

**Partner: Symetrix  
Model: Edge/Radius  
Device Type: Digital Signal Processor**



## GENERAL INFORMATION

SIMPLWINDOWS NAME:	Symetrix Volume v3.0
CATEGORY:	Mixer
VERSION:	3.0
SUMMARY:	<p>This module controls volume control points in the Symetrix Edge and Radius.</p> <p>This module controls volume points in the Symetrix Edge and Radius.</p> <p>This Symetrix Volume v3.0 module is used to control multiple types of volume control objects within the Symetrix Edge or Radius. This module's parameters need to be setup correctly in order to control the volume object that you wish to control. In order for feedback to function properly, the volume control number should be setup to push changes in state.</p> <p><b>Important: Feedback status will only be accurate if the volume control is set to push changes in status.</b></p>
GENERAL NOTES:	<p><b>CRESTRON HARDWARE REQUIRED:</b> N/A</p> <p><b>SETUP OF CRESTRON HARDWARE:</b> This module requires the Symetrix Command Processor IP v3.0 or the Symetrix Command Processor Serial v3.0 modules in order to operate. Please read the help files associated with these modules for Crestron Hardware Setup.</p> <p><b>VENDOR FIRMWARE:</b> 2.868</p>

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## PARAMETERS:

<b>Controller_Number</b>	The controller number of the object that you wish to control. This should be entered as 5 digits with leading zeroes as necessary. For example, if the controller number is 150, it should be entered as 00150.
<b>Full_Range_Of_Control</b>	This is the full range of control available for the volume control object. This must be setup properly in order for the volume control to function correctly. The available options are: <ul style="list-style-type: none"><li>• Std (-72 to +12)</li><li>• Analog In (-24 to +24)</li><li>• Dial/Ring Tone (-40 to +20)</li><li>• AGC Level (-40 to 0)</li><li>• DTMF (-20 to 0)</li><li>• Noise Cancel (0 to +20).</li></ul> All values are in dB.
<b>User_Max_Level</b> <b>User_Min_Level</b>	These values are used to limit the range of adjustment on the volume control object when it is being controlled from the control system. These values have no impact on volume controls used within the Symetrix Composer software. The Max and Min levels are in dB and should be entered as decimal values. For example, if the user min is desired to be -35 dB, the User_Min_Level parameter should be entered as -35d. The module will compare the entered user min and max values to the hardware min and max values to ensure that the values entered are acceptable. If the values are out of range or otherwise not usable the module will default to using the hardware limits. Such cases include: <ul style="list-style-type: none"><li>• If the user max is less than or equal to the user min, the hardware limits will be used.</li><li>• If the user max is greater than the hardware max, the hardware max limit will be used.</li><li>• If the user min is less than the hardware min, the hardware min limit will be used.</li></ul>
<b>Volume_Increment_In_dB</b>	This is the volume step increment that will be used when adjusting volume up or down. The acceptable values are decimal numbers in dB and should be entered as such. For example, if the increment is desired to be 2 dB, the Volume_Increment_In_dB parameter should be entered as 2d. The increment entered will be used in all cases except when the current value approaches the user min or max and the full increment cannot be applied. In these cases the next increment or decrement will go to the user max or min respectively.

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## CONTROL:

Volume_Up	D	Press and hold to increase or decrease the volume level.
Volume_Slider	A	Use this input to control the volume using a slider control object. The slider uses the full range of 0 to 65535d to adjust levels between the user min and user max settings.
Volume_Direct_In_dB	A	Use this input to set the volume level to a specific setting in dB. The value must be within the user min/max range in order to transmit a command. The value should be a decimal value that is triggered from a symbol such as an analog initialize. For example, to set the volume to a level of -5 db, use an analog initialize with a value of -5d.
From_Command_Processor	S	Serial data signal to be routed from one of the To_Module_* outputs on the Symetrix Command Processor IP v3.0 or the Symetrix Command Processor Serial v3.0 modules.

## FEEDBACK:

Volume_Level_dB_Text	S	A serial string indicating the current volume level in dB.
Volume_Bar	A	Analog signal used to provide feedback for an analog bar graph or slider. When the volume level is at the user min the value of the bar graph should be 0d. When the volume level is at the user max the value of the bar graph should be 65535d.
Volume_Is_Out_Of_User_Range	D	This signal will be high if the current volume level is outside of the range defined by the user min and max. This can happen if the volume is adjusted in the Symetrix Composer software to a level that is outside of the user range.
User_Volume_Range_Fault	D	This signal will be high if the values entered for user min and max are determined to be unusable. Specific cases are described above for User_Max_Level and User_Min_Level in the PARAMETERS section of this document.
To_Command_Processor	S	Serial data signal to be sent to the From_Modules input on the Symetrix Command Processor IP v3.0 or the Symetrix Command Processor Serial v3.0 modules.

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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>	4.02.53
<b>CRES DB USED FOR TESTING:</b>	47.05.002.01
<b>DEVICE DATABASE:</b>	60.02.001.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	906
<b>SAMPLE PROGRAM:</b>	Symetrix ATI IP Demo v3.0 CP3 Symetrix ATI Serial Demo v3.0 CP3 Symetrix ATI IP Demo v3.0 Pro2 Symetrix ATI Serial Demo v3.0 Pro2 Symetrix VOIP IP Demo v3.0 CP3 Symetrix VOIP Serial Demo v3.0 CP3 Symetrix VOIP IP Demo v3.0 Pro2 Symetrix VOIP Serial Demo v3.0 Pro2
<b>REVISION HISTORY:</b>	v3.0 – Initial Release – named as v3.0 to avoid confusion with earlier module versions provided by Symetrix.