

## Remote Control System

### Features:

- Up to 200m Range
- 868MHz FM Technology
- 1 – 4 Channels each 1000W
- Waterproof Receiver (IP68)
- High Security RF Protocol
- 2 / 4 Changeover Relay Contacts Rated 5A @ 230Vac
- 12-30Vac/dc, 110V or 230Vac versions Available
- Outputs Momentary or Latching
- Any Switch Map to Any Relay
- Systems supplied 'ready to Go'



### Applications

- General Purpose Remote Switching
- Electric Gates
- Roller Shutter Doors
- Garden Lighting, Sports Grounds

### Description

A versatile general purpose Remote Control System for many different applications.

Housed in a rugged IP68 weatherproof enclosure, The new HORNETPRO system is ideally suited to any remote switch requirement. With upto 4 changeover Relay switch outputs each output can be controlled from any switch on any transmitter. Additional transmitters may be added to the system using the same 'easy-learn' process without opening the enclosure.

Installation is by screw terminals to the power supply and the output relay contacts. The output relays are activated by the button press on the transmitter encoder.

## Systems Part Numbers

Part Number	Description	Power Supply
HORNETPRO-8S1	1 channel System	12-30Vac/dc
HORNETPRO-8S2	2 channel System	
HORNETPRO-8S3	3 channel System	
HORNETPRO-8S4	4 channel System	
Part Number	Description	Power Supply
HORNETPRO-8S1M	1 channel System	230Vac
HORNETPRO-8S2M	2 channel System	



## Additional Transmitters



Part Number	Description	Range*
FOBBER-8T1	1 Sw	200m
FOBBER-8T2	2 Sw	200m
FOBBER-8T3	3Sw	200m
FOBBER-8T4	4 Sw	200m
FOBBER-8T6	4 ch 6 Sw	200m
FOBBER-8T8	8 Sw	200m
FOBBER-8TL1	2 button 1ch ON/OFF	200m
FOBBER-8TL2	4 button 2ch ON/OFF	200m

\*\* Range stated is optimum, direct line of sight. In worst conditions this can be reduced by over 50%

## Additional Receivers

Part Number	Description	Power Supply
HORNETPRO-8R4	4 ch Receiver	12-30Vac/dc
HORNETPRO-8R2M	2 ch Receiver	230Vac

## Custom Systems

Fobber keyfobs can be customised with logo, colour or complete custom plastic housing for unique Branding

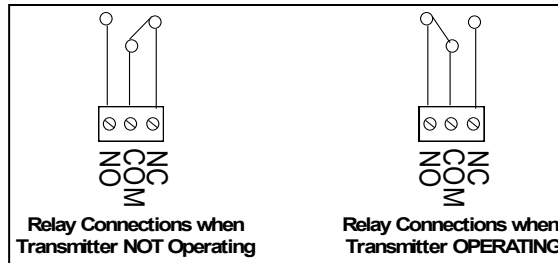
Please contact Sales for further info.



## Relay Outputs

The receiver provides 4 changeover relay switches each capable of switching up to 1.2KW (5A @ 230V). Each relay is independent and separately controlled, and can therefore be used to switch most voltages either ac or dc.

Each output relay provides an isolated switch. Connections are Common (COM), Normally Open (NO) and Normally Closed (NC).

