COBRA CONTROLS   ACP – T SERIES QUICK START GUIDE

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-T 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 – T Series Hardware. These instructions refer to the following pieces of equipment:

- Power Supply
- Request to Exit Devices
- Door Status Switches
- Proximity Reader
- ACP - 1T
- ACP - 2T
- ACP - 4T
- 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.
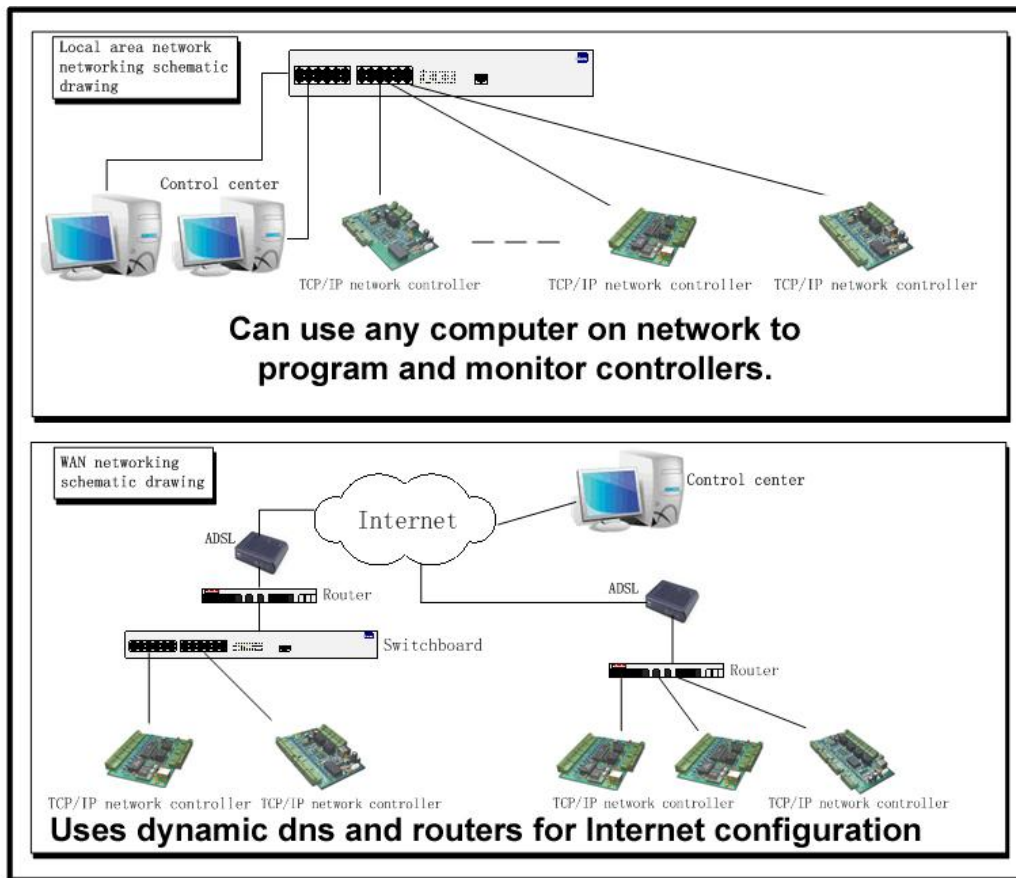
2   INSTALLATION OF HARDWARE

2.1   Power Supply

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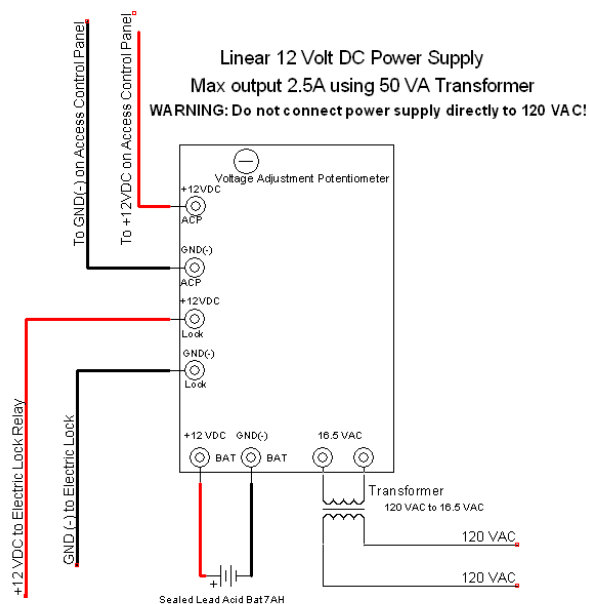
2.2 Network Setup

2.3 Cobra and Wiegand Proximity Readers
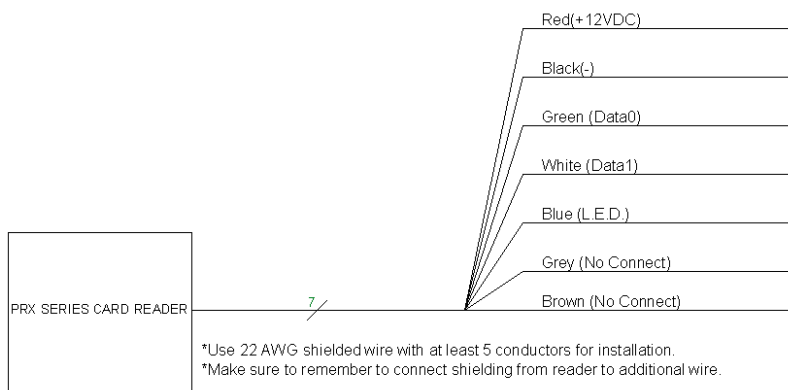
EACH READER HAS A SHIELDED CABLE. CONNECT SHIELD TO SHIELD AT THE CARD READER. CONNECT SHIELD TO GROUND (-) AT THE CONTROL PANEL INPUT FOR EACH INDIVIDUAL READER. Use 22awg 5 conductor or better stranded cable with an overall shield for proximity reader wiring.

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

2.4 ACP – 1T

Red(+12VDC)
Black(-)
White(data1)
Green(data0)
Brown(LED)
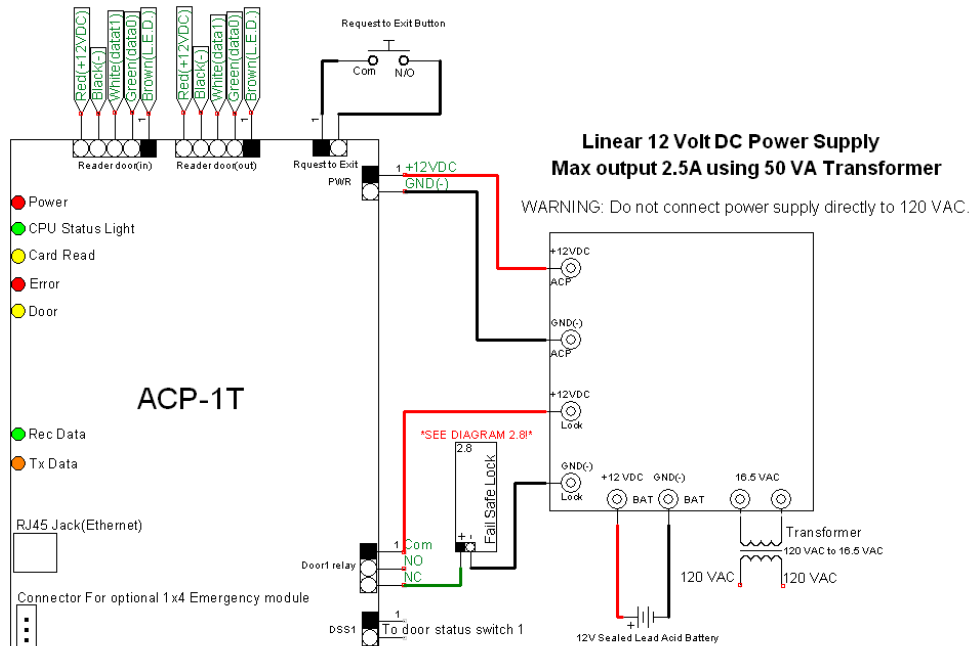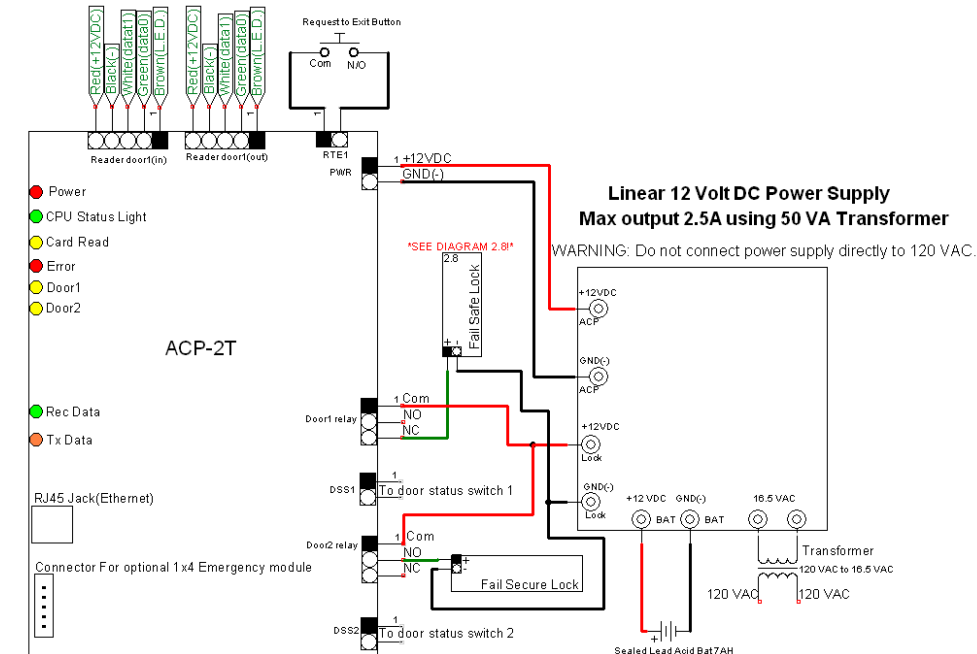Red(+12VDC)
Black(-)
White(data1)
Green(data0)
Brown(LED)

Request to Exit Button
Com N/O

Reader door(in) Reader door(out) Rquest to Exit

PWR 1 +12VDC
GND(-)

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

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

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

+12VDC
ACP

GND(-)
ACP

ACP-1T

+12VDC
Lock

● Rec Data
● Tx Data

SEE DIAGRAM 2.8!
2.8
Fail Safe Lock

GND(-) +12 VDC GND(-) 16.5 VAC
Lock BAT BAT

RJ45 Jack(Ethernet)

