





GENERAL INFORMATION				
SIMPLWINDOWS NAME:	Biamp AudiaFlex VoIP Dialer v7.4			
CATEGORY:	Mixer			
VERSION:	7.4			
SUMMARY:	This module controls the VOIP dialing interface within the Biamp AudiaFlex. The Nexia does not have VOIP dialing capabilities.			
GENERAL NOTES:	This module will control the voice over IP dialing interface within the Biamp AudiaFlex.			
	This module MUST be used in conjunction with the Biamp AudiaFlex + Nexia Command Processor Serial v7.4 module or the Biamp AudiaFlex + Nexia Command Processor IP v7.4. These modules process all transmitted and received serial strings and reformats device feedback so that this data can be sent to the proper module for final processing.			
	When polling the BiAmp for current status, you should poll for only the information you really need at the time. The more data points you poll for at one time, the longer it will take to get an update for any one data point. It should not normally be necessary to poll for all data points all the time.			
	This module will have some latency when dialing in an off hook state. This is due to the time that it takes the AudiaFlex's processor to process a dial command then send it to the dialer.			
	This module has (4) four parameter fields, all of which must be set for proper module operation. All parameters are entered as ASCII characters. ADDRESS is the device's ID and is automatically assigned when the .dap file is compiled. INSTANCE is the "Logic Block's" ID that is automatically assigned when the .dap file is compiled. LENGTH is the total number of characters allowed for dialing within a dialing string or preset. Entries Per Page is the number of dialer presets to be displayed per page.			
	NOTE: THIS MODULE WAS DEVELOPED AND TESTED WITH THE BIAMP AUDIAFLEX. THE INCLUDED .DAP FILE WAS PROVIDED BY BIAMP, AND IS FOR THE AUDIAFLEX ONLY.			
	Presets are stored internally in the Crestron processor. Speed Dial Entries are stored in the BiAmp.			
	This information is all contained in the Block properties field when developing the .dap file within the Biamp AudiaFlex Windows software. A .dap file (Crestron Test v7.0.dap) was created by Crestron for testing purposes and MUST be used for proper operation of the v7.4 Demo program.			
	When the Initialize input on the BiAmp AudiaFlex + Nexia Command Processor Serial v7.4 or on the Biamp AudiaFlex + Nexia Command Processor IP v7.4 is pulsed, the BiAmp AudiaFlex + Nexia Command Processor Serial v7.4 or the Biamp AudiaFlex + Nexia Command Processor IP v7.4 module will send out initialization strings to each of the To_Module_* outputs, asking for the connected module's command type, instance ID or Tag and indexes. The control module will transmit that information out its To_Processor output.			
CDECTRON HADDWARE DECLURED	NOTE: THE NEXIA DOES NOT HAVE VOIP DIALING CAPABILITIES.			
CRESTRON HARDWARE REQUIRED:	ST-COM, C2-COM, C2ENET-1/2			







**SETUP OF CRESTRON HARDWARE:** 

RS232

Baud: 38400 Parity: N Data Bits: 8 Stop Bits: 1 TCP/IP

Port 23 (Telnet)

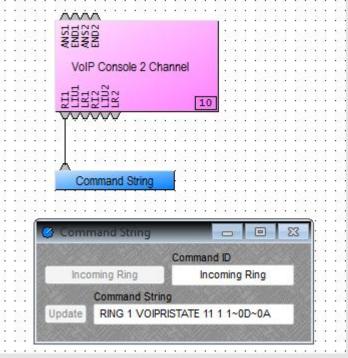
**VENDOR FIRMWARE:** 

4.560

**VENDOR SETUP:** 

In order to get the incoming call notification you need to add some programming to the BiAmp program.

"For incoming call notification from the VoIP-2 console, please connect a command string block to the RI1 or RI2 (as applicable) nodes of the VoIP Console block. This command string block needs to be configured similar to this example. This command string block needs to be configured similar to this example. The command needs to look like this: "RING 1 VOIPRISTATE 12 1 1~0D~0A". The first digit between the RING and VOIPRISTATE is the unit number. The "12" is the instance ID. The number after the "12" is the line number. This must be either "1" or "2". The final "1" is the state and should always be 1. Please be sure to use the unit number, instance ID and line number that you enter into the parameter fields on the Crestron module. When an incoming call is detected, this string will be sent to the Crestron."



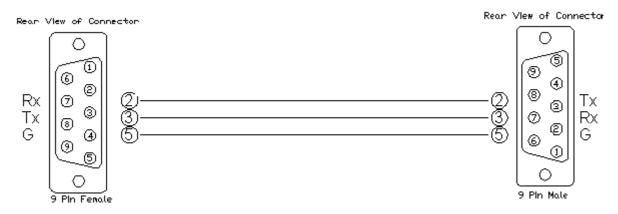
NOTE: INCOMING CALL NOTIFICATION WILL ONLY WORK VIA SERIAL. IT WILL NOT WORK VIA TCP/IP.







