TSG-TAP

Fingerprint Reader

Installation and Configuration Guide

http://www.trustone.co.kr/
Document 001-120401 Rev.A

♦Contents♦

1 Installation Environment

○ Operating System: Windows 98/NT/2000/XP

[Note] If a system utilizing TCP/IP is established on Windows XP environment, firewall related connection problems may occur. In this case, enter a local port(5005, 5006) using TSG-TAP into the XP firewall.

TSG-TAP does not support to Windows Vista.

○ CPU : At least Pentium4 Processor 1GHz

○ RAM : At least 256MB

○ HDD : 10GB of free space(for DB storage)

○ VGA : At least 1024x768 resolution

○ Network

When using serial networking : As many serial ports as needed

When using TCP/IP networking : LAN card

○ Others: Mouse,keyboard

[Note] By default, you can use Excel for editing attendance info and user's menu characters. For more streamlined use of the program, Excel should be installed.

2 How To Install

1. Contents of provided CD

A. TSG-TAP installation file

1. TSG-TAP_Setup(V1xx).exe

   Run this executable file for automatic installation of TSG-TAP.

B. Document

1. TSG-TAP user manual
2. FPS-200 user manual
3. Controller user manual (TSG-350/TSG-550/TSG-750)
4. Controller installation manual (TSG-350/TSG-550/TSG-750)

C. Tools

1. Settings Tools (Program)
2. FPS-200 Driver

[Note] FPS-200 can only be used if a driver is installed on the corresponding PC.

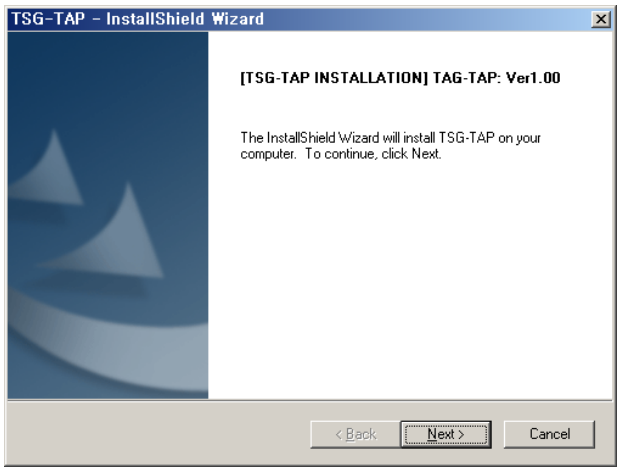
2. TSG-TAP Installation

You can install TSG-TAP according to the following procedure.

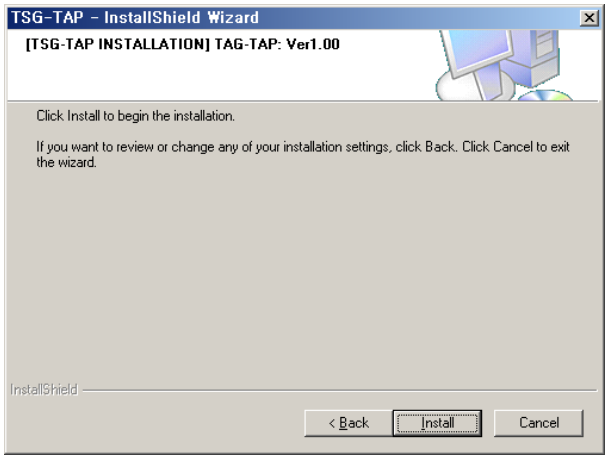
[Note] We recommend using the default values for all settings such as setup directory etc.

[Note] If re-installing over an existing operational installation, first back up the data in use(fingerprint file/user DB/default settings file) then proceed with installation; after instrallation has been completed, copy the backed up data to the PC.

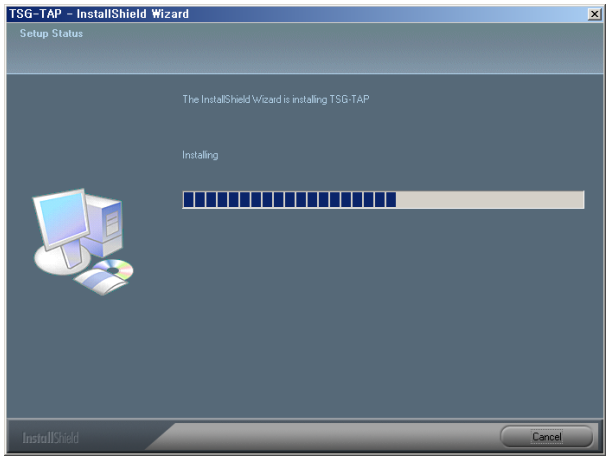
[Step 1] Excute install program



[Step 2] Start install program

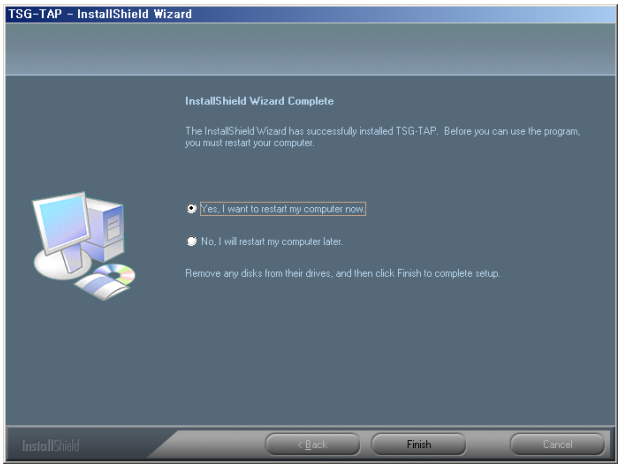


[Step 4] Installing program



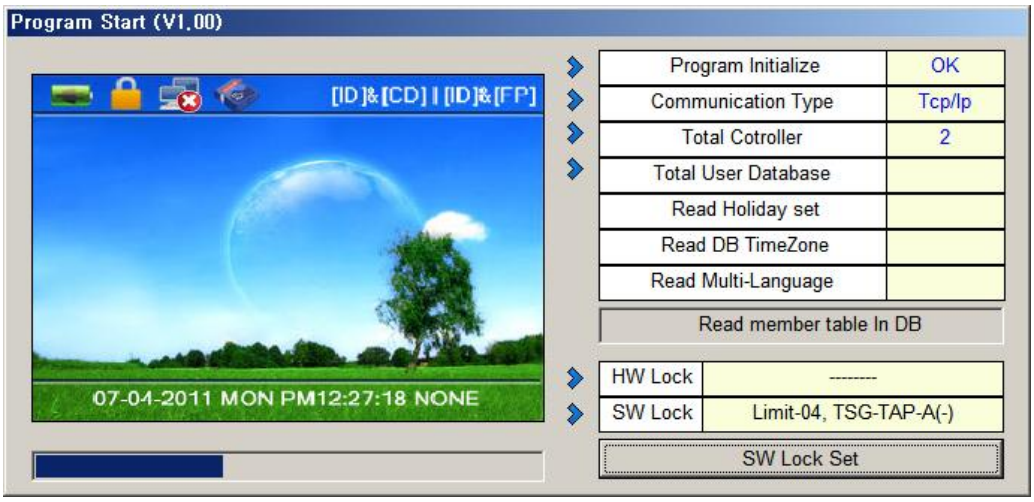
[Note] Depending on the PC's performance, the installation procedure may take up to 30 seconds.

[Step 5] Installation complete



3 Getting Started

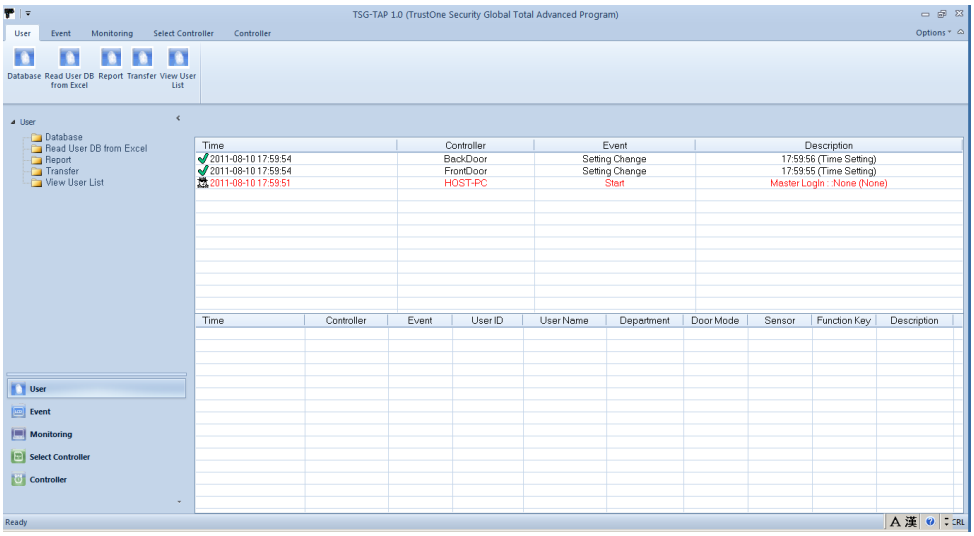
Initializing and loading data



♦ Initializes program and reads user information etc. from DB.

[Note] At initial setup of TSG-TAP, 3 users are registered; the initial screen is selected to English mode user.

Program Main View



♦ Started program.

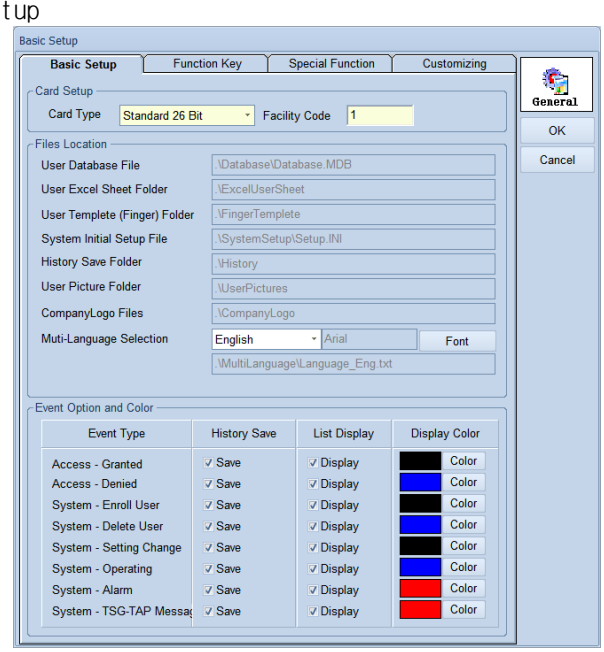
4 Description of Functions

4-1 Setup

4-1-1 Basic Setup

- Basic setup refers to basic setup for using TSG-TAP.
- Basic setup is divided into 4 categories: Basic Setup / Function Key / Special Function / Customizing.

○ Basic Setup



< Fig. 4-1 Basic Setup >

♦ Card Setup

The card type to be used should be defined.
Select from Standard 26/ Mifare 34 Bit.
In addition, select an appropriate encryption code(facility code).

[Note] For more detailed information about cards, please consult our company.

♦ File position

Information about database file and other required files basically used for execution of TSG-TAP.
User database: Database file for storing user information
User Excel file: Folder used for registering and reading user information using Excel
User fingerprint file: Folder storing user fingerprints
System configuration file: File for storing various initial settings
Event storage folder: Folder for storing each event
User photo folder: Folder for storing user photos
Company logo file: File storing the company' s logo image file

[Note] You don't change each file position.

♦ Language selection

You can select the language to be used.
Language can be selected from English/Korean/User.

