

Product Manual

Metal Touch Access  
Controller and Reader



## 1. Packing List

Name	Quantity	Remarks
Keypad	1	
User manual	1	
Screw driver	1	Φ20mm×60mm, Special for keypad
Rubber plug	2	Φ6mm×30 mm, used for fixing
Self tapping screws	2	Φ4mm×28 mm, used for fixing
Star screws	1	Φ3mm×6mm, used for fixing

Please ensure all the above contents are correct. Any missing, please notify the supplier of the unit.

## 2. Quick Reference Programming Guide

Enter the programming mode	* [Master code] [#] 999999 is the default factory master code
Exit the programming mode	*
<b><i>Note that to undertake the following programming the master user must be logged in</i></b>	
Change the master code	0 [Newcode] [#] [New code] [#] The master code can be 6 to 8 digits
Add a PIN user	1 [User ID number] [#] [PIN] [#] The ID number is any number between 1 & 2000. The PIN is any four digits between 0000 & 9999 with the exception of 1234 which is reserved. Users can be added continuously without exiting programming mode
Add a card user	1 [Read Card] [#] Cards can be added continuously without exiting programming mode
Delete a PIN or a card user.	2 [User ID number] [#] for a PIN user or a card user 2 [Read Card] [#] for a card user Users can be deleted continuously without exiting programming mode
Unlock the door by a PIN user	Enter [PIN] [#]
Unlock the door by a card user	[Read Card]

### 3. Description

The unit is single door multifunctional standalone access controller or a Wiegand output keypad or card reader. It is suitable for mounting either indoor or outdoor under harsh environments. It is housed in a strong, sturdy and vandal proof Zinc Alloy electroplated case which is available in either a bright silver or matt silver finish. This unit supports up to 2000 users in either a Card, 4 digit PIN, or a Card + PIN option. The inbuilt card reader supports 125KHZ EM cards, 13.56MHz Mifare cards. The unit has many extra features including lock output current short circuit protection, Wiegand output, and a backlit keypad. These features make the unit an ideal choice for door access not only for small shops and domestic households but also for commercial and industrial applications such as factories, warehouses, laboratories, banks and prisons.

### 4. Features

- Indoor use
- Strong Zinc Alloy Electroplated anti-vandal case
- Full programming from the keypad
- 2000 users, supports Card, PIN, Card + PIN
- Can be used as a stand alone keypad
- Backlight keys
- Wiegand 26 input / output
- Adjustable Door Output time, Alarm time, Door Open time
- Very low power consumption (30mA)
- Fast operating speed, <20ms with 2000 users
- Lock output current short circuit protection
- Easy to install and program
- Built in buzzer
- Red, Yellow and Green LEDS display the working status

### 5. Specifications

Operating Voltage	12V DC
User Capacity	2000
Card Reading Distance	3-6 cm
Active Current	< 60mA
Idle Current	25±5 mA
Lock Output Load	Max 3A
Alarm Output Load	Max 20A
Operating Temperature	-45°C – 60°C
Operating Humidity	10%-90% RH
Adjustable Door Relay time	0-99 seconds
Adjustable Alarm Time	0-3minutes
Wiegand Interface	Wiegand 26 bit
Wiring Connections	Electric Lock, Exit Button

## 6. Installation

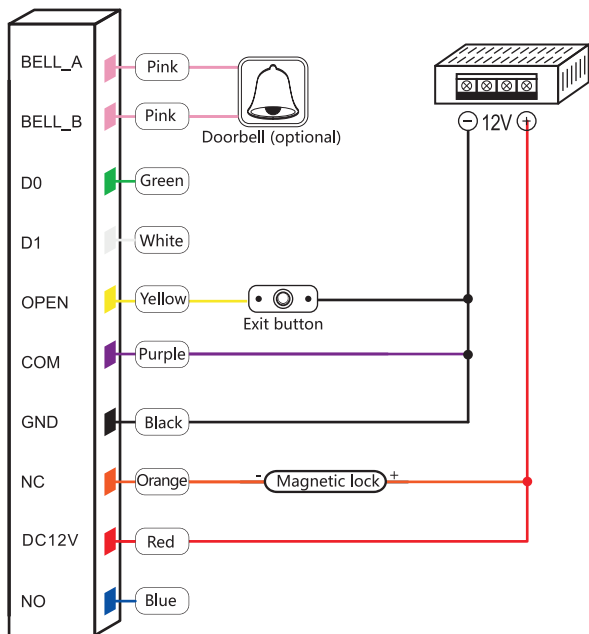
- Remove the back cover from the keypad using the supplied special screw driver
- Drill 2 holes on the wall for the self tapping screws and dig a hole for the cable
- Put the supplied rubber bungs into the two holes
- Fix the back cover firmly on the wall with 2 self tapping screws
- Thread the cable through the cable hole
- Attach the keypad to the back cover.

