



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

GENERAL INFORMATION

SIMPLWINDOWS NAME:	BSS BLU State 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>Analog: Input [A] Mute AEC: Input [A] AEC Mute AEC: Input [A] Dry Mute Mixer: Input [A] Mute Mixer: Input [A] Solo Mixer: Input [A] Group [B] Mixer: Master Mute L Mixer: Master Mute R Gain: Mute Gain N-Input: Mute [A] MatrixMixer: XPoint Input [A] to Output [B] MatrixRouter: XPoint Input [A] to Output [B] RoomCombiner: Source Mute Room [A] Room Combiner: BGM Mute Room [A] Room Combiner: Master Mute Room [A] Room Combiner: Partition [A] Analog Dialer: TX Mute Analog Dialer: RX Mute VoIP Dialer: Line [A] TX Mute VoIP Dialer: Line [A] RX Mute</p> <p>You will notice in the list above, that some of the items have "[A]" and some also have "[B]" in the description fields. This is an indication that additionally the [A] and [B] module parameters 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</p>



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Architect DSP Program. These values become obvious when you understand that they are based on what Input, Output, Line Number that you are controlling.

In example: "Matrix Mixer: XPoint Output [A] Input [B]" Selection
 The [A] Value is what Output you wish to control, whereas the [B] Value is what input you wish to control. So if you want to control Output 10 and Input 3 cross point. Your [A] Value is 10d and your [B] Value is 3d.

If the description of your selection does not contain [A] or [B], then the [A] and [B] parameters should be set to 0d. If only [A] exists in your description then the [B] value would be 0d and the [A] parameter value would be set to Input, Output or Line you wish to control..

Control Type	[A]	[B]
Analog: Input [A] Mute	>= 1d (Input)	0d
AEC: Input [A] AEC Mute	>= 1d (Input)	0d
AEC: Input [A] Dry Mute	>= 1d (Input)	0d
Mixer: Input [A] Mute	>= 1d (Input)	0d
Mixer: Input [A] Solo	>= 1d (Input)	0d
Mixer: Input [A] Group [B]	>= 1d (Input)	1d to 4d (Group)
Mixer: Master Mute L	0d	0d
Mixer: Master Mute R	0d	0d
Gain: Mute	0f	0d
Gain N-Input: Mute [A]	>= 1d (Input)	0d
MatrixMixer: XPoint Output [A] to Input [B]	>= 1d (Output)	>= 1d (Input)
MatrixRouter: XPoint Output [A] to Input [B]	>= 1d (Output)	>= 1d (Input)
RoomCombiner: Source Mute Room [A]	>= 1d (Room)	0d
Room Combiner: BGM Mute Room [A]	>= 1d (Room)	0d
Room Combiner: Master Mute Room [A]	>= 1d (Room)	0d
Room Combiner: Partition [A]	>= 1d (Partition)	0d
Analog Dialer: TX Mute	0d	0d
Analog Dialer: RX Mute	0d	0d
VoIP Dialer: Line [A] TX Mute	>= 1d (Line)	0d
VoIP Dialer: Line [A] RX Mute	>= 1d (Line)	0d

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



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files for connection information.

CONTROL:

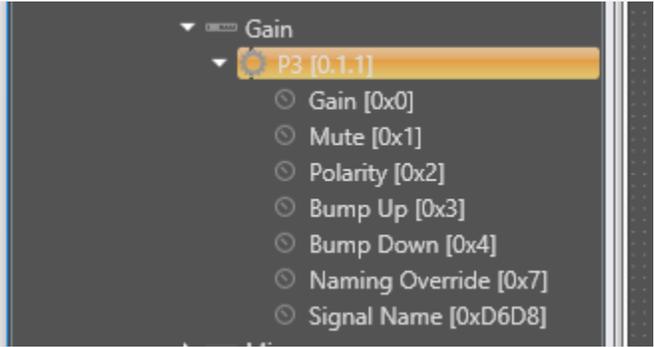
<u>Signal/Function Name</u>	<u>D.S.A</u>	<u>Digital, Serial, Analog signal property definition.</u>
StateOn	D	Pulsing will set the state high.
StateOff	D	Pulsing will set the state low
StateToggle	D	Pulsing will set toggle the state

FEEDBACK:

<u>Signal/Function Name</u>	<u>D.S.A</u>	<u>Digital, Serial, Analog signal property definition.</u>
ActualState	AD	This signal will display the current state value.

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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> <ul style="list-style-type: none"> Analog: Input [A] Mute AEC: Input [A] AEC Mute AEC: Input [A] Dry Mute Mixer: Input [A] Mute Mixer: Input [A] Solo Mixer: Input [A] Group [B] Mixer: Master Mute L Mixer: Master Mute R Gain: Mute Gain N-Input: Mute [A] MatrixMixer: XPoint Input [A] to Output [B] MatrixRouter: XPoint Input [A] to Output [B] RoomCombiner: Source Mute Room [A] Room Combiner: BGM Mute Room [A] Room Combiner: Master Mute Room [A] Room Combiner: Partition [A] Analog Dialer: TX Mute Analog Dialer: RX Mute



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VoIP Dialer: Line [A] TX Mute
 VoIP Dialer: Line [A] RX Mute

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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.

In example: "Matrix Mixer: XPoint Output [A] Input [B]" Selection
 The [A] Value is what Output you wish to control, whereas the [B] Value is what input you wish to control. So if you want to control Output 10 and Input 3 cross point. Your [A] Value is 10d and your [B] Value is 3d.

If the description of your selection does not contain [A] or [B], then the [A] and [B] parameters should be set to 0d. If only [A] exists in your description then the [B] value would be 0d and the [A] parameter value would be set to Input, Output or Line you wish to control..

Control Type	[A]	[B]
Analog: Input [A] Mute	>= 1d (Input)	0d
AEC: Input [A] AEC Mute	>= 1d (Input)	0d
AEC: Input [A] Dry Mute	>= 1d (Input)	0d
Mixer: Input [A] Mute	>= 1d (Input)	0d
Mixer: Input [A] Solo	>= 1d (Input)	0d
Mixer: Input [A] Group [B]	>= 1d (Input)	1d to 4d (Group)
Mixer: Master Mute L	0d	0d
Mixer: Master Mute R	0d	0d
Gain: Mute	0f	0d
Gain N-Input: Mute [A]	>= 1d (Input)	0d
MatrixMixer: XPoint Output [A] to Input [B]	>= 1d (Output)	>= 1d (Input)
MatrixRouter: XPoint Output [A] to Input [B]	>= 1d (Output)	>= 1d (Input)
RoomCombiner: Source Mute Room [A]	>= 1d (Room)	0d
Room Combiner: BGM Mute Room [A]	>= 1d (Room)	0d
Room Combiner: Master Mute Room [A]	>= 1d (Room)	0d
Room Combiner: Partition [A]	>= 1d (Partition)	0d
Analog Dialer: TX Mute	0d	0d
Analog Dialer: RX Mute	0d	0d
VoIP Dialer: Line [A] TX Mute	>= 1d (Line)	0d
VoIP Dialer: Line [A] RX Mute	>= 1d (Line)	0d

[A]

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



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