

Proximity/Smart Reader Operation Manual

Model: 6609E/M



KEYKING GROUP LIMITED

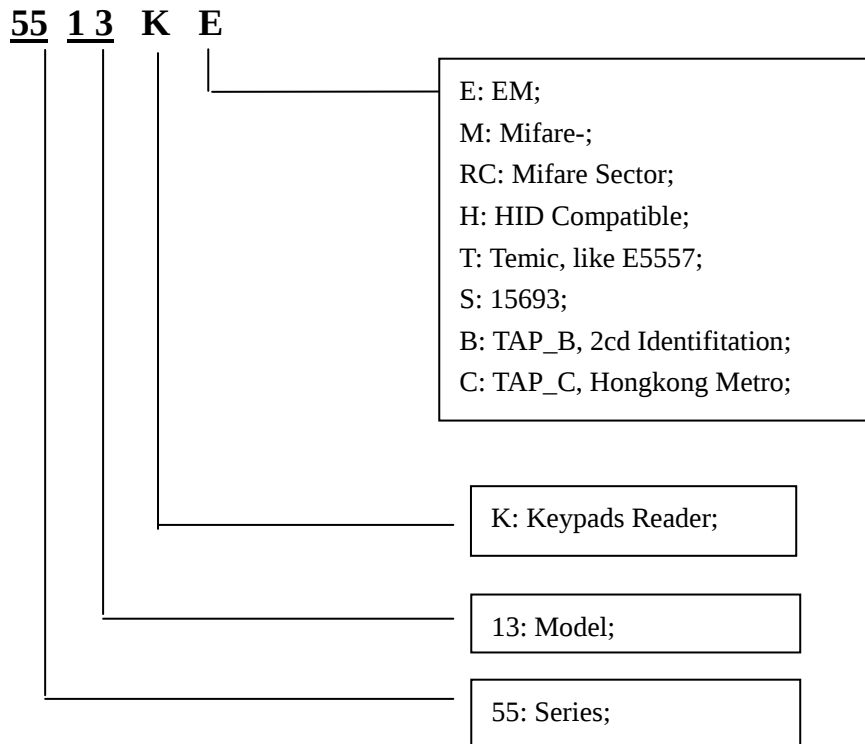
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Chapter 1: Summarize

1.1 Summarize

Reader Model Define:



Support Card Type:

E: EM; For example: EM4100, TK4100 series.

M: Mifare-; For example: Philips S50, S70 series smart cards.

RC: Mifare Sector; For example: Philips S50, S70 series smart cards.

H: HID Compatible; For example: 1326, 1386 and tags.

T: Temic, like E5557;

S: 15693; For example: Ti series cards.

B: TAP_B, For example: Chinese 2cd Identifitation;

C: TAP_C, Hongkong Metro;

1.2 System Characteristics

Technical Parameters:

- Power: 12 VDC $\pm$ 10%, 200mA
- Dimensions: 86mm (H) x 86mm (W) x 15mm (D)
- Weight: 300 grams
- Operating Frequency:

125KHZ:

- E: EM;
- H: HID;
- T: Temic;

13.56MHZ:

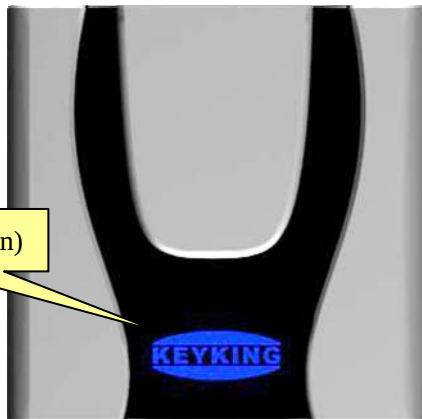
- B: TAP_B;
- C: TAP_C;
- M: Mifare;
- RC: Mifare Sector;
- S: 15693;

- Read Range: 5 to 15 cm
- LED indicators: Dual LEDs, Blue&Green.

