SIERRA ST8000

Integrated Security Access System

PROGRAMMING & USER MANUAL

SOFTWARE LICENSE AGREEMENT

Limited warranty: this material is provided strictly “as is”; Sierra Technology (M) Sdn Bhd disclaims all warranties if any kind, either express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

Liability: in no event will Sierra Technology (M) Sdn Bhd be liable for any damages, including any loss profits or other incidental or consequential damages arising out of the furnishing, performance and / or use of this material.

Information in this document is subject to change without prior notice.

Revision number: 2.1
Revision date for this manual is 21 June, 2010.

Table of contents

SIERRA ST8000 1
PROGRAMMING & USER MANUAL 1
Introduction 5
Setup 5
Quick Start 7
Database Menu 11
Event Type Settings 11
Bus 12
Controller Settings 13
Controller Setup 14
Door Setup 17
Antipassback and In Reader Location/Out Reader 19
Alarm System Setup 22
Time Set Settings 24
8.1 Functions 24
Time Zone Settings 25
Functions 27
Holiday 28
Holiday Settings 28
10.1 Functions 28
Access Level Settings 30
Card Holder Settings 31
Card Holder DB 32
User Defined Field Name 32
Department Settings 33
Job Title Settings 34
Parameter Settings 34
Password On 34
Auto Re-Index Database 34
Show Photo Online 34
Floor Plan Online 34
Printer Online 35
Card Validity Check 35
Auto Time Synchronisation 35
Auto Download Configuration 35
Warning Display Message 35
Hard Disk Monitoring Level 35
Customer Code List 36
System User Settings 36
Modify PIN 36
Menu Level 37
Menu Setup Settings 37
Configuration Settings 38
Reports Menu 41
Transaction Menu 41
Database Setting 43

Time Attendance 44
System User Log 44
Operation Menu 46
Door Release 46
Reset Controller 47
Security On & Security Off 49
Utilities Menu 50
Backup & Restore 50
Purge Log 51
Log Viewer 52
Change Password 52
Change Editor Password 53
Resource 53
Reindex DB 53
Verify Card 53
View Version 53
Find Card Holder 53
Schedule 53
ST TCP/IP 54
Logout & Quit 56
Graphical Floor Plan 56
Adding Floor Plan 56
Editing The Floor Plan 56
Trouble Shooting 58
Database Format 61
Card Holder's Database Format 61
Transaction Database Format 63
Naming Convention Tr*YYMMDD*.dbf 63
Possible Events 64
Appendix 1: Sierra Card Access System 65
Appendix 2: A Single Door Configuration 66
Appendix 3: Wiring Diagram For ST8000 Card Access System 67
Appendix 4: Wiring Diagram For ST8000-PCU to ST8000-PXS 67
Appendix 5: Wiring Diagram For ST-PR100 to ST8000-PXS 68
Appendix 6: ST8000 Configuration Settings 69
Appendix 7: ST8000 Features and version Differences 74
Appendix 8: Communication port setting for Windows 2000 / Windows XP 81
Appendix 9: Communication port setting for Windows 7 81
Appendix 10: Optional feature – UDP Link 83
Appendix 11: ST8000 Appendix – Sample Reports 84
Index 85

Introduction

We thank you for your fine choice of investing in a **Sierra ST8000 Security Access System**. The **ST8000** is one of our products release, offering impressive features and reliability. During the development of the **ST8000**, extra efforts were put in to ensure the **ST8000** would be user friendly yet powerful enough to provide the level of security demanded by you.

Furthermore, our Research & Development Team has equipped the **ST8000** with all the latest security features demanded in the industry. With our **ST8000**, your investment is secured as our products are designed to be technologically upgradeable, thus protecting it from being obsolete in years to come.

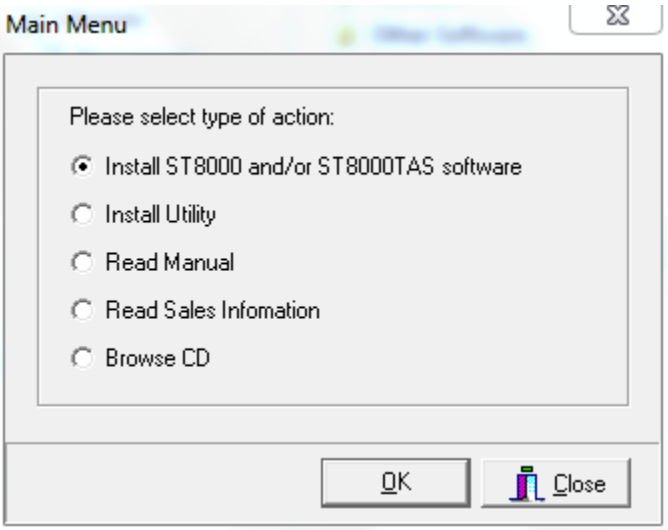
Once again, we thank you for your support and we are confident the **ST8000** will serve you well.

Setup

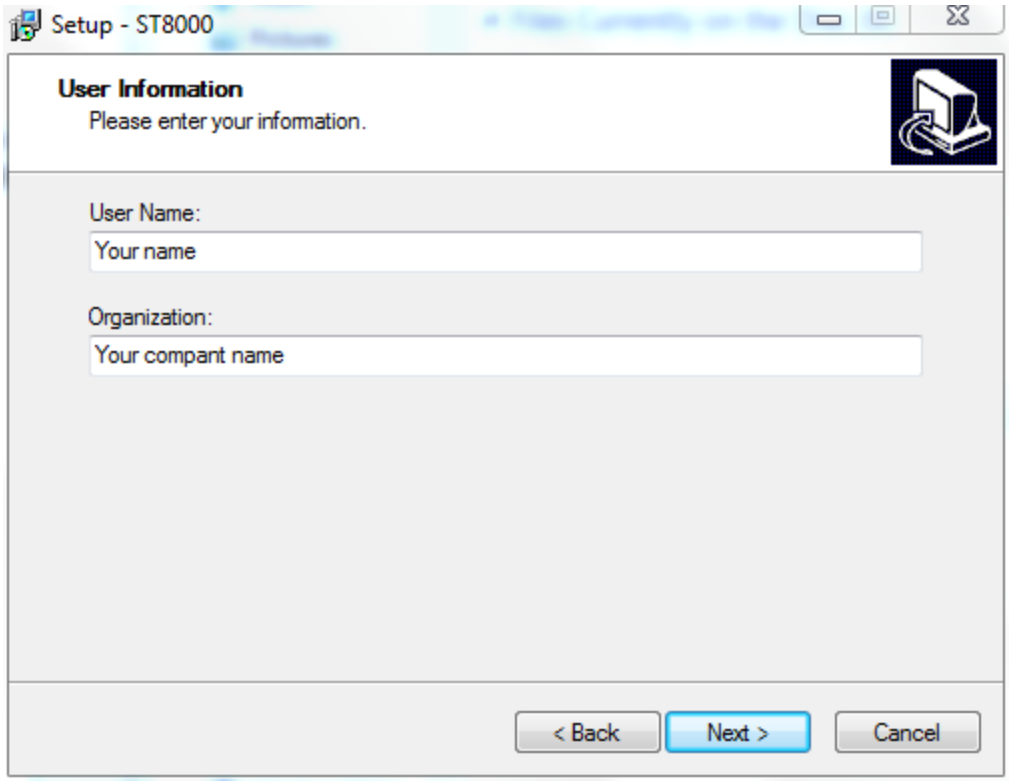
Before you start up the **ST8000** Software, double check all cabling has been terminated correctly. Only then you proceed to the following steps. The **ST8000** is designed as a user-friendly system. Therefore, you will be surprised how easy it is to setup the **ST8000**. Just follow the steps listed below:-

Insert Sierra CD into CD-Rom drive, wait for it to auto run the application setup file. You are now on your way as the program is now preparing InstallShield Wizard to guide you in your installation.

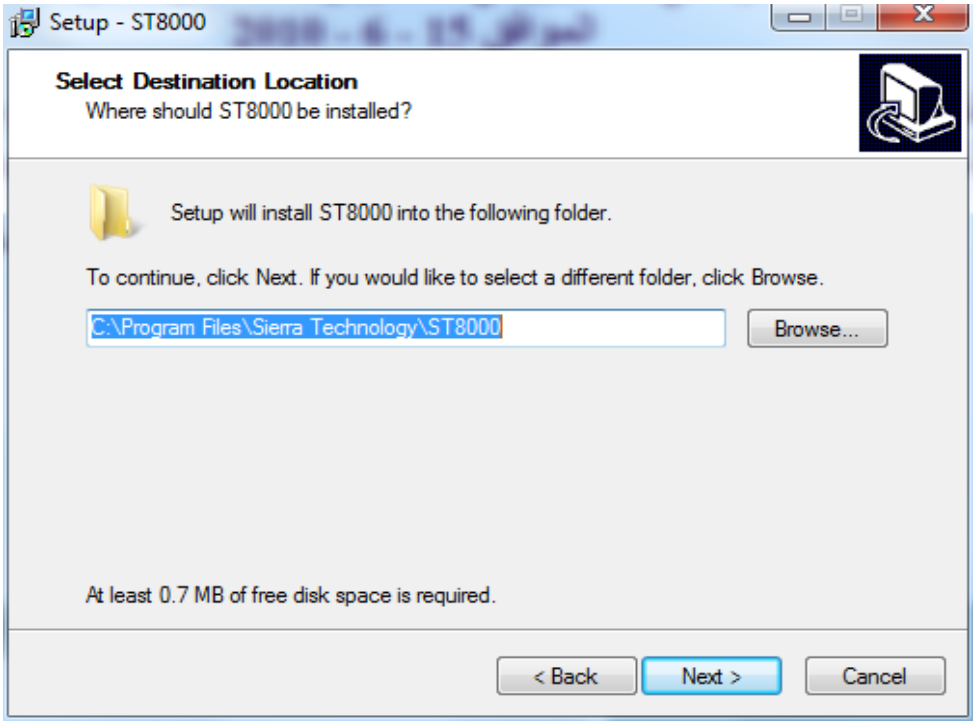
Welcome screen: Read the instructions and click the on **NEXT** button once.



User Information screen: Type in your name and company name. When finish click **NEXT.**



Choose Destination Location screen: Read the instructions and click on the **NEXT** button once if you do not wish to change anything.



Select Program Folder screen: You may change your program folder name but we suggest you accept our default settings. Click on the **NEXT** button once to proceed.
Start Copying Files screen: Click on the **NEXT** button once to start copying the program files into your PC.

Setup Completed screen: Click on the **FINISH** button.

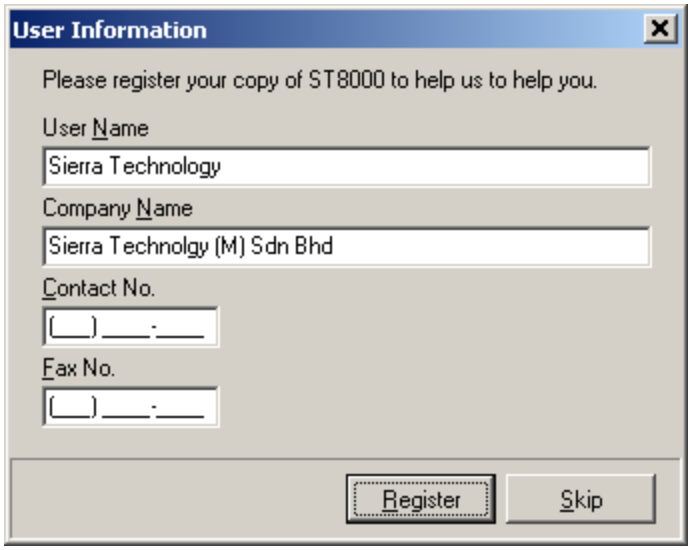
Quick Start

Close all screens and click on the **START** button to locate “Programs”. You will now find **“ST8000”** icon created. Double click this icon. If installed accordingly, you will now see the **ST8000** main menu.

If you are starting the **ST8000** program for the first time, the prompt will ask you if you want to install the security key. Press ‘**OK**’ and restart the **ST8000** program again. It will then prompt you before creating the databases. Answer ‘**OK**’ to all the prompts.

On first run, you will be required to register, and your registration information will be printed on all the reports produced.

The following form will help us to contact you if you need help from us. Kindly fill up the form and click on Register button. Click Skip button will leave blank to Contact No & Fax No text field.



Then, go to **DATABASE** menu and select **BUS.** Press **EDIT** and select the correct communication type, either by network or serial, in which the **ST8000** controller is connected to.

Example for a system up to 64 doors by using Serial connection type: -
Bus No : Bus 0
Comm Port : Com 1 or Com 2
The baud rate should be at 9600.

Go to **DATABASE** menu and select **CONTROLLER**. You will now be presented with the **VIEW CONTROLLER LIST** form. Click **ADD** then **ADD CONTROLLER LIST** form will appear. You can configure all the doors in the system here. There are three folders available:

- Controller Setup
- Door Setup
- Alarm System Setup

Controller Setup

Controller Name	: Front Door
Controller Description	: Near front door
Serial Address	: Bus No.: 00
	Unit No.: 00
Installed	: Yes
Fire Monitor	: No
Lockout Feature	: No
Lockout Duration	: 0
Antipassback Duration	: 0
Tamper Switch	: Enable

Door Setup

Door Release Time	: 5

Door Open Time (Sec.)	: 10
Door Close Time (Sec.)	: 00
Auto Lock Release TZ	: 00
Card + Pin TZ	: 00
Pin TZ	: 00
Antipassback TZ	: 00
No Access TZ	: 00
Push Button Enable TZ	: 99
Alarm Relay	: Disabled
In Reader Location	: 0
Out Reader Location	: 1
Auto Pin No.	: -999

Alarm System Setup

Alarm System	: No
Alarm Arm Time Zone	: 00
Alarm Sound Time (Min)	: 5
Alarm Arm PIN	: 111111
Alarm Point Description	: Keep blank

Proceed to **DATABASE** menu and select **CARDHOLDER** then **CARDHOLDER DB.** You will now see the **View Card Holder List** screen. Click on **ADD** to add new cardholder database into the system. We recommend for the moment, you only enter the card number and staff name. When finish click on **CLOSE** button.

Note:
If your pc is running on Windows 2000 or Windows XP and if, you encounter with the communication port problem i.e. controller down, then you will need to change the Transmit Buffer for the communication port. Refer appendix 8 on how to change this setting.

Congratulations! Your ST8000 is now in operation.

(**Tip!** *If anytime during the setup procedure the alarm is activated to indicate an alarm or violation, press the **F9** key to acknowledge and silenced the buzzer.*)

Important!
This quick start guide only defines the general settings of the **ST8000**. To complete the database for your cardholders and enjoy its full power, information such as Access Levels, Time Zones, Holidays, Departments, and Job Titles must be planned out and created later.

NOTE: We strongly recommend you read and understand the whole manual to enjoy the full benefits the **ST8000** can offer.

Database Menu

The following settings are included in this menu: -

Event Type Settings

Event types are classified into status, warning, alarm and output. The system provides various standard event descriptions and normal settings for your convenience. To search for any event types, click on **FIND** button. However to change any event types, use the **EDIT** function.

- Status: Shown on screen as green letters.
- Warning: Shown as blue letters on screen with a single beep
- Alarm: Shown as red color letters and audible alarm
- Output: Not available – Future Expansion.

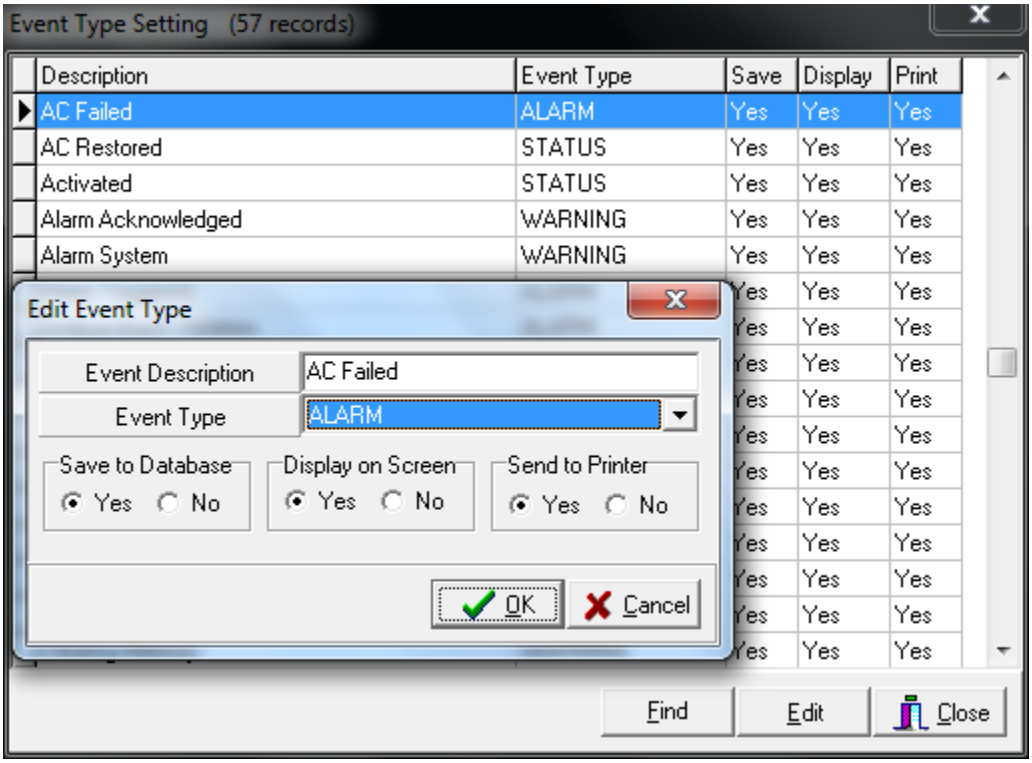
For example: Presently, the **AC Failed** event is an ALARM type event. When it occurred, the ST8000 software will produce an audible alarm siren and the event will be shown on the Online Transaction and Online Alarm Screen. To change its event type to Warning type,

1. Select the **AC Failed** event,
2. Click **Edit** button
3. Change its event type to Warning
4. Click **OK** to accept the new event type.
5. Click **Close** to quit.

Save to Database (Yes/No)
By default, system will record/save all event transaction to the system's database whenever those event occurs. The system will not record a specified event into the system's database if you set this function for the event to No. Thus, the event will not shown in the backup transaction files and Transaction Report.

Display on Screen (Yes/No)
This is where you define whether to display a specified event on Online Transaction screen whenever the event occurs. For example, if 'Door Closed' event is set to No, then the system will not displays 'Door Closed' event on the screen when it happens.

Send to Printer (Yes/No)
This feature allows you to choose whether you want to print out a specified event transaction whenever the event occurs. The default setting is Yes.
Note: This feature will not work, if the Printer Online function in the Parameter list is set to No.



Bus

This setting is to establish communication between the hardware part of the card access system and the computer i.e. software application.

You can select the communication type of controller, either by serial or network.

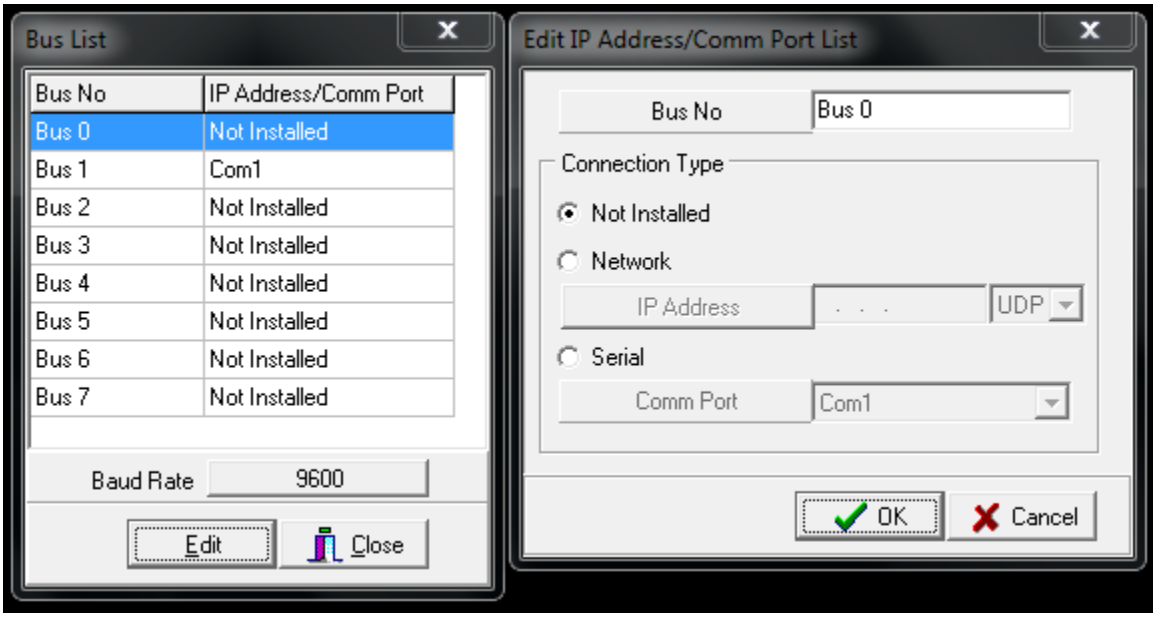
Network

Select Network option, if you are using Ethernet controller, which is, using IP address. Enter the IP address or simply click on button labeled IP Address, it will bring up a form for auto detecting, getting and changing setting for the Ethernet controller, and from there, click Assign IP to Controller button to assign the IP address to the relevant controller. Refer section 21.12 for more details.
Communication protocol UDP/TCP : Refer to Connection types in section 7.1 for description.

Serial

If you connect the **PCI** into Com1, then you should enable Com1 at Bus 0 in the bus setting. Bus Setting should be programmed in the proper sequence.

Each communication port can accommodate up to sixteen (16) controllers using a RS485 bus. A maximum of eight (8) RS485 buses can be installed into a single system using communication port expanders for large installations. Use the maximum number of controllers on to one bus before selecting the next bus. The baud rate currently used is 9600 bps. Each comm port must be connected to a unique Bus. Each bus on the other hand can be connected to a maximum of 16 controllers.

