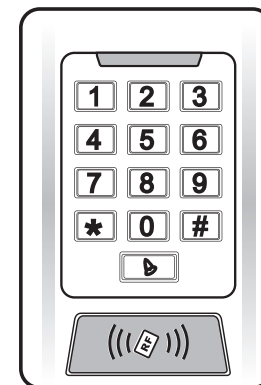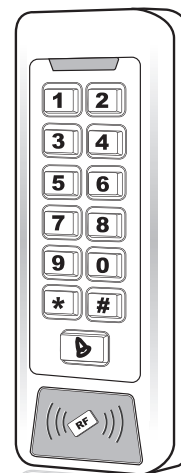# CC Series metal access control Manual

1. Description

CC Series is a standalone for two doors, support card, pin, card+pin access way. It is with 2 relays to control 2 doors and supports up to 2000 users in total,each user can possess one card and one pin. It can directly drive Lock,Alarm, Ring Bell, and also can connect with Exit Button and Door Contact.

There are 7 working mode with this device:
1. Wiegand Reader.
2. Standalone for single door.
3. standalone for two doors.
4. with external reader for two doors.
5. two units interlocked for two doors.
6. Anti-passback for single door.
7. Anti-passback for two door.

Besides, it also supports 1 Master code, 2 Manager card, 2 Anti-duress Card users and 2 Anti-duress PIN users, providing users with easy operations and safety reliability.

2. Features

1. Pure Zinc alloy case; waterproof conform to IP 68.
2. Built-in 125KHz OR 13.56MHz card reader (CC1).
   Built-in 125KHz and 13.56MHz card reader (CC2).
3. Perfect digital backlit key, the back light can be set to Normal ON, Normal OFF or Human-Approach ON.
4. With anti-tamper Alarm, door contact Alarm, Anti-duress Alarm function.
5. Add and delete card user quickly With Manager cards.
6. Can register and delete user via keypad.
7. Master can open the door when entering the setting status.
8. Multi working modes: reader, one door, two door, interlock, anti-passback and so on, suitable for many occasions.

3. Specification

Input Voltage AC/DC 12V
Idle Current<25mA
Lock output load<1A
Alarm output load<1A
Ring bell load<1A
Card reading distance 40mm Max
Card Frequency: 125KHz for EM and HID
                13.56MHz for Mifare
Card transmission format 26-37 bit wiegand
Keypad transmission format: 4bit, 8bit and Virtual card number
Operating Temperature: -45°C ~ 55° C

Operating Humidity: 0% ~ 95%

4. 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 I hole for the cable.
● Put the supplied rubber bungs to 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.
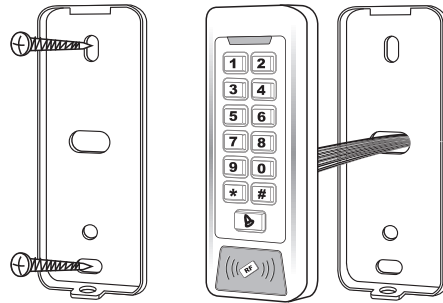
5. Wiring

No.	ZONE1			ZONE2		
	Marks	Color	Description	Marks	Color	Description
1	BELL_A	Pink	Doorbell button	D0	Green	Wiegand output D0
2	BELL_B	Pink	Doorbell button	D1	White	Wiegand output D1
3	ALARM+	Red	Alarm anode	AC1	Red	AC1 (+12V)
4	AC2	Black	AC input	GND	Black	GND
5	OPEN2	Yellow	Exit button	OPEN1(BZ)	Yellow	Exit button (for green LED)
6	D_IN2	Brown	Door contact	D_IN1(LED)	Brown	Door contact(for buzzer)
7	ALARM2-	Gray	Alarm 2	ALARM1-	Gray	Alarm 1
8	NO2	Blue	Relay 2 NO end	NO1	Blue	Relay 1 NO end
9	COM2	Purple	Relay 2 Com	COM1	Purple	Relay1 Com
10	NC2	Orange	Relay 2 NC end	NC1	Orange	Relay1 NC end

15   To Reset to Factory Default
a. Disconnect power from the unit.
b. Press and hold # key whilst powering the unit back up.
c. On hearing two "Di" release # key, system is now back factory settings.

Please note only installer data is restored, user data will not be affected.

16   Packing List

Name	Model / size	Quantity	Remarks
Keypad	CC1/CC2	1	
User manual	CC1/CC2	1	
Self tapping screws	Φ4mm×27 mm	2	Used in fixing
Rubber plug	Φ6mm×30 mm	2	Used in fixing
Star screw driver	Φ20mm×60mm	1	Special for Keypad
two-electrode valve	1N4007	1	

Warm Tip:

✱ Please do not to repair the device privately, if have problem, please
  return to the supplier.
✱ Before installation on wall, please check carefully concealed wiring
  or wire tube, in case of the trouble from broken concealed wiring
  etc when drilling, please use safe glasses, when drilling or fixed
  line clip.
✱ if the poduct update, manual may be different,Without Prior Notice.

