In-Ground, All-weather Loudspeaker

Model G8G

Description

The **G8G** In-Ground, All-weather Loudspeaker combines the best technologies ever developed for an outdoor loudspeaker system. From time-proven Metal Diaphragm Technology (MDT) to revolutionary Magnetic Liquid Suspension (MLS), superior sound is combined with superior weather durability.

The drivers are encased in a virtually indestructible molded polyethylene enclosure, with a stainless steel grille protecting the driver elements (tweeter and woofer). An input pigtail is provided with multiple wire selection for 8-ohm or 70V operation.

Unique MDT™ (Metal Diaphragm Technology):

- High rigidity and low mass of metal versus traditional papers and plastics
- Extremely stable cone structure over long periods of time
- Fast transmission of sound through the diaphragm means low energy storage
- Special anodizing process creates a ceramic coating for increased stiffness
- Efficient heat-sinking of voice coils under long-term, high-power situations

Patented MLS™ (Magnetic Liquid Suspension):

- Voice coil is constantly centered for lower distortion
- Voice coil is more efficiently heat-sinked by fluid instead of air
- Greater linearity is accomplished because the mechanical spider is eliminated
- Constant lubrication of the gap prevents oxidation from outdoor use

Features

- In-ground, outdoor, all-weather speaker with fully-sealed enclosure
- Sloped cabinet panels ensure pull-out resistance of the loudspeaker when buried
- 8-Ohm or 70V taps included
- Metal-alloy MDT™ woofer cone delivers natural sound with ultra-low distortion
- Extremely stable, long-lasting MDT cone structure
- High efficiency and power handling for optimum performance
- Dual-layer voice coil with separate inner and outer windings for high output with ultra-low distortion
- Patented MLS™ magnetic fluid voice coil suspension replaces distortion-causing mechanical spider
- Compound rubber surrounds resist UV rays and salt spray and chemicals
- Multiple input power connections
- High-density, rotational-molded enclosure resists chipping, scratching, and damage from impact
- Low-resonance cabinet structure
- Corrosion-resistant driver frames
- Wide coverage angles produce a broad sound field which provides even coverage throughout listening area
- Available in green

Specifications subject to change without notice.
© 2012, 2015 Bogen Communications, Inc.
54-8023-57B 1503

Technical Specifications

Frequency Resp. (-10dB)*	45 Hz to 20 kHz
LF Driver	8-inch Nominal Diameter Metal Alloy Cone utilizing patented MLS (Magnetic Liquid Suspension)
HF Driver	Co-axial Design; 1” Titanium Cone
Sensitivity (1 W/1m, 8Ω)	91 dB SPL
Max. SPL (@ 1m)	114 dB continuous, 120 dB Peak
Max. Power Input (cont.)	150W (8Ω) or 64W (70V)
Impedance	Nominal 8Ω or 70V
Taps (70V only)	2W, 4W, 8W, 16W, 32W, 64W**
Input Terminations	8-Conducter Cable Color-Coded
Environmental	Designed to meet or exceed Mil-Std-810E, IEC IP56
Installation Hole Depth	10-inches Max.
Enclosure Material	LLDPE (Linked Low-Density Polyethylene, UV-Inhibited)
Enclosure Color	Green
Product Dimensions	17-1/4” H x 13” W x 12-1/4” D
Product Weight	14 lbs.

**Half-Space Response*
***Requires simple wiring change inside G8 cabinet*

Architect & Engineer Specifications

The loudspeaker shall be a Bogen Model G8G with a power handling capacity of 150W (8-ohm) or 64W (70V) or approved equivalent. The loudspeaker shall consist of one 8-inch nominal low frequency transducer and one 1-inch nominal titanium high frequency transducer with a filter network for dividing frequencies between the transducers. A weather-tight enclosure shall house all components. The enclosure shall be constructed from a rotational molded, LLDPE (Linked Low-Density Polyethylene) compounded with UV inhibitors.

Perforated speaker grilles shall be made from heavy-gauge, stainless steel, color-matched to the enclosure. Available in green.

The low frequency driver shall utilize a metal-alloy cone with deep-anodized surface treatment for rigidity and corrosion resistance. The cone shall provide a heat transfer element for the voice coil under high-power input. Compounded rubber cone surrounds shall be formulated to withstand all-environment installations, including salt spray, ultraviolet light (UV), heat, cold, and constant humidity. The voice coil will be centered via a high gauss, low viscosity magnetic fluid (ferrofluid), which increases the heat transfer rate from the voice coil under long-term high-power use. The magnetic fluid shall prevent corrosion from occurring in the magnet gap.

The high frequency driver shall utilize an environmentally stable titanium diaphragm. Ferrofluid shall dampen the voice coil and assist in the heat transfer for higher power capability.

