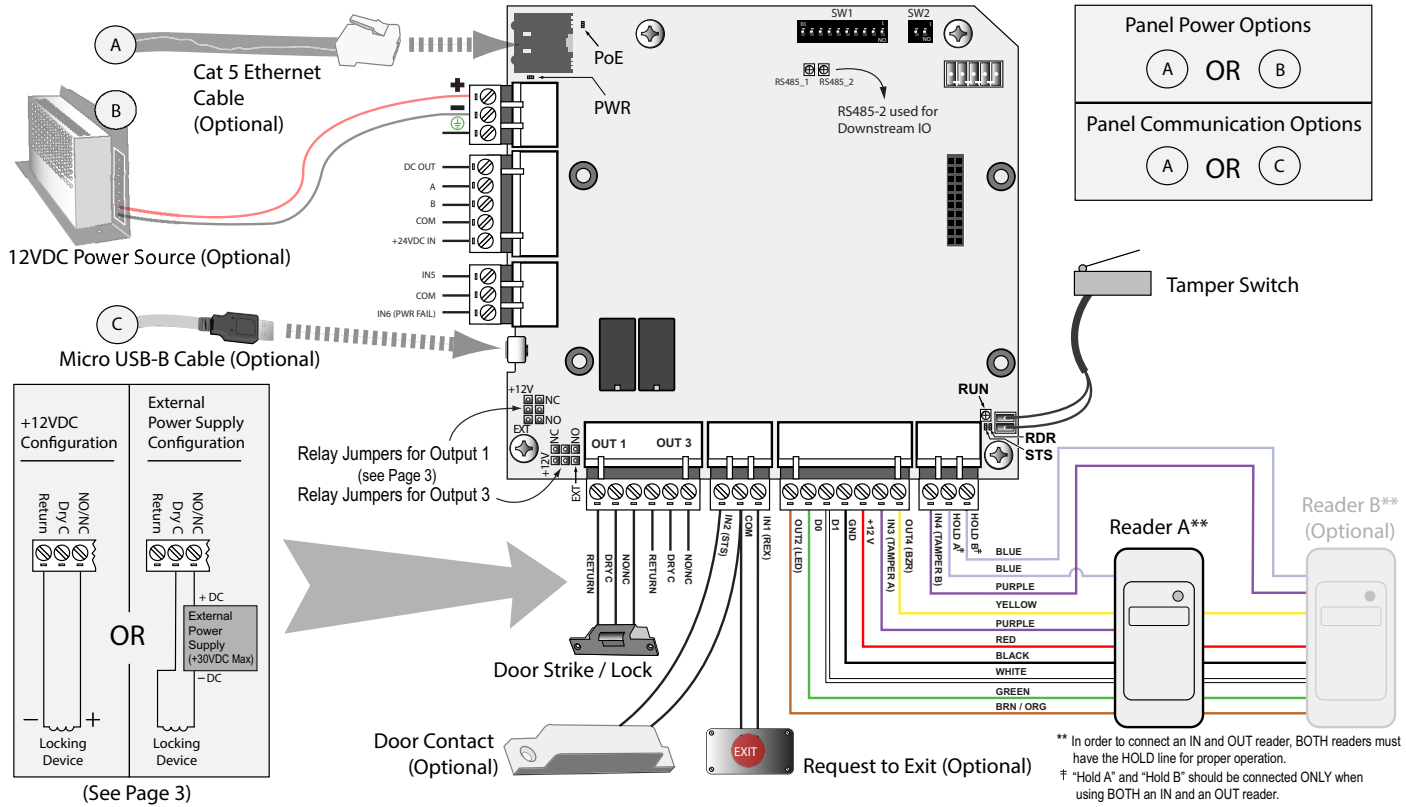
NetAXS-123

Startup Guide

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



** In order to connect an IN and OUT reader, BOTH readers must have the HOLD line for proper operation.

† "Hold A" and "Hold B" should be connected ONLY when using BOTH an IN and an OUT reader.

TABLE OF CONTENTS

1) Introduction

This document describes the basic setup, wiring and configuration steps needed for the NetAXS-123 access control system.

NetAXS-123 can be configured in many different ways, depending on the specific needs of the end-users. This document covers a single panel, 1 door system. Additional doors are set up, wired and configured in a similar manner to the first door. This document does not cover all of these configurations.

For further configuration and setup information including installations related to WIN-PAK and/or RS-485 communications please consult the *NetAXS-123 User Guide* and *NetAXS-123 Installation Guide;* both on *NetAXS-123 Product CD*.

2) Before You Start

1. Verify factory default DIP switch settings (Address 1, Gateway Panel) as shown below:

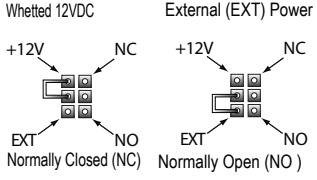
NOTE: Actual DIP switch orientation may vary depending on the panel mounting orientation. Please refer to *Appendix G* for more information on DIP switch configuration. **If using EVL, DIP switch addresses are not used as addressing is configured in the web browser. Refer to Appendix A for additional details.**

2. Determine the power source: Power Over Ethernet (PoE) or 12VDC power supply.

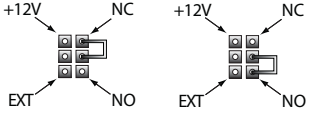
NOTE: If using PoE, a total maximum of 450ma @ 12VDC is available for all external devices (locking device, reader(s), input and output devices).

3. Determine communications source: IP/Ethernet or USB.
4. Determine relay configuration (see the circuit diagram on Page 2).

- Power at relay terminals: Whetted 12VDC (factory default) or External (EXT) power source:



- Relay Type: Normally Closed (NC) or Normally Open (NO, factory default):



3) Device Connection Order

1. Reader(s) 	Connect readers to terminal block per Connection Diagram.
2. Input Device(s) (if used)  	Connect Request to Exit Devices and/or Door Status / Position Switch (if used) to terminal block per Connection Diagram.
3. Output Device(s) 	Connect Locking Device(s) and/or Auxiliary Devices (Intrusion, Sounder, Strobe, etc.) (if used) to terminal block per Connection Diagram.
4. Communications  	Connect the Controller Board to the computer by using an Ethernet cable or a Micro USB-B cable. **NOTE:** Install USB drivers prior to making USB connection (see Section 5.1).

