

Envelope Mode

Modulation channel modulator assignment

Model Name	MOD Channel 1 (Shape)	MOD Channel 2 (ShiftShape)	MOD Channel 3 (Param1)	A.S.
Virtual Analog	Tri>Saw>PW M	Detune -Pitch/+Pitch H	Pulse Width T	Exp
VA Sync	Tri>Saw>PW M	Detune -Pitch/+Pitch H	Pulse Width T	Exp
Tides	Wavefold T	Asymmetry M	Waveform H	Exp
Warps	Wavefold T	Asymmetry M	Waveform H	Exp
FM	Modulation Index T	Frequency Ratio H	Feedback 10P/20P M	Exp
Grain	Formant Frequency T	Width and Shape M	Frequency Ratio H	Exp
ZBraids	CF Freq T	Saw>Sqr>Tri M	PK>LP>BP>HP H	Exp
Additive	Harmonic Index T	Bump Shape M	Number of Bumps H	Exp
SWARM	Pitch Randomization H	Grain Duration/Overlap M	Grain Density T	Lin
Particle	Pitch Randomization H	Filter Type AP/BP M	Particle Density T	Lin
Noise	Filter Resonance M	LP>BP>HP H	Clock Frequency T	Lin
NoiseDBP	Filter Resonance M	2nd BP Center frequency	Clock Frequency T	Lin
String	Inharmonicity H	Brightness/density T	Decay M	Lin
Modal	Inharmonicity H	Brightness/density T	Decay M	Lin
Bass Drum	Brightness T	Sharpness/Overdrive H	Decay M	Lin
Snare	Mode Balance T	Harmonic/Noisy H	Decay M	Lin
HiHat	HP Filter Cutoff T	Metallic/Noisy H	Decay M	Lin
Virtual VCF	Cutoff Freq T	Waveform M	Resonance 12/24 H	Exp

Modulator Key

Envelope
Env+LFO
Key Track
KT+LFO

Envelope Mode control ranges

Param5	Param6	
Attack	Decay	
[+] Rate	[+] Rate	AD Envelope
[+] Rate	[-] Rate	AR Envelope
[-] Rate	[+] Rate	ADSR 40% Sustain
[-] Rate	[-] Rate	ADSR 70% Sustain

LFO mode:

Modulation channel modulator assignment

Model Name	MOD Channel 1 (Shape)	MOD Channel 2 (ShiftShape)	MOD Channel 3 (Param1)	A.M.
Virtual Analog	Tri>Saw>PW M	Detune -Pitch/+Pitch H	Pulse Width T	LFO
VA Sync	Tri>Saw>PW M	Detune -Pitch/+Pitch H	Pulse Width T	LFO
Tides	Wavefold T	Asymmetry M	Waveform H	LFO
Warps	Wavefold T	Asymmetry M	Waveform H	LFO
FM	Modulation Index T	Frequency Ratio H	Feedback 10P/20P M	LFO
Grain	Formant Frequency T	Width and Shape M	Frequency Ratio H	LFO
ZBraids	CF Freq T	Saw>Sqr>Tri M	PK>LP>BP>HP H	LFO
Additive	Harmonic Index T	Bump Shape M	Number of Bumps H	LFO
SWARM	Pitch Randomization H	Grain Duration/Overlap M	Grain Density T	LFO
Particle	Pitch Randomization H	Filter Type AP/BP M	Particle Density T	LFO
Noise	Filter Resonance M	LP>BP>HP H	Clock Frequency T	LFO
NoiseDBP	Filter Resonance M	2nd BP Center frequency	Clock Frequency T	LFO
String	Inharmonicity H	Brightness/density T	Decay M	KeyT
Modal	Inharmonicity H	Brightness/density T	Decay M	KeyT
Bass Drum	Brightness T	Sharpness/Overdrive H	Decay M	LFO
Snare	Mode Balance T	Harmonic/Noisy H	Decay M	LFO
HiHat	HP Filter Cutoff T	Metallic/Noisy H	Decay M	LFO
Virtual VCF	Cutoff Freq T	Waveform M	Resonance 12/24 H	LFO

Modulator Key

LFO2
LFO2[x]LFO
Key Track
KT+LFO

LFO Mode control ranges

Param5	Param6	
Attack	Decay	
0	[+] Rate	LFO2+LFO
0	[-] Rate	LFO2*LFO
[+] Rate	0	LFO2trem+
[-] Rate	0	LFO2trem*