

Access Controller / Reader

WiFi Version

INTRODUCTION

1

STANDALONE MODE

5

WIEGAND READER MODE

14

INSTALLATION

3

CONTROLLER MODE

12

ADVANCED APPLICATION

15

CONTENTS

INTRODUCTION

1

STANDALONE MODE

5

WIEGAND READER MODE

14

INSTALLATION

3

CONTROLLER MODE

12

ADVANCED APPLICATION

15

The device is a single door multifunction standalone access controller or a Wiegand output reader. It uses Atmel MCU assuring stable performance. The operation is very user-friendly, and low-power circuit makes it long service life.

The device supports 1,000 users (990 common users + 10 visitor users), all user data can be transferred from one to another. It supports multi-access modes in card access, PIN access, or multi cards/PINs access. It has extra features including block enrollment, Wiegand input & output interface, etc.

Features

- > WiFi 2.4G network
- > Touch key
- > Waterproof, conforms to IP68
- > One relay, 1,000 users (990 common + 10 visitor)
- > PIN length: 4-6 digits
- > EM card, EM+ Mifare cards optional
- > EM card: Wiegand 26~44 bits input & output (Factory default: Wiegand 26bits for EM card, Wiegand 34bits for Mifare card)
- > Mifare card: Wiegand 26~44 bits, 58bits, 58bits input & output
- > Can be used as Wiegand reader with LED & buzzer output
- > Card block enrollment
- > Tricolor LED status display
- > Pulse mode, Toggle mode
- > User data can be transferred
- > Bulk+ light dependent resistor (LDR) for anti tamper
- > Backlit keypad, can set automatic OFF after 20 seconds

Specifications

User Capacity	1000
Common User	990
Visitor User	10
Operating Voltage	12~18V DC
Working Current	≤150mA
Idle Current	≤60mA

Proximity Card Reader

Radio Technology: 125KHz / 125KHz / 13.56MHz

Read Range: 2~4cm

PIN Length: 4~6 digits

Wiring Connections

Relay Output: Relay Output, Light Bulb, Wiegand Input, Wiegand Output

One (NO, NC, Common)

Adjustable Relay Output Time: 0~99.9s (seconds default)

Look Output Level: 2 Amp Maximum

Wiegand Interface

EM card: Wiegand 26~44 bits Input & output

Mifare card: Wiegand 26~44bits

58bits, 58bits Input & output (Factory default: Wiegand 26bits for EM card, Wiegand 34bits for Mifare card)

PIN Output: 4 bits, 5 bits (ASCII), 10 digits Virtual Number (Factory default: 4 bits)

Environment

Operating Temperature: -40°C ~ 60°C (°40°F ~ 140°F)

Operating Humidity: 10% ~ 90% RH

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

EM / EM + Mifare (Optional)

125KHz / 125KHz / 13.56MHz

2~4cm

4~6 digits

Relay Output, Light Bulb, Wiegand Input, Wiegand Output

One (NO, NC, Common)

Adjustable Relay Output Time: 0~99.9s (seconds default)

2 Amp Maximum

Wiegand Interface

EM card: Wiegand 26~44 bits Input & output

Mifare card: Wiegand 26~44bits

58bits, 58bits Input & output (Factory default: Wiegand 26bits for EM card, Wiegand 34bits for Mifare card)

PIN Output: 4 bits, 5 bits (ASCII), 10 digits Virtual Number (Factory default: 4 bits)

Environment

Operating Temperature: -40°C ~ 60°C (°40°F ~ 140°F)

Operating Humidity: 10% ~ 90% RH

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

INSTALLATION

Remove the back cover from the unit

Drill 2 holes(A,C) on the wall for the screws and one hole for the cable

Knock the supplied rubber bumps to the screw holes(A,C)

Fix the back cover firmly on the wall with 4 flat head screws

Thread the cable through the cable hole(B)

