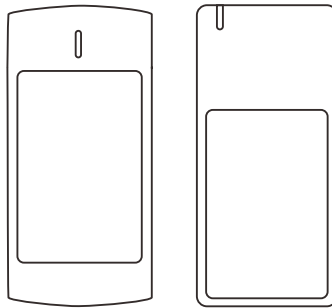# Metal Wiegand Reader

(IK10)

User Manual

1. Introduction

The devices are advanced access control readers with 125KHz &13.56MHz RFID technology. It's an ideal choice for high-security applications. They are intelligently designed with IK10 certification which brings better protection.

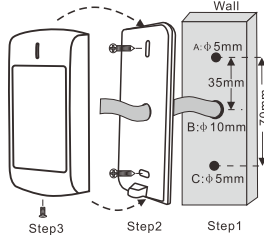The readers are very powerful, can read many types of cards as below:

Frequency	Card Type
125KHz	HID & EM cards
13.56MHz	NXP Mifare, Mifare Plus, DesFire, Mifare Pro, Mifare UltraLight, Mifare Class 4K and NFC cards

2. Specifications

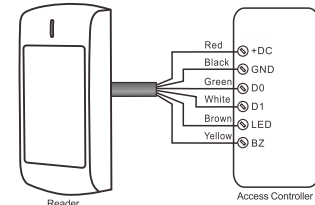|	
Operation Voltage	9~24V DC
Standby Current	≤50mA
Frequency	125KHz & 13.56MHz
Card Type	EM & HID & MIFARE
Read Range	2~6 cm
Output Format	Wiegand 26~58 Bits
Operating Temperature	-40°C ~ +60°C (-40°F ~ 140°F)
Operating Humidity	0% ~ 98% RH
Color	Silver
Index of Protection	IK10 and IP66
Dimension	L105 x W49 x H21 (mm)
Net Weight	240g
Shipping Weight	270g

3. Installation

- Drill 2 holes (A,C) on the wall for the screws and one hole for the cable
- Knock the rubber bungs to the holes (A,C)
- Fix the back cover on the wall with 2 screws
- Thread the cable though the cable hole (B)
- Attach the unit to the back cover

4. Wiring

Color	Function	Notes
Red	Power	9~24V DC
Black	GND	Ground
Green	D0	Data 0
White	D1	Data 1
Brown	LED	Green LED Light Control
Yellow	Buzzer	Buzzer Control

5. Connection

6. Programming

The readers are equipped with an IR remote control, users can use it to program the Wiegand output format if needed.

6.1 Enter and Exit Program Mode

Programming Step	Keystroke Combination
1. Enter Program Mode	*(Master Code)# (Factory default is 123456)
2. Exit Program Mode	*

Note: Master Code can not be changed.

6.2 Set Wiegand Format for EM Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	*(Master Code)#
2. Set Wiegand Format	1 (26~44) # (Factory default is 26bits)
3. Exit Program Mode	*

6.3 Set Wiegand Format for HID Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	*(Master Code)#
2. Set Wiegand Format OR	2 (26~37) #
2. Recognize Card Format Automatically	2 0 # (Factory default)
3. Exit Program Mode	*

6.4 Set Wiegand Format for MIFARE Cards

Programming Step	Keystroke Combination
1. Enter Program Mode	*(Master Code)#
2. Set Wiegand Format OR	3 (26~44, 56, 58) # (Factory default is Wiegand 34 bits)
2. Recognize Card Format Automatically (4byte card output WG34, 7 byte card output WG58)	3 0 # (Apply for WG34 and WG58 only)
3. Exit Program Mode	*

Note: WG56 is without parity bits, WG58 is with parity bits.

6.5 Reset to Factory Default

Programming Step	Keystroke Combination
1. Enter Program Mode	*(Master Code)#
2. Reset to Factory Default	5 0 #
3. Exit Program Mode	*

7. Function Table Sheet

Read Card	The LED light will turn into Green, and the buzzer sounds a beep, at the meantime, the reader outputs the Wiegand signal
External LED Control	When the input voltage for LED is low, the LED will turn into Green
External Buzzer Control	When the input voltage for Buzzer is low, the buzzer will sound
Wiegand Data Output	The Wiegand output is 26~58 bits

8. Packing List

Name	Quantity
Reader	1
Manual	1
IR Remote Control	1
Screw Driver	1
Wall Fixing Plugs	2
Self Tapping Screws	2