



Warp 3

User's Manual

2008.07

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1 About WARP3 SERIES

WARP3 SERIES 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. Our fingerprint ID technology bypasses problems of existing security solutions such as security cards and keypad locks.

WARP3 SERIES 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 WARP3 SERIES user-friendly.

2 Features

2.1 Characteristics

- **Fingerprint identification enhances security**
Existing security measures such as security cards system and keypad locks are prone to breach by unauthorized persons through card-duplication or disclosure of set security code. Fingerprint ID system can truly restrict security access only to those authorized persons.
- **Reliable fingerprint ID algorithm**
Our in-company developed fingerprint ID algorithm has minimized False Rejection Rate and False Acceptance Rate.
- **Entrance security, time and attendance, over-time management and other applications**
Fingerprint ID 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 fingerprint ID system.
- **Special function keys may be configured to time and attendance and entrance access management**
40 programmable function keys can be used to manage time and attendance. One WARP3 SERIES can be adapted to manage many different kinds of work involving site security control and time and attendance.
- **Low cost of system maintenance**
Existing IC cards require new issuance of cards with addition of new users and lost of cards. This becomes unnecessary with fingerprint ID system. System maintenance can be lowered to negligible levels when compared to other solutions.
- **Use of stand-alone modules and working in conjunction with an ACU**
WARP3 SERIES entrance control system may be used as stand-alone units to control entrance traffic or in multiple module configurations Utilizing Weigand/RS485 protocol to contain with an ACU. Also, direct connection to a PC is possible via TCP/IP or RS485 protocol when software library bundled. Because WARP3 SERIES content RTC and log management capabilities (up to 32,700 records), entrance security and other event management are possible without an ACU.
Besides, WARP3 SERIES involves clock on time and record ability (32,700 logs at most), so it can be used to entrance security or other stand-alone modules.
- **Expandable and Convenience**
WARP3 SERIES has Http Server inside, and that makes you revise the setting on line, download data, manage employees and maintain the system conveniently.

2.2 Support functions

2.2.1 User management

- Register a user, provide 4 type of register (1.Fingerprint 2.Password 3.RFID 4.Fingerprint+Password)
- Support 32 designations and departments for set
- Manager can depend on the real supply situation for the limit period of employee one by one
- Manage the entrance security and time by group
- The status of employee can activate or deactivate
- Supply employee's data, you can check every employee's number, name, status and the way of identification.
- Delete a user or all users

2.2.2 System management

- Http server inside can use IE to revise the data and manage user on line
- System setting has two security level includes account and password to avoid the setting status revised by a bad intention
- Set terminal ID, title on LCD, description, fingerprint security level, maintenance time, card ID display format
- Set communication status on the internet, such as IP Address, Gateway, DNS, Port Number, Host Name and DDNS.
- System clock setup: you can setup clock immediately by your hand or connect to the time server to revise everyday
- Support 40 IN/OUT trigger setup
- Backup and restore the user's data directly
- Import all user's list directly on the internet

2.2.3 Door mode

- 64 time set, 64 time zone setup, 32 group list, 32 holiday setup
- You can aimed at some entrance/exit setup location, relay trigger, lock release time zone, exit button time zone, anti pass back level, lock release time and door open delay time by connect to door lock controller or elevator controller
- You can define some entrance/exit, floor, parking area and attendance control by system
- Door status on line
- Configure and read door mode (normal/ forced open) by real situation

2.2.4 Log

- Access log: user or employee can query their access log by any computer
- Query by user ID, terminal ID, department, function key and time zone
- Query daily first in/last out for separate user
- Export the IN/OUT log (TXT or XLS) directly on line
- You can use software program to download the log instantly

2.2.5 Authentication

- WARP3 SERIES supply 5 authentication ways (1. fingerprint 2. RFID 3. password 4. fingerprint+ password 5. fingerprint or password)
- Door access setup finger+ pin time zone, card+ pin time zone

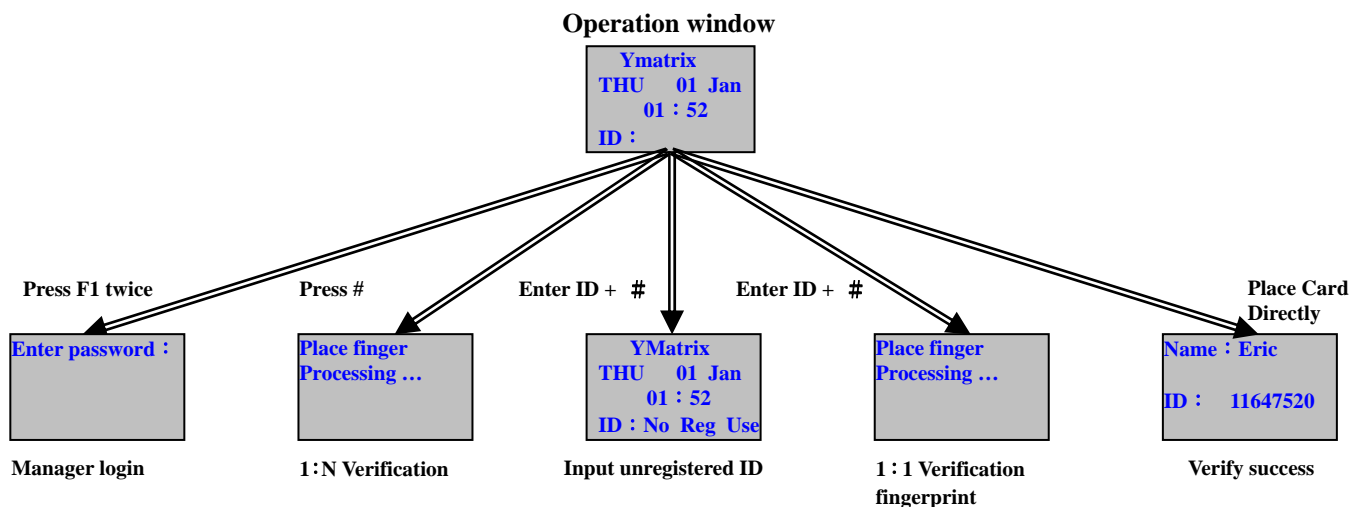
2.2.6 Real time event

- Display user I.D. Name on LCD at authentication time
- Display fingerprint status grade on LCD at authentication time and supply to fingerprint file

2.2.7 Auxiliary function

- Exit button
- Relay out (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

User password:
XXXXXXXXXX

1 : 1 Verification
password

YMatrix
THU 01 Jan
01 : 52
ID : No Reg Use

Input unregistered ID

Card ID Error
User Denied

Illegal card

Place finger
Processing ...

