Continental Access

Configuring CA4K Napco Integration utilizing a IBR-ZREMOTE or IBR-ZREMOTE-W

(V1.1.x or later)

Date: 03/05/2020

Revision: Rev A

Education   Airport

CA4K

Healthcare   Government

Copyright, trademarks and disclaimer

Table of Contents

IMPORTANT INFORMATION - MUST READ

1) Verify you have a functional CA4K V1.1.x or later system for use with the Napco integration feature and FULL ADMINISTRATOR rights to install the Napco Integration software.

2) Verify the CA4K software license supports at least 1 Napco Server. You must purchase the Napco Integration feature to enable the feature in the software license.

3) The RCM IBR-ZREMOTE or the IBR-ZREMOTE-W unit must be used with the CA4K Napco Integration. If using the IBR-ZREMOTE-W, the Wifi section is not supported with CA4K and the Napco Integration feature. In the IBR-ZREMOTE-W unit, there is an additional plug-in board for the Wifi.

4) The RCM IBR-ZREMOTE and IBR-ZREMOTE-W requires one network connection unlike the older units that required two network connections.

5) The NL-Mod is not supported for communications with the CA4K Napco Integration feature. The only time an NL-Mod must be used, is to update firmware files in the IBR-ZREMOTE. For firmware updates, the communications method for the NL-Mod to the IBR-ZREMOTE is through the network cable and not the serial port.

6) Prior to programming the CA4K for Napco Integration, it is very important to have the Napco Alarm panel and the RCM IBR-ZREMOTE unit pre-programmed before configuring it for the Continental Napco Integration feature. It is highly recommended to consult Napco Technical Support to assist with the initial configuration of the Gem panel and the ZREMOTE. During the initial configuration, do not have the CA4K connected.

7) Once the Napco panel and the RCM IBR-ZREMOTE is configured and communicating with each other, please refer to the steps in this document to configure the CA4K software. If you have an issues regarding the CA4K software, please contact Continental Technical support to assist with programming the CA4K software for Napco Integration.

8) It is highly recommended to install and execute the CA4K Napco Integration on a CA4K workstation. This would require the CA4K software license to support 5 workstations.

9) The IBR-ZREMOTE contains 4 processors and each processor performs certain functions. For the Continental Napco Integration, the RCM section is mainly used.

10) Refer to Appendix A for the supported Napco Alarm panels for the CA4K Napco Integration feature.

Scope

This document contains information regarding the installation and configuration of the Napco RCM IBR-ZREMOTE and IBR-ZREMOTE-W units to be used with the CA4K Napco Integration. In this document and all other referenced documents, the Napco RCM IBR-ZREMOTE and IBR-ZREMOTE-W units will be referenced as RCM, IBR-ZREMOTE or only ZREMOTE.

As previously noted, it is very important to have the Napco RCM IBR-ZREMOTE programmed prior to integrating it with the Continental CA4K software. Please contact Napco Technical Support for assistance with the Napco Quickloader software and programming the Napco Gem panel to communicate with the RCM IBR-ZREMOTE unit.

In addition to this document, please refer to the Napco documents referenced below. The Napco documents provide detailed information regarding the IBR-ZREMOTE configuration.

Prerequisites

Prior to starting the installation and configuration of the CA4K Napco Integration feature, please verify you have the following items:

- CA4K (V1.1.x or later)

- CA4K Software license with Napco Integration enabled (Napco Server = 1 or more)

- DHCP enabled Router

- 1 - Ethernet cable

- 1 - IBR-ZREMOTE unit (Single Network Jack)

- Napco Quickloader Software (v6.3.6 or later)

- If updating any IBR-ZREMOTE Firmware, you need the Napco NL-Mod configuration software (v3.0.5.10 or later)

- Napco Panel Firmware chip V61B or later (if using old Siemans board in GEM Napco panels)

- X255SF_72E.HEX - Napco Panel downloadable Firmware (if using new Sil Lab board in GEM Napco panels)

- IBR_ZREMOTE_RCM_3Q4.hex   (RCM Firmware image)

- Stack_ZWAVE_LUM_7027.hex (ZWAVE firmware image)

- Mac Address on the RCM IBR-ZREMOTE unit

- IBridge ZREMOTE Discover utility (in the CA4K Tools folder)

Related Documents

The following documents are Napco documents and reference the preprogramming of the Napco equipment prior to programming the CA4K Napco Integration.

1. IBR-ZREMOTE-W WI2173A

2. IBR-ZREMOTE-W WI2174A

3. Napco Tech Tip (Updating the IBR-ZREMOTE Firmware using the NL-MOD configuration software)

Firewall Information

The following ports need to be opened on the firewall for the RCM IBR-ZREMOTE units. In addition to these ports, all the required ports for the CA4K software must also be opened (Contact the Network Administrator).

1. Port # 8003 (TCP) - Used for the RCM Wave port

2. Port # 10081 (TCP) – Used for the RCM NL-MOD port

3. Port # 30717 (UDP) -

CA4K RCM IBR-ZREMOTE Controller Diagram

KEYPAD BUS

KEYPAD (4 wire keypad bus)

NAPCO CONTROL PANEL

1 - CAT5 Network Connection is required (Must be plugged in at all times)

