

EST4HVAC Specification.

RF output	433.92Mhz 10m/w
Antenna connection	Screw terminal
Antenna	433Mhz 1/4 wave (included)
RF range	100—200m line of sight
Operating voltage	220-240 volts 50Hz
Number of inputs	4 Mains voltage
Input voltage	220-240 volts 50Hz per input
Power consumption	0.67m/a all open and 0.9 m/a all closed
Enclosure	ABS L140 W65 H35mm (Includes glands)
IP rating	65
Operating temperature	-20 deg C to +70 deg C
Complies with	EN300 220-3 Harmonised radio standard EMC standard 301 489-3 CE R&TTE directive

Luminite *Easyswitch wireless* product range

PIR detectors Wide angle	ESD.1
PIR detectors Long range	ESD.2
PIR detectors Pet ally	ESD.3
Single zone ON/OFF receiver.	ESR.1
Four zone ON/OFF receiver.	ESR.4
ESR.4 & ESF.4 Kit.	ESR4X4
Plug adaptor.	ESA.1
Plug in bleeper.	ESB.1
Wall switch transmitter.	EST.1
Key fob 1 button	ESF.1
Key fob 2 button	ESF.2
Key fob 4 button	ESF.4

Technical help: Tel: 0208 368 7887
www.luminite.co.uk

EasySwitch

EST4HVAC

4 channel

Transmitter

Installation

Handbook

Type: **EST4HVAC**

Issue 2.

PRE-INSTALLATION NOTES

Unpacking.

On receipt, inspect the package and contents for signs of damage. If damage has occurred, advise the carrier and/or suppliers immediately. Inspect the contents to confirm that all items are present and undamaged. If any items are missing or damaged, contact the supplier immediately. It is advisable that the original carton is retained as this forms the safest transport container in the event that a unit has to be returned for any reason.

Servicing.

This unit should not require general servicing. Any repair work should only be undertaken by Luminite Electronics Ltd.

Moisture.

Do not expose the internal electronics of this unit to moisture i.e. take care during installation not to allow rain or damp into the product. When the product is sealed it is water resistant to IP66.

Box Contents.

EST4HVAC

- 1 x Easyswitch EST4HVAC Transmitter
- 1 x Flexible wire aerial
- 1 x Operating instructions

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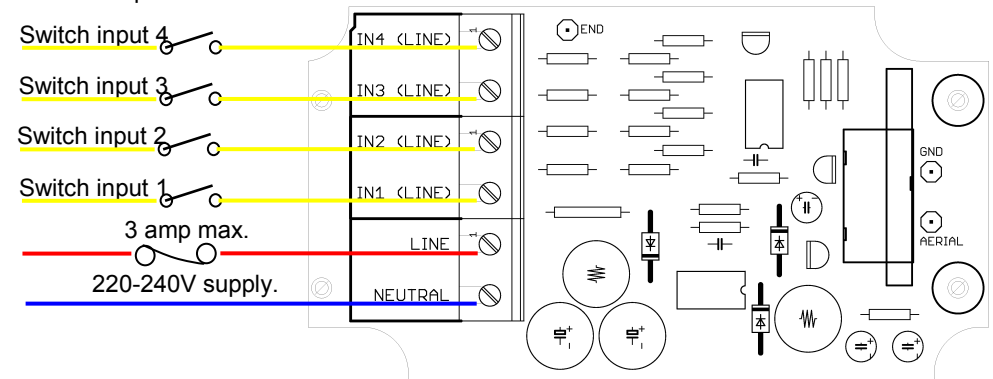
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COMMISSIONING AND CODING WITH THE RECEIVER. (Four circuit)

The EST4HVAC transmitter has four (4) inputs which may be used however it is not necessary to use them all if they are not needed. The ESR4 four circuit receiver may be employed to make use of the full functionality. The learning process for up to four circuits is as follows.