Transformer
120 VAC to 16.5 VAC

1 Com
NO
NC

Door1 relay

120 VAC 120 VAC

Connector For optional 1x4 Emergency module

DSS1 1 To door status switch 1

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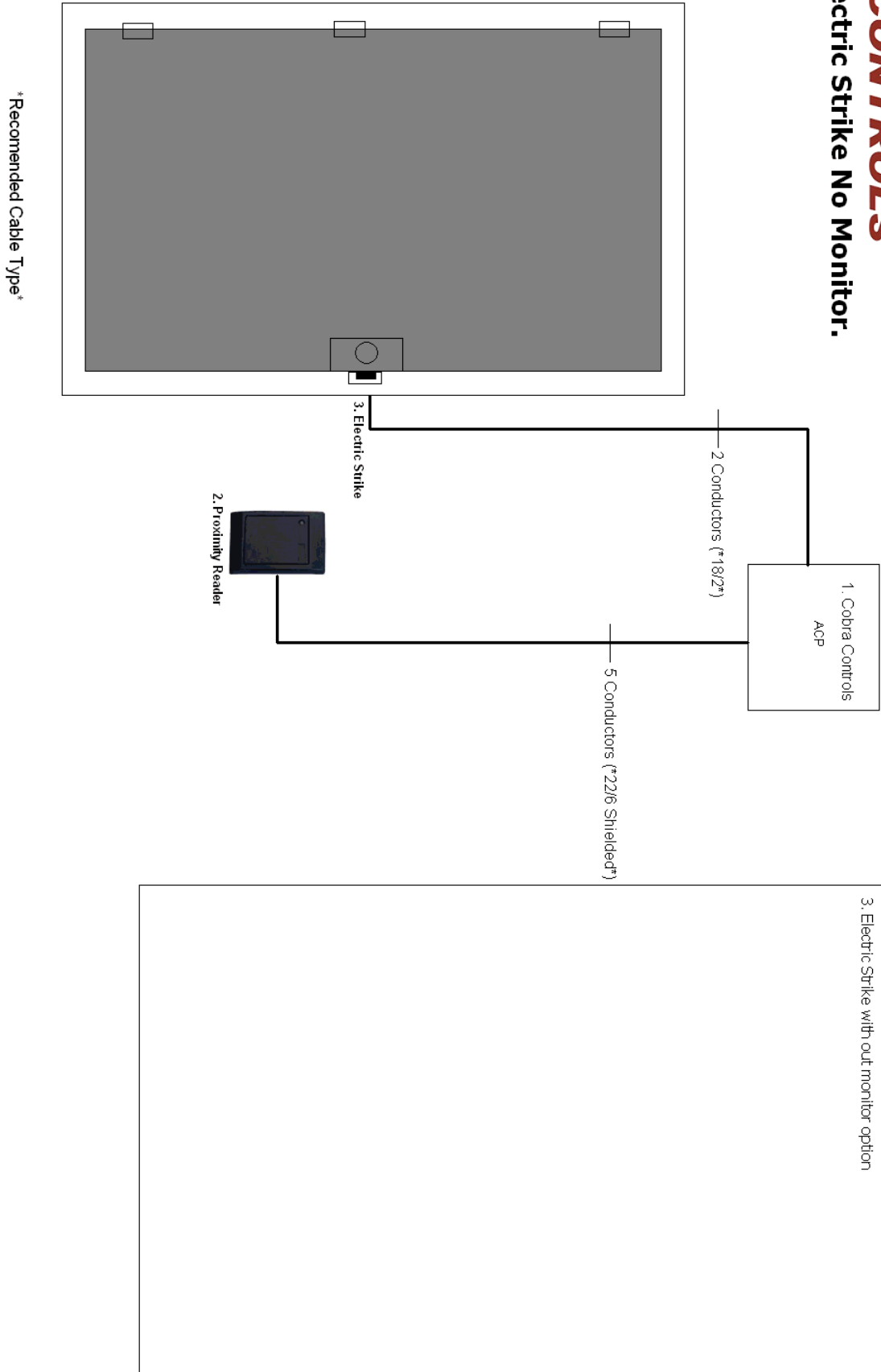*use of other cabled types such as CAT5 for these devices may void your warranty.

2.5 ACP – 2T

Red(+12VDC)
Black(-)
White(data1)
Green(data0)
Brown(LED)
Red(+12VDC)
Black(-)
White(data1)
Green(data0)
Brown(LED)

Request to Exit Button
Com N/O

Reader door1(in) Reader door1(out) RTE1

PWR 1 +12VDC
GND(-)

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

● Power
● CPU Status Light
● Card Read
● Error
● Door1
● Door2

SEE DIAGRAM 2.8!
2.8
Fail Safe Lock

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

+12VDC
ACP

GND(-)
ACP

ACP-2T

● Rec Data
● Tx Data

1 Com
NO
NC

Door1 relay

+12VDC
Lock

DSS1 1 To door status switch 1

GND(-)
Lock

RJ45 Jack(Ethernet)

+12 VDC GND(-) 16.5 VAC
BAT BAT

1 Com
NO
NC

Door2 relay

Transformer
120 VAC to 16.5 VAC

Fail Secure Lock

120 VAC 120 VAC

Connector For optional 1x4 Emergency module

DSS2 1 To door status switch 2

Sealed Lead Acid Bat 7AH

RTE 2 Reader door2(in) Reader door2 (out)

Com N/O

Request to Exit Button

Brown(LED)
Green(data0)
White(data1)
Black(-)
Red(+12VDC)
Brown(LED)
Green(data0)
White(data1)
Black(-)
Red(+12VDC)

⚠ **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 – 4T
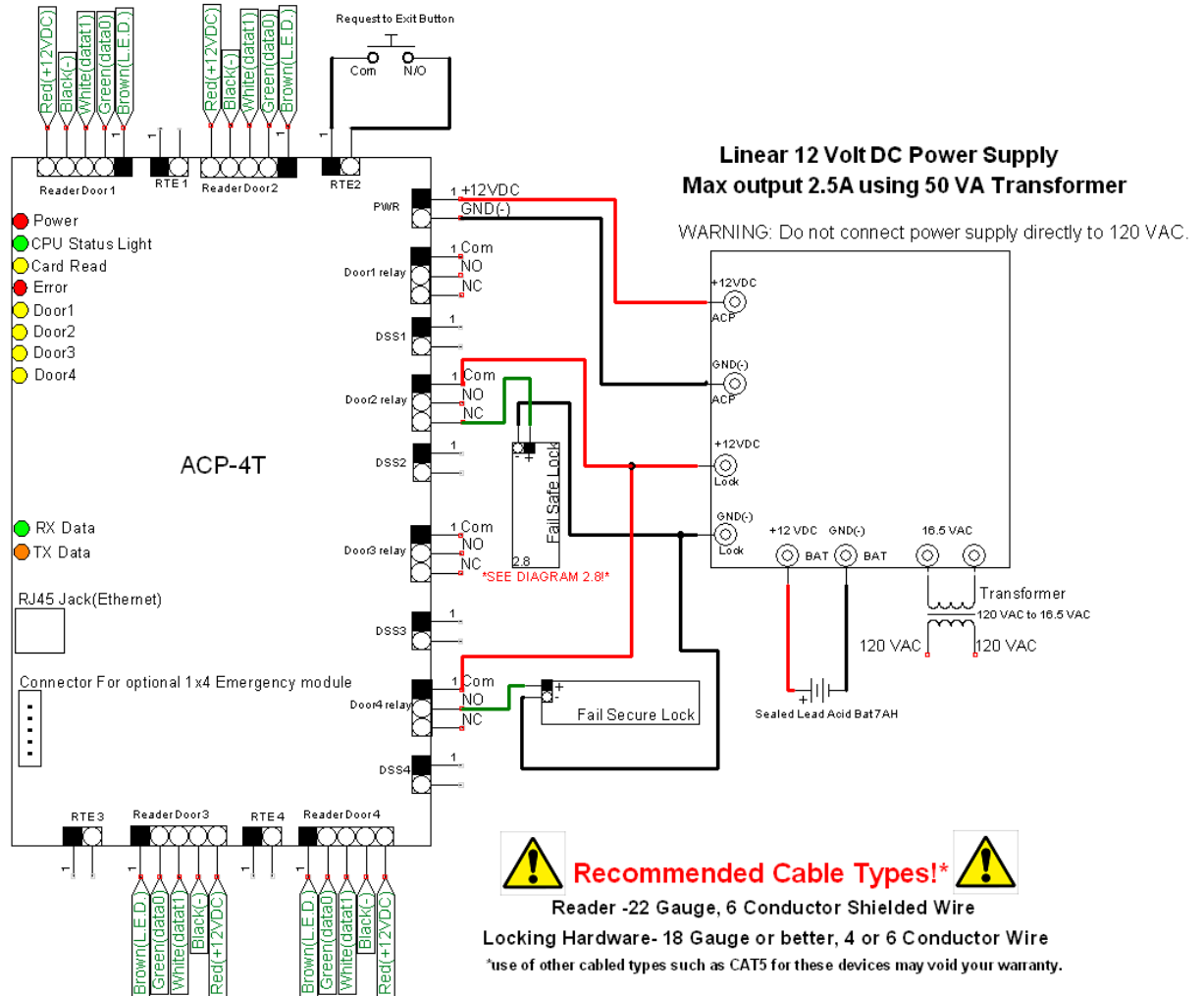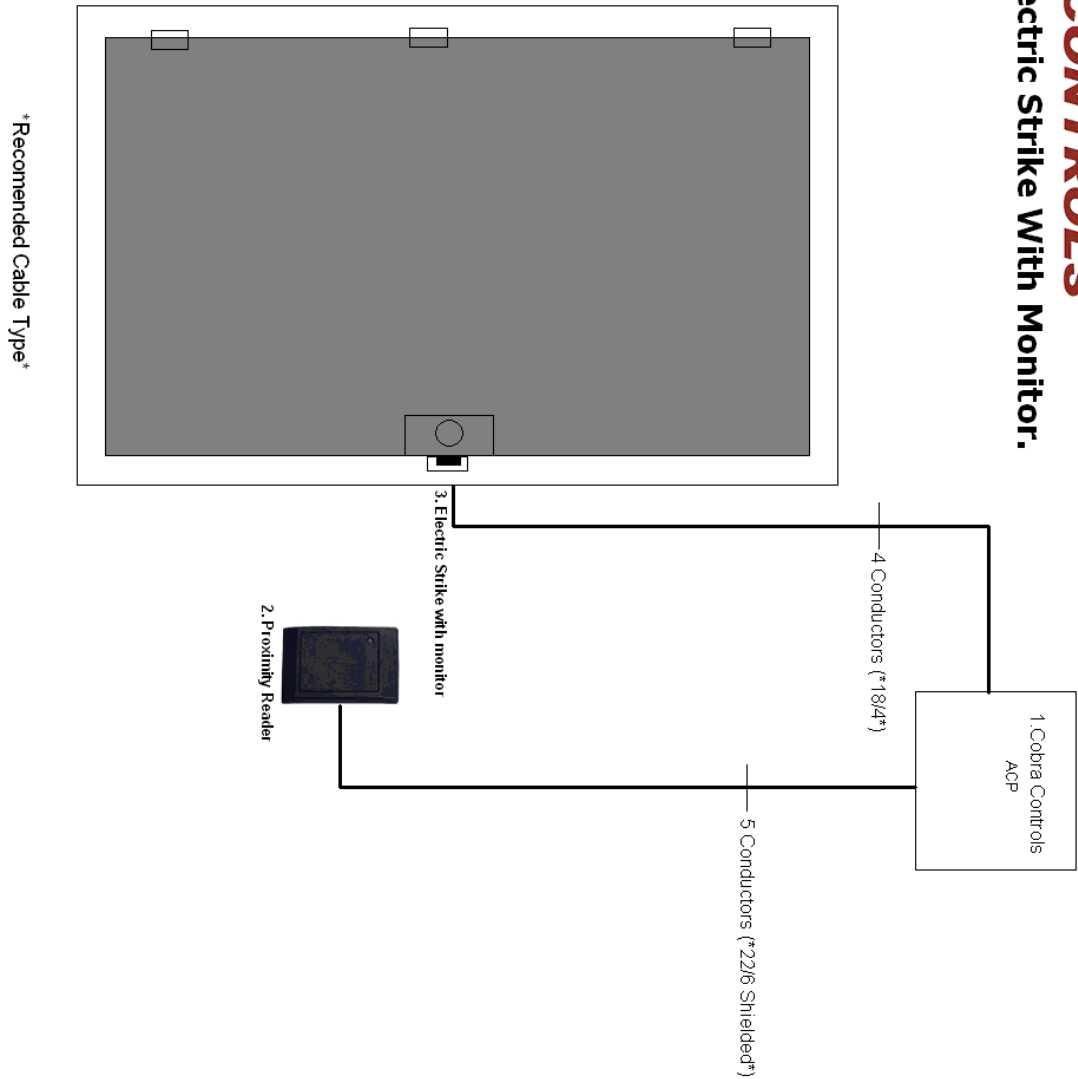

2.6.1   Riser Diagrams

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.

COBRA CONTROLS

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

Electric Strike With Monitor.

