Card Reader User's Manual

V1.0.1

Table of Contents

Important Safeguards

Please read the following safeguards and warnings carefully before using the product in order to avoid damages and losses.

Note:

- Do not expose the device to lampblack, steam or dust. Otherwise it may cause fire or electric shock.
- Do not install the device at position exposed to sunlight or in high temperature. Temperature rise in device may cause fire.
- Do not expose the device to humid environment. Otherwise it may cause fire.
- The device must be installed on solid and flat surface in order to guarantee safety under load and earthquake. Otherwise, it may cause device to fall off or turnover.
- Do not place the device on carpet or quilt.
- Do not place any object on the device.
- Do not disassemble the device without professional instruction.

Special Announcement

- This manual is for reference only.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.

1 Overview

Card Reader is a complement to video monitoring, visual talk products. It has simple appearance, powerful function, and is suitable for advanced commercial building, company property and smart community.

Card reader has abundant functions, including:

- Support Mifare card, within distance of 6cm~8cm, response time <0.1s.
- Support Wiegand Protocol and RS485 protocol. RS485 baud rate is 9600bps.
- Support unlock function, and it can control door lock directly.
- Support built-in watch dog.
- All connection ports have over load protection.
- IP67.
- It can read 32-bit Mifare SN, and use 64-bit multi-bit key to verify. Via safe algorithm, it has advanced key management system which lowers risk from data lost or reproduction.

2 Device Structure

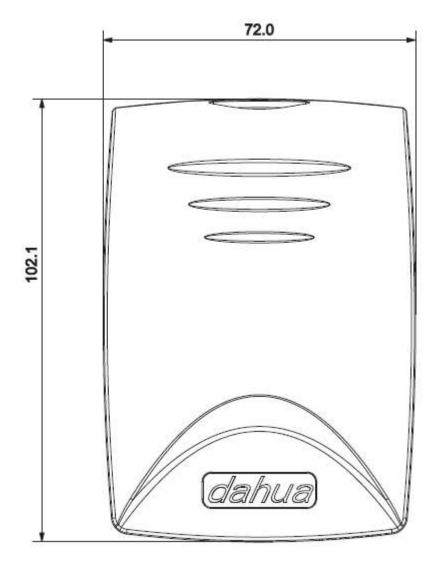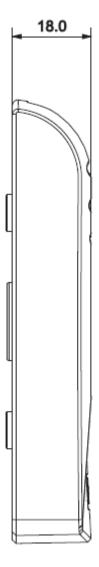The device's structure and dimension are shown in Figure 2- 1 and Figure 2- 2.

Figure 2- 1

18.0

Figure 2- 2

3 Device Installation

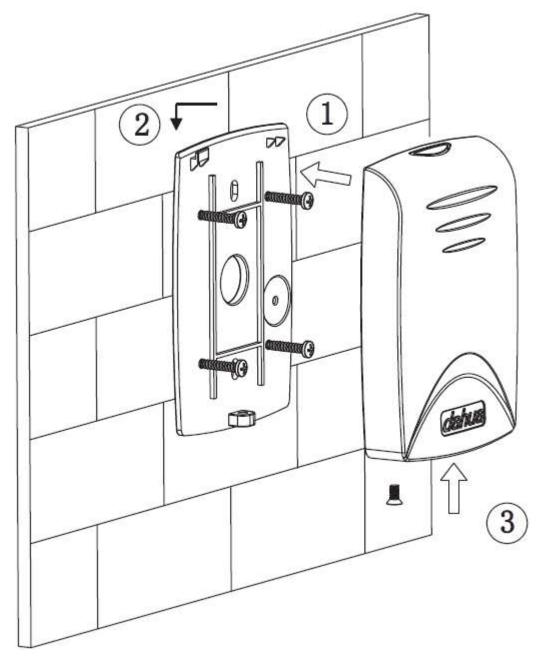Card Reader 's installation illustration is in Figure 3- 1.

Figure 3- 1

Step 1. Fix rear cover's self-tapping screw on wall.
Step 2. Hang front cover on hook on rear cover.
Step 3. Pull recessed screw throught hole at bottom, and lock front cover on rear cover.

4 System Structure

4.1 Wiring

Wiring of the device includes two groups of wires, as 8-pin and 3-pin.

8-pin wires shall be refer to Chart 4- 1.

No.	Color	Port	Note	Protocol
1	Red	12V	DC 12V	-
2	Black	GND	GND	-
3	Blue	ALARM_OUT	Wiegand Protocol vandal proof alarm output	Wiegand Protocol
4	White	D1	Wiegand signal 1	
5	Green	D0	Wiegand signal 0	
6	Brown	LED/BELL_CTRL	Wiegand swipe card signal	
7	Yellow	RS485-	-	RS485 protocol
8	Purple	RS485+	-	

Chart 4- 1

3-pin wires shall be refer to Chart 4- 2.

No.	Color	Port	Note
1	Blue	NC	Power off to unlock
2	Yellow	NO	Power off to lock
3	Black	COM	12V power input

Chart 4- 2

4.2 System Organization

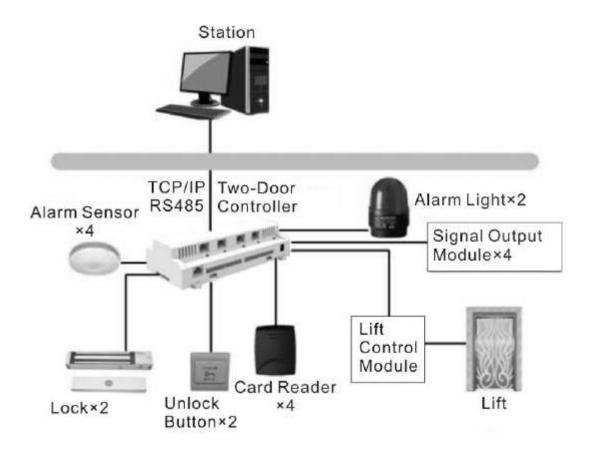Access control card reader and controller, integration device form a system as in Figure 4-1.

Figure 4- 1

Note:
- **This manual is for reference only. Slight difference may be found in user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website or contact your local service engineer for more information.**