KC868-A series board protocol – MQTT command

Note: This protocol document use for KinCony smart controller:

KC868-AM ASR A2 A4 A4S A6 A8 A8M A8S A16 A16S E16S A32 A32M A64 A128 AG AK AI AIO AP

Different board will have different channel of digital output, digital input , ADC, DAC, so the protocol is same , just according to the hardware resource to set channel number.

Command topic format: Board model/UID/SET
State topic format: Board model/UID/STATE

If using KC868-A64:
Command topic: `KC868_A64/B48A0A404664/SET`
State topic: `KC868_A64/B48A0A404664/STATE`

1. Set ON/OFF of one digital output channel

   send: {"output64":{"value":true}} means: turn ON output64
   send: {"output64":{"value":false}} means: turn OFF output64

2. Feedback STATE
   If board first time connect to mqtt broker, will auto feedback all state of board.
   If digital input or output STATE changed by any way, will auto feedback mqtt message.

   For example:

   {"output1":{"value":true}} output1 is ON
   {"output2":{"value":false}} output2 is OFF
   {"input3":{"value":true}} input3 is trigger
   {"input4":{"value":false}} input4 is not trigger

   If you send control output command, then will feedback all STATE of board together, such as:

   {{"output1":{"value":true}},{"output2":{"value":false}},·····{"input1":{"value":true}},{"input2":{"value":true}},·····{"adc1":{"value":2610}},·····{"dac1":{"value":10}},·····}

3. Set DAC value
   Send: {"dac1":{"value":58}}

   Set DAC1 value=58, range is 0-255

4. Digital output ALL ON/OFF
   send: {"all_outputs":{"value":true}}
   turn ON all output

send: {"all_outputs":{"value":false}}
turn OFF all output

true=ALL ON, false=ALL OFF

5. Read board all data
   send: {"get_datas":{"value":true}}

   feedback all data:

   {"input1":{"value":false},"input2":{"value":false},"input3":{"value":false},"input4":{"value":false},"input5":{"value":false},"input6":{"value":false},"input7":{"value":false},"input8":{"value":false},"input9":{"value":false},"input10":{"value":false},"input11":{"value":false},"input12":{"value":false},"output1":{"value":false},"output2":{"value":false},"output3":{"value":false},"output4":{"value":false},"adc1":{"value":0},"adc2":{"value":0},"adc3":{"value":0},"adc4":{"value":0},"dac1":{"value":133},"dac2":{"value":0},"dac3":{"value":0},"dac4":{"value":0},"dac5":{"value":0},"dac6":{"value":0},"dac7":{"value":0},"dac8":{"value":0},"dac9":{"value":0},"dac10":{"value":0},"dac11":{"value":0},"dac12":{"value":0},"dac13":{"value":0},"dac14":{"value":0},"dac15":{"value":0},"dac16":{"value":0},"sensor1":{"temperature":77.9,"humity":-100.0},"sensor2":{"temperature":-100.0,"humity":-100.0}}

   "sensor1":{"temperature":77.9,"humity":-100.0},"sensor2":{"temperature":-100.0,"humity":-100.0}

   -100: data invalid
   The display unit of temperature is set in the webpage

6. Set ON/OFF of multi digital output channel
   send: {{"output1":{"value":true}},{"output2":{"value":false}}} means: turn ON output1 and turn OFF output2

   feedback all STATE
   {{"output1":{"value":true}},{"output2":{"value":false}},·····{"input1":{"value":true}},{"input2":{"value":true}},·····{"adc1":{"value":2610}},·····{"dac1":{"value":10}},·····}

7. Send one IR signal have learned
   send: {"run_ir":{"value":1}} means: send IR signal that id=1

   feedback: {"run_ir1":{"value":success}}

8. Send one RF signal have learned
   send: {"run_rf":{"value":1}} means: send RF signal that id=1

   feedback: {"run_rf1":{"value":success}}

9. Set beep output

   send: {"set_beep":{"value":1}} means: beep ON
   send: {"set_beep":{"value":0}} means: beep OFF

   feedback: {" set_beep":{"value":success}}