Thank you for purchasing your ACP-Series Access Control hardware and Contactless Card Management software from Cobra Controls!

This quick start guide provides basic installation information, drawings, first time power-on instructions, software installation instructions, first time software use instructions, and short descriptions of key terms and concepts for installation and use of your ACP-N Series hardware and software.

TABLE OF CONTENTS

1   INITIAL SET UP

1.1   Hardware Guide

This section of the Quick Start Guide is for installation of your ACP – N Series Hardware. These instructions refer to the following pieces of equipment:
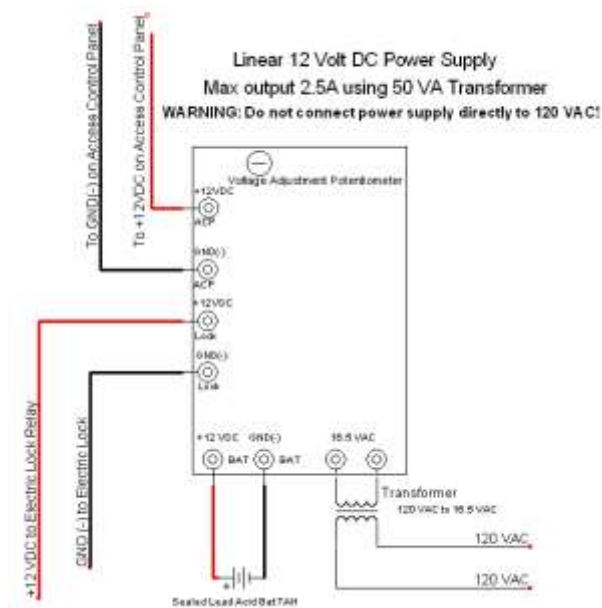
- Power Supply
- Request to Exit Devices
- Door Status Switches
- Proximity Reader
- ACP - 1N
- ACP - 2N
- ACP - 4N
- Fail Safe Magnetic Locks with a Motion Detector

The access control panel comes pre installed within a metal enclosure and a 12VDC 2.5 amp output linear power supply. ACP Series control panel current draw: 100mA @ 12VDC. The metal enclosure conveniently includes several ½' and ¾' knockouts to accommodate wiring and conduit.
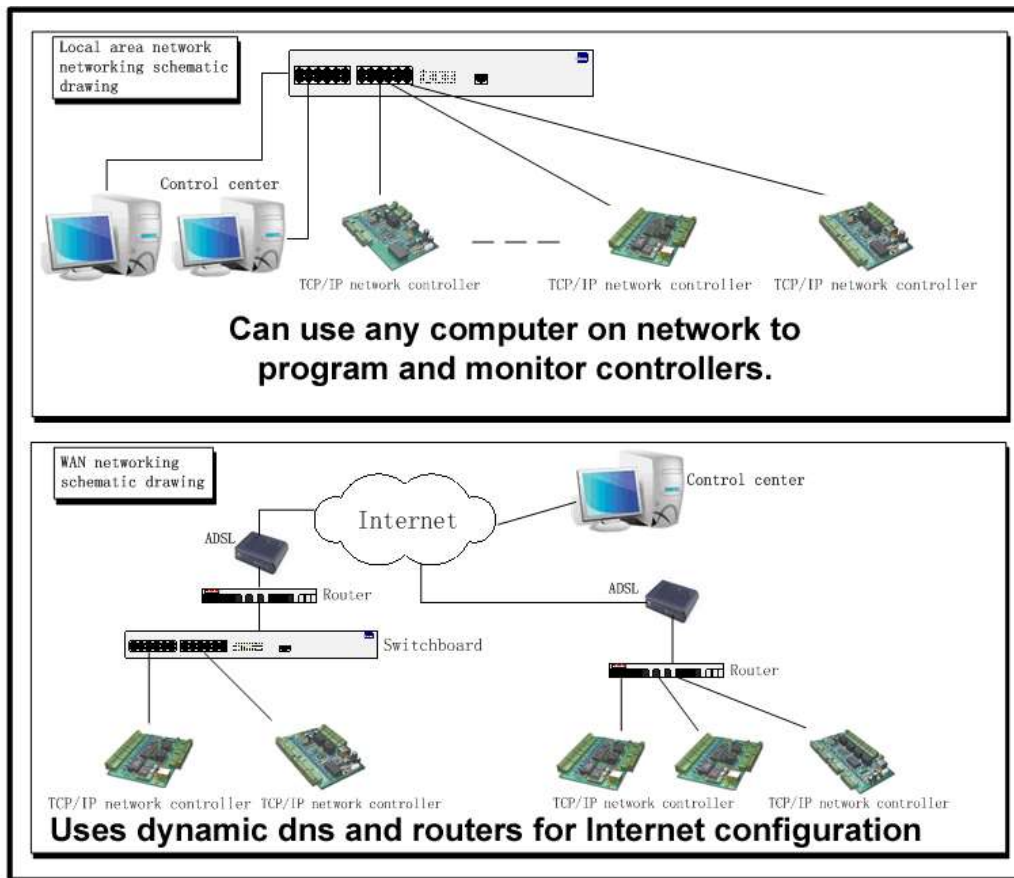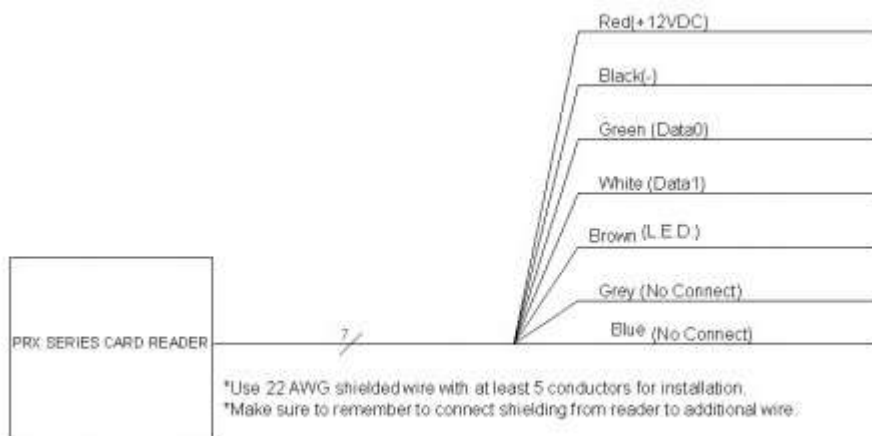
2   INSTALLATION OF HARDWARE

2.1   Power Supply

INCLUDED IN ACP-SERIES CONTROL PANELS 12.0VDC 2.5Amp LINEAR POWER SUPPLY

2.2   Network Setup

Local area network networking schematic drawing

Control center

TCP/IP network controller   TCP/IP network controller   TCP/IP network controller

Can use any computer on network to program and monitor controllers.

WAN networking schematic drawing

Internet

ADSL

Control center

Router

ADSL

Switchboard

Router

TCP/IP network controller   TCP/IP network controller   TCP/IP network controller   TCP/IP network controller   TCP/IP network controller

Uses dynamic dns and routers for Internet configuration

2.3   Cobra and Wiegand Proximity Readers

Red (+12VDC)

Black (-)

Green (Data0)

White (Data1)

Brown (L.E.D.)

Grey (No Connect)

Blue (No Connect)

PRX SERIES CARD READER   7

*Use 22 AWG shielded wire with at least 5 conductors for installation.
*Make sure to remember to connect shielding from reader to additional wire.
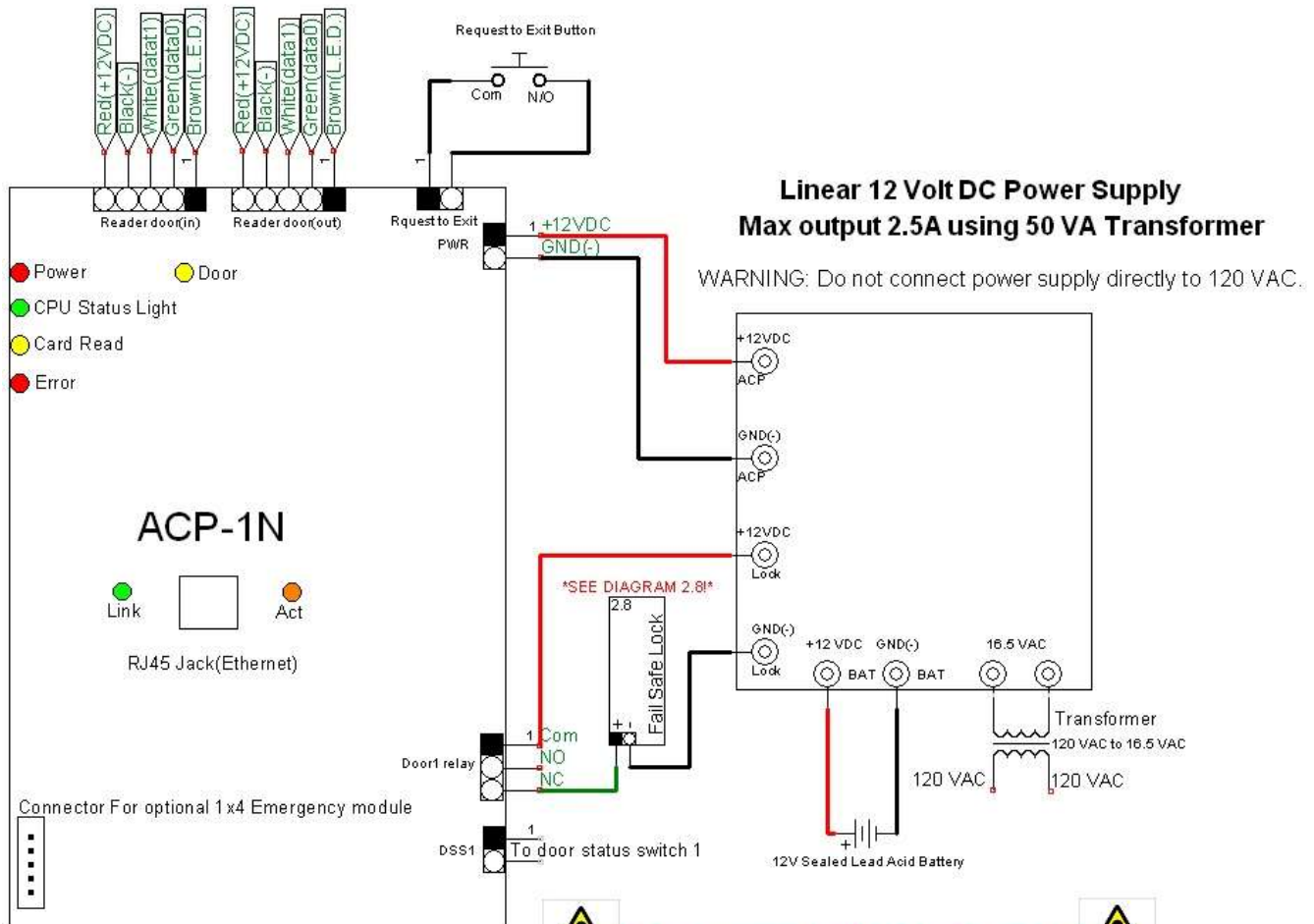
EACH READER HAS A SHIELDED CABLE. CONNECT SHIELD TO SHIELD AT THE CARD READER. CONNECT SHIELD TO GROUND (-) AT THE CONTROL PANEL INPUT FOR EACH INDIVIDUAL READER. Use 22awg 5 conductor or better stranded cable with an overall shield for proximity reader wiring.

Current Draws: PRX-3, PRX-5, PRX-4 readers: 50mA @ 12VDC   PRX-10LR: 100mA @ 12VDC

2.4   ACP – 1N

Reader door(in): Red(+12VDC), Black(-), White(data1), Green(data0), Brown(LED)

Reader door(out): Red(+12VDC), Black(-), White(data1), Green(data0), Brown(LED)

Request to Exit Button — Com, N/O

Rquest to Exit
PWR   1 +12VDC
       GND(-)

● Power   ○ Door
● CPU Status Light
○ Card Read
● Error

ACP-1N

● Link   [ ]   ● Act

RJ45 Jack(Ethernet)

Connector For optional 1 x 4 Emergency module

Door1 relay — 1 Com, NO, NC

DSS1 — 1 To door status switch 1

SEE DIAGRAM 2.8!

2.8   Fail Safe Lock   + -

Linear 12 Volt DC Power Supply
Max output 2.5A using 50 VA Transformer

WARNING: Do not connect power supply directly to 120 VAC.

+12VDC ACP
GND(-) ACP
+12VDC Lock
GND(-) Lock

+12 VDC BAT   GND(-) BAT   16.5 VAC

Transformer
120 VAC to 16.5 VAC

120 VAC   120 VAC

12V Sealed Lead Acid Battery

⚠️ **Recommended Cable Types!** ⚠️

Reader -22 Gauge, 6 Conductor Shielded Wire

Locking Hardware- 18 Gauge or better, 4 or 6 Conductor Wire

*use of other cabled types such as CAT5 for these devices may void your warranty.

2.5 ACP – 2N

Linear 12 Volt DC Power Supply
Max output 2.5A using 50 VA Transformer

WARNING: Do not connect power supply directly to 120 VAC.

Recommended Cable Types!*

Reader -22 Gauge, 6 Conductor Shielded Wire
Locking Hardware- 18 Gauge or better, 4 or 6 Conductor Wire
*use of other cabled types such as CAT5 for these devices may void your warranty.
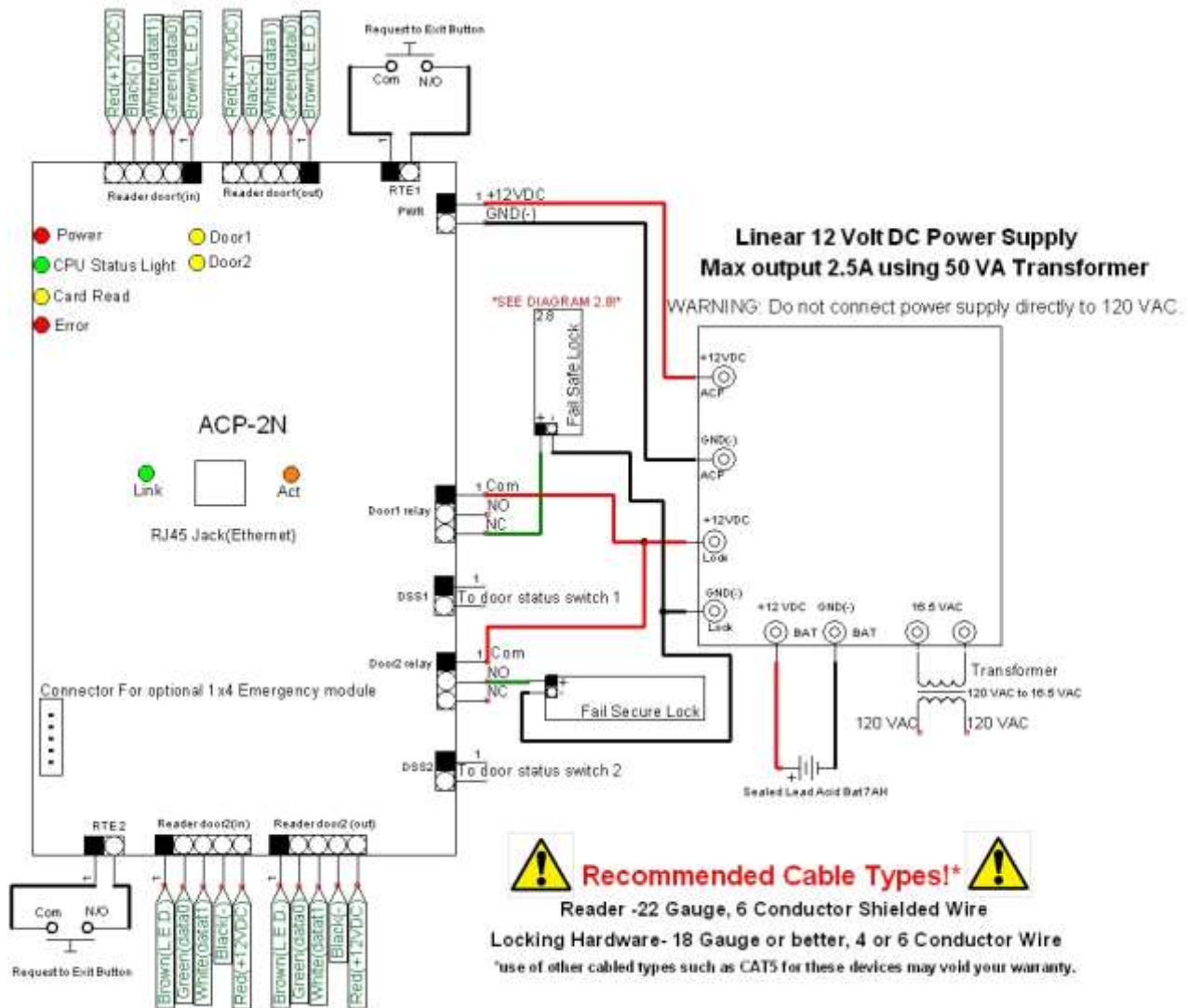
2.6   ACP – 4N
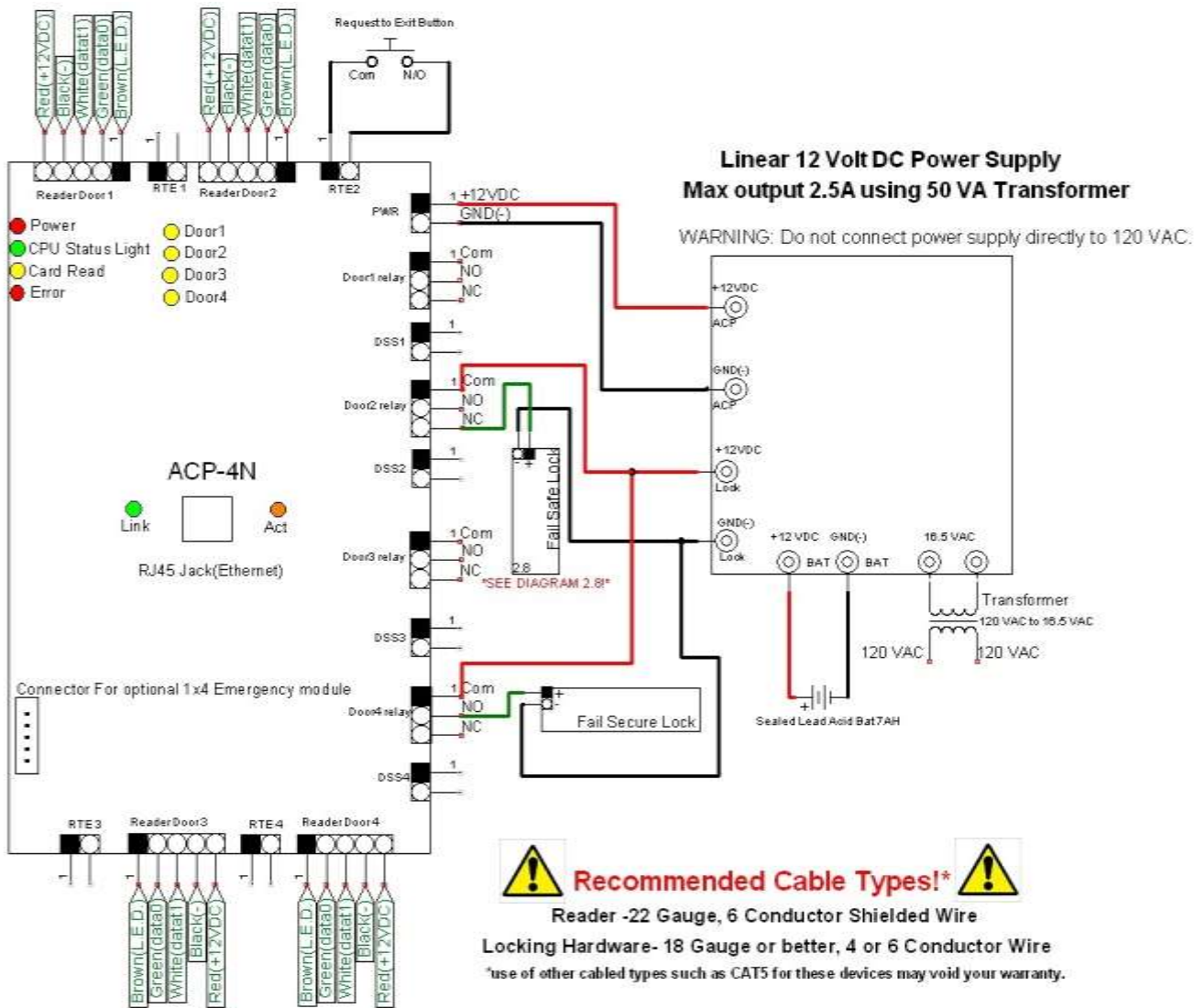
2.6.1   Riser Diagrams

The following diagrams are Riser Diagrams that should assist you or your access control installer in running cable to each door in the system. Select the diagram with the equipment list which best matches your application.

