



NAPCO

333 Bayview Avenue

Amityville, New York 11701

For Sales and Repairs, (800) 645-9445

For Technical Service, (800) 645-9440

Publicly traded on NASDAQ Symbol: NSSC

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QUICK START

MAPPING FIRE SLC OUTPUT DEVICES

WI1884 11/11

SYSTEM OUTPUT OVERVIEW

The Gemini C-Series control panel motherboards have the ability to provide up to seven (7) integral programmable outputs, four (4) optional Burglary outputs requiring the GEMC-BM (see WI1701) or GEMC-BM/PS (see WI1700), and 88 additional external Fire outputs requiring external modules and devices. **Fire outputs** are available on the GEMC-FW-SLC Fire SLC (*Signaling Line Circuit*) modules for the FWC-FSLC-SOM1 and FWC-FSLC-RM2 devices. This Quick Start Guide will focus on configuring and programming these two Fire devices using PCD-Windows Quickloader download software.

SLC OUTPUT DEVICES

For additional information regarding the installation and programming of the GEMC-FW-SLC Fire SLC Module, see WI1647. The two devices that may be wired to the GEMC-FW-SLC Fire SLC module are:

- **FWC-FSLC-RM2** - Dual Relay Module provides two unsupervised independently configurable Form C contacts per address, Contacts rated 1.0A @ 30VDC or 0.5A @ 125VAC. For more information, see WI1715.
- **FWC-FSLC-SOM1** - Supervised Output Module, provides a single supervised Class B NAC output rated for 2A/30VDC (requires a listed power supply, properly installed, to power the output). For more information, see WI1717.

Each GEMC-FW-SLC can support *three* relay groups, allowing up to a maximum of 24 FWC-FSLC-SOM1's and/or FWC-FSLC-RM2's on the GEMC-FW-SLC.

To be used in the system, the FWC-FSLC-RM2 and the FWC-FSLC-SOM1 must be pre-programmed prior to installation to the correct internal device address using the FWC-FSLC-PROG2 hand held programming tool (see WI1738). The SOM / RM2 must be programmed with a **FWC-FSLC-PROG2** hand held programmer as 126 to 103. (The progression is as follows: 126 is Relay #1, 125 is relay #2 ... 103 is relay #24). The address (126-103) is determined by the number of the External Relay as directed by the **GEMC-FW-SLC EXTERNAL OUTPUT ASSIGNMENT** chart.

Note: If two relays are added to the FWC-FSLC-RM2, the second relay must be mapped to the same relay group as the first relay. Each SLC can have all three relay groups enabled, but the system can not have duplicate relay group address numbers on the same or different busses.

FIRE SLC PC BOARD CONFIGURATION

The GEMC-FW-SLC module must be connected to the correct SLC jack on the Gemini C-Series control panel motherboard via its supplied 4-wire harness. In addition, there are two mounting locations in the control panel hous-

ing for the GEMC-FW-SLC module(s). If the maximum of two GEMC-FW-SLC modules are connected to the control panel, each module must be individually addressed (via the **ADDR** dip switches) to allow the control panel to identify each module correctly. If only one GEMC-FW-SLC module is used inside the enclosure, the #1 **ADDR** dip switch must be pushed up and the #2 must be pushed down. If a second GEMC-FW-SLC module is used inside the enclosure, the #1 **ADDR** dip switch must be pushed down and the #2 must be pushed up.

In addition, the associated GEMC-FW-SLC PC board (addressed as 1 or 2) must have the **RELAY** dip switches set to the correct group number(s). The **RELAY** dip switches are located on the right side of the GEMC-FW-SLC module printed circuit board and provide for up to 11 relay groups. Only the first 5 selections can be used, as follows:

- If devices are used in the first relay group (external relay outputs 1-8), switch 1 must be set (pushed up).
- If devices are used in the second relay group (external relay outputs 9-16), switch 2 must be set (pushed up).
- If devices are used in the third relay group (external relay outputs 17-24), switch 3 must be set (pushed up).
- If devices are used in the fourth relay group (external relay outputs 25-32), switch 4 must be set (pushed up).
- If devices are used in the fifth relay group (external relay outputs 33-40), switch 5 must be set (pushed up).