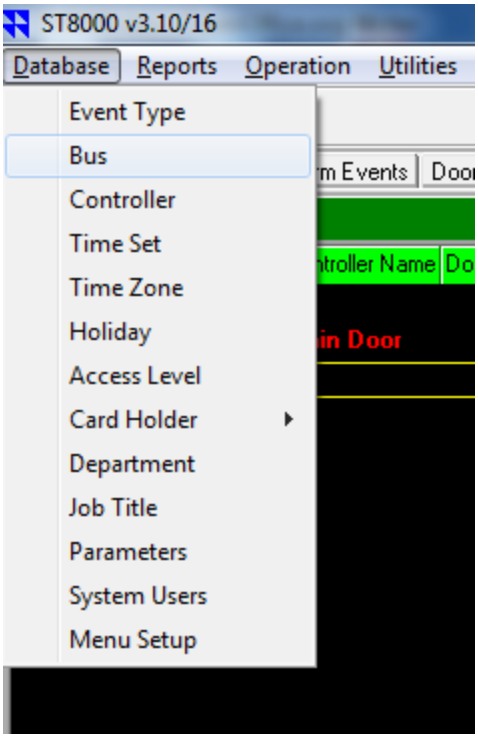


Click the **EDIT** key to add, edit or change any data. **CLOSE** when finish.

Tips: If Com1 or an IP address is set to Bus 0, then in the controller setup, the Address Setting for Bus 'bb' is set to '00'. If Com1 or an IP address is set to Bus 1, then in the controller setup, the Address Setting for Bus 'bb' is set to '01'.

Controller Settings

This is where you setup your door settings. There are three folders available:



Important:
Controller adding is depend on the HASP key or Rockey, if the HASP/Rockey can just support 2 controllers then software application will only communicate with the FIRST two controller only. For example, if your HASP/Rockey is programmed to support 3 controllers only, then the 4th controller (that added under Add Controller List form) will not be polled.

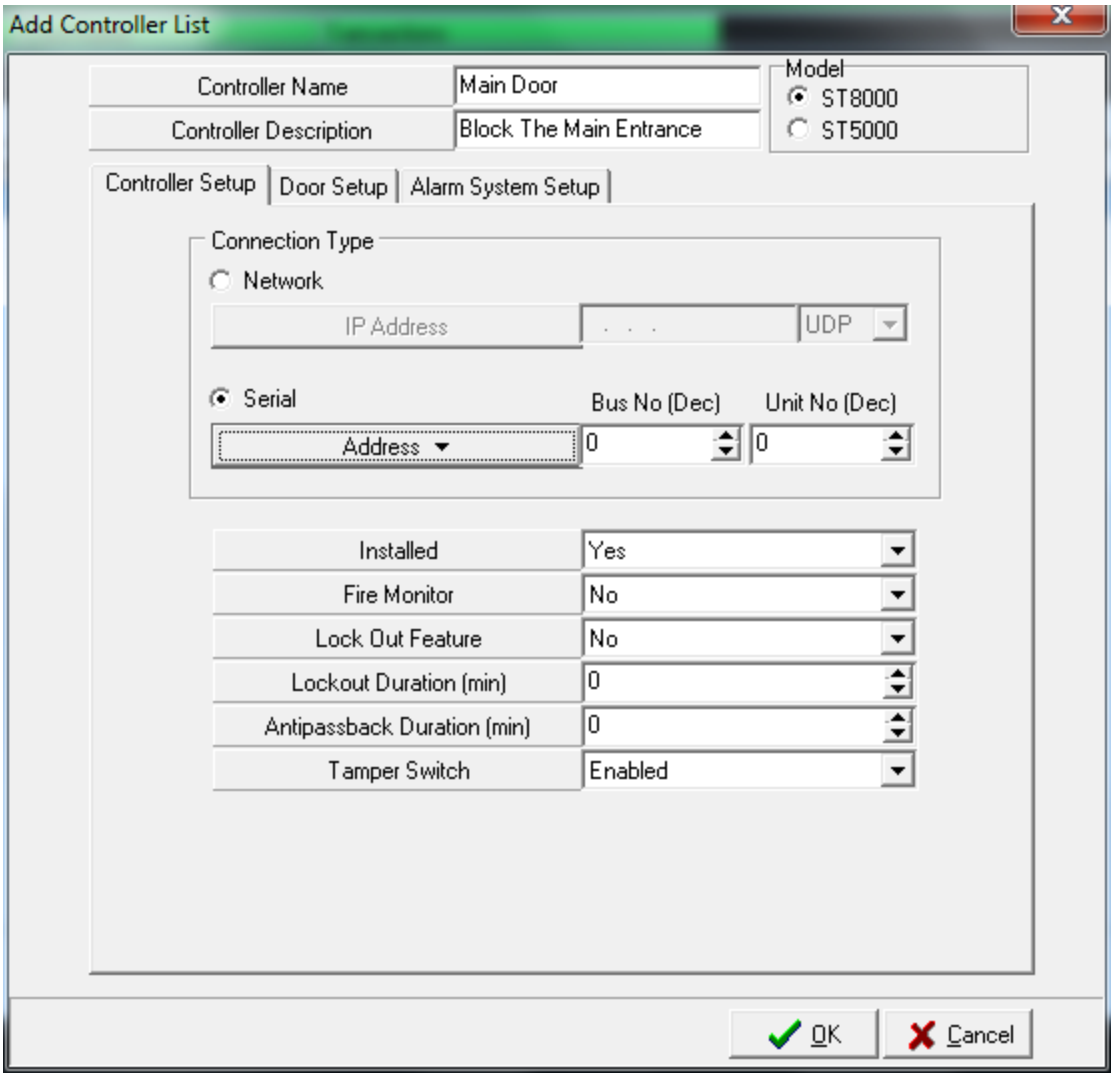
- Controller Setup
- Door Setup
- Alarm System Setup

Controller Setup

Controller Name	: 12 characters	: To describe controller reader name.
Controller Description	: 16 characters	: To display reader LCD message.
Connection Type		
- Network	: IP Address	
- Serial	: Communication Port	
Installed	: Yes or No	: Defines the status of each controller.
Fire Monitor	: Yes or No	: Set to Yes if linked to Fire Alarm Panel.
Lock Out Feature	: Yes or No	: If Yes, cardholder will be lockout after 3 invalid attempts.
Lockout Duration	: 0 – 999 minutes	: The duration in which the security system will not allows entry to a cardholder as a result of the above feature. This setting will only be applicable if the Lockout Feature is on.
Antipassback Duration	: 0 – 999 minutes	: The duration in which the security system will not allows entry to a cardholder due to violation of the antipassback rule.
Tamper Switch	: Enabled/Disabled	: If enabled, a message will notify the system user if the controllers are tampered without authorisation.

Select each input box and do the necessary changes accordingly.

Controller Name - this entry allows you to label the controller for easy reference.



Controller Description - this entry allows you to label the controller location for easy reference. The controller description text will be displayed on the reader display wordings (maximum 16 characters).

Connection type:
Network – This function is applied for Ethernet controller. Enter the IP address or simply click on button labeled IP Address, it will bring up a form for auto detecting, getting and changing setting for the Ethernet controller, and from there, you can easily assign the IP address to the relevant controller by click Assign IP to Controller button. Refer section 21.12 for more details.

UDP/ TCP Communication protocol - There are two types of communication protocol used for Ethernet Controller i.e. UDP or TCP. Choose TCP if the Ethernet Controller is

set to TCP and vice-versa.
The communication protocol of software and Ethernet Controller must use the same protocol for data transmission between PC and Ethernet Controller. If you are changing the communication protocol for a specific Ethernet Controller in the software (i.e. under section Database menu > Controller – Network connection type) then you have to change the Ethernet Controller's communication protocol type.
To change the communication protocol for Ethernet Controller, Click on the IP address button – Choose Properties, press OK. Click Network tab, set the transport protocol for Ethernet Controller. Press OK.
TCP communication protocol type is recommended for more reliability.

Address – the address of controller is separated into two terms, which are 'bb' and 'uu'. The term 'bb' means the Bus usually '00' for the first one. The term 'uu' means the controller unit number, which can be shown in decimal or hexadecimal format. Unit that shown in Decimal number will starts from '00' for the first controller to '15' for the sixteenth controller. However, Unit shown in Hexadecimal number will starts from '0x0' for the first controller to '0xF' for the sixteenth controller. If you have more than sixteen controllers then the setting for the seventeenth controller will be, 'bb' is '01' and the controller unit number 'uu' is '00' (decimal) or '0x1' (Hexadecimal) again. Each controller MUST have a unique address setting.

Installed – this setting is to turn on or off the communication from the pc to this controller.

Fire Monitor – this is to monitor the fire alarm input from the Fire Alarm Panel, the installer should set this input setting. When the fire alarm input is triggered, the controller will release this door if you set the "Installed" and "Fire Monitor" to YES for this controller.
[Note: To release all the doors at any bus lines, you must set the feature of "Installed" and "Fire Monitor" to YES to all the controllers and the software must always be running. This feature will not work if pc is offline].

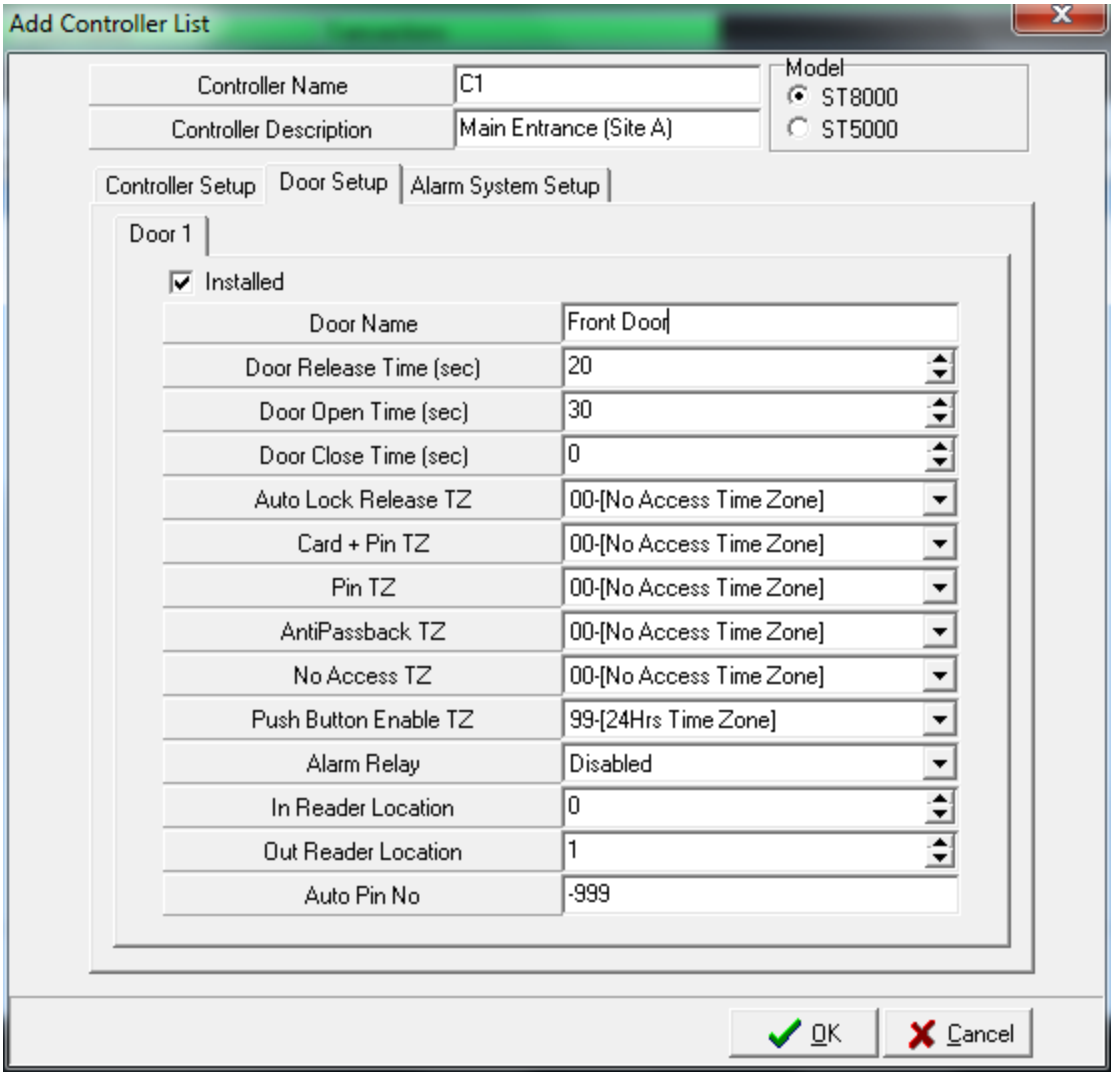
Lock Out Feature – if the cardholder has violated 3 successive invalid Card PIN or Antipassback violation, the card will be lock out.

Lockout Duration – this feature allows you to have an auto reset of the Lockout Feature after this preset duration. The cardholder will able to use the card after this lockout duration. The default '0' means forever lockout until somebody resets this card at the card database.

Antipassback Duration – this feature ties in with the Antipassback feature in the Door Setup. This feature is similar to the Lockout Duration feature. It auto resets the Antipassback Feature after this preset duration. The default '0' means forever antipassback violation until somebody resets this card at the card database.

Tamper Switch – this feature is to enable the tamper located inside the reader. This is to ensure that if the reader is tampered with, an alarm will trigger in the software (only if the event type for the Tamper Alarm is set to Alarm).

Door Setup



Door Release Time	: 00 – 99 seconds	(time in second for door to be in unlock/release mode)
Door Open Time	: 00 – 99 seconds	(time in second for door to be in open mode)
Door Close Time	: 00 – 99 seconds	(time in second for door to be in close mode)
Auto Lock Release TZ	: 00 – 99 sets	(time zone for door to be in unlock mode)

Card + Pin TZ	: 00 – 99 sets	(time zone for card and pin mode to be used)
Pin TZ	: 00 – 99 sets	(time zone for pin only mode to be used)
Anti-passback TZ	: 00 – 99 sets	(time zone for antipassback mode)
No Access TZ	: 00 – 99 sets	(time zone for no access)
Push Button Enable TZ	: 00 – 99 sets	(time zone for exit push button to be used)
Tamper Switch	: Enabled/Disabled	: If enabled, a message will notify the system user if the controllers are tampered without authorisation.
Alarm Relay	: Enabled/Disabled	: Set to Enabled it if you are using the alarm siren
In Reader Location	: 0	
Out Reader Location	: 1	
Auto Pin No.	: [-999]	: (for use with Pin TZ only. Default PIN is 1234)

Features:

Door Release Time – The door will remain unlock for this preset duration of time as long as the door is not open.

Door Open Time – Once the door is open and remains open, the reader will wait for this preset duration of time before starts to beep and sends a message to the pc saying that the door is left open.

Door Close Time – to delay the detection of door force open for X secs. This is for swinging door with drop-bolt. Once the door is opened, the drop-bolt will be energised immediately. The drop-bolt will only be locked when it detects that the door is aligned properly. The swinging door will cause the controller to detect multiple door opens & closes when the door is closing. This setting prevents the detecting of the door force open after the very first detection of the door close. Door force open will be detected after the door close time has expired. If the door does not swing, it will actually be locked once the controller detects that the door is closed. Note:This setting has no effects on ST8000 firmware version below 2.06.

Auto Lock Release TZ – When this feature is activated the door will automatically unlock following the preset time zone.

Card And Pin TZ – When this feature is activated the reader will request the cardholder for pin identification upon flashing his/her card and therefore provides a higher level of security.

PIN TZ – When this feature is enable, the user only needs to know the 4-digit password to gain entry without flashing any card. The 4-digit no is set below at the

Auto Pin No. When this feature is disable, the **Auto Pin No** will not work.

Antipassback TZ – Please refer to **7.3**.

No Access TZ – When this feature is activated, it has the highest priority and will bar the door from opening. No user may enter or exit through this door.

Push Button Enable TZ – This feature enables you to control the activation of push button. If the feature is disabled, the remote door release feature will not work.

Alarm Relay – this feature is used for a local door siren that is if any of the following events occurs the siren will sound. The combination of these events can be selected as follows.
When tampered.
When force open and tampered.
When force open, left open and tampered.

In Reader and Out Reader Location – this feature ties in with the antipassback feature. It decides the grouping of the reader for each location. Each group must be within the same area and different areas will have different group number. This feature can be further explained in Diagram 1 of 7.3.

Auto Pin No – This is the 4-digit PIN number required to gain access. If you set the **Auto Pin No** to 9999, the system will allow access to preprogrammed cardholder whose numbers starts from 99**** to access by entering the last 4-digit of their card number. The default setting is -999, which follows a default code number of 1234.
Example
If a cardholder's badgeID is 991122, the cardholder only needs to enter 1122 at the keypad to gain access.

Antipassback and In Reader Location/Out Reader

Antipassback is a security feature. To enabled it, first of all the **In Reader** and **Out Reader** number must be set. The **In Reader** refers to the controller where the user needs to validate his/her card to gain access, whereas the **Out Reader** is the number for the controller, where the user again must validate his/her card to go out.

The feature behind this security is that once a user has entered a ST8000 security accessed area by validating his/her card at the controller, the same user at one time or another must leave the area and validates his/her card, not necessary through the same way.

The rule of this feature says that a user cannot go into an area and not go out. Otherwise a **Passback Violation** has incurred and the user will be lockout for the duration of the **Antipassback Duration** settings. This is to prevent card holders from passing their card to unauthorised users once they have gained accessed to a certain area and allowing these unauthorised users to accessed other card security accessed area.

Please refer to **Diagram 1**, for the example of a Global Antipassback.

Example

Let say the user is at position **X** and wants to go to **Area 2**. He first flashes his card at reader **R1** to gain entry to **Area 1**. His card is now set to '**1**'. This number follows the opposite* reader location number (If the location of the exit reader R1 is '**2**' then the card will set to '**2**'). Then he flashes his card at reader **R2** to gain entry to **Area 2**. His card is now set to '**2**'.

To return back to **Area 0**, he flashes his card at reader **R3** to exit from **Area 2**. His card is now set to '**1**'. To return to **Area 0**, he flashes his card at reader **R4.** His card is now set to '**0**'. Therefore he can enter **Area 1** again without violating the antipassback.

Lets say if he tail follows another person into **Area 1** without flashing his card, he will create an antipassback violation when the tries to return back to **Area 0** or enter **Area 2**. This is because his card was previously set to '**0**' and all reader location in **Area 1** are location '**1**'. The condition is that the reader location number must be equal to the number set in the card.

* opposite of In Reader is the Exit Reader and vice-versa

Note: For the Global Antipassback ST8000 software MUST be running at all times. Extra cares when setting the **In/Out Reader** Number to avoid unnecessary **Antipassback Lockout**.

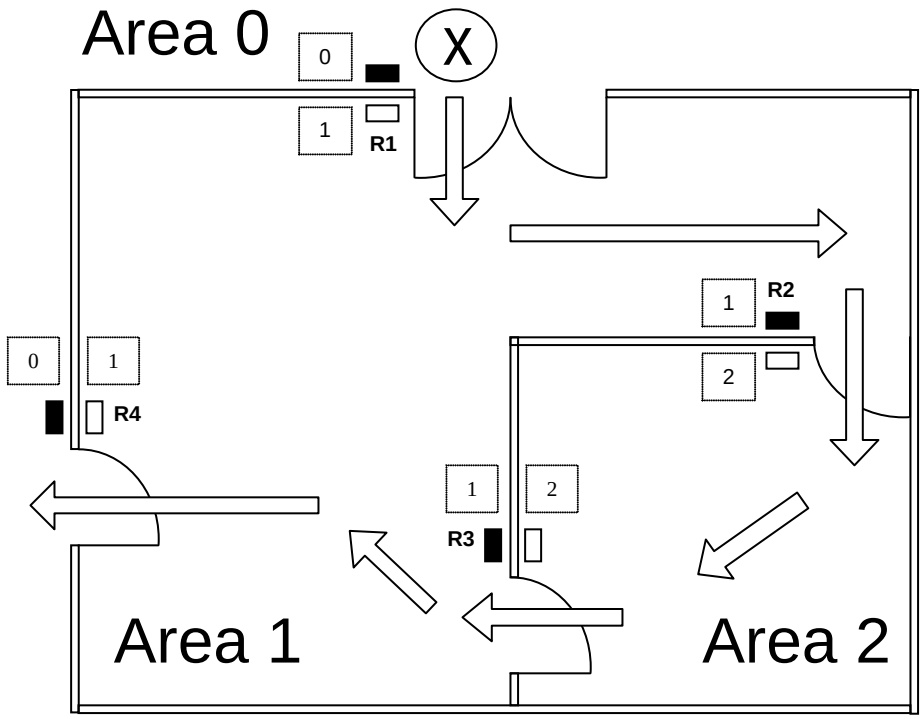
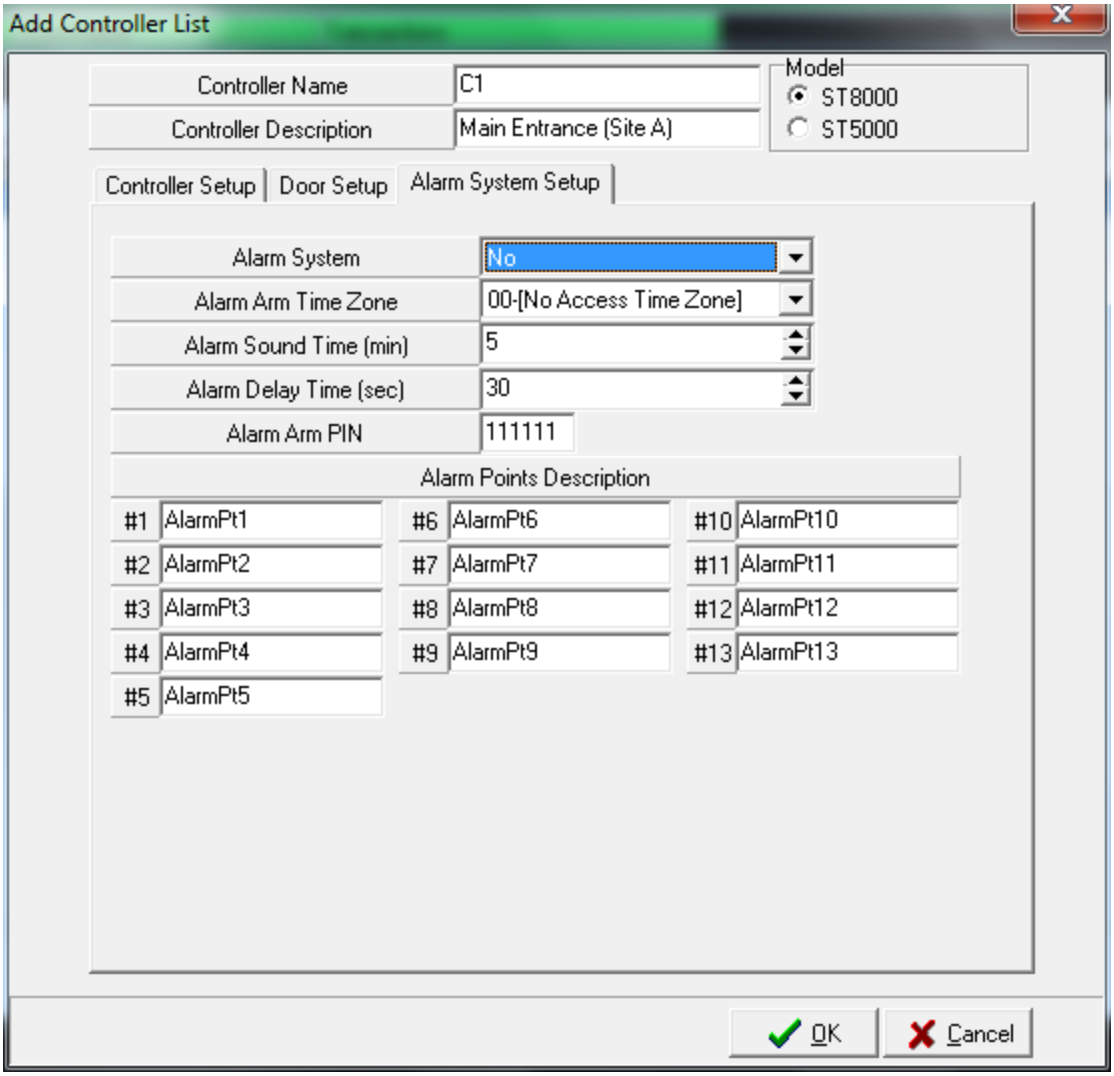


Diagram 1

Legend

X	Beginning Position
▮	In Reader
▯	Out Reader
0	Reader Location Number
⇨	Route

Alarm System Setup



Alarm System : No. Yes if any input alarm is required.
Alarm Arm Time Zone : 00 – 99 sets of time zone
Alarm Sound Time (Min) : 0 – 15 minutes
Alarm Delay Time (Sec) : 0 – 99 seconds
Alarm Arm PIN : 6 digits
Alarm Point Description : 4 alarm zones if ST8000-PCU available and up to 13 zones with expansion board.

