



BIA-100

FEATURES

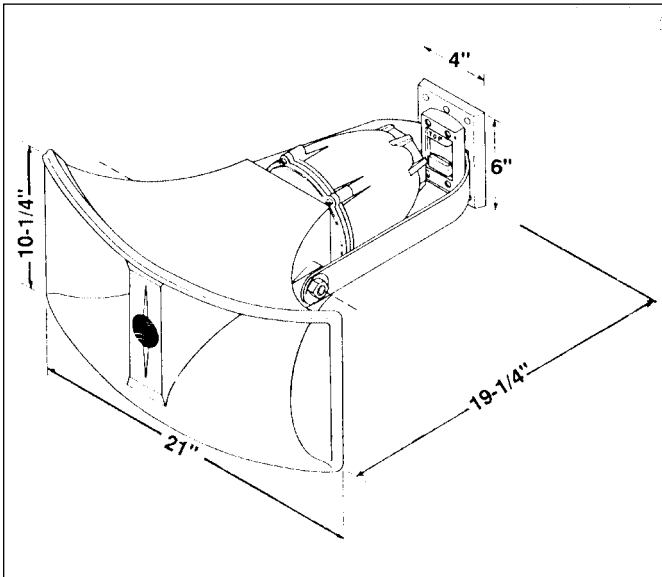
- High-Efficiency Bi-Axial Horn Provides 130° x 60° Wide-Angle Sound Coverage
- Combine with PD Series Drivers
- Nominal Frequency Response of 350-8,000 Hz for High-Intelligibility Voice, Signaling and Full-Range Music in Indoor/Outdoor Applications
- Patented 180° Gimbal-Mount for Installation Flexibility
- Accepts All Atlas Sound and 1 1/2" - 18 Thread Compression Drivers with Throat Openings of 0.7" Dia.

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 and is ideal for use as a mid-range component for two and three-way, high-fidelity loudspeaker systems. Weather-resistant construction is suitable for permanent or portable installation in church, recreation/sport centers, mass transit terminals, industrial, commercial, educational and institutional facilities.

GENERAL DESCRIPTION

Model BIA-100 is the original reflex horn featuring a bi-axial design with twin air columns and exponential bell for wide-angle coverage with a linear frequency response. The horn provides excellent acoustic loading maintained to a 350 Hz low-frequency roll-off and optimizes delivery of high and mid-range signal levels. BIA-100 is designed for use with Atlas Sound PD Series compression drivers and models having 1 1/2" -18 male threads and 0.707" dia. throat openings. Refer to PD Series compression driver specification sheets for high-pass filter requirements. Transformer-equipped drivers are available (power-tap information is outlined on individual compression driver specification sheets). 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. Overall dimensions are 21"W x 10 1/4"H x 19 1/4"D (533 x 260 x 489 mm). Weight is 16 lbs.



MODEL	POWER RATING	SOUND LEVEL		**DISPERSION	IMPEDANCE
		PEAK	*RP / 1M, 1W / 1M		
BIA-100 w/ PD-30	30	125dB	121dB, 107dB, 400-5200 Hz	130° x 60°	8 ohm
BIA-100 w/ PD-5VH	40	126dB	121dB, 106dB, 300-6300 Hz		16 ohm
BIA-100 w/ PD-60A	60	128dB	125dB, 108dB, 300-6000 Hz		16 ohm

\* Measured at Rated Power, 1 Meter (avg)  
 \*\*Angle Shown for -6dB, 2 kHz Octave Band

