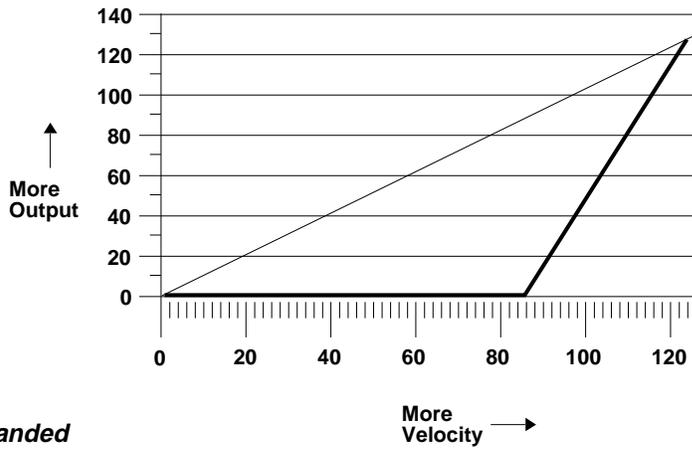
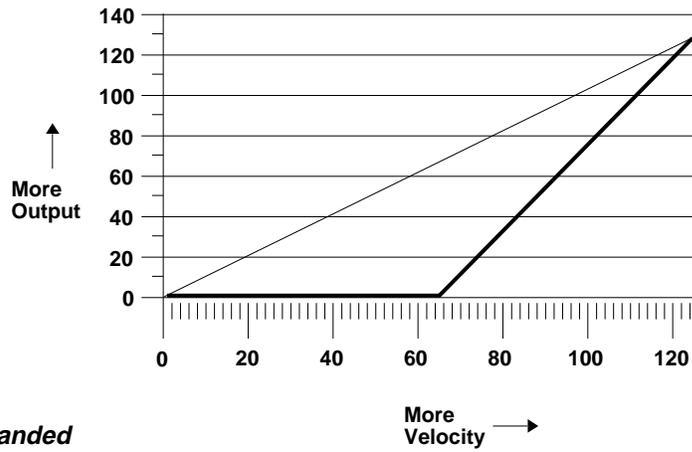
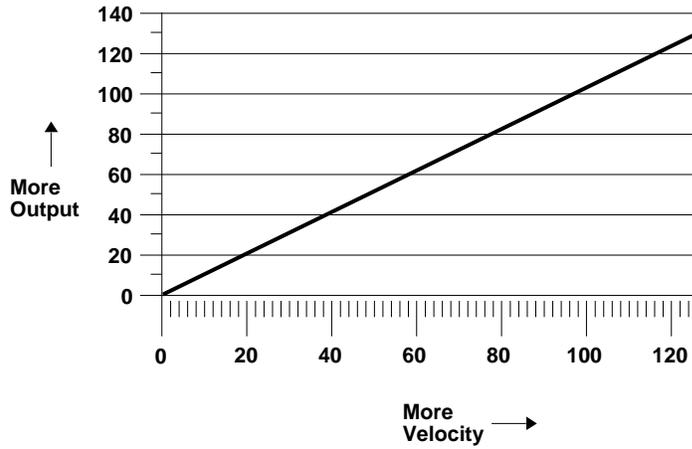


