# Partner: Cisco
# Model: SX80
# Device Type: Conferencing

## GENERAL INFORMATION

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|---|---|
| **SIMPLWINDOWS NAME:** | Cisco SX80 Tech Pages v1.0 |
| **CATEGORY:** | Conferencing |
| **VERSION:** | 1.0 |
| **SUMMARY:** | This module allows for the setup of the IP settings of the Cisco SX80 video codec. It also provides for network diagnostics. |
| **GENERAL NOTES:** | This module was tested with Cisco firmware TC7.3.6 and CE8.1.1. It is expected that this module will be used via RS232 since its intended purpose is to allow for the setup of the network settings for the video codec.<br>This module is for 3-series and higher processors since it uses Simpl#. |
| **CRESTRON HARDWARE REQUIRED:** | C2I-COM, C2-COM-* |
| **SETUP OF CRESTRON HARDWARE:** | RS232<br>Baud: 115200<br>Parity: None<br>Data Bits: 8<br>Stop Bits: 1 |
| **VENDOR FIRMWARE:** | TC7.3.6 or CE8.1.1 |
| **VENDOR SETUP:** | None |
| **CABLE DIAGRAM:** | |


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CRESTRON CERTIFIED INTEGRATED PARTNER

## CONTROL:

| | | |
|---|---|---|
| **Initialize** | D | Pulse to get the initial status of the video codec. |
| **ipStack<Dual/Ipv4/Ipv6>** | D | Pulse to set the IP stack to the desired setting. |
| **Ipv4Assignment<Dhcp/Statis>** | D | Pulse to set the IPv4 assignment to the desired setting. This is only available if the ipStack is set to Dual or Ipv4. |
| **setIpv4New<Address/SubnetMask/ Gateway>** | D | Pulse to set the IPv4 address, subnet mask or gateway. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **<save/cancel>Ipv4Changes** | D | Pulse to save or cancel the IPv4 address, subnet mask and gateway changes. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. This will not save or cancel the Ipv4 assignment since that is changed immediately with the button press for the desired assignment. |
| **Ipv6Assignment<DHCPv6/Static/ AutoConf>** | D | Pulse to set the IPv6 assignment to the desired setting. This is only available if the ipStack is set to Dual or Ipv6. |
| **setIpv6New<Address/Gateway>** | D | Pulse to set the IPv6 address or gateway. This is only available if the ipStack is set to Dual or Ipv6 and the IPv6 assignment is set to static. |
| **<save/cancel>Ipv6Changes** | D | Pulse to save or cancel the IPv6 address and gateway changes. This is only available if the ipStack is set to Dual or Ipv6 and the IPv6 assignment is set to static. This will not save or cancel the Ipv6 assignment or DHCP options since those are changed immediately with the button press for the desired assignment or DHCP options. |
| **Ipv6DhcpOptions<On/Off>** | D | Pulse to set the IPv6 DHCP options on and off. |
| **setDnsNewDomainName** | D | Pulse to set the DNS domain name. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **cancelNewDnsDomianNameChange** | D | Pulse to cancel the DNS domain name change This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **<save/cancel>DnsChanges** | D | Pulse to save or cancel the DNS domain name and DNS server address<1/2/3> changes. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **<save/cancel>AllChanges** | D | Pulse to save or cancel all changes. This applies to IPv4 address, subnet mask, and gateway; IPv6 address and gateway; DNS domain name and server address <1/2/3>. It will not send changes if the ipStack or IPvX assignment are set to prevent those changes. If there is a question about whether a setting can be changed, please the help file item for the desired setting for more details regarding the requirements for allowing a change to the setting. |
| **systemToolsPing** | D | Pulse to ping the address entered using the systemToolsPingAddress input. The results are displayed on two lines of text. |


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| **systemToolsNetStat** | D | Pulse to get the network stats for debugging. The results will be displayed on up to 100 lines. |
| **systemToolsTraceRoute** | D | Pulse to trace the network route between the Cisco video codec and the address entered using the systemToolsTraceRouteAddress input. The results will be displayed on 29 lines. NOTE: This could take several minutes to complete. |
| **systemToolsGetAddress** | D | Pulse to retrieve the IP address of the video codec. |
| **linkSpeed<Auto/10half/10full/100half/ 100full/1000full>** | D | Pulse to set the network speed to the desired speed. |
| **vlanVoiceMode<Auto/Manual/Off>** | D | Pulse to set the VLAN Voice mode. |
| **setVlanVoiceVlanId** | D | Pulse to set the VLAN Voice VLAN Id. Valid range is 1 to 4094. |
| **cancelVlanVoiceVlanIdChanges** | D | Pulse to cancel the VLAN Voice VLAN Id change. |
| **setDnsNewServerAddress[<1/2/3>]** | D | Pulse to set the DNS server address 1, 2 or 3. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **cancelDnsNewServerAddressChange [<1/2/3>]** | D | Pulse to cancel the DNS server address 1, 2 or 3 change. |
| **vlanVoiceVlanIdIn** | A | Analog value for the new VLAN Voice VLAN Id. Valid range is 1 to 4094. |
| **ipv4New<Address/SubnetMask/Gateway>** | S | Serial signals for entering the IPv4 address, subnet mask, and gateway. Cisco has set the maximum length for these values to 64 characters. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **Ipv6New<Address/Gateway>** | S | Serial signals for entering the IPv6 address and gateway. Cisco has set the maximum length for these values to 64 characters. This is only available if the ipStack is set to Dual or Ipv6 and the IPv6 assignment is set to static. |
| **dnsNewDomainName** | S | Serial signal to enter the new DNS domain name. Cisco has set the maximum length for this value to 64 characters. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |
| **systemToolsPingAddress** | S | Serial signal to enter the desired address to ping. |
| **systemToolsTraceRouteAddress** | S | Serial signal to enter the desired address to trace the route. |
| **fromDevice** | S | Serial signal to be routed from a 2-way serial com port. |
| **dnsNewServerAddress[<1/2/3>]** | S | Serial signals for entering the DNS server address(es). Cisco has set the maximum length for these values to 64 characters. This is only available if the ipStack is set to Dual or Ipv4 and the IPv4 assignment is set to static. |