[Note] In case of User language, modify directly at the corresponding Excel

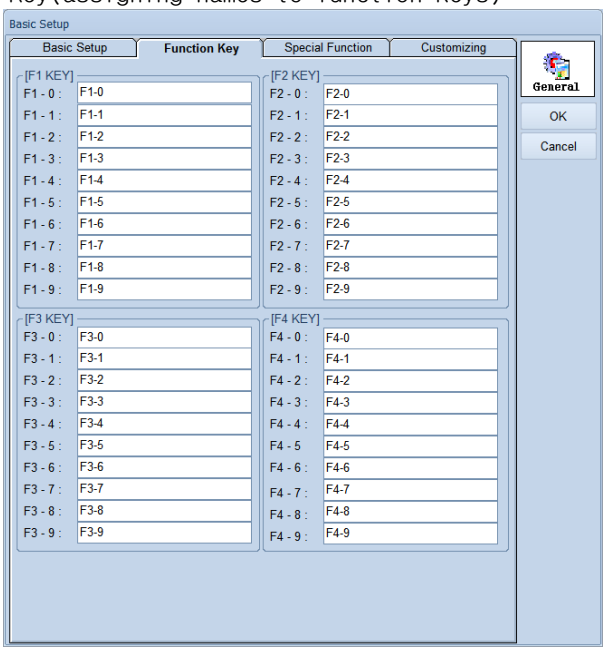
file.

♦ Select the font you would like to use.

♦ Event configuration and color
TSG-TAP has a total of 8 event groups.
You can configure whether to display these events, whether the occurrence of these events should be recorded etc; in particular, the color of the screen to be displayed upon an event can be specified.

< Fig. 4-2 Color >

○ Function Key(assigning names to function keys)



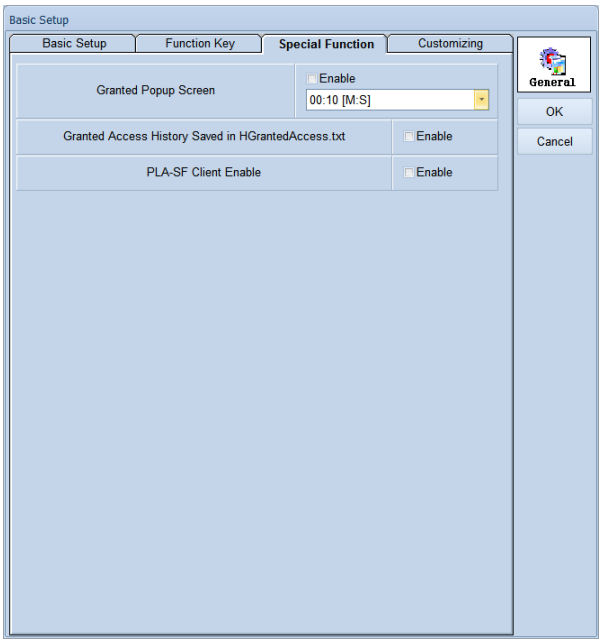
< Fig. 4-3 Function Key >

♦ You can assign names to each of the Function Keys

♦ Controller (TSG-350/TSG-550/TSG-750) has 40 Function Keys.

(Refer to TSG-350/TSG-550/TSG-750 user manual)

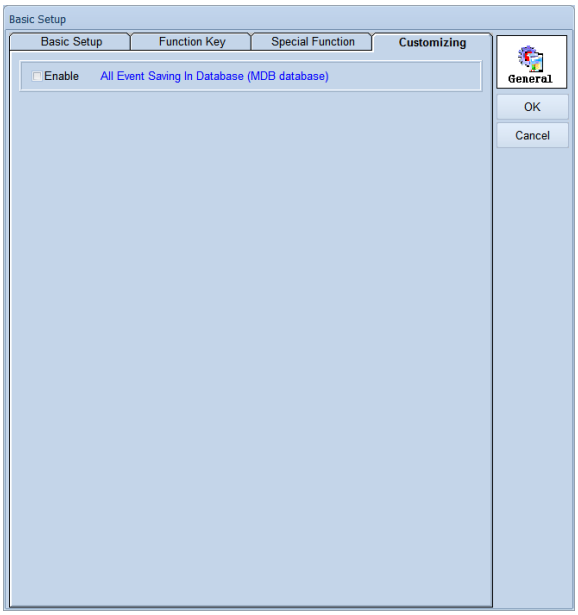
○ Special Function



< Fig. 4-4 Special >

♦ By placing a check on Granted Popup Screen, a popup window will appear every time a user is granted access.
(Dropdown list shows maintenance time of Popup window.)
♦ Granted Access History Saved in HGrantedAccess.txt
- Granted Access events are saved in the HGrantedAccess.txt file
♦ TSG-TAP Client Enable
  - This enables the connection with TSG-TAP Client program.

○ Customizing



< Fig. 4-5 Customizing >

♦ All Event Saving In Database

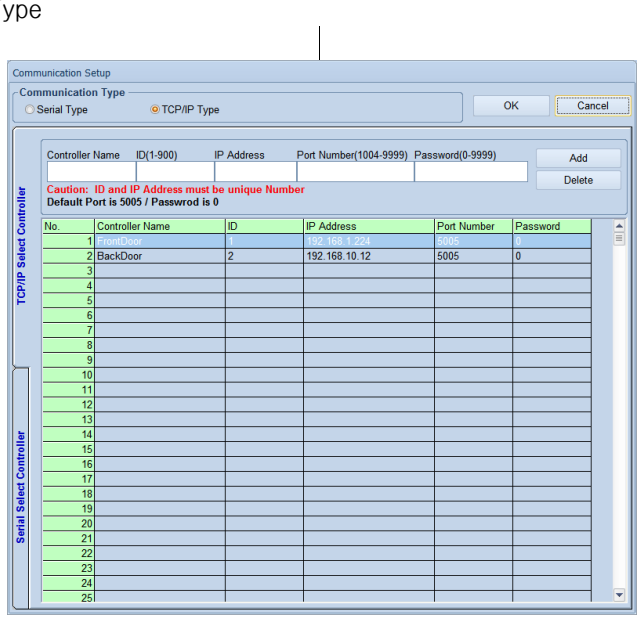
- By placing a check all events are saved as a txt file in the History folder.
  All events are stored in the MDB database

[Note] MDB does not support capacity that is over 2GB.

4-1-2 Communication Setup

▪ There are two ways of establishing a network: serial and TCP/IP.

○ Serial Type



< Fig. 4-6 Serial Communication Setup >

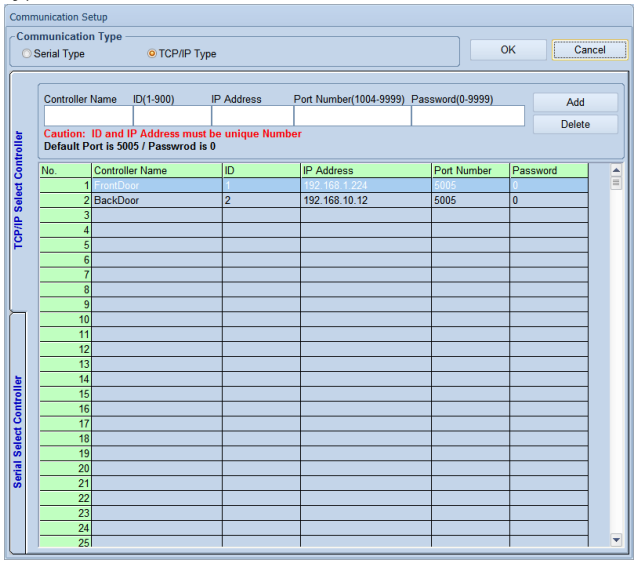
♦ Using serial port : Use the PC's RS232C port.Usually, COM1 and COM2 are built-in as basic features; by installing a multiport board, additional serial ports become available. In this case, a converter (232<->422) has to be used as a communication device to enable connection with multiple controllers.

♦ How to

- Check 'Serial Type' button.
- That will restart the program,
- Input name at 'Controller Name'.
- Input controller number at 'ID Number'.
  (Do not overlap the ID Number.)
- Input serial port number at 'Serial Port' that connects with computer.
- Click 'Add' button after inputting all the data and the controller will be registered.
- If you want to delete controller, click the 'Delete' button after selecting the controller.

[Note] If only one controller is used and the controller is configured to RS232c, connection is possible without using a serial converter.

○ Tcp/Ip Type



< Fig. 4-7 TCP/IP Communication Setup >

♦ Using TCP/IP : Since the TSG-350/TSG-550/TSG-750 terminal acts as a server, IP address, port number and password information are entered through the terminal's menu or by using the program.

♦ How to

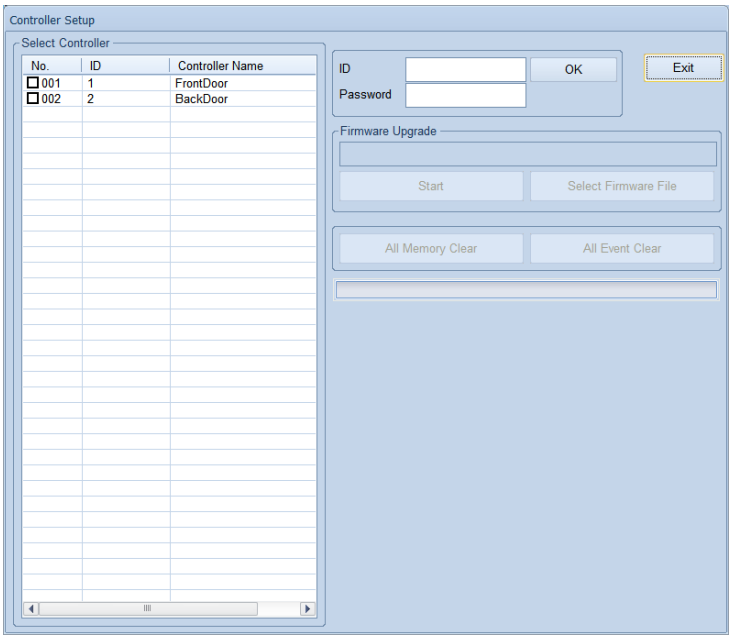
- Check 'Tcp/Ip Type' button.
- That will restart the program
- Input name at 'Controller Name'.
- Input controller number at 'ID Number'.
  (Do not overlap the ID Number.)
- Input IP Address at 'IP Address'
  (The 'IP Address is must same the controller have).
- Input Port number at 'Port'.
  (Controller has Default value '5005')
- Input Password at 'Password'.
  (Controller has Default value '0')
- Click 'Add' button after inputting all the data and the controller will be registered.
- If you want to delete controller, click the 'Delete' button after selected the controller.

▪ Polling event time : The time interval for the frequency of communication between controller and PC is entered in ms (milliseconds : 1/1000 secs) units; a value of 200ms means that an event is requested to the controller each 200ms in the fastest case.

▪ No.of no-replies : If the physical communication line with the controller is disconnected, a 'No reply' event is generated every 200ms; therefore,such a message will occur 8 times a second.

4-1-3 Controller Setup

- You can initializing memory and event, and F/W upgrade of controller.
- Memory initialization : Initialize the memory of the selected controller (factory set value)
- Event initialization : Delete all events of the selected controller
- F/W Upgrade : F/W Upgrade of the selected controller



< Fig. 4-8 Controller Setup >

♦ How to

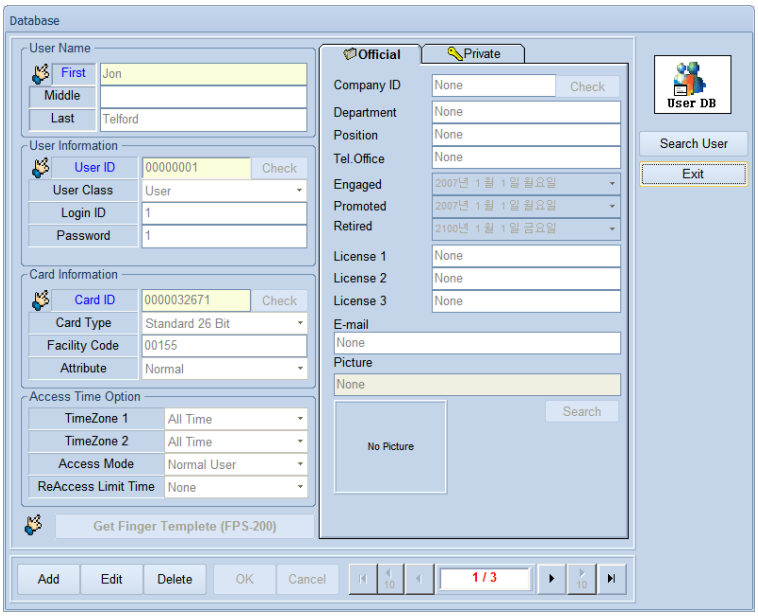
- Select the controller for work at checkbox.
- Input ID and Password. ID and Password is 'admin' (cannot be changed).
- Click Memory initialization button or Event initialization button then run to work.
- Click 'Application' button, select file for F/W upgrade and click 'Start' button and run to upgrade.