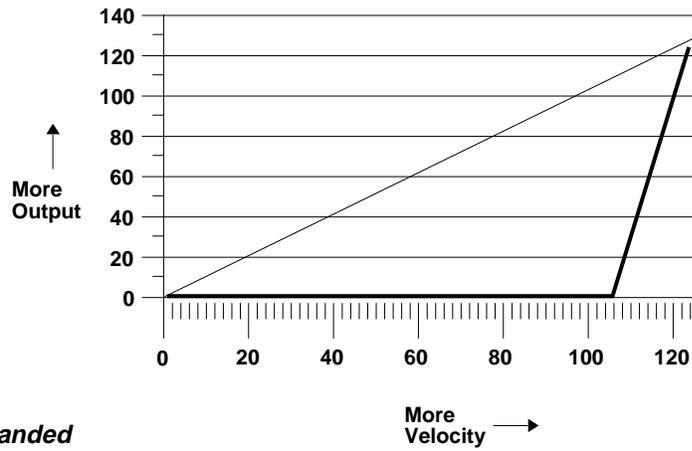
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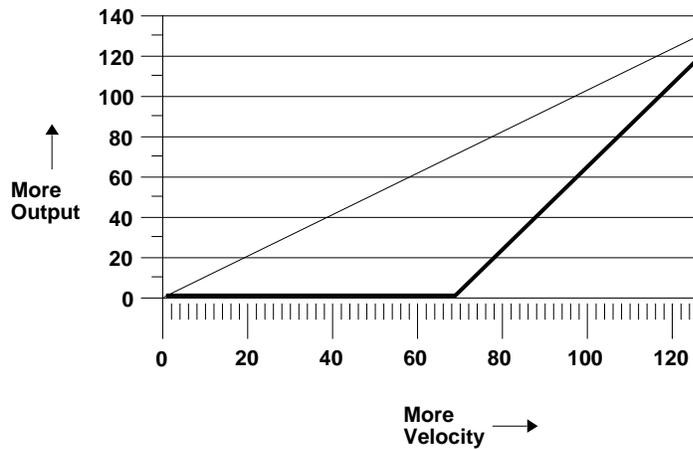
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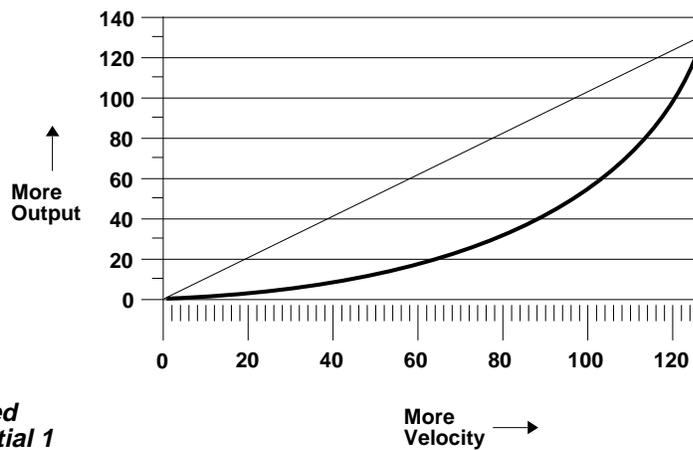
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4. Heavy Handed