BROADBAND MODEM

ROUTER

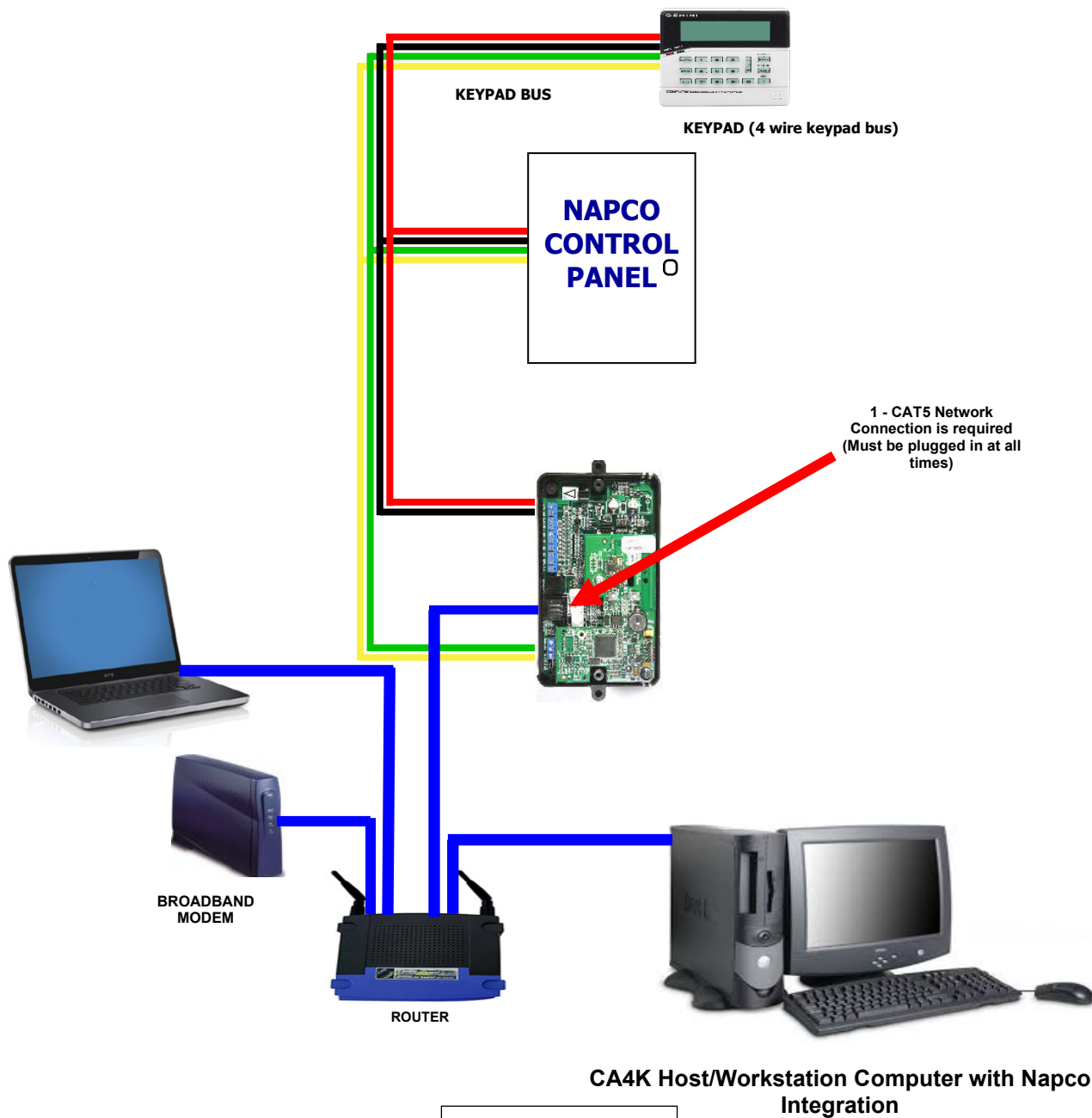**CA4K Host/Workstation Computer with Napco Integration**

Figure 1

STEP 1:

RCM Physical Connection

RCM Physical Connection (Refer to Figure 1)

Connect the RCM IBR-ZREMOTE to the Napco panel and program the Napco panel using the Napco Quickloader software. Additionally, the following connections should be made for the RCM.

1. Keypad buss connection as follows from Napco Panel -> RCM. (For GEMC – connect to Burg keypad bus) RED -> +12V, BLK -> GND ,GRN->GRN ,YEL -> YEL

STEP 2:

Using the CardAccess.IBridge Discover utility

Note: This utility is used to verify the IP Address, Mac Address, Firmware version and Bootloader version in the IBR-ZREMOTE unit. The Mac Address should be used in the CA4K software.

1. Use the CardAccess.IBridge.Discover.exe utility in the CardAccess4K>Tools folder and search for the IBR-ZREMOTE unit (Refer to the figure 2).
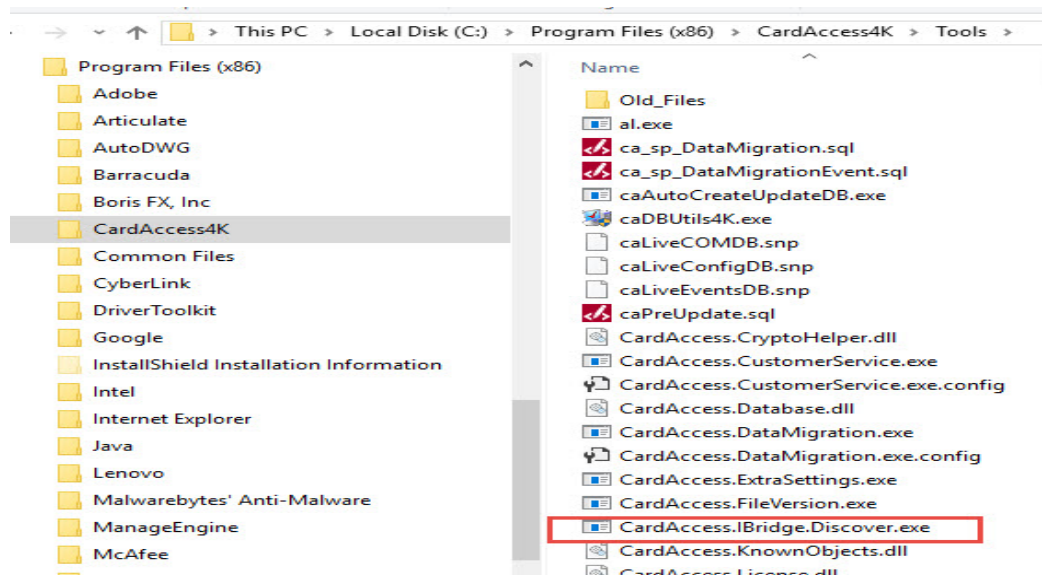
Figure 2.

