

KYL-811 wireless switch input and output module user manual



Shenzhen KYL Communication Equipment Co., Ltd

Address: Room 305-307, Building 1, Zhuguang Innovation Science and Technology Park, Xili, Nanshan District, Shenzhen, China

Tel: +0086-755-83410815 Fax: +0086-755-83408785 Skype: rf-data E_mail: <u>sales01@rf-data.com</u> Website: http://www.rf-data.com KYL Shenzhen KYL Communication Equipment Co., Ltd

(\boldsymbol{I}) Function

1 channel ON-OFF DI and DO transmitting timely. The 1 channel switching condition for the transmitting equipment can be output timely at the receiver equipment. That is the switching condition for the transmitting equipment is shut down, while the switching condition will be shut down at the receiver equipment; and the transmitting equipment is disconnect, while the receiver equipment will disconnect.

The following is the schematic diagram of the ON-OFF transmission.

(II)Performance Inde	ex
----------------------	----

Characteristic	Range	Typical value	Remarks
Power supply	12-30V	24V	Output current>=500mA
Transmission	1-3km	_	Open line- of- sight
distance			
Output No.	-	1 output	-
Output type1	-	Relay	Max.Load DC 220V 5A
Input No.		1input	
Input type1		Dry contact	
Input type II	DC0-5V	Low voltage<1V	Low voltage -switch on
		High voltage>3V	High voltage-switch off
Transmission	_	300mA	-
current			
Receiving	-	30mA	-
current			
Size	-	95mm*90mm*40m	-
		m	

(III) Comport Definition

Com port	Connectio n Cable	Definition	Description		
COM1	1	GND	Ground		
	2	24V	DC: 12-30V		
	3	OUT1(O1)	1 st channel relay dry contact output		
	4				
	5	IN1(I1)	1 st on-off switch input		
	6	GND			

(VI) **DIP Switch**

KYLShenzhen KYL Communication Equipment Co., Ltd

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

(V) Feature:

1, One relay output, with Max. load capacity of 220V / 5A,

2, One way switch input, support passive and active input.

When a passive input is made, it is only necessary to access a switch or button between I1 and GND. The open or disconnected state will be sent to the remote output module and be outputed.

When active input, the user needs to enter a high or low level at the I1 terminal, a high level corresponding to a disconnection, and a low level corresponding to close. Note that when no level is input, the receiver output is disconnected.

(VI) Using Method

1, install the antenna to the module.

2, in accordance with the use of demand, according to the above instructions set the DIP switch, connect the corresponding switch input, switch output device.

3, connect the power (12-30V), turn on the power switch, the power requirements of the output current needs reach more than 500mA.

4, At this point, the input of module can control the output of another module .

5, the module is two-way transmission, that is, a module can as an input ,at the same time, can also be used as a controlled output, and vice versa.

6, Within the same remote control distance range if user using more than two sets of remote control system, one should use a different operating frequency to avoid mutual interference.

KYL Shenzhen KYL Communication Equipment Co., Ltd

(VII) Working Mode

1, trigger mode

- Switch input state changes, will trigger the switch module to send the local switch state. This mode is fast transmission and good real-time, because only the switch input state changes will be launched, so there will be less energy consumption.
- 2, the timing mode
 - In timing mode, one is host and the other one must be slave. The host synchronizes with the slave every second, that is, the host sends the state of the switch to the slave per second, and then the slave give the local state feedback to the host. When the master can not synchronize with the slave up to 3s, the output of the master / slave output contact will be disconnected until the synchronization is repeated. In this mode, there will be a delay of at most 1 second.
- 3, the collection mode

In the acquisition mode, DIP8 (transmit mode), DIP7 (master / slave mode), DIP5 (relay / feedback mode) are invalid. At this point the module is equivalent to a wireless Modbus slave, can not send data initiativly . The host computer is a PC or other data terminal that connects the wireless data transmission module. The data terminal sends the Modbus RTU command, which requests the slave to return to the acquisition state or control the slave switch output. Slave address 1-254 can be set.