13.6 **Set open mode of Zone 1 as card+PIN**
press ⧫ * ⧫ | 201100 | | # | | 13 | | 1 | | # |

13.7 **Rapid increase consecutive numbers 1000 cards (start with 00987865 ID is 005）**
press ⧫ * ⧫ | 201100 | | # | | 17 | | 05# | | 00987865# | | 1000 | | # |

13.8 **Ret working mode as reader mode**
press ⧫ * ⧫ | 201100 | | # | | 31 | | 0 | | # |

13.9 **Ret card output format as WG34**
press ⧫ * ⧫ | 201100 | | # | | 32 | | 34 | | # |

13.10 **Set master open lock 1**
press ⧫ * ⧫ | 201100 | | # | | 51 |

14 Simple Troubleshooting

Code	Fault	Fault Cause	Solutions
1	Close Read range	Quality of card	Use original card
2	Problem in PIN setting	1. PIN is not standard 2. Set Password at reader mode	1. first number of PIN should be 1 or 2, match with Area number 2. PIN shouldn't be 1234 3. PIN is 4 to 6 digits 4. don't set PIN at reader mode
3	PIN can't open door	1. use PIN 1234 2. entry mode setting	1. 1234 is original PIN, can't open the door, should be modified as other PIN 2. set open mode as entry by card or PIN.
4	Alarms at normal condition	While installation, light leak under bottom	While installation, device should closed to the wall
5	No responds after card reading	Units are not in ready mode	Press * key, light flash, units back to ready mode
6	Keypad light is not bright	Mode of keypad light setting is wrong	1. set keypad light as shine or auto 2. under auto mode, light shine after press keypad, delay 30 seconds
7	Can't enter master mode	Forget master code	Reset to Factory Default, master code will be 999999, only installer data is restored, user data will not be affected

6. Sound and Light Indication

Operation	LED Color	Buzzer
Standby	Red flash	
Press key		Di
Read card	Green	Di-
Door 1 Open	Green	Di-
Door 2 Open	Green Flash	Di-
Operation Successful	Green	Di-
Operation Failed		Di Di Di
PIN Inputting	Red	
Card&PIN Reading	Red	
Multi Card Reading	Red	
Under Menu	Red	
Under Setting	Orange	
Manager Card Enter	Orange	Di Di
Manager Card Exit	Red Flash	Di-
Alarm	Red Quick Flash	Alarm

7 Quick Programming Guide
7.1 Administrator Setting

Stand by	Master Code	Menu	Setting	Remarks	Functions
Red Flash	Red	Red	Orange		
*	Master code#	00		Factory default: 999999	Change the master code
		01	Read Manager Add Card	Default: Zone 1	Set Manager Add Card
		02	Read Manager Delete Card		Set Manager Delete Card
		03	Read Anti-duress card (Zone 1)		Set Zone1 Anti-duress card
		04	Read Anti-duress card (Zone 2)		Set Zone2 Anti-duress Card
		05	Anti-duress PIN# (Zone 1)		Set Zone1 Anti-duress PIN
		06	Anti-duress PIN# (Zone 2)		Set Zone2 Anti-duress PIN
		07	000 #		Delete All Users
		51			Master open Lock 1
		52			Master open Lock 2

7.2 User setting for Zone 1

Stand by	Master Code	Menu	Setting	Remarks	Functions
Red Flash	Red	Red	Orange		
		11	Read card	Users can be added continuously without exiting programming mode	To add card users
			User ID number# read card		
			Card number#		
			ID number# card number#		
			User ID number# PIN#		To add PIN users
∗	Master code#	12	Read card	Users can be added continuously without exiting programming mode	To delete users
			User ID number#		
			Card number#		
		13	0#	Default 2	Entry by Card
			1#		Entry by card+PIN
			2#		Entry by either Card or PIN
		14	0-99#	Default 5	Set door relay time
		15	0#	Default 0	Relay Setting-Pulse mode
			1#		Relay Setting-Toggle mode
		16	1-10#	Default 1	To set open door by multi cards
		17	User ID number#, card number#, card quantity#		To add a series cards users

