Content

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Federal Communication Commission Interference Statement:

NOTE：This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

Chapter 1 Brief Introduction

This chapter mainly introduces the characteristics, components and functions of FTA600 fingerprint time attendance.

1.1 Characteristics

1.1.1 Exact & Scientific

It records staff attendance information correctly, exactly and rapidly.

Attendance by password or card (paper card, magcard or IC card) cannot avoid others replace of attendance. With fingerprint technology, attendance cannot be replaced any more, and cannot be lost, cannot be forged, it definitely changes the attendance method, reflects the equality of attendance.

1.1.2 Convenient

No need to buy the card reader, nor issue card, just press the enrolled fingerprint on the machine, the attendance is realized.

1.1.3 Strong functions

It provides strong attendance data management, remark, data statistic, report printing, etc. It can make the add to the absence event, such as official travel, absenteeism, etc. Appointed time period or department or staff query statistic are available.

1.1.4 Flexible shift

It supports flexible kinds of working time and shift attendance, which can meet different companies requirements.

1.1.5 Easy maintenance

Support standalone Attendance without PC. And support online multi machine attendance.

1.2 Components

Include: fingerprint time attendance machine, fingerprint time attendance management software, communication machine etc.

1.2.1 FTA600 introduction

FTA600 is a wall mounted, fingerprint time attendance. It can work independently or work online.

Fig 1-1 FTA600 fingerprint time attendance

1.2.1.1 Functions

·World-Known Brand Miaxis, large blue LCD, world super thin design.

·SamSung 32 bit ARM920T, strong image processing, high performance and reliability.

·Miaxis SM-621 optical sensor, scratch-resistant, durable, blue background light.

·Miaxis high capacity fingerprint algorithm FPIDA, self-adjust fingerprint image reading, well accept all kinds of fingers

·User name display, user number optional

·Standalone time attendance, record output without connecting to PC

·Voice prompts

·Support real time record

·Easy-to-use software, suitable for all kinds of complicated time attendance management

1.2.1.2 Specifications

Item	Description
Scan area	16mm×19mm
Resolution	500DPI
Identification method	Fingerprint，password
FRR	≤0.01%
FAR	≤0.0001%
Identification time	≤1s
Register method	Fingerprint, password
Fingerprint capacity	3,000 fingerprints
Record capacity	100,000
Communication	RS232,RS485,TCP/IP,USB
LCD	128×64 blue LCD
Language	English, Chinese
User interface	16 keypads,voice prompts
Work current	≤250mA
Standby current	≤100mA
ESD	>15000V
Power supply	DC 12V/1A
Working temperature	-10℃-60℃
Working humidity	20％-90％（no dew）
Size	180mm×130mm×30mm
Color	Dark gray（can by customized）

1.2.2 Management software

·Meet the needs for different size of company, improve HR efficiency

·Process overtime, illness & private affair leave, out, holiday management

·Easy check in/out time setting

·complicated check in/out time management

·Easy record tracking to know staff status in time.

·Easy management of forgotten sign-in/out.

·Strong HR management function

·Record accurate analysis, and easy revision

·Collect and preview staff's late/leave early/overtime/absence

·Good central management of multi units online.

1.3 Quick Navigation

This chapter is very important, please read carefully.

FTA600 includes: fingerprint time attendance machine, fingerprint time attendance management software, communication machine etc. the management software includes the following modules: system parameter, system maintenance, department management, staff management, shift setup, staff shift, attendance records collection, abnormal handling, Statistical report etc. users should well understand the relations of every module and the working flow so as to get the correct attendance report.

When first use the machine, users should setup the system parameter, machine management, and attendance rules.

Chapter 2 Operation Guide

This chapter introduces FTA600 fingerprint time attendance appearance, installation guide, operation manual and related parameter setup.

Technical terms:

Fingerprint time attendance- machine for attendance use with fingerprint technology, here means FTA600

Users- attendance users, such as staff in a company or community.

Administrator-users who can setup, revise the parameter of FTA600 and carry through the maintenance rights.

Fingerprint reader- transform fingerprint image to the file that DSP can verify and deal with, blue light reader for FTA600

Fingerprint reader-the area where press finger to collect fingerprint.

2.1 FTA600 Appearance

2.1.1 Packing list

Please check if the below parts are included:

·FTA600 terminal	1pc
·Hanging board（steel）	1pc
·12DC@2A power supply	1pc
·RS232 cable	1pc
·Screws	1set
·User manual	1pc
·FTA600 management software disc	1pc
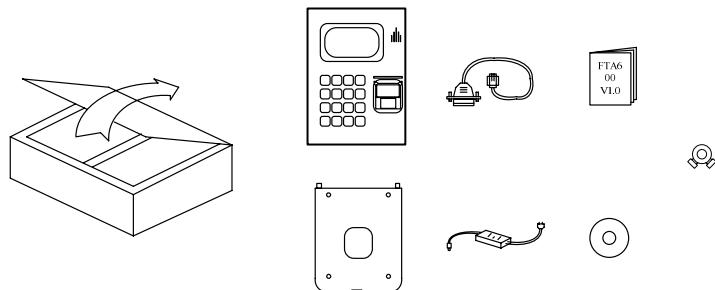
Fig. 2-1 FTA600

2.1.2 FTA600 photo

LCD Display

MIAXIS®

MIAXIS   ☺   On duty

12:30:05

2007-05-01   WED

Voice

Cancel Key

Number Key

1	2	3	ESC
4	5	6	△
7	8	9	▽
⊙	0	M	OK

LED indicator

Fingerprint Sensor

Turn On/Off Key

FTA600

Function/Backspace Key

Confirm Key

Page Down/Up Key

warranty Label

Hanging Hole×3

Product Label

FINGERPRINT T&A AND ACCESS CONTROL SYSTEM

Model: FTA-600
Input: DC12V 1.5A
Communication: □ RS232/485
                □ TCP/IP   □ USB
Capacity: 3000Fingerprints

Power Plug

Communications Jack

DC 12V
= 1.5A

□ 10Base-T
□ RS232/485
□ USB

□ Wiegand
□ No-wiegand

Cable Channel

Fig 2-2

2.2 FTA600 Connection Interface

FTA600 has the below interface: power input interface, communication interface, access control interface. Please find figure 2-2 and2-3.

Power   Communicati
Plug   ons Jack
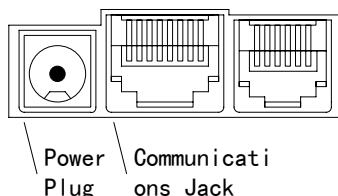
Fig. 2-3

2.2.1 FTA600 power connection

FTA600 adopts external power supply: **12DC@2A**

DC 12V
== 1.5A
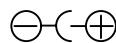
Fig 2-4

### 2.2.2 FTA600 communication connection

□ 10Base-T
□ RS232/485
□ USB
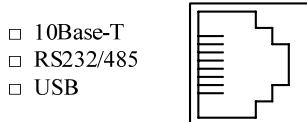
Fig. 2-5

FTA600 series fingerprint time attendance support three kinds of communications, each of them has its item No.

·FTA600 support RS232/485 communication（standard configuration）

·FTA601 support 10Base-T Ethernet communication (should indicate when order)

·FTA602 support USB1.1 communication（should indicate when order）

FTA600 series adopts the RJ45 standard outlet.

2.2.2.1 Serial port connection method

FTA600 has RS232/485 standard communication method, connect to PC with RS232 interface, which has three-lead communication method, support multi-FTA600 to form RS485 bus network. then connect to PC with RS485-232 transducer. As per below figure:
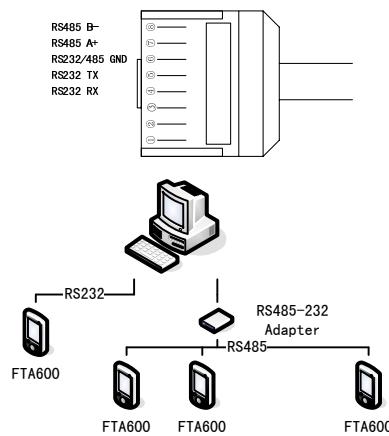

Fig. 2-6

RS232 communication traffic rate is 115200bps as max., cable length 30M as max.

RS485 communication cable is the STP (Shielded Twisted Pair), one-step of RS485 bus can support max. 1.2km network. And traffic rate is 115200bps as max. It can support 32sets FTA600 interconnection at most. Other parameter of RS485, please refer to RS484 files.

2.2.2.2 Ethernet connection method

FTA601 adopts 10Base-T Ethernet communication method, connect to PC by Ethernet concentrator or interchanger. Refer to below figure:
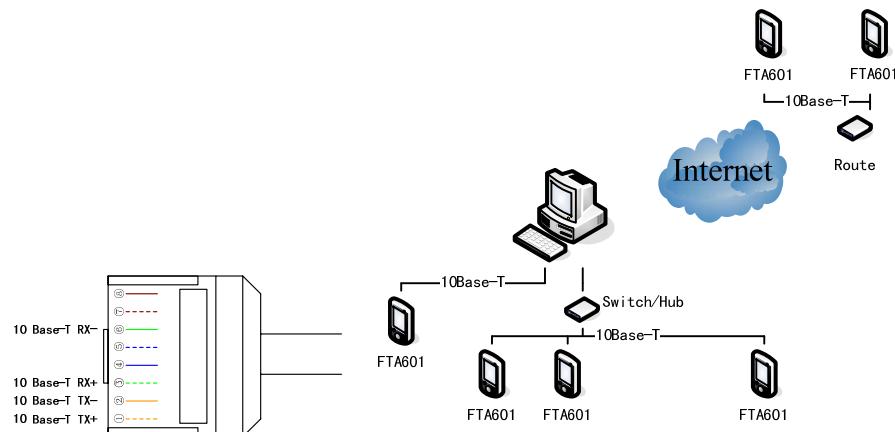
Fig. 2-7

10Base-T Ethernet adopts Category 5 or extra Category 5 STP, with max. onestep communication distance 100M, and connect by double transceiver signals. Please refer to figure 2-7. Using Category 5 or extra Category 5STP as web line, follows the standards of ANSI/TIA/EIA-568A（for short T568A）and ANSI/TIA/EIZ-568B（for short T568B）, the line sequence of T568B is: white-orange, orange, white-green, blue, white-blue, green, white-brown, brown. the line sequence of T568A is: white-green, green, white-orange, blue, white-blue, orange, white-brown, brown.

When FTA600 connects with PC through Ethernet or Ethernet concentrator, the two sides of web line is T568B. when FTA600 connects with PC directly, one side of web line is T568A, the other side is T568B.

2.2.2.3 USB connection method

FTA602 adopts USB1.1 compatible communication method; connect to PC through USB concentrator or PC USB host. Or make data switching by a USB disc, signal definition as blow:
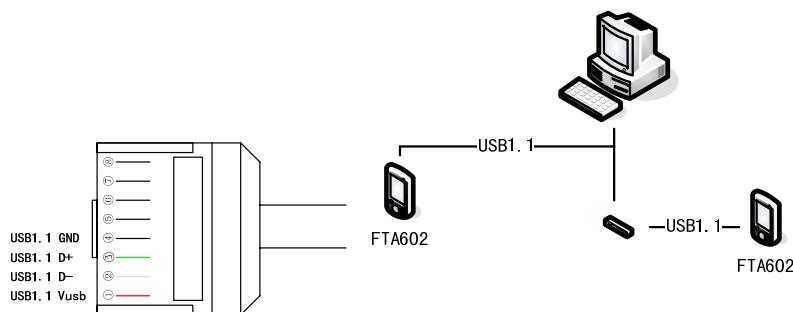
Fig 2-8

USB1.1 communication cable length is 6M as max., the traffic rate is 12Mbps as max.

2.3 FTA600 Installation

FTA600 is the wall mounted installation. The hanging board(steel board) is included in the package, and the installation attachment included as well.   The installation steps as below:

1. Confirm the installation height and position: the recommended height is 1.2M to 1.4M. The recommended position is the firmly wall near the passage.

2. Fix the hanging board (steel board) to the wall with the 4 expansion bolts

3.   Connect the power line, communication cable or access control cable.

4. Fix the FTA600 machine to the hanging board (steel board) with the security screws.
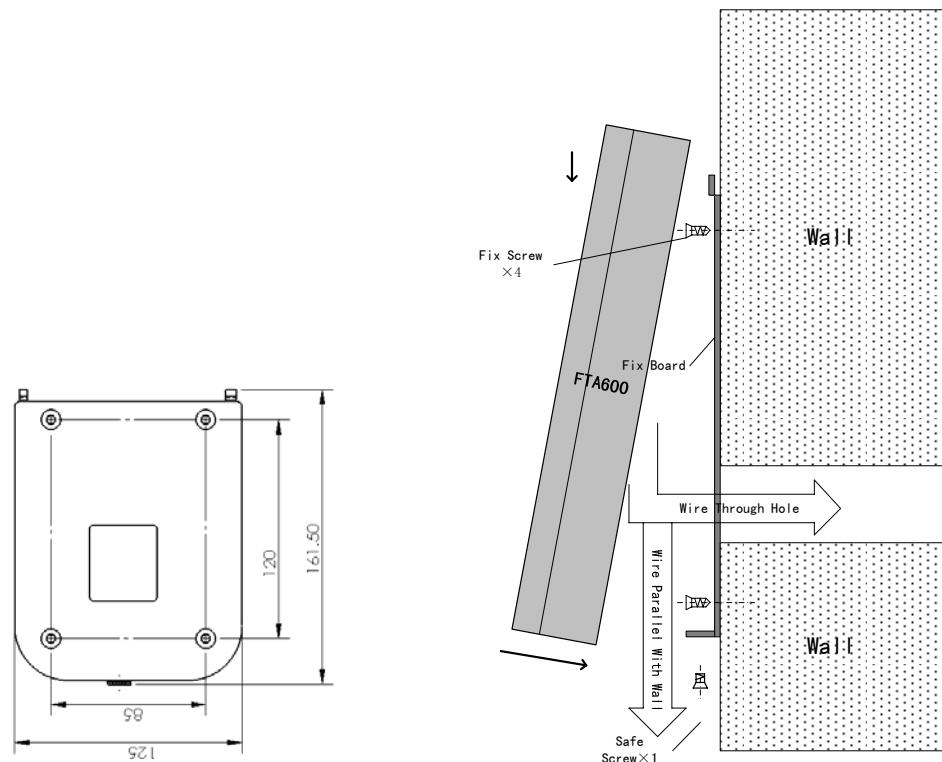
Fig. 2-13

2.4 FTA600 Operation

2.4.1 FTA600 key introduction

FTA600 keys include: Number key, turn on/off key, cancel key, confirm key, page up/down key, function/back space key,

· 0 1 2 3 4 5 6 7 8 9 the No. keys is for input No. information when setup.

· ⊙ turn on/off key, press ⊙ for 1 second to turn on the machine, and press ⊙ for 1 second to turn off the machine.

· ESC cancel key is for cancel the present input & operations or for return.

· OK confirm key if for confirm the present input & operations or for next menu.

· △ ▽ page up/down key is for chose the present input & operations; and for on duty/ off duty exchange in the main interface.

· M function/back space key is for enter into function menu, during the operations, it also for back space usage.

2.4.2 FTA600 main interface

2.4.2.1 turn on/ turn off

Press ⊙ for 1second to turn on the machine, and press ⊙ for 1second to turn off the machine.
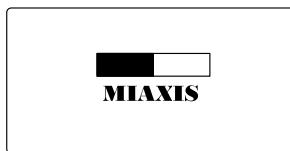
When power on and turn on FTA600, the LCD will display the below main interface:
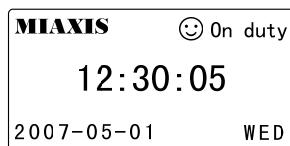
The contents include, date: year-month-day-week, time: hour-minute-second, and other attendance status. （the main interface can be user defined. Please refer to 4.4.3）

2.4.2.2 Fingerprint Verification

· **fingerprint verification successful**
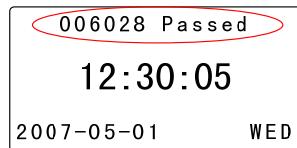
The main interface will show" XXXXXX passed" and voice prompt "thanks", LED flash blue light.

· **fingerprint verification failure**

```
┌──────────────────────────────┐
│  ⟨Press finger again⟩         │
│        12:30:05              │
│  2007-05-01        WED       │
└──────────────────────────────┘
```
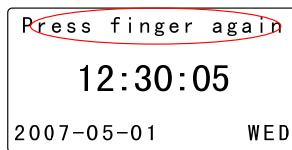
The main interface will show "press finger again", and voice prompt" press finger again", LED flash red light.

2.4.2.3 Password verify

Press any key to enter the password verify interface, input the user ID and password.

(before password verify please make sure the user ID has added the password)

·Password verify interface

```
┌──────────────────────────────┐
│     Password Verify          │
│  Input ID⟨012345⟩            │
│  Password⟨****⟩              │
│                              │
└──────────────────────────────┘
```
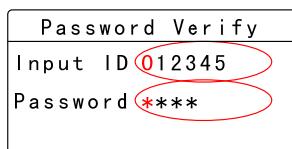
Press Number key to input user ID and password, press ⌷OK⌷ to confirm.

· Password verify passed

```
┌──────────────────────────────┐
│    ⟨006028 Passed⟩           │
│        12:30:05              │
│  2007-05-01        WED       │
└──────────────────────────────┘
```

· Password verify failed

```
┌─────────────────┐ ┌─────────────────┐
│       ⚠         │ │       ⚠         │
│  Input error    │ │                 │
│ The ID don't exist│ │  Password error │
└─────────────────┘ └─────────────────┘
```
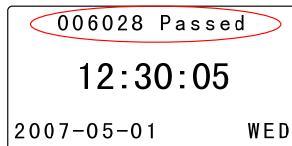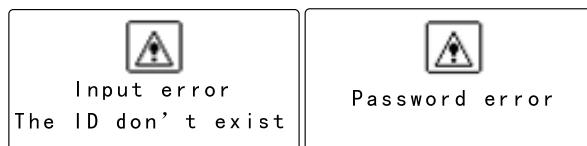
2.4.2.4 Administrator ID verify

Press ⌷M⌷ to enter administrator ID verify interface (before verification, please make sure the machine has added the administrator)

·Administrator ID verify interface

```
┌─────────────────┐ ┌─────────────────┐
│       👆        │ │  Admin verify   │
│                 │ │ Input ID⟨012345⟩│
│  Press finger   │ │ Password⟨****⟩  │
│  Administrators  │ │                 │
└─────────────────┘ └─────────────────┘
```

·Administrator ID verify passed

```
┌─────────────────────────┐
│        Menu             │
│ 1.Device manage    🔧   │
│ 2.Staff manage     👤   │
│                         │
└─────────────────────────┘
```
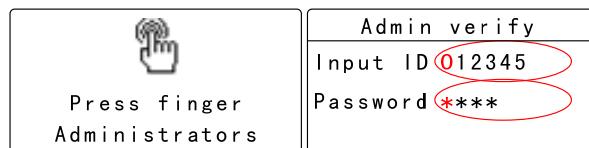
Enter the main menu, voice prompts "thanks", and LED flashes blue light.

FTA600 has three level menu management methods, please refer to2.4.3 and 2.4.4.

·Administrator ID verify failed

If the input fingerprint verified, but not administrator's fingerprint, then display as blow:

```
┌─────────────────────────┐
│          ⚠              │
│                         │
│     Input error         │
│     Not Admin           │
└─────────────────────────┘
```

2.4.2.5 FTA600 sleep by

In the main interface, if no operation on the machine more than 5minutes, it will put into sleep by.   Then press any key to wake up the machine.

