![Chipsmall logo]

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!

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Secure Remote Control System

Features

- Complete FM Remote Control System
- 1 – 3 Channels
- 12 / 24Vdc Supply
- High Security Protocol
- 'Easy Learn' Feature
- Easy Installation Via Screw Terminals
- Up to 7 Transmitters per System
- Relay Outputs 5A @ 230Vac
- Momentary or Latching Outputs
- ABS Enclosure
- FCC / CE Compliant
- Range up to 100 Metres
- EMC Compliant for Europe

Applications

- General Purpose Remote Switching
- Garage Doors
- Electric Gates, Shutters
- Access Control

Description

A versatile general purpose remote control, which can be used for controlling many different applications.

Easy to install, the receiver is connected using standard 'screw terminals' provided. Power to the receiver is 12 or 24Vdc and the output(s) can switch up to 5A at 230Vac.

The receiver outputs operate when the transmitter switch is pressed. The outputs can be set to 'momentary' or 'latching' operation.

The system is supplied ready to 'plug and play', in addition a further 6 transmitters can be 'learnt' by the receiver.
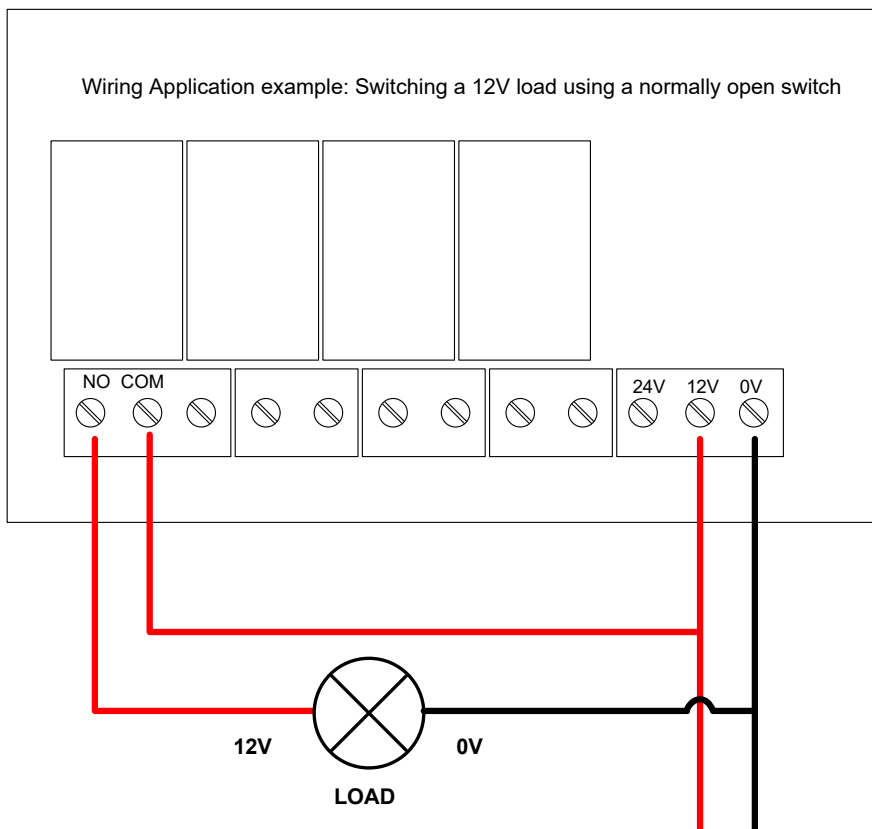
WASP Remote Control System

Relay Outputs

Each output relay provides an isolated switch. Outputs 2 to 4 Connections are Common (COM) and Normally Open (NO) which close together when activated. Output 1 has an additional Normally Closed (NC) changeover contact.
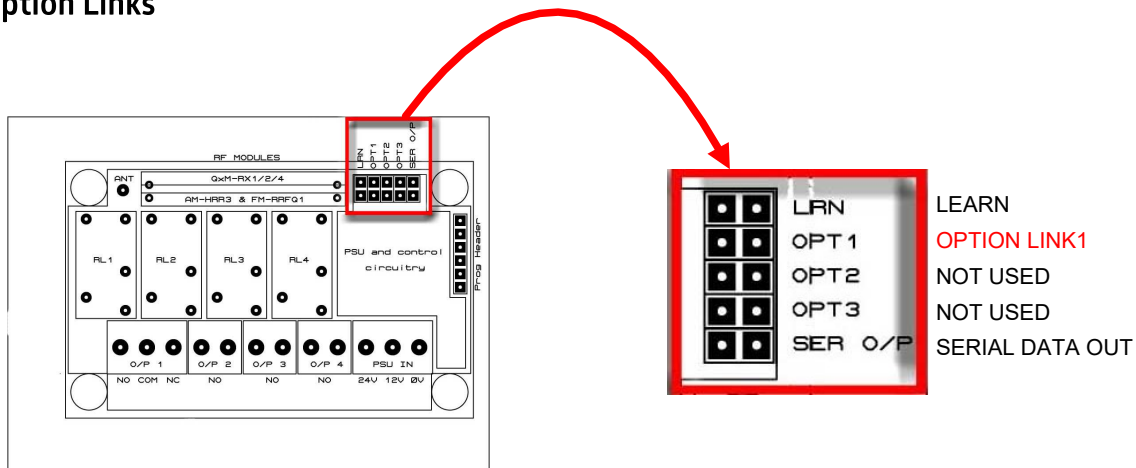