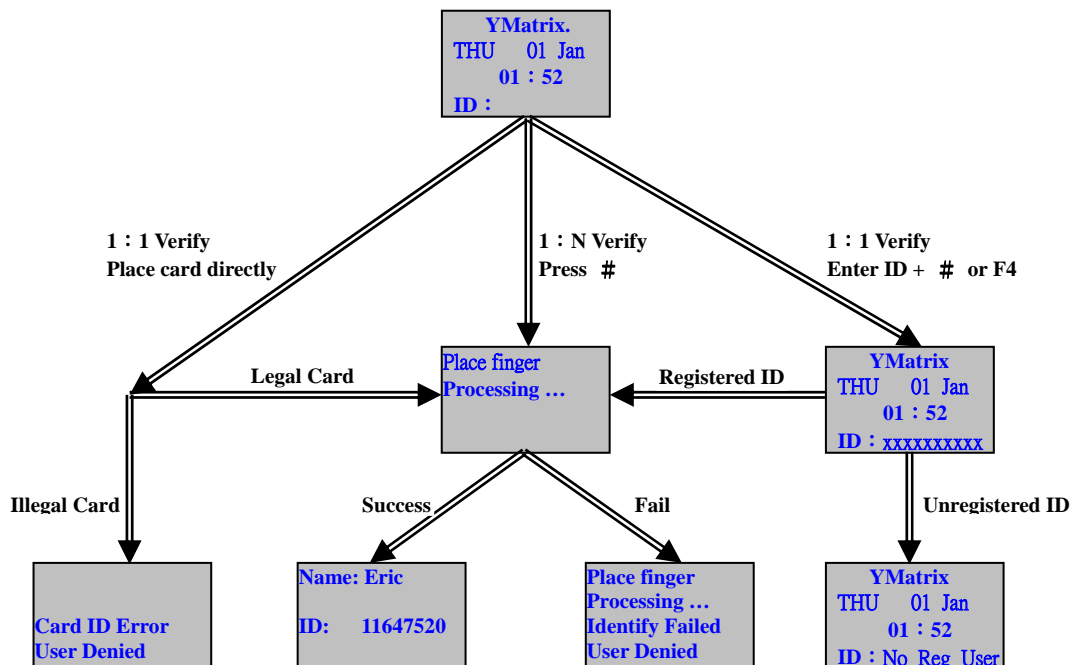
Asking fingerprint
verify

Enter password:
XXXXXX

Asking password
verify

4 User's Menu

4.1 For fingerprint verify user



Operation description :

Method 1 : 1 : 1 verify , 950 users for Warp3G and 5000 users for Warp3

Place sensor card on the coil directly
Place finger for verify

Method 2 : 1 : N verify

Place finger for verify

Method 3 : 1 : 1 verify

0 ~ **9** Enter ID

**F4** Press # or F4

Place finger for verify

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

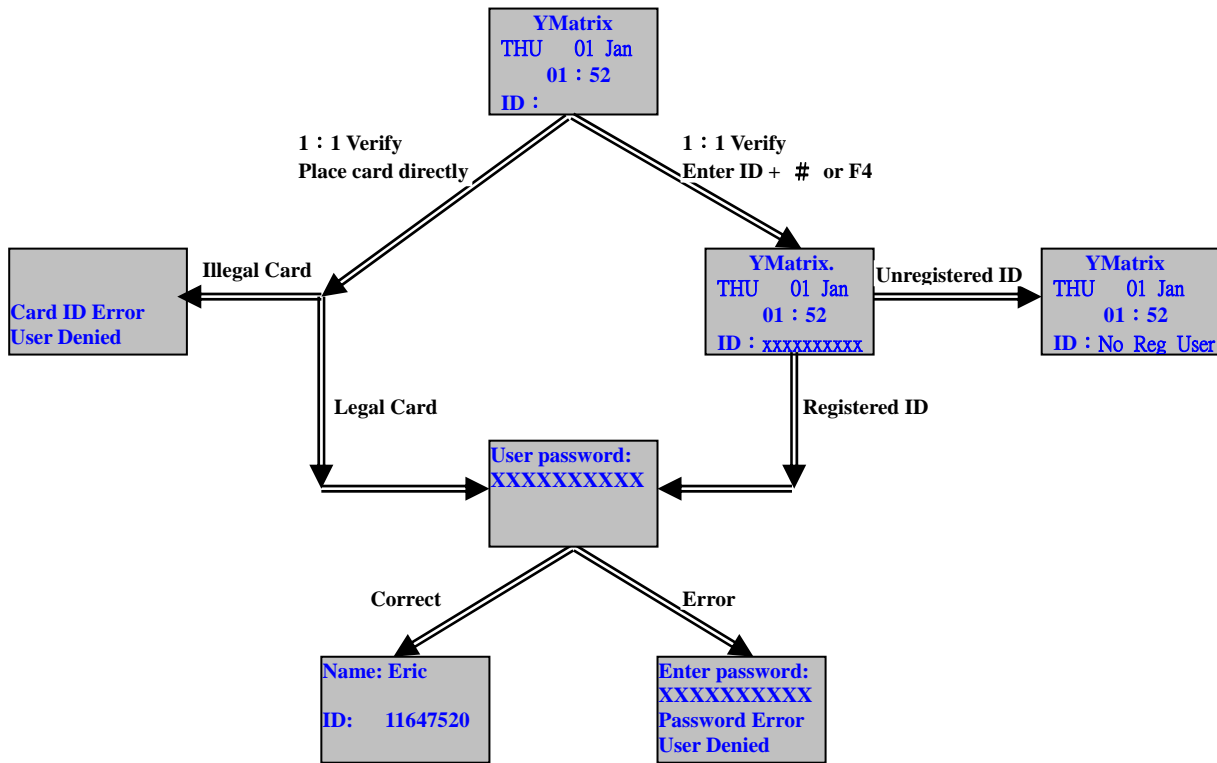
***** : Cancel

0 ~ **9** : Number key

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

2. If you want to show name on LCD then you must register Name to WARP 3 SERIES by

4.2 For password verify user (1:1 verify)



☞ Operation description :

1 : 1 verify , max. 950 users for Warp3G and 5000 users for Warp3

Method 1 :