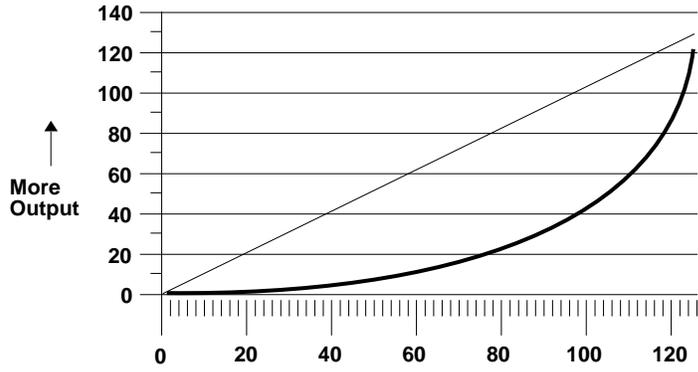


5. Clipped

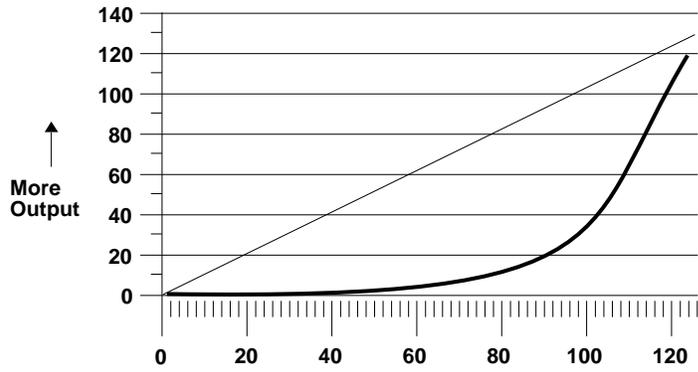


6. Concaved Exponential 1

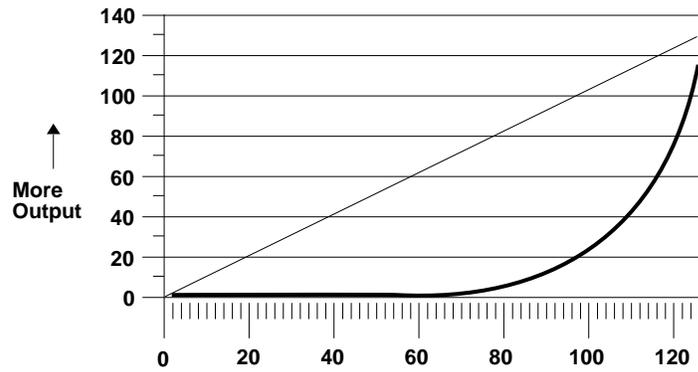
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7. Concaved Exponential 2

