

Partner: Biamp
Model: Tesira
Device Type: Digital Signal Processor



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Biamp Tesira VoIP Control v1.4
CATEGORY:	Mixer
VERSION:	1.4
SUMMARY:	This module controls the Biamp Tesira VoIP Dialer and VoIP Control Status objects in the Biamp Tesira Server and Forte.
GENERAL NOTES:	<p>This module controls the Biamp Tesira VoIP Dialer and VoIP Control Status objects. This Biamp VoIP control object supports two lines, this module only supports one. Select which line to use from the parameter list.</p> <p>The VoIP control object supports up to 6 separate calls per line, the Biamp protocol manuals calls these "Call Appearances". Set the Call_Select signal to select which "Call Appearance" to control. You MUST have this value set in order to use most of the controls on this module. Call_*_State, Call_*_State_Text, Call_*_Prompt_Text signals provide status of each call appearance.</p> <p>In order to use this module you must assign two Instance Tags, Dialer_Instance_Tag and Control_Status_Instance_Tag. The Biamp Dialer control object provides functionality for Call and Directory Control, while Control Status provide for call status and incoming call features. Together they provide complete control. VoIP Receive and VoIP Transmit Level/Mute adjustment are supported by the Biamp Tesira Level Control v1.4 module and Biamp Tesira State Control v1.4 module.</p>
CRESTRON HARDWARE REQUIRED:	N/A
SETUP OF CRESTRON HARDWARE:	This module requires the Biamp Tesira Command Processor IP v1.4 or the Biamp Tesira Command Processor v1.4 modules in order to operate. Please read the help files associated with these modules for Crestron Hardware Setup.
VENDOR FIRMWARE:	Tesira Server - 1.2.1.0 Tesira Forte – 2.0.0.32

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**PARAMETER:**

Dialer_Instance_Tag	Dialer_Instance_Tag is the unique name of the Biamp Tesira VoIP Dialer object you wish to control. <i>Note: If your Instance_Tag has spaces in its name, surround the name with quotes using the \x22 hex escape sequence. Example: \x22My Name\x22</i>
Control_Status_Instance_Tag	Control_Status_Instance_Tag is the unique name of the Biamp Tesira VoIP Control Status object you wish to control. <i>Note: If your Instance_Tag has spaces in its name, surround the name with quotes using the \x22 hex escape sequence. Example: \x22My Name\x22</i>
Line_Number	The Biamp VoIP dialer supports two lines, select which line this module will control.
Directory_Page_Size	Directory_Page_Size can be a value from 1d to 16d. The values is used to determine the page size for the directory list.

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CONTROL:

Poll_Dialer	D	Pulse to poll for items that are not handled by subscriptions. A subscription is a process of registering for unsolicited messages. Some Biamp Tesira Control objects have this capability.
Call_Select	A	Assign to select which call to control. Valid values are 1d to 6d.
Conference	D	Pulse to add currently selected Call to conference. Call _Select must be set.
Answer	D	Pulse to answer currently selected Call. Call_Select must be set.
Flash	D	Pulse to perform Hook-Flash of the currently selected Call. Call_Select must be set.
Redial	D	Pulse to redial using the currently selected Call. Call_Select must be set.
Send	D	Pulse to send the DTMF characters that were sent when the call was off-hook using the currently selected Call. Call_Select must be set.
End	D	Pulse to end the call/conference of the currently selected Call. Call_Select must be set.
Resume	D	Pulse to resume the call/conference of the currently selected Call. Call_Select must be set.
Hold	D	Pulse to hold the call/conference of the currently selected Call. Call_Select must be set.
Keypad_0-9, Star, Pound	D	Pulse to enter digits 0-9, * and # to Keypad_Text for dialing. If there is an active call, DTMF tones will be transmitted automatically. Send must be pulsed to send the DTMF tones.
Keypad_Clear, BackSpace	D	Pulse to edit Keypad_Text.
Keypad_Dial	D	Pulse to Dial Keypad_Text using the currently selected call. Call_Select must be set.
Auto_Answer_On	D	Pulse to set auto-answer on.
Auto_Answer_Off	D	Pulse to set auto-answer off.
Auto_Answer_Toggle	D	Pulse to toggle auto-answer state.
Directory_Top_Page	D	Pulse to display the first entries in the directory. Quantity to display is set by the parameter Directory_Page_Size.
Directory_Previous_Page	D	Pulse to display the previous entries in the directory (Toward Top). Quantity to display is set by the parameter Directory_Page_Size.

