

FG70 Administrator's Manual

Version 1.1.0
(English Edition)



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FG70 Technical Documentation



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FG70

Administrator's Manual

Note: This manual can be applied to standard version and Mifare version of FG70. However, in section 2.1.1, standard version and Mifare version has differential functions respectively and that will be discussed respectively.

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Regulatory Standards Compliance

A. EMI Warning

FCC Class A Certification

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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.

Warning! This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

B. CE Mark Declaration of Conformance

This product complies with the requirements of the Low Voltage Directive 73/23/EEC (UL 60950) and the EMC Directive 89/336/EEC (ETS 300 329).

CE mark	
EMC directive	89/336/EEC (ETS 300 329)
Safety (low voltage directive)	73/23/EEC (UL 60950)

Revision History

Rev. #	Date	Updated By	Description
1.0.0	2003.03.15	Joe Kuo	Initial
1.0.1	2003.04.22	PC Hung	Merge of Maintenance and Administrator
1.0.2	2003.09.22	NT.Tsai	Adding the process for Card and Modifying some functions
1.0.3	2004.01.15	ZR. Huang	Modifying some functions and settings
1.1.0	2004.02.10	ZR. Huang	Combining Mifare version with standard version

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1. Administrator Mode UI's

FG70 series products provide an “Administrator Mode” to manage the users and configure the system on an interactive basis. These are also automatic tests that are carried out by the system to insure the hardware components’ integrity and the readiness of the software modules before the system can be used. The functions provided in “Administrator Mode” are detailed as follow.

1.1. How to invoke the Administrator Mode

At the default screen, as shown in Figure 1-1, press * and # key to bring up the “Administrator Mode” login UI.

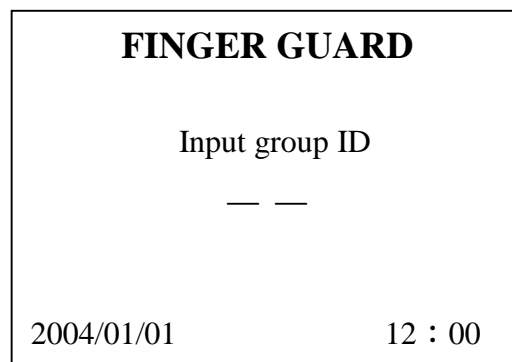


Figure 1-1 Default Screen

When the “Administrator Mode” login UI is invoked, as shown below, the user has to input valid UserID, which is “0998” by default, to verify himself / herself within 3 seconds. Please be noted that *after the first administrator have been enrolled, the default UserID and default password will no longer be valid.*

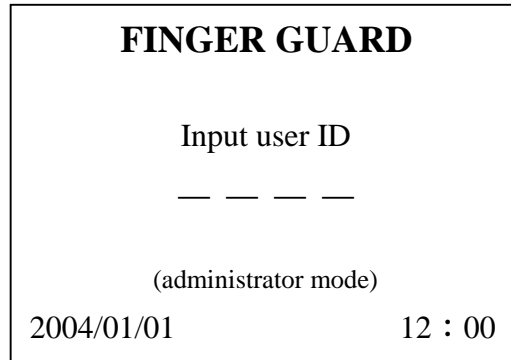


Figure 1-2. Administrator Mode login step 1.

If the input is not completed within or idle more than this time limit, the system will roll back to the default screen, as shown in Figure 1-3.

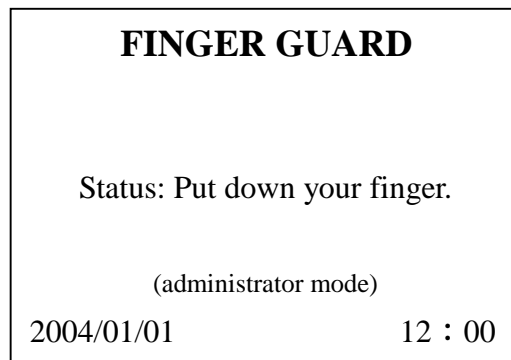


Figure 1-3. Administrator Mode login step 2

When succeed, screen is displayed such as Figure 1-3. (system will go to input password screen after input any key, which is “9998” by default). When done, the “Administrator Mode” menu is prompted and ready for selection, as shown in Figure 1-4.

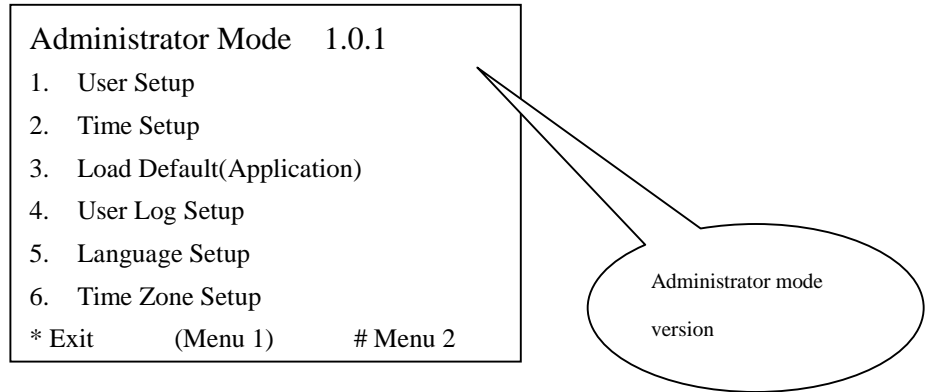


Figure 1-4 Administrator Mode menu 1.

Press “#” in the Administrator Mode to switch between [Menu 1] 、 [Menu 2] and [Menu 3] , as shown in Figure 1-4 & 1-5.

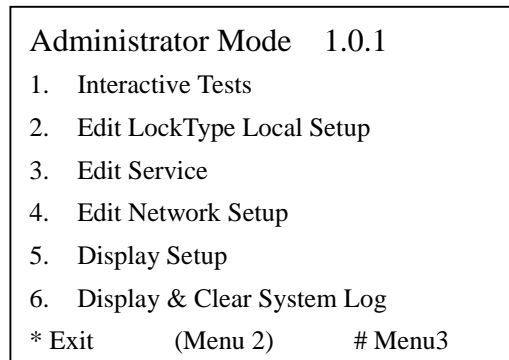


Figure 1-5 Administrator Mode menu 2.

In menu 2, menu 2 will switch to menu 3 by pressing “#”. Menu 3 is applied to Mifare version, standard version is not suitable for it. But, menu 3 is still established now. The meat of it is not ready, therefore, the figure of menu 3 is not provided, now.

While in Administrator Mode, FG70 might be required to be removed or attached from / to the hanger on a needed basis. In those cases, an alarm will be triggered accordingly. The corresponding alarming is suppressed to be silent and, instead, the warning message “IDS alarm detected” is issued on the screen, as shown in Figure 1-6.

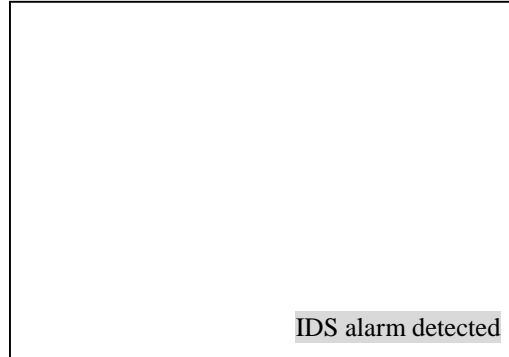


Figure 1-6 An alarming message is issued while removing / attaching FG70

At this point, the user could clear the alarming message and go back to the Administration Mode menu by pressing the escape key “*”.

2. Functions provided in the Administrator Mode

This chapter discusses the functionality provided in the Administrator Mode in details. There are basically three categories of parameters that need to be setup before FG70 could be put into use, namely Lock control, service type, and network settings.

2.1. User Setup

Select “1” in the Administrator Mode menu 1 will enable the “User Setup” and bring up the menu, as shown in Figure 2-1.

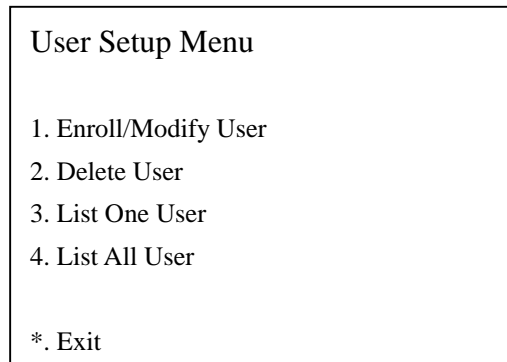


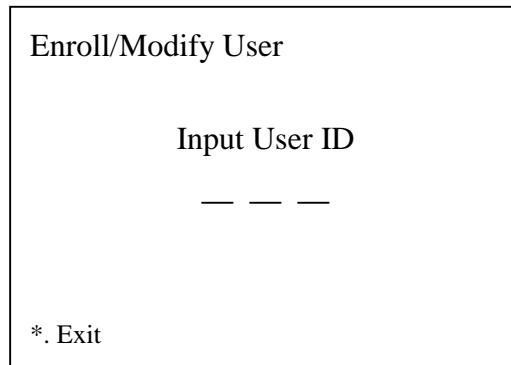
Figure 2-1. User Setup

2.1.1. Enroll/Modify User

Next, standard version and Maifare version will be discussed respectively.

2.1.1.1 Applied to Standard Version

After selecting “1” in User Setup menu, the system will prepare the Enroll/Modify User for manual scheme. The initial screen is displayed in Figure 2-2.



Enroll/Modify User

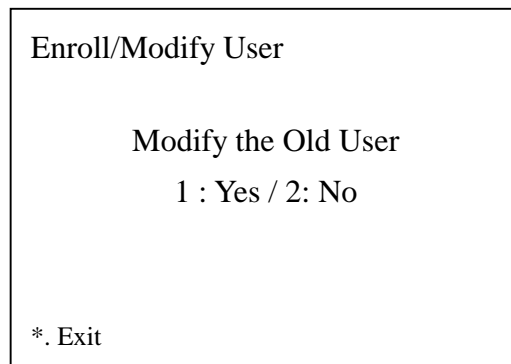
Input User ID

— — —

*. Exit

Figure 2-2 Input User ID

If the user id exists, the screen is shown as in Figure 2-3.



Enroll/Modify User

Modify the Old User

1 : Yes / 2: No

*. Exit

Figure 2-3 Modify the old user

If the user id doesn't exist, the screen is shown as in Figure 2-4.

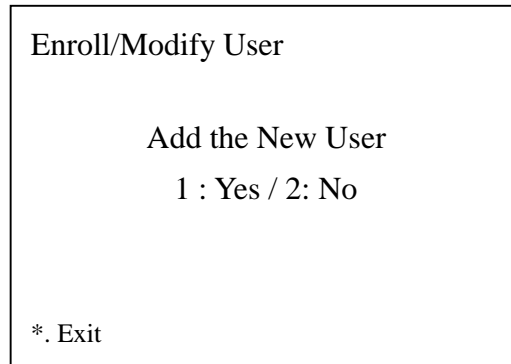


Figure 2-4 Add the New User

If selecting “2” either in Figure 2-3 or 2-4, the system will return to the screen as shown in Figure 2-2.

After inputting to adding the New User or Modifying the Old User, the screen is shown as in Figure 2-5.

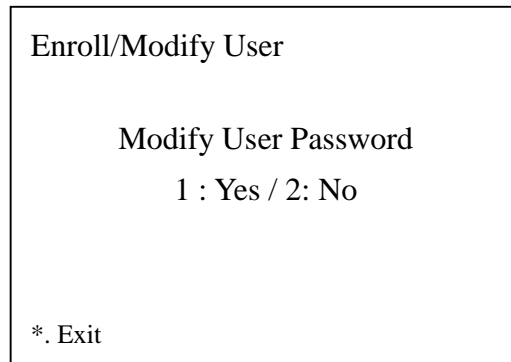


Figure 2-5 Modify User Password

If selecting “1”, the process will go to the screen as shown in Figure 2-6. If selecting “2”, the process will go to the screen as shown in Figure 2-8.

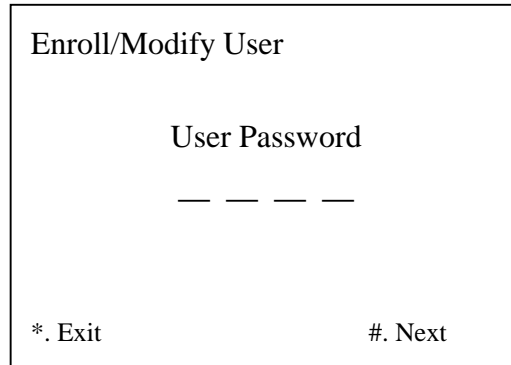


Figure 2-6 Input User Password

After inputting the user password, you should confirm the user password and the screen is shown as in Figure 2-7.