~ Enter ID

Press # or F4

~ 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

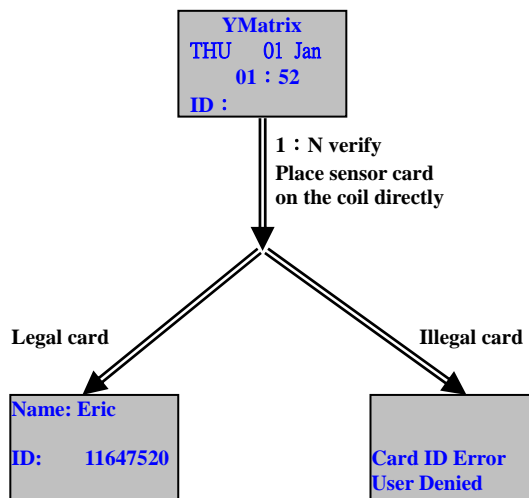
: Confirm

: 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 register Name to Warp 3 Series by software

4.3 For card verify user (1:N verify)



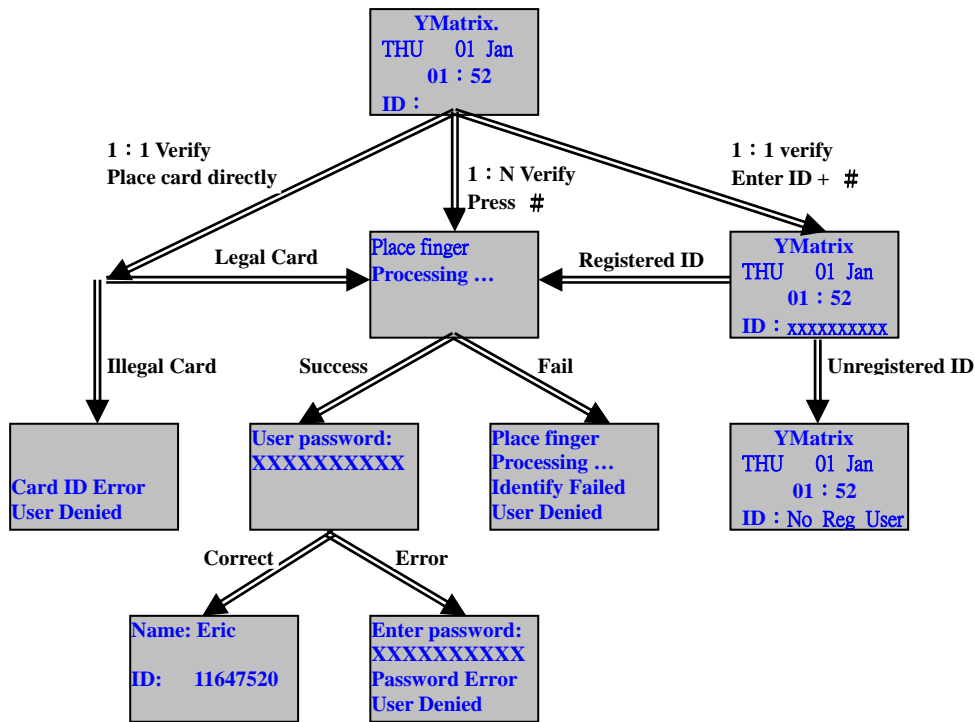
Operation description :
 1 : N verify , max. 950 users for Warp3G and 5000 for Warp3
 Place sensor card on the coil directly

Note : 1. If you use function key please press function key first
 2. If you want to show name on LCD then you must register Name to Warp 3 Series by

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

4.4 For fingerprint + password verify user



Operation description :

Method 1 : 1 : 1 verify , max. 950 users for Warp3G and 5000 users for Warp3

- Place sensor card on the coil directly
- Place finger for verify
- ~ Enter password 6~10 digit
- Press #

Method 2 : 1 : N verify , less than 100 users

- Press #
- Place finger for verify
- ~ Enter password 6~10 digit
- Press #

Method 3 : 1 : 1 verify , max. 950 users for Warp3G and 5000 users for Warp3

~ Enter ID

Press # or F4

Place finger for verify

~ Enter password 6~10 digit

Press #

- Note : 1. If you use function key please press function key first
- 2. If you want to show name on LCD then you must register Name to Warp3 Series by software

☞ **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

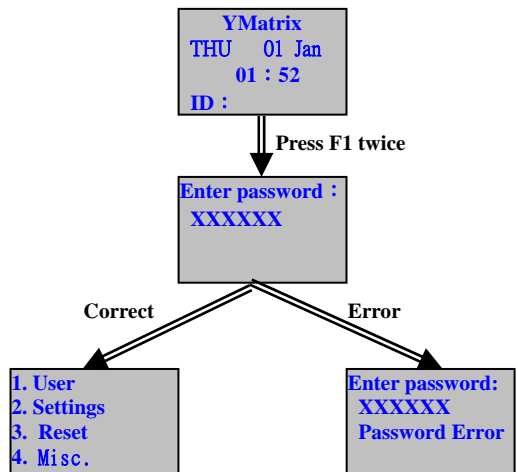
4.5 Fingerprint or Password verify user

Operation is same as 4.1 、 4.2 and the priority is Password > Fingerprint (for sensor card 1 : 1 verify).

Enter "ID + #" will run fingerprint verify, "ID + F4" will run password verify.

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
- F1** **F2** Press F1/F2 to Page Up/Page Down
- *** Press * to exit