2.4.3 FTA600 machine management

In the main interface, press ⬚M enter the main menu function. Before enter the main menu, please setup the administrator in the way of fingerprint or password. Press ⬚M to enter the below menu:

```
┌─────────────────────────┐
│        Menu             │
│ 1.Device manage    🔧   │
│ 2.Staff manage     👤   │
│                         │
└─────────────────────────┘
```
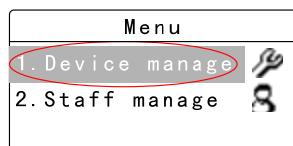
The main menu includes two submenu: 1. machine setting 2. user manage. Press⬚OKor⬚1enter "machine setting" submenu, press⬚ESC return to the main menu. Press ⬚△⬚▽ or number keys for functional switch.

Machine setting submenu includes 8 menu: 1. Date & time, 2.transmission, 3.language, 4.voice, 5.save info, 6.machine info, 7.default set, 8. screen savers

2.4.3.1 Date & Time

In the "date & time" submenu, press⬚OKor⬚1enter "date setting". Press ⬚ESC return "machine setting", press⬚△⬚▽and number keys for functional switch.

```
          Device Manage
      1.Date&Time         🕐
      2.Transmission      🖧
      3.Language          🄰
```

```
     Date&Time          Date setting         Time setting
  1.Date setting          YY/MM/DD             HH:MM
  2.Time setting         2008/05/01            19:20
```
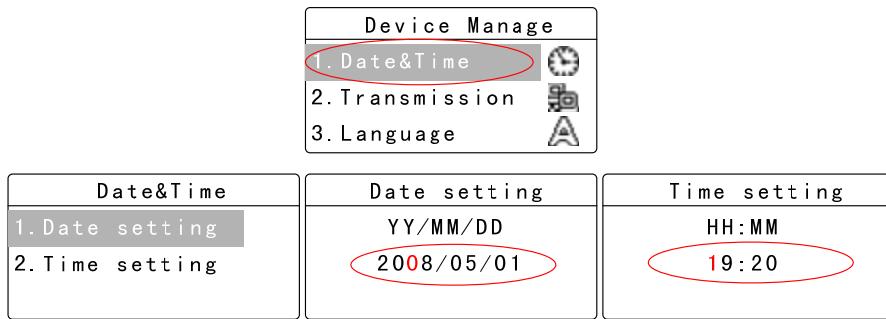
"Date & time" has date setting and time setting, date format: year/month/day, time format is: hour: minute, 24-hours system.

During setting, press ⎡ESC⎤ will not change the time setting but return to the previous menu. Press ⎡OK⎤ for confirmation.

2.4.3.2 Transmission

In "machine setting", press ⎡OK⎤or⎡2⎤ enter "transmission" menu. press⎡ESC⎤ return to "machine setting", press△ ▽ and number keys for functional switch.

```
          Device Manage
      2.Transmission      🖧
      3.Language          🄰
      4.Voice             🔊
```

·**FTA600 support RS232/485 commnication**

'Uart setting" has two menu: 1. machine ID, 2.baud setting. Press △ ▽ and number keys for functional switch.

```
     Uart setting         Device ID          1.19200
  1.Device ID          Input ID 001          2.38400
  2.Baud setting        (Input001~254)       3.57600
                                             4.115200
```
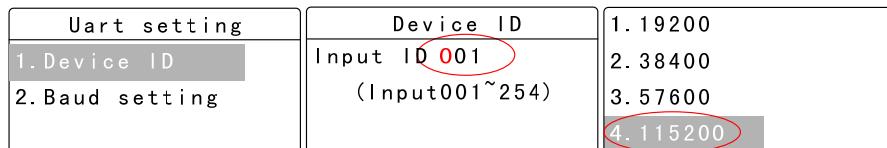
Machine ID is the only number mark to distinguish the connected machine in RS232/485 web, ranging from 1 to 254. Default: 001

Baud rate is the communication rate of PC serial port. At present the machine support：19200bps、38400bps、57600bps、115200bps，the default setting is：**115200bps**。

During the setting, press ⎡ESC⎤ for return, press⎡OK⎤ for confirmation, and press ⎡M⎤ for deletion.

·**FTA601 support TCP/IP communication**

'network setting' includes three items: 1. IP address 2. Subnet mask, 3. Gateway press△ ▽ and number keys for selection.

```
          Net setting
   1.IP address
   2.Mask
   3.Gateway
```

```
    IP address          Mask              Gateway

  192.168.001.100   255.255.255.000   192.168.001.254
```
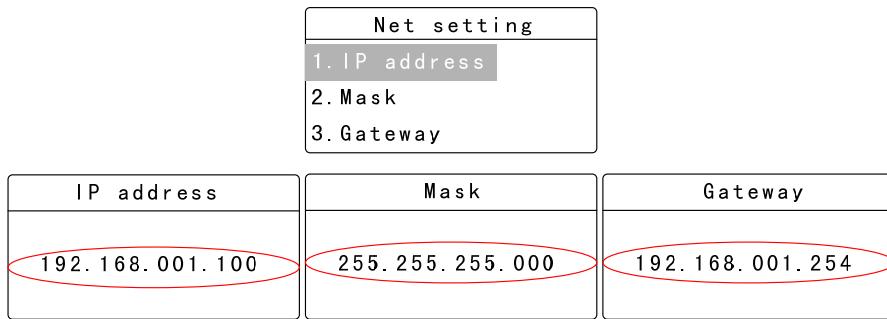
IP address is the only TCP/IP address no. belongs to the machine. The address format is: **192.168.0.100**。

Subnet Mask is the TCP/IP address No. of the subnet, the address format is:XXX.XXX.XXX.XXX。Default is：**255.255.255.0**。

Gateway is the TCP/IP address No. leap subnet part required，the address format is：XXX.XXX.XXX.XXX。default is：**192.168.0.254**。

In settings, press ⎡ESC⎤ for return, press⎡OK⎤ for confirmation, and press⎡M⎤ for deletion.

·FTA602 supports USB communicaiton

'**USB setting**' includes two items:**1. Host 2. Device**。Press ⎡△⎤⎡▽⎤ and number keys for selection.

```
         USB setting
   1.Host
   2.Device
```
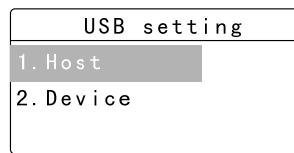
USB Host is FTA602 can store as the USB.

USB Device is FTA602 can connect with PC for communication.   The default setting is ：**USB Host.**

In settings, press⎡ESC⎤ for return, press ⎡OK⎤ for confirmation, press⎡M⎤ for deletion.

2.4.3.3 language

In "machine setting" submenu, press⎡OK⎤or⎡3⎤ to entre "language" menu. Press ⎡ESC⎤ for return, press ⎡△⎤⎡▽⎤ and number keys for functional switch.

```
  Device Manage         Language
  3.Language    A    1.English
  4.Voice      ⬕)    2.简体中文
  5.Saved Info  📷   3.繁体中文
```

FTA600 supports three language: **1. English 2. simplified Chinese 3. Transitional Chinese**，press⎡△⎤⎡▽⎤and number keys for selection. Default is: simplified Chinese.

Pres ⎡ESC⎤ for return, press⎡OK⎤ for confirmation.

2.4.3.4 voice

In " machine settings" submenu, press ⌷OK⌷ or ⌷4⌷ to "voice" menu. Press ⌷ESC⌷ for return, press△▽and number keys for functional switch.

```
┌──────────────────────┐ ┌──────────────────────┐
│  Device Manage       │ │       Voice          │
│ 4.Voice        ◁))   │ │ 1.Off                │
│ 5.Saved Info         │ │ 2.On                 │
│ 6.Device Info        │ │                      │
└──────────────────────┘ └──────────────────────┘
```
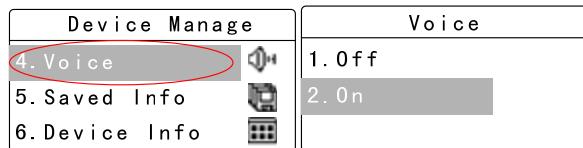
FTA600 has voice on/off function selections, press △ ▽ and number keys for selection. The default setting is: voice on.

2.4.3.5 saved info

In menu "machine settings", press ⌷OK⌷or ⌷5⌷ enter "saved info" menu. Press⌷ESC⌷for return, and press△ ▽ and number keys for functional switch.

```
┌──────────────────────┐ ┌──────────────────────┐
│  Device Manage       │ │    Saved Info        │
│ 4.Voice        ◁))   │ │ User space    3000   │
│ 5.Saved Info         │ │ Finger space  3000   │
│ 6.Device Info        │ │ Log space     0.1%   │
└──────────────────────┘ └──────────────────────┘
```
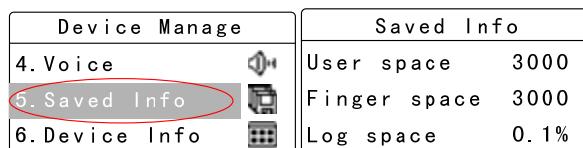
FTA600 supports one user has multi fingerprint enrollment, Max. Fingerprint capacity is 3000fingerprints. And the record capacity is **131072pcs.**

2.4.3.6 device info

In the "device info" submenu, press ⌷OK⌷ or ⌷6⌷ to enter "device info" menu, press⌷ESC⌷ for return, press △▽ and number keys for functional switch.

```
┌──────────────────────┐ ┌──────────────────────┐
│  Device Manage       │ │    Device Info       │
│ 4.Voice        ◁))   │ │ Name:        FTA600   │
│ 5.Saved Info         │ │ Ver:       V1.00.01   │
│ 6.Device Info        │ │ Factory:     MIAXIS   │
└──────────────────────┘ └──────────────────────┘
```
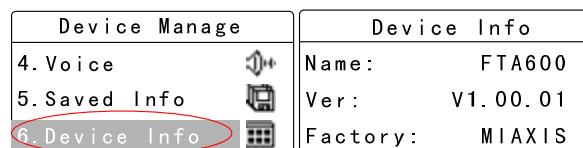
2.4.3.7 default set

In the "default set" submenu, press ⌷OK⌷ or⌷7⌷ to enter "default set", press ⌷ESC⌷ for return, press△▽ and number keys for functional switch.

```
┌────────────────────┐ ┌────────────────────┐ ┌────────────────────┐
│  Device setting    │ │   Default set      │ │  Default setting   │
│ 7.Default set      │ │ password ****      │ │ 1.Yes              │
│ 8.Screen savers    │ │ (Input 6 numbers)  │ │ 2.No               │
└────────────────────┘ └────────────────────┘ └────────────────────┘
```
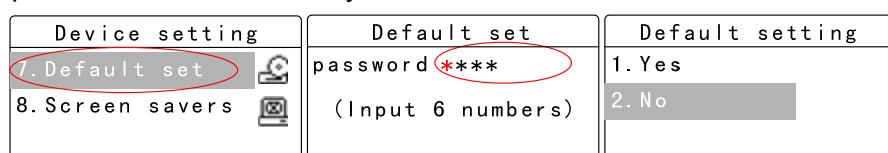
Please note, after default setup, all the enrolled fingerprints, saved info, will be deleted and return to the default status. And these information cannot be comeback. The password for default setup is: 888888 as original.

2.4.3.8 screen savers

In the "machine setting" submenu, press⌗or⌗ to enter "screen savers" menu, press⌗ for return，press⌗⌗ and number keys for functional switch.

```
┌──────────────────────┐ ┌──────────────────────┐
│   Device setting     │ │   Screen saver       │
│ 7.Default set    ⊙   │ │ Time-out   05        │
│ 8.Screen savers  ▣   │ │    (1~30Minuts)      │
│                      │ │                      │
└──────────────────────┘ └──────────────────────┘
```
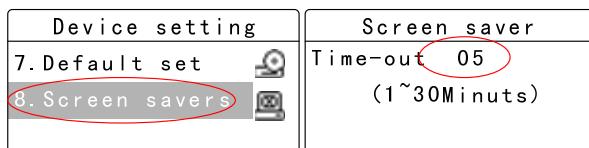
FTA600 will put in sleep by status if no operation within 5minuties, users can setup the time accordingly.

2.4.4 FTA600 staff manage

In the main interface, press ⌗ to enter the main functional menu, before entering the staff mange menu, it is required the administrator confirmation by password or fingerprints. If no administrator added, press ⌗ to enter directly.

```
┌──────────────────────┐
│        Menu          │
│ 1.Device manage  ⚙   │
│ 2.Staff  manage  🚹  │
│                      │
└──────────────────────┘
```
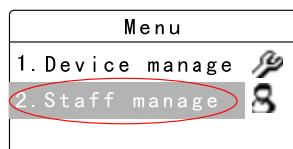
Staff mange submenu has three items: 1. add user, 2. delete user, 3. modify user.

2.4.4.1 Add user

In the "staff manage" submenu, press⌗ or ⌗ to "add user" menu, press⌗ for return, and press⌗⌗ and key numbers for functional switch.

Users can use optical ID No. for FTA600, user ID No. is unique, company can use staff's ID No. as the user NO.

```
┌──────────────────────┐
│    Staff manage      │
│ 1.Add user       🚹⁺ │
│ 2.Delete user    🚹ˣ │
│ 3.Modify user    🚹ᵛ │
└──────────────────────┘
```

Input the user's ID No. by number keys, the user's ID No. has 6 figures, if user input less than 6 figures, it will automatically fill 0 in front. Then press ⌗ for confirmation，and press⌗ for deletion.

```
┌─────────────────────────┐  ┌─────────────────────────┐
│       Add user          │  │      012345 User        │
│                         │  │                         │
│ User ID 012345          │  │ 1.Add finger            │
│                         │  │                         │
│ (Input 1~6 number)      │  │ 2.Password              │
│                         │  │                         │
│                         │  │ 3.Manage level          │
└─────────────────────────┘  └─────────────────────────┘
```

Press △▽ or number keys for selection, press ① to enter the add fingerprint interface, press② to enter the add password interface, press ③ to enter the manage level interface.

·Add fingerprint

```
┌─────────────────────────┐  ┌─────────────────────────┐
│     002304 user         │  │     002304 user         │
│     Add 1 finger        │  │     Add 1 finger        │
│    (Most 8 fingers)     │  │    (Most 8 fingers)     │
│                         │  │                         │
│     Press finger        │  │   Press finger again    │
└─────────────────────────┘  └─────────────────────────┘
```

Enroll one fingerprint need press 2 or 3 times usually, press operate according to the prompts.

· Add password

```
┌─────────────────────────┐
│      012345 user        │
│                         │
│ Password 012345         │
│                         │
│ Affirm   ****           │
│                         │
│   (Input 6 numbers)     │
└─────────────────────────┘
```

FTA600 supports fingerprint verification or password verification, and password should be 1 to 8 figures.

· Manage level interface

```
┌─────────────────────────┐
│      002304 user        │
│ 1.Guest                 │
│                         │
│ 2.Admin                 │
│                         │
│                         │
└─────────────────────────┘
```

FTA600 has two level users, one is administrator, and the other is user. Administrator can operate machine and staff management, users just can use the time attendance.

2.4.4.2 delete users

In the "staff manage" menu, press OK or② to the "delete user" menu, press ESC for return and △▽ & number keys for functional switch.

```
┌─────────────────────────┐  ┌─────────────────────────┐
│     Staff manage        │  │      Delete user        │
│ 1.Add user          ☺   │  │ 1.Delet one             │
│                         │  │                         │
│ 2.Delete user       ☺   │  │ 2.Delet all             │
│                         │  │                         │
│ 3.Modify user       ☺   │  │                         │
└─────────────────────────┘  └─────────────────────────┘

┌─────────────────────────┐  ┌─────────────────────────┐
│      Delet user         │  │  Delete 002304 user     │
│                         │  │ 1.Yse                   │
│ User ID 012345          │  │                         │
│                         │  │ 2.No                    │
│ (Input 1~6 number)      │  │                         │
└─────────────────────────┘  └─────────────────────────┘
```

Administrator can delete one user or all the users. Choose the user ID No. to delete.

And press ▵▿ and number keys for selecting YES or NO.

2.4.4.3 modify user

In the "staff manage" submenu, press OK or 3 to modify user menu, press ESC for return, press ▵▿ and number keys for functional switch.

```
      Staff manage
1.Add user          8⁺
2.Delete user       8ˣ
3.Modify user       8ᵛ
```

The enrolled user can be modified, such as: add fingerprints, midity password, modify the management level, each user has 8 fingerprints at most. Please refer to 2.4.4.1.

2.4.5 FTA600 the prompt info

This paragraph is explaining all the prompt information during the operation.

2.4.5.1 successful info

·setup successfully

```
         💾
        Saved
```

·add successfully

```
         💾
     Add successful
```

2.4.5.2 failure info

· add failure

```
      ⚠               ⚠
   Add failed        Add failed
  Change finger    User total is full
```

```
     ⚠                      ⚠
Add  failed             Add  failed
Finger  sum  is  full   User's  finger  full
```
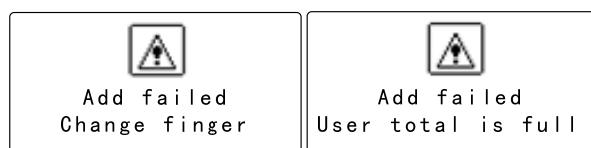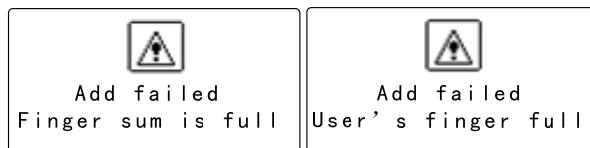
'add failure, please change another fingerprint'——means the enrolled fingerprint doesn't have good quality image or finger place in a incorrect way. Please try another fingerprint.

'add failure，**the totally user number full**'——means the fingerprints enrolled has succeed three thousand, please refer to 2.4.3.5.

'add failure，**the user number full**'——means the user fingerprints enrolled has succeed eight. This machine allows one user to add eight fingerprints at most.

·Input Error

During the operations, such as add user, delete user, modify user,etc, it requires to input user number. If input is wrong, input error interface will appear. The voice will prompt 'input error' at the same time.

```
     ⚠                    ⚠                      ⚠
Input  error         Input  error          Input  error
The  ID  is  empty   The  ID  is  used     The  ID  don't  exist
```

```
     ⚠                    ⚠
Input  error          Password  error
No  user  is  exist
```
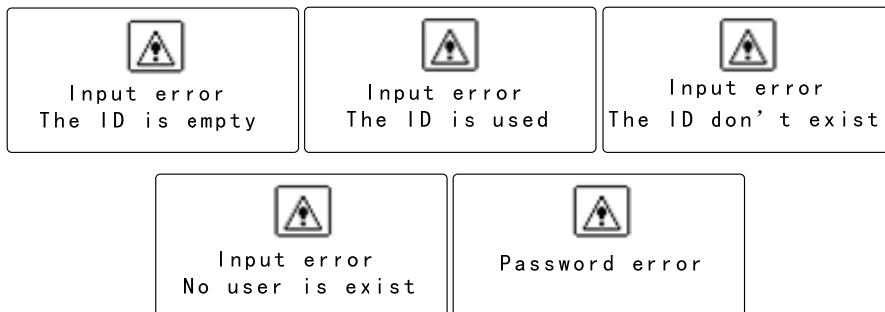
2.4.6 FTA600 product fingerprint placing

Before using FTA600 fingerprint time attendance, it needs to make the illustration for the users' finger select, finger placing means, etc.