User setting for Zone 2

Stand by	Master Code	Menu	Setting	Remarks	Functions
Red Flash	Red	Red	Orange		
		21	Read card	Users can be added continuously without exiting programming mode	To add card users
			User ID number# read card		
			Card number#		
			ID number# card number#		
			User ID number# PIN#		To add PIN users
∗	Master code#	22	Read card	Users can be added continuously without exiting programming mode	To delete users
			User ID number#		
			Card number#		
		23	0#	Default 2	Entry by Card
			1#		Entry by card+PIN
			2#		Entry by either Card or PIN
		24	0-99#	Default 5	Set door relay time
		25	0#	Default 0	Relay Setting-Pulse mode
			1#		Relay Setting-Toggle mode
		26	1-10#	Default 1	To set open door by multi cards
		27	User ID number#, card number#, card quantity#		To add a series cards users

● Means connect together
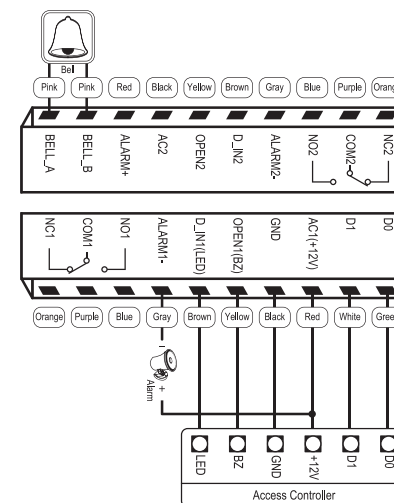
Mode Wiegand reader diagram

13 Instance Operations

13.1 Modify master code as 201200
press ∗ 999999 # 00 201100 # 201100 #

13.2 Set Anti-duress PIN of Zone 1 as 12012000
press ∗ 201100 # 05 12012000 #

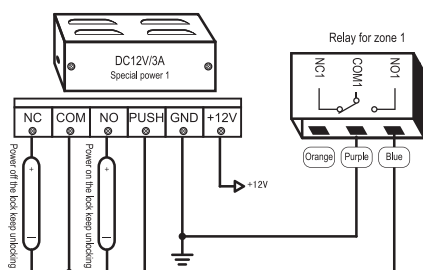**13.3 Add last 8 digit card number as 00967865 and 86998736 user of Zone 1**
Press ∗ 201100 # 11 00967865 # 86998736 #

13.4 Add first 10 digit card number as 0098786500 and 8699873600 user of Zone2
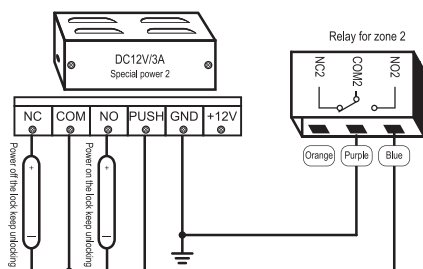Press ∗ 201100 # 21 0098786500 # 8699873600 #

13.5 Add ID user 006, PIN 201200, Zone 2 user
press ∗ 201100 # 21 6 # 201200 #

Special power with Lock 1 diagram

special power with Lock 2 diagram

Composite Diagram 2

DC12V special power 1

Mode With external reader for two doors diagram
Mdoe Standalone for two doors diagram
Mode Two units interlocked for two doors diagram
Mode Anti-passback for two doors diagram

7.3 System Setting

Stand by	Master Code	Menu	Setting	Remarks	Functions
Red Flash	Red	Red	Orange		
*	Master code#	30	0-15#	Default 0	To set facility code
		31	0#	When device reset to factory default, the setting is still valid	Wiegand reader
			1#		Standalone for single door（Factory default setting）
			2#		Standalone for two doors
			3#		With external reader for two doors
			4#		Two units interlocked for two doors
			5#		Anti-passback for single door
			6#		Anti-passback for two door
		32	26-37#	Default 26	To set Wiegand format
		33	0-2#	When device reset to factory default, the setting is still valid	To set keypad transmission format
		34	1-3#	Default 1	To set alarm time
		35	0#	Default 0	Safe mode 0
			1#		Safe mode 1
			2#		Safe mode 2

7.4 User optional setting

Stand by	Master Code	Menu	Setting	Remarks	Functions
Red Flash	Red	Red	Orange		
*	Master code#	41	0#		Buzzer will be be in silence except enter the programming mode
			1#	Default 1	Buzzer will sound when press the key
		42	0#		Disable keypad backlight
			1#		Enable keypad backlight
			2#	Default 2	Automatic mode,Normally it is off (sleeping mode) but wake up with human approach
		43	0#		LED Light Disable when stand-by status
			1#	Default 1	LED flash when stand-by status

Instruction:
1. Master code must be 6-8 digits, Anti-duress PIN must be 8 digits, user PIN is 4-6 digits, The 1st digit of user PIN and Anti-duress PIN in Zone1 must be 1; The 1st digit of user PIN and Anti-duress PIN in Zone 2 must be 2.