Alarm Arm Time Zone – The system is able to automatically arm and disarm the alarm system following the preset time zone.

Alarm Sound Time (min) – When an alarm triggers the siren will sound and this is the duration.

Alarm Delay Time (sec) – This setting is to delay the triggers time of alarm. Say, if the alarm is triggered, it will wait for this duration before to trigger the alarm. Set the alarm delay time duration to 0 will disable this function.

Alarm Arm PIN – This is a 6-digit code that can be changed at any time. This code is used at the reader keypad to arm or disarm the alarm system manually. You need to press the '#' key before entering the password.

Alarm Point Description – This is where you can label the alarm points. Any triggered alarm this label will appear on the online-screen.

Time Set Settings

Time Set enables you to define the period to activation of the operation of a certain feature. Each time set has three intervals for flexibility. These setting works hand in hand with the **Time Zone setting (9.0)**.

8.1 Functions

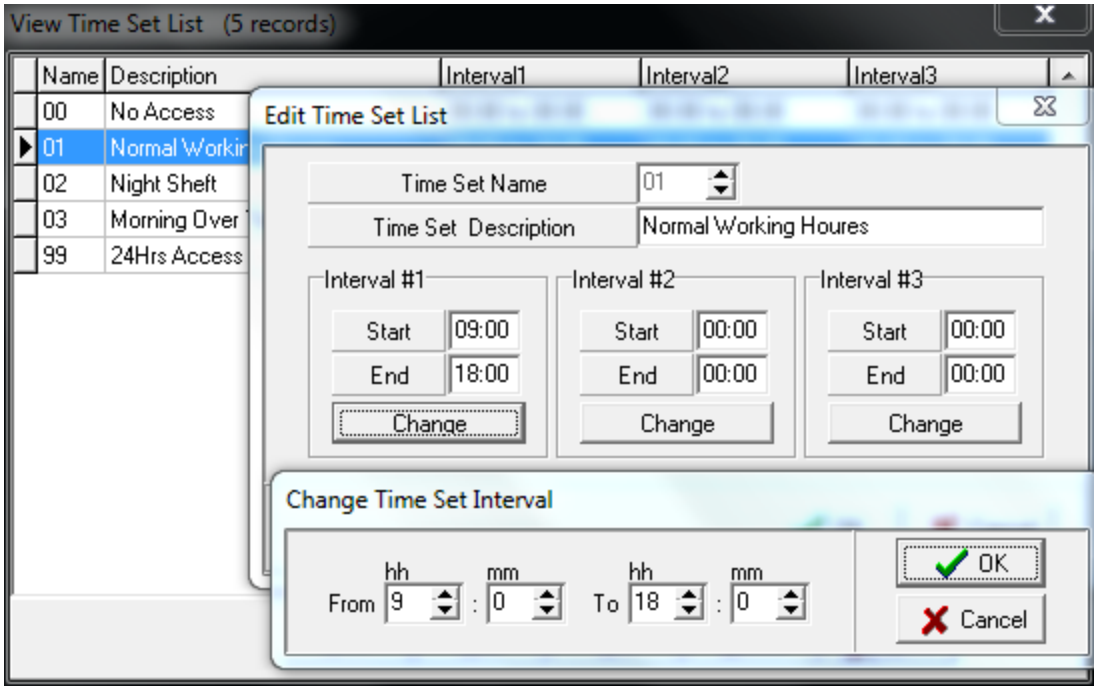
To add new Time Set, Click **ADD** button. Type in the Time set Name and Description.

Time Set Name : 98 time sets from 1 to 98
Time Set Description : User defines 30 character description

Click on the **Change** button on the intervals required and continues to change the hours (hh) and minutes (mm). Click the **OK** button when finished when done. The hours (hh) must be in 24hours format.

- To edit an existing Time Set, select the Time Set that you need to edit, then click **EDIT** button. The setting is the same as the **ADD** settings, except you cannot change the Time Set name.
- To delete a Time Set, select the Time Set to delete, then click **DELETE** button.
- To find a Time Set, click **FIND** button.

Note: **00** (No access) and **99** (24 hour Access) are ST8000 System default settings; any attempts to **Edit** or **Delete** them will generate an error message.



An example of a typical Time setting: -

	Start	End
Interval #1	08:00	10:30
Interval #2	10:45	12:30
Interval #3	13:30	17:30

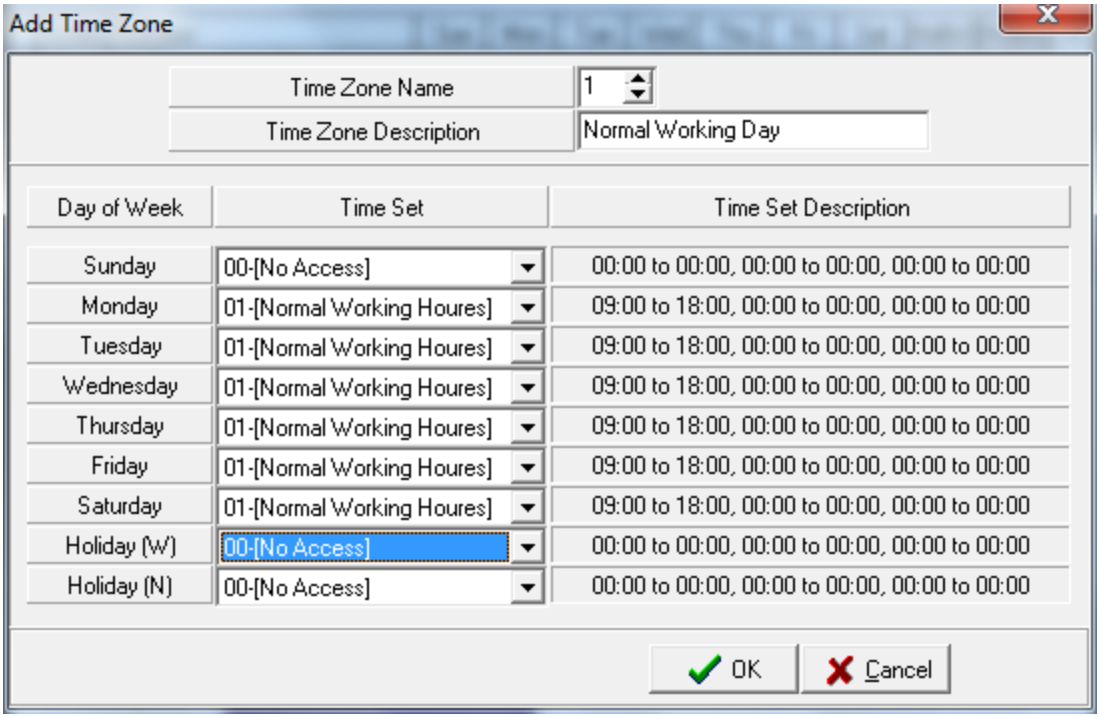
There are three intervals available for you to program. You can choose to program for one interval only or for all three intervals. The breaks in between the intervals will disable the feature that is program to.

Time Zone Settings

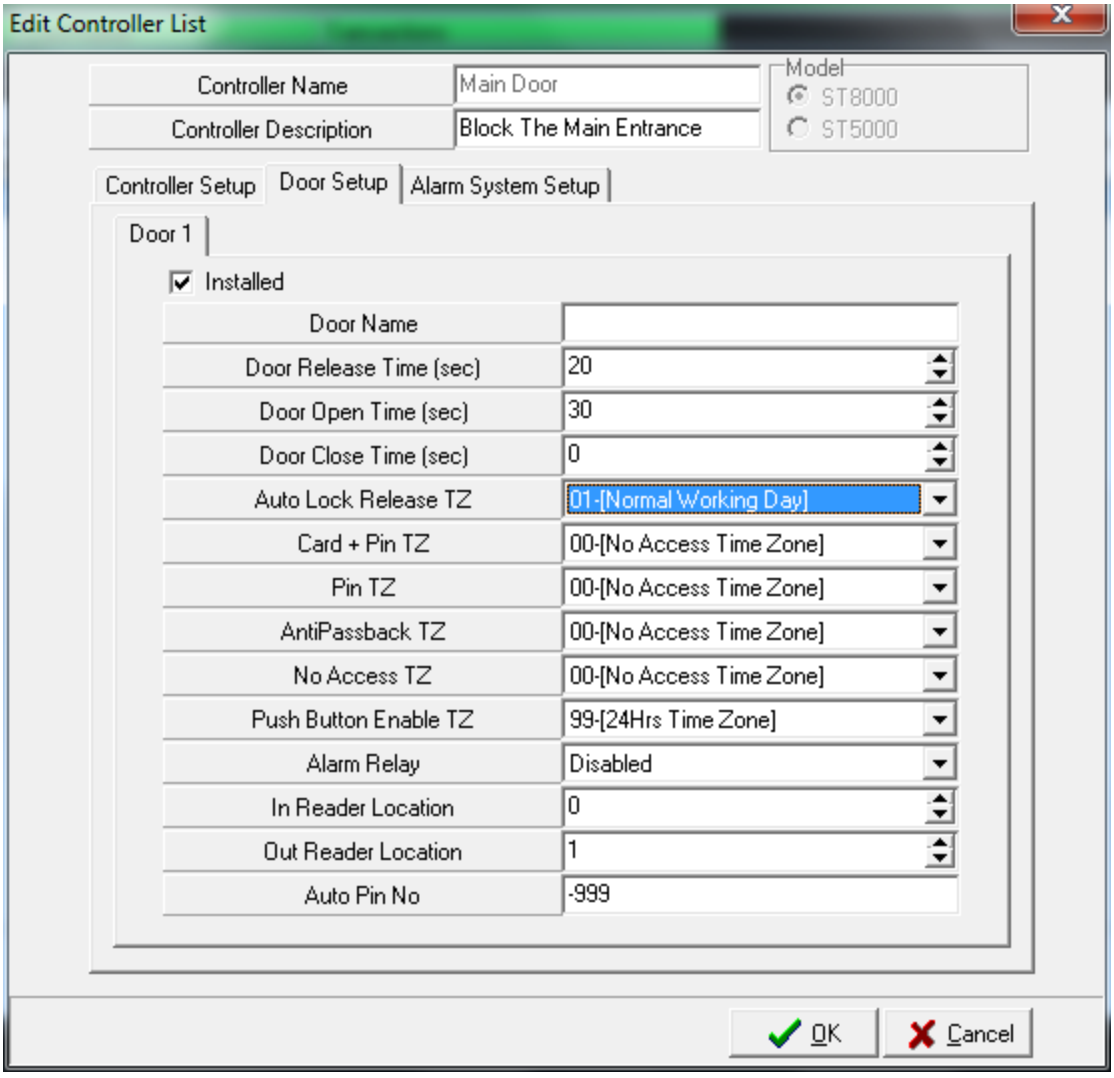
Time Zone is a setting to enable any feature following a set of Time Sets in a weekly routine. Example, you are able to control the access of cardholders for each day of the week in your own unique pattern. The ST8000 provides you with 98 user defined time zone patterns. The system has two default Time Zones: **00 (No access Time Zone) and 99 (24hrs Time Zone)**.

Example
With reference to the **Add Zone Setting** window, a typical **Time Zone Setting** to enable a feature 9am to 5pm, Monday to Friday and 9am to 1pm on Saturday.

Example



To enable a Card + PIN feature following the previous preset Time Zone, just select the Normal Working Hours Time Zone.



Functions

To add a Time Zone, click **ADD** button. Type in a Time Zone name and Description

Time Zone Name : Enter 1-98
Time Zone Description : User defines 30 character description

Set the time set for every day of the week. The default setting is **00** (**No Access**) or disable, therefore any particular day that you did not do settings; the System will disable the feature for the whole day. The Time Sets options are what you set earlier in the **Time Set Settings**. The **Time Set Description** will show the actual time settings of a particular Time Set that you have chosen.

To edit an existing Time Zone, select a Time Zone, then click **EDIT** button. The setting is the same as the **ADD** settings, except you cannot change the Time Set name.
To delete a Time Zone, select a Time Zone, then click **DELETE** button.
To find a Time Zone, click on **FIND** button.

Note: **00** (No access) and **99** (24 hour Access) are ST8000 System default settings, any attempts to **Edit** or **Delete** them will generate an error message.

Holiday

The ST8000 has 50 holiday settings. The system will overwrite the original time set setting for the particular day if its detected the particular day is fall on a holiday(s). (Refer to **10.0** – **Holiday Settings**).

Holiday Settings

Holiday Types

There are 2 types of holiday, **Working (W)** and **Non-Working (N)**. These 2 features allow you to change the time setting for the particular working day/s should it falls on a holiday/s. During working holiday, you might want to have a shorter **Time Set** instead of the normal full working hours or if it's a non-working holiday and you do not wish any of your staff to be in the office. For example, if Monday is a working holiday, the **Time Set** from the **Holiday (W)** will automatically overwrites the Monday's original **Time Set** and if you have set 00 for **Holiday [N]**, no one will be allow access on a non-working holiday, regardless of what the **Time Set** for the particular day is.

Important! You must create your Time Sets accordingly before you can implement the next step.

Holiday Consistency

Yearly Holiday, if tick, means system will treat the date that you set in Holiday setting as holiday for every year, whereas **Non-Yearly** Holiday means system will only treat the defined holiday for the specified year. For example, if i defined date 01/01 as **Yearly** holiday, then the system will treat 01/01 in every year as Holiday. If **Non Yearly** is selected and is set to year 2010, then the system will only treat the date of 01/01/2010 as holiday.

Tips: - Use **Yearly** if the defined holiday is constant in every year.
- Use **Non Yearly** for the dynamic holiday e.g. Hari Raya Puasa holiday.

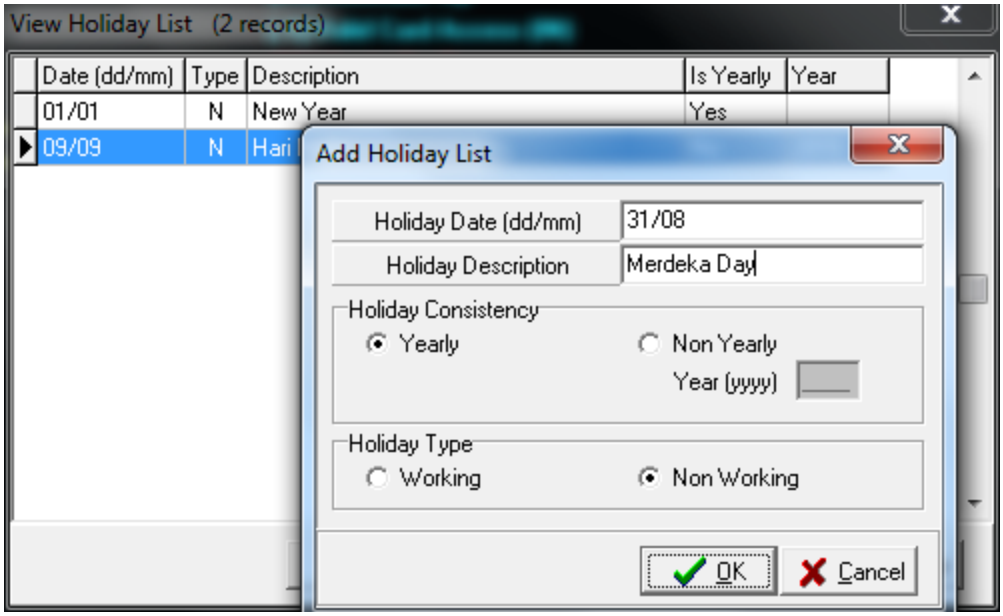
10.1 Functions

To add new Holiday List, Click **ADD** button. Type in the Holiday Date and Description.

Holiday Date	: **Day** (2 digit) / **Month** (2 Digit)
Time Set Description	: User defines 30 character description
Holiday Consistency	: Yearly or Non Yearly
Holiday Type	: Working or Non Working

Click the **OK** button when finished when done.

- To edit an existing Holiday List, select the Holiday record that you need to edit, then click **EDIT** button. The setting is the same as the **ADD** settings, except you cannot change the Holiday Date.
- To delete a Holiday record, select the record to delete, then click **DELETE** button.
- To find a Holiday record, click on **FIND** button.



Example
The Merdeka Day for year 2000 falls on a Thursday (weekday). If you set the Merdeka Day on the Holiday Setting and select it as a **Non-Working** Holiday, all the features on this day will follow the **Holiday(N) Time Zone**
and select it as **Yearly** Holiday, the system will treat 31/08 in every year as Holiday and follow the **Holiday(N) Time Zone** setting.

For the **Time Zone** example which enabled the Card + PIN mode on the times 9am to 5pm, from Mondays to Fridays and 9am to 1pm on Saturday, will be disabled on the preset Merdeka Day, as the Time Zone for the non-working holiday is '**00**' **No Access** or Off during all times.

Notes:

- If you did not set any of holidays in the Holiday Settings, the Time Zone for Holiday(W) and Holiday(N) will never be enable.
- During start up, system will automatically loads the Holiday settings to controller to update its records. However, it does not happen every time when the software is started, else it will be annoying. Hence, it was set to load only when the software is first time launch and, every year if software detects year has changed i.e. every year. To abort this operation, press F5.

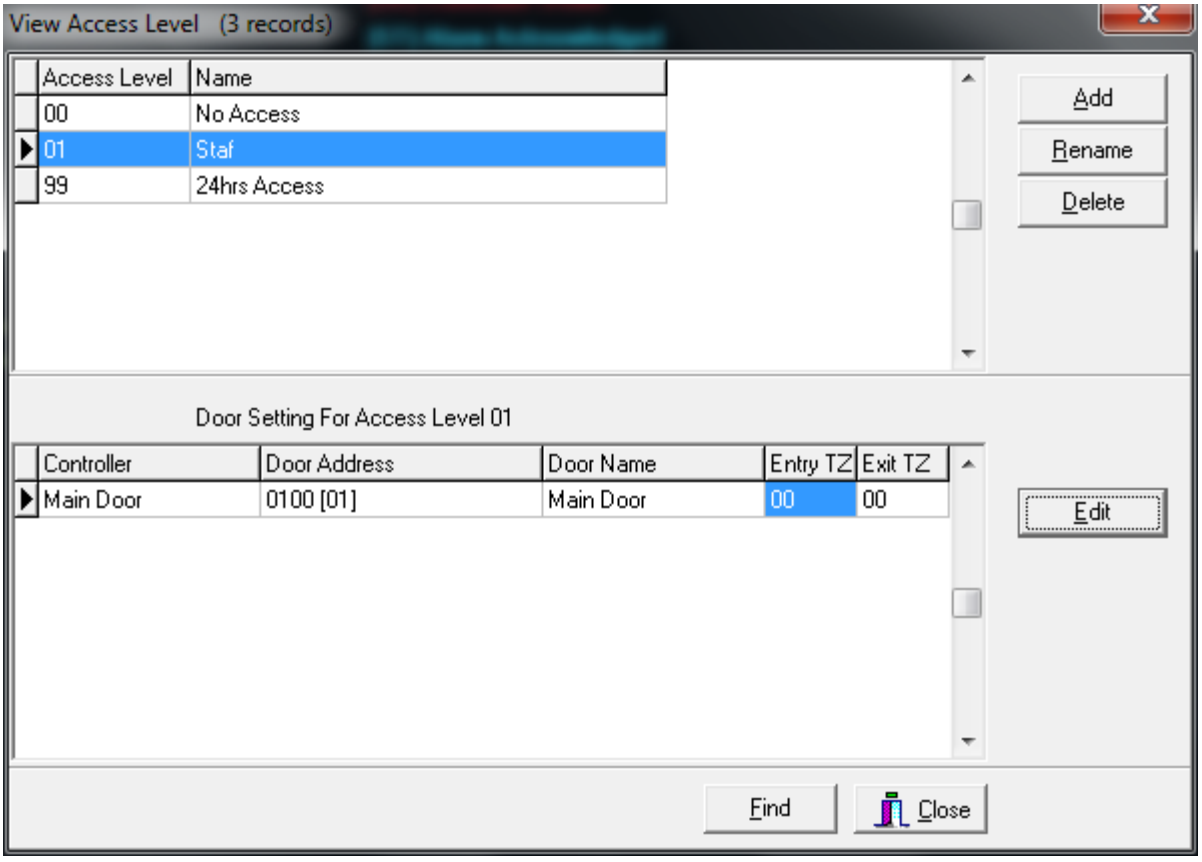
Access Level Settings

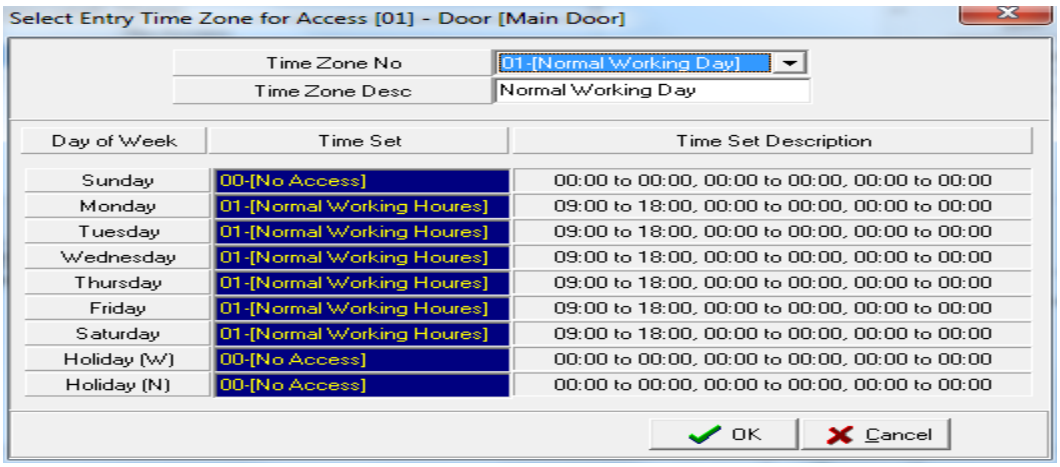
Use this function to set security access levels for each of your staff according to their important in the Company. By defining the Access Level, your staff may access to a group of doors at a preset time of the day. Access Level is the combination of doors to time zones. You may set your access level from 1 to 98.