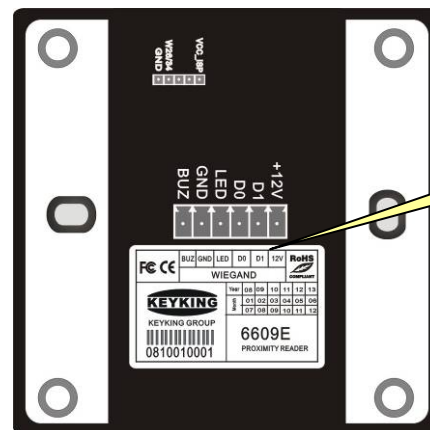


Chapter 2: 6609 Reader Instructions:

2.1 6609 surface:



LED(Blue&Green)

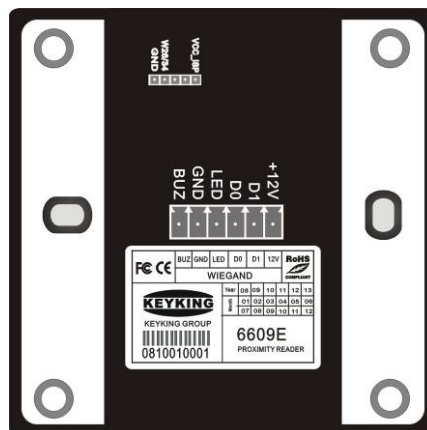


Diagram

LED:

- Blue LED for power indication.
- Green LED for card reading indication.

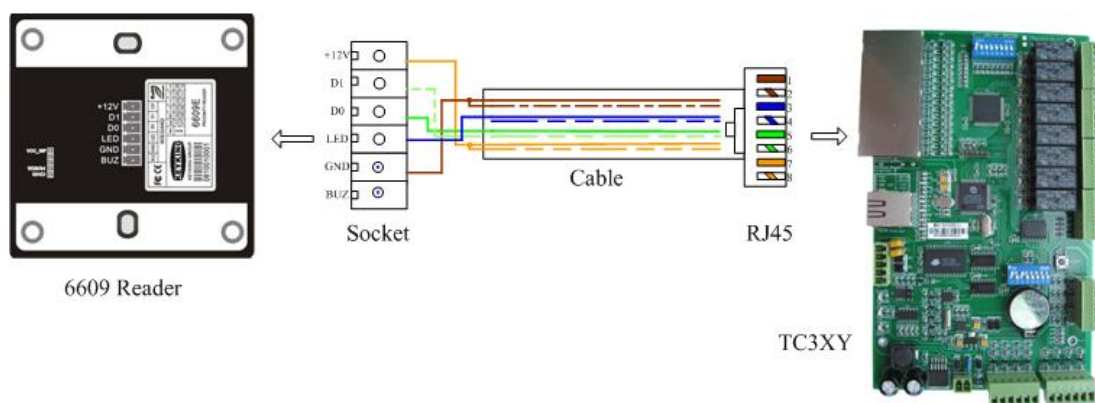
2.2 6609 Wiring:



Definition of wiring:

No.	Mark	Definition	Note
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1	+12V	Power Supply	
2	D1	Data 1	
3	D0	Data 0	
4	LED	LED control, when it was shorted with GND, then LED will change the color.	
5	GND	GND, Ground Wire	
6	BUZ	Buzzer control, when it was shorted with GND, then Buzzer will beep.	



2.3 Mode setting:

Jumper Setting (JP1, valid for 6609E, 6609M only):

- **None:** the reader will output Wiegand 26 bits format.
- **Short:** the reader will output Wiegand 34 bits format.

2.3.1 Wiegand 26 Bits

Please keep nothing on the JP1, then the reader will output Wiegand 26 bits format.

2.3.2 Wiegand 34 Bits

Please keep a Jumper on the JP1 to short the 2 Pins, then the reader will output Wiegand 34 bits format.

