

# ESR-1

## Easyswitch MAINS ON/OFF RECEIVER

Installation and operating instructions

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### FORWARD

The ESR-1 wireless receiver is a Mains Voltage ON/OFF switch housed in a weather proof enclosure. The 1000 watt switch capacity means you can operate a variety of loads such as pumps, motors, lighting and much more. Range testing and code learning is all done using a temporary battery and there is no need to connect to the mains at this stage. Each wall switch (EST-1) and key fob (ESF-1) has a unique code which may be learnt by the receiver.

### Learning the switch code.

**Do this before connecting the mains power for safety. You will need a PP3 9 volt battery.**

- STEP1. Screw the aerial provided to the screw fitting at the top of the receiver enclosure.
- STEP2. Connect a standard PP3 9 volt battery (not supplied) to the clip provided. The LEARN led will flash three times indicating correct operation.
- STEP3. Press the LEARN button. The learn LED will light.
- STEP4. Operate the wall switch or key fob button which is to work with this receiver. The learn LED will flash and go out indicating that the code has been learnt. Operate the switch again and observe the ON/OFF LED.
- STEP5. Carry out range testing.
- STEP6. Remove battery and lead from screw terminals and fix the receiver permanently in position.
- STEP7. Connect to the mains and replace cover.

### Range testing.

Do not fit the wall switch or receiver permanently in position until a range test has been successfully completed. With the temporary battery still connected place the receiver in the position where you want it to be. Now take the wall transmitter or key fob to the place where it is to be used. With a wall switch, hold it against the wall and operate the switch. Now go to the receiver and check that the ON/OFF LED has changed state. It is easier if you have help during this procedure. Repeat this test until you are satisfied that the system works 100% and then fit the units permanently as follows.

### Fixing and wiring.

**All wiring must be in compliance with IEE regulations. If in doubt you should consult a qualified electrician.**

Remove the temporary battery and screw the receiver to the wall by inserting two no8 3/4" screws into the fixing holes. The receiver must be fitted vertically with the aerial at the top and the cable glands at the bottom.

Pass a mains supply three core cable through one gland and tighten to provide anchorage and weather resistance.

1. Connect the red cable to terminal LINE IN and the black to terminal NEUTRAL.
2. Pass the lamp load three core cable through the left hand gland and connect the red wire to terminal NO.
3. Connect the black wire together with the first black wire to terminal NEUTRAL.
4. Connect a loop or red wire to the LINE IN terminal and C terminal.
5. Both earth wires must be joined together and insulated. The Earth wires DO NOT connect in the receiver but simply loop through. See Fig 1.

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

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

**WARNING:** The components in this product are LIVE. Replace the cover before applying mains power.

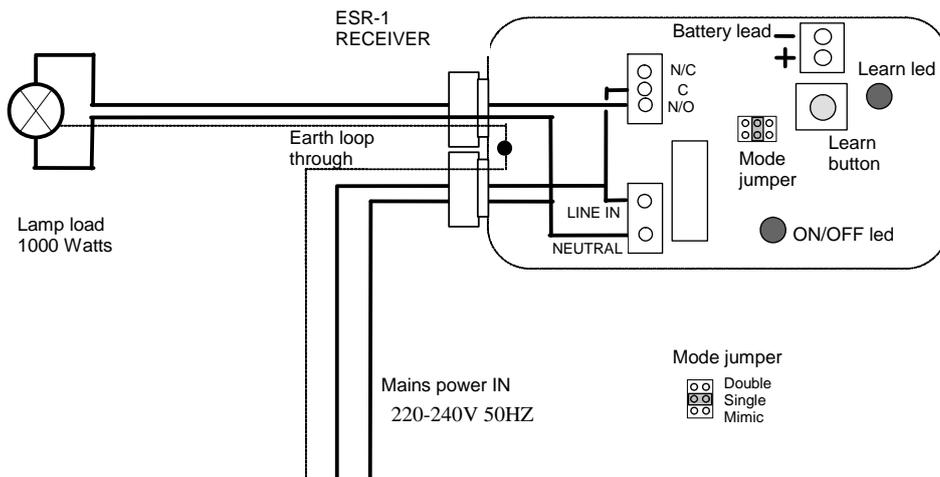
### Mode selection.

The receiver has three modes to choose from and these are selected by inserting or removing a link as shown on the diagram.

**Double Mode** is for multi switch operation or 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.

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

**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.



**Aerial.**

To achieve the best range results you will need to fit the receiver where it has the least amount of obstacles between it and the transmitter. The aerial must be vertical as shown and the higher the receiver is placed above ground level the greater the range will be. 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 metres high transmission ranges of 250 metres and beyond are possible. For greater ranges it is necessary to use special aerials on the transmitter and receiver. See the web site or contact us directly for further details.

**Set-up notes.**

1. The battery is not required after range testing has been completed. The battery lead **MUST** be unscrewed from the terminals and removed.
2. The receiver can learn up to 16 switches and/or key fobs
3. The receiver will retain the learned codes even if the power is removed
4. To flush the memory, simply press and hold the learn button until the led goes off. This takes about 5 seconds.
5. The ON/OFF led mimics the switch action. This is especially useful when range testing with a battery.

<b>Technical data:</b>
Operating voltage 220-240V @ 50Hz
Max lamp load 1000 watts resistive. 500 watts inductive
Switch current 5 amps @ 240 volts
Temperature range -10 to +40C
Enclosure IP66 Polycarbonate
Standards BS EN 60669

**TECHNICAL HELPLINE**

**020 8361 5255**

**Luminite Electronics Ltd**

2a Bellevue Road, Friern Barnet, London N11 3ER.

Phone: +44 (0)20 8361 5255

Fax: +44 (0)20 8368 3952

Email: [info@luminite.co.uk](mailto:info@luminite.co.uk)

Web: [www.luminite.co.uk](http://www.luminite.co.uk)