[Note] Be careful so that the controller's power does not go off during upgrade.
The upgrade procedure takes a total of 5 minutes.

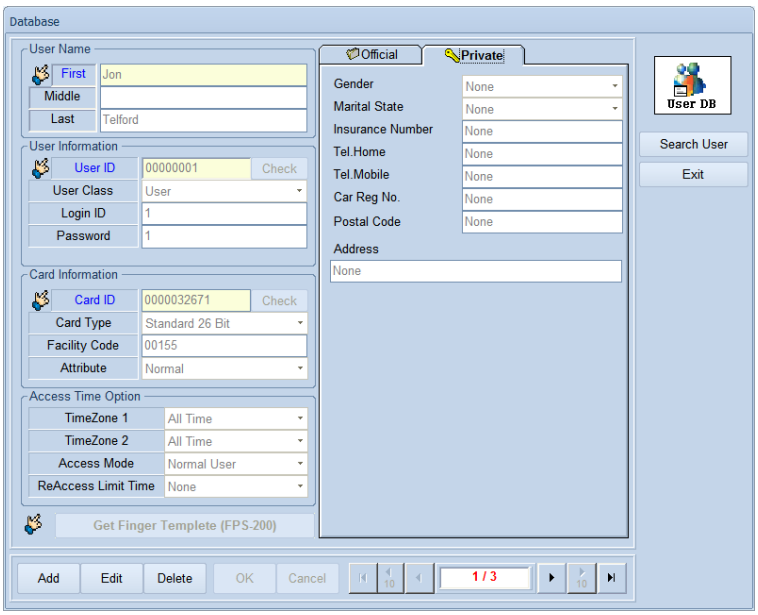
4-2 User

4-2-1 Database

- Enter user details, user information, fingerprint and card information etc.
  - Name : Enter the user's name(name's letters can be entered at any position)
  - User registration : Enter user UD,user level,login ID and password.
  - Card ID : Enter card type,code,card ID etc. of the user.
  - Allowed access time : User's access time and allowed mode can be specified.



< Fig. 4-9 Database 1 >



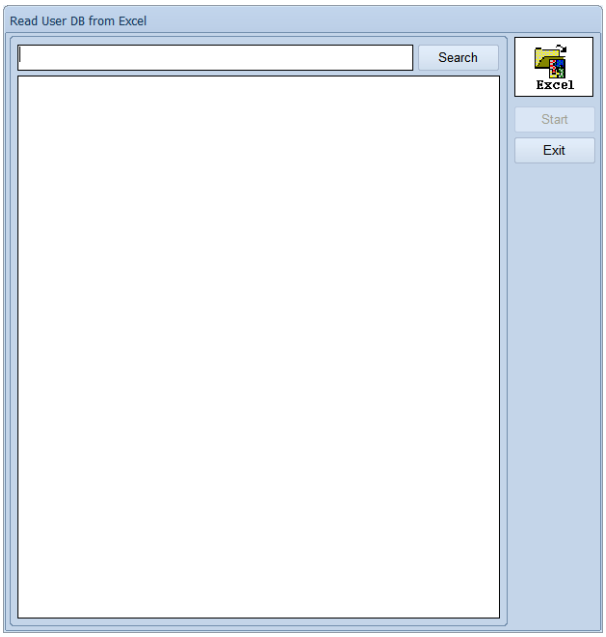
< Fig. 4-10 Database 2 >

[Note] As for 'Registering user Fingerprints', please refer to the How to FPS-200.

4-2-2 Read User DB from Excel

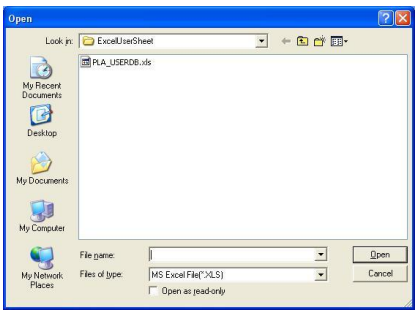
- If a large number of users have to be registered, register users in batch mode by using Excel(*.xls) sheet file.

Click 'Search' button.



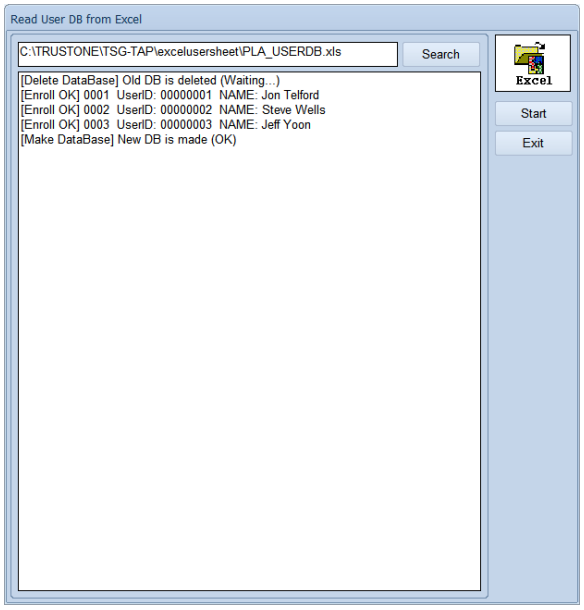
< Fig. 4-11 Batch registration 1 >

② Select the file in which user information is stored then click 'Open' button.



< Fig. 4-12 Batch registration 2 >

③ 'Click 'Start' button to start batch registration.

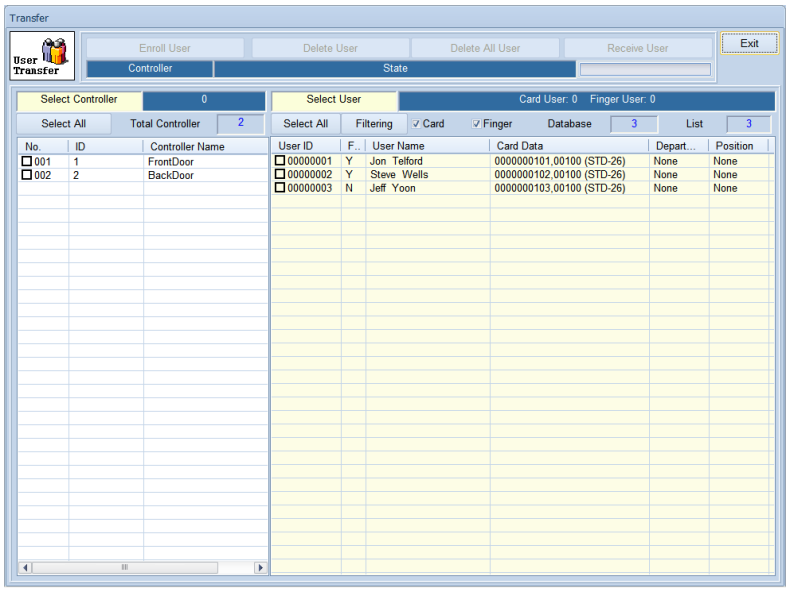


< Fig. 4-13 Batch registration 3 >

[Note] Upon batch registration, all users registered in the controller are deleted.
If you want to add user, register data then you have to edit '/ExcelUserSheet/PLA_USERDB.xls'.

4-2-3 Transfer

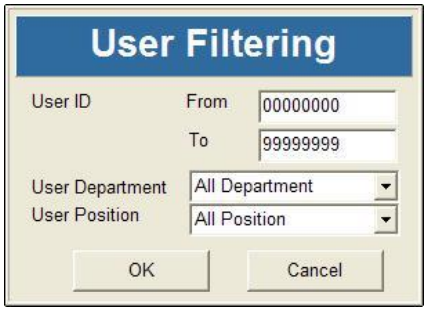
- Functionality to send user information to each controller.
- Destination controller can be specified according to user registration type(fingerprint or card).
- If 'Delete all users' is selected, any user is deleted even if selected.



< Fig. 4-14 Transfer >

[Note] The delete functionality only applies to the selected controller; relevant user data remains on the user DB. It is possible that a user does not exist on the user DB even if the user is registered at the controller if receiving of user data is not performed. (if user registration is done directly at the controller)

- Button functions
  - Register user : Register selected user on the controller.
  - Register all users : Register selected users in batch on the controller.
  - Delete user : Delete selected user from the controller.
  - Delete all users: Delete all users from controller.
  - Receive user : Receive fingerprint or card data through the controller and store it on DB.
  - Filtering : When specifying multiple users for send/receive, specify the range of the user ID s to send/receive so that only the users within that range appear, without having to check each individual user.

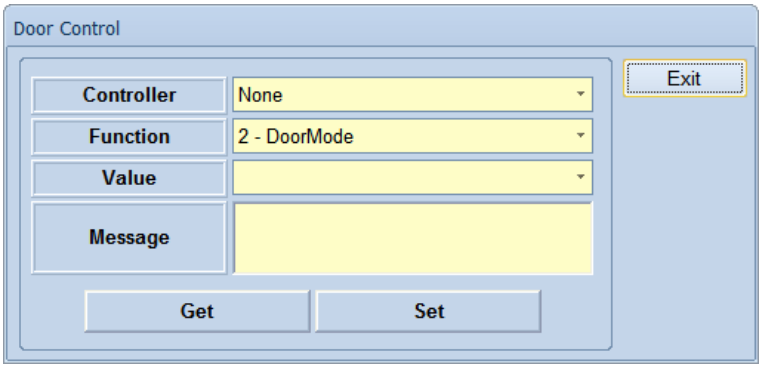


< Fig. 4-15 User Filtering >

4-3 Controller

4-3-1 Door Control

- The operation mode of each controller can be set and modified.
- A maximum of 27 operation modes can be configured.
- The mode of the currently configured controller is displayed.
- Click 'Get' button after selecting 'Function' and you will see the current value of operation mode.
- Select controller and click 'Set' button after changing the 'Value' of selected controller mode. Once completed the selected controller mode will change.



< Fig. 4-16 Door Control >

[Note] Description of each operation mode

- DoorRelay : Door Relay
- DoorMode : Operation mode
- DoorTime : Lock time
- DoorAlarm : Door open bell
- CdType : Wiegand method
- ReAccess : certification security
- Cd2Fun : external reader function key
- AlmRelayFun : external alarm functionkey (Relay)
- AlmBuzzFun : external alarm function key (Buzzer)
- AntiPass : AntiPass
- Fire : fire surveillance/intrusion surveillance
- IdSecret : ID security
- Limit : entry restriction for specific time
- Language :language
- VoiceOut : select whether voice function to be used.
- MachineID : controller address
- Baudrate : Communication speed.
- DeviceTime : Controller time
- UserCount : Number of currently registered user Ids (including TEMP ID)
- ManagerCount : Number of currently registered manager IDs
- FpCount : No.of currently registered fingerprints
- CardCount : No.of currently registered cards
- SLogTotal : No.of currently recorded management logs
- SLogRead : Current management record read position

- GLogTotal : No.of currently recorded entrance records
- GLogRead : Current entrance record read position
- CurDoorMode : Current door mode

4-3-2 Holiday Setup

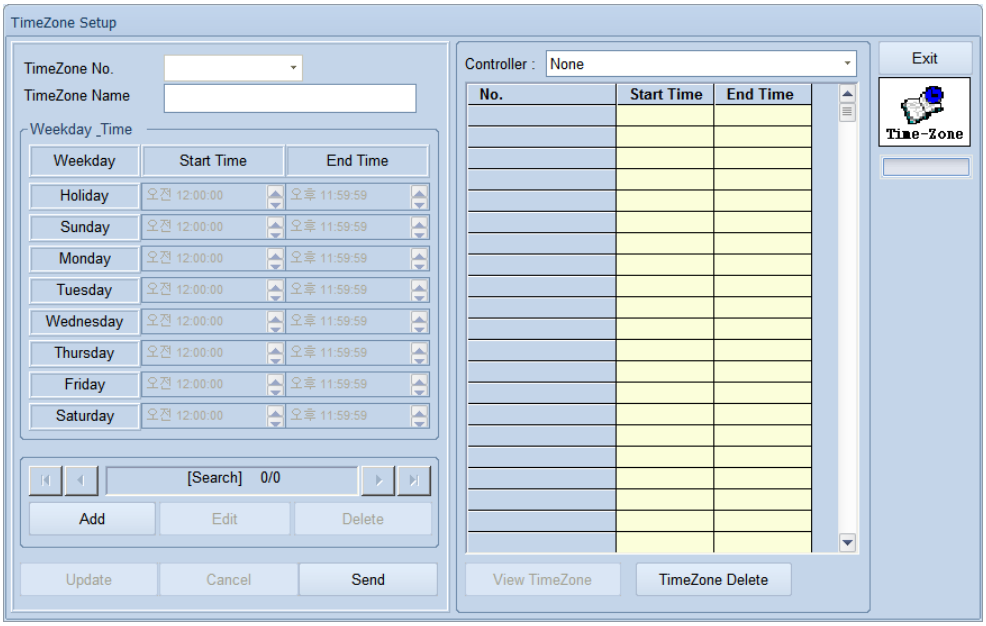
- After entering all user holidays by repeatedly clicking 'Add', click the 'Send' button to send data to the controller.