Electric Strike No Monitor.

'Recomended Cable Type'

3. Electric Strike

2. Proximity Reader

2 Conductors ('18/2')

1. Cobra Controls

ACP

5 Conductors ('22/6 Shielded')

Equipment List

1. Cobra Control Access Control Panel
2. Cobra Controls Proximity Reader
3. Electric Strike with out monitor option.
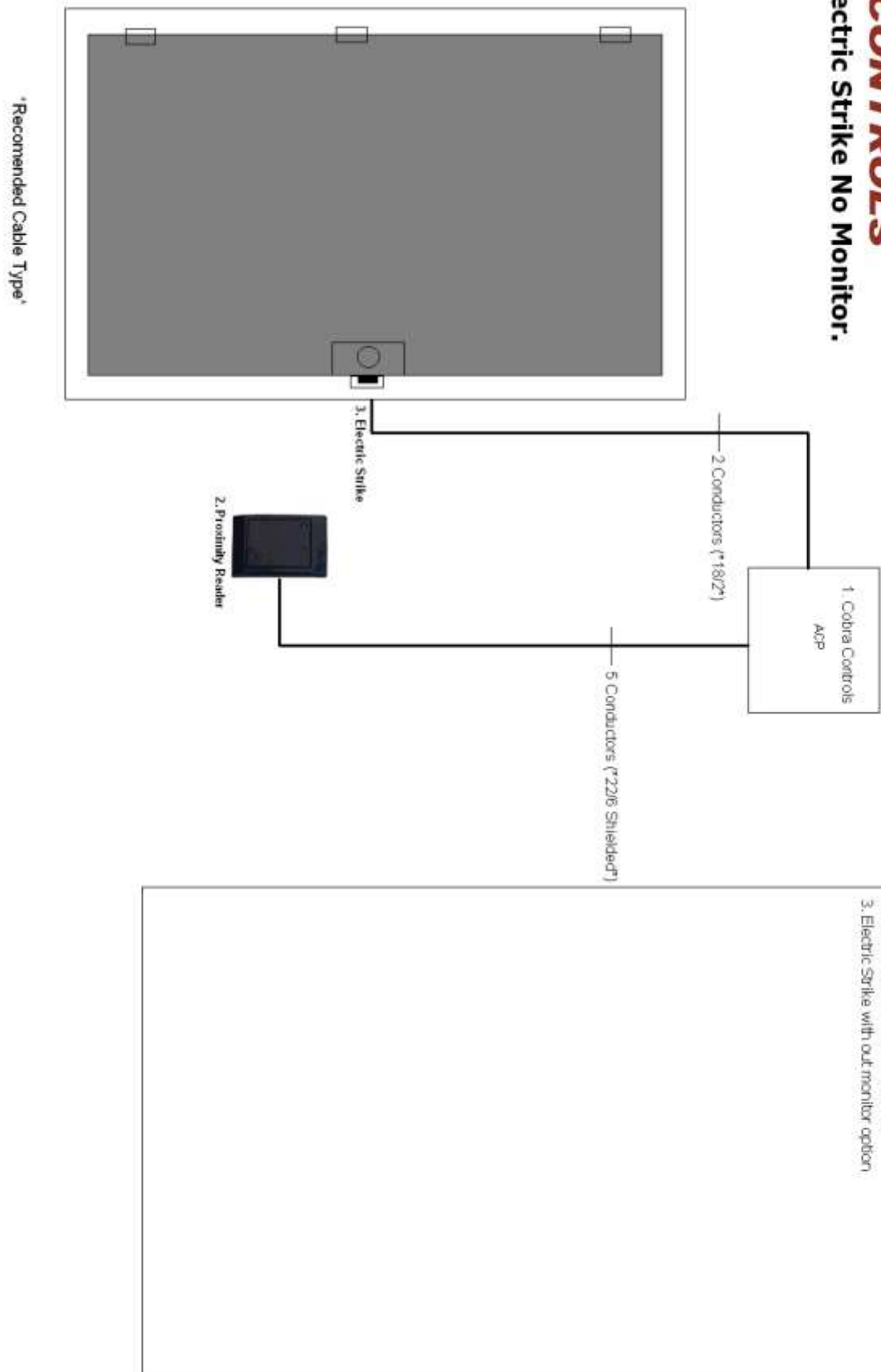
COBRA CONTROLS

Electric Strike With Monitor.
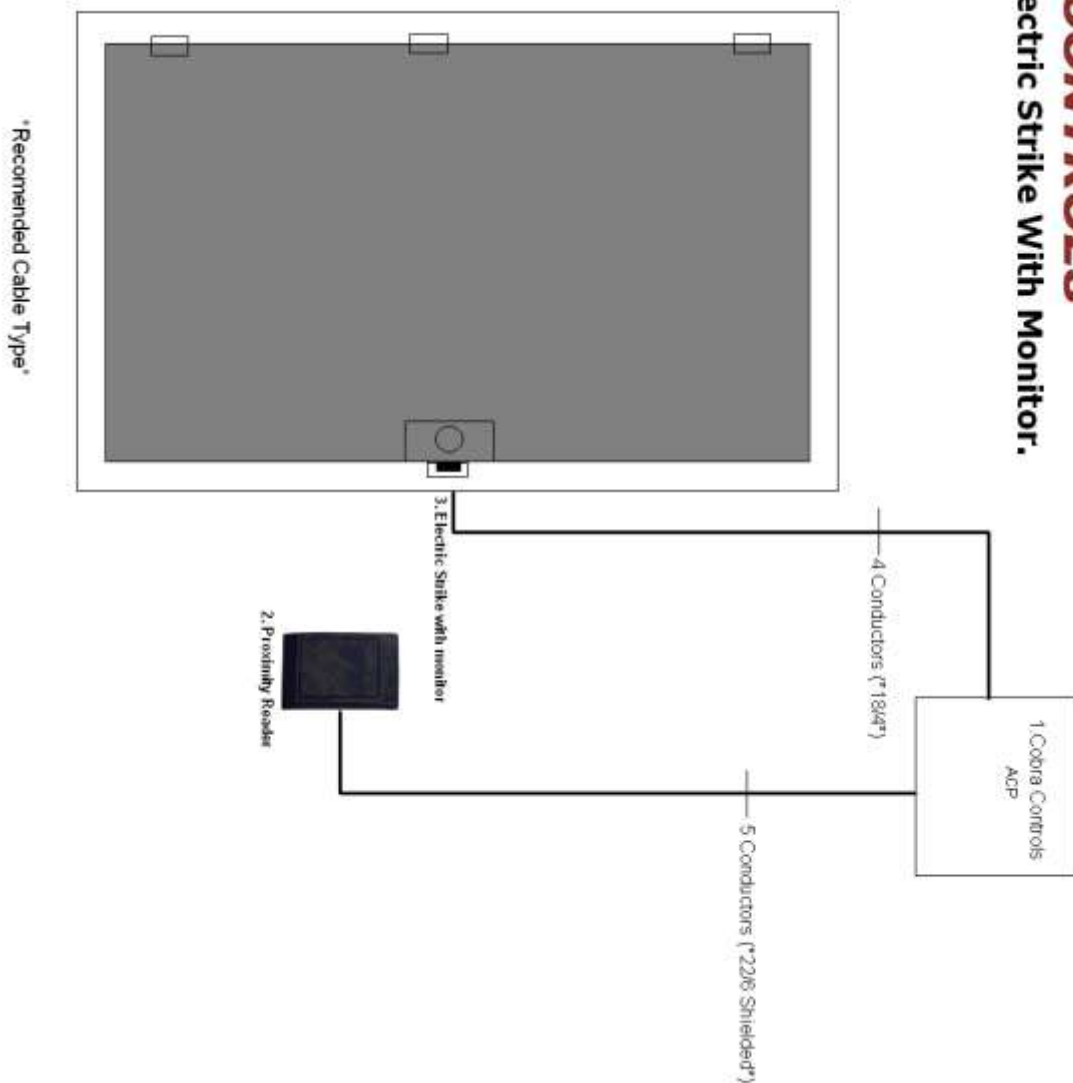
COBRA CONTROLS

Recomended Cable Type

3. Electric Strike with monitor

2. Proximity Reader

4 Conductors (*18/4*)

5 Conductors (*22/6 Shielded*)

1. Cobra Controls ACP

Equipment List

1. Cobra Control Access Control Panel
2. Cobra Controls Proximity Reader
3. Electric Strike with monitor option

ACP Magnetic Lock No Monitor
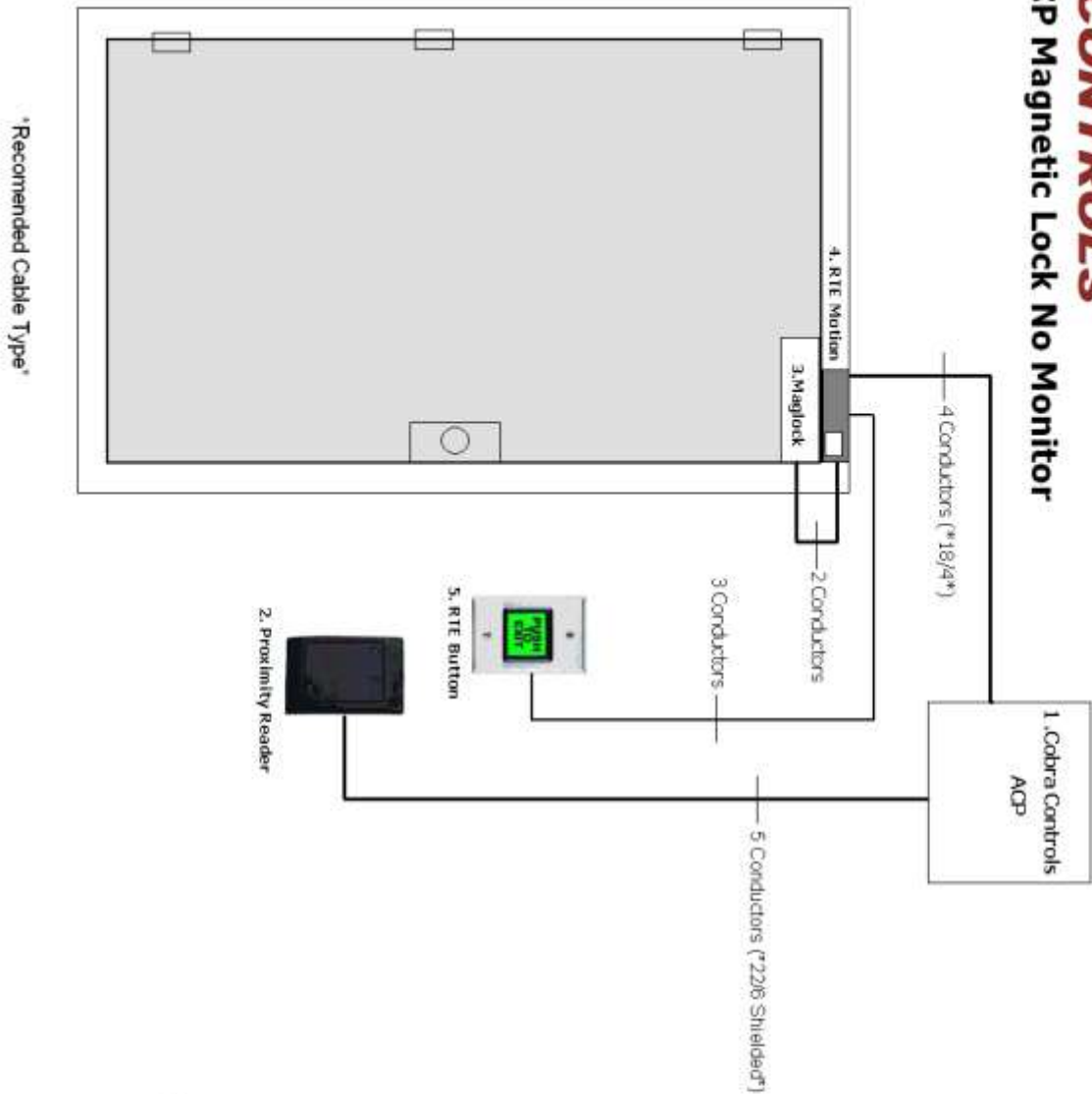
COBRA CONTROLS

"Recomended Cable Type"

4. RTE Motion

3.Maglock

4 Conductors ("18/4")

5. RTE Button

2. Proximity Reader

3 Conductors

2 Conductors

1.Cobra Controls ACP

5 Conductors ("22\6 Shielded")

Equipment List

1. Cobra Control Access Control Panel
2. Cobra Controls Proximity Reader
3. Magnetic Lock No Monitor Feature
4. Request to Exit Motion
5. Illuminated Request to Exit Button

COBRA CONTROLS

ACP Magnetic Lock With Monitor
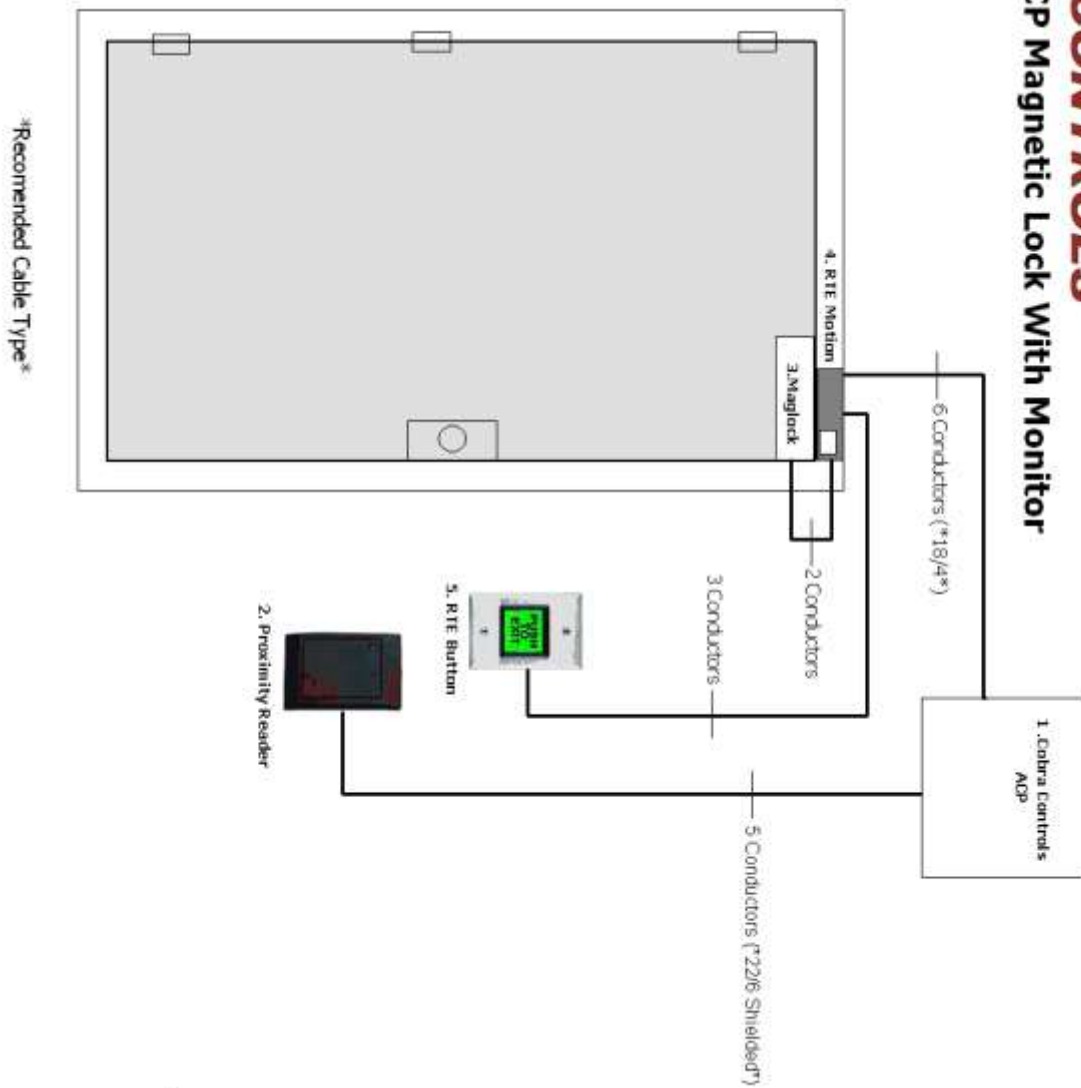
Equipment List

1. Cobra Control Access Control Panel
2. Cobra Controls Proximity Reader
3. Magnetic Lock with Monitor feature
4. Request to Exit Motion
5. Illuminated Request to Exit Button