The devices must also be wired correctly to the GEMC-FW-SLC, as shown on their individually printed installation instructions.

QUICKLOADER MAPPING PROCEDURE

The panel must first be programmed to look for the GEMC-FW-SLC module in its correct address location as set by its dip switches and its connector. To do this, use PCD-Windows Quickloader Download software.

1. Enable the GEMC-FW-SLC PC Board

In the **System Assignment** screen, click the **RF Receivers/SLC** tab, click the **SLC Fire Address 1** radio button. If a Class A style wiring to the SLC device was used, check the **Class A** checkbox. If Class B style wiring to the SLC device was used, uncheck the **Class A** checkbox. Click **OK** to save.

Note that the output devices FWC-FSLC-RM2 and FWC-FSLC-SOM1 can ONLY be mapped to a control panel external output using PCD-Windows Quickloader download software. With PCD-Windows, the selected panel External Output must be enabled before being programmed to

activate upon appropriate events. Once programmed, the remaining steps detail the assignment of features to the External Outputs. Proceed as follows:

2. Enable Panel External Output(s)

Open the **NAC/Output Assignment** screen, click the **NAC/Output Assignments** tab.

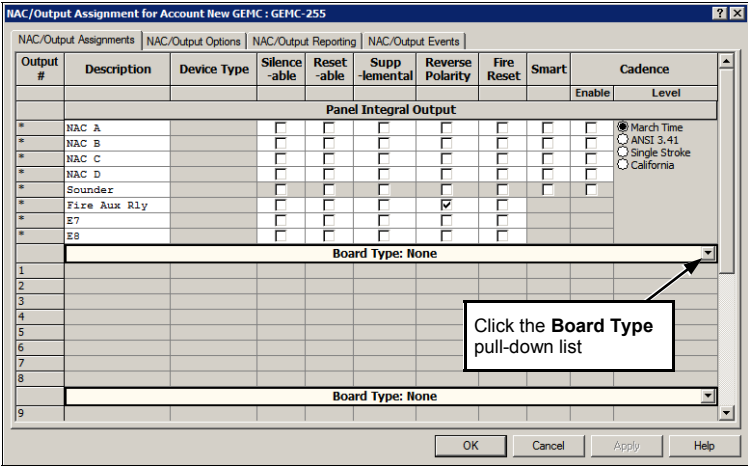
- a. Shown below the **Panel Integral Output** is the first **Board Type** pull-down list. Click to open the pull-down list and select **"Fire Output on Fire SLC 1"** or **"Fire Output on Fire SLC 2"** in the associated output group.

- A **"R2M on 2nd Relay"** may not be the first device of an output group.
- If **"R2M on 2nd Relay"** is selected, it must be immediately preceded by an **"R2M on 1st Relay"** with the same device address.

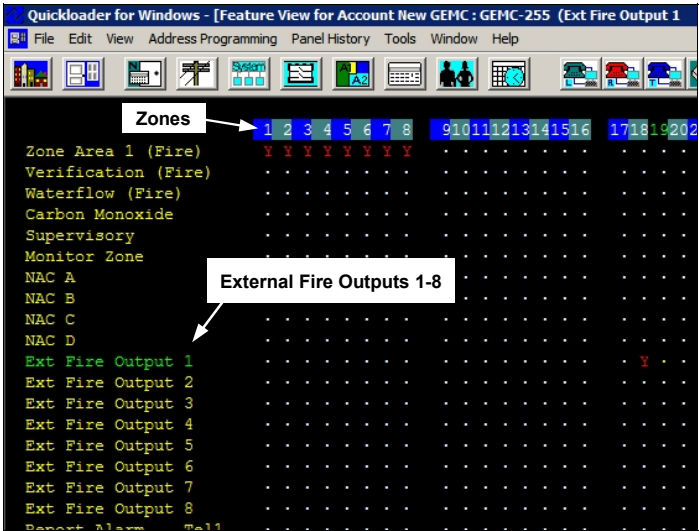
Note: The default text **"Ext Fire Rel 1"** in the **Description** column can be changed, if desired. For example, **"Ext Fire Rel 1"** can be changed to **"Front Lobby Fire Bell"**. The new text will appear in subsequent Quickloader screens.