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Directory_Next_Page	D	Pulse to display the next entries in the directory (Toward Bottom). Quantity to display is set by the parameter Directory_Page_Size.
Directory_Bottom_Page	D	Pulse to display the bottom entries in the directory. Quantity to display is set by the parameter Directory_Page_Size and remaining items.
Select_Directory_Page_Item_*	D	Pulse to select a displayed directory item. Will assign directory item for display to Selected_Directory_Item_Name_Text and Select_Directory_Item_Num_Text.
Dial_Selected_Directory_Item	D	Pulse to dial directory entry displayed in Selected_Directory_Item_Name_Text and Select_Directory_Item_Num_Text.
Select_Directory_Save_Location	A	Setting this value will pick the location in the directory to edit an entry. Valid values are 1d through 16d.
Directory_Save_Name_Text	S	Setting this value will assign the display text of the directory item location assigned by Select_Directory_Save_Location. Save_Directory_Item must be pulsed in order to finalize the save.
Directory_Save_Num_Text	S	Setting this value will assign the phone number of the directory item location assigned by Select_Directory_Save_Location. Save_Directory_Item must be pulsed in order to finalize the save.
Save_Directory_Item	D	Pulse to save Directory_Save_Name_Text and Directory_Save_Num_Text to the directory item assigned by Select_Directory_Save_Location.
From_Processor	S	Serial data signal to be routed from one of the To_Module_* outputs on the Biamp Tesira Command Processor IP v1.4 module or the Biamp Tesira Command Processor v1.4 module.

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FEEDBACK:

Is_Initialized	D	Signal is high to indicate the module has successfully received a response from its initializing queries.
Selected_Call	A	Indicates currently selected call. Valid values 0d to 6d. 0d indicates no call is selected.
Call_*_State	A	Indicates the current state of the call. Valid values are as follows. Init = 1 Fault = 2 Idle = 3 Dial Tone = 4 Silent = 5 Dialing = 6 Ringback = 7 Incoming Call = 8 Busy = 10 Reject = 11 Invalid Number = 12 Active = 13 Active Muted = 14 On Hold = 15 Waiting Ring = 16 Conference Active = 17 Conference Hold = 18
Call_*_State_Text	S	Text descriptions of the Call_*_State signal. Valid values are as follows "Init", "Fault ", "Idle ", "Dial Tone", "Silent", "Dialing", "Ringback", "Incoming Call", "Busy", "Reject ", "Invalid Number ", "Active ", "Active Muted ", "On Hold", "Waiting Ring ", "Conference Active", "Conference Hold "
Call_*_Prompt_Text	S	Text help prompt, indicates possible next step for users or information on issue. Valid values are as follows. "Unknown", "None", "Starting", "Registering", "SIP User Not Configured", "Enter Number", "Connecting", "Incoming Call", "Peer Busy", "Call Cannot Be Completed", "On Hold", "On Held", "Conference", "Conference On Hold", "Connected", "Connected Muted", "Auth Failure", "Proxy Not Configured", "Network Init", "DHCP In Progress", "Network Link Down", "Network Link Up", "IP Address Conflict", "Network Configured", "CODEC Negotiation Failure", "Unexpected Error", "Auth User Not Configured", "Auth Password Not Configured"
Call_*_CID_Name_Text	S	Indicates Caller ID name of incoming call.
Call_*_CID_Num_Text	S	Indicates Caller ID number of incoming call.

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Last_Number_Dialed_Text	S	Displays last number called.
Auto_Answer_Is_On	D	Indicates Auto-Answer is enabled.
Auto_Answer_Is_Off	D	Indicates Auto-Answer is disabled.
Call_ID_Num_Text, Call_ID_Name_Text	S	Displays caller ID information. Must pulse either Get_Caller_ID_Basic or Get_Caller_ID_Full during an incoming call in order to see the current values.
Keypad_Text	S	Displays the current entered telephone number.
Directory_Page_Item_*_Text	S	Displays the currently paged directory items. Directory_Page_Size sets how many items are displayed at a time.
Selected_Directory_Item_Name_Text	S	Displays the name of the currently selected directory item.
Selected_Directory_Item_Num_Text	S	Displays the phone number of the currently selected directory item.
To_Processor	S	Serial data signal to be sent to the From_Modules input on the Biamp Tesira Command Processor IP v1.4 or the Biamp Tesira Command Processor v1.4 modules.

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TESTING:	
OPS USED FOR TESTING:	PRO2: 4.008.0008 CP3: 1.009.0029
SIMPL WINDOWS USED FOR TESTING:	4.02.20
CRES DB USED FOR TESTING:	44.05.005.00
DEVICE DATABASE:	55.00.002.00
SYMBOL LIBRARY USED FOR TESTING:	889
SAMPLE PROGRAM:	Biamp Tesira IP v1.4 Demo CP3 Biamp Tesira IP v1.4 Demo PRO2 Biamp Tesira v1.4 Demo CP3 Biamp Tesira v1.4 Demo PRO2
REVISION HISTORY:	v1.0 – Initial Release v1.1 – Updated all of the control modules to unsubscribe prior to subscribing to fix RS232 initialization issues. Control modules have also been updated to disallow input control prior to control module being initialized. v1.2 – No Revision Performed v1.3 – Added Crestron recommended updates to change the methods used for handling messages from the command processor to account for variations between 2 and 3 series processors. v1.4 – For RS232 control, replaced individual “unsubscribe” commands with a single “exit” command which unsubscribes from all messages.