



User's Manual V2.0

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1 About BF-880X/870X

BF-880X/870X is developed to manage entrance security, work place time and attendance, over-work time verification and other situation requiring the presence of the authorized personnel. BF-880X/870X supports various I/O protocols. Within 1 Card Reader, 128 X 64 pixel LCD screen, 10 push buttons, 6 function keys, and 1 buzzer. These equipments make BF-880X/870X user-friendly.

Through the Chinese web inside and the function of Master/Slave, you can manage the branch office easily. Beside that, the user can check the in/out log by using IE.

2 Features

2.1 Characteristics

- **Entrance security, time and attendance, over-time management and other applications**
BF-880X/870X system allows for entrance security, work place time and attendance, over-time work. Also, situations that require the presence of the authorized persons at a secured point can take advantage of our BF-880X/870X system.
- **Special function keys may be configured to time and attendance and entrance access management**
4 programmable function keys can be used to manage time and attendance. One BF-880X/870X can be adapted to manage many different kinds of work involving site security control and time and attendance.
- **Use of stand-alone modules and working in conjunction with an ACU**
BF-880X/870X entrance control system may be used as stand-alone units to control entrance traffic or in multiple module configurations Utilizing Weigand protocol to contain with an ACU. Also, direct connection to a PC is possible via TCP/IP protocol when software library bundled. Because BF-880X/870X content RTC and log management capabilities (up to 65,000 records), entrance security and other event management are possible without an ACU.
- **Support Weigan 、RS-485 and TCP/IP communication**
Support 2 Weigan In (26), 1 Weigan Out (26), 1 RS-485 for card reader, 1 TCP/IP connector

2.2 Support functions

2.2.1 User management

- Register a user, provides 2 type of register (1.Password 2.Card)
- Provide 128designations and 128 departments
- User can set the employee limit period separately by truly situation
- User can set the attendance and time by the group
- View all registered ID list
- Delete a user or all users

2.2.2 System management

- You can use the Chinese Http server inside to revise the data and manage employee on IE
- The system sets 2 level accounts and passwords to prevent the setting form change purposely
- You can set the terminal number, title, description, maintenance time, card ID display format and the master/slave function
- You can check the slave data on the slave list
- Set the communicate status on line. For example, IP ADDRESS, Gateway, DNS, Port Number, Host Name.
- Set the clock on line. You can revise it by your hand or connect to the time server to revise everyday
- Provide 40 in/out trigger setup
- Provide 16 alarm clock setup
- Upgrade firmware on line
- You can backup or restore the user log directly
- You can import all logs directly on line

2.2.3 Door mode

- Provide 255 time set, 255 time zone, 200 group, 100 holiday
- You can connect 16 reader to control 8 doors mostly
- You can connect door lock controller or elevator controller to set the type of reader, relay trigger, lock release time zone and anti-pass back level for every entrance
- Monitor every entrance status on line
- You can turn on or close door security by real situation

2.2.4 Log

- Access log: each user or employee can check in or out log by through any computer
- Query log by user number, terminal number, department, function key or time period
- Query user first in and last out log in one day
- Export the in/out log (TXT and XLS format)
- Download the log by using the software program

2.2.5 Authentication

- Authentication at the terminal by Card/Password
- Collocate with group, time zone, card+password

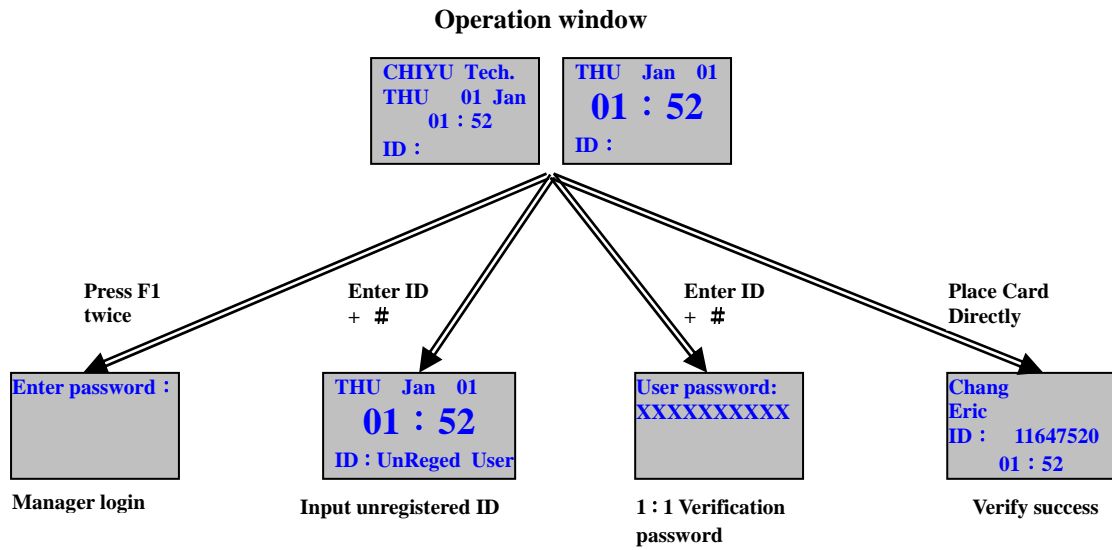
2.2.6 Real time event

- Display user I.D. Name on LCD at authentication time.

2.2.7 Auxiliary function

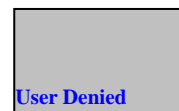
- Exit button
- Relay out for lock driver

3 Operation window

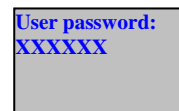


Function key description :

- F1** : Enter Administrator Mode
Function key for Time & Attendance
- F2** : Function key for Time & Attendance
- F3** : Delete (Backspace)
Function key for Time & Attendance
- F4** : Function key for Time & Attendance
- #** : Confirm
- *** : Cancel
- 0** ~ **9** : Number key



