

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



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	Biamp Tesira Level Control v1.4
<b>CATEGORY:</b>	Mixer
<b>VERSION:</b>	1.4
<b>SUMMARY:</b>	<p>This module controls most level points in the Biamp Tesira Server and Forte.</p> <p>This module controls most level points in the Biamp Tesira.</p> <p>This Biamp Tesira Level Control v1.4 module is used to control a wide variety of control objects within the Biamp Tesira. This module's parameters need to be setup correctly in order to control the level object that you wish to control. So understanding what your level object requires is important to the settings of this module.</p> <p><b>The following are required.</b></p> <p><b>Instance_Tag:</b> Instance_Tag is the unique name that was assigned inside the Biamp Tesira Programming.</p> <p><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></p> <p><b>Attribute_Code:</b> Attribute_Code selection informs the module what type of level to control. This is required since some Biamp Tesira objects having multiple level control points. The choices are Level, InputLevel, OutputLevel, CrossPointLevel, SourceLevel, ChannelLevel, LevelIn, LevelOut, LevelSource, HostMasterVol and HostVol. If the object that you wish to control contains one of this control attribute codes, then this module will control that object.</p> <p><b>Level_Step:</b> Selection to choose the dB offset for Incrementing and Decrementing.</p>
<b>GENERAL NOTES:</b>	<p><b>The following maybe optional.</b></p> <p><b>Index1:</b> When controlling a Biamp Tesira object, part of the control protocol may use Index1. When Index1 is not required, the parameter needs to be set to 0.</p> <p><b>Index2:</b> When controlling a Biamp Tesira object, part of the control protocol may use Index2. When Index2 is not required, the parameter needs to be set to 0.</p> <p>Index1 in most cases represents the input value, and Index2 represents the output value. So when dealing with things like Crosspoints, both Index1 and Index2 are required. Understanding the Biamp Tesira control object is mandatory in order to setup this module correctly.</p> <p>During initialization of the module, it will automatically try to figure out based on the Instance_Tag what type of Biamp Tesira control object you are attempting to control. Once it acquires the identification, it will request only the appropriate state information from the Biamp Tesira control object. If the control object supports things like Max Level and Min Level, the module will automatically scale and control based on that range. So please use the internal settings of the Biamp Tesira control object where needed. If it was not able to figure out what type of control object, it will send queries based on a standard list. In this case you may get some errors back from the Biamp Tesira indicting the commands are not supported. This is normal, but if ALL commands are returned with errors, than your Instance_Tag may be incorrect or not currently configured.</p>

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<b>CRESTRON HARDWARE REQUIRED:</b>	N/A
<b>SETUP OF CRESTRON HARDWARE:</b>	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.
<b>VENDOR FIRMWARE:</b>	Tesira Server - 1.2.1.0 Tesira Forte – 2.0.0.32

## 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 level to control. This is required since some Biamp Tesira objects having multiple level control points. The choices are Level, InputLevel, OutputLevel, CrossPointLevel, SourceLevel, ChannelLevel, LevelIn, LevelOut, LevelSource, HostMasterVol and HostVol. If the object that you wish to control contains one of this control attribute codes, then this module will control that object.
<b>Index1</b>	When controlling a Biamp Tesira object, part of the control protocol may use Index1. When Index1 is not required, the parameter needs to be set to 0.  Index1 in most cases represents the input value, and Index2 represents the output value. So when dealing with things like Crosspoints, both Index1 and Index2 are required. Understanding the Biamp Tesira control object is mandatory in order to setup this module correctly.
<b>Index2</b>	When controlling a Biamp Tesira object, part of the control protocol may use Index2. When Index2 is not required, the parameter needs to be set to 0.  Index1 in most cases represents the input value, and Index2 represents the output value. So when dealing with things like Crosspoints, both Index1 and Index2 are required. Understanding the Biamp Tesira control object is mandatory in order to setup this module correctly.
<b>Level_Step</b>	Selection to choose the dB offset for Incrementing and Decrementing.

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**CONTROL:**

<b>Poll_Level</b>	D	Pulse to poll for the current value. If the control object that you are controlling has been able to successfully register a subscription, then this signal may not do anything. A subscription is a process of registering for unsolicited messages. Some Biamp Tesira Control objects have this capability.
<b>Level_Up, Level_Down</b>	D	Press and hold to adjust the volume level.
<b>New_Level</b>	A	Analog value of volume level. This is the signed dB level to set the volume level to. Will be sent when the Send_New_Level input is pulsed. This will allow preset values to be sent to the Biamp. Valid ranges are the Max Level or Min Level settings set inside your Biamp Tesira programming.  NOTE: THIS INPUT IS NOT DESIGNED TO BE USED WITH A RAMP SYMBOL IN SIMPL WINDOWS. IT IS ONLY DESIGNED TO BE USED FOR PRESET LEVELS.
<b>Send_New_Level</b>	D	Pulse to send the volume entered in the New_Volume_Level input. This will allow preset values to be sent to the Biamp.
<b>From_Processor</b>	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:**

<b>Is_Initialized</b>	D	Indicates high when this control module has been correctly initialized.
<b>Volume_Gauge</b>	A	Analog value indicating the current volume level. To be displayed using a gauge on a touch panel.
<b>Volume_Level_Signed_Unscaled</b>	A	Analog volume level value. This is the signed dB level. To be displayed using a digital gauge on a touch panel.
<b>Volume_Level_Text</b>	S	Serial signal indicating the current volume level.
<b>To_Processor</b>	S	Serial data signal to be sent to the From_Modules input on the Biamp Tesira Command Processor IP v1.4 module or the Biamp Tesira Command Processor v1.4 module.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	PRO2: 4.008.0008 CP3: 1.009.0029
<b>SIMPL WINDOWS USED FOR TESTING:</b>	4.02.20
<b>CRES DB USED FOR TESTING:</b>	44.05.005.00
<b>DEVICE DATABASE:</b>	55.00.002.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	889
<b>SAMPLE PROGRAM:</b>	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
<b>REVISION HISTORY:</b>	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 – Added The following Room Combiner Attributes; LevelOut, LevelIn, LevelSource.  v1.3 – Added The following USB Attributes; HostMasterVol, HostVol. Also 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.