1. Install the ESR4 easyswitch receiver as per the installation instructions provided with it. Set jumpers to SINGLE mode. Switch on the power and press learn button 1 on the receiver.
2. Switch on the power to the EST4HVAC and wait for at least five seconds for the power to stabilise.
3. Now operate the switch input to IN1 which will cause a transmission.
4. The receiver Learn LED will flash three times to indicate that it has learnt the transmitter.
5. Turn OFF the power to the transmitter and press learn button 2 on the receiver.
6. Switch on the power to the EST4HVAC and wait for at least five seconds for the power to stabilise.
7. Now operate the switch input to IN2 which will cause a transmission.
8. The receiver Learn LED will flash three times to indicate that it has learnt the transmitter.
9. Repeat this process for circuits 3 and 4 if required using learn buttons 3 & 4 and inputs IN3 & IN4.



Principal of operation.

When power is first applied to the EST4HVAC it does not make a transmission for the first 80 seconds. After this period it transmits Input 1 status and then waits a further 80 seconds before transmitting Input 2 status. This process repeats through inputs 3 and 4 and round again for the life of the product. This ensures that if the command messages is missed by the receiver it will be sent again after every 320 seconds.

Any input change is immediately transmitted and does not affect the continual loop message process.

Learning the inputs should be done one at a time and the transmitter powered up on each occasion to make use of the initial 80 second transmission free period.

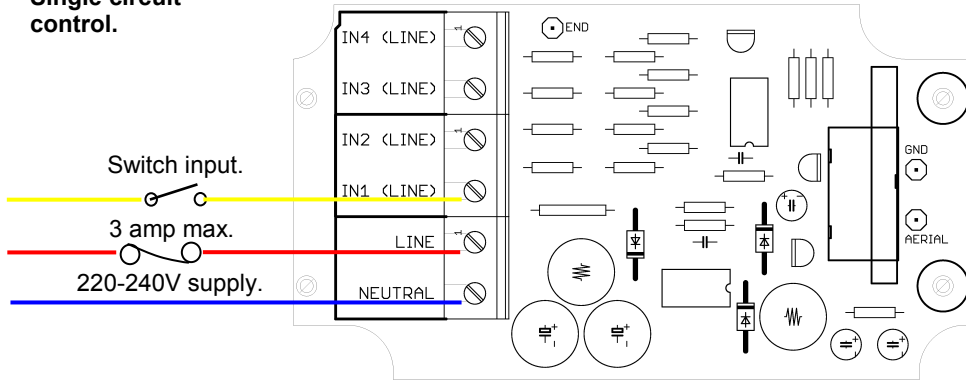
POSITIONING & WIRING.

IMPORTANT: All wiring must be carried out by a qualified electrician in accordance with IEE and part P regulations.

This product is IP65 rated and may be fitted outdoors if necessary but may also be used internally. Choose a suitable position for easy wiring but make sure that the aerial is not close to Pipes, electrical cables or metal objects.

When used outdoors the cable glands must face down and the aerial skywards. When used indoors the aerial should still be positioned to point skywards for best transmission.

Single circuit control.



From a fuse spur, use 1.5mm mains cable and connect a permanent 220-240V 50Hz supply to the Line and Neutral terminals as shown. This supply should be fused with a 3 amp fuse (max). Now connect the mains voltage control switch wire to IN1 as shown. Fit the cover before applying mains power.

COMMISSIONING AND CODING WITH THE RECEIVER. (Single circuit)

1. Install the ESR1 easyswitch receiver as per the installation instructions provided with it. Set jumper to SINGLE mode. Switch on the power and put it into Learn Mode.
2. Switch on the power to the EST4HVAC and wait for at least five seconds for the power to stabilise.
3. Now operate the switch input to IN1 which will cause a transmission.
4. The receiver Learn LED will flash three times to indicate that it has learnt the transmitter.