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## FEEDBACK:

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| **initializeIs<Busy/Complete>** | D | High to indicate the state of the initialization. |
| **ipStackIs<Dual/Ipv4/Ipv6>** | D | High to indicate the IP stack setting. |
| **ipv4Assignment<Dhcp/Static>** | D | High to indicate the IPv4 assignment setting. |
| **ipv4<Address/SubnetMask/Gateway>Changed** | D | High to indicate that new IPv4 address, subnet mask and gateway values have been entered. This could be used to enable individual save buttons. |
| **ipv4SettingsChanged** | D | High to indicate that new IPv4 address, subnet mask and/or gateway value(s) have been entered. This could be used to enable a save IPv4 changes button. |
| **ipv6AssignmentIs<Dhcpv6/Static/AutoConf>** | D | High to indicate the IPv6 assignment setting. |
| **ipv6<Address/Gateway>Changed** | D | High to indicate that new IPv6 address and gateway values have been entered. This could be used to enable individual save buttons. |
| **ipv6SettingsChanged** | D | High to indicate that new IPv6 address and/or gateway value(s) have been entered. This could be used to enable a save IPv4 changes button. |
| **ipv6DhcpOptionsAre<On/Off>** | D | High to indicate the Ipv6 DHCP options setting. |
| **dnsDomainNameChanged** | D | High to indicate that a new DNS domain name value has been entered. This could be used to enable a save button. |
| **dnsSettingsChanged** | D | High to indicate that new value(s) have been entered for the DNS domain name and/or server address(es). This could be used to enable a save DNS changes button. |
| **settingsChanged** | D | High to indicate that new value(s) have been entered for the IPv4 address, IPv4 subnet mask, IPv4 gateway. IPv6 address, IPv6 gateway, DNS domain name and/or DNS server address(es). This could be used to enable a save all changes button. |
| **pingIsBusy** | D | High to indicate that the ping command is busy. |
| **netStatIsBusy** | D | High to indicate that the net stat command is busy. |
| **traceRouteIsBusy** | D | High to indicate that the trace route command is busy. This could take several minutes. |
| **linkSpeedIs<Auto/10half/10full/100half/ 100full/1000full>** | D | High to indicate the link speed setting. |
| **vlanVoiceModeIs<Auto/Manual/Off>** | D | High to indicate the VLAN Voice mode setting. |
| **dnsServerAddressChanged[<1/2/3>]** | D | High to indicate that a new DNS server address has been entered. This could be used to enable individual save buttons. |


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| **netStatLineCount** | A | Analog value indicating the number of lines in the net stat results. This could be used for the Set Num of Items input on a scrolling list smart object. |
| **vlanVoiceVlanId** | A | Analog value indicating the VLAN Voice VLAN Id setting. Valid range is 1 to 4094. |
| **Ipv4<Address/SubnetMask/Gateway>** | S | Serial signals indicating the IPv4 address, subnet mask and gateway. |
| **Ipv6<Address/Gateway>** | S | Serial signals indicating the IPv6 address and gateway. |
| **dnsDomainName** | S | Serial signal indicating the DNS domain name. |
| **systemToolsAddress** | S | Serial signal indicating the IP address retrieved using the systemToolsGetAddress command. |
| **toDevice** | S | Serial signal to be routed to a 2-way serial com port. |
| **dnsServerAddress[<1/2/3>]** | S | Serial signals indicating the DNS server addresses. |
| **systemToolsPingLine[<1/2>]** | S | Serial signals displaying the results of the ping command. |
| **systemToolsTraceRouteLine[<1…29>]** | S | Serial signals displaying the 29 lines of results from the trace route command. This will always be 29 lines. |
| **systemToolsNetStatLine[<1…100>]** | S | Serial signals display the results of the net stat command. There are a maximum of 100 lines. |

## TESTING:

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| **OPS USED FOR TESTING:** | v1.501.013 |
| **SIMPL WINDOWS USED FOR TESTING:** | 4.03.24 |
| **DEVICE DB USED FOR TESTING:** | 76.00.002.00 |
| **CRES DB USED FOR TESTING:** | 57.00.003.00 |
| **SYMBOL LIBRARY USED FOR TESTING:** | 998 |
| **SAMPLE PROGRAM:** | Cisco SX80 Tech Pages v1.0 |
| **REVISION HISTORY:** | v1.0 – Initial Release |


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