4) Powering Up

1. Apply power (PoE or 12VDC power source) to panel.

2. Verify panel power up.
   - The PoE or PWR LED will be illuminated and there will be a slight delay as the operating system loads.
   - RUN LED will initially be solid red then steadily flash green, once per second.

3. Verify panel and wiring functionality.
   - Trigger any input device. STS LED should flash BLUE briefly.
   - Swipe a card at any reader. RDR LED should flash GREEN briefly.

Note: For dry-type configurations, the power supply must be voltage-compatible, listed to UL 294 or UL 609 for UL installations and CAN/ULC-S318 for ULC installations, and able to supply sufficient backup power.

CONGRATULATIONS!

YOU HAVE SUCCESSFULLY POWERED UP

the NetAXS-123 Access Controller!

5) Connecting to the Web Server

This section describes two configurations for connecting a computer to the NetAXS-123 web server:

- Connecting via USB port.
- Connecting via Ethernet port.

NOTE: The panel that you are connecting to the computer is the Gateway panel. DIP switch 6 on a Gateway panel must be set to ON for a successful connection.

5.1 Connecting via USB Port

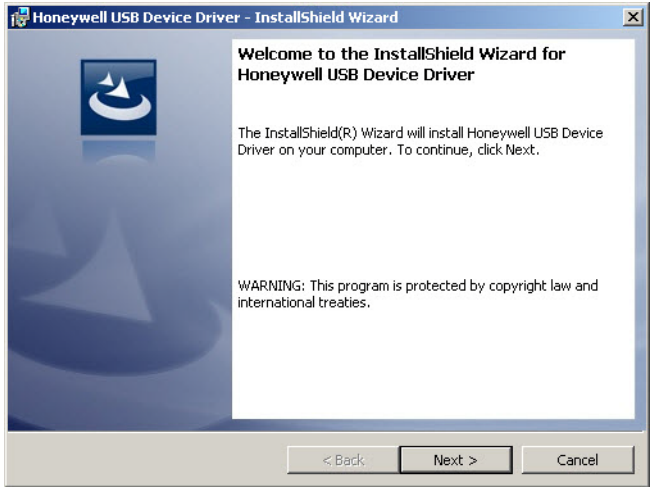
Warning: Do NOT connect the USB cable to the panel until AFTER the drivers are installed.

Follow these steps to set up the NetAXS-123 USB connection. (This procedure should be performed only once.)

1. Insert the NetAXS-123 Product CD into your Windows-based computer. The NetAXS-123 product menu opens in the web browser.

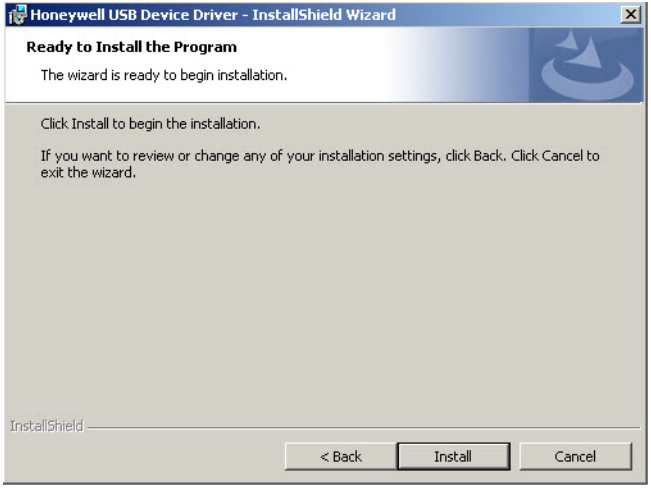
   Note: If the product menu does not open automatically in your browser, right click on the **Start** button and select **Explore**. In the folder tree, find and click the CD drive that is reading the *NetAXS-123 Product CD*.

2. Click **Install USB Drivers** on the product menu to start the USB driver installation wizard.



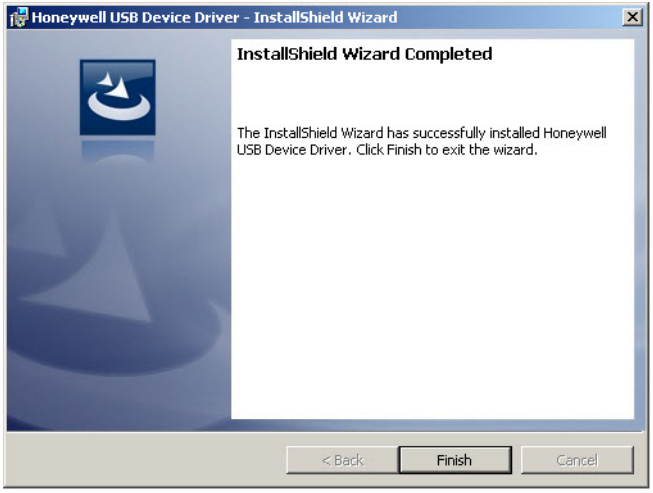
3. Click **Next** to display the **Ready to Install the Program** screen.

NOTE: If confirmation dialog boxes pop up before or during the installation, click the appropriate boxes to allow or approve the installation.



4. Click **Install** to initiate the installation.

5. When the installation is complete, the final screen appears:



6. Click **Finish**.
7. Connect the computer to the NetAXS-123 controller with a USB-A to Micro USB-B cable.
8. Turn on the power to the NetAXS-123 controller.

Proceed to Section 6, “Logging In to the System” on page 7.

5.2 Connecting via Ethernet Port

You can connect the NetAXS-123 panel to a PC either directly with a standard or cross-over ethernet cable as well as through an ethernet switch with standard ethernet patch cables.

Perform the following steps:

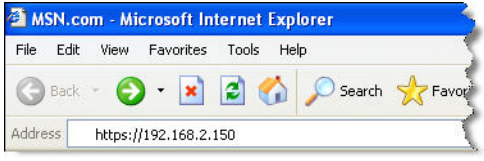
1. In order to connect to the NetAXS-123 for the first time, configure the computer's network connection:
    a. Select **Start** > **Settings** > **Control Panel**.
    b. Click **Network and Dial-up Connections**.
    c. Identify your local Ethernet connection (commonly labeled **Local Area Connection**), and right-click the icon to display the Local Area Connection Properties screen.
    d. Highlight the Internet Protocol (TCP/IP) connection.
    e. Click **Properties** to display your system's current Internet Protocol properties.