< Fig. 4-17 Holiday Setup >

[Note] Holidays of countries using lunar calender change each year relative to the solar calendar and therefore have to be reconfigured once a year.

4-3-3 TimeZone Setup

- The 'TimeZone Setup' is entered by dividing 24 hours of a day according to the 'start time' and 'end time' for each weekday and is used to allow or restrict the user's entry during a specific time.
- Set number and name of entry time and holiday time ,select a controller then click 'Update' to send.
- Click 'View TimeZone' to verify the time zone stored on the controller.

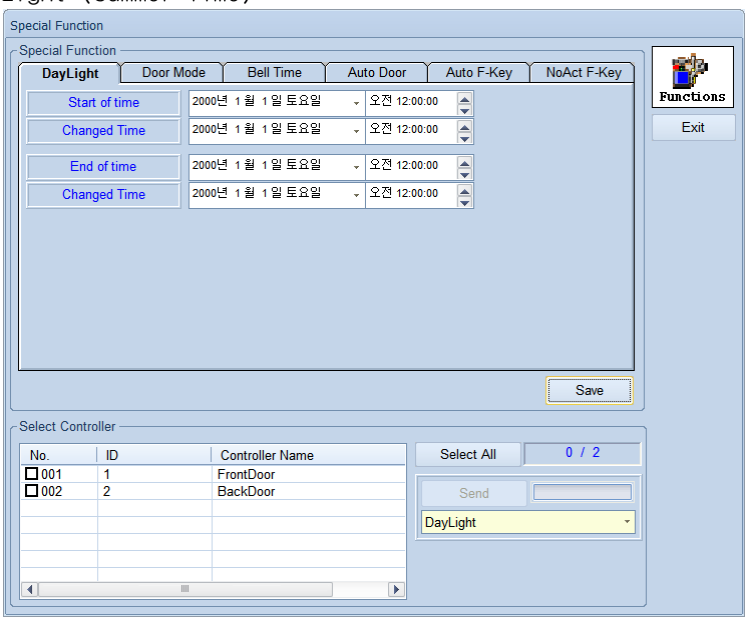


< Fig. 4-18 TimeZone Setup >

[Note] Upon update, all TimeZone stored on the controller are deleted. A maximum of 254 TimeZone can be specified.

4-3-4 Special Function

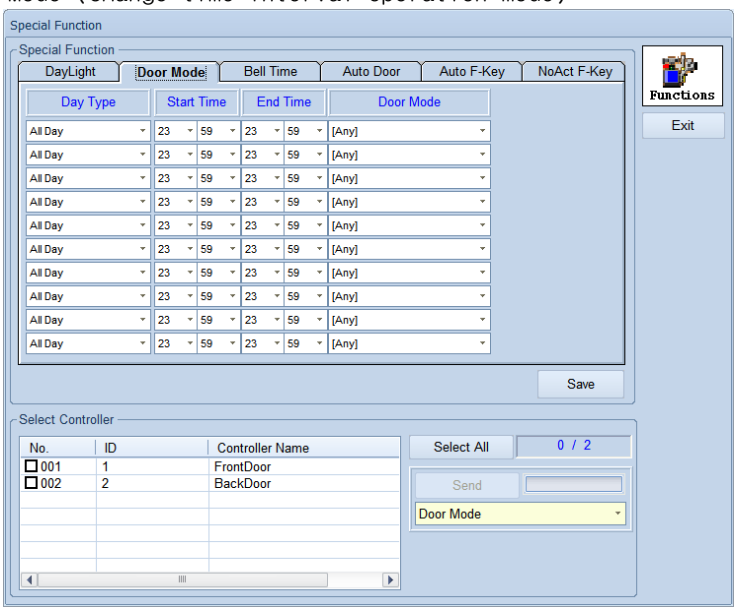
○ DayLight (Summer Time)



< Fig. 4-19 DayLight >

- Function used to change the day/time of each terminal at a specific date/time.
- Time to be changed-enter the date/time on which summertime starts; New time-enter the new date/time; Return time-date/time on which summertime ends; New time after return- time to be returned to after summertime ends.
- Click Save button to select controller then click 'Send' buton.

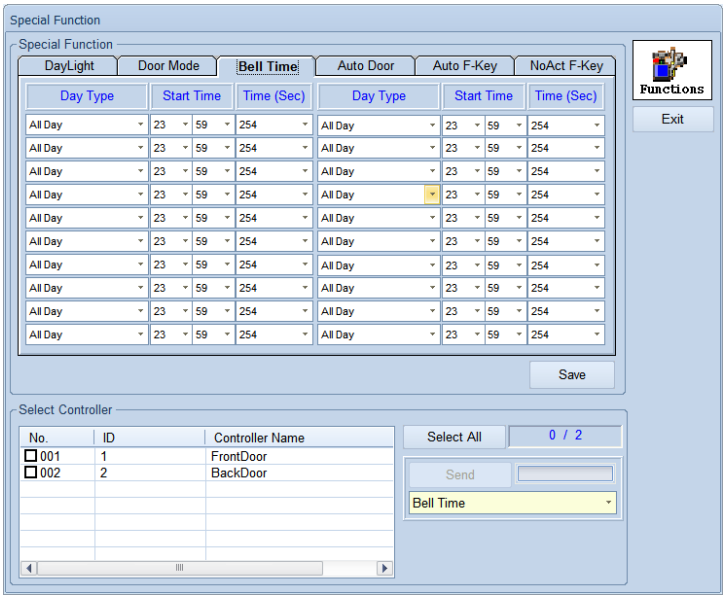
○ Door Mode (change time interval operation mode)



< Fig. 4-20 Door Mode >

- Function to change operation mode according to time.
- This function automatically changes operaion mode during the specified time.
- A maximum of 10 intervals can be set according to the following sequence.
  ① Select the weekday.
  ② Select Start time(start time of door time interval).
  ③ Select End time(end time of door time interval).
  ④ Select the operation mode.
  ⑤ Click 'Save' button to store information on database.
  ⑥ At Select Controller, select data to be transmitted from controller and transmitted data selection.
  ⑦ Click 'Send' button to transmit information to controller.

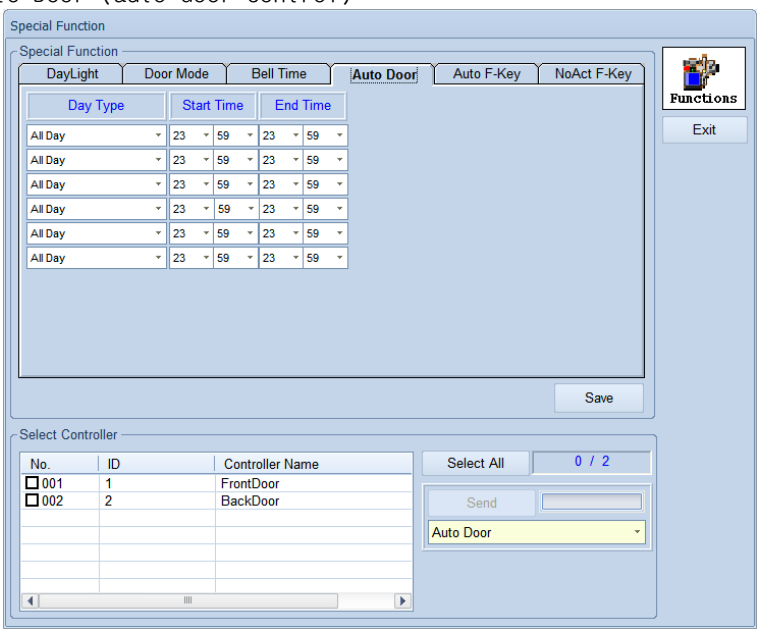
○ Bell Time (bell control)



< Fig. 4-21 Bell Time >

- Function to control a bell connected to a relay so that the bell rings for a preset time.
- A maximum of 10 bells can be preset according to the following procedure.
  ① Select the weekday.
  ② Select the start time(time at which the bell starts ringing).
  ③ Select Time(the time during which the bell operates).
  ④ Click 'Save' button to store information on database.
  ⑤ At Select Controller, select transmit data at controller and transmit data selection.
  ⑥ Click the 'Send' button to send information to the controller.
  (Up to 254 bell ringing times can be set; unit is seconds(sec))

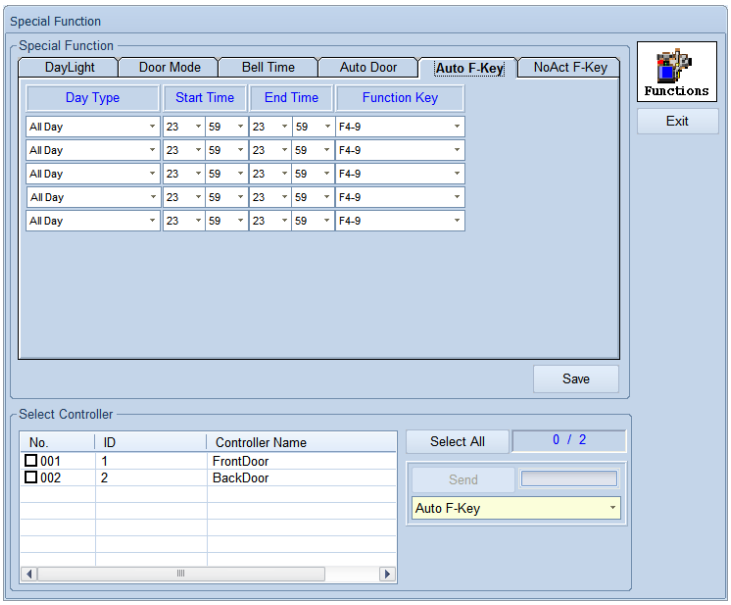
○ Auto Door (auto door control)



< Fig. 4-22 Auto Door >

- Set the operation time interval of the automatic door's sensor if the automatic door is operated through a sensor. A maximum of 6 intervals can be set according to the following procedure.
  ① Select the weekday.
  ② Select the start time(start time of automatic door's sensor operation).
  ③ Select end time(end time of automatic door's sensor operation).
  ④ Click 'Save' button to store information on database.
  ⑤ At Select Controller, select transmit data at controller and transmit data selection.
  ⑥ Click 'Send' button to send information to the controller.