Attach the unit to the back cover

Wiring

Colour	Function	Notes
Red	+12V	12-18V DC Power Input
Black	GND	Negative Pole of DC Power Input
Blue	NO	Normally Open Relay Output
Purple	COM	Common Connection for Relay Output
Orange	NC	Normally Closed Relay Output
Yellow	OPEN	Request to Exit (REX) Input
White	DI	Wiegand Output Input Data 1
Green	D0	Wiegand Output Input Data 0
Grey	Doorbell A	Contact for Doorbell
Brown	Doorbell B	Contact for Doorbell

Physical

Colour: Black

Dimensions: 116 x 72 x 224 (mm)

Unit Weight: 160g

Shipping Weight: 165g

Carton Inventory

1 Access Controller

10 Screws

4 Flat Head Screws

1 Cable

1 Screw Driver

User Manual

- 01 -

- 02 -

- 03 -

- 04 -

- 05 -

Simplified Instruction <table> <tr> <th>Function Description</th><th>Operation</th></tr> <tr> <td>Enter the Programming Mode</td><td>• Master Code - # then you can do the programming (123456 is the factory default master code)</td></tr> <tr> <td>Change the Master Code</td><td>0- New Code - # - Repeat the New Code - # (code 6 digits)</td></tr> <tr> <td>Add Card User</td><td>1- Read Card - # (can add cards continuously)</td></tr> <tr> <td>Add PIN User</td><td>1- PIN - # (The PIN is any 4-6 digits)</td></tr> <tr> <td>Delete User</td><td>2- Read Card - # 2- PIN - #</td></tr> <tr> <td>Exit from the Programming Mode</td><td>*</td></tr> <tr> <td>How to release the door</td><td>Read Card Card User PIN User Input PIN #</td></tr> </table>	Function Description	Operation	Enter the Programming Mode	• Master Code - # then you can do the programming (123456 is the factory default master code)	Change the Master Code	0- New Code - # - Repeat the New Code - # (code 6 digits)	Add Card User	1- Read Card - # (can add cards continuously)	Add PIN User	1- PIN - # (The PIN is any 4-6 digits)	Delete User	2- Read Card - # 2- PIN - #	Exit from the Programming Mode	*	How to release the door	Read Card Card User PIN User Input PIN #	Programming Step <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Add Card</td><td>1 (User ID) # (0-9) # (Read Card) / (Input 8/10/17 Digits Card Number) #</td></tr> <tr> <td>OR</td><td>1 (User ID) # (0-9) # (PIN) # (0-9 means times of usage, 0-10 times)</td></tr> <tr> <td>2. Add PIN</td><td>•</td></tr> <tr> <td>3. Exit</td><td>*</td></tr> </table> Delete Users <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Delete User- By Card/ PIN</td><td>2 (Read Card)/ (Input PIN) # The users can be deleted continuously.</td></tr> <tr> <td>OR</td><td>2 (User ID) #</td></tr> <tr> <td>2. Delete User- By Card number</td><td>2 (Input 8/10/17 Digits Card Number) #</td></tr> <tr> <td>OR</td><td>2 (Master Code) #</td></tr> <tr> <td>3. Exit</td><td>*</td></tr> </table> Set Relay Configuration The relay configuration sets the behaviour of the output relay on activation. <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Pulse Mode</td><td>3 (1-99) # (factory default)</td></tr> <tr> <td>OR</td><td>The relay time is 1-99 seconds. (Default is 1 seconds)</td></tr> <tr> <td>2. Toggle Mode</td><td>3 # Sets the relay to ON/OFF. Toggle mode</td></tr> <tr> <td>3. Exit</td><td>*</td></tr> </table>	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Add Card	1 (User ID) # (0-9) # (Read Card) / (Input 8/10/17 Digits Card Number) #	OR	1 (User ID) # (0-9) # (PIN) # (0-9 means times of usage, 0-10 times)	2. Add PIN	•	3. Exit	*	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Delete User- By Card/ PIN	2 (Read Card)/ (Input PIN) # The users can be deleted continuously.	OR	2 (User ID) #	2. Delete User- By Card number	2 (Input 8/10/17 Digits Card Number) #	OR	2 (Master Code) #	3. Exit	*	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Pulse Mode	3 (1-99) # (factory default)	OR	The relay time is 1-99 seconds. (Default is 1 seconds)	2. Toggle Mode	3 # Sets the relay to ON/OFF. Toggle mode	3. Exit	*																		
Function Description	Operation																																																																								
Enter the Programming Mode	• Master Code - # then you can do the programming (123456 is the factory default master code)																																																																								
Change the Master Code	0- New Code - # - Repeat the New Code - # (code 6 digits)																																																																								
Add Card User	1- Read Card - # (can add cards continuously)																																																																								
Add PIN User	1- PIN - # (The PIN is any 4-6 digits)																																																																								
Delete User	2- Read Card - # 2- PIN - #																																																																								
Exit from the Programming Mode	*																																																																								