Recomended Cable Type

4. RTE Motion
3.Maglock
5. RTE Button
2. Proximity Reader
1.Cobra Controls ACP

6 Conductors (*18/4*)
2 Conductors
3 Conductors
5 Conductors (*22/6 Shielded*)

2.7   Fail-Secure Lock with Door Status Monitor
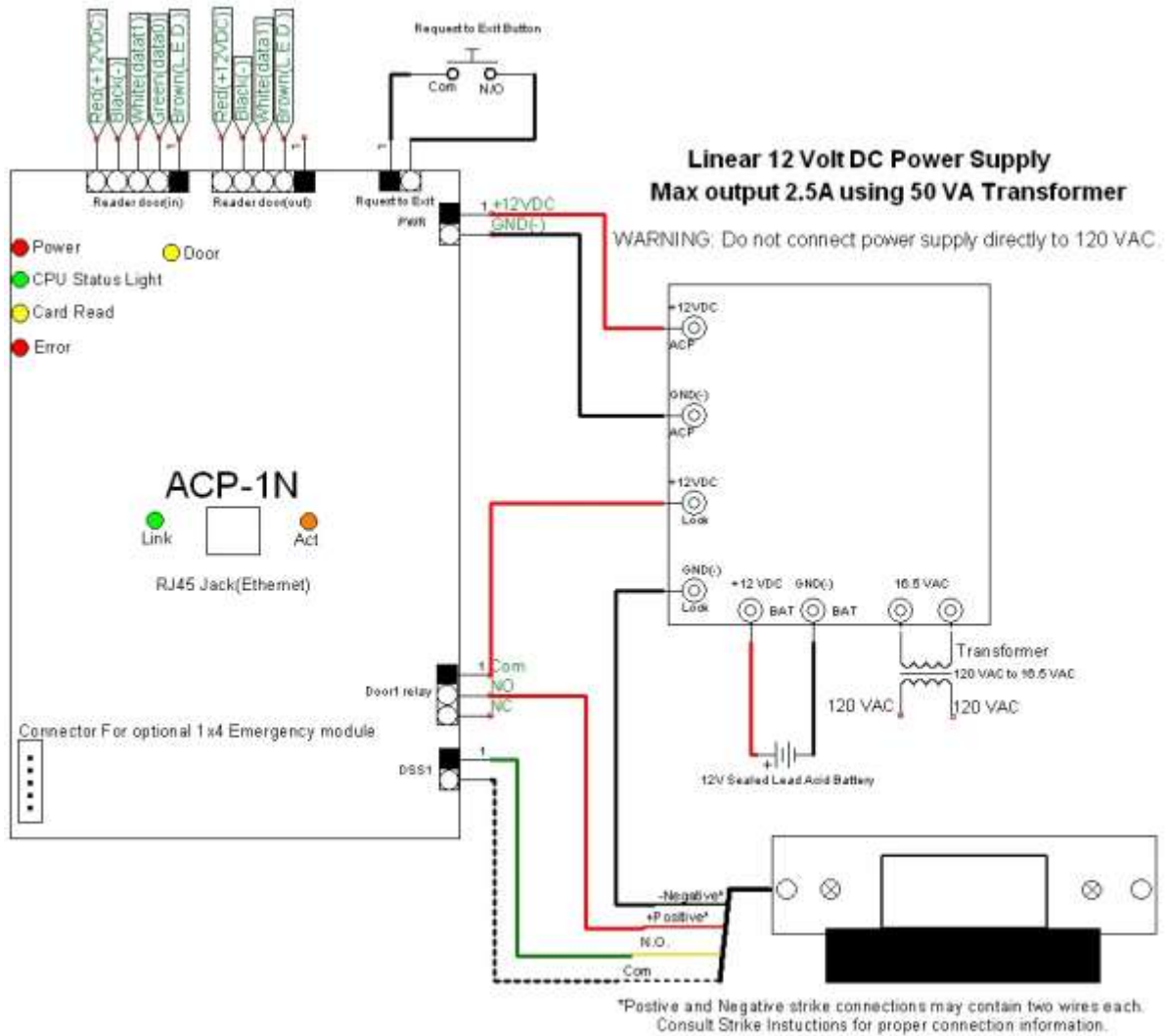
2.8   Fail Safe Lock with Request to Exit pushbutton and Motion Detector
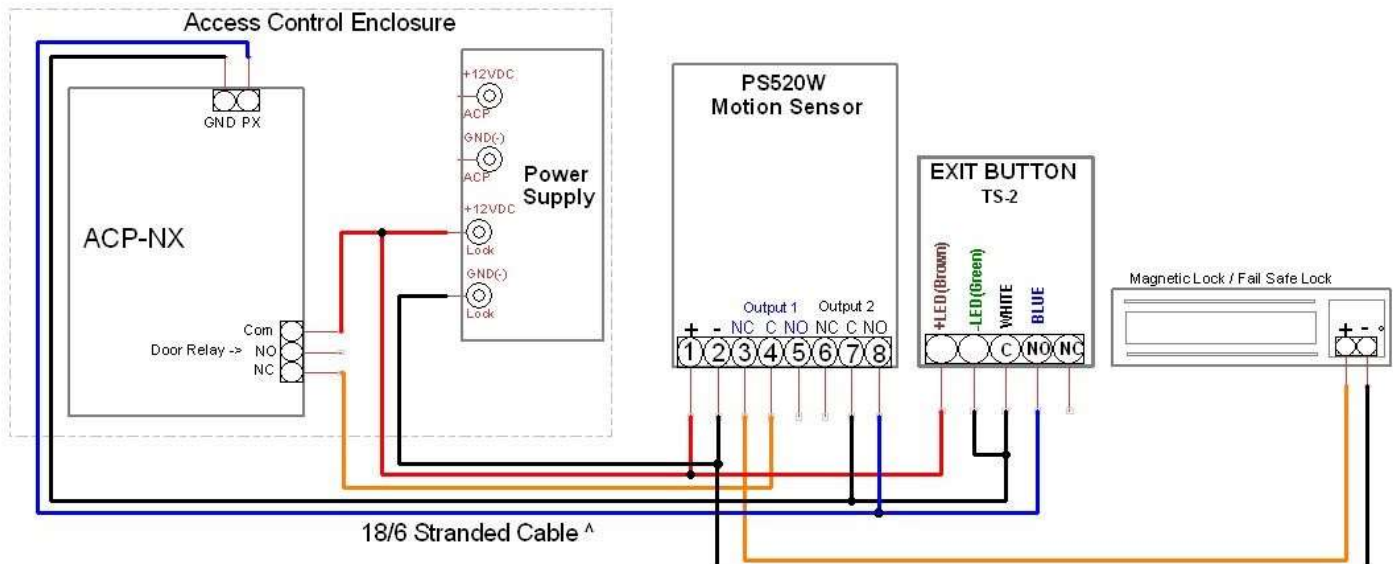
ONLY USE A REQUEST TO EXIT MOTION DETECTOR WITH TWO RELAYS FOR RELEASE OF THE FAIL SAFE MAGNETIC LOCK AT THE DOOR AND A REQUEST TO EXIT SIGNAL SENT TO THE ACP SERIES CONTROL BOARD.

2.9   ACP 1X-4
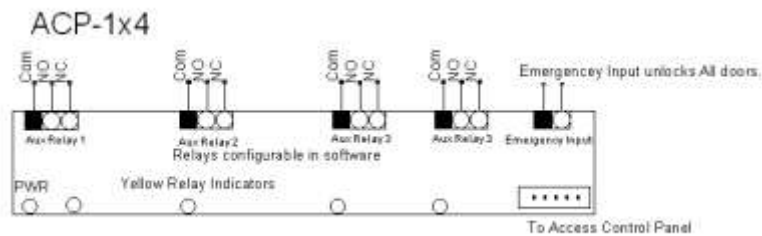
3   INSTALLATION OF SOFTWARE

3.1   The software disc

Your hardware includes a CD Rom software disc containing the Contactless Cards Management software. Insert the Cobra disc into your computer.   Browse the CD in windows explorer and copy all contents to your local hard drive. The disc includes a copy of the following:

- ✓ The Cobra_CD 1-X folder,
- ✓ ACP-N_series_quick_start_guide.pdf Quick Start Guide.
- ✓ Adobe Reader XI Installer
- ✓ WEBConfigV2.7_EN.exe
- ✓ Web Interface and Application Quick Start Guide
- ✓ Video Tutorial folder

- Copy the contents of the entire disc directly to your computer's hard drive.
- Open the Cobra_CD 1-X folder, which you have copied to your hard drive.
- Open the ACP-N_series_quick_start_guide.pdf file and read the contents.
- Open the AccessControlV7.79en Folder.
- For Windows 7 users scroll down and open "setupWin7.exe"
- For all other Windows systems Scroll down and open "setup.exe" to get started. The following prompt will appear:

3.2 Installation and Operation of Software

Part 1: Installation

1.1 Basic Steps of Installation

1、 If your system is Windows XP, it is required to install Windows XP SP3.

2、 Install software Access Control.

1.2 Basic requirements for hardware of Installation

Memory：1GB.

Hard Disk：1GB above of free space.

1.3 Operating system supported by software

Windows XP SP3

Windows 7

Windows Server 2003 SP2

Windows Server 2008

Windows Server 2008 R2

1.4 Software setup

First puts in the CD to CD-ROM, then run the applications of "setup.exe".

Click "English"

Click "Accept"

COBRA CONTROLS

Click "Accept"

Click "Yes"

Access Control Setup

Installing .NET Framework 2.0 SP2...

Suite Integration Toolkit Executable

Suite Integration Toolkit Executable has encountered a problem and needs to close. We are sorry for the inconvenience.

If you were in the middle of something, the information you were working on might be lost.

Please tell Microsoft about this problem.

We have created an error report that you can send to help us improve Suite Integration Toolkit Executable. We will treat this report as confidential and anonymous.

To see what data this error report contains, click here.

[Send Error Report]   [Don't Send]

If the error occurs, need to install xp sp3. then install the software.

"Microsoft . NET Framework" is required to install, please do not skip. If you do not install "Microsoft . NET Framework", the program will not work correctly.

The system will enter into next step for you to install Access Control.
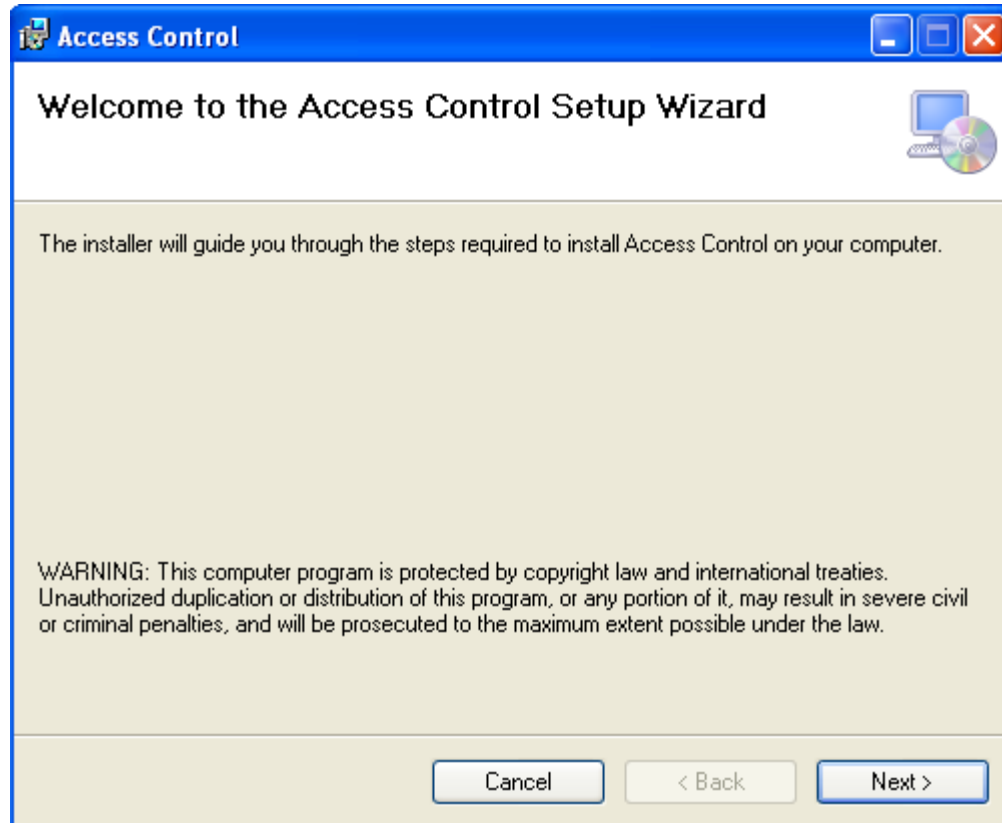
Click "Next"
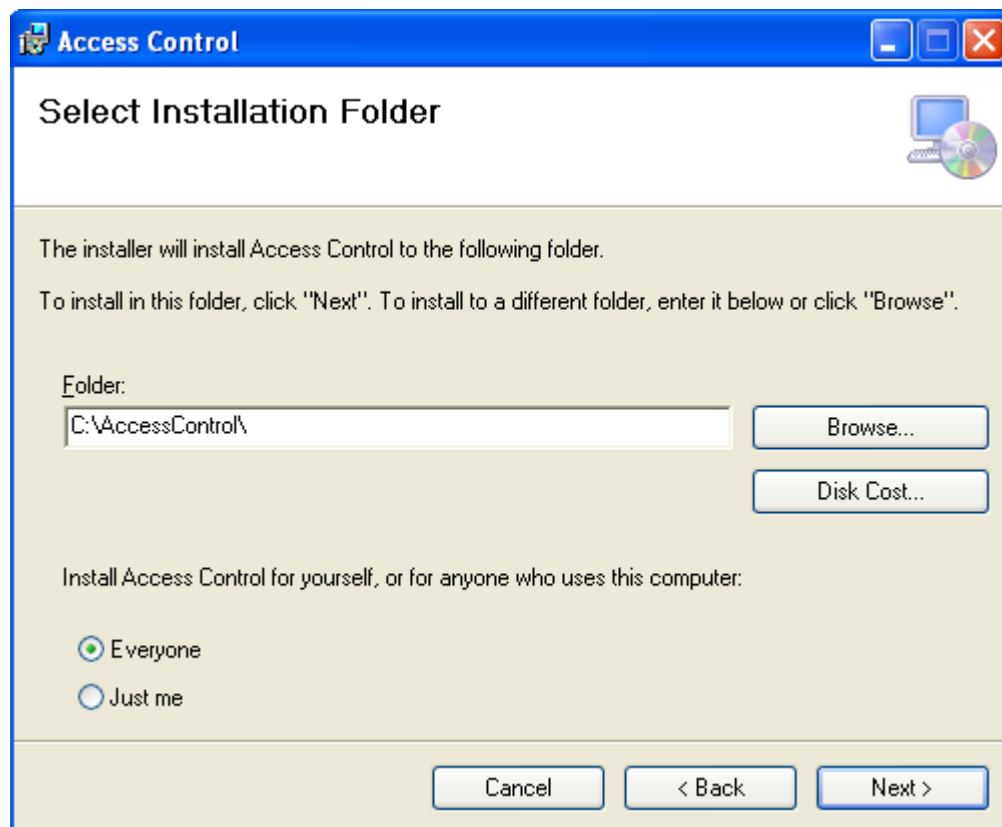
Click "Next"
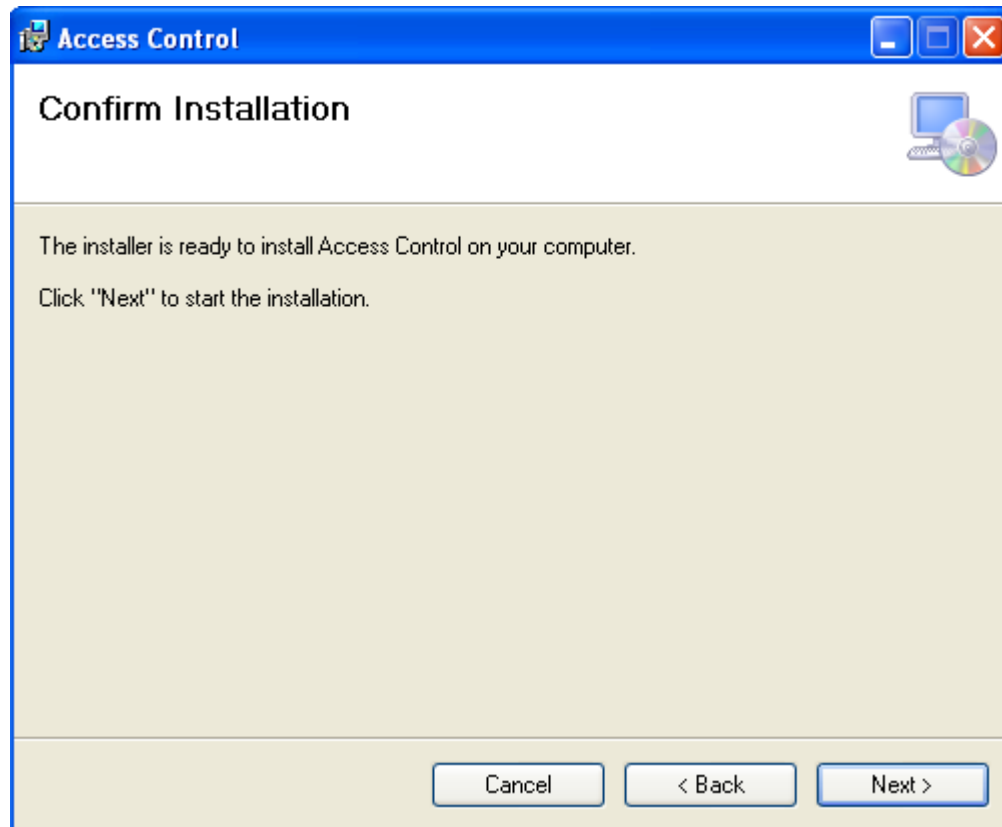
Click "Next"
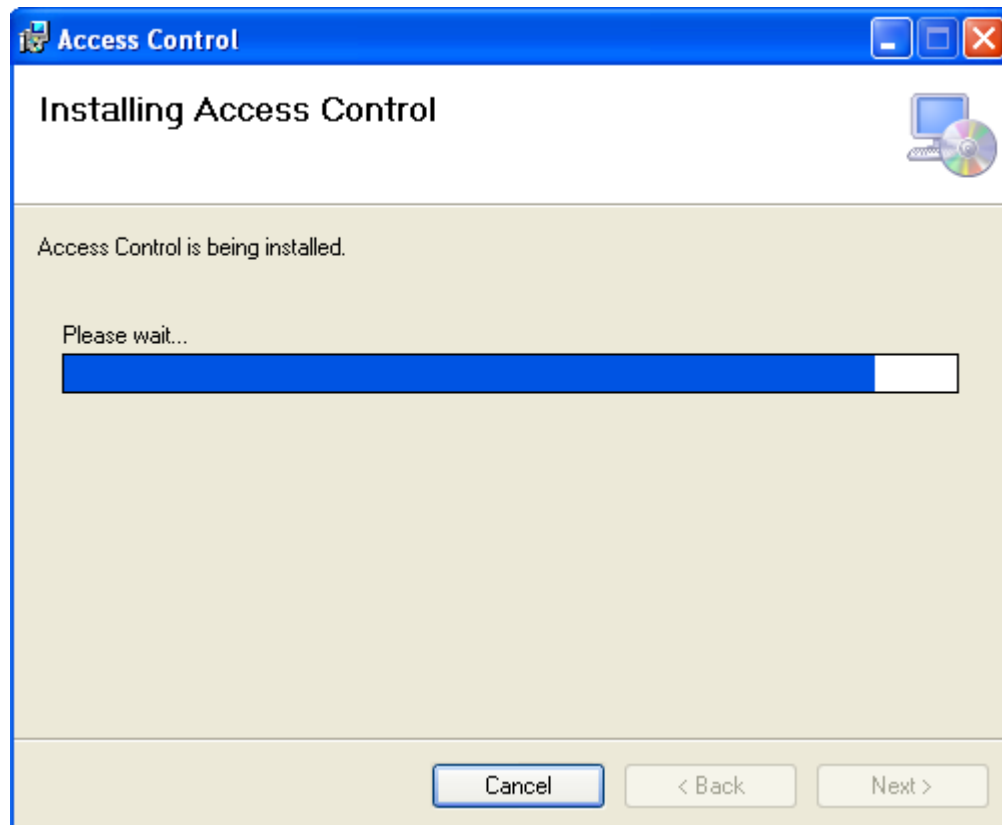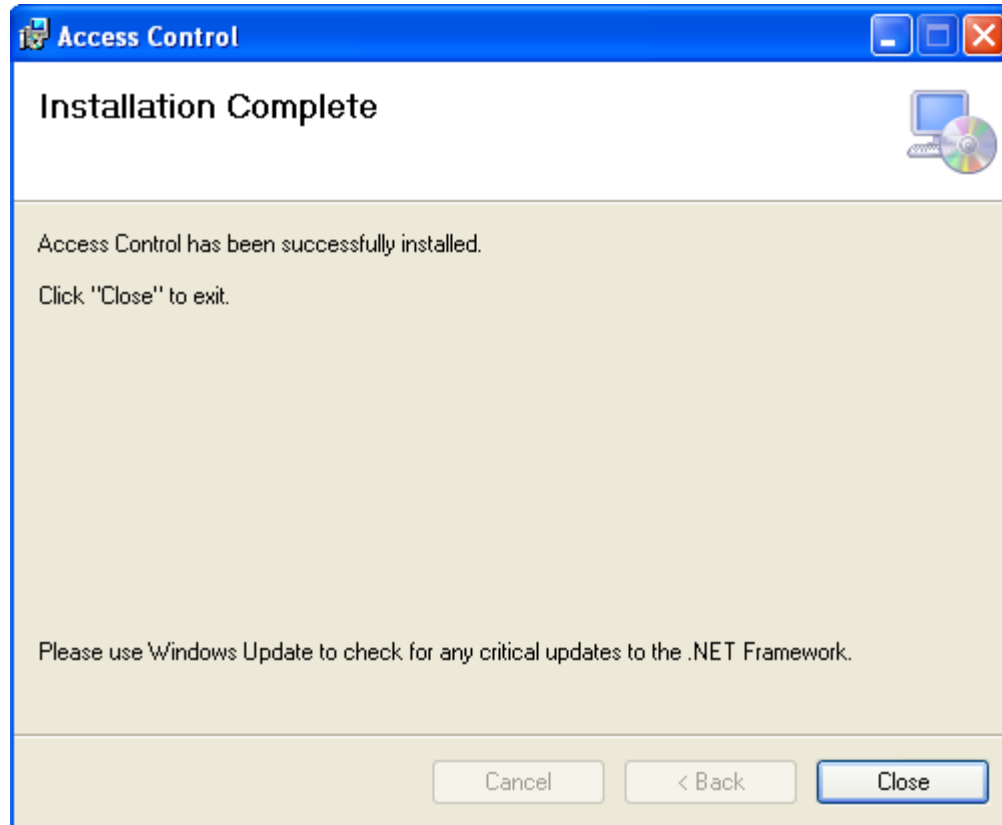
Click "Close"

