Access Control System

User Programming Guide

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NORTEK SECURITY & CONTROL
USA & Canada (800) 421-1587 & (800) 392-0123
(760) 438-7000 - Toll Free FAX (800) 468-1340
www.nortekcontrol.com
Notices

It is IMPORTANT that this instruction manual be read and understood completely before installation or operation is attempted. It is intended that the installation of this unit will be performed only by persons trained and qualified in the installation of access control equipment. The IMPORTANT safeguards and instructions in this manual cannot cover all possible conditions and situations which may occur during installation and use. It must be understood that common sense and caution must be exercised by the person(s) installing, maintaining, and operating the equipment.

Standards Approvals
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
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1. Introduction

This manual contains information regarding the programming and configuration of the eMerge access control system. The system offers multi-station ability to secure doors, manage access of personnel, create and analyze reports, and monitor the system remotely from any Web browser. All monitored activity at the facility is recorded in the system memory — providing a record of all Card Holder entries and exits, input detection, and security or fire detection, if desired.

The system can be seamlessly scaled up, via software keys, to provide increased door and reader capacity, enhanced features, and higher level capabilities.

General Features

The following is a feature summary of the Controller:

- Browser-based management enables system status and updates from any location, with any supported OS, using any supported browser — Chrome ver. 22 or higher; IE 9.0 or higher; Firefox ver. 13 or higher; Safari ver. 5.1.7 or higher.
- Supports access from iPhone, iPad and Android devices.
- Intuitive Wizard allows for ultra-fast setup.
- Configure the system to perform automatic functions on specific days and times. For example, schedule when a door is unlocked or when an employee can gain access to the facility.
- Create, view and print customized reports using the reporting tool.
- Create a set of instructions that the system will follow when an event occurs. For example, when a door is forced open the system can be instructed to turn on a camera and display a graphic.
- Configure the system to store custom information about each Card Holder such as phone number or employee ID.
- Define up to 30 holidays for use as special schedules. For example, schedule a door to remain locked during a holiday.
- Configure the system to send email and text message notifications.
- Software updates for new feature and product enhancements.

System Information

<table>
<thead>
<tr>
<th>Feature</th>
<th>System Capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doors/Portals</td>
<td>1 (scalable to 4 with optional key upgrades)</td>
</tr>
<tr>
<td>Maximum readers</td>
<td>8 (4 in / 4 out)</td>
</tr>
<tr>
<td>Inputs</td>
<td>12</td>
</tr>
<tr>
<td>Outputs</td>
<td>8</td>
</tr>
<tr>
<td>Card holders</td>
<td>1,000</td>
</tr>
<tr>
<td>Cards per person</td>
<td>12</td>
</tr>
<tr>
<td>Card formats</td>
<td>32</td>
</tr>
<tr>
<td>Access Levels</td>
<td>25</td>
</tr>
<tr>
<td>Time Schedules</td>
<td>25</td>
</tr>
<tr>
<td>Simultaneous system users</td>
<td>8</td>
</tr>
<tr>
<td>Online transactions</td>
<td>15,000</td>
</tr>
<tr>
<td>Elevator</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* NOTE: Using optional expansion Controllers
2. Software Layout
System Server Software

The Controller browser interface includes two methods available to the operator for programming and navigation. These methods include using the Toolbar and Wizard. The Toolbar provides access to all configuration options; whereas the Wizard provides access to the core system components. The following illustration shows the location of the Toolbar and Wizard icon.

![Toolbar and Wizard Icon]

The first time the system is run, the Wizard will run automatically. This allows setting of the following core system components:

- System Language Selection
- System License
- Card Format Setup
- Holiday Group Setup
- Schedule Setup
- Door Setup
- Access Level Setup
- Card Holder Setup
- Card Setup
- Network Setup
- Dealer Registration
- System Startup Screen Selection

Refer to the Section in the rear of this manual “Using the Wizard” for details on each Wizard screen.
Toolbar Menu
The Toolbar provides access to all setup, programming, management, and reporting options of the Controller.

Dashboard: The default system software page, which is primarily used to monitor and acknowledge recent events.

Camera: Configure and view cameras and DVRs if installed.

Administration: Add, edit or delete Card Holders, card formats and Access Levels, badge layouts and templates.

Schedule: Add and edit time schedules, holidays and unlock schedules.

Events: Create events that are assigned to actions. For example, a time schedule can be assigned to an auxiliary output.

Threat Level: Enable and configure Threat Level settings, if Threat Levels are enabled.

Device Setting: Configure the doors, elevators, inputs and outputs that are licensed and available within the system. Edit Controller locations and region.

User Setting: Set user fields, define the operators that can login and select their level of system access.

System Setting: Update, backup, restore or reset the Controller.

Network Setting: Configure the IP address, FTP, update server, SMTP, time server, and RMC.

Floor Setting: Load a floor plan graphic, which will be displayed on the Dashboard.

Data Transfer: Export or import data using a CSV file.

Log: Opens the log database allowing the user to generate, view, and print log reports.

Report: Provides system and event reporting, smart reports feature customizable report formats.

Group Table: Enter cards, door and camera groups as well as configure Access Level groups.

Site Management: View and edit client, site, and device information, option to add a custom logo.

Logout: Logs the operator out of the system.
3. System Programming
Connect to the Controller

Open a web browser on a local computer and enter the IP address of the Controller (Default = 192.168.0.250).

The browser presents the login page as shown.

1. Enter the User ID.
   - Default User ID = admin
2. Enter the Password.
   - Default Password = admin
3. Click Login.

Just in case, a link is displayed to send a message to the eMerge Super Administrator for a forgotten password.

✓ NOTE: The Super Administrator password is set in Device Settings > Controller
Click the **Dashboard** icon to open the Dashboard window, which displays incoming events and allows users to view, acknowledge, and clear events. The Dashboard allows the operator to monitor real-time activities in the facility — for example, use of a valid card or a door forced open. The Dashboard also provides the ability to manually lock and unlock doors and activate outputs.

**M-UnLock**: Unlocks the door for the time defined as the *Door Unlock Time* (default = 3 seconds).

**E-UnLock**: Unlocks the door until the user clicks Lock.

**Lock**: Locks the door

**Trigger**: Activates the selected auxiliary or elevator output according to the *Aux Output* settings (see Aux Output to configure output settings).
The **Dashboard Setting** dialog provides default icons for each door, input and output. Customize the visual layout of the system by dragging the icons to the floor image (see **Floor Setting** to add an image of the floor).
Camera View

A license upgrade is required to use this feature.

Defining Camera Views
1. Click Edit and add the desired cameras from the drop-down list. This defines the camera position in the camera view.
2. Select 1mode, 4mode, 9mode, or 16mode to set the amount of cameras displayed in the view window.
3. Click Save.

✓ NOTE: Live video is dependent on IP camera settings and browser capabilities. Not all camera and browser configurations are supported.
Camera Setting

Camera Setting allows configuration of IP cameras. A license upgrade is required to use this feature.

Adding a Camera
1. Click New and enter a name and description for the camera.
2. Select a camera brand from the drop-down list. If your camera is not listed, select Other.
3. Enter the additional information for the camera. This information is provided in the camera’s installation manual.
   - Browser Address: The IP address of the camera.
   - Control Address: The IP address of the camera.
   - IP Port: The port to obtain video from the camera.
   - ID: User name of the admin or live view user of the camera.
   - Password: Password of the admin or live view user of the camera.
   - Door: The door on the system that linked to the camera (for triggering events).
   - Enable PTZ: Enable if the camera has PTZ capability.
4. Enter the camera's Image URL, and Motion JPEG URL. This information is typically listed in the camera's installation manual.
5. Click Add.

✓ NOTE: Live video is dependent on IP camera settings and browser capabilities. Not all camera and browser configurations are supported.
**DVR View** allows the user to select defined IP DVR video matrix and different DVR views. *A license upgrade is required to use this feature.* Refer to the DVR manual for programming information.
DVR Setting

**DVR Setting** allows configuration of digital video recorders. *A license upgrade is required to use this feature.*

**Adding a DVR**

1. Click **New** and enter a name and description for the DVR.
2. Select a DVR brand from the drop-down list. If your DVR is not listed, select **Other**.
3. Enter the additional information for the DVR. This information is provided in the camera's installation manual.
4. Click **Add**.

✓ **NOTE:** Digital Watchdog DVR integration is only compatible with Microsoft IE9 or higher, 32-bit version only. The DVR setting must be configured using IE and will require installation of an ActiveX component. Refer to DVR manual for additional information.
Card Holders are individuals who access the facility and are entered in the system. Access credentials are assigned to Card Holders.

Creating a Card Holder
1. Click New.
2. Enter the name and contact information of the Card Holder.
3. Under File Upload, click Snapshot to take a picture from an attached USB camera or click Browse to select a file to assign an image to the Card Holder for identification purposes.

✓ NOTE: Picture files can be 20 Kb maximum. JPG, BMP, or PNG formats.

Card Holder Options
1. Select ADA Timing for extended timing for the door relay.
2. Select Exempt to allow the Card Holder to bypass Anti-Passback rules (except occupancy rules) if the Card Holder is allowed access to the region.
3. Select a Web User Account to give the Card Holder operator privileges to the Controller.
4. Choose the highest Threat Level that the Card Holder will be allowed access.

✓ NOTE: A Card Holder cannot access a door if either the Door Threat Level or the System Threat Level is greater than the Card Holder Threat Level.
5. Click Save.

Card Holder Badge
1. Select the Template for the badge.

✓ NOTE: See Section Badge Printing for details on setting up badge design templates.
2. Click Print Badge to launch the badge printing window.
3. Click Print Badge to select the printer and print out the badge.
Assigning a Card to an Existing Card Holder

1. Select the Card Holder from the main window.
2. Click Add Card.

Card Format
3. Select the appropriate Card Format from the drop-down field.

Card Number
4. Enter the Card Number, or use the Auto Scan feature.

Auto Scan
5. Choose the Auto Scan door reader where the card will be presented.
   ✓ NOTE: Card scanner can only be used with doors 1 - 4.
6. Click Card Scan and present the card to the reader. The new card number will populate the data field.

Card Status
7. Select the current Card Status.

Card Type
8. Select the function for the card with Card Type dropdown.
Card Holder (Cont.)

Access Level
9. For Select Type select Individual or Group access level.
10. For Select Level select the desired access levels (or use the search icon to find a specific access level) and click the right arrow to move the access level to the field on the right.

Activation Date
11. Choose an optional activation and expiration date for the card.
12. Click Save to assign the card to the Card Holder.

The added card will show on the card list for the Card Holder.