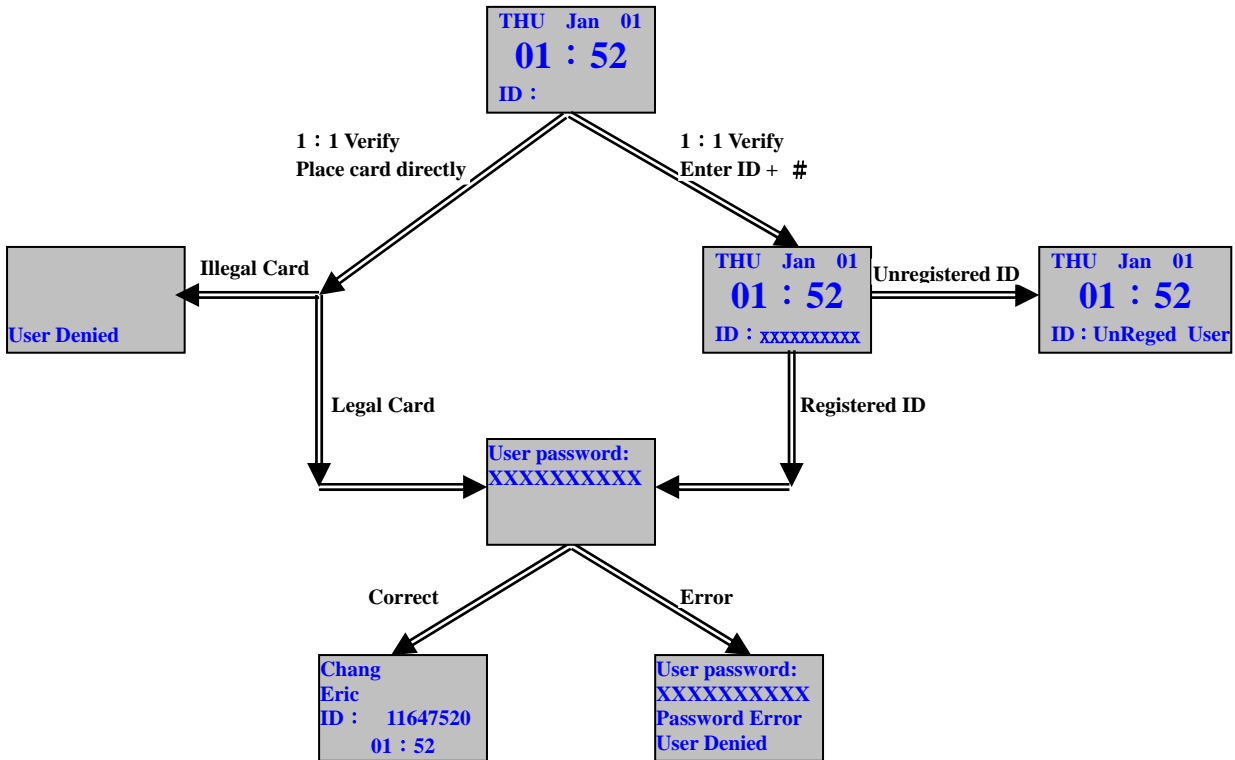
Illegal card



Asking password verify

4 User's Menu

4.1 For password verify user (1:1 verify)



☞ Operation description :

1 : 1 verify , max. 5000 users

Method 1 :

~ Enter ID

Press #

~ Enter password
6~10 digit

Press #

Method 2 :

Place sensor card on the coil directly

~ Enter password
6~10 digit

Press #

☞ Function key description :

: Enter Administrator Mode
Function key for Time & Attendance

: Function key for Time & Attendance

: Delete (Backspace)
Function key for Time & Attendance

: Function key for Time & Attendance

: Confirm

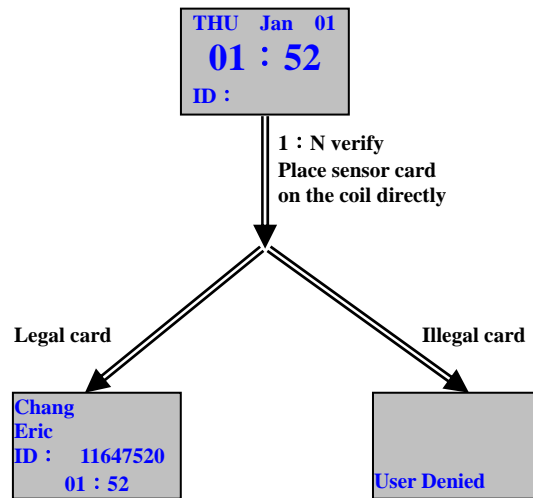
: Cancel

~ : Number key

Note : 1. If you use function key please press function key first

2. If you want to show name on LCD then you must enter name in BF-880X/870X web

4.2 For card verify user (1:N verify)



☞ Operation description :

1 : N verify , max. 5000 users
Place sensor card on the coil directly

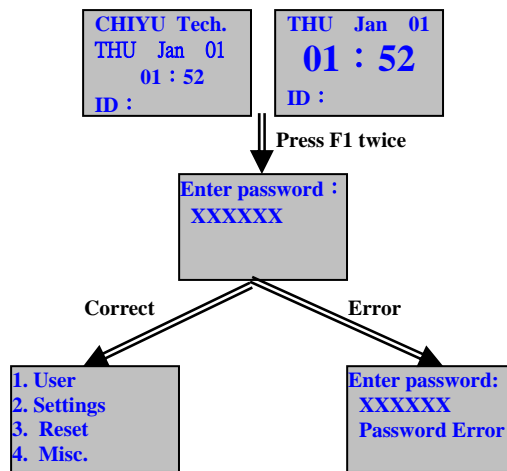
Note : 1. If you use function key please press function key first
2. If you want to show name on LCD then you must enter name in BF-880X/870X web setting

☞ Function key description :

- F1** : Enter Administrator Mode
Function key for Time & Attendance
- F2** : Function key for Time & Attendance
- F3** : Delete (Backspace)
Function key for Time & Attendance
- F4** : Function key for Time & Attendance
- #** : Confirm
- *** : Cancel
- 0** ~ **9** : Number key

5 Administrator Menu

Administrator menu allows new user registration and deletion, and system configuration. Press “F1” twice to enter ◦



☞ Operation description :

- F1** Press F1 twice
- 0** ~ **9** Enter 6 digit password
default value is 111111
- #** Press #
- 0** ~ **9** Press 1~4 to select
- *** Press * to exit

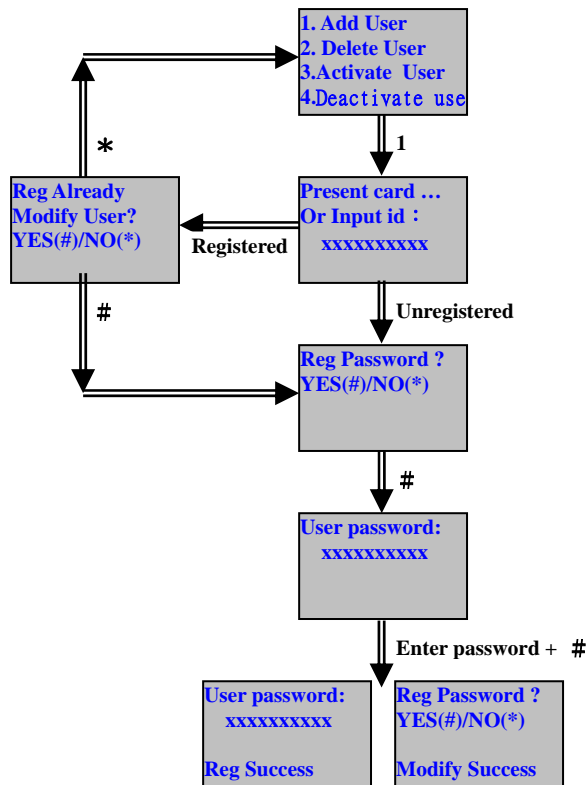
☞ Function key description :

- F1** : Enter Administrator Mode/Page Up
- F2** : Page Down
- F3** : Delete (Backspace)
- F4** : No use
- #** : Confirm
- *** : Cancel
- 0** ~ **9** : Number key