NB: If IN1 is connected to a motorised vale, increase the thermostat setting to cause the valve to open and provide the switch command to IN1. Alternatively you may connect a temporary switch to the input to facilitate the learning process.

If IN1 is connected to a time clock, operate the manual override on the clock to cause the EST4HVAC to transmit.

INDEX

	page
Introduction.	2
Examples.	3
Positioning and wiring.	4
Commissioning and coding the receiver. Single Circuit.	4
Principal of operation.	5

Introduction

The EST4HVAC transmitter works in conjunction with other products in the easyswitch range, in particular the ESR1 single circuit and ESR4 four circuit receivers. The purpose of this product is to facilitate mains control switching where power cables cannot be run.

This product is Mains Powered and uses the latest Power Saving Circuitry so that it does not waste energy during its lifetime. The control inputs are also Mains Voltage so that this product can be connected to other mains voltage products such as time clocks, motorized valves etc.

Typical examples:



A boiler pump switch output is required to operate a pump but the pump is in another part of the building. Cables cannot be easily run and so a wireless solution is required. The EST4HVAC transmitter mains voltage inputs and will transmit radio signals through the house or across open ground to a receiver placed next to the pump.

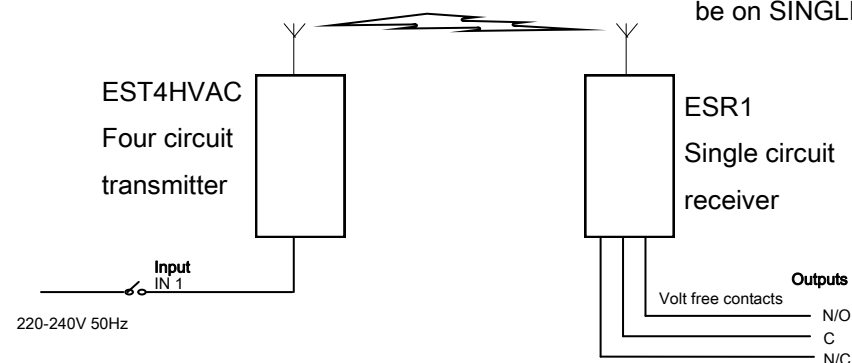
The transmitter sends the command messages periodically to overcome the possibility of missed or poor communication.

Because the transmitter has four inputs it can be used on more comprehensive systems that have more switching functions to be transmitted. See examples on page 3.

Another popular use for this product is to connect mains time clocks to its inputs to wirelessly control garden lighting and other features.

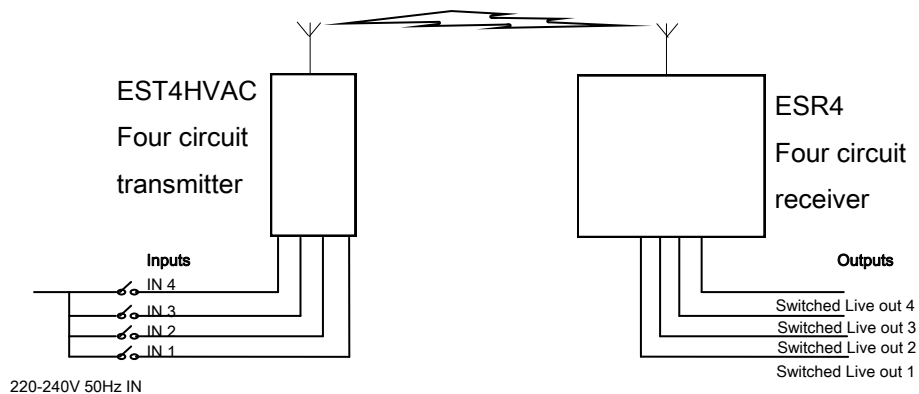
EXAMPLES:

Single circuit control



IMPORTANT:
Receiver jumpers **MUST**
be on SINGLE mode.

Four circuit control



IMPORTANT:
Receiver jumpers **MUST**
be on SINGLE mode.