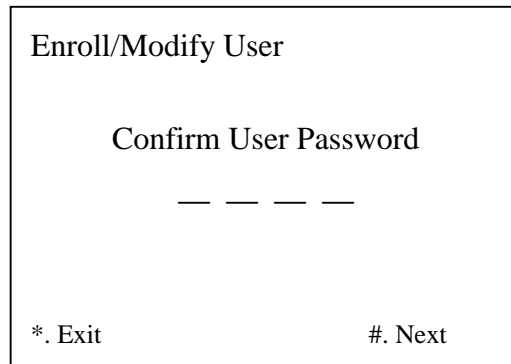


Figure 2-7 Input to confirm User Password

After passing the confirmation of user password, the screen is shown as in Figure 2-8.

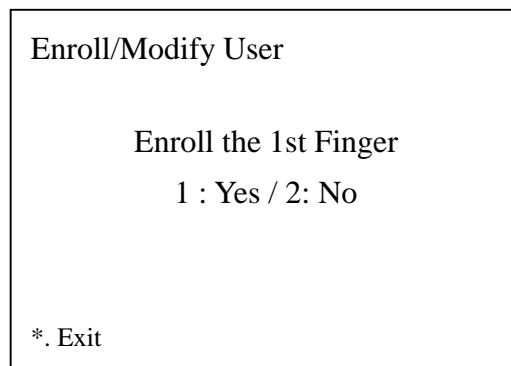


Figure 2-8 Enroll the 1st Finger

If selecting '2', the screen is shown as in Figure 2-9.

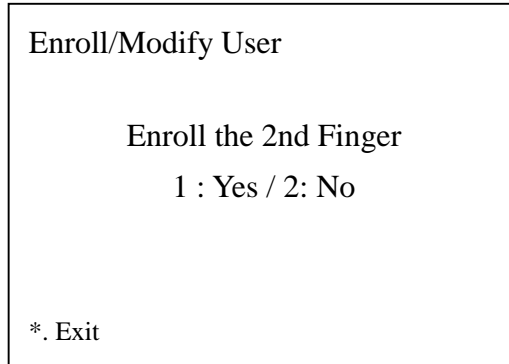


Figure 2-9 Enroll the 2nd Finger

If selecting '2', the screen is shown as in Figure 2-10.

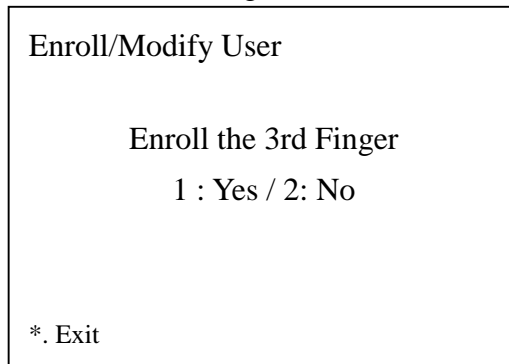


Figure 2-10 Enroll the 3rd Finger

If selecting '1' either in the Figure 2-8, Figure 2-9 and Figure 2-10, the screen is shown as in Figure 2-11.

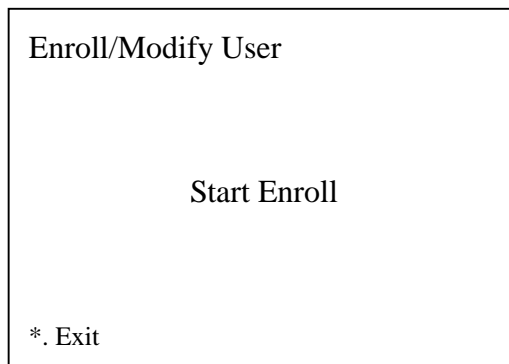


Figure 2-81 Start Enroll

Next, the screen is shown as in Figure 2-12.

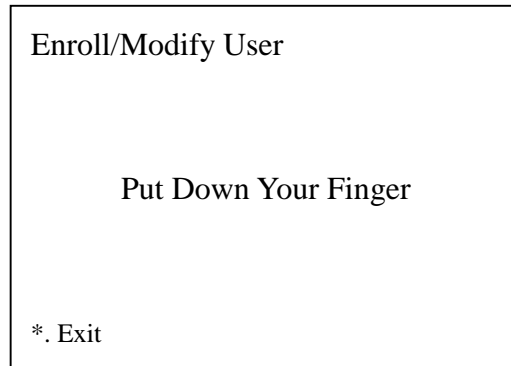


Figure 2-92 Put down your finger

After putting down your finger, the screen is shown as in Figure 2-13.

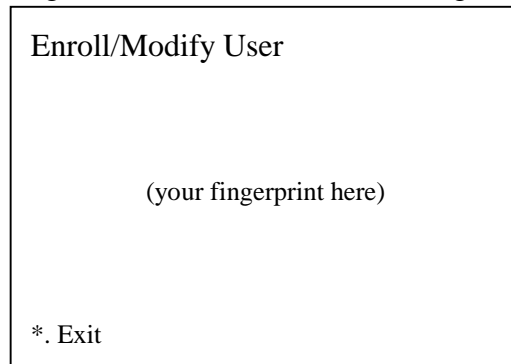


Figure 2-13. Display the image of the finger

After snapping, the screen is shown as in Figure 2-14.

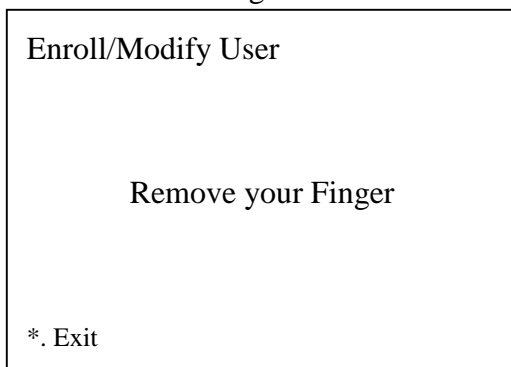


Figure 2-14 Remove your Finger

If the enrolling of your finger fails, the process will return to the screen as shown in Figure 2-8, 2-9 or 2-10.

Otherwise, it repeats the flow from the Figure 2-12 to Figure 2-14 for 3 or 5 times until a stable fingerprint template is captured. Finally, the fingerprint snapping is classified as shown in Figure 2-15, if the enrolling of your finger is successful.

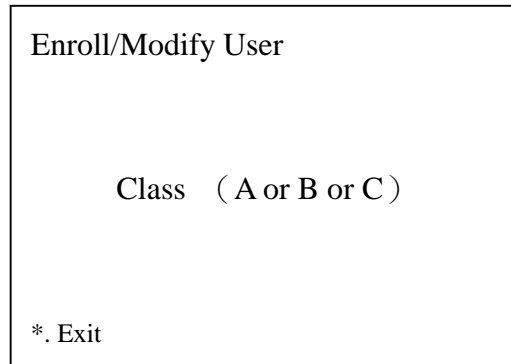


Figure 2-105. Classification of your Finger

Next, choose the index of your finger, and the screen is shown as in Figure 2-16.

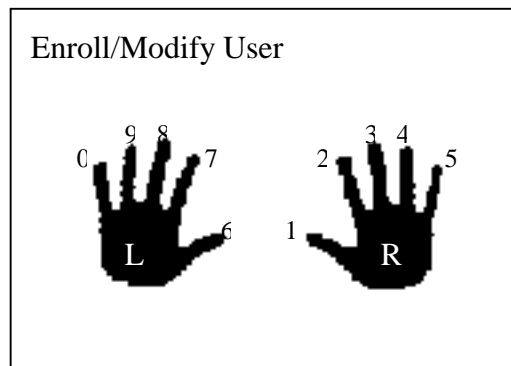


Figure 2-16. Choose the index of your finger (From 0 to 9 viewed as the screen)

You could assign the user as an administrator, and the screen is shown as in Figure 2-17.

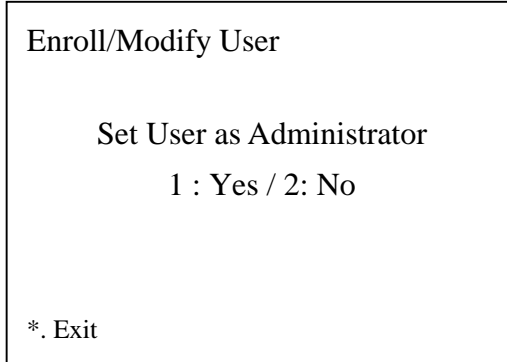


Figure 2-17. Set user as administrator

Next, you could assign door access permission for this user, and the screen is shown as in Figure 2-18.

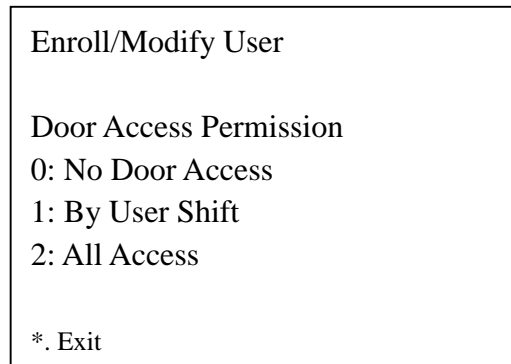


Figure 2-18 Door access permission setting

After finish the door access permission setting, the next step is determining the valid period of the user profile, the screen is shown as in Figure 2-19.

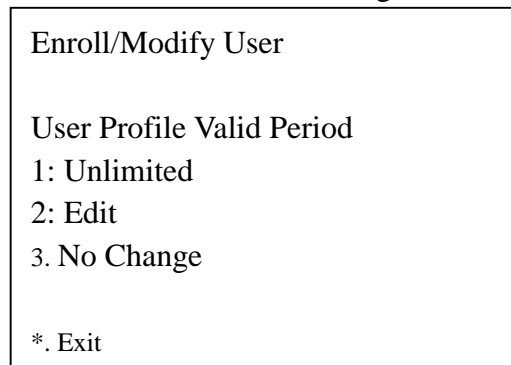
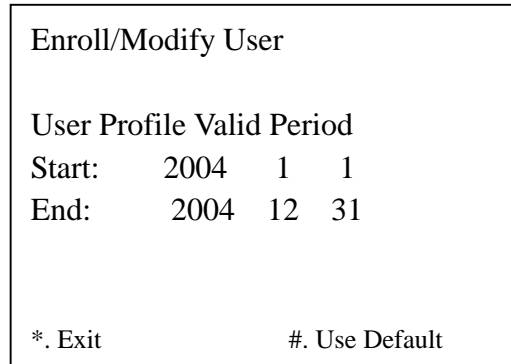


Figure 2-19 User profile valid period setting

If selecting item 1 to escape the valid period setting, this user will have no limitation of

valid period. If selecting item 2 to edit valid period, the screen is shown as in Figure 2-20.



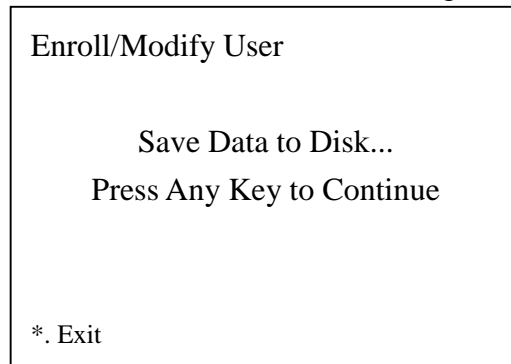
```
Enroll/Modify User

User Profile Valid Period
Start:   2004   1   1
End:    2004  12  31

*. Exit          #. Use Default
```

Figure 2-20 Edit user profile valid period

Press “#” to finish the process, the screen is shown as in Figure 2-21.



```
Enroll/Modify User

Save Data to Disk...
Press Any Key to Continue

*. Exit
```

Figure 2-21 Save User Data

2.1.1.2 Applied to Mifare Version

After selecting “1” in User Setup menu, the system will prepare the Enroll/Modify User for manual scheme. The initial screen is displayed in Figure 2-22.

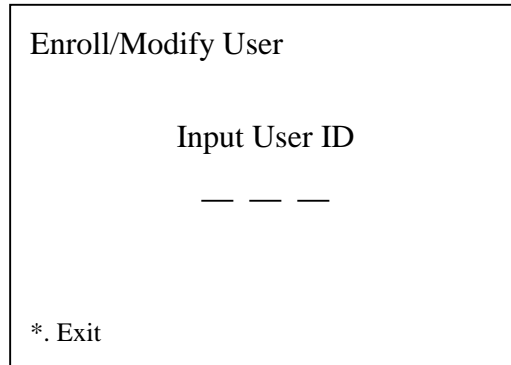


Figure 2-211 Input User ID

If the user id exists, the screen is shown as in Figure 2-23.