2.   Upon finding the IBR-ZREMOTE unit, take note of the IP Address, Mac Address, Firmware version and Bootloader version. The Firmware version should be 3Q4 or later and the Bootloader version should be 3.1 or later. If the RCM firmware needs to be updated, the image name is **IBR_ZREMOTE_RCM_3Q4.hex** (Refer to figure 3).
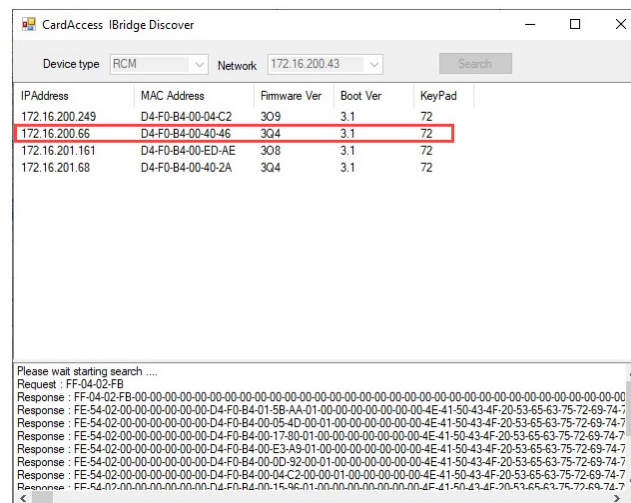

Figure 3.

STEP 3:

Update the RCM IBR-ZREMOTE Firmware using the Napco NL-MOD configuration software

Note: This step is only performed if the IBR-ZREMOTE firmware files have to be updated in the RCM IBR-ZREMOTE unit. Refer to the Napco Tech Tip (Updating the IBR-ZREMOTE Firmware using the NL-MOD configuration software).

1. Using the Napco NL-MOD configuration software, update the firmware images for the RCM IBR-ZREMOTE. The two firmware images are **IBR_ZREMOTE_RCM_3Q4.hex** and **Stack_ZWAVE_LUM_7027.hex**.

STEP 4:

Upgrade Napco Panel Firmware (New chip or downloadable FW image)

Note: This only applies to the residential GEM series alarm panels. The GEMC alarm panels all contain downloadable firmware capabilities.

1. If the Napco Panel contains the older Siemens board with a removable Firmware chip, power down the Napco panel and replace the chip with an updated firmware chip. The removable firmware chip is under the silver can (refer to Figure 4). The required firmware chip **MUST** be a **V61B** or later.

Figure 4.

2. If the Napco Panel contains a new Sill-lab board with flash programmable firmware, download firmware image (X255SF_72B.HEX) using the Napco Quickloader software. The Napco panel with the new Sill-lab board will not contain the removable firmware chip in the previous step (Refer to Figure 5).
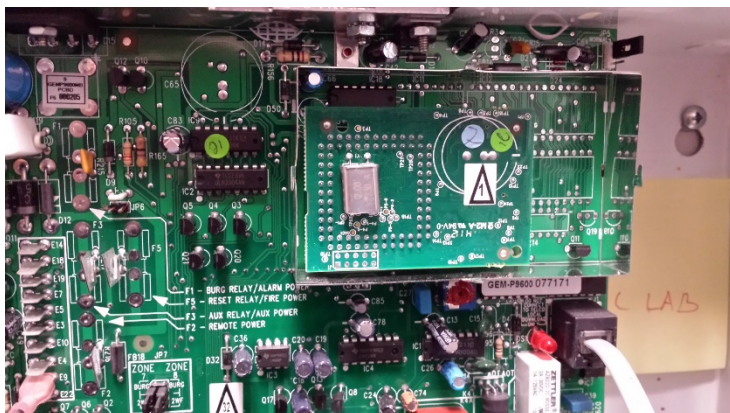

Figure 5.

STEP 5:

Add RCM unit(s) to the Napco Quickloader software (v6.3.6 or newer)

The RCM unit(s) need to be added in using the Napco Quickloader software. On a new system, the RCM (IBridge/IBR-ZREMOTE) unit is configured by **default** to **Keypad Address** 1. It is recommended to keep it at address 1. On existing systems, the installer might need to configure the RCM (IBridge/IBR-ZREMOTE) unit in order to program the next available keypad address. If this must occur, please refer to the Napco documentation for the Web utility to configure the IBR-ZREMOTE. If the address is changed in the IBR-ZREMOTE, then it also must be updated in the Napco Quickloader software. In the Quickloader software, adding a new device is done on the Keypad programming screen (Refer to the Napco documents for keypad address assignments to RCM IBR-ZREMOTE units).

STEP 6:

Programming the CA4K for Napco Integration

Reminder: Before programming the CA4K software, verify the Napco Alarm panel and the RCM IBR-ZREMOTE unit has been programmed with the Napco Quickloader and the Napco NL-Mod configuration software (Please contact Napco Technical Support for assistance).

1. Launch the CA4K software and log in.

2. **Enable Napco Integration** and configure the screens as per the following steps (refer to the Figure 6).

- Click **System/System Settings/Alarm Panel Integration** on the main menu.

