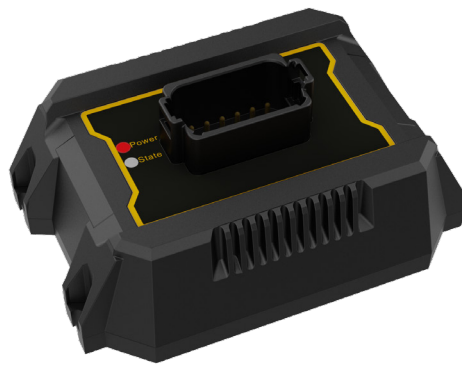


# Key transmitter and receiver instruction manual



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1 Technical Parameter

1.1 Key transmitter:

|                         |                                                           |                          |
|-------------------------|-----------------------------------------------------------|--------------------------|
| Key                     | Key                                                       | 6 key                    |
|                         | Operating life                                            | 1000000                  |
| Environmental parameter | Working temperature                                       | -30~+85℃                 |
|                         | Storage temperature                                       | -40~+85℃                 |
| Electrical parameters   | Radio frequency communication                             | 315MHZ                   |
|                         | Power supply mode                                         | CR2032 Button Battery 3V |
| EMC                     | Electric load                                             | GB/T 28046.2             |
|                         | Voltage transient or gradual change                       | IGB/T 28046.2            |
|                         | Electrical Transient Conductive Immunity along Power Line | GB/T 21437.2             |
|                         | Electrical Transient Immunity of Non-Power Line Coupling  | GB/T 21437.3             |
|                         | ESDR                                                      | GB/T 19951               |
|                         | Surge immunity                                            | GB/T 17626.5             |
|                         | Radiation emission                                        | GB/T18655-2018 6.4       |

1.2 Receiver :

|                         |                                                           |                                                    |
|-------------------------|-----------------------------------------------------------|----------------------------------------------------|
| Software                | Processor                                                 | S9S12 series                                       |
|                         | Maximum operating frequency                               | 25MHz                                              |
|                         | CAN bus node                                              | 0X8D                                               |
|                         | Programming language                                      | C language                                         |
| Environmental parameter | Working temperature                                       | -30℃ ~ +70℃                                        |
|                         | Storage temperature                                       | -40℃ ~ +85℃                                        |
|                         | IP grade                                                  | IP54                                               |
| Electrical parameters   | Service voltage                                           | 18V~32V                                            |
| EMC                     | Electric load                                             | GB/T 28046.2                                       |
|                         | Voltage transient                                         | IGB/T 28046.2                                      |
|                         | Electrical Transient Conductive Immunity along Power Line | GB/T 21437.2                                       |
|                         | Electrical Transient Immunity of Non-Power Line Coupling  | GB/T 21437.3                                       |
|                         | ESDR                                                      | GB/T 19951                                         |
|                         | Surge immunity                                            | GB/T 17626.5                                       |
|                         | Radiation emission                                        | GB/T18655-2018 6.4                                 |
| Pilot lamp              | Number                                                    | 2 individual                                       |
|                         | Pigment                                                   | Red (one indicates red, one indicates key pairing) |
| Communication mode      | 1.CANbus<br>2. Radio frequency 315MHz                     |                                                    |

| Pin number | Definition | Function                        | Remarks                          |
|------------|------------|---------------------------------|----------------------------------|
| 1          | 24VDC      |                                 |                                  |
| 2          | GND        |                                 |                                  |
| 3          | DIH        |                                 | DIL/DIH hardware is configurable |
| 4          | DIH        |                                 | DIL/DIH hardware is configurable |
| 5          | DIH        |                                 | DIL/DIH hardware is configurable |
| 6          | CAN_H      |                                 |                                  |
| 7          | CAN_L      |                                 |                                  |
| 8          | DOH_1      | Shutting                        | 8A                               |
| 9          | DOH_2      | Unblanking                      | 8A                               |
| 10         | DOH_3      | Power supply relay control port | 8A                               |
| 11         | DOH_4      | Buzzer                          | 4A                               |
| 12         | DOH_5      | Engine starting relay           | 4A                               |

