

## MIDI Parameter Details

<b>Parameter</b>	<b>CC#</b>	<b>Range</b>	<b>Value</b>	<b>Description</b>
<b>Reverb Engine A</b>	<b>1</b>	0-13		Selects and loads reverb engines into A
			0	Room
			1	Hall
			2	E-Dome
			3	True Spring
			4	Plate
			5	Lo-Fi
			6	Modverb
			7	Shimmer
			8	Echoverb
			9	Swell
			10	Offspring
			11	Reverse
			12	Outboard Spring
			13	Metal Box
<b>Time A</b>	<b>2</b>	0-127		Sets min and max delay times
<b>Mix A</b>	<b>3</b>	0-127		Sets the wet/dry mix - 50/50 point at approx. 95
<b>Pre-Delay A</b>	<b>4</b>	0-127		Sets Pre-Delay A
<b>Treble A</b>	<b>5</b>	0-127		Sets Treble A
<b>Output A</b>	<b>6</b>	0-127		Sets Output A
<b>Bass A</b>	<b>7</b>	0-127		Sets Bass A
<b>Diffusion A</b>	<b>8</b>	0-127		Sets Diffusion A
<b>Modulation Depth A</b>	<b>9</b>	0-127		Sets Modulation Depth A
<b>Modulation Rate A</b>	<b>10</b>	0-127		Sets Modulation Rate A
<b>Pre-Delay Feedback A</b>	<b>11</b>	0-127		Sets Pre-Delay Feedback A
<b>Pre-Delay Mod Depth</b>	<b>12</b>	0-127		Sets Pre-Delay Mod Depth
<b>Size A</b>	<b>13</b>	0-max (engine dependent)		Examples: True Spring has 6 sizes, hall has 5, Echoverb has 1
				See Desktop Editor for size option list
<b>Input Low Cut A</b>	<b>14</b>	0-7		0 Offspring
			1	20Hz
			2	100Hz
			3	125Hz
			4	150Hz

			5	200Hz
			6	250Hz
			7	Default Setting
<b>Engine Param 1 A</b>	<b>15</b>	0-127	See chart below for details	
<b>Engine Param 2 A</b>	<b>16</b>	0-127	See chart below for details	
<b>Engine Param 3 A</b>	<b>17</b>	0-127	See chart below for details	
<b>Engine Param 4 A</b>	<b>18</b>	0-127	See chart below for details	
<b>Engine Param 5 A</b>	<b>19</b>	0-127	See chart below for details	
<b>Engine Special Control A</b>	<b>20</b>	0-127	See chart below for details	
<b>Reverb Engine B</b>	<b>25</b>	0-13	Selects and loads reverb engines into B	
			0	Romm
			1	Hall
			2	E-Dome
			3	True Spring
			4	Plate
			5	Lo-Fi
			6	Modverb
			7	Shimmer
			8	Echoverb
			9	Swell
			10	Offspring
			11	Reverse
			12	Outboard Spring
			13	Metal Box
<b>Time B</b>	<b>26</b>	0-127	Sets min and max delay times	
<b>Mix B</b>	<b>27</b>	0-127	Sets the wet/dry mix - 50/50 point at approx. 95	
<b>Pre-Delay B</b>	<b>28</b>	0-127	Sets Pre-Delay B	
<b>Treble B</b>	<b>29</b>	0-127	Sets Treble B	
<b>Output B</b>	<b>30</b>	0-127	Sets Output B	
<b>Bass B</b>	<b>31</b>	0-127	Sets Bass B	
<b>Diffusion B</b>	<b>32</b>	0-127	Sets Diffusion B	
<b>Modulation Depth B</b>	<b>33</b>	0-127	Sets Modulation Depth B	
<b>Modulation Rate B</b>	<b>34</b>	0-127	Sets Modulation Rate B	
<b>Pre-Delay Feedback B</b>	<b>35</b>	0-127	Sets Pre-Delay Feedback B	
<b>Pre-Delay Mod Depth B</b>	<b>36</b>	0-127	Sets Pre-Delay Mod Depth B	

