

# N·E·A·R™

The Leader in Metal-Alloy Speaker Technology



## A-Series All-Environment Loudspeaker

Models A8, A8T, A8E



### Features

- Indoor and outdoor all-weather speaker with fully-sealed cabinet
- Available versions: 8-ohm, 70V, 100V
- Available colors: black, green, white
- NEAR-patented metal-alloy MDT™ mid/bass speaker 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
- NEAR-patented MLS™ fluid voice-coil suspension replaces distortion-causing mechanical spider
- Compound rubber surrounds resist UV rays and salt spray
- Gold-plated stainless steel connectors
- High-density, injection-molded cabinet resists chipping and scratching
- Low-resonance cabinet structure
- Easy-to-grasp multi-faceted mounting brackets with 180° swivel
- Easy grip oversize mounting knobs
- Brackets mount with knobs attached for easier and safer installation in hard-to-reach locations
- Heavy-gauge aluminum (A2 & A6 models) or stainless steel (A8 models) brackets
- Corrosion-resistant frame and mounting hardware
- Attractive styling with "Armadillo" ridges for stiffness
- Coaxial (A2 models) or 2-way speaker systems (A6 & A8 models)

### Description

NEAR™ A-Series Armadillo™ loudspeakers feature NEAR-patented technologies that improve sound quality and operating reliability. Attractively styled, they are engineered for both indoor and outdoor applications. The A8 models are high-output, 2-way designs for larger spaces such as clubs, auditoriums, and theme parks. The compact A2 models are designed for smaller spaces. Their high audio intelligibility and superb articulation make them ideal for music or paging applications. The A6 models are conveniently-sized, 2-way designs with high-power handling for applications such as restaurants, health clubs, and patio and pool areas. All models feature NEAR's MDT (Metal Diaphragm Technology) and MLS (Magnetic Liquid Suspension).

#### Exclusive 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

#### Unique MLS™ (Magnetic Liquid Suspension):

- Voice-coil is constantly centered for lower distortion
- Voice-coil is more efficiently heat-sunked 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

Additional information at [www.nearspeakers.com](http://www.nearspeakers.com)

Specifications subject to change without notice.  
© 2000 Bogen Communications, Inc.  
Part No. 54-8010-01R1 Printed in U.S.A. 0010

## Technical Specifications

MODEL NUMBER	A8	A8T	A8E
<b>Frequency Response (-10dB)*</b>	45Hz to 20kHz		
<b>LF Driver</b>	8" MDT™ Metal-Alloy Cone		
<b>HF Driver</b>	1" Titanium		
<b>Sensitivity (1M/1W, 8-ohms)</b>	91 dBspl		
<b>Impedance</b>	8-ohms	70V	100V
<b>Power Handling</b>	175W	64W	64W
<b>Additional Taps</b>	—	32W	32W
	—	16W	16W
<b>Product Weight</b>	18 lbs.	20 lbs.	20 lbs.
<b>Cabinet Material</b>	Mineral-Filled Polypropylene - UV inhibited		
<b>Speaker Dimensions</b>	17-13/16" L x 10-3/16" W x 10-7/8" D		
<b>Terminations</b>	Gold-Plated Stainless Steel Barrier Strip		
<b>Environmental</b>	Meets or exceeds Mil-Std-810E		
<b>Included Accessories</b>	Color-Matched Stainless Steel Mounting Bracket		
<b>Cabinet Colors</b>	Black, Green, White		

\*Half-Space Response

## Architectural & Engineering Specifications

The loudspeaker shall be a NEAR Model A8 (8-ohm), Model A8T (70V) or Model A8E (100V) in Black (BLK), White (WHT) or Green (GRN), or approved equivalent, loudspeaker consisting of one 8-inch nominal low frequency transducer, 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 an injection-molded, high density (30% or greater) mineral-filled polypropylene material compounded with UV inhibitors.

Three molded-in colors shall be made available (Black, White, Green). Perforated speaker grilles shall be made from heavy-gauge PVC, color-matched to the enclosure. An integral safety strap mounting point shall be included.

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. Specifications shall exceed Mil-Std-810E Test Methods for Temperature, Humidity, Ultra-Violet Light, and Salt Spray.