How to release the door	Read Card Card User PIN User Input PIN #																																																																								
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Add Card	1 (User ID) # (0-9) # (Read Card) / (Input 8/10/17 Digits Card Number) #																																																																								
OR	1 (User ID) # (0-9) # (PIN) # (0-9 means times of usage, 0-10 times)																																																																								
2. Add PIN	•																																																																								
3. Exit	*																																																																								
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Delete User- By Card/ PIN	2 (Read Card)/ (Input PIN) # The users can be deleted continuously.																																																																								
OR	2 (User ID) #																																																																								
2. Delete User- By Card number	2 (Input 8/10/17 Digits Card Number) #																																																																								
OR	2 (Master Code) #																																																																								
3. Exit	*																																																																								
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Pulse Mode	3 (1-99) # (factory default)																																																																								
OR	The relay time is 1-99 seconds. (Default is 1 seconds)																																																																								
2. Toggle Mode	3 # Sets the relay to ON/OFF. Toggle mode																																																																								
3. Exit	*																																																																								
Set Access Mode For Multi user access mode, the interval time of reading can not exceed 5 seconds, or else, the device will exit to standby automatically. <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Card Access</td><td>4 0 #</td></tr> <tr> <td>OR</td><td>4 1 #</td></tr> <tr> <td>2. Card or PIN Access</td><td>4 3 # (factory default)</td></tr> <tr> <td>OR</td><td>4 3 (2-9) # (Only after 2~9 valid users, the door can be opened)</td></tr> <tr> <td>2. Multi User Access</td><td>•</td></tr> <tr> <td>3. Exit</td><td>*</td></tr> </table> Set Strike-out Alarm The strike-out alarm will engage after 10 failed entry attempts (Factory is OFF). It can be set to deny access for 10 minutes after engaging or disengage only after entering a valid card/PIN or Master code / card. <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Strike-Out OFF</td><td>6 0 # (factory default)</td></tr> <tr> <td>OR</td><td>6 1 # Access will be denied for 10 minutes (Exit button is still workable)</td></tr> <tr> <td>2. Strike-Out ON (Alarm)</td><td>6 2 #</td></tr> <tr> <td>Set Alarm Time</td><td>5 (0-3) # (factory default is 1 minute) Enter Master Code or Master Card or valid user card/PIN to silence</td></tr> <tr> <td>3. Exit</td><td>*</td></tr> </table>	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Card Access	4 0 #	OR	4 1 #	2. Card or PIN Access	4 3 # (factory default)	OR	4 3 (2-9) # (Only after 2~9 valid users, the door can be opened)	2. Multi User Access	•	3. Exit	*	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Strike-Out OFF	6 0 # (factory default)	OR	6 1 # Access will be denied for 10 minutes (Exit button is still workable)	2. Strike-Out ON (Alarm)	6 2 #	Set Alarm Time	5 (0-3) # (factory default is 1 minute) Enter Master Code or Master Card or valid user card/PIN to silence	3. Exit	*	Set Audible and Visual Response <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Disable Sound</td><td>7 0 #</td></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. LED Always OFF</td><td>7 2 #</td></tr> <tr> <td>OR</td><td>7 3 # (factory default)</td></tr> <tr> <td>2. LED Always ON</td><td>•</td></tr> <tr> <td>2. Keypad Backlit Always Off</td><td>7 4 #</td></tr> <tr> <td>Keypad Backlit Always ON</td><td>7 5 #</td></tr> <tr> <td>2. Keypad Backlit Automatic OFF</td><td>7 6 # (factory default)</td></tr> <tr> <td>Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)</td><td>•</td></tr> <tr> <td>3. Exit</td><td>*</td></tr> </table> Master Card Usage Users can add the Master Cards by themselves Using Master Card to add and delete users <table> <tr> <th>Programming Step</th><th>Keystroke Combination</th></tr> <tr> <td>1. Enter Program Mode</td><td>• (Master Code) #</td></tr> <tr> <td>2. Input (Master Card)</td><td>• (Master Code) #</td></tr> <tr> <td>Repeat step 2 for additional users</td><td>• (Master Code) #</td></tr> <tr> <td>3. Input (Master Card) again</td><td>• (Master Code) #</td></tr> <tr> <td>1. Input (Master Card Twice within 5s)</td><td>• (Master Code) #</td></tr> <tr> <td>2. Input (Card) or (PIN #)</td><td>• (Master Code) #</td></tr> <tr> <td>Repeat step 2 for additional users</td><td>• (Master Code) #</td></tr> <tr> <td>3. Input (Master Card) again</td><td>• (Master Code) #</td></tr> </table> Users Operation & Reset to Factory Default Open the door: Read valid user card or input valid user PIN # Remove Alarm: Enter Master Code # or Master Card or valid user card / PIN	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Disable Sound	7 0 #	1. Enter Program Mode	• (Master Code) #	2. LED Always OFF	7 2 #	OR	7 3 # (factory default)	2. LED Always ON	•	2. Keypad Backlit Always Off	7 4 #	Keypad Backlit Always ON	7 5 #	2. Keypad Backlit Automatic OFF	7 6 # (factory default)	Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)	•	3. Exit	*	Programming Step	Keystroke Combination	1. Enter Program Mode	• (Master Code) #	2. Input (Master Card)	• (Master Code) #	Repeat step 2 for additional users	• (Master Code) #	3. Input (Master Card) again	• (Master Code) #	1. Input (Master Card Twice within 5s)	• (Master Code) #	2. Input (Card) or (PIN #)	• (Master Code) #	Repeat step 2 for additional users	• (Master Code) #	3. Input (Master Card) again	• (Master Code) #
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Card Access	4 0 #																																																																								
OR	4 1 #																																																																								
2. Card or PIN Access	4 3 # (factory default)																																																																								
OR	4 3 (2-9) # (Only after 2~9 valid users, the door can be opened)																																																																								
2. Multi User Access	•																																																																								
3. Exit	*																																																																								
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Strike-Out OFF	6 0 # (factory default)																																																																								
OR	6 1 # Access will be denied for 10 minutes (Exit button is still workable)																																																																								
2. Strike-Out ON (Alarm)	6 2 #																																																																								
Set Alarm Time	5 (0-3) # (factory default is 1 minute) Enter Master Code or Master Card or valid user card/PIN to silence																																																																								
3. Exit	*																																																																								
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Disable Sound	7 0 #																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. LED Always OFF	7 2 #																																																																								
OR	7 3 # (factory default)																																																																								
2. LED Always ON	•																																																																								
2. Keypad Backlit Always Off	7 4 #																																																																								
Keypad Backlit Always ON	7 5 #																																																																								
2. Keypad Backlit Automatic OFF	7 6 # (factory default)																																																																								
Automatic OFF after 20 seconds, it will go ON by pressing any key (this key isn't taken into consideration)	•																																																																								
3. Exit	*																																																																								
Programming Step	Keystroke Combination																																																																								
1. Enter Program Mode	• (Master Code) #																																																																								
2. Input (Master Card)	• (Master Code) #																																																																								
Repeat step 2 for additional users	• (Master Code) #																																																																								
3. Input (Master Card) again	• (Master Code) #																																																																								
1. Input (Master Card Twice within 5s)	• (Master Code) #																																																																								
2. Input (Card) or (PIN #)	• (Master Code) #																																																																								
Repeat step 2 for additional users	• (Master Code) #																																																																								
3. Input (Master Card) again	• (Master Code) #																																																																								