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
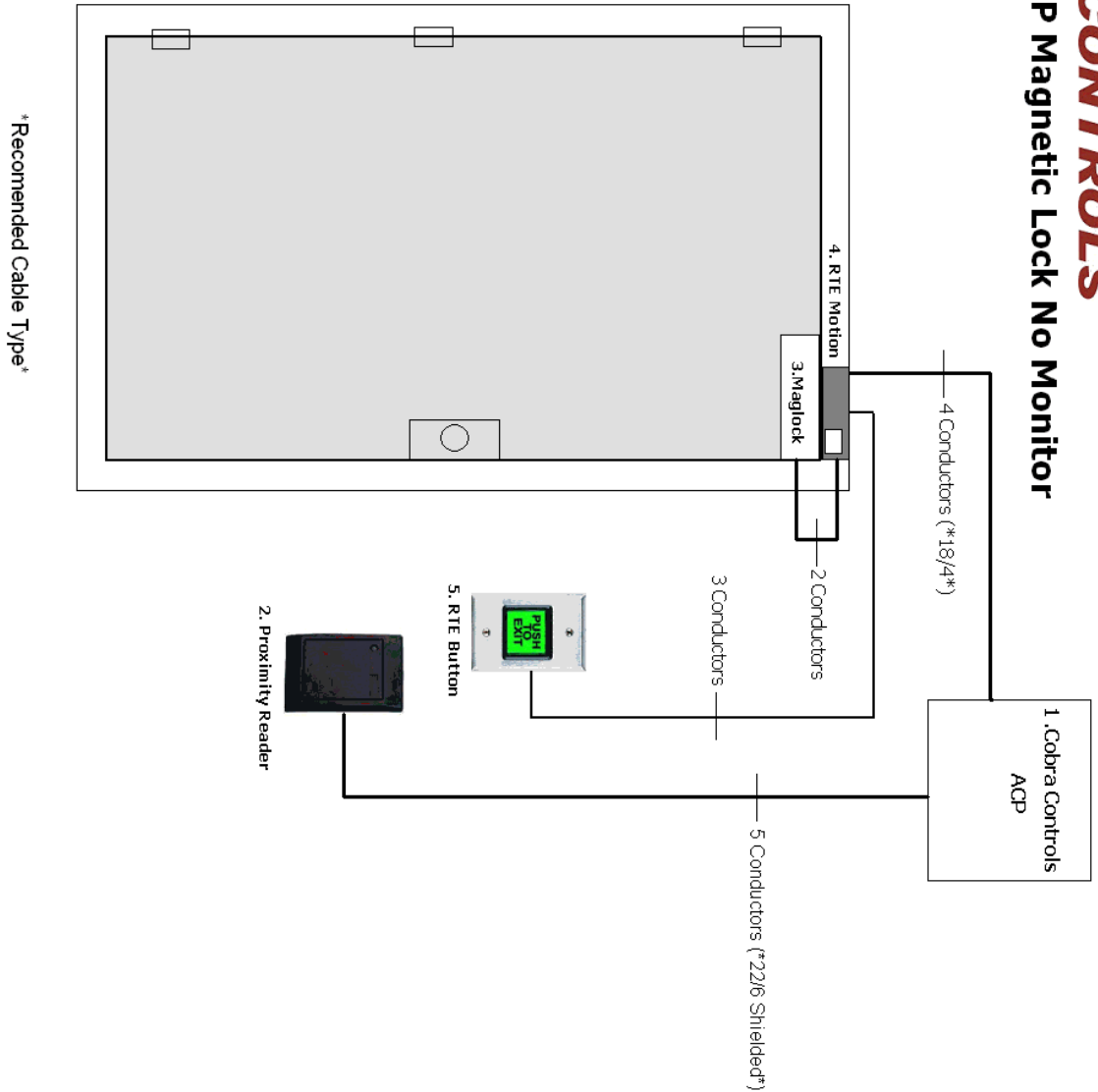
Recomended Cable Type

4. RTE Motion

3.Maglock

4 Conductors (*18/4*)

2 Conductors

3 Conductors

5. RTE Button

PUSH TO EXIT

2. Proximity Reader

1 .Cobra Controls ACP

5 Conductors (*22l6 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

ACP Magnetic Lock With Monitor
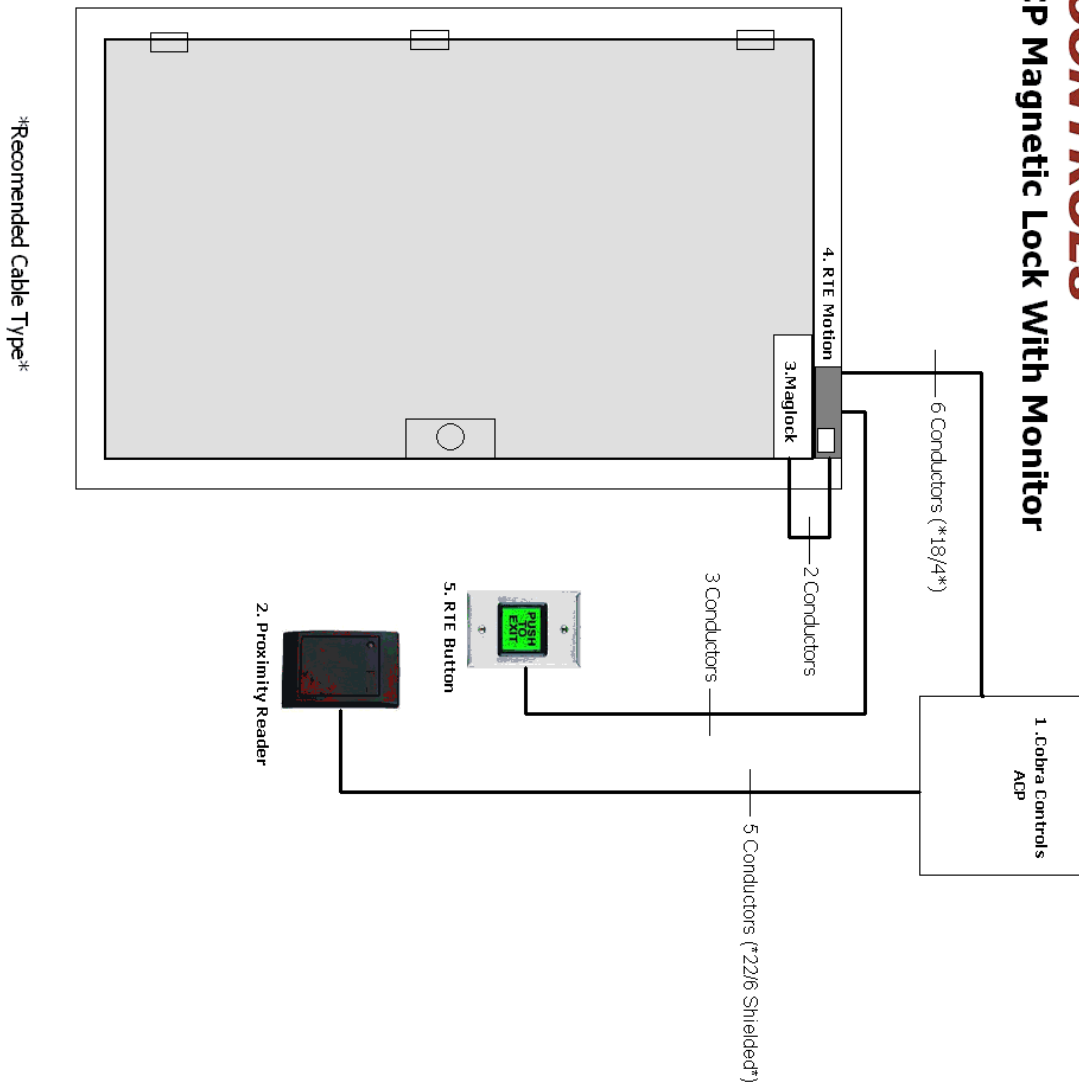
Recomended Cable Type

4. RTE Motion

3.Maglock

6 Conductors (*18/4*)

2 Conductors

3 Conductors

5. RTE Button

PUSH TO EXIT

2. Proximity Reader

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 with Monitor feature
4. Request to Exit Motion
5. Illuminated Request to Exit Button

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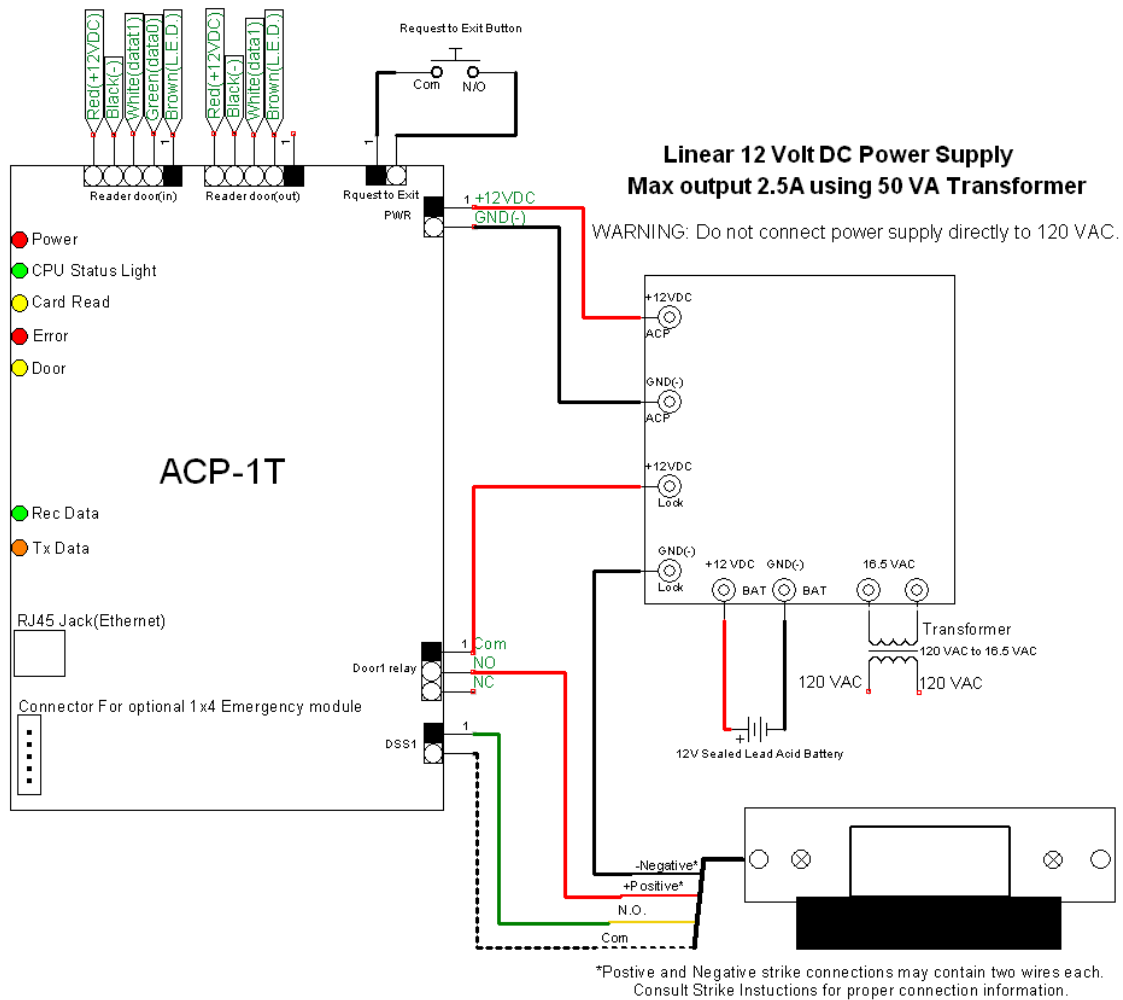
2.8   Fail Safe Lock with Request to Exit pushbutton and Motion Detector
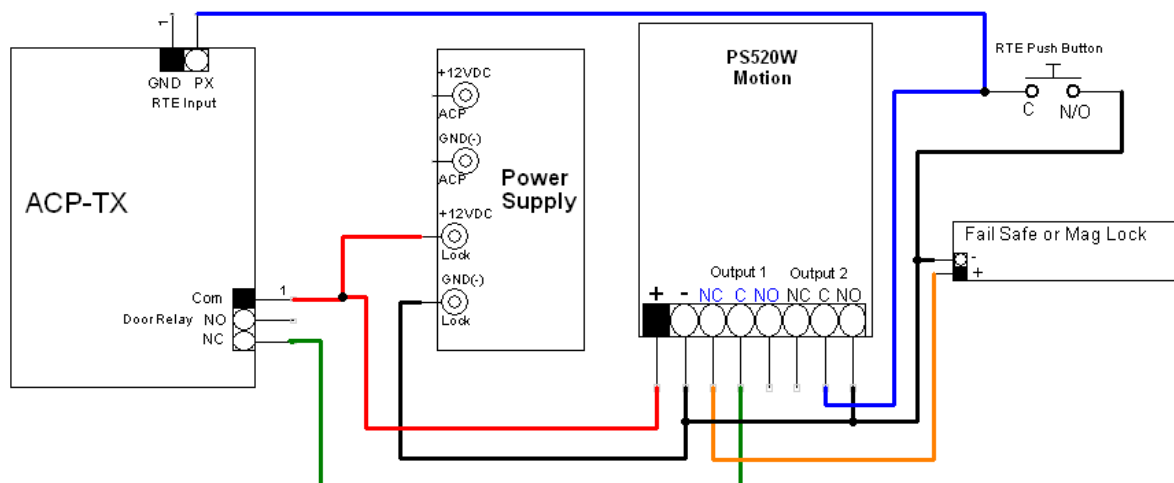
ONLY USE A REQUEST TO EXIT MOTION DETECTOR WITH TWO RELAYS FOR RELEASE OF THE FAIL SAFE MAGNETIC LOCK AT THE DOOR AND A REQUEST TO EXIT SIGNAL SENT TO THE ACP SERIES CONTROL BOARD.