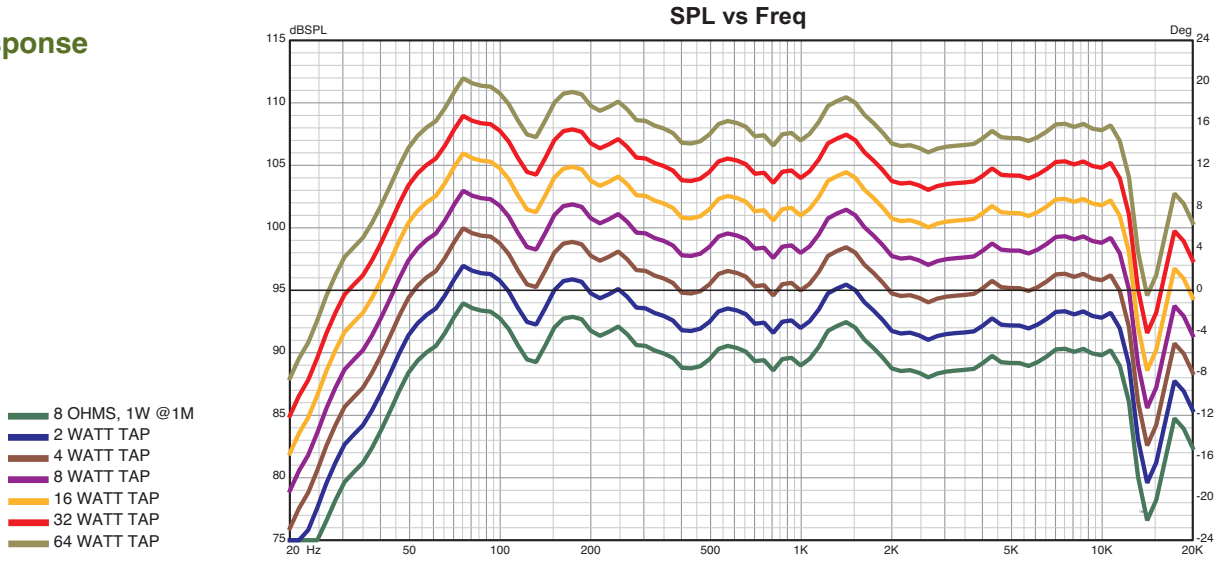
Environmental testing shall ensure long-term operation in all weather. Designed to meet or exceed exceed Mil-Std-810E Test Methods for Temperature, Humidity, Ultraviolet Light, and Salt Spray.

The input connectors for 8-ohm and 70-volt systems shall be multiple stripped and tinned wires provided to select power input levels at 2W, 4W, 8W, 16W, 32W, 64W Tap settings.

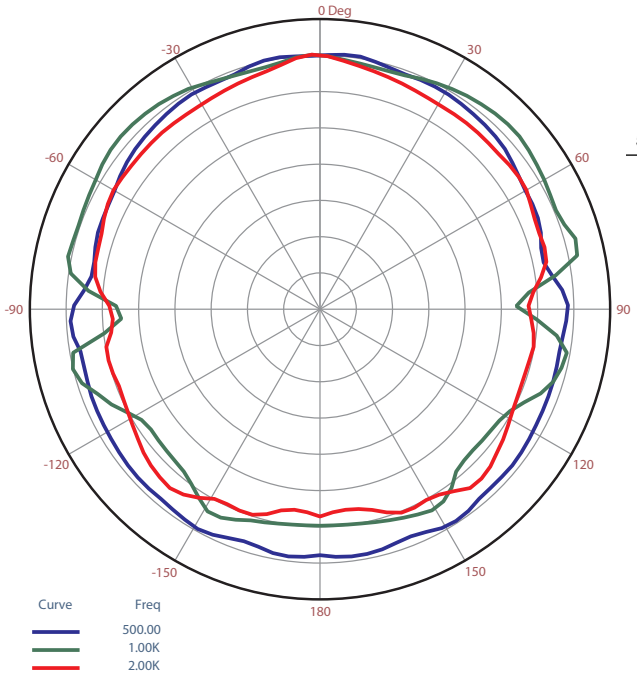
Dimensions of each speaker shall not exceed 17-1/4" H x 13" W x 12-1/4" D. Product weight shall not exceed 14 lb.