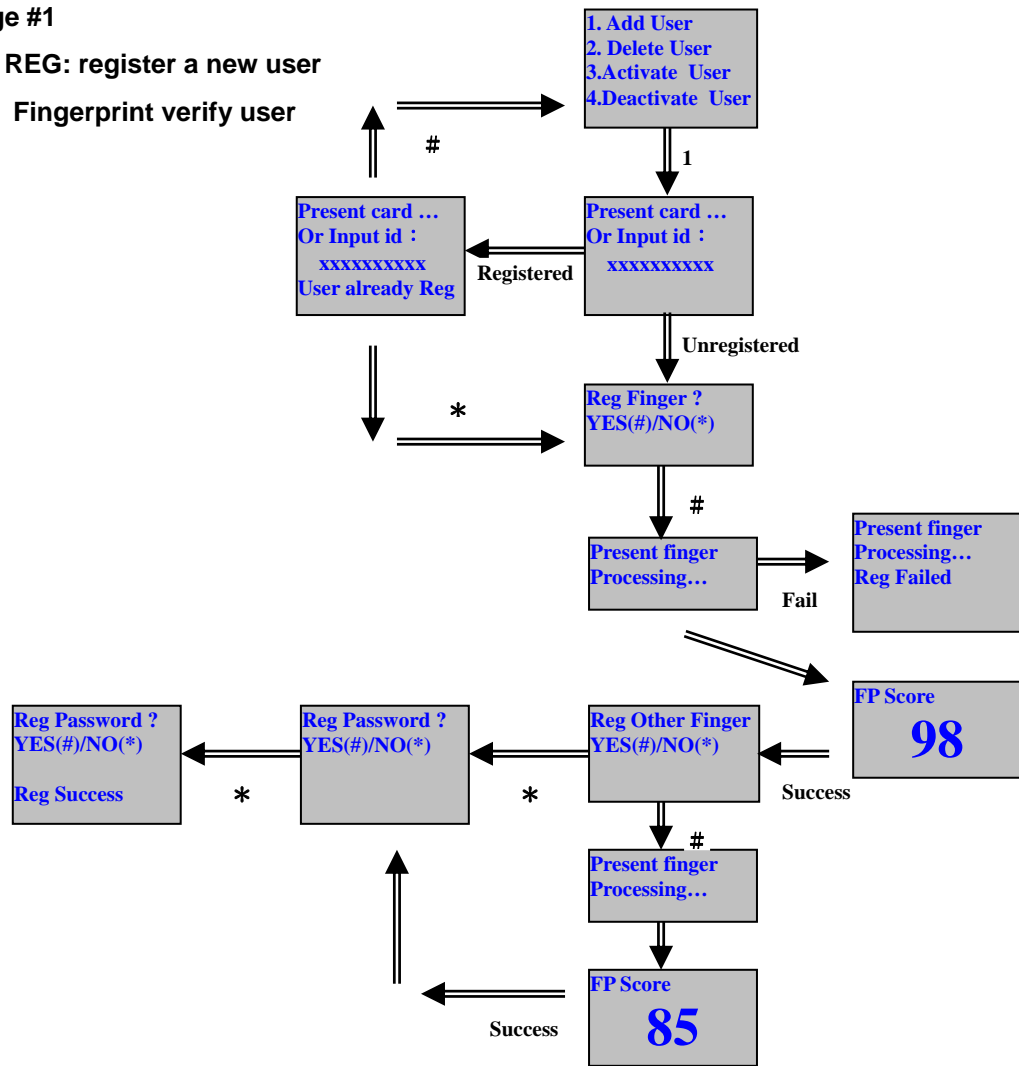
☞ Function key description :

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

5.1 Menu page #1

5.1.1 User REG: register a new user

5.1.1.1 Fingerprint verify user



☞ Operation description :

F1 **F2** Press F1/F2 to find User REG

0 ~ **9** Press 1

0 ~ **9** Enter ID or Place sensor card on the coil

Press

Press # to register fingerprint

Place finger on the sensor to enroll fingerprint

Press # to enroll second fingerprint

Place finger on fingerprint sensor

***** Press * to cancel password register

☞ Function key description :

F1 : Enter Administrator Mode/Page Up

F2 : Page Down

F3 : Delete (Backspace)

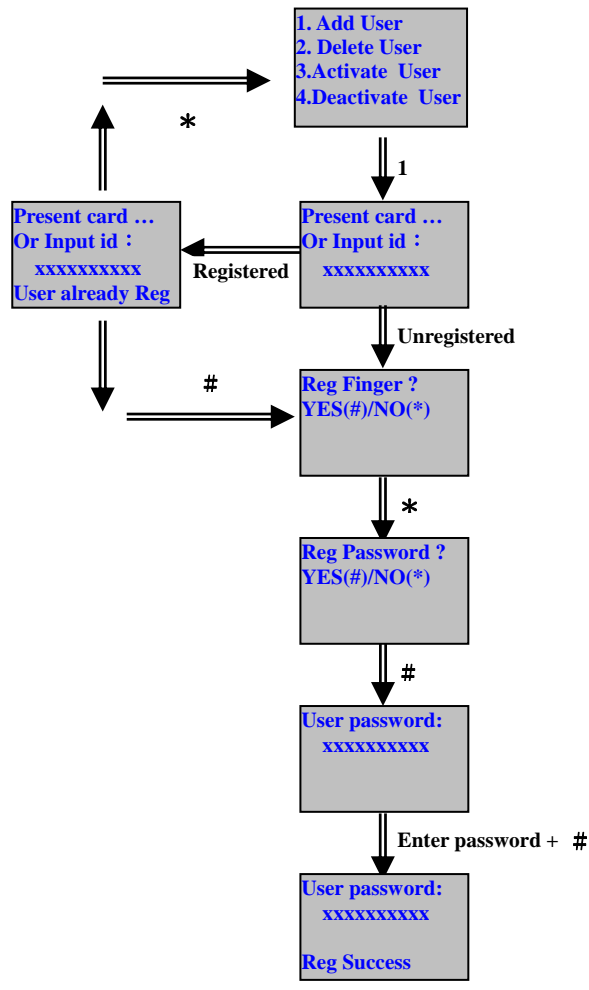
F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

5.1.1.2 Password verify user



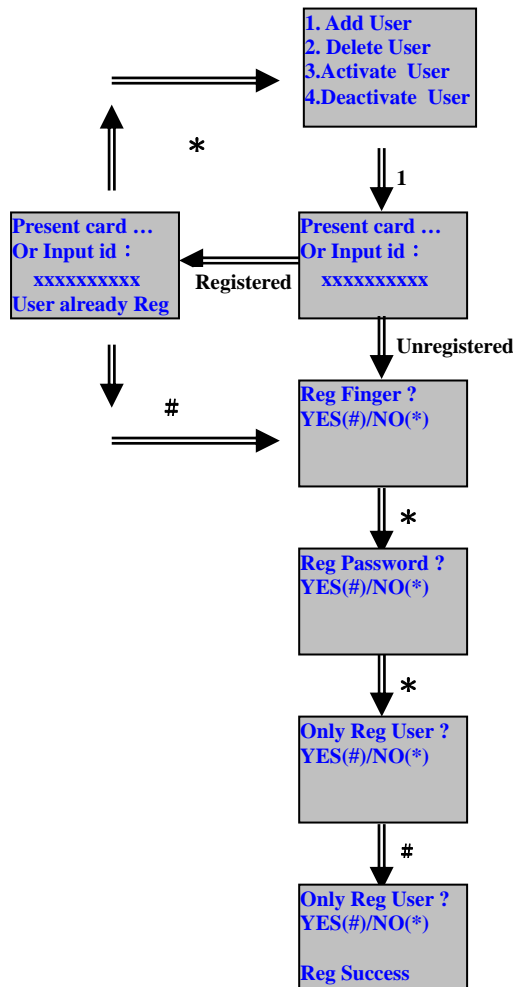
☞ Operation description :

- F1** **F2** Press F1/F2 to find User REG
- 0** ~ **9** Press 1
- 0** ~ **9** Enter ID or Place sensor card on the coil
- #** Press #
- *** Press * to cancel fingerprint register
- #** Press # to register password
- 0** ~ **9** Enter password 6~10 digit
- #** 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