To find an existing Access Level or Door setting, click **FIND** button.

To set the Door Setting, Click on the **Entry TZ** (Time Zone) or **Exit TZ** in the particular door and press the **EDIT** button. You can have a different Time Zone for both Entry and Exit. This will allow added flexibility. Choose a **Time Zone Number**.

Example
With reference to the **View Access Level** window on the following, an **Access Level** for **Staff**, whereby the level permits access to the Front Door from 9am to 5pm Monday to Friday and 9am to 1pm on Saturday.

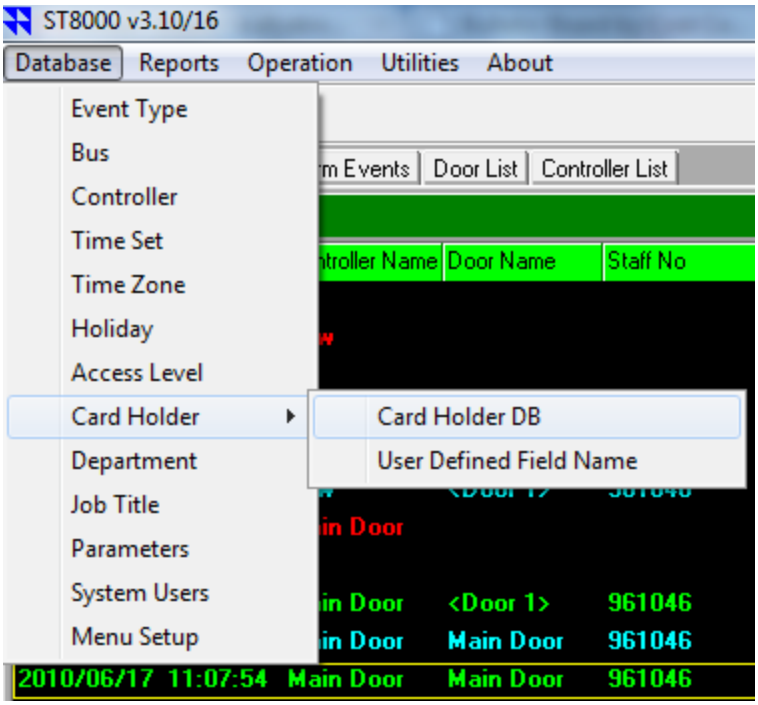




In the default from:
00-No access all day
99-Access allow 24 hours a day

After defining the various levels of access levels, proceed to **CARDHOLDER** then to **CARDHOLDER DB** menu to identify each staff and their access levels.

Card Holder Settings



Card Holder DB

This menu will enable you to add, edit or delete cardholders and their database. You will be able to see all the cardholders and their information. Although the controller is able to store only 5,000 cardholders(version dependent), the software can accommodate up to 500,000 cardholders(hard disk dependent).

Shortcut Tips:

From the Online Transaction screen and Online Alarm Event screen, double click on the transaction record of the particular card holder where Card Name column shows some other value besides "Unlisted User" will allows you to **view, delete, clear antipassback/lockout, or initialise a particular card** from all controllers.

To Add a card

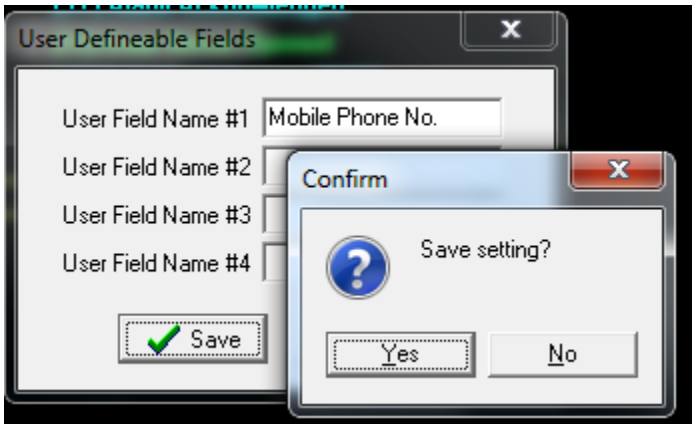
Double click on the transaction record which shows "Unlisted User" under the Card Name column from Online Transaction screen and Online Alarm Event screen. Then, *Add Unlisted User* form will prompt out. Enter appropriate text fields and click OK to add the card.

Note: This function depends on the **menu level** that is assigned to the operator. If operator is not allowed to add or change cardholder's data, then double clicking on the screen will cause nothing. Refer to section 16.2 on how to define the menu level.

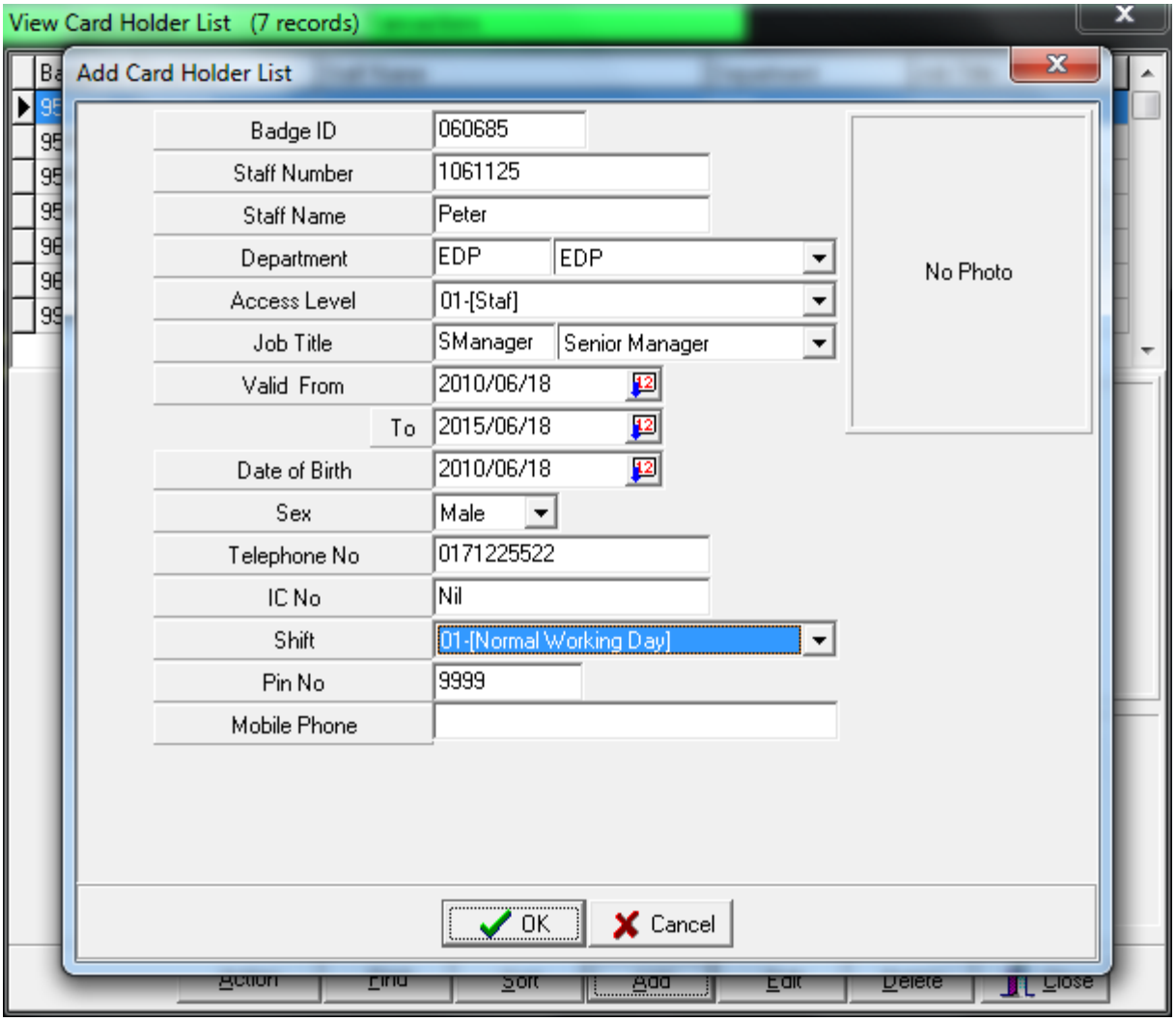
User Defined Field Name

We have provided 4 user defined fields for you to define your own fields and creates your own unique database. It is not compulsory to fill up this column. To start defining your own fields, go to **DATABASE** menu and select **CARD HOLDER** then **USER DEFINED FIELD NAME.** You will now see the User Definable Fields screen. Enter the appropriate field titles, for example:

- Mobile phones no.
- EPF no.
- SOCSO no.
- TAX no.



Click **SAVE** and then **YES** to confirm or **NO** to if you do not want to save the changes. Then Press **Cancel** to return to main menu.



Now go to **DATABASE** menu and select **CARD HOLDER** and **CARD HOLDER DB,** you will be able to see the changes in your **View Card Holder List** Menu. Enter the appropriate data in each field that you have created for the entire cardholders by clicking the **EDIT** button and close when finish. If you wishes to delete the changes to the field created, then go back to **DATABASE** menu and select **CARD HOLDER** then **USER DEFINED FIELD NAME** and clear the field titles that you have created and leave the field blank, then click **SAVE** and **YES** to confirm it.

Department Settings

The system allows you to set the different departments in your company with no restriction on the total number. Click **ADD** to include a new Department while **EDIT** allows you to change the Department Description**. DELETE** any of the Departments that are not needed. Close when finished. Click **FIND** to find a department in the database. This option will be available in **Card Holder DB** where you can choose which Department an employee will be in.

Job Title Settings

The system also allows you to set the different job titles in your company with no restriction on the total number. Click **ADD** to include a new Job Title while **EDIT** allows you to change the Job Description. **DELETE** any of the Job titles that are not needed**.** Close when finished. Click **FIND** to find a job title in the database. This option will be available in **Card Holder DB** where you can choose which Job Title. Department an employee will be in.

Parameter Settings

This menu defines the system parameters. The default is as follows: -

Password On

[Yes or No (default – No)]
The Password feature keeps track of the ST8000 software users as well as providing additional security for software access. When enable, operators must enter the correct password to gain access to this software.

Auto Re-Index Database

The system will automatically re-index its database whenever ST8000 software is turn on.

Show Photo Online

[Yes or No (default – No)]
When this feature is enable, a small photo window frame will appear on your upper-right hand corner. The photo of the cardholder will appear in this window when the card is flashed.

The following steps will guide you in installing the photo into the system.
i) The scanned individual photos must be saved as the staff number of the cardholder (e.g. Save As 806246.bmp) in the Photos directory of the ST8000 software.
ii) Default directory is C:\Program Files\Sierra Technology\ST8000\Photos
iii) Supports BMP and JPG files. BMP files are recommended for better picture clarity.

Floor Plan Online

[Yes or No (default – No)]
When this function is enable, a Floor Plan Folder will appear. This feature allows you to observe individual points on a floor plan at you premises. Please refer to 22.1 for adding the floor plans into the system.

Printer Online

[Yes or No (default – No)]
When this mode is enabled, the online transaction will be printed automatically on the default printer. It is advised to use a line printer for this application.

Card Validity Check

[Yes or No (default – No)]
Set to enable if you require the validity of each individual cardholder. Every time you turn on the ST8000 software or when the software detects a past mid-night into the next day, the software automatically checks the validity of the each individual card in the card db.

Tips: During progress of validity check, if the *send data* window is shown on screen, you can abort it by pressing F5 from keyboard until a message box prompt you for confirmation. Click YES to abort the operation.

Auto Time Synchronisation

This function is to synchronise the system's time. The software will automatically synchronise the computer's time with the controller's time when the software detects a past 60 minutes or whenever you turn on the ST8000 software.

Auto Download Configuration

If enabled, all changes done at the PC will be downloaded into the controllers automatically.
[Note: This feature has been turn off].

Warning Display Message

If enabled, all events that are described as WARNING in Event Type menu will be displayed on screen.
[Note: This feature has been turn off].

Hard Disk Monitoring Level

The system will warn you if the hard disk space available reaches to the level specified by you. Default is 10MB.

Start of Work Hour: 00:00 (Default)
End of Work Hour: 00:00 (Default)

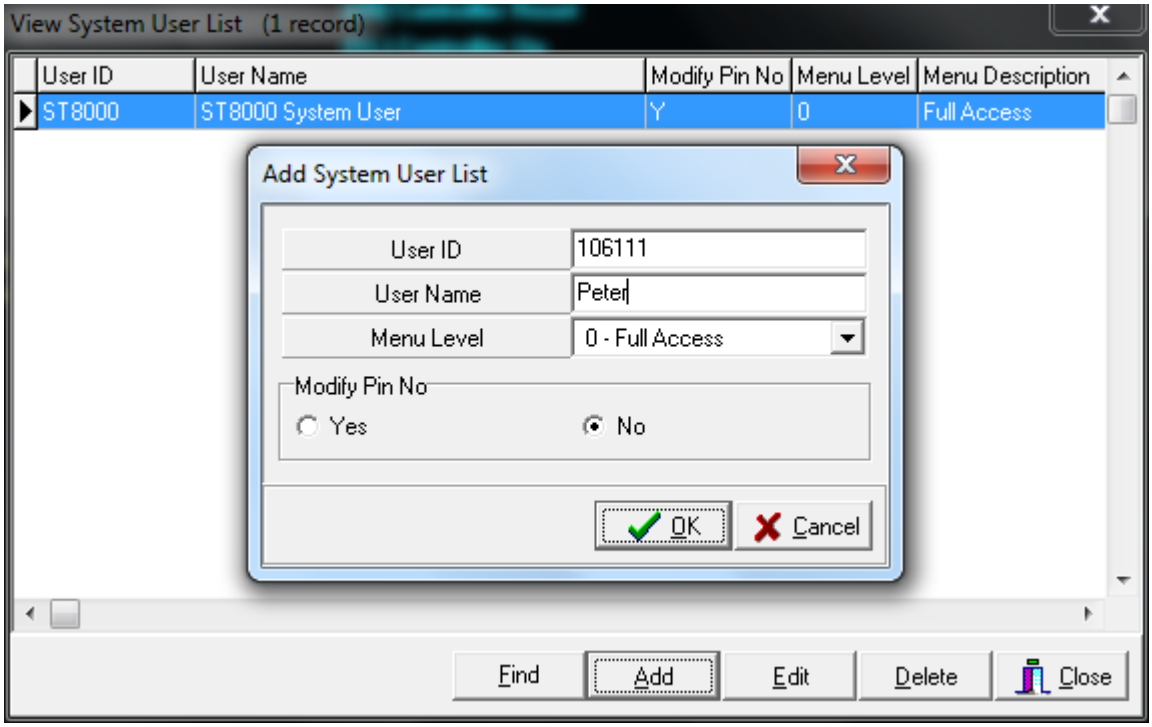
Set the correct time of your normal working hours. This mode is useful for your Time & Attendance reporting.

Customer Code List

The ST8000 allows you to define up to 10 codes to protect your system. If set at 0000, the ST8000 will accept any cards irrespective of their codes. If for example you set your code at 1111, then only cards encoded with 1111 will be recognised by your system.

System User Settings

This menu allows you to define various levels for system's authorised operators. Click **ADD** to add a new operator. To find a system user click **FIND** button. While **EDIT** the UserID is not allowed to edit. Click **DELETE** to remove the system user from database.



The default is: -

User ID : ST8000
User Name : ST8000 System User
Modify PIN No. : Y
Menu Level : 0
Menu Description : Full Access

Modify PIN

If set to **No**, the operator does not have the authority to view or change the PIN number of each individual card holder and **Auto PIN No** for each door.

Menu Level

Menu Level allows you to set different levels of access to the software for your operators. Menu Setup is elaborate further in the following section.

Menu Setup Settings

This will assign the various menus Available to each operator. There are 10 user define levels available. This function is useful for controlling the powers of certain operators from changing the systems configuration.

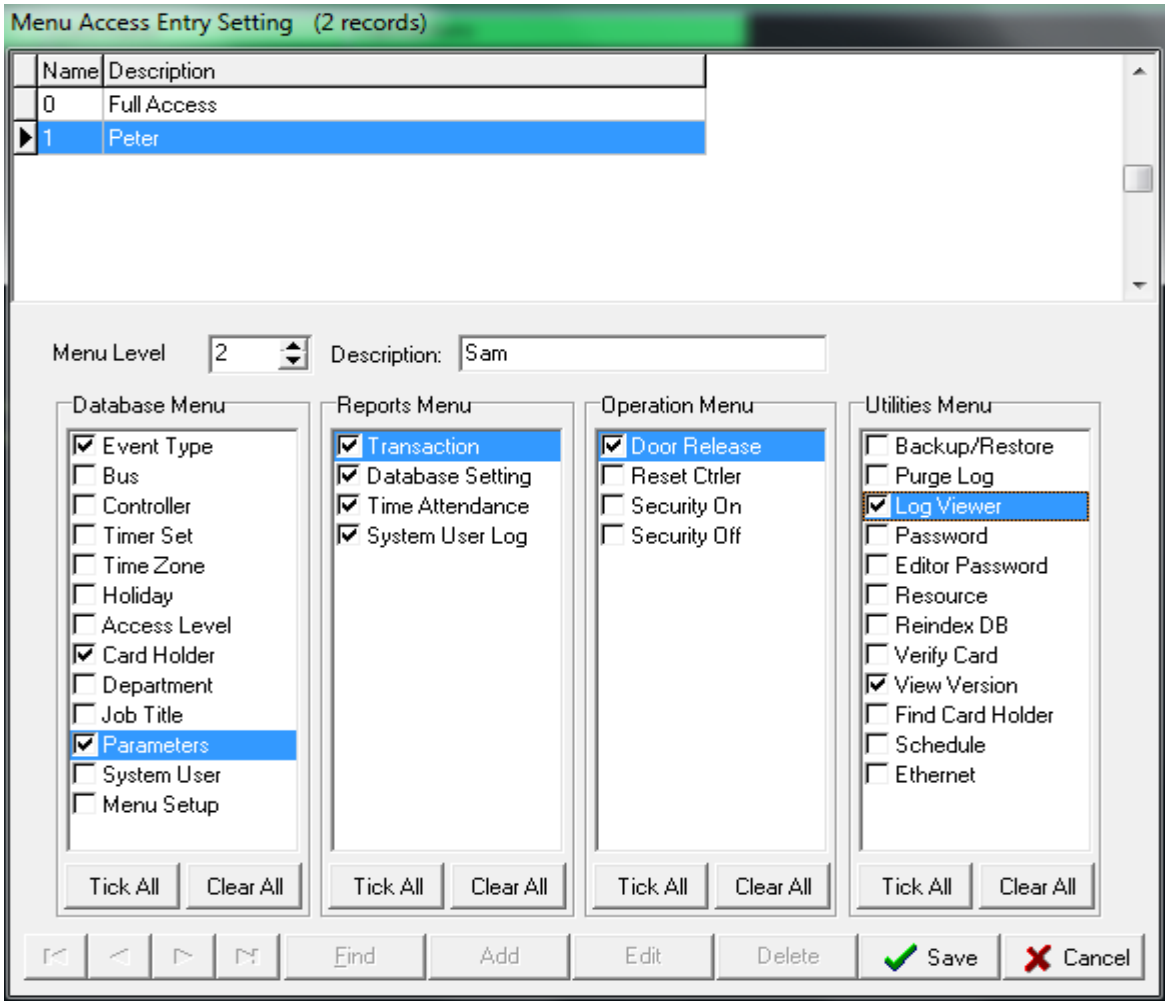
The default level is **0 - Full Access** in which complete menu access is granted. You are not allows to edit or delete it.

To set the menu option, click **Add** button to assign a new level of menu access, enter the descriptions for the particular menu access level and tick to select the desire menu feature. Once finished, click **Save** button.

To edit, select the desired record and then click **Edit** button. Note: The menu access number is not allowed to edit.

To delete, select the desired record and then click on **Delete** button.

To find a menu access record, click on **Find** button.