- Select **Use NAPCO Panels**

- Select **Enforce NAPCO Permission settings**

- Click **Add NAPCO Server**

- Type in the **Workstation name** (computer UNC name) and **IP Address**
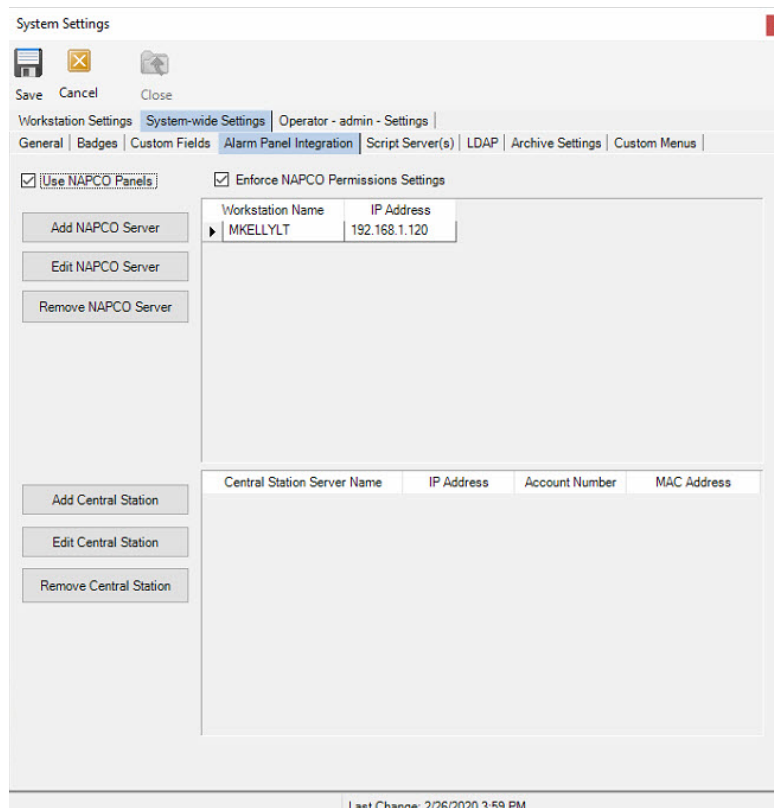
- Click **Save** and **Close**

Figure 6.

3. After Alarm Panel integration is enabled, verify the new **CardAccess.Napco Integration Service** is running (refer to figure 7.)

    Note: If it is not running, start the service and set it to Automatic.

Figure 7.

4. Configure **Napco Panel** screen (General tab) as follows (refer to Figure 8).

- Click **Configuration>Napco>Napco Panels** on the main menu.

  Note: If Napco does not display under the Configuration menu, please make sure Napco is enabled as per the previous step.

- Type in a Descriptive **Device Name**

- Select the Napco **Panel Type** (ex. 3200, 9600, x255)

- Select the **Enabled** checkbox

- Enter the **Panel Security Code**. The Panel Security code can be found in the alarm panel. It is on the firmware chip and also on the metal can shielding the firmware chip

- Select **Admin Partition** for the Partition Group.

- Select the **UNC name of computer** for the **Workstation**. (This is the workstation name in figure 6)

- Select **Zremote** for **Connection type**

- **Network Address** = It is recommended to use the MAC Address of the RCM IBR-ZREMOTE. As an alternative, the IP address can also be used. The MAC address of the RCM IBR-ZREMOTE can be found on the unit and can also be retrieved by performing a search using CardAccess.IBridge Discover utility.

- **Socket Number** = 8003 (This is the port used by the RCM)

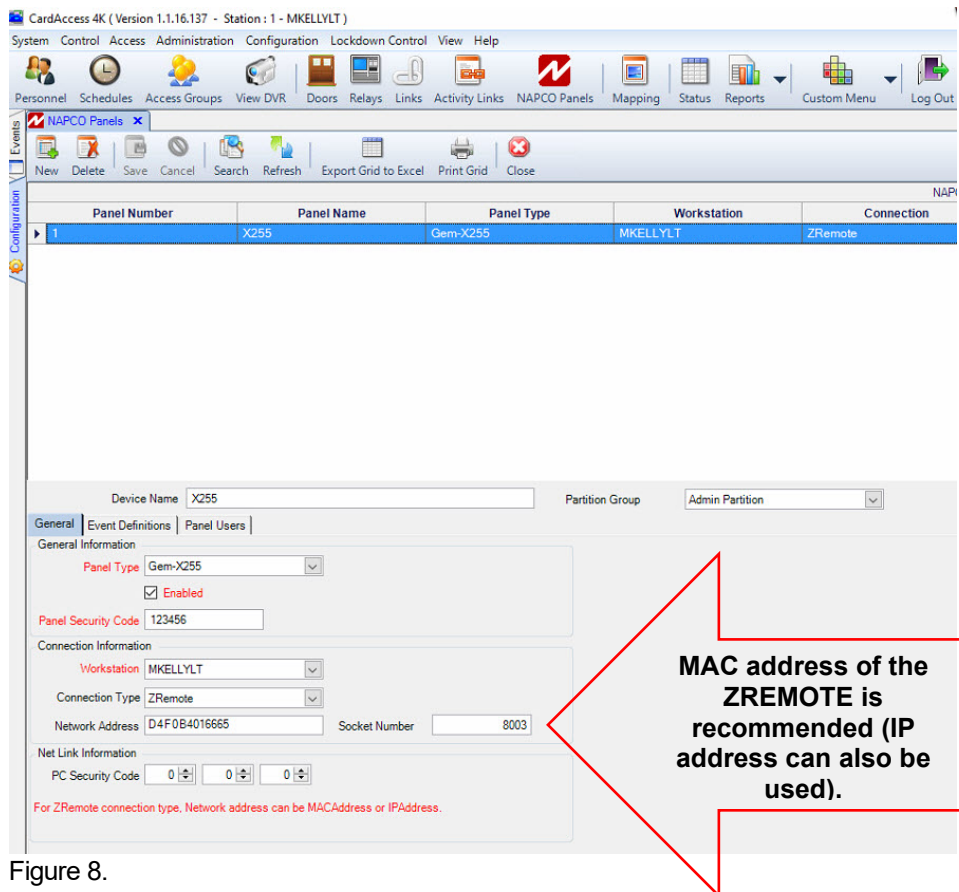- **PC Security Code** = Optional

- Click **Save**

Figure 8.