> To reset to factory default & Add Master Card: Power off, press the Exit button, hold it and power on, there will be two beeps. then release the exit button. When the LED light turns into yellow, then read any 125KHz EM card (13.56MHz Mifare card, the LED will turn into red, means reset to factory default successfully after the card reading, it is the Master Card).

Remarks:

- ① If no Master Card added, must press the Exit button for at least 5 seconds before the LED light turns into yellow, then read any Master Card (invalid).
- ② Reset to factory default, the user's information is still retained.

CONTROLLER MODE

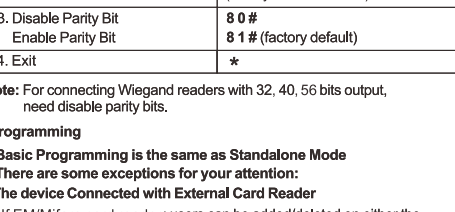
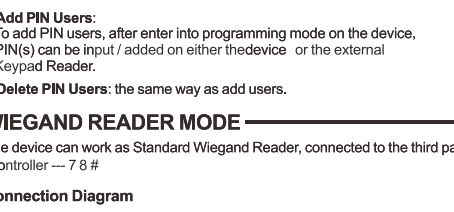
The device can work as Controller, connected with the external Wiegand reader (Factory default mode) — 7 7 #

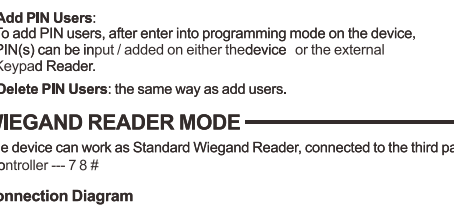
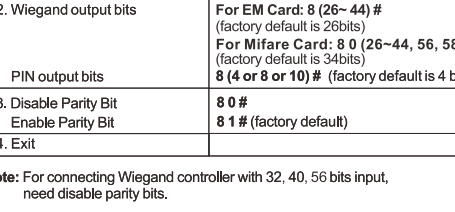
Connection Diagram

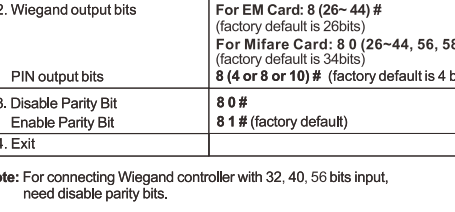
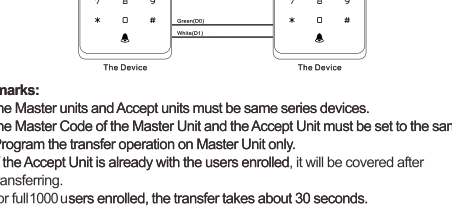
The diagram illustrates the wiring for the device in Controller Mode. A 'Special Power Supply' (DC 12V) is connected to the 'VCC' and 'GND' pins of the device. A 'Wiegand reader' (represented by five red circles) is connected to the 'DI' (Data In) and 'D0' (Data Out) pins of the device. The 'DI' pin is also connected to a 'Key'. The device also has pins for 'NO', 'COM', 'NC', 'OPEN', 'Doorbell A', and 'Doorbell B'.

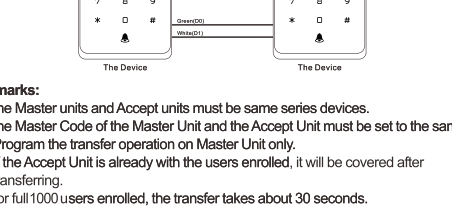
Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the reader might be damaged. (1N4004 is included in the packing)

- 11 -

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram  Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
---	---

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
--	--

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
--	--

STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)	STANDALONE MODE The device can work as Standalone Access Control for single door. (Factory default mode) — 7 7 # Connection Diagram Attention: Install a 1N4004 or equivalent diode is needed when use a common power supply, or the keypad might be damaged. (1N4004 is included in the packing)
--	--

STANDALONE MODE The device can work as
--