

**Engineering Standard**

Date Effective

Number

**Engineering Design
Specification**

3/11/03

210119

Date Revised

Rev Number

A

4348**Acoustical and Electrical Specifications****System:**

Sensitivity:	85 dB for 2.83V @ 1M
Rated Impedance:	8 ohm
Minimum Impedance:	4.5 Ohm @ 85 Hz, 3.8 Ohms @ 25 kHz
Impedance Curve:	See Page 5
Frequency Response (-6 dB):	33 Hz to 40 kHz (Anechoic)
G₁ (-3 dB):	38 Hz
Sound Power:	See Page 6
Harmonic Distortion, 96dB:	See Page 6
Power Compression:	Less than 0.5 dB @ 100dB SPL
Crossover Frequencies:	300 Hz, 1 kHz, 10 kHz
System Polarity:	E.L.A.

System Component Specifications

Driver(s)	Size	Supplier	Model #	Specification
Bass Transducer:	16"	JBL Pro	1500PE	Spec #
Mid/Bass Transducer:	10"	JBL Pro	2251J-1	Spec #
High Frequency Transducer:	3"	JBL Pro	435AL	Spec #
Ultra High Frequency Transducer:	1"	JBL Pro	045T1	Spec #
Network:				
Voltage Drive:			See Page 7	
Schematic:			See Page 9	
Amplifier:			N/A	

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4348**System Physical Specifications**

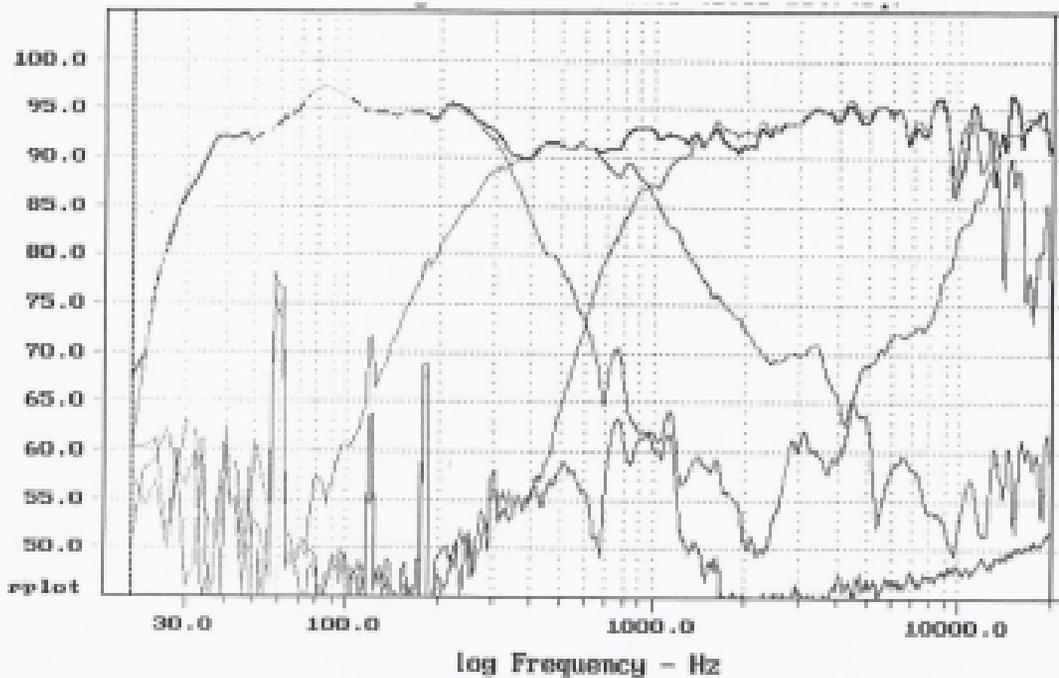
May be superseded by information on the drawings

Cabinet:

HWD, inches	42.5" H X 23.5" W X 15.75" D, Plus Grilles (1" Depth)
Enclosure Volume	4.5 Cubic Feet
Material	MDF
Panel Thickness	1"
Finish	Walnut, Satin overcoat
Sub Enclosure	0.5 cubic feet
Bracing	1" x 3" on sides and back
Grille	LF and HF sections, 1" MDF wood frames, Monitor Blue Cloth
Grille Cup	10, molded rubber
Port	2, Baffle mounted, 4-13 Dia. by 7" long
Lining	1" Fiberglass lining both enclosure sections
Terminals	Metal, 5-Way Binding Posts, Gold Plated
Network Controls	3 L-Pads plus Bi-Amp Switch
Badging	UHF Bazel Logo plate
Folicals	None
Feet	None
Weight	200 lb
Accessories	None

	Date Effective	Number	Rev Number
Engineering Test Specification	3/11/02	210119	A
4348			
System Test Specifications			
<i>production testing quantities per-BS, CA, AGC</i>			
System:	Frequency Response:	Window	Averaging
			Slope
	+/- 2.0 dB, 50 Hz to 5 kHz:	1/3 Octave	36dB/Octave
	+/- 2.5 dB, 5 kHz to 20 kHz:	1 Octave	36dB/Octave
	Microphone Position:	On HF @ 1 meter.	
Dynamic Test:	Sine Sweep Voltage:	8 V	
	Frequency Range:	20 Hz to 20000 Hz	
	Sweep Duration:	8 seconds	
Power Test:	Input Signal:	20 V, IEC Shaped Noise	
	Duration:	8 + 90 Hours	
	Control Settings:	N/A	
Polarity Test:	EIA for LF and HF, Reverse for MF and UHF		
Environmental Test:	HCGUBL Spec #		
Tonal Test:	A.S.T.M.	DC-4	
Visual Criteria:	HCGUBL GA Spec #		
Network:	Voltage Drive:	Window	Averaging
			Slope
	LF, 8 Ohm	+/- 0.5 dB, 20 Hz to 200 Hz	1/6 Octave
		+/- 1.0 dB, 200 Hz to 800 Hz	1/6 Octave
		+/- 2.0 dB, 800 Hz to 1600 Hz	1/6 Octave
	MF, 8 Ohm	+/- 2.0 dB, 20 Hz to 100 Hz	1/3 Octave
		+/- 1.0 dB, 100 Hz to 300 Hz	1/6 Octave
		+/- 0.7 dB, 300 Hz to 600 Hz	1/6 Octave
		+/- 1.0 dB, 600 Hz to 1200 Hz	1/6 Octave
		+/- 2.0 dB, 1200 Hz to 2500 Hz	1/6 Octave
	HF, 8 Ohm	+/- 2.0 dB, 100 Hz to 600 Hz	1/3 Octave
		+/- 1.0 dB, 600 Hz to 1000 Hz	1/6 Octave
		+/- 0.7 dB, 1000 Hz to 6000 Hz	1/6 Octave
		+/- 1.0 dB, 6000 Hz to 12000 Hz	1/6 Octave
		+/- 2.0 dB, 12000 Hz to 20000 Hz	1/6 Octave
	UHF, 8 Ohm	+/- 2.0 dB, 8000 Hz to 12000 Hz	1/6 Octave
		+/- 1.0 dB, 12000 Hz to 40000 Hz	1/6 Octave