After the installment completes, The [icon] will created automatically and display in computer screen.

1.5 Software Remove

Click【start】>【Settings】>【Control Panel】
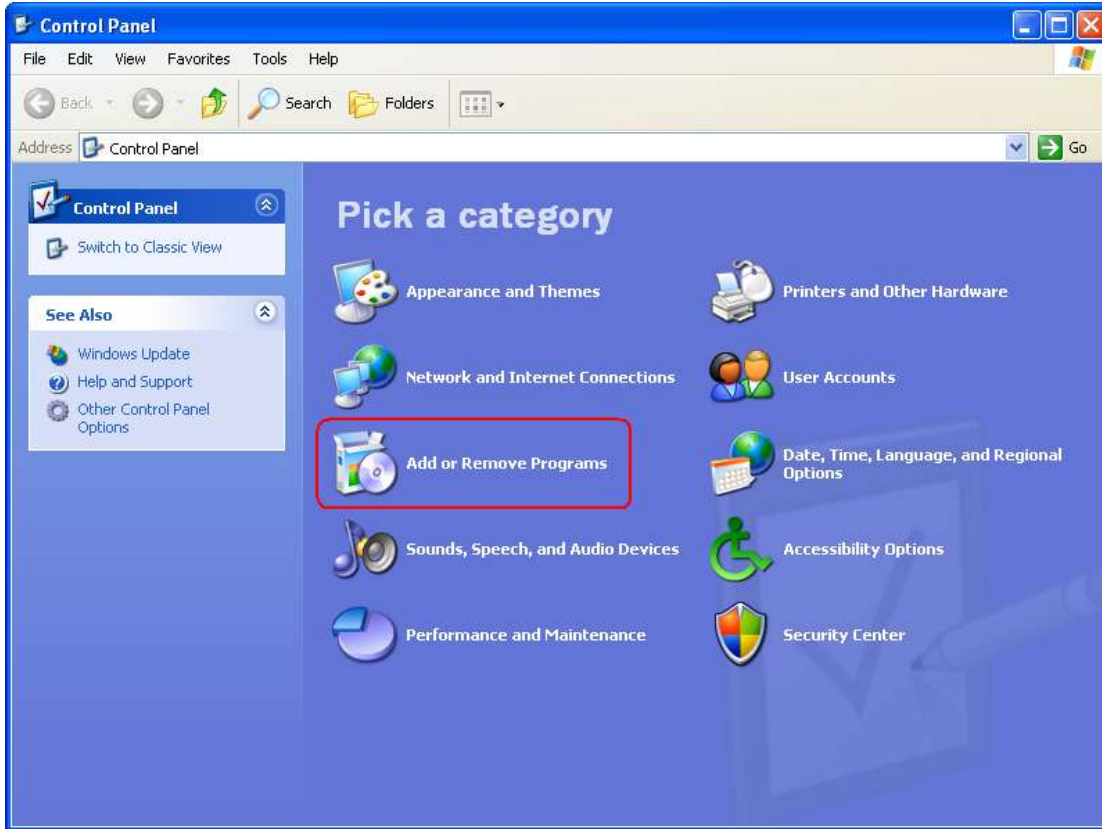
Click "Add or Remove Programs"
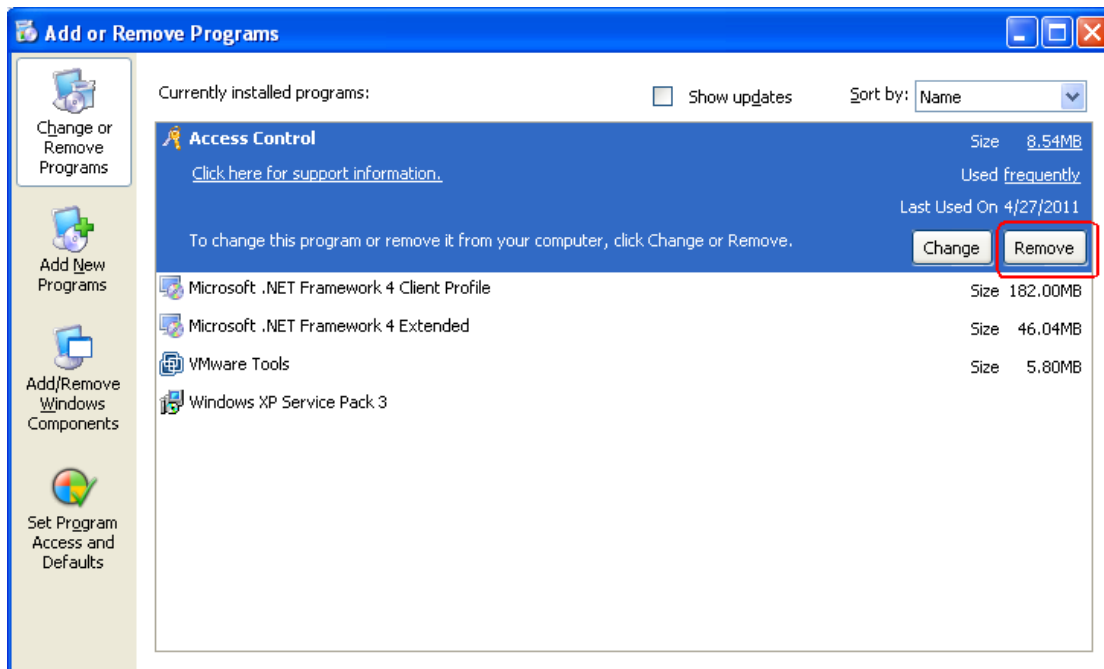
Find software "Access Control" in "Currently installed programs", Click "Remove".

Add or Remove Programs

Are you sure you want to remove Access Control from your computer?

Yes   No

Click "Yes"

Access Control

Cancel
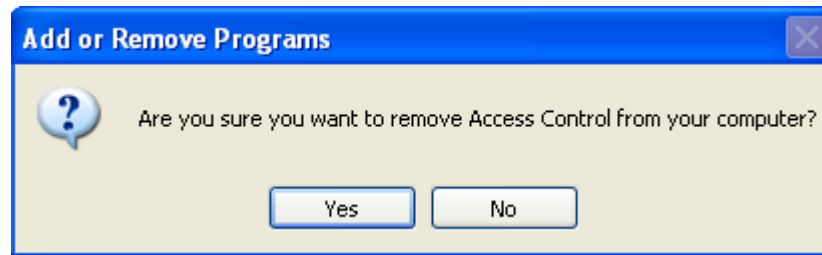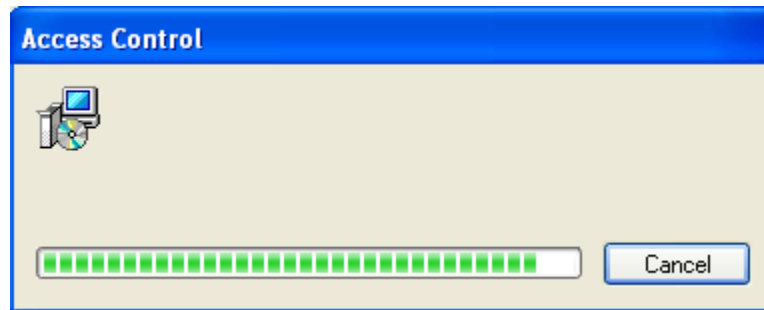
Part 2 Basic Operation of Software

2.1 Login

Click the [key icon] or run 【start】 > 【Programs】 > 【Access Control】 > 【Access Control】 ,It will open up the Login window as follows:

The default user name is " abc ", the password is "123".

It is recommend to change the user name and password after first log in.

If the SQL Server connection fails a dialog box will appear as follows:
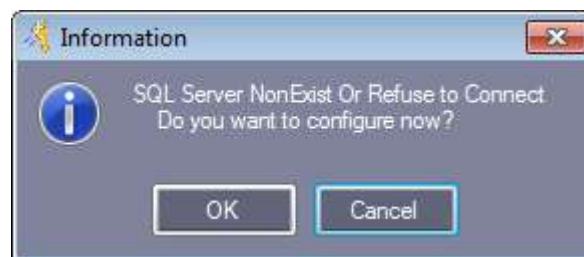
Click "OK', Please consult the full menu at "Help" > "Manual", See Section 5.2 SQL Server Configuration.

After login , It will show the main window as follows:
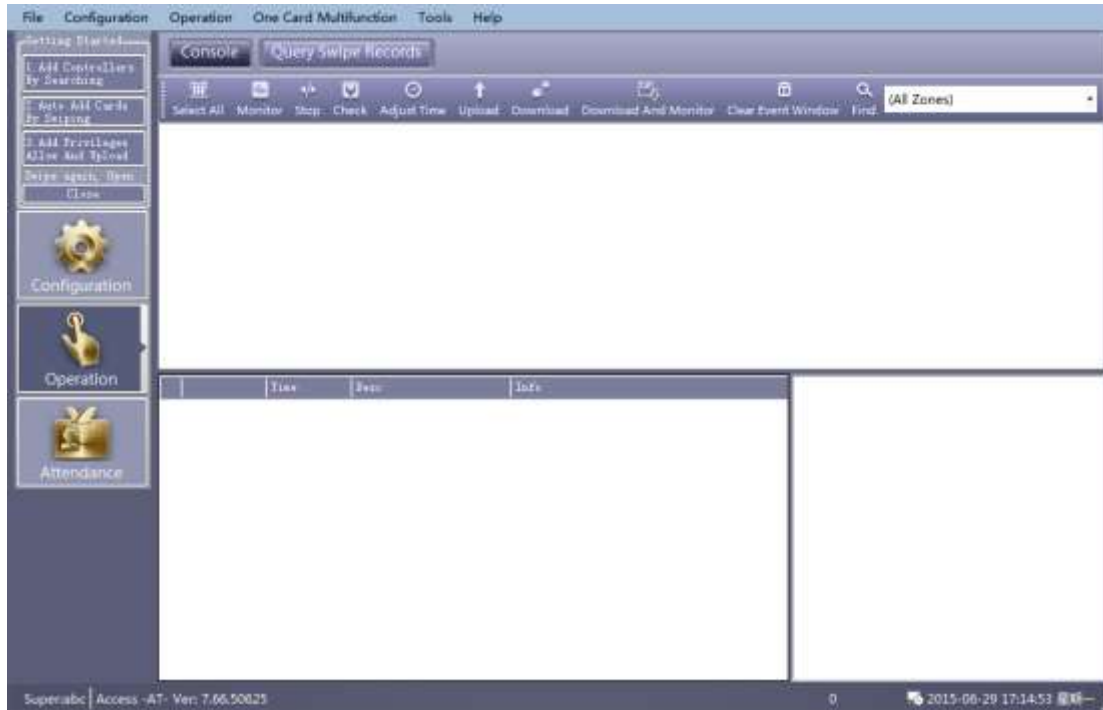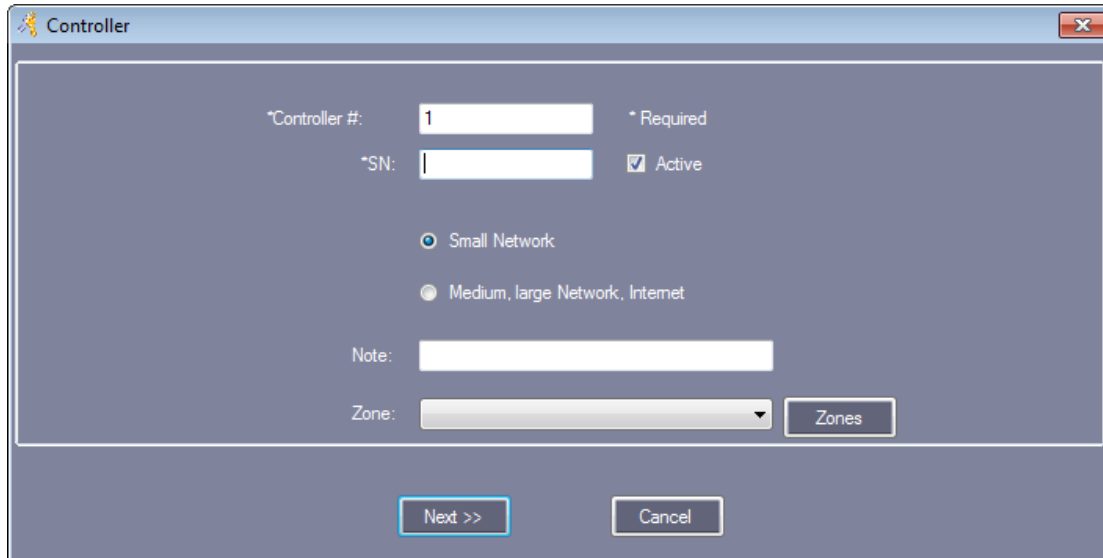
2.2 Parameter Settings of Equipment

2.2.1 Add/Set up Controller

Click【Configuration】>【Controllers】from the menu bar

click the ＋ New to add the controllers into system.
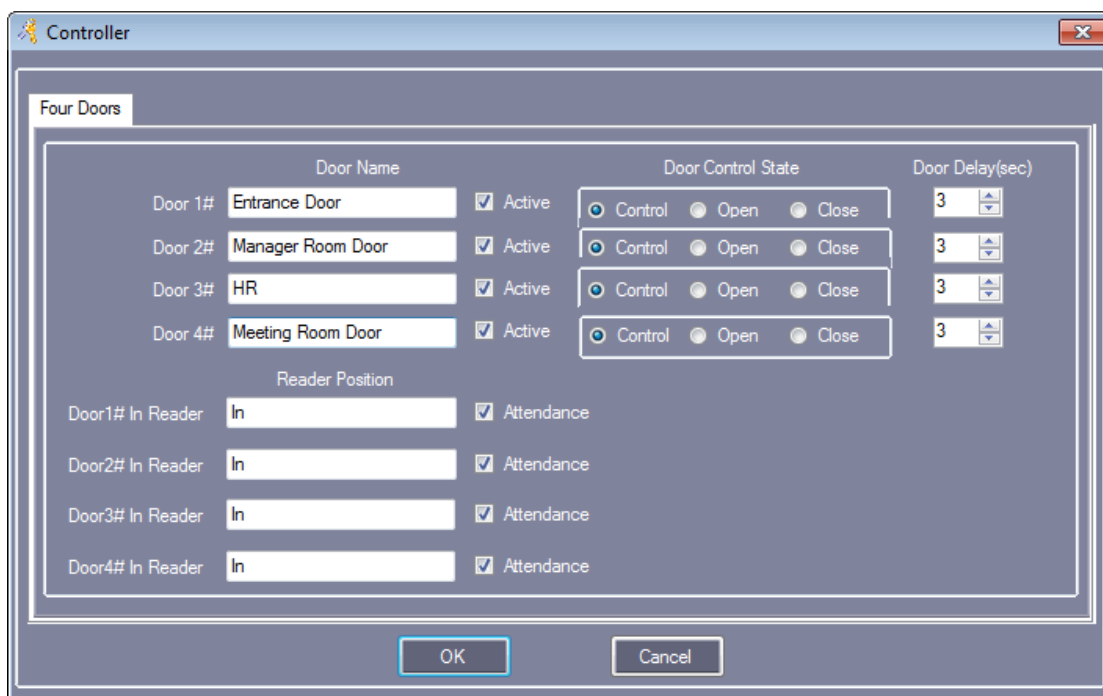
The product S/N (namely each controller serial number) on the PCB's label S/N:********* of the controller . please enter that 9-digit value.

Attention: If the product S/N which you entered is not same as the PCB's label S/N:*********

the software can't communicate with the controllers.

Small Network: Support TCP/IP communication, all controllers are in the same network segment

Medium, large scale LAN, or Internet: Support TCP/IP communication for different network segment controllers.

Click "Next"

"Door Name" and "Reader Position" can be modified

Mark "Active": by ✔, the control console will display each door; otherwise, it won't display.

Mark "Attend":by ✔, the records on card reader can be used as attendance records; otherwise, it can't.