5.1 User

5.1.1 Add User : register a new user

5.1.1.1 Password verify user



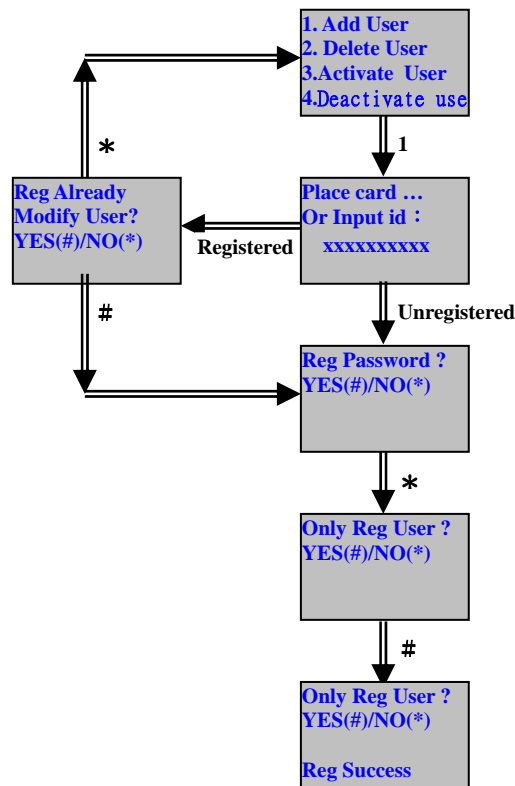
☞ Operation description :

- ~ Press 1
- ~ Enter ID or Place sensor card on the coil
- Press #
- Press # to register password
- ~ Enter password 6~10 digit
- Press #

☞ Function key description :

- : Enter Administrator Mode/Page Up
- : Page Down
- : Delete (Backspace)
- : No use
- : Confirm
- : Cancel
- ~ : Number key

5.1.1.2 Card verify user



☞ Operation description :

0 ~ **9** Press 1

Place sensor card on the coil

***** Press * to cancel password register

Press # to confirm

Note : After register success please modify open mode to card first , see 5.1.3

☞ Function key description :

F1 : Enter Administrator Mode/Page Up

F2 : Page Down

F3 : Delete (Backspace)

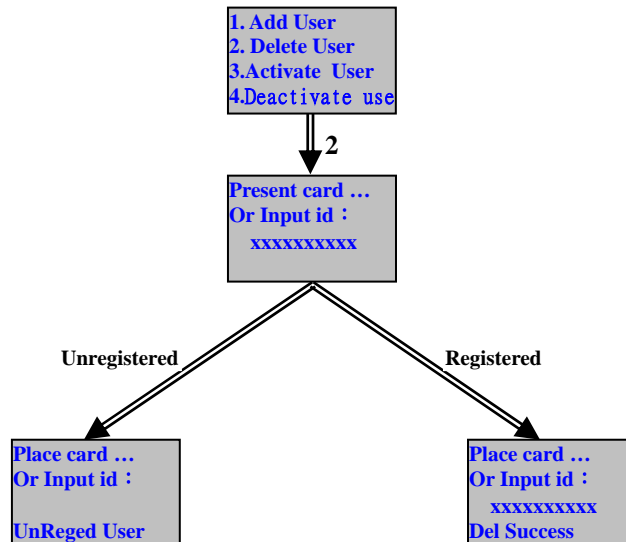
F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

5.1.2 Delete User : Del one registered user



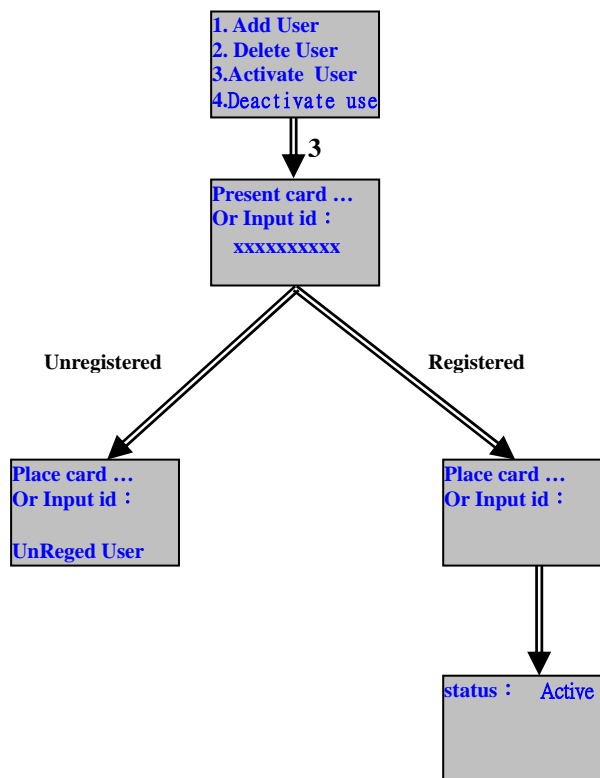
☞ Operation description :

- 0** ~ **9** Press 2
- 0** ~ **9** Enter ID or Place sensor card on the coil
- #** Press #

☞ Function key description :

- F1** : Enter Administrator Mode/Page Up
- F2** : Page Down
- F3** : Delete (Backspace)
- F4** : No use
- #** : Confirm
- *** : Cancel
- 0** ~ **9** : Number key

5.1.3 Activate User : To enable authority of user for using BF-660C



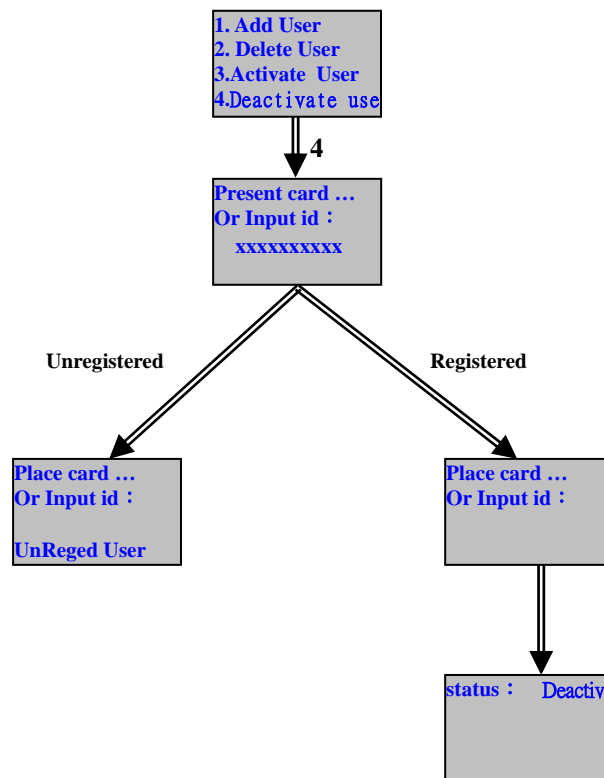
☞ Operation description :