Click Add Card to add additional cards for the selected Card Holder.
Card Format displays the default card formats of the system. The system has several pre-configured card formats. If the desired card format is not listed, a custom format may be added.

Adding a Card Format
1. Click New.
2. Enter a name and description (optional) for the card format.
3. Enter the facility code bit/length, card number bit/length and parity information as provided by the card manufacturer.
4. Click Add to save the changes.
✓ NOTE: It is recommended to delete card formats that are not in use.

Using the Decoder
If the desired card format is not listed as a default format, the Decoder can be utilized to auto scan and detect the card format.

1. Click Decoder.
2. Select the door where the card will be auto scanned.
3. Click Card Scan and present the card (or multiple cards) to the reader.
4. The new card format will populate the data fields.
5. Click Add to save the new format.
✓ NOTE: The decoder takes a “best guess” based on existing card formats. Without knowledge of the card’s start bits and length, it cannot guarantee proper decoding.
Access Level

An Access Level establishes which doors the Card Holder can access and when they are allowed to access them. Access Levels are comprised of a time schedule and door(s).

Adding an Access Level
1. Click New.
2. Enter the desired Access Level Name and Description (optional).
3. Assign a time schedule to the Access Level by choosing it from the Schedule dropdown menu.
4. Select Group or Individual for the Access Group Type.
5. For Door List, select the desired doors (or use the search icon to find a specific door) and click the right arrow to move the doors to the field on the right.
   ✓ Note: Ctrl-click or shift-click will select multiple doors.
6. Click Add to save the changes.

Editing an Access Level
1. Select an Access Level from the list and click Edit.
2. Make the desired edits.
3. Click Save to save the changes.

Deleting an Access Level
1. Select an Access Level from the list and click Edit.
2. Click Delete.
3. A confirmation window will pop up, click OK to delete the Access Level.
Badging Layout

The Badging Layout Module is used to design printable badges. The badge orientation, background, logo, Card Holder picture, and text fields can be customized and saved under a layout name.

Layout
1. Use the Select Layout dropdown to modify an existing badge layout, or create a new layout.

Orientation
2. Choose Landscape (wide) or Portrait (tall) for the badge orientation.

Background File
3. If a background is needed, browse for the Background File.

Logo
4. Set a logo size to fit the logo with the Logo Width and Logo Height settings.
5. Set the logo position on the badge. The X Position is the number of pixels in from the left edge. The Y Position is the number of pixels down from the top edge.

Picture
6. Set the Card Holder Picture (100 pixels wide by 130 pixels high) position on the badge. The X Position is the number of pixels in from the left edge. The Y Position is the number of pixels down from the top edge.

Text Fields
7. Enter names for the text fields in the Field ID boxes.
8. Set each text field position with the X Position and Y Position settings.
9. Set the Max Number of Characters for each of the text fields. The field will be truncated to this length when it is populated from the database.

Save and Preview
10. Click Preview to look at the badge layout then adjust any design settings.
11. When the badge layout is as desired, click Save to save the layout.
A **Badging Template** is used to select which Card Holder data populates the text fields positioned on the badge by the Badging Layout.

**Editing a Badge Template**

1. Choose a Badge Layout or Badge Template to edit with the dropdown selectors. A sample of the badge layout displays for reference.

   ✓ **Note:** The number of fields listed depends on the fields in the Badge Layout

2. For each of the text fields, choose a Card Holder database field to populate the badge field.

3. Click **Save Template** to store the template.
A Schedule is a combination of a time interval and one or more days of the week. Use schedules to identify the hours and days when inputs, outputs or door access are in operation. Assign holiday groups to the schedule to control when operations occur on holidays. There is one default time schedule of Always, which is defined as 00:00–23:59, seven days per week.

Adding a Schedule
1. Click New.
2. Enter the desired name and description (optional) for the schedule.
3. Adjust the sliders for the Start Time and End Time on days when the schedule is to be active. (Collapse slider for no access on that day.)
4. (Optional) Select a holiday group to allow access on the holidays in the group. If a holiday group is selected, identify a start and end time for holiday access.
5. Click Add to save the new schedule.
   ✓ Note: To create a schedule with a “Midnight Crossing” (e.g., 16:00 to 00:30) click Reverse.

Deleting a Schedule
1. Select the schedule to be deleted.
2. The schedule will appear. Scroll to the bottom of the page and click Delete.
3. Click OK to confirm the deletion.

Editing a Schedule
1. Select the schedule to be edited and click Edit.
2. Perform the desired changes to the Name, Description and time intervals.
3. Scroll down and click Save to save the changes.
   ✓ NOTE: When changing or deleting a schedule review the unlock schedules and Access Levels for possible changes.
Use *Holiday* to define days and times during the year when holiday hours are used. When the holiday starts, the Controller switches from regular hours to holiday hours. When the holiday ends, the regular hours resume. You can assign four holiday groups with up to 30 holidays total among the groups. A holiday can include any number of consecutive days within the same calendar year. The system Controller has preconfigured holiday groups based upon the country you selected in the *Language* section of the Wizard. The holiday groups are preconfigured through 2021 for quick setup.

**Editing a Holiday**
1. Select the desired holiday and click *Edit*.
2. Change the start date and end date to the desired date.
3. Rename the holiday (it is recommended that pre-configured holidays be renamed when edited).
4. Click *Save*.

**Deleting a Holiday**
1. Highlight the holiday to be deleted.
2. Click *Delete*. A confirmation box will appear.
3. Click *OK* to confirm.

**Adding a Holiday**
1. Click *New* and enter the desired name, start date and end date.
2. Select the desired holiday group for the new holiday.
3. Click *Add* to save the new holiday.

✓ **NOTE:** Access will be restricted on any holiday assigned to a holiday group. See *Schedules* for information on how to allow access on holidays.
Unlock Schedule

An Unlock Schedule defines which Schedule will be used with selected access devices to automatically unlock one or more doors.

Adding an Unlock Schedule
1. Click New.
2. Enter a Unlock Schedule Name.
3. Select the Schedule when the door will be unlocked.
4. Click the Select Type drop-down to select an individual door or a group of doors.
5. For Unlock Device, select the desired doors (or use the search icon to find a specific door) and click the right arrow to move the doors to the field on the right.

Click Add to create the unlock schedule.

Editing an Unlock Schedule
1. Select the desired Unlock Schedule and click Edit.
2. Edit the Unlock Schedule Name, Schedule Type, Unlock Device.
3. Click Save.

Deleting an Unlock Schedule
1. Select the Unlock Schedule to be deleted.
2. Click Delete. A confirmation box will appear.
3. Click OK to confirm.
A *One Time Unlock Schedule* defines one date and time to automatically unlock one selected door.

**Adding a One Time Unlock Schedule**
1. Click **New**.
2. Enter a **Name** for the One Time Unlock Schedule.
3. Select the **Date** when the door will be unlocked.
4. Select the **Start Time** and **End Time** for the unlock period.
5. Click the drop-down to select a door to unlock.

Click **Add** to create the One Time Unlock Schedule.

**Editing a One Time Schedule**
1. Select the desired One Time Unlock Schedule and click **Edit**.
2. Make the changes desired.
3. Click **Save**.

**Deleting a One Time Schedule**
1. Select the desired One Time Unlock Schedule to be deleted.
2. Click **Delete**. A confirmation box will appear.
3. Click **OK** to confirm.
**Event Action** allows the operator to create events that are assigned to actions. For example, the operator may assign a time schedule to an auxiliary output.

**Adding an Event Action**

1. Click **New** and enter a name and description.
2. In the **Basic** section, name the event, fill in a **Description**, and select a **Schedule** for the time the Event Action will be active.
3. In the **Event** section, click **Insert** to add a new event.
4. Choose the type of equipment that can trigger the event action in the **Event Source Type** dropdown.
5. Under **Where**, choose the event source location(s) by selecting the location(s) and clicking the right arrow to move it to the field on the right.
6. Under **Event**, choose the event(s) to monitor by selecting the event(s) and clicking the right arrow to move it to the field on the right. This is the event(s) that will trigger the action.
7. In the **Action** section, click **Insert**.
8. Choose either **Aux Output** or **System** for the **Action Source Type**.
   - **Aux Output**
     - This is the auxiliary relay(s) that will respond to the event. Select them and move it to the right by clicking the right arrow.
   - **System**
     - These are various messages and operations that the system can perform if the Event Action triggers.
9. Click **Action Save** and **Save** in each section to save the settings.

**NOTE:** To have the system send an e-mail for an event, use the Where dropdown and select **Send E-Mail**.
Event Code lists the events that are available to the operator. The user can configure the event to display in the Dashboard and/or require the operator to acknowledge the event.

Selecting Event Codes
1. On the Event Code list, edit the checkboxes for the events codes that will display on the dashboard if they occur.
2. On the Event Code list, edit the checkboxes for the events codes that will require operator acknowledgment if they occur.

Use the Search button to find specific event codes or event code names.
Threat Levels are used in systems to modify existing unlock schedules and Access Level privileges. The system has five pre-defined Threat Levels. The names of each can be changed to match installation requirements.

Current Threat Level Setting
1. Click Edit to change or disable the Threat Level.
2. Un-check the Turn Off Threat Level checkbox to enable Threat Levels.
3. Use the Threat Level dropdown menu to select a Threat Level.
4. Click Save.

✓ NOTE: When the Threat Level is Off, defined Access Level privileges and unlock schedules operate normally.
Threat Level Setting

There is a three tier hierarchy of Threat Levels to consider when configuring an system. First the **System** Threat Level, second the **Door** Threat Level and third the **Card Holder** Threat Level. See the Door and Card Holder sections for details on setting the Door and Card Holder Threat Levels.

### System Threat Level Setup

1. Click **Edit** to change the number or title of the Threat Levels.
2. Select the number of Threat Levels available for the system with the **Threat Level Count** dropdown. Up to 25 Threat Levels can be defined.
3. The titles of each Threat Level can be customized to suit the installation.
4. Click **Save** when finished.

<table>
<thead>
<tr>
<th>Threat Level</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>LOW</td>
</tr>
<tr>
<td>Level 2</td>
<td>GUARDED</td>
</tr>
<tr>
<td>Level 3</td>
<td>ELEVATED</td>
</tr>
<tr>
<td>Level 4</td>
<td>HIGH</td>
</tr>
<tr>
<td>Level 5</td>
<td>SEVERE</td>
</tr>
</tbody>
</table>

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Optional Feature

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Click to Edit Threat Levels

Number of Threat Levels

Threat Levels Titles

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Door displays the doors that are assigned to the system. Click on the door name for additional information pertaining to each door.