Important: Keep a record of your computer's current network configuration as it appears in this screen. You will need to re-instate this configuration later.

    f. Select "Use the following IP address."
    g. Enter "192.168.1.10" in the IP address field.
    h. Enter "255.255.255.0" in the Subnet mask field.
    i. Click **OK** to accept the entries.

6) Logging In to the System

1. Open your internet browser (Internet Explorer and Mozilla Firefox are supported).
2. Connect to the panel default address by entering the IP address into the address box to reach the login screen:



- If using USB: https://192.168.2.150 (fixed address)
- If using IP/Ethernet: https://192.168.1.150 (default)

NOTE: When connecting to the web using a browser, you must use **https://** for a secure connection. The standard http:// that is the default in most browsers will not work.

NOTE: The Ethernet IP address can be changed from the default address for additional security or to align with an existing network. Please refer to *Appendix B* for additional details.

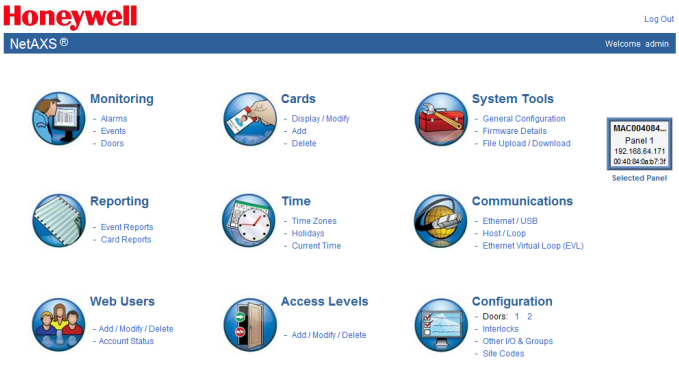
3. Approve any security certificates by clicking "Continue to this website".

NOTE: If you receive a **certificate error message**, follow the appropriate steps to accept and move on. These steps will differ from one browser to another.

4. Enter "**admin**" in the User Name field, and enter "**admin**" in the Password field. Both the user name and password are case-sensitive.

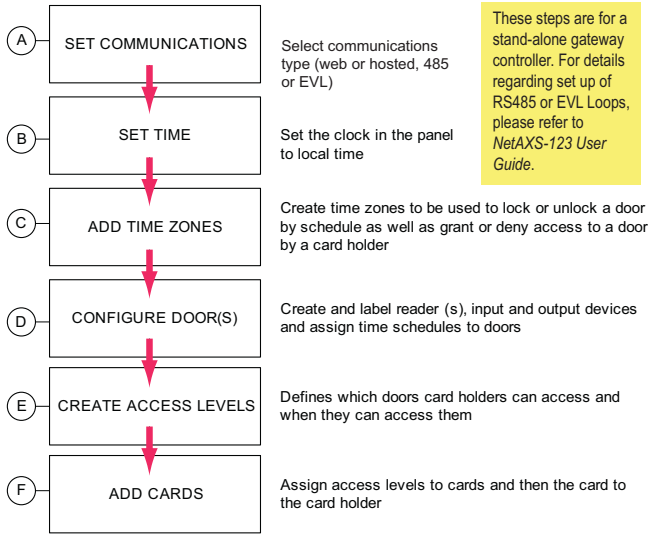
NOTE: For additional security, it is recommended that you change your default user name (admin) and password (admin) to a new user name and password. Refer to *Appendix A* for additional details.

5. Click **Login** to display the NetAXS-123 Main Window, also referred to as the "Landing Page".



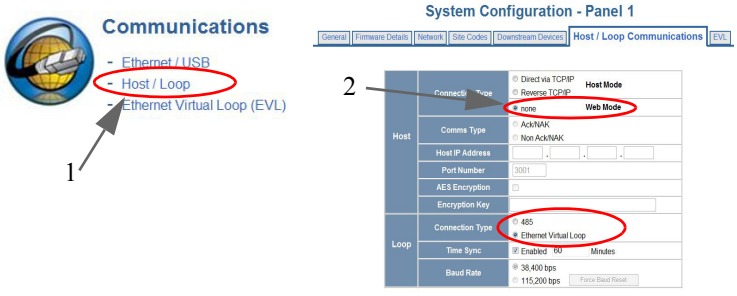
7) System Configuration

The flowchart below outlines the basic steps necessary to successfully program your NetAXS-123 panel.



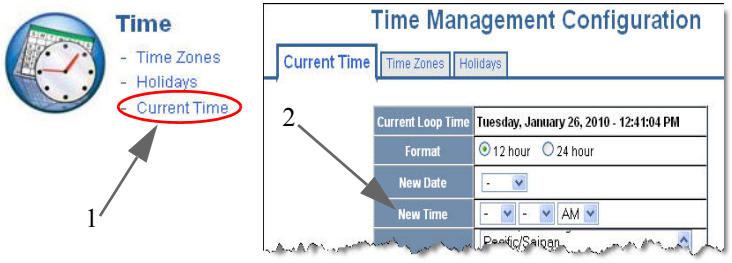
Please follow the detailed steps in the next six sections to ensure the successful programming of your NetAXS-123 panel. Start each of the major steps on the Landing Page by selecting the link shown. Return to the Landing Page by clicking on  .

Step Ⓐ - Set Communications to “Web Mode”.



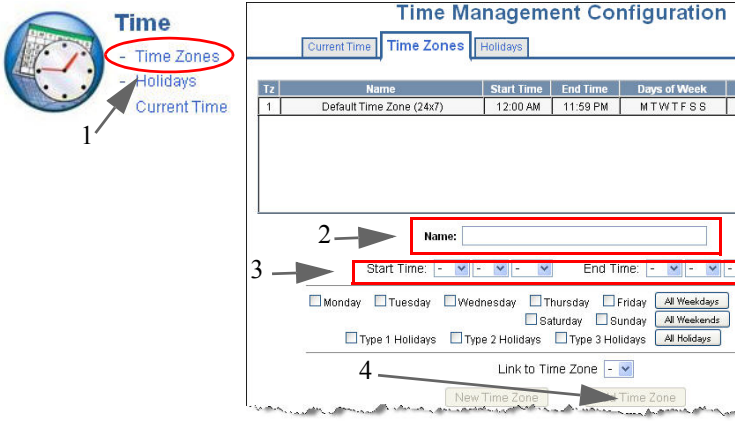
1. Under **Communications,** click **Host / Loop** to display the Host/Loop Communications tab.
2. Select **None** for Web Connection type. Select either EVL or 485 for communication type to downstream panels.
3. Click **Submit** to save the change.
4. Return to the Landing Page by clicking  .