- 0 ~ 9** Press 3
- 0 ~ 9** Enter ID or Place sensor card on the coil
- #** Press #

☞ Function key description :

- F1** : Enter Administrator Mode/Page Up
- F2** : Page Down
- F3** : Delete (Backspace)
- F4** : No use
- #** : Confirm
- *** : Cancel
- 0 ~ 9** : Number key

5.1.4 Deactivate Use : To disenable authority of user for using BF-880X/870X



☞ Operation description :

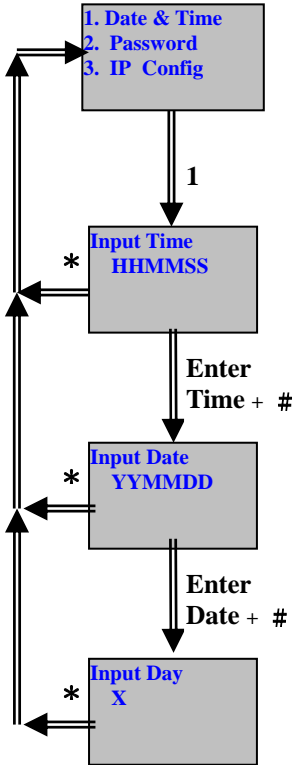
- 0 ~ 9** Press 4
- 0 ~ 9** Enter ID or Place sensor card on the coil
- #** Press #

☞ Function key description :

- F1** : Enter Administrator Mode/Page Up
- F2** : Page Down
- F3** : Delete (Backspace)
- F4** : No use
- #** : Confirm
- *** : Cancel
- 0 ~ 9** : Number key

5.2 Settings

5.2.1 Date & Time: Set time、date and week of BF-880X/870X



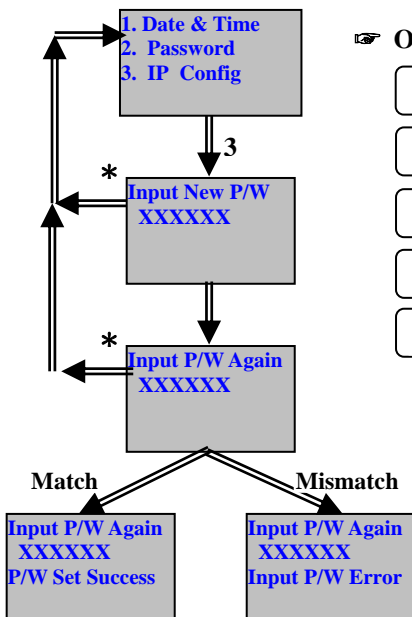
Operation description :

- ~ Press 1
- ~ Enter time HHMMSS
- Press #
- ~ Enter date YYMMDD
- Press #
- ~ Enter week 1~7
- Press #

Function key description :

- : Enter Administrator Mode/Page Up
- : Page Down
- : Delete (Backspace)
- : No use
- : Confirm
- : Cancel
- ~ : Number key

5.2.2 Password: Change manager's password



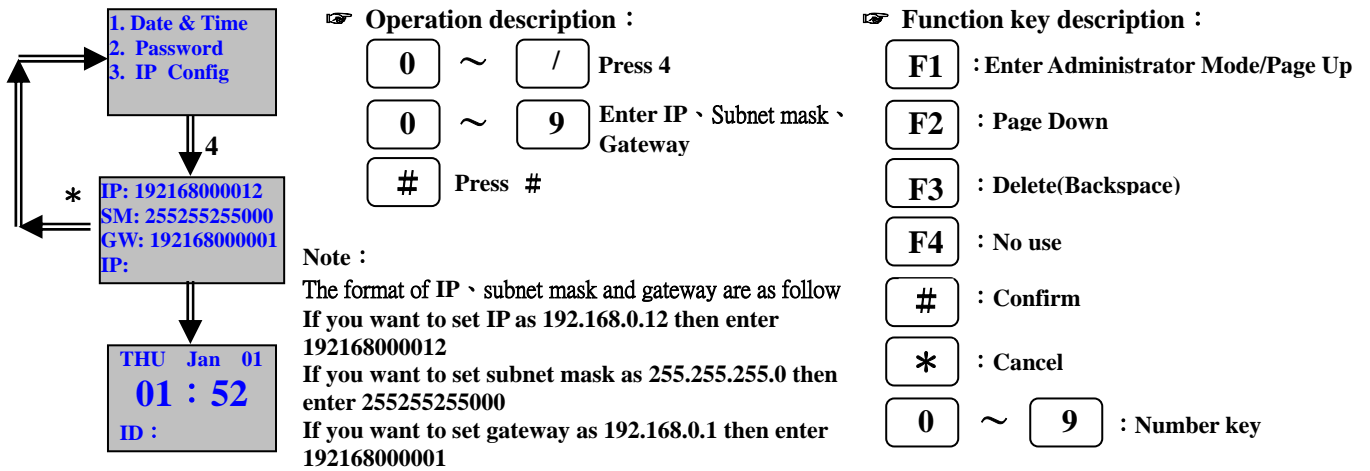
Operation description :

- ~ Press 3
- ~ Enter 6 digit password
- Press #
- ~ Enter 6 digit password
- Press #

Function key description :

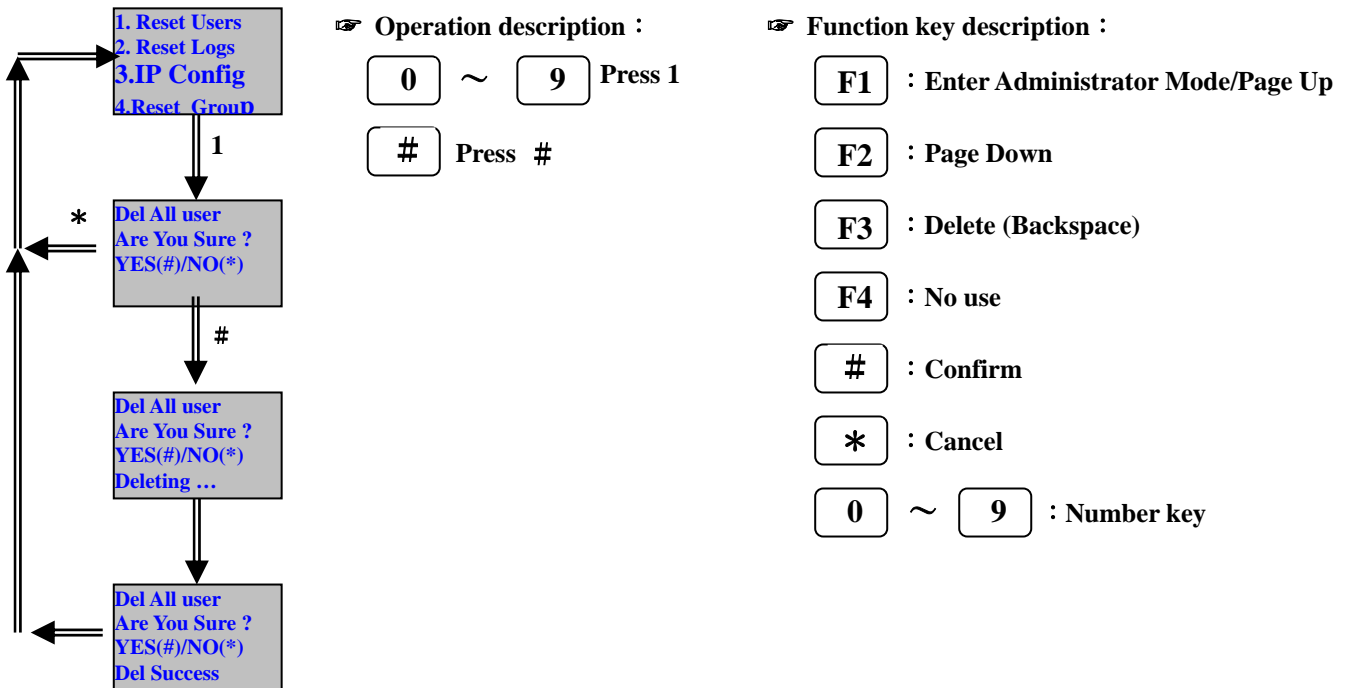
- : Enter Administrator Mode/Page Up
- : Page Down
- : Delete(Backspace)
- : No use
- : Confirm
- : Cancel
- ~ : Number key

