



PROFESSIONAL SERIES

DELTA PRO 12-450-4

The Delta Pro 12-450 is a lighter weight version of the Delta Pro 12. Recommended as a woofer or midbass in vented enclosures. Also makes a perfect replacement in many portable PA cabinets.



☐ Midrange	☒ Woofer	☐ Sealed Box	☐ Scoop Loading
☒ Midbass	☒ Subwoofer	☒ Vented Box	☒ Horn Loading
☒ Bass Guitar			

SPECIFICATION

Nominal Basket Diameter	12", 305 mm
Nominal Impedance*	4 Ω
Power Rating**	
Watts	450 W
Music Program	900 W
Resonance	45 Hz
Usable Frequency Range	45 Hz – 3.8 kHz
Sensitivity***	97.4 dB
Magnet Weight	56 oz.
Gap Height	0.313", 7.9 mm
Voice Coil Diameter	2.5", 64 mm

THIELE & SMALL PARAMETERS*

Fs	45 Hz
Re	3.65 Ω
Le	0.45 mH
Qms	7.97
Qes	0.41
Qts	0.39
Vas	4.86 cu.ft., 137.73 liters
Vd	271.5 cc
Cms	0.35 mm/N
BL	9.51 T-M
Mms	36 grams
EBP	110
Xmax	5.2 mm
Sd	532.4 cm ²
Xlim	13.7 mm

MOUNTING INFORMATION

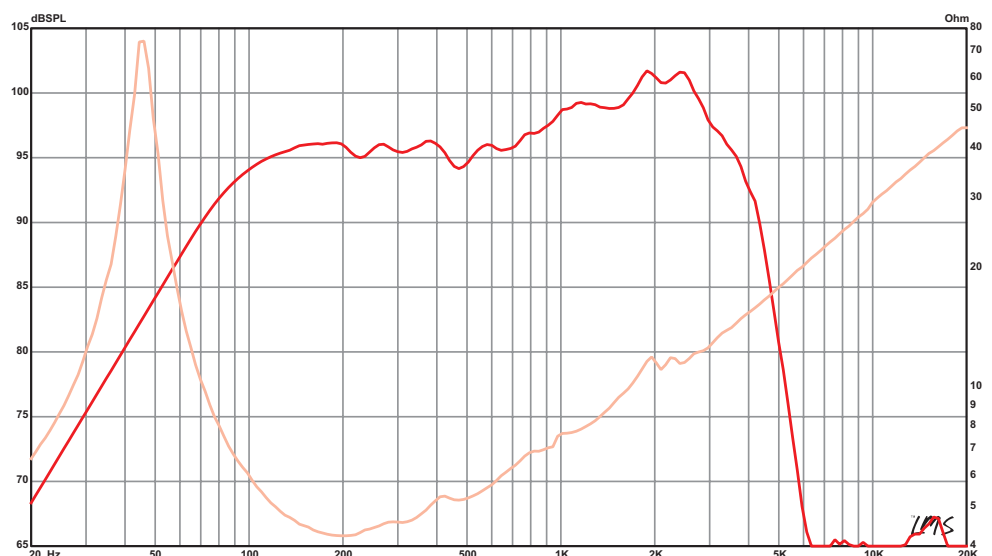
Recommended Enclosure Volume	
Sealed	N/A
Vented	33.98–99.12 liters, 1.2–3.5 cu.ft.
Driver Volume Displaced	0.079 cu.ft., 2.25 liters
Overall Diameter	12.38", 314.5 mm
Baffle Hole Diameter	11.07", 281.2 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.27", 6.9 mm
Mounting Holes B.C.D.	11.57", 293.9 mm
Depth	5.5", 139.7 mm
Net Weight	11.7 lbs, 5.31 kg
Shipping Weight	14 lbs, 6.35 kg

MATERIALS OF CONSTRUCTION

Aluminum voice coil
Polyimide former
Ferrite magnet
Vented and extended core
Die-cast aluminum basket
Paper cone
Cloth cone edge
Paper dust cap



FREQUENCY RESPONSE & IMPEDANCE CURVE*



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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-temperature-controlled 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.

EMINENCE SPEAKER LLC

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DeltaPro-12-450-4 Small Vented MidBass Box

By Tom James, Eminence Speaker LLC

450 Watts; F3 of 81 Hz. Use a steep high pass filter at 75 Hz or higher.

Not for Full Range Use. Use above 75 Hz only.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.2 cu.ft