5. Configure the **Napco Areas** screen (General tab) as follows (refer to Figure 9).

- Click **Configuration>Napco>Napco Areas** on the main menu.

- Type in a Descriptive **Area Name**

- Select the **Configured** checkbox

- Select **Admin Partition** for the Partition Group.

- Select ALL for the **Manual Control Privilege**

  Note: The next four items get configured only if you are using a Napco proxpoint cover with LEDs

- Select **Use Relay Control**

- Select **Use Access Control Panel**

- Select the **Panel** being used for the Prox Cover LED (this is optional)

- Select the **Relay** being used for the Prox Cover LED (this is optional)

- Click **Save**

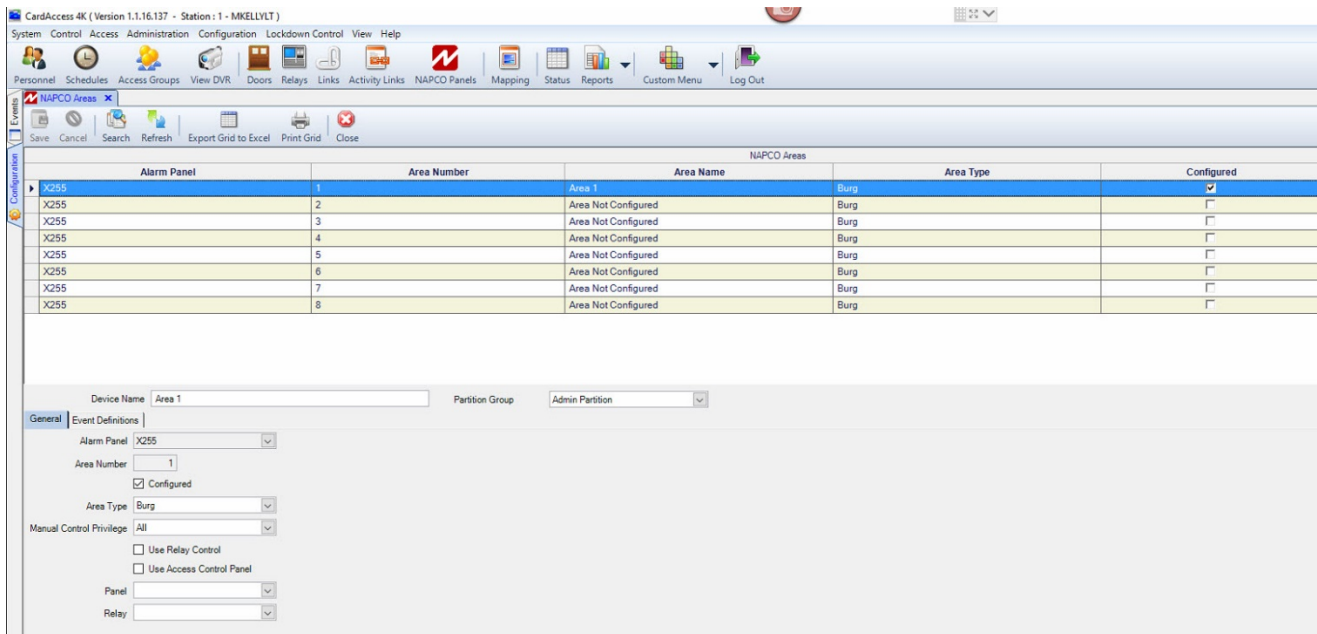   **Note:** Repeat the previous steps for additional areas.

Figure 9.

6. Configure the **Napco Zones** screen (General tab) as follows (refer to Figure 10).

- Click **Configuration>Napco>Napco Zones** on the main menu.

- Type in a Descriptive **Zone Name**

- Select the **Zone**

- Select the **Zone Configured** checkbox

- Select **Admin Partition** for the Partition Group.

- Click **Save**

    Note: Repeat the previous steps for additional Zones.
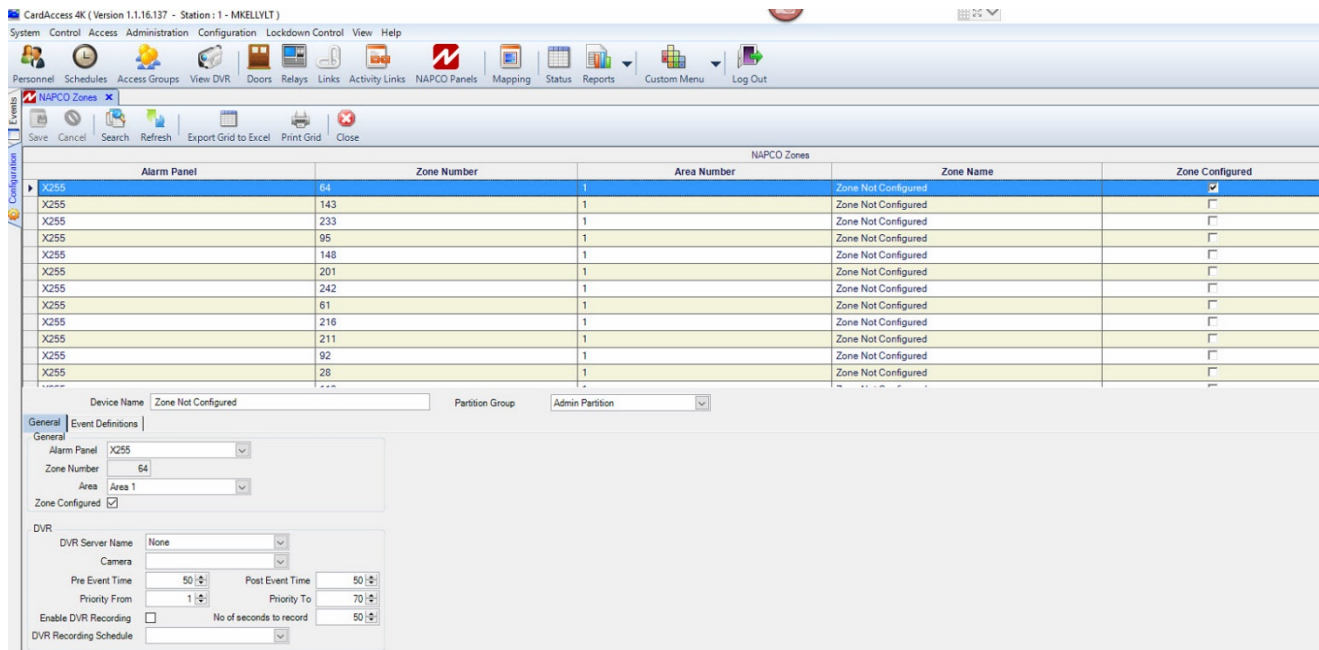