Click "OK"

2.2.2 IP setting of Controller

Click【Configuration】>【Controllers】>【Search】.
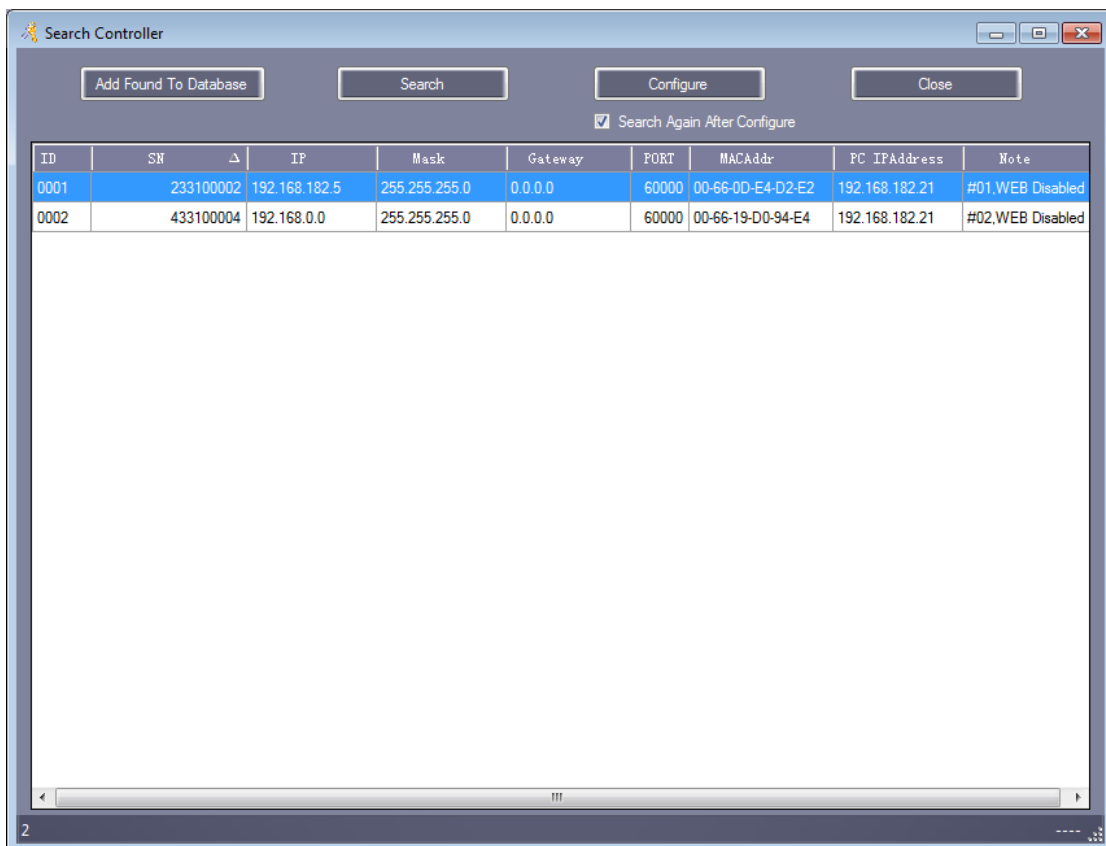
Search will take around 5 Seconds.

Click **"Configure"**
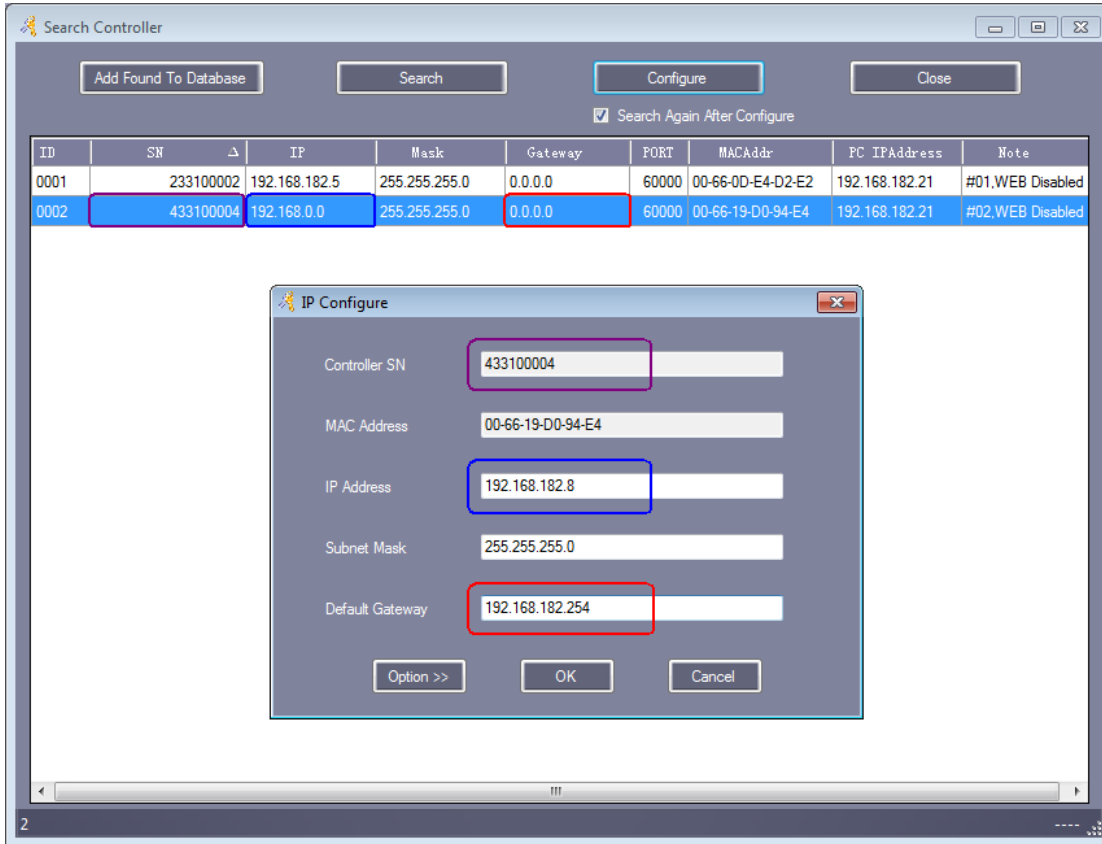
Click **"OK"**
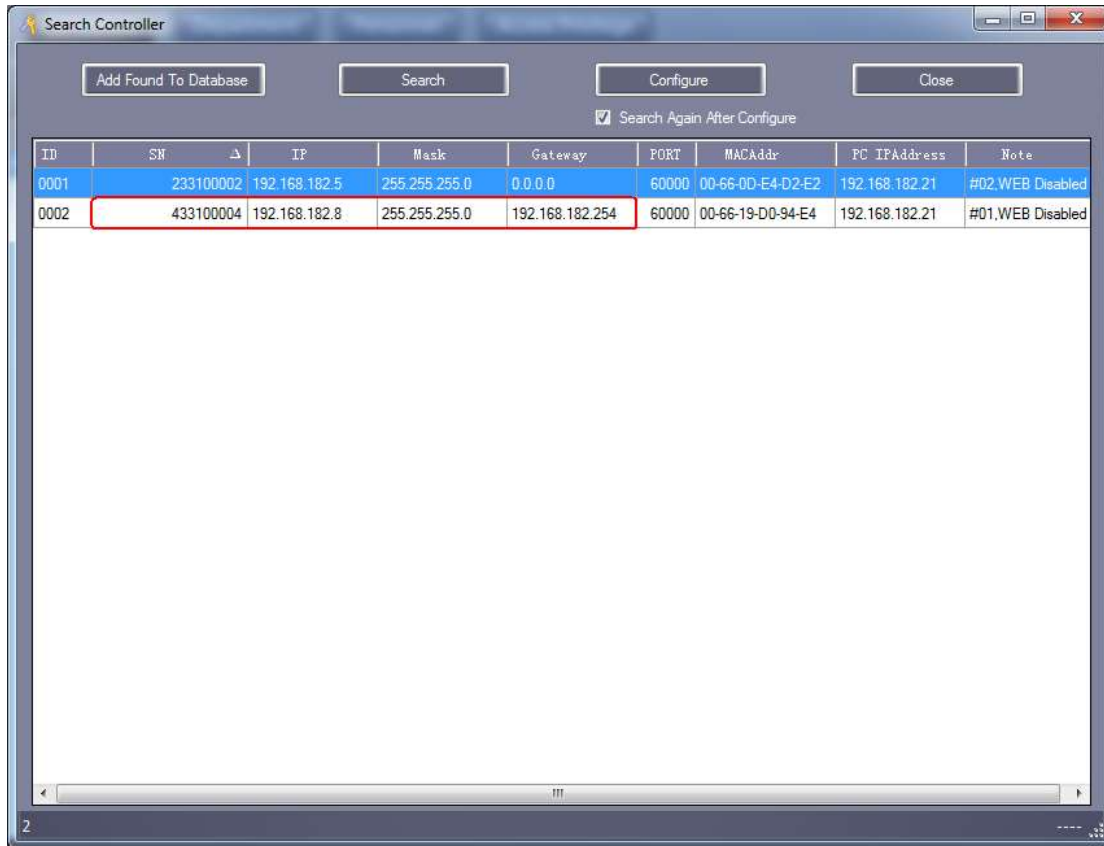
After IP address setting, you can move to chapter 2.2.1 Add/Set up Controller to set the controller parameters, the IP address should be assigned to the corresponding Controller.
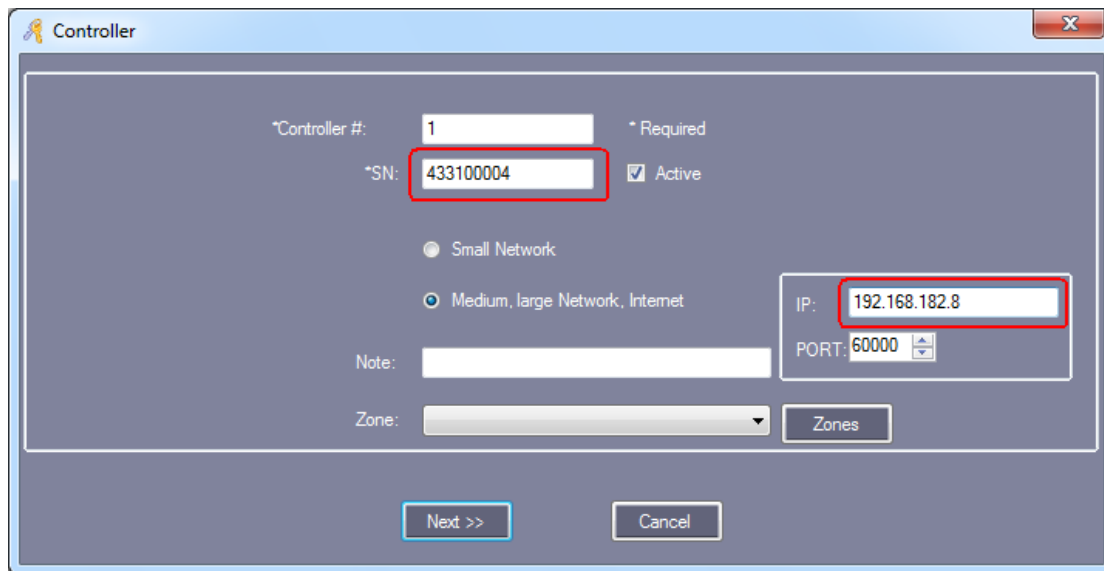
Result, You can see IP address.

The controllers are separated into different network . Each controller must be assigned a unique IP address .

2.2.3 Controller Zone Management

Click【Configuration】>【Zones】
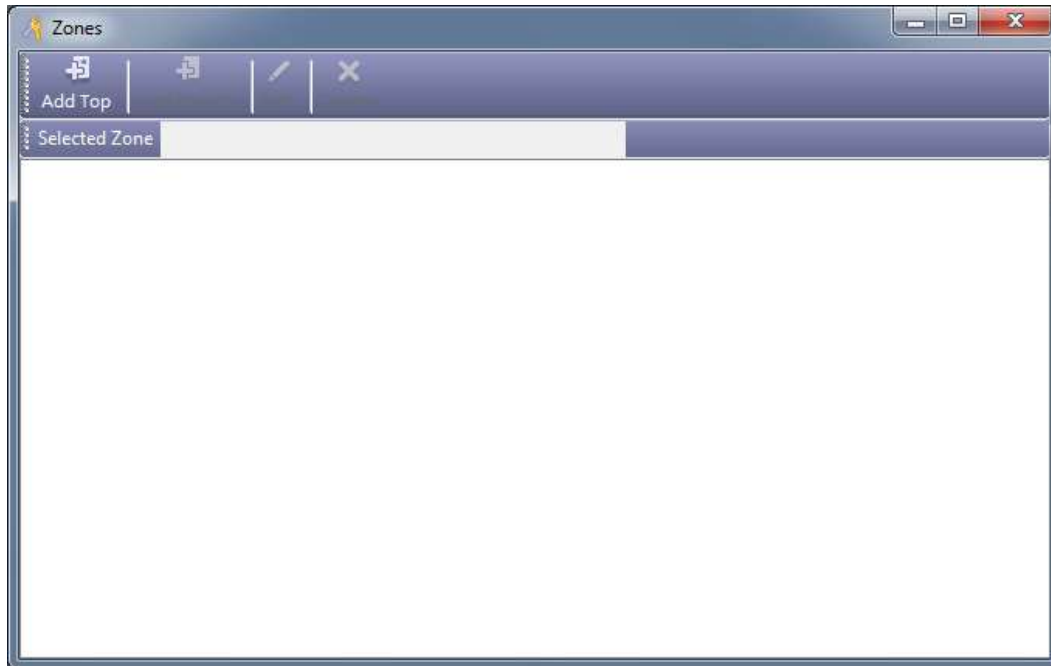
Click "Add Top"
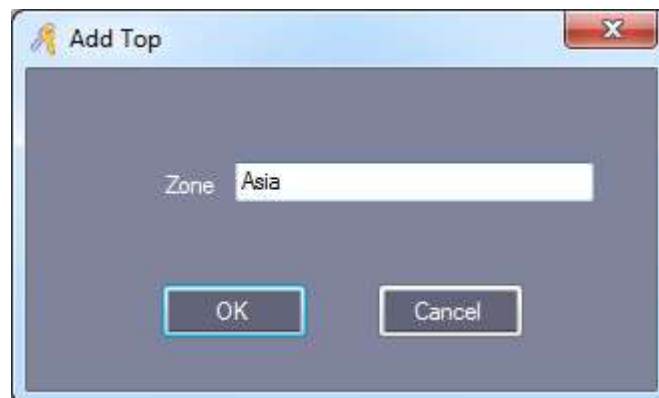
Click "OK"
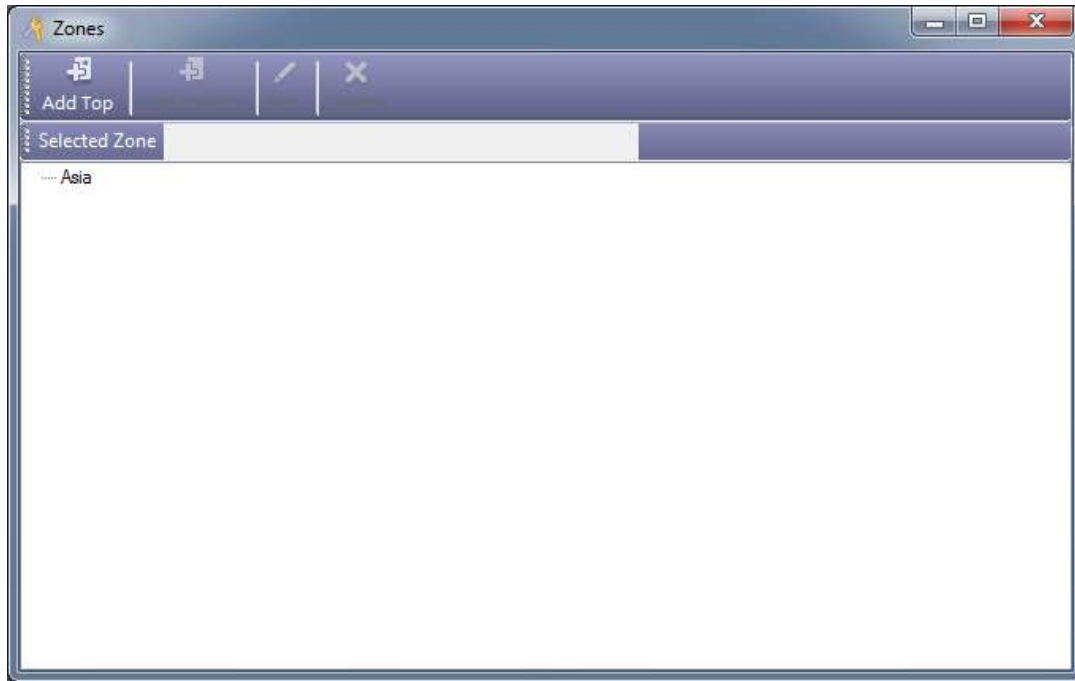
Click the "Add Branch" to add a new Branch under the Top.
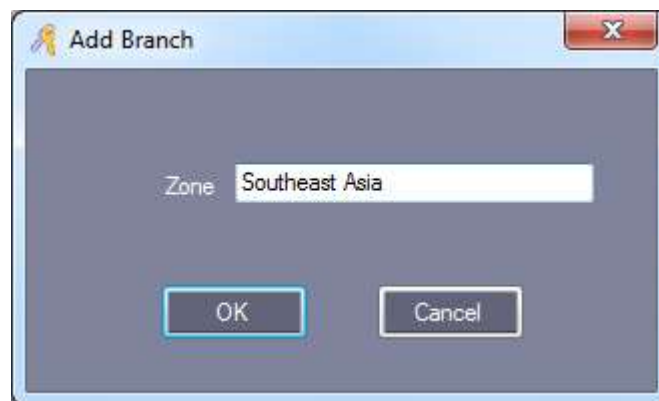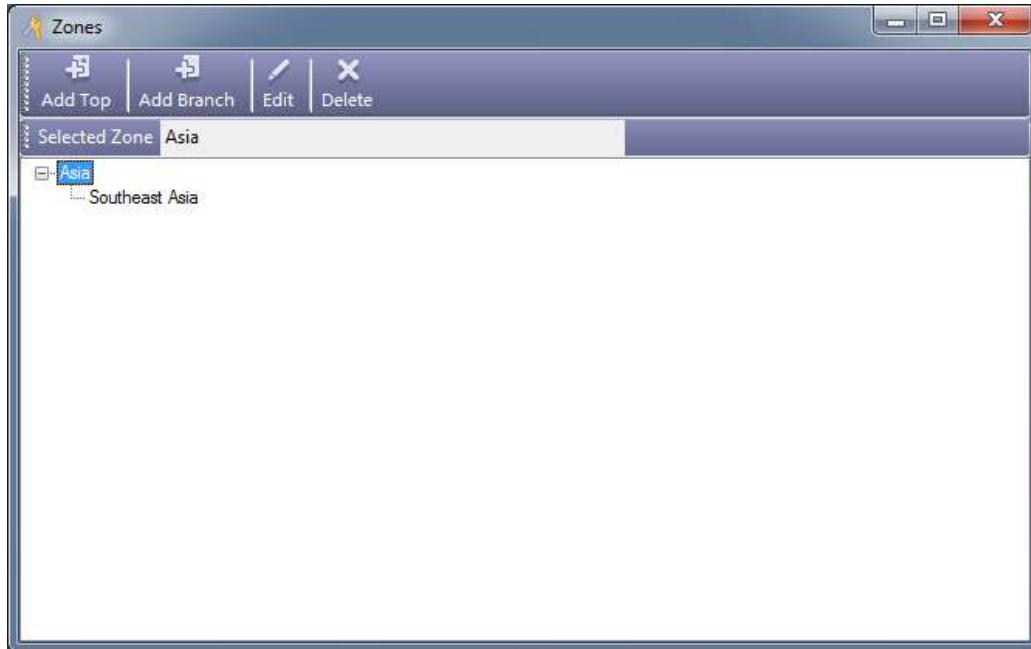
Click "OK"

Click ,Click【Configuration】>【Controllers】>【New】.
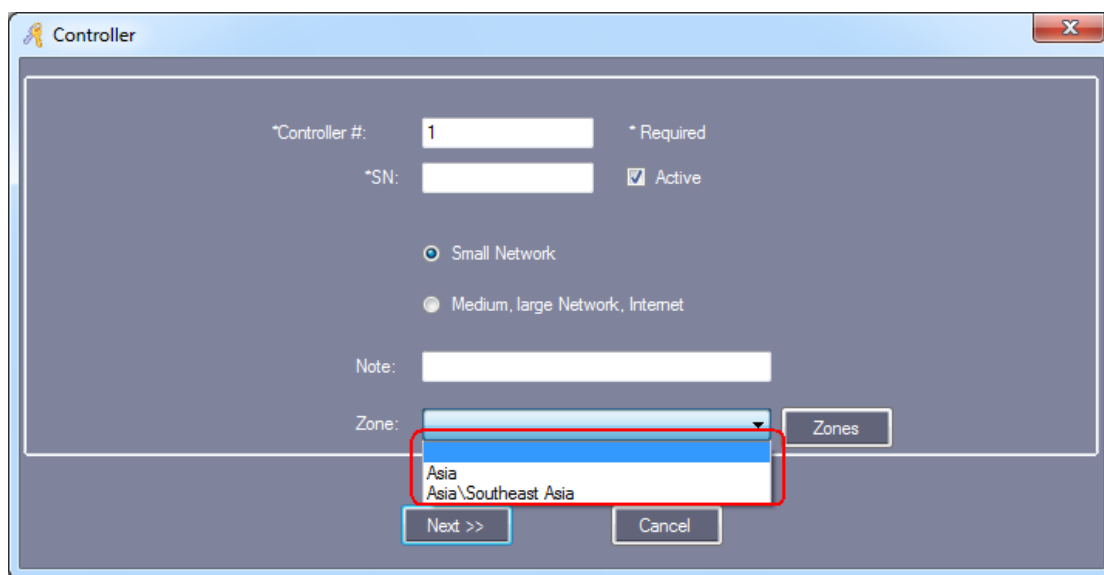
2.2.4 Adjust Time of Controller before proceeding!