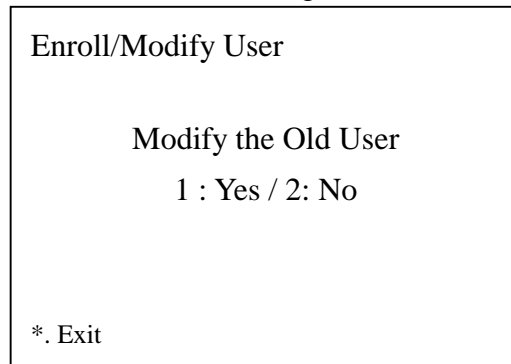


Figure 2-212 Modify the old user

If the user id doesn't exist, the screen is shown as in Figure 2-24.

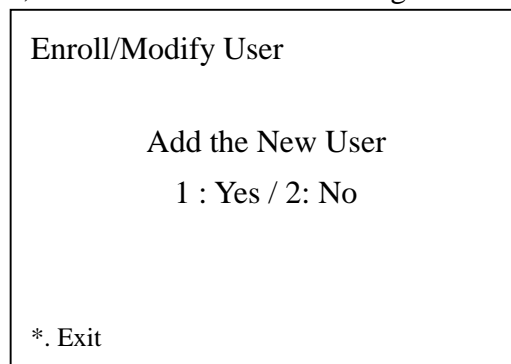


Figure 2-213 Add the New User

If selecting “2” either in Figure 2-23 or 2-24, the system will return to the screen as

shown in Figure 2-22.

After inputting to adding the New User or Modifying the Old User, the screen is shown as in Figure 2-25.

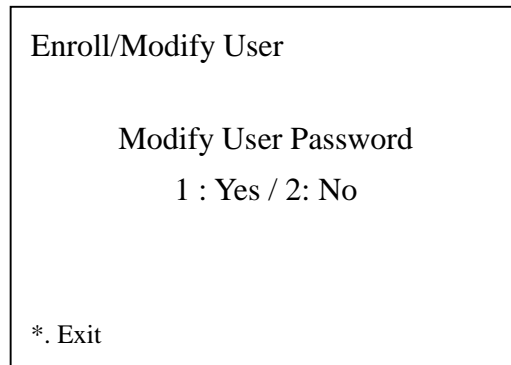


Figure 2-214 Modify User Password

If selecting “1”, the process will go to the screen as shown in Figure 2-26. If selecting “2”, the process will go to the screen as shown in Figure 2-28.

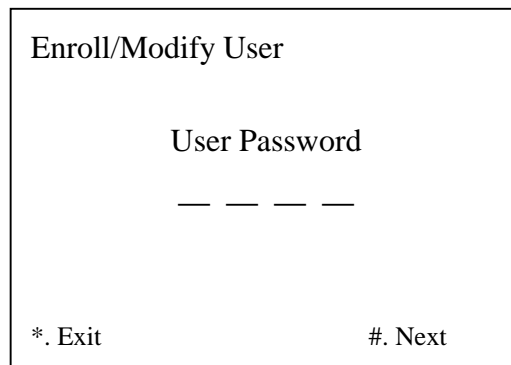


Figure 2-215 Input User Password

After inputting the user password, you should confirm the user password and the screen is shown as in Figure 2-27.

Enroll/Modify User

Confirm User Password

— — — —

*. Exit #. Next

Figure 2-216 Input to confirm User Password

After inputting to adding the Confirming User Password, the screen is shown as in Figure 2-28.

Enroll/Modify User

Modify Card ID

1 : Yes / 2: No

*. Exit

Figure 2-217 Modify Card ID

If selecting “1”, the process will go to the screen as shown in Figure 2-29. If selecting “2”, the process will go to the screen as shown in Figure 2-31.

Enroll/Modify User

Card ID

— — — — — — — —

*. Exit #. Next

Figure 2-218 Input Card ID

When closing to the front of FG70 with the identification card, the system will get a response of the card's ID. And, the screen is shown as in Figure 2-30. [Annotation]

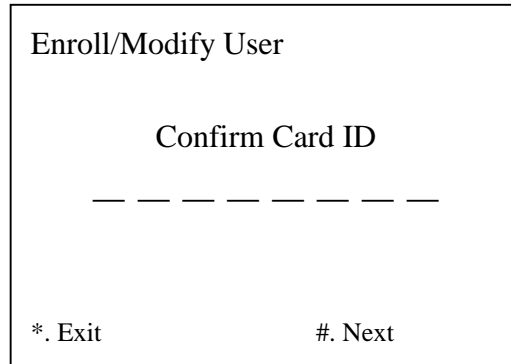


Figure 2-30 Input to confirm Card ID

After passing the confirmation of card ID by above action, the screen is shown as in Figure 2-31.

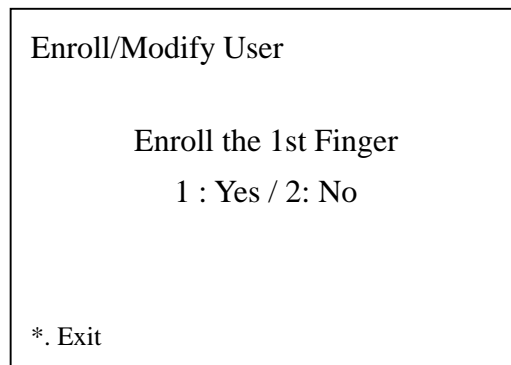


Figure 2-31 Enroll the 1st Finger

If selecting '2', the screen is shown as in Figure 2-32.

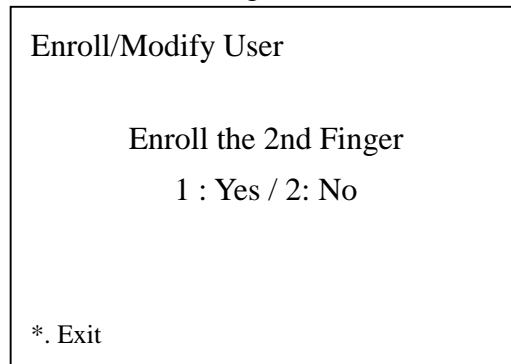


Figure 2-32 Enroll the 2nd Finger

If selecting '2', the screen is shown as in Figure 2-33.

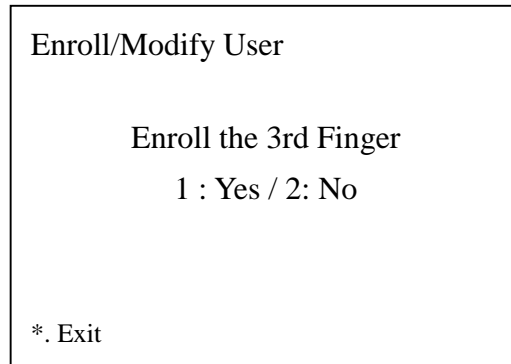


Figure 2-33 Enroll the 3rd Finger

If selecting '1' either in the Figure 2-31, Figure 2-32 and Figure 2-33, the screen is shown as in Figure 2-34.

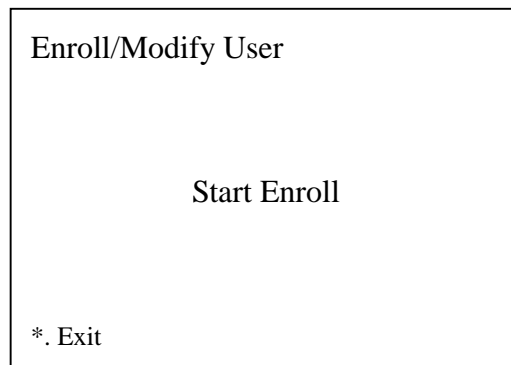


Figure 2-34 Start Enroll

Next, the screen is shown as in Figure 2-35.

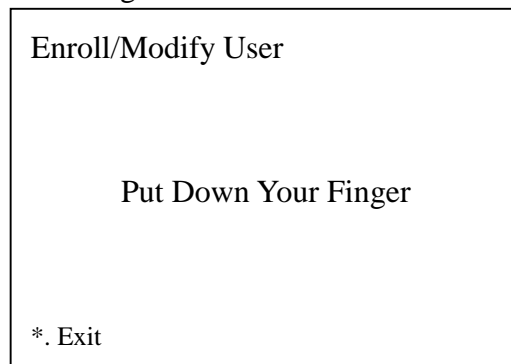


Figure 2-35 Put down your finger

After putting down your finger, the screen is shown as in Figure 2-36.

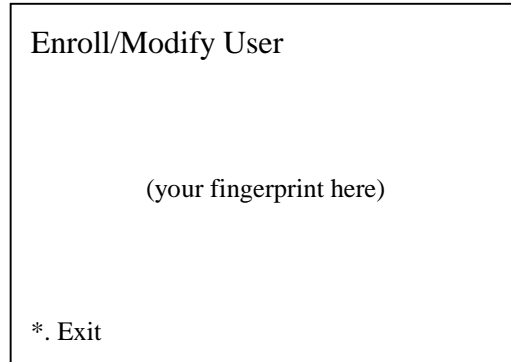


Figure 2-36. Display the image of the finger

After snapping, the screen is shown as in Figure 2-37.

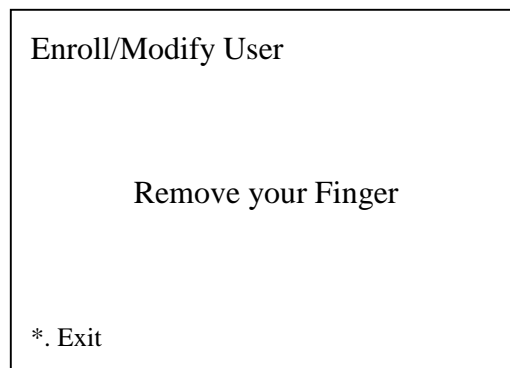


Figure 2-37 Remove your Finger

If the enrolling of your finger fails, the process will return to the screen as shown in Figure 2-31, 2-32 or 2-33.

Otherwise, it repeats the flow from the Figure 2-35 to Figure 2-37 for 3 or 5 times until a stable fingerprint template is captured. Finally, the fingerprint snapping is classified as shown in Figure 2-38, if the enrolling of your finger is successful.

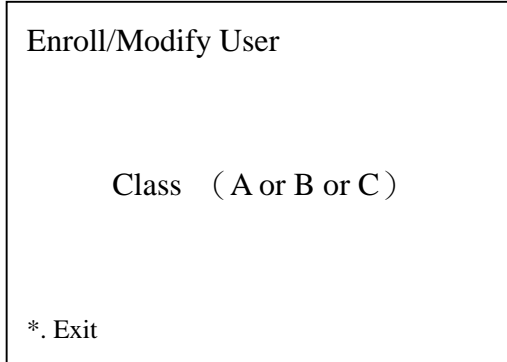


Figure 2-38. Classification of your Finger

Next, choose the index of your finger, and the screen is shown as in Figure 2-39.

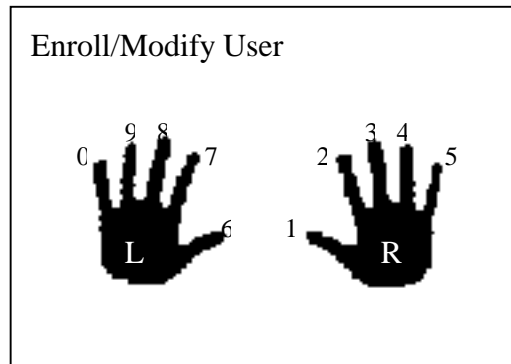


Figure 2-39. Choose the index of your finger (From 0 to 9 viewed as the screen)

Next, you can modify the finger to the card, and the screen is shown as in Figure 2-40.

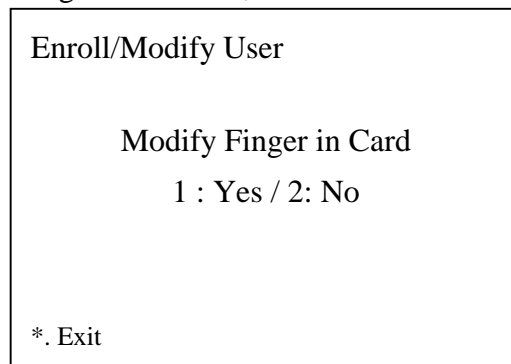


Figure 2-40. Modify Finger in Card

Next, you can assign door access permission for this user, and the screen is to as shown in Figure 2-41.