○ Auto F-key (automatic function key control)

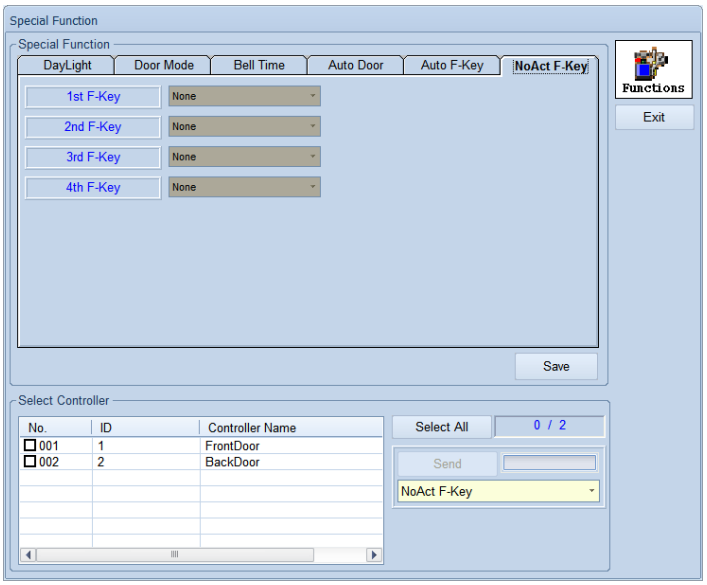


< Fig. 4-23 Auto F-Key >

- A function to store a function key value automatically through an event even if a separate function key is not pressed within a set time.
- Mainly used during commuting time (for attendance management) to avoid the burden of authentication through pressing a function key.
- A maximum of 5 items can be set according to the following procedure
  ① Select the weekday.
  ② Select the start time(start time of automatic function key operation).
  ③ Select the end time(end time of function key operation).
  ④ Select the function key.
  ⑤ Click 'Save' button to save information on database.
  ⑥ At Select Controller, select transmit data at controller and transmit data selection.
  ⑦ Click 'Send' button to send information to the controller.

[Note] There are a total of 40 function keys, from F1-0 to F4-9. Refer to the 'Function Key' part of menu 'General Setup'. (Page 8)

○ NoAct F-key (Setting of function key realy nonoperation)



< Fig. 4-24 NoAct F-Key >

- Function for not activating the door operation relay if entrance authentication occurs using the function key set at the relevant window.
- Can be mainly used if door should not be opened while checking attendance.
  ① Select function key.
  ② Click 'Save' button to save information on database.
  ③ At Select Controller, select transmit data at controller and transmit data selection.
  ④ Click 'Send' button to send information to the controller.

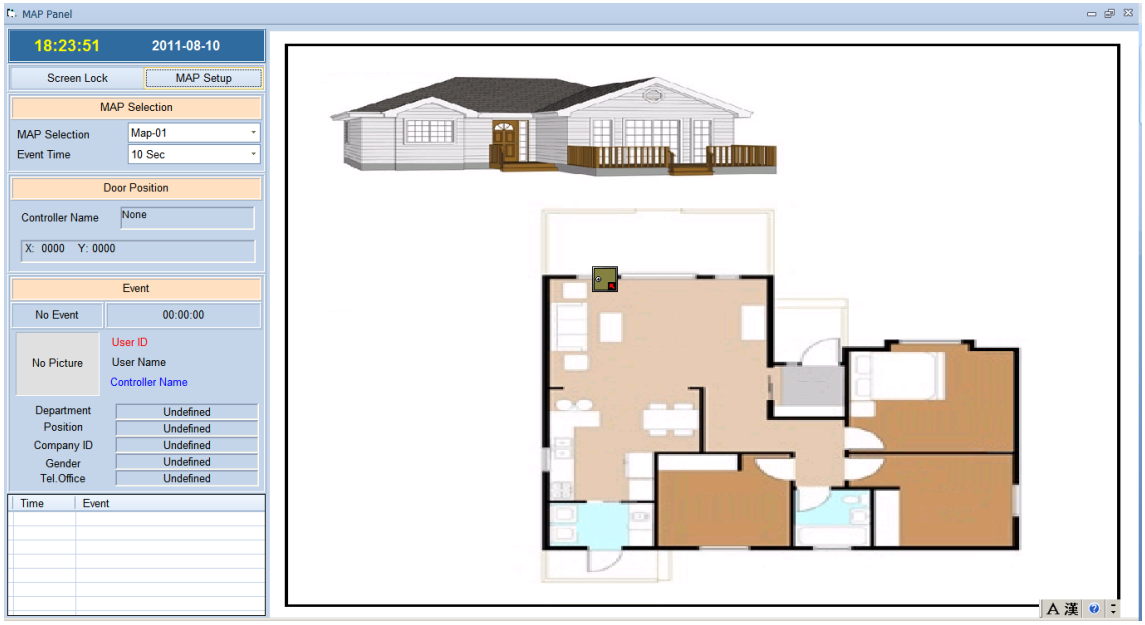
[Note] There are a total of 40 function keys, from F1-0 to F4-9. Refer to the 'Function Key' part of menu 'General Setup'. (Page 8)

4-4 Monitoring

4-4-2 MAP Panel

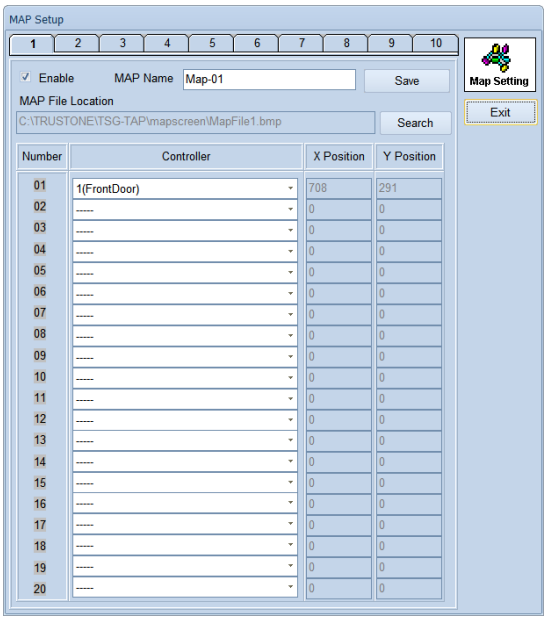
- The entry/exit status of users can be checked through the overall organization map.
- The map is saved in the 'MapScreen' folder within the program folder.
- A maximum of 10 maps can be set.
- Set the position of the contoller to be shown on the map.
  (Can be moved up/down/left/right in units of -1,-2,-5,-10,-20,1, 2, 5, 10, 20)
- Always click 'Save' after all settings have been completed.
- As shown on <Fig.5-4>.  is displayed on the specified coordinates on the map.
  (Controller display)
- If you click 'Screen Lock' button, you will only be able to view Map Panel.

○ Map Panel



< Fig. 4 - 25 MAP Panel >

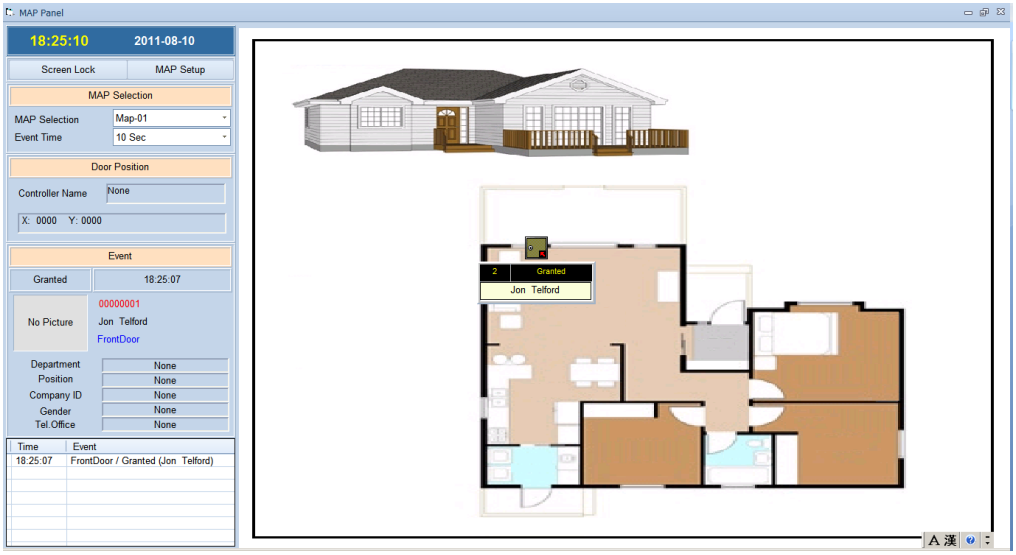
○ Map Setup



< Fig. 4 - 26 MAP Setup >

- Enable : Check whether the map function is to be used.
- Map Name : Show map filename.
- Map BackGround File : Show map path.

○ Map status display

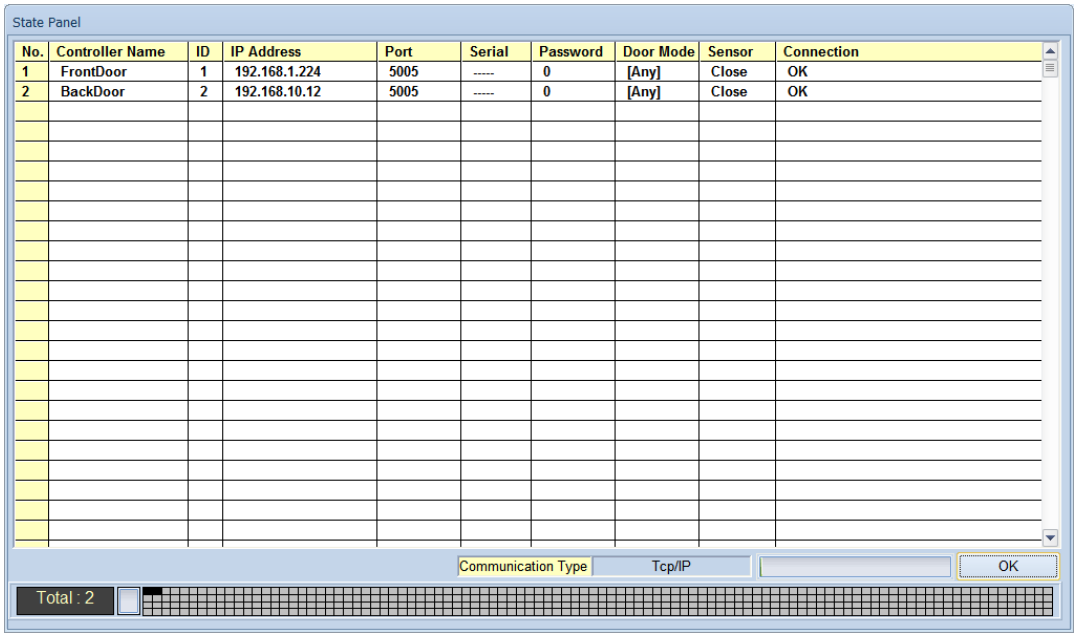


< Fig. 4-27 Map status display-if access granted >

- A message will popup like the above fig.4-27 when the controller senses any connection.

4-4-1 State Panel

- Check the communication status and events of each controller.
- You can check each controllers information,function keys and authentication status.
- In addition, by using the 'lock screen' feature, only the communication status screen can be viewed, as on < Fig.4-28 >.