V(total) = 1.442 cu.ft

Fb = 70 Hz

QL = 7

F3 = 80.5 Hz

Fill = normal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 6.78 in

Driver Properties

--Description--

Name: DeltaPro-450-4

Type: Standard one-way driver

Company: Eminence Speaker USA

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 45.2 Hz

Qms = 7.97

Vas = 137.7 liters

Cms = 0.35 mm/N

Mms = 35.8 g

Rms = 1.28 kg/s

Xmax = 5.2 mm

Xmech = 7.8 mm

P-Dia = 258.9 mm

Sd = 532.4 sq.cm

P-Vd = 0.272 liters

--Electrical Parameters--

Qes = 0.41

Re = 3.6 ohms

Le = 0.45 mH

Z = 4 ohms

BL = 9.51 Tm

Pe = 450 watts

--Electromech. Parameters--

Qts = 0.39

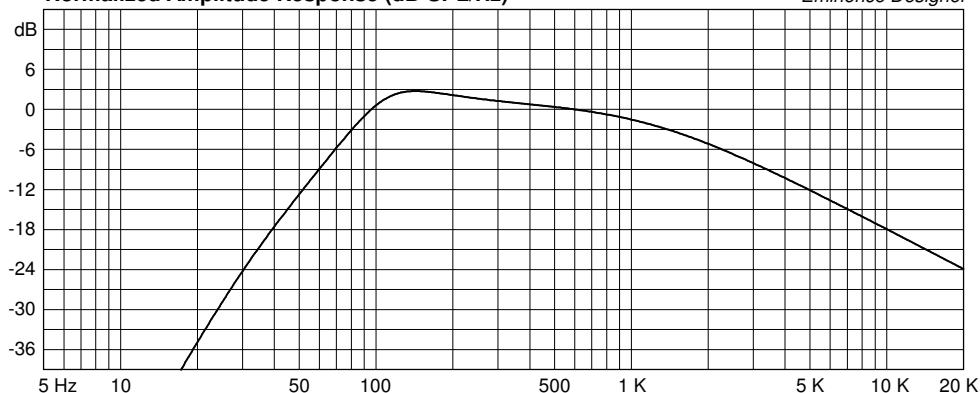
no = 2.991 %

1-W SPL = 97.4 dB

2.83-V SPL = 100.4 dB

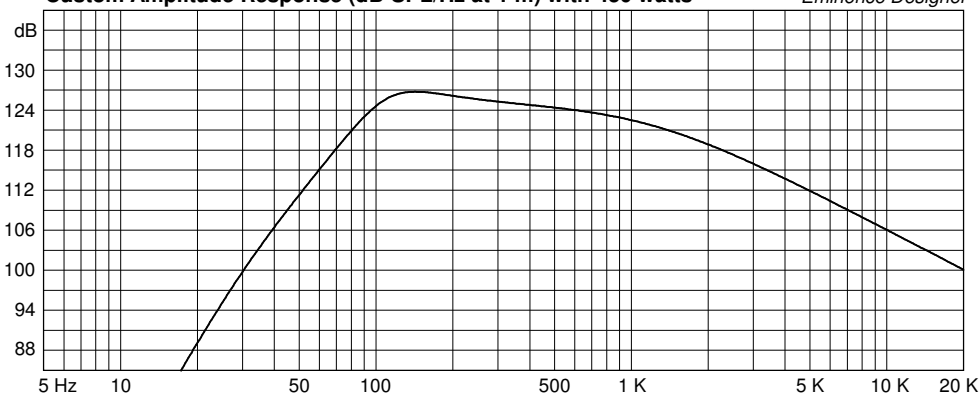
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



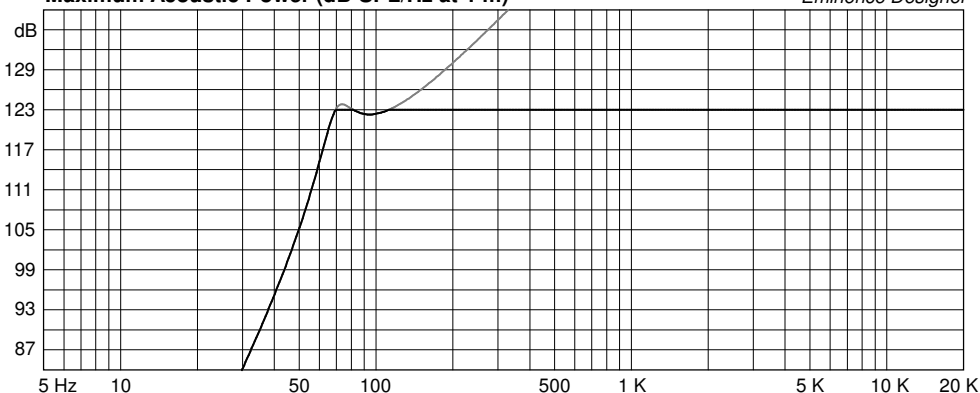
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts

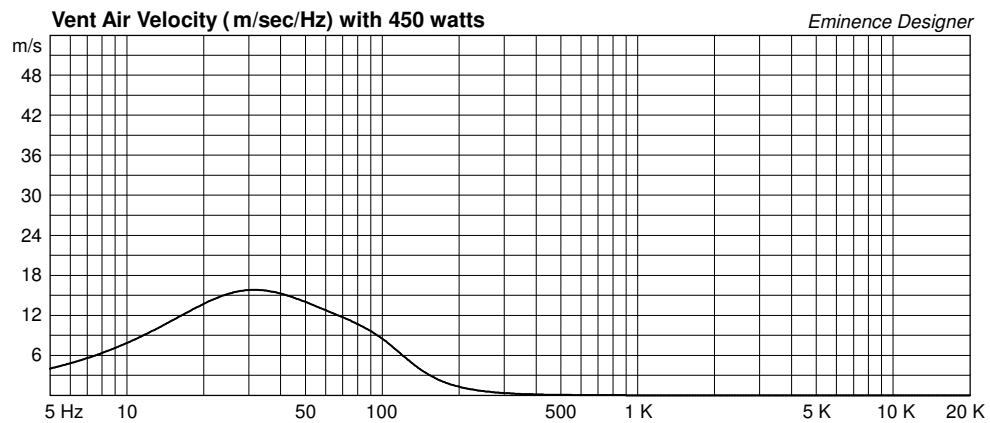