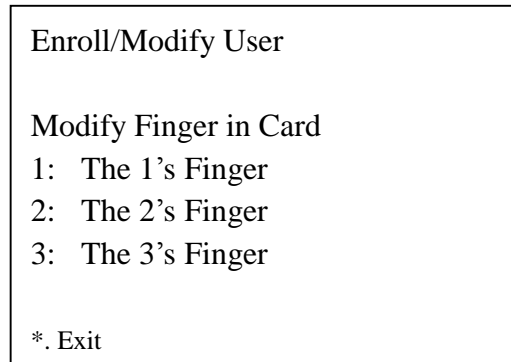


Figure 2-41 Choose the finger index to be set in card

After selecting fingerprint of 1.2.3 item at Figure 2-41 to card, the data of fingerprint can be saved when the card close to FM200 reader, as shown in Figure 2-42.

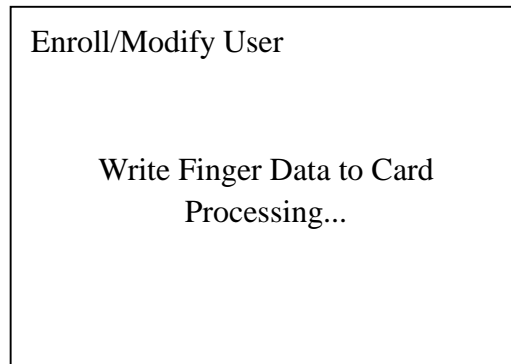


Figure 2-42 Select the fingerprint that be stored in card

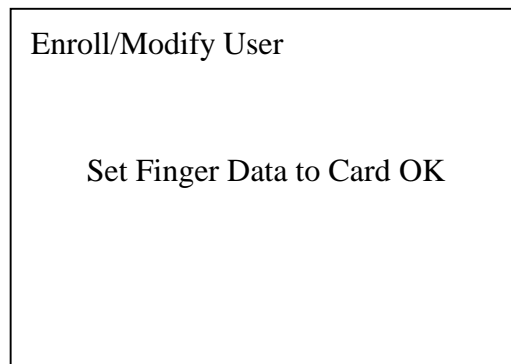
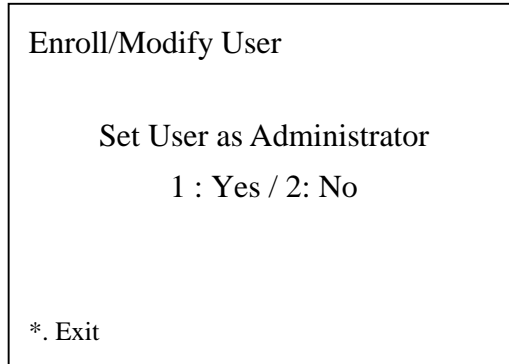


Figure 2-43 Successfully

You could assign the user as an administrator, and the screen is shown as in Figure 2-44.



Enroll/Modify User

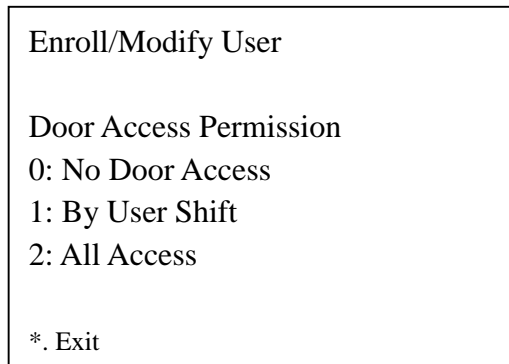
Set User as Administrator

1 : Yes / 2: No

*. Exit

Figure 2-44. Set user as administrator

Next, you could assign door access permission for this user, and the screen is shown as in Figure 2-45.



Enroll/Modify User

Door Access Permission

0: No Door Access

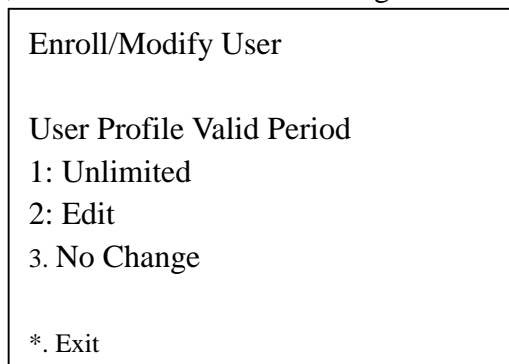
1: By User Shift

2: All Access

*. Exit

Figure 2-45 Door access permission setting

After finish the door access permission setting, the next step is determining the valid period of the user profile, the screen is shown as in Figure 2-46.



Enroll/Modify User

User Profile Valid Period

1: Unlimited

2: Edit

3. No Change

*. Exit

Figure 2-46 User profile valid period setting

If selecting item 1 to escape the valid period setting, this user will have no limitation of valid period. If selecting item 2 to edit valid period, the screen is shown as in Figure 2-47.

```
Enroll/Modify User

User Profile Valid Period
Start:   2004   1   1
End:    2004  12  31

*. Exit          #. Use Default
```

Figure 2-47 Edit user profile valid period

Press “#” to finish the process, the screen is shown as in Figure 2-48.

```
Enroll/Modify User

          Save Data to Disk...
          Press Any Key to Continue

*. Exit
```

Figure 2-48 Save User Data

2.1.2. Delete User

After selecting “2” in User Setup menu, the system will prepare to Delete User for manual scheme. The initial screen is shown as in Figure 2-49.

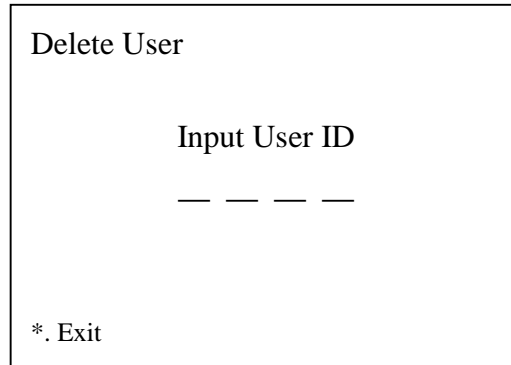


Figure 2-49. Input user id

If the user id doesn't exist, the screen is to as shown in Figure 2-50.

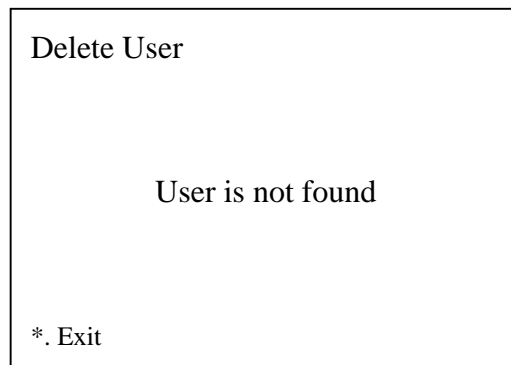


Figure 2-50. No This User

If the user id exists, the screen is shown as in Figure 2-51.

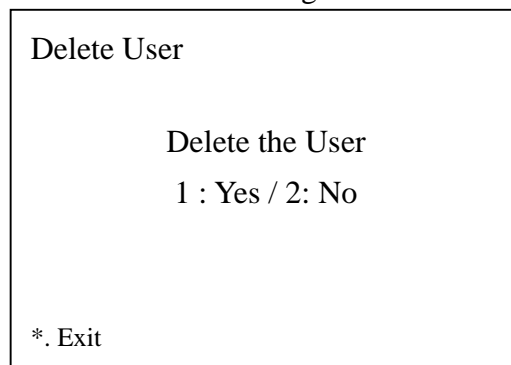


Figure 2-51. Delete the user

If selecting ‘1’, the screen is shown as in Figure 2-52. If selecting ‘2’, the process will return to the screen as shown in Figure 2-1.

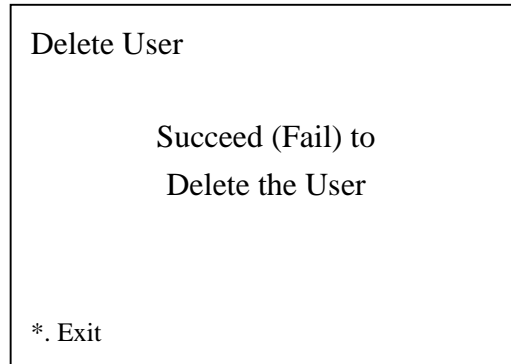


Figure 2-52. Succeed (Fail) to Delete the user

Next, the process will return to the screen as shown in Figure 2-1.

2.1.3. List One User

After selecting “3” in User Setup menu, the system will prepare the List One User for manual scheme. The initial screen is shown as in Figure 2-53.

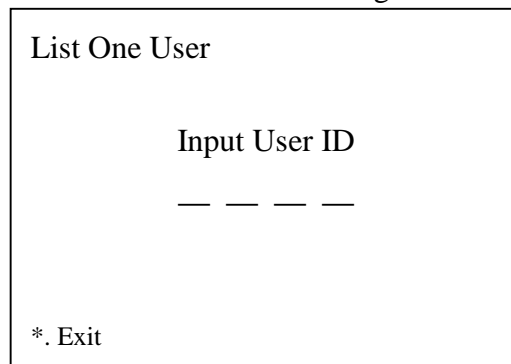


Figure 2-53. Input user id

If the user id doesn't exist, the screen is shown as in Figure 2-54.

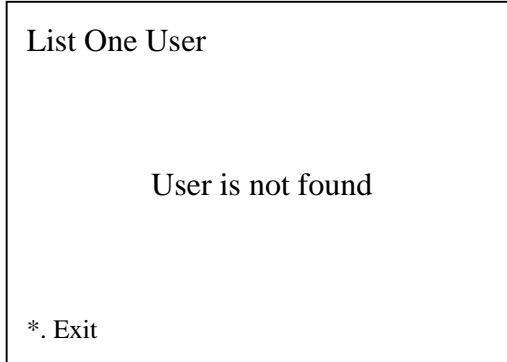


Figure 2-54. User is not found

If the user id exists, the screen is shown as in Figure 2-55.

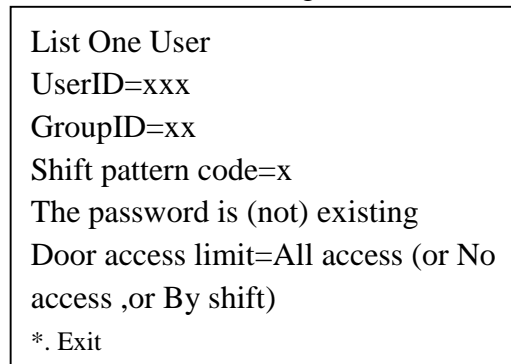


Figure 2-55. The detailed info of the user

2.1.4. List All User

After selecting “4” in User Setup menu, the system will prepare the List All User for manual scheme. The initial screen is shown as in Figure 2-56.

List All User		100(1-6)
UserID	GroupID	Admin
xxx	xx	Y
xxx	xx	N
xxx	xx	Y
xxx	xx	N
xxx	xx	Y
*. Exit		#.Next Page

Figure 2-56. List all users

2.2. Time Setup

Select “2” in the Administrator Mode menu 1 will enable the “Set Time” and bring up the menu, as shown in Figure 2-57.

Set Time
1. Set Local Time
2. Set Network Time Server
3. Set Auto Sync Time
4. NTP Sync Time Manually
*. Exit

Figure 2-57. Set Time

2.2.1. Set Local Time

After selecting “1” in Set Time menu, the system will bring out the screen as shown in Figure 2-58.

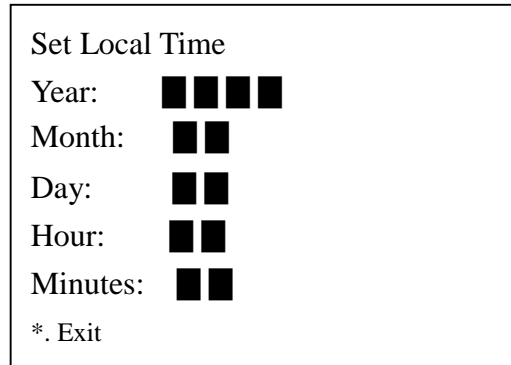


Figure 2-58. Set Local Time

If the date or time format is incorrect, the screen will be shown as below:

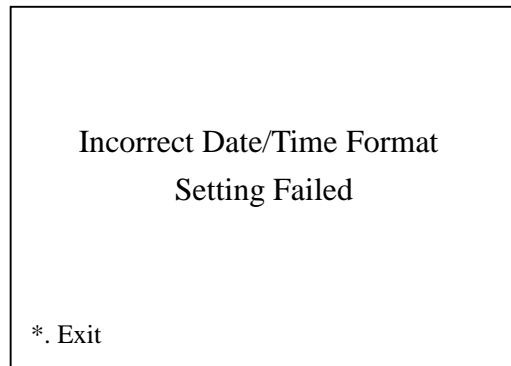


Figure 2-59. Incorrect Date/Time Format

If the date or time format is correct, the current date and time will be modified and the screen will return to Figure 2-57.

