# **BIA-100**

#### Bi-Axial Horn With Gimbal-Mount



#### **Features**

- High-Efficiency Bi-Axial Horn Provides 130° x 60° Wide-Angle Sound Coverage
- Combine with PD Series Drivers
- Patented 180° Gimbal-Mount for Installation Flexibility
- Accepts All Atlas Sound and 1%" 18 Thread Compression Drivers with Throat Openings of 0.7" Diameter

# **Applications**

Bi-axial horn model BIA-100 delivers outstanding sound dispersion and audio efficiency when used with medium or high powered compression drivers. Unit features exponentially-flared projectors which eliminate phase cancellation, control low-frequency roll off, and offers maximum results in professionally-applied voice, music, and signaling systems. It can be surface or flange-mounted. Weather-resistant construction is suitable for permanent or portable installation in house of worship, recreation/sport centers, mass transit terminals, industrial, commercial, educational, and institutional facilities.

# **General Description**

BIA-100 is the original reflex horn featuring a bi-axial design with exponential bell for wide-angle coverage. The horn provides excellent acoustic loading maintained to a 350Hz low-frequency roll-off and optimizes delivery of high and midrange signal levels. BIA-100 is designed for use with Atlas Sound PD Series compression drivers and models having 1% -18 male threads and 0.707 diameter throat openings. Refer to PD Series compression driver specification sheets for high-pass filter requirements. The easily-mounted horn features the labor-saving patented gimbal-mount bracket assembly (U.S. Patent #4,325,529) which allows for directional positioning up to 180° vertically and horizontally. It includes a steel bracket, cast-mounting base, and provisions for flange installation. The weather-resistant, non-glare matte black foam horn is resistant to resonance. Bracket assembly is finished in durable epoxy.

### **Specifications**

 Dispersion
 130° x 60°

 Height
 21" (533mm)

 Width
 10¼" (260mm)

 Depth
 19¼" (489mm)

Weight 16 lbs

# **Architect and Engineer Specifications**

Horn shall be Atlas Sound or approved equal incorporating a unitized, bi-axial, twin-reflex air column assembly for wide-angle coverage pattern. Low-frequency roll off shall be 500Hz, air column length  $2\frac{3}{4}$ ' (838mm) and sound-dispersion angle  $130^\circ$  in the plane of narrower horn dimension and  $60^\circ$  in the wider dimension. The horn shall accommodate compression driver units with standard  $1\frac{3}{6}$ " - 18 thread and measure 21"W x  $10\frac{3}{4}$ " L  $10\frac{3}{4}$ " D.

The horn bell shall be weather resistant and constructed of non-resonant molded foam textured in black. A steel mounting bracket and cast installation base shall provide adjustable flexibility in sound focusing up to 180° vertically and horizontally. The gimbal-mount shall include provisions for surface installation, banding, and strapping.