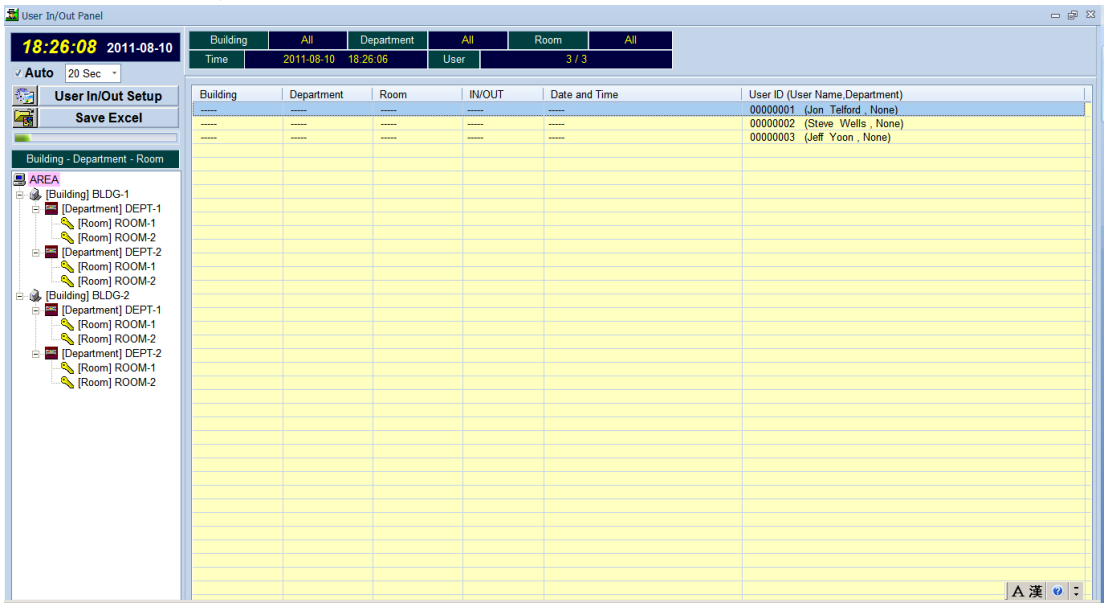


< Fig. 4-28 State Panel >

[Note] If the next event occurs, the previously displayed event disappears and the last event is displayed.

4-4-3 User In/Out Panel

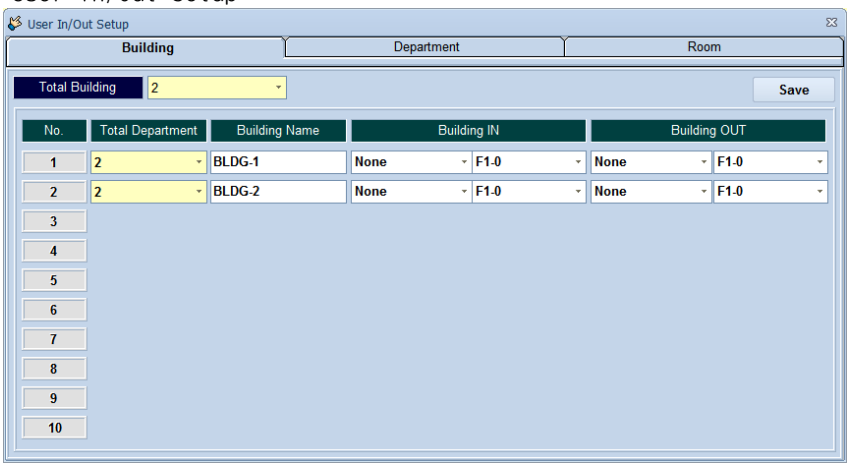
○ User In/Out Panel



< Fig. 4-29 User In/Out Panel >

- You can confirm the present position of users.
- Three location : Bulding, Department and Room
- Confirmation of user In/Out state can be checked.
- List output is possible and can be saved as an Excel file.

○ User In/Out Setup



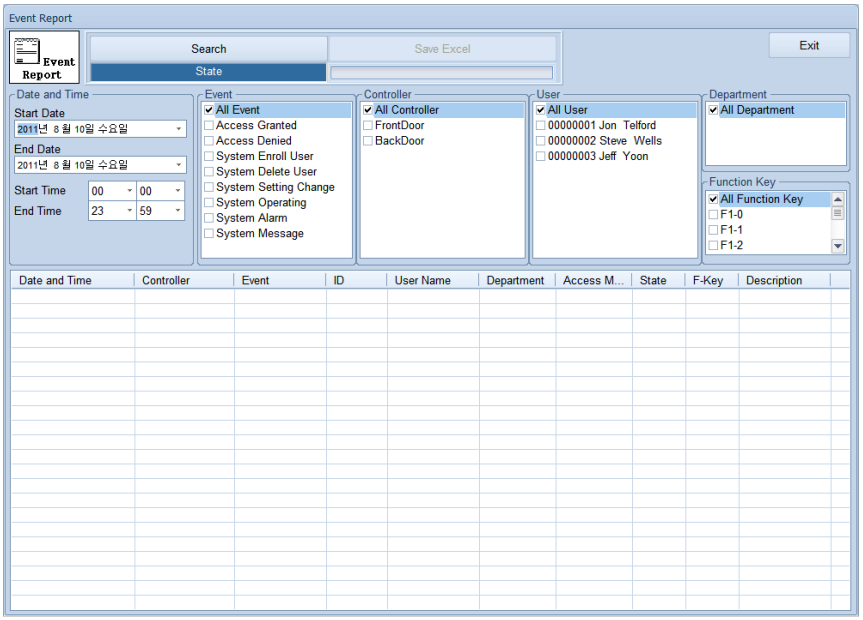
< Fig. 4-30 User In/Out Setup >

- You can set up to 10 buildings, the builings can have 10 departments and the departments can have10 rooms.

4-5 Report

4-5-1 Event Report

- Searches and outputs events that occurred during communication.
- Search is possible by event, user, location, department and function key.
- List output is possible and can be saved as a text file.
- Check the criteria to be searched for then click 'Search'.

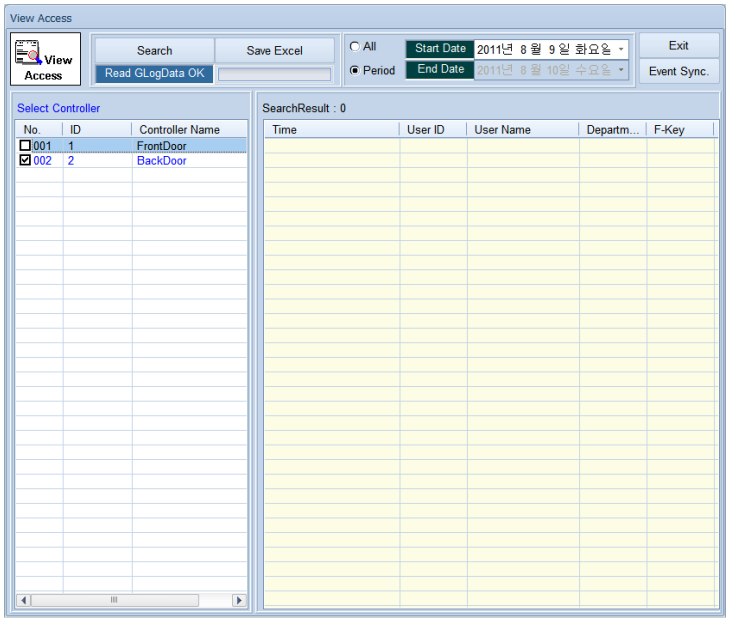


< Fig. 4-31 Event Report >

[Note] If no item is checked, the 'search' button is deactivated.

4-5-2 View Access

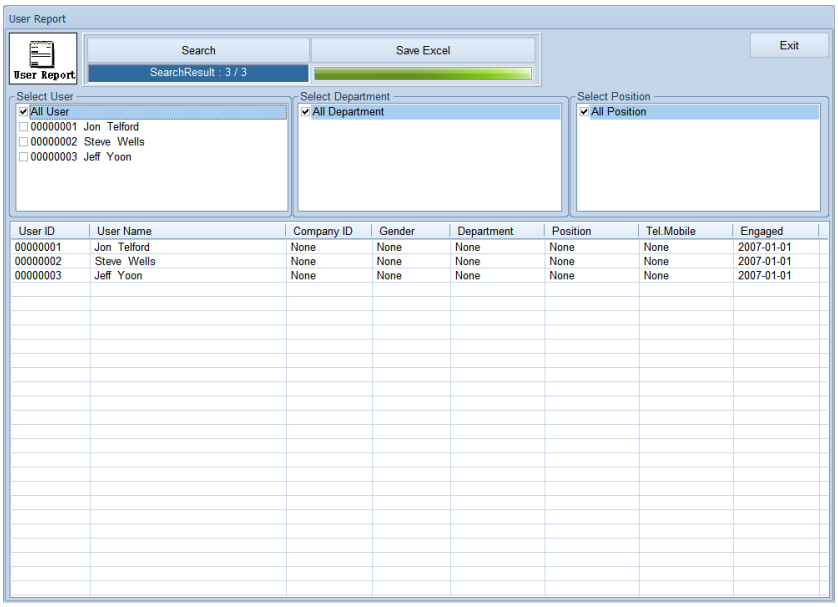
- Unlike the 'Event Output' function which loads data from the DB, this function loads the events of users granted access by the controller.
- Can be used for attendance management ; data can be loaded from each controller.
- List output is possible and can be saved as a text file.



< Fig. 4-32 View Access >

4-5-3 User Report

- Searches users stored in the user DB.
- You can search by user ID, name, department and position.
- List output is possible and can be saved as a text file.
- Check the criteria to be searched for then click 'Search'.

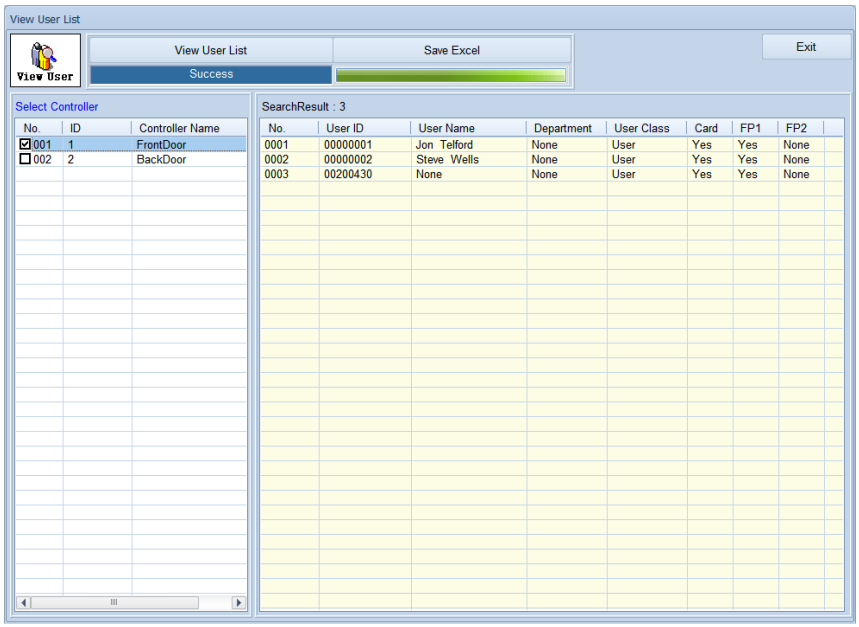


< Fig. 4-33 User Report >

[Note] If no item is checked, the 'search' button is not activated.

4-5-4 View User List

- Provides a view of users registered on each controller at a glance.
- List can be printed out and saved as a text file.
- Check the controller from which you want to receive data then click 'View user list'.

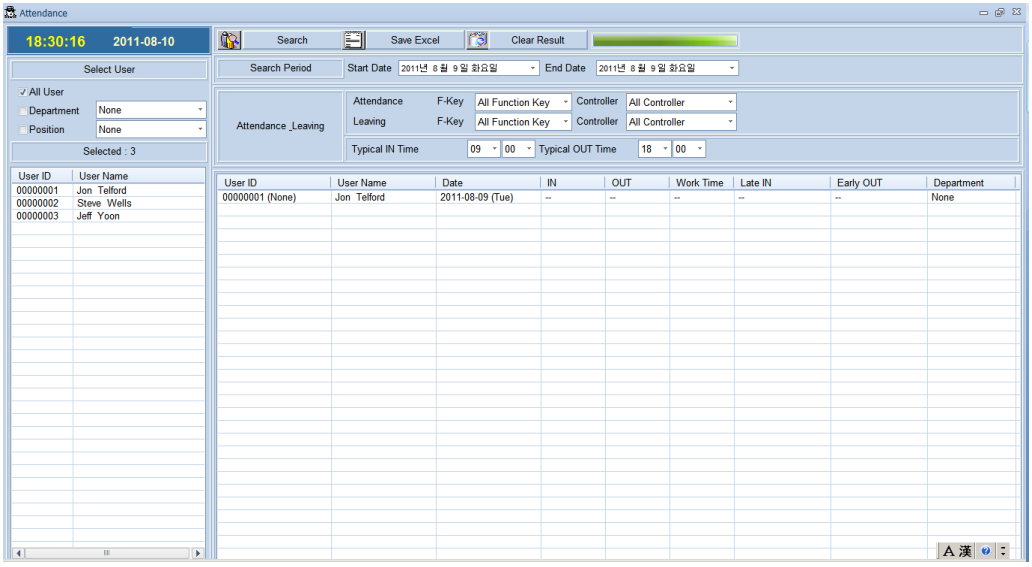


< Fig. 4-34 View User List >

4-6 Others

4-6-1 Attendance

- Function for attendance management through preset function keys(F1-0 - F4-9).
  (Refer to page 8 as for how to assign function keys)
- Preset 'entry time' and 'leaving time' then show users who entered / left using the entry / leave function keys.
- You can search for all users or by department,position and also by date and controller.
- Even if the function key is pressed, users subject to 'authentication denied' are not displayed.
- User list is saved in Excel file format.



