User Manual

Please read the manual carefully before use this unit

1.Packing List

Name	Quantity	Remarks
Keypad	1	
User manual	1	
Screw driver	1	Φ20mm×60mm,special for keypad
Rubber plug	2	Φ6mm×30mm,used for fixing
Self tapping screws	2	Φ4mm×28mm,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 from the programming mode	*
Note that to undertake the following programming the master user must be logged in	
Change the master code	0 New code # 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 2 Read Card # for a card user Users can be deleted continuously without exiting programming mode
Unlock the door for a PIN user	Enter the PIN then press #
Unlock the door for a card user	Present the card

3.Description

The unit is single door multifunction standalone access controller or a Wiegand output keypad or card reader. It is suitable for mounting either indoor or outdoor in 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. The electronics are fully potted so the unit is waterproof and conforms to IP68. 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.
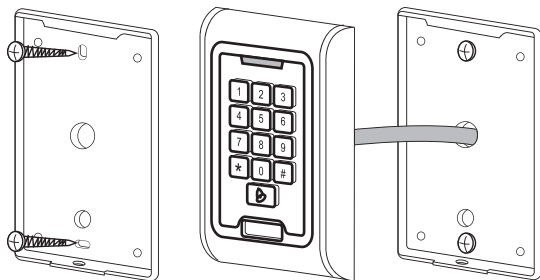
4.Features

- Waterproof, conforms to IP65/IP68
- 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 for connection to external reader, Wiegand 26 output for connection to a controller
- 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 programme
- Built in buzzer
- Red, Yellow and Green LEDS display the working status

5.Specifications

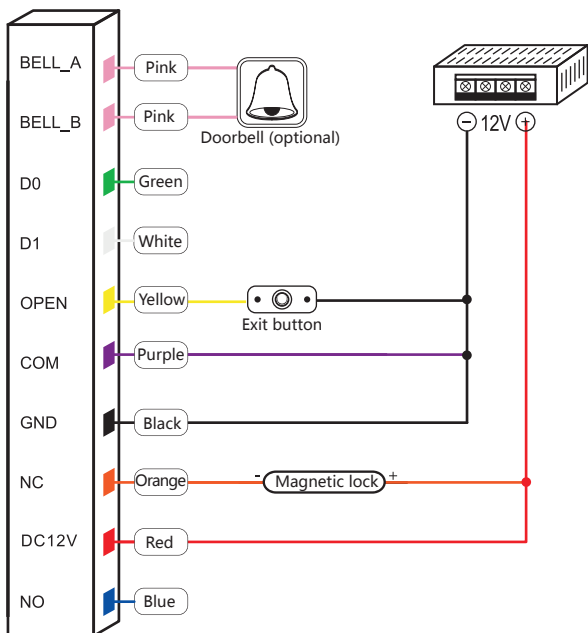| Operating Voltage	DC12-24V
User Capacity	2000
Card Reading Distance	3-6 cm
Active Current	<60mA
Idle Current	25±5 mA
Lock Output Load	Max 1A
Operating Temperature	-45℃～60℃
Operating Humidity	10%- 90% RH
Waterproof Degree	IP65/IP68
Adjustable Door Relay time	0 -99 seconds
Wiegand Interface	Wiegand 26 bit
Wiring Connections	Electric Lock, Exit Button, External Alarm

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
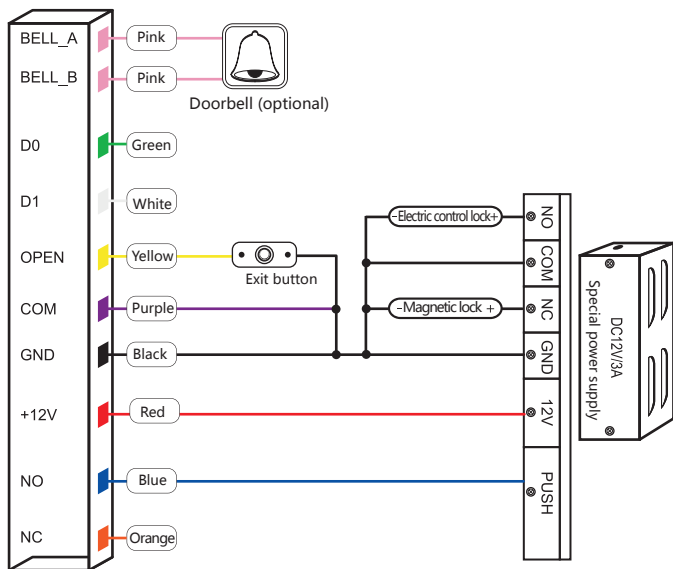- Attach the keypad to the back cover.

