

### Front Panel Assignments

Control	Function	Description
Shape 1	Timbre Bias	Timbre Input Bias
Picth 1	Timbe Intensity	Timbre Modulation Intensity
Waveform 1	[Sum   LFO*LFO2   KT*EG Env]	Timbre Modulation Matrix Operator
Pitch Int	EG Envelope Intensity	EG Envelope with EG Velocity Intensity
Shape 2	Morph Bias	Morph Input Bias
Pitch 2	Morph Intensity	Morph Modulation Intensity
Waveform 2	[Sum   KT*Env2   KT*LFO2]	Morph Modulation Matrix Operator
Crossmod	LFO2 Intensity	LFO2 Intensity
Shape	Harmonics Bias	Harmonics Input Bias
ShiftShape	Harmonics Intensity	Harmonics Modulation Intensity
Ring / Sync	[MultiMod   LFO+S/H]	Harmonics Modulation Type Select

### MultiEngine Parameter Menu Assignments

Param1	LFO2 Rate	Triangle/Ramp LFO2 frequency
Param2	Mod Channel 1 Intensity	Timbre Key Track
Param3	Mod Channel 1 Intensity	Morph Key Track
Param4	Mod Channel 1 Intensity	Harmonics Key Track
Param5	Env2 Attack	Env2 Attack Rate and Envelope Mode
Param6	Env2 Decay	Env2 Decay Rate and Envelope Mode

### Notes

1. Matrix Operator controls how Built In and Hardware Modulators are combined per channel
2. Mod Channel 1, 2 and 3 are summed across rows.
3. Mod Channel 1 is assigned to Menu Params 2, 3, and 4
4. Mod Channel 2 is assigned Front Panel Int1, Int2, and Int3
5. Mod Channel 3 is assigned to Front Panel EG Env Int, LFO2 Int, Mod Type Select, and Param1

### Modulation Matrix Assignments

MX		Mod Ch. 1	Mod Ch. 2	Mod Ch. 3
3	Timbre	KT	LFO   S/H*KT	EG Env*KT
2	Timbre	KT	LFO*LFO2	EG Env
1	Timbre	KT	LFO	EG Env
3	Morph	KT	MultiMod	LFO2*KT
2	Morph	KT	MultiMod*KT	LFO2
1	Morph	KT	MultiMod	LFO2
2	Harmonics	KT	LFO	
1	Harmonics	KT	MultiMod	

### Model Input Key

	Timbre
	Morph
	Harmonics
	Timbre and Morph
	Morph and Harmonics
	Harmonics and Timbre

### MultiMod Programming

Param5	Param6	
AttackMM	DecayMM	
[+] Rate	[+] Rate	AD Envelope
[+] Rate	[-] Rate	AR Envelope
[+] Rate	0	LFO3 Triangle
[-] Rate	0	LFO3 Saw
0	[+] Rate	S/H LFO>LFO3
0	[-] Rate	S/H LFO3>LFO
[-] Rate	[+] Rate	ADSR 40% Sustain
[-] Rate	[-] Rate	ADSR 70% Sustain

S+H LFO3 clocked by LFO

S+H LFO clocked by LFO3