2.9   ACP 1X-4
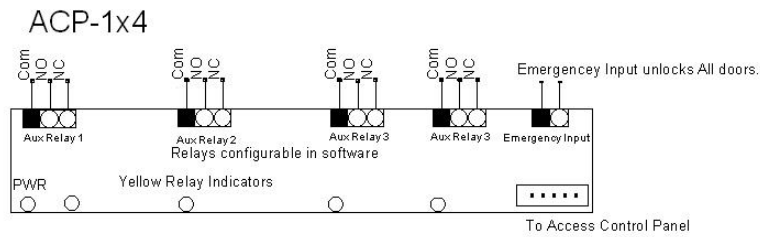
3   INSTALLATION OF SOFTWARE

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 .NET V6.9.21 folder,

- ✓ A copy of the Firefox web browser installation file,

- ✓ A copy of the Flash-10 installation file, and

- ✓ A readme.txt file.

- 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 readme.txt file and read the contents.

- Open the Cobra V6.9.21 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:
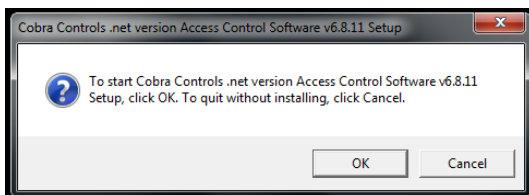
- Click OK .

NOTE: If you do not have Microsoft .NET installed on your computer, you will be prompted to install Microsoft .NET 1.1 when you click OK.   Microsoft .NET is **REQUIRED** in order to run the Contactless Card Management software and is included on the USB drive. Continue to section 3.2 to install Microsoft .NET.

If Microsoft .NET is already installed on your computer, you may skip section 1.2 and proceed to section 1.3 to continue installing the Contactless Card Management software.

3.2   Installation of Microsoft .NET

The following prompt will automatically appear if you do not have Microsoft .NET installed on your computer. It is included with the USB drive and software.
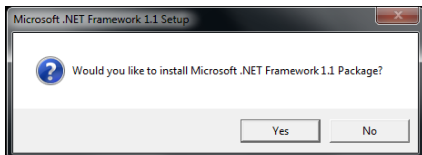
- Click Yes and follow the install prompts for Microsoft .NET

NOTE: There will be a prompt informing you of compatibility issues.

- Ignore this prompt and continue the install by clicking on the "Run program" button.
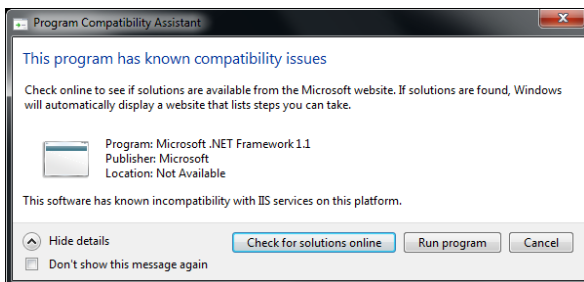
- The license agreement window will pop up. Select the "I agree" radio button and install the program by clicking on Install.
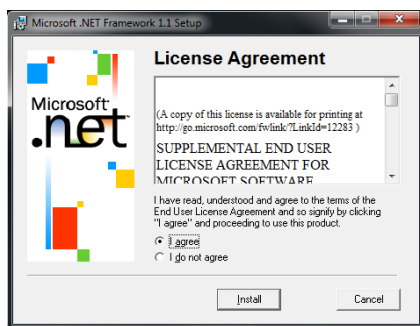
- Finish the Microsoft .NET installation by clicking OK when complete. You will see the following window:
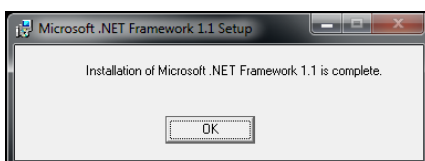
The installation of Microsoft .NET Framework 1.1 is now complete. Proceed to section 1.3.

3.3   Installation of Contactless Card Management Software

After opening the setup.exe file, the following prompts will appear:
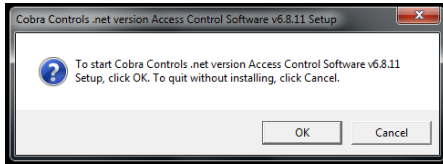
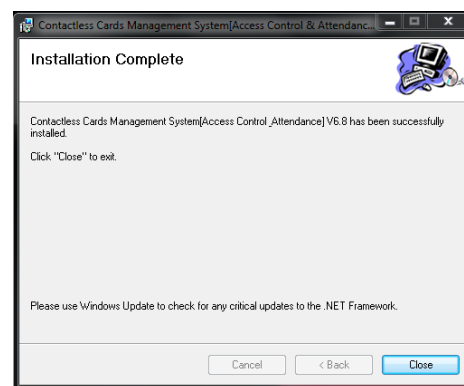- Click OK. The next screen is as follows:
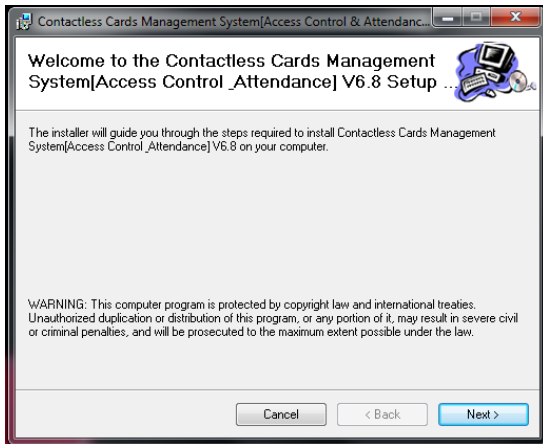
- Click Next. For this next step we
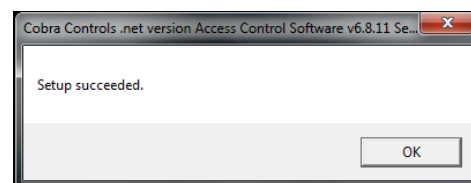 recommend you keep the default settings:
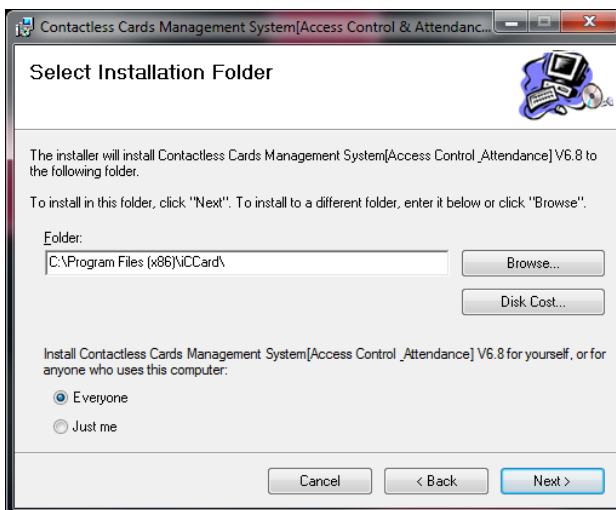
- Click Next to continue.

- When installation is complete, the
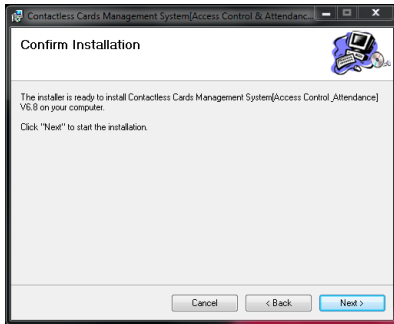 following window will appear. Click
  close.

- The following screen will appear if the
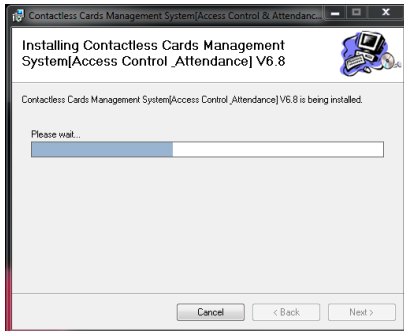 software has been installed correctly:

- Click OK to close the screen.

- Click Next to continue.

The installation is now complete. The software will create a desktop icon in the shape of a gold key named management center v6.8. You can access the software by either double clicking on the icon or by going to:

Start → Programs → iCCard

- Click on "Access Control & Attendance v6.8" or the gold key icon to open the software and begin setting up users. See section 4.1.

Congratulations! You are ready to begin using the Contactless Card Management software!

4   USING THE SOFTWARE

4.1   First Time Login

When you first open the Contactless Card Management software, the following Login screen appears:

- Enter the following User Name and Password into the login screen.

The default login is:

User Name: cobra

Password: cobra

- Click OK.

The following screen appears. This is the main screen for the Contactless Card Management software:
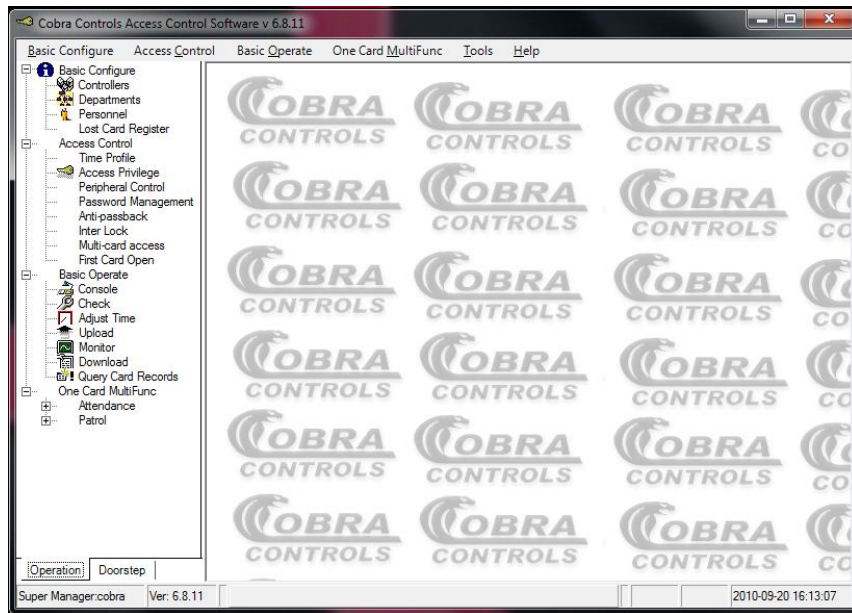
At this point, you can begin adding controllers to the software. See section 4.2.

4.2   Adding Controllers and Naming Doors

On the toolbar located on the left hand side of the software screen:

- Select the "Controllers" option, located under "Basic Configure". It is circled in red in the next screen shot for your convenience.