Specifications subject to change without notice

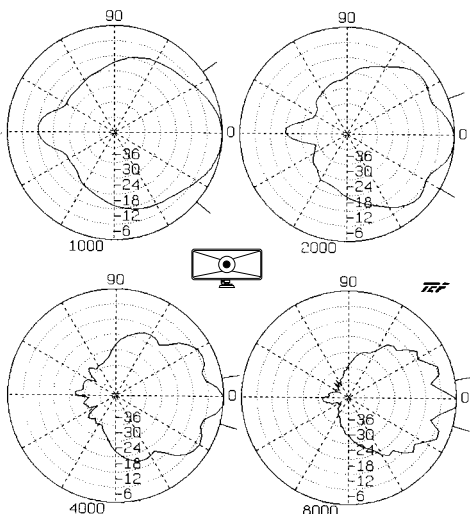


1601 JACK MCKAY BLVD. / ENNIS, TEXAS 75119 U.S.A. / TELEPHONE: (800) 876-3333 / FAX (800) 765-3435

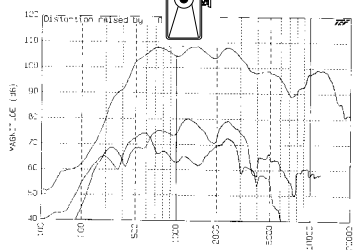
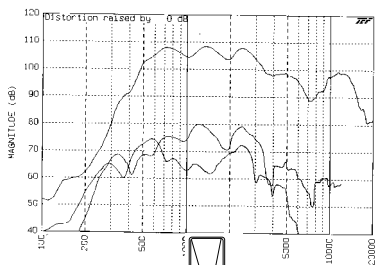
## ARCHITECT AND ENGINEER SPECIFICATIONS

Horn shall be Atlas Sound \_\_\_\_\_ (Model BIA-100) or approved equal incorporating a unitized, bi-axial, twin-reflex air-column assembly for wide-angle coverage pattern. Low-frequency roll off shall be 350 Hz, air column length 2' (838mm) and sound-dispersion angle 130° in the plane of narrower horn dimension and 60° in the wider dimension. The horn shall accommodate compression driver units with

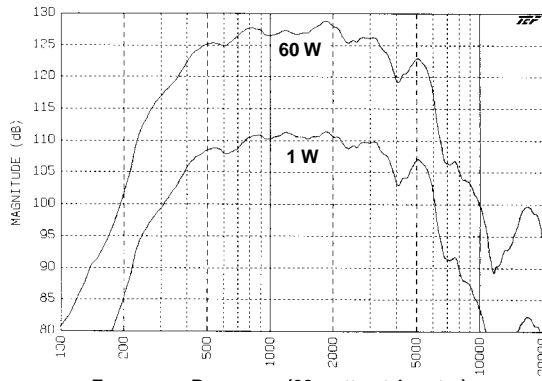
standard 1 1/8" - 18 thread, and measure 21"W x 10 1/4" H x 19 1/4" D. The horn bell shall be weatherproof and constructed of non-resonant molded foam textured in black. A steel mounting bracket and cast installation base shall provide adjustable flexibility in sound focusing up to 180° vertically and horizontally. The gimbal-mount shall include provisions for surface installation, banding and strapping.



**Horizontal Polars Are Normalized To Zero On Axis**

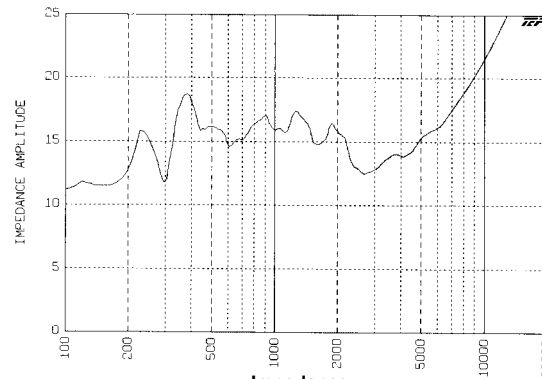


**Harmonic Distortion  
Measured with 60-watt driver Model PD-60A**



**Frequency Response (60 watts at 1 meter)  
Measured with 60-watt driver Model PD-60A**

**Vertical Polars Are Normalized To Zero On Axis**



**Impedance  
Measured with 60-watt driver Model PD-60A**

Frequency	MODEL BIA-100 with PD60A			
	Q	Di	Beamwidth	
			Horizontal	Vertical
500	4	7	95	165
1000	8	9	75	105
2000	14	11	50	55
4000	25	14	25	35
8000	48	17	25	25

*Specifications subject to change without notice*



1601 JACK MCKAY BLVD. / ENNIS, TEXAS 75119 U.S.A. / TELEPHONE: (800) 876-3333 / FAX (800) 765-3435