Figure 10.

7. Configure the **Napco Permissions** screen as follows (refer to Figure 11).

- Click **Configuration>Napco>Napco Permissions** on the main menu.

- Type in a Descriptive **Permission Name**

- Select **Admin Partition** for the Partition Group.

- Select Arm and Disarm accordingly as per the permission name:

    Full Control = Arm and Disarm selected

    Arm Only = Arm selected

    Disarm = Disarm selected

- Click **Save**

Note: Repeat the previous steps for additional permissions you wish to create. At the minimum, there should be 3 permissions (Full Control, Arm only and Disarm only)
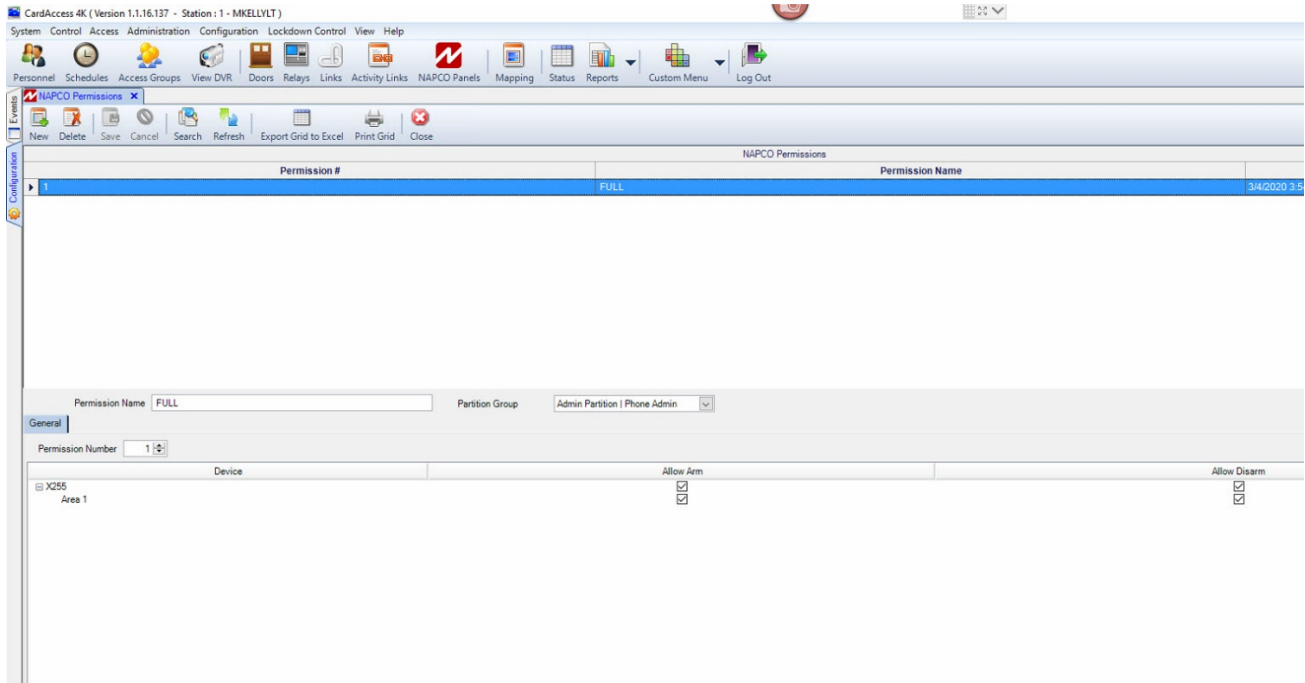

Figure 11.

8. Configure the **CA4K Panels** screen as follows (Refer to Figure 12).

*   Click **Configuration>Panels** on the main menu.

*   In the Panel Configuration screen, select the **NAPCO Panel Link** that was configured under Napco Panels.