Step Ⓑ - Set the time.



1. Under **Time,** click **Current Time** to display the Current Time tab.
2. Set current local area time, date, and geographic time zone.
3. Click **Submit** to save the changes.
4. Return to the Landing Page by clicking  .

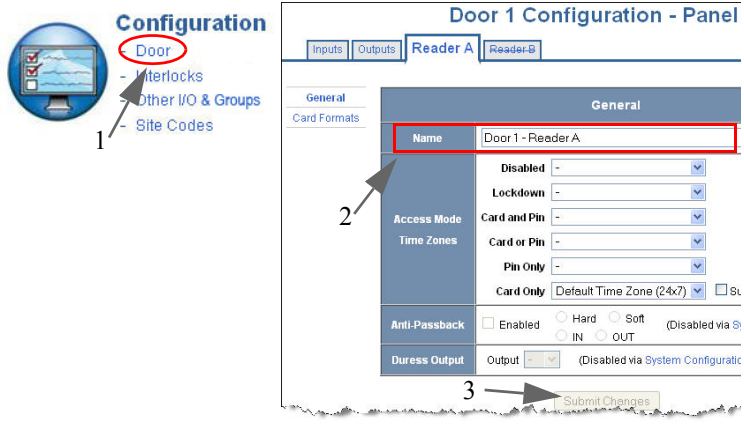
Step Ⓒ - Add time zones.



1. Under **Time,** click **Time Zones** to display the Time Zones tab.
2. Enter a **Name** for the time schedule.
3. Select **Start Time** and **End Time**. Select **days of the week**.
4. Click **Add Time Zone** to save the new time schedule.
5. Return to the Landing Page by clicking  .

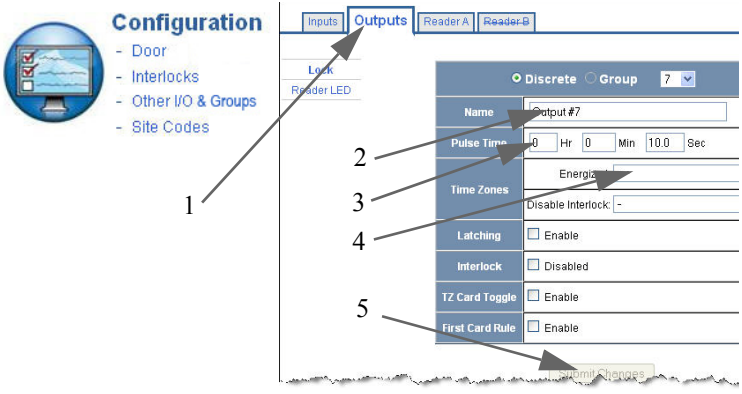
Step Ⓓ - Door Configuration

Ⓓ1 - Door Configuration: Label Reader



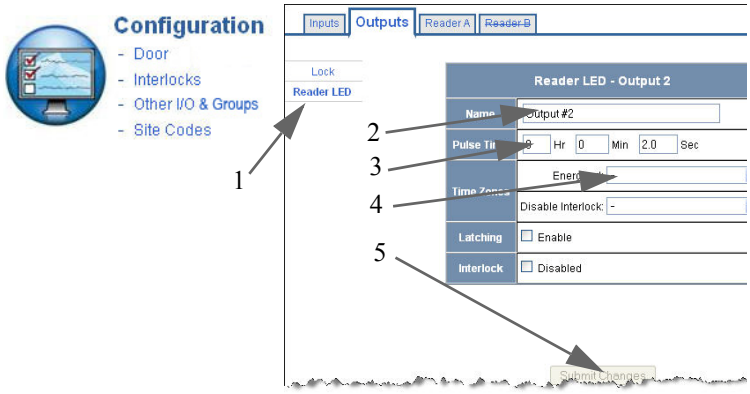
1. Under **Configuration,** click **Door** to display the Reader A tab.
2. Enter a **Name** for Reader A.
3. Click **Submit Changes** to save the change.

(D2) - Door Configuration: Assign Door Auto Unlock Schedule



1. Click the **Outputs** tab to edit the lock settings.
2. Enter a **Name** for the locking device / output.
3. Set the **pulse time** to determine how long the door will remain unlocked when a card is swiped.
4. *(Optional Step)* If you want this door unlocked during a scheduled period of time, select an appropriate time zone in the **Energized** drop-down menu.
5. Click **Submit Changes** to save the changes.

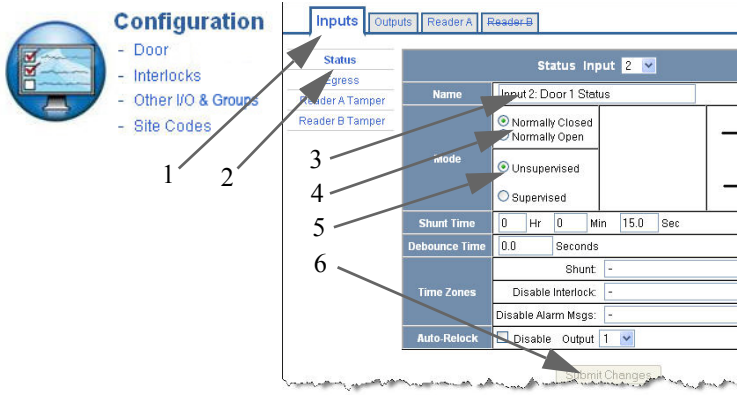
(D3) - Door Configuration: Label and Program Reader LED



1. Click the **Reader LED** link.
2. Enter a **Name** for the Reader LED.
3. Set the **pulse time** to match the pulse time of the Reader.
4. *(Optional Step)* Select a **time zone** to energize the Reader LED. You may want to use the same time zone used in D2 Step 4.
5. Click **Submit Changes** to save the changes.

