

**Partner:** Network Technologies Inc.  
**Model:** ST-2U-RS, UNIMUX-2X8, SM-8X2-AV-LCD  
**Device Type:** Switcher

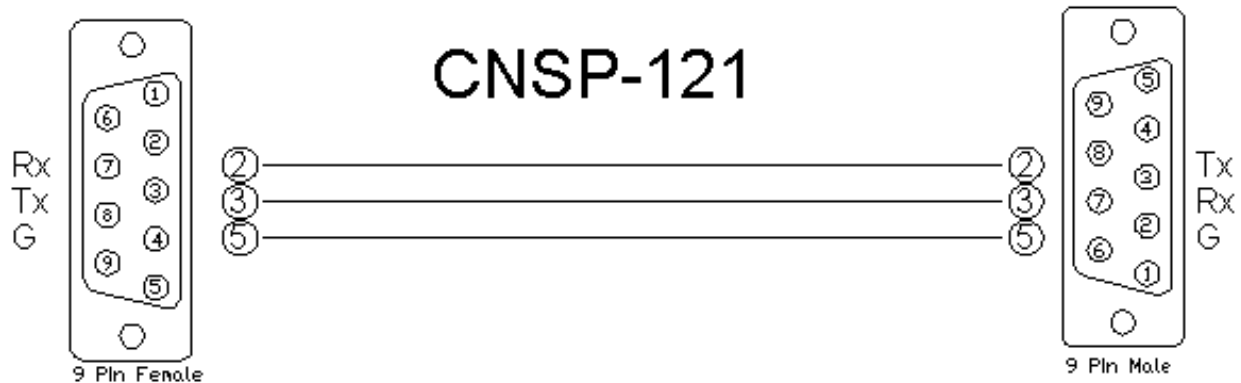


## GENERAL INFORMATION

|                                    |   |
|------------------------------------|---|
| <b>SIMPLWINDOWS NAME:</b>          | NTI KVM Control   |
| <b>CATEGORY:</b>                   | Switcher  |
| <b>VERSION:</b>                    | 1.0   |
| <b>SUMMARY:</b>                    | Controls the NTI KVM and audio routing, and reset functions. Provides true feedback for system status.  |
| <b>GENERAL NOTES:</b>              | <p>This module will control routing, reset and status RS232 functions on an NTI KVM Switcher.</p> <p>True feedback is provided for routing and status functions.</p> <p>The Switcher can be operated by a front panel and via RS-232. When operating the unit with the front panel, follow the instructions provided for the specific switcher by NTI. The front panel will display routes with an LED or an LCD display. The Switcher will show the status for each user, and may alternate the media routed if Video and Audio are both being routed.</p> <p>The Unit ID and User Number are specified in the Module's parameter fields. There are three parameter fields per parameter. The first parameter field (ID or User) is an ASCII two digit value, e.g. "01" = ID 1, "02" = ID 2. The second and third parameter fields (pHi or pLo) are the hexadecimal equivalent of each of the two digits used in the first parameter. If one chose "12" for the first parameter, then the second and third parameters would be "31" and "32" respectively.</p> <p>This module has two parts. The routing and status section and the volume control section. Some commands will not work with some of the NTI models. Audio commands sent to a switcher that does not have audio capability can return a Nack, an echo, and/or can cause the switcher to behave in an undesirable fashion.</p> <p>To send a command pulse one of the command selects on the module. The routing commands (Connect Video or Audio) require a user specified parameter in order to send the NTI switcher a valid command. A numeric keypad is an excellent way to provide a user interface for the entry of this parameter. The demo files for the X Gen and 2 Series systems provide a sample interface.</p> <p>To send a command:</p> <ol style="list-style-type: none"><li>1) Pulse the command you want to send.</li><li>2) Enter the CPU (Input number) you wish to route.</li><li>3) Pulse the Cmd_Send input.</li></ol> <p>Any changes made from a front panel do not automatically update to the serial port.</p> |
| <b>CRESTRON HARDWARE REQUIRED:</b> | CNXCOM, C2COM, ST-COM, CNXCOM-2, C2COM-2, C2COM-3   |



|                                    |  |
|------------------------------------|--|
| <b>SETUP OF CRESTRON HARDWARE:</b> | RS232<br>Baud: 9600<br>Parity: N<br>Data Bits: 8<br>Stop Bits: 1   |
| <b>VENDOR FIRMWARE:</b>            | None   |
| <b>VENDOR SETUP:</b>               | If an external hard panel or the front panel are going to be used in conjunction with RS-232 control then the Print command will have to be set to "On" to receive updates when a change is made from the hard panel(s). |
| <b>CABLE DIAGRAM:</b>              | CNSP-121   |