5.2.3 IP Config: Set IP data of BF-880X/870X

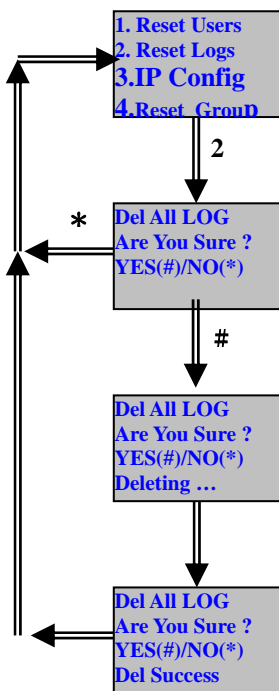


5.3 Settings

5.3.1 Reset Users : Delete all registered users



5.3.2 Reset Logs : Delete all logs



☞ Operation description :

0 ~ **9** Press 2

Press

☞ Function key description :

F1 : Enter Administrator Mode/Page Up

F2 : Page Down

F3 : Delete (Backspace)

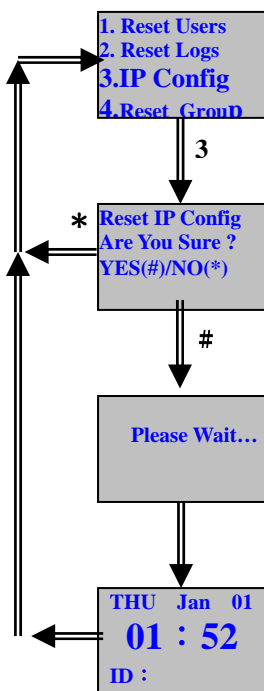
F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

5.3.3 IP Config : Reset IP to factory default



☞ Operation description :

0 ~ **9** Press 3

Press

☞ Function key description :

F1 : Enter Administrator Mode/Page Up

F2 : Page Down

F3 : Delete (Backspace)

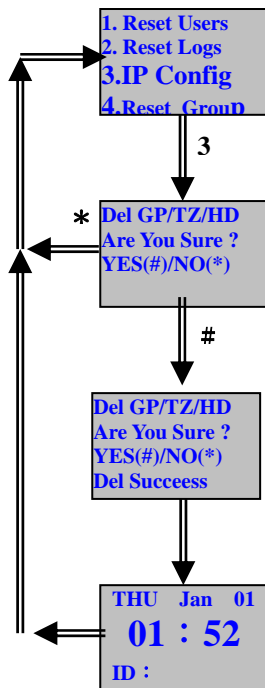
F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

5.3.4 Reset Group



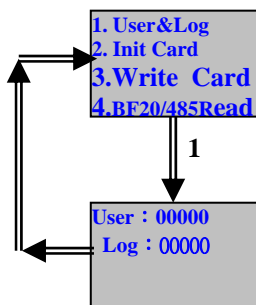
☞ Operation description :
 ~ Press 4
 Press #

☞ Function key description :

- : Enter Administrator Mode/Page Up
- : Page Down
- : Delete (Backspace)
- : No use
- : Confirm
- : Cancel
- ~ : Number key

5.4 Misc.

5.4.1 User&Log : Display total number of registered users and total number of logs

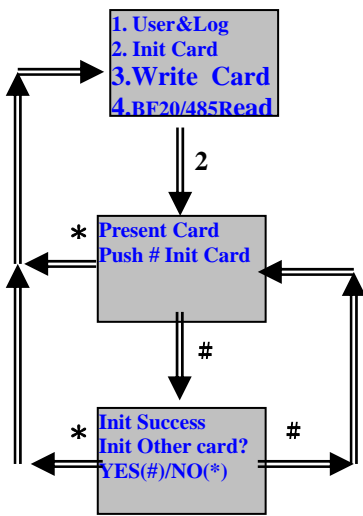


☞ Operation description :
 ~ Press 1

☞ Function key description :

- : Enter Administrator Mode/Page Up
- : Page Down
- : Delete (Backspace)
- : No use
- : Confirm
- : Cancel
- ~ : Number key

5.4.2 Init Card : Initial TM card to EM format



☞ Operation description :

~ Press 2

Press #

Place sensor card on the coil

☞ Function key description :

: Enter Administrator Mode/Page Up

: Page Down

: Delete (Backspace)

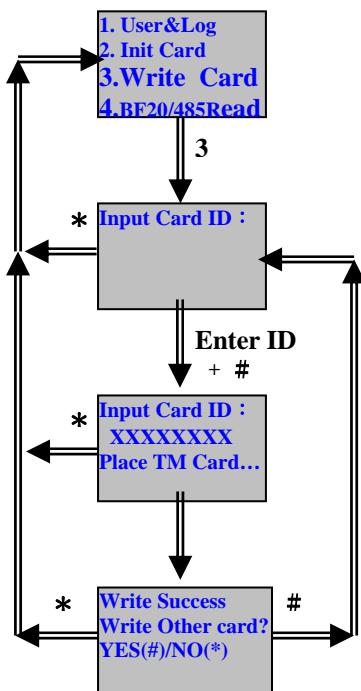
: No use

: Confirm

: Cancel

~ : Number key

5.4.3 Write Card : Write ID number to TM card



☞ Operation description :

~ Press 3

~ Enter ID+ #

Place sensor card on the coil

☞ Function key description :

: Enter Administrator Mode/Page Up

: Page Down

: Delete (Backspace)