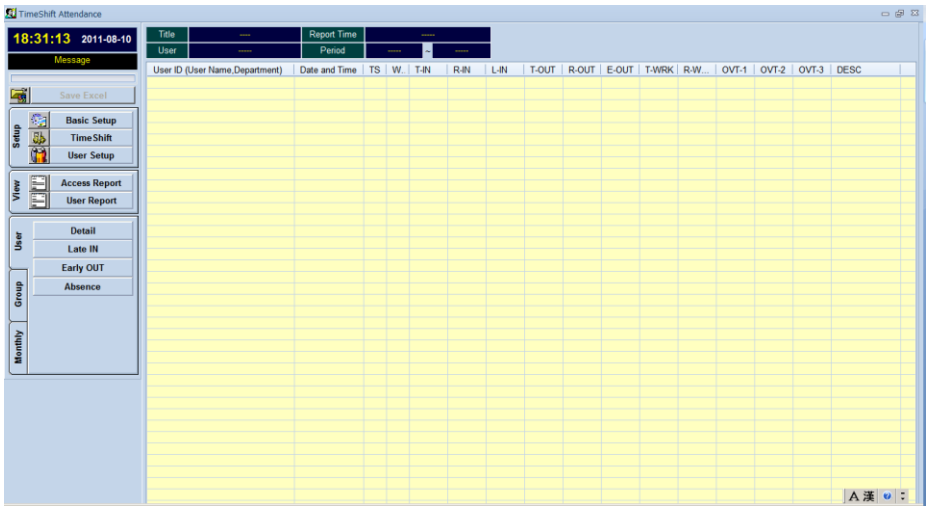
< Fig. 4-35 Attendance >

[Note] If arrived earlier than the specified enter time:
'GOOD' (If late for work, 'BAD')
If left from work later than the specified leave time:
'GOOD' (If left earlier from work, 'BAD')

4-6-2 TimeShift Attendance

- This fuction is for attendance of time shift users.
- You can set maximum of 10 work times and 10 work groups.
- You can search all users, all departments and all groups for any days and for any controllers.
- User List output is possible and can be saved as an Excel file.

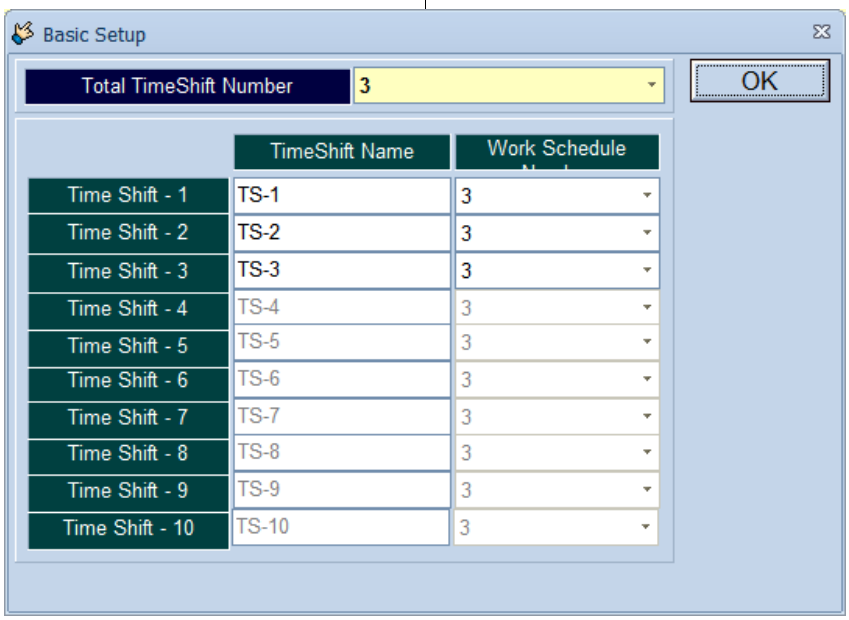
○ TimeShift Attendance main view



< Fig. 4-36 TimeShift Attendance >

- This shows the searching data of TimeShift Attendance.

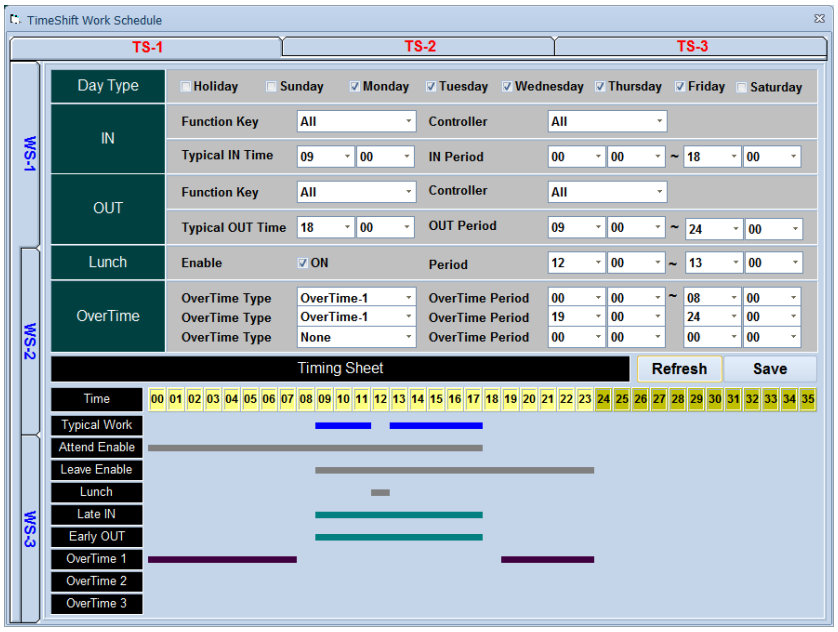
○ Basic Setup



< Fig. 4-37 Basic Setup >

- This window shows the setup of TimeShift Attendance.
- You can set a maximum of 10 time shift groups and each group can have a maximum 10 time shifts.

○ TimeShift Work Schedule Setup

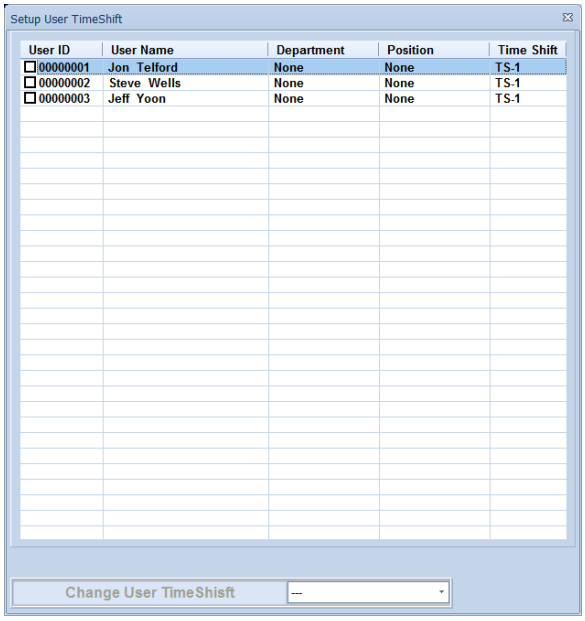


< Fig. 4-38 TimeShift Work Schedule >

- This window shows the setup of TimeShift Attendance for each time shift group.
- The 'General Setup' shows both time shift groups and time shifts .

- You can setup In time and Out time by 'Day Type'.

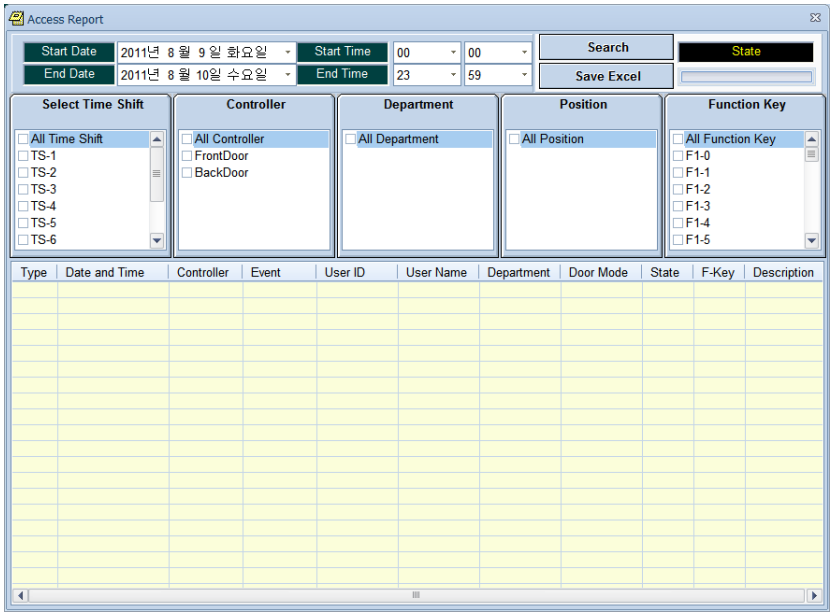
○ Setup User TimeShift Setup



< Fig. 4-39 Setup User TimeShift >

- You can edit user time shift.
- Click on the user that needs to be changed
- Select time shift group from the list box like Fig 4-40, and click 'Save Excel'.

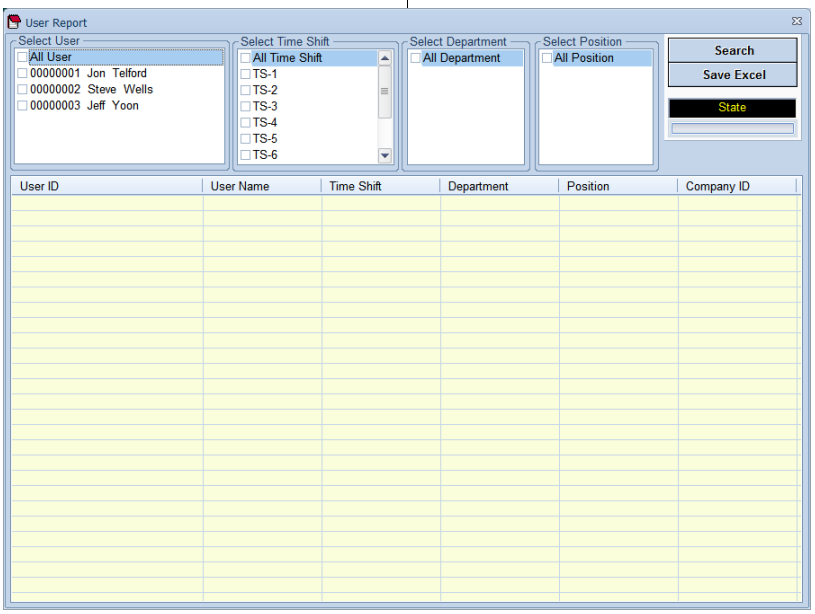
○ Access Report



< Fig. 4-40 Access Report >

- The above figure shows access information of the time shift group.