✓ **NOTE:** When programming various elements of the system, do not use the same name for multiple items (e.g., use Door 1, Door 2, etc.).

✓ **NOTE:** Do not use special characters (<>?!)(*%#@^{ | /).

**Editing a Door**

Select the desired door. Scroll to the bottom of the page and click **Edit**.

After making any edits, be sure to click **Save** at the bottom of the page.

**Basic**

1. Enter the desired **Name** and **Description** (optional) for the door.
2. For multi-floor installations, select the **Floor**.

**Reader**

1. In the **Reader** section, select the settings for the door's reader.

**Door Contact**

1. In the **Door Contact** section, check the Enable checkbox if a door contact is used.
2. **Name** the door contact and select its type.
3. Adjust the **Held Open Time**, which is the length of time the door can be open following a valid access request.
4. The **ADA Open Time** is an additional time added to the Held Open Time.

**Rex**

1. Enter the **Door Rex Name** for the door's request to exit switch.
2. Select the type of **Rex** switch.
3. Check the **Rex Activates Door Lock** checkbox to have the Rex activate the door's lock.
Door Lock Mode

1. Choose a **Door Lock Name** to name the lock for logging.

2. Configure **Door Lock Mode** as follows:

   - **Normal**: Lock activates in response to a valid access request and REX unlocks door for exit.
   - **Locked**: Does NOT grant access in response to REX, card or code.
   - **Locked w/REX**: Remains in locked mode, ONLY REX will activate lock.
   - **Unlocked**: Door will remain unlocked at ALL times.
   - **Man-Trap**: Sets the door lock for use in conjunction with another door to create a man-trap passage. A Man-Trap will only allow one door to be opened if the other door is locked. When Man-Trap is selected, **Man-Trap Mode** options appear:
     - **Unlock**: No security on Entry or Exit.
     - **Secure Entry/Free Egress**: Two options, both options use card access to enter the Exterior Door. Option 1 allows free exit through the exterior door; Option 2 requires card access to exit through the exterior door.
     - **Restricted Entry and Exit**: Four options, all options use card access to enter the Exterior Door. Option 1 allows free exit through the exterior door; Option 2 requires card access to exit through the interior door, Option 3 requires card access to exit through the exterior door. Option 4 requires card access to exit through either door.
   - **Pair Door**: Select the second Man-Trap door that is closest to the secured area.

3. Select the Door’s **Default Status**. This setting will be determined by the lock type (energized or de-energized).

4. Assign **Re-Lock on Open** if desired. This will re-lock the door immediately upon opening the door.

5. Adjust **Door Unlock Time** if desired. This is the length of time the door relay is active after a valid access request.
Door Status Alarm Output
Sets the actions of a door contact on the door. The door contact must be enabled to use these functions.

1. Check Forced Door to trigger the door alarm output if the door opens, but no access was granted.
2. Check Held Door to trigger the door alarm output if the door is held open longer than the Held Open Time.
4. Select an Output to use for the Door Status Alarm Output.
5. Click to enable an Alarm Shunt output to operate when access is granted to the secured door.
7. Select an Output to use for the Alarm Shunt Output.

Threat Level
1. Select the highest Threat Level allowed before the door will automatically lock.

✓ Note: An unlocked door will lock if the System Threat Level is greater than the Door Threat Level; including doors that are unlocked by schedule.

✓ Note: The Dashboard M-Unlock and E-Unlock may be used to unlock a door that has been locked due to elevated system Threat Level.
2. Check Ignore REX to ignore input from a Rex button if the current System Threat Level is higher than the Door Threat Level.

Anti-Passback
1. Check to enable Timed Anti Passback. Select a time in seconds to disable a credential after it has been used to grant access.
2. Check to enable Room Anti Passback. Select a time in seconds to disable access to a room after access has been granted to the room.
First Man In Rule
First Man in Rule unlocks a door when first Card Holder enters.

1. Check Enable to use a First Man In Rule.
2. Select a Grace Period to allow the selected first man Card Holder(s) access minutes before a scheduled start time.
3. Select up to three time Schedules for the rule to be active.
4. Select the Type of Card Holders (individual or group).
5. Search or choose Card Holder(s) or Groups for the rule. Use the arrows to move the name(s) in and out.

Manager In Rule
With Manager in Rule enabled, if a Card Holder designated as a Door Manager has not entered the system within a specific time period, the door will not unlock.

1. Check Enable to use the Manager In Rule.
2. Select up to three time Schedules for the rule to be active.
3. Select the Type of Card Holders (individual or group).
4. Search or choose Card Holder(s) or Groups for the rule. Use the arrows to move the name(s) in and out.

Two Man Rule
With Two Man Rule enabled, two Card Holders must present credentials at the same time in order to unlock the door. Credentials must be presented in the proper sequence (Card Holder 1 then Card Holder 2), or access will be denied.

1. Check Enable to use the Two Man Rule.
2. Enter a Time in seconds allowed for the second Card Holder to present their credentials.
3. Search or choose Card Holder 1 for the rule. Use the arrows to move the name(s) in and out.
4. Search or choose Card Holder 2 for the rule. Use the arrows to move the name(s) in and out.

Saving Changes
After making any edits, be sure to click Save at the bottom of the page.
**Elevator** displays the elevators that are assigned to the system. Click on the elevator name to view or edit the settings of the elevator. Each elevator cab requires an elevator module, which activates up to 8 outputs for controlling access to floors. Access to more than 8 floors requires additional elevator modules.

**Editing an Elevator**
1. Click the desired elevator from the list and click **Edit**.
2. For **Elevator Name**, enter a name for the elevator.
3. For **Description**, enter a description for the elevator.
4. Select **Elevator Client** for the factory default setting for the client, or **Elevator Client Extension** to add more floors to an existing elevator client.
5. Select the **Reader Type** that matches the elevator reader from the dropdown list.
6. Select the **Elevator Lock Mode** from the dropdown list.
7. Select the **Threat Level** from the dropdown list.
8. Select the **Floor** from the dropdown list.
9. Click **Save**.
Aux Input displays the inputs that are assigned to the system. Click on the input name to view or edit the settings of the input.

**Editing an Input**
1. Select the desired input and click `Edit`.
2. Enter a desired **Name** and **Description** (optional) for the input.
3. Assign the input to a **Floor** for viewing on the Dashboard.
4. Select the appropriate **Input Type** for the input. This setting will be determined by the wiring and type of switch connected to the input (NC or NO, supervised or unsupervised).
5. Click **Save**.
**Aux Output** displays the outputs that are assigned to the system. Click on the output name to view or edit the settings of the output.

**Editing an Output**
1. Select the desired output and click **Edit**.
2. Enter a desired **Name** and **Description** (optional) for the output.
3. Configure the **Mode** of the output:
   - **Single Pulse**: Output latches in response to a valid event for the time entered.
   - **Repeating**: Output opens and closes in a cycle for the time entered.
   - **E-On**: Will latch the output ON when activated from the dashboard. Press Stop on dashboard to turn output OFF.
   - **E-Off**: Will latch the output OFF when activated from the dashboard. Press Stop on dashboard to turn output back ON.
4. Assign the output to a **Floor** for viewing on the Dashboard.
5. Select the **Default State** of the output (energized or de-energized).
6. Click **Save**.
Elevator Action

allows the operator to assign the elevator outputs to Access Levels.

Adding an Elevator Action

1. Select an elevator output from the list and click **Edit**.
2. Enter a name and additional information as required.
   ✓ **NOTE:** In order to activate floors, first assign an access level to doors.
3. Select the Access Level that will be used to grant access to the floor(s).
   (Doors must be assigned to the Access Level for the Access Level to be active).
4. Click **Save** to save the changes.
   ✓ **NOTE:** When a valid credential is presented to the reader, the elevator outputs will be activated as configured in the Elevator Action. For example, if Elevator outputs EO 1, EO 2, EO 3 and EO 4 are assigned to Floors 1-4 Access Level, all four outputs will activate when the valid credential is presented. This allows the Card Holder to select floors 1-4 in the elevator cab.
Controller displays information pertaining to each system Controller. Click on the Controller name on the list to view or edit information.

**Editing the Controller Info**
1. Select the Controller and click **Edit**.
2. Enter a desired name and location (optional).
3. Select the appropriate **Tamper Input** value. This will be determined by the wiring configuration of the input.
4. Select the appropriate **Power Fault Input** value. This will be determined by the wiring configuration of the input.
5. Enter the ID and **Password** of the **Super Administration Account**. This is the top-level administration account for the Controller.
6. Set the default language, page and floor for the account.
7. Click **Save**.

✓ **IMPORTANT!** It is highly advised to change the Super Administrator password. Keep it in a safe place. This password cannot be recovered if it is lost or forgotten.
A **Region** is an area (a “zone”) you want to limit security into and/or out of. Entering or exiting a Region occurs through controlled door access. The In Reader and Out Reader (if used) for a door can each be assigned a Region.

The primary usage for Regions is to count or control occupancy and implement door access sequence rules to prevent or track access to areas if the correct door access sequence is not met.

A Region can contain up to five nested partitions called “Sub Regions” and “Child Regions”, each controlling access to a sub-section of the “Parent” Region.

**Region Rules Overview**

- Regions contain Credentials that are owned by Card Holders. Because Card Holders can have multiple Credentials, a Card Holder could exist in multiple Regions at the same time but a Credential can only exist in one Region at a time.
- Once the Card Holder enters a Region, they remain in the Region for occupancy until they enter another Region or exit the Region by presenting a Credential on the out reader.
- A Region can contain Sub Regions and Child Regions that are contained inside the main Region.
- Anti Passback and Tailgating rules are applied to Regions.
- A maximum of 125 Regions are supported on a system.

**Examples of Regions**

Regions should be programmed to suit the controlled access requirements and the expected Card Holder locations as they move about the installation.

- Example 1: A company has a room with its building that is used to store hazardous chemicals. That room can become a Hazardous Region within the Building Region and restrict access to a limited number of Card Holders.
- Example 2: A company has four buildings at its facility. By making each a Region and using occupancy, an administrator can locate what building a Card Holder is in if there is an emergency.
Region (cont.)

Child Regions
A Child Region follows the definition of a Region with these exceptions:

- A Child Region cannot have an occupancy limit, only a Parent or Sub Region can have an occupancy limit.
- Normally, a Child Region will be fully contained within the Parent Region but the rules do not restrict this.
- A Child Region is logically contained inside of its Parent Region. This means if the Card Holder in the Child Region, they are, for occupancy, in the Parent Region.
- Anti PassBack and TailGating rules can be applied to Child Regions.
- There is a maximum of 20 Child Regions per Region.
- There is a maximum of 250 total Child Regions per system.