5.1.1.3 Card verify user



☞ Operation description :

F1 **F2** Press F1/F2 to find User REG

0 ~ **9** Press 1

Place sensor card on the coil

***** Press * to cancel fingerprint register

***** 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)

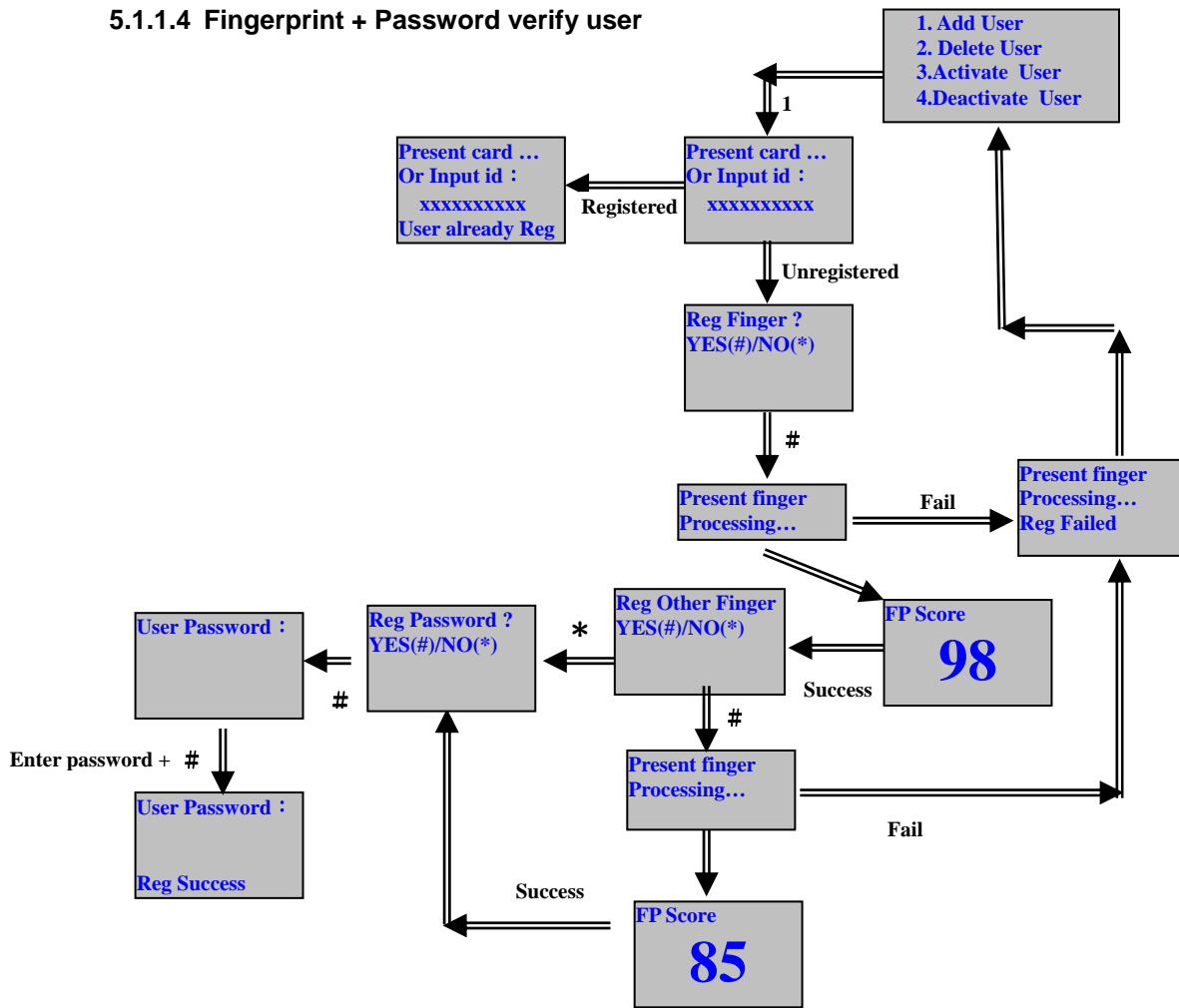
F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

5.1.1.4 Fingerprint + Password verify user



Operation description :

F1 **F2** Press F1/F2 to find User REG

0 ~ **9** Press 1

0 ~ **9** Enter ID or Place sensor card on the coil

Press

Press # to register fingerprint

Place finger on the sensor to enroll fingerprint

Press # to enroll second fingerprint

Place finger on fingerprint sensor

Press # to register password

0 ~ **9** Enter password 6~10 digit

Press

Function key description :

F1 : Enter Administrator Mode/Page Up

F2 : Page Down

F3 : Delete (Backspace)

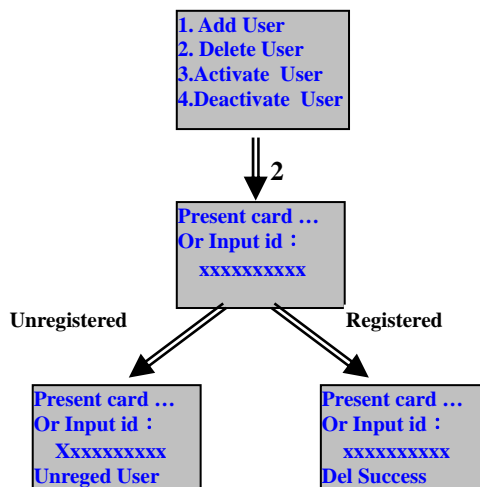
F4 : No use

: Confirm

***** : Cancel

0 ~ **9** : Number key

5.1.2 User Del: Del One User



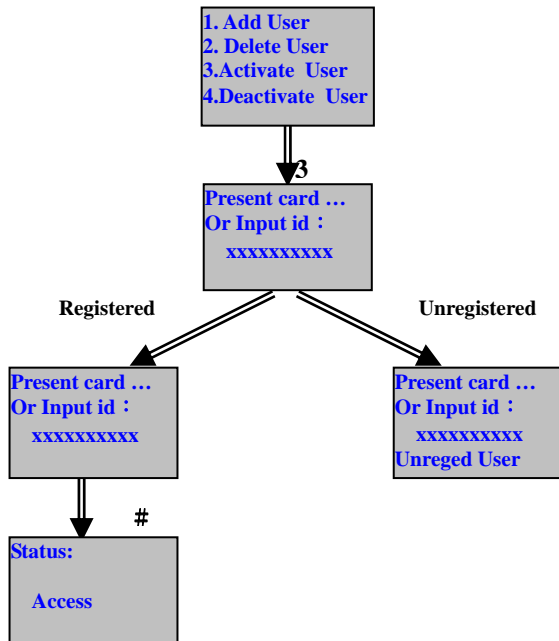
☞ Operation description :