Chapter 4: Installation

Installation Procedure:

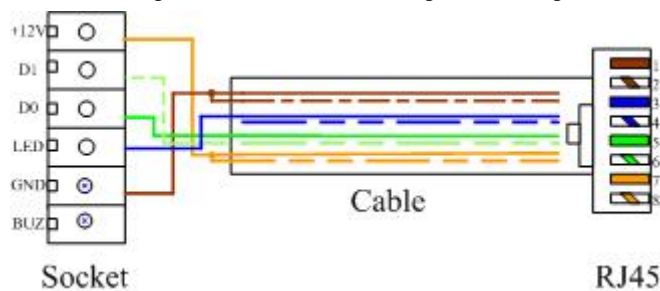
4.1 Install on the wall (Based on Internal Back Box)

1. **Install a Reader Back Box inside wall:** Determine an appropriate **mounting position** for the reader. Install a single or double standard electrical box (86*86mm) inside wall. If mounting to a metal surface, drill two 7/64 (.109) inch holes and use the enclosed self tapping screws for mounting.

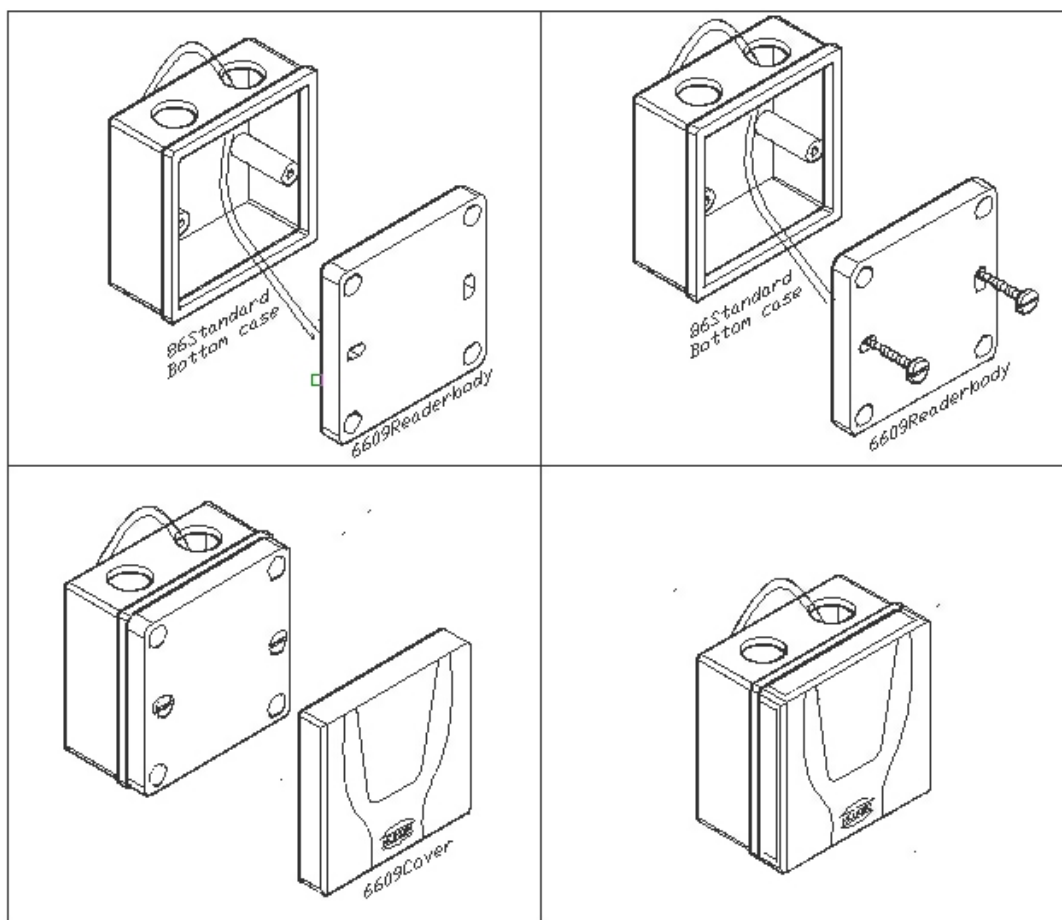


a). Reader Back Box (Standard Electronic Box, single) b). Reader Back Box (Double)

2. **Route:** Route the interface cable from the reader to the Host.
3. **Wiring:** Install all wires to the green connector according below image.