2.2.2. Set Network Time Server

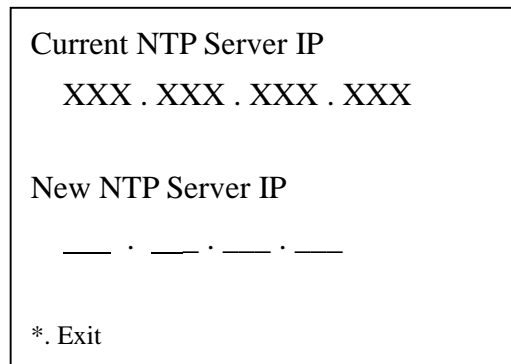


Figure 2-60 Set NTP Server IP Address

2.2.3. Set Auto Sync Time

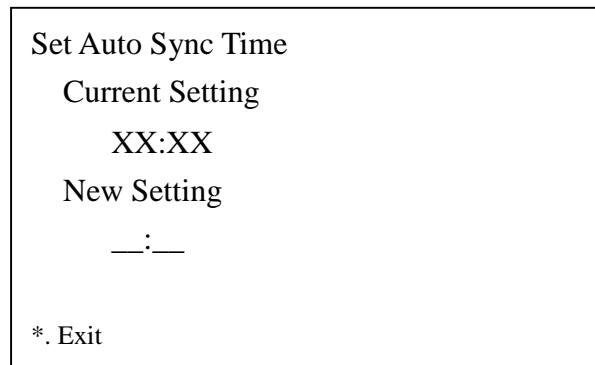


Figure 2-61. Set Auto Sync Time

2.2.4. NTP Sync Time Manually

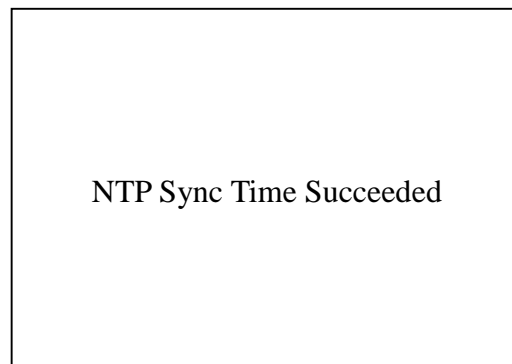


Figure 2-62. NTP Sync Time Succeeded

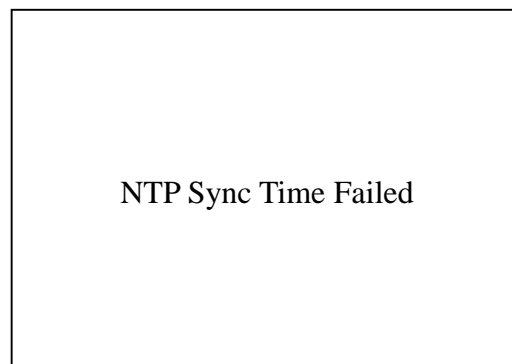


Figure 2-63. Set Auto Sync Fail

2.3. Load Default

Select “3” in the Administrator Mode menu 1 will enable the “Load Default” and bring up the menu, as shown in Figure 2-44.

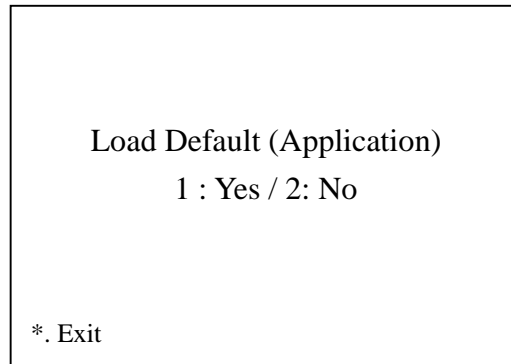


Figure 2-64. Load default

If the default system parameters are loaded successfully, the screen will display the result as shown below and quit 2 minutes later.

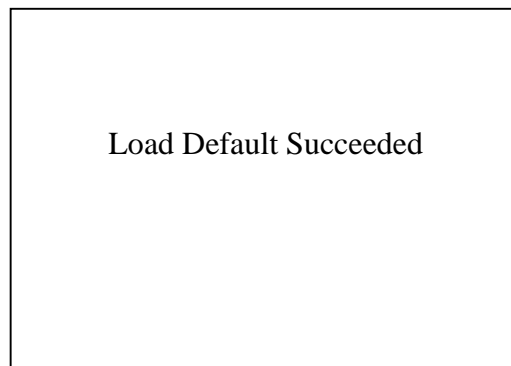


Figure 2-65. Load default successful

If the default system parameters fail to be loaded, the screen will display the result as below and quit 2 minutes later.

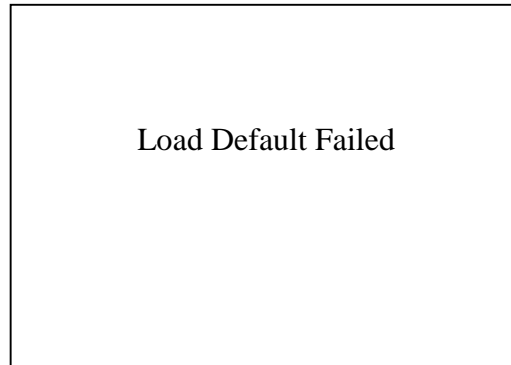


Figure 2-66. Load default failed

2.4. User Log Setup

Select “4” in the Administrator Mode menu 1 will enable the “Log Setup” and bring up the menu, as shown in Figure 2-67.

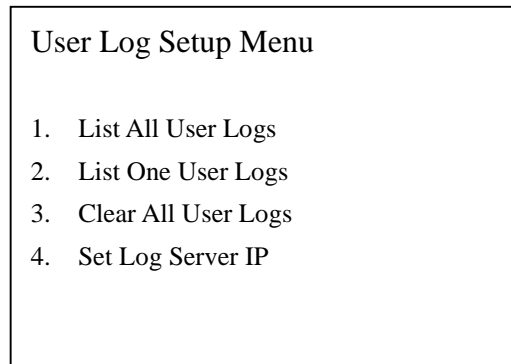


Figure 2-67. User Log Setup

2.4.1. List All User Logs

After selecting “1” in User Log Setup menu, the system will prepare the List All User for manual scheme. The initial screen is shown as in Figure 2-68.

```
List All User Logs
2003/03/10 21:10:12 1223 01 041
2003/03/10 21:28:38 0000 00 F01
2003/03/11 00:02:05 0890 03 042
2003/03/11 12:33:55 0288 01 041

*. Exit          #.Next Page
```

Figure 2-68. List all user logs

2.4.2. List One User Logs

After selecting “2” in User Log Setup menu, the system will prepare the List One User for manual scheme. The initial screen is shown as in Figure 2-69.

```
List One User Log

          User ID
          — — —

*. Exit
```

Figure 2-69. Input the user id

If the user id doesn't exist, the screen is to as shown in Figure 2-70.

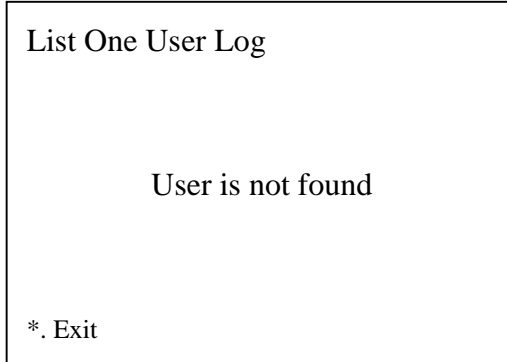


Figure 2-70. No such User

If the user id exists, the screen is shown as in Figure 2-71.

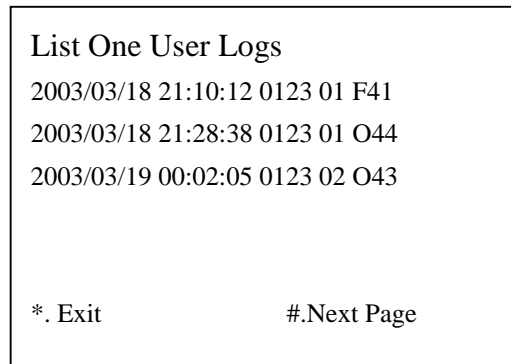


Figure 2-71. List one user log

2.4.3. Clear All User Logs

After selecting “3” in User Log Setup menu, the system will prepare the Clear All User Logs for manual scheme. The initial screen is shown as in Figure 2-72

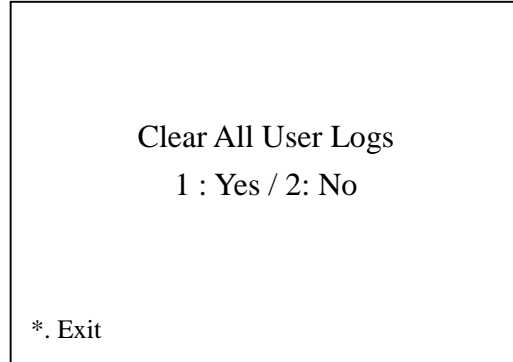


Figure 2-72. Clear all logs

If selecting '1', the screen is shown as in Figure 2-73. If selecting '2', the process will return to the screen as shown in Figure 2-67.

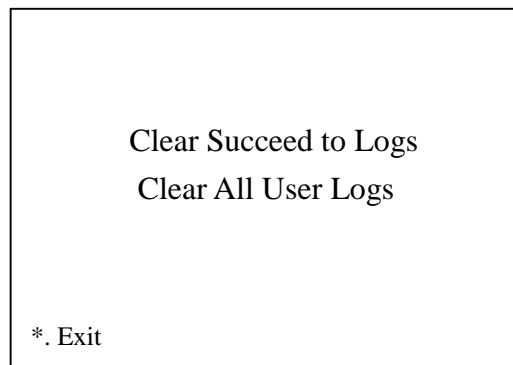


Figure 2-73. Succeed to clear all user Logs

2.4.4. Set Log Server IP

After selecting "4" in User Log Setup menu, the system will prepare the Set Log Server IP for manual scheme. The initial screen is shown as in Figure 2-74

```
Current Log Server IP
XXX . XXX . XXX . XXX

New Log Server IP
___ . ___ . ___ . ___

*. Exit                               #.
```

Figure 2-74 Set Log Server IP Address

Next, the process will return to the screen as shown in Figure 2-67.

2.5. Language Setup

Select “5” in the Administrator Mode menu 1 will enable the “Select UI Language” and bring up the menu, as shown in Figure 2-75.

```
Select UI Language
1. Chinese (Traditional)
2. English
3. Japanese

*. Exit
```

Figure 2-75. Select user interface language

After selecting an item in Select UI Language menu, system will change current UI language to specific language.

If the language transforming procedure succeeded, system will bring up the screen as shown in Figure 2-76.

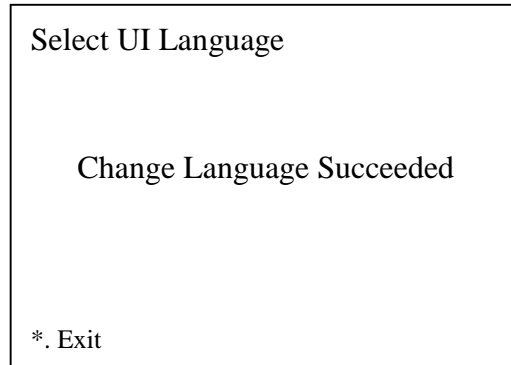


Figure 2-76. Change user interface language succeeded

If the language transforming procedure failed, system will bring up the screen as shown in Figure 2-77.

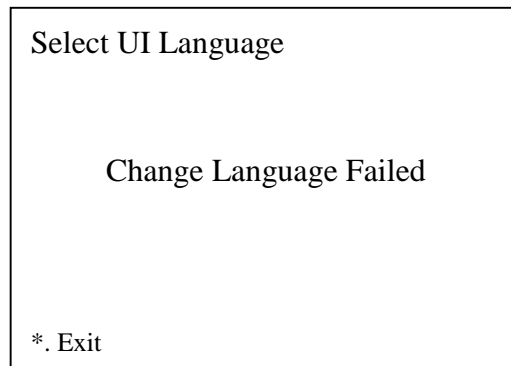


Figure 2-77. Change user interface language failed

2.6. Time Zone Setup

Select “6” in the Administrator Mode menu 1 will enable the “Select Time Zone” and bring up the menu, as shown in Figure 2-78.