Click【Operation】> "Select All" > "Adjust Time" > Click ok on "Adjust Time?" Prompt.

2.3 Operation of Department and Registered User

2.3.1 Add Department

Click 【Configuration】>【Department】from the menu bar
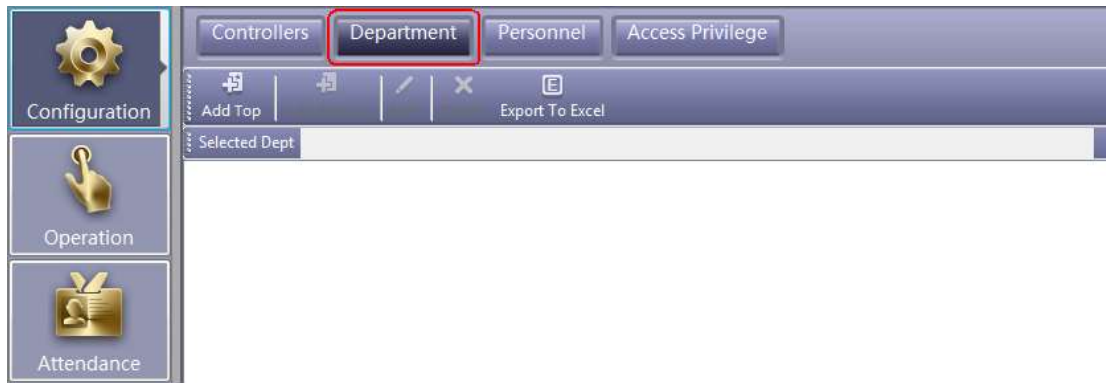
click the **Add Top** to create a new department.
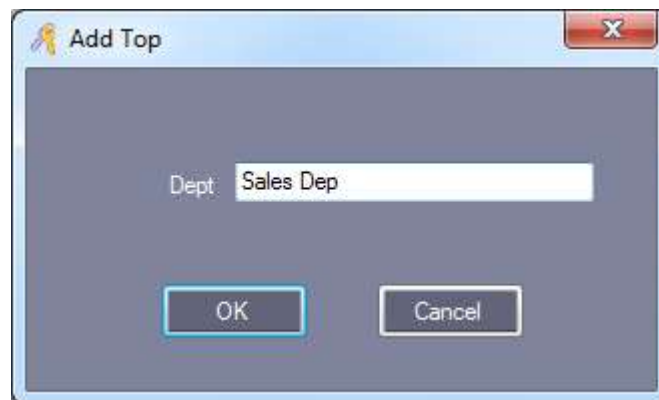
Click "OK"

Click the **Add Branch** to add a new Branch under the Top.
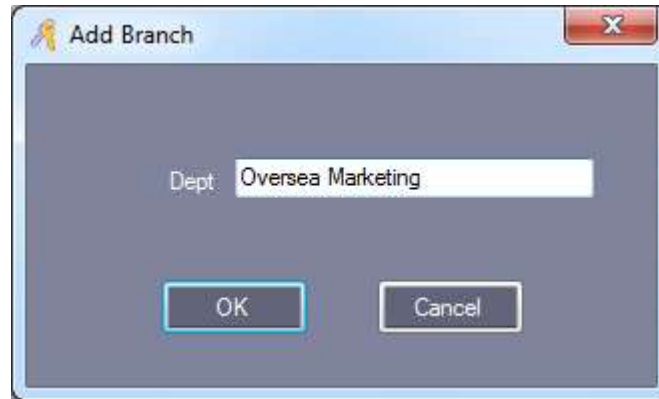
Click "OK"
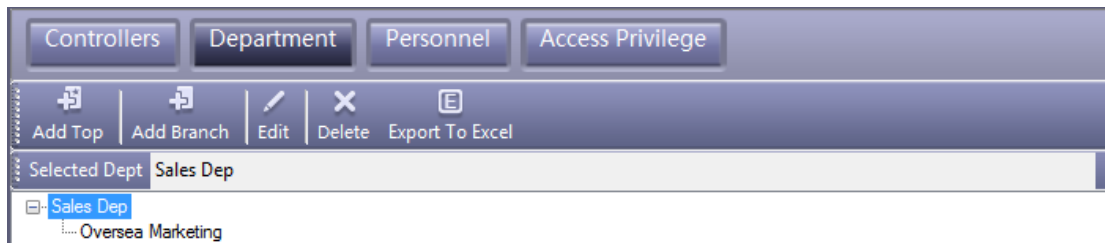
Click 【Configuration】 > 【Personnel】 from the menu bar

Click "Add" to add users.

2.3.2 Add and Edit a User

Remark: "User No." and "Name" must input.
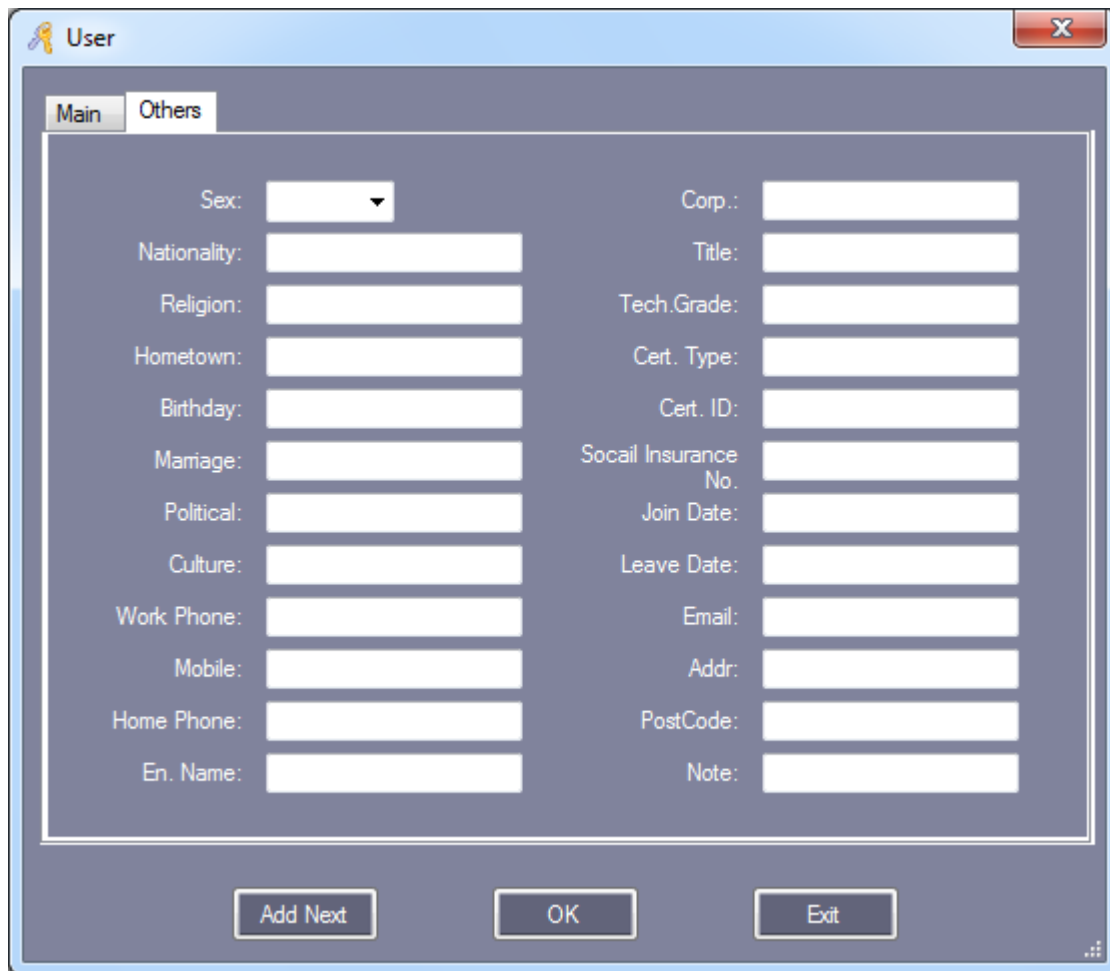
 After you input all information of the user, click this button, you complete adding a user to the system, Meanwhile it will remain show the user windows and wait for you input the next user's information.

Add photo, please consult full manual at "Help" -> "Manual", see Section 5.1 How to display user's photo at Monitor.

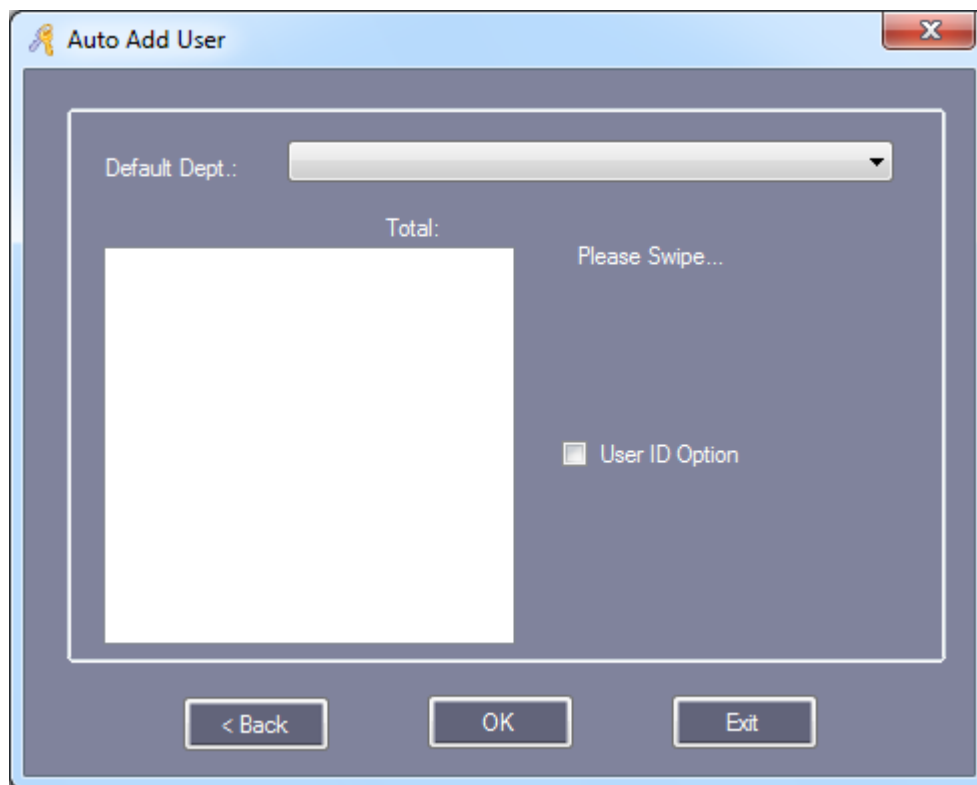Click "OK", This user has been added to the System.

User "Others" information

2.3.3 Auto Add the registration card

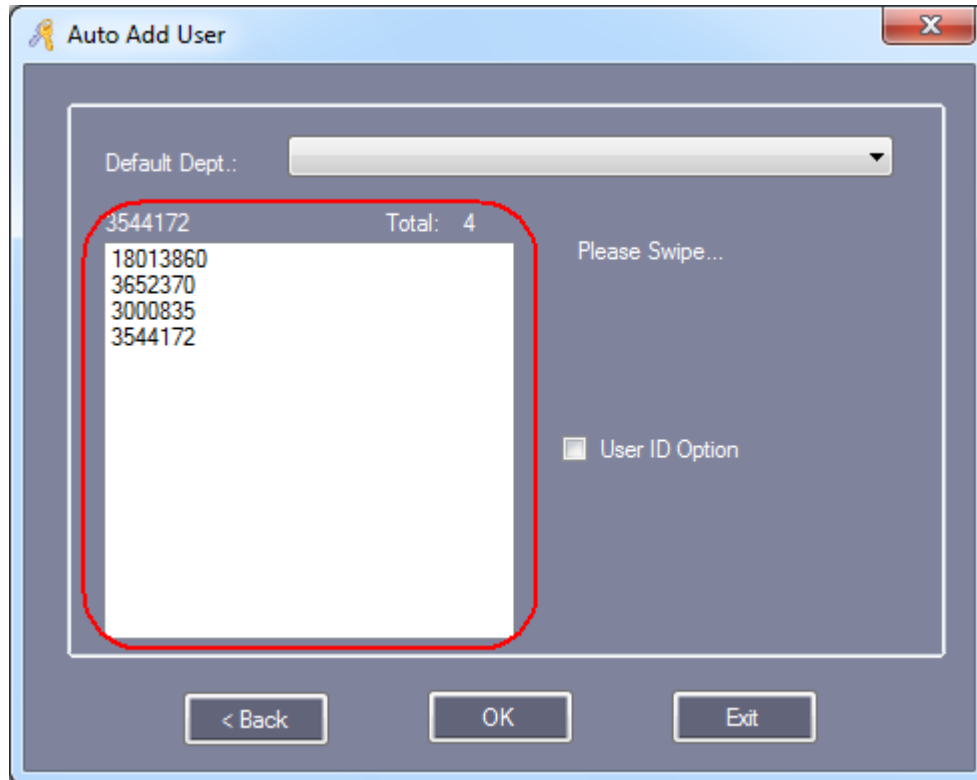Click【Configuration】>【Personnel】>【Auto Add】
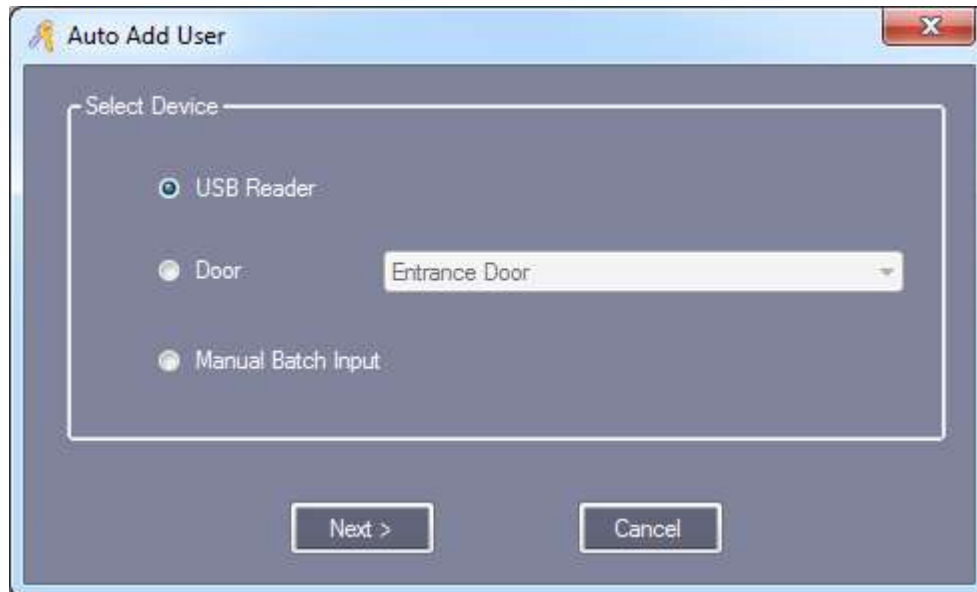
If you selected "USBReader", must connect the assign card reader with computer .
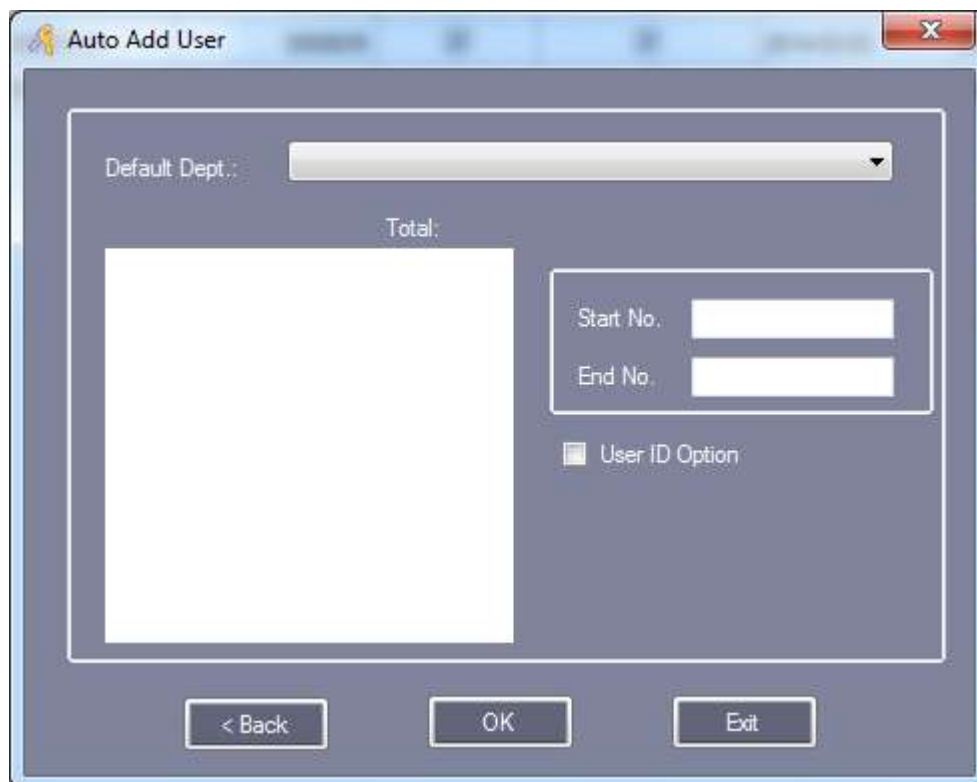
Click "USB Reader" or "Controller", Click "Next"

After the card swiping

Click "OK", Auto added to the Software.