(D4) - Door Configuration: Door Status (if used)

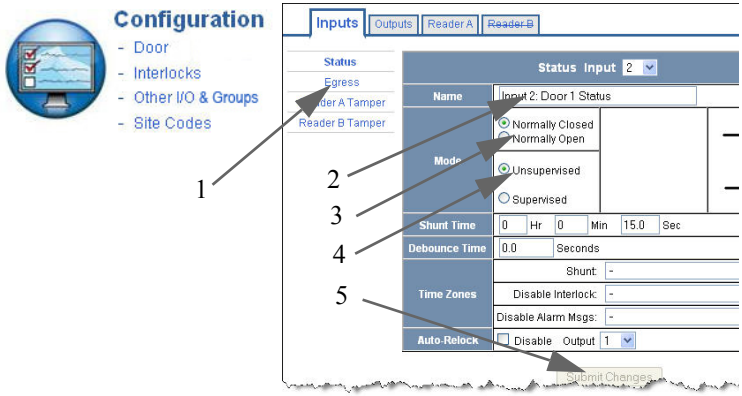
NOTE: If a door position switch is not used, SKIP THIS SECTION by clicking on  .



1. Click the **Inputs** tab.
2. Click the **Status** sub-link.
3. Enter a **Name** for the Input Device.
4. Select a **Mode** (Normally Closed or Normally Open).
5. Select **Supervision** type.
6. Click **Submit Changes** to save the changes.

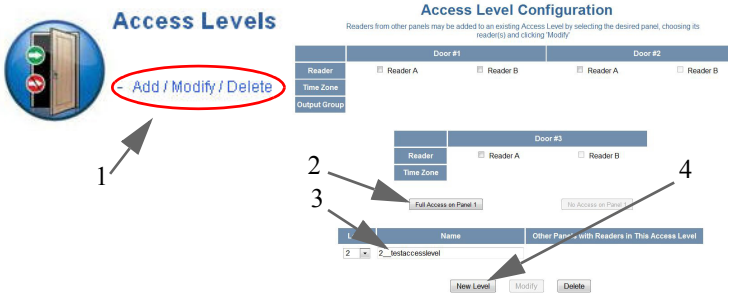
(D5) - Door Configuration: Door Egress (if any)

NOTE: If a Request To Exit (REX) device is not used, SKIP THIS SECTION by clicking on  .



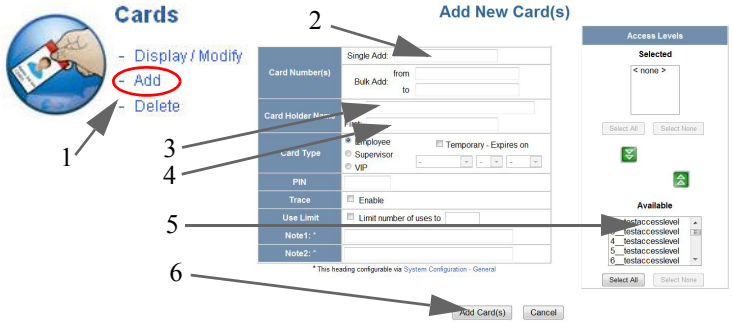
1. Click the **Egress** sub-link.
2. Enter a **Name** for the Input Device.
3. Select a **Mode** (Normally Closed or Normally Open).
4. Select **Supervision** type.
5. Click **Submit Changes** to save the changes.
6. Return to the Landing Page by clicking  .

Step (E) - 24/7 Master Access Level Creation and Configuration



1. Under **Access Levels,** click **Add/Modify/Delete** to display the Access Level Configuration screen.
2. Click **Full Access on Panel 1**.
3. Enter the **Name** “Master 24/7” for the new access level.
4. Click **New Level** to add the new access level.
5. Return to the Landing Page by clicking  .

Step (F) - Add Cards



1. Under **Cards,** click **Add** to display the Add New Cards screen.
2. Enter a valid **Card Number**.
3. Enter **First Name**.
4. Enter **Last Name**.
5. Select **Access Level**.
6. Click **Add Cards** to save and add the new card.

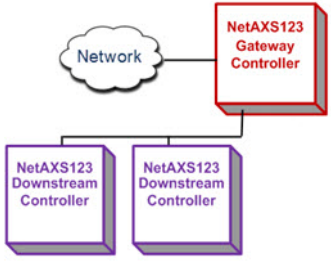
Test your card at the reader to verify that the door unlocks and follows the assigned time schedule (if any).

Congratulations!

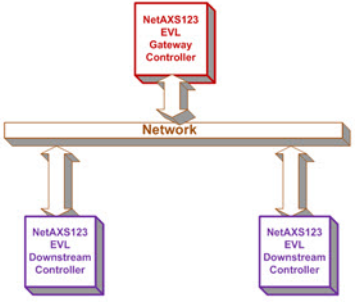
You have successfully programmed the NetAXS-123!

APPENDIX A) Adding a Panel

Additional panels may be connected downstream of the gateway panel either via RS-485 or the Ethernet Virtual Loop (EVL).

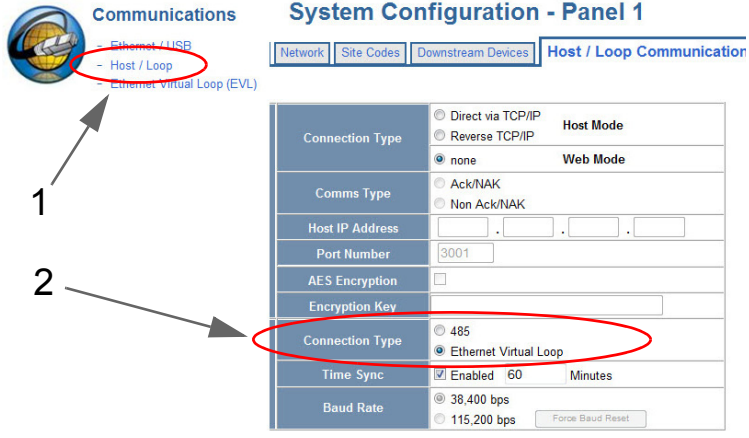


RS-485 provides a means to hardwire up to 30 additional panels to the gateway panel. Only the gateway panel will contain an IP address while the remaining connected panels are configured (via DIP switch six) as "downstream" panels using DIP switches 1-5 to provide a physical address.



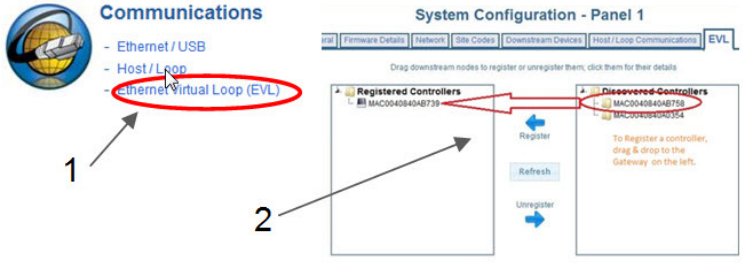
The **Ethernet Virtual Loop (EVL)** provides a means to connect a group of up to 16 panels over a network connection. When using EVL, it is recommended that DIP switches 1-5 be left at factory default as addressing is configured in the web browser and not through the panel DIP switches.

