

dbx: SC 32/64 NODE

This module handles all the communication with a dbx SC 32/64.



GENERAL INFORMATION

SIMPLWINDOWS NAME: dbx SC 32/64 NODE.umc

CATEGORY: Device Interface

VERSION: v1.0

SUMMARY: This module handles all the communication with a dbx SC 32/64

GENERAL NOTES: **This module was written by the Manufacturer.**

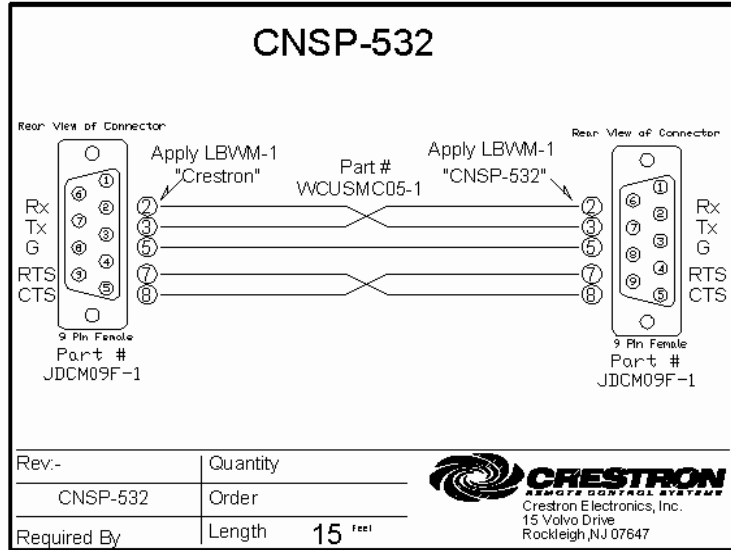
This module is meant for a single dbx SC32/64 device. Use a different NODE instance for each SC 32/64 being controlled. The user must select the connection type of "TCP/IP" or "RS232" on the module parameters to match the method of connection to the SC.

Extensive debug capabilities have been built into this module. To access additional information concerning errors, messages types/values, module status, and basic trouble shooting information the programmer can uncomment the #DEFINE statements in the Simpl+ code. NOTE: debugging info takes processor resources. Comment out the #DEFINE for final release to ensure optimum performance.

This module is designed only to handle direct interfacing to the SC device. The SC is user configurable and thus the programmer can determine how much traffic and how much control is exchanged between the Crestron and the SC by using external sub-modules such as "dbx SC32-64 Input Router.umc" available in the module download package. To utilize additional modules the programmer must expand the "From_IO_Module" and "To_IO_Module" signals. ONLY 1 sub-module can be tied to each signal on the NODE. See sample image on last page of this document.



CABLE DIAGRAM:



CONTROL:

| | | |
|-----------------------------|---|---|
| Connect | D | Hold HIGH to enable the module to communicate. If using RS232 a "1" may be placed on this line. If using TCP/IP, use the "Connect_FB" for this input. This ensures a connection is open to the SC before initialization occurs. If the socket is dropped and re-established, this signal ensures initialization and re-sync will restart quickly. |
| Locate | D | Pulsing this signal will cause the discovered SC device's LCD screen to flash. Also, useful module parameters will be printed to the Crestron console for trouble-shooting purposes. |
| Venue_Preset_Recall | A | Will recall the associated Venue Preset. Valid values are 1-50d. |
| Device_Preset_Recall | A | Will recall the associated Device Preset. Valid values are 1-50d. |
| From_Device | S | To be connected to RX\$ of the com port. If the module parameter of "Connection Type" is defined as TCP/IP, then this will be connected to the RX\$ port of a TCP/IP Client (port 3804). If defined as "RS232" then this will be connected to an RS232 port 57600,N,8,1 |

From_IO_Module_[x] S Array of serial inputs. Connect the "To_NODE_Module" signal from other dbx modules such as "dbx SC32-64 Input Router.umc" to this input. Data from these modules will be sent to this module where the NODE address will be inserted into the message. The message will then be formatted and sent to the SC device. The number of available array inputs can be modified by changing the #DEFINE statement in the Simpl+.

IMPORTANT: Only 1 module may be connected to each "From_IO_Module" input. If more than 1 module is connected the modules WILL NOT FUNCTION properly.

FEEDBACK:

Device_Ready D After communication has been established to the SC with the specified NODE address, this signal will go high allowing all sub-modules to send and receive data from the SC. This signal must be connected to all sub-module's "Device_Ready" signal input for proper functionality.

NOTE: the programmer can open the Crestron console to view connection messages that may explain why this signal is not HIGH after connecting to the SC.

Device_Preset_Status A Will reflect the last recalled Device Preset. Valid values are 1-50d.

To_Device S To be connected to TX\$ of the com port. If the module parameter of "Connection Type" is defined as TCP/IP, then this will be connected to the TX\$ port of a TCP/IP Client (port 3804). If defined as "RS232" then this will be connected to an RS232 port 57600,N,8,1

To_IO_Module_[x] S Array of serial outputs. Connect the "From_NODE_Module" signal from other dbx modules such as "dbx SC32-64 Input Router.umc" to this output. Replies from the SC will be parsed and sent to the correct module via this signal. The number of available array outputs can be modified by changing the #DEFINE statement in the Simpl+.

IMPORTANT: Only 1 module may be connected to each "To_IO_Module" output. If more than 1 module is connected the modules WILL NOT FUNCTION properly.

Parameters:

NodeAddress d Enter the Node Address of the SC. This information is available via the Venue View of HiQnet System Architect. The Node address is the number directly below the device (i.e. 20).

NOTE: if the Node address of the device does not match the node address of entered the programmer can view the Crestron console for debug info. If another device is detected on the network its Node Address will be displayed.

ConnectionType d Select via the drop-down parameter list either TCP/IP (default) or RS232. This parameter MUST match the method used to connect to the SC.

OPS USED FOR TESTING:

Firmware: PRO2 4.001.1012

COMPILER USED FOR TESTING:

V2.12.18; Simpl+ 3.03.11

SAMPLE PROGRAM:

dbx SC32-64 Demo Program.smw and dbx SC32-64 TPMC-12 Demo Panel.vtp

REVISION HISTORY:

V. 1.0 – Creation by Manufacturer (S.E.)

Sample Screen shot of NODE module and Input Router sub-module defined properly.

The screenshot displays two windows from a software development environment. The left window, titled "S-2 : dbx SC32/64 Node", shows the configuration for the main node. It includes fields for "NodeAddress" (1d) and "ConnectionType" (TCP/IP). Below these are various I/O connections, such as "TCP_Connect_FB" connected to "Connect" and "ice_Ready", and "aiVenue_Preset" connected to "Venue_Preset". The right window, titled "S-5.1 : Input Router A1 Chan1 : dbx SC32/64 Input...", shows the configuration for a sub-module. It includes fields for "VD\$" (1d) and "ObjectID\$" (1.1.0). Its I/O connections include "SC_DeviceReady" connected to "Device_Ready" and "tpRouterA1_Chan1_..." connected to "Mute_ON" and "Mute_FB".