7.Wiring

Colour	Function	Description
Pink	BELL_A	Doorbell button one end (optional)
Pink	BELL_B	Doorbell button to the other end (optional)
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 "-")

BELL_A	Pink	Doorbell (optional)
BELL_B	Pink	
D0	Green	
D1	White	
OPEN	Yellow	Exit button
COM	Purple	
GND	Black	
NC	Orange	Magnetic lock
DC12V	Red	
NO	Blue	

12V

common power supply diagram

special power supply diagram

8.To Reset to Factory Default

a. Power off
b. Press and hold # key whilst powering on
c. On hearing tick twice , release # key, system is back to factory settings now
Registered users won't be deleted when reset to factory default

9.Sound and Light indication

Operate Status	LED Light Color	Buzzer
Standby	Flash Red Slow	
Keypad		Short Tick Once
Operation Successful	Green	Long Tick Once
Operation Failed		Short Tick 3 Times
Entering into Programming	Red	Long Tick Once
Programmable Status	Orange	
Exit Programming	Flash Red Slow	Long Tick Once
Door Opening	Green	Long Tick Once
Alarm	Flash Red Quick	Alarming

10. Detailed Programming Guide
10.1User Settings

Enter the programming mode	* Master code # 999999 is the default factory master code
Exit from the programming mode	*
Note that to undertake the following programming the master user must be logged in	

Change the master code	0 New code # New code # The master code can be 6 to 8 digits long
Setting the working mode: Set valid card users only Set valid card and PIN users Set valid card or PIN users	3 0 # Entry is by card only 3 1 # Entry is by card and PIN together 3 2 # Entry is by either card or PIN (default)
Add a user in either card or PIN mode, i.e. in the 3 2 # mode. (Default settings)	
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 as follows: 1 User ID no 1 # PIN # User ID no 2 # PIN #
Delete a PIN user	2 User ID number # Users can be deleted continuously without exiting programming mode
Change the PIN of a PIN user (This step must be done out of programming mode)	* ID number # Old PIN # New PIN # New PIN #
Add a card user (Method 1) This is the fastest way to enter cards, user ID number auto generation	1 Read card # Cards can be added continuously without exiting programming mode
Add a card user (Method 2) This is the alternative way to enter cards using User ID Allocated. In this method a User ID is allocated to a card. Only one user ID can be allocated to a single card	1 ID number # Read card # User can be added continuously without exiting programming mode
Add a card user (Method 3) Card number is the last 8 digits printed on the back of the card,user ID number auto generation	1 Card number # User can be added continuously without exiting programming mode
Add a card user (Method 4) In this method a User ID is allocated to a card number. Only one user ID can be allocated to the card number	1 ID number # Card number # User can be added continuously without exiting programming mode

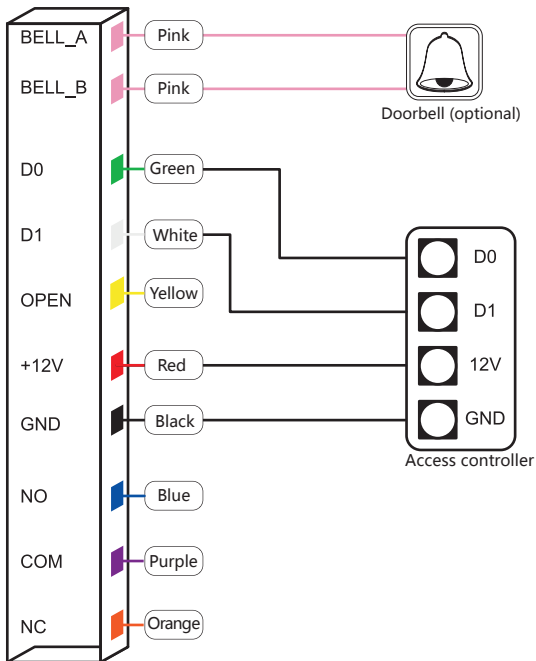|	
Delete a card user by card. Note users can be deleted continuously without exiting programming mode	2　Read Card　#
Delete a card user by user ID. This option can be used when a user has lost their card	2　User ID　#
Delete a card user by card number. This option can be used when the user want to make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

By card	Read card
By card and PIN	Read card then enter PIN #

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	
Set the alarm output time (0-3 minutes) Factory default is 1 minute	5 0~3 #
Keypad Lockout & Buzzer Actived. 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 #

11.The unit operates as a Wiegand Output Reader

The unit supports a Wiegand 26 bit output, so the Wiegand data wires can be connected to any controller which supports a Wiegand 26 bit input.

Terminal	Wire Color	
BELL_A	Pink	
BELL_B	Pink	Doorbell (optional)
D0	Green	D0
D1	White	D1
OPEN	Yellow	
+12V	Red	12V
GND	Black	GND
NO	Blue	Access controller
COM	Purple	
NC	Orange	

Standalone Keypad Access Control

User Manual

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.

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

NOTE: 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 and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

Radiation Exposure Statement
The device has been evaluated to meet general RF exposure requirement in portable exposure condition without restriction.