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Impedance vs Freq

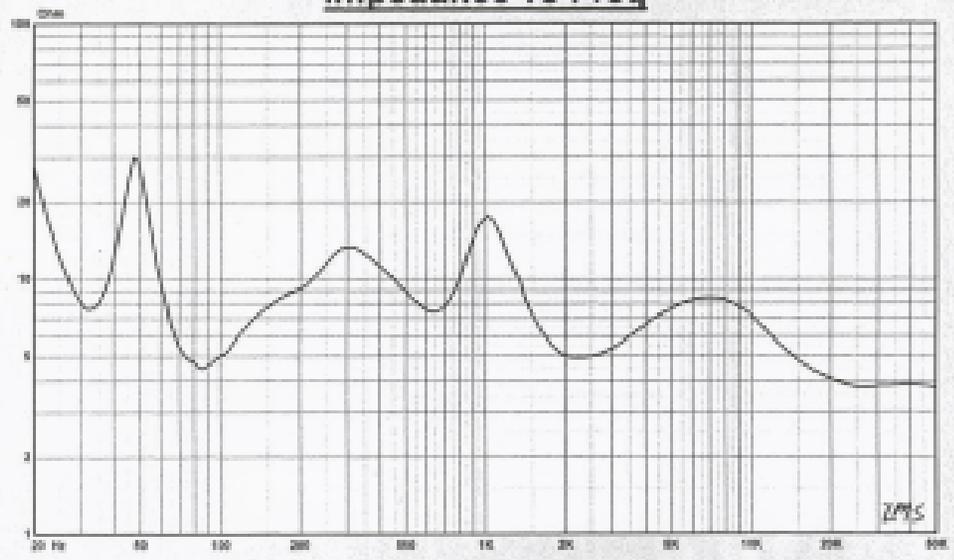


Figure 5

Key: — 14 Ohm R Impedance, Constant

Notes	_____	_____
	_____	_____

ZMYS
4.10.03
Jan18/2001

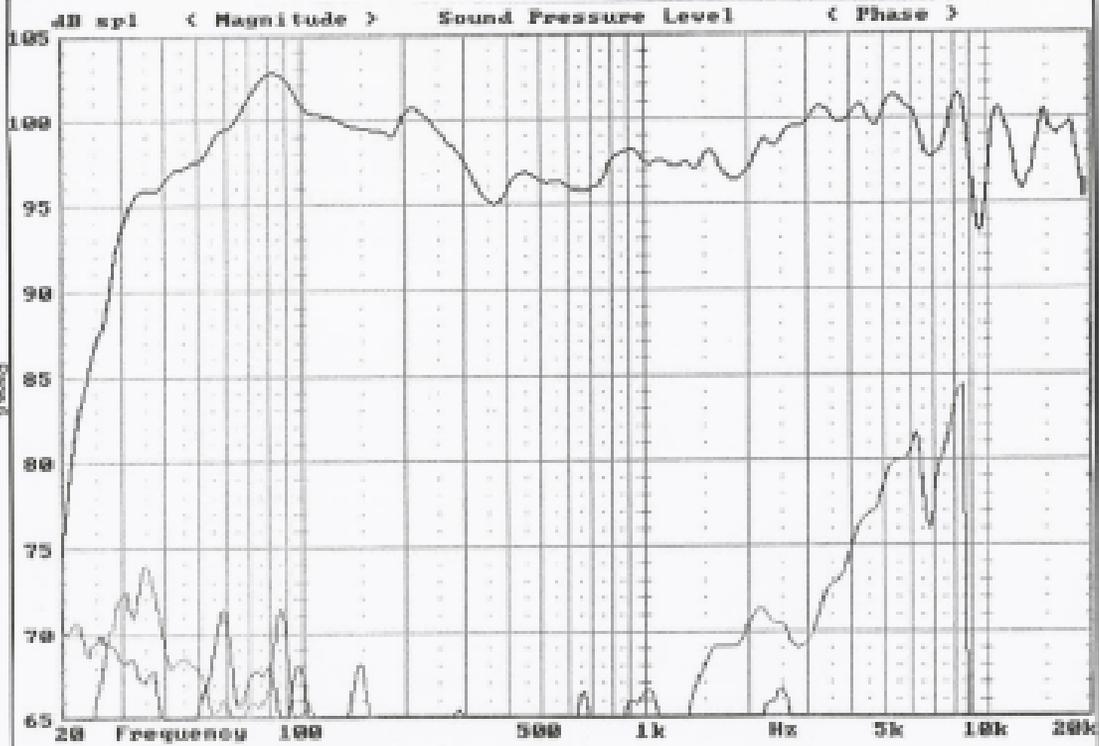
Person:
Company:

