

### AMERICAN STANDARD SERIES

# ALPHA-8A

Recommended for professional audio midrange applications in a sealed cabinet, or as a mid-bass in a vented satellite enclosure.



#### SPECIFICATION

### THIELE & SMALL PARAMETERS\*

### MOUNTING INFORMATION

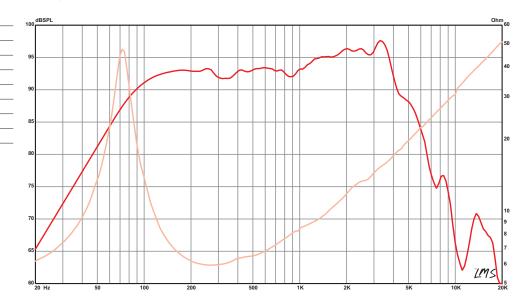
Nominal Basket Diameter	8.0", 203 mm	Fs	73 Hz	Recommended Enclosure Vo	olume
Nominal Impedance*	8 Ω	Re	5.30 Ω	Sealed	5.00–7.00 liters,
Power Rating**		Le	0.44 mH		0.18–0.25 cu.ft.
Watts	125 W	Qms	4.60	Vented	16.70–25.50 liters,
Music Program	250 W	Qes	0.68		0.59–0.90 cu.ft.
Resonance	73 Hz	Qts	0.59	Driver Volume Displaced	0.020 cu.ft., 0.58 liters
Usable Frequency Range	58 Hz – 5.0 kHz	Vas	0.63 cu.ft., 17.70 liters	Overall Diameter	8.24", 209.3 mm
Sensitivity***	94.0 dB	Vd	67.0 cc	Baffle Hole Diameter	7.13″, 181.1 mm
Magnet Weight	20 oz.	Cms	0.28 mm/N	Front Sealing Gasket	Yes
Gap Height	.250", 6.4 mm	BL	7.80 T-M	Rear Sealing Gasket	Yes
Voice Coil Diameter	1.5", 38 mm	Mms	17 grams	Mounting Holes Diameter	0.22″, 5.6 mm
		EBP	107	Mounting Holes B.C.D.	7.75″, 196.9 mm
		Xmax	3.20 mm	Depth	3.25″, 82.6 mm
		Sd	210.0 cm2	Net Weight	4.30 lbs , 1.95 kg
		Xlim	7.1 mm	Shipping Weight	5.10 lbs , 2.31 kg

#### MATERIALS OF CONSTRUCTION

Copper voice coil
Polyimide former
Ferrite magnet
Vented core
Pressed steel basket
Paper cone
Cloth cone edge
Solid composition paper dust cap



### FREQUENCY RESPONSE & IMPEDANCE CURVE\*





From design and manufacturing to the stage or studio. Once you've experienced the performance of Eminence, you'll never accept anything else.

### **MISSION STATEMENT**

*Eminence is dedicated to providing the best Quality, Value and Service to meet our customers' needs.* 

### FOOTNOTES

- Please consult www.eminence.com for specifications of models with alternative impedances.
- \*\* Multiple units exceed published ratings evaluated under EIA 426A specification while tested in a free-air, non-temperature-controlled environment.
- \*\*\* The average output across the usable frequency range when applying 1W/1m into the nominal impedance. i.e: 2.83V/8Ω, 4V/16Ω. Eminence response curves are measured under the following conditions: All speakers are tested at 1W/1m using a variety of test set-ups for the appropriate impedance | LMS using 0.25" supplied microphone (software calibrated) mounted 1m from wall/baffle | 2 ft. x 2 ft. baffle is built into the wall with the speaker mounted flush against a steel ring for minimum diffraction | Carver PM-120 amplifier | 2700 cu. ft. chamber with fiberglass on all six surfaces (three with custom-made wedges).
- \*\*\*\* BETA 8CX, 10CX, and 12CX are coaxial speakers with tweeter sold separately. Published usable frequency response contingent upon use of ASD:1001 HF Driver.
- \*\*\*\*\* Multiple units exceeded published ratings evaluated under EIA-426A or AES specification while mounted on Eminence's H290, H290S, or H2EA horn in a non-temperaturecontrolled environment.
- \*\*\*\*\*\*The average on axis output across the entire usable frequency range when applying 1W/1m into the nominal impedance, i.e. 2.83V/8Ω, 4V/16Ω. Eminence response curves are measured under the following conditions: All speakers are tested at 1W/1m using a variety of test set-ups for the appropriate impedance | LMS using 0.25" supplied microphone (software calibrated) mounted 1m from wall/baffle | 2ft x 2ft baffle is built into the wall with horn front mounted | Carver PM-120 amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges).