Child Region Notes
- Under the Region setting for the Door - A Child of a Parent would be a Class 2. A Child of a Child would be Class 3, etc. When a Class other than Class 1 is selected, the Parent Region option will turn into a drop down list.
- Specify the Parent Region for this Child Region from the drop down list.

Sub Regions
Sub Regions function the same as Child Regions, except for occupancy counting. Sub Regions can report occupancy counts of the Sub Region as well as contribute to the occupancy count of the Parent Region.
Adding or Editing a Region
1. Click New to add a region or click Edit to modify a region.

Basic
2. For the Region's **Name**, enter up to 30 characters.
3. In the **Description** field, enter a short description of the Region.
4. Select the **Depth** for the Region. Class 1 is the highest. Class 2 through Class 5 are Sub Regions or Child Regions, each sub Class must physically reside inside the next lower number Class number around it.
5. If **Parent Region** is left empty (the default) the Region becomes the Parent Region. If the Region is Class 2-5, select Sub Region or Child Region's the **Parent Region**.
6. If the Region is used only for Muster Station personnel assembly, check **Only Muster**. The remaining Region options are not used or available when Only Muster is selected.

Muster Region Notes
- A Muster Region is a Region used as a centralized place to do a roll call.
- A Muster Region will remove Card Holders from their currently occupied Region and place them in the Muster Region where the reader is at.
- Maximum number of Muster Regions 125.
- A Muster Region is attached to an In/Out set of readers for a door (both readers must be defined to the Region).
- A Muster Region is valid for the entire site. It is possible to have multiple Muster Regions but they all serve in parallel for the entire site. For instance, each building of a site could have its own Muster Reader but a Card Holder could go to any of the Muster stations to check in.
- A Muster Region cannot contain another Muster Region.
Region (cont.)

Passback Violations
Anti PassBack is intended to prevent Card Holders from sharing credentials to gain access. With timed anti passback, a Passback Violation event occurs when the same credential is used to request access to the same door or region more than once during a set period of time.

1. Select the level for the Default Violation.
   - **None**: Timed Anti Passback is not in use (default setting).
   - **Soft**: Triggers an alarm then grants access if the Anti Passback time interval has not expired before the credential was used at the same reader again.
   - **Hard**: Triggers an alarm and prevents access if the Anti Passback time interval has not expired before the credential was used at the same reader again.

2. Enter the number of minutes (0-999) for **Anti Passback Interval**. This is the length of time that presenting the same credential again will cause an anti passback violation. Check the **Enable Grace** checkbox to allow the administrator to permit grace for the Card Holder in case of an anti passback violation.

   ✓ **NOTE**: Selecting 0 minutes for the Anti Passback Interval allows no time and effectively disables the Passback Violation for the region. Don’t set it to 0 and expect Anti Passback to function properly.

3. To minimize clutter on the Grace Screen, check the **Reset Violations Daily** checkbox to clear all Passback Violations for the Region once a day.

4. When Reset Violations Daily is enabled, select the **Time of Day** for the reset to occur.

Passback Violation Operation Notes
- Presenting a credential again before the timer has expired will restart the timer.
- Timed Anti Passback is for In Readers only, it has no effect on Out Readers.
- If the Card Holder exits the Region through an Out Reader, the timer is reset and stopped.
- When Enable Grace is set, Card Holders can only re-enter the Region by properly exiting the Region first or by being Graced in.
- The log message for a Passback Violation is “Denied Region Anti Passback Violation”.
- Anti Passback can also be set for a door not assigned to a Region using the Door setup menu, but if the door is later assigned to a Region, the Region Anti Passback setting will override the door setting.
Tailgate Violations
A **Tailgate Violation** occurs when an authorized Card Holder is granted access and one or more persons pass through the open controlled access point in addition to the authorized Card Holder. Tailgating is detected when a Card Holder tries to exit a Region, or enter another Region, from a Region which they were never granted access to enter.

1. Select the level for the **Default Violation**.
   - **None**: Tailgating feature is turned off (default setting).
   - **Soft**: Triggers an alarm then grants access.
   - **Hard**: Triggers an alarm and prevents access through the Out Reader and/or the In Reader of a sub Region.

**Tailgate Violation Operation Notes**
- In the Door setup menu, the Out Reader Region must be set to the Region with the Tailgate Default Violation turned ON.
- Hard Tailgating is only for the most secure facilities and requires In Readers and Out Readers at all doors.
- With Hard Tailgating, if a Card Holder leaves a Region by any other means than authorized controlled exiting, a Tailgate Violation will occur at any other door until either (1) the Card Holder presents their credential to a Muster Reader (this removes the Tailgate Violation and adds the Card Holder to the Muster Region), or (2) the Card Holder is Graced by the system administrator using the Grace Tab on the Dashboard (they will be placed in the Region where they swiped their card to enter), or (3) the Card Holder can somehow get back into the Region the system thinks they Occupy and then exit that Region correctly.
- Hard Tailgating applies to the Region the system thinks the Card Holder is in and will deny access to any other non-connected Region. For example, suppose there are two separate buildings, Bldg1 is Region 1 with Hard Tailgating, Bldg2 is Region 2 with Soft Tailgating. If the Card Holder enters Bldg 1 and occupies Region 1, then leaves Bldg 1 without being granted exit access, the Card Holder will be denied access to any other door (trying to re-enter Bldg1, entering or exiting Bldg 2). However, if the Card Holder enters Bldg 2 first and Occupies Region 2, then leaves Bldg 2 without being granted exit access, the Card Holder will create a warning but will be allowed access into either building.
Region (cont.)

Occupancy Limit Enforcement

Occupancy Limit Enforcement counts and/or limits (restricts) the number of Card Holder credentials that can occupy a given Region at the same time.

The log message for an Occupancy Limit violation is “Access Denied Occupancy Limit Violation”.

1. Select the level for the Default Violation.
   - None: The Controller counts occupancy, but no action results (default setting).
   - Soft: When a Card Holder presents credentials to enter the Region and the occupancy limit has been reached, an alarm activates and the Card Holder is granted access. An alarm will continue to activate for each new Card Holder that presents credentials until the occupancy count falls under the Maximum Occupancy number.
   - Hard: When a Card Holder presents credentials to enter the Region and the occupancy limit has been reached, an alarm activates and the Card Holder is denied access.

2. Enter the Maximum Occupancy number (0-99999) allowed in the Region. (Entering 0 results in no occupancy limit, the Controller just counts occupancy.)

Occupancy Rules

- When a Card Holder presents a credential to a reader and is granted access, the Card Holder credential enters into the Region specified by the In Reader and exits the Card Holder credential from all other Regions.
- A Card Holder credential can only exist in one Region at a time.
- A Card Holder may occupy multiple regions if they are assigned multiple credentials.
- A Child Region cannot have an Occupancy Limit because its occupancy count is included as part of its Parent Region.

Region Occupancy Counting

- The occupancy count for a Region is the sum of the occupancy count for the Region plus any Child Regions or Sub Regions, which in turn may have Children or Sub Regions of their own.
- When a Card Holder credential enters a Region, the occupancy count for that Region increases by 1.
- When a Card Holder credential exits a Region, the occupancy count for that Region decreases by 1.
- The Occupancy count can never go below 0.

Occupancy Limit Enforcement Notes

- For occupancy counting to work effectively, both In Readers and Out Readers must be used.
- An Out Reader cannot be in an uncontrolled space (no Region assigned) unless the In Reader is also in an uncontrolled space (means it is not connected to a Region).
- The In Reader and Out Reader cannot be the same device unless they are both setup as in an uncontrolled space or a Muster Region.
- Card Holders with the Exempt option enabled still obey the occupancy limit enforcement rules.
- A denied access attempt at an occupied Region does not restrict the Card Holder from entering other Regions with normal access.
Deadman Region

A **Dead Man** region requires each Card Holder, after entering the region to periodically check in for safety reasons.

Card Holders are issued a normal card to enter and exit the region and a special “Dead Man Card” to indicate activity

An alarm will activate after the Card Holder's DeadMan Interval has expired unless they have:

✓ Swiped their Dead Man Card at one of the Dead Man Regions Out Readers. This will reset the timer to the DeadMan Interval for that Card Holder.
✓ Exit the Region using their normal card. This will cancel the timer for that Card Holder.
✓ Swiped their normal card at a Muster station. This will cancel the timer for that Card Holder.

Once the alarm has been activated, the alarm may be deactivated by:

✓ Card Holder swiping their Dead Man Card at one of the Dead Man Regions Out Readers. This will reset the timer to DeadMan Interval for that Card Holder. It may or may not turn off the alarm.
✓ Card Holder exiting using their normal card. This will cancel the timer for that Card Holder. It may or may not turn off the alarm.
✓ Card Holder swiping their normal card at a Muster station. This will cancel the timer for that Card Holder. It may or may not turn off the alarm.
✓ System Administrator Acknowledges the alarm. This will deactivate the alarm even if all Card Holder alarm triggers have not been cleared.

If multiple Card Holder have triggered the Dead Man Alarm, then only when the last Card Holder has been cleared will the alarm be deactivated.

Creating a Dead Man Region

1. Check the **DeadMan Region** checkbox to create a Dead Man Region.
2. Enter a time in minutes (5-60) for the **DeadMan Interval**. The default is 5 minutes.

Dead Man Region Notes

• In the Door setting for the reader in the Dead Man Region, the Out Reader Region must be set to the Region defined as a Dead Man region.
A **HazMat Region** can be locked down to prevent entry and exit in case of hazardous materials emergency. When the selected AUX input is triggered, all doors associated with the HazMat Region will be locked and all access in and out of the HazMat Region will be denied until the selected AUX input has returned to normal. After a HazMat alarm has been triggered, a HazMat Unlock Card is required to cancel the alarm.

**Creating a HazMat Region**
1. Check the **HazMat Region** checkbox to create a HazMat Region.
2. For the HazMat Input, select the Auxiliary Input (1-4) that the trigger device is connected to.

**HazMat Region Notes**
- The log message for a hazardous materials alarm is: “Hazmat Region Lockdown [Region Name]”.
- For a HazMat Unlock Card, in the Card setting for a Card Holder select HazMat Unlock for the Card Type.
User Defined Field

User Defined Fields are 20 custom data fields that can be assigned to a Card Holder profile. This field can be used for employee ID or other specific information unique to a Card Holder.

Editing User Defined Fields
1. Click Edit to enter user defined fields.
2. Enter any custom data in the 20 User Info fields.
3. Click Save when finished.
**User Role**

*User Roles* define the access privilege of the operators. A *User ID* is assigned to each person who will work with the Controller. Each *User ID* can be configured to have different system privileges. System privileges determine the options the user has available in the Controller browser interface.