3. Program the selected panel External Output(s) to activate on the appropriate event(s).

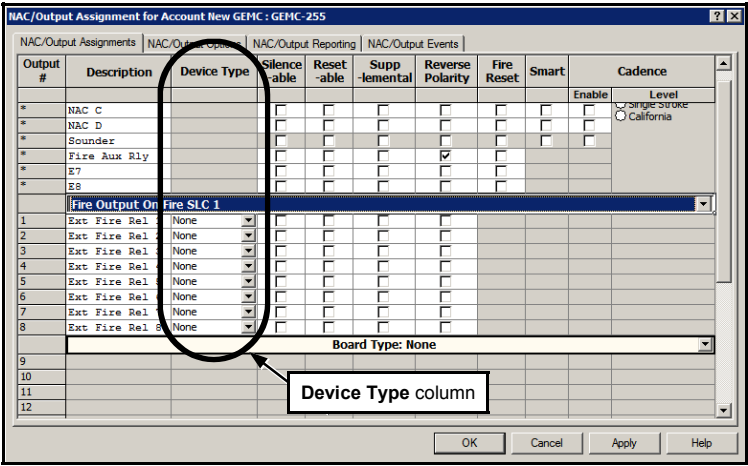
For External Outputs 1-8, open the **Feature View** screen and program the selected **External Fire Output** to activate any zone numbered 1-255 upon alarm (or you can use the **Zone Assignment** screen).



Enable Panel External Outputs in the **NAC/Output Assignment** tab

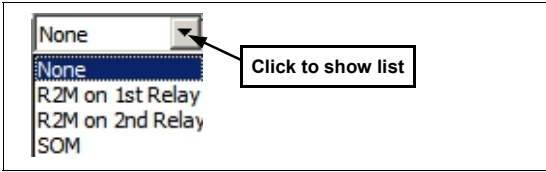


External Fire Outputs in the **Feature View** screen



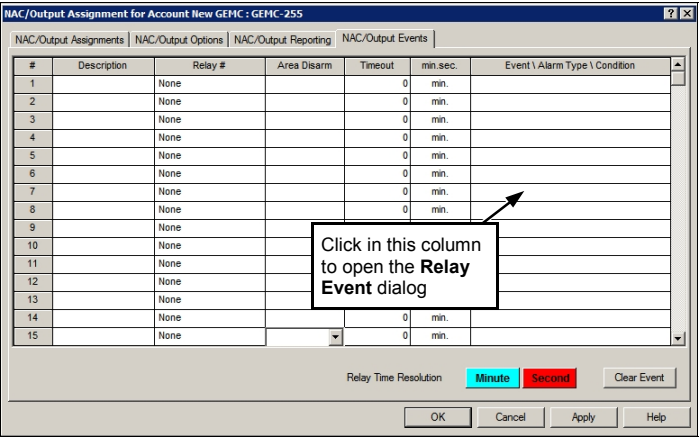
Device Type column in the **NAC/Output Assignment** tab

- b. In the **Device Type** column, pull-down lists appear allowing the selection of devices.