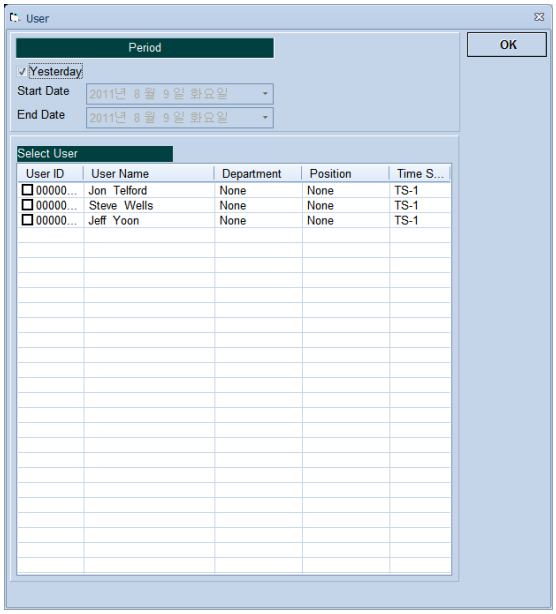
○ User Report



< Fig. 4-41 User Report >

- This figure shows user report by time shift, department and position.

○ User View

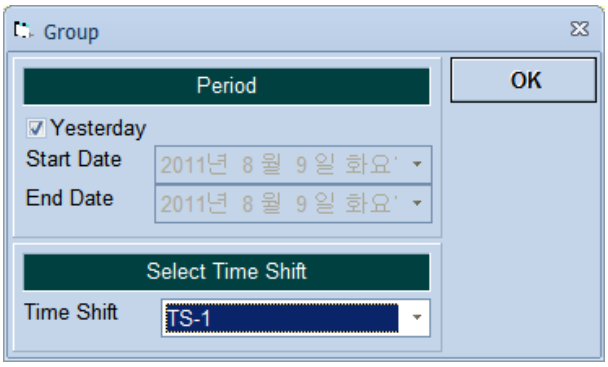


< Fig. 4-42 User >

- The figure 4-42 shows the In/Out information of selected user on the

main window.
- If information of a specific day needs to be seen, uncheck the check box of 'Yesterday' and click 'OK' button after setting the specific day.
- Four items can be seen from each menu on the main window.
(Detail, Late IN, Early OUT, Absence: If you want to know details then see 'Note')

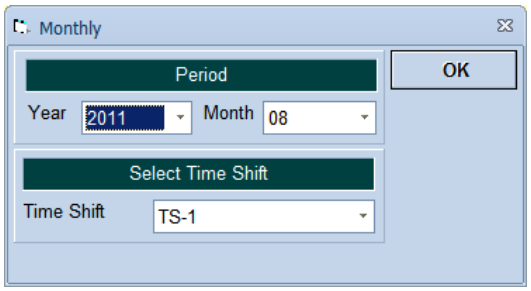
○ Group View



< Fig. 4-43 Group >

- The Fig.4-43 shows information of attendance of each time shift group.
- If information of a specific day needs to be seen, uncheck the check box of 'Yesterday' and click 'OK' button after setting the specific day.

○ Monthly View



< Fig. 4-44 Monthly >

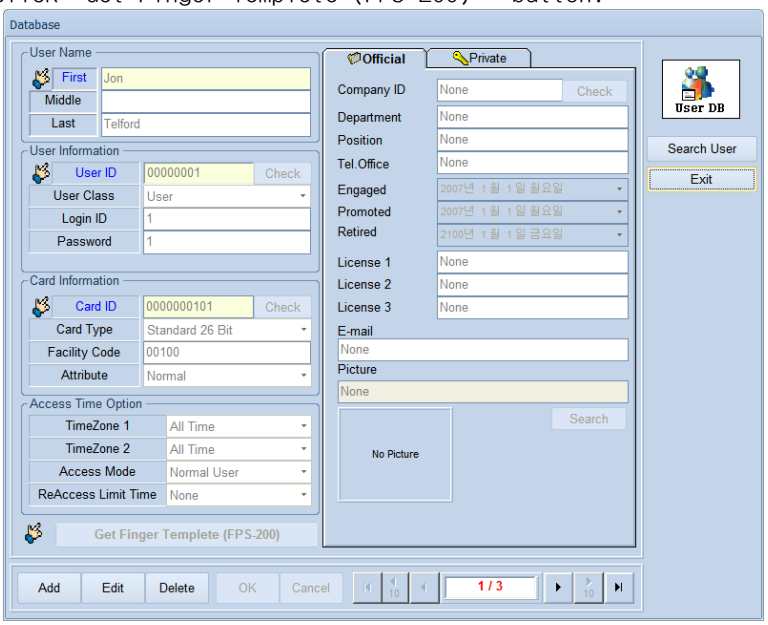
- The Fig. 4-44 shows information of monthly attendance from each time shift group.
- Select year, month and time shift group, and click 'OK' button then you will see attendance information on the main window.

[Note] Three items: Personal, Group and Monthly
- Detail : Views DETAIL information of time shift from selected item.
- Late IN : Views LATE IN information of selected item.
- Early OUT :Views EARLY OUT information of selected item.
- Absence : Views ABSENCE information of selected item.

4-6-3 How to FPS-200

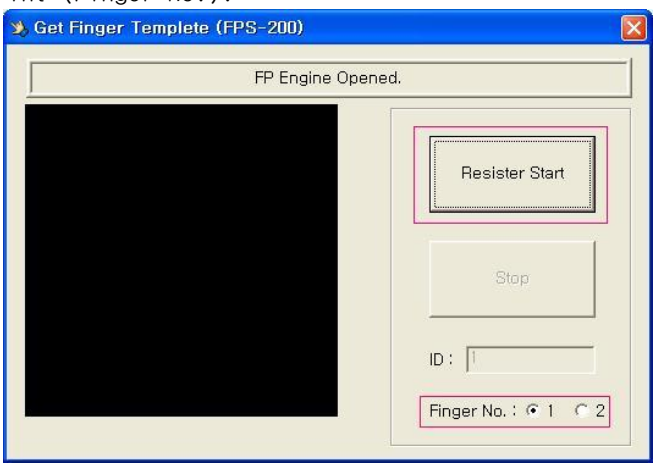
- FPS-200 is used for scanning fingerprints from the server PC.
- Fingerprints can be scanned when user needs to be added or edited from 'User DB'.
- You can enter up to two fingerprints for each user ID.

Click 'Get Finger Templete (FPS-200)' button.



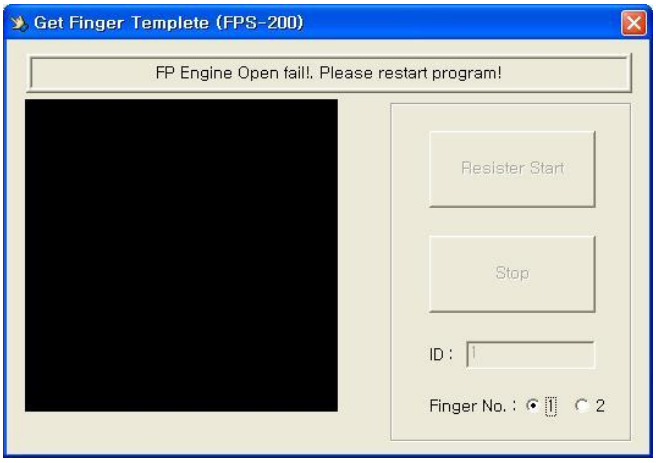
< Fig. 4-45 Database >

② Click 'Register Start' button after choosing number for enter fingerprint (Finger No.).



< Fig. 4-46 Port Open >

- Choose number of fingerprints using 'Finger No.' button.
- Click 'Register Start' then it starts scaning the fingerprint.
- If FPS-200 is not connected with PC or you have not installed the driver for FPS-200, then you see a window like the one below.

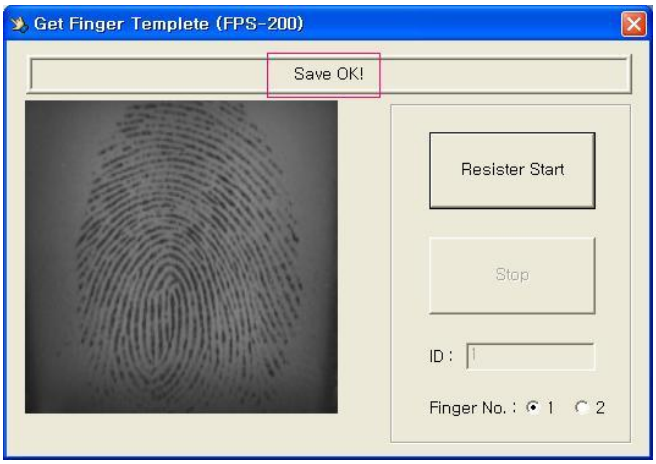


< Fig. 4-47 FPS-200 Open error>

③ - I When you enter one fingerprint.

< Fig. 4-48 Scanning Fingerprint Start>

- If you click 'Register Start' button, then you will see the window like the above.
- You must scan three times
- If you want to cancel when already in progress, click 'Stop' button.



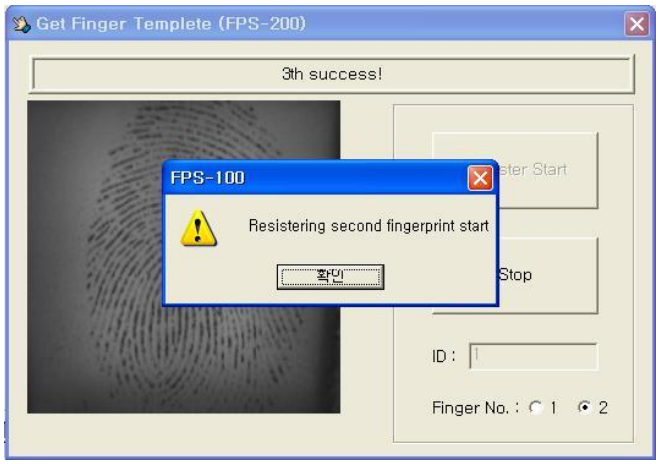
< Fig. 4-49 Complete Scanning Fingerprint >

- Once scanning is done, you will see the message 'Save OK'
- Click 'Save Ok' and fingerprint data is saved on DB.
- The DB file that has the fingerprint data is saved at 'WTSG-TAPWFingerTemplete' in the installation folder.
- If you want to send fingerprint data to controller, please see the 'User Send/Receive' (Page 15. 4-2-3 User Send/Receive).

③ -II When you enter two fingerprint.

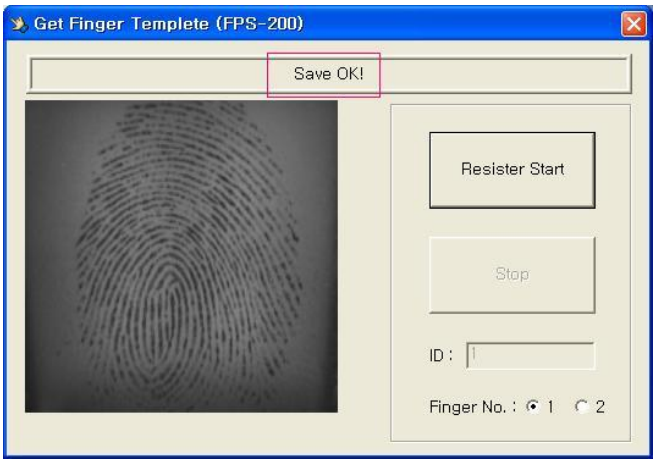
< Fig. 4-50 Scanning First Fingerprint >

- If you click 'Register Start' button, then you will see the window(Fig.4-50).
- Click 'OK' button and start scancing the first fingerprint.
- You must scan three times for each finger.
- If you want to cancel when already in progress, click 'Stop' button.



< Fig. 4-51 Scanning Second Fingerprint >

- Once scanning is complete, you will see the window (Fig.4-51).
- Click 'OK' button and start scanning the second fingerprint.
- You must scan three times.



< Fig. 4-52 Complete Scanning Fingerprint >

- Once the second fingerprint scanning is complete, you will see the message 'Save OK'.
- Click on 'Save Ok' and fingerprint data will be saved on DB.
- The DB file that has the fingerprint data is saved at 'WTSG-TAPWFingerTemplete' in the installation folder.
- If you want send fingerprint data to controller, please see the 'User Send/Receive' (Page 15. 4-2-3 User Send/Receive).