MB-1 Technical Specifications

Power

Supply Voltage	Minimum less than 5.0V, absolute maximum 16.0V
Supply Current - Typical	32mA @ 5.0V, 38 mA @ 10.0V, 45mA @ 16.0V
Power Jack	Boss Style, 2.1 mm, center pin negative
Internal Battery	Standard 9V Alkaline

Amplitude Frequency Response

Conditions:	Reference level set at 1 KHz
IN to OUTPUT	-.2dB @ 20 Hz, -.1dB @ 20KHz; independent of OUTPUT GAIN

Distortion

IN to OUT or SEND	Less than .01% THD with 0 dBV applied
RECEIVE to OUT	Less that .03% THD with 0 dBV applied

Maximum Unclipped Signal Output, SEND or OUTPUT

Maximum Output	With 9.60V DC supply, 2.75 VRMS (approx +9 dBV)
Maximum Output	With 16.0V DC supply, 5.20 VRMS (approx +14 dBV)

Noise Levels

Conditions:	In shorted, blend fully CCW, noise over 100 KHz filtered out
Output Noise	Less than -100 dBV with OUTPUT GAIN fully CCW
Output Noise	Less than -94 dBV with OUTPUT GAIN fully CW
Conditions:	Rcv shorted, blend fully CW, noise over 100 KHz filtered out
Output Noise	Less than -83 dBV with HP filter type selected
Output Noise	Less than -91 dBV with BP filter type selected
Output Noise	Less than -91 dBV with LP filter type selected

20Hz to 20KHz Input Impedance on IN and RECEIVE Inputs

20 Hz	1.1 Megohm
50 Hz	1.1 Megohm
100 Hz	1.1 Megohm
200 Hz	1.1 Megohm
500 Hz	1.1 Megohm
1KHz	1.0 Megohm
2KHz	825 Kohm
5KHz	525 Kohm
10KHz	300 Kohm
20KHz	175 Kohm

20Hz to 20KHz Output Impedance on SEND and OUTPUT Outputs

20 Hz	1.3 Kohm
50 Hz	1.1 Kohm
100 Hz	1.0 Kohm
200 Hz	1.0 Kohm
500 Hz	1.0 Kohm
1KHz	1.0 Kohm
2KHz	1.0 Kohm
5KHz	1.0 Kohm
10KHz	1.0 Kohm
20KHz	1.0 Kohm

Filter Characteristics

Nominal Frequencies in Hz

LO	60
--	113
--	180
HI	445

BP -6 dB Frequencies in Hz

	Lower	**Higher**
LO	14	221
--	27	422
--	46	719
HI	113	1805

LP -6 dB Frequencies in Hz

LO	48
--	88
--	152
HI	373

HP -6 dB Frequencies in Hz

LO	66
--	127
--	214
HI	542

Maximum Sweep Range

Conditions:	SWEEP DEPTH fully CW
LO	60 Hz to 2.35 KHz
--	113 Hz to 4.80 KHz
--	180 Hz to 7.70 KHz
HI	445 Hz to 21.0 KHz

Conditions:	SWEEP DEPTH @ approx 4:00 o'clock
LO	60 Hz to 1.30 KHz
--	113 Hz to 2.45 KHz
--	180 Hz to 3.70 KHz
HI	445 Hz to 10.9 KHz

Note: The "4:00" setting is VERY close to duplicating the original Meatball ® range

Envelope Generator Characteristics

Overall EG Gain	47 dB @ 1KHz

ENV B/W High-Pass Filter -6 dB Frequencies in Hz

MAX	40
MID	160
MIN	780