# RFID CARD READER USER MANUAL HBK-D01

## 1.Warm Tips

- 1) Confirm the voltage (12VDC) and differentiate positive anode and cathode of the power supply.
- 2) About the wiring between the reader and the controller, the wire should be 22 AWG at least and the length should not exceed 100 meters.
- 3 ) When external power is used, suggest to use same power GND with controller panel. It is recommended to use multi-strand twisted pair cable to connect card reader to access controller.
- 4 ) There is no need to wire the LED and BEEP cables if you do not need the card reader to prompt an authorized card through sound and light.

#### 2.Introduction

The RFID card reader can't work-alone and it needs to work with Wiegand protocol access controller, such as access control panel, fingerprint device or master controller. It uses ST MCU to ensure stable performance, and low-power circuit makes the service life longer.

#### 3.Features

The maximum reading distance is 6cm.

Waterproof, conforms to IP66.

It is useful for safety door system, easy to connect and use.

Ultra-low power consumption, the standby current is less than 50mA.

Support wiegand 26bits or wiegand 34bits output format.

Fast response speed, the door opening time is less than 0.3s.

Widely used in factories, houses, residential quarters, offices, mechanical and electrical control equipment and so on.

# 4. Specification

Working Voltage	12VDC	Static Current	≤50mA	
Card Type	EM-ID	Frequency	125KHz	
Working Temperature	-40°C~60°C	Working Humidity	10%-90%RH	
Panel Material	PC	Waterproof Rating	IP66	
Shell Material	PC + ABS	Shell Size	90x45x19mm	
Outt Fammat (Calastalala)	Wiegand 26bits	Communication	-100M	
Output Format (Selectable)	Wiegand 34bits	Distance	<100M	
Status Indication	Bi-color LED + Buzzer	Lead Cable Length	25cm	
LED Status Indication	Red means standby, Green means activated/triggered			

# 5. Wiring Definiti

Color	Functionality	Description
Red	+12V	+12V power input
Black	GND	GND
Green	D0	Wiegand output D0
White	D1	Wiegand output D1
Blue	LED	LED signal feedback
Yellow	BEEP	Buzzer signal feedback
Gray	Wiegand 34bits	Optional

#### Note:

If the output format of the card reader you want is Wiegand 34bits, please connect the Gray wire and the Black wire together.

#### 6.Installation

Remove the back cover from the reader

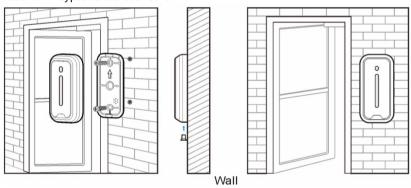
Drill 2 holes on the wall for the self-tapping screws and 1 hole for the cable

Put the supplied rubber plugs into the 2 holes

Fix the back cover firmly on the wall with 2 self-tapping screws

Thread the cable through the cable hole

Attach the keypad to the back cover

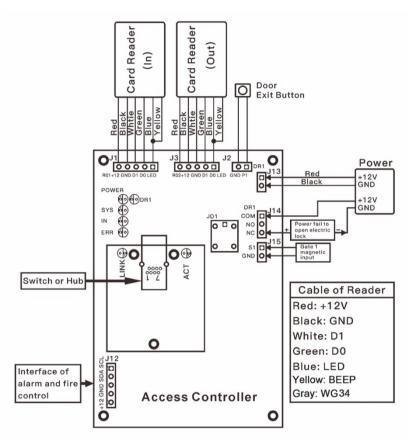


# 7. Sound and Light Indication

Operation Status	LED Indicator	Buzzer
Standby	Red	
Read authorized card	Green	A short beep
Read un-authorized card	Flash red 3 times	3 short beeps

Remarks: The card reader will prompt sound and light indication only when the LED and BEEP cables are connected to the access controller.

## 8. Wiring Diagram



# 9.Packing List

Name	Quantity	Remarks
Card Reader	1	
User Manual	1	
Plastic Anchors	2	Used for fixing
Self-Tapping Screw	2	#7x1", used for fixing

## **FCC Statement**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.