- 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
- F3** : Delete (Backspace)
- #** : Confirm
- *** : Cancel
- 0** ~ **9** : Number key

5.1.3 User Set: Set user's verify type



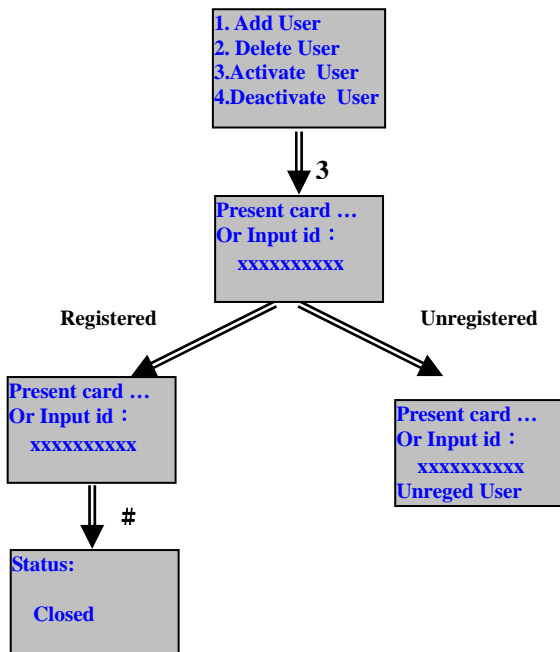
Operation description :

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

Function key description :

- : Enter Administrator Mode/Page Up
- : Delete (Backspace)
- : Confirm
- : Cancel
- ~ : Number key

5.1.4 User Closed: Closed user's verify type



Operation description :

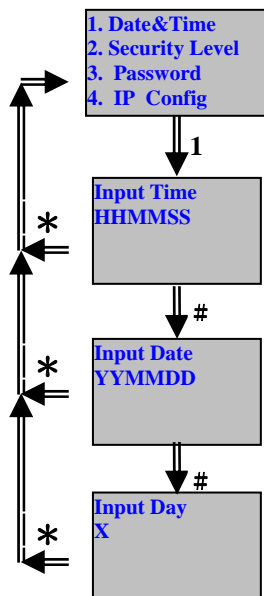
- ~ Press 4
- ~ Enter ID or Place sensor card on the coil
- Press #

Function key description :

- : Enter Administrator Mode/Page Up
- : Delete (Backspace)
- : Confirm
- : Cancel
- ~ : Number key

5.2 Menu page #2

5.2.1 Time: Set time, date and week of Warp3 series



☞ Function key description :

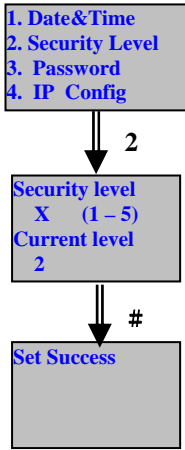
- F1** : Enter Administrator Mode/Page Up
- F3** : Delete (Backspace)
- #** : Confirm
- *** : Cancel
- 0** ~ **9** : Number key

☞ Operation description :

- 0** ~ **9** Press 1
- Set Time
 - 0** ~ **9** Enter time HHMMSS
 - #** Press #
- Set Date
 - 0** ~ **9** Enter date YYMMDD
 - #** Press #
- Set Day
 - 0** ~ **9** Enter week 1~7
 - #** Press #

5.2.2 Secure Level: Set system security level (for Warp3G only)

1 2 3 4 5
Low ← → High
High security level will decrease FAR (false acceptance rate) while increasing FRR (false rejection rate). Opposately, lower security level will increase FAR while decreasing FRR °



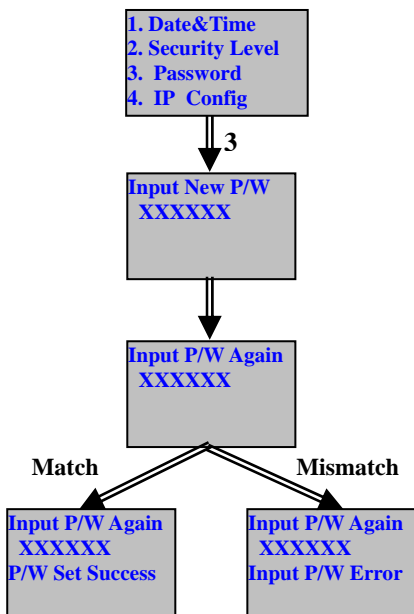
Operation description :

- [0] ~ [9] Press 3
- [0] ~ [9] Enter level 1~5
- [#] Press #

Function key description :

- [F1] : Enter Administrator Mode/Page Up
- [F3] : Delete (Backspace)
- [#] : Confirm
- [*] : Cancel
- [0] ~ [9] : Number key

5.2.3 Manager P/W: Change system password



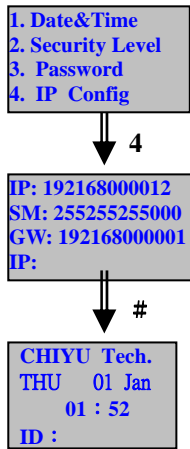
Operation description :

- [0] ~ [9] Press 3
- [0] ~ [9] Enter 6 digit password
- [#] Press #
- [0] ~ [9] Enter 6 digit password
- [#] Press #

Function key description :

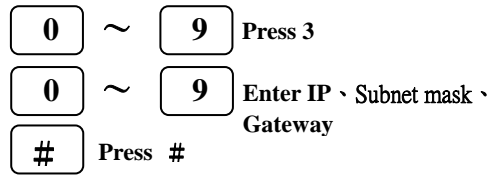
- [F1] : Enter Administrator Mode/Page Up
- [F3] : Delete (Backspace)
- [#] : Confirm
- [*] : Cancel
- [0] ~ [9] : Number key

5.2.4 IP Config: Set IP data of Warp3 series

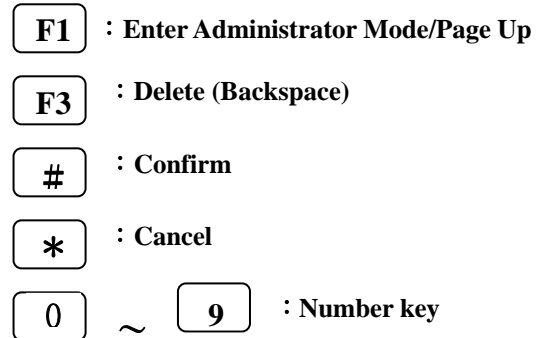


Note : The format of IP 、 subnet mask and gateway are as follow
 If you want to set IP as 192.168.0.12 then enter 192168000012
 If you want to set subnet mask as 255.255.255.0 then enter 255255255000
 If you want to set gateway as 192.168.0.1 then enter 192168000001

