



Manufacturer: BSS Audio
 Model: BLU Series
 Device Type: Audio DSP

GENERAL INFORMATION

SIMPLWINDOWS NAME:	BSS BLU Router Control Module v1.0								
CATEGORY:	Audio DSP								
VERSION:	v1.0								
SUMMARY:	<p>This module is a control module for a suite of modules. The suite of modules utilizes the SIMPL# technology and will only work on the 3-Series Controller.</p> <p>The control modules are responsible for providing the actual control interface in SIMPL. With the SIMPL# technology, the Control modules no longer need to be physically "connected" to the command processor. They register themselves automatically behind the scenes. Each of the control modules also have a command processor ID parameter that you assign to the instance of the command processor to which they report to. You can virtually have an unlimited number of control modules report to a single instance of a command processor.</p> <p>The command processor must be initialized in order for this module to operate properly. Please see the BSS BLU Command Processor and BSS BLU RS232 Command Processor modules help files.</p> <p>This control module can control a bunch of different types of DSP control points. Assigning what type is controlled is handled by the "ControlType" module parameter field. Here is the list of Control Types.</p> <p>SourceMatrix: Output [A] RoomCombiner: BGM Input Room [A] SourceSelector</p> <p>You will notice in the list above, that some of the items have "[A]" in the description fields. This is an indication that additionally the [A] module parameter need to be set to make that selection work.</p> <p>Utilizing these values saves you from hunting down even more data from the Audio Architect DSP Program. These values become obvious when you understand that they are based on what Input, Output, Line Number that you are controlling.</p> <p>In example: "SourceMatrix: Output [A] Selection The [A] Value is what Output you wish to control. So if you want to control Output 10. Your [A] Value is 10d.</p> <p>If the description of your selection does not contain [A], then the [A] parameter should be set to 0d. If only [A] exists in your description then the [A] parameter value would be set to the Input, Output or Room you wish to control.</p> <table border="1"> <thead> <tr> <th>Control Type</th> <th>[A]</th> </tr> </thead> <tbody> <tr> <td>SourceMatrix: Output [A]</td> <td>>= 1d (Output)</td> </tr> <tr> <td>RoomCombiner: BGM Input Room [A]</td> <td>>= 1d (Room)</td> </tr> <tr> <td>SourceSelector</td> <td>0d</td> </tr> </tbody> </table>	Control Type	[A]	SourceMatrix: Output [A]	>= 1d (Output)	RoomCombiner: BGM Input Room [A]	>= 1d (Room)	SourceSelector	0d
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GENERAL NOTES:	
CRESTRON HARDWARE REQUIRED:	3-Series Controller
SETUP OF CRESTRON HARDWARE:	N/A
VENDOR FIRMWARE:	This module was tested using BSS BLU Firmware Version: 86.02.02
VENDOR SETUP:	The SIMPL Demo program provided works with the also include BSS DSP Programming File: "BSS Crestron Demo.audioarchitect"
CABLE DIAGRAM:	This module does not communicate directly with the BSS DSP. Please see the BSS BLU Command Processor and BSS BLU RS232 Command Processor modules help files for connection information.

CONTROL:

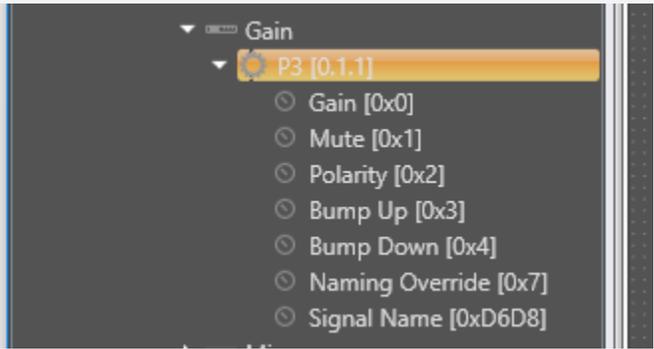
<u>Signal/Function Name</u>	<u>D,S,A</u>	<u>Digital, Serial, Analog signal property definition.</u>
Route	D	Pulsing will route the "InputValue" to the controlled output.
Deroute	D	Pulsing will deroute the "InputValue" to the controlled output, if the input value is currently set.
ToggleRoute	D	Pulsing will route or deroute based on the logic described above.
InputValue	D	Assigns the "InputValue" to be set. Alternatively if the "Route" signal is high, then changing this value will automatically route to the controlled output.

FEEDBACK:

<u>Signal/Function Name</u>	<u>D,S,A</u>	<u>Digital, Serial, Analog signal property definition.</u>
Is_Routed	D	This will indicate high if the control signal "InputValue" equals the feedback signal "ActualRoute".
ActualRoute	A	This is the actual input value that is current routed to the controlled output.

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PARAMETERS:

CommandProcessorID	A	Set this value to match the value set on Command Processor module. This is how the control module registers itself for control.
ObjectID	S	<p>Set this value to match the Object ID found in the BSS Audio Architect for the DSP object you wish to control. <i>This is a three byte hexadecimal value.</i></p> <p>You can find this Object ID by looking in the BSS Audio Architect software with the DSP program file opened. In the venue explorer will be list of DSP controls under the associated Node, in this example "Gain". You will see the address in square brackets with three values separated by commas "[0,1,1]". This is the Object ID, and the correct way to assign this in the module parameter field would be \x00\x01\x01.</p> 
ControlType	A	<p>This control module can control a bunch of different types of DSP control points. Assigning what type is controlled is handled by the "ControlType" module parameter field. Here is the list of Control Types.</p> <p>SourceMatrix: Output [A] RoomCombiner: BGM Input Room [A] SourceSelector</p> <p>You will notice in the list above, that some of the items have "[A]" in the description fields. This is an indication that additionally the [A] module parameter need to be set to make that selection work.</p> <p>Utilizing these values saves you from hunting down even more data from the Audio Architect DSP Program. These values become obvious when you understand that they are based on what Input, Output, Line Number that you are controlling.</p> <p>In example: "SourceMatrix: Output [A] Selection The [A] Value is what Output you wish to control. So if you want to control Output 10. Your [A] Value is 10d.</p> <p>If the description of your selection does not contain [A], then the [A]</p>



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[A]	A	Please see "ControlType" parameter above for information about setting this value.								

TESTING:	
OPS USED FOR TESTING:	CP3 1.501.0025
SIMPL WINDOWS USED FOR TESTING:	4.05.03
DEVICE DB USED FOR TESTING:	79.05.002.00
CRES DB USED FOR TESTING:	59.00.002.00
SYMBOL LIBRARY USED FOR TESTING:	1012
SAMPLE PROGRAM:	BSS BLU v1.0 IP Demo.smw or BSS BLU v1.0 RS232 Demo.smw
REVISION HISTORY:	v1.0 - Initial Release