4. **Plug the Green Connector:** Plug the green connector to the reader socket.
5. **Set the JUMPER (Output mode):** select W26 or W34 bits output of reader.
6. **Mount the reader body:** Mount the reader body to the Electronic Box (Reader Back Box) using the two screws. Two #6-32 x 1 inch screws are provided for mounting to a gang box or metal surface.
7. **Put the top cover** and face plate.

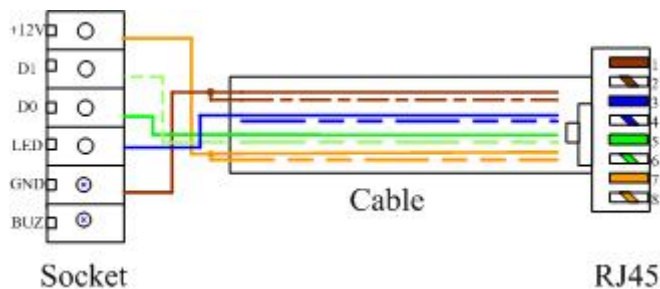


4.2 Install on the wall (Based on Surface Back Box)

1. **Install a Reader Back Box on wall:** Determine an appropriate **mounting position** for the reader.
Install a single or double standard electrical box (86*86mm) on the wall using 4 screws.



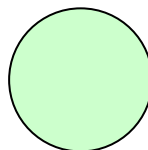
- a). Reader Back Box (Surface, Standard Electronic Box, single)
2. **Route:** Route the interface cable from the reader to the Host.
 3. **Wiring:** Install all wires to the green connector according below image.



4. **Plug the Green Connector:** Plug the green connector to the reader socket.
5. **Set the JUMPER (Output mode):** select W26 or W34 bits output of reader.
6. **Mount the reader body:** Mount the reader body to the Electronic Box (Reader Back Box) using the two screws which is $\phi 4$, 30mm length.
7. **Put the top cover** and face plate.

4.3 Install on the wall (Surface, Without Back Box)

1. **Drill a $\phi 30$ hole on the wall:** Drill a $\phi 30$ hole using a professional drill.

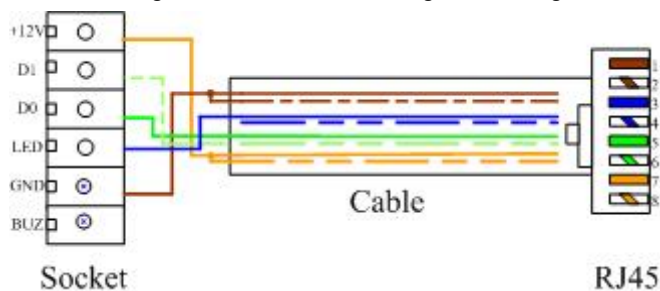


a). $\phi 30$ drill, professional tool

b). A hole on the wall, $\phi 30$

Note: This drill can drill the metal wall and wood wall, can not drill stone or cement wall.

2. **Route:** Route the interface cable from the reader to the Host.
3. **Wiring:** Install all wires to the green connector according below image.



4. **Plug the Green Connector:** Plug the green connector to the reader socket.
5. **Set the JUMPER (Output mode):** select W26 or W34 bits output of reader.
6. **Mount the reader body:** Mount the reader body to the Electronic Box (Reader Back Box) using the two screws which is $\phi 4$, 30mm length.
7. **Put the top cover** and face plate.

4.4 Notes

Cable Notes:

- 1) **Cable type:** Category 5 with shield.
- 2) **Same Ground:** the reader and Host must have the same ground. If you use different power supply for reader and controller, please connect the GND of reader to GND of controller.
- 3) **Max Cable Length:** The MAX LENGTH is up to 60 meters from controller to reader.
- 4) **Shield:** Shield wire should be connected to GND of controller.

Other Notes:

- 1) **Metal disturbing:** the reader can not be installed on the metal wall, otherwise it will affect the read range. Sometimes the reader can not read cards. So you should avoid the metal when you install the reader.