Relay Connections when Transmitter NOT Operating   **Relay Connections when Transmitter OPERATING**
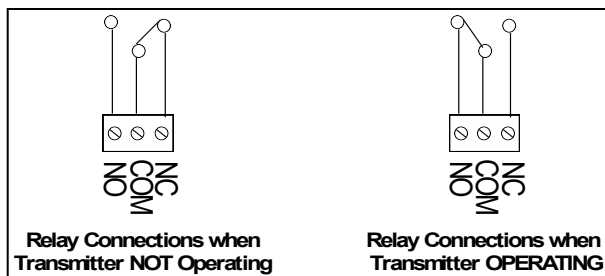
Please Note: The relay contacts in this unit are for functional use only and must not be used for power isolation purposes

Wiring Diagram

Wiring Application example: Switching a 12V load using a normally open switch

NO COM   24V 12V 0V

12V   0V

LOAD

WASP Remote Control System

Option Links

The action of the relay outputs is set by the Option link setting Jumper. A link is made / removed by the small shorting link 'cap' placed over the pin header.

Option Link 1 Fitted = All Relays Momentary Operation*
Option Link 1 Not Fitted = All Relays Latching Operation*

*the receiver unit must be power cycled after changing the jumper link configuration.

To Learn a New Transmitter switch follow this procedure

Any transmitter button can be learnt to one or many of the receiver output relays.
Each button must be learnt to each relay individually by following this procedure:

1. Select the receiver output relay to learn to:
2. Briefly short the LRN (Learn) pins once
3. The Learn LED will flash once to indicate output relay 1 is selected
4. After the LED stops flashing, press the short the LRN pins again to select the next relay channel
5. Repeat until the chosen output relay is selected.
6. Press the button on the transmitter you want to learn to the relay output.
7. The Learn LED will then illuminate, press the same transmitter button again.
8. The Learn LED will then flash to indicate learning is complete.
9. To test the operation, press the transmitter button again and you will hear the relay 'click' as it operates.

Erasing Receivers Memory

Short the LRN (Learn) pins for approx 10 seconds.

When the short is removed all memory is erased.

NOTE: You cannot erase individual Tx encoders.

WASP Remote Control System

System Part Numbering

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

Part Number	Description	Freq (MHz)	Range** (Metres)
WASP-S1	System 1 switch	433.92	100
WASP-S2	System 2 switch	433.92	100
WASP-S3	System 3 switch	433.92	100

Additional Transmitters

Part Number	Description
HORNET-TX1	Transmitter 1 switch
HORNET-TX2	Transmitter 2 switch
HORNET-TX3	Transmitter 3 switch
HORNET -TX-IPKIT	'O' Ring, Seals Transmitter to IP65

Bespoke Versions

Custom versions available with your own logo and or protocol.
Please contact Sales for further info.

WASP Remote Control System

Low Battery Indication

When the battery on the HORNET-TX becomes low (<2.1V) the LED will indicate this by pulsing on and off and one second intervals. The battery should be changed at this point. When the battery reaches this level the HORNET-TX may continue to operate but the range will be reduced and the LED will dim.

Technical Specifications

Transmitters: HORNET

Enclosure Rating: Standard   **(TBA)**   With IP Kit   IP65
Battery Type: CR2032AE
Battery Life Est.   3 Years (Calculated as 50 operations per day)
Dimensions: 66 x 36 x 17mm
Operating Temperature: 0 to +70º Celsius.
Changing Batteries: Remove Two fixing screws, remove battery and replace, note polarity!

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage		3		V
Supply Current (transmitting)		8		mA
Frequency:	432.90	433.920	434.10	MHz
RF Output Power (ERP) @ 433 MHz	-	3		mW
Packet length		68		ms

Receiver Decoder WASP-RX

Dimensions   96mm x 55mm x 29mm
Operating Temperature: 0 to +60º Celsius.

ELECTRICAL CHARACTERISTICS	Min	Typical	Max	Units
Supply Voltage for 12V versions for 12V versions	10.5 22	12 24	14 28	Vdc
Relay Rating* (230Vac)		5(rms)	12(peak)	A
Supply Current : Quiescent @12V All relays operating*		14 140		mA
Time delay from Tx on Switch to Rx Relay operation			100	mS
Time delay from Tx sw relax to Rx Relay release			300	mS

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

Reader Response

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1. What are the best features of this document?

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3. Do you find the organization of this document easy to follow? If not, why?

4. What additions to the document do you think would enhance the structure and subject?

5. What deletions from the document could be made without affecting the overall usefulness?

6. Is there any incorrect or misleading information (what and where)?

7. How would you improve this document?

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