Click "Manual Batch Input" ,Click "Next"

Manual Input "Start NO." and "End NO."

Click "OK", All users card auto added to the Software.

Attention: Auto add users, Name default is "N + Card Number"
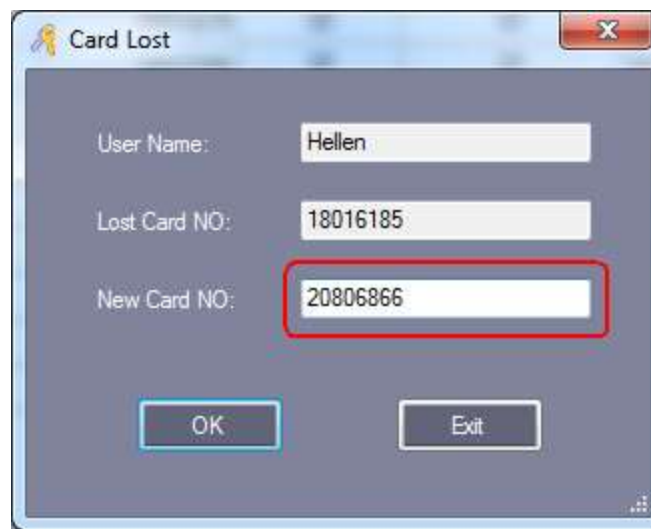
2.3.4 Alter Single-user's Privilege

Please consult the chapter 2.4.1.2 Edit One User's Privilege.

2.3.5 Card Lost

If someone has lost his card, they must register the lost card, and then redistribute a new card to someone .The steps are as follows:

Click【Configuration】>【Personnel】>【Card Lost】

Input "New Card ID" :20806866

Click "OK"

"Download" database changes to controller.

If the controller communication fails, it will display "Download Failed". Please check your network connections if you see this message:
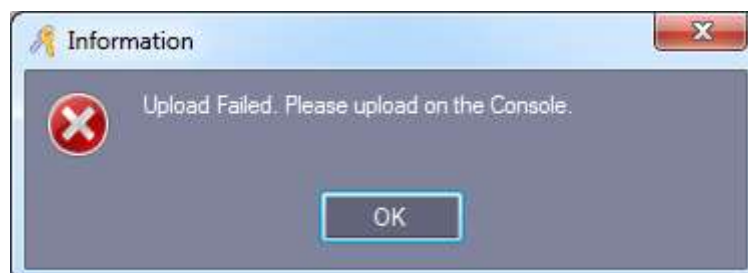
2.4 Operation

2.4.1 Privilege Management

2.4.1.1 Access Privilege

Click 【Configuration】>【Access Privilege】 from the menu bar or shortcut.
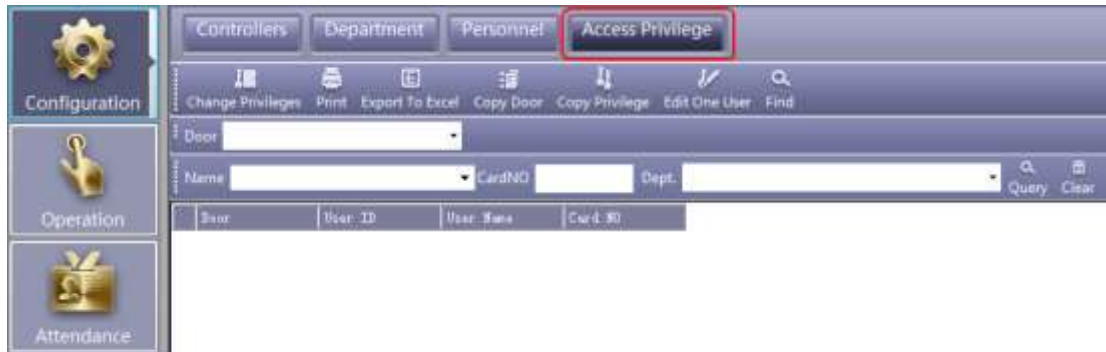
Click Change Privileges
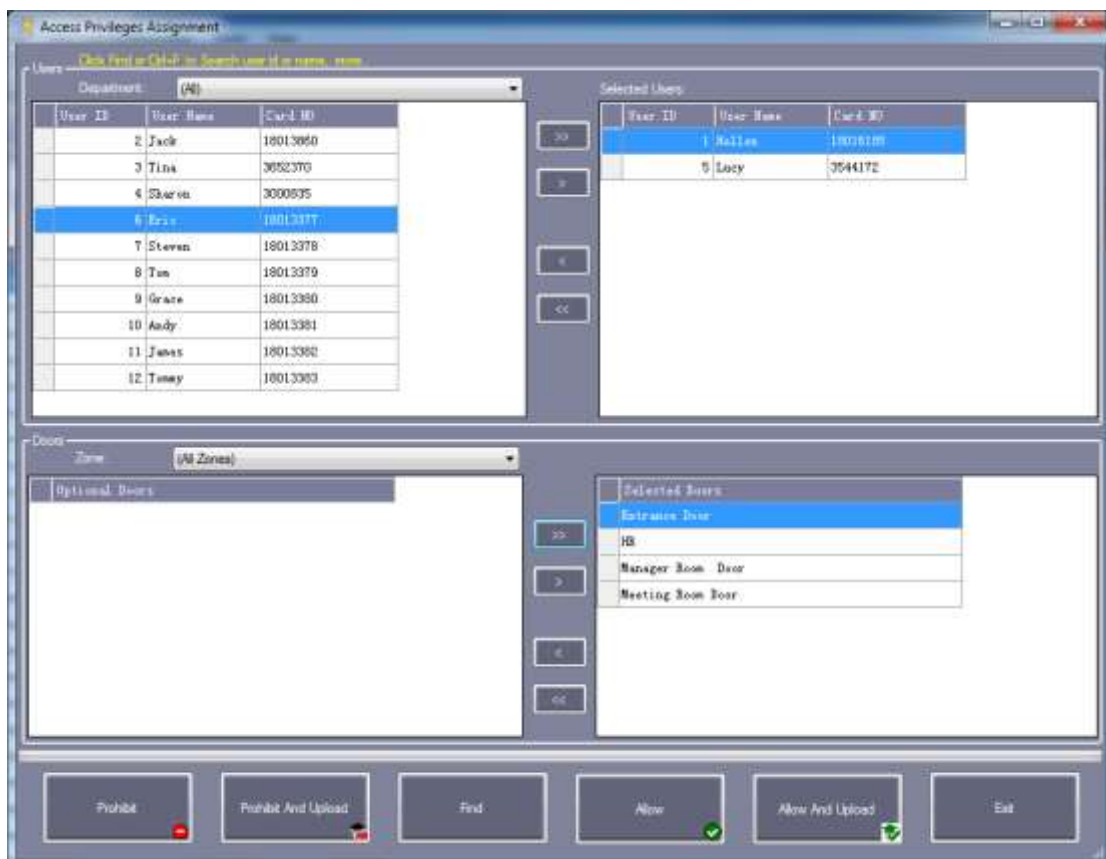
">>":Select all "Users" or Select all "Optional Doors"

">":Select one "Users" or Select one "Optional Doors".

"<": Cancel one "Selected Users" or Cancel one "Selected Doors".

"<<":Cancel all "Selected Users" or Cancel all "Selected Doors".

After clicking this button, and then **Operation << Upload**, the selected users can pass through selected doors.

After clicking this button, the selected users can pass through selected doors.

After clicking this button, and then **Operation << Upload**, the selected users can't pass through selected doors.

After clicking this button, the selected users can't pass through selected doors.

Door	User ID	User Name	Card NO
Entrance Door	1	Hellen	18016185
Manager Room Door	1	Hellen	18016185
HR	1	Hellen	18016185
Meeting Room Door	1	Hellen	18016185
Entrance Door	5	Lucy	3544172
Manager Room Door	5	Lucy	3544172
HR	5	Lucy	3544172
Meeting Room Door	5	Lucy	3544172

After adding all privilege into the system, you must go to the **Operation << Upload** the operation, please consult (Chapter 2.5.2 Upload Setting).

2.4.1.2 Edit One User's Privilege
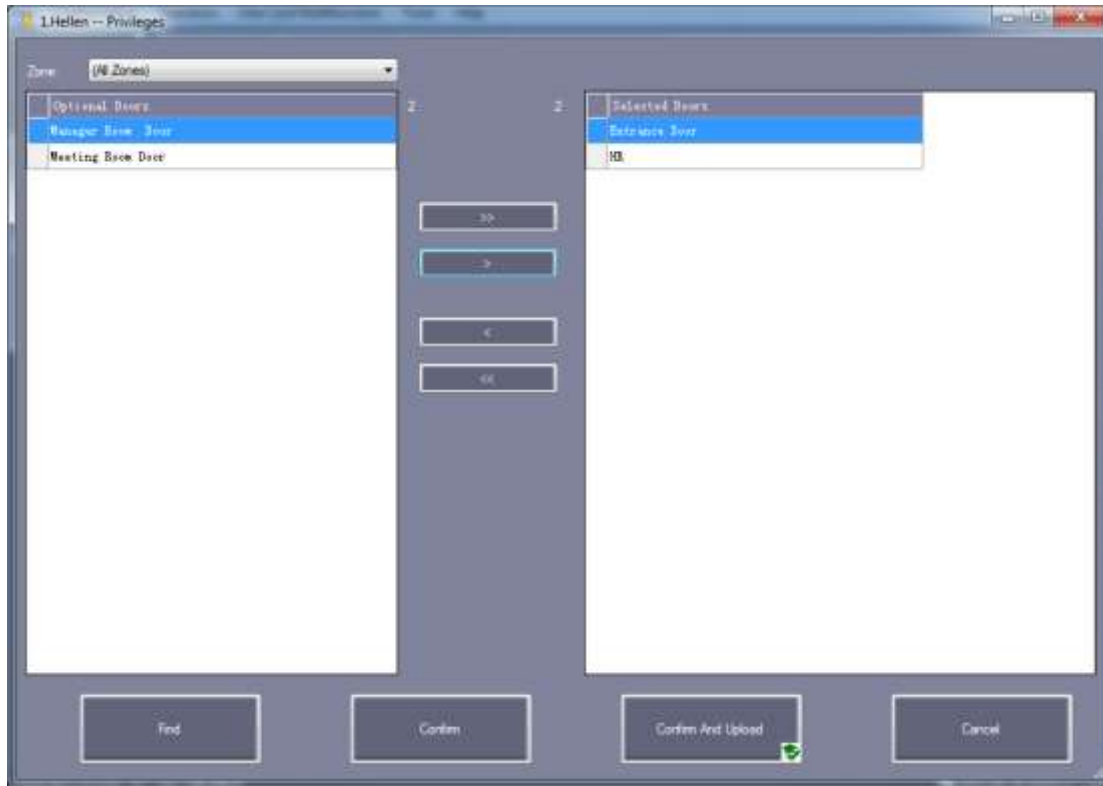
">>": Select all "Optional Doors"
">": Select one "Optional Doors"
"<": Cancel one "Selected Doors"
"<<": Cancel all "Selected Doors"
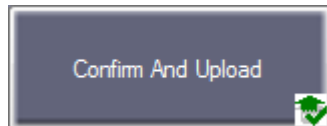
If you add "Optional Doors" or cancel "Selected Doors", Click this button, and Upload to the controller, you can pass through "Selected Doors".

2.5 Console

Click【Operation】>【Console】 from the menu bar .The console window contains many basic operations. For example, "Monitor", "Check", "Adjust Time", "Upload", "Download" and "Download and Monitor".

2.5.1 Controller's Info Check

Click【Operation】>【Console】>【Check】from the menu bar
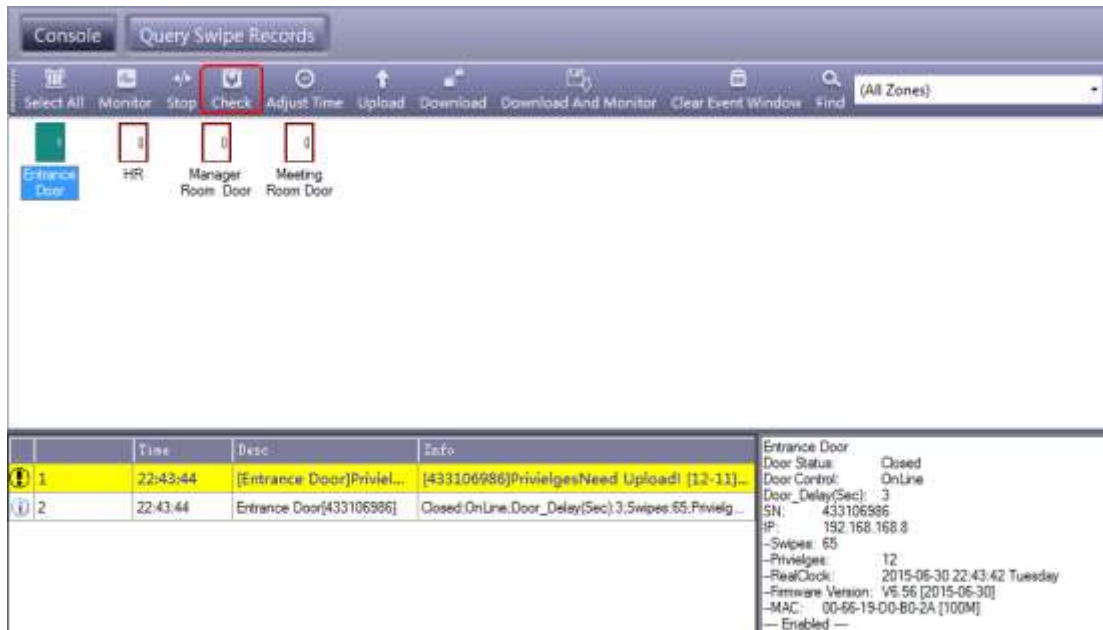
It will show the control's basic information .such as the amount of swipings and privileges, Door status, control status, open delay (sec) .If the controller is well communicated with computer, the door label's color is green , and otherwise the color is red.
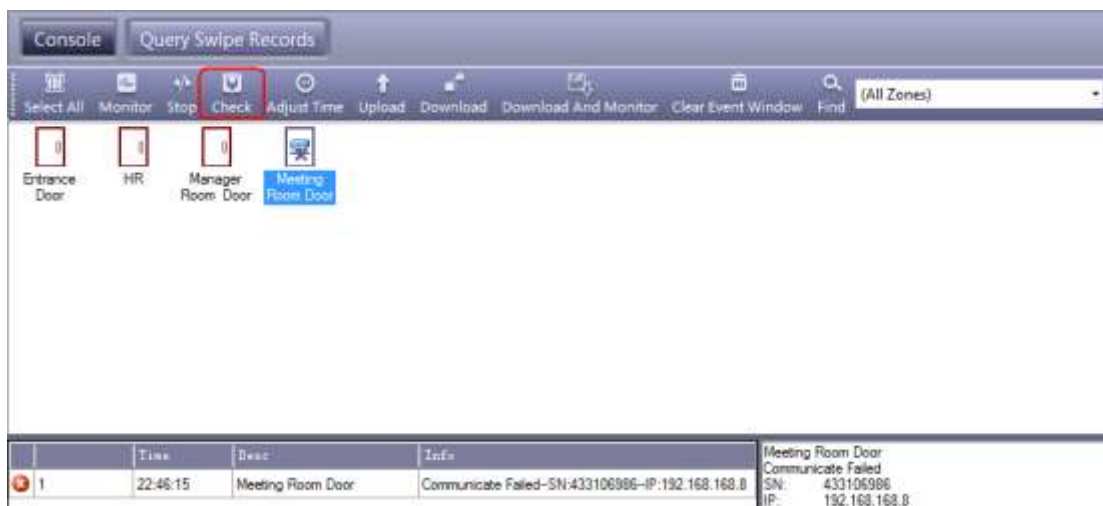
2.5.2 Upload Setting

Click【Operation】>【Console】>【Upload】from the menu bar
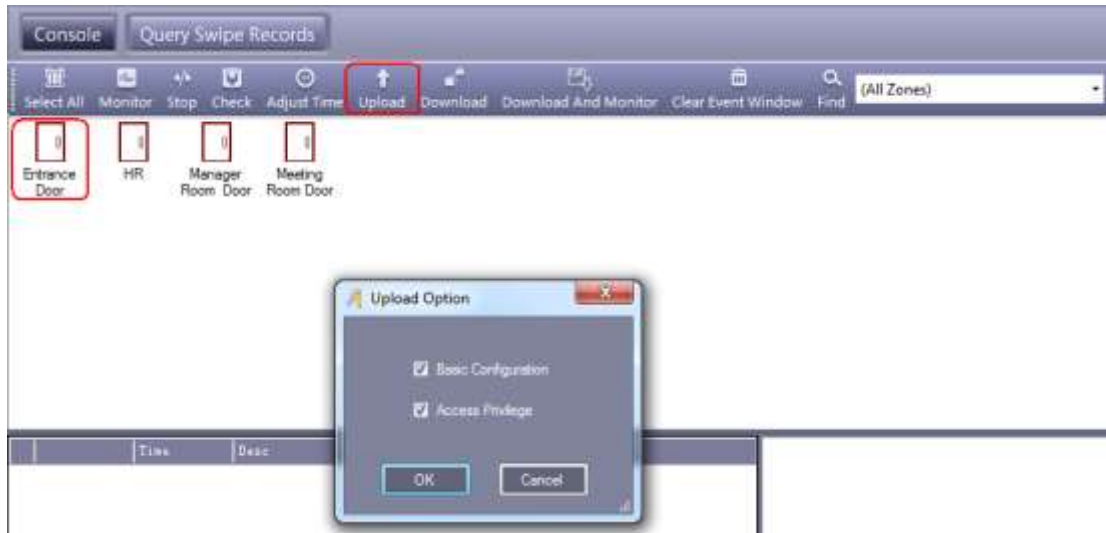
Click "OK"
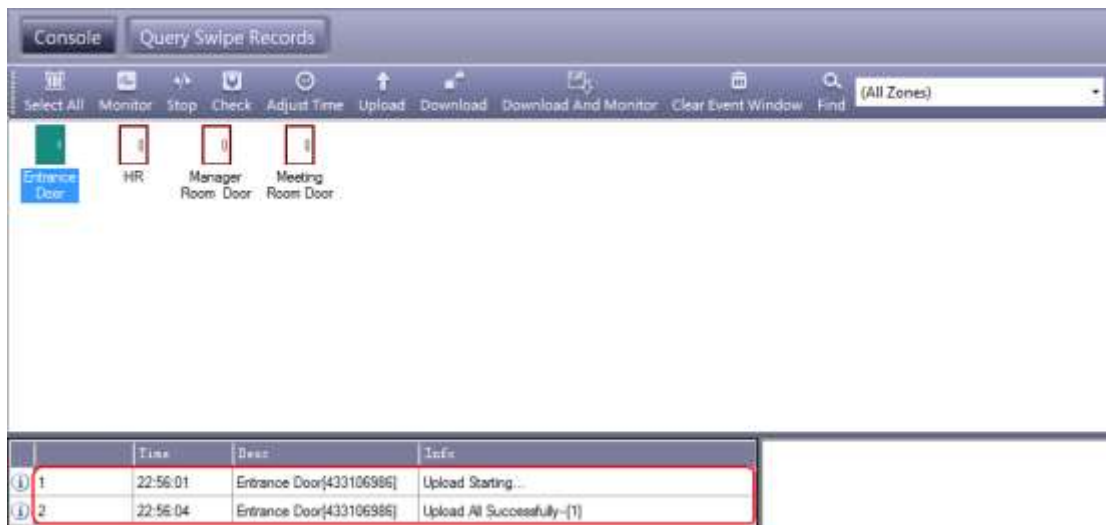
If you have changed any information, you must upload the database configuration to the access controllers in order to keep the software and controllers in sync.