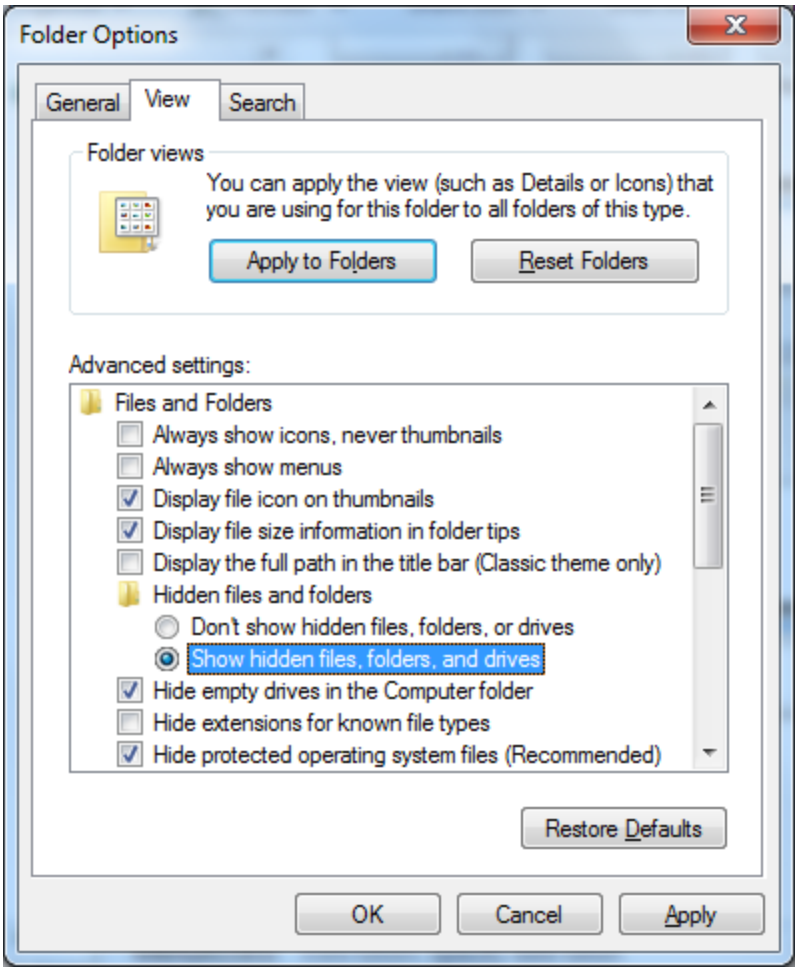


An example of a typical menu setup for reporting purposes. The desired functions are selected and saved as Menu Level 2 – ver3.

Configuration Settings

This configuration setting is to create an **INI** file for the ST8000. The INI file will look through the settings that set in the INI file before running the software. In the INI file, you are able to set certain system configuration settings such as display wording on the reader, activate/deactivate the Global Antipassback, create a secondary transaction file, export transactions captured to Ascii file, etc.

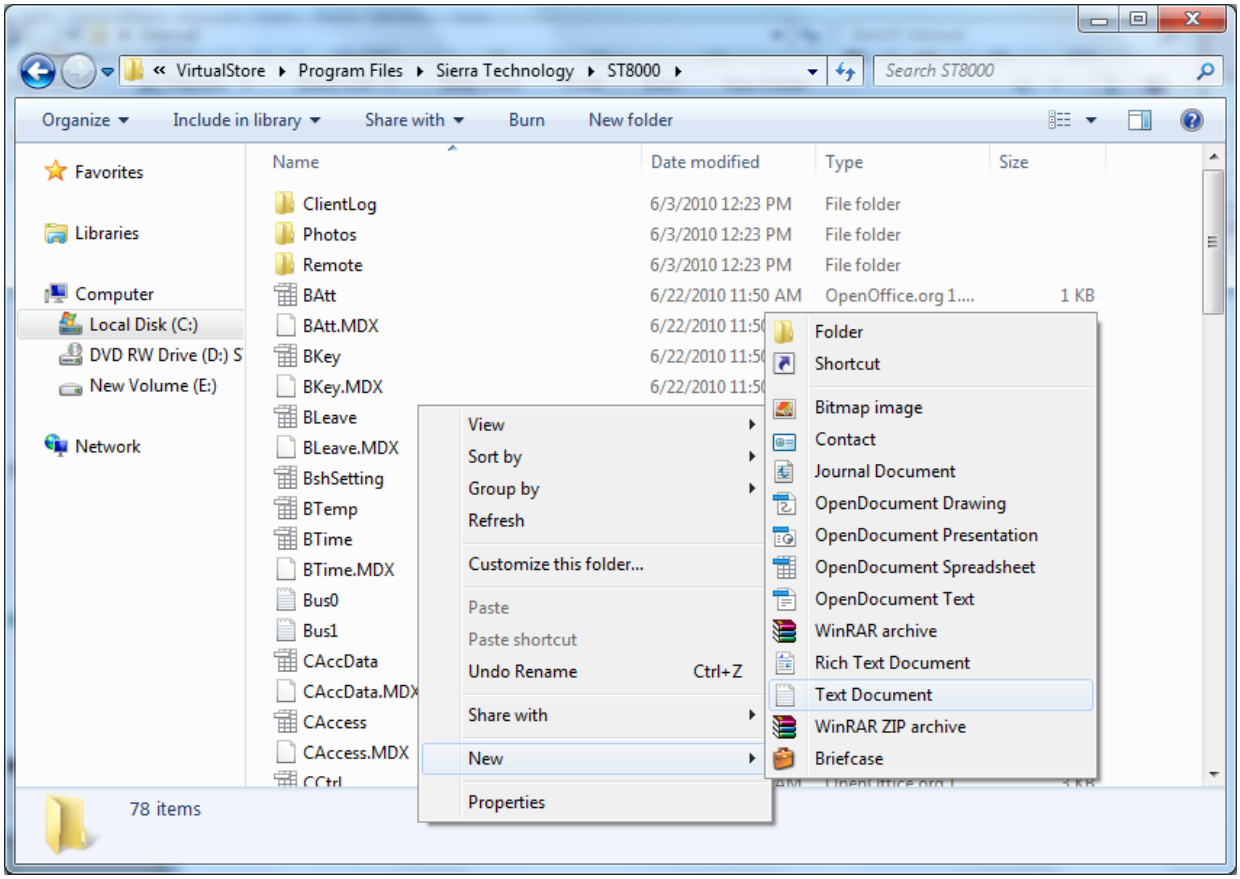
To create the **INI** file,
Click on the Windows **Start** button then select **Programs** and click on the **Windows Explorer.** Go to **View** on toolbar and select **Folder Option.** Select the **View** folder and UNCHECK “hide file extensions for known file types” and click **Apply** and then **OK**.



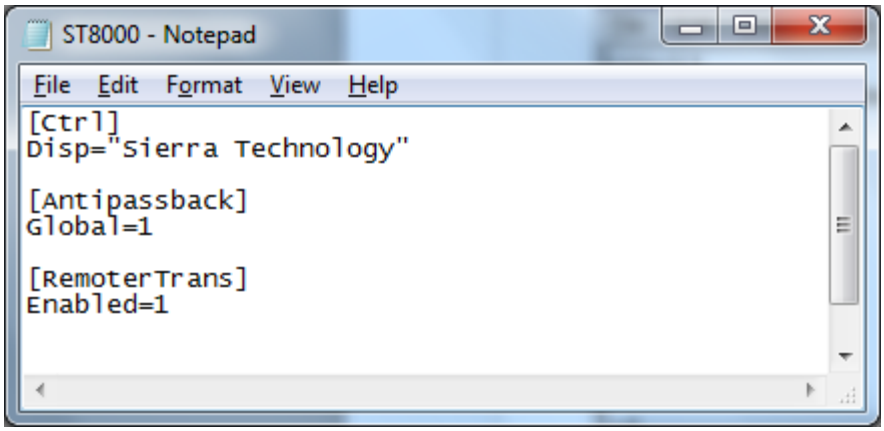
Now, in the **Windows Explorer** select the installation folder for the ST8000 software. Usually it is installed in **Program Files** folder, **Sierra Technology** folder and then **ST8000**. In the **ST8000** folder, press the right mouse button and select **New** and then **Text Document**.

Label the text document as st8000.ini. A Rename Warning dialog will appear. Click 'Yes' and double click to open the file.

Please refer to Appendix 6 on page 61 for commands available in the st8000.ini file.

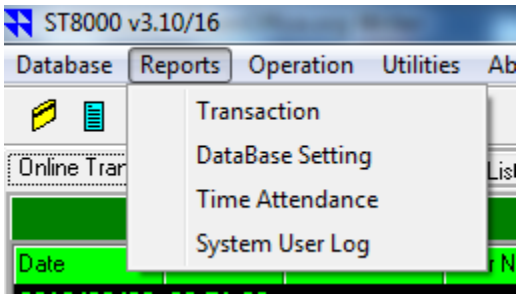


Following is an example of typical a ST8000.INI settings.



Note: For any changes done on the configuration file, you need to quit ST8000 application and run it again in order to make the changes take effect.

Reports Menu

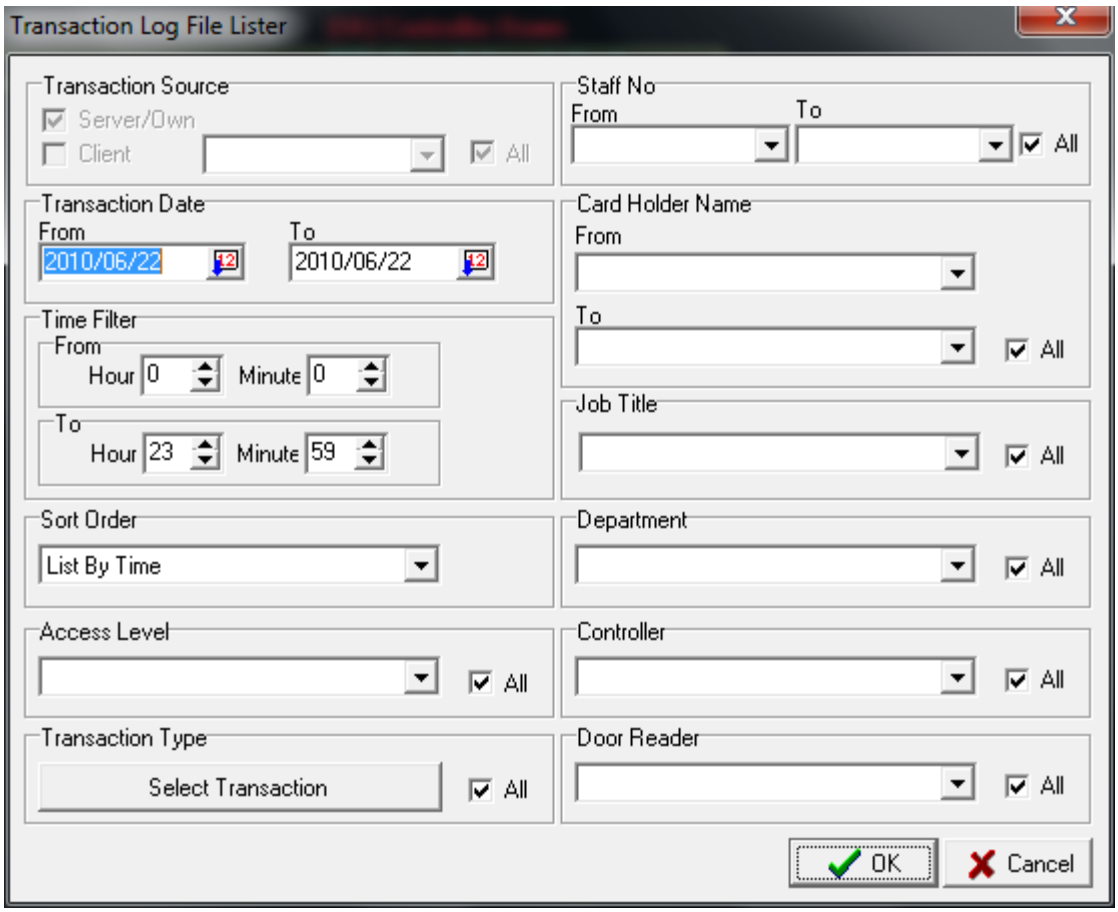


The ST8000 **Reports Menu** offers you many printout options for evaluation purposes. The files are kept in the popular **DBF** format.

Transaction Menu

Open this menu and you can have reports printed according to the following selection: -

- Staff Numbers
- Card Holder Names
- Job Titles
- Departments
- Controllers
- Door Readers
- Transaction Source
- Transaction Date
- Time Filter
- Sort Order
- Access Level
- Transaction Types



Transaction Source section is disabled (turned to gray colour), if the software is not a 'Server' type. This section is only useful if the software is configured as a 'Server' type. 'Server' type is configured in an enviroment where a remote PC need to access to ST8000 database e.g. add card.

If the system is configured as a 'Server' type, then you can select to print out the transaction record either for your own site or/and other clients site through this section.

Tips:
To set the software to become 'Server' type, type these two lines in the ST8000.ini file.

[System]
Server=n

where n =1 (Server type)
= 0 (Normal type)
Refer to section 18.0 on how to create the ST8000.ini file.

Tips:
The ST8000 saves all its transaction everday in the application directory and the filename is named according to the date saved such as Tr101025.dbf (Tr + yymmdd.dbf) meaning transaction for 25th Jun 2010.

The ST8000 will also saves all its transaction from all the clients everyday in ClientLog

folder of the application directory and the filename is named according to the date saved such as RT011025.dbf (RT + yymmdd.dbf) meaning transaction for 25th Jun 2010.

Database Setting

This menu gives you the option to print either on screen or hard copy of the following settings: -

- Door Settings
- Access Levels
- Card Database
- Holidays
- Time Sets
- Time Zones

Time Attendance

Please refer to the Time Attendance System manual.

System User Log

This function enables user to view/print the system user transaction log file. It will list all the activities/actions of the system operator done onto the system database e.g. add card, delete card, clear controller's memory etc.
Open this menu and you can have reports printed according to the following selection : -

- **Transaction Source**

This function allows you to print/view the system user transaction log file either for your own site or/and other clients site. To generate transaction for client, tick the Client checkbox and select the desire client by clicking the text box.

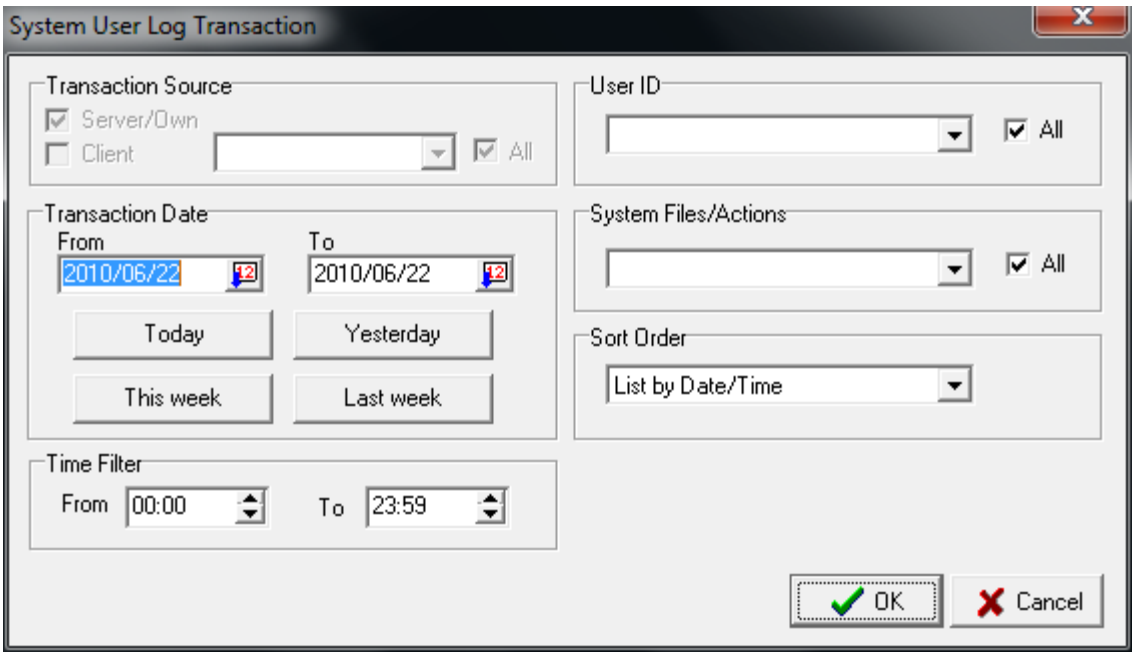
Note: This section is disabled (turned to gray colour), if the software is not a 'Server' type.

- **Transaction Date**

Select the date range that you want to view/print the system user transaction log file by clicking the small icon in the 'From' and 'To' textbox or, click on the following quick buttons to select the date.

Example: Today is 25/06/2010, if you choose:-

Today	-	generate today's report only i.e. from 25/10/2010 to 25/10/2010.
Yesterday	-	generate yesterday's report only, i.e. from 24/10/2010 to 24/10/2010.
This week	-	generate report for this week according to the pc's date (i.e.Sunday to Saturday where Sunday is the first day of week). i.e. from 21/10/2010(Sun) to 25/10/2010.
Last week	-	generate report for last week according to the pc's date (i.e.Sunday to Saturday where Sunday is the first day of week). i.e. from 14/10/2010 to 20/10/2010.



Tips:

The ST8000 saves all its system user log transaction everday in the application directory and the filename is named according to the date saved such as Su101025.dbf (Su + yymmdd.dbf) meaning transaction for 25th Jun 2010.

The ST8000 will also saves all its system user transaction from all the clients everyday in ClientLog folder of the application directory and the filename is named according to the date saved such as Ru100625.dbf (Ru + yymmdd.dbf) meaning transaction for 25th Jun 2010.

- **Time Filter**
- **User IDSystem Files/Actions**
- **Sort Order**

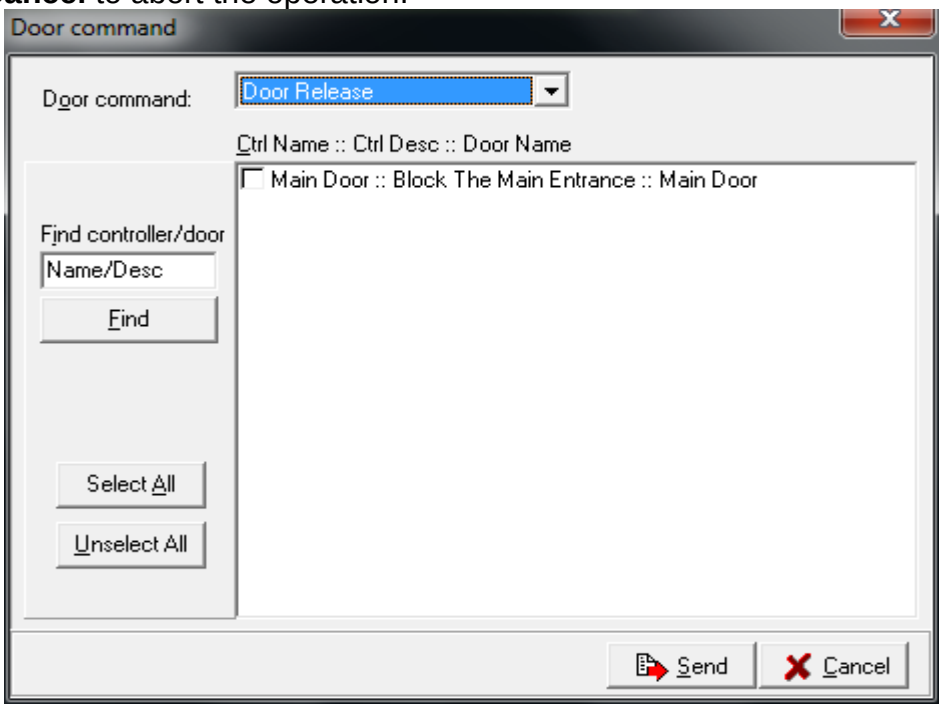
Operation Menu

Door Release

The ST8000 allows you to remotely release any doors from the PC.
Steps to release the door:-

1. From the list box, 'tick' the desire door that you want to release.
   Tips: Click on **Select All** button to select all door. Click **Unselected All** button to untick all the selected doors.
2. Click on **Send** button.

Click **Cancel** to abort the operation.



You can find a specific door by typing in the controller name or description or door name in the Find door list box and then click **Find** button.

From here, besides releasing a door, you can also on/off security for a door. Click down the door command selection box and select the action. **Note:** This function depends on the **menu level** that is assigned to the operator.

Note: If the push button feature is not enabled at the Door Setup, this feature will not work.

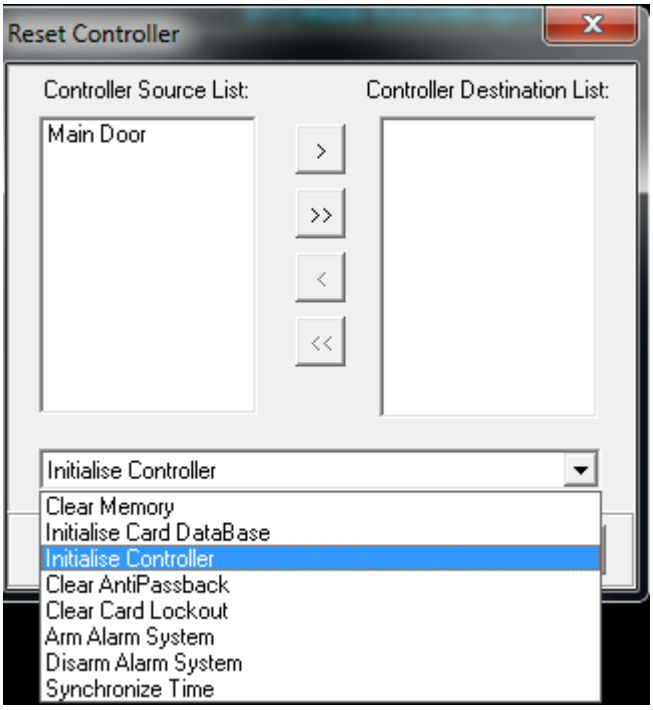
Shortcut! Go to Door List screen and double click on desired door to release.

Tips! From the Door List screen, you can monitor the state of the door such as Door Closed, Door Opened, Lock or Unlock mode and AC/Battery status. The **Input State** will show **CL** if the door is closed or **OP** if door is opened. The **Lock State** will show **Lock** if the door is locked, **Unlock** if door is unlock, **Auto Lock Release** if the door is

automatically unlock following the preset time zone and **Security Off** if the security system is disabled. The **AC/Battery State** will show **AC ON**. This state will show **AC Failed** once system has detected the AC is failure, and will show Battery OK if the backup battery is fine or **Battery Low** if battery is low.

Reset Controller

After making changes to the system, you can download the changes to the controllers using this function. Transfer all the relevant controllers that need to be updated from the *Controller Source List* to *the Controller Destination List* using the arrow button. Select **Initialise Controller** to update controller settings.



