Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Remote Control System

Features

- Up to 150m Range

- 433/868MHz FM Technology

- 1 – 4 Channels each 1000W

- 12-30Vac/dc or 230VAC versions

- Waterproof Receiver (IP68)

- New High Security RF Protocol

- 4 Changeover Relays 5A @ 230Vac

- Outputs Momentary or Latching

- Any Switch Map to Any Relay

- Systems supplied 'ready to Go'

- FCC Certified and CE Compliant

Applications

- General Purpose Remote Switching
- Electric Gates
- Roller Shutter Doors
- Garden Lighting.

Description

A highly 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. Each receiver has 4 relays, using the 'easy-learn' process each relay can be controlled from any switch on any transmitter. Additional transmitters may be added to the system using the same 'easy-learn' process.

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.

FM76316

HORNET PRO

Systems Part Numbers

Part Number	Description	Power Supply	Frequency
HORNETPRO-4S1	1 ch System	12-30Vac/dc	433
HORNETPRO-4S2	2 ch System	12-30Vac/dc	433
HORNETPRO-4S3	3 ch System	12-30Vac/dc	433
HORNETPRO-4S4	4 ch System	12-30Vac/dc	433
HORNETPRO-8S1	1 ch System	12-30Vac/dc	868
HORNETPRO-8S2	2 ch System	12-30Vac/dc	868
HORNETPRO-8S3	3 ch System	12-30Vac/dc	868
HORNETPRO-8S4	4 ch System	12-30Vac/dc	868

Additional Transmitters

Part Number	Description	Range*	Frequency
FOBBER-4T1	1 Sw	150m	433
FOBBER-4T2	2 Sw	150m	433
FOBBER-4T3	3Sw	150m	433
FOBBER-4T4	4 Sw	150m	433
FOBBER-4T6	6 Sw	150m	433
FOBBER-4T8	8 Sw	150m	433
FOBBER-8T1	1 Sw	150m	868
FOBBER-8T2	2 Sw	150m	868
FOBBER-8T3	3Sw	150m	868
FOBBER-8T4	4 Sw	150m	868
FOBBER-8T6	6 Sw	150m	868
FOBBER-8T8	8 Sw	150m	868

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

Custom Systems

Fobbers can be customised with logo, colour or complete custom plastic housing for unique Branding
Please contact Sales for further info.

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HORNET PRO

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).

Relay Connections when Transmitter NOT Operating　　**Relay Connections when Transmitter OPERATING**
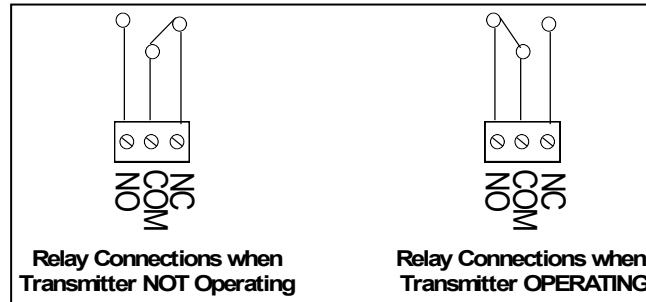
Installation

Below is a simple example showing one possible way to wire a relay 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 and slide out the circuitboard.

2. Connect the power supply screw terminals 12-32V ac or dc to the supply terminals.

3. Wire your desired connections to the relay switches

4. Once all required wiring is complete, use the handheld QUANTA transmitter to switch the outputs on and off.

5. As supplied, the handheld will operate the outputs - button 1 to output 1, button 2 to output 2 etc.

6. Change the output functions to latching, / Momentary Operation..

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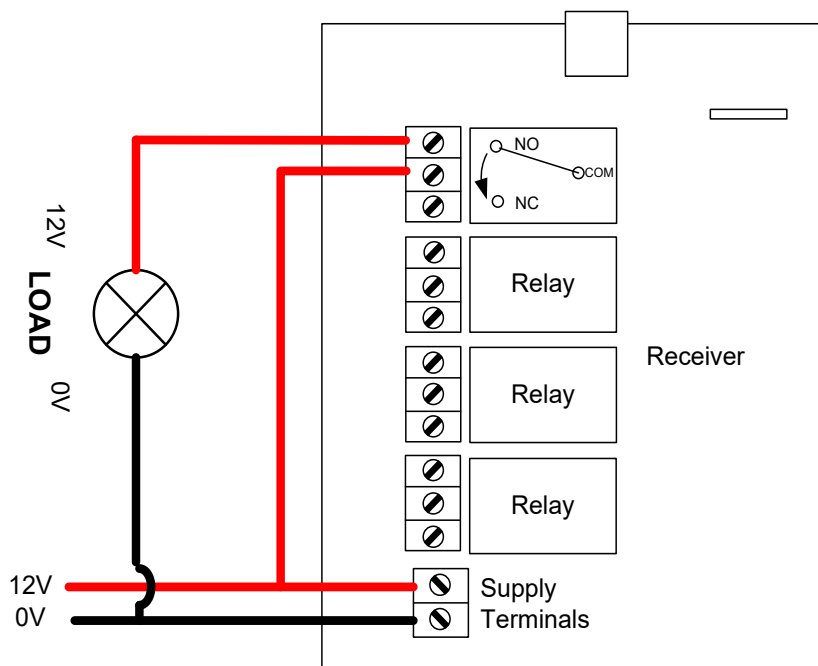
HORNET PRO

## Configuring receivers Relays

Receivers can be used for many applications. The link pins LK1 and LK2 set the action of the relays

