

## Meatball™ vs. Barge Concepts MB-1 Comparison

Feature	Lovetone Meatball™	Barge Concepts MB-1	Details
Enclosure	2-part sheet metal	Die-cast aluminum	More sturdy and better noise shielding
Footprint	7.1" x 7.9" (56 sq. in.)	4.7" x 7.4" (35 sq. in.)	37% less board area used
Warranty	1 year from original shipment	Unlimited (except for abuse), lifetime and transferable	Higher product confidence level
Input Buffer	High impedance	High impedance	Avoids 'tone sucking'
Output Buffer	None	Constant low impedance	Consistent performance with all downstream devices
Output Gain Control	None	0 - 10 dB gain control	Sometimes you just need more oomph (that's a technical term)
Send Buffer	Low impedance	Low impedance	Consistent performance with all downstream devices
Receive Buffer	None	High impedance	Avoids 'tone sucking'
Battery Supply	Standard 9V	Standard 9V	Effect box standard
External DC Supply	Maximum 12V	Maximum 16V	Higher voltage allows more dynamic range
DC Jack	Proprietary	"Boss-style" standard	Easy to find, allows operation with standard power 'Bricks'
Bypass	True bypass	True bypass with pop suppression	Reduces bypass switching pops
Bypass LED	Single color	Dual color (Blue/Red)	Easy indication of effect state
Control pots	Loose operation plastic shaft	Smooth, progressive, metal shaft Alpha pots	Harder to accidentally move
Pot Knobs	Press on	Setscrew	Don't pop off
Signal Jacks	All plastic	Metal & Plastic Switchcraft	Full metal sleeve attaches to enclosure for improved grounding
Circuit board	2 layer	4 layer with separate power & ground layers	Improved power distribution, filtering, and noise reduction
Filter Sweep Control Optoisolators	Discrete LED & photoresistor	Integrated LED-Photoresistor	More consistent and eliminates sensitivity to light leakage
Signal Path Op-Amps	TL-072	OPA-2134 Pro Audio Grade	Lower noise, lower distortion
Control Circuit Op-Amps	Limited range bipolar	Rail-to-Rail CMOS	Allows wider dynamic range of all EG controls
Capacitors	Quality parts	Film, silver mica, aluminum, and tantalum electrolytics	Better signal path performance and more power supply filtering
Resistors	Quality parts	1% metal film resistors throughout	Lowest noise resistors commonly available
Blend Control	Variable impedance output	Fully buffered - constant output impedance	Consistent performance with all downstream devices
Expression Pedal Blend Control	None	Optically isolated and auto-switched	Change blend without bending over
Internal Voltage Bias	Resistive divider	Actively buffered	Reduces noise susceptibility & eliminates 'Color' oscillation
Envelope Generator (EG) Rectifier	Half wave	Full wave	Best representation of incoming signal envelope
EG Bandwidth Control	2 position	3 position	More choices for envelope control
EG Depth	Limited	Improved range	Wider range due to circuit topology and/or device choices
EG Depth Expression Control	Direct connect to circuit internals	Optically isolated	Reduces damage risk and allows wider range of choices
EG Attack Speed	Limited	Improved range	Wider range due to circuit topology and/or device choices
EG Decay Speed	Limited	Improved range	Wider range due to circuit topology and/or device choices
EG Decay Speed Expression Control	Limited	Improved range	Wider range due to circuit topology and/or device choices