Or, you can use the toolbar at the top of the window and select:

Basic Configure → Controllers

The following screen will appear:

ACP – T SERIES QUICK START GUIDE
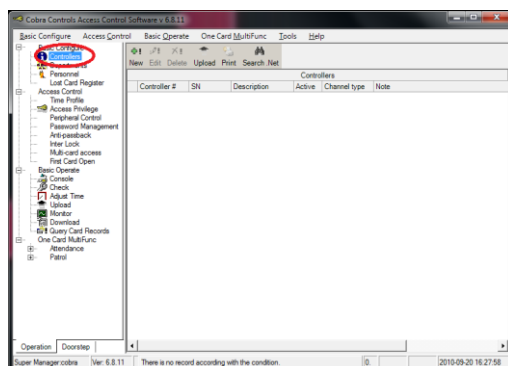
NOTE: All of the options listed on the left hand side of the software main screen are also accessible by right clicking an option in the main screen.

- From the "Controllers" screen, click on Search .NET to list all controllers visible on the network. See the following screen. The search .NET button has been circled in red.
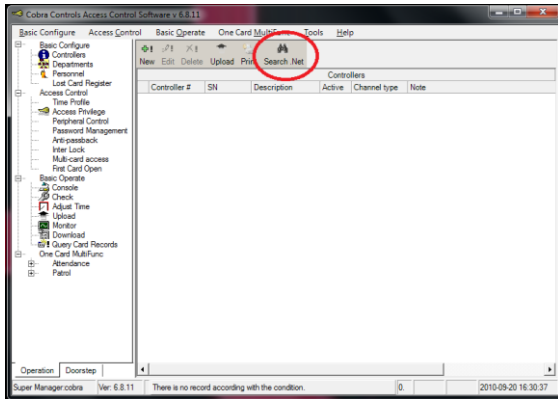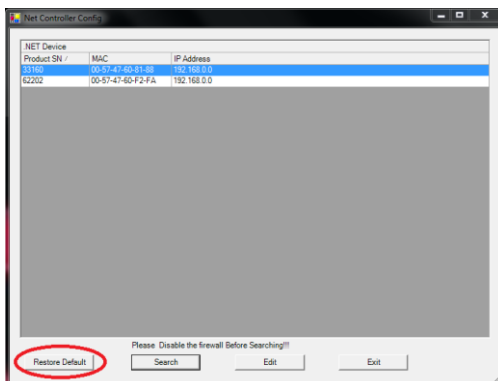

The following screen appears listing all controllers on the network:
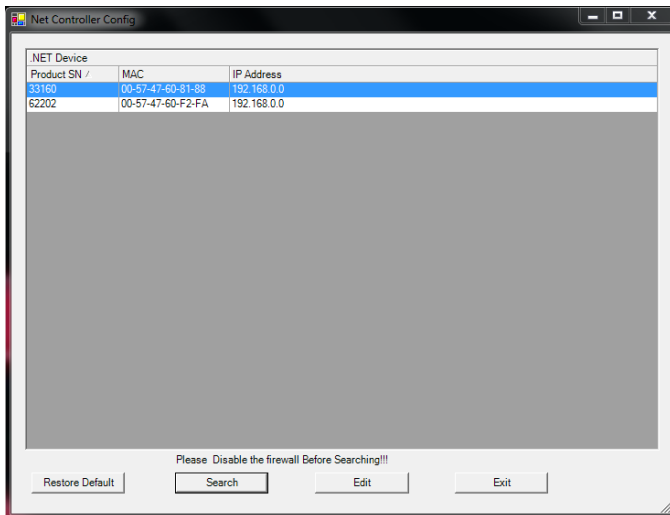
- Select a controller to configure.

NOTE: For the remainder of this guide, a 4-Door controller will be configured as an example.

- Click "Restore Default" to restore the IP address to 192.168.0.0. Refer to the following screen shot. For convenience, "Restore Default" is circled.

NOTE: On a <u>local network</u>, it is NOT necessary to change the IP address of the controller. Based on the serial number of each controller, the software will assign an IP and MAC address automatically.

- Write down each controller's serial number (SN).
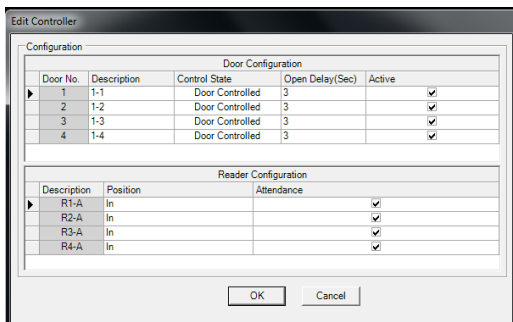
- Click Exit.

- Click "New".
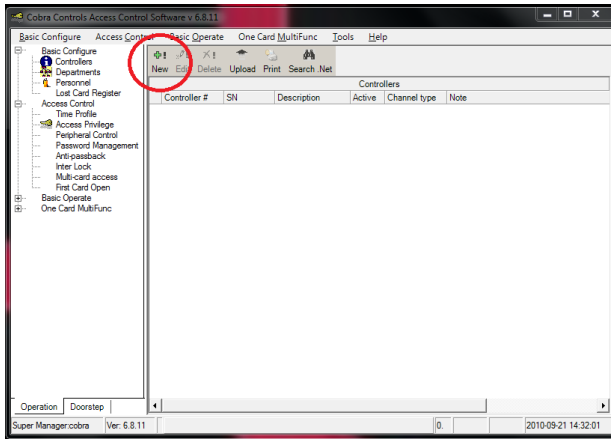
The following screen will appear:
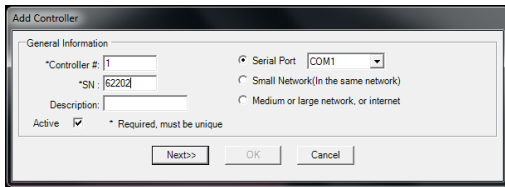
NOTE: For Local Area Network the controllers are installed on a small network. Select Small Network.

- Enter the controller's SN (this is a five digit number) and add a description.

- Click Next. The following screen appears:

You are ready to being naming doors.

- Under the Description field, click inside each box and enter a name for the door.
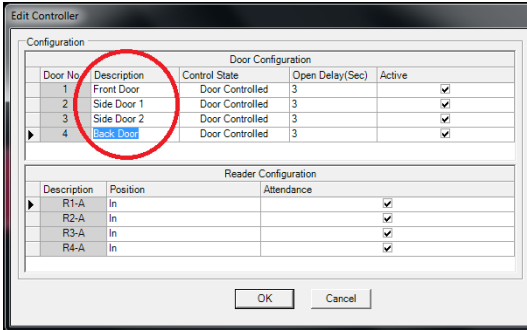
- Under the Control State field, use the drop down menu to make your selection for each door.
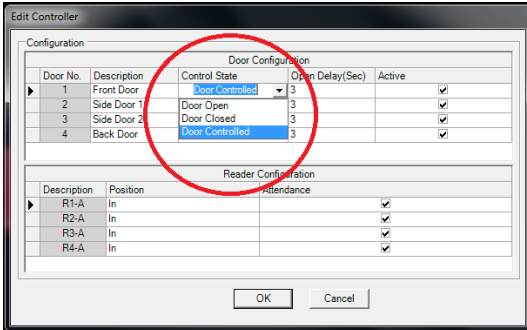
NOTE: No cards work if the doors are set to "Closed". The "Door Closed" option is the equivalent of a system lockdown! Setting the doors to "Open" keeps all selected doors open.

Use "Doors Controlled" to set up your access control system.

- Navigate to the "Open Delay (Sec)" field.
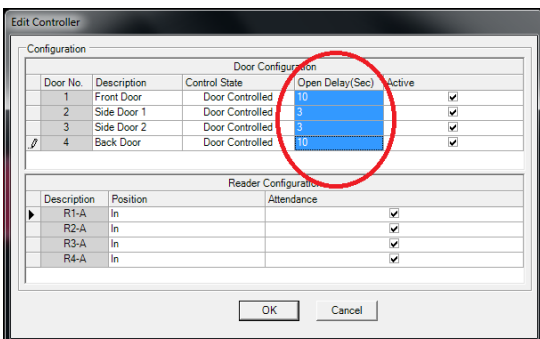
- Click inside one of the Open Delay boxes to change the door delay time. The default delay is 3 seconds.

This is where the Attendance time feature is set up. The default setting is checked. It is OK to leave the attendance on.

Click OK to finish.

Repeat the above steps to add additional controllers and name additional doors.

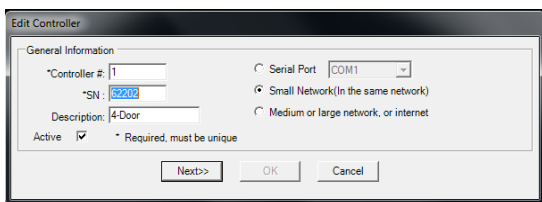### 4.3   Editing and Deleting Controllers and Doors
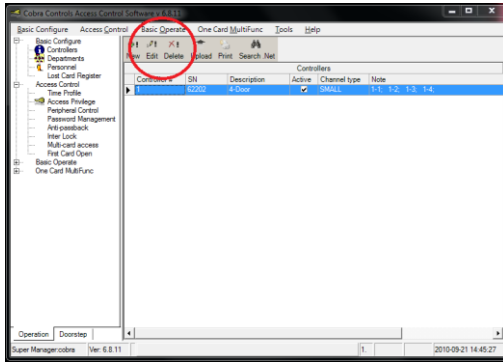
From the Controllers screen, you can edit or delete controllers.

- Select a controller to edit.

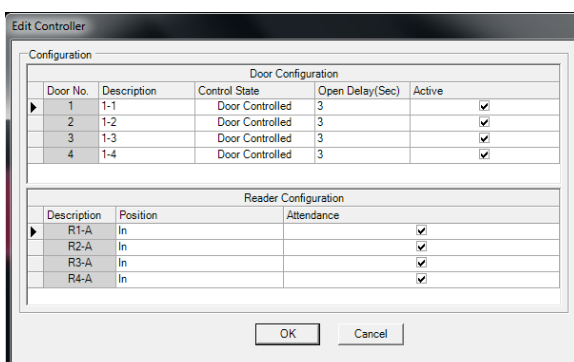- Click on the "Edit" button to edit a controller.

You can also double click on a selection to bring up the edit screen.

The "Edit Controller" window appears as follows:

- Edit the necessary information and click "Next" when finished.

The following screen will appear:

- Click inside any of the fields to edit the door information.

To delete a controller:

- Select a controller to delete.

- Press the "Delete" button to delete the controller.

You will see a confirmation window asking to delete the controller.

- Click OK to delete or Cancel to cancel.

You can also access a list of menu options by *right clicking* on a selection in the screen.
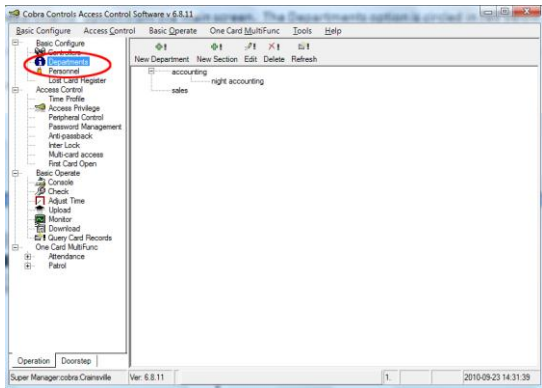
4.4   Creating and Naming Departments

**NOTE**: This step is optional.

- Select the "Departments" option from the main screen. The Departments option is circled in red below.

Additionally, you can navigate to the Departments screen from the drop down menu at the top of the screen by selecting:
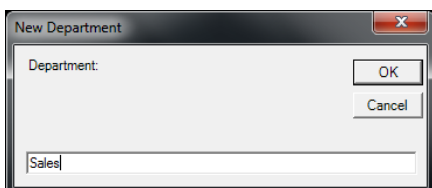
Basic Configure → Departments

- From the Departments screen, click "New Department". It is circled in red in the screen shot below.
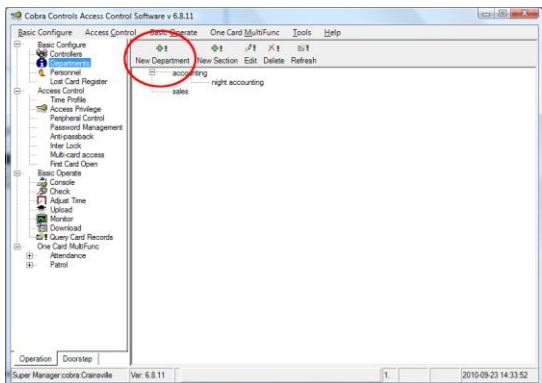

A window will appear labeled "New Department".