### Setting User Roles

1. Select the *User ID* to edit and click *Edit*.
2. Enter the options and name for the *Basic* settings.
3. Select the *Dashboard* options that will be available for the user.
4. Select the *Camera* options that will be available for the user.
5. Select the *DVR* options that will be available for the user.
6. Select the *Administration* options that will be available for the user.
7. Select the *Schedule* options that will be available for the user.
8. Select the *Event Action* options that will be available for the user.
9. Select the *Threat Level* options that will be available for the user.
10. Select the *User* options that will be available for the user.
11. Select the *Floor* options that will be available for the user.
12. Select the *System Setting* options that will be available for the user.
13. Select the *Network* options that will be available for the user.
14. Select the *Data Transfer* options that will be available for the user.
15. Select the *Log Report* options that will be available for the user.
16. Select the *Device Setting* options that will be available for the user.
17. Select the *Client & Site Setting* options that will be available for the user.
18. Select the *Group Setting* options that will be available for the user.
19. Select the *Quick Menu* options that will be available for the user.
20. Click *Save*.
Web User Account

Create or edit the **Web User Accounts** that are used to log into the Controller.

**Adding or Editing a Web User**

1. To add a new Web User, click **New**. To edit an existing Web User, click **Edit**.
2. Enter the **User ID**, **Password** and **Web User Name** of the new user.
3. Assign a **User Role**, which defines the privilege level of the user account.
4. Enter the **Language** and **Default Page** for the user.
5. Assign the **Default Floor** and enable **Floor Show** if the floor graphic will display to the user.
6. Enter the **Auto Disconnect Time**, which is the amount of time, in hours, before the Controller will automatically log out the user.
7. Click **Add** or **Save** to save the settings.
Update allows the user to update the firmware of the Controller.

Updating the Firmware
1. Select the location of the firmware file. User PC, SD Card, or Update Server.
2. Click Update.

✓ NOTE: This function only updates the firmware of the Controller. To update the client firmware refer to Client Management.

◆ WARNING: Servers and Clients MUST be using the same firmware version!

✓ NOTE: Gateway and DNS IP addresses must be configured to access the update server. Refer to IP Address to configure these settings.
Backup enables the system backup and defines the backup device, time and location of the backup.

The system automatically assigns a name to the backup at the time of the backup with the following format:

- **YYYYMMDDHHMMSS**
- **YYYY** = 4-digit year
- **MM** = 2-digit month
- **DD** = 2-digit day
- **HH** = 2-digit hour
- **MM** = 2-digit minutes
- **SS** = 2-digit seconds

### Scheduled Backup
1. To change the backup settings, click **Edit**.
2. Set a log name for the backup in the **Name** field.
3. For automatically scheduled daily backup check the **Enable** checkbox.
4. Select **SD Card** or **FTP** for the backup device.
5. Choose a time for the daily backup with the **Backup Time** selector.
6. Click **Save**.

### Immediate Backup
1. Select **User PC**, **SD Card** or **FTP Server** for the backup device.
2. To run an immediate backup, click **Backup**.
Restore allows the operator to restore the system from a backup.

**Restoring the System**

1. Select the location of the restore file. User PC, SD Card, or FTP Server.
2. Enter a file name and path or click **Browse** to choose the file to restore from.
3. Click **Restore**.
**Save & Reboot**

*Save and Reboot* can save the Controller data only, or save the Controller data and reboot the Controller.

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**Saving Data**

1. Click **Save Data** to force a data save on the Controller.
2. Enter a super administrator password and click **OK**.

**Saving Data and Rebooting**

1. Click **Save Data & Reboot** to force a data save on the Controller and restart the system.
2. Enter an super administrator password and click **OK**.
Factory Default will erase ALL Card Holder data, logs, IP settings and license key.

◆ **IMPORTANT!!**: Write down the license key prior to performing a factory default.
◆ **WARNING**: It will take 3-5 minutes to factory default a system. DO NOT power down when performing a factory default. Make sure the electrical power source is reliable when performing a factory default. Any loss of power during a factory default can damage your system.

**Resetting to Factory Defaults**
1. After heeding the above warnings, click **Factory Default**.
2. Enter an **Super Administrator Password** and click **OK**.
3. Wait 3-5 minutes for the system to reset and reboot.
4. Enter the license key when the system restarts.

Factory Default Will Erase ALL User Data, Logs, IP Settings and License Key. Make sure you have your data backed up and a copy of your license key before proceeding.

Do You Really Want to Factory Default?

Super Administrator Password *: [Input]
IP Address

The **Internet Protocol (IP) Address** area sets all of the network settings including the IP Address, Subnet Mask, Gateway Address, DNS Server 1, DNS Server 2, and HTTP Port.

**DHCP** assigns an IP address to the Controller automatically on a network containing a DHCP Server (a router will typically have a built-in DHCP Server). When Static is selected, options IP Address, Subnet Mask, Gateway must be entered.

**DNS** is an Internet service that translates domain names into IP addresses. The IP address of a DNS is required if using NTP time server or SMTP e-mail.

**Editing Network Settings**
1. Select **DHCP** or **Static**. (Skip to Step 5 if using DHCP).
2. Enter a static **IP Address** for the Controller to use on the LAN. The first three values must match other devices on the network (e.g., 192.1.0.x).
3. Enter the **Subnet Mask** address. The Subnet Mask determines the manual address mask used by the Controller (typically 255.255.255.0).
4. Set the **Gateway** Address to match the address of the router that connects the LAN to the Internet.
5. Enter the IP address of the **DNS Server 1** (optional, use for NTP time server access or SMTP e-mail connection).
6. Enter the IP address of the **DNS Server 2** (optional, use for NTP time server access or SMTP e-mail connection).
7. Enter the **HTTP Port** number for remote Web browser connection (typically 80).
8. Check the **HTTPS** checkbox if RMC is being used.
9. If using HTTPS, edit the **HTTPS Port** number if required (default is 443).
10. When finished entering the network settings, click **Save & Reboot**.

**Upload cer-key**
For installations using HyperText Transport Protocol Secure (HTTPS) communications, the eMerge system uses a default security key and certificate. If the installations network requires a different specific security key and certificate, edit the two items.

1. Click **Upload cer-key**.
2. Enter the **Private Key** into the SSL Toolbox.
3. Enter the **Certificate** into the SSL Toolbox.
4. Click **Save & Reboot**.
File Transfer Protocol (FTP) enables and configures the system to backup to an FTP location. Enter FTP information as provided by your web host.

**Editing FTP Settings**
1. Check the **Enable** checkbox to enable an FTP server connection.
2. Enter the IP address of the FTP server in the **Server Address** field.
3. Enter the communications port number into the **Server Port** field.
4. Enter the FTP server user name into the **Server ID** field.
5. Enter the FTP server password into the **Server Password** field.
6. Check the **Server Passive Mode** checkbox if required by the FTP server.
7. Enter the upload directory path used on the FTP server in the **Upload DIR** field.
8. Click **Save** to save the changes.
Simple Mail Transfer Protocol (SMTP) provides the ability to send email to specified email addresses.

Editing SMTP Settings
1. To allow the Controller to send SMTP e-mail messages, check the Use SMTP Service checkbox.
2. Enter the SMTP mail server URL (typically “mail.your email domain.com”) in the SMTP Server field.
3. Enter the incoming port number of the SMTP mail server in the Port field.
4. Enable TLS if your mail server uses secure server communication (this is common). Check the TLS Used checkbox to enable TLS.
5. Enter your SMTP mail server user ID (your email address) in the ID field.
6. Enter your SMTP mail server Password in the Password field.
7. Test the system by entering an email address in the Send to (E-mail Address) field and click Test.
8. Click Save to save the changes.

✓ NOTE: The Controller’s Gateway IP address and DNS address must be properly configured to be able to send email. Refer to IP Address to configure these settings.
**Time Server**

*Time Server* provides the ability to sync the system to a time server or manually set the time.

✓ **NOTE:** Gateway IP and DNS IP addresses must be configured to access public time servers. Refer to IP Address to configure these settings.

**Editing Time Server Settings**

1. To manually set the system time select **Manual Time Setting**. Skip to Step 6.
2. To use a time server, select **NTP Server Synchronization**.
3. Select one of the time servers from the **Server Address** drop box.
4. Select the time period for the time server synchronization from the **Sync Time** dropdown. Skip to Step 7.
5. Select the time zone at the Controller's installation location from the **Sync Time Zone** dropdown.
6. For manual date and time setting, enter the current date and time in the **Date** and **Time** fields.
7. To enable Daylight Saving Time (DST) select **ON**. Enter the DST start and end dates in the two fields.
8. Click **Save**.
The **Remote Management Console** (RMC) server is used to manage multiple Controllers, usually from a remote location.

If using RMC, the settings for the RMC server’s URL, Domain UUID, and Device ID will need to be edited in the Controller.

**Editing RMC Settings**
1. Click the **Connect to RMC** checkbox if an RMC server will be used.
2. Enter the RMC **Server URL**.
3. Enter the RMC **Domain UUID**.
4. Enter the **Device ID**.
5. Click **Save** to keep the changes.

Refer to the RMC User Guide P/N 620-100701 for details on RMC setup and operation.
Floor Setting allows the operator to load and view floor plan graphics which will be displayed on the Dashboard.

Adding a Graphic
1. To add a new floor plan graphic, click New.
2. Enter a name for the floor in the Floor Name field.
3. Enter a description for the floor graphic in the Description field.
4. To add a new image, click Choose File and select the graphics file.

✓ NOTE: The maximum JPG, BMP, or PNG image size is 685 pixels wide by 340 pixels high and the maximum file size is 150KB
5. To save the graphic, click Add.

Viewing a Graphic
1. Click on a floor graphic in the table.
2. The floor graphic will be previewed on the screen.

Deleting a Graphic
1. Click on a floor graphic in the table.
2. Click Delete to remove the entire floor graphic record, or click Edit then Delete Image File to just delete the graphic and leave the floor name and description.
User Data Export

User Data Export provides the ability to export Card Holder data to a comma separated value (CSV) file.

Exporting User Data
1. To export the Card Holder data, click Export.
2. The CSV file of the Card Holder data will be downloaded through the browser.
User Data Import

User Data Import provides the ability to import Card Holder data from a comma separated value (CSV) file.

To successfully import a file, the column headers must match those present in the User Data Export file. It is suggested to perform a data export and use it as a template for the import file.

You must have the related card formats and Access Levels configured before importing the file.