Step Ⓐ - Enabling the Ethernet Virtual Loop (EVL)



1. Under Communications, click “Host / Loop” to display the Host/Loop Communications tab.
2. Select Ethernet Virtual Loop for loop connection type.
3. Click OK to reboot the panel.
4. After reboot, login.

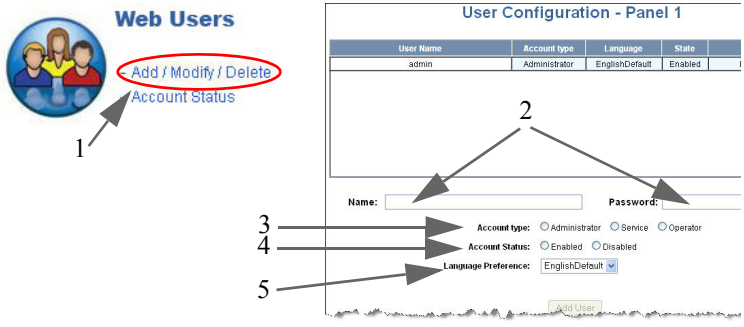
Step Ⓑ - Configuring the Ethernet Virtual Loop (EVL)



1. From the Gateway panel, under Communications, click Ethernet Virtual Loop.
2. Drag & Drop controllers to the left to add them to the group.
3. Repeat for all controllers to be registered.

4. Return to the Landing Page by clicking the Home icon.

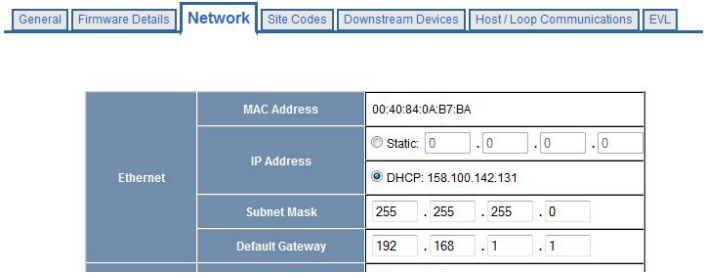
APPENDIX B) Adding a User



1. Under **Web Users,** click **Add/Modify/Delete** to display the User Configuration screen.
2. Enter a **Name** and **Password** for the new user.
3. Select an **Account Type** (Admin, Service, or Operator).
4. Select an **Account Status** (Enabled or Disabled).
5. Select a **Language Preference** (default is English).
6. Click **Add User** to save the new user.

APPENDIX C) Changing the Ethernet Default IP Address

1. From the landing page, click on **Ethernet/USB** in the **Communications** section.
2. Locate the Ethernet IP Address, replace within the Network Tab, and update with new values.



Note: Please check with your network administrator before changing the IP address since inputting incorrect values could impact the surrounding network.

3. Edit Subnet Mask and Default Gateway, if required.
4. Click **Submit** to submit the changes.
5. Click **OK** to allow panel to reboot and then click **OK** again to acknowledge "Reboot this Panel Now?".
6. After panel reboots, connect to new address using the https:// secure connection.

APPENDIX D) Enabling the In and Out Readers

NOTE: In order to connect an In and Out reader, BOTH readers must have the Hold line for proper operation.

1. Wire **In and Out** reader per diagram inside the front cover.

   Note: Make sure to connect Hold and Tamper lines appropriately.
2. From the landing page, select the appropriate door in the **Configuration** section.
3. Click on the Reader B tab.

4. Click to activate Reader B.

5. On Reader B tab, enter the name for Reader B and submit changes.

APPENDIX E) Additional Features

The following section provides a brief description of additional features contained within the NetAXS-123 system. For further details on set-up and use of each feature, please refer to the *NetAXS-123 Resource CD* or *NetAXS-123 User Guide, # 800-05168*.

Card Import

The NetAXS-123 has the ability to import a data file that contains card holder information to assist in quickly adding card holders information to the panel.

Database Backup

The NetAXS-123 allows you to save a backup file of each panel on your PC for safe keeping.

Deleting Cards

Cards may be deleted either by number, a range of numbers or by Card Holder Last Name.

Groups

NetAXS-123 supports output groups which are most commonly used for elevator control.

Downstream IO Devices

NetAXS-123 now supports auxiliary Input and Output Devices (NX4IN and NX4OUT boards). Refer to the installation and user guides for details on wiring and configuration details.

Ethernet Virtual Loop (EVL)

Ethernet Virtual Loop feature allows multiple IP Network connected controllers to be managed from a single IP Address.

Holidays

Holidays are special days that take precedence over a standard day. Holidays are most often used for a day when no work is scheduled at the facility, employees are not to have premises access and the doors are to remained locked.

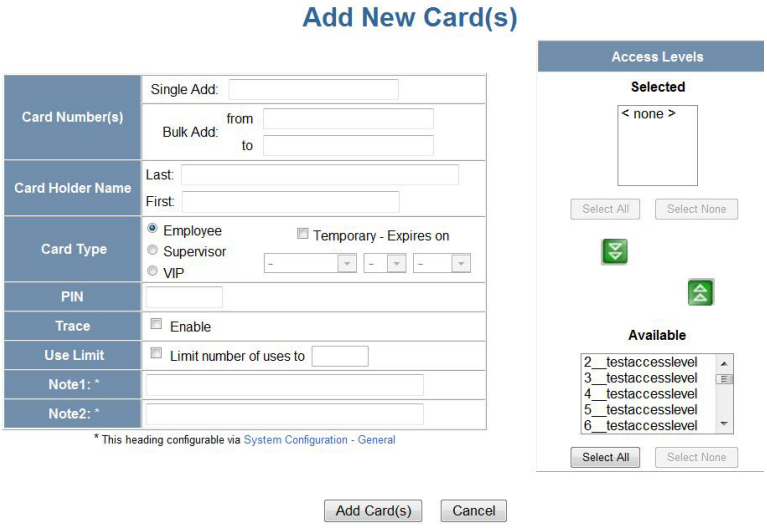
Reports

Events Reports: Allows generation of card event reports by last name and card number.

Card Reports: Allows the ability to view cards and card data by last name as well as card number.

User Card Types

Card types provide enhanced features outside of access levels.