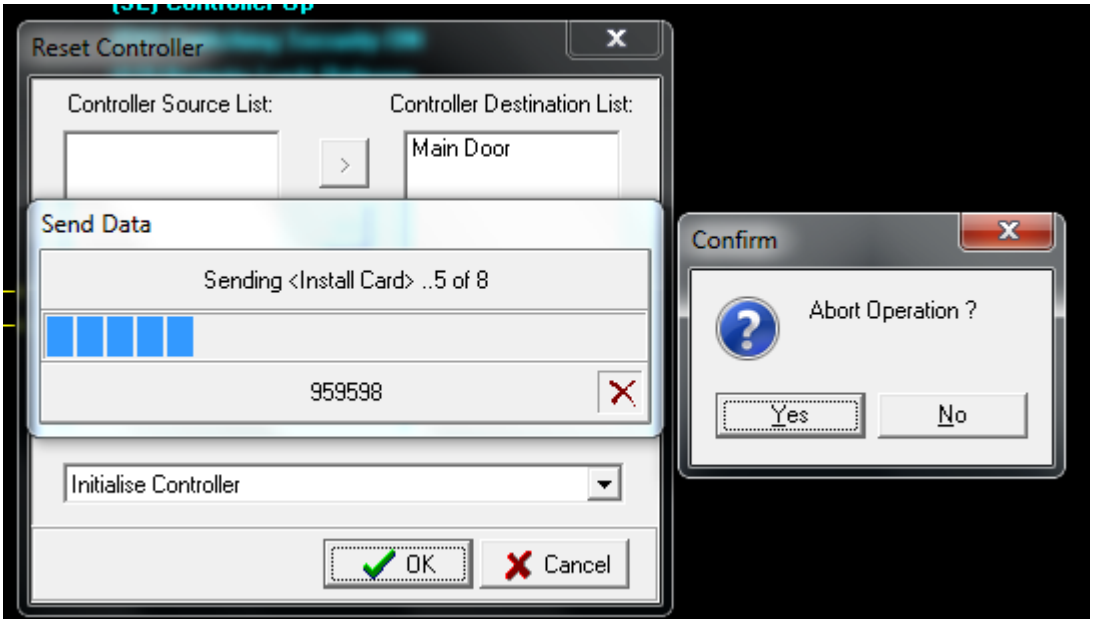
Your may also select other types of operation to be performed from the selection bar at the bottom of the menu. These operations include: -

a) Clear Memory – this feature allows you to clear the controller's memory. The controller will lose all databases and transactions previously keep in its RAM.

b) Initialise Card DataBase – this feature allows you to download all preprogrammed cards into the controller.

- During downloading of card database, the system allows user to abort to reinstalling the card database. To abort, clicking on  in the *Send Data*

window. It will prompt a confirm message. Click Yes to confirm abort otherwise click No.

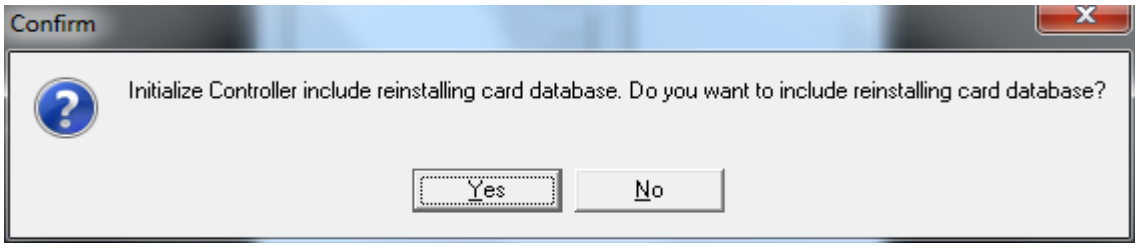


[Note: Reinstalling card database will first clear **ALL** cards in the controller before its reinstalling the cards. Therefore, aborting the card downloads will only successfully downloaded up to the point before it is cancelled **]**.

---

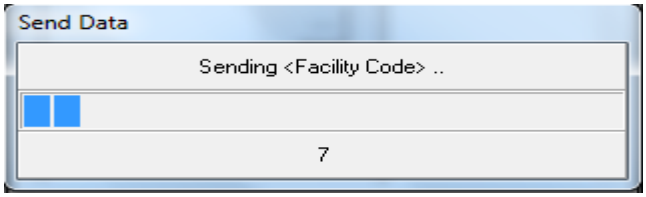
c) Initialise Controller – this feature allows you to download all settings and databases into the controller.

- Once the Initialise Controller is selected, the system will prompt you the following message.



Click Yes to confirm reinstalling the current card database otherwise click No. Then, you will see the following window. It is in the progress of sending the database settings to the controller.

During downloading the card database, you can abort it. Refer to part b)Initialiase Card Database on how to abort this operation.



d) Clear Anti-Passback Flags – this feature allows you to clear all antipassback violated cardholders in this controller.

e) Clear Card Lockout – this feature allows you to clear all cardholders that are lockout in this controller.

f) Synchronise Time – this feature allows you to synchronise computer's time with the controller's time.

If the alarm inputs are implemented and you wish to arm or disarm the security alarms system, select the controllers and pick the preferred alarm state: -

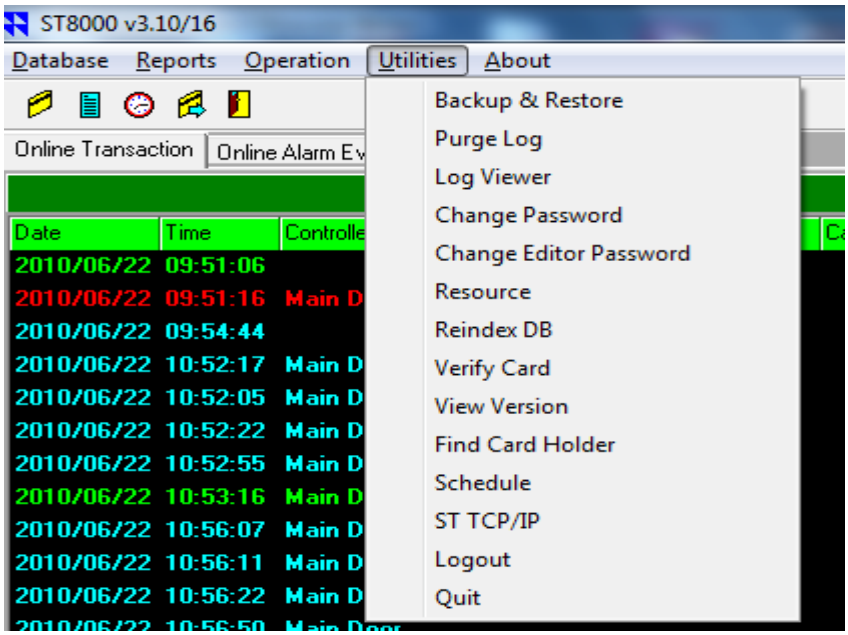
g) Arm Alarm System – this feature allows you to Arm the controller from your computer.

h) Disarm Alarm System – this feature allows you to Disarm the controller from your computer

Security On & Security Off

If you wish, you could disable or enable the security according to readers using this function. This feature is useful during instances whereby some renovation is being done and the door need to be unlocked for a specific time.
Follow the same steps in section 20.1 on how to security on and off the system.

Utilities Menu



Under this menu, you will find the following function: -

Backup & Restore

This function enables you to backup and restore your system and data files into your diskettes. Using your mouse, select your source files to copy.

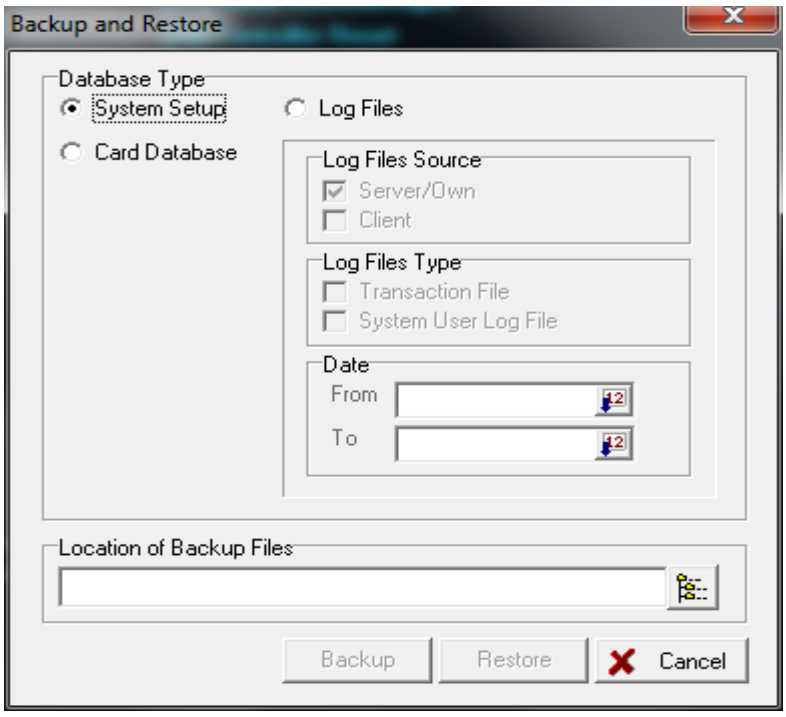
System Setup will backup all the system database files such as door setup, timeset, timezone, access level, system user file, except the cardholder database file, department and job title.
It is advisable to backup the system setup when there is an update or changes have been done to the system configuration or setting.

Card Database will backup the cardholder, department and job title data. It is advisable to backup the cardholder database when there is a lot of changes to the cardholders data.

Log Files backup will backup Transaction files and/or System User Log files.

Steps to backup:

1. Select database type (i.e.System Setup or Log Files).
2. Click on  icon to select a location to backup this file.
3. Click on Backup button. System will prompts “Ready to backup?” message, click OK to confirm backup the file.



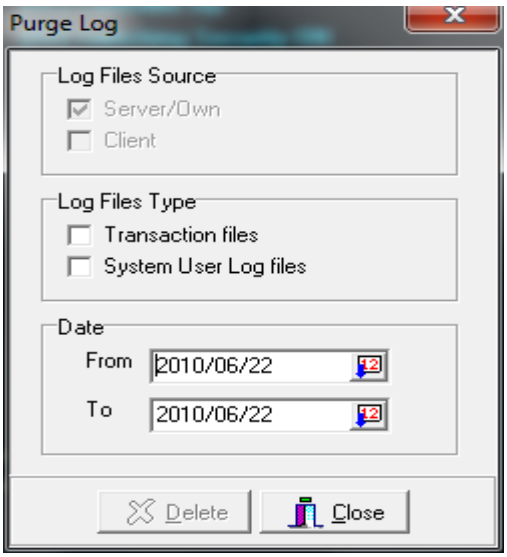
To restore, follow the above steps 1 and 2. Then, click on Restore button. System will prompts “Ready to restore?” message, click OK to confirm restore the file.

Notes:

Log Files Source section enables you to select either you want to backup or purge transaction files for Server or Client. This section only enabled if your software version is a ‘Server’ type.

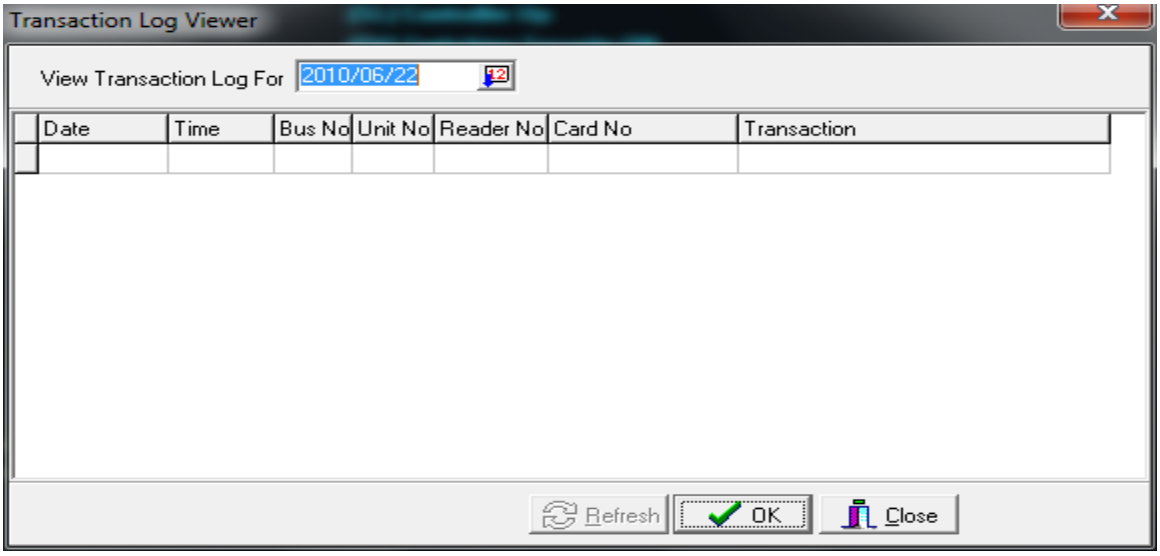
Purge Log

Use this function if you need to delete any of the saved transaction files or/and system user log files in the system database. Please note that unless you have backup these files in a separate diskette, once you delete these files it will be lost forever.



Log Viewer

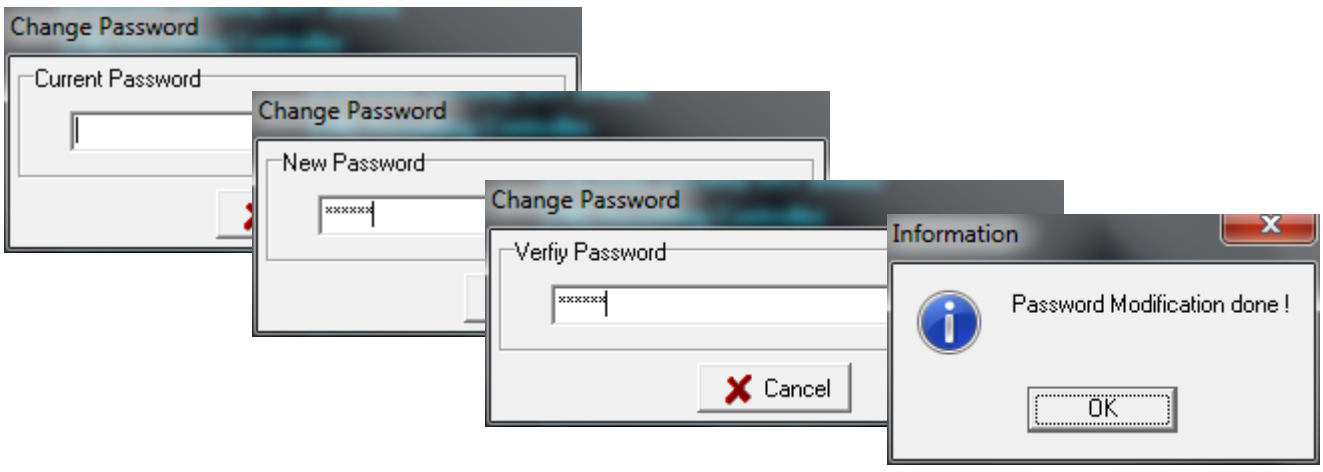
This function permits you to view the saved transactions on screen.
Click the small icon in the 'View Transaction Log For' textbox to select a desire date and then click OK.



Change Password

If necessary, use this function to change the system operator's password. Only authorised System User that can change it (see 15.1). When first time user needs to set the password, press **Enter** when the system asks for **Current Password,** as you don't have a password yet. Careful not to press the **Cancel** button as it will go back to the main menu. Type in your new password and press **Enter.** The system will then ask you to verify your new password by retyping the new password, a message box will then inform you that you have successfully set your password.

Important! You must remember your password in order to log in to the system and also for further changes.



Change Editor Password

This password is for the purpose of Editing Floor Plan. Only authorized System user that can change it (see 15.1). Methods for changing password is the same as **Change Password** (19.4)

Resource

This function will show you the available memory and hard disk space in your PC.

Reindex DB

Only use this function when you suspect your files are corrupted.

Verify Card

This function enables you to check if the cardholders are assign correctly to the intended controllers. You will see 3 folders. The Correct Card Database at the Controller folder is the list of card database in Software, the Retrieved Card Database at the Controller folder is the list of card database retrieved from the controller and the Card Database Exceptions folder is the difference in card database. If the card number appears on the Card Database Exceptions Folder, this means that the card is not downloaded into that controller. Click Correct It button to rectify.

On Card Database Exceptions Folder, you have option to select which card you want to correct, unchecked the card that you not desire to correct (By default, it will correct all cards to the controller).

Tips: Click Find button to find your desire record for each folder tab.

View Version

This function enables you to check the controller's version.

Find Card Holder

This function will assist you in locating the last entry point of a cardholder. It will let you know the last controller, door, date and time the card was used. If the ST8000 software is restart, the software is unable to show the previous cardholder location through the find cardholder feature.
Use **FIND** function to find a particular staff.

Schedule

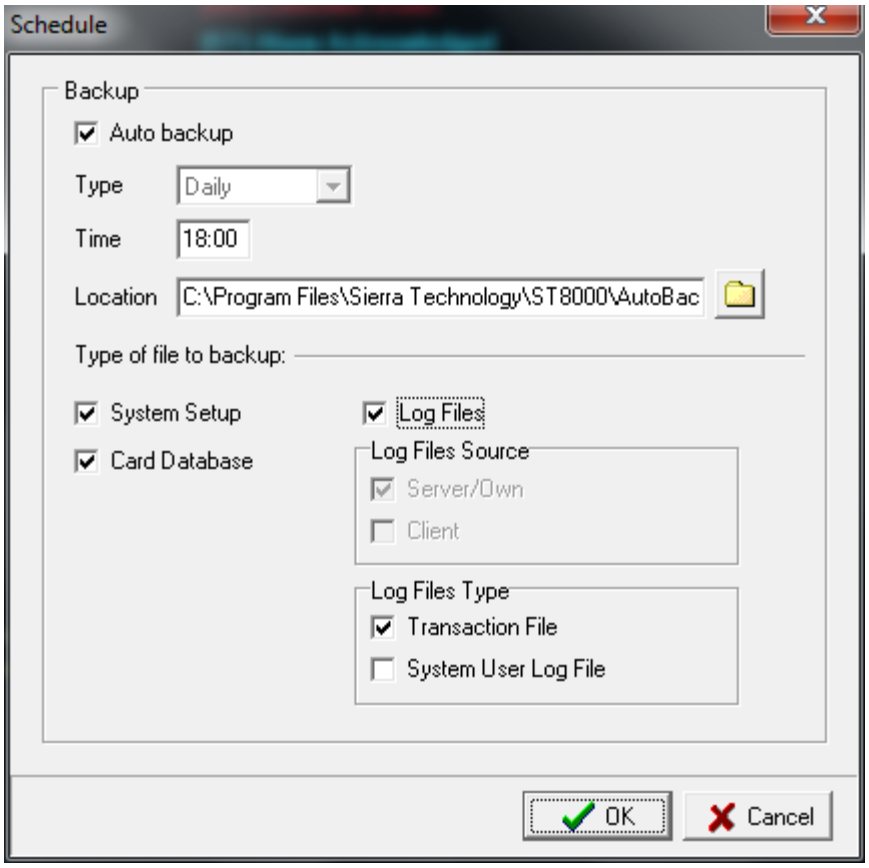
By enabled, the software will automatically backup the system and data files for everyday at a predefined time.

To enable this function, simply "Tick" Auto Backup checkbox.

Time
This is the time setting where the system will perform the backup. For example, if time

is set to 16:00 meaning that the system will perform the backup at 4pm past the days.

Location



This is the location where all the backup files will be saved. The default location is in c:\Program Files\Sierra Technology\ST8000\Autobackup. Click on  to choose your desired location or simply type in the location path in the location textbox.

Types of file to backup

Refer to section 21.1 for the description of the types of backup file.

Notes:

- Please note that for backup of Log Files (i.e. the Transactions and System User Log files), is for the day before e.g. if it performs the backup on 31/5/2002, it will backup the log files for 30/5/2002.
- The system will only backup the files that you selected in types of file to backup section.

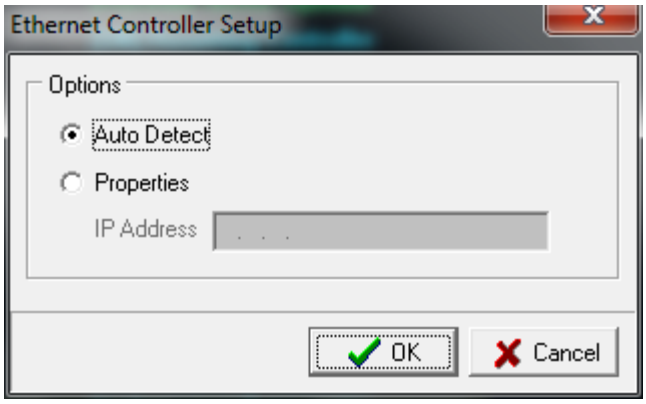
Important:

Software must be up and running at the time when it suppose to perform the auto backup e.g. if you have set the time to perform the auto backup at 9:00 a.m, then the software must be on at 9:00 a.m.

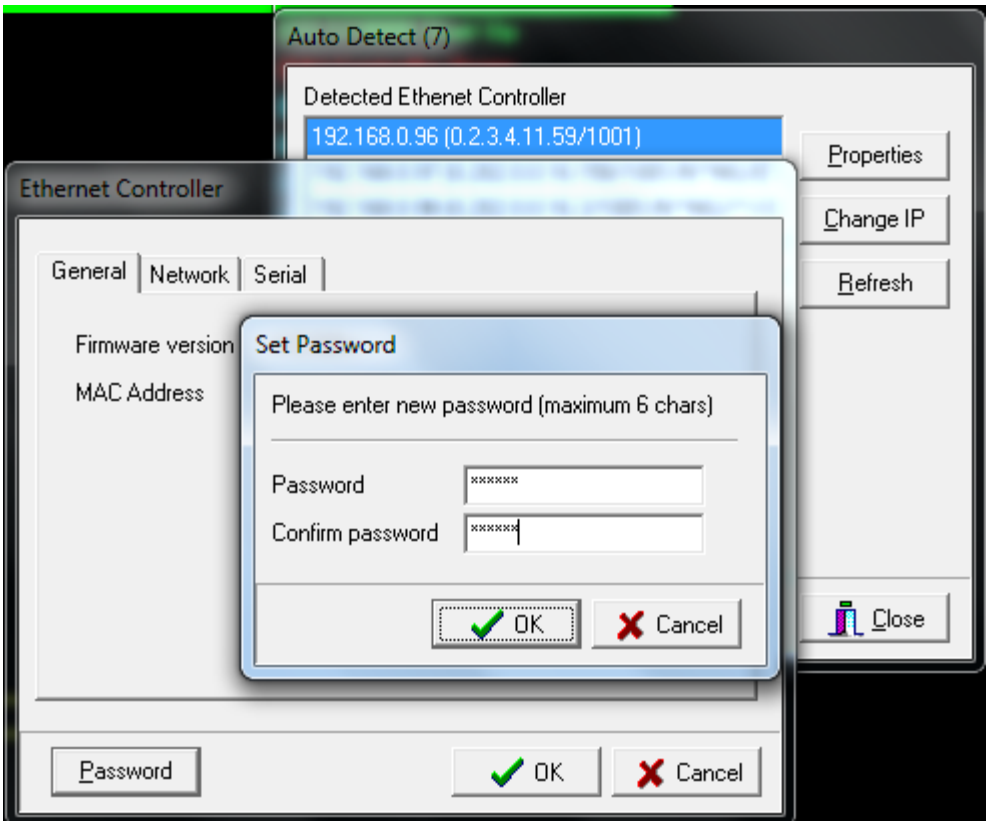
ST TCP/IP

This function enables you to auto detect attached Ethernet Controller,
and to perform related operations such as changing IP, getting and changing Ethernet

Controller's setting (Port No, Baudrate, Parity, Flow Control, etc).