◆ WARNING: Do not use special characters <>?()%@ in any fields.
✓ NOTE: Data will not be imported unless the information is entered in the same manner in which it appears in the system software database (e.g., case sensitive and syntax sensitive).

Importing User Data
1. To skip Card Holder records that currently exist in the system, select Skip. To overwrite Card Holder records that currently exist in the system, select Overwrite.
2. Click Choose File and select the file to import.
3. Click Import.
Log displays the most recent events for quick viewing.

**Viewing the Log**
1. When Log is selected, the log displays on the screen.
2. Click the page number or arrows at the bottom of the screen to display other pages of the log.

**Printing the Log**
3. To print out the log, click Print.
4. Log Report

The Log Report allows the operator to create a customized report of system, network and Controller events.

Customizing the Log Report
1. Select the database to search, either Current DB, User PC, or SD Card.
2. Select beginning and ending Log Date for the search.
3. Select the general events to search for with the Log Type checkboxes.
4. Search for a particular device by checking the Device Name checkbox and enter the device name.
5. Search for a particular Card Holder by checking the Card Holder Name checkbox and enter the Card Holder name.
6. Select specific system events by checking the Event Name checkbox and selecting the specific event in the dropdown list.
7. To create the log report, click Search.
8. To print the log report, click Print.
9. To save the log report as a text file, click CSV. The data will be downloaded through the browser.
Log Management allows the operator to create a backup of all log events. The backup can be scheduled and directed to the SD card on the Controller or an FTP location. The backup can also be manually generated to a CSV or DB file.

**Automatic Log Backup**
1. Enter the percentage of log fullness to trigger a pop up message or automatic log backup.
2. The message displayed can be edited in the **Pop Up Message** field.
3. Enter a name for the backup in the **Name** field.
4. To enable the automatic log backup check the **Enable** checkbox.
5. Select either **SD Card** or **FTP** for the **Backup Device**.
6. Click **Save**.

**Schedule Log Backup**
1. Enter a name for the backup in the **Name** field.
2. To enable the scheduled log backup check the **Enable** checkbox.
3. Select either **SD Card** or **FTP** for the **Backup Device**.
4. Select the daily time for the scheduled log backup from the **Backup Time** dropdown.

**Log Reset**
1. To delete all log data in memory, click **Reset**
2. Enter an administrator password to confirm the log reset.
3. Click **OK**.

**Manual Log Backup**
1. Select the backup type, either **CSV** or **Database** format.
2. Click **Backup**.
Report allows the operator to view and print or save a report of items in the system's memory. The report is created using Filters. Items that match the filters entered will be included in the report.

Running a Report
1. Use the Table Name dropdown to select which area of system memory to generate a report from.

✓ NOTE: The remaining filter options will vary depending on the Table Name selected.

Doors, Elevators, Aux In & Out
- Select the filters for the report.
  - Number (NO), Floor, Name, Description

Card Holder
- Select the filters for the report.
  - Card Holder Number (NO), Last Name, First Name, Card Number, Card Status

Card
- Select the filters for the report.
  - Card Number, Card Status, Card Format, Card Type, Last Name, First Name, Phone Number

Card Holder Access Levels
- Select the filters for the report.
  - Card Holder Number (NO), Last Name, First Name, Card Number, Access Level, Door Number (NO), Door Name

Access Level Doors
- Select the filters for the report.
  - Access Level Number (NO), Access Level, Reader Number (NO), Reader Name, Door Number (NO), Door Name

Door Groups
- Select the filters for the report.
  - Door Group Number (NO), Group Name, Access Level, Door Number (NO), Door Name

Occupancy
- Select the filter for the report.

Muster
- Select the filter for the report.

Region

2. To generate the report, click Search.
3. To print the report, click Print.
4. To save the log report as a text file, click CSV. The data will be downloaded through the browser.
The *Access Report* allows the user to generate reports for all access events that occur at any door or elevator.

**Running an Access Report**

1. Select **Door** or **Elevator** for the **Type** to search for.
2. Select the starting and ending date range for the search in the **Date** fields.
3. Select the **Door**, **Card Holder**, and **Access Level** to search for in the **Condition** fields.
4. To generate the report, click **Search**.
5. To print the report, click **Print**.
6. To export the report as a file, click **CSV**. The data will be downloaded through the browser.
The *System Report* displays the current memory allocation of the database.

The report runs when System Report is selected.

```
<table>
<thead>
<tr>
<th>Report &gt; System Report</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User</strong></td>
<td>0.02%</td>
</tr>
<tr>
<td><strong>Card</strong></td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Card Format</strong></td>
<td>25.00%</td>
</tr>
<tr>
<td><strong>Access Level</strong></td>
<td>0.43%</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>1.29%</td>
</tr>
<tr>
<td><strong>Holiday Group</strong></td>
<td>16.87%</td>
</tr>
<tr>
<td><strong>User Def. Field</strong></td>
<td>30.00%</td>
</tr>
<tr>
<td><strong>Transaction</strong></td>
<td>0.10%</td>
</tr>
</tbody>
</table>

**Disk Space**

- **System**: 183,726 KB
- **File image**: 0 KB
- **Database**: 1,212 KB
- **Available**: 159,932 KB

**User Image**

- **Used**: 44,490 KB
- **Image**: 338,454 KB
- **Available**: 3,481,120 KB

**SD Card**

- **Used**: 1,552 KB
- **Available**: 770,640 KB
```

This report was ran at 09-29-2018 11:38:32.
Smart Report

The **Smart Report** option displays Smart Reports that were generated with the Smart Report Setting.

Options are available for viewing, printing, and exporting the Smart Report.

**Viewing a Smart Report**

1. With the selector buttons for the desired Smart Report, click **View**.
2. A Smart Report Viewer browser window will open displaying the Smart Report.
3. Use the page numbers at the bottom to navigate to other pages of the Smart Report.

**Printing a Smart Report**

1. With the selector buttons for the desired Smart Report, click **Print**.
2. A Smart Report Viewer browser window will open displaying the Smart Report.
3. Click the **Print** button in the upper right corner to send the Smart Report to the system’s printer.

**Exporting to a Text File**

1. With the selector buttons for the desired Smart Report, click **Text**.
2. The browser will prompt for saving or viewing. Select your choice.
3. A basic text file will be created.

**Exporting to a CSV File**

1. With the selector buttons for the desired Smart Report, click **CSV**.
2. The browser will prompt for saving or viewing. Select your choice.
3. A comma separated value file for use in spreadsheets will be created.

**Exporting to a HTML File**

1. With the selector buttons for the desired Smart Report, click **HTML**.
2. The browser will prompt for saving or viewing. Select your choice.
3. An HTML file for viewing in a browser will be created.
Smart Report Setting is a function that allows creating and saving custom designed system reports with interactive features. Each element of the report can be customized to suit the installation or management of the installation.

Creating a Smart Report
1. Click Create New Report to begin setting up a smart report template.

Date / Time
Report Covers Time Frame
- Select one of the time frame options, enter any variable data, then click Add New Time Frame to add the filter to the Smart Report.

Limit Daily Time To
- Select one of the daily time limit options, enter any variable data, choose to include or exclude these times, then click Add New Time Frame to add the filter to the Smart Report.

Include Holidays
- Choose holidays to include in the report with the dropdown selector.

Exclude Holidays
- Choose holidays to exclude in the report with the dropdown selector.

2. Click Next to setup the Card Holder filter.
Smart Report Setting (Cont.)

Cardholders

Cardholder Filters
- Select one of the Card Holder filter options for no restriction, ask when report is run, or use manual Card Holder selection with Card Holders or Card Holder groups.

Attribute Filter
- Select a Card Holder Attribute, then choose a logical Relation and Value for the filter. Check the Ask checkbox for a prompt at run time.
- Click Add Attribute to add the filter to the Smart Report.

3. Click Next to setup the Card filter.

Cards

Card Filters
- Select one of the Card Holder filter options for no restriction, ask when report is run, or use manual Card Holder selection with cards or card types.

4. Click Next to setup the Doors filter.
Doors
Door Filters
- Select one of the door filter options for no restriction, ask when report is run, or use manual door selection, Threat Level selection, or doors on selected floors.
5. Click Next to setup the Elevators filters.

Elevators
Elevator Filters
- Select one of the elevator filter options for all elevators, ask when report is run, or use manual elevator selection, elevator relays, or elevators on selected floors.
6. Click Next to setup the Events filters.
Events

Event Filters
• Select one of the event filter options for all events, ask when report is run, or use the event filter checkboxes.

Event Groups
• Use the checkboxes to select Event Group filters for the Smart Report.

Individual Events
• Use the checkboxes to select Individual Event filters for the Smart Report.

7. Click Next to setup the Output Format for the Smart Report.
Output Format
The Output Format settings control the resulting look of a Smart Report when it is run. The columns, column titles, column widths and sort orders can be customized and saved for a Smart Report.

8. For each column of the Smart Report, choose the column details.
   **Column**
   • Use the dropdown selectors to choose the data field to place in the column.
   **Title**
   • Enter the title to place above the column.
   **Width**
   • Choose the number of characters wide for the column.
   **Sort Order**
   • Select a number for the sort order, the lower the number, the higher output will be in the sort results (or select None for no sort priority for the column).
   **Column Order**
   • Use the arrow buttons to rearrange the column order of the Smart Report.
   • Click Remove to delete a column from the Smart Report.

9. Click Add Column to add a column to the Output Format configuration window.

10. Click Next to finish setting up the Smart Report.
Smart Report Setting (Cont.)

Save Report
Saving the report saves all the filter and column options from the other Smart Report Setting tabs.

- **Save Report**
  - Enter a **Report Name** for the customized Smart Report.
  - Enter the maximum number of lines to limit the report length.
  - Enter the number of lines allowed for each page of the report. A form feed will occur when this line count is reached.

- **Allow Access To**
  - Choose which User Roles will be allowed to run the Smart Report.

11. Select **Save Only** to save the customized Smart Report without running the report. Select **Save and Run** to save the customized Smart Report and run the report.
A Card Holder Group contains individual Card Holders for the purposes of common access and reporting.

Adding a Card Holder Group
1. Click New.
2. Enter the Card Holder Group Name.
3. For Card Holder List, select the desired card holders (or use the search icon to find a specific card holder) and click the right arrow to move them to the field on the right.
   ✓ NOTE: Ctrl-click or shift-click will select multiple Card Holders.
4. Click Add to save the changes.

Editing a Card Holder Group
1. Click on the Card Holder Group name to edit.
2. Click Edit.
3. The Card Holder Group name can be edited.
4. Card holders can be added or removed from the group.
5. Click Save.

