M72-40 C-Bass

The M72-40 is a member of the M72 “C-Bass” family of very low frequency electrodynamic sound projectors. These projectors are less expensive, lighter, smaller, more efficient, and have a broader bandwidth than their peers. This versatile source is suitable to be used for over-the-side trials, routine calibrations, long-duration moorings, or integration into any size of customer system.

Applications include VLF calibration source, beacon for navigation or timing, augmentation, VLF communication systems, VLF acoustic science, seismic, VLF sonar, and more.

Characteristics

Acoustic
With over a decade of useful response above and below resonance, this coherent source is capable of transmitting arbitrary waveforms, including:
- Single and combined tones.
- Frequency modulated sweeps.
- Communication signals.
- White or shaped noise.

Directivity
Omni-directional; can be used individually or in arrays to produce high-power sources with or without directivity.

Operating depth
- 10 m with passive pressure compensation system.
- > 200 m with active pressure compensation system.

Amplifier
Can be operated using commercial audio amplifier; high-current VLF amplifier required to achieve full power.

Form factor and mounting
- Compact unit for easy lift and rigging operations.
- Array of bolt interfaces available for mounting to customer equipment.
Sound Pressure Level Limits - 10m Depth

- Pulsed SPL, max 60 A, 10% duty cycle, 30s pulse
- Continuous SPL, 30 A max

Transmitting Voltage Response (10m depth)

Impedance

Resonance Frequency vs Depth