2.4.6.1 User finger select

For the quick and convenient operation for FTA600 fingerprint time attendance, it suggests the users select the finger according to the below means when adding fingerprints.

This machine allows each user to add one to eight fingerprints, it suggests each user enroll two fingerprints at least.

·Finger select sequence suggestion: index finger of right hand, index finger of left hand, middle finger of right hand, middle finger of left hand, thumb of right hand, thumb of left hand.ring finger and little finger are not suggested to use.

Select fingers with good ridges, avoiding to selecting peeled, broken fingers, no ridges or disable fingers,etc.

If possible, it suggests add fingers in winter and summer separately.

2.4.6.2 Finger placing means

For the quick and convenient operation for FTA600 fingerprint time attendance, please follow the below requirements to place finger.

·Proper placing
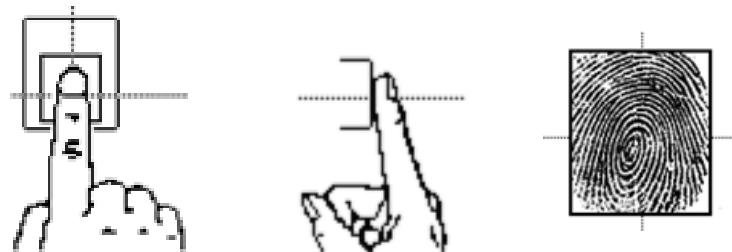
The proper finger placing position is to place the first knuckle of the finger on the fingerprint collection window of FTA600 evenly. Make sure the finger prominence contact with fingerprint collection window closely.

·Improper placing

General improper placing position is to place the first knuckle of the finger on the fingerprint collection window of FTA600 unevenly, or make the side placing, tilt placing,etc.

Chapter 3 System Installation

This chapter mainly introduces the install and uninstall of fingerprint time attendance management software as well as computer configuration requirements for the installation.

3.1 Running Environment

·Hardware requirement

Above PentiumIII500

At least 256MB memory,at least 40GB hard disk

CD-ROM driver

True color display adapter, support resolution above 1024×768

RS232 serial port(DB9 socket)

Mouse

Above USB1.1 version Universal Serial Bus(USB),it is optional according to the fingerprint time attendance communication means

10-Base Ethernet adapter, it is optional according to the fingerprint time attendance

communication means.

·OS

Microsoft Windows XP, Microsoft Windows 2000

3.2System Installation

1. Insert the attached fingerprint time attendance installation CD to the CD-ROM driver, the CD can run the installation program automatically. If it doesn't run automatically, please run the Setup.exe installation program at the root directory of the CD, the below interface will pop up.

2. Select the installation language needed, click ok button, it will pop up the below interface. If MSDE database has been installed in the Windows OS, it will skip the step3 and run the step4 directly.
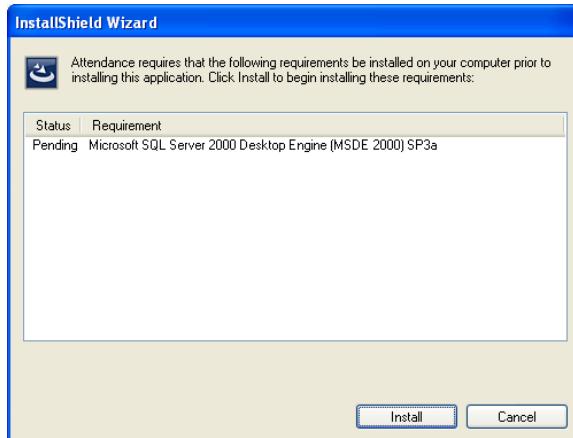
3.Click Install button, it will pop up the below interface.

4. After finishing database installation, it will install the software automatically. It will pop up the below interface.
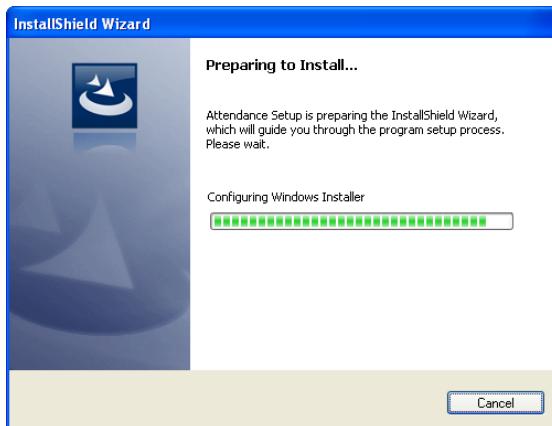
5.Afer several seconds, the system will proceed the next step. Please see the below interface.
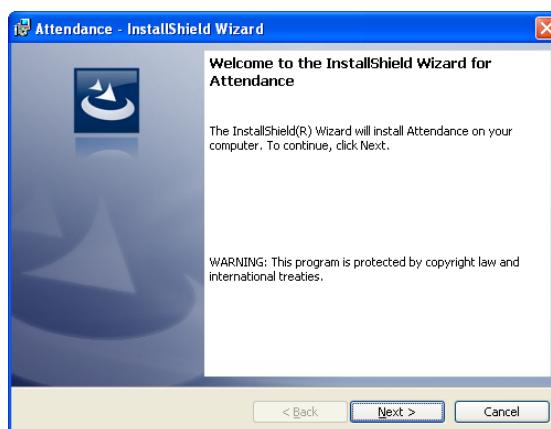
6. Click next, the license agreement will pop up.
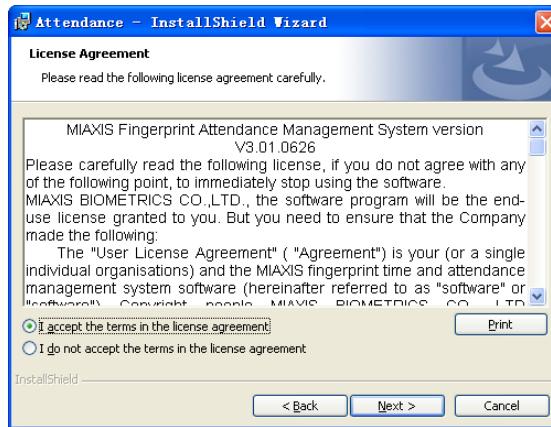
7.Select I accept the terms in the license agreement, click the next button. Select the installation directory. It will pop up the below interface.
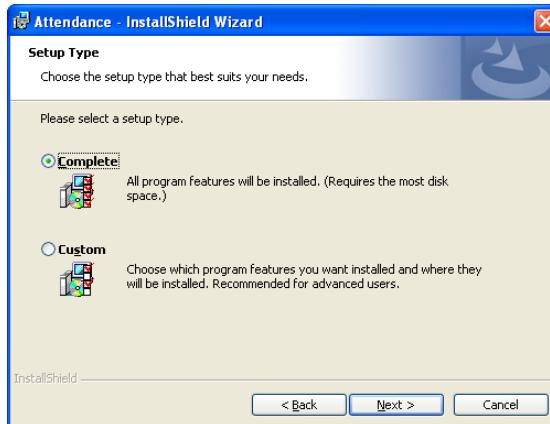
8. Generally, it only needs to select the complete installation, click Next button, it starts to install until the below interface pop up.
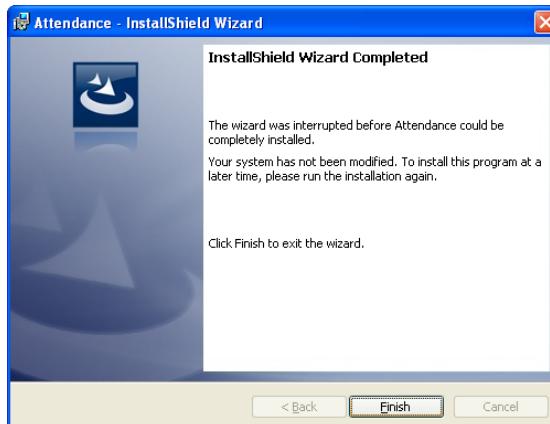
9. After finish installation, one icon   will appear in the desktop. Double click it, the fingerprint time attendance management program will run. By the way, fingerprint time attendance management system 'Attendance' will add in the windows program group. Please see the below interface.
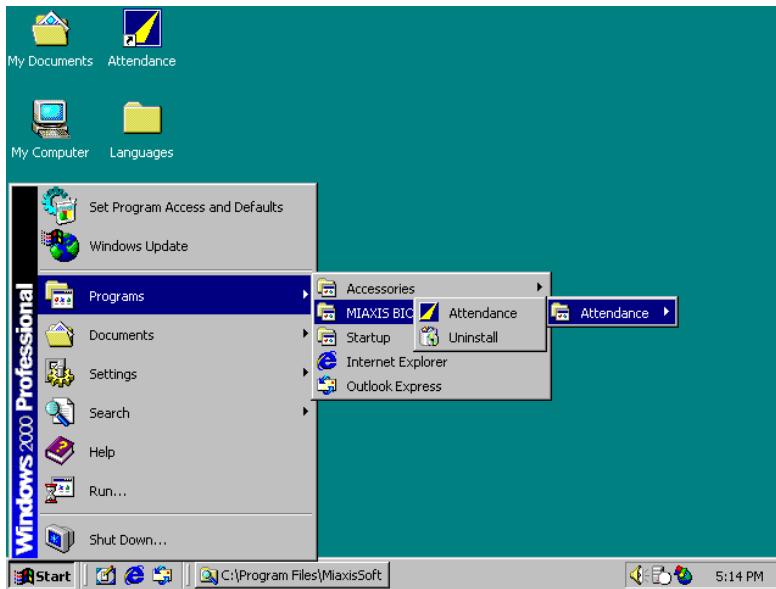
3.3 System Uninstall

Click Uninstall Att on the above interface, click Next button on the popping up window, thus the uninstall can be finished automatically.

Notice: All the documents and data will be deleted after uninstall. Be careful of it before this operation.

Chapter 4 Background Management

This chapter mainly introduces how to operate, set up the T&A management software, how to manage the department, how to maintenance personnel, how to collect attendance records and how to make statistic forms.

The T&A management software includes all the attendance data collected by all kinds of the T&A machines. It can generate all kinds of statistics form according to staff shift.The software can maintain all staff information, staff shifts as well as staff attendance rules.

 Please read the 2.3 section about the operation when first using it.

4.1 System Log on

Double click the icon Attendance on the desktop, start up the attendance management program, then it will pop up the below system log on interface.

When log on the system, it will start the initialization, check the system integrity, user validity. Run the program after first installing it, it will pop up the below window.
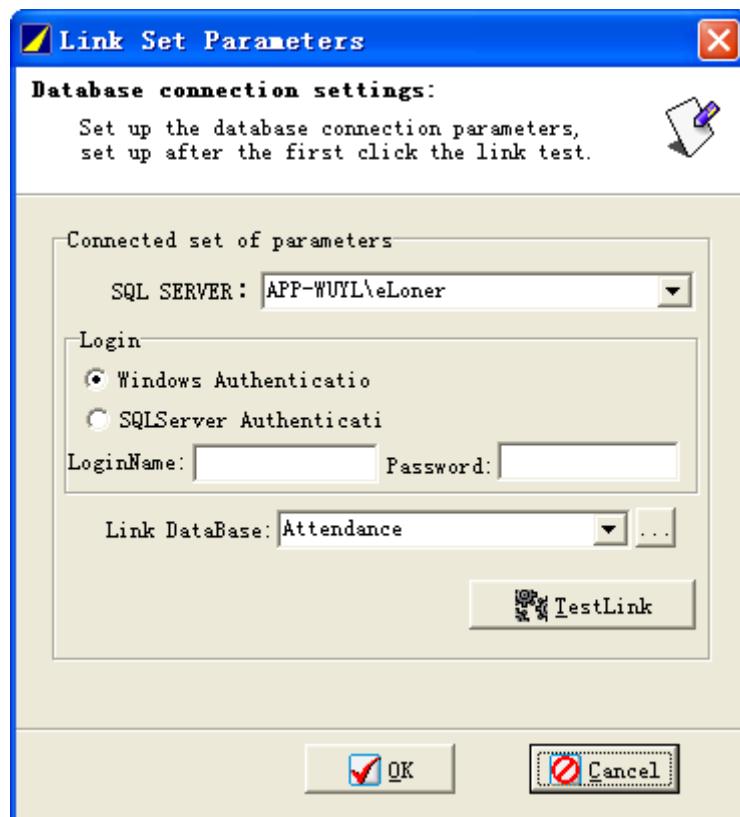
You can click the [OK] button to connect, or appoint the link as follows: choose "SQL Server Authenticati", then click ⸺ button, choose Attendance_Data.MDF under the installation directory, then click [OK] button to complete the setting.
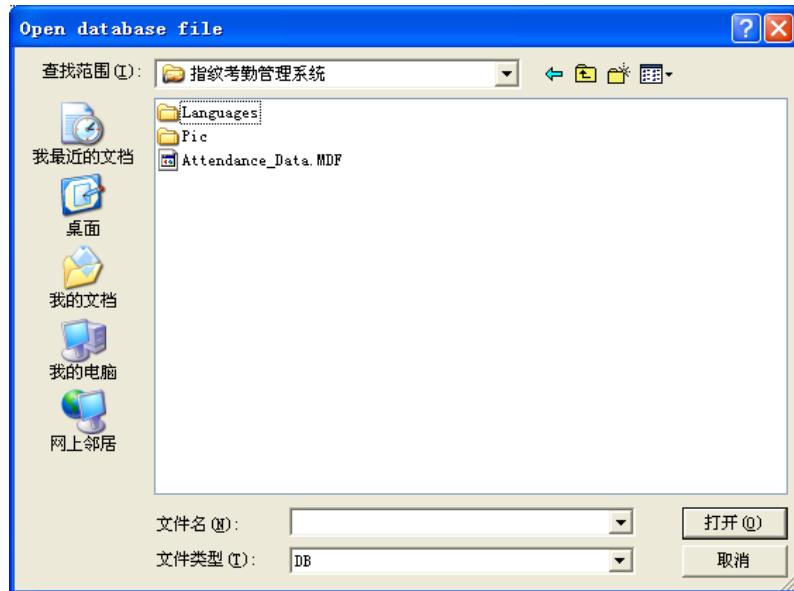
After successful connecting initialization, it will pop up the following window.
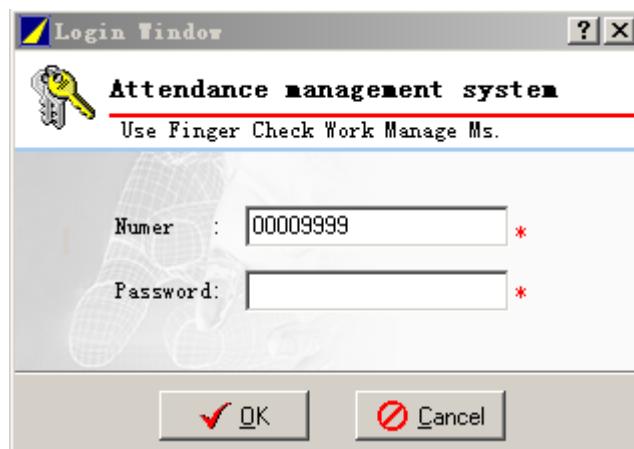
Input the right number, name and password, then click the [OK] button. For default setting, number is 00009999, no password. If you input the wrong information, the system will remind you. For the three wrong password input, it will exit the system automatically. Click the [OK] button. It will pop up the following window.
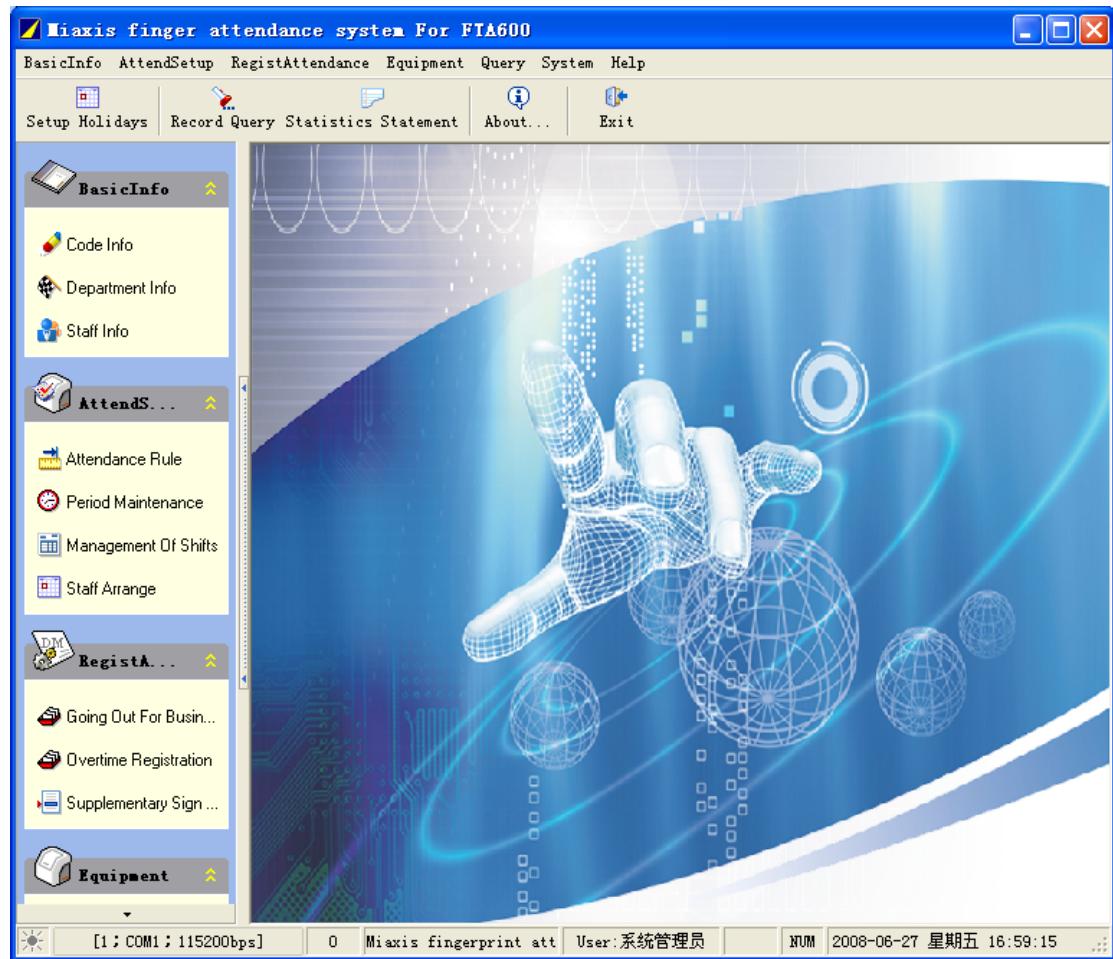
4.2 Basic Information

4.2.1Code Setup

Click the code info module, accessing this module. It will pop up the below window. Then finish setting up the code parameter in this module.
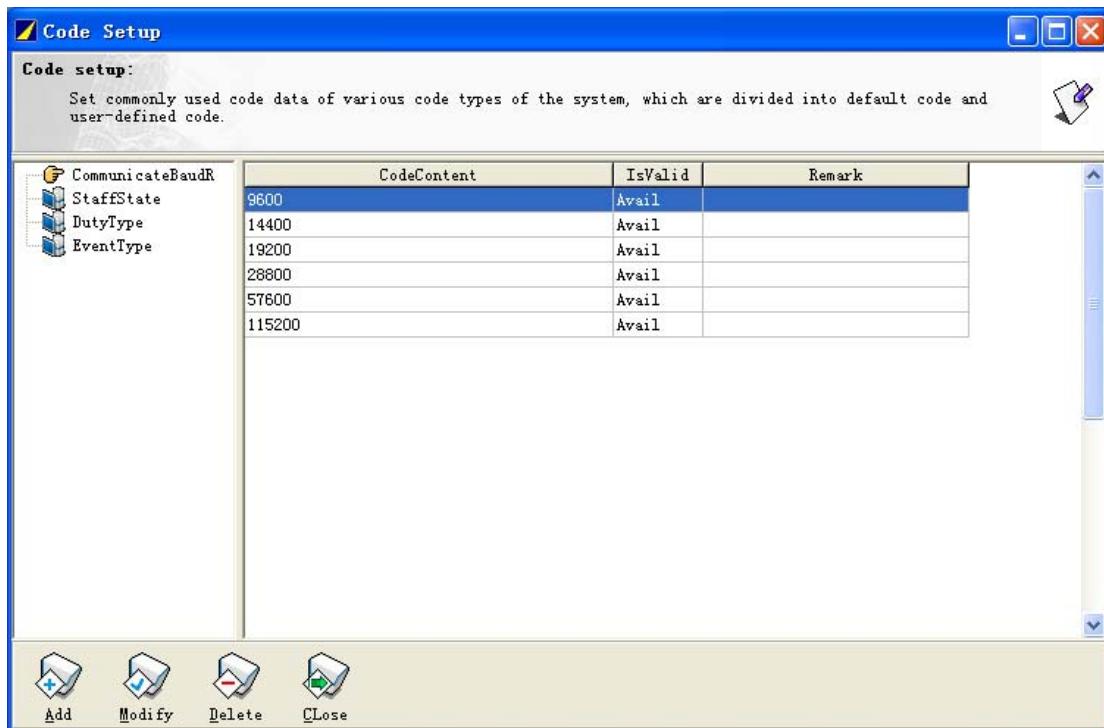
code parameter refers to the code parameter needed in this system.