Frequency Response

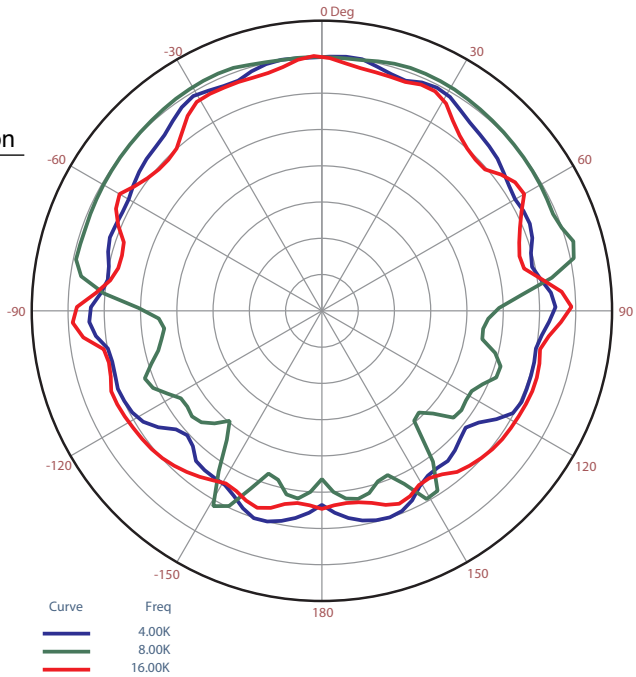
(Half-space @ 1m)



Horizontal Polar Response

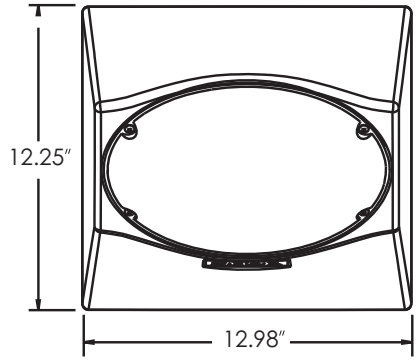


5 dB per Division

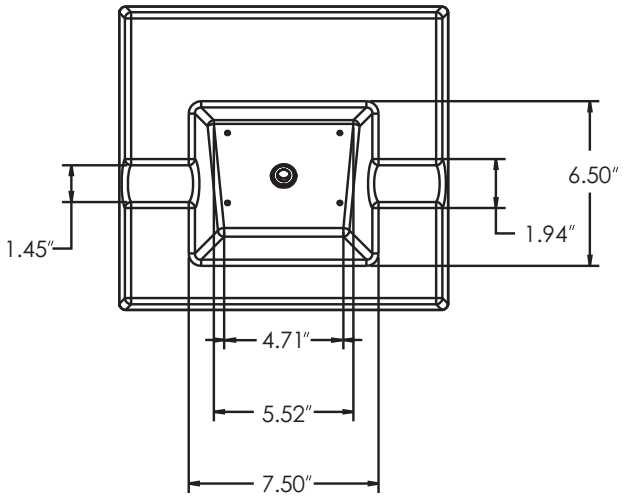


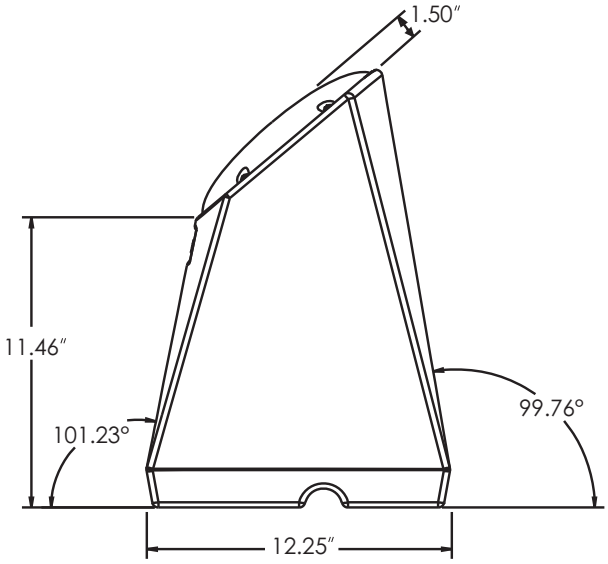
Mechanical Drawings

Top View

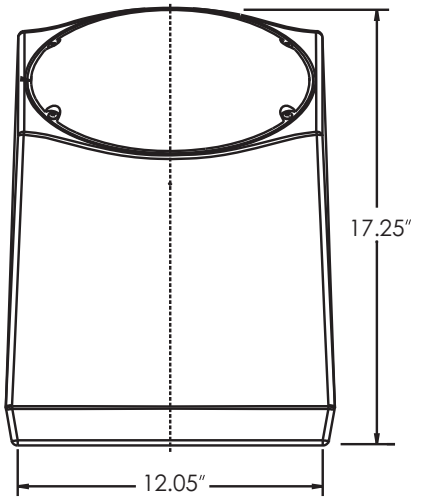


Bottom View





Side View



Front View