KYL-815 4-way wireless ON-OFF Module



I.. Introduction

This 4-way ON-OFF module is to transmit the ON-OFF condition to a remote place wirelessly in time. When here the switch condition is ON, the output in the remote place is ON. When the local switch condition is OFF, the other terminal is OFF.



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II.. Features of KYL-815

- 1. 4-way isolated input, high reliability and stability.
- 2. 4-way relay dry contact output, contact current is 220V, 5A.
- 3. Collocated with a wireless data module inside whose transmitting distance is about

2km-3km; the working frequency 433MHz (400-470MHz); RF power: 1000mW;

- 4. Receiving sensitivity: -120dBm
- 5. Receiving current: 60mA; transmitting current: 350mA
- 6. Power supply: DC 12V-30V
- 7. Dimension: 95mm*90mm*40mm

III.. Dip Switch Instruction



Pic 1. DIP Switch

DIP8: Working method

ON — input changes trigger transmission. Once you change any of the

4-way's condition, the module will send out this info.

OFF---fixed time transmitting. The master transmits 4-way's condition to

the slave every 1s or 2s (not real-time transmitting).

DIP7 : Master and slave choosing under the fixed time transmitting mode

ON—slave, OFF—master

DIP6: Data collecting mode choosing

ON---Point to point transmission mode

OFF----Data collection mode

The master collects input condition or controls output condition via sending data. In data collecting mode, the module can't send out data actively. That is to say touch off transmitting and fix time transmitting are both invalid at this mode.

DIP5: Feedback choice

ON--feedback function close

OFF--receiver will send back the received data to transmitter

DIP1-4: Channel choosing

To avoid interference, please use different DIP switch mode and choose different channels when you use several pairs of modules in the same place , Maximal 16 channels.

The following is a channel correspondence table for DIP switch 1-4:

DIP position	Channel No	DIP	Ch.	DIP	Ch.	DIP	Ch.
	1		5		9		13
	2		6		10		14
	3		7		11		15
	4		8		12		16

Notice: * For most users "touch off transmitting mode" is OK-----DIP7-ON * To avoid interference caused by more pairs of modules working in the same place, please choose different channels for different systems. * In timing mode, there should be a master and a slave. * changing the DIP switch just takes effect after the module is re-powered on.



IV.. Wiring Terminal Schematic

Pic 2: Switch input wiring terminal schematic



Pic 3: Switch output wiring terminal schematic

V.. Pin Definition:

Port name	Pin No.	Definition	remarks	
COM1	1	GND	GND	
	2	VCC	DC: 12-30V	
	3	-	No conection	
	4	-	No connection	
	5	-	No connection	
	6	OUT1	1 st way relay day contact output	
	7			
	8	OUT2	2 nd way relay day contact output	
	9			
	10	OUT3	3 rd way relay day contact output	
	11			
	12	OUT4	4th way relay day contact output	
COM2	1	IN1	1st ON-OFF input	
	2	GND		
	3	IN2	2ns ON-OFF input	
	4	GND		
	5	IN3	3 rd ON-OFF input	
	6	GND		
	7	IN4	4 th ON-OFF input	
	8	GND		

VI.. How to use KYL-815

1. Consider your specific application, set the DIP switch, connect VCC (12V-30VDC) and connect input and output cables as per the above instruction.

2. Power supply for the module

3. The factory setting is input changes trigger transmission mode and current channel is No.1.

4. Choose different frequency points to avoid interference caused by more pairs of modules working in the same area.

VII.. About the LED Indicator:

1. The power LED--It is always ON if modem is power supplied.

2. The data LED--It blinks once modem transmits or receives data

3. The working LED--It blinks every 1s, this indicates modem is working normally

4. The output LED--It's on indicates the corresponding output condition is connect.It's off indicates the corresponding output condition is disconnect.

VIII.. Working Mode Instruction

1. Touch off transmitting mode

Once there is any input change happens, the module will send it out. This mode has the advantage of high speed, real-time transmission, and low power consumption. Because module only transmits if there is input changes.

2. Fixed time transmitting mode

Under this mode, there should be one master and one slave module. The master will synchronize with the slave every 1s, means the master will transmits its condition to slave every 1S and the slave will transmits its condition to master every 1S. If the master cannot synchronize with slave, the buzzer inside of module will alarm. And all contacts will disconnect at the same time. This alarm will stop automatically until the master is synchronize with slave again.There will be at most 1s ON-OFF delay under this mode.