the information in this manual.

If you do not understand or are unsure how to install this product, please consult a qualified electrician.



Please note: Where the equilateral triangle is present, observe and understand the information before proceeding.

Thank you for purchasing from the Luminite Easyswitch range. Please follow theinstructions closely.

The ESR-1 wireless receiver is a Mains Voltage ON/OFF switch housed in a weatherproof enclosure.

The high switch capacity means you can operate a variety of loads such as pumps, motors, lighting and much more.

Each wall switch (EST-1) and key fob (ESF-1/4) has a unique code which may be learnt by the receiver.

## Fixing and wiring

All wiring must be in compliance with IEE regulations. If in doubt you should consult a qualified electrician. Fix the receiver to the wall by inserting two no8 3/4" screws into the fixing holes, above left and bellow right. The receiver must be fitted vertically with the aerial at the top and the cable glands at the bottom.

#### This product is Class 2 and does not require an earth.

It is the installers responsibility to ensure that any other appliance connected to this receiver is earthed correctly.

- 1. Pass the mains supply two core cable through right hand gland and tighten to provide anchorage and weather resistance.
- 2. Connect the Brown wire to the vacant LINE terminal and the blue wire to one of the NEUTRAL terminals.
- 3. Pass the lamp load two core cable through the left-hand gland and connect the Brown wire to terminal NO.
- 4. Connect the Blue wire into the remaining NEUTRAL terminal.

#### NB: This product is supplied with a jumper wire fitted between LINE and COMMON

If the relay contacts are to be used as volt free, the white jumper wire must be removed.

The product must be supplied via a 6 Amp breaker or fuse.

This receiver is intended to operate lighting up to 1000 watts of resistive and small load electrical appliances such as pond pumps, electric gates and doors etc.

## Learning the transmitter code

STEP 1	Screw the aerial provided to the screw fitting at the top of the receiver enclosure
STEP 2	Connect and apply mains power. The two indicator LED's will flash momentarily
STEP 3	Press the LEARN button. The learn LED will flash quickly whilst in learn mode. If a valid transmission is not received withing twenty seconds the learn mode will cancel
STEP 4	Operate the wall switch, key fob button or active a PIR detector which is to work with this receiver. LED1 swill flash 5 times indicating that the code has been learnt. LED2 will also light during the transmission period indicating a valid signal being received
STEP 5	Operate the switch again and observe the ON/OFF LED.

This receiver can learn up to 16 different devices. Learned devices will be retained even if the power is switched off NB: If working with a PIR detector, the ON Time and Day/Night settings are mad in the PIR detector. The ESR1 will still learn a PIR detector transmission even in day light hours however the relay will not operate

## **Clearing the memory**

Press and hold the LEARN/CLEAR button. LED1 will flash for about ten seconds and then stop. You can then release the button. All learned devices will now have been cleared

### **Mode selection**

The receiver has three modes to choose from and these are selected using the MODE button

**NB:** Wall switches transmit ON and OFF signals when the switch is operated. Switch ON, transmit ON. Switch OFF, transmit OFF. Key fobs send ON and OFF codes sequentially when a button is pressed. Each press toggles between ON and OFF

Single Mode is for single switch operation. In this mode with the switch ON the light load will also be ON.

2-Way Mode is for two way switching. In this mode it does not matter which position the switch is in. Any switch which is operated will reverse the action of the previous switch.

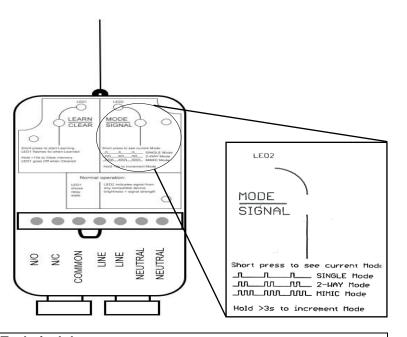
**Mimic Mode** is used for momentary contact closure as required for operating garage doors, electric blinds etc. When the button on the key fob is pressed, the relay contacts will close and when the button is released the contacts will open.

To check mode, momentarily press the MODE/SIGNAL button to see the current setting

To change the mode, press and hold the MODE /SIGNAL button for three seconds to advance to the next mode

#### Signal strength

LED2 lights each time a signal is received and will be brighter with a stronger signal



Technical da	ta:
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Operating voltage 220-240V @ 50Hz

Max lamp load 1000 watts resistive. 200 watts inductive and LED

Max switch current 10 amps @ 240 volts

- Temperature range -10 to +40C
- Enclosure IP66 Polycarbonate
- L 114 x W 65 x D 40mm
- Standards BS EN 60669

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#### Aerial

To achieve the best transmission range, you will need to fit the receiver where it has the least number of obstacles between it and the transmitter. The aerial must be vertical and the higher the receiver is placed above ground level the greater the range will be within reason. The same applies to the transmitter. Do not fit the receiver on or in metal objects as this will seriously affect range. Keep cables away from the aerial. With a clear line of site and with both the transmitter and receiver at 2 meters high transmission ranges of up to 200 meters are possible.

#### **Electromagnetic Compatibility (EMC)**

This equipment generates radiated radio frequency energy, if not installed and used in accordance with the instructions, it maycause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user should take the following measures: Re-orient or **relocate the receiving antenna. Increase the separation between the equipment and receiver.** 

#### **WEEE Directive**

The European Union has enacted a Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE Directive). This directive is applicable in the European Union member states. The WEEE marking on this product (see above) or its documentation indicates that the product must not be disposed of together with household waste. To prevent possible harm to human health and/or the environment, the product must be disposed of in an approved and environmentally safe recycling process. For further information on how to dispose of this product correctly, contact the product supplier, or the local authority responsible for waste disposal in your area. Business users should contact the product supplier for information on how to dispose of this product correctly. This product should not be mixed with other commercial waste.