- Enter the name of the department and click OK. This guide will use the example "Sales" for demonstrative purposes.

The new department will then be shown in the list of departments in the software.

Another way to add a new department is to right-click any selection in the department list, then select "New" from the drop down menu:
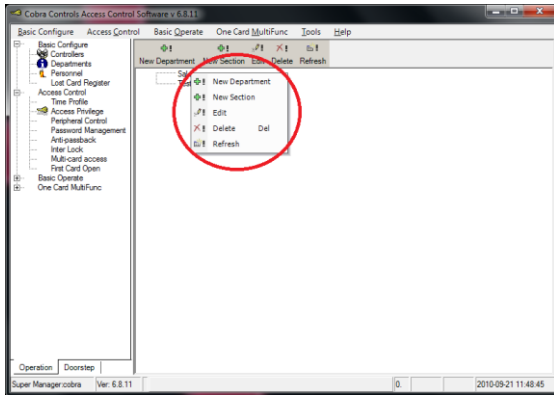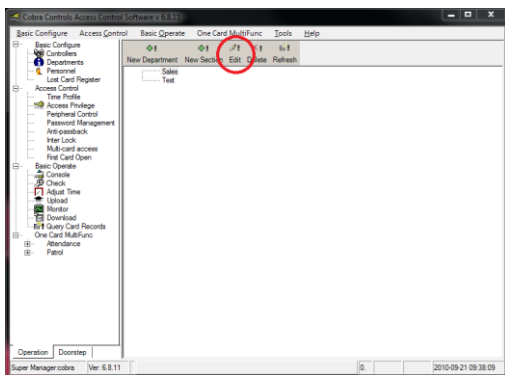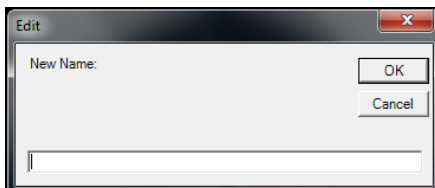
4.5 Editing and Deleting Departments

There are a few ways to edit a department name.

From the Departments screen:

- Select the department you want to change and click "Edit", circled in red below.

You will be prompted for the new department name.

- Enter the new Department name in the field and click OK.

Another way to edit a department is to right click on the department you want to re-name and select "Edit" from the drop down menu. Refer to the last screen shot in section 4.5: Adding Departments, for a visual example of the right click drop down menu.

To delete a department:

- Select the department you want to delete and click the "Delete" button.

- The software will ask you to confirm before deleting a department.

NOTE: You can also right click on a department to bring up a list of toolbar selections and delete departments.

4.6   Adding Card Users

There are two ways to add users. The first method is explained below:

From the main screen:

Select the Personnel option from the toolbar on the left hand side of the screen. It is directly under the "Departments" section and circled in red on the next screen shot.

You can also navigate to the Personnel screen by navigating the toolbar at the top of the screen by selecting:
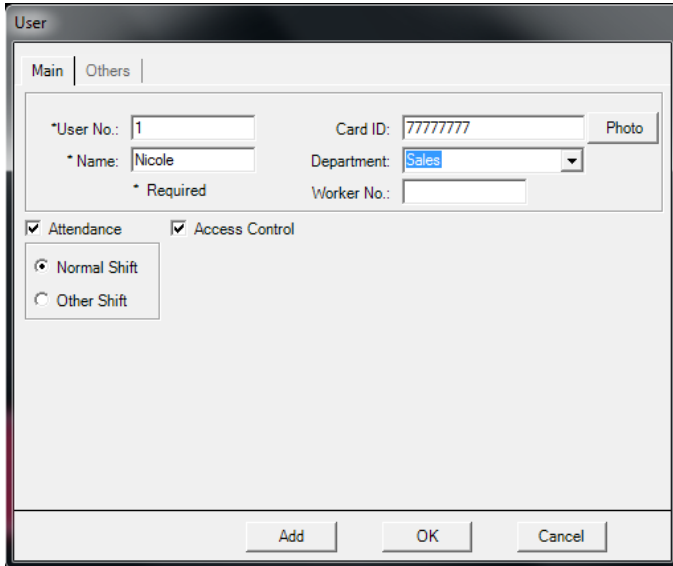
Basic Configure → Personnel
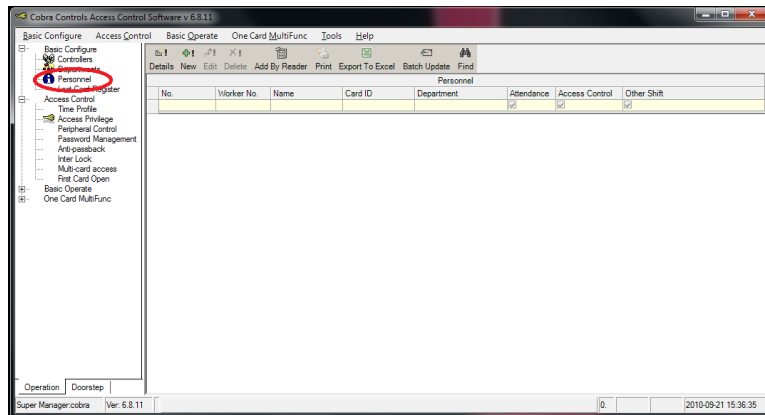
- Click "New", circled in red. The Personnel screen is shown below for reference:
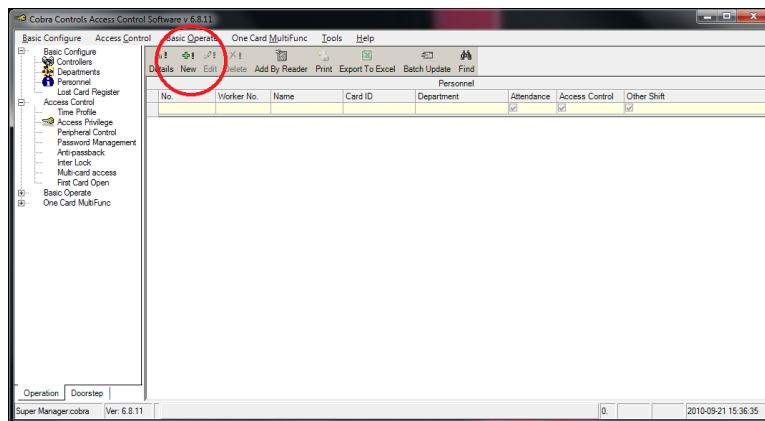
- After clicking "New", enter the fields as follows:

  ❖ Card number: The last 8 digits on the card.

  ❖ Name: Enter the card holder's name as you would like it to appear.

  ❖ Department: Enter the card holder's department as you would like it to appear.

  ❖ Worker #:   This is optional.

Below is an example worker:
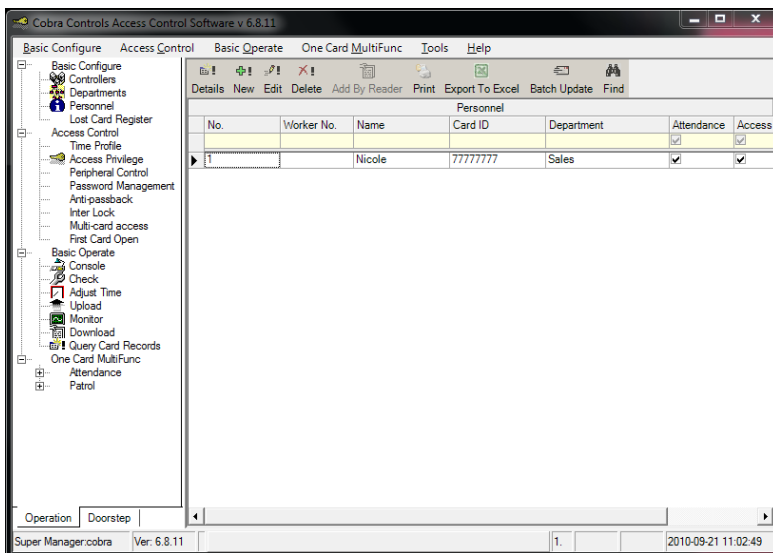
- Click Add to add a user.

Continue this process to add users to the system. When finished, exit out of this screen by clicking Cancel. You can always come back to this section and add or edit card users at a later time.

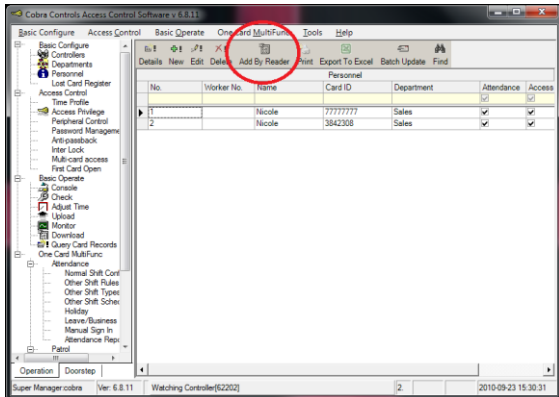When finished adding users, the main software screen will appear as follows:

NOTE: Another way to add users is by simply scanning in new cards. You can then double click on the entries in the main window to enter the card holder's name, department, etc.

- From the add new users screen, click the "Add by Reader" button. Select controller with reader you wish to use.

- Scan the card(s), then click OK. You can designate a department before scanning. See the screen below.
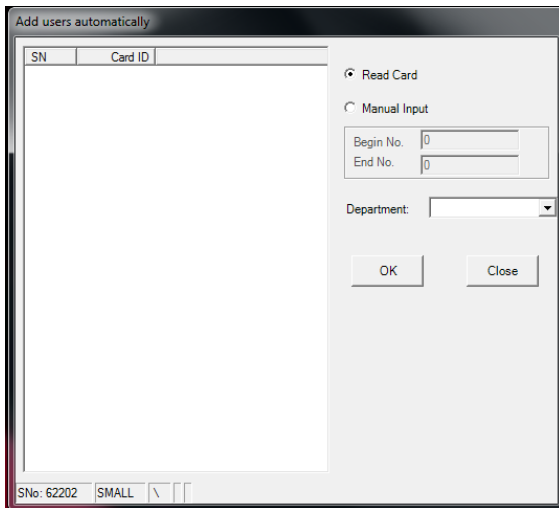
- Edit each entry as necessary.

NOTE: In addition, you can add users by right clicking on any user to view a list of menu options, then select "New".
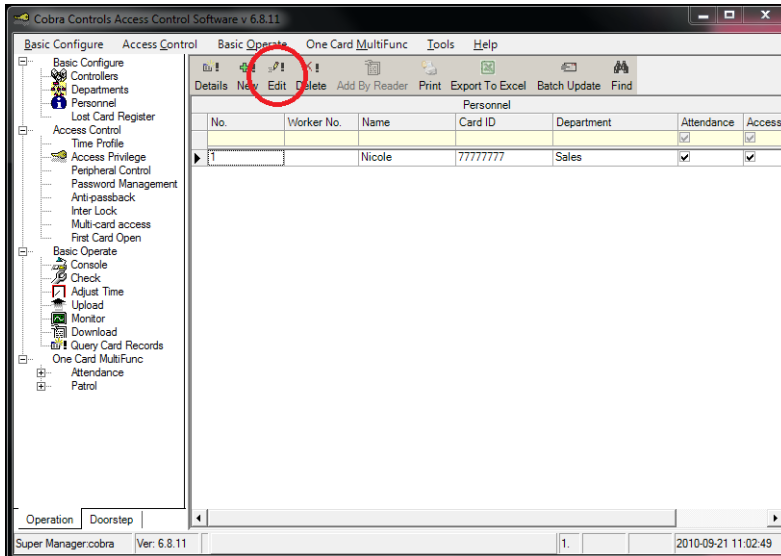
4.7   Editing and Deleting Card Users

There are a few different ways to edit or delete existing card users. The first method is explained below.
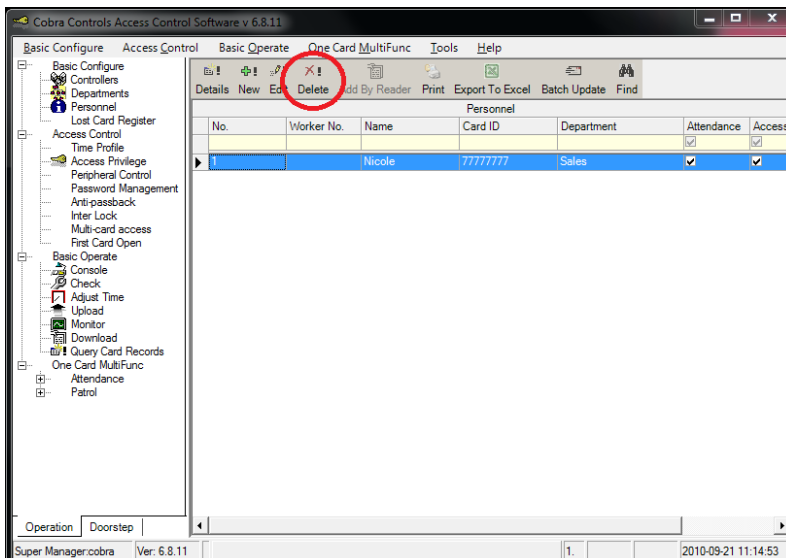
From the Personnel screen:

- Select an entry for editing or deletion.