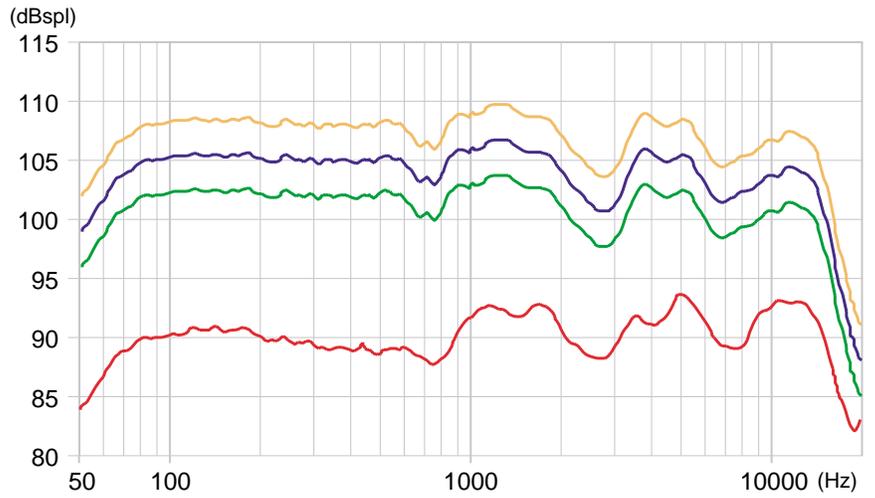
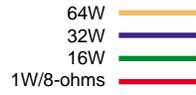
The mounting bracket shall be designed with multiple angles to facilitate installation in corners or when angulation is required. The loudspeaker shall rotate about its axis a minimum of 180°. The bracket shall be formed from heavy-gauge stainless-steel (minimum 3mm thick), and finished with a scratch-resistant paint (color-matched to the enclosure).

The input connectors for 8-ohm 70-volt, and 100-volt systems shall be gold-plated, stainless-steel screws with integral clamping washers.

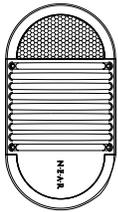
Dimensions of the system shall not exceed 17-13/16" Long x 10-3/16" Wide x 10-7/8" Deep. Weight shall not exceed 18 lbs. (A8), and 20 lbs. (A8T & A8E). The system shall be the NEAR Model A8 (8-ohm) or Model A8T (70V) or Model A8E (100V) in Black (BLK), White (WHT) or Green (GRN) .

## Frequency Response

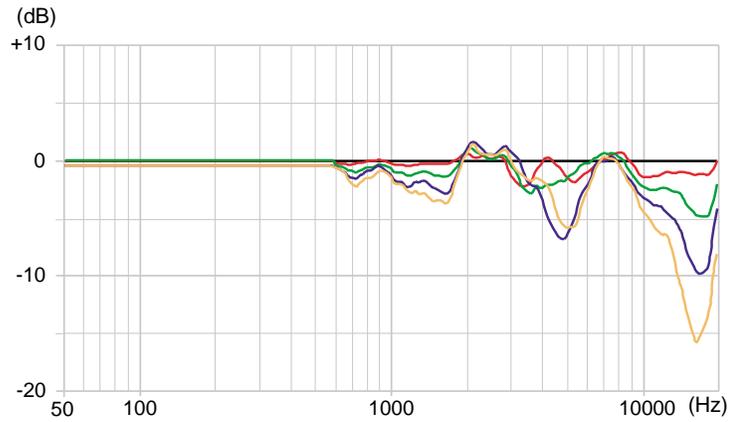
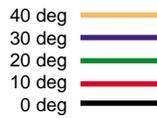
(Half-space @ 1M/1W, 8-ohms)