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**CONTROL:**

|                               |   |  |
|-------------------------------|---|--|
| <b>Initialize</b>             | D | Pulse to clear buffer and update status on touch panel.                      |
| <b>CPU</b>                    | A | Input port number.   |
| <b>Connect_All</b>            | D | Pulse to route the input to all outputs.                                     |
| <b>Connect_One</b>            | D | Pulse to route the input to the output entered in the parameter field.       |
| <b>Audio_All</b>              | D | Pulse to route the audio input to all outputs.                               |
| <b>Audio_One</b>              | D | Pulse to route the audio input to the output entered in the parameter field. |
| <b>Status_CPU</b>             | D | Pulse to update the current port status.                                     |
| <b>Status_Audio</b>           | D | Pulse to update the current audio status.                                    |
| <b>Reset_Unit</b>             | D | Pulse to reset the unit specified by the ID parameter.                       |
| <b>Reset_All</b>              | D | Pulse to reset all connected NTI units.                                      |
| <b>Cmd_Send</b>               | D | Pulse to send the command selected above.                                    |
| <b>Vol_Up/Down</b>            | D | Press and hold to adjust the volume for the assigned user.                   |
| <b>Vol_Mute_On/Off/Toggle</b> | D | Pulse to turn the volume mute on and off for the assigned user.              |
| <b>Poll</b>                   | D | Pulse to get the status of the unit. This takes about 1 second to get.       |
| <b>From_Device\$</b>          | S | Serial signal to be routed from a 2-way serial com port.                     |
| <b>ID</b>                     | P | NTI Device ID in hex. For ID 1, use 01.                                      |
| <b>IDHi</b>                   | P | NTI Device ID high byte in hex. For ID 1, use 30.                            |
| <b>IDLo</b>                   | P | NTI Device ID low byte in hex. For ID 1, use 31.                             |
| <b>USER</b>                   | P | User number in hex. This is the output number. For User 2, use 02.           |
| <b>UserHi</b>                 | P | User number high byte in hex. For User 2, use 30.                            |



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| <b>UserLo</b> | P | User number low byte in hex. For User 2, use 32. |
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**FEEDBACK:**

|                           |   |  |
|---------------------------|---|--|
| <b>Connect_All_Fb</b>     | D | High to indicate that the connect all command will bne sent when the Cmd_Send input is pulsed. |
| <b>Connect_One_Fb</b>     | D | High to indicate that the connect one command will bne sent when the Cmd_Send input is pulsed. |
| <b>Audio_All_Fb</b>       | D | High to indicate that the audio all command will bne sent when the Cmd_Send input is pulsed.   |
| <b>Audio_One_Fb</b>       | D | High to indicate that the audio one command will bne sent when the Cmd_Send input is pulsed.   |
| <b>Cmd_Ack_Fb</b>         | D | Will pulse high to indicate that the command was accepted by the NTI.                          |
| <b>Cmd_Nack_Fb</b>        | D | Will pulse high to indicate that the command was not accepted by the NTI.                      |
| <b>Volume_Bar</b>         | A | Volume level for the assigned user. To be displayed on a bar graph.                            |
| <b>Vol_Mute_On/Off_Fb</b> | D | High to indiacte the current volume mute state.  |
| <b>Status\$</b>           | S | Current status of all port assignments.  |
| <b>To_Device\$</b>        | S | Serial signal to be routed to a 2-way serial com port.   |

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**TESTING:**

|                                   |  |
|-----------------------------------|--|
| <b>OPS USED FOR TESTING:</b>      | PRO2: 3.088<br>CNMSX: 5.14.02                    |
| <b>COMPILER USED FOR TESTING:</b> | Simpl Windows 2.05.20                            |
| <b>SAMPLE PROGRAM:</b>            | PRO2: NTI KVM PRO2 demo<br>CNMSX: NTI CNMSX Demo |
| <b>REVISION HISTORY:</b>          | V. 1.0 – Original release.                       |