1/2 sec Mom = Relay will operate for half a second no matter how long a transmitter switch is operated

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

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

Learn Switch
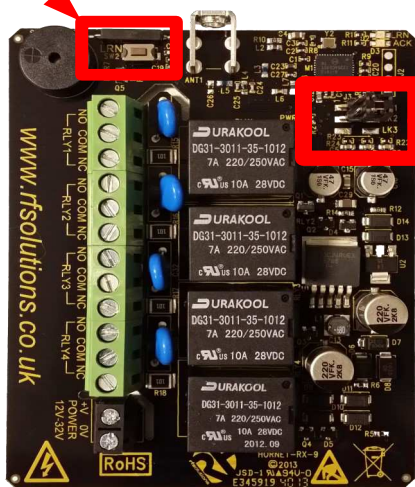
Link Pins

LK1

LK2

Link Positions		Relays			
LK1	LK2	RLY 1	RLY 2	RLY 3	RLY 4
Fitted	Fitted	1/2 sec Mom	1/2 sec Mom	1/2 sec Mom	1/2 sec Mom
Fitted	Open	Mom	Mom	Latch	Latch
Open	Fitted	Mom	Mom	Mom	Mom
Open	Open	Latch	Latch	Latch	Latch

HORNET PRO

Advanced operation - Pairing a transmitter button with a magnet

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

All you need is a magnet.

1. Briefly (less than 1 second) place the transmitter next to the receiver in the position shown and then remove it.

2. The receiver will buzz **once** (One beep means the receiver unit is ready to allocate a transmitter to relay switch 1)

3. Press the button on the transmitter which you wish to pair

4. The receiver will beep twice to confirm pairing

5. Repeat for any additional transmitter switches

NOTE: *Each receiver has a maximum memory for up to 28 pairings, these can be from any buttons on any transmitters!*

NOTE: *The switch that is operated by the magnet is on the left of the antenna.*

Advanced Note: *It is possible to select relay outputs 2-4, by repeating step 3 and counting the number of beeps. 2 beeps for relay 2, 3 for 3 and 4 f or 4.*

Advanced operation - Erasing receiver memory with a magnet

1. Hold the magnet in the position shown for ~5 seconds.

2. The receiver will sound a long 'Beep' to confirm erased

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HORNET PRO

Advanced Operation - Pairing a transmitter button using the internal learn switch

To pair a new transmitter switch follow this procedure

Open the receiver enclosure and extract the Circuitboard assembly

Note!: Any transmitter button can be configured to operate any of the receiver relays.

1.	Select the receiver output relay to learn to:
2.	Briefly press the receiver Pairing switch (S2) once
3.	The Learn LED will flash once to indicate relay 1 is selected
4.	After the LED stops flashing, press the Learn switch again to select the next relay channel
5.	Repeat step 4 until the required relay is selected.
6.	Press the button on the transmitter you want to learn to the chosen relay.
7.	The Learn LED will flash to indicate Pairing is complete.

Pairing a Transmitter to a Receiver

The only limitation is that 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 approx 10 seconds.
2.	When the Learn LED turns ON all memory is erased

NOTE: You cannot erase individual Tx encoders

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HORNET PRO

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 +50º Celsius.

Electrical Characteristics	MIN	TYPICAL	MAX	DIMENSION
Supply Voltage for	11		32	Vdc or ac
Relay Rating* (230Vac) RLY1-4		5	12	A
Supply Current : Quiescent		25		
All 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

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Mechanical Dimensions

All Dimensions in mm

50.00

46.00

59.00

10.00

82.00
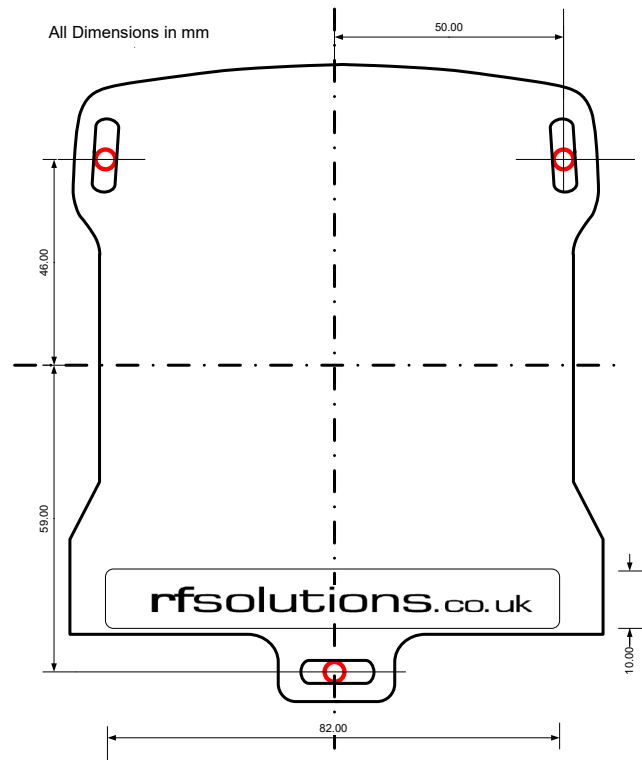
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RED Directive

This product meets the requirements of directive 2014/53/EU.

Full declaration is available at:-

https://www.rfsolutions.co.uk/certification-i59

RF Solutions Ltd. Recycling Notice

Meets the following EC Directives:

DO NOT

Discard with normal waste, please recycle.

ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfills its WEEE obligations by membership of an approved compliance scheme.

Waste Batteries and Accumulators

Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

Environment Agency producer registration number: WEE/JB0104WV.

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