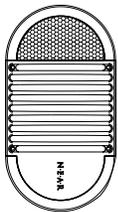
## Horizontal Off-Axis Response



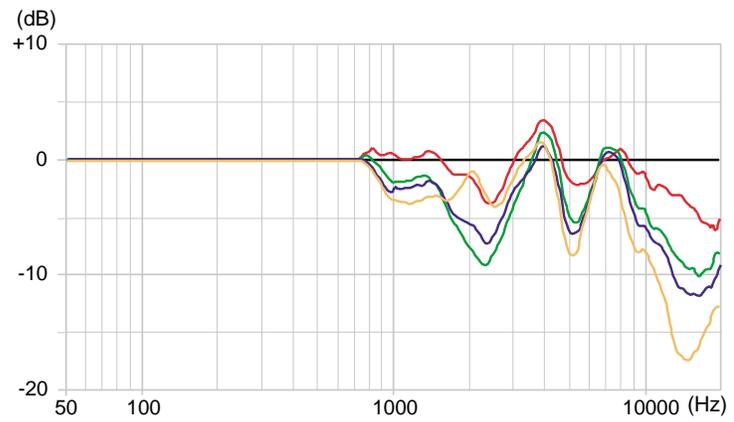
Speaker Orientation



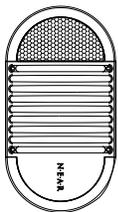
## Vertical Off-Axis Response (Up)



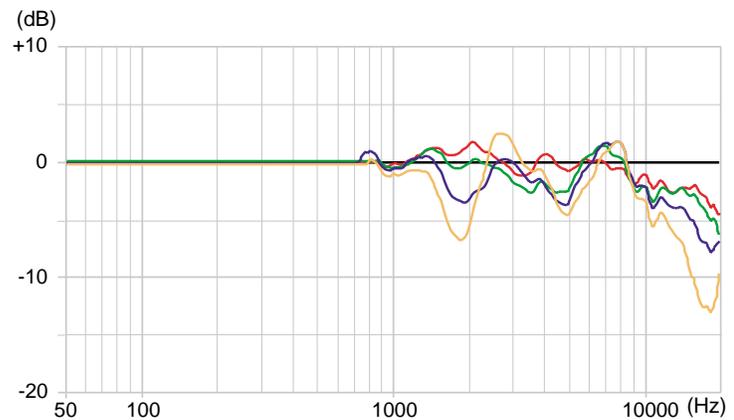
Speaker Orientation



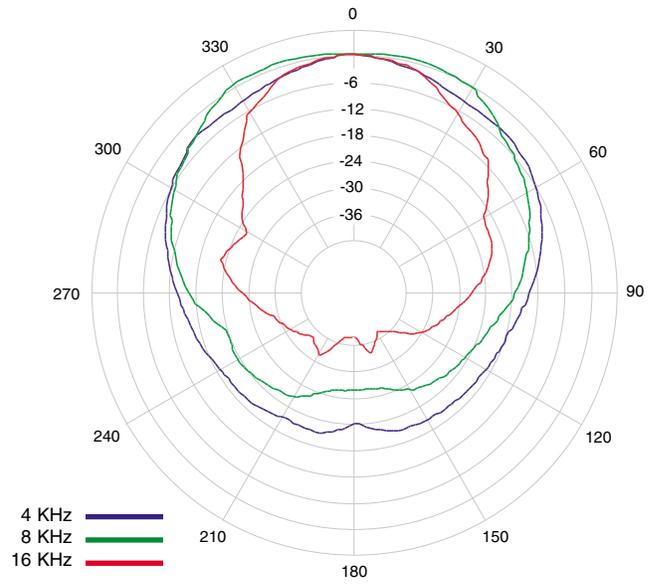
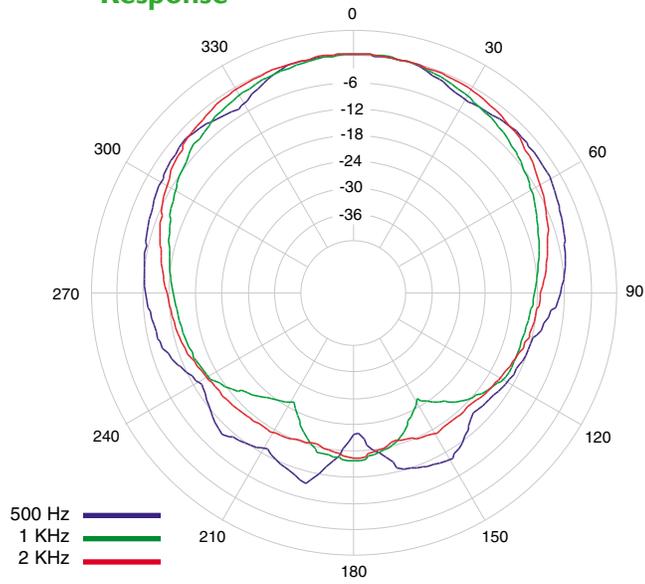
## Vertical Off-Axis Response (Down)



