

**University
Sound, Inc.**

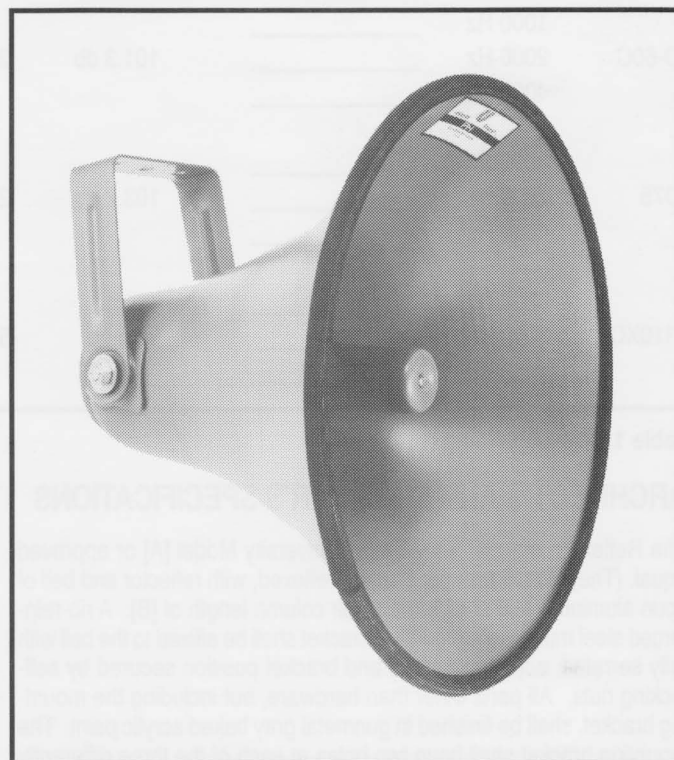
a MARK IV company

SPECIAL FEATURES

- *Overcome High Noise Levels*
- *Extremely Rugged*
- *Fully Weatherproof*
- *All Hardware Impervious To Rust*
- *Directional Sound Distribution*

SPECIFICATIONS

Horn Model:	PH	SMH
Low-Frequency Roll-off:	150 Hz.	200 Hz.
Dispersion Angle:	See Table 1.	See Table 1.
Air Column Length:	3.5 ft. (1.07 m).	2.5 ft. (0.76 m).
Dimensions:		
Length:	15.75 inches (40.0 cm).	12.0 inches (30.5 cm).
Diameter:	20.38 inches (51.8 cm).	16.25 inches (41.3 cm).
Shipping Weight:	11.75 lbs. (5.33 kgs).	8.25 lbs. (3.74 kgs).



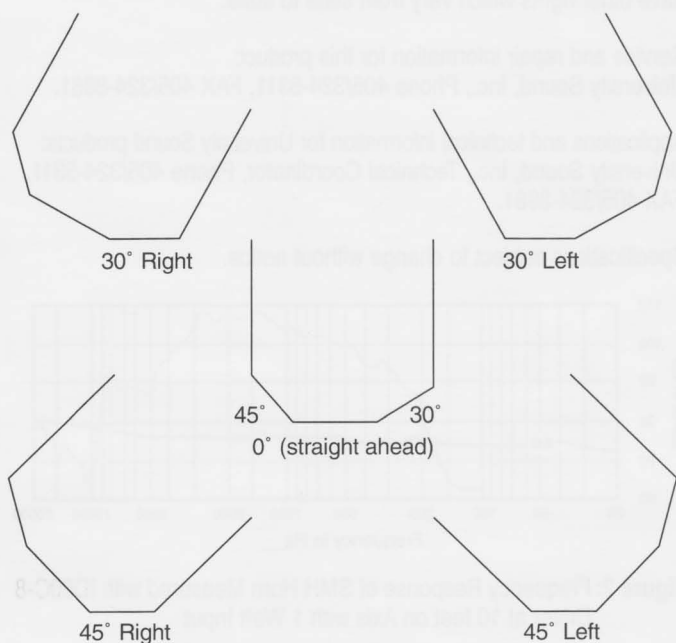
**PH
SMH**

**Directional
Reflex Trumpets**

DESCRIPTION

The Models PH and SMH Directional Reflex Trumpets have exponentially flared horns, the most efficient trumpet design for maximum power transfer characteristics with efficiencies as high as 40%, requiring less amplifier power. The result is freedom from distortion and remarkable amplifier economy, especially when combined with high efficiency University Compression Drivers.

