dbx: ZonePRO 640m-641m

This module controls a dbx ZonePRO 640m or 641m over IP

CERTIFIED CRESTRON Integrated Partner

GENERAL INFORMATION	
SIMPLWINDOWS NAME:	dbxZonePRO640m_641m_IP_NODE
CATEGORY:	Device Interface
VERSION:	V3.0
SUMMARY:	This module controls a dbx ZonePRO 640m or 641m over IP
GENERAL NOTES:	**IP CONTROL ONLY. USE "dbxZonePRO640_41_40m_41m_Node.umc" MODULE FOR SERIAL COMMUNICATION** Port: 38O4 TCP This module is meant for a single dbx ZonePRO 640m/641m. This module MUST be used to communicate with any ZonePRO unit. This module will handle all connection "keep-alive" communication, as well as distributing all incoming serial traffic to the proper module(s). This module is designed to be used in conjunction with the **"dbxZonePRO640m_41m_IP_Router.umc"** module and "**dbxZonePRO640m_41m_IP_Mixer.umc"** module. Because the user can choose whether to have a mixer or router for each of the 4 output zones, the Crestron programmer must use the proper module to match the ZonePRO's configuration. Connect the 'tx_ModuleX' and 'rx_ModuleX' signals from the Node module to the corresponding Mixer or Router module in each zone. See example program. This module controls a dbx ZonePRO 640m/641m. The ZonePRO 640m/641m has 4 outputs and 6 inputs. The Node module controls all 6 input volumes, handles the incoming/outgoing serial traffic, and handles the serial traffic for the 4 mixer/router modules. For each output you can use either a Router module or a Mixer module. The Router module controls the zones input source, adjusts the output zones master volume, and toggle the mute status. The Mixer module can control all 6 mixer input volumes, the mixer master output volume, and master mixer mute. This module handles live - feedback. So whenever something is changed manually on the ZonePRO, the module will receive an update and adjusts its outputs. In order to enable live-feedback, you have to pulse the Enable_Feedback input every time the ZonePRO is rebooted. NOTE: When statuses are changed using the module, the feedback of the module is simulated. When statuses are changed using the ZonePRO, the feedback is real. Usually the address parameters will be: ObID_Module1: \x01\x05\x00\x14 ObID_Module2: \x01\x05\x01\x15 ObID_Module3: \x01\x05\x02\x16 ObID_Module4: \x01\x05\x03\x17

15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400

ObID_inputVol1:
\x01\x01\x00\x00
ObID_inputVol2:
\x01\x01\x01\x01
ObID_inputVol3:
\x01\x01\x02\x02
ObID_inputVol4:
\x01\x01\x03\x03
ObID_inputVol5:
\x01\x01\x04\x04
ObID_inputVol6:
\x01\x01\x05\x05

However, since these addresses will differ depending on the unit's configuration, please ask the dbx installer for the correct information. See http://www.dbxpro.com/Download/index.htm for help documents showing how to get these objectID's, and for detailed protocol specifications

"If the default configuration is not loaded into the ZonePRO, then the user must manually enter the Object ID addresses for each device. To get the object ID address, start the PC software for ZonePRO. The easiest way to get the Object ID in **decimal** format is to click on the device in the ZonePRO program screen and press<Ctrl>+<Shift>+<o> and a dialog box will appear with the correct address. Note that bit 0 is presented at the top and bit 3 at the bottom of the dialog box. Enter this Object ID address in the Crestron module parameter field in **HEX** as b3,b2,b1,b0.
Another easy way to get the Object ID address in hex is to click on the device symbol in the ZonePRO Designer window and press Ctrl + Shift + T to open the Network Trace Window. Click on the ZonePRO object you want the address for in the software. Change the value of the mute button, volume control, or any other control you are interested in and look for the first row of "MULTSVSET" in the Network Trace Window. Click on this line and look in the window "Frame Data". The object ID will always be the 8th, 9th, 10th, and 11th byte. Enter this 4 byte value into the address parameter on the front of the Crestron module. Repeat this for every address parameter on the front of the module." – DBX

CRESTRON HARDWARE REQUIRED:	2-series or X-series processor with Ethernet card
SETUP OF CRESTRON HARDWARE:	Pro2 with C2-ENET2 and TPS-6000 Port: 3804 TCP
VENDOR FIRMWARE:	V2a-1.110
VENDOR SETUP:	ZonePRO 640m
CABLE DIAGRAM:	(Ethernet connection)

CONTROL:

15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400

Enable_Feedback	D	Pulse to enable live feedback. Pulse once every time the processor or the ZonePRO restarts
Disco	D	Pulse to send a disco message. The ZonePRO will then report back with it's Node Address. Before this, all commands will be send to default node address \x00\x20 (32 decimal)
IP_Status	A	Connected directly to the TCP-IP Client Object's status output.
Input_VolumeChX	A	Sets the volume for input channel X 0d (0%) = -inf (less then -60 dB) 65535d (I00%) = 20.0 dB
tx_moduleX	S	Connect to zone X module's 'module_tx'. In other words, this can come from either a 'dbxZonePRO640m_41m_IP_Router.umc' module or a 'dbxZonePRO640m_41m_IP_Mixer.umc' module depending on the configuration loaded inside the ZonePRO.
rx_IP	S	To be connected to rx of the TCP-IP Client Object
FEEDBACK:		
Input_VolChX_fb	A	Current volume for input channel X
rx_moduleX	S	Connect to zone X module's 'module_rx'. In other words, this can come from either a 'dbxZonePRO640m_41m_IP_Router.umc' module or a 'dbxZonePRO640m_41m_IP_Mixer.umc' module depending on the configuration loaded inside the ZonePRO.
tx_IP	S	To be connected to tx of the TCP-IP Client Object
PARAMETERS:		
ObID_X	S	The address to which commands have to be send to reach the appropriate control. Usually those will be: obID_Module1: \x01\x05\x00\x14 obID_Module2: \x01\x05\x01\x15 obID_Module3: \x01\x05\x02\x16 obID_Module4: \x01\x05\x03\x17 obID_inputVol1: \x01\x01\x00\x00 obID_inputVol2: \x01\x01\x01\x01 obID_inputVol3: \x01\x01\x02\x02 obID_inputVol4: \x01\x01\x03\x03 obID_inputVol5: \x01\x01\x04\x04 obID_inputVol6: \x01\x01\x05\x05

15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400

		However, since these addresses will differ depending on the unit's configuration, please ask the dbx installer for the correct information. See http://www.dbxpro.com/Download/index.htm for help documents showing how to get these objectID's, and for detailed protocol specifications

TESTING:	
OPS USED FOR TESTING:	V4.001.1012
COMPILER USED FOR TESTING:	V2.12
SAMPLE PROGRAM:	dbxZonePRO640m_41m_IP_DemoProgram.smw
REVISION HISTORY:	V. 1.O – Creation V. 2.0 – Dbx manufacturer update V. 3.0 – Dbx manufacturer Added support for the 640m and 641m (ETHERNET)

15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400