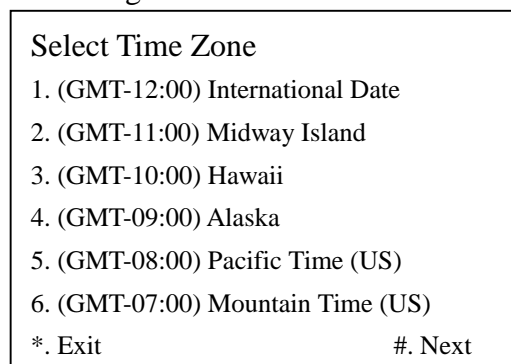


Figure 2-78. Select time zone

Press “#” in Select Time Zone menu, it will turn to next page to display the following available time zones. After selecting an item in Select Time Zone menu, system will change current time zone to specific time zone and modify current date and time. If the time zone is changed successfully, system will bring up the screen as shown in Figure 2-79.

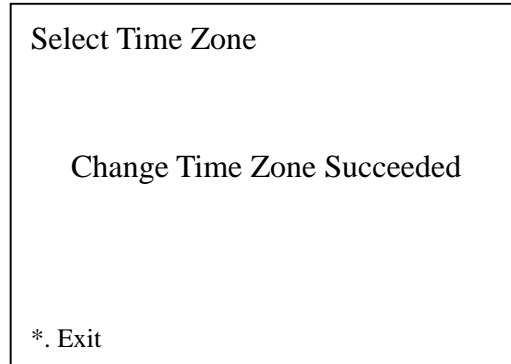


Figure 2-79. Change time zone succeeded

If the time zone is not changed successfully, system will bring up the screen as shown in Figure 2-80.

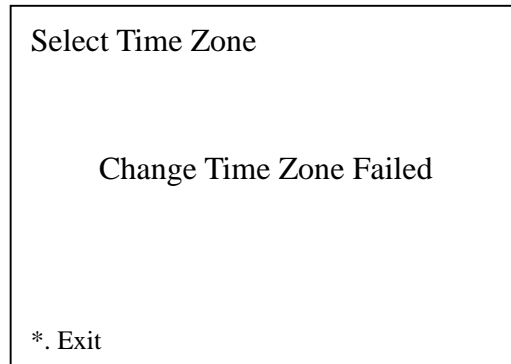


Figure 2-80. Change time zone failed

2.7. Interactive Test

Select “1” in the Administrator Mode menu 2 will enable the “User Setup” and bring up the menu, as shown in Figure 2-81.

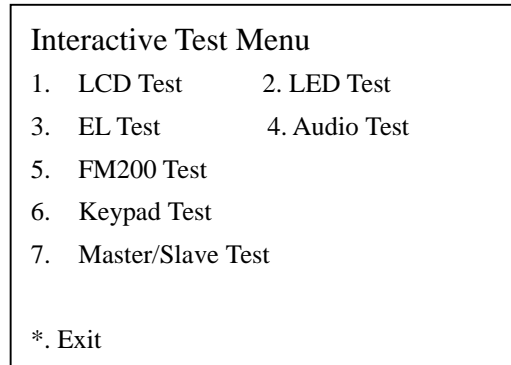


Figure 2-81 Interactive Test

There are eight selectable items in the Interactive Tests Menu, including one hidden function. When press “0” in this prompt, the application version and its release date will be displayed underneath the selectable test items, as shown in Figure 2-82.

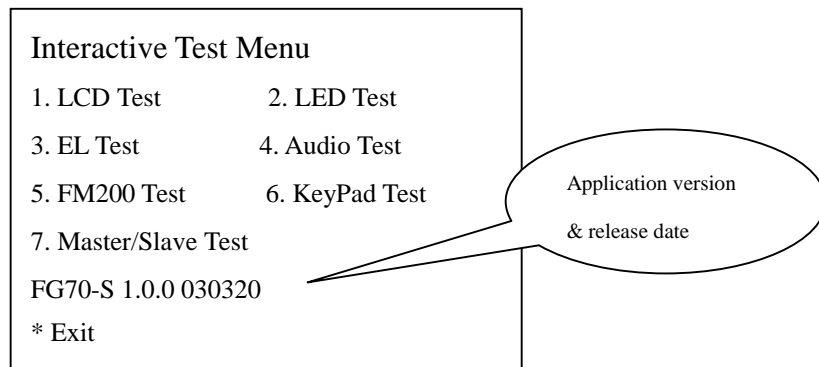


Figure 2-82 Display application version and its release date

2.7.1. LCD Test

After selecting “1” in Interactive Tests menu, the system will prepare the LCD test for manual scheme. The initial screen is to fill up the whole area with black color, as shown in Figure 2-83.



Figure 2-83. The initial screen in LCD test; The whole area is black.

At this moment, press “#” will clear the screen, as shown in Figure 2-84.

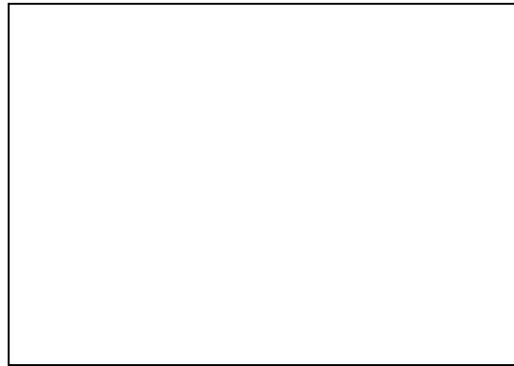


Figure 2-84. The screen is clear

Press “#” again will switch the screen back and forth between the aforementioned two states, as shown in Figure 2-83 and 2-84, until the maximum switching times, which is 5 by default, is reached. Press “*” at any given time will exit the current LCD test and roll back to its parent screen, which is Interactive Test menu.

2.7.2. LED Test

After selecting “2” in Interactive Tests menu, the system will prepare the LED test for manual scheme, as shown in Figure 2-85.

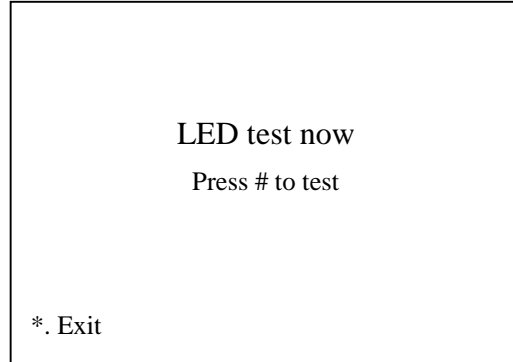


Figure 2-85. Screen for LED test

Press “#” the first time will light up the green LED, as shown in Figure 2-86.

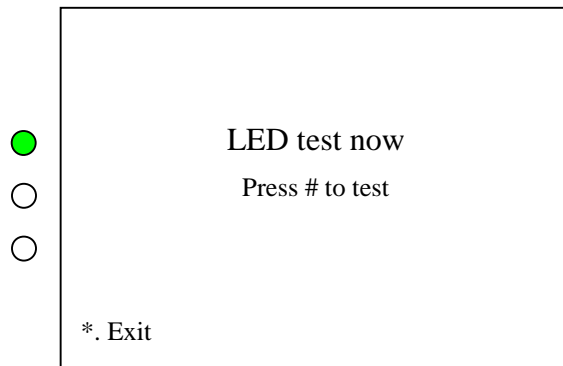


Figure 2-86. Green LED's lit on

Press “#” again will power off the green LED and light up the red one, as shown in Figure 2-87.

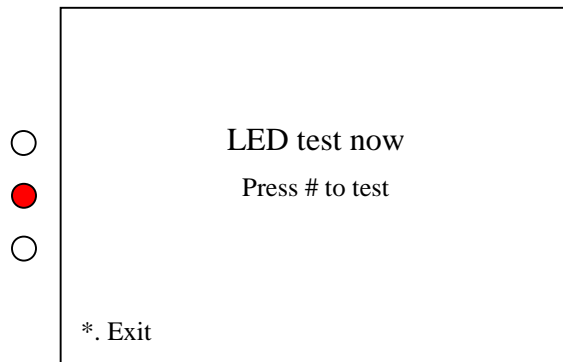


Figure 2-87. Red LED's lit on

Press “#” again will power off the red LED and light up the orange one, as shown in Figure 2-88.

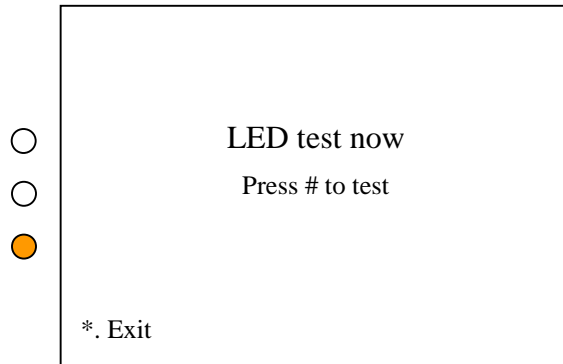


Figure 2-88. Orange LED's lit on

Press “#” again will power off the orange LED, as shown in Figure 2-89

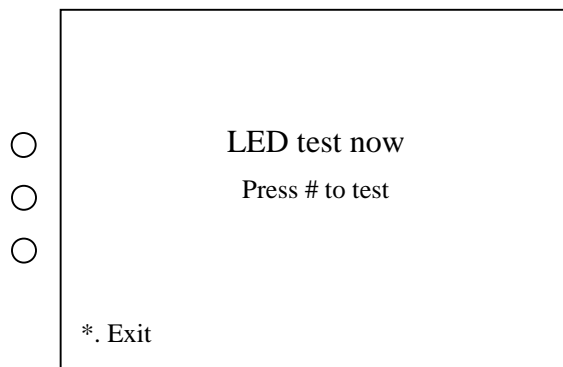


Figure 2-89. Orange LED's powered off

Repeatedly pressing “#” will iterate the LED's on/off scheme all over again. Press “*” at any given time will exit the current LED test and roll back to its parent screen, which is Interactive Test menu.

2.7.3. EL Test

After selecting “3” in Interactive Tests menu, the system will prepare the EL test for manual scheme, as shown in Figure 2-90

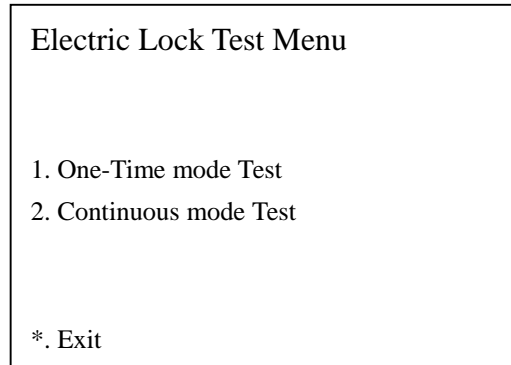


Figure 2-90. Electric Lock Test menu

There are three types of electric locks / control panel that could work with FG70. EL Test is required to insure the selection of electric lock /control type and their harnessing with FG70 are both correct. There are two kinds of test schemes, namely One-time mode and Continuous Mode.

1. One-time mode

Press “#” to unlock for a certain period of time, which is 5 seconds by default, and then locked up when the period expires.

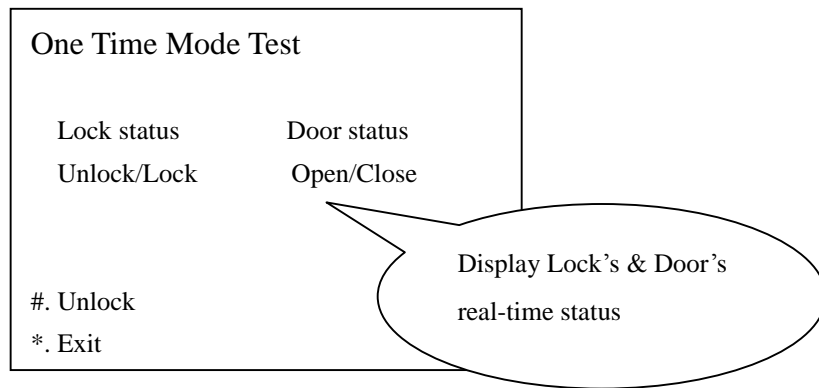


Figure 2-91. One-time mode

2. Continuous mode

Press “#” to unlock indefinitely; Press “*” to lock up.