1.Add:Click the code item on the left, then click the [Add] button.
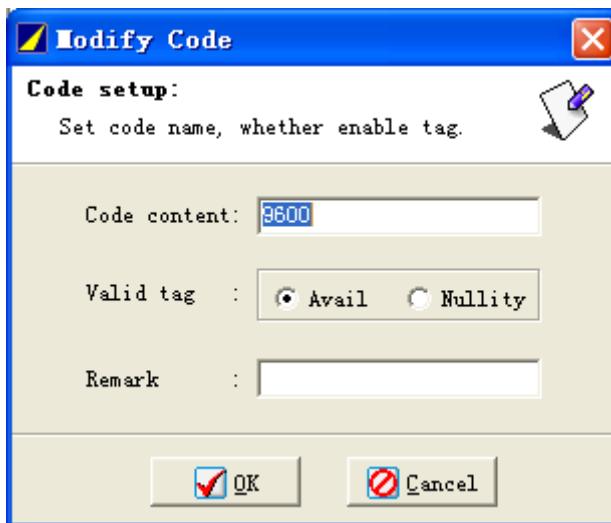
·Code content: specific data on the left column

·Valid tag: Avail is the parameter which is effective. Nullity is the parameter which is not effective.

·Remark: The description to the specific data.

2.[Modify]：Click this button，and then modify the data.

3.[Delete]：Click this button，and then delete the data. For the dialog box,[Yes]means delete，[No]means cancel this operate.

4.[Close]: Click this button will close this window.

4.2.2 Department Setup

Click the department info，it will pop up the below interface. All settings of the functional department in the module can be finished.

Department info: correlation department information (such as name of the department and the principal).

1.Add: Click the [Add same] or [Add lower] button.(Notice: Set the department level according to the real department)，and set all the information in the below window.
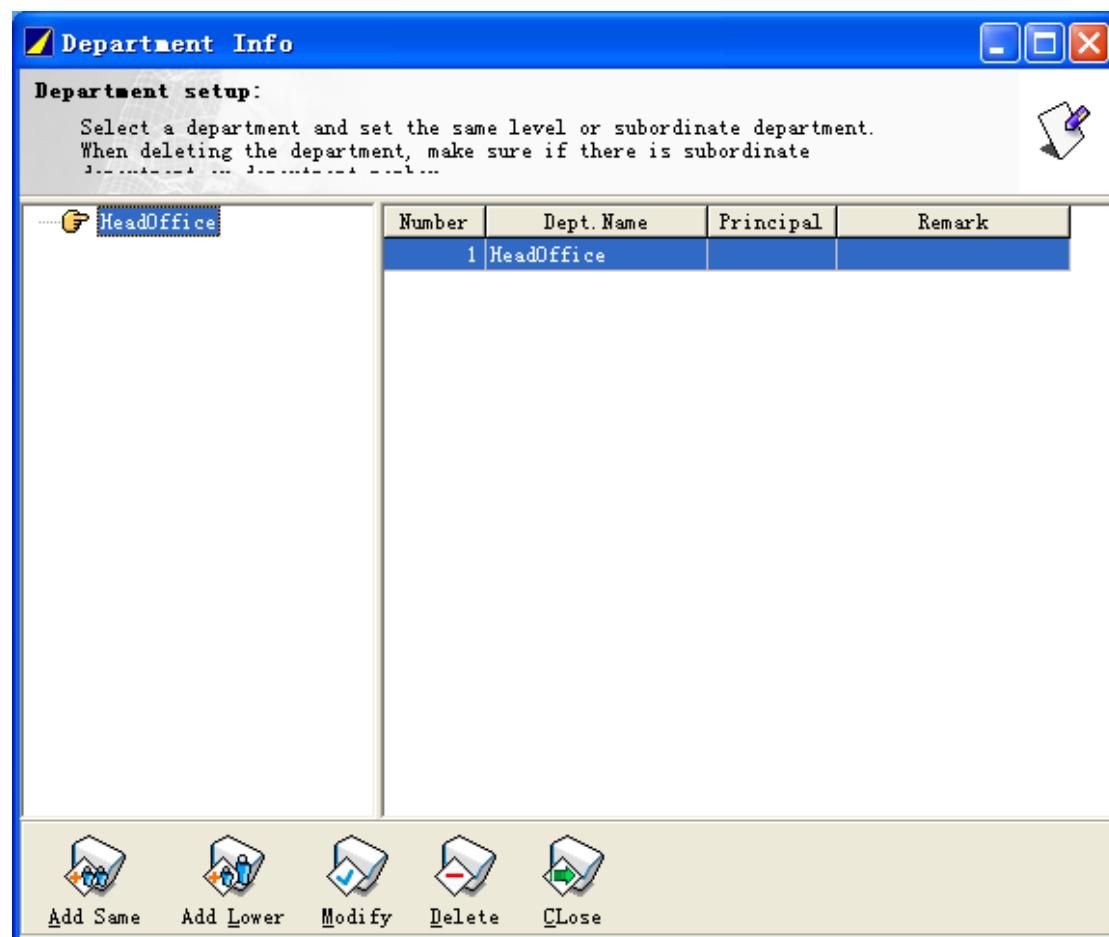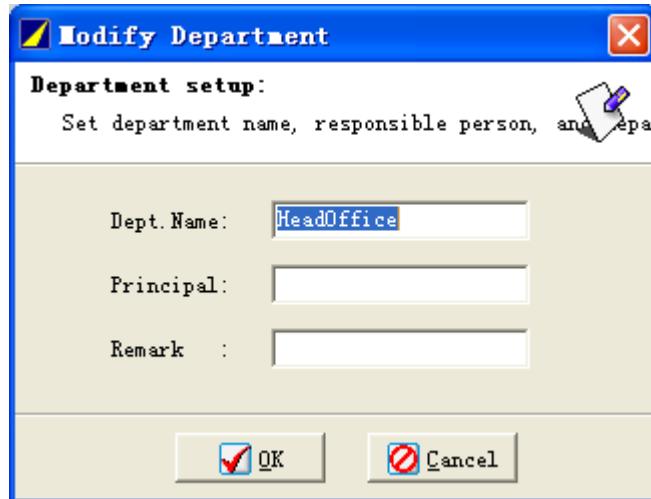
·Dept. Name（necessary）: specific and full name of the department, no repeated name, or the system will pop up a mistake hint.

·Principal: Every department has a principal to contact easily.
·Remark: It can be full of some descriptive words.
Make sure the name of the department is full, or the system will have this following mistake hint.
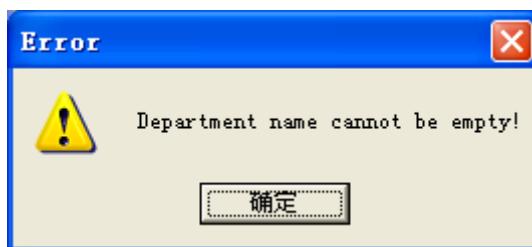
   In order to improve the integrity of the system, please make sure to fill in all items correctly. Then click the [OK] button to save the data. If success, this will display on the interface.
   2.[Modify]:Choose the item needed to be modified, then click the [Modify].It will automatically load information on the popping up window, then click the [Yes] to save the data. If success, this modified data will display in the interface.
   3.[Delete]:Delete the set account department. Then choose the department to be deleted. Click [Delete] button, it will pop up the following window.
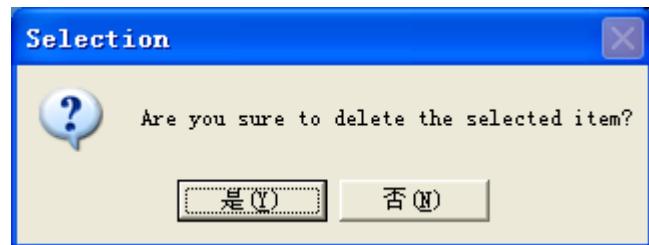
[Yes] means delete it, [No] means cancel the operation.

4.Click the [Close] button means close the window.

Notice: At present,the system supports only four department levels.

4.2.3 Staff Setting

Click the Staff info module, it will pop up the following interface, please input all the staff information in this module.
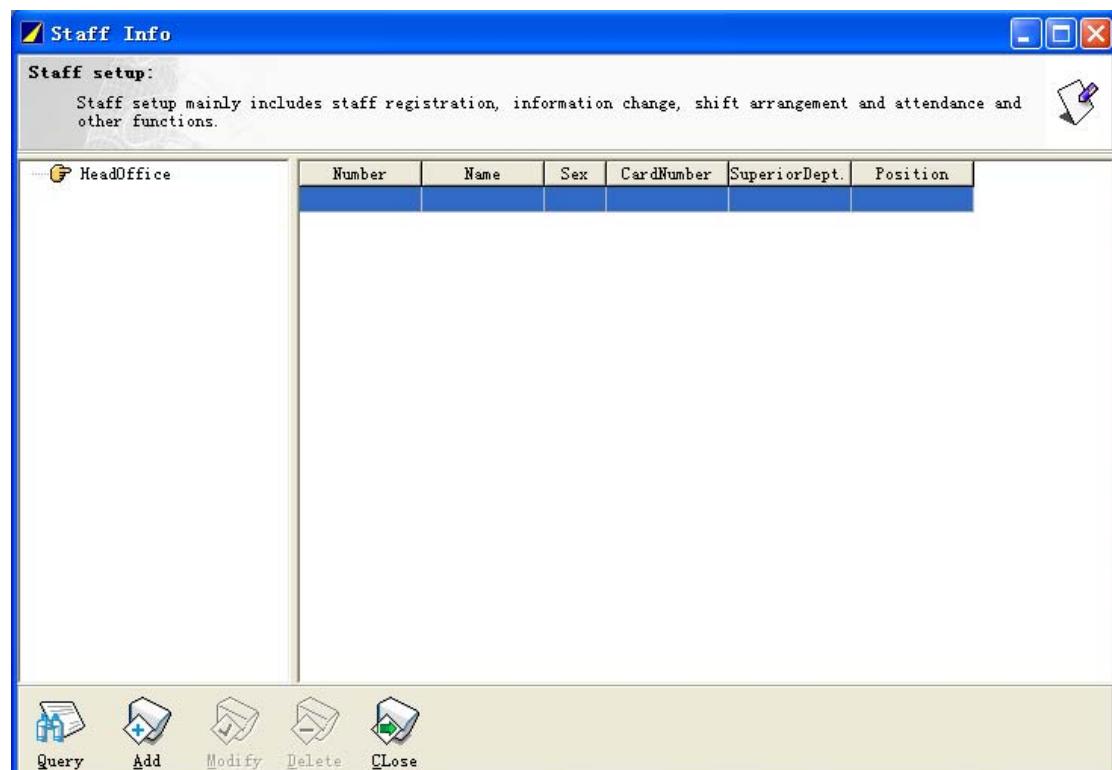
Staff setup: including staff enrollment, modification information, set the working shift. The tree model view of all the function departments is on the left of the window. The staff of the functional department is on the right of the window.

1.Click [Query] ,it will pop up the following window.
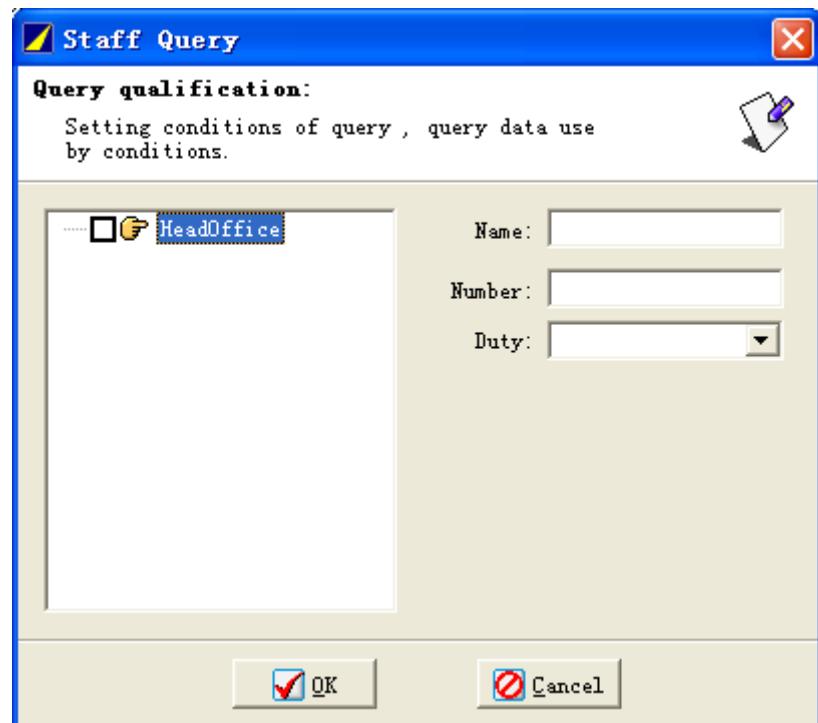
Setup the query condition, choose the department on the left and input the staffs 'information on the right, click the [OK] button, then output the data. The more specific of the query condition, the more accuracy of the data. If on exact query condition setup for staff, the system will return all staffs' information in this department.

2.Click [Add],it will automatically add information in the following window. Click [Save], it will save the modified data and be shown in the interface.

3.Click [Modify], it will automatically add information in the following window. Click [Save], it will save the modified data and be shown in the interface.

4.Click[Delete],choose one piece of staff record and click this button. Click [Yes]

means delete the data. Click [No] means cancel the operation.

5.Click[Close] means close the window.

Notice: Please set the account situation, position and other information in the 'code setting' before adding the staffs' information.

4.3 Attendance Setting

4.3.1 Attendance Regulation

All attendance statistics can be conducted according to the attendance regulation.

Click the Attendance Rule: click the Attendance Regulation Setup. It will pop up the below interface.
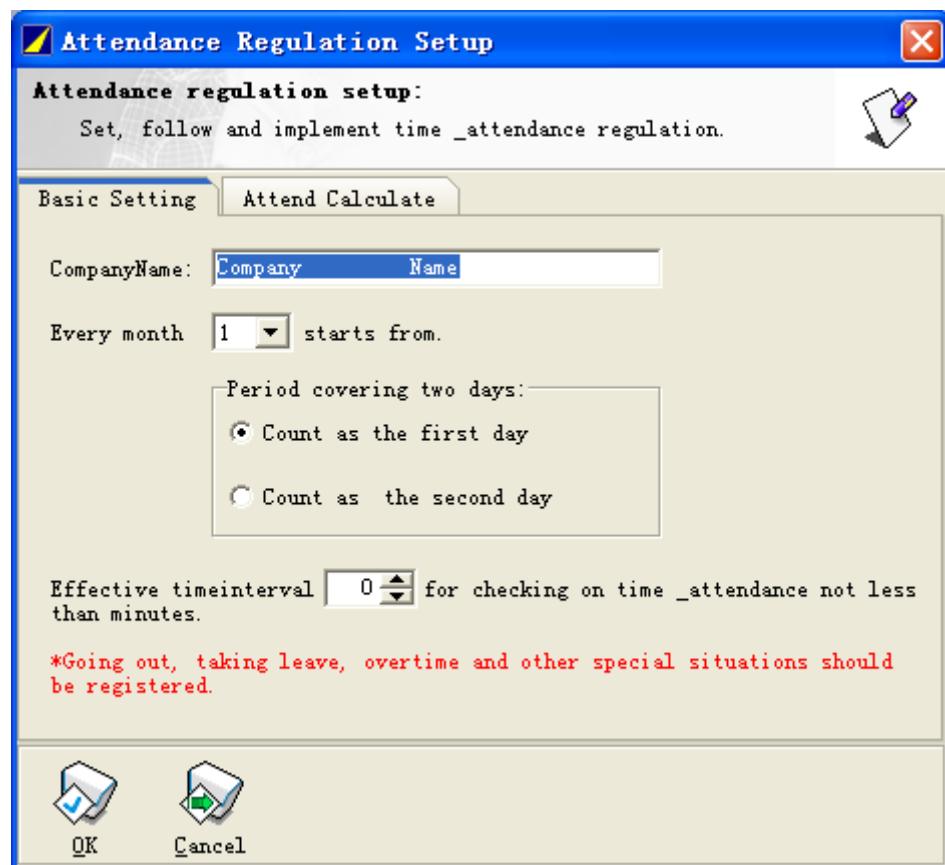
There are three tab pages in total in the Setup Interface. First, look at the label page content of the Basic Setup.

·**Basic Setup**

You need to set the starting day for every month. For some units, one month is

counted from 26th. After Setup-up is done here, it is easy to choose the time when conducting statistics.

For the shifts which span 00:00 hour, It is necessary to specify which working day these shifts fall into.

The valid interrecord gap for the attendance shall not be less than several minutes. As for the record results generated at a time less than this time range, the Attendance Management System will deem them as invalid. For example, the interrecord gap is 5 minutes and there is valid record at 08:10 hour, then all other records within a range between 08:10 to 08:15 hour between are invalid, only the record after 08:15 hour is valid.

As for the special circumstances such as going out, asking for leave and working overtime, registration shall be conducted in the relevant department.