- Click the Edit button to bring up the window to edit users. The edit button is circled below:

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To delete a user:

- Select an entry and press the "Delete" button, circled in red below.

The software will ask you to confirm deletion of a user.

- Select OK to delete the user from the system.

Additionally, you can double click on an entry and edit the user information. Or, right click on any user to bring up a list of menu options.

4.8   Creating Time Profiles

NOTE: If all people have access to all doors at all times, this step is not necessary; However, if any person(s) has limited access during certain times to any door, this step must be performed.

- Navigate to the "Access Control" menu option circled below.
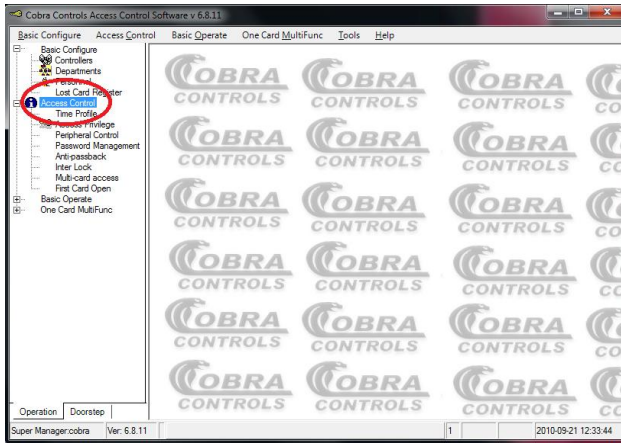
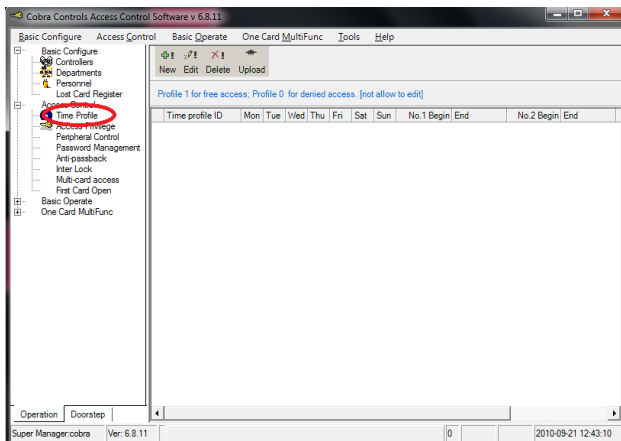- Select "Time Profile", located directly under the "Access Control" menu option. It is circled in red below:

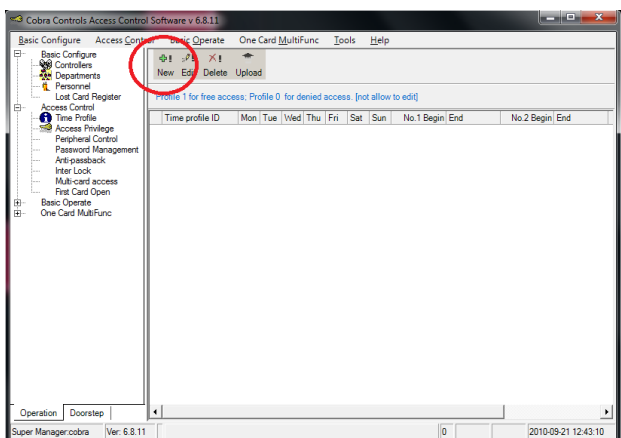You can also access the Time Profile screen by using the toolbar at the top of the window. Select:

Access Controls → Time Profile

NOTE: The term "time zone" is equivalent to "time profile".

To add a new time profile:

- From the Time Profile screen, click the "New" button, circled in red below.

The following screen appears:

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- Fill out the fields as follows:

❖ Time profile ID: Select a number to label this time profile.

❖ Name: Name your profile. This example will be "Day Shift".

❖ Activate Date: The date you want to start allowing card access.

❖ Deactivate Date: The date you want to stop allowing card access.

❖ Next Linked Profile: Leave this set to '0' for now.

❖ Week Day: Check or un-check the days you want to allow card access.

❖ Time Segment: Enter the times (in military time) you want access allowed for each card. Up to three segments can be designated.

The example above is named "Day Shift". Such a time profile could be set up to only allow certain users access to a building or area between 9:00am and 5:00pm (17:00) Monday through Friday.

- Click OK to finish. The main screen will appear as follows:

You may repeat the above steps to continue adding new time profiles.

4.9   Editing and Deleting Time Profiles

To edit or delete an existing time profile:

- Select a profile to edit or delete.

- Edit or delete a time profile by clicking the "Edit" or "Delete" buttons, as required. The buttons are circled in red below.
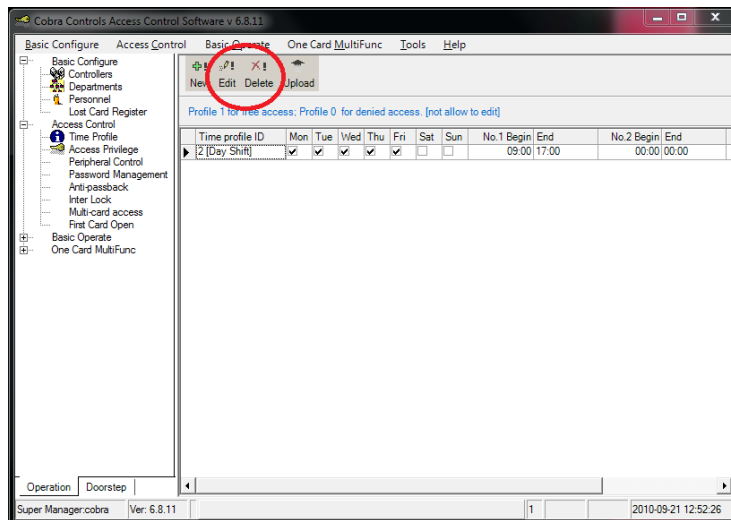
You will get a window asking you to confirm deletion of a time profile. Select OK to delete a time profile or Cancel to escape.
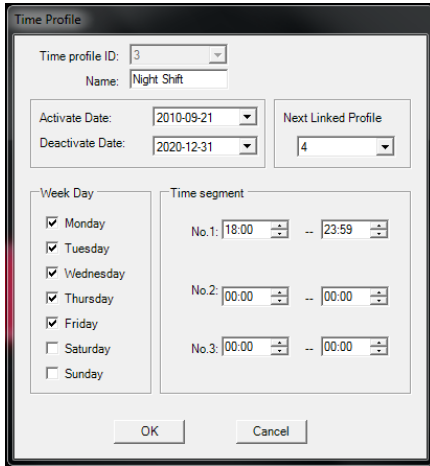
As always, you can double click on a time profile ID for editing. Or, you can right click a time profile ID to see a list of menu options.

4.10   Linking Time Profiles
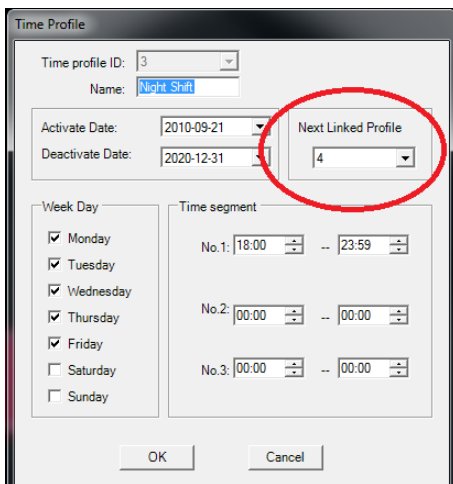
Linking time profiles allows you to set different levels of access. It also allows you to assign access control to selected users with time windows overlapping different days. To clarify, consider the following example:

To create a "Night Shift" time profile starting at 6pm (18:00) and ending at 2:00am the following day, you need to link two profiles together.

- Create a new time profile. The Night Shift example is shown below:

Please note below how "Next Linked Profile" is set to 4. In this example, the Time profile ID is set to 3. The reason for this will become clear in a moment.

- Click OK to add the time profile.

Note how the Time Profile is set for Monday through Friday, 6pm (18:00) to 11:59pm (23:59).

- Create a new time profile. For the sake of example, it will be named Night Shift, as well.

When creating the second portion of your linked Time Profile, make sure there are no time gaps. To clarify, view the following screenshot:

Notice how this time profile ID is set to 4, and "Next Linked Profile" is set to 0 and is circled in red. Furthermore, notice how the days have been changed to Tuesday through Saturday, and the times have been changed to 12:00am (00:00) to 2:00am (02:00). This way, you can set up your access control system to allow card access across day/time gaps, such as a night shift.

- Click OK to add this time profile.

You should now have two time profiles linked to each other.

4.11 Access Privileges

Select Access Privileges from the menu options on the left hand side of the screen, circled in red below.

You can also get to the Access Privileges screen from the drop down menu at the top of the screen by going to:

Access Control → Access Privileges
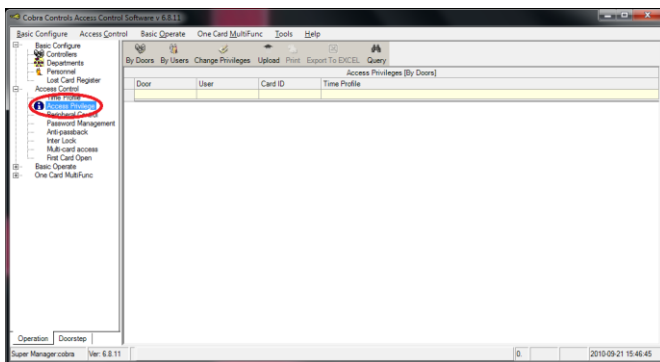
- Select the "Change Privileges" button.
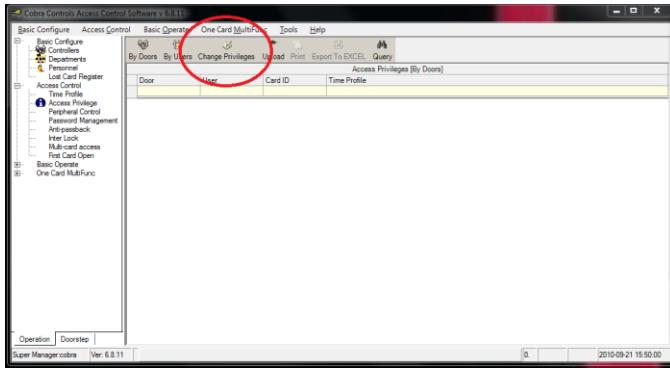
The following window will appear:
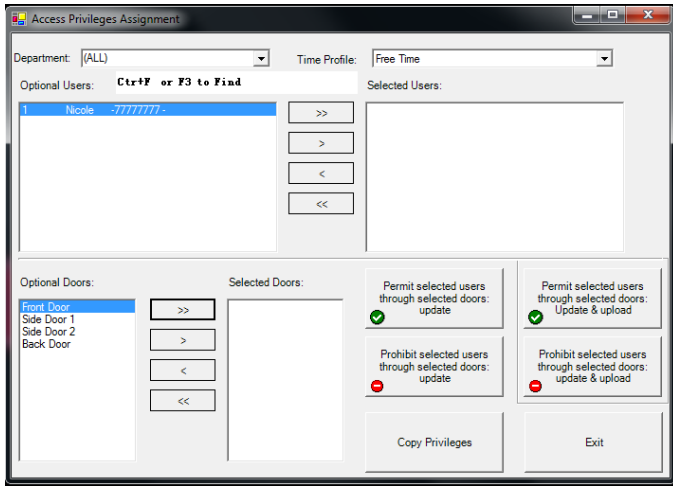
- Select the department you want to assign to each user from the drop down window in the upper left hand corner of the screen. It is also circled in red below.
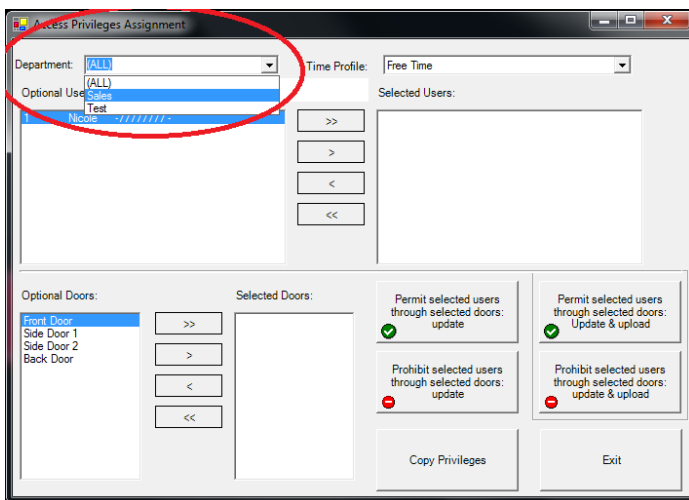
Select the user(s) you would like to assign to a time profile by using the > , >> , < , and << buttons.