Operation description :

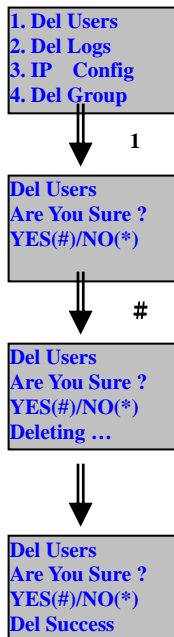


Function key description :

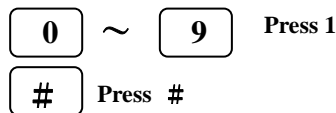


5.3 Menu page #3

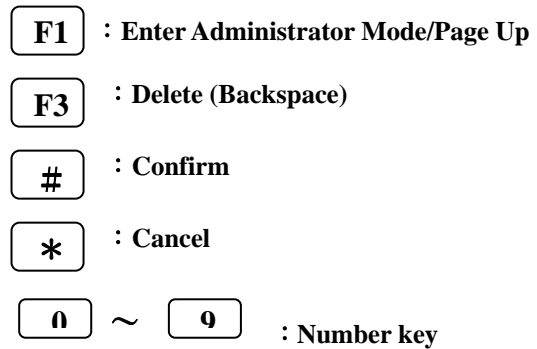
5.3.1 Del Users: Delete all users



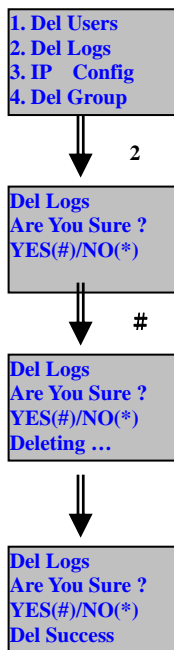
Operation description :



Function key description :



5.3.2 Del Logs: Delete all logs



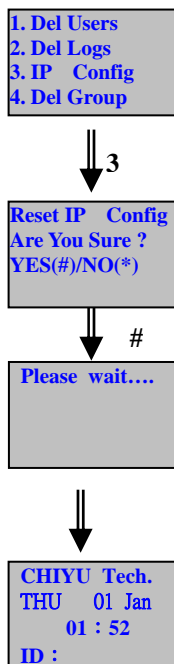
☞ Operation description :

0 ~ **9** Press 2
Press

☞ Function key description :

F1 : Enter Administrator Mode/Page Up
F3 : Delete (Backspace)
: Confirm
***** : Cancel
0 ~ **9** : Number key

5.3.3 IP Config: Reset IP



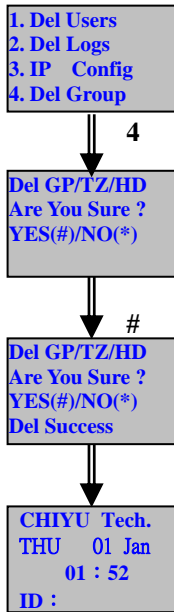
☞ Operation description :

0 ~ **9** Press 3
Press

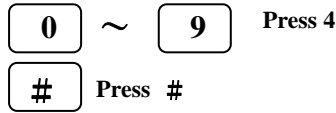
☞ Function key description :

F1 : Enter Administrator Mode/Page Up
F3 : Delete (Backspace)
: Confirm
***** : Cancel
0 ~ **9** : Number key

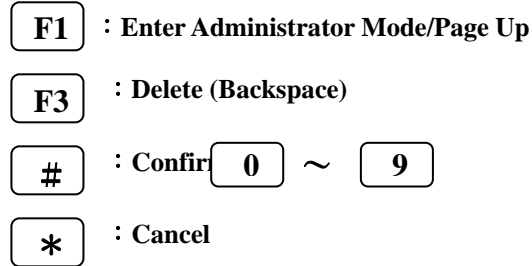
5.3.4 Del Group



☞ Operation description :



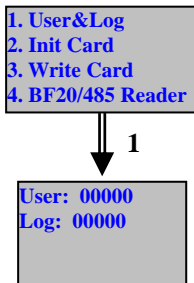
☞ Function key description :



: Number key

5.4 Menu page #4

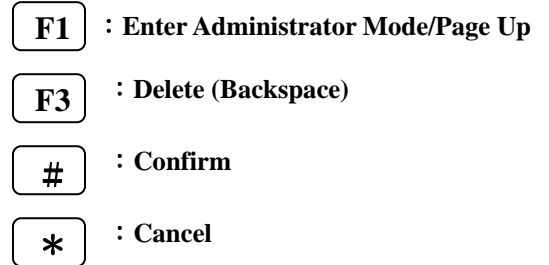
5.4.1 User & Log



☞ Operation description :

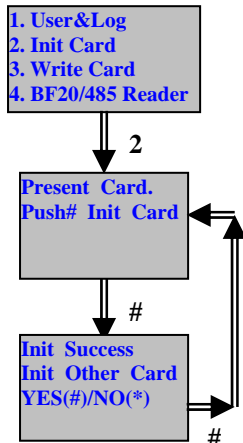


☞ Function key description :

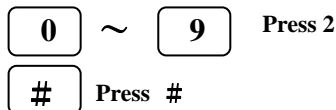


0 ~ 9 : Number key

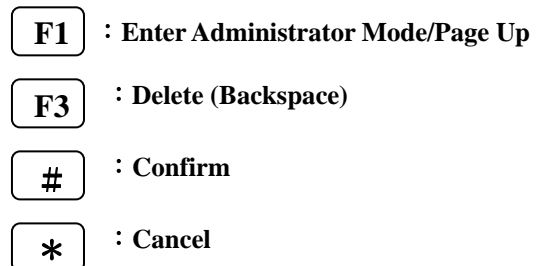
5.4.2 Init Card



☞ Operation description :