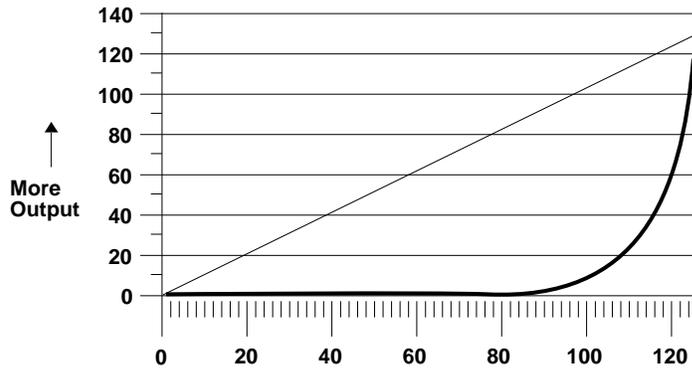


8. Concaved Exponential 3

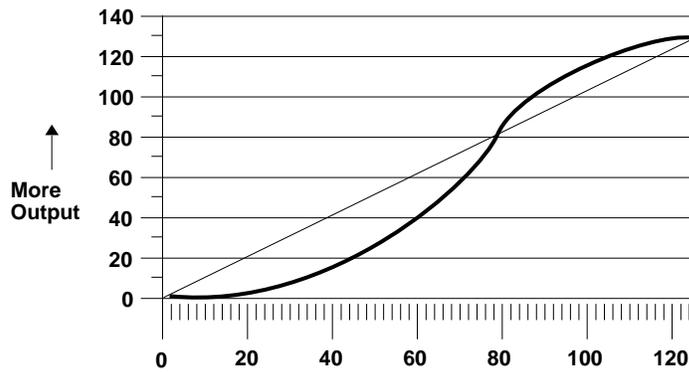


9. Concaved Exponential 4

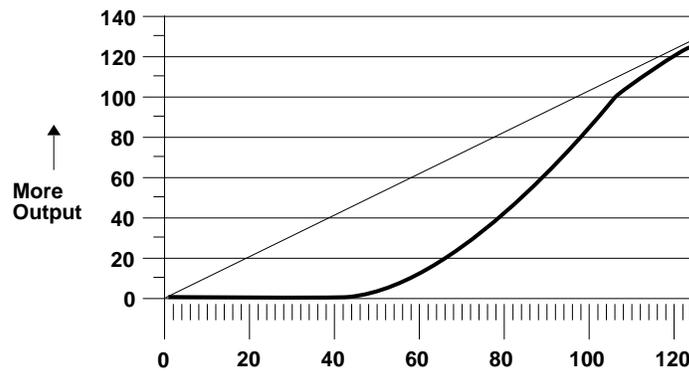
VELOCITY CURVES



10. Concaved Exponential 5

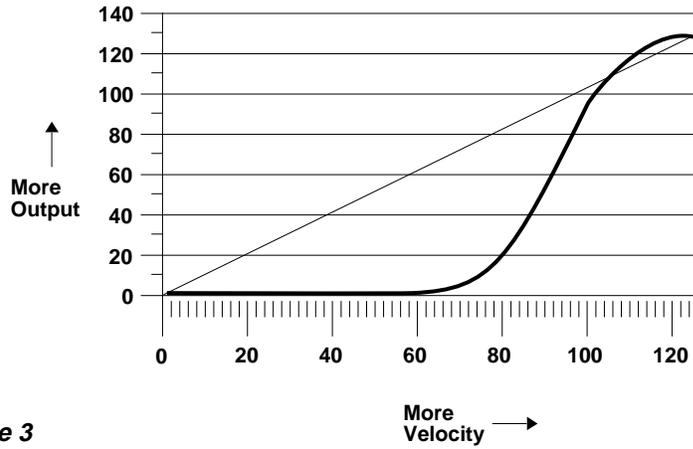


11. S-Shape 1

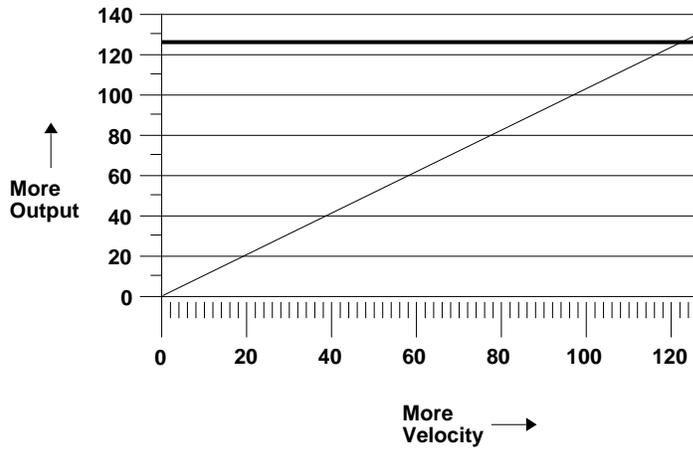


12. S-Shape 2

VELOCITY CURVES



13. S-Shape 3



14. Trigger

EMAX II MEMORY EXPANSION

INCREASE YOUR MEMORY

The amount of memory in your Emax II determines the bank size and thus the amount of sample time which can reside in the unit at one time. Emax II comes standard with either 2 or 6 Megabytes of memory, but it can be considerably expanded. Memory expansion kits may be added to increase the bank size up to 8 Megabytes. The charts below show how Emax II may be expanded in 2 Megabyte stages.

	2 MB Emax II	Total Memory
1st add	Memory Board	4 MB
2nd add	2 MB Xpansion	6 MB
3rd add	2 MB Xpansion	8 MB

	4 MB Emax II	Total Memory
1st add	2 MB Xpansion	6 MB
2nd add	2 MB Xpansion	8 MB

The chart below shows the amount of sample time available with various amounts of memory. For stereo samples, divide the time in half.

SAMPLE RATES	TIME (seconds)							
	1 M	2 M	3 M	4 M	5 M	6 M	7 M	8 M
20.000kHz	26.1	52.5	78.6	104.9	131.1	157.3	183.5	209.7
22.050kHz	23.7	47.6	71.3	95.1	118.9	142.7	166.4	190.2
27.778kHz *	18.9	37.7	56.6	75.5	94.4	113.2	132.1	151
31.250kHz *	16.8	33.5	50.3	67.1	83.9	100.7	117.4	134.2
39.0625kHz	13.4	26.9	40.3	53.7	67.1	80.5	94	107.4

* Sample rates shown in bold have a maximum *continuous* sampling time equal to that of the 39kHz rate. Emax II performs automatic sample rate conversion on the sample, then frees up the additional memory for subsequent sampling.