Project:
File: 4348.06

Date Plotted:
1/11/2003 10:10:08 am



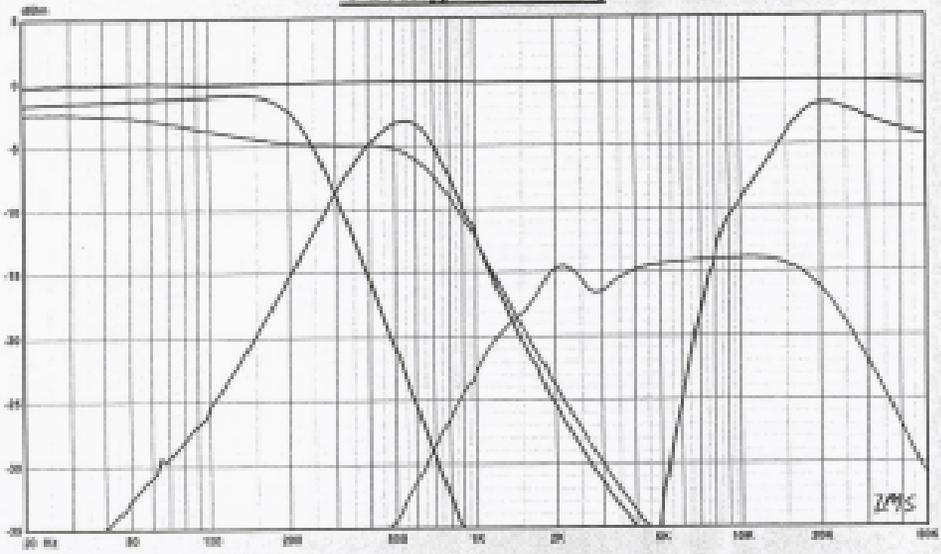
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Voltage vs Freq



dBm

- 1. 00T
- - - 2. L7 Rev 0 (70 dB)
- ... 3. M7 Rev 0
- ... 4. M7 Rev 0
- ... 5. L6T Rev 0
- ... 6. M7 Rev 0 (dotted)

kHz

Data Measured, Jan. 2, 2003, 10:02:37 am

Data Measured, Mar. 2, 2000, 10:18 am

ZMS
4.0.0.01
Jan 16, 2001

Patrick
Company

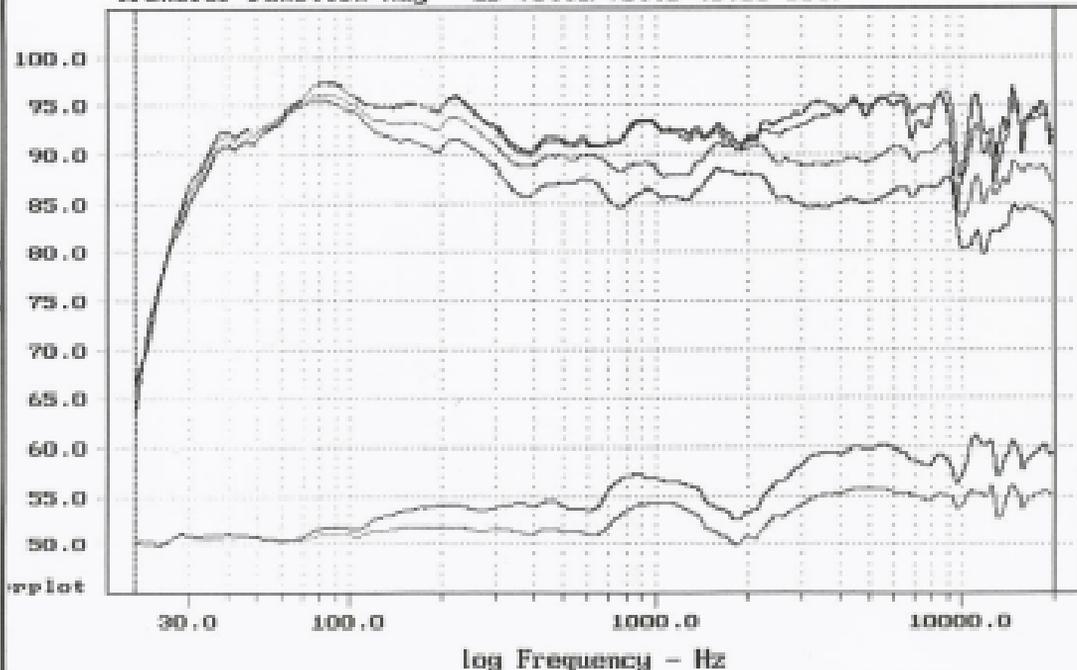
Project:
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Mar 20, 2003
Fri 10:57 am



4348

File: C:\SNDPWR\DI_SND.FRD 3-11-2002 8:57 AM (equalized)
Transfer Function Mag - dB volts/volts (8.85 oct)



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Simplified Schematic
338126

3/7/02
Rev. 9
S.T.