2. The user ID number is any number among 1-2000,Invalid 0 can be omitted; card number must be 8 or 10 digits,if the card number is less than 8 or 10 digits, input 0 before the card number.
3. Door open time is 0-99 second,0=50mS
4. When register one card user into the device, the device will automatically generate a PIN 1234 , this PIN cant open the door door.
5. When an invalid master pin is pressed the device will go back to the standby status after 5 seconds, when a valid PIN is entered it will go back to standby status after 30 seconds.
6. In operating the keypad, pressing # means to confirm the input digits ,In operation of a cycle adding or deleting cards, pressing # means to end the cycle operation and back the up operation; pressing * means to exit the operation.
7. When add a series cards, this unit will make the ID number and card number initial value; after adding one user, then it will increase the ID number and card number automatically ,Until the specified number of card is added. the card number must be consecutive card quantity is between 1-2000.
8. Working mode and keypad transmission format have been set before shipping, customer can change according to requirement, but when device reset to factory default, the setting is still valid.
9. When users of Zone 1 is registered successfully, LED will turn green; when users of Zone 2 is registered successfully, LED will be green flash.

8. Administrator setting

Administrator setting on keypad
Press ＊ | Master code # | factory default:999999

8.1 Change the master code
Press | 00 | new code # | repeat new master code# |
Note: Master Code length:6~8 digits

8.2 Set Manager card

Set manager add card
Press | 01 | read manager add card |

Set manager delete card
Press | 02 | read manager delete card |

Note: when add the new manager card, the new one will automatically cover the old card, only one manager card for one device
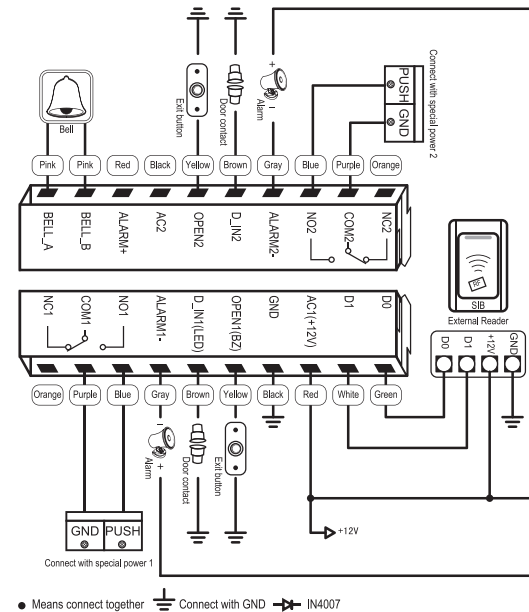
8.3 Set Anti-duress card

Set Anti-duress card for Zone 1
Press | 03 | read anti-duress card | (Zone 1)

Set Anti-duress card for Zone 2
Press | 04 | read anti-duress card | (Zone 2)

Note: when add the new anti-duress card, the new one will automatically cover the old card, only one anti-duress for one device

● Means connect together ⏚ Connect with GND ▷▶ IN4007

Composite Diagram 1

DC12V special power 1

Mode With external reader for two doors diagram
Mdoe Standalone for two doors diagram
Mode Two units interlocked for two doors diagram
Mode Anti-passback for two doors diagram

● Means connect together   ⏚ Connect with GND   ▷|◁ IN4007

AC12V common power
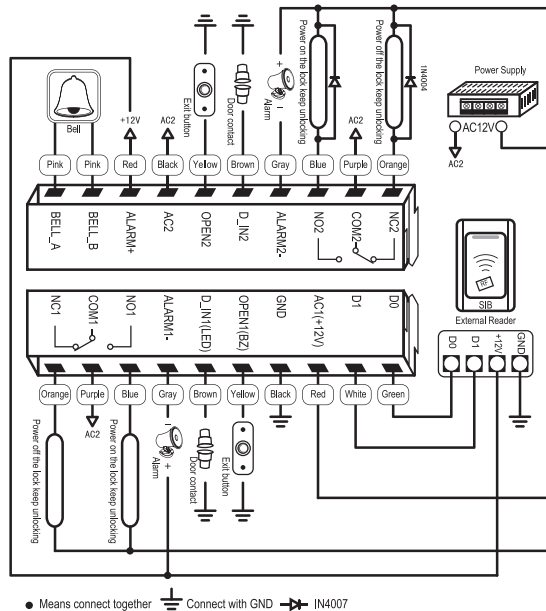
Mode With external reader for two doors diagram
Mdoe Standalone for two doors diagram
Mode Two units interlocked for two doors diagram
Mode Anti-passback for two doors diagram

8.4   Set Anti-duress PIN

Set Anti-duress PIN for Zone 1
Press 05   8-digit duress PIN# (Zone 1)

Set Anti-duress card for Zone 2
Press 06   8-digit duress PIN# (Zone 2)

Note: 1. the 1st digit must be 1 for Zone 1
      2. the 1st digit must be 2 for Zone 2
      3. when set the new anti-duress PIN, the new one will automatically cover
         the old anti-duress PIN, only one anti-duress PIN for one device.