Auto Detect - You can use this function to detect all the Ethernet Controller that you setup in the network.
Important: This function is confine to a local network segment as broadcast packets cannot penetrate routers, bridges etc.



Properties
Do not change the value of the Ethernet Controller's properties. All the value settings of the Ethernet Controller must match with reader's interface settings. Any change of the settings will cause no communication between Ethernet controller and ST8000 software.
Click Password button to protect the properties settings of the controller.

To change the IP address of the Ethernet Controller, click on Change IP button. Then enter the IP address. Click OK to assign new IP address to the Ethernet controller.

Click Refresh to make sure changes have take effect.

Logout & Quit

This is the logout and quit function. You will need your password for this operation.

Graphical Floor Plan

The ST8000 Graphical floor plan displays are optional modules. Floor plan allows the user to quickly pinpoint the doors and alarms. Up to 10 graphical floor plans are supported.

Adding Floor Plan

The floor plans are added as .bmp files. For the first floor plan, copy the bmp files to m0.bmp in the ST8000 directory. For the next plan copy the bmp file to m1.bmp etc. Any graphical editor can be used (i.e. Windows paint program) to create the floor plan.

Editing The Floor Plan

Select the '**EDIT**' at the bottom left of the task bar. You will be required to enter a password.

To add floor plan

Click on '**MAP**' button. Give the plan a name and press the '**REFRESH**' button. The floor plan will appear.

To insert the monitoring door points into the map

Click on '**Insert**', select the desired door point and drag it to the location required. The icon door point will follow the door name. Repeat the above steps for the following door points.

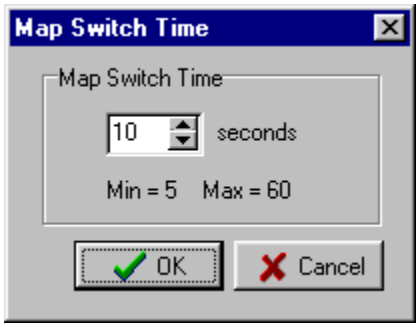
To delete the door points from the map

Click on the desired door point in the map and then, click '**Delete**'. Click Yes to remove the door point from the map.

When you have finished all door-points click on '**Edit** ' to exit from the map editor program.

'AUTO' button – this function is used to switch the map after a period of time. If your system has more than one controller and more than one map, the software will automatically switch the maps that you added previously when past every 10 seconds by default.

To change the map switch time, click on **'Map Switch Time'** , then the following window will appear. Click the up or down arrow to set your desire time (where the time range is from 5 to 60 seconds). Click OK button to confirm to update the map switch time.



Tips: Click on **Auto** button then it will change to **Manual** button, use **Manual** if you want to monitor the desired map permanently on the screen.

'FIND' – You can find a specify door point in the map by typing the door address or door name in the find textbox, and then click on **Find** button.

Hints: Use mouse points to the door point, it will shows the address of the specific door point. Display of address for door is 6 digits, with first 4 showing the controller's address, and last 2 the door's number.

Note:

Map will not shown on the screen, if the Floor Plan Online feature (database menu > Parameters) is set to No.

Tips:

- The door points will change its colour automatically when the following door events had occurred.

Colour of the door point	Events
Green	Door is closed
Purple	Door is opened
Red Blinking	Door is forced opened and Left Opened

Trouble Shooting

Problem	Possible Cause	Solution
No communication with controller. For example, failure in transmitting commands or receiving data from controller	- Connection failure - Inaccurate **Comm Port** settings - Inaccurate controller Settings - Controller maybe down	- Check the connection to Comm port. Check the connection and wiring from monitoring PC to PC interface to the controller - Make sure that the controller is installed in the **Controller** setting. - Check to see whether the controller LED is blinking
Door cannot be release by PC	- Push button is not enabled at **Controller**	- Go to **Database > Controller** Choose the controller of that particular door and click **Edit**. Click on **Door Setup** and check the time zone for the **Push Button Enabled TZ**
Newly installed card cannot be used or is not stored in the controller	- Database at controller could be full - Might not have access to the controller	- If the controller is full, a larger database will be needed. - Go to **Database > Access Level.** Check the *Time Zone* set for the user. - To make sure the controllers have received all the card information, go to **Utilities > Verify card**. Select a controller and click *Rebuild List* button. If there are cards listed in the **Card Database Exceptions**, click the *Correct It* button. The system will update the card holder database to the controller. Updating the controller can also be done from **Operation > Reset Controller**. Select the controller(s) that needs updating. Select **Initialise Card Database**, then click **OK** button

Some transactions missing after PC is offline	- The transaction storage in the controller is possibly full. Any old transactions will be overwritten by newer ones.	- It is advisable that the host PC be always on, to collect data from controllers. This will ensure the controller's transaction has been transferred to the host PC.
Operation of controller not following Time Zone Setting	- Time Zone Setting is improperly set.	- Check that **Time Zone Setting** under **Database** is set properly - Check the **Holiday** setting. If today is set as holiday, then the holiday time zone will be used instead.
Corrupted transactions received	- Memory of controller is not cleared when the controller is installed. - Backup battery on the controller may be weak	- Go to **Database > Reset Controller**. Choose the Controller from *Controller Source List* and place it in *Controller Destination list*. Choose **Clear Memory** from the list box below and click **OK**. - Go back to **Reset Controller** and choose back the same controller/s. Choose **Initialise Controller** and click **OK** to load back the settings to the controller. (**Note**: From the time you clear the memory to reinitialising it, no card holder will be able to access the controller.) - Make sure that the controller is powered up to a 15v power source. The battery is rechargable, if there is a power source, the battery will be able to recharge itself.
Door is always unlocked	- Auto Lock Release settings and Security off	- Go to **Database > Controller.** Choose the particular controller and click **Edit**. Look under **Door Setup** and make sure your time zone setting for **Auto Lock Release TZ** is set correctly.
Time on the	- Controller may not be	- Resynchronize the controller's

Controller Is not correct.	initialized with PC's time.	time from **Operation > Reset Controller**. Select actions **Synchronize Time** and click **OK.** - Go to **Database > Parameters** Press **Edit** and choose **Yes** for **Auto Time Synchronization**

Database Format

All databases use the .dbf format compatible to dbaseIII or dbaseIV. It is also ODBC compliant.

Card Holder's Database Format

Field	No of characters	Description	Remark
Card Number	6 digits	Unique card number for system identification. (Badge ID Number)	
Staff Number	15 characters	Staff company number (any characters)	
Staff Name	35 characters	Name of staff.	
Department	Dept List 12 characters	List of department previously created. Predefined EDP department	Used for reporting.
Access Level	Access Level list 2 digits	List of Access Level previously created. Predefine 00-No Access 99-Unlimited Access	Used to control access of the staff to any doors.
Job title	Job title list 12 characters	List of job title previously created. Predefined – Senior Manager	Used for reporting.
Valid From	Date field 8 digits	Date of card (Badge) to be valid after (inclusive) this date	Uploading & down loading of cards to the panel occurs at 12 midnight
Valid To	Date field 8 digits	Date of card (Badge) expiry. Inclusive of this date.	Uploading & Downloading of cards to panel occurs at 12 midnight.
Date of Birth	Date field 8 digits		
Sex	M/F 1 digit	Male / Female	
Telephone No	15 characters		
IC Number	15 characters		
Pin No	4 digits	Pin number of the Card. Can be changed here	
User Define #1	45 characters	Multi purpose user defined field.	
User Define #2	45 characters	Up to four extras field are provided.	

User Define #3	45 characters		
User Define #4	45 characters		

Transaction Database Format

The transaction file format is used for the export of data generated by the system. The files are .dbf types.

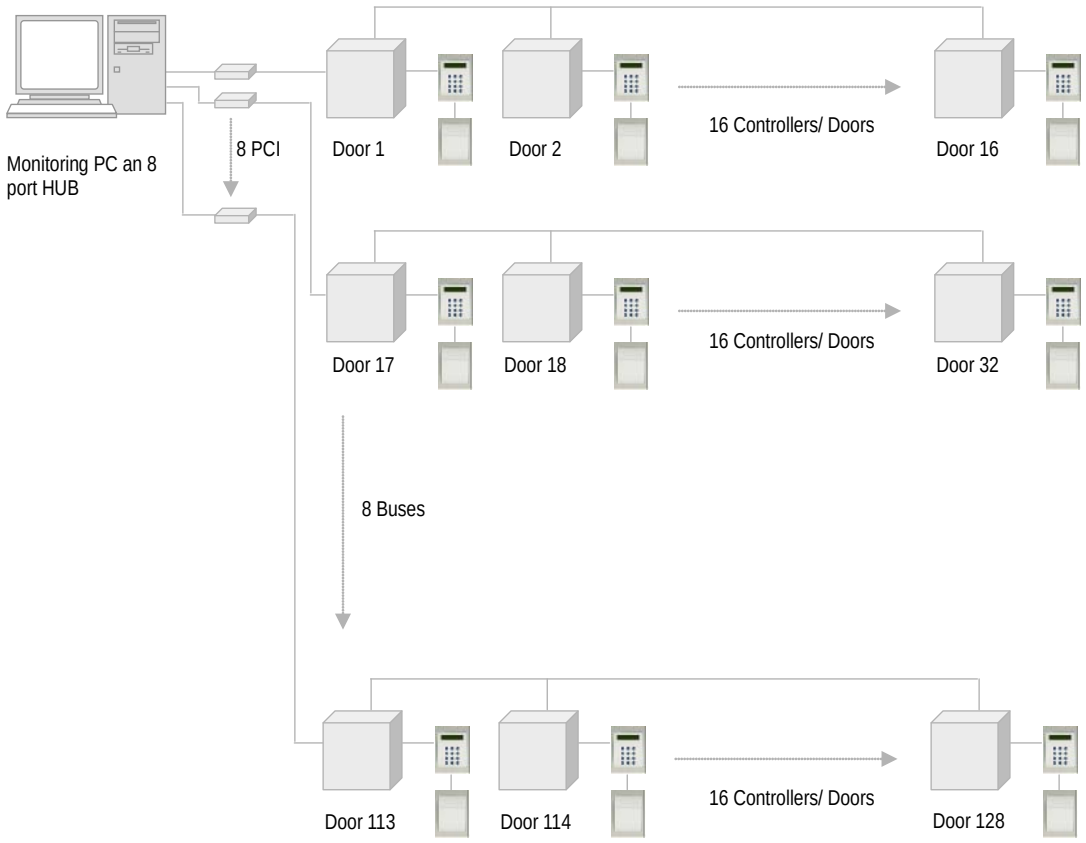
Naming Convention Tr*YYMMDD*.dbf
A new file is generated everyday.

Field	No of characters	Descriptions	Remark
Date	10	Date of transaction	
Time	8	Time of transaction	
Trans_code	2	Transaction code	
Trans_desc	30	Transaction code description	
Busno	2	Code for which loop (bus) the panel is connected	
Unitno	2	Address setting of the Panel in the loop (bus)	
Readerno	2	in hex format 00,01,02,03 (in) ; 80,81,82,83 (out)	
Contname	12	Name of Panel i.e. Carpark	
Drname	12	Name of Door i.e. Main Door	
Cardno	15	Staff number (Card no if staff no is empty)	
Name	35	Name of Card holder	
Dept	12	Department	
Job	12	Job title	

Possible Events

AC Failed	Deactivated	Invalid Card PIN
AC Restored	Disarming Alarm System	Invalid PIN Access
Activated	Door Interlock	Log In
Alarm Acknowledged	Door Closed	Log Out
Alarm System	Door Forced Opened	Manual Lock Release
Alarm Triggered	Door Left Opened	Real Time Clock Failed
Antipassback Violation	Door Never Opened	Remote Lock Release
Arming Alarm System	Door Opened	Resetting Card Database
Battery Low	Door Reader Down	Resetting Controller
Battery OK	Door Reader Up	ST8000 Shut down
Card Lockout	Door Security OFF	ST8000 Start up
Change PIN	Door Security ON	Switching Security OFF
Clear Antipassback Flag	Duress Alarm	Switching Security ON
Clear Card Lockout Flag	Enter Programming Mode	Tamper Alarm
Clear Controller Memory	Exit Programming Mode	Valid Card Access
Clearing Memory	Fire Alarm	Valid PIN Access
Controller Down	Fire Alarm Off	Wrong Facility Code
Controller Reset	Hard Disk Full	Wrong Password Entered
Controller Up	Invalid Card Access	Wrong Time Zone

Appendix 1: Sierra Card Access System



Legend

PC Interface

ST8000-PXS Proxstation

ST-PR100 Proximity Reader

ST8000-PCU Power Control Unit

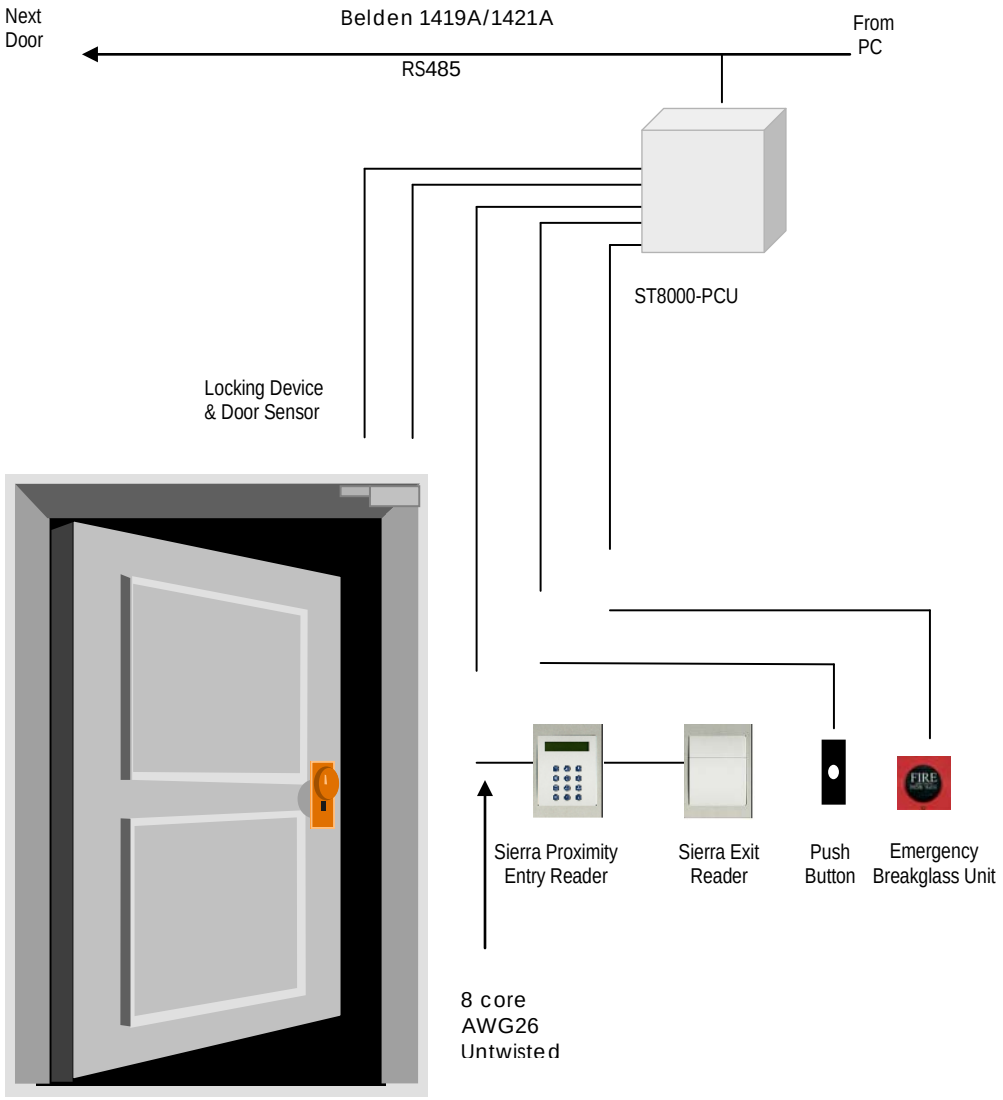
Dip Switch Setting

Eg. Dip switch setting for Controller 2, address setting no.01

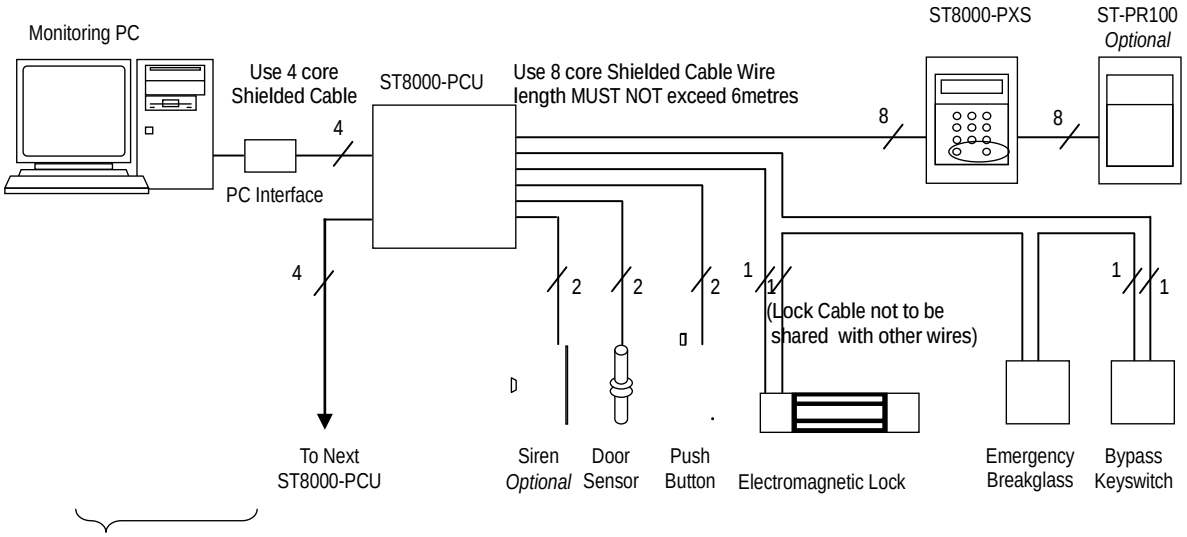
For each bus, each controller will have a unique dip-switch address setting.

Dip Switch Setting				
1	2	3	4	Add.
---	---	---	---	00
On	---	---	---	01
---	On	---	---	02
On	On	---	---	03
---	---	On	---	04
On	---	On	---	05
---	On	On	---	06
On	On	On	---	07
---	---	---	On	08
On	---	---	On	09
---	On	---	On	10
On	On	---	On	11
---	---	On	On	12
On	---	On	On	13
---	On	On	On	14
On	On	On	On	15

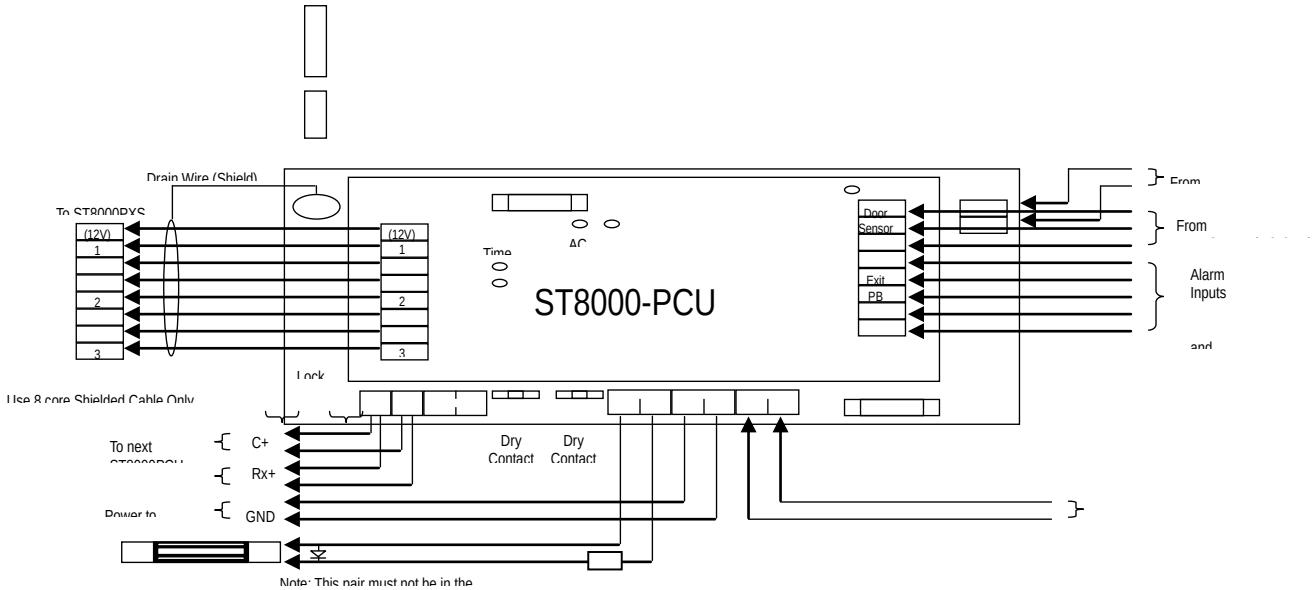
Appendix 2: A Single Door Configuration



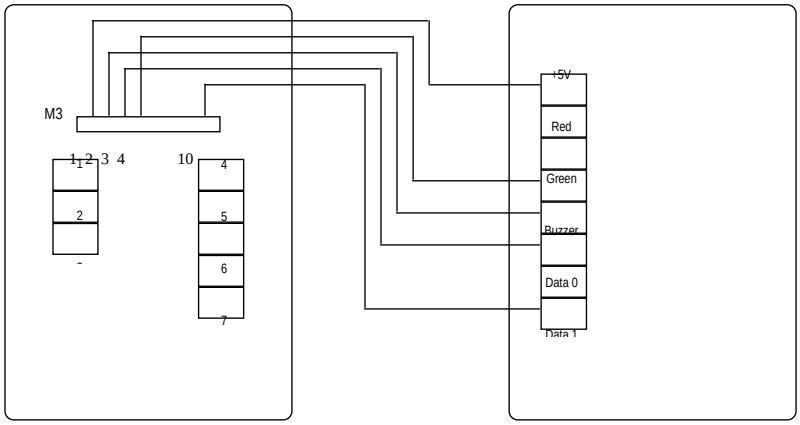
Appendix 3: Wiring Diagram For ST8000 Card Access System



