Partner: Napco
Model: Gemini X255
Device Type: Security System

## GENERAL INFORMATION

SIMPLWINDOWS NAME:	Napco Gemini X255
CATEGORY:	Security
VERSION:	5.1
SUMMARY:	Control arm/disarm/bypass/relays and provide zone status
GENERAL NOTES:	This module will allow control of arming/disarming and status for all 8 available areas. For each area, a two line text display is also provided. This display will mimic the display on the Napco keypad, although it may be 1 message behind what's being shown on the Napco keypad. This is a limitation of the Napco system. There are also feedback signals for each of the LED's on the Napco keypad (armed, status, bypassed, etc). This macro will also provide feedback for all 255 zones for open zones, shorted zones, protected zones, and bypassed zones. It also allows any of the 255 zones to be bypassed. Once a zone has been manually bypassed, the only way to unbypass it is to disarm the system. Real-time status information is provided by Napco for open zones, shorted zones, and protected zones. However for bypassed zones, the Crestron system has to request the status, unless a zone is bypassed from the Napco keypad. The macro will do this automatically provided that the Enable_Auto_Polling_Remotely_Bypassed_Zones input is high. Whenever a Bypass/arm/disarm command is sent, the Napco will be polled for bypass status afterward. This macro also provides control of all 96 relays accessible on the Napco system. Each relay can be opened or closed. No status is provided. This macro has six parameter fields used for entering the 6 digit Napco Master Code. The parameters entered here must match the actual master code of your system, otherwise nothing will work. The digits should be entered as decimal numbers from 0 to 9. so for a code of 112233, the correct parameters would be 1d, 1d, 2d, 2d, 3d, 3d respectively. Note that this module uses Simpl+ and can therefore only be used on a Generation CNX or 2-Series control system. Also note that the cts and rts signals on the com port are necessary and must be connected to the cts and rts signals on the module. Also note that any unused digital outputs of this module can be defined as 0. There is no need to use dummy signal names for unused digital outputs. This applies to this module only. For all other modules, you should not define any outputs as 0...you should use dummy signal names. Also note that all inputs are to be momentary, as if from button presses, except where noted differently. Note: The Napco system must be running X255 v60a10 firmware in order to work with this module.
CRESTRON HARDWARE REQUIRED:	C2I-COM, ST-COM, C2-COM-*, CNMSX-PRO or PRO2

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SETUP OF CRESTRON HARDWARE:	RS232 Baud: 9600 Parity: Even Data Bits: 8 Stop Bits: 1 RTS and CTS should not be defined on the com port definition, but they must be connected to the "rts" and "cts" signals on the module.
VENDOR FIRMWARE:	X255 v60a10
VENDOR SETUP:	You must use the Napco GEM-RS232 interface to connect to the Crestron system.
CABLE DIAGRAM:	CNSP-141

CNSP-141
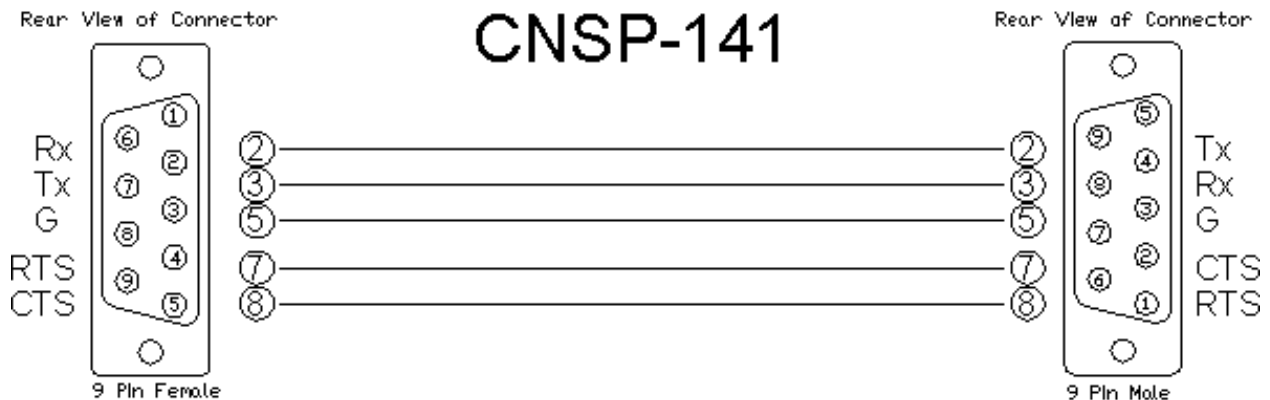
CONTROL:

Area_*_Arm/Disarm	D	Pulse to arm/disarm each of the 8 areas.
Close/Open_Burg	D	Pulse to control the Burg relay.
Close/Open_Fire	D	Pulse to control the Fire relay.
Close/Open_Aux	D	Pulse to control the Aux relay.
Close/Open_Reset	D	Pulse to control the Reset relay.
Reset_Panel	D	Pulse to reset panel.
Restart_Panel	D	Pulse to restart panel.

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Poll_Shorted_Zones	D	Pulse to request all of the shorted zones. Should only be necessary upon startup of the system, since any changes will be automatically sent by the Napco system.
Poll_Open_Zones	D	Pulse to request all of the open zones. Should only be necessary upon startup of the system, since any changes will be automatically sent by the Napco system.
Poll_Protected_Zones	D	Pulse to request all of the protected zones. Should only be necessary upon startup of the system, since any changes will be automatically sent by the Napco system.
Poll_Bypassed_Zones	D	Pulse to request all of the bypassed zones.
Enable_Auto_Polling_Remotely_Bypassed_Zones	D	When high, the Napco will be polled for the currently bypassed zones 5 seconds after a bypass button is pressed.
Bypass_*	D	Pulse to bypass a zone. These buttons will not unbypass zones. To unbypass, you must disarm the system.
Relay_*_Open/Close	D	Pulse to open or close any of the 96 available relays
cts	D	This input must be connected to the [cts] output of the com port being used to communicate with the Napco system
From_Device	S	Serial data signal to be routed from a 2 way com port.

FEEDBACK:

Area_*_Entry_Or_Exit_Message	D	Mimics the Entry/Exit message on the Napco display.
Area_*_Audio_Message	D	Mimics the Audio message on the Napco display.
Area_*_Fire_Trouble_Message	D	Mimics the fire trouble message on the Napco display.
Area_*_Fire_Message	D	Mimics the fire message on the Napco display.
Area_*_Trouble_Message	D	Mimics the trouble message on the Napco display.
Area_*_Bypass_Message	D	Mimics the bypass message on the Napco display
Area_*_Green_Status_LED	D	Mimics the green status LED on the Napco keypad.
Area_*_Red_Armed_LED	D	Mimics the Red armed LED on the Napco keypad.
Area_*_Line_1_Text	D	Mimics the first line of text displayed on the Napco keypad.
Area_*_Line_2_Text	D	Mimics the second line of text displayed on the Napco keypad.
Zone_*_Is_Shorted	D	Indicates which of the 255 zones are shorted.

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Zone_*_Is_Opened	D	Indicates which of the 255 zones are opened.
Zone_*_Is_Protected	D	Indicates which of the 255 zones are protected.
Zone_*_Is_Bypassed	D	Indicates which of the 255 zones are bypassed.
rts	D	This output must be connected to the [rts] input of the com port being used to communicate with the Napco system
To_Device	S	Serial commands to be routed to a 2 way com port.

PARAMETERS:

Master_Code_*	P	Use these fields to setup the master code of the Napco system. For a master code of 11223, use 1d, 1d, 2d, 2d, 3d, 3d.

TESTING:

OPS USED FOR TESTING:	v4.001.1012
SIMPL WINDOWS USED FOR TESTING:	2.11.10
DEVICE DB USED FOR TESTING:	20.07.005.00
CRES DB USED FOR TESTING:	20.04.008.00
SYMBOL LIBRARY USED FOR TESTING:	593
SAMPLE PROGRAM:	Napco Gemini X255 v5.1 Demo PRO2.smw
REVISION HISTORY:	v1 – Initial release v4 – Modified RTS/CTS logic to make it more robust. Added Panel-Reset, Panel-Restart. v5.0 – Added change for \x00's occasionally received from the Napco unit, split up request sequence for remotely and locally bypassed zones due to Napco limitation. v5.1– Modified to work with Napco X255 v60a10 firmware.