    Note: The Continental panel to be edited is the panel the arming/disarming reader is attached to.
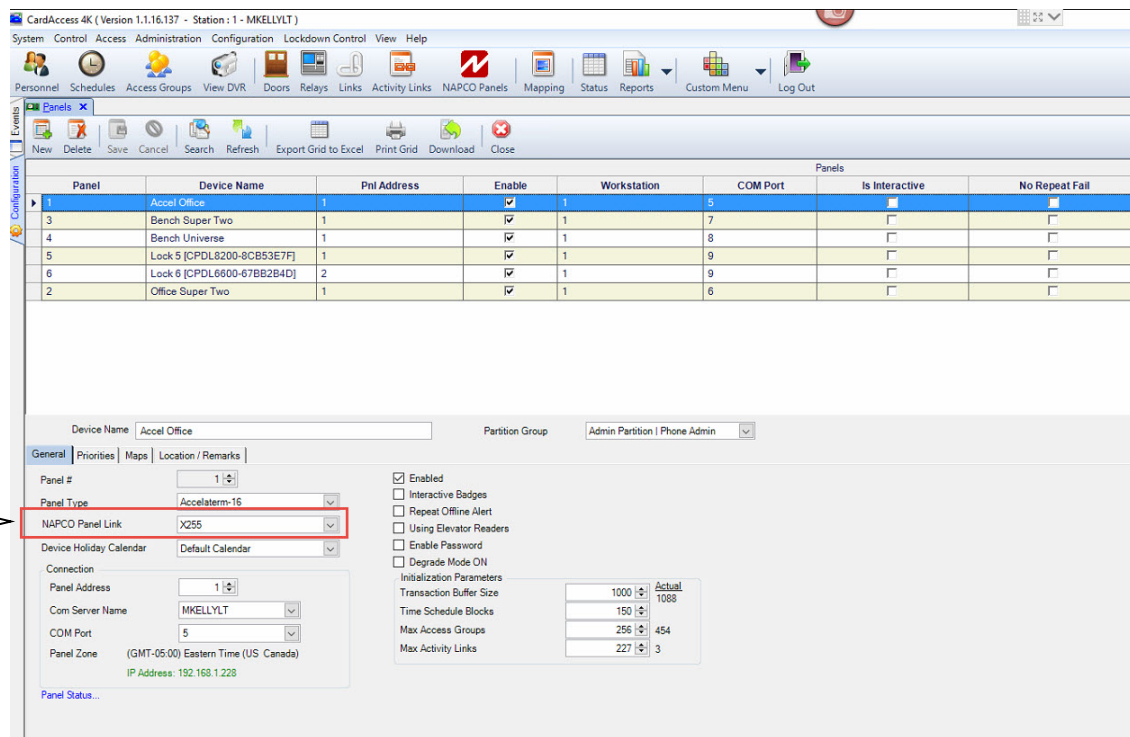
*   Click **Save**

Figure 12.

9. Configure the **CA4K Readers** screen as follows (Refer to Figure 13).

- Click **Configuration>Readers** on the main menu.

- Select **Admin Partition** for the Partition Group.

- Select **Remote Control** tab

- In the Reader Configuration screen, select the Napco Area to control (this is the area this reader will arm/disarm)
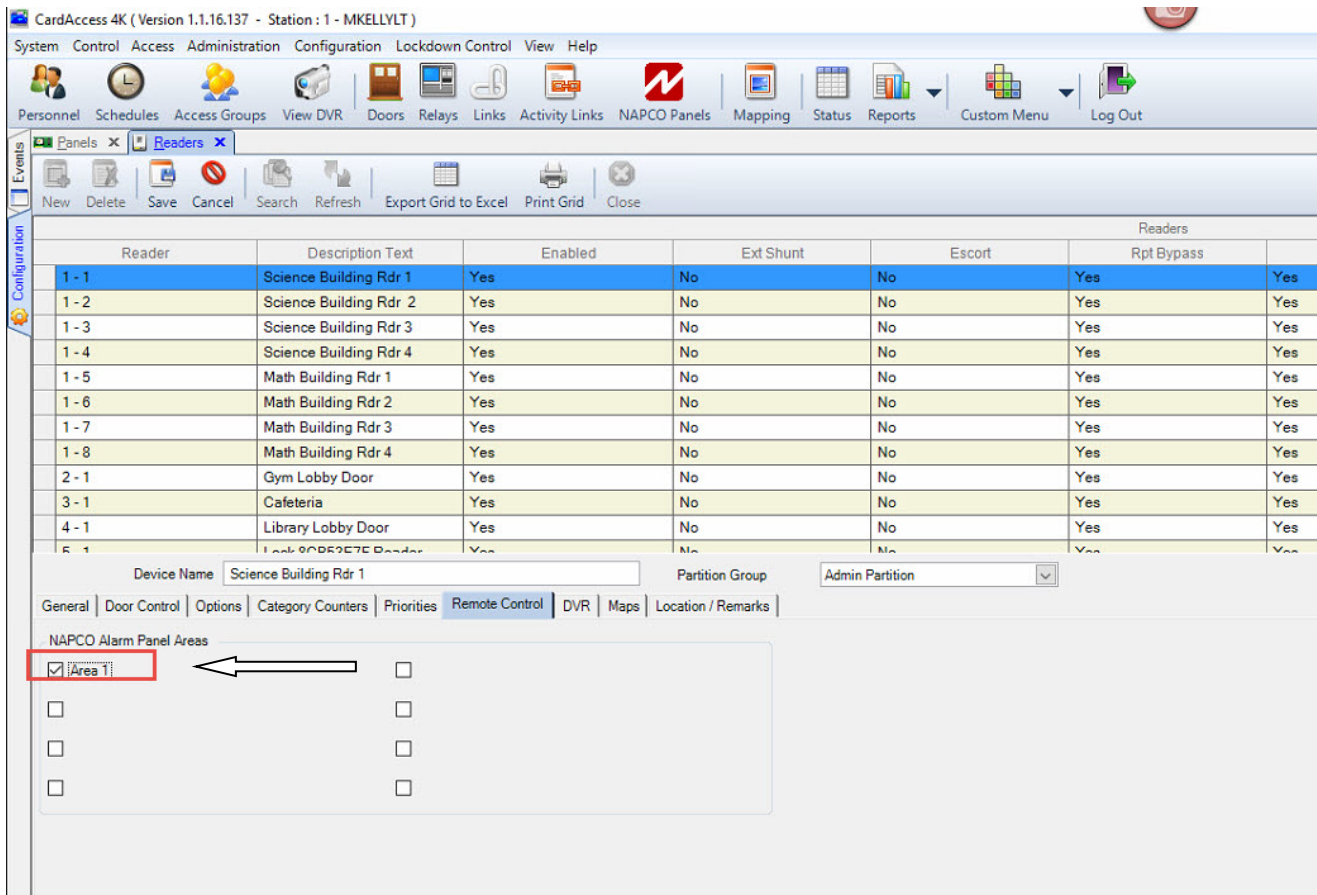
- Click **Save**

Figure 13.