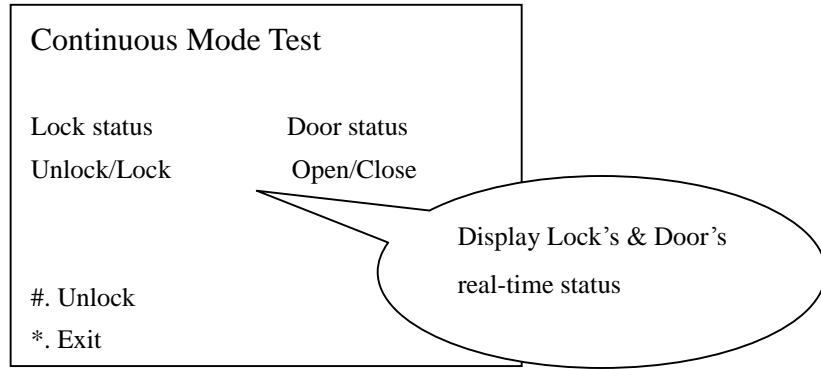


Figure 2-92. Continuous mode

While in these tests, the door status could be reflected real-time as well.

2.7.4. Audio Test

After selecting “4” in Interactive Tests menu, the system will prepare the Audio test for manual scheme, as shown in Figure 2-93.

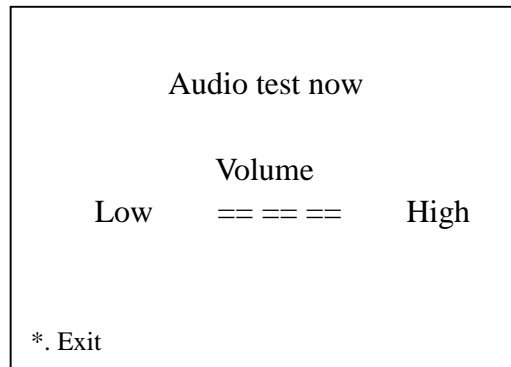


Figure 2-93. Audio test

The system will automatically playback some “beeping” audio file in 3 different levels of volume, respectively, and start with the lowest one. This playback will iterate as a loop until the “*” is pressed and thus signal the system to roll back to the Interactive Tests menu.

2.7.5. FM200 Test

After selecting “5” in Interactive Tests menu, the system will prepare FM200 test for manual scheme, as shown in Figure 2-94.



Figure 2-94. FM200 test

In this test, user need to place down one finger onto the platen of FM200. If FM200 is functional properly, an echo message “Image scanned OK” will be printed on the lower part of the screen, as shown in Figure 2-94. If otherwise, “Image scanned Failed” will be printed instead. Press “*” at any given time will exit the current FM200 test and roll back to its parent screen, which is Interactive Test menu.

2.7.6. KeyPad Test

After selecting “6” in Interactive Tests menu, the system will prepare keypad test for manual scheme, as shown in Figure 2-95. In this test, press any key, except the “*”, and the key will be echoed back on the screen. Press “*” at any given time will exit the current keypad test and roll back to its parent screen, which is Interactive Test menu.

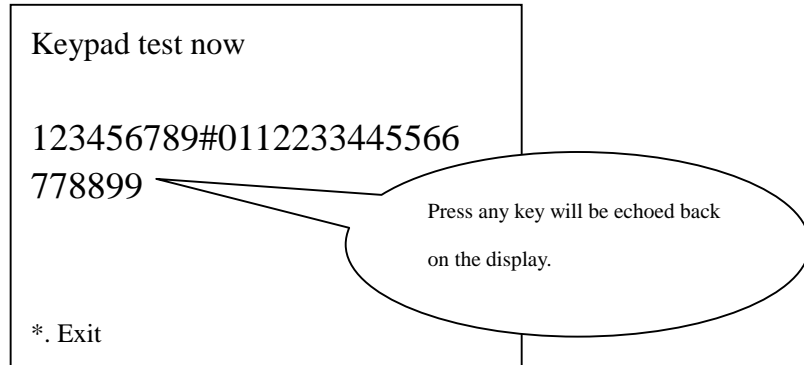


Figure 2-95. Keypad test

2.7.7. Master/Slave Test

After selecting “7” in Interactive Tests menu, the system will prepare Master / Slave communication test for manual scheme, as shown in Figure 2-96.

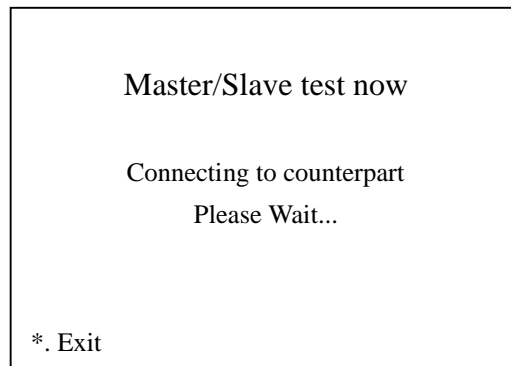


Figure 2-96. System is undergoing Master/Slave communication test

When this item is selected, the local node will send a message to its counterpart for verification of pair-matching. If both service types are setup OK and the network communication is up, a string “Communication succeeded” will be echoed back on the display, as shown in Figure 2-97.

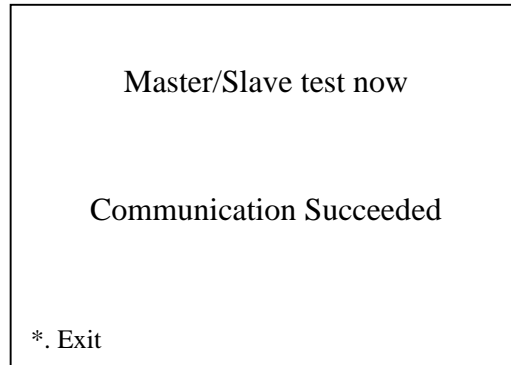


Figure 2-97. Test return OK

If the local IP and its counterpart IP do not match, a string “Communication failed” will be displayed, as shown in Figure 2-98.

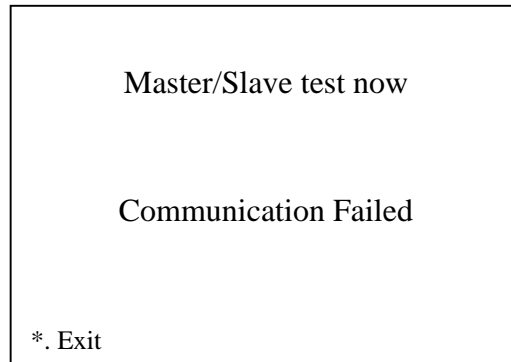


Figure 2-98. IP's do not match

If the network is down, a string “Network error” will be displayed, as shown in Figure 2-99.

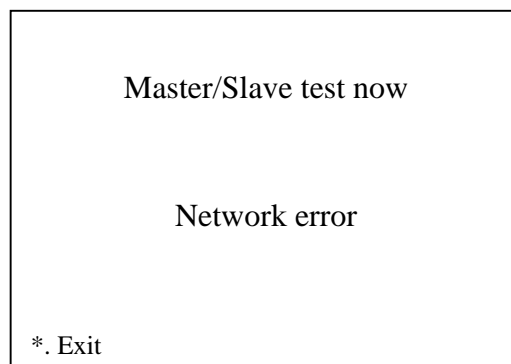


Figure 2-99. Network is down

If the local service type is setup as “Standalone” instead of “Master” or “Slave”, a string “Device Type is Standalone!!” will be displayed, as shown in Figure 2-100.

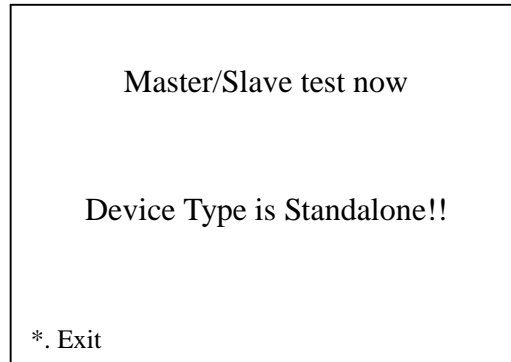


Figure 2-100. Local service type is set to “Standalone”

If the counterpart service type is setup as “Standalone” instead of “Master” or “Slave”, a string “Counterpart is Standalone!!” will be displayed, as shown in Figure 2-101.

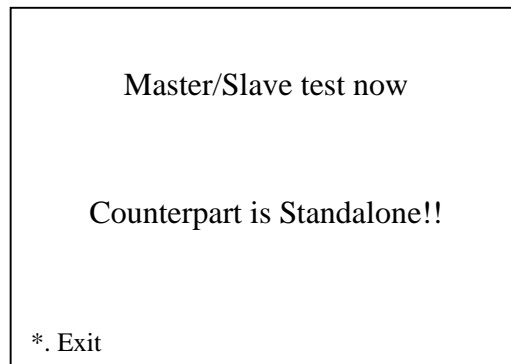


Figure 2-101. Counterpart service type is set to “Standalone”

Press “*” at any given time will exit the current Master / Slave communication test and roll back to its parent screen, which is Interactive Test menu.

2.8. Edit LockType Local setup

Select “2” in the Administrator Mode menu 2 will enable the “Edit LockType Setting Menu”, as shown in Figure 2-102

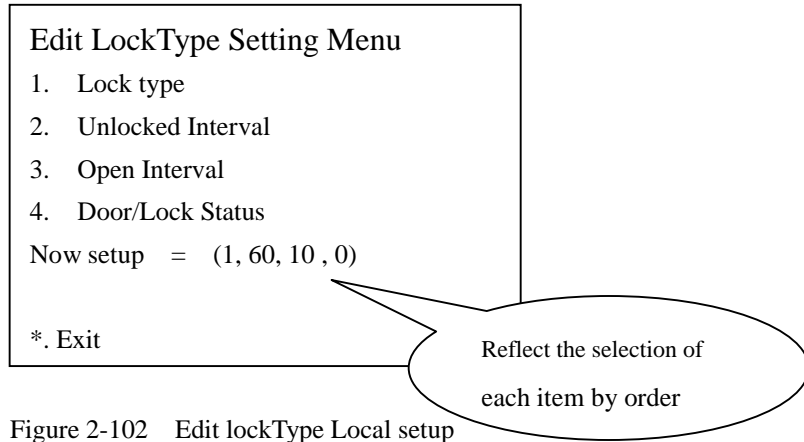


Figure 2-102 Edit lockType Local setup

Select “1” in the Edit LockType Setting Menu will bring the following menu, as shown in Figure 2-103.

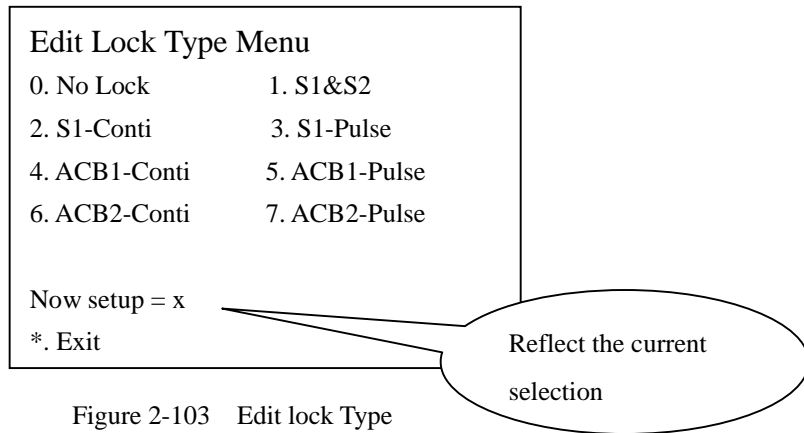


Figure 2-103 Edit lock Type

Select “2” in the Edit LockType Setting Menu will bring the following menu, as shown in Figure 2-104.

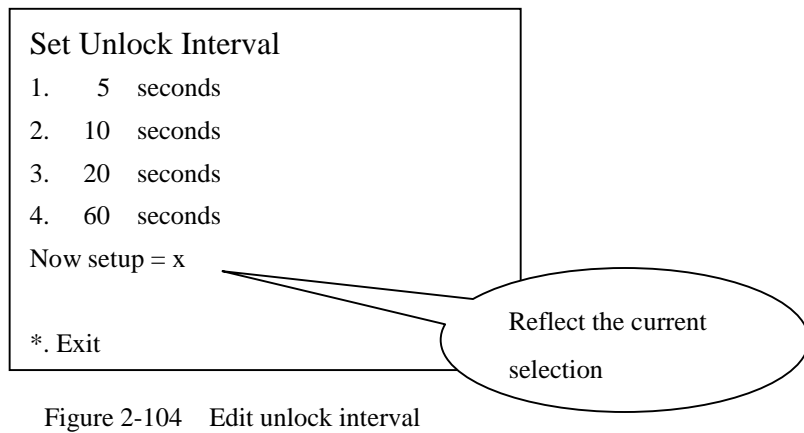


Figure 2-104 Edit unlock interval

Select “3” in the Edit LockType Setting Menu will bring the following menu, as shown in Figure 2-105.