·Attendance calculation

Click the Attendance Calculation label page, the interface of Attendance Calculation appears as shown in the following window.
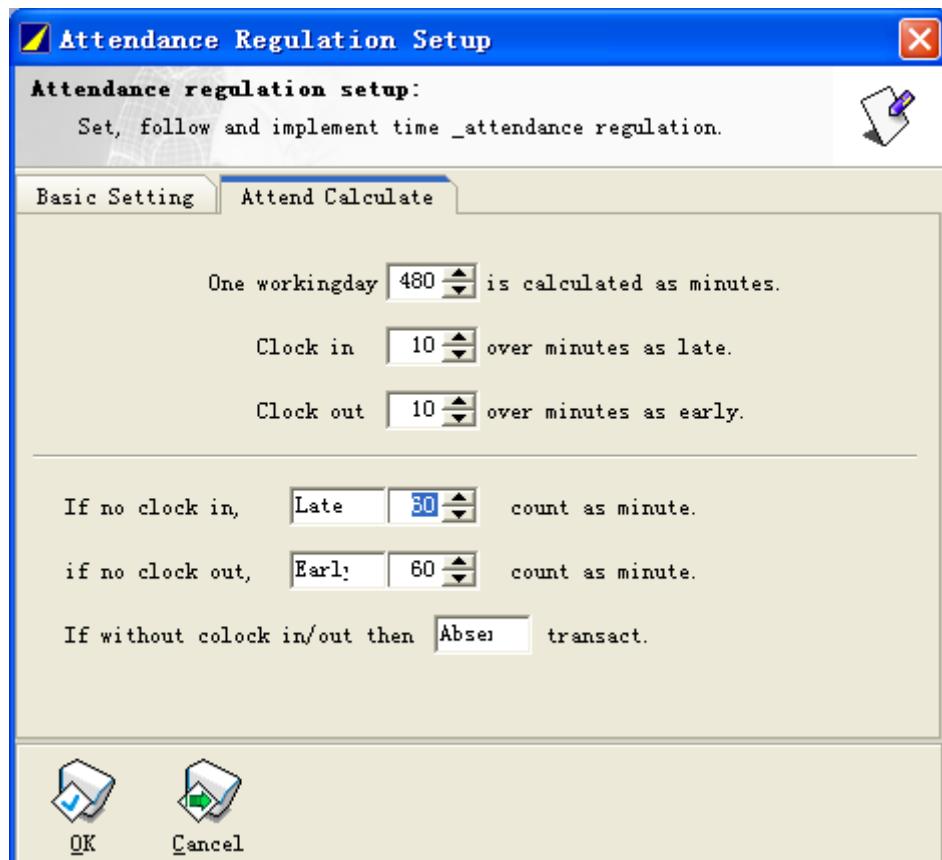
Time Setup of one working day is intended to calculate the time conversion between the items.

"Signing-in X (X) minute(s) after on-duty time shall be recorded as Late Arrival" and "Signing-out X(X) minute(s) before off-duty time shall be recorded as Early Departure, which are set up in this interface, must be consistent with the Late Arrival and Early Departure set up in the in the Time Period Maintenance, otherwise, the statistical results will be inaccurate.

No signing-in when on duty shall be recorded as the late arrival for X (X) minute(s); no signing-off when off duty shall be recorded as the early departure for X(X) minute(s).

No signing-in when on duty time as well as no signing-off when off duty can be recorded as Absenteeism.

Notice: The Attendance rules setting will influence the veracity of the attendance statistic forms. We should set it according to the practice.

4.3.2 Time period maintenance

Before conducting the Shift Setup, setting up of all time periods which are probably used must be completed. By clicking the Time Interval Maintenance option (see diagram below) under the Attendance Setup in the menu, you can set the time periods to be used for making the shift arrangement for the staffs.

Click [Add] button to add a new time period, enter the name of time period, on duty time and off duty time, singing-in and signing-out time range, late arrival record time, early departure record time and number of working days to be recorded. Only the attendance record made within the signing-in and signing-out time is valid, and also forms the statistical basis. At the same time, determine whether signing-in and signing-out are necessary for this selected time period. Enter the time in form of hh:mm, which respectively correspond to the hours and minutes.

The selected time periods can be deleted using the [Delete] button·

·Meaning of each item of time period setup

Late arrival record time (minute): In the above figure, the late arrival time is set to be 5 minutes; meaning that the late arrival shall be recorded only when an staff arrives 5 minutes later than the on duty time. For instance, in the above figure, the on duty time is 07:50 hour, an staff A signs in at 07:53 hour and the staff B singes in at 08:00 then the staff A is not late, because the period from the time when he (or her) signs in to the on duty time does not   exceed 5 minutes. Whereas, the staff B is late for 10 minutes because the period from the time when he (or her) signs in to the on duty time exceeds 5 minutes.

Early Departure record time (minute): same as the late arrival record time, check the time difference between the signing-off time and off duty time.

Start signing-in & end signing-in: the valid scope of the signing-in time period must be entered; the signing-in record beyond this scope is invalid.

Star signing-off & end signing-off: the valid scope of the signing-off time period must be entered; the signing-off record beyond this scope is invalid. The signing-off start & end time shall not have coincident time.

Number of working days to be recorded: refers to the number of working days for each shift, if numbers are set up here, when making statistics, the program will conduct working day statistics according to the set number, otherwise, the statistics shall be made according to the Setup Statistics in the attendance rule.

Time length (minutes) to be recorded: in the statistical report, the users themselves can set up this time period length to be recorded in the statistical report. For instance, the actual time period length is 9 hours, however, it can be recorded as 8 hours, and this time period shall also be recorded as 8 hours in the attendance statistics.

Must sign-in and must sign-out: according to the different requirements of different positions, you can choose whether signing-in and signing-out must be done for a time period.

4.3.3 Shift management

After having set up the time period maintenance, you can conduct the shift management. Choose the Attendance Setup Menu, click Shift Management option, then you can access the Shift Management Menu. It will pop up the below Menu Interface.
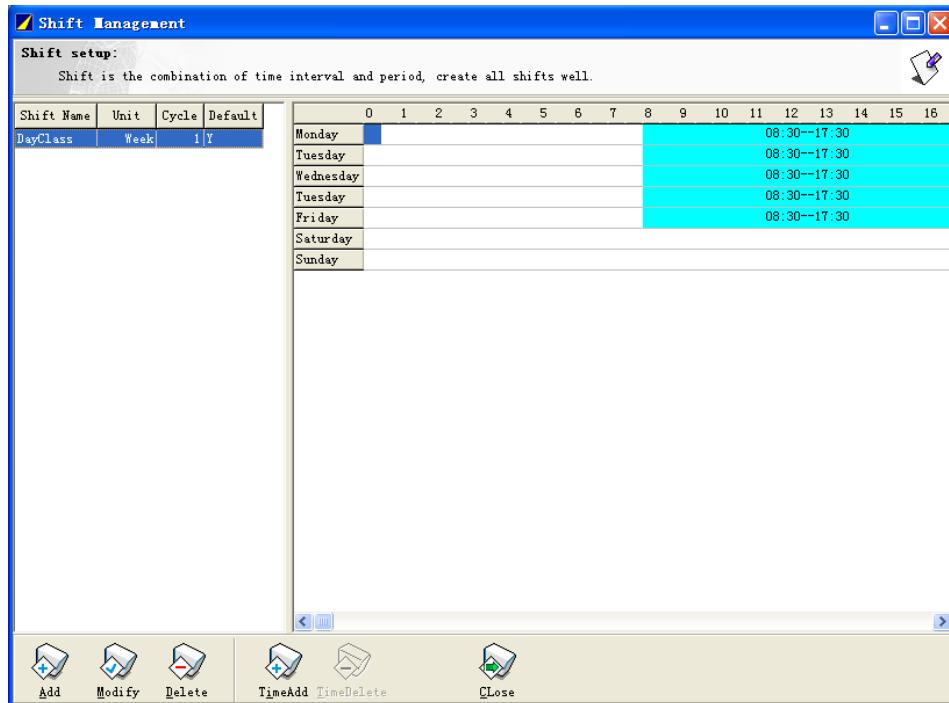
The interface is divided into the Shift Name and Shift Time Period. The Shift Name box mainly includes the shift name, shift's starting and ending date, shift's number of cycles and shift cyclical unit.

Shift name: The shift name shall not be repetitive; all fields in the form can not be empty.

Number of cycles: the shift's cycle period = Number of cycles *cyclical unit.

Cyclical unit: there are three options available, i.e. the day, week and month.

The Shift Time Period can be added, revised and deleted.

Add New Shift button, add a new shift and add one blank Add Shift: click the [Add] button under the Time segment, the following interface pops up.
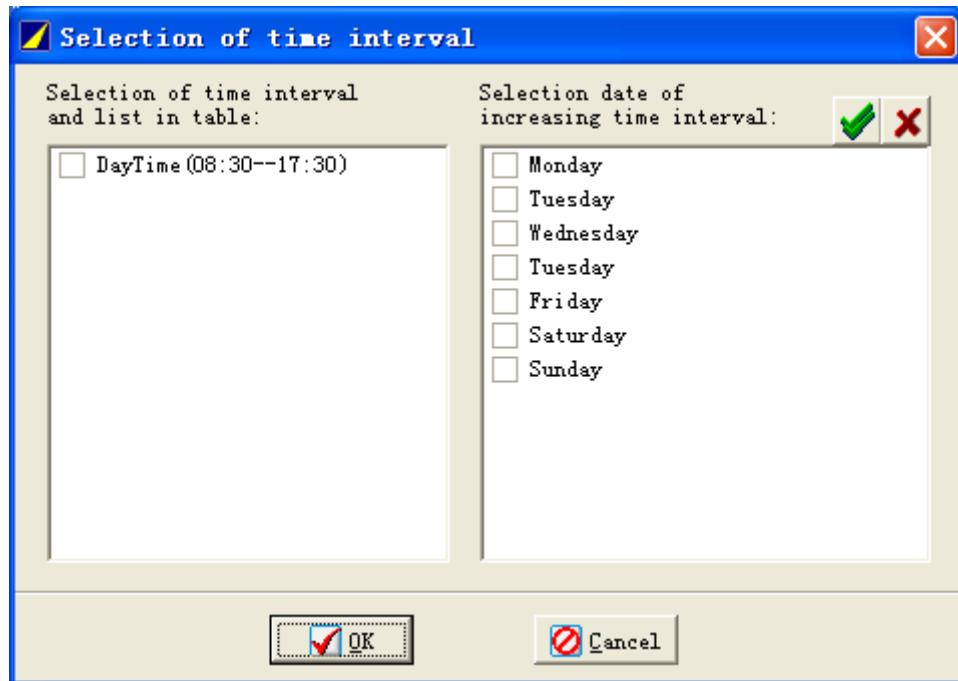
After having set up the Shift Time Period, directly add the Shift Time Period, then choose the date using this time period, click [OK] button to save the settings or click [Cancel] button to cancel the operation.

Blank shift without indicating working hours can be set up, if necessary.

Deleting shift: select an existing shift, the selected shift can be deleted by clicking the [Delete] button.

Modification: select an existing shift, the selected shift can be modified by clicking the [Modify] button.

4.3.4 Shift Staff Arrangement

It is unable to make the attendance statistics for a staff without arranging shift for him (her). In case one staff is not arranged for shift work, then the system will fail to make judgment based on his (her) attendance record whether he (or her) is on duty or off duty, therefore, and also fail to make attendance statistics for him (her).

After having set up the time period and shift arrangement, shift arrangement can be conducted for the staffs. Select the Attendance Setup Menu, click Shift Arrangement option, you can open Shift Arrangement Setup window and maintain the Shift Information on Staffs under this window.
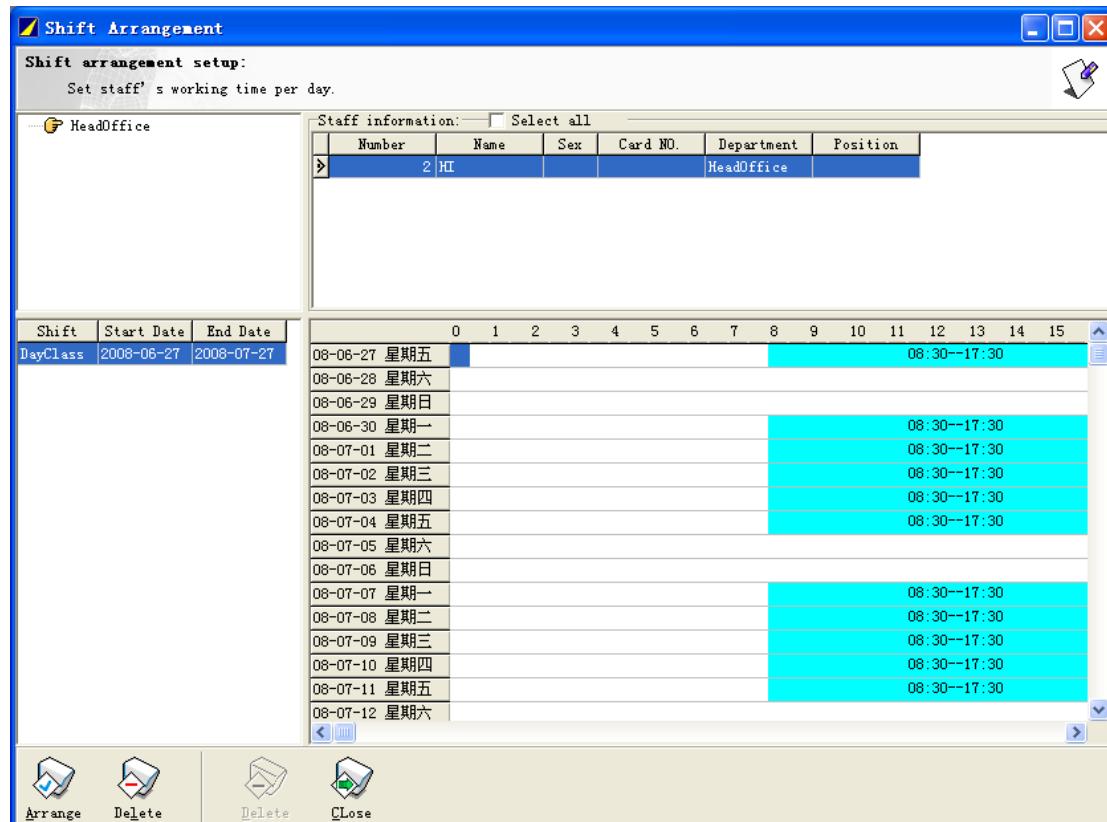
Page on the right side is the Shift Arrangement for Staffs. The shift arrangement can be conducted for individual staffs, and also be performed in batch mode. Click [Select All] box, you can make shift arrangement for all staffs. By clicking the mouse while holding the CTRL button, you can make shift arrangement for more than one staff. Select the staffs for whom, shift arrangement needs to be done and then click the staffs, the following interface pops up.
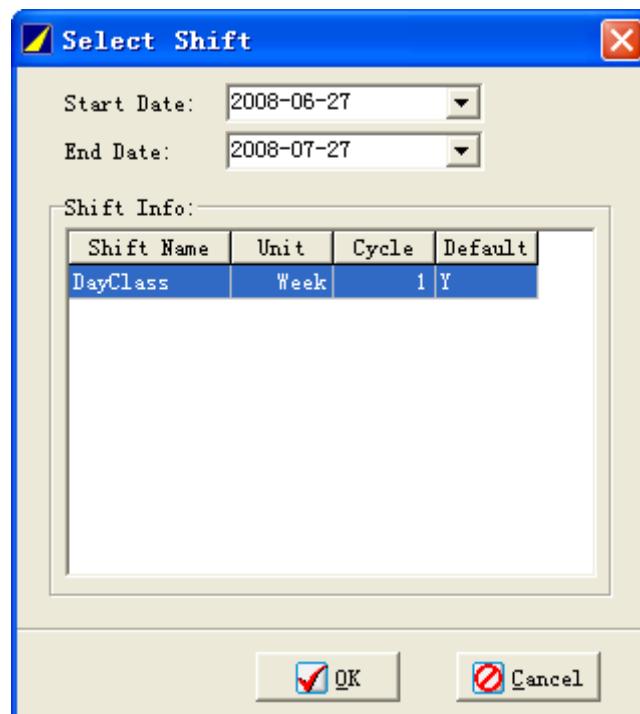
Select a new shift among the shifts which have been set up, determine its starting and ending time, click [OK] button to confirm the operation conducted or click the [Cancel] button to cancel operation performed, return to the Shift Personnel Arrangement Setup window. After the shift arrangement is successfully conducted, the corresponding shift name will appear in the shift column, and the time period of the shifts on duty is indicated in the time list in the interface.

4.3.5 Holiday Setup

Click the Holiday Setup option under Attendance Setup Menu and open Holiday Setup Window.
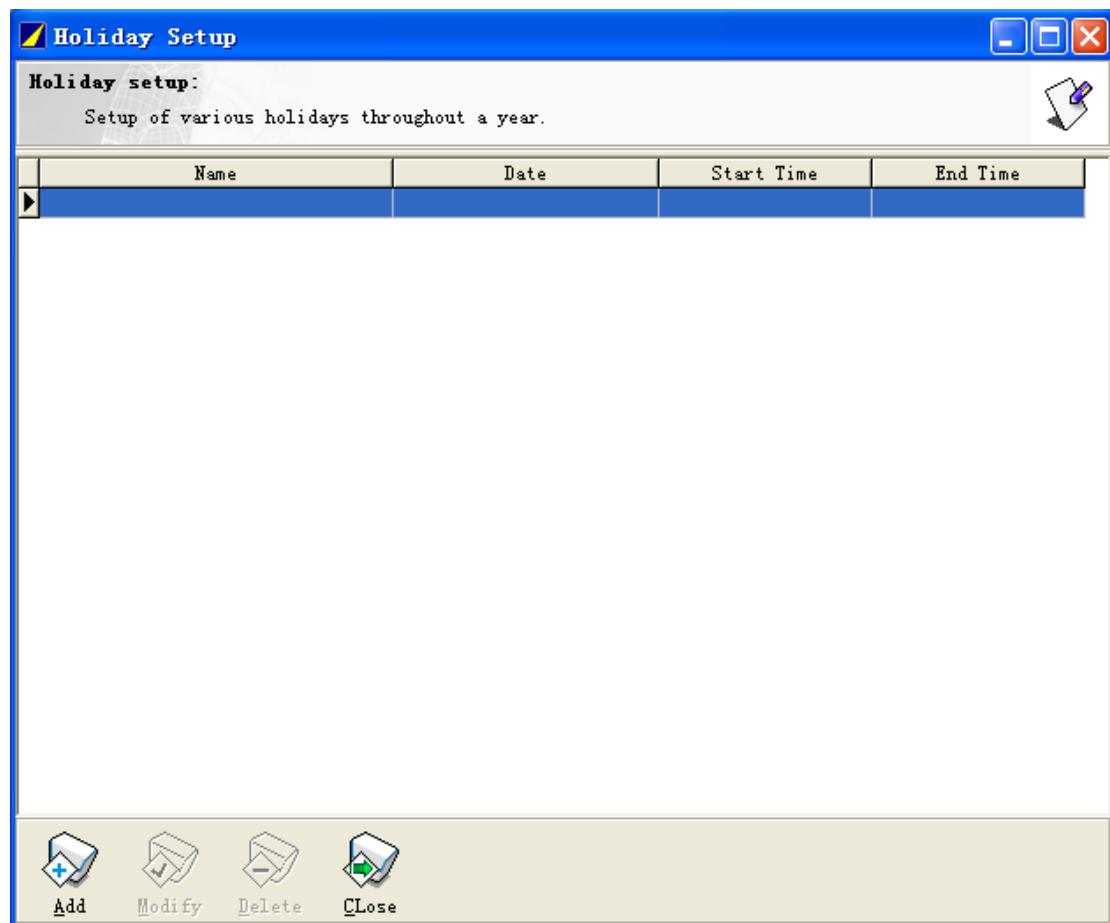
Holiday setup: set up all the public holidays in a year, such as May Day Holiday, the National Holiday.

