



Integration Note

Manufacturer:	Napco
Model Number(s):	GEM-X255
ELAN Versions:	4.0 Build 220 and later
Comments:	Panel Firmware V20 and later
Document Revision Date:	03/28/2013

OVERVIEW AND SUPPORTED FEATURES

The **Napco** panel integrates with the **g!** system using an RS-232 serial connection. The panel requires the PCI-MINI connector to provide this RS-232 connection to the panel.

IMPORTANT: On a legacy HomeBrick install the Napco panel must be connected to one of the two DB9 serial ports on the System controller with a cable run of no more that 50 feet. DO NOT connect the Napco panel to a SerialBrick or a USB – Serial Adapter.

IMPORTANT: The GEM-RS232 automation kit is required to connect the security panel to the system controller. The kit included an RS-232 converter and a 6C modular cable for connections. See the diagram below and Napco documentation for details.

IMPORTANT: YOU MUST HAVE THE MASTER SECURITY CODE FOR THE PANEL. The X255 panel includes a chip with a unique Master Security Code: the code is printed on a label included with the panel, but it may not always be affixed to the chip. DO NOT LOSE THIS CODE

THESE PANELS SUPPORT THE FOLLOWING FEATURES:

Arm – Disarm: Arm and disarm from the Viewer interface is supported. Status information is available for all partitions.

Auto Arm: Arming as a System Command from the Event Mapper is supported. By default, automatic arming is disabled in the Configurator.

Zone Status: Zone status information is available for all zones (in any partition).

History View: The history view is properly supported on any Viewer.

Auto Zone and Partition Detection: The **g!** system can automatically detect the number of Partitions and the zone names, as well as zone partition assignments.

THESE PANELS DO NOT SUPPORT THE FOLLOWING FEATURES:

Arm Modes: The system can only be armed in one mode.

Zone Bypass Status: Zones can be bypassed from the Viewer interface, but any zone bypassed from the Napco keypad will not appear as a bypassed zone in the Viewer interface.

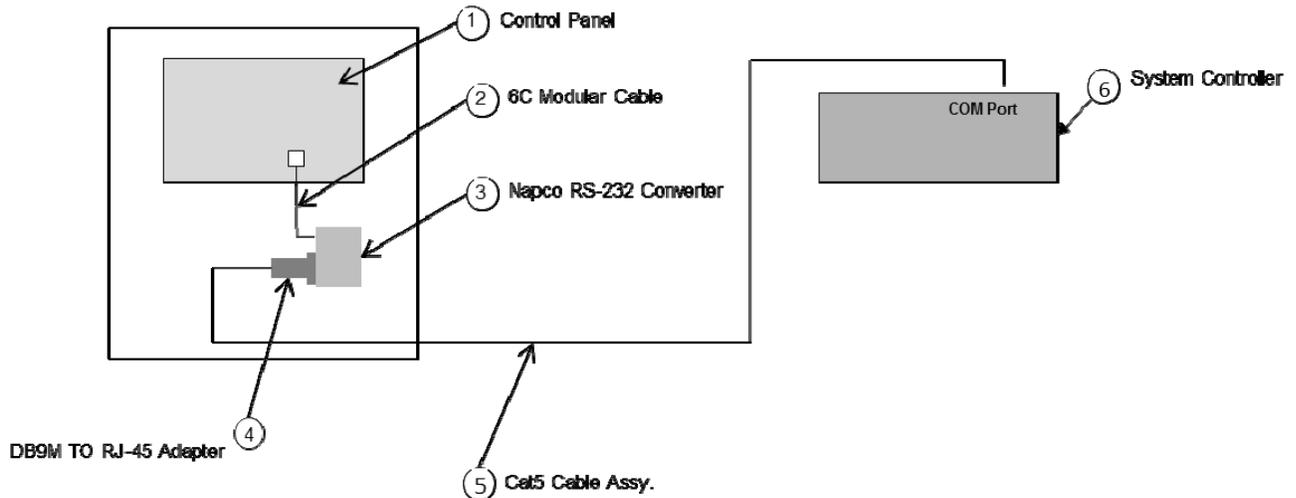
Control on Extender Com Port: Napco may not be used with HC Extenders.

Any feature not specifically noted as supported should be assumed to be unsupported.

INSTALLATION OVERVIEW

1. Install the security system including the GEM-RS232 Automation kit.
2. Run a Cat5 wire from the **g!** system to the security panel and test the cable.
3. Test the security panel, zone sensors and keypads for functionality.
4. Connect the **g!** system to the panel electrically. Refer to **Connection Diagram** below. You must connect the panel to one of the COM ports at the System controller: **DO NOT USE A LEGACY SERIAL BRICK TO CONNECT TO THE NAPCO PANEL.**
5. Configure the **g!** system controller communication device and security panel and confirm communication between the panel and the **g!** system controller.
6. Test the arming and disarming capability from a computer or touch screen and confirm history function.

CONNECTION DIAGRAM



BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	DB9M TO RJ-45 Adapter	TEK	DB9M-RJ45	RS-485	DB9M	
1	6C Modular Cable	TEK	6C-0001	RS-485	6C	
1	Napco RS-232 Converter	TEK	RS-232	RS-232	DB9M	
1	Cat5 Cable Assy.	TEK	CAT5	RS-485	CAT5	
1	Control Panel	TEK	CP	RS-485	DB9M	
1	System Controller	TEK	SC	RS-485	COM	

PANEL PROGRAMMING

You must install the chip that is included with Automation Kit if needed.

Note: Newer Napco panels may come with the chip pre-installed.

If programming utilizing the Napco software, ensure the TCP/IP Communications box is **NOT** checked.

No further programming steps are required.

COMMON MISTAKES

1. Using the CAT5/DB9 adapters provided by Napco. These adapters will not work with the **g!** system controller. You must use the adapters provided by ELAN for proper communication.
2. Failing to test the Cat5 cable assembly. It is easy to make a mistake when terminating the Cat5 cable with the RJ-45 connectors. Always use a LAN tester to check for continuity and shorts.
3. Using a Cat5 patch cable without all 8 conductors. Some Ethernet patch cables only have the 4 conductors (1,2,3,6) needed for Ethernet communications. These cables will not work as patch cables for RS-232 communications. Visually inspect the clear plastic connectors to determine if all 8 wires are present.
4. Failing to plug the Cat5 cable assembly into the correct port. Make sure the RJ-45 connector is plugged into the same port (COM1, 2, 3 or 4) that is specified in the Configurator.
5. Failing to plug the Network Assembly serial cables and USB cables into the correct ports on the **g!** system controller. Check that the COM port printed on the grey ribbon cables (COM1 and COM2) as well as the USB cables (COM3 and COM4) match the port numbers as printed on the **g!** system controller label.
6. Failing to connect the Napco panel with a serial run of less than 50 feet.
7. Failing to connect the Napco panel with either COM1 or COM2. Connecting to COM3, COM4, COM5 or COM6 will seem to work but will cause problems with the communication over time. DO NOT use these ports.