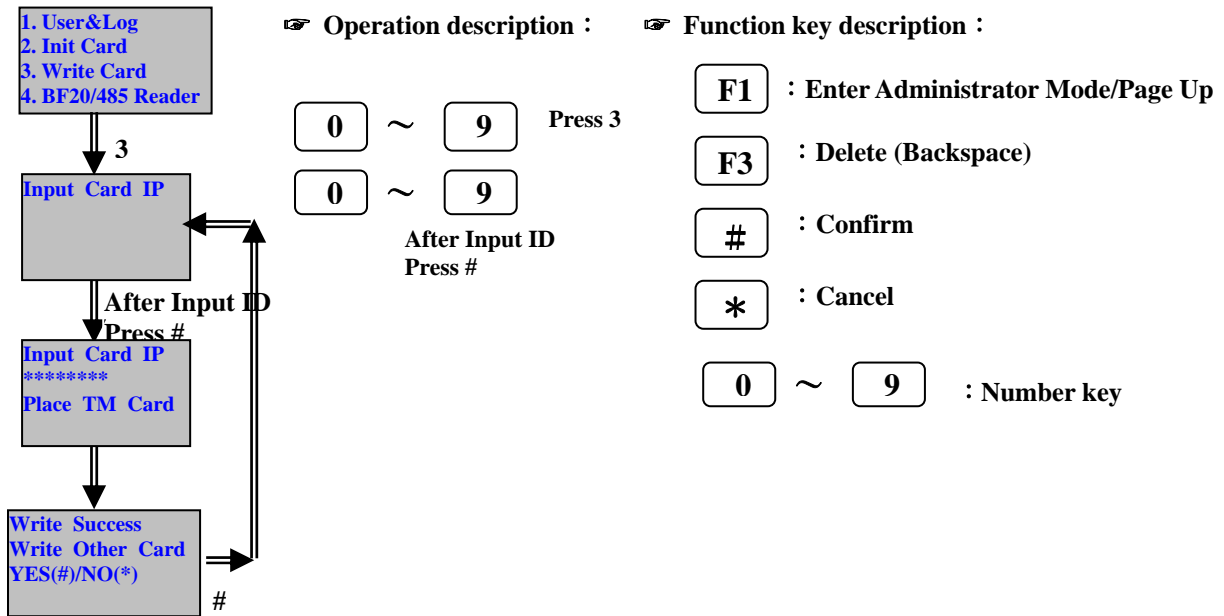


☞ Function key description :



0 ~ 9 : Number key

5.4.3 Write Card



6 Specifications

6.1 Module Features

- Main board
- Keyboard and LCD Module
- Finger sensor module
- Build-In Card Reader

6.2 Power Supply

6.2.1 Voltage

- +9V to +30V DC

6.2.2 Current

- Current power consumption: 300Ma, 12V
- Maximum power consumption: 500Ma, 12V

6.3 Environment

6.3.1 Temperature and humidity

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

6.3.2 Immunity to electro static discharge

- Serial port 15kv ESD
- Ethernet port 1.5kv

6.4 Communication

- 1 RJ-45 port(10/100M)
- 1 RS-232 port
- 1 RS-485 port
- Meet RS232C 、RS485 specifications

6.5 Drivers

- 1Relay Out (COM, NO, NC)

6.6 Capacity

- 950 persons with 2 fingerprints/1 card/1 password per person.

6.7 Log entry memory

- 32,700 log entries total.

6.8 Size(yet to be set)

- WARP3 SERIES: 130 mm(H) X 143 mm(W) X 48 mm(D)

6.9 Weight

- 470g

6.10 Authentication time

- Average : shorter than 2 second.

6.11 False Rejection Rate (FAR)

- Configurable from 0.1% - 0.000001%

6.12 Equal Error Rate (EER)

- Less than 0.1%

6.13 Fingerprint data size

- 352 Byte

6.14 Input

- 10 number keys + 6 function keys

6.15 Display

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

7 Appendix

7.1 Note



The first thing when you install Warp3 Series

- Please change the system password first. Warp3 Series's password is fixed at "111111" initially. It makes a security problem.



Please do these when you have the problem for verification.

- Cleaning your finger first, then do it again.
- Don't move your finger when you put your finger on the Warp3G's sensor.

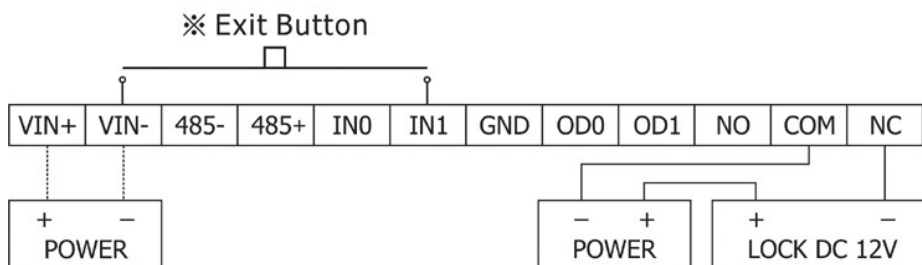


Please do these when Warp3 has out of function.

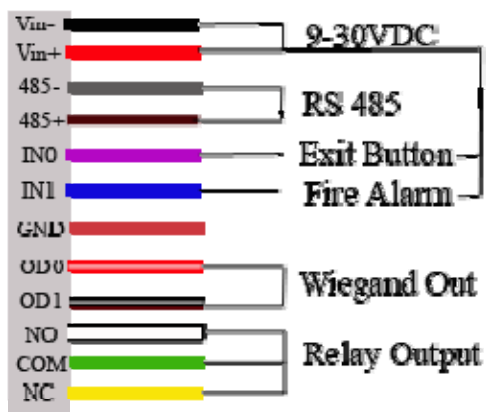
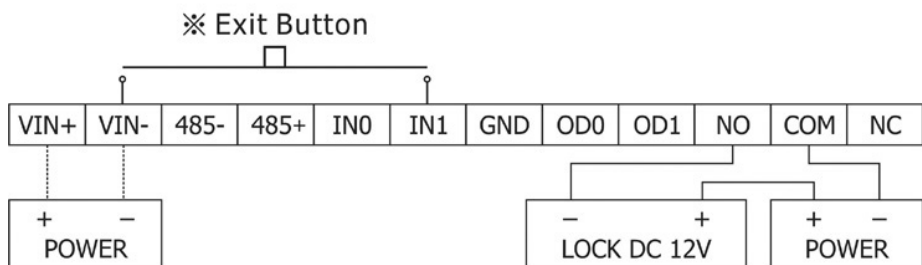
- Power off and power on again, so initialize Warp3. After initializing Warp3, if it has same status still, please calls on our service center.

7.2 External connector

Lock open when lock is power off



Lock open when lock is power on



- The list below is to keep user's safety and prevent any loss. Please read carefully before use.



Do not drop or damage the device.



Do not press two buttons at the same time.



Do not disassemble, repair or alter the device.



Do not let children touch the device without supervision.



Do not use the device for any other purpose than specified.



Contact your nearest dealer in case of a trouble or problem.