Information about the memory expansion kits is available from your local E-mu dealer.

EMAX II TECHNICAL SPECIFICATIONS

AUDIO CHANNELS:	32 (16 Stereo)
AUDIO OUTPUTS:	2 Main (stereo, poly) 6 Submix (3 stereo, poly) Stereo/Phones Mono
SUBMIX INPUTS:	6 (3 stereo)
MAX OUTPUT LEVEL:	+4 dB into 600 Ω
INPUT IMPEDANCE:	5 k Ω
OUTPUT IMPEDANCE:	Stereo 100 k Ω Mono 2.5 k Ω Audio 600 Ω
MIDI:	In, Out/Thru
DATA ENCODING:	Input 16-bit Linear Output 18-bit Linear
MAX INPUT SAMPLE RATE:	39kHz
SIGNAL TO NOISE:	>90 dB
DYNAMIC RANGE:	Input >90 dB Output >102 dB
FREQUENCY RESPONSE:	20 Hz - 19 kHz
THD+N:	<.05%
STEREO PHASE:	Phase Coherent $\pm 1^\circ$ @ 1 kHz
POWER REQUIREMENTS:	45 Watts

MIDI IMPLEMENTATION CHART

COMMAND	TRANSMITTED	RECEIVED	COMMENTS
Note Off	Y	Y	keys 21-108
Note On	Y	Y	keys 21-108
Poly Key Pressure	N	N	
Control Change	Y	Y	Cntr. # 0-31
Program Change	Y	Y	Prog. # 0-99
Channel Pressure	N	Y	
Pitch Wheel	Y	Y	
Sustain Footswitch	Y	Y	Cntr. # 64
Local Control On/Off	N	Y	
All Notes Off	N	Y	
Omni Mode On/Off	N	N	
Mono Mode	N	N	
Poly Mode	N	N	
Song Position Pointer	N	N	
Song Select	Y	Y	
Tune Request	N	N	
Timing Clock	Y	Y	
Start Sequence	Y	Y	
Continue Sequence	N	N	
Active Sensing	N	N	
System Reset	N	N	
System Exclusives	Y	Y	Call for Documentation

Y = implemented

N = not implemented

SuperMode is an Emax II MIDI mode designed to enhance the sequencer/MIDI interface. It is basically equivalent to "Poly Mode On" for all 16 channels simultaneously.

When SuperMode is on, the Omni/Poly setting is ignored, but the MIDI notes/wheels flag of the current preset is still checked by Emax II to determine whether or not to accept or ignore incoming MIDI performance data.

Emax II's sequencer has 16 tracks, and each track has an independent preset assigned to it. These presets are referred to as "Sequencer Presets".

NOTE-TO-FREQUENCY CONVERSION CHART

Use this chart when performing Spectrum Synthesis or to compute perfect single cycle loops.