Device Type column pull-down list

Select the **Device Type**, noting the following rules:



NAC/Output Events tab

Relay outputs can be programmed to activate on a particular event or combination of events. To pro-

gram, click in the "Event\Alarm Type\Condition" column for the desired relay "row", and the Relay Event dialog appears:

The "Relay Event" dialog box is shown. It has a title bar "Relay Event" and a close button. Inside, there's a section "Activate on Event" with a list box containing various events. "Area 1 Gen. Alarm" is selected. To the right, there are three radio buttons: "Show All", "Show Fire Only" (selected), and "Show Burg Only". Below these are two list boxes. The "Alarm Type" list box contains "Fire", "WtrFlow", "SpkISup", and "Monitor". The "Condition" list box contains "Alarm", "Restore", "Trouble", and "Trouble Restore". At the bottom are "OK" and "Cancel" buttons.

Shown above is a typical example, where an "Area 1 General Alarm" activates the selected relay; the **Alarm Type (Fire)** and **Condition (Alarm)** are also programmed.

4. Assign the control panel External Output(s) features as displayed in the *NAC/Output Assignments* tab and in the *NAC/Output Reporting* tab.

The "NAC/Output Assignment" screen is shown. It has a title bar "NAC/Output Assignment for Account New GEMC: GEMC-255" and a close button. Below the title bar are four tabs: "NAC/Output Assignments", "NAC/Output Options", "NAC/Output Reporting", and "NAC/Output Events". The "NAC/Output Assignments" tab is active. It contains a table with columns: "Output #", "Description", "Device Type", "Silence-able", "Reset-able", "Supp-lemental", "Reverse Polarity", "Fire Reset", "Smart", "Cadence", "Enable", and "Level". The table has several rows, including "NAC C", "NAC D", "Sounder", "Fire Aux Rly", "E7", "E8", and a section for "Fire Output On Fire SLC 1" with rows for "Ext Fire Rel 1" through "Ext Fire Rel 8". The "Fire Reset" column is highlighted. At the bottom are "OK", "Cancel", "Apply", and "Help" buttons.

Programmable attributes in the *NAC/Output Assignment* screen

Note: Programmable options not available (such as "Fire Reset" for *External Fire Relays 1-8*) will not be displayed for the specific output.

- If the devices wired to the SLC device Output are **intended to turn off when [SILENCE] is pressed** (audible sounding appliances) then program SILENCE-

ABLE, but do not program SUPPLEMENTAL, REVERSE POLARITY or FIRE RESET.

- If the devices wired to the SLC device Output are **intended to remain on until all fire alarm conditions restore** (for example, a strobe) then do not program SILENCEABLE, SUPPLEMENTAL, REVERSE POLARITY or FIRE RESET.
- If the devices wired to the SLC device Output are **intended for supplementary devices that will turn off when [RESET] is pressed**, program SUPPLEMENTAL, but do not program SILENCE or REVERSE POLARITY.
- If the devices wired to the SLC device Output are **intended to be normally energized and have power removed when a fire alarm occurs and power restored after fire alarms are reset** (for example, a fire door latch), then program REVERSE POLARITY, do not program SILENCE or SUPPLEMENTAL.

GEMC-FW-SLC EXTERNAL OUTPUT ASSIGNMENT CHART

EXTERNAL OUTPUT #	DESCRIPTION	RLY DIP SWITCH SET					DEVICE TYPE			
		1	2	3	4	5	NONE	RM2 RLY1	RM2 RLY2	SOM
1		Y								
2		Y								
3		Y								
4		Y								
5		Y								
6		Y								
7		Y								
8		Y								
9			Y							
10			Y							
11			Y							
12			Y							
13			Y							
14			Y							
15			Y							
16			Y							
17				Y						
18				Y						
19				Y						
20				Y						
21				Y						
22				Y						
23				Y						
24				Y						
25					Y					
26					Y					
27					Y					
28					Y					
29					Y					
20					Y					
31					Y					
32					Y					
33						Y				
34						Y				
35						Y				
36						Y				
37						Y				
38						Y				
39						Y				
40						Y				