Deleting a Card Holder Group
1. Click on the Card Holder Group name to delete.
2. Click Delete.
The *Door Group* allows individual doors to be combined in groups. The group can then be added to an Access Level for simpler management.

**Adding a Door Group**
1. Click *New*.
2. Enter the desired door *Group Name*.
3. For *Door List*, select the desired doors (or use the search icon to find a specific door) and click the right arrow to move the doors to the field on the right.

✓ **NOTE:** Ctrl-click or shift-click will select multiple doors.
4. Click *Add* to save the changes.

**Editing a Door Group**
1. Click on the Door Group name to edit.
2. Click *Edit*.
3. The Door Group name can be edited.
4. Doors can be added or removed from the group.
5. Click *Save*.

**Deleting a Door Group**
1. Click on the Door Group name to delete.
2. Click *Delete*. 
Camera Group

The **Camera Group** allows individual cameras to be combined in groups.

**Adding a Camera Group**
1. Click **New**.
2. Enter the desired camera **Group Name**.
3. For **Camera List**, select the desired cameras (or use the search icon to find a specific camera) and click the right arrow to move the cameras to the field on the right.

   ✓ **NOTE**: Ctrl-click or shift-click will select multiple cameras.
4. Click **Add** to save the changes.

**Editing a Camera Group**
1. Click on the Camera Group name to edit.
2. Click **Edit**.
3. The Camera Group name can be edited.
4. Cameras can be added or removed from the group.
5. Click **Save**.

**Deleting a Camera Group**
1. Click on the Camera Group name to delete.
2. Click **Delete**.
Add individual Access Levels to *Access Level Groups*. These groups can then be assigned to cards in the Card Holder section.

### Adding an Access Level Group
1. Click **New**.
2. Enter the desired **Group Name**.
3. For **Access Level List**, select the desired access level (or use the search icon to find a access level) and click the right arrow to move the access levels to the field on the right.
   ✓ **NOTE**: Ctrl-click or shift-click will select multiple Access Levels.
4. Click **Add** to save the changes.

### Editing a Access Level Group
1. Click on the Access Level Group name to edit.
2. Click **Edit**.
3. The Access Level Group name can be edited.
4. Access Levels can be added or removed from the group.
5. Click **Save**.

### Deleting a Access Level Group
1. Click on the Access Level Group name to delete.
2. Click **Delete**.
Client Management

Client Management allows the user to enable/disable, connect/disconnect, and update client Controllers associated to the main Controller’s server database.

Client Management allows user to update the firmware of the clients. The firmware for an individual Controller may be updated by clicking the Update Client button for the Controller. If multiple Controllers are connected to a main Controller, the Update All will update all the clients.

✓ NOTE: It will take 2-5 minutes to update each client. During that time the clients will be off-line.
✓ NOTE: Gateway and DNS IP addresses must be configured to access the Update Server. Refer to IP Address to configure these settings.
✓ WARNING: All Controllers in a system MUST be using the same firmware version.

Managing Clients
1. The installed client(s) will be listed in the Client Management section.
2. Use the Client Management buttons to manage the system clients.

Global Commands
- Update All
  • Updates all connected Clients
- Data Sync
  • Re-sends Server Database to all Clients

Client Specific Commands
- Client Disconnect
  • Disables a client in the Server Database
- Client Connect
  • Enables a client in the Server Database
- Delete Client
  • Permanently removes Client from Server Database
- Update Client
  • Updates the selected Client firmware to the latest version
- Client Reboot
  • Reboots selected Client
Client Replacement

Replace a Client

1. Power off bad Client board and disconnect from network. At the Dashboard the Door and Aux icons are grayed out.
2. Install replacement Client board on the network and set the IP to the same address as the bad client.
3. Save the MAC address of the new client.
   ✔ NOTE: Leave the Server address set to 0.0.0.0
4. On the Controller, go to Site Management > Client Replacement. Select the IP/MAC of the bad client and click Edit button.
5. Change the MAC address to the replacement client
6. Login to the replacement client and set the server IP and click Save.
7. After the replacement client connects, the dashboard icons will change from gray to color.
Logout

Logout prevents unauthorized persons from working in the system but still allows all access control operations to continue. To secure the system, be sure to logout when finished.

Logging Out of the Controller
1. When ready to exit, click Logout.
2. The Controller will logout the user and return to the Login screen.
4. Using the Wizard

The *Wizard* allows the user to configure the basic settings of the system. Advance through each setting by clicking the **Next** button. The Wizard will launch automatically the first time the system is run. Visit the Wizard at any time by clicking the icon in the lower left corner of the window.

✓ **NOTE:** When programming various elements of the system, do not use the same name for multiple items (e.g., use Door 1, Door 2, etc.).

✓ **NOTE:** Do not use special characters (<>?@)(*&%#@^\{\|/).
Language

Use Language to select the country and language where the system will be located. Click Next to advance.

License

License displays the basic system information of the Controller. Please print the License Key for future needs or in case of a factory default. Click Next.
Card Format

*Card Format* displays the default card formats of the system. The system includes several pre-configured card formats. If the desired card format is listed, click **Next** to advance to the next Wizard item. If the desired card format is not listed, click **New** to enter the format information and click **Add**.

✓ **NOTE:** It is recommended to delete card formats that are not in use.

Using the Decoder

If the desired card format is not listed as a default format, the **Decoder** can be utilized to auto scan and detect the card format.

1. Click **Decoder**.
2. Select the door where the card will be auto scanned.
3. Click **Card Scan** and present the card (or multiple cards) to the reader.
4. The new card format will populate the data fields.
5. Click **Add** to save the new format.
Holiday Group

Use Holiday Groups to define days and times during the year when holiday hours are used. When the holiday starts, the Controller switches from regular hours to holiday hours. When the holiday ends, the regular hours resume. You can assign four holiday groups with up to 30 holidays total among the groups. A holiday can include any number of consecutive days within the same calendar year. The Controller has pre-configured holiday groups based upon the country you selected in the Language section of the Wizard. The holiday groups are pre-configured through 2021 for quick set-up.

Editing a Holiday
1. Select the desired holiday and click Edit.
2. Change the start date and end date to the desired date.
3. Rename the holiday (it is recommended that pre-configured holidays be renamed when edited).
4. Click Save.

Deleting a Holiday
1. Highlight the holiday to be deleted.
2. Click Delete. A confirmation box will appear.
3. Click OK to confirm.

Adding a Holiday
1. Click New and enter the desired name, start date and end date.
2. Select the desired holiday group for the new holiday.
3. Click Add to save the new holiday.
Schedules

A Schedule is a combination of a time interval and one or more days of the week. Use schedules to identify the hours and days when inputs, outputs or door access are in operation. Assign holiday groups to the schedule to control when operations occur on holidays. There is one default time schedule of Always, which is defined as 00:00-23:59, seven days per week.

Adding a Schedule
1. Click New.
2. Enter the desired name and description (optional) for the schedule.
3. Adjust the sliders for the Start Time and End Time on days when the schedule is to be active. (Collapse slider for no access on that day.)
4. (Optional) Select a holiday group to allow access on the holidays in the group. If a holiday group is selected, identify a start and end time for holiday access.
5. Click Add to save the new schedule.
✓ Note: To create a schedule with a “Midnight Crossing” (e.g., 16:00 to 00:30) click Reverse.

Deleting a Schedule
1. Select the schedule to be deleted.
2. The schedule will appear. Scroll to the bottom of the page and click Delete.
3. Click OK to confirm the deletion.

Editing a Schedule
1. Select the schedule to be edited and click Edit.
2. Perform the desired changes to the name, description and time intervals.
3. Scroll down and click Save to save the changes.
**Doors**

Displays the *Doors* that are assigned to the system. Click on the door name to view or edit each door.

**Editing a Door**

Select the desired door. Scroll to the bottom of the page and click *Edit*.

After making any edits, be sure to click *Save at the bottom of the page*.

**Basic**

1. Enter the desired *Name* and *Description* (optional) for the door.
2. For multi-floor installations, select the *Floor*.

**Reader**

1. In the *Reader* section, select the settings for the door’s reader.

**Door Contact**

1. In the *Door Contact* section, check the *Enable* checkbox if a door contact is used.
2. *Name* the door contact and select its type.
3. Adjust the *Held Open Time*, which is the length of time the door can be open following a valid access request.
4. The *ADA Open Time* is an additional time added to the Held Open Time.

**Rex**

1. Enter the *Door Rex Name* for the door’s request to exit switch.
2. Select the type of *Rex* switch.
3. Check the *Rex Activates Door Lock* checkbox to have the Rex activate the door’s lock.
Doors (Cont.)

Door Lock Mode

1. Choose a **Door Lock Name** to name the lock for logging.

2. Configure **Door Lock Mode** as follows:
   - **Normal**: Lock activates in response to a valid access request and REX unlocks door for exit.
   - **Locked**: Does NOT grant access in response to REX, card or code.
   - **Locked w/REX**: Remains in locked mode, ONLY REX will activate lock.
   - **Unlocked**: Door will remain unlocked at ALL times.
   - **Man-Trap**: Sets the door lock for use in conjunction with another door to create a man-trap passage. A Man-Trap will only allow one door to be opened if the other door is locked. When Man-Trap is selected, **Man-Trap Mode** options appear:
     - **Unlock**: No security on Entry or Exit.
     - **Secure Entry/Free Egress**: Two options, both options use card access to enter the Exterior Door. Option 1 allows free exit through the exterior door; Option 2 requires card access to exit through the exterior door.
     - **Restricted Entry and Exit**: Four options, all options use card access to enter the Exterior Door. Option 1 allows free exit through the exterior door; Option 2 requires card access to exit through the interior door, Option 3 requires card access to exit through the exterior door. Option 4 requires card access to exit through either door.
     - **Pair Door**: Select the second Man-Trap door that is closest to the secured area.

3. Select the Door’s **Default Status**. This setting will be determined by the lock type (energized or de-energized).
4. Assign **Re-Lock on Open** if desired. This will re-lock the door immediately upon opening the door.
5. Adjust **Door Unlock Time** if desired. This is the length of time the door relay is active after a valid access request.
Doors (Cont.)

Door Status Alarm Output
Sets the actions of a door contact on the door. The door contact must be enabled to use these functions.

1. Check **Forced Door** to trigger the door alarm output if the door opens, but no access was granted.
2. Check **Held Door** to trigger the door alarm output if the door is held open longer than the **Held Open Time**.
3. Select Energized or De-energized for the **Default State** of the Door Status Alarm Output.
4. Select an **Output** to use for the Door Status Alarm Output.
5. Click to enable an **Alarm Shunt** output to operate when access is granted to the secured door.
6. Select Energized or De-energized for the **Default State** of the Alarm Shunt Output.
7. Select an **Output** to use for the Alarm Shunt Output.