8.5   Delete all users

Press 07   0000 #
Note: both zone 1 and zone 2 will be deleted. This is a dangerous option, so use
      with care.

8.6   Set administer open lock

Set administer open Lock 1
Press 51
Set administer open Lock 2
Press 52

8.7   Users setting for Zone 1

8.7.1 Read card to add user
      Press 11   read card #   read card ... #

8.7.2 Use ID Number and read card to add user
      Press 11   ID number #   read card ... ID number # read card ... #

8.7.3 Use card number
      Press 11   card number # ... card number# ... #

      Note: 1.Card number must be 8 or 10 digits, if the card number is less than 8 or
            10 digits, input 0 before the card number
            2.Automatically increases, the user ID will be generated by the machine
            automatically, the range is 1 ~ 2000, and automatically search from 1 to 2000

8.7.4 Use ID number and card number to add user

      Press 11   ID number #   8-digits card number # ...
            ID number# 8-digits card number# ... #

      Note:1. ID number is 1~4 digits, the range is 1~2000, 1,01,001,0001, all these
            mean ID number 1.
            2. add card user will generate one "1234 "PIN, this PIN cant open door, only
            for user modify PIN.

8.7.5 Use ID number and PIN to add user
Press `11` `ID number#PIN #` ... `ID number#PIN#` ... `#`

Note: this fit PIN user, pin is irrelevant with card, the PIN is any 4-6 digits,1st digits must be 1 for Zone 1 with the exception of 1234 which is reserved.

8.8   Delete user

8.8.1 Read card to delete user
Press `12` `read card` `read card` ... `#`

8.8.2 Use ID number to delete user
Press `12` `ID number #` `ID number #` ... `#`

8.8.3 Use card number to delete user
Press `12` `card number #` `card number #` ... `#`

8.8.4 Delete all users
Press `07` `0000` `#`
Note: both zone 1 and zone 2 will be deleted.

8.9   Set opening door mode

8.9.1 Entry is by card only
Press `13` `0` `#`

8.9.2 Entry is by card and PIN together
Press `13` `1` `#`

8.9.3 Entry is by card or PIN (factory default)
Press `13` `2` `#`

8.10 Set door relay time
Press `14` `0~99` `#`
Note: 0~99 is to set the door delay time 0-99 seconds, factory default is 5 seconds.
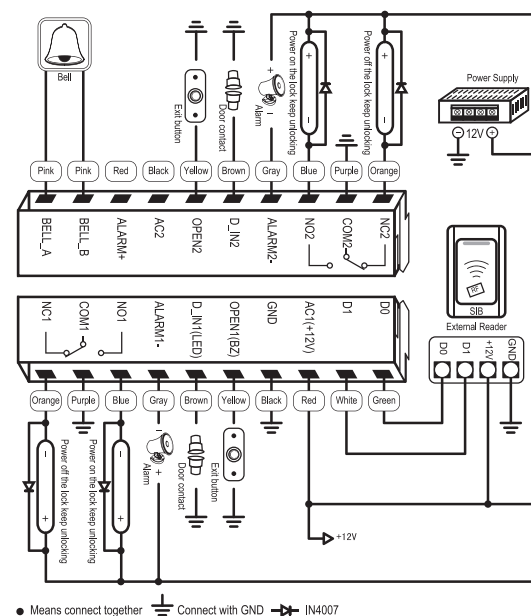
8.11 Set Relay mode

Relay setting -pulse mode
Press `15` `0` `#`

Every time a valid card/tag read or PIN input, the relay will operate, for the pre-set relay pulse time. (Factory default setting)
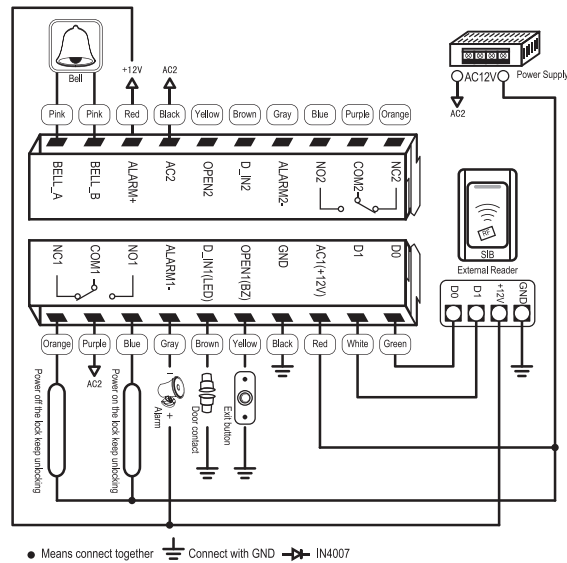
Relay setting-Toggle mode
Press `15` `1` `#`

Every time a valid card/tag read or PIN input, the relay changes state, which will not turn back until read card/tag or input PIN again.