1.[Add]: click the button, it will pop up the following window, and set up all the information in the window.
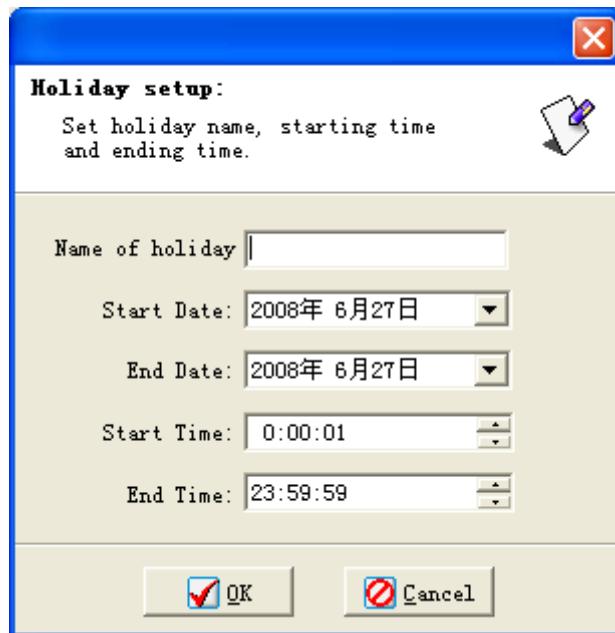
·Name of holiday: such as the May Day holiday

·Start Date, End Date: set the start and end date of the
holiday.

·Start Time, End Time: set the start and end time of everyday.

Click [OK] to save the data. If success, it will show on the interface.

2.Click [Modify],it will automatically load information, then click [Confirm] to save the data. If success, it will show on the interface.

3.[Delete] will delete the holiday information .Choose one piece of information, then click [Delete].If click [Yes] in the window, it will delete. If click [No], it will cancel the operation.

4.[Close] means close the window.

4.4 Equipment Management

4.4.1 Equipment Information

Click the Machine set option under Attendance Setup Menu, it will pop up the following interface and finish the setup.
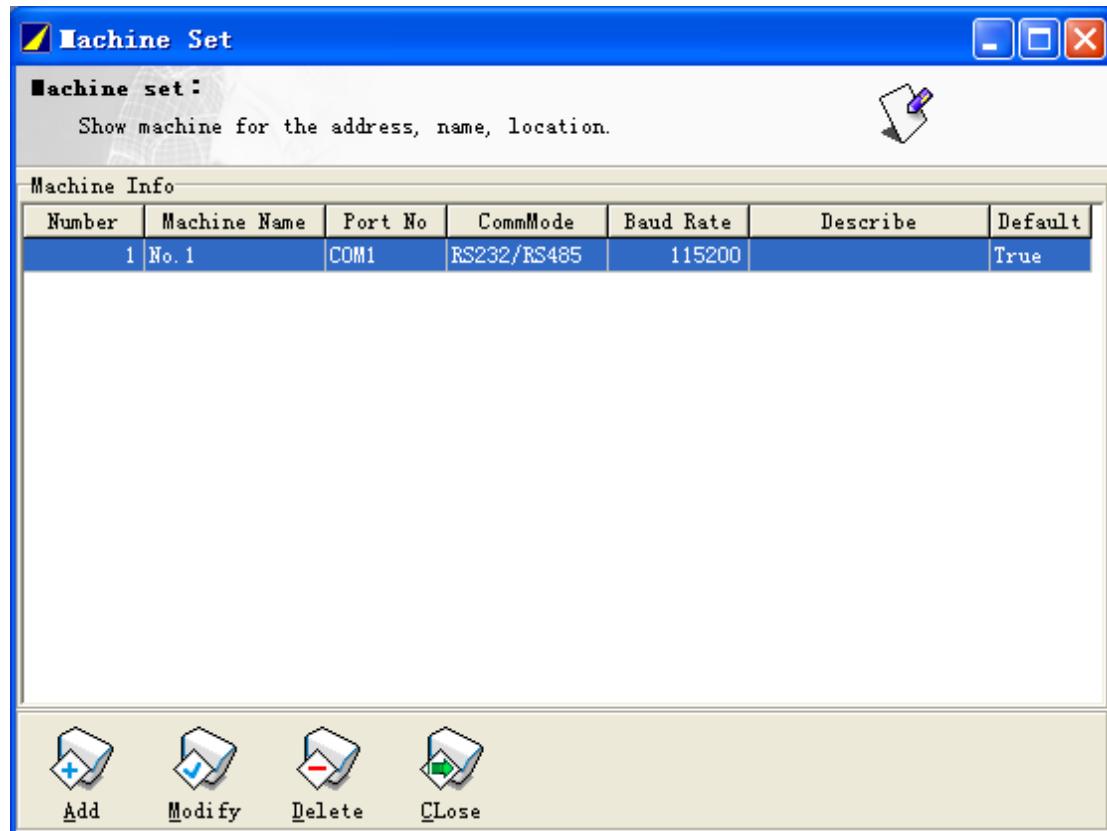
Machine Set: set the Machine Name and the CommMode.

1.Click [Add] to set the information in the below window.
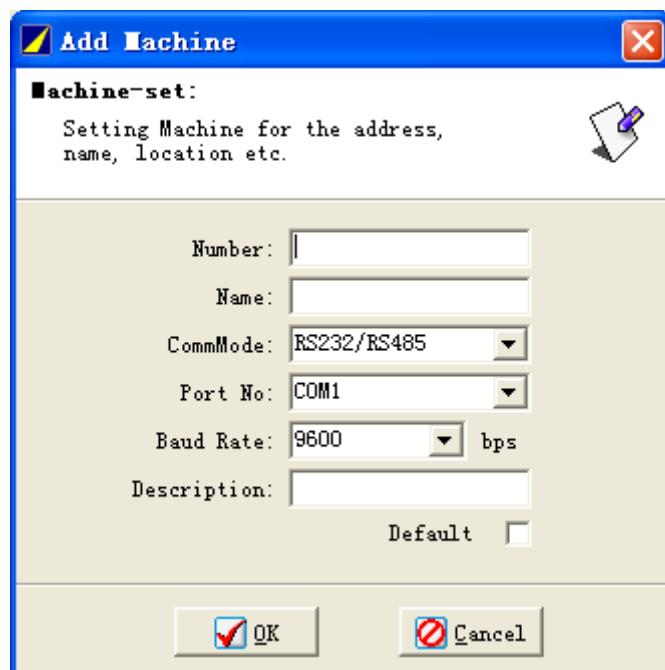
·Number: Figure number (eg.1.2.3.4….)

·Name：Necessary

·CommMode: RS232/485 (default)

·Port No.： COM1 (default)

·Baud rate: 115200bps (default)

·Description：Remark allowed，the specific illustration of the machine

2.Click [OK] to save the data. If success, it will show on the interface.

3.Click [Modify],it will automatically load information, then click [OK] to save the data. If success, it will show in the interface.

4.[Delete] will delete the holiday information .Choose one piece of information, then click [Delete]. If choose [Yes] in the window, it will delete. If choose [No], it will cancel the operation.

Notice: The number of the Fingerprint time attendance（0 not allowed）、repeated name not allowed.

4.4.2 Collect Attendance Record

Click Acquisition Log option under Attendance Setup Menu, it will pop up the following interface to finish collecting the data.
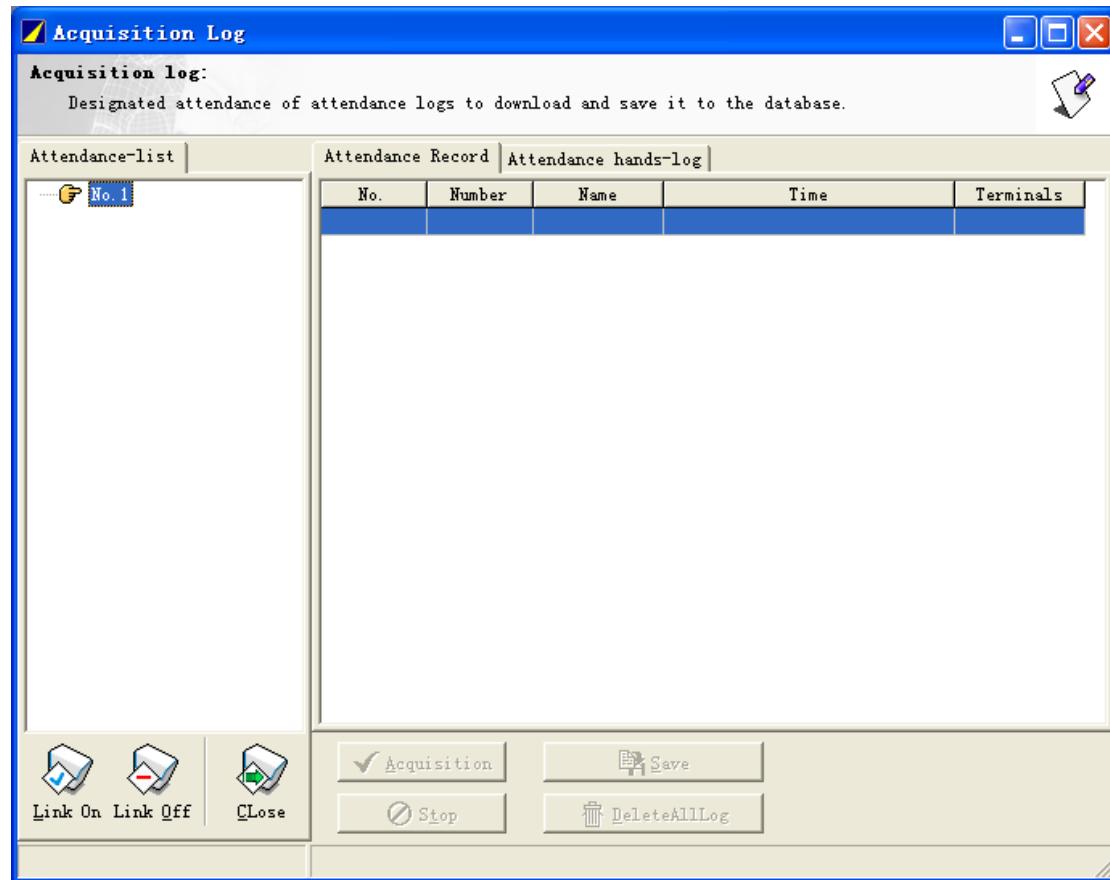
Data collected: inspect the appointed T&A in real time and collect records

1.[Link on]:Choose and connect a fingerprint time attendance to collect the log.

2.[Link off]:After the operation, link off the fingerprint time attendance connection.

3.[Acquisition]:According to the connection of the fingerprint time attendance and a computer to choose the corresponding port(com1,com2…),choose the fingerprint time

attendance and click [Begin] to collect the information. If the connection is good, the computer will show the number of the collected attendance record. Or it will show the failure of the connection. Please check whether the connection of equipments is good. The collected information will show in the attendance record form.

4.[Stop]:Stop collecting the information.

5.[Save]:Save the collected information to make the statistic form.

6.[DeleteAllLog]:Clear all the logs, including the operation logs.(Please don't delete the logs by yourself)

7.[Close]:Close the window.

4.4.3 Equipment Operation

The equipment operation mainly includes uploading, downloading the staffs, time information set and screen display set.

1.[Link on]: Choose and connect a fingerprint time attendance to operate..

2.[Link off]:After the operation, link off the fingerprint time attendance connection.

3.[Close]:Close the window.

Enter into the module to finish collecting the information in the following interface.
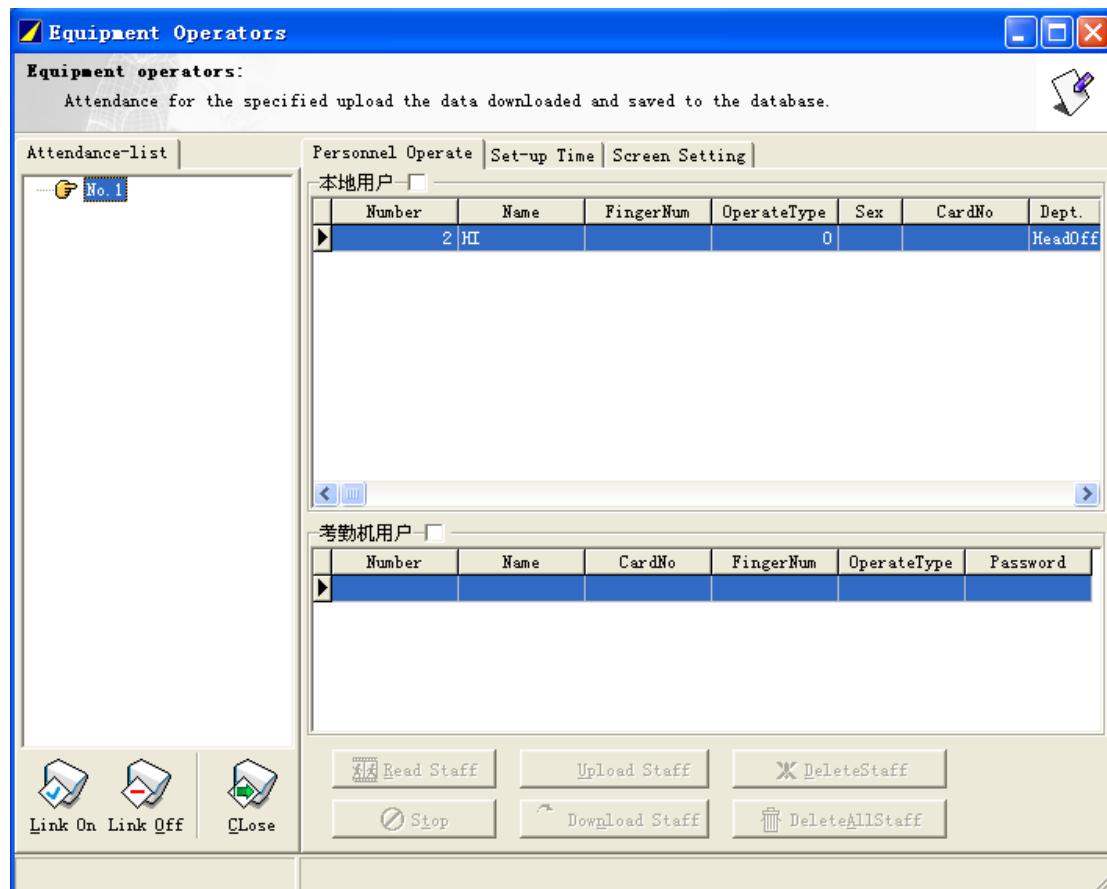
On the top of the interface is the local software users' information. At the bottom of the interface is the fingerprint time attendance users' information. Press the [Ctrl], you can make a multi-choice or click the top small box to choose the all. Default means choosing no user.

1.[Read Staff]:Read the attendance users' information.

2.[Upload Staff]: Before save the users' information into the software, choose the attendance user.

3.[Download Staff]:Choose the local user , download it and save it in the T&A

4.[Delete Staff]:Delete the selected users' information in the T&A

5.[Delete all Staff]:Delete all the users' information in the T&A

6.[Stop]:Stop the operation.
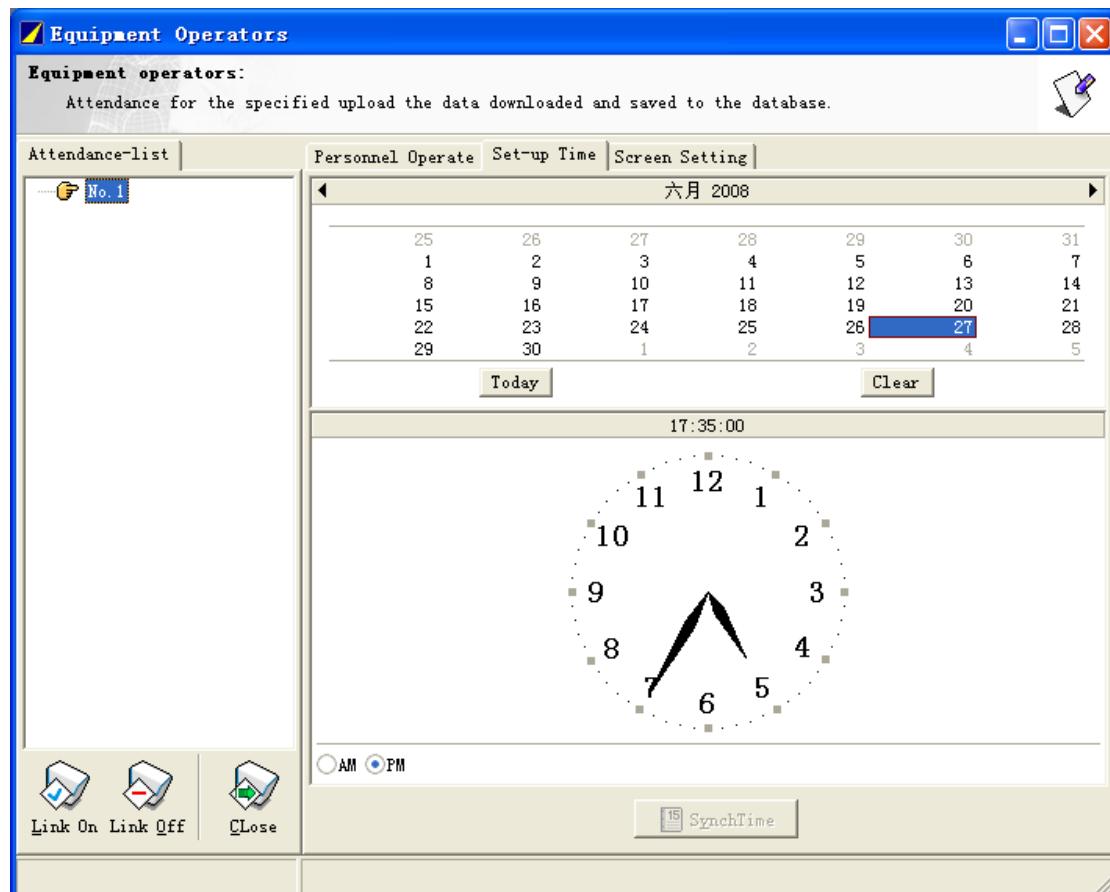
Set-up time: Both the up and down time forms in this window can be choosed. Then make the software and the machine with the same time.