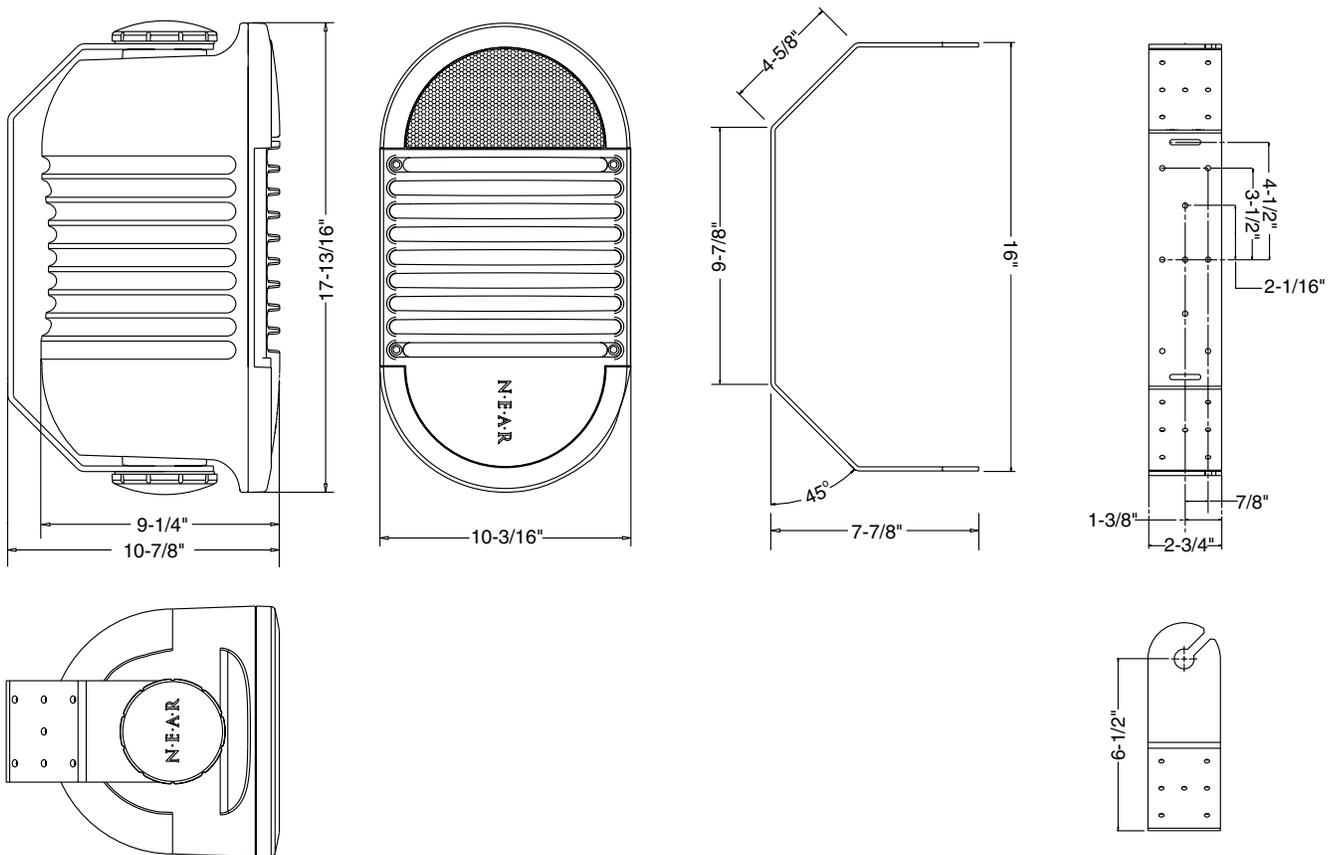
Speaker Orientation



## Polar Response



## Mechanical Drawings



**BOGEN®**  
 COMMUNICATIONS, INC.

50 Spring Street,  
 Ramsey, New Jersey 07446, USA  
 Tel: 201-934-8500 • Fax: 201-934-9832  
 www.bogen.com