

MIDI Implementation

Grainmother
Version 1.0 - 12.01.2025

<u>Parameter</u>	<u>CC</u>	<u>Range</u>	<u>Value</u>	<u>Description</u>
Ringmod - Tune	1	0-127	Sets the frequency of the modulator	
Ringmod - Rate	2	0-127	Sets the frequency of additional modulation	
Ringmod - Depth	3	0-127	Sets the amount of additional modulation	
Ringmod - Saturation	4	0-127	Blends between two different analog simulations (transistor->diode)	
Ringmod - Spread	5	0-127	Sets the phase offset between the two stereo modulators	
Ringmod - Noise	6	0-127	Sets the amount of post processed noise-ring modulation	
Ringmod - Bitcrush	7	0-127	Sets the amount of pre processed bit crushing	
Ringmod - Mix	8	0-127	Sets the level of the wet signal	
Ringmod - Waveform	9	0-4	Sets the waveform of additional modulation	
			0	Sine
			1	Triangle
			2	Sawtooth
			3	Pulse
			>= 4	Random
Granulator - Grainlength	21	0-127	Sets the length of the individual grains	
Granulator - Density	22	0-127	Sets the density of grain appearance	
Granulator - Variation	23	0-127	Sets the randomness of some internal parameters	
Granulator - Pitch	24	0-127	Sets the pitch of the individual grains, no Pitch at 64	
Granulator - Delay	25	0-127	Sets the level and feedback amount of the post delay effect	
Granulator - Feedback	26	0-127	Sets the level of feedback	
Granulator - Highcut	27	0-127	Sets the cutoff frequency of a high cut filter	
Granulator - Mix	28	0-127	Sets the level of the wet signal	
Granulator - Reverse	29	0-127	Sets the play direction of the individual grains	
			< 64	OFF
			>= 64	ON
Granulator - Delay Speed Ratio	30	0-3	Sets the ratio between density and delay speed	
			0	1:1
			1	1:2

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			2	1:3
			>= 3	1:4
Granulator - Glide	31	0-127	Sets the amount of pitch modulation applied to each individual grain, no glide at 64	
Granulator - Filter Resonance	32	0-127	Sets the amount of resonance applied to the high cut filter	
Granulator - Filter Model	33	0 or 1	Sets the steepness of the high cut filter	
			0	Moog Ladder (-24dB per octave)
			1	Moog Half Ladder (-12dB per octave)
Granulator - Envelope Type	34	0-2	Sets the type of envelope applied to each individual grain	
			0	Parabolic
			1	Hann
			>= 2	Triangular
Reverb - Decay	41	0-127	Sets the approximated decay time (RT60)	
Reverb - Predelay	42	0-127	Sets the initial delay time	
Reverb - Modulation Rate	43	0-127	Sets the frequency of modulation	
Reverb - Modulation Depth	44	0-127	Sets the amount of modulation	
Reverb - Size	45	0-127	Sets the spreading of the early reflections	
Reverb - Feedback	46	0-127	Sets the amount of feedback applied to the early reflections	
Reverb - Highcut	47	0-127	Sets the cutoff frequency of the higncut filter	
Reverb - Mix	48	0-127	Set the level of wet signal	
Reverb - Type	49	0-3	Sets the type of reverb	
			0	Church
			1	Digital Vintage
			2	Seasick
			>= 3	Room
Reverb - Lowcut	50	0-127	Sets the cutoff frequency of the low-cut filter	
Reverb - Multiplier Frequency	51	0-127	Sets the frequency of the pre processed peak equalizer	
Reverb - Multiplier Gain	52	0-127	Sets the gain of the pre processed peak equalizer	
Tempo	61	0-127	Sets the global tempo	
Global Bypass	62	0-127	Engages/disengages the whole effect chain	
			< 64	OFF

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			>= 64	ON
Ringmod Engaged	63	0-127	Engages/disengages the Ringmodulator engine	
			< 64	OFF
			>= 64	ON
Granulator Engaged	64	0-127	Engages/disengages the Granulator engine	
			< 64	OFF
			>= 64	ON
Reverb Engaged	65	0-127	Engages/disengages the Reverb engine	
			< 64	OFF
			>= 64	ON
Effect Edit Focus	66	0-2	Sets the effect control focus	
			0	Ringmodulator focussed
			1	Granulator focussed
			>= 2	Reverb focussed
Effect Order	67	0-6	Sets the processing order of the three effect engines	
			0	Ringmod (A) -> Granulator (B) -> Reverb (C)
			1	A B C lin parallel)
			2	C -> B -> A
			3	C -> A -> B
			4	B -> C -> A
			5	B -> A -> C
			>= 6	A -> C -> B
Tempo Set	68	0-1	Defines whether the tempo button affects:	
			0	Only the current effect
			>= 1	All effects
Global Mix	69	0-127	Sets the wet/dry level of the whole effect engine	
Recall Preset All Engaged	101	0-127	Recalls any preset with all effects engaged	
Recall Preset All Bypassed	102	0-127	Recalls any preset with all effects bypassed	
Recall Preset Ringmod Engaged	103	0-127	Recalls any preset with Ringmodulator engaged	
Recall Preset Granulator Engaged	104	0-127	Recalls any preset with Granulator engaged	
Recall Preset Reverb Engaged	105	0-127	Recalls any preset with Reverb engaged	

<u>Parameter</u>	<u>CC</u>	<u>Range</u>	<u>Value</u>	<u>Description</u>
Recall Preset Ringmod & Granulator Engaged	106	0-127		Recalls any preset with Ringmod and Granulator engaged
Recall Preset Ringmod & Reverb Engaged	107	0-127		Recalls any preset with Ringmod and Reverb engaged
Recall Preset Granulator & Reverb Engaged	108	0-127		Recalls any preset with Granulator and Reverb engaged