



# MODAL 110

Exciter System

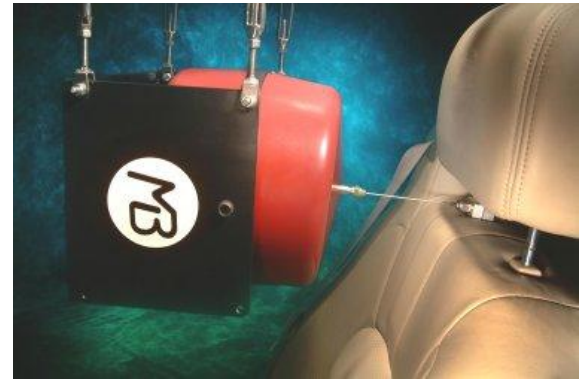


- ❖ **MB's MODAL 110 – longer – lighter – stronger – and RED!**
- ❖ **MB MODAL EXCITERS are the #1 selling exciters in the world -- over 1300 in use worldwide!**

The MODAL 110 delivers 110 lbs force (500N) and 1.5" (38 mm) stroke pk-pk; has twice the force and 50% more stroke than the MODAL 50.



- ❖ **Long Stroke**
- ❖ **Light moving element mass**
- ❖ **Low longitudinal stiffness**
- ❖ **Stiff radial stiffness**
- ❖ **Patented flexure assembly**
- ❖ **Neodymium magnets**
- ❖ **Light-weight exciter**
- ❖ **Thru-hole to attach stinger**



MODAL 110 EXCITER SPECS	MB500VI AMPLIFIER SPECS
<ul style="list-style-type: none"> <li>❖ Force: 110 lbf peak (500 N) forced-air cooled; 55 lbf pk (250 N) convection air cooled</li> <li>❖ Force: 75 lbf RMS (350 N) forced-air cooled; 40 lbf RMS (175 N) convection air cooled</li> <li>❖ Stroke: 1.5" (38 mm) p-p; 1.6" (41 mm) between stops</li> <li>❖ Max. Acceleration: 830 m/s<sup>2</sup> peak</li> <li>❖ Max. Velocity: 1.6 m/s peak</li> <li>❖ Bandwidth: DC-5000 Hz</li> <li>❖ Moving element: 0.9 lbs (0.41 kg)</li> <li>❖ Axial resonance frequency: &gt; 5,000 Hz</li> <li>❖ Longitudinal stiffness; 30 lb/in (5.2N/mm)</li> <li>❖ Shaker weight: &lt;55 lbs (25 kg)</li> <li>❖ Shaker cooling: shop air, with integral air coupling; aux. fan cooling package</li> <li>❖ Clearance hole through armature for stinger</li> <li>❖ Compression and piano wire stingers, secured with collets &amp; chuck via 5/16-24 (M8) threads</li> <li>❖ Overtravel protection</li> <li>❖ Current limiting shutdown</li> <li>❖ DC Resistance: 0.4 Ω; AC Impedance: 1.0 Ω</li> <li>❖ Options: Accessory Kit &amp; Cooling Unit</li> <li>❖ Continuous Operation: 5 – 35 degC; &lt;85% RH</li> <li>❖ CE Mark</li> </ul>	<ul style="list-style-type: none"> <li>❖ Linear amplifier design for high fidelity, low noise (50% efficient); convection cooled</li> <li>❖ Frequency range; DC-20 KHz; usable to 50 KHz</li> <li>❖ AC or DC coupled, separate BNCs</li> <li>❖ Current feedback and voltage feedback, external switch selectable</li> <li>❖ Output power: 625 VA; 25 VRMS max. voltage; 25 ARMS max. current, 35 A peak</li> <li>❖ Output connector: 3-pin AMP, mates to shaker</li> <li>❖ Output current measurement, BNC</li> <li>❖ Over-current, over-voltage shutdown protection</li> <li>❖ Over-temperature protection</li> <li>❖ Internal DC Supply: 42VDC and 20ADC</li> <li>❖ Signal-to-noise: &gt;100dB THD: &lt;0.1%</li> <li>❖ Options include: set-up &amp; monitor with PC via Ethernet; shutdown via TTL or contact closure; remote monitoring of MODAL 110 temperature</li> <li>❖ User-adjustable current and voltage trip limits</li> <li>❖ Input power: 100, 110, 120, 200, 220, 240V; 48 - 62 Hz (1.0 KVA); in-line fuse protection</li> <li>❖ Sig. IN for max OUT: ±3Vpk; also ±1, 5, 10Vpk</li> <li>❖ Input Impedance: &gt;10kOhm</li> <li>❖ 19" rack x 3½"H (89mm) x 14¼"D (362mm)</li> <li>❖ Weight: 33 lbs (15 kg)</li> <li>❖ CE Mark</li> </ul>