1.[SynchTime]: After choosing the time and the date, the machine shows the clock
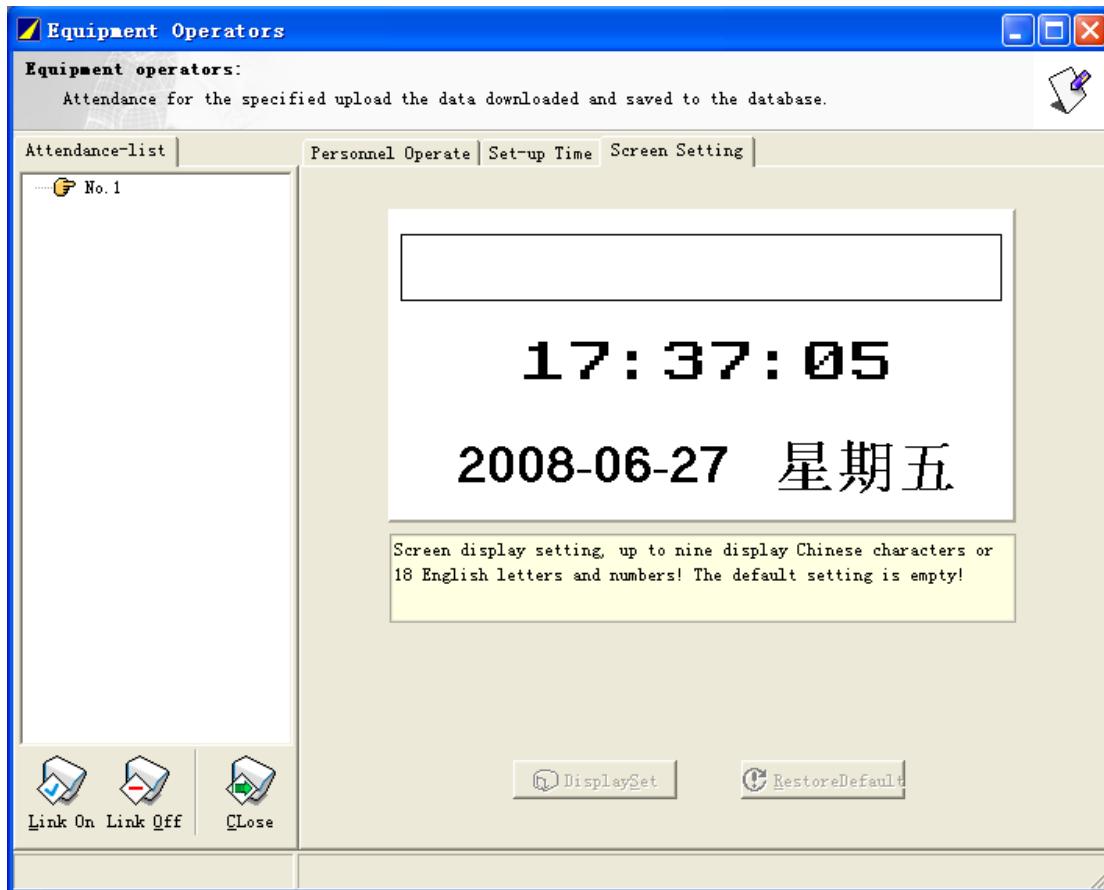
Set the individual words on the top of the screen of T&A. The words will be shown after successful opening the machine.

2.[DisplaySet];Set the individual words.

3.[RestoreDefault]:Show 'MIAXIS   ^_^On Duty/Off Duty'.

Notice: Screen display setting up, up to 9 display Chinese characters or 18 English letters and numbers! The default setting is empty!

4.5 Attendance Registration

4.5.1 Being out for business and taking leave

The staffs who are away on official business or leave are untenable to participate in the normal attendance. In order to ensure the accuracy of the final statistical results, it is necessary to make set-up through this function. Click "Being away on Official Business /Leave" Command in the Menu, the following interface pops up.
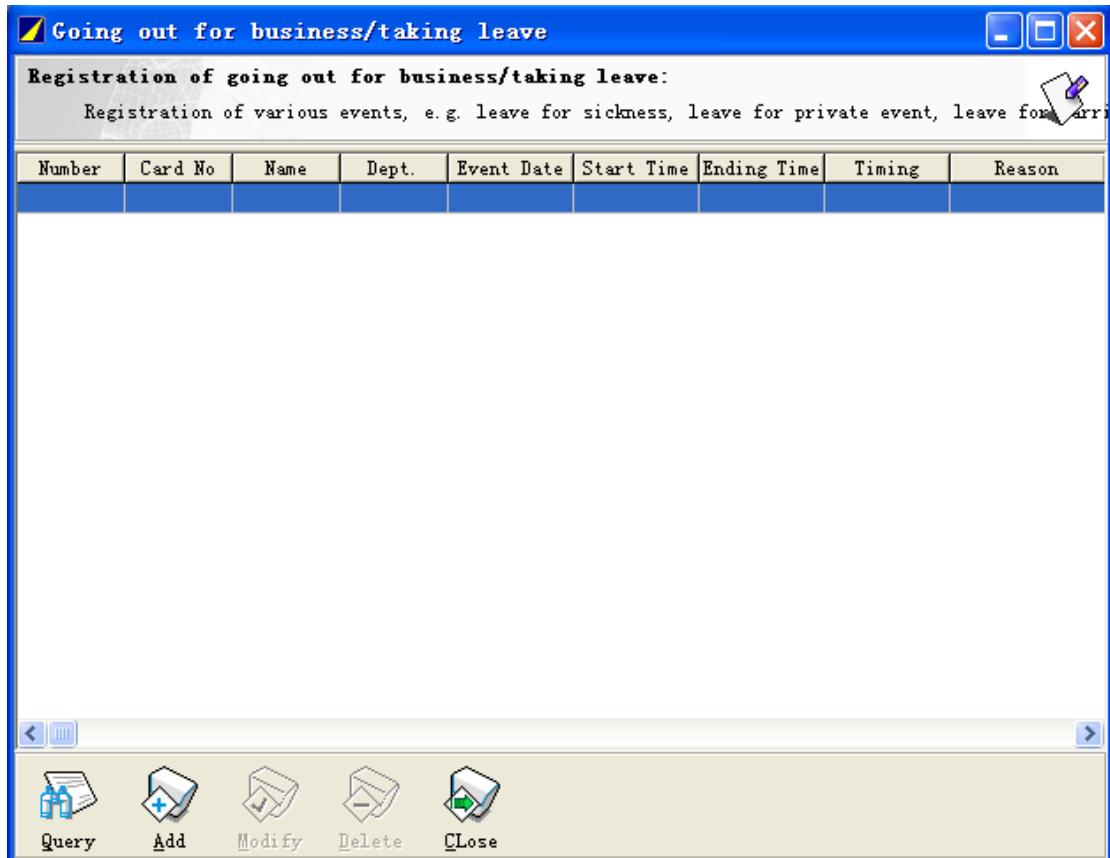
The click [Add] button, add the items of being away on official business and on leave. The existing registration information can also be revised.

In case the data quantity is relatively large, through [Query] button, you can choose the corresponding conditions to retrieve relevant information.

4.5.2 Overtime Registration

When the company needs to make the staff's overtime statistics, add the staff overtime information in the Overtime Registration Function.

Click the Overtime Registration Menu under the Attendance Registration Menu as shown in the below window.
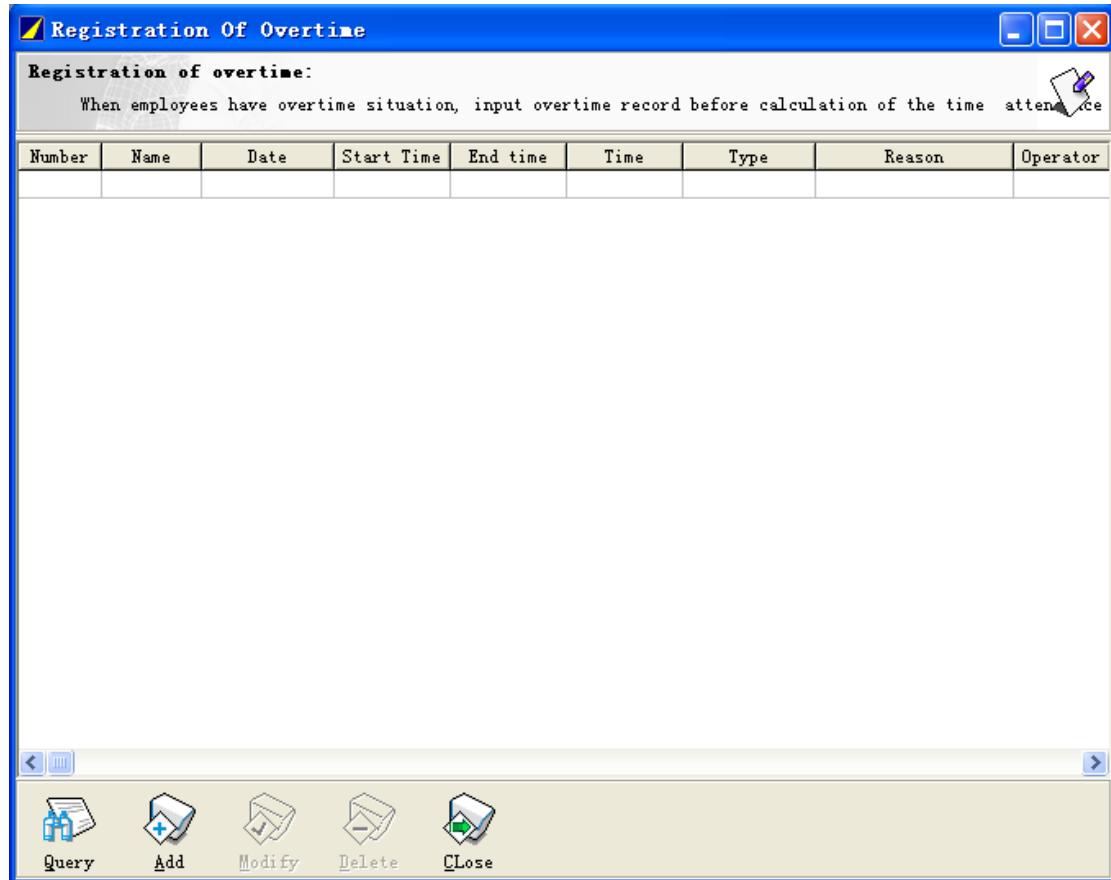
Click [Add] button, add the new information on the staff overtime.

The existing registration information can also be revised.

In case the data quantity is relatively large, through [Query] button, you can choose the corresponding conditions to retrieve relevant information.

4.5.3 Supplementary Addition of Forgotten signing-in /signing-off

In case a staff did not sign in because of special reasons, then he (or she) can add the signing-in record through the Function for Handling Forgotten Signing-in. Click the Supplementary Addition of Forgotten signing-in /signing-off Handling button under Attendance Registration Menu, the following Dialog Box pops up.
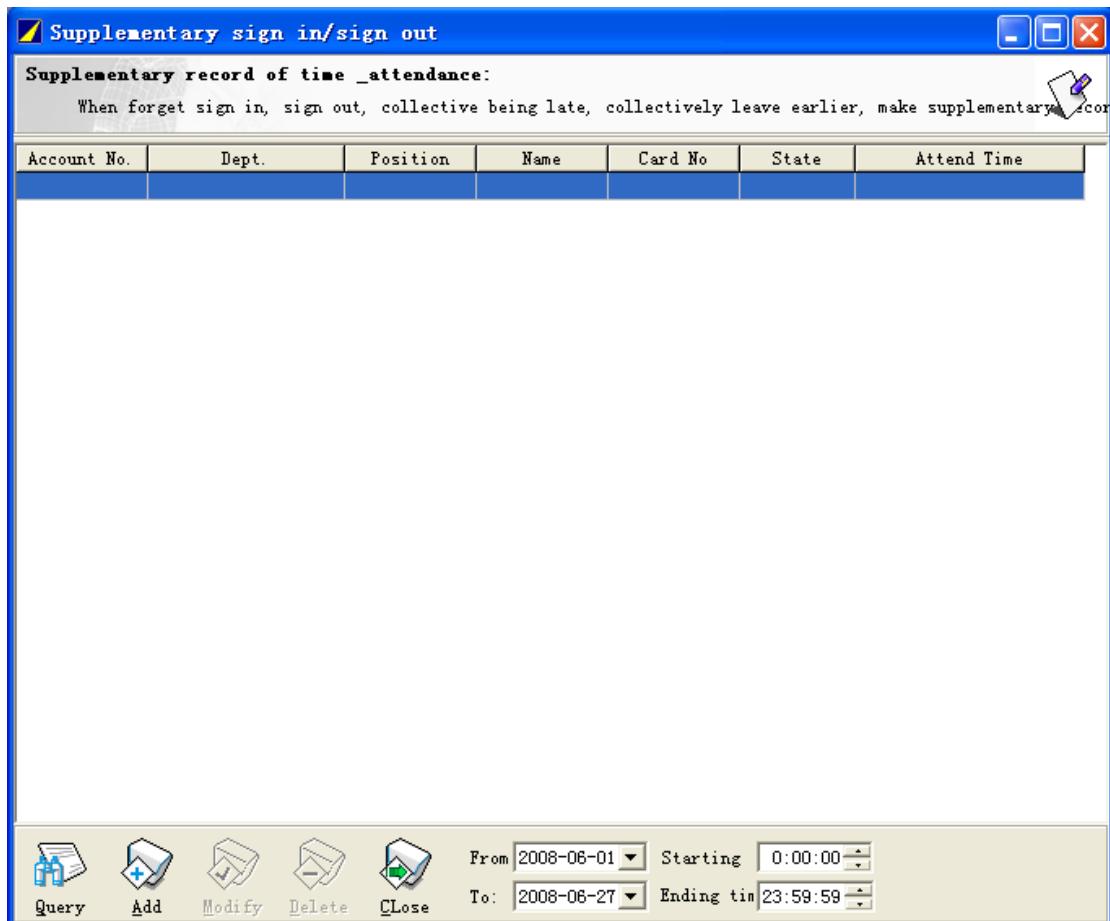
For supplementary addition of attendance record, you can select either one staff or more than one staff by clicking the [Add] button. To choose more than one staff, you just need to press the Ctrl key and click the left key. After having added the new attendance record, click the [OK] button.

The interface pops up.
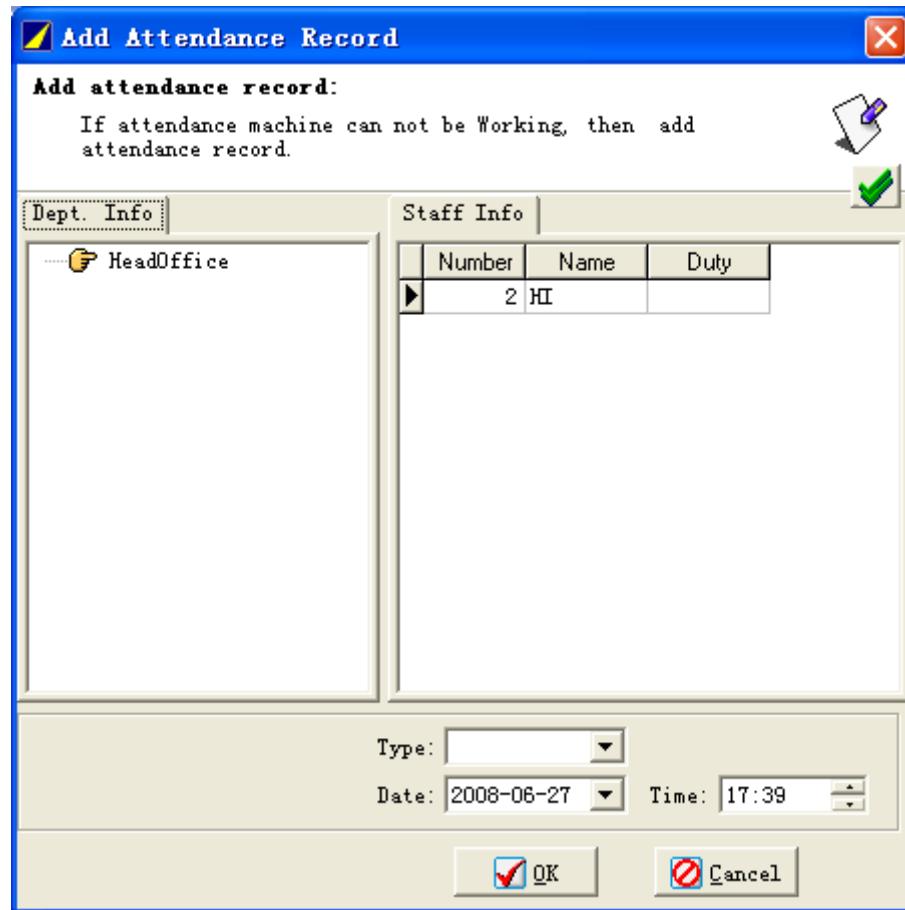
4.6 Inquiring Statistics

4.6.1 Inquiring record

With this module, you can inquire the attendance records of all staffs. These attendance records are the original records downloaded from the attendance machines and serve as the essential basis for all attendance statistics.

Clicks in the Inquiring Record under the Inquiring Record Menu on the main interface, and examines the staff's attendance records. The Inquiry Condition Window pops up.
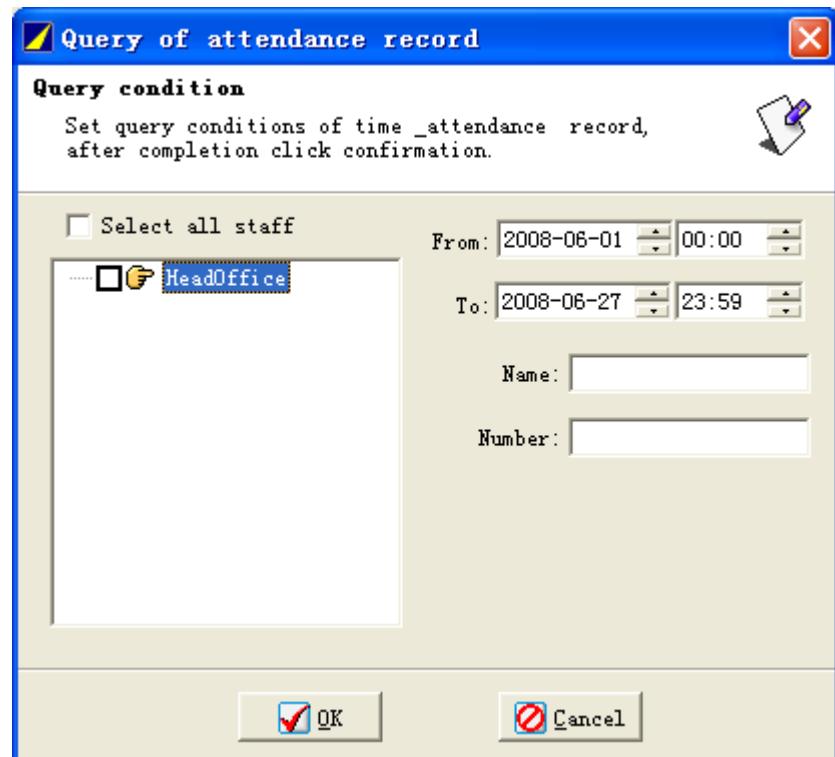
Select all staff: indicate all departments of the unit.

Name and Number: by which you can enter the staff's name and ID to make inquiry.