Prices, specifications and product cosmetics are subject to change without notice.







# Alpha8 Med Vented Enclosure

By McJerry, Eminence Speaker LLC

50 Watt Displacement Limit. F3 of 58 Hz; Best used with a high pass filter set to 55 Hz or higher.

10

50

100

500

1 K

5 K

10 K

20 K

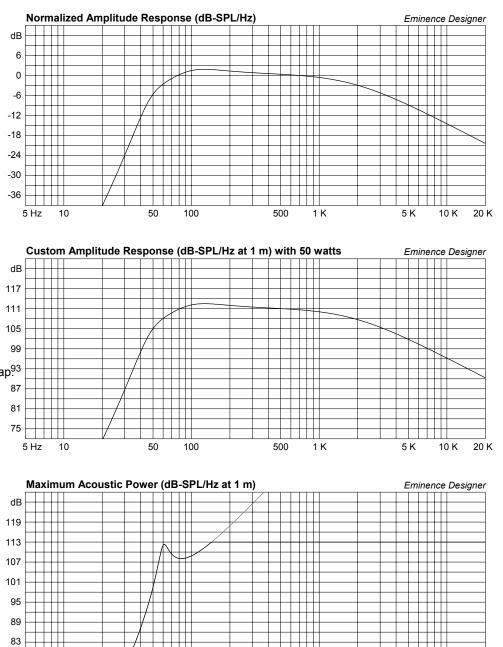
### **Box Properties**

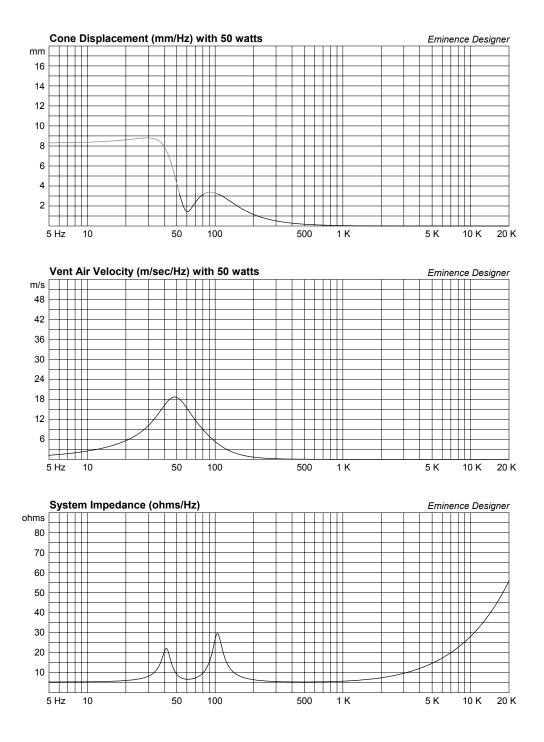
--Description--Name: Type: Vented Box Shape: Prism, square (optimum) --Box Parameters--Vb =0.85 cu.ft V(total) = 0.887 cu.ft Fb = 60 Hz QL = 7 F3 = 58.05 Hz Fill = minimal --Vents--No. of Vents = 1 Vent shape = round Vent ends = one flush Dv = 3 in Lv = 3.475 in

### **Driver Properties**

--Description--Name: Alpha-8 Type: Standard one-way driver Company: Eminence Speaker LLC Comment: Revised OCT 2005 Piston: Paper cone. Suspension: Cloth surround. Dust Cap: Solid composition paper dust cap93 Frame: Pressed steel basket. Voice Coil: 1.5 inch (38.1 mm) copper. Magnet: 20 oz ferrite magnet. --Configuration--No. of Drivers = 1 --Driver Parameters--Fs = 72.7 Hz Qms = 4.6

Vas =	17.7 liters
Xmax =	3.2 mm
Sd =	210 sq.cm
Qes =	0.68
Re =	5.3 ohms
Le =	0.44 mH
Z =	8 ohms
Pe =	125 watts





## Alpha8 Sealed Midrange Enclosure

By McJerry, Eminence Speaker LLC 125 Watt Thermal Limit. Use a steep High Pass filter set to 160 Hz or higher.