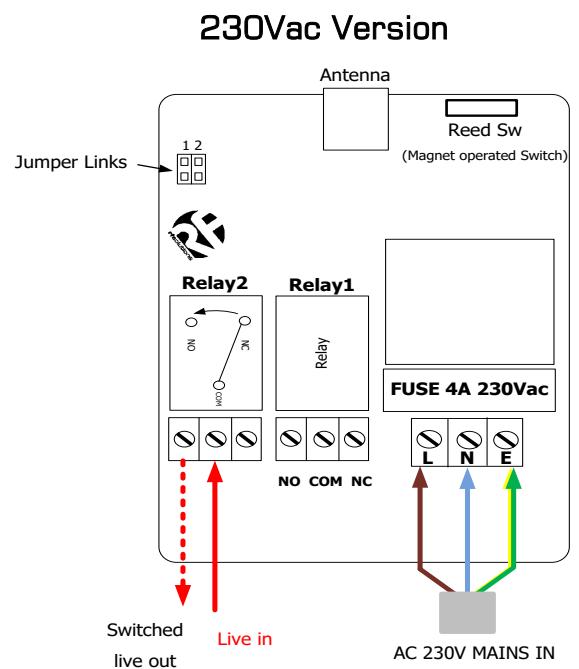
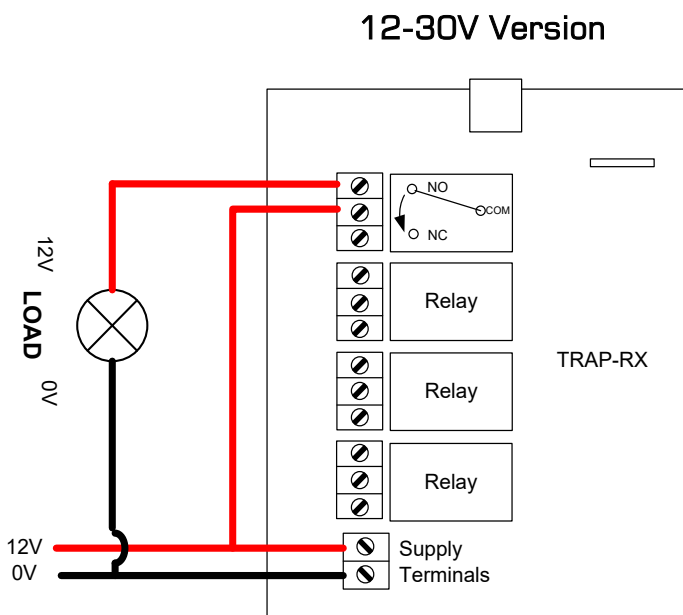


## Installation

Below is a simple example showing one possible way to wire a single set of relay Changeover contacts in order to provide switched power to an external load:

When the relay is energised the 'COM' connects to 'NO' and power is applied to the Load.

1. Open the enclosure by removing fixing screws from the enclosure
2. Remove the antenna and slide out the circuit board.
3. Connect the power supply screw terminals.
4. Wire your desired connections to the relay contact outputs
5. As supplied, the handheld will operate the outputs; switch1 to output1, switch2 to output2 etc.
6. Set the output functions to latching, / Momentary Operation.



## Advanced Operation

### Configuring receivers

The link pins LK1 and LK2 set the action of the relays

**1/2 sec Mom** = Relay will operate for 1/2 sec

**Mom** = Relay will operate for as long as transmitter switch operated

**Latch** = Relay will toggle ON/OFF on each transmitter button press

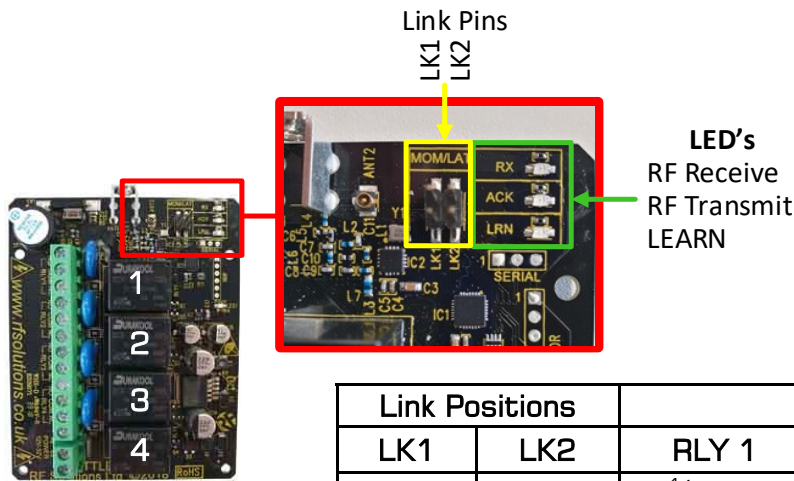
**FlipFlop** = Relays 1 & 2 and 3 & 4 operate in pairs.

When button 1 is pressed relay 1 switches on, Relay 2 Switches off

When button 2 is pressed relay 2 switches on, Relay 1 Switches off

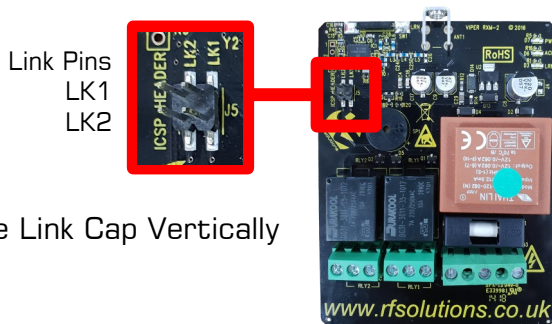
Relay 3 & 4 operate in the same manor to Transmitter buttons 3 & 4.