CABLE: CNSP-121



CONTROL:			
On/Off_Hook	D	Pulse to put VoIP on and off hook.	
Dial	D	Pulse to dial current string displayed on the Dialer Text field	
Redial	D	Pulse to re-dial previously dialed phone number	
KEYPAD-*	D	Pulse to enter the number to dial.	
Get_Speed_Dial_Names	D	Pulse to get the speed dial names from the BiAmp. Will then display the first page of entries.	
First	D	Pulse to display the first page of speed dial entries.	
Scroll_Up/Down	D	Pulse to scroll up or down in the list. This is a true scroll and will advance only one entry at a time in each direction.	
Dial_Speed_Dial_Entry_*	D	Pulse to dial the desired speed dial entry.	
Preset_<0-16>	D	Pulse to select the preset. These are stored internally in the Crestron processor. Press and hold for 3 seconds to store the currently displayed phone number in the speed dialer memory. Stored feedback will go high for 3 seconds	
Poll_Enable	D	Pulse to poll the VoIP dialer for its current hook status. This MUST be done.	
From_Processor	S	Serial data signal to be routed from one of the To_Module_* outputs on the BiAmp AudiaFlex + Nexia Command Processor Serial v7.4 module or the BiAmp AudiaFlex + Nexia Command Processor IP v7.4 module.	







FEEDBACK:				
Phone_is_On/Off_Hook	D	True feedback indicating current hook status.		
Speed_Dial_Name_*_Text	S	Serial signal indicating the speed dial names from the BiAmp.		
Preset_Stored	D	True feedback indicating a speed dial has been stored.		
Phone_Number_Text	S	Serial text string displaying the current phone number to be dial or stored.		
To_Processor	S	Serial data signal to be sent to the BiAmp AudiaFlex + Nexia Command Processor Serial v7.4 module or the BiAmp AudiaFlex + Nexia Command Processor IP v7.4 module.		

PARAMETERS:				
ADDRESS	ASCII	Device address automatically assigned after the Biamp .dap file is compiled		
INSTANCE	ASCII	Logic Block ID assigned after the Biamp .dap file is compiled		
Line Number	ASCII	VoIP line number to control. Either 1 or 2.		
LENGTH	ASCII	Total length of phone number string to be dialed or stored		
Entries Per Page	ASCII	Number of Speed Dial Entries to be displayed per page. Maximum is 16.		







TESTING:	
OPS USED FOR TESTING:	PRO2: 4.003.0015 MC3: 1.002.0000
SIMPL WINDOWS USED FOR TESTING:	3.10.20
DEVICE DB USED FOR TESTING:	39.00.005.00
CRESTRON DB USED FOR TESTING:	29.01.004.00
SAMPLE PROGRAM:	BiAmp AudiaFlex + Nexia Serial v7.4 Demo
REVISION HISTORY:	V3 – 2-Series Only, corrected dialer timing, text display, speed of dialing and over all operation (firmware)  V4 – Changed timing of dialer strings sent when off hook  V5 – Made changes for the new responses from the BiAmp. These new responses have the command details and status in them. This eliminates the need to poll for status when making changes. Added new commands. Added buffering for the responses to improve system response.  V5.1-Changed the Command Processor module to handle the response for presets. Also eliminated the Command Processor sending any response if the unit ID is determined to be 0. Changed all of the modules to allow instance IDs up to 65534d. Changed all modules to look for the proper channel ID. Added MBMUTE command to the On-Off module.  V7.0 – Changed all modules to allow the use on Instance ID Tags. Changed the volume control module to allow for the selection of the size of the volume change step. Changed the command processor module to handle all filtering of the feedback. Eliminated the unit buffer module. Also eliminated the need for using serial buffers.  V7.1 – Fixed an issue in the Processor module that allowed feedback from the BiAmp to be sent to the wrong module. Also fixed an issue in the level control module with controlling the AEC Inputs.  V7.2 – Created separate processor module for IP and Serial control. The IP processor module sets the telnet echo to off. Fixed an issue in the BiAmp AudiaFlex + Nexia Dialer module where a wait statement in Simpl+ was not programmed correctly. Fixed an issue with the processor module that allowed the processor module uses to collect the InstanceID information. The new method should be less confusing to program. Added a Simpl Windows gather to the processor modules to reduce the number of entries into the Simpl+. Added code to the control modules to prevent buttons presses more frequently than every 1 second.  V7.4 – Adjusted a timing issue with the way that the modules initialize. Changed the Initialize input after the 60 second lock