## KC868-HA protocol for RS485 relay board

KC868-HA RS485 communication baud rate: 9600bps

When KC868-HA power on , KC868-HA will feedback Initialization information. (don't care about these) FF

52 53 34 38 35 5F 74 65 73 74 21 21 21 0D 0A 00



## 1. Key control relay command:

SLAVE ID + fixed package and lengther (10 00 00 00 06 0C) + (relayX 01) + CRCH+CRCL

SLAVE ID is your relay controller's RS485 address. (relayX 01) + (relayX 01) mean: key1-key6 toggle which relay

Here is sample command for key1->relay1 key2->relay2 key3->relay3 key4->relay4 key5->relay5 key6->relay6



01 10 00 0A 00 06 0C 01 01 00 00 00 00 00 00 00 00 00 00 75 4F toggle relay1

01 10 00 0A 00 06 0C 00 00 02 01 00 00 00 00 00 00 00 00 20 2A toggle relay2

01 10 00 0A 00 06 0C 00 00 00 00 03 01 00 00 00 00 00 00 DC A5 toggle relay3

01 10 00 0A 00 06 0C 00 00 00 00 00 00 04 01 00 00 00 00 B0 34 toggle relay4

01 10 00 0A 00 06 0C 00 00 00 00 00 00 00 00 05 01 00 00 DD 7C toggle relay5

01 10 00 0A 00 06 0C 00 00 00 00 00 00 00 00 00 00 00 06 01 4E 10 toggle relay6

For example:

01 10 00 0A 00 06 0C 00 00 02 01 00 00 00 00 00 00 00 20 2A toggle relay2
01 is KC868-H32B Pro or your own relay module's RS485 address.
10 00 0A 00 06 0C is fixed.
00 00 : it's set for key1, not used.
02 01 : 02 is relay2 01 is toggle, it's fixed. 02 01 use by K2.
00 00 00 00 00 00 00 00 : it's set for key3-key6, not used, just fill 00
20 2A : it's CRC code

## 2. Feedback relay state to KC868-HA

SLAVE ID + fixed package and lengther (03 06 55 AA) + byte3+byte2+byte1+byte0 + CRCH+CRCL

SLAVE ID is your relay controller's RS485 address. byte3 is relay state of channel 32-25 byte2 is relay state of channel 24-17 byte1 is relay state of channel 16-9 byte0 is relay state of channel 8-1

every byteX use by 8 bits: 0:OFF 1:ON

fox example:

byte0 is 10001101

means: relay1:ON relay2:OFF relay3:ON relay4:ON relay5:OFF relay6:OFF relay7:OFF relay8:ON

Here is sample command and feedback for toggle relay1 by key1

•	Uart Assistant	₩ - □ ×
COM Configs	Data log	<u>VartAssist V4.3.25</u>
Baudrate 9600	[2022-12-08 09:23:24.853]# RECV HEX> 01 10 00 0A 00 06 0C 00 00 00 00 03 01 00 00 00 00 00	DO DC A5
Paritybit: NONE	[2022-12-08 09:23:25.719]# RECV HEX>	
Databits 8 🔽	01 10 00 0A 00 06 0C 00 00 00 00 00 00 04 01 00 00 0	DO BO 34
Stopbits 1	[2022-12-08 09:23:26.628]# RECV HEX>	
· Close	01 10 00 0A 00 06 0C 00 00 00 00 00 00 00 00 05 01 00	DO DD 7C
	[2022-12-08 09:23:27.124]# RECV HEX>	
Recv Options	01 10 00 0A 00 06 0C 00 00 00 00 00 00 00 00 00 00 00 06 0	01 4E 10
○ ASCII		
Log display mode		
Auto linefeed		
Recv save to file <u>AutoScroll</u> <u>Clear</u>	12022-12-08 10:03:56.154]# RECV HEX> 01 10 00 0A 00 06 0C 01 01 00 00 00 00 00 00 00 00 0	00 75 4F
Datagram Themes	[2022-12-08 10:03:56.837]# RECV HEX> 01 03 06 55 AA 00 00 00 01 F4 A8	
Send Options		
• ASCII O HEX		
✓ Use escape chars		
AT CMD auto CR+L		
Append checkcode     Send from file	Data Send 1. DCD • 2. RXD • 3. TXD • 4. DTR • 5. GND •	6. 두 Clear 📩 Clear
Period 1000 ms Shortcut History	www.kincony.com	Send
🕼 Readv!	23/0 RX:319	TX:0 Reset

KC868-HA will send command to KC868-H32B Pro relay controller: 01 10 00 0A 00 06 0C 01 01 00 00 00 00 00 00 00 00 00 00 75 4F

KC868-H32B Pro relay controller will feedback the newest relay state to KC868-HA: 01 03 06 55 AA 00 00 00 01 F4 A8

How to decode 01 03 06 55 AA 00 00 00 01 F4 A8 : 01 is KC868-H32B Pro or your own relay module's RS485 address. 03 06 55 AA is fixed. byte3:00 byte2:00 byte2:00 byte1:00 byte0:01

byte0:01 is (0000001) binary data. So "1" means relay1 is ON.

If turn ON all 32 channel relay by mobile phone or any software or switch panel, just by anyway changed relay state, then will feedback:

01 03 06 55 AA FF FF FF FF 34 FC

byte3:FF byte2:FF byte1:FF byte0:FF byte3:01 is (1111111) binary data. Relay32-25 all ON. byte2:01 is (1111111) binary data. Relay24-17 all ON.

byte2:01	is (11111111) binary data.	Relay24-17 all ON
byte1:01	is (1111111) binary data.	Relay16-9 all ON.
byte0:01	is (1111111) binary data.	Relay8-1 all ON.