note	frequency	note	frequency	note	frequency	note	frequency
C0	16.35 Hz	D2#	77.78 Hz	F4#	369.99 Hz	A6	1760.00 Hz
C0#	17.32 Hz	E2	82.41 Hz	G4	392.00 Hz	A6#	1864.66 Hz
D0	18.35 Hz	F2	87.31 Hz	G4#	415.31 Hz	B6	1975.53 Hz
D0#	19.45 Hz	F2#	92.50 Hz	A4	440.00 Hz	C7	2093.01 Hz
E0	20.60 Hz	G2	98.00 Hz	A4#	466.16 Hz	C7#	2217.46 Hz
F0	21.83 Hz	G2#	103.83 Hz	B4	493.88 Hz	D7	2349.32 Hz
F0#	23.12 Hz	A2	110.00 Hz	C5	523.25 Hz	D7#	2489.02 Hz
G0	24.50 Hz	A2#	116.54 Hz	C5#	554.37 Hz	E7	2637.02 Hz
G0#	25.96 Hz	B2	123.47 Hz	D5	587.33 Hz	F7	2793.83 Hz
A0	27.50 Hz	C3	130.81 Hz	D5#	622.25 Hz	F7#	2959.96 Hz
A0#	29.14 Hz	C3#	138.59 Hz	E5	659.26 Hz	G7	3135.96 Hz
B0	30.87 Hz	D3	146.83 Hz	F5	698.46 Hz	G7#	3322.44 Hz
C1	32.70 Hz	D3#	155.56 Hz	F5#	739.99 Hz	A7	3520.00 Hz
C1#	34.65 Hz	E3	164.81 Hz	G5	783.99 Hz	A7#	3729.31 Hz
D1	36.71 Hz	F3	174.61 Hz	G5#	830.61 Hz	B7	3951.07 Hz
D1#	38.91 Hz	F3#	185.00 Hz	A5	880.00 Hz	C8	4186.01 Hz
E1	41.20 Hz	G3	196.00 Hz	A5#	932.33 Hz	C8#	4434.92 Hz
F1	43.65 Hz	G3#	207.65 Hz	B5	987.77 Hz	D8	4698.64 Hz
F1#	46.25 Hz	A3	220.00 Hz	C6	1046.50 Hz	D8#	4978.03 Hz
G1	49.00 Hz	A3#	233.08 Hz	C6#	1108.73 Hz	E8	5274.04 Hz
G1#	51.91 Hz	B3	246.94 Hz	D6	1174.66 Hz	F8	5587.65 Hz
A1	55.00 Hz	C4	261.63 Hz	D6#	1244.51 Hz	F8#	5919.91 Hz
A1#	58.27 Hz	C4#	277.18 Hz	E6	1318.51 Hz	G8	6271.93 Hz
B1	61.74 Hz	D4	293.67 Hz	F6	1396.91 Hz	G8#	6644.88 Hz
C2	65.41 Hz	D4#	311.13 Hz	F6#	1474.98 Hz	A8	7040.00 Hz
C2#	69.30 Hz	E4	329.63 Hz	G6	1567.98 Hz	A8#	7458.62 Hz
D2	73.42 Hz	F4	349.23 Hz	G6#	1661.22 Hz	B8	7902.13 Hz

Emax II Sample Rates

20.000 kHz
22.050 kHz
27.778 kHz
31.250 kHz
39.0625 kHz

$$\frac{\text{Sample Rate}}{\text{Frequency}} = \text{Number of Samples in a Single Cycle Loop}$$

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This warranty covers all defects in materials and workmanship for a period of one year (90 days for disk drives) from the date of purchase by the original owner, provided that the Warranty Registration Card is filled out and returned to E-mu Systems within 14 days from the date of purchase. Cases may arise where E-mu's Service Department or one of E-mu's authorized service centers will ask for a copy of your sales receipt to facilitate warranty service. Please keep your purchase receipt in a safe place.

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SERIAL NUMBER: _____

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Your Name: _____ Telephone: _____

Address: _____

We would appreciate your answers to the following questions.

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For what activities will you use this E-mu product?

- | MUSIC | FILM/VIDEO PROD. | PERSONAL/HOBBY |
|--------------------------------------|--|--|
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| <input type="checkbox"/> Performance | <input type="checkbox"/> FX/Sound Design | <input type="checkbox"/> Home Recording |
| <input type="checkbox"/> Recording | | <input type="checkbox"/> Just Messing Around |

What percentage of your income is derived from music? 100% 50-99% 25-49% 1-24% 0%

Where did you first learn about this E-mu product? _____

What led you to choose this E-mu product? _____

Where will this product be used? Studio Tour Local Venue Home Studio
 Church Living Room Other _____

What other equipment are you using with this product (mixer,amp,effects)? _____

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Producer (006) DownBeat (009) Electronic Musician (010) Modern Drummer (012)
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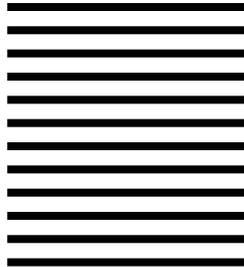
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