## 7. Wiring

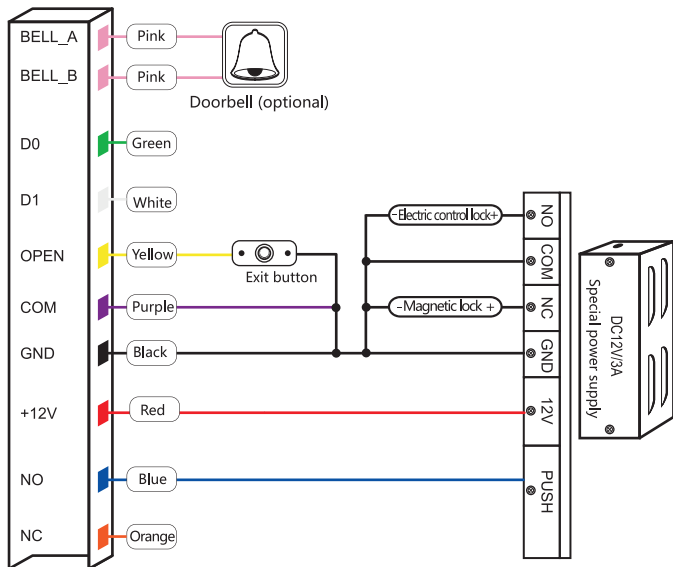
Colour	Function	Description
Pink	BELL_A	Doorbell button one end
Pink	BELL_B	Doorbell button to the other end
Green	D0	WG output D0
White	D1	WG output D1
Yellow	OPEN	Exit button one end(the other end connected GND)
Red	12V+	12V + DC Regulated Power Input
Black	GND	12V - DC Regulated Power Input
Blue	NO	Relay normally-on end(Connect positive electric lock "-")
Purple	COM	Relay Public end, connect GND
Orange	NC	Relay Closed end(Connect negative electric lock "-")



## common power supply diagram



## special power supply diagram



## 8. To Reset to Factory Default

- a. Power off, press the exit button continuously, or power on, press "#" key and release it immediately, when LED light turns orange.
- b. On hearing "didi" sounds twice, system is back to factory settings.

★Registered user data won't be deleted when reset to factory default

## 9. Sound and Light indication

Operation Status	Red Light	Green Light	Buzzer	Mark
Power on	Bright	-	Di	-
Stand by	Slow flash	-	-	-
Press keypad	-	-	Di	-
Operation successful	-	Bright	Di-	-
Operation failed	-	-	DiDiDi	-
Enter into programming mode	Bright	-	Di-	LED:orange
In the programming mode	-	-	Di	-
Exit from the programming mode	Slow flash	-	Di-	-
Open the door	-	Bright	Di-	-
Alarm	Quick flash	-	Alarm	-

## 10. Detailed Programming Guide

### 10.1 User Settings

Enter the programming mode	* [Master code] # 999999 is the default factory master code
Exit the programming mode	*
<b>Note that to undertake the following programming the master user must be logged in</b>	
Change the master code	[0] [New code] [#] [New code] [#] The master code can be 6 to 8 digits
<b>Setting the working mode</b>	
Set valid card users only	[3] [0] [#] Entry by card only
Set valid card and PIN users	[3] [1] [#] Entry by card and PIN together
Set valid card or PIN users	[3] [2] [#] Entry by either card or PIN (default)
<b>Add a user in either card or PIN mode, i.e. in the [3] [2] [#] mode. (Default setting)</b>	