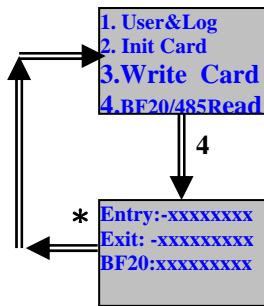
: No use

: Confirm

: Cancel

~ : Number key

5.4.4 BF20/485 Reader



☞ Operation description :

0 ~ **9** Press 2

Press

Place sensor card on the coil

☞ Function key description :

F1 : Enter Administrator Mode/Page Up

F2 : Page Down

F3 : Delete (Backspace)

F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

6 Specifications

6.1 Module Features

- Main board
- Keyboard module
- LCD module
- Build-In Card Reader

6.2 Power Supply

6.2.1 Voltage

- +9V to +30V DC

6.2.2 Current

- Average: 300Ma, 12V
- Maximum power consumption: 500mA

6.3 Environment

6.3.1 Temperature and humidity

- Operating temperature: 0°C to 55°C
- Storage temperature: -20°C to 85°C
- Operating humidity: 0% to 95%
- Storage humidity: 0% to 95%

6.3.2 Immunity to electro static discharge

- 0~4kV contact discharge: No unrecoverable error °
- 0~8kV air discharge: No user detectable error °

6.4 Communication

- 1 RJ-45 port(10/100M) for management
- 1 rs-232 port
- 1 RS-485 port
- Meet RS232, RS485 specifications

6.5 Drivers

- 2 Relay Out (COM, NO, NC)

6.6 Capacity

- 5000 persons with 1 card/1 password per person.

6.7 Log entry memory

- 65000 log entries total.

6.8 Size(yet to be set)

- BF-880X: 170 mm(H) X 143 mm(W) X 48 mm(D)
- BF-870X: 156 mm(H) X 140 mm(W) X 50 mm(D)

6.9 Weight

- BF-880X: 480g.
- BF-870X: 385g.

6.10 Authentication time

- Average : shorter than 1 second.

6.11 Register time

- Average: shorter than 2 second

6.12 Input


- 10 number keys + 6 function keys

6.13 Display


- 1 Buzzer
- 1 LCD: 128 X 64 pixels
- 2 LED

7 Appendix

7.1 Note

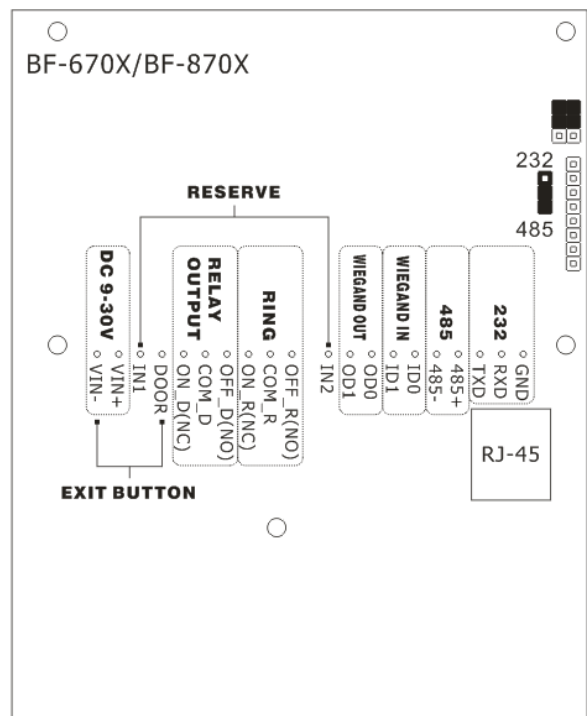
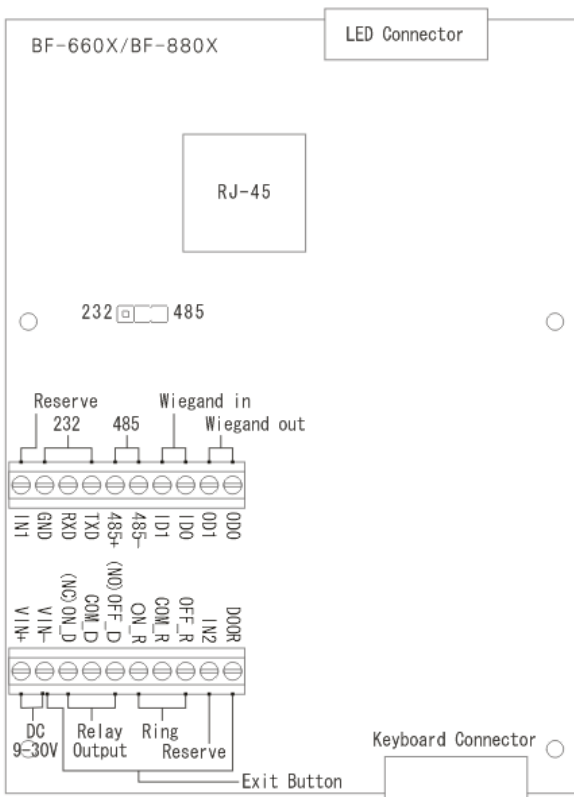
 **The first thing when you install BF-880X/870X**

- Please change the system password first. BF-880X/870X's password is fixed at "111111" initially. It makes a security problem.