- **Employee:** This card type is what is assigned to the majority of cards; has no special privileges and follows the assigned access levels.
- **Supervisor:** This card type enables the user's card the ability to temporarily turn off employee access to a specific reader regardless of the employee's access level.
- **VIP:** This card type overrides the access level assigned to the card and grants the card access at all readers regardless of access level.
- **Temp:** This card type allows the ability to set an expiration date at which time the card is de-activated.
- **Card Expiration Date:** Specifies the date that a temporary employee's card is de-activated.
- **Card Use Limit:** Allows the ability to specify the number of times a card may be read at a card reader to which it has valid access before the card expires.

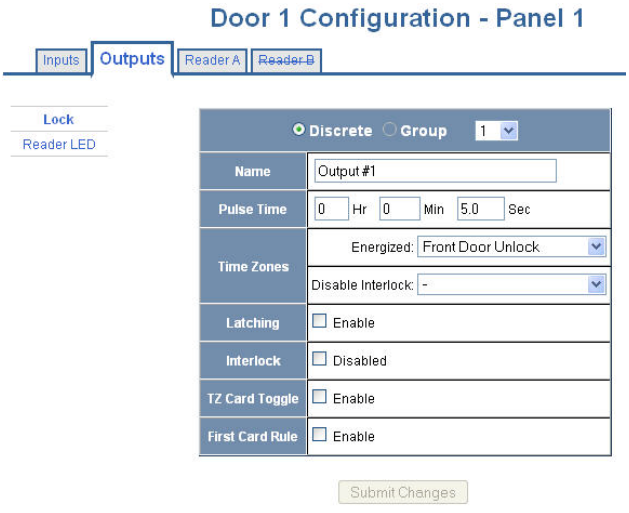
First Card Rule

Also known as the "Snow Day" feature, this feature can be used to ensure that a door does not follow a time schedule and remains locked until a valid card is used at that door.

TZ Card Toggle

Also known as the "Lunch Hour" feature, this feature can also be used to ensure that a door does not follow a time schedule and remains locked until a valid card is used at the door. Unlike the First Card Rule however, if the users want to leave for lunch, they can swipe their card a second time at the reader to return the door to a locked

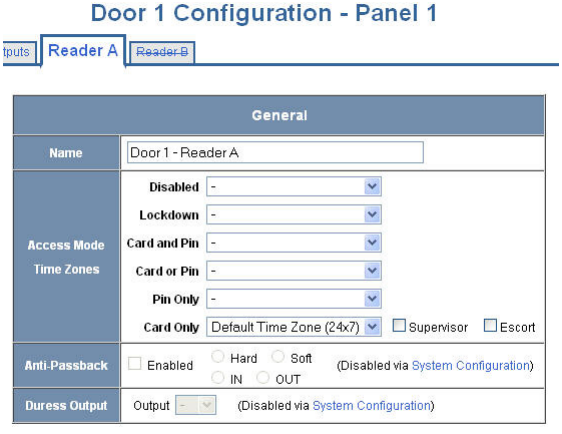
state. After lunch, the users can then present their card to the reader again and the door returns to following the assigned time schedule.



Both TZ Card Toggle and First Card Rule cannot be enabled at the same time.

Reader Access Modes

By default, cards with a valid access level can be used at a reader during the time zone in the Card Only drop-down list within the reader configuration. Selecting the Supervisor or Escort mode can modify these settings.



Supervisor Rule

This feature enables a supervisor to temporarily turn off employee access to a specific reader regardless of the employee's access level.

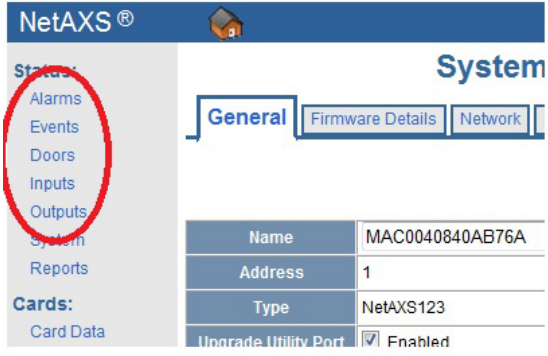
Escort Rule

Also known as the "two-man rule", this feature requires an employee to also have a supervisor present their card at the door to gain access.

APPENDIX F) Monitoring Status

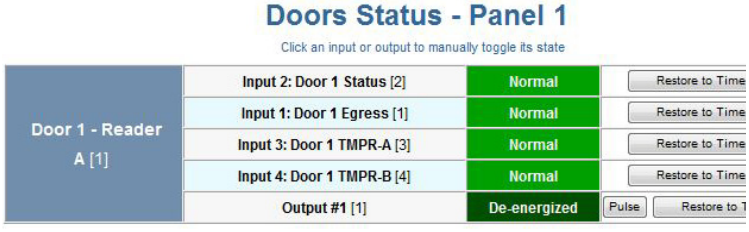
From the landing page, one may monitor the status of Doors, Alarms and Events.

The users can monitor the status of Alarms, Events, Doors, Inputs, Outputs, System, and Reports from their respective links in the **Status** navigation sidebar, as shown below:



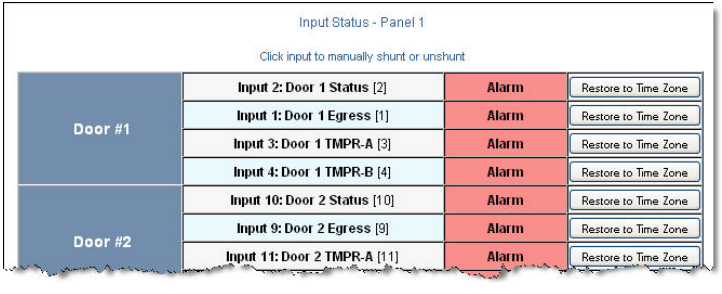
Monitoring Door Status

The current status of each Door can be viewed live as well as manipulated from the status page.



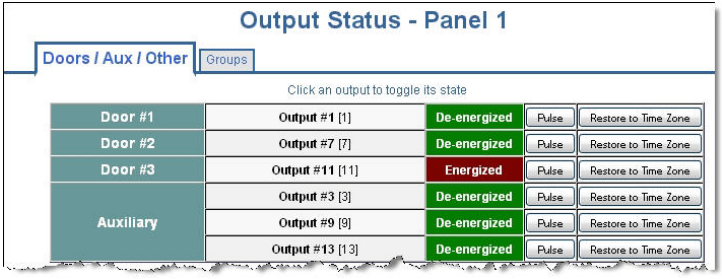
Monitoring Input Status

The current status of each input device can be viewed live as well as manipulated from the status page.