> Add highlighted selection(s)
>> Add All
< Remove highlighted selection(s)
<< Remove All

Select the door(s) you would like to assign to specific users using the > , >> , < , and << buttons.

In the above example, Nicole has access to all doors and is part of the Sales department.

In the upper right hand corner of the screen under "Time Profile":

- Select the time profile you want associated with each group of users.
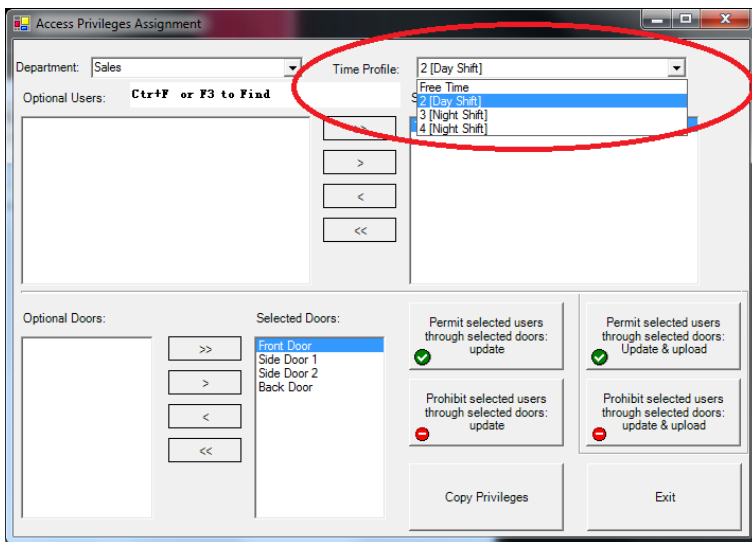
In the above example, Nicole is part of the Day Shift.

Once you have all of the users, doors and departments correctly selected for a specific configuration, you are ready to proceed to the next section.
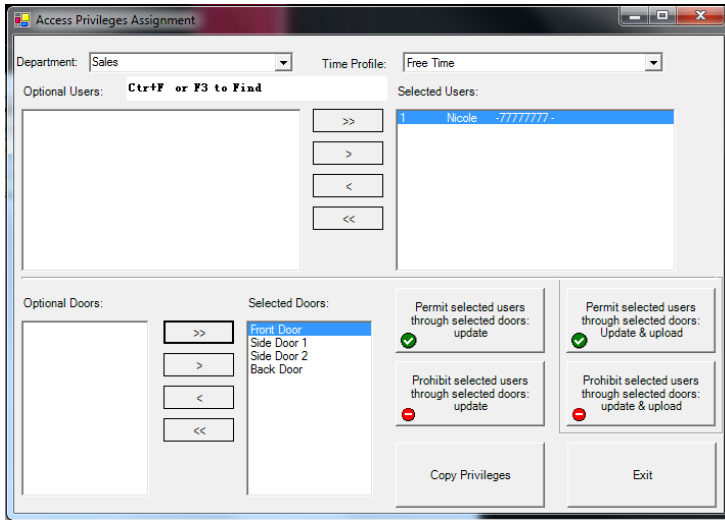
NOTE: If you need to configure different combinations of users, doors and departments, repeat section 4.11 followed by section 4.12.

4.12 Update and Upload

NOTE: It is important that when you first program the system that you upload ALL information.

- When ready, click "Permit selected users through selected doors; Update & upload" circled in red below:
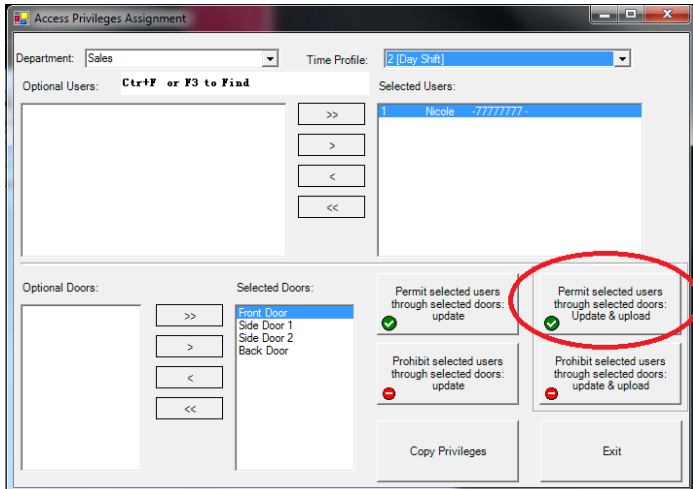
The following screen appears:
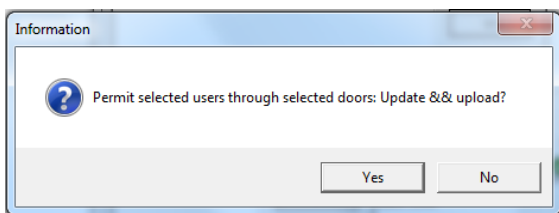
- Click Yes.

A window will appear with the number of records changed.

- Click OK

Repeat sections 4.11 and 4.12 for each combination of doors, users and time profiles.

Use the above instructions to prohibit users from entering doors by clicking on the "Prohibit selected users" button instead.

The following upload operation must be performed on each installation after initial programming to ensure complete upload of all configuration parameters.

- Navigate to Basic Operate → Upload
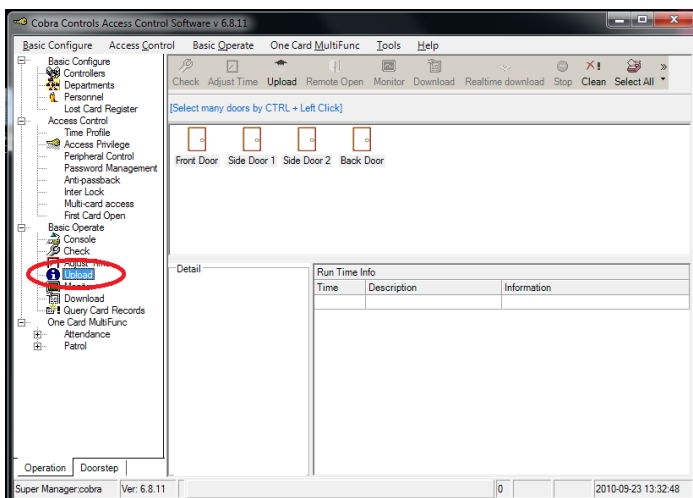
- Click the "Select All" button, circled in red below.
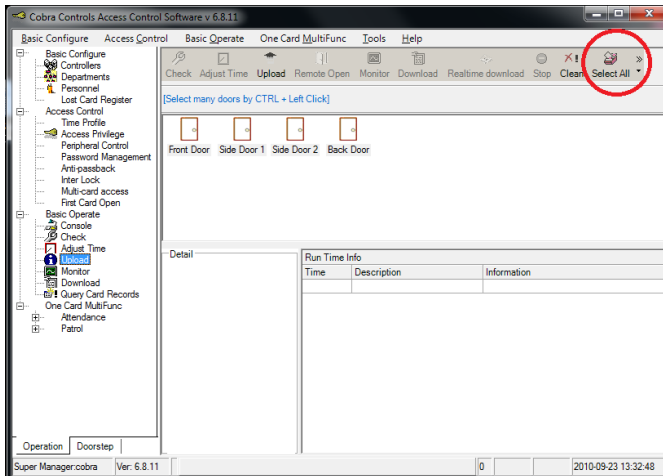
- Click the "Upload" button to upload the settings.
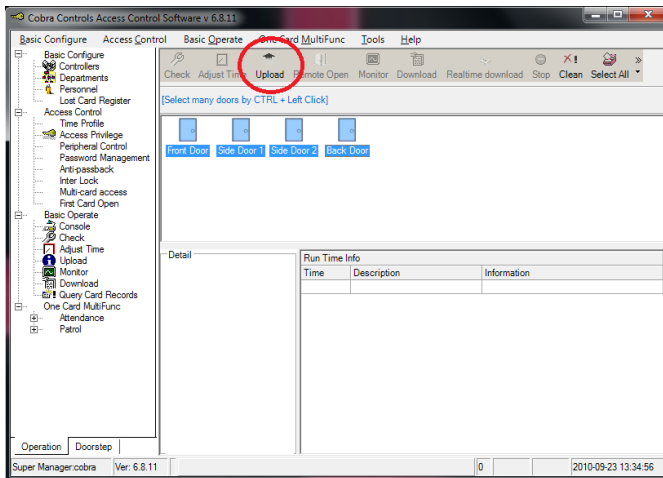
The following screen will appear. Leave all of the boxes checked.
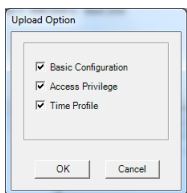
- Click OK.

You are all ready to begin using your Contactless Card Management system. Please review section 5 for some brief additional information.

5   ADDITIONAL INFORMATION

5.1   Definitions

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

Password Management: PIN codes for card or PIN entry.

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.

5.2 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.

❖ Audit Trail Note:

  o Download → Select All → Get All Records → Query Card Records → Sort (Run Reports)

❖ 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.

6   Frequently Asked Questions / Troubleshooting

Why are the Error Light on my controller and the readers flashing red?

This is most likely a time of day error that came on when the controller was first powered up. Please navigate to the "Adjust Time" section of the software click "select all" in the above bar then "adjust time" in the upper bar.

My Software indicates that the trial period has expired.

Please visit 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.

I added the cards to the personnel section in the software but the door still does not unlock when I present the cards.

Make sure you navigate to section 4.11 on page 30 of the document and follow the instructions on setting up access privileges. If still experiencing issues continue to the next step

Check to make sure the yellow light on the main controller board labeled "IN" flashes when the card is presented to the reader. If this does not flash when the card is read then please check the Green(Data0) and White(Data1) reader wires to make sure they are in the proper terminals.

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

The recommended cable types are "22 gauge 6 six conductor shielded" for Readers and 18 gauge 4 or six conductor cable for the locking hardware. Deviation from these recommendation 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.

When I attempt to upload information to the controller I receive a "Comm Failed..." error message.

Please refer to section 4.2 of this document to confirm your controller has been added properly. If no controller is listed in the "Search.net" window please disable any firewall programs then try the "Search.net" button again. If unsuccessful continue to the next step.

Before calling tech support please confirm that the green LED labeled "RX" located above the Ethernet port on the controller is illuminated. If this is not illuminated there is a possible problem with the physical wired network connection between the controller and your network. Please check the cable.