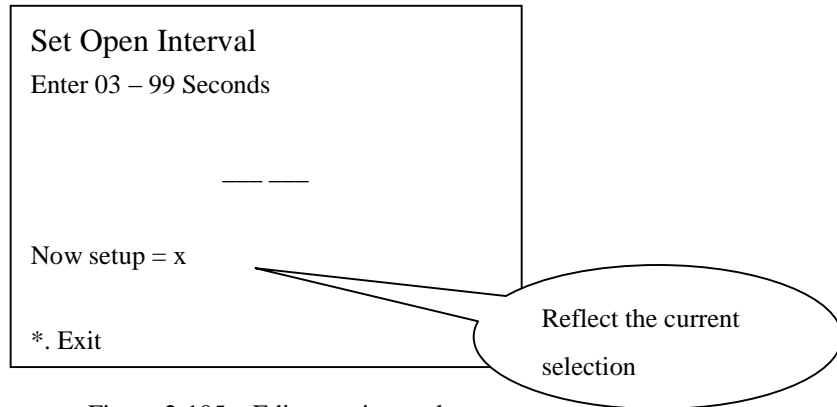


Figure 2-105 Edit open interval

Select “4” in the Edit LockType Setting Menu will bring the following menu, as shown in Figure 2-106.

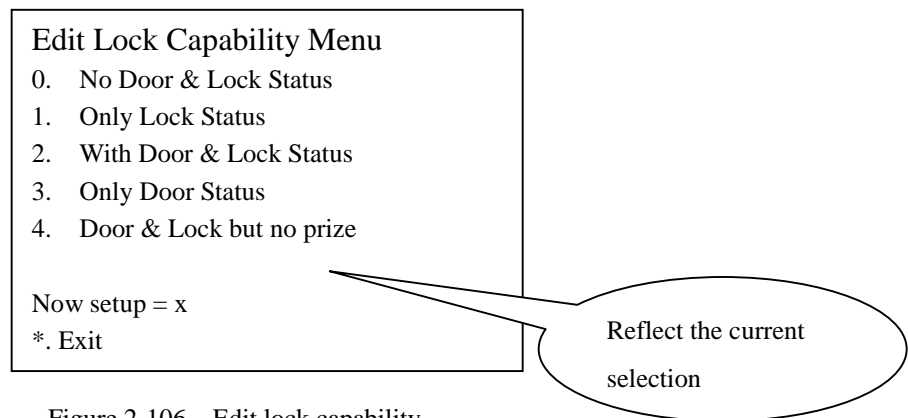


Figure 2-106 Edit lock capability

2.9. Edit Service

Select “3” in the Administrator Mode menu 2 will enable the “Edit Service Type Setup menu”, as shown in Figure 2-107. There are three service types, namely “Master”, “Slave”, and “Standalone”.

Definition of “Standalone” refers to the application that a FG70 is working alone without any peer’s presence. “Master” and “Slave” must work in a pair in that only “Master” FG70 is connected with an electric lock / control panel.

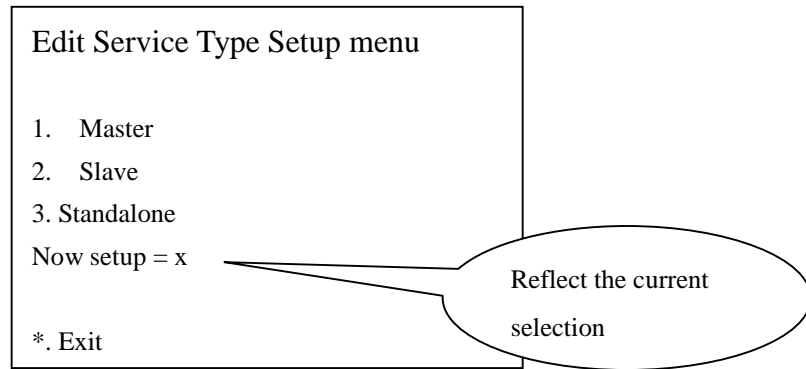


Figure 2-107 Edit Service Type Setup menu

Press “*” at any given time will exit the current “Edit Service Type Setup menu” and roll back to its parent screen, which is “Maintenance Mode menu”.

2.10. Edit Network Setup

When FG70 is placed into a networked environment, its network settings need to be correctly configured before it could do any data/message transaction with others. There are two ways to configure the local network settings by using either DHCP, which is easier, or static IP’s. By default, FG70’s DHCP setting is enabled. In such case, select “4” in the Administrator Mode menu 2 will enable the “Edit Network Setup menu” and bring up the menu, as shown in Figure 2-108.

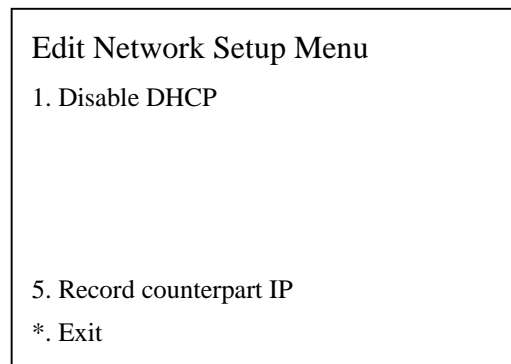
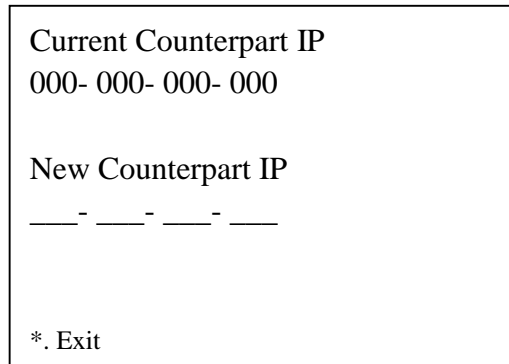


Figure 2-108 Edit network setup menu while DHCP is enabled already

At this point, the “counterpart IP” needs to be setup if the local service type is anything other than “Standalone”. Select “5” will bring up the “counterpart IP setting UI”, as

shown in Figure 2-109.



```
Current Counterpart IP
000- 000- 000- 000

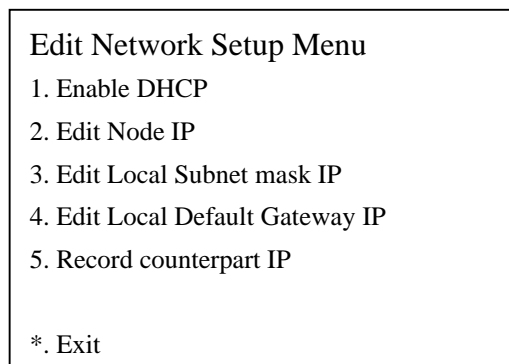
New Counterpart IP
__- __- __- __

*. Exit
```

Figure 2-109 Counterpart IP setting

User should input the valid counterpart IP address at this point. The cursor will move automatically to the next section if the previous section is saturated. Press “*” will backspace the last input. Press “#” could move the cursor from the current section to the next section.

If DHCP setting is disabled by default, then user need to provide all of the required network settings manually. In this case, select “4” in the Administrator Mode menu 2 or select “1. Disable DHCP” in the “Edit Network Setup Menu” will enable the “Edit Network Setup menu” and bring up the menu, as shown in Figure 2-110.



```
Edit Network Setup Menu
1. Enable DHCP
2. Edit Node IP
3. Edit Local Subnet mask IP
4. Edit Local Default Gateway IP
5. Record counterpart IP

*. Exit
```

Figure 2-110 Edit Network Setup Menu while DHCP is disabled already

At this point, user need to select 2, 3, and 4, respectively, to provide the required network settings.

2.11. Display Setup

Select “5” in the Administrator Mode menu 2 will enable the “Display Setup” and bring up the menu, as shown in Figure 2-111

```
Display Setup
1.EL type :      (xxxxxxx)
2.Service Type : (xxxxxxx)
3.Node IP :     xxx.xxx.xxx.xxx
4.Submask IP :  xxx.xxx.xxx.xxx
5.Gateway IP :  xxx.xxx.xxx.xxx
6.Counterpart:  xxx.xxx.xxx.xxx
*. Exit
```

Figure 2-111. Display setup

The following is an example of “Display setup”.

```
Display Setup
1 EL type :      (Control Panel)
2.Service Type : (Master)
3.Node IP :     192.168.10.123
4.Submask IP :  255.255.255.0
5.Gateway IP :  192.168.10.254
6.Counterpart:  192.168.10.124
*. Exit
```

Figure 2-112. An example of “Display setup”

2.12. Display & Clear System Log

Select “6” in the Administrator Mode menu 2 will enable the “Display System Log” and bring up the menu, as shown in Figure 2-113.

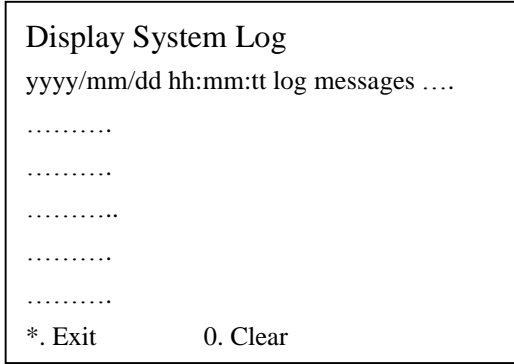


Figure 2-113. Display system logs

The following is an example of “Display System Log”.

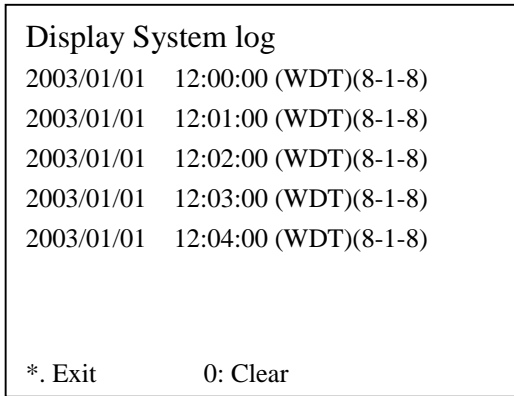


Figure 2-114 An example of “Display System Log”

At this point, press “0” will bring up the following display.

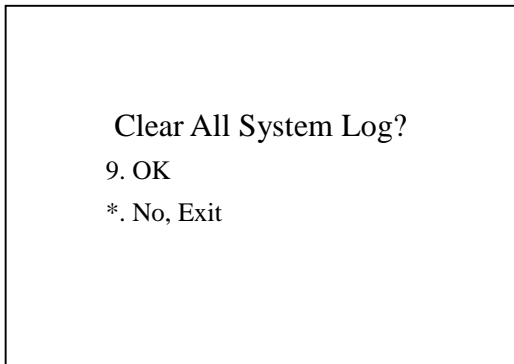


Figure 2-115. Clear system logs

If “9” is pressed then all of the log will be cleared & return to Maintenance mode menu.
If press “*”, it will not clear any log.

2.13. Hidden Function

If one press “0” at Administrator Mode menu 2, the following screen will be displayed.

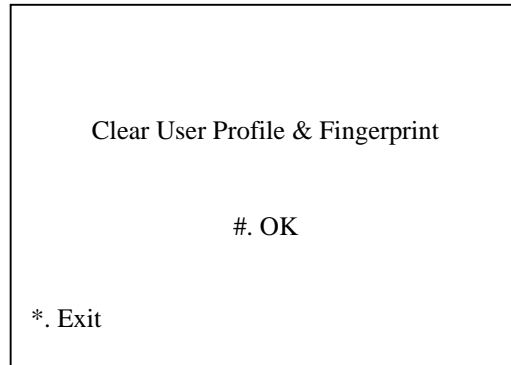


Figure 2-116. Clear user data

At this point, if one press “#”, system will remove all user’s profile and fingerprint data.

Annotation



Annotation 1 : Standard of Mifare card

The International Standards Organization (ISO) defined it ; The relative standard is ISO14443 (proximity cards) 。

Annotation 2 : Advantage of Mifare card

- n Among of the contactless card products, it provides the most security level for safe protection. (In industry, there is only one to own public key for encryption among of the contactless card products)
- n It is fully verified and tested by VISA and TNO.
- n There are organs operating independently to verify the relative products.
- n Mifare can provide the most types of the product to be chose, and it also can meet any different requirement.
- n There are .two hundred and fifty million cards in sales volume.
- n It is installed in the world wide and worked very well.
- n There are numerous card, card reader, terminal suppliers. It is very easy to get them.
- n The architecture is open, convenient, safe and easy.
- n It is a candidate to fight the deception when we do the contact billing.
- n It can work very well in the poor environment, and it is a reliable technology, and it doesn't need to be maintain in general.
- n It is full tolerance for next generation of production.

Annotation 3 : Usage Pictures of the Mifare card for FG70

The side usage	The front usage
	

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