



Proximity Card Reader

User Manual

1 Product Introduction

Reader1 adopts high-strength PC plastic appearance. EM & HID or Mifare card reading are supported. Built-in high integration micro-controller and simple circuit are applied. Safety and reliability are assured. Reader1 is cost effective and durable, suitable for office, community, etc.

2 Performance Parameter

Body material: PC plastic

Card type: EM & HID Cards(125Khz) or Mifare Card (include CPU & NFC tag,13.56Mhz,ISO14443A)

Reading range: $\leq 5\text{cm}$

Output format: Wiegand 26 to 37bit Default 26bit, Customize for other format)

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Input voltage: DC12V \pm 10%

Quiescent current: $\leq 25\text{mA}$ (EM&HID) $\leq 18\text{mA}$ (Mifare)

Operating temperature: -20 to 50 $^{\circ}\text{C}$

Operating humidity: 0 to 95%

Dimension: 150 \times 30 \times 20mm

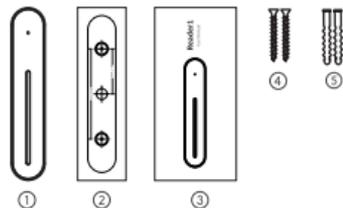
Ingress Protection: IP65

3 Wires and instruction

Serial No.	Color	Definition	Instruction
①	Red	+12V	Positive pole
②	Black	GND	Negative pole
③	Green	D0	Wiegand output
④	White	D1	Wiegand output
⑤	Brown	LED	Green LED control input
⑥	Yellow	BZ	Buzzer control input

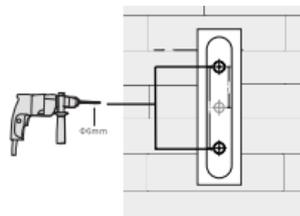
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4 Packing list



- ① Card Reader *1
- ② Punch sticker *1
- ③ User Manual *1
- ④ Self tapping screw KA4*25mm*2
- ⑤ Expansion rubber bung $\phi 6 \times 24\text{mm} \times 2$

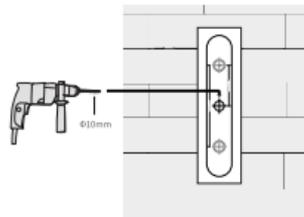
5 Installation



5.1 Drill installation holes

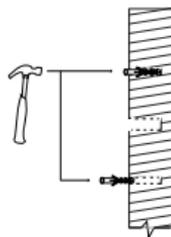
Put the punch sticker on the wall. Drill 2 $\phi 6\text{mm}$ installation holes with percussion drill with the depth of 26mm.

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5.2 Drill the hole for outlet

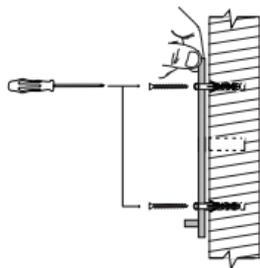
Drill $\phi 10\text{mm}$ hole for outlet with the depth according to the practical situation of electric lines.



5.3 Click expansion rubbers

Click 2 accessory expansion rubbers into the installation holes.

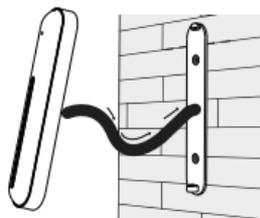
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5.4 Fix the back shell

Fix the back shell on the wall with 2 KA4*25 self-tapping screws.

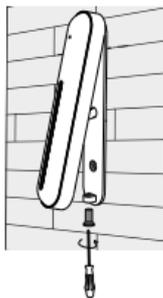
(The percussion drill, hammer and screwdriver in figure 2, 3 and 4 should be self-prepared)



5.5 Connect cables

Put the outlet cables through the $\phi 10\text{mm}$ hole and connect the needed cables. (pack the useless cables with the insulating tape)

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5.6 Install the front shell

Put the front shell on the back shell. Install the $\phi 3 \times 8$ screw from the bottom of the device and tighten it by screwdriver.

6 Functional description

6.1 When swiping the card, the indicator light turns green and the reader has a steady beep. Then indicator light turns red, wiegand signal is output at the same time.

6.2 When the LED line is lowered, the indicator light turns green; when the LED line is set high, the indicator light turns red.

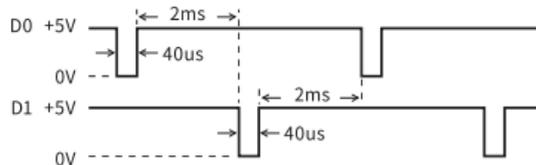
6.3 When the BZ line is lowered, the buzzer rings. When the BZ line is lowered for more than 30 seconds or set higher, the buzzer will return to normal.

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7 Wiegand data description

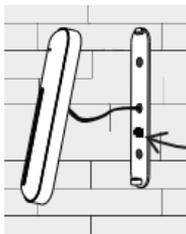
7.1 The Wiegand format of the card reader can be customized according to the customer's needs. The format range is: 26 to 37bit Wiegand. The EM card and Mifare card output 26 to 37bit Wiegand format according to the set format. HID card has nothing to do with factory Settings, and automatically outputs 26 to 37bit Wiegand in card format.

7.2 The green line D0 is Wiegand signal data line 0, and the white line D1 is data line 1. Usually high level, low level represents the output data. Low level pulse width is 40 μ S, The pulse width interval is 2mS. The following figure illustrates the waveform of data "0101".



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8 E-instruction



Please unpack the shell and scan the QR code on the back shell to get an E-instruction if you lost the physical one



E-instruction

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