<b>Size B</b>	<b>37</b>	0-max (engine dependent)	Examples: True Spring has 6 sizes, hall has 5, Echoverb has 1
			See Desktop Editor for size option list
<b>Input Low Cut B</b>	<b>38</b>	0-7	0 Offspring
			1 20Hz
			2 100Hz
			3 125Hz
			4 150Hz
			5 200Hz
			6 250Hz
			7 Default Setting
<b>Engine Param 1 B</b>	<b>39</b>	0-127	See chart below for details
<b>Engine Param 2 B</b>	<b>40</b>	0-127	See chart below for details
<b>Engine Param 3 B</b>	<b>41</b>	0-127	See chart below for details
<b>Engine Param 4 B</b>	<b>42</b>	0-127	See chart below for details
<b>Engine Param 5 B</b>	<b>43</b>	0-127	See chart below for details
<b>Engine Special Control B</b>	<b>44</b>	0-127	See chart below for details
<b>Dual/Single Mode</b>	<b>50</b>	0-3	0 Selects Reverb A
		(note, no spillover)	1 Selects Reverb B
			2 Selects A&B Parallel
			3 Selects A&B Cascade
<b>I/O Routing Option</b>	<b>53</b>	0-7	0 Auto-detect
			1 Mono in - Stereo Out
			2 Stereo In - Stereo Out
			3 Mono In - Mono Out - Dry out 2
			4 Stereo In - Wet Sum to Mono
			5 Dual Mono - Independent Stereo
			6 Mono In - Independent Stereo Out
			7 Pre-Processing External Loop
<b>Reverb Send</b>	<b>54</b>	0-127	Sets the level being sent into the reverb
<b>A/B Crossfade</b>	<b>55</b>	0-127	Fade from all A Reverb to all B Reverb (Dual Only)
<b>Preset Decrement</b>	<b>80</b>	any	
<b>Preset Increment</b>	<b>82</b>	any	
<b>Remote Tap Tempo</b>	<b>93</b>	any	Same as tappng the OPTION footswitch
<b>Remote Hold Function</b>	<b>97</b>	any	Sustains the reverb trail of the active reverb
<b>Remote Expression</b>	<b>100</b>	0-127	Overrides all expression inputs

<b>Bypass/Engage</b>	<b>101</b>	0-127	0-64 Bypass, 65-127 - Engage
<b>Toggle Bypass/Engage</b>	<b>102</b>	any	
<b>Recall Preset - Bypass</b>	<b>103</b>	0-127	Recalls any preset in Bypass
<b>Recall Preset - Engage</b>	<b>104</b>	0-127	Recalls any preset Engaged

**Engine Specific Parameters: CC values 15 through 20 and 39 through 44 change depending on the selected engine. The table below is a guide to the CC values for each Engine Specific Parameter.**

<b>ENGINE</b>	<b>ENGINE PARAM 1</b>	<b>ENGINE PARAM 2</b>	<b>ENGINE PARAM 3</b>	<b>ENGINE PARAM 4</b>	<b>ENGINE PARAM 5</b>	<b>ENGINE SPECIAL CONTROLS</b>
<b>ROOM</b>	Pre-Delay Feedback High Cut	Pre- Delay Feedback Low Cut	Early Reflections Level	Reverb Level	Early/Reverb Crossfade	
<b>HALL-L</b>	Diffusion Modulation Depth					
<b>E-DOME</b>	Pre-Delay Feedback High Cut	Pre- Delay Feedback Low Cut	Early Reflections Level	Reverb Level	Early/Reverb Crossfade	
<b>TRUE SPRING</b>						
<b>PLATE</b>	Metallic Mix	Reverb Level	Early Reflections Level			
<b>LO-FI</b>	Distortion (Drive)	Quantize (0-9 knob mapped)	Sample Rate Reduction	Destruct/Clean Mix	Destruct High Cut	Modulation Noise Depth
<b>MODVERB</b>	Tremolo Depth	Tremolo Rate	Tremolo Shape (0-4 knob mapped)	Termolo Options (0-7 knob mapped)	Tremolo Stereo Spread	
<b>SHIMMER</b>	Pitch Shift/Normal Crossfade	Pitch Shift Modulation		Pitch Interval (0-26 no mapping)	Pitch Feedback (Regen)	
<b>ECHOVERB</b>	Pre-Delay Feedback High Cut	Pre- Delay Feedback Low Cut	Early Reflections	Reverb Level	Early/Reverb Crossfade	
<b>SWELL</b>	Envelope Gain	Swell Time	Swell Send Signal	Swell Dry Signal		
<b>OFFSPRING</b>	Master Offset	Master Pre-Delay	Early Reflections	Reverb Level		
<b>REVERSE</b>	Delay Curve Shape (0-5 knob mapped)	Curve Filtering (0-2 knob mapped)				
<b>OUTBOARD SPRING</b>	Drive (Dwell)					
<b>METAL BOX</b>	Pre-Delay Feedback High Cut	Pre- Delay Feedback Low Cut	Early Reflections	Reverb Level	Early/Reverb Crossfade	