2.5.3 Monitor

Click【Operation】>【Console】>【Monitor】from the menu bar

2.5.4 Display More Swipes

Only display swipe card records.

Right click card records, select "Display More Swipes".

Right click "Photo". You can adjust the display of information.

2.5.5 Download Records

Click【Operation】>【Console】>【Download】 from the menu bar

	Time	Door	Info
① 1	23:09:58	Entrance Door[433106986]	Getting Swipe Record Start...
① 2	23:10:00	Entrance Door[433106986]	Getting Swipe Record Successfully--[69]

Download : Collect the access controller's records to database.

2.6 Records Query

Please "Upload" Records to PC and then query.

Click【Operation】>【Query Swipe Records】from the menu bar

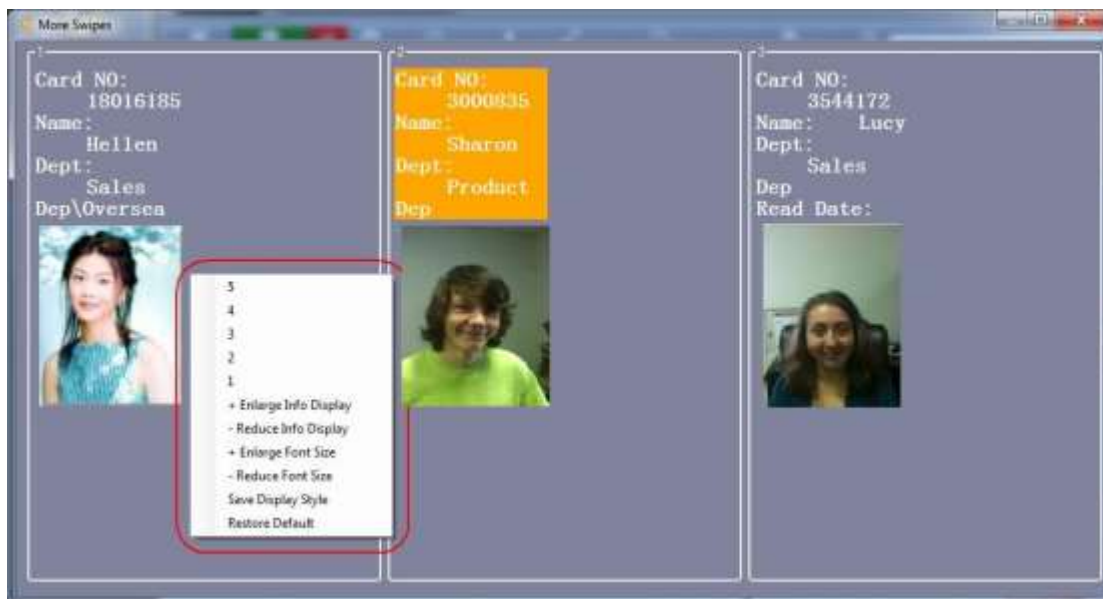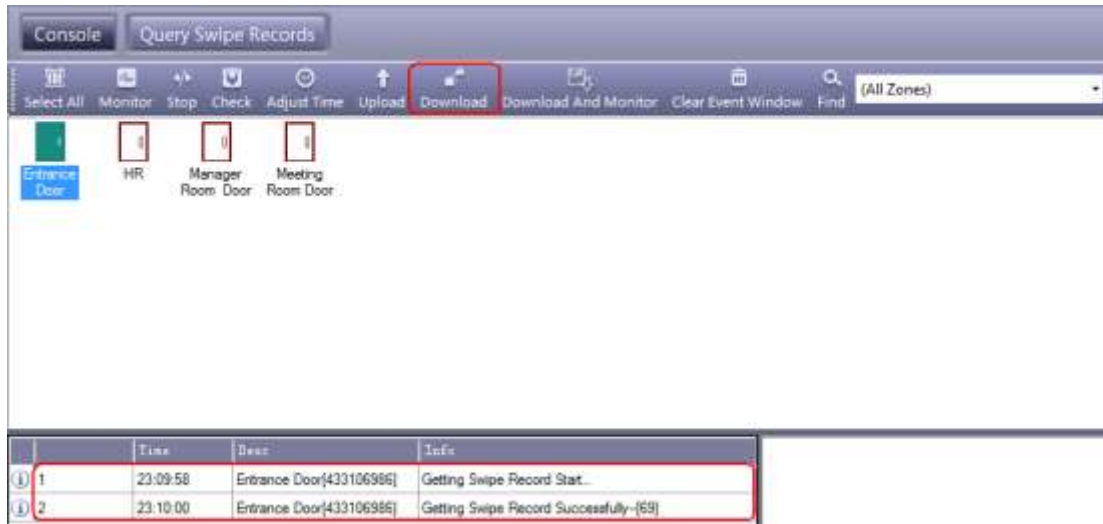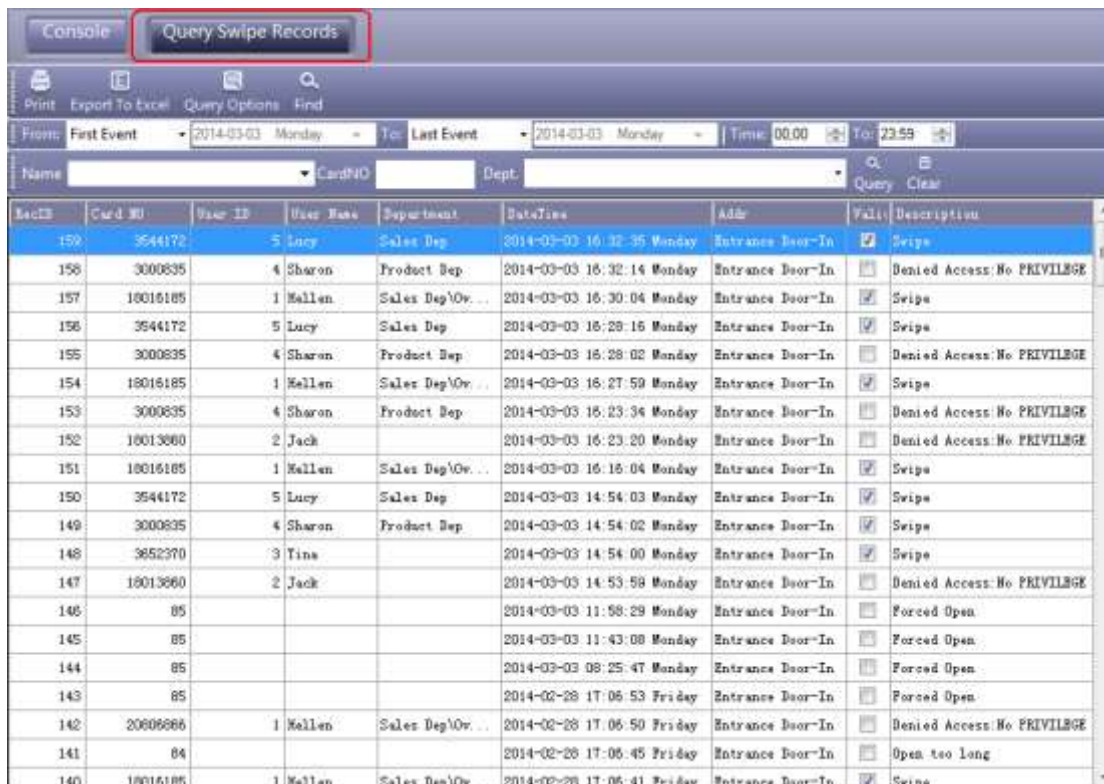| RecID	Card NO	User ID	User Name	Department	DateTime	Addr	Valid	Description
159	3544172	5	Lucy	Sales Dep	2014-03-03 16:32:35 Monday	Entrance Door-In	☑	Swipe
158	3000835	4	Sharon	Product Dep	2014-03-03 16:32:14 Monday	Entrance Door-In	☐	Denied Access:No PRIVILEGE
157	18016185	1	Mellen	Sales Dep\Ov...	2014-03-03 16:30:04 Monday	Entrance Door-In	☑	Swipe
156	3544172	5	Lucy	Sales Dep	2014-03-03 16:28:16 Monday	Entrance Door-In	☑	Swipe
155	3000835	4	Sharon	Product Dep	2014-03-03 16:28:02 Monday	Entrance Door-In	☐	Denied Access:No PRIVILEGE
154	18016185	1	Mellen	Sales Dep\Ov...	2014-03-03 16:27:59 Monday	Entrance Door-In	☑	Swipe
153	3000835	4	Sharon	Product Dep	2014-03-03 16:23:34 Monday	Entrance Door-In	☐	Denied Access:No PRIVILEGE
152	18013860	2	Jack		2014-03-03 16:23:20 Monday	Entrance Door-In	☐	Denied Access:No PRIVILEGE
151	18016185	1	Mellen	Sales Dep\Ov...	2014-03-03 16:16:04 Monday	Entrance Door-In	☑	Swipe
150	3544172	5	Lucy	Sales Dep	2014-03-03 14:54:03 Monday	Entrance Door-In	☑	Swipe
149	3000835	4	Sharon	Product Dep	2014-03-03 14:54:02 Monday	Entrance Door-In	☑	Swipe
148	3652370	3	Tina		2014-03-03 14:54:00 Monday	Entrance Door-In	☑	Swipe
147	18013860	2	Jack		2014-03-03 14:53:59 Monday	Entrance Door-In	☐	Denied Access:No PRIVILEGE
146	85				2014-03-03 11:58:29 Monday	Entrance Door-In	☐	Forced Open
145	85				2014-03-03 11:43:08 Monday	Entrance Door-In	☐	Forced Open
144	85				2014-03-03 08:25:47 Monday	Entrance Door-In	☐	Forced Open
143	85				2014-02-28 17:06:53 Friday	Entrance Door-In	☐	Forced Open
142	20806866	1	Mellen	Sales Dep\Ov...	2014-02-28 17:06:50 Friday	Entrance Door-In	☐	Denied Access:No PRIVILEGE
141	84				2014-02-28 17:06:45 Friday	Entrance Door-In	☐	Open too long
140	18016185	1	Mellen	Sales Dep\Ov...	2014-02-28 17:06:41 Friday	Entrance Door-In	☑	Swipe

If you want to query by "Addr", Click "Query Option"

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Query result as follows:

2.7 Tools

2.7.1 Change Password

Change operator and operator's password.

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Click【Tools】>【Edit Operator】

Modify operator Name, input the new name in "Name".

"New Password" and "Confirm Password" must be the same, After modifying current password, Re-log is required.

2.7.2 DB Backup

Click【File】>【DB Backup】
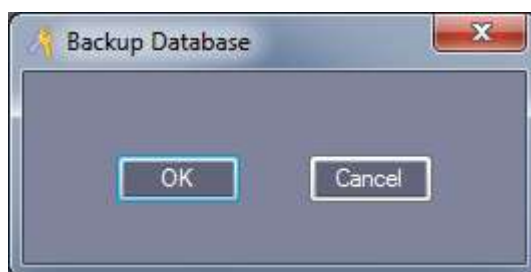
Click "OK".

This backup file is saved in software under the default installation path "C:\AcccessControl".
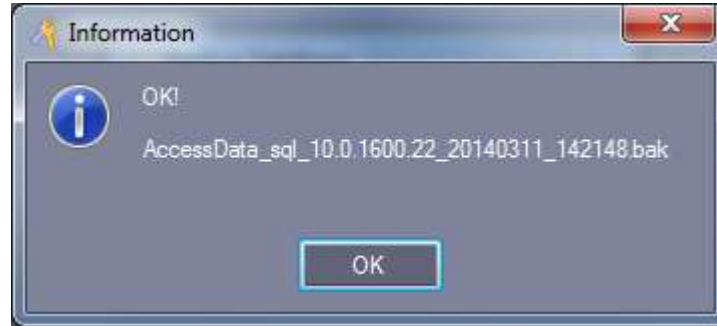
If Backup is SQL DB.:

Click "OK", This backup file is saved in database under the default installation path.

"C:\Program Files\Microsoft SQL Server\MSSQL10.MSSQLSERVER\MSSQL\Backup"

2.7.3 Option

【Language】

Click【Tools】>【Language】from menu bar.

【Interface Title】

Click 【Tools】 > 【Interface Setting】 from menu bar.
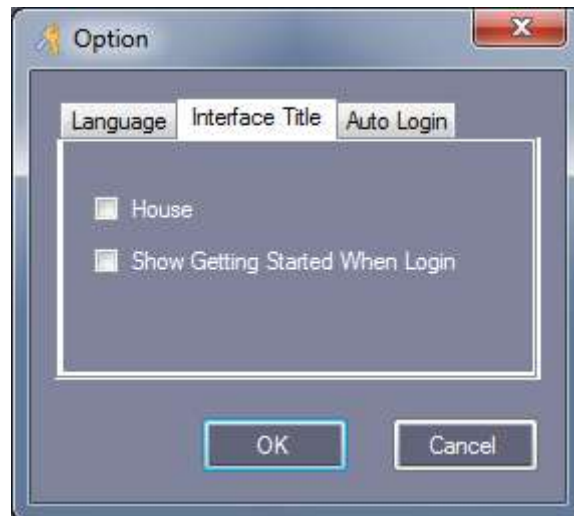
【House】 : Used in community management.

【Show Getting Started When Login】 : To guide the operation software.

【Auto Login】

Click【Tools】>【Auto Login】from menu bar.
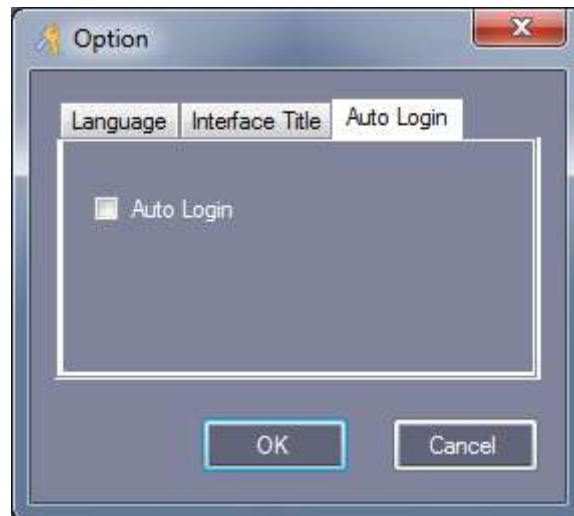
【Auto Login】: Select "Auto Login", In "Login" windows, you don't need to input "User Name" and "Password".

You are all ready to begin using your Contactless Card Management system. Please review section 4 for some brief additional information.

4   ADDITIONAL INFORMATION

4.1   Definitions

Peripheral Control: To configure inputs and outputs of the ACP-1x4 and ACP-4x4
                              input/output modules.

Password Management: For dual-factor authentication or manual entry of card number.

Anti-Passback: Enables/defines parameters for the anti-passback feature.

Interlock: Enables/defines multi door interlock feature.

First Card Open: Enables/defines the first card open feature, which allows one (or more)
                              card(s) to be configured in such a way that if one of them opens a door
                              (or doors), the door(s) remain open until a selected time.

Console: Check and adjust time, upload, download, remote open and monitor
                              time options.

Check Status: Checks the communication status of doors.

Download: Gathers audit trail information.

4.2 Additional Information

Below is some additional information and a brief list of other features. If you need more detailed information, please refer to the help guide within the software for further instruction. Or, contact Cobra Controls Technical Support.

❖ To release any door(s), right click on "Doors" and select "Remote Open".

❖ You can change the open delay for any and all doors.

❖ You can unlock or lock any and all doors by changing the control state.

❖ If the doors are set to "Door Closed" mode, it is the equivalent of a lockdown. No doors will open with cards.

❖ The "Door Controlled" option is the normal operating state for the Contactless Card Management system.

❖ The attendance and Patrol features are explained further in the help guide within the software.

❖ Additional information and complete help file is available in the software under help>manual.

❖ REGISTRATION: Go to www.cobracontrols.com/register to register your copy of access control software.

5   Frequently Asked Questions

My Software indicates that the trial period has expired.

Please visit http://www.cobracontrols.com/register . Once you have provided your company information, controller information and confirmed your email address an email will be sent out to you with the registration code.

Are the cards pre-programmed to the system?

No. In order to release a door using the included proximity cards they must first be programmed to the system using the included software.

Can I use Cat5 cable to wire my readers or locking hardware?

The recommended cable types are "22 gauge 6-conductor shielded" for Readers and 18 gauge 4 or 6 conductor cable for the locking hardware. Deviation from these recommendations may cause unexpected behavior and or invalidation of your equipments warranty.

How do I wire a magnetic lock with a motion sensor and "Exit" button?

Please refer to diagram 2.8 on page 10 of the document.

6   Troubleshooting Guide

Issue	Possible Causes	Fixes
Red Error Light on Controller/Reader	Controller has incorrect time	Operation -> Select All -> Adjust Time
Maglock won't hold.	Wiring	Check wiring.
	Plate alignment	Loosen center sex bolt on armature plate to allow float.
	Relay stuck open (check door status light to confirm)	Check auto-operation settings.
Reader not sending card info to panel.	D1/D0 loose or swapped or not connected.	Check connections or swap D1/D0
Comm Failed when downloading/uploading.	No data connectivity to panel.	Check connection and network config.
Door not opening as scheduled.	Daylight savings or configuration error.	Operation -> Select All -> Adjust Time
Lock unlocked when expected to be locked or locked when expected to be unlocked.	Incorrectly wired lock to door relay.	Correct wiring issue. If connected to NC, connect to NO, if connected to NO, connect to NC.
Swiping card at Reader 'A' unlocks Door 'B'?	Reader connected to wrong input.	Connect Reader to appropriate input.
	Door connected to wrong door relay.	Connect door lock to appropriate door relay.
Card swipes and indicates access granted but does not open (1 or 2 door system)	Reader is connected to 'Exit' reader connection instead of 'In' reader connection.	Connect Reader to appropriate input.
Added card to system and reader reads card, but door does not unlock.	Card does not have access privilege.	Navigate to section 2.4.1 on page 40 and set up access privilege.
"The ID was already assigned" message even though card/user is not present.	No file/admin rights to database.	Try again under original windows account software was installed with.