Appendix 4: Wiring Diagram For ST8000-PCU to ST8000-PXS



Appendix 5: Wiring Diagram For ST-PR100 to ST8000-PXS



ST8000-PXS Proxstation

ST-PR100 Proximity Reader

Appendix 6: ST8000 Configuration Settings

Commands	Value of n	Description	Default Value
[Ctrl] Disp=n	text to display	To set reader display wordings (maximum 16 characters).	None
[Antipassback] Global=n	0=Local, 1=Global	To activate global/local antipassback.	0
[Comm] SwitchDelay=n	1 to 9	To fine tune the communicaton between controller and PC if PC is unable to detect controller.	1
[UserDB] CheckStaff=n	0=No, 1=Yes	To prompt a message if same Staff No or Name is detected when add/edit card holder record.	0
[RemoteTrans] Enabled=n	0=No, 1=Yes	To create a secondary transaction files for a particular polled day that is irrelevant to the transaction date. These files are stored into the 'Remote' folder of st8000 directory and the file is named according to the date saved in yyyymmdd format e.g. 20100920.dbf	0
[ValidityCheck] ActivationRange =N	1 to 7	To check the validity range for all cards within N days from current day.	3

[System]			
Server=n	0=No, 1=Yes	To set ST8000 ver2.10 software become a "Server" version.	0
GlobalFireRelease=n	0=No, 1=Yes	To release all doors (where Fire Monitor feature set to YES) when Fire Alarm triggered.	1
SynCtrlDoorDB=n	0=No, 1=Yes	To synchronize Controller, Door, Map and Access Level table	1
[Export]		To export the transactions captured (only for Valid Card Access transaction) to ASCII file in system defined format which is unchangeable	
ClockFile=n	location and file name of export file	To set the location/path and file name of the export file (you will need to create this file manually as the software will not create it automatically)	..\ST8000\ClkData.txt
Format=n	1=Format 1	Unit No. (2 digits) Date (8 digits in ddmmyyyy) Time (4 digits in hhmm) Card No. (6 digits) Extra 3 digits with default 000 Code (1 char, where < = In and > = Out) e.g. 0106112010094168198600 0 <	0
	2=Format 2	Unit No. (2 digits) Date (6 digits in ddmmyy) Time (4 digits in hhmm) Card No. (6 digits)	

	3=Format 3	Extra 4 digits with default 0000 e.g. 0016110109456819860000 only for version 2.07 and above Unit No. (2 digits) Date (8 digits in ddmmyyyy) Time (4 digits in hhmm) Staff No. (15 digits) Extra 3 digits with default 0000 Code (1 char, where < = In and > = Out) e.g. 00161120100948 681986000<	
[ExportToText]		To export the transactions captured (only for Valid Card Access transaction) to ASCII file in system or user defined format which is changeable	
Generate=n	0=No, 1=Yes	To export to ASCII file	0
SaveDailyFile=n	0=No, 1=Yes	To named the exported file on daily basis in 'Tr'yyyymmdd format e.g. Tr20100923.txt or on a fixed name	0
FileName=n	name of file	Fixed name of export file if SaveDailyFile is set to 0	export.txt
FileLocation=n	location/path of file	Location/path of exported file	..\ST8000\
SaveFormat=n	export format	Field available to export: Date, Time, CtrlAddr, InOut, Dept, BadgeID, EmpName, EmpNo	DATETIMECTRLADDR INOUTDEPTBADGEID EMPNAMEEMPNO

Delimiter=n	any alphanumeric value	character to separate the field	None
DateFormat=n	any valid date format	Format of date to export	yyyymmdd
TimeFormat=n	any valid time format	Format of time to export	hhnn
BadgeWidth=n	any numeric value	width of the Card No./Badge ID	6
EmpNameWidth=n	any numeric value	width of Employee Name	35
EmpNoWidth=n	any numeric value	width of Employee No.	15
DeptWidth=n	any numeric value	width of Department	12
InOutWidth=n	any numeric value	width of InOut indication (will show I as In and O as Out)	1
CtrlAddrFormat=n	br, or rb	if br then will export controller address in BBUU, else the other way round, where BB is bus no and UU is unit no	br
[TMS]		Setting for Time Attendance System	
Leave Type=n	any alphanumeric value	set selectable value for Leave Type (separate each type by a semicolon, if more than one)	None
Leave Reasons=n	any alphanumeric value	set selectable value for Leave Reason (separate each type by a semicolon, if more than one)	None

IgnoreRdr=n	controllers to be ignored	Set controllers that you do not want its transaction to be taken into account when generating attendance report (key in the controllers in this order: XXYYZZ, where XX is the Bus No., YY is the Unit No. and ZZ is the Reader No. Reader No. is needed as it is used to differentiate In and Out Reader, where value 00 - 03 refers to In Reader and value 80 - 83 refers to Out Reader). Note: separate each controller with a semicolon, if more than one.	None
First=n	0=No, 1=Yes	[This is for upgrade version] If you are running ST8000 software version 2.05 and below, the system will check this value if you are first time to run the upgrade version of ST8000TAS software.	1
Checked=n	0=not check, 1=Checked	Check whether the system has checked the upgrade version of ST8000TAS software.	1

Appendix 7: ST8000 Features and version Differences

	Version		
features	2,05	2,07	2.10
Event types	57 types	57 types	57 types. Sort by Description
For transactions captured from reader, user can decide whether or not to save to database, display it on online screen and send it to printer (for online printing)	-	-	Yes
multi comports	8 bus lines	8 bus lines	8 bus lines
controllers per busline	16	16	16
Controller's name same as door name	User defined	User defined	**yes**. User not allowed to change door name anymore.
controller's unit address display	decimal	decimal	Changeable from decimal to **hexadecimal**
Add controllers with same address as others	yes	yes	**disallowed**
controller list screen	yes	yes	-
Update controllers changes to map, if any.	-	-	yes
column 'Reader No' on door list screen	yes	yes	-
Holidays	50	50	50
Define holiday as yearly and with year	-	-	yes
Send holiday record to controller when software is first run/launch, and every time if software detects year change i.e. every year	-	-	Yes. Can be aborted by pressing F5
Time Set	00-99	00-99	00-99
Time Zone	00-99	00-99	00-99
Access Level	1296	1296	1296
CardHolder	limited to 1,000,000 due to 6 digits cardno	limited to 1,000,000 due to 6 digits cardno	limited to 1,000,000 due to 6 digits cardno
cards per holder	unlimited	unlimited	unlimited
department	theorectically unlimited	theorectically unlimited	theorectically unlimited
designation	theorectically	theorectically	theorectically

	unlimited	unlimited	unlimited
menu setup - with description	-	-	yes
Menu setup: items selection method	one by one	one by one	Select all with button
Enable/disable password login	yes	yes	yes
Generate new default system user if login password is required and when no system user is available	-	-	yes
Enable/disable auto reindex db	yes (occurred on startup only)	yes (occurred on startup only)	yes - **always enabled**. (occurred on startup only)
Enable/disable online photo display	yes	yes	yes
Enable/disable printer online	yes	yes	yes
Enable/disable card valid check	yes (occurred on startup and change of date - midnight)	yes (occurred on startup and change of date - midnight)	yes (occurred on startup and change of date - midnight)
Abort card valid check during processing	-	yes. Press F5.	yes. Press F5.
Card valid check range	all cards	**For cards within N days from current day. This N days can be modified from ST8000.ini. Max= 7 days**	**For cards within N days from current day. This N days can be modified from ST8000.ini. Max= 7 days**
Enable/disable Auto Time Sync	yes	**yes. Selectable between daily and hourly**	**yes. Always enabled as hourly. Cannot be changed.**
Hard disk monitoring	0-99 MB	0-99 MB	0-99 MB
system user	unlimited	unlimited	unlimited
menu setup	0-10	0-10	0-10
For Time Set, Time Zone, Access Level and Menu Setup, a unique/available No./Name will be generated automatically when a new record is to be added.	-	-	Yes
An extra button named 'Find' is added on all database viewing form to enable user to locate/search for record.	-	-	Yes

Installation disks	**3+1**	4	4
Initializing controllers	Auto include downloading of cards	**Prompt user to include downloading of cards**	**Prompt user to include downloading of cards**
downloading of card database can be aborted	-	yes	yes
export to text file - system defined format for '*valid card access'*	yes. 2 formats	yes. 3 formats	yes. 3 formats
export to text file - user defined format for '*valid card access'*	-	-	yes
generate remote transaction files	-	yes	yes
broadcast fire alarm door release signal	-	yes. (Notes: only doors with fire alarm monitor set to yes, will be released)	yes. (Notes: only doors with fire alarm monitor set to yes, will be released)
doubleclick at transaction screen with unlisted user	-	-	popup add user form
doubleclick at transaction screen with existing user	-	-	popup view-editable user form
doubleclick at online alarm screen with unlisted user	-	-	popup add user form
doubleclick at online alarm screen with existing user	-	-	popup view-editable user form
Door release, security on and off	standard combo selection	standard combo selection	**checklist selection**
Door close/open and lock status display	-	yes	yes
Map interval change period	fixed at 10 seconds	fixed at 10 seconds	changeable by users
map point display unit address and hint as door name	yes	yes	-
map point display door name and hint as unit address	-	-	yes
unit address length	6 digits	6 digits	**4 digits**
Find point in map	-	-	yes
system user audit trail	-	-	yes
system user audit report	-	-	yes
Display total record	-	-	yes
synchronize controller, door, map and access level table on startup to remove unnecessary	-	-	Yes (only once, but of course can be configured on

doors record			st8000.ini)
can generate report, purge, backup and restore for transactions and user log for server and client (useful if in server-client environment)	No, server only	No, server only	Yes
Time Attendance version (latest)	1,72	1,72	1,8

ST8000 software New Features and Differences

New features of ST8000 software **version 2.11**:
- Can support Ethernet controller.

New features of ST8000 software **version 2.12**:

1. Database menu > Controller > Door Setup
   Door Close Time - to delay the detection of door force open for X secs. This is for swinging door with drop-bolt. Once the door is opened, the drop-bolt will be energised immediately. The drop-bolt will only be locked when it detects that the door is aligned properly. The swinging door will cause the controller to detect multiple door opens & closes when the door is closing. This setting prevents the detecting of the door force open after the very first detection of the door close. Door force open will be detected after the door close time has expired. If the door does not swing, it will actually be locked once the controller detects that the door is closed.
   Note: This setting has no effects on ST8000 firmware version below 2.06.

2. **Saving of grid's column length** (for Online Transaction, Online Alarm Events, Door List).

3. Utilities menu > Schedule
   Auto backup schedule (under), where it will automatically backup the files at a predefined time.

New features and differences of ST8000 software **version 3.00**:

1. You can delete, clear antipassback, or initialise a particular card from the Online Transaction screen and Online Alarm Event screen.

2. You can initialise a card from View Card Holder List form.

3. On View Controller form, you can search for a particular controller by its Door1 Name or Door2 Name.

4. HASP Key checking which limits the use of bus (1,2,4,8) has changed to limit the use of controllers (16,32,64,128) i.e. all buses are opened and user can now use whichever bus he/she wants and can even use more than 1 bus to support the controllers e.g. Bus 1 for 1st and 2nd controllers, Bus 2 for 3rd and 4th controllers and so on.

5. Controller List screen is back, with an additional column called Status, showing status of controller i.e. Up, Down, Not Installed and Not In Support (due to HASP Key checking, if it is programmed to support 16 controllers, then the 17th controller will be in Not In Support status).

6. Additional status information in Poll Status form i.e. Not In Support. Also, have fixed a

bug i.e. if a controller is changed to Not Installed, then the status will change back to Idle.

7. On Door List screen, the column Reader No. is back, but is now called Door No..

8. On Door List Screen, column Lock State will show extra information i.e. Auto Lock Release and Security Off.

9. On View Access Level form and Add Door Point form, a new column is introduced, called Controller, showing the controller's name for each door.

10. Display of address for door is back to 6 digits, with first 4 showing the controller's address, and last 2 the door's no..

11. On Card Validity Check form, you have the option to select which card to correct, and a Find button is added.

12. On first run, you will be required to register, and your registration information will be printed on all the reports produced.

13. For client/server environment, this version must be up and running in order for ST8000 Client software v1.05 or above to establish communication.

New features and differences of ST8000 software **version 3.02**:

1. Comm Port menu is now called Bus, a more appropriate name as this menu no longer related
to comm port assigning only, but also IP address assigning.

2. A new menu, called ST TCP/IP is introduced - to auto detect attached Ethernet Controller, and to perform related operations such as changing IP, getting and changing Ethernet Controller's setting (Port No, Baudrate, Parity, Flow Control, etc). To make life easier, this menu can also be called from Add Controller Form and Edit Bus Form, so that user can easily auto detect the Ethernet Controllers and then assign their IP address to the relevant field.

3. Address for Controller has changed - it has the format of BBUU or IP Address (e.g. 0000, 192.168.0.99).

4. Address for Door has changed - it has the format of BBUU [Door No] or IP Address [Door No]
(e.g. 0000 [01], 0000 [02], 192.168.0.98 [01], 192.168.0.98 [02]).

5. On Add/Edit Controller Form, you can now select the communication type, either by Serial or Network, and by clicking the button labeled IP Address, it will bring up a form for auto detecting, getting and changing setting for Ethernet Controller, and from there, user can easily assign the IP Address to the relevent field.

6. Different doors can now have different name displayed on the LCD. The name displayed is based on the Controller Description field, under View Controller Form.

7. Poll Status Form has changed to include the showing of poll status of Ethernet Controller.

New features of ST8000 software **version 3.03**:

- Do support Rockey or HASP key.
- Database > Controller – Network connection types section added communication protocol options, user can select UDP or TCP transport protocol for the Ethernet Controller.

New features of ST8000 software **version 3.04**:

1**.) Bugs solved**

a:) Card Validity Check

There is a bug in ST8000 v3.0x where if card validity check is turned ON, there is an error when starting the program and everytime the card validity check is triggered. This means that card validity check WILL NOT WORK as the error causes the routine to crash. Note the program will continue to function as normal, only the card validity function crashes.

b). Clearing antipassback and initializing card from ST8000Client

Bug on Clearing antipassback and initializing card from emote ST8000Client was fixed. Wrong card number(normally the last cuser record) was sent to controller(s) at ST8000 v3.0x software. Fixes needed only on ST8000 software.

New features of ST8000 software **version 3.05**:

Status of AC and Backup Battery is added in Door list.

New features of ST8000 software **version 3.06**:

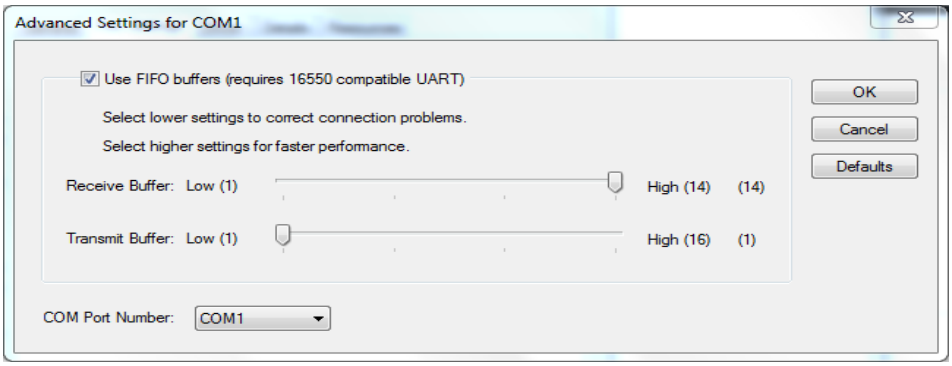
1) **Bug fixes:**

ST8000 verify card function reports correctly for ST8000 controller.

Appendix 8: Communication port setting for Windows 2000 / Windows XP

If you encounter with the communication port problem i.e. unable to communicate with the controller, which leads to controller down, you will need to change the Transmit Buffer for the communication port. Follow the guidelines below:

Quit ST8000 program. Go to **Start** button then **Settings > Control Panel**, double click on **System** icon. Click on **Hardware** tab in the System Properties window. Click **Device Manager** button. Under **Ports (Com & LPT)** section, double click on the communication port that you used e.g. if you set com1 to bus 0 in the ST8000 program, then double click on Communications Port (Com1). After this, you will see another window appears on screen, click on **Port Settings** tab and click **Advanced** button. Then, you will see the following window appears.

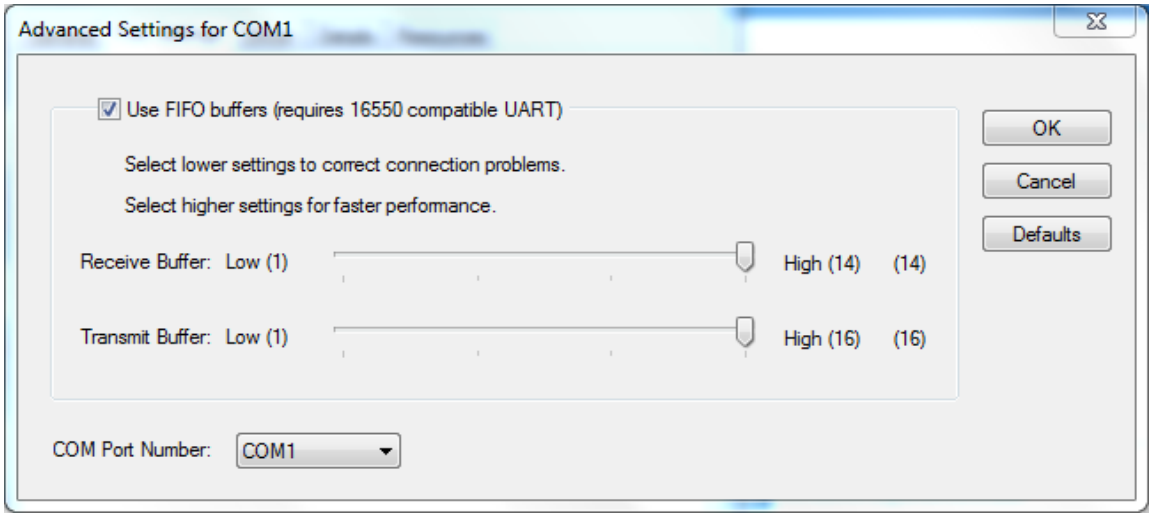


Change the **Transmit Buffer** to lowest value i.e. 1. Click **OK**. After that, restart your pc for the setting to take effect.

Appendix 9: Communication port setting for Windows 7

If you encounter with the communication port problem i.e. unable to communicate with the controller, which leads to controller down, you will need to change the Transmit Buffer for the communication port. Follow the guidelines below:

Quit ST8000 program. Go to **Start** button then **Control Panel**, double click on **System** icon. Click **Device Manager** . Under **Ports (Com & LPT)** section, double click on the communication port that you used e.g. if you set com1 to bus 0 in the ST8000 program, then double click on Communications Port (Com1). After this, you will see another window appears on screen, click on **Port Settings** tab and click **Advanced** button. Then, you will see the following window appears.



Change the **Transmit Buffer** to lowest value i.e. 1. Click **OK**. After that, restart your pc for the setting to take effect.

Appendix 10: Optional feature – UDP Link

UDP Link

ST8000 software has a new feature to integrate to third party software through the use of LAN networking via UDP broadcasting. On a predefined event, ST8000 will automatically broadcast the event message over the LAN to predefine port number. ST8000 will broadcast the message for a certain period of time until its time is up before it goes on to the next message. If the third party software reply within a stipulated time, ST8000 will jump straight to the next message to broadcast until all the messages has been broadcasted. Handshake can be enabled or disabled.

The UDP setting can be configure from ST8000.ini file under [UdpConfiguration].

```
port=600            ; listening port for this application
Sendport=100        ; port number to send to
server=127.0.0.1    ; default to 127.0.0.1
LocalPort=0         ; do not change this value.
DELIMITERDATA=FALSE ; either send data with delimiter or fixed
                    length
RECTIMEOUT=10       ; number of message sent if no
                    acknowledgement is received
INTERVALTIME=4000   ; time in millisecond between each message
                    sent, unless the previous message has been
                    acknowledged.
MAXMSGID=9999       ; maximum message id. Will reset to 0 once
                    this value is reached.
StartUDP=TRUE       ; startudp : start udp=true; stop udp =
                    false
```

Appendix 11: ST8000 Appendix – Sample Reports

Index

A

Access 30
  level 30, 43
Address 14, 16
  bus 13
Alarm 9, 11, 21
  Arm 49
  arm pin 22
  arm time 22
  Disarm 49
  point des 23
  relay 18, 19
  sound time 22
Antipassback 18, 19
  duration 14, 16, 19
  Global 19
  reader location 18, 19
  violation 19
Auto PIN 18, 19
AutoLockRelease 17, 18

B

Backup 50
Baudrate 12

C

Card + Pin 17, 18
Card Database 43
Card Holder 31, 41, 45
Card Numbers 41, 44
Clear Anti-Passback 49
Clear Card Lockout 49
Clear Memory 47
Comm Port 12
Configuration 38
Controller 8, 13, 41
Customer code 35

D

Database Format 62
DBF 41
Department 33, 41
Door Reader 41
Door Release 46
Door Settings 43

E

Editor Password 53
Event 11

F

Find Card 54

Fire Monitor 14, 16
Floor Plan 34, 56
H
Hard disk 35
Holiday 28
Holidays 43
I
Initialise
  Card DB 47
  Controller 48
Installed 14, 16
J
Job Titles 33, 41, 45
L
Lockout 14, 16
  duration 14, 16
Log Viewer 52
Logout 56
M
Menu Level 36
Modify PIN 36
N
No Access 18, 19
Non-Working 28
O
Open Time 18
P
Parameter 34
Password 34, 52
Photo 34
Pin 17, 18
Possible Events 65
Printer 34
Push Button 18, 19
Q
Quit 56
R
Re-Index 34
Reindex DB 53
Release Time 18
Reset Controller 47
Resource 53
Restore 50
S
Security Off 49
Security On 49
Setup
  alarm 8

alarm system 14
controller 8, 14
door 8, 14
Sort Order 41
ST8000.ini file 39
Status 11
Synchronisation 35
Synchronise 49
T
Tamper 14, 16, 18
Time Filter 41
Time Set 24
interval 25
Time Sets 43
Time Zone 25
Transaction Types 41
Trouble Shooting 59
U
User 32
V
Validity 34
Verify Card 53
View Version 54
W
Warning 11
Working 28