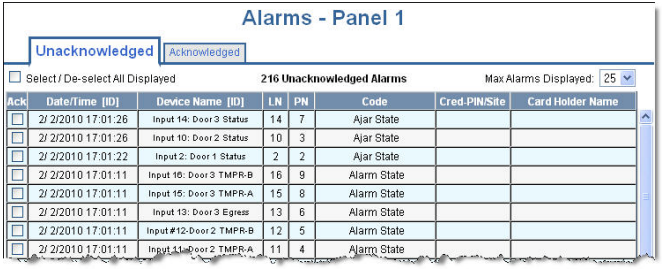
Monitoring Output Status

The current status of each output device can be viewed live as well as controlled. Doors can be restored to time zones or manually locked or unlocked.



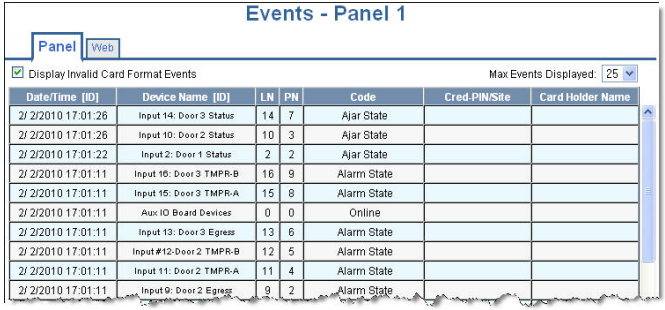
Alarms

Alarms can be viewed as system-generated messages that may indicate the need for user attention.



Events

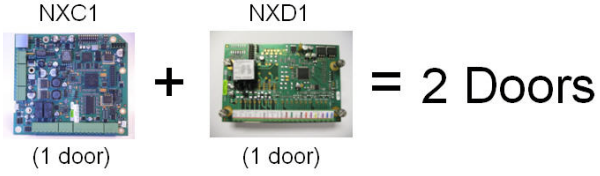
Monitors both panel and web-generated events. Dynamically refreshes when new events are generated.



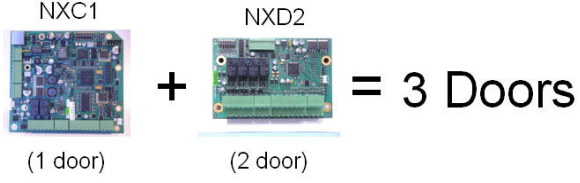
APPENDIX G) Adding Additional Doors

With the addition of either a 1- or 2-door Add-On board, the modular design of the NetAXS-123 allows the ability to easily expand from one door to either two or three doors.

Expanding from 1 door to 2 doors:



Expanding from 1 door to 3 doors:



Setup of the 2nd and 3rd door is accomplished by selecting **Add/ Modify/Delete** under Access Levels from the Landing Page and enabling the correct door, reader and access level.

To expand your system beyond three doors, please refer to the *NetAXS-123 User Guide, # 800-05168* or *NetAXS-123 Product CD*.

APPENDIX H) Resetting the Panel

NOTE: When you use the DIP switches to reset a panel to the original factory default values, the Event History is lost and any customized databases are removed; the panel is reset with the original factory default database. This does not affect the Ethernet IP address.

To reset the panel to the factory default values:

1. Make a note of the existing settings on SWI DIP switches.
2. While the panel is powered up, turn all of the DIP switches to the OFF position. NOTE: The **OFF** position of the DIP switches is towards the outer edge of the panel. The **ON** position is towards the inner part of the panel.
3. Power down. Then power the panel back up.
4. Wait for the panel to come up. The RUN LED should flicker fast.
5. Set the DIP switches back to their original positions.
6. Power down. Then power the panel back up.
7. The RUN LED should flash at a normal pace.

The panel is now reset to the original factory default values.

Factory default DIP Switch settings:

NOTE: If using EVL, DIP switch addresses are not used as addressing is configured in the web browser. Refer to Appendix A for additional details.

S1	S2	S3	S4	S5	S6	S7[a]	S8[b]	S9[b]	S10[c]	Selection
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Address 0
										Reset Panel
OFF	OFF	OFF	OFF	OFF						Address 1 (Default)
OFF	ON	OFF	OFF	OFF						Address 2
ON	ON	OFF	OFF	OFF						Address 3
...	...	...	...	...	...	...	...	...	...	...
ON	ON	ON	ON	ON						Address 31
					OFF					Downstream Panel
					ON					Gateway Panel (Default)
						OFF				Allows the User Provided Ethernet IP Address (Default)
						ON				Forces Ethernet IP Address to 192.168.1.150
							OFF	OFF		RS-485_1 termination (EOL) DISABLED
							ON	ON		RS-485_1 termination (EOL) ENABLED (Default)

[a] DIP Switch 7 does NOT require a panel reboot to take effect. This does not affect the USB IP address.
[b] Both DIP Switch 8 and DIP Switch 9 need to be either ON or OFF to be properly configured.
[c] S10 is not used. Default is OFF.
[d] When used in EVL mode, panels ignore S1-S5, and address is assigned in web programming. In this case leave address switches as default.

Technical Support

Need Support? We're Always There For Our Customers!

Contact Technical Support before, during or after a system installation whenever troubleshooting or programming assistance is needed.

Call 1-800-323-4576, Option 2

Email: HASsupport@honeywell.com (For North America Authorized Dealers only)

After Hours? Check out our website:

https://www.honeywellaccess.com/contact/tech/index.html

Technical Support Services

Honeywell Access Systems' technical support group is available to assist Honeywell dealers with issues they may encounter with Honeywell Systems Group hardware and software during system installation.

Product Matrix

Find product information including datasheets, manuals, images, drawings, A & E Specs and other information.

Download Center

Existing customers get valuable software upgrade information.

Technical FAQs

Read frequently asked questions ranging from the basic to the unique along with product bulletins.

Document 800-05780V2
August 2013

Specifications subject to change without notice
For more information see NetAXS-123 Resource CD
Technical support : 1-800-323-4576, Option 2
Honeywell Access Systems
2700 Blankenbaker Pkwy, Suite 150, Louisville, KY 40299 | 1-800-223-9436