<p>Add a <b>PIN</b> user</p>	<p>1 <input type="text" value="User ID number"/> # <input type="text" value="PIN"/> #</p> <p>The ID number is any number between 1 &amp; 2000. The PIN is any four digits between 0000 &amp; 9999 with the exception of 1234 which is reserved. Users can be added continuously without exiting programming mode as follows:</p> <p>1 <input type="text" value="User ID no 1"/> # <input type="text" value="PIN #"/> <input type="text" value="User ID no 2"/> # <input type="text" value="PIN #"/></p>
<p>Delete a <b>PIN</b> user</p>	<p>2 <input type="text" value="User ID number"/> #</p> <p>Users can be deleted continuously without exiting programming mode</p>
<p>Change the <b>PIN</b> of a PIN user (This step must be done out of programming mode)</p>	<p>* <input type="text" value="ID number #"/> <input type="text" value="Old PIN #"/> <input type="text" value="New PIN #"/> <input type="text" value="New PIN #"/></p>
<p>Add a <b>card</b> user (Method 1) This is the fastest way to enter cards, user ID number auto generation.</p>	<p>1 <input type="text" value="Read card"/> #</p> <p>Cards can be added continuously without exiting programming mode</p>
<p>Add a <b>card</b> user (Method 2) This is the alternative way to enter cards using User ID Allocated . Only one user ID can be allocated to a single card.</p>	<p>1 <input type="text" value="ID number"/> # <input type="text" value="Read card"/> #</p> <p>Users can be added continuously without exiting programming mode</p>
<p>Add a <b>card</b> user (Method 3) Card number is the last 8 digits printed on the back of the card,user ID number auto generation</p>	<p>1 <input type="text" value="Card number"/> #</p> <p>Users can be added continuously without exiting programming mode</p>
<p>Add a <b>card</b> user (Method 4) Only one user ID can be allocated to the card number</p>	<p>1 <input type="text" value="ID number, #"/> <input type="text" value="Card number, #"/></p> <p>Users can be added continuously without exiting programming mode</p>
<p>Delete a <b>card</b> user by card. Note users can be deleted continuously without exiting programming mode</p>	<p>2 <input type="text" value="Read Card"/> #</p>
<p>Delete a <b>card</b> user by user ID. This option can be used when a user lost their card</p>	<p>2 <input type="text" value="User ID"/> #</p>



<p>Delete a <b>card</b> user by card number.</p> <p>This option can be used when the user want to make the change but the card has lost</p>	<p>[2] [Card number] [#]</p> <p>Note users can be deleted continuously without exiting programming mode</p>
<p>Add a <b>card and PIN</b> user in card and PIN mode ([3] [1] [#])</p>	
<p>Add a <b>card and Pin</b> user</p> <p>(The PIN is any four digits between 0000 &amp; 9999 with the exception of 1234 which is reserved.)</p>	<p>Add the card as for a card user</p> <p>Press [*] <b>exit from the programming mode</b></p> <p>Then allocate a PIN for the card as follows:</p> <p>[*] [Read card] [1234#] [PIN#] [PIN#]</p>
<p>Change a <b>PIN</b> in card and PIN mode (Method 1) Note that this is done outside programming mode so the user can undertake this themselves</p>	<p>[*] [Read Card] [Old PIN #] [New PIN #] [New PIN #]</p>
<p>Change a <b>PIN</b> in card and PIN mode (Method 2) Note that this is done outside programming mode so the user can undertake this themselves</p>	<p>[*] [ID number #] [Old PIN #] [New PIN #] [New PIN #]</p>
<p>Delete a <b>Card and PIN</b> user just delete the card</p>	<p>[2] [User ID] [#]</p>
<p>Add a <b>card</b> user in card mode ([3] [0] [#])</p>	
<p>Add and Delete a <b>card</b> user</p>	<p>The operating is the same as adding and deleting a card user in [3] [2] [#]</p>
<p>Delete <b>ALL</b> users</p>	
<p>Delete <b>ALL</b> users. Note that this is a <b>dangerous</b> option so use with care</p>	<p>[2] [0000] [#]</p>
<p><b>Unlock the door</b></p>	
<p>By <b>PIN</b></p>	<p>Enter the [PIN] [#]</p>
<p>By <b>card</b></p>	<p>[Read card]</p>
<p>By <b>card and PIN</b></p>	<p>[Read card] then enter [PIN] [#]</p>

## 10.2 Door Settings

Relay Output Delay Time	
Set door relay strike time	* [Master code] # 4 [0~99] # *
0-99 is to set the door relay time 0-99 seconds	
Alarm output time	
To set the alarm output time (0-3 minutes) Factory default is 1 minute	5 [0~3] #
<b>Keypad Lockout &amp; Buzzer Activated.</b> If there are 10 invalid cards or 10 incorrect PIN numbers in a 10 minute period either the keypad will lockout for 10 minutes and the inside buzzer will operate for 10 minutes, depending on the option selected below.	
Normal status: No keypad lockout or buzzer operate (factory default)	7 0 # (Factory default settings)
Keypad Lockout	7 1 #
Inside buzzer actived	7 2 #
Remove the alarm	
Reset the Door Forced Open warning	[Read valid card] or [Master Code #]
To reset the Door Open Too Long warning	Close the door or [Read valid card] or [Master Code #]

## 11.The unit operating as a Wiegand Output Reader

In this mode the unit supports a Wiegand 26 bit output so the Wiegand data lines can be connected to any controller which supports a Wiegand 26 bit input.