Means connect together   Connect with GND   IN4007

DC12V common power

Mode With external reader for two doors diagram
Mdoe Standalone for two doors diagram
Mode Two units interlocked for two doors diagram
Mode Anti-passback for two doors diagram

Bell

+12V AC2

Pink | Pink | Red | Black | Yellow | Brown | Gray | Blue | Purple | Orange

BELL_A | BELL_B | ALARM+ | AC2 | OPEN2 | D_IN2 | ALARM2- | NO2 | COM2 | NC2

NC1 | COM1 | NO1 | ALARM1- | D_IN1(LED) | OPEN1(BZ) | GND | AC1(+12V) | D1 | D0

Orange | Purple | Blue | Gray | Brown | Yellow | Black | Red | White | Green

AC12V Power Supply
AC2

SIB
External Reader

D0 | D1 | +12V | GND

Power off the lock keep unlocking
AC2
Power on the lock keep unlocking
Alarm +
Door contact
Exit button

● Means connect together   Connect with GND   ▷|◁ IN4007

AC12V common power   Mode Standalone for single door diagram
Mode Anti-passback for Single door diagram

8.12   Set opening door by multi cards
Press 16 card quantity #

Note: the door will be opened only after reading all the valid multi cards up to the
card quantity setting. It is only for card entry mode(Factory default setting :1)

8.13   Add a series consecutive cards users
Press 17 ID number # card number # card quantity #

Note: the card number must be consecutive card quantity is between 1~20000;
card number is 10 digits or 8 digits.

8.14   User setting for Zone 2
The method is the same with Zone 1, corresponding menu should be 21,22,23,24,
25,26,27

8.15   system setting

8.15.1 To set facility code
Press 30 0~15 #
Note: code should be 0~15, factory default setting :0

8.15.2 Wiegang Reader
Press 31 0 #

8.15.3 Standalone for single door(Factory default setting)
Press 31 1 #

8.15.4 Standalone for two doors
Press 31 2 #

8.15.5 With external reader for two doors
Press 31 3 #

8.15.6 Two units interlocked for two doors
Press 31 4 #

8.15.7 Anti-passback for Single door
Press 31 5 #

8.15.8 Anti-passback for two doors
Press 31 6 #

8.16   To set wiegang format
Press 32 26 34 37 #
Note: factory default setting :26

8.17   Setting keypad transmission format
Press 33 0~2 #

Note: keypad transmission format is 0 1 2, factory default is 0; when device reset
to factory default, the setting is still valid.

8.18   Setting alarm time
Press ⟨34⟩ ⟨1~3⟩ ⟨#⟩
Note: 1. factory default is 1 minute
　　　2. when device reset to factory default, the setting is still valid.

8.19   Setting safe mode

8.19.1 Normal mode (factory default)
Press ⟨35⟩ ⟨0⟩ ⟨#⟩

8.19.2 Dead mode
Press ⟨35⟩ ⟨1⟩ ⟨#⟩

If read invalid card or input wrong PIN 10 times in 10 minutes, system will be dead for 10 mins

8.19.3 Alarm mode
Press ⟨35⟩ ⟨2⟩ ⟨#⟩

if read invalid card or input wrong PIN 10 times in 10 minutes, external alarm and built-in buzzer will work.

8.20   User optional setting

8.20.1 Setting keypad tone OFF or ON
Press ⟨41⟩ ⟨0⟩ ⟨#⟩
The device will be in silence except enter the programming mode
Press ⟨41⟩ ⟨1⟩ ⟨#⟩
The device will give the voice when press the keys (Factory default setting)

8.20.2 Setting keypad backlight
Disable keypad backlight
Press ⟨42⟩ ⟨0⟩ ⟨#⟩
Enable keypad backlight
Press ⟨42⟩ ⟨1⟩ ⟨#⟩
Automatic mode (factory default setting)
Press ⟨42⟩ ⟨2⟩ ⟨#⟩
Normally it is off(sleeping mode) but wake up with human approach

