

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



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	Biamp Tesira Generic Control v3.3
<b>CATEGORY:</b>	DSP
<b>VERSION:</b>	3.3
<b>SUMMARY:</b>	This module controls objects in the Biamp Tesira in either a Digital, Analog or Serial manner, depending on your needs.
<b>GENERAL NOTES:</b>	<p>The Biamp Tesira Generic Control v3.3 module was created in order to allow for controlling objects within the Biamp program that may not be controllable using one of the other standard control modules included in the Biamp module package.</p> <p>The module is capable of controlling a Biamp object via either Digital, Analog, or Serial methods. Multiple Generic modules can be added to your programming to allow for a fully flexible solution to match any programming problem you might encounter.</p>
<b>CRESTRON HARDWARE REQUIRED:</b>	3-series & 4-series processors <b>only</b>
<b>SETUP OF CRESTRON HARDWARE:</b>	This module requires the Biamp Tesira Command Processor IP v3.3 or the Biamp Tesira Command Processor RS232 v3.3 modules in order to operate. Please read the help files associated with these modules.
<b>VENDOR FIRMWARE:</b>	Tesira Firmware – 4.2.4.5

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**PARAMETER:**

<b>Instance_Tag</b>	Instance_Tag is the unique name, for the control object, that was assigned inside the Biamp Tesira Programming.  <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>
<b>Attribute_Code</b>	Attribute_Code selection informs the module what type of object to control.
<b>Index_1</b>	When controlling a Biamp Tesira object, part of the control protocol may use Index_1. When Index_1 is not required, the parameter needs to be set to 0.  Index_1 in most cases represents the input value, and Index_2 represents the output value. So when dealing with things like Crosspoints, both Index_1 and Index_2 are required. Understanding the Biamp Tesira control object is mandatory in order to setup this module correctly.
<b>Index_2</b>	When controlling a Biamp Tesira object, part of the control protocol may use Index_2. When Index_2 is not required, the parameter needs to be set to 0.  Index_1 in most cases represents the input value, and Index_2 represents the output value. So when dealing with things like Crosspoints, both Index_1 and Index_2 are required. Understanding the Biamp Tesira control object is mandatory in order to setup this module correctly.
<b>Signal_Type</b>	As the generic module is capable of supporting either digital, analog or serial control, this value indicates how you intend to use the module. Once a selection is made, the module will only operate on the inputs and outputs listed for that type and ignore any input and output changes for the other types.  For instance, if the value is set to "Digital", the module will only respond to changes on the Digital inputs and only update values on the Digital outputs. In this case, changes and feedback on the Analog and Serial signals will not be processed or updated.
<b>Has_Subscription</b>	Value indicates whether the object you are controlling has subscription capabilities (i.e. supports unsolicited feedback). If this value is set to "Yes", the module will attempt to subscribe to state changes supported by the object. If this value is set to "No", no subscription attempts will be made and feedback will only be updated when the module is polled manually or when the Biamp provides feedback based on state changes made by the module.
<b>Subscription_Update_Interval</b>	Values indicate the rate of subscription updates that will be delivered from the Tesira device. This parameter will be ignored if the Has_Subscription parameter is set to 'No'. Available values include:  - None, 0.1s, 0.25s, 0.3s, 0.5s, or 1s
<b>Command_Processor_ID</b>	Setting to indicate the ID for the command processor that this module will register itself with.

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CONTROL:		
Poll	D	Pulse to poll for the current value. If the Has_Subscription parameter has been set to "Yes", this signal will be ignored.
Digital_On, Digital_Off, Digital_Toggle	D	Pulse to change the state of the digital inputs. These signals will only be processed if the "Signal_Type" parameter has been set to "Digital".
Analog_Value	A	Analog value to be sent when the Analog_Set input is pulsed. This signal will only be processed if the "Signal_Type" parameter has been set to "Analog".
Analog_Set	D	Pulse to send the analog value entered in the Analog_Value input. This signal will only be processed if the "Signal_Type" parameter has been set to "Analog".
Serial_Value	S	Serial value to be sent when the Serial_Set input is pulsed. This signal will only be processed if the "Signal_Type" parameter has been set to "Serial".
Serial_Set	D	Pulse to send the analog value entered in the Serial_Value input. This signal will only be processed if the "Signal_Type" parameter has been set to "Serial".
Enable	D	Set High: Control Module Enabled. Set Low: Control Module Disabled.  <i>Note: Use a 1 for normal operation.</i>

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**FEEDBACK:**

<b>Is_Initialized</b>	D	Signal is high to indicate the module has successfully received all required responses from its initializing queries.
<b>Digital_Is_On, Digital_Is_Off</b>	A	Indicates the current digital state of the object being controlled. These signals will only be processed if the "Signal_Type" parameter has been set to "Digital".
<b>Current_Analog_Value</b>	A	Indicates the current analog state of the object being controlled. This signal will only be processed if the "Signal_Type" parameter has been set to "Analog".
<b>Volume_Level_Text</b>	S	Indicates the current serial state of the object being controlled. This signal will only be processed if the "Signal_Type" parameter has been set to "Serial".
<b>Is_Quarantined</b>	D	Signal is high to indicate that a component has failed to initialize because of configuration issues. The Command Processor will attempt to initialize the quarantined component again when a new connection has been established.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	CP3: v1.8001.0146
<b>SIMPL WINDOWS USED FOR TESTING:</b>	4.2000.00.00
<b>CRES DB USED FOR TESTING:</b>	211.05.001.00
<b>DEVICE DATABASE:</b>	200.175.001.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	1164
<b>SAMPLE PROGRAM:</b>	Biamp Tesira v3.3 IP Demo Biamp Tesira v3.3 RS232 Demo
<b>REVISION HISTORY:</b>	v2.0 – Initial Release v2.1 – No Revisions have been performed. v2.2 – No Revisions have been performed. v2.3 – No Revisions have been performed. v3.0 – Added SIMPL# event callbacks. Reworked module Registration, and added Enable signal. v3.1 – Added quarantine functionality. v3.2 – No revisions have been performed. v3.3 – Added parameter that allows a subscription update interval to be set.