 **Please do these when BF-880X/870X has out of function.**

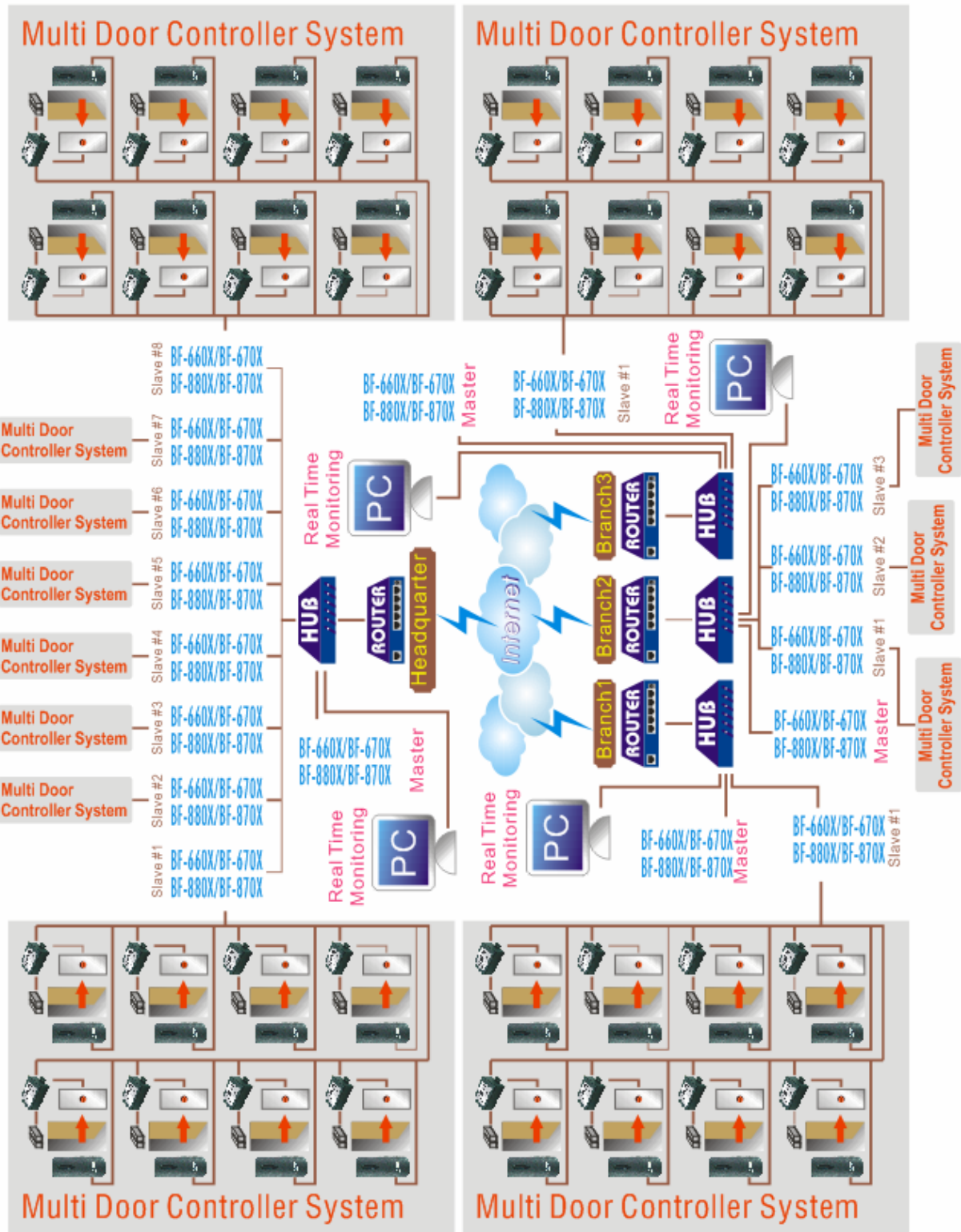
- Power off and power on again, so initialize BF-880X/870X. After initializing BF-880X/870X, if it has same status still, please calls on Chiyu's service center.