> > 5 Hz

10

50

100

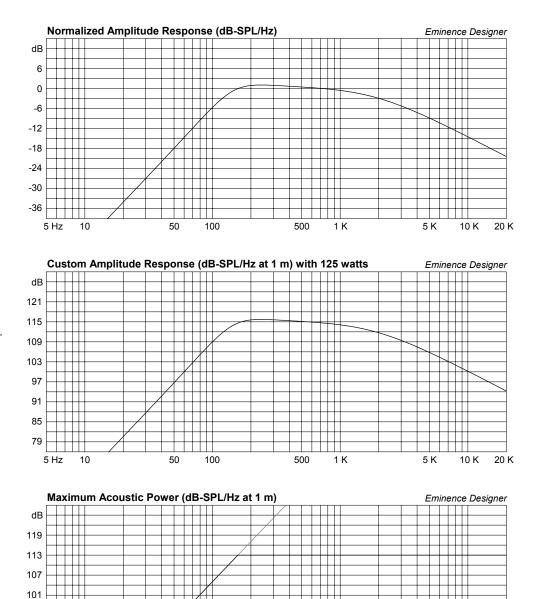
### **Box Properties**

Description			
Name:			
Type: Closed Box			
Shape: Prism, square			
Box Parameters			
Vb =	0.18 cu.ft		
V(total) =	0.2 cu.ft		
Qtc =	0.902		
QL =	20		
F3 =	119 Hz		
Fill =	heavy		

### **Driver Properties**

--Description--Name: Alpha-8 Type: Standard one-way driver Company: Eminence Speaker LLC Comment: Revised OCT 2005 Piston: Paper cone. Suspension: Cloth surround. Dust Cap: Solid paper dust cap. Frame: Pressed steel basket. Voice Coil: 1.5 inch (38.1 mm) copper. Magnet: 20 oz ferrite magnet. --Configuration--No. of Drivers = 1 --Driver Parameters--72.7 Hz Fs = Qms = 4.6 Vas = 17.7 liters Xmax = 3.2 mm Sd = 210 sq.cm 0 68 مم

Qes –	0.00
Re =	5.3 ohms
Le =	0.44 mH
Z =	8 ohms
Pe =	125 watts
_	



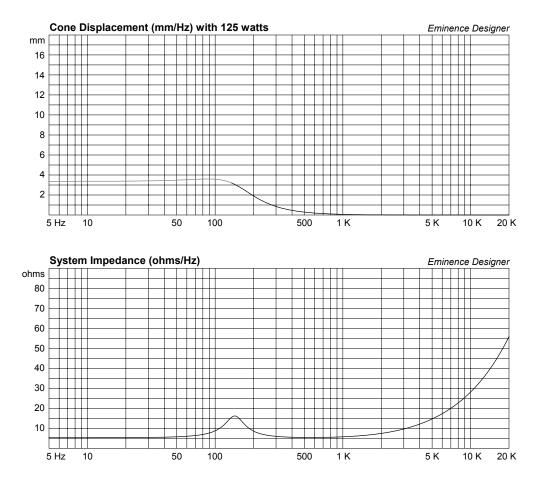
1 K

5 K

10 K

20 K

500



# Alpha8 Small Vented Mid/High Sat. Enclosure

5 Hz

10

50

100

500

1 K

5 K

10 K

20 K

By McJerry, Eminence Speaker LLC 75 Watt Displacement Limit. F3 of 71 Hz; best used with a High Pass filter set to 70 Hz or higher.

### **Box Properties**

--Description--Name: Type: Vented Box Shape: Prism, square (optimum) --Box Parameters--Vb =0.55 cu.ft V(total) = 0.59 cu.ft Fb = 71 Hz 7 QL = F3 = 70.59 Hz Fill = minimal --Vents--No. of Vents = 1 Vent shape = round Vent ends = one flush Dv = 3 in Lv = 4.146 in

### **Driver Properties**

--Description--Name: Alpha-8 Type: Standard one-way driver Company: Eminence Speaker LLC Comment: Revised OCT 2005 Piston: Paper cone. Suspension: Cloth surround. Dust Cap: Solid composition paper dust cap94 Frame: Pressed steel basket. Voice Coil: 1.5 inch (38.1 mm) copper. Magnet: 20 oz ferrite magnet. --Configuration--No. of Drivers = 1 --Driver Parameters--Fs = 72.7 Hz Qms = 4.6

<b>AB</b>	
Vas =	17.7 liters
Xmax =	3.2 mm
Sd =	210 sq.cm
Qes =	0.68
Re =	5.3 ohms
Le =	0.44 mH
Z =	8 ohms
Pe =	125 watts