**Threat Level**
1. Select the highest **Threat Level** allowed before the door will automatically lock.
   ✓ **Note:** An unlocked door will lock if the System Threat Level is greater than the Door Threat Level; including doors that are unlocked by schedule.
   ✓ **Note:** The Dashboard M-Unlock and E-Unlock may be used to unlock a door that has been locked due to elevated system Threat Level.
2. Check **Ignore REX** to ignore input from a Rex button if the current System Threat Level is higher than the Door Threat Level.

**Anti-Passback**
1. Check to enable **Timed Anti Passback**. Select a time in seconds to disable a credential after it has been used to grant access.
2. Check to enable **Room Anti Passback**. Select a time in seconds to disable access to a room after access has been granted to the room.
Doors (Cont.)

First Man In Rule
First Man in Rule unlocks a door when first Card Holder enters.

1. Check Enable to use a First Man In Rule.
2. Select a Grace Period to allow the selected first man Card Holder(s) access minutes before a scheduled start time.
3. Select up to three time Schedules for the rule to be active.
4. Select the Type of Card Holders (individual or group).
5. Search or choose Card Holder(s) or Groups for the rule. Use the arrows to move the name(s) in and out.

Manager In Rule
With Manager in Rule enabled, if a Card Holder designated as a Door Manager has not entered the system within a specific time period, the door will not unlock.

1. Check Enable to use the Manager In Rule.
2. Select up to three time Schedules for the rule to be active.
3. Select the Type of Card Holders (individual or group).
4. Search or choose Card Holder(s) or Groups for the rule. Use the arrows to move the name(s) in and out.

Two Man Rule
With Two Man Rule enabled, two Card Holders must present credentials at the same time in order to unlock the door. Credentials must be presented in the proper sequence (Card Holder 1 then Card Holder 2), or access will be denied.

1. Check Enable to use the Two Man Rule.
2. Enter a Time in seconds allowed for the second Card Holder to present their credentials.
3. Search or choose Card Holder 1 for the rule. Use the arrows to move the name(s) in and out.
4. Search or choose Card Holder 2 for the rule. Use the arrows to move the name(s) in and out.

Saving Changes
After making any edits, be sure to click Save at the bottom of the page.
Access Levels

An *Access Level* establishes which doors the Card Holder can access and when they are allowed to access them. Access Levels are comprised of a time schedule and door(s).

Adding an Access Level

1. Click **New**.
2. Enter the Access Level name.
3. Assign a time schedule to the Access Level by choosing it from the drop-down menu.
4. For **Door List** select the desired doors (or use the search icon to find a specific door) and click the right arrow to move the doors to the field on the right.
5. Click **Add** to save the changes.
Card Holder

Use Card Holder to enter card users in the database. An image may be assigned to the Card Holder for identification purposes.

To Add a Card Holder
Individuals who enter the facility are entered in the system as Card Holders.

Creating a Card Holder
1. Click New.
2. Enter the name and contact information of the Card Holder.
3. Under File Upload, click Snapshot to take a picture from an attached USB camera or click Browse to select a file to assign an image to the Card Holder for identification purposes.

✓ NOTE: Picture files can be 20 Kb maximum. JPG, BMP, or PNG formats.
Card Holder Options

1. Select ADA Timing for extended timing for the door relay.
2. Select Exempt to allow the Card Holder to bypass Anti-Passback rules (except occupancy rules) if the Card Holder is allowed access to the region.
3. Select a Web User Account to give the Card Holder operator privileges to the server software.
4. Choose the highest Threat Level that the Card Holder will be allowed access.
   ✓ **NOTE:** A Card Holder cannot access a door if either the Door Threat Level or the System Threat Level is greater than the Card Holder Threat Level.
5. Click Save.

Card Holder Badge

1. Select the Template for the badge.
   ✓ **NOTE:** See Section Badge Printing for details on setting up badge design templates.
2. Click Print Badge to launch the badge printing window.
3. Click Print Badge to select the printer and print out the badge.

Assigning a Card to an Existing Card Holder

1. Select the Card Holder from the main window.
2. Click Add Card.

Card Format

3. Select the appropriate card format from the drop-down field.

Card Number

4. Enter the Card Number, or use the Auto Scan feature.

Auto Scan

5. Choose the Auto Scan door reader where the card will be presented.
   ✓ **NOTE:** Card scanner can only be used with doors 1 - 4.
6. Click Card Scan and present the card to the reader. The new card number will populate the data field.
Card Holder (Cont.)

Card Status
7. Select the card’s current status.

Card Type
8. Select the function for the card with card type dropdown.

Access Level
9. For Select Type select Individual or Group access level.
10. For Select Level select the desired access levels (or use the search icon to find a specific access level) and click the right arrow to move the access level to the field on the right.

Activation Date
11. Choose an optional activation and expiration date for the card.
12. Click Save to assign the card to the Card Holder.

The added card will show on the card list for the Card Holder.

Click Add Card to add additional cards for the selected Card Holder.

<table>
<thead>
<tr>
<th>Card Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Scan *     : Door 1</td>
</tr>
<tr>
<td>Card Format *   : IEI 26 Bit Wiegand</td>
</tr>
<tr>
<td>Card Number *   :</td>
</tr>
<tr>
<td>Key Number      :</td>
</tr>
<tr>
<td>Card Status *   : Active</td>
</tr>
<tr>
<td>Card Type *     : Stolen</td>
</tr>
</tbody>
</table>

Card Enrollment

| Auto Scan *     : Door 1  |
| Card Format *   : IEI 26 Bit Wiegand  |
| Card Number *   :         | Card Scan |
| Key Number      :         |
| Card Status *   : Active  |
| Card Type *     : Normal  |

Access Level

| Select Type : Individual  |
| Select Level : Client 3  |

Activation Date

| Never Expired :  |
| Inactive Reason :  |

| Activation Date : 09-23-2015 |
| Expiration Date : 12-31-2015 |

<table>
<thead>
<tr>
<th>Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>
Assigning a Card to a Card Holder
1. Select the Card Holder from the main window.
2. Click Add Card.
3. If using Card Scan, select the door where the card will be scanned.
4. Select the appropriate Card Format from the drop-down.
5. Enter the Card Number of the card.
6. If using Card Scan, click the button and present the card to the reader. The card number will populate the Card Number field.
7. For Select Type select Individual or Group access level.
8. For Select Level select the desired access levels (or use the search icon to find a specific access level) and click the right arrow to move the access level to the field on the right.
9. For Activation Date, choose an optional activation and expiration date for the card.
10. Click Save to assign the card to the Card Holder.
Network

Enter the Network configuration information as provided by the IT administrator.

**DHCP** assigns an IP address to the Controller automatically on a network containing a DHCP Server (a router will typically have a built-in DHCP Server). When Static is selected, options IP Address, Subnet Mask, Gateway must be entered.

**DNS** is an Internet service that translates domain names into IP addresses. The IP address of a DNS is required if using NTP time server or SMTP e-mail.

**Editing Network Settings**

1. Select **DHCP** or **Static**. (Skip to Step 5 if using DHCP).
2. Enter a static **IP Address** for the Controller to use on the LAN. The first three values must match other devices on the network (e.g., 192.1.0.x).
3. Enter the **Subnet Mask** address. The Subnet Mask determines the manual address mask used by the Controller (typically 255.255.255.0).
4. Set the Gateway Address to match the address of the router that connects the LAN to the Internet.
5. Enter the IP address of the DNS Server 1 (optional, use for NTP time server access or SMTP e-mail connection).
6. Enter the IP address of the DNS Server 2 (optional, use for NTP time server access or SMTP e-mail connection).
7. Enter the HTTP Port number for remote Web browser connection (typically 80).
8. Check the HTTPS checkbox if RMC is being used.
9. If using HTTPS, edit the port number if required (default is 443).
10. When finished entering the network settings, click **Save & Reboot**.

**Upload cer-key**

For installations using HyperText Transport Protocol Secure (HTTPS) communications, the eMerge system uses a default security key and certificate. If the installations network requires a different specific security key and certificate, edit the two items.

1. Click **Upload cer-key**.
2. Enter the **Private Key** into the SSL Toolbox.
3. Enter the **Certificate** into the SSL Toolbox.
4. Click **Save & Reboot**.
**Dealer Registration**

*Dealer Registration* is highly recommended for maximum system support. Please fill out the required information.

**NOTE:** Gateway and DNS IP addresses and SMTP must be configured to send the registration email. Refer to IP Address and SMTP to confirm these settings.

### Registering the System

1. Enter the **Installing Dealer** information (required for upgrade requests).
2. Enter the **Site Information**. This is optional, but recommended to document the site information in the system.
3. When finished editing, click one of the action buttons.
   - The **Register** button will attempt to send an email with the information provided.
   - The **Save** button will save the contact information without sending an email.
   - The **Clear** button will clear the data in the form.
**Start Save**

*Start Save* is the command to save the initial settings for the system and select which page appears on logon.

**Editing Startup Page**

- **Default Page**: Use the dropdown selector to choose the page that the system will display upon logon.
- **Save to SD Card**: Leave this box selected to save the startup information to the SD card. Un-check to save the startup information to the Controller’s memory.
5. Site Map

The Site Map is an overview of the pages within the Controller interface. Each page listed in the site map is linked to the page it represents. This allows the user to quickly jump to any section listed in the site map.
6. Lost Card

Lost Card is a utility to quickly identify the Card Holder associated with a lost card. The operator may enter any card number to view the Card Holder that is associated with the card, reset a One Time Card, or override a Violation Grace.
7. License

License displays the basic system information of the Controller. Please print the License Key for future needs or in case of a factory default.

✓ NOTE: You can use the MAC address to recover the license key for the system. Visit http://www.e3upgrade.com and enter the MAC address and follow the directions.

System Information
- Press the + sign to display the system configuration information and upgrade options.
- Current system information is shown on the left.
- Upgrade options are shown on the right. Select options from the two dropdown boxes.
- Enter any comments to send with the request in the text box.
- Click Request Upgrade to send in an upgrade request.
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Corporate Office
Nortek Security & Control LLC
1950 Camino Vida Roble, Suite 150
Carlsbad, CA 92008-6517
Tel: (800) 421-1587 / 760-438-7000
Fax: (800) 468-1340 / 760-931-1340
Technical Support
Tel: (800) 421-1587
Hours: 5:00 AM to 4:30 PM Pacific Time, Monday - Friday