10. Configure the **CA4K Personnel** badge record for the correct **NAPCO Permission** (Refer to Figure 14).

- Click **Configuration>Personnel** on the main menu.

- Select **Admin Partition** for the Partition Group.

- Select the badge being used for Napco arming and disarming

- Click **Control tab**

- Select the predefined **NAPCO Permissions** to be assigned to the badge
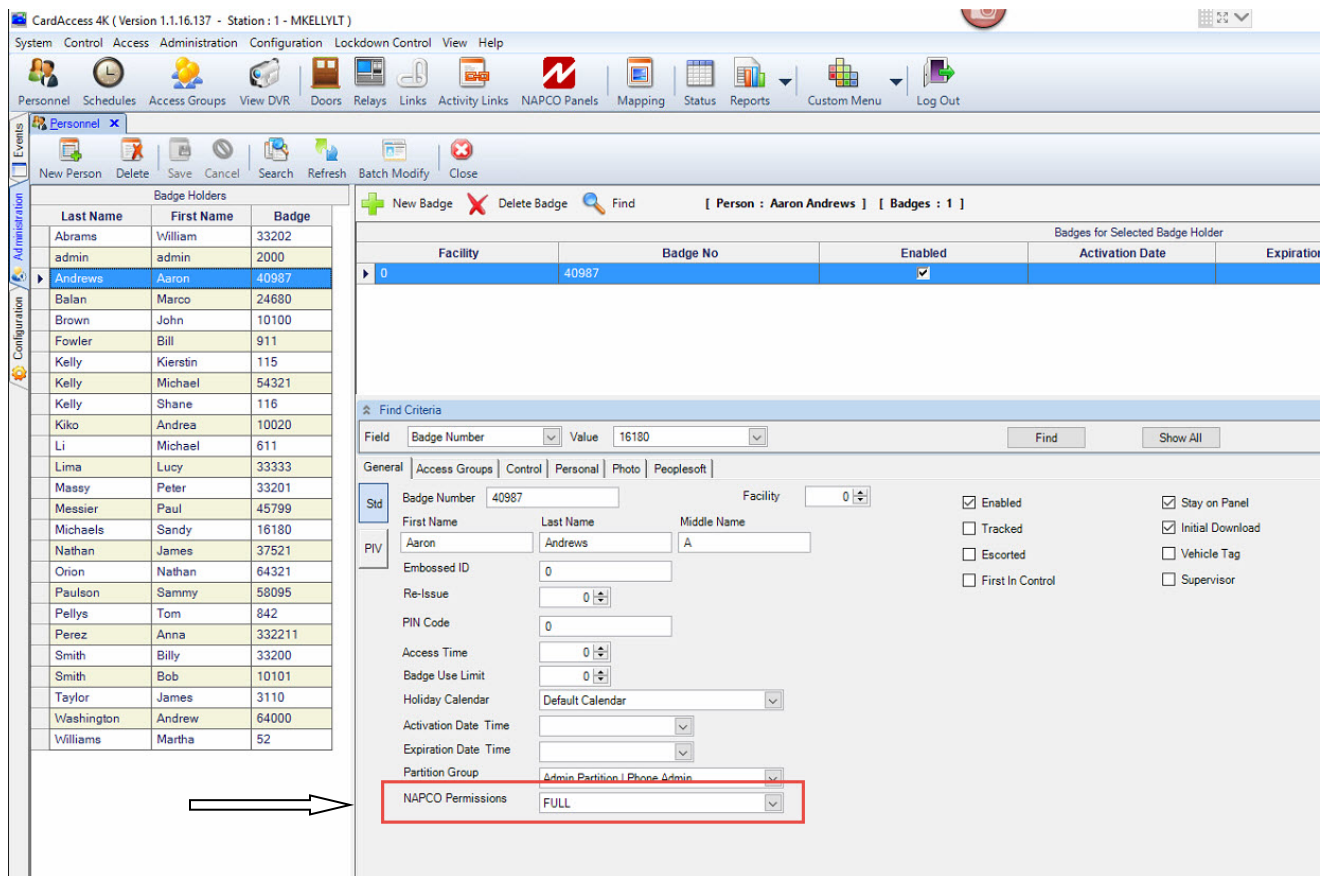
- Click **Save**

Figure 14.

NOTES:

- The permissions assigned to the badge will determine if a badge can only arm, disarm or perform both.

- In addition to the Napco permissions, the badge must also have a valid access group to access the reader that is configured above in step 9.

Appendix A

Supported Napco Panels for CA4K Napco Integration

//The following 3 Napco panels are residential grade and are supported in CA4K with the Napco Integration feature.

GEM-P3200

GEM-P9600

GEM-X255

The following GEMC Napco panels are commercial grade Napco panels. These units are UL compliant.

Note: If you use an RCM IBR-ZREMOTE unit for the CA4K Napco Integration, you will lose the UL compliancy. As of Feb 2020, the RCM IBR-ZREMOTE unit is not UL compliant.

GEMC-3200 (Combo unit with a Red commercial enclosure)

GEMC-9600 (Combo unit with a Red Commercial enclosure)

GEMC-255 (Combo unit with a Red Commercial enclosure)

GEMC-128 (burg only with a white commercial enclosure)

NOTE- the Combo units can contain only burg or fire, or both burg and fire)