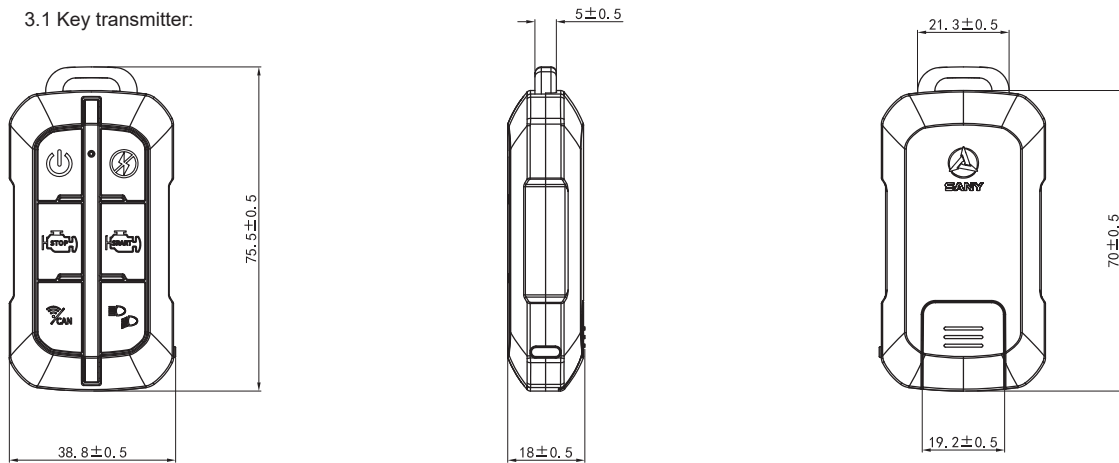
inputoutput port :

5 2-channel DO (current <3A), 3-channel DO  
(current <9A), 3-channel DIL/DIH (hardware  
configurable)

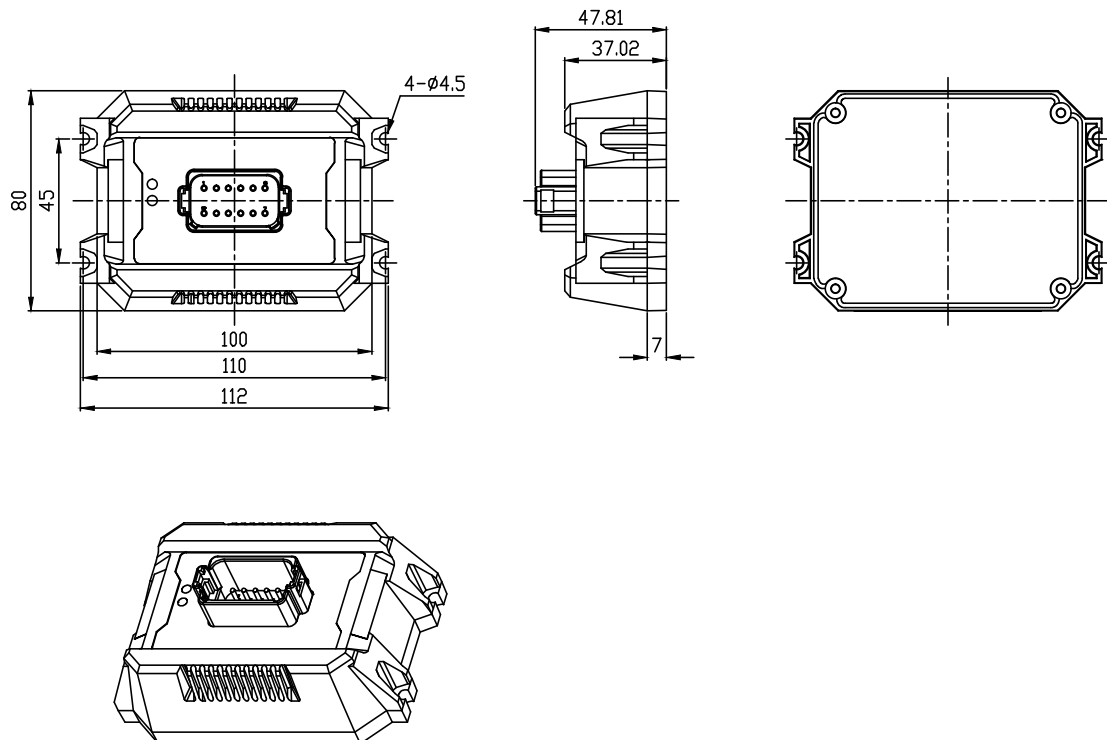
1 Road CAN

3 Product Size Diagram

3.1 Key transmitter:



3.2 receiver :



#### 1、 Pairing method:

First power on the receiver, then send the pairing message via PCAN. When the message is received, the indicator light will flash slowly. Press any key on the transmitter to keep the indicator light on. Release the key without further action. Wait for the indicator light to flash again to confirm successful pairing. Pairing message

Can message ID: 005 standard frame

Can message data: 00 00 00 5345 54 52 46.

#### 2、 matters need attention :

- a. Do not let the key transmitter come into contact with water to prevent switch failure.
- b. Regularly inspect the transmitter housing and buttons, and replace any damaged components immediately.
- c. The key transmitter contains a battery. Do not damage the battery itself to avoid potential hazards.
- d. If the key transmitter and receiver fail to communicate, contact technical support immediately and do not operate it privately.

# FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## RF Exposure Information

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition, compliance with exposure requirements.

This equipment should be installed and operated with minimum distance 0 mm between the radiator & your body.