7.2 External connector

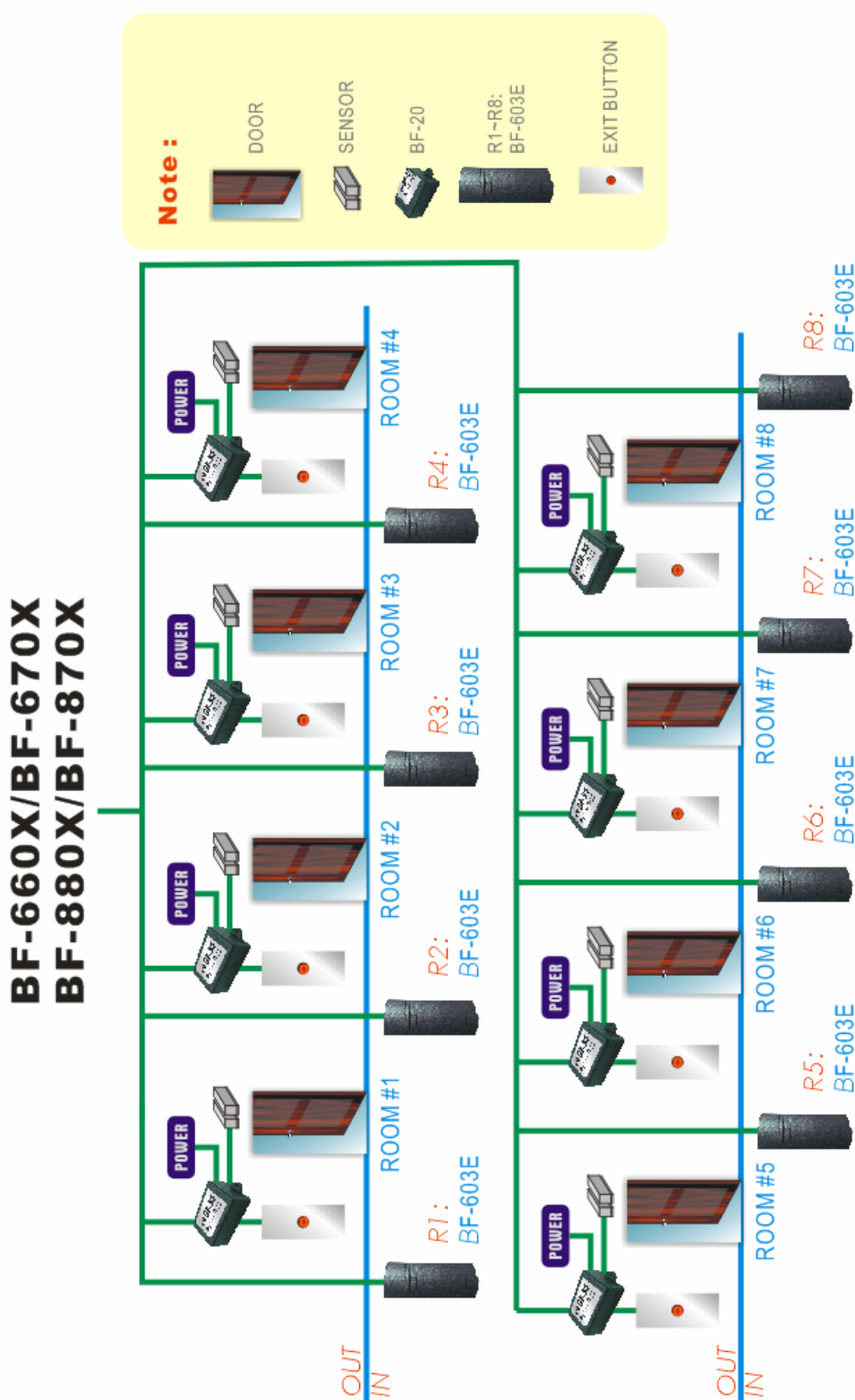


7.3 Connection example

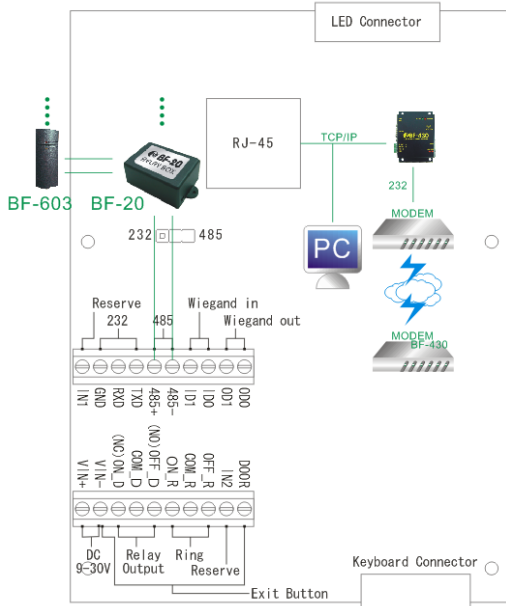
- Time & Attendance System Application



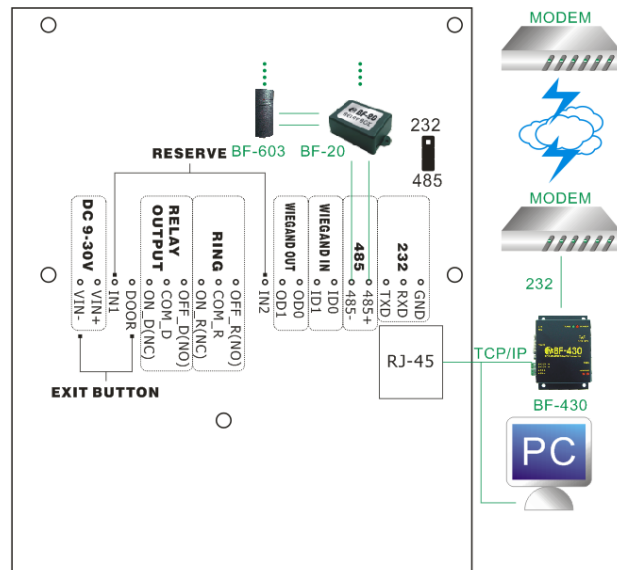
- Multi-doors Control System Application



● 485 Connection example



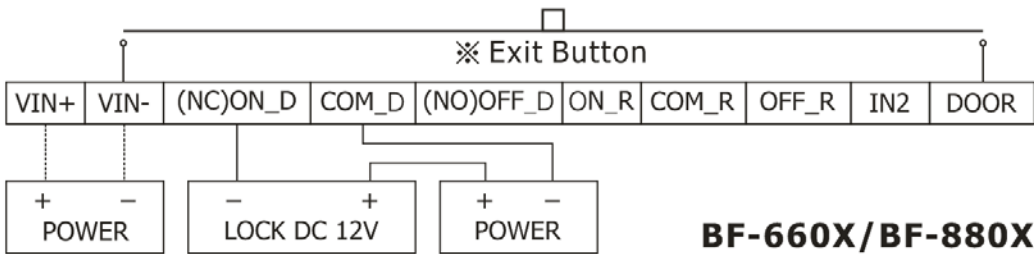
【BF-660X/BF-880X】



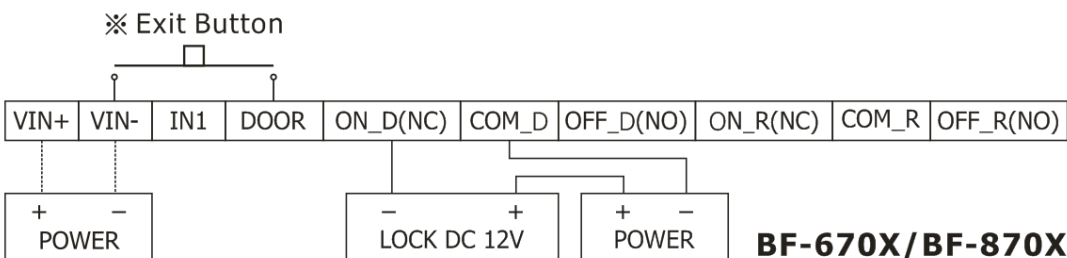
【BF-670X/BF-870X】

● Electronic Lock Control

Lock open when lock is power off

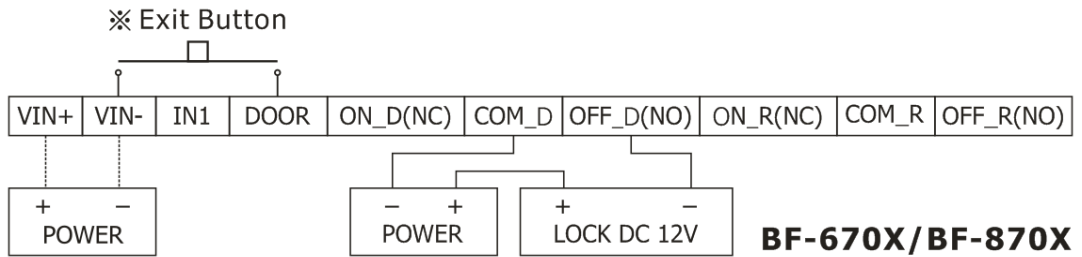
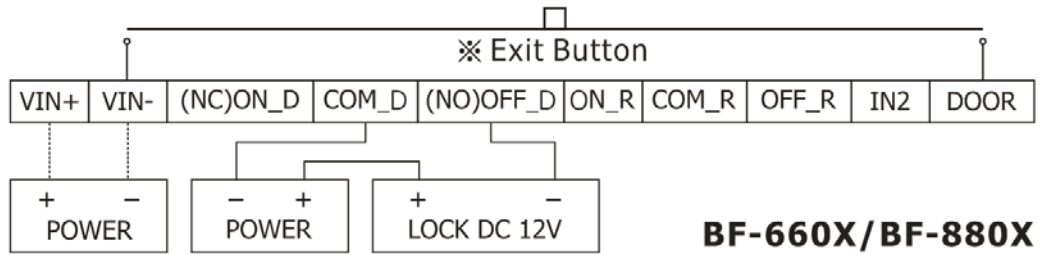


BF-660X/BF-880X



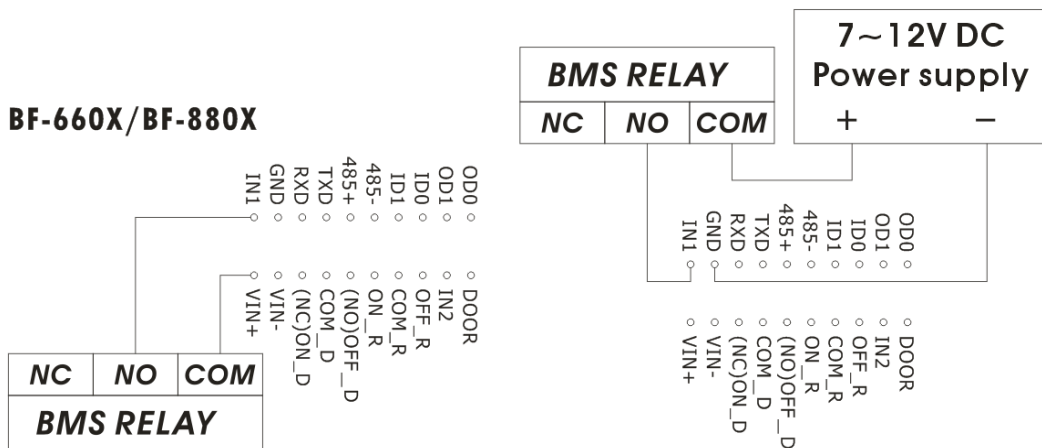
BF-670X/BF-870X

Lock open when lock is power on



● **Fire Alarm**

BF-660X/BF-880X



BF-670X/BF-870X