### 12-30V Version



Link Positions		Switch relays			
LK1	LK2	RLY 1	RLY 2	RLY 3	RLY 4
Open	Open	1/2 sec Mom	1/2 sec Mom	1/2 sec Mom	1/2 sec Mom
Closed	Open	Mom	Mom	Latch	Latch
Open	Closed	Mom	Mom	Mom	Mom
Closed	Closed	Latch	Latch	Latch	Latch

### 230Vac Receiver



Link Positions		Relay Outputs	
LK1	LK2	RLY 1	RLY 2
Open	Open	Mom	Mom
Closed	Open	Mom	Latch
Open	Closed	Flipflop	Flipflop
Closed	Closed	Latch	Latch

**Note** When using Keyfobs with "ON" "OFF" set the jumper links to MOM, then the receiver output will energise when ON is pressed and relax when OFF is pressed

## Advanced operation - Pairing a transmitter button with a magnet

With this system, you can pair together any individual transmitter switch with any receiver relay switch. Without opening either enclosure:

1. Briefly (less than 1 second) place a magnet next to the receiver in the position shown and then remove it.
2. The receiver will buzz **once** (One buzz means the receiver unit is ready to allocate a transmitter button to relay output 1) To select relay output 2, 3 or 4, briefly place the magnet again so that the Buzzer Buzzes to indicate the Relay output 2,3, or 4.
3. Press the switch on the transmitter which you wish to pair
4. The receiver will buzz twice to confirm pairing
5. Repeat for any additional transmitter switches



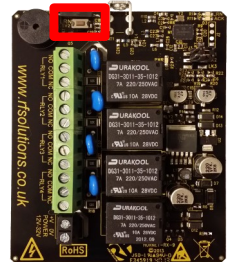
## Pairing a transmitter button using the LEARN switch option (12-30Vac-dc Receiver only)

To pair a new transmitter switch follow this procedure:

Unscrew the antenna, Open the enclosure, and extract the Circuit-board assembly

1. Briefly press the receiver LEARN switch once
2. The Learn LED will flash once (One flash means the receiver unit is ready to allocate a transmitter to relay output 1)
3. To select relay output 2, 3 or 4, briefly press the LEARN switch again and repeat until the LED flashes 2, 3 or 4 times. The LED will flash the correct number of times to indicate which Relay output is selected.
4. Press the button on the transmitter you want to learn to the chosen relay.
5. The Learn LED will flash to indicate Pairing is complete.

LEARN Switch



## Maximum Number of Transmitters to a Receiver

Each receiver has a maximum memory for up to 30 pairings, these can be from the same or any number of transmitters.

## Erasing Receivers Memory

1. Press and hold the receiver Learn Switch for ~5 seconds.
2. The receiver will sound a long Beep to confirm erased.

**NOTE:** You cannot erase individual Tx encoders



## Technical specifications

### Transmitters: FOBBER Transmitter

Enclosure Rating: Standard IP68  
 Battery Type: CR2032 (supplied)  
 Battery Life: 2 years @ approx. 50 1/2second presses p/day  
 Dimensions: 90 x 54 x 27 mm

**Changing the Battery:** Remove the 2 enclosure screws. replace battery, taking care of contacts and the battery polarity

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage	2.9	3	3.3	V
Supply Current		17		mA
Frequency:		433.92 869.50		MHz
RF Output Power (ERP)	-		10	mW
RF Bandwidth		60		KHz

### Receiver Unit

Enclosure Rating: IP68  
 Dimensions: 130 x 112 x 42 mm (not including antenna)  
 Operating Temperature: -10 to +50° Celsius.

Electrical Characteristics	MIN	TYPICAL	MAX	DIMENSION
Supply Voltage for Low Voltage version	11		32	Vdc or ac
Supply Voltage for high Voltage version		230		Vac
Relay Rating*		5	12	A
Supply Current : Quiescent		25		
All (4) relays operating*		140		mA
Time delay from Tx on Switch to Rx Relay operation		30		mS
Time delay from Tx sw relax to Rx Relay release		30		mS

\*The relay contacts in this unit are for functional use only and must not be used for isolation purposes