



## Mini "Combo" Shaker



### Mini Shaker with Integral Power Amplifier

The mini "combo" shaker is a small, portable permanent magnet exciter with an integral power amplifier. The design eliminates the need for a separate, inconvenient power amplifier. Excitation signal can be connected directly to the BNC connector from most vibration controllers or signal generators. The mini "combo" shaker is perfect for frequent conveyance, and educational and research purposes in both lab and industrial environments.

#### System Performance

Output Force, Sine peak	4.5 lbf (20 N)
Output Force, Random rms	3 lbf (13.3 N)
Output Force, Shock peak	9 lbf (40 N)
Frequency Range	0.3 Hz -15 kHz
Max. Displacement pk-pk	0.2 in (5 mm)
Max Acceleration	---
Bare Table	40 g
0.1lb (45 gram)	21 g
1 lb (450 gram)	4 g
2 lb (900 gram)	2 g
Max Payload	2 lb (900 gram)
Max Input Current	4 A
Coil Resistance	1.2 Ω
First Resonance Frequency	17 kHz

#### Advantages

- Embedded power amplifier eliminates the need for a separate, inconvenient power amplifier.
- Light-weighted mini-shaker 4.5 kg (9 lb) makes it highly portable.
- The mini "combo" shaker provides a stable wide-frequency range up to 15,000 Hz
- Compatible with most vibration controllers.
- M5 threaded mounting table supports payloads up to 2 lb.
- Trunnion design allows mini-shaker to be rotated and locked in any angle from vertical through horizontal orientations.

#### Integrated Power Amplifier

Efficiency	>92%
Input Voltage rms	0-1.2 VAC
Input Voltage (absolute maximum) rms	1.8 VAC
Output Voltage rms	12 VAC
Output Current	4 A
Input Power,	15-21 VDC
Output Power	40 W
Distortion	<0.02 %
Cooling	Convection (Forced Air optional)
Interlock Protection	Over Temp. and Over Current
Self-Check Function: Embedded Signal Source	1. Fixed Frequency: 20 Hz. 2. Sine Sweep: 50 - 2,000 Hz

#### Supplied Accessories

- Power Adapter, 60 W, 18 VDC output; 100-240 VAC (50/60 Hz) input. or any 15-21 VDC power supply.
- Coaxial cable with BNC connector on both ends for signal input, 1 m (3 feet) long.

#### Physical

Armature Mass	0.11 lb (50 gram)
Suspension Stiffness	15 lbf/in (2.63 N/mm)
Armature Insert Pattern PCD	4 on Ø25 mm and 1 in center
Armature Mounting Threads	M5
Outline Dimension W x D x H	170 x 150 x 155 mm (6.7 x 6.0 x 6.1in)

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