Maximum compactness is achieved through reflex construction. The directional characteristics of these trumpets assure optimum penetration of high ambient noise levels for clear voice and music articulation. All University Directional Trumpets are completely weatherproofed and utilize a positive-lock multi-angle bracket for convenience of mounting in almost any position.



Positions for Mounting Bracket

DRIVER MODEL	Frequency	TRUE ANGLE		PH HORN		SMH HORN	
		HORIZ.	VERT.	10 ft. SENS. 500 - 3k Hz	10 ft. Freq. Response ± 6 db	10 ft. SENS. 500 - 3k Hz	10 ft. Freq. Response ± 6db
ID30	1000 Hz	_____	_____	99.3 db	500-3500 Hz	99 db	650-4500 Hz
	2000 Hz	_____	_____				
	4000 Hz	_____	_____				
ID-60C	1000 Hz	_____	_____	101.3 db	260-3600 Hz	101.5 db	420-4000 Hz
	2000 Hz	_____	_____				
	4000 Hz	_____	_____				
ID75	1000 Hz	_____	_____	103.2 db	290-3000 Hz	101.4 db	280-3800 Hz
	2000 Hz	_____	_____				
	4000 Hz	_____	_____				
7110XC	1000 Hz	_____	_____	92.5 db	550-2900 Hz	94.5 db	470-3200 Hz
	2000 Hz	_____	_____				
	4000 Hz	_____	_____				

Table 1: Dispersion Angles

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The Reflex Trumpet(s) shall be (a) University Model [A] or approved equal. (The) (Each) trumpet shall be reflexed, with reflector and bell of spun aluminum and shall have an air column length of [B]. A rib-reinforced steel multi-angle mounting bracket shall be affixed to the bell with fully serrated, adjustable joints and bracket position secured by self-locking nuts. All parts other than hardware, but including the mounting bracket, shall be finished in gunmetal gray baked acrylic paint. The mounting bracket shall have two holes at each of the three differently angled bases for mounting to a pipe fixture. Threaded throat area to accommodate screw-in driver shall have standard 1 3/8" - 18 thread. Overall trumpet length shall not exceed (C), less mounting bracket and driver unit. Bell mouth diameter shall not exceed (D) and shall have a rubber resonance damping rim. University Sound Model [A] is specified.

[A]	[B]	[C]	[D]
SMH	2.5"	12.0"	16.25"
PH	3.5"	15.75"	20.38"

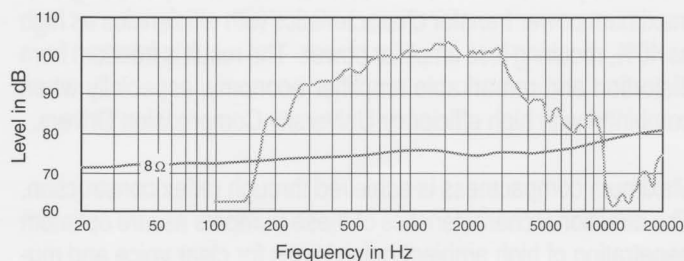


Figure 1: Frequency Response of PH Horn Measured with ID60C-8 Driver at 10 feet on Axis with 1 Watt Input

WARRANTY (Limited) - University Sound Speakers and Speaker Systems (excluding active electronics) are guaranteed for five years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to University Sound. Unit will be returned prepaid. Warranty does not extend to finish, appearance items, burned coils, or malfunction due to abuse or operation under other than specified conditions, including cone and/or coil damage resulting from improperly designed enclosures, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than University Sound will void this guarantee. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair information for this product:
University Sound, Inc., Phone 405/324-5311, FAX 405/324-8981.

Applications and technical information for University Sound products:
University Sound, Inc., Technical Coordinator, Phone 405/324-5311, FAX 405/324-8981.

Specifications subject to change without notice.

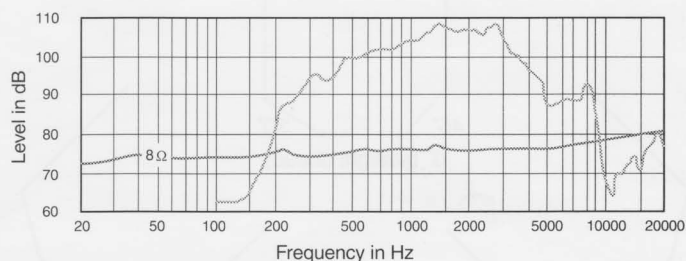


Figure 2: Frequency Response of SMH Horn Measured with ID60C-8 Driver at 10 feet on Axis with 1 Watt Input