From and To: determine the time scope to be inquired.
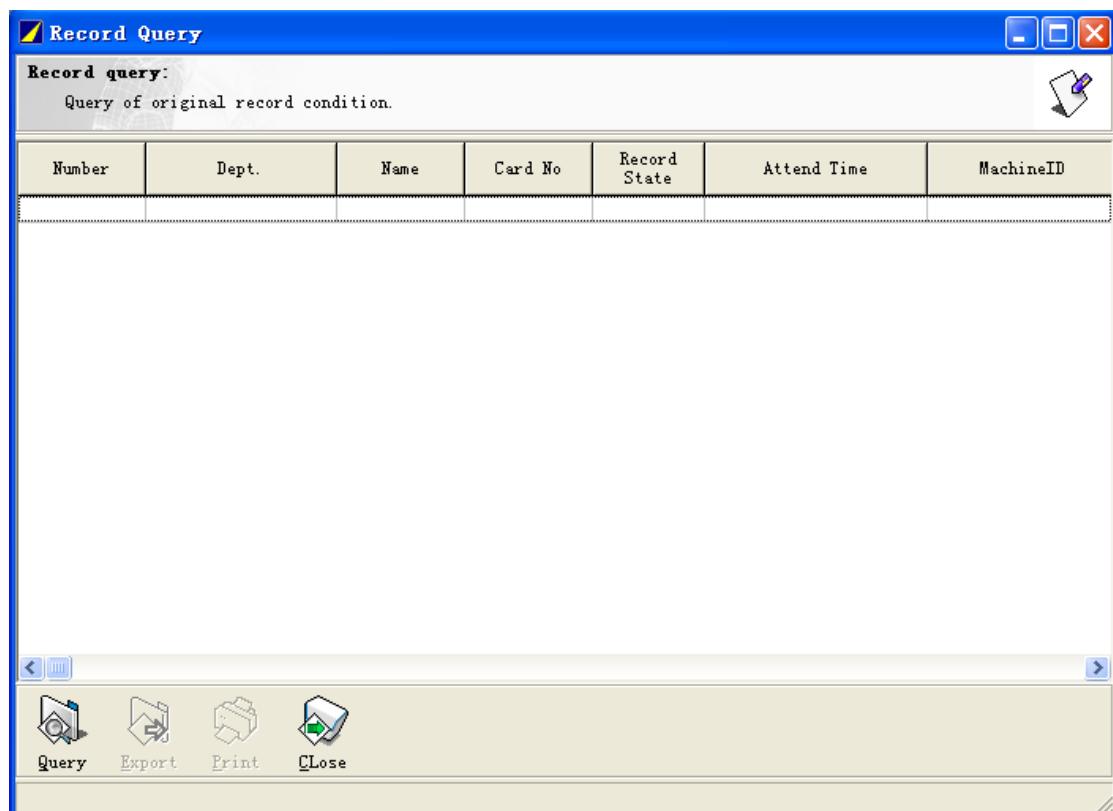
This list includes the department name, registration number, number, name, date, time and other fields.

Record status: the attendance status (singing-in when on duty and signing-off when off duty) are indicated in the list.

4.6.2 Statistical report

In attendance management, you often have to inquire the attendance management and print out various kinds of the attendance reports, which can be realized through this function. By the attendance calculation, you can inquire and revise any abnormal situation occurred in the attendance. There are four operating interfaces in total, i.e. the detail statistical results, detail shift status, other abnormal situations as well as attendance statistics.

First, choose the staffs to be searched, determine the starting and ending time and click the Inquiry button, then the page will indicate the t of all selected sectors, choose to find the staff to identify start and end time, click the button for attendance pages will indicate the statistical results about the attendance. The page will pop up.
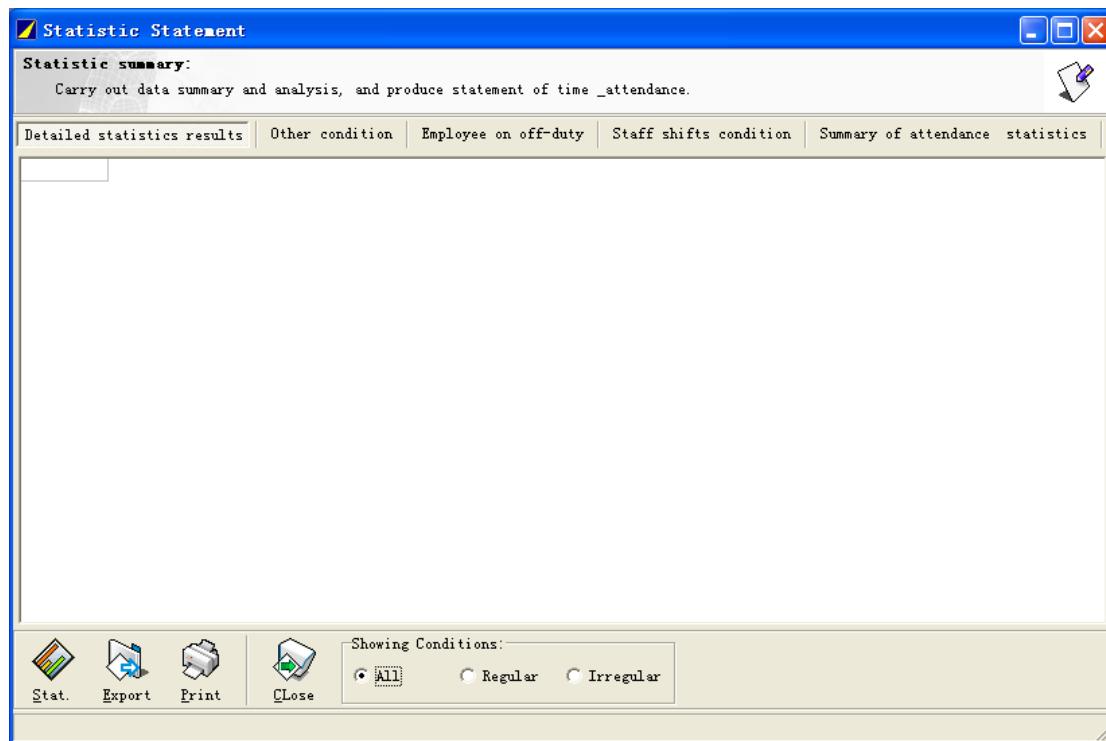
4.7 System Maintenance

4.7.1 Change passwords

After logging on the system, the user can change the password in order to improve the security of the system.

Enter the original password and repeatedly reenter the new password two times, then the password can be successfully changed, as shown in the following window.


4.7.2 Operator management

In order to ensure the system security, to prevent unauthorized users to change the system data,, management procedures provides the managers with the setup items. Select Management of operators option under the System Maintenance Menu of the Management Program, the following dialog box pops up.
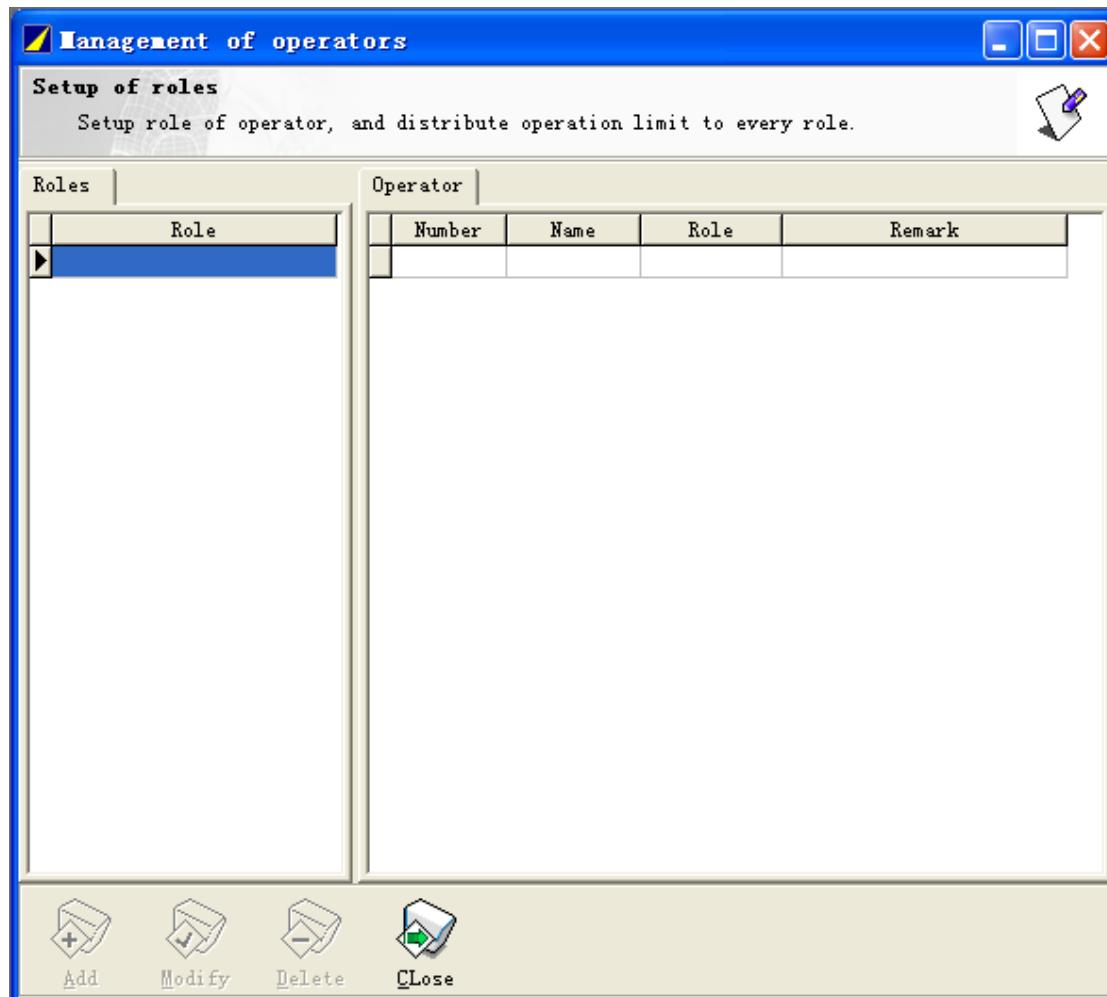
In order to facilitate the rights management, operators are added on the basis of the role foundation, and the operator's authority changes with variation in the role authority.

Operator management can be realized through the [Add], [Modify] and [Delete] buttons.

### 4.7.3 Operator's role management

Add the new operator's roles for managing the system authority and for conveniently maintain the operator's authorization information. Click the Operations management role under the System Maintenance Menu, as shown in the following window.
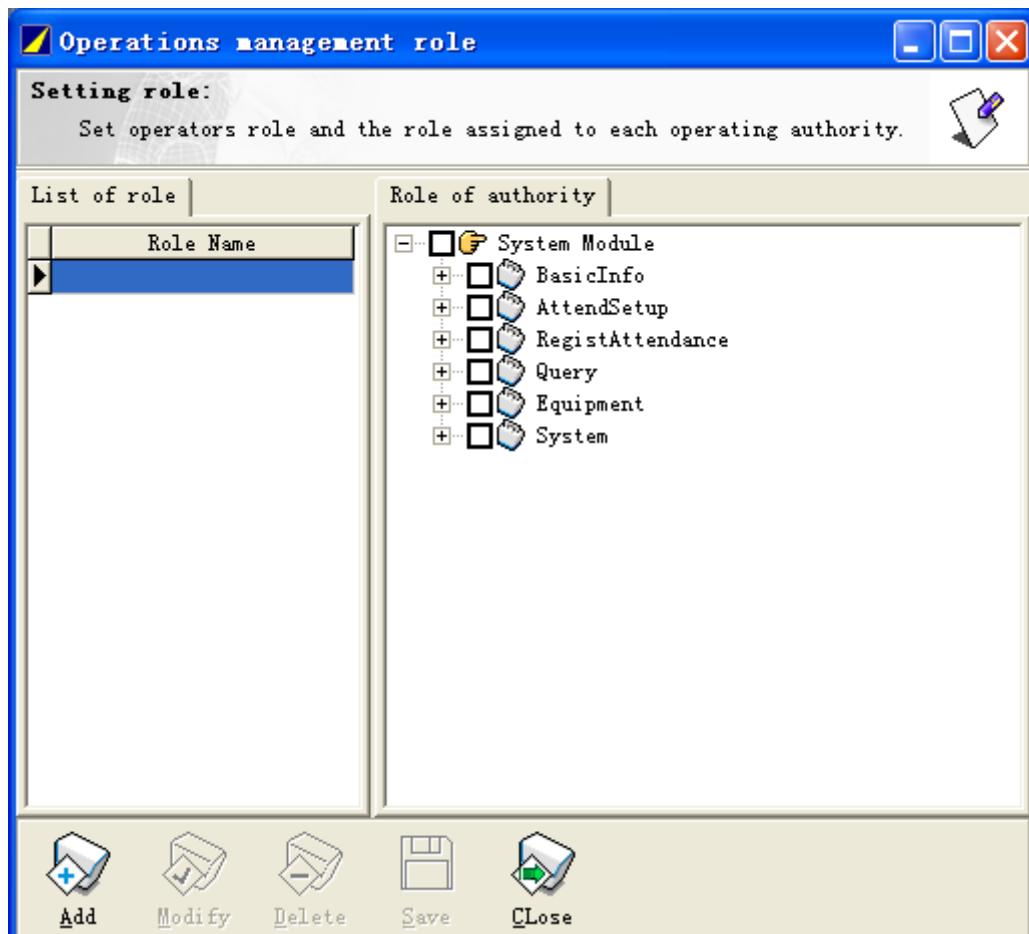
Addition, modification and deletion are the Role Management functions. Saving is to store the authority information of the newly added roles into the database.

4.7.4 System log management

With this function, all the steps and operating activities, which are conducted by all software operating personnel during operating the software, are recorded for examination.
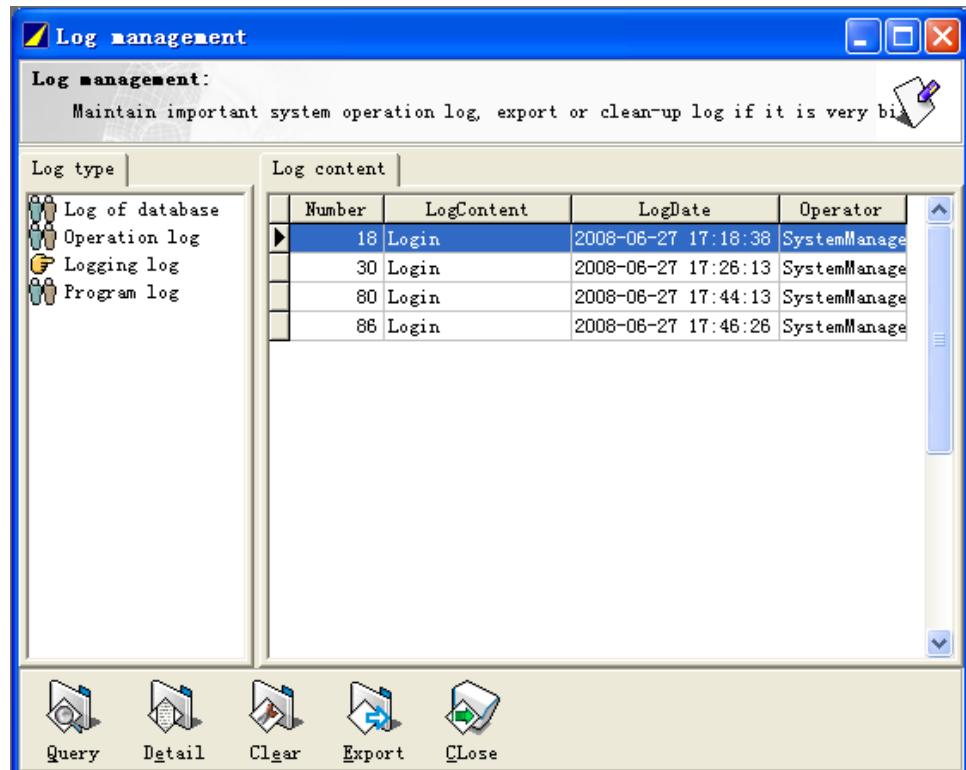
4.7.5 System Initialization

The system initialization operation to remove all business data and re-generation system default settings, restore the environment at the time of installation. Click the system initialization menu, it will pop up the below window.
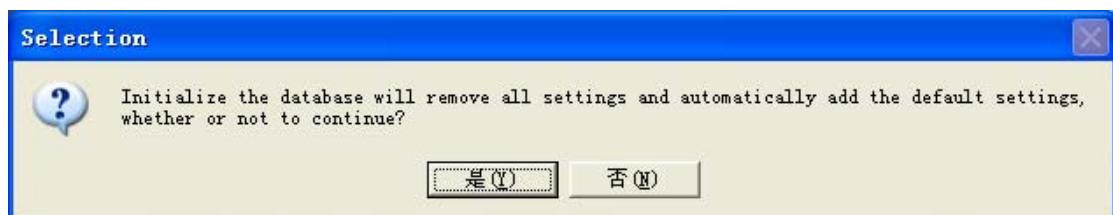
1、[Yes]:Begin the initialization
2、[No]:Cancel the operation

Notice: Please be careful about the initialization

4.8 Other Functions

4.8.1 About

Click into the [About] module, it will pop up the following interface, including the version, service tel, all rights reserved and the website.
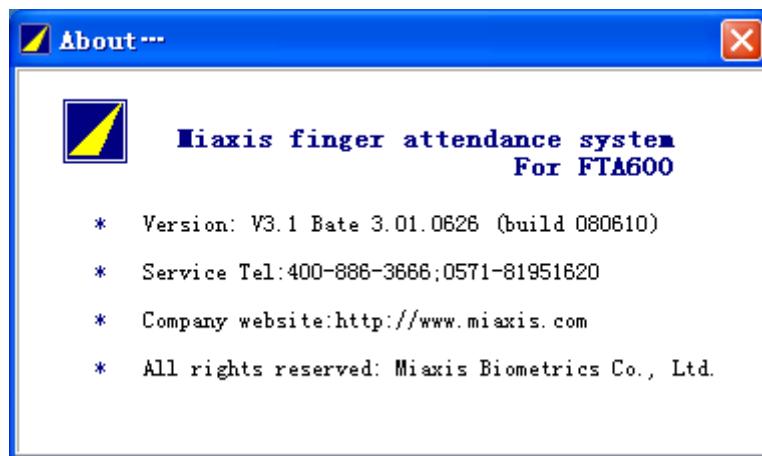
4.8.2 Exit System

Click into the module, it will pop up the following interface,[Yes] means exit system,[No] means cancel the operation.

Chapter 5 General Problems

This chapter mainly includes all the general problems about the Fingerprint Time and Attendance, such as why verification fails even the fingers are enrolled.

5.1 Why verification fails even the fingers are enrolled？

Reasons	Resolution
1.Users' fingerprints don't enroll correctly.	Refer to section 2.4.6 and enroll fingerprints again.
2.Finger is too dry.	Have a breath on the finger, and then press with some pressures.
3.Have oil, smudginess and make up on the finger.	Clean the finger.
4.Fingerprint is not perfect, such as dry, break, molt and callus.	Refer to section 2.4.6, changing the finger and enroll it again.
5.Put the finger in a wrong position.	Refer to section 2.4.6
6.The fingerprint collected window is dirty.	Clean the glass surface of the collected window.
7.The affection of the finger skin's change	Refer to section 2.4.6 and enroll it again.
8.The collected window with the direct sunshine and strong light.	Put the machine at the place where avoiding the direct sunshine and the strong light.
9.Press with un-enrolled finger.	Press with enrolled finger

5.2 Why do T&A and PC fail to connect?

Reasons	Resolutions
1.The communication haven't been operated correctly.	The communication of the software should be accorded with the T&A

2.Electric line's problem or not be inserted well.	Insert the electric line again or change anther line. How to make a electric line please refer to the section 2.2
3.RS232 interface can't access successfully.	Please check the interface numbers, baud rate and instrument numbers. The time attendance should be accorded with the software.
4.RS485 main line can't access successfully.	Please check the interface numbers, baud rate and instrument numebers,485 main line is not permitted the repeated instrument numbers, please choose the professional RS485-232.
5.Ethernet can't access successfully.	Please check the IP address.

5.3 Why the T&A will remind 'Please press the finger again' when nobody attend?

Reasons	Resolutions
1.The collected window with the direct sunshine and strong light.	Put the machine at the place where avoiding the direct sunshine and the strong light.
2.The fingerprint collected window is dirty.	Clean the glass surface of the collected window.

If you have any other question, please E-mail us.