5 Installation Of Receivers

When installing the 50mm x 50mm box receivers, the antenna is located towards the top of the module. When installing individually the receiver should normally receive the transmitter signal from all angles (dependant on surrounding materials).

When installing multiple receivers in the same *non-metallic* enclosure, the following installation guidelines are recommended:

1. Both box and DIN rail mountable receivers require a distance of >30mm between each module.



2. Box receivers, stagger each one. So one towards the back and the next towards the front. This helps the signal to reach the required receiver if controlled from the side.

Contactors - When using with receivers

The recommended distance from a contactor to a receiver or a transmitter is greater than 1 metre. This is due to the electromagnetic field (EMF) created when the contacts engage in the contactor.

Receiver operating randomly

With the receivers manufactured using electronic components, their control can be influenced by electromagnetic fields created by contactors or other electronic devices in local proximity to the receiver. We recommend the distance between the receiver and any device emitting EMF is greater than 1 metre.

6 LED Loads - Installation And Control

The mains input running current of an LED driver is different from the current immediately after the moment of switching on. For this reason the switched contact needs to be rated to withstand the input current (inrush). This is owing to the capacitive nature of their input circuits.

The inrush current can be greater than 10 times the normal running current. This can cause practical problems like contacts welding together (will not turn off) etc.

Potential solutions are:

1. Split the load

- 2. Install a suitable contactor controlled by the ClickSmart receiver.
- 3. Install a thermistor to suppress the inrush current

7 Fault Protection

All receivers have an integrated fault mode, this is signified by the receiver's LED permanently flashing.

In the event the receiver is overloaded, controlled constantly over a short timescale by one or more transmitters or there is a wiring issue can lead to the fault mode being triggered.

To return the receiver to normal working mode, the power to the receiver must be isolated and the issue resolved prior to reenergising the power.

If the fault persists and the load being controlled is LED, please refer to section 6 above or if connected to a contactor see section 5 above.







Installation of receiving devices should be carried out by a qualified electrician.

Any device with the signs of damage and/or missing parts should not be installed and should be returned to the seller.

Before attempting installation, ensure all associated circuits and cables have been isolated at the source. Please refer to 'installation guidance notes' supplied before commencing with the installation.

Devices are designed to be mounted internally only.

1 RFSA-66M - 8A x 6 Channel Switching Receiver - DIN Rail Mountable



6 x 8A switching receiver with 3 normally open contacts and 3 normally closed and/ or normally open contacts.

Receivers can be mounted directly behind individual appliances, control circuits locally or within the consumer unit.

Install the antenna carefully in to the front termination, ensuring the centre connection is aligned prior to tightening the nut. DO NOT OVERTIGHTEN THE NUT.

We recommend the receiver is installed inside a non-metallic enclosure.

If mounted inside a metal enclosure or the signal is impaired, the AN-E external antenna with 3M of cable (supplied separately) can be fitted.

We recommend noting the hexadecimal code printed on each channel and the appliance it is controlling for potential future use.

Each channel can be controlled by up to 32 transmitting devices.

2 Signal Range

The RFSA-66M has a signal range in free air of up to 200 metres.

Once the signal penetrates building materials etc. the signal range will be reduced. See the installation guidance notes supplied with this device.

3 Load Type

! Warning Inductive and resistive loads MUST NOT be connected together through one channel

Type of load Contact material AgSnO ₂ contact 8A	cos φ ≥ 0.95 AC1 250V / 8A			≠[]≢ AC5a uncompensated x	T T AC5a compensated X	AC5b 250W	AC6a 250V / 4A	 AC7b 250V / 1A	AC12 250V / 1A
Type of load Contact material AgSnO ₂ contact 8A	AC13 X	 AC14 250V / 4A	 AC15 250V / 3A	 DC1 30V / 8A			DC12 30V / 8A	 DC13 30V/2A	 DC14 X

4 Wiring



5 Functions (Switching Receivers)						
Function 1	Press Button	Press for ON, release for OFF				
Function 2	'ON' Button	Press for ON				
Function 3	'OFF' Button	Press for OFF				
Function 4	ON/OFF Button	Press for ON, press again for OFF				
Function 5	'OFF' Delay	Press for ON, device will turn off after predetermined time period as set in STEP 3 of programmir (2 seconds to 60 mins)				
Function 6	'ON' Delay	Press to start timer. 'ON' delay will be as predetermined in STEP 3 of programming (2 seconds to 60mins)				

Functions 5 & 6 (timed elements) are programmed in real time. If you require 30 minutes you have to wait for the 30 minutes to complete the pairing. To help save time and remove potential frustration on 5+ minute timed elements, we always recommend conducting a few shorter timed elements (e.g. 10 seconds) to ensure both the correct function and the correct timed element are programmed.

STEP 2 - Select Function

5 Programming the actuator receivers to button transmitters

When installing with the RF Pilot or RF Touch, use the dedicated product manuals for programming. Circuits 1 to 3 are along the top, left to right (normally open). Circuits 4 to 6 are along the bottom (normally open/normally closed)

STEP 1 - Programming Mode



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