8.20.3 Setting LED light (stand-by status)
Disable LED light
Press ⟨43⟩ ⟨0⟩ ⟨#⟩
Flash LED light (factory default setting)
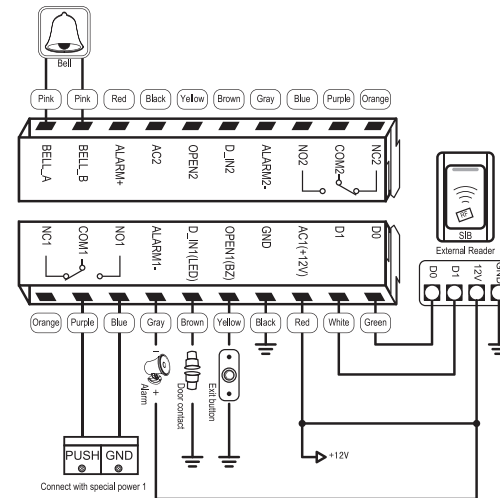Press ⟨43⟩ ⟨1⟩ ⟨#⟩
Manager card operation

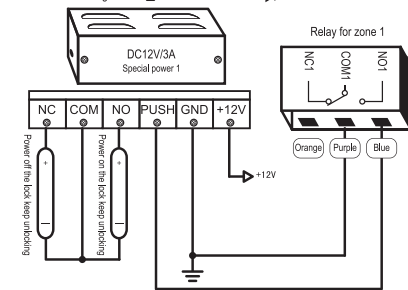**8.21   Add user for Zone1**
Read Manager Add Card, read user cards continuously, read Manager Add card again.

8.22   Delete user for Zone 1
Read Manager Delete Card, read user cards continuously, read Manager Delete card again.

Mode Standalone for single door diagram
Mode Anti-passback for Single door diagram

11.6   Anti-passback for Single door
In this mode, this unit install outside is for entering door, external reader inside for exiting door, the users can only enter door when read valid card on the machine, and exit from the inside external reader. If without the entering record from the machine, the users can not exit from the inside reader, also the Users can't enter in twice without the first exit record.
Remark: this is only for card users of Zone 1,PIN users of Zone 1 an all users of Zone 1 are invalid.

11.7   Anti-passback for two doors
In this mode, this unit on door 1 is anti-passback master unit, and external reader on door 2 aa the anti-passback auxiliary unit. then they build up a two doors anti-passback system, which is normally used for parking lot.
The users can only enter door 1 when read valid card on this unit, and exit from door 2 when read valid card on external reader. If without the entering record from door 1, the users can not exit from the door 2, also the users can't enter in twice without the first exit record.

Remark: this is only for card users of Zone 1,PIN users of Zone 1 and all users of Zone 2 are invalid.
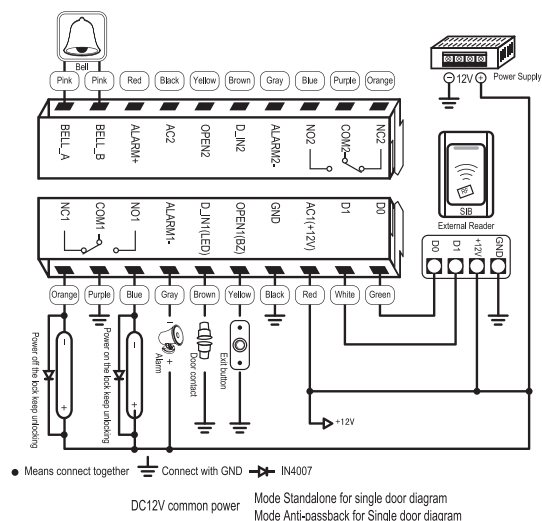
12   Diagram for 7 working mode

Bell
Pink | Pink | Red | Black | Yellow | Brown | Gray | Blue | Purple | Orange

12V Power Supply

BELL_A | BELL_B | ALARM+ | AC2 | OPEN2 | D_IN2 | ALARM2- | NO2 | COM2- | NC2

NC1 | COM1 | NO1 | ALARM1- | D_IN1(LED) | OPEN1(BZ) | GND | AC1(+12V) | D1 | D0

Orange | Purple | Blue | Gray | Brown | Yellow | Black | Red | White | Green

SIB
External Reader
D0 D1 +12V GND

Power off the lock keep unlocking
Power on the lock keep unlocking
Alarm
Door contact
Exit button

+12V

● Means connect together   Connect with GND   IN4007

DC12V common power   Mode Standalone for single door diagram
Mode Anti-passback for Single door diagram

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9   User Operation

9.1   Entry by card mode, Set multi cards to open door when card quantity is 1
Read user card, lock will be unlocked

9.2   Entry by card mode, Set multi cards to open door when card quantity is 2-10
Read these cards one by one, present each card in 5 seconds, lock will be unlocked

9.3   Entry by card and PIN
Present card, then press PIN(4 to 6 digits), #, lock will be unlocked

9.4   Entry by card or PIN mode
Present card, lock will be unlocked
Or Press PIN(4 to 6 digits), #, lock will be unlocked

9.5   Relay mode

Relay setting -pulse mode.
Every time a valid card/tag read or PIN input, the relay will operate, for the pre-set relay pulse time.

Relay setting-Toggle mode
Every time a valid card/tag read or PIN input, the relay changes state, which will not turn back until read card/tag or input PIN again

9.6   Modifyuser PIN (no need enter programming mode)

*, read user card, press old PIN, #, new PIN # new PIN #
Or *, press ID number # old PIN# new PIN # new PIN #

Notice: user who dont have user card must get ID number and origin PIN from Admin, Zone 1 users PIN must start with 1, Zone 2 users PIN must start with 2.

10   Alarm function

10.1 Anti-tamper alarm
If the device is disassembled illegally, the buzzer and the external alarm will operate.

10.2 Door contact alarm
When connect with door contact, if the door is opened illegally, the buzzer and the external alarm will operate.

10.3 The Anti-duress alarm
When read zone 1 anti-duress card/input 8-digit anti duress PIN or zone 2 anti-duress card/input 8-digit anti duress PIN, then press #, The corresponding lock will open, at the same time, the external alarm witll operate,but the device buzzer will not operate.

10.4 Remove alarm
Read valid user card, manager card or input master code, then alarm will be removed. If no any operation, alarm will be removed automatically after 1 min.

11 Multi working mode:

There are 7 working mode with this device.
1. Wiegand Reader.
2. Standalone for single door.
3. Standalone for two doors.
4. with external reader for two doors.
5. two units interlocked for two doors.
6. Anti-passback for single door.
7. Anti-passback for two door.
The factory default is Standalone for single door (we can change the default model according to customer order). User can modify the working mode, when the device reset to factory default the setting is still valid.

11.1 Wiegand Reader mode

In this mode, the access control works as reader, connected with the common access controller, it has following function.
Modify master pin
Set facility code
Set the card transmission format
Set the keypad transmission format
Set optional setting
Anti-Tamper alarm

When LED level is low, indicator light(LED) will turn into green, after 30 seconds or LED level rising, LED will back to normal.
When BZ level is low, the buzzer will beep, after 30 seconds or BZ level rising, the buzzer will back to normal.
When it used as the reader, both card number and keypad transmits in Wiegang format, the output data are shown by the low level of DO&D1 wire:
D0: Low level means 0,green wire
D1: Low level means 1,white wire

The Pulse width of low level is 100uS, bit period is 1.6mS
The digits of card number can be set to 26-37 bit, should be matched with the controller. (Factory default is 26Bit)
Keypad transmission can be set in the following 3 modes(modes can be set by user)

Model 0: Virtual card number

The reader will transmit the PIN data when it receives the last key(#) press after PIN code.
Format: Decimal card number with 10 digits, Facility code(1st~4th digit)+PIN Code (5th-10th digit).
Facility code is any digits between 0~15, PIN code is 4~6 digits.
Example: facility code: 15
PIN code: 9999
Press 9999 #, then output format will be 0015009999
PIN code: 999999
Press 999999#, then output format will be 0015999999

Model 1: 4 Bit
The output data is provided in following format after every key is pressed:

key	Output in hex	Output in Binary
0	0	0000
1	1	0001
2	2	0010
3	3	0011
4	4	0100
5	5	0101
6	6	0110
7	7	0111
8	8	1000
9	9	1001
*	A	1010
#	B	1011

Model 2: 8 Bit
The output data is transmitted in following format after every key is pressed:

key	Output in hex	Output in Binary
0	0	11110000
1	1	11100001
2	2	11010010
3	3	11000011
4	4	10110100
5	5	10100101
6	6	10010110
7	7	10000111
8	8	01111000
9	9	01101001
*	A	01011010
#	B	01001011

11.2 Standalone for single door

In this mode, the device supports connecting external card reader for exiting door. The users of Zone 1 or external can open the door by valid card or PIN.

11.3 Standalone for two doors

In this mode, users are for controlling two doors. Read valid card or input PIN of Zone 1 on this unit, door 1 will be opened; reading valid card or input PIN of Zone 2 on this unit, door 2 will be opened.

Remark: the common card for Zone 1 and Zone 2 can only open door 1.

11.4 With external reader for two doors

In this mode, this unit is for entering door 1, and external reader is for entering door 2. Read valid card or input of Zone 1 on the machine, door 1 will open; read valid card or input PIN of Zone 2 on external reader, door 2 will open.

Remark: the common card for Zone 1 and Zone 2 can open door 1 on this unit, and open door 2 on external reader.

11.5 Two units interlocked for two doors

The interlock function is mainly used in banks ,prisons,and other places where a higher level security is required. When and only door 2 closed, read valid card / input PIN on this machine, door 1 will open; when and only door 1 closed, read valid card / input PIN on external reader, door 2 will open.

Remark: The valid card /PIN is only for users of Zone 1,users of zone 2 are invalid.