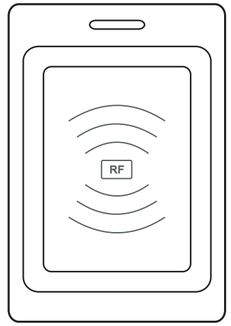
# Metal Waterproof Standalone Access Control/Reader




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## INTRODUCTION

This product is designed only supporting proximity card. It works as standalone access control, supporting up to 10,000 ID card holders. With wiegand 26 bits input & output, it can be also used as controller or external reader.

It is operated by remote control. Also, the Manager Card make it convenient and faster to add/delete users.

It adopts the Atmel MCU, however, the User Data stored in independent chip. Once the device is damaged deliberately, the User Data chip can be disassembled quickly and installed in the same model product.

## Features and Benefits

- > Stand-alone access control or Wiegand reader
- > Metal case, anti-vandal
- > Waterproof, conforms to IP67
- > Operated by remote control and manger cards
- > Large user capacity: 10,000 card holders
- > Independent user data chip, make it safe and convenient
- > Can be install on 86 type box
- > Wiegand 26 bits input & output can also work as controller and reader
- > Can make it in & out by card, high-level of security
- > 125KHz EM card
- > Interlock, anti-passback

## Specifications

| | |
|---|---|
| Power supply | 12-24V DC |
| Standby current | ≤30 mA |
| Working current | ≤60 mA |
| Waterproof | IP67 |
| User capacity | 10,000 card holders |
| Card type | 125KHz EM card |
| Wiegand format | 26 bits input & output |
| Operating temperature | -40 ~ + 70 ℃ |
| Operating Humidity | 0% ~ +98%RH |
| Dimension | 110 x 76 x22(mm) |
| Net weight | 435g |
| Gross weight | 505g |



## Packing List

| Number | Name | Quantity | Note |
|---|---|---|---|
| 1 | Access control | 1 | |
| 2 | User manual | 1 | |
| 3 | Rubber stopper | 2 | 6*25mm |
| 4 | Screw | 2 | KA4*25mm |
| 5 | Safety screw driver | 1 | |
| 6 | Protective diode | 1 | 1N4004 |
| 7 | Master Card | 2 | Add Card/ Delete Card |
| 8 | Infrared remote keyboard | 1 | |

## Master Cards Usage

| Using Master cards to add and delete card users | |
|---|---|
| **Add a user** | **1. (Read Master Add Card)**<br>**2. (Read user card)**<br>Repeat step 2 for additional user cards<br>**3. (Read Master Add Card)** |
| **Delete a user** | **1. (Read Master Delete Card)**<br>**2. (Read user card)**<br>Repeat step 2 for additional use cards<br>**3. (Read Master Delete Card)** |



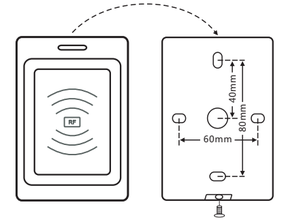
## Factory Default Settings

Power off, press and hold the "exit button", power on. There will be two "beep", release the button to read "Master Add Card" and "Master Delete Card". There will be one long "beep". Enter into standby mode. Factory default Settings and add master cards successfully.

**Note:** Factory default is cannot delete the user data. If you do not want to add master cards, power on, press the exit button for 10 second and then release.

## INSTALLATION

1. Remove the back cover from the unit.
2. Drill holes on the wall for the screw and one hole for the cable.
3. Knock the supply rubber bungs to the screw holes.
4. Fix the back cover firmly on the wall with 4 flat head screws.
5. Tread the cable through the cable hole.
6. Attach the unit to the back cover.






## Simplified Instruction

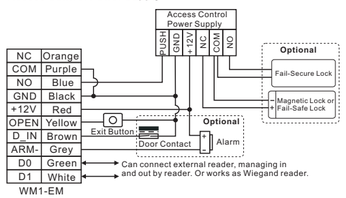
| Function Description | Operation |
|---|---|
| Enter the Programming Mode | **＊(Admin Code) #**<br>then you can do the programming<br>(777777 is the factory default master code) |
| Change the Master Code | **0 - New Code - # - Repeat the New Code - #**<br>(code:6-8 digits) |
| Add Card User | **1 - Read - #**<br>(can add Cards continuously) |
| Delete User | **2 - Read Card - #** for Card User |
| Exit from the Programming Mode | **＊** |
| **How to release the door** | |
| Card User | Read Card |

## Wiring

| Number | Wire Color | Definition | Function |
|---|---|---|---|
| 1 | Orange | NC | Normally Closed Relay Output |
| 2 | Purple | COM | Common Connection for Relay Output |
| 3 | Blue | NO | Normally Open Relay Output |
| 4 | Black | GND | Negative Power |
| 5 | Red | +12V | Positive power |
| 6 | Yellow | OPEN | Request to Exit (REX) Input |
| 7 | Brown | D_IN | Door/Gate Contact Input |
| 8 | Grey | ARM- | Negative contact for alarm |
| 9 | Green | D0 | Wiegand Input/ Output Data 0 |
| 10 | White | D1 | Wiegand Input/ Output Data 1 |

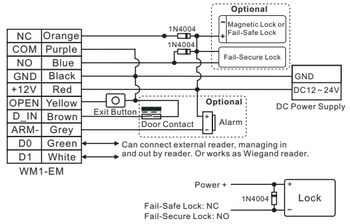
## Connection Diagram

**Access Control Power Supply**






**Common Power Supply**




**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)

## Sound and Light Indication

| Operation Status | LED | Buzzer |
|---|---|---|
| Stand By | Red light bright | – – |
| Enter into master model | Red light shines | – – |
| In the programming mode | Yellow light bright | – – |
| Open lock | Green light bright | One beep |
| Operation error | – – | Three beeps |



## OPERATION

**Enter and Exit Program mode**

| Programming Step | Keystroke Combination |
|---|---|
| Enter Program Mode | **＊(Master Code) #**<br>(Factory default is777777) |
| Exit Program Mode | ＊ |

**Set Master Code**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Update Master Code | **0 (New Master Code) #**<br>**(Repeat New Master Code) #**<br>(Master Code is any 6-8 digits) |
| 3.Exit Program Mode | ＊ |

**Add Users**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Add users: by Card<br>**OR**<br>2.Add users: by Card Number | **1 (Read Card) #**<br><br>**1 (Input 8/10 digits card number) #** |
| 3.Exit Program Mode | ＊ |

**Delete Users**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2. Delete Card - By Card<br>**OR**<br>2. Delete Card - By Card number | **2 (Read Card) #**<br><br>**2 (Input 8/10 digits Card number) #** |
| 2. Delete All User | **2 0000 #** |
| 3.Exit Program Mode | ＊ |



**Set Anti-pass Back Mode (Factory default disabled the function)**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2. Deny anti-passback<br>**OR**<br>2.Set as main machine<br>**OR**<br>2.Set as sub-machine | **3 0 #**<br><br>**3 1 #**<br><br>**3 2 #** |
| 3.Exit Program Mode | ＊ |

**Instruction**

① Anti-pass back for single door: Install an external Wiegand 26 card reader outside door, and the machine is installed inside door. Then in/out by swiping cards.

② Anti-pass back for two doors: install machine A at the door 1, setting it vice machine. Install machine B at door 2, setting it main machine. And then connect the Wiegand wires(D0 to D0, D1 to D1). Finally, you can only enter from door 1, out from door 2.

**Set Relay Configuration**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Toggle Mode<br>**OR**<br>2. Pulse Mode | **4 0 #**<br>Set the relay to ON/OFF Toggle Mode<br><br>**5 (0~255)** 0 means 50ms. |
| 3.Exit Program Mode | ＊ |

**Note:** 1. Factory default is **Pulse Mode** and the access time is 5 seconds.

2. **Pulse Mode:** The door will be closed automatically after opening the door for a while. 0 means 50ms, and it only used for Electric Control Lock
3. **Toggle Mode**: Under this mode, after opening the door, the door won't be closed automatically until next valid user input. That is to say, whether open or close the door, you must swipe valid card.



**Door status detection Setting (factory default is closed)**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Close the setting of magnetic<br>**OR**<br>2.Open the detection setting | **6 0 #**<br><br>**6 1 #** |
| 3.Exit Program Mode | ＊ |

**When you activate the door status detection**

> If you forgot to close the door in 1 min, the buzzer will alarm. When the door closed or swipe valid card, the buzzer will be release.

> If the door opened by force, the buzzer and external alarm will activated at the same time.

**Safe Mode setting (factory default is off)**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Common Mode<br>**OR**<br>2.Lockout Mode<br>**OR**<br>2.Alarm Mode | **7 0 #** (factory default)<br><br>**7 1 #** Access will be defined for 10 minutes<br><br>**7 2 #** |
| 3.Exit Program Mode | ＊ |

**Note:** ① Lockout Mode: Read invalid card for ten times continuously in ten minutes, the machine lockout for 10 minutes.

② Alarm mode: read the invalid card 10 times in 10 minutes. Machine alarm.

**Set Alarm Time**

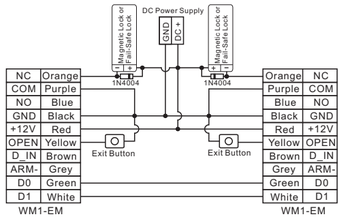
| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Set the mode of relay | **9 (0-3) # (factory default is 1 minute)** |
| 3.Exit Program Mode | ＊ |

**Note:** "0" means no alarm. Read valid card (or master code #/ Master card) can stop alarm or reminder.



**Interlock and Indicator Light**

| Programming Step | Keystroke Combination |
|---|---|
| 1.Enter Program Mode | **＊(Master Code) #** |
| 2.Interlocked-OFF<br>**OR**<br>2.Interlocked-ON | **8 0 # (factory default)**<br><br>**8 1 #** |
| **Light** | |
| 2.Red light-ON<br>**OR**<br>2.Red light-OFF | **8 3 #; (factory default)**<br><br>**8 4 #** |
| 3.Exit Program Mode | ＊ |




**Note:** install machine A at the door 1, install machine B at door 2, setting them interlock. And then connect the Wiegand wires (D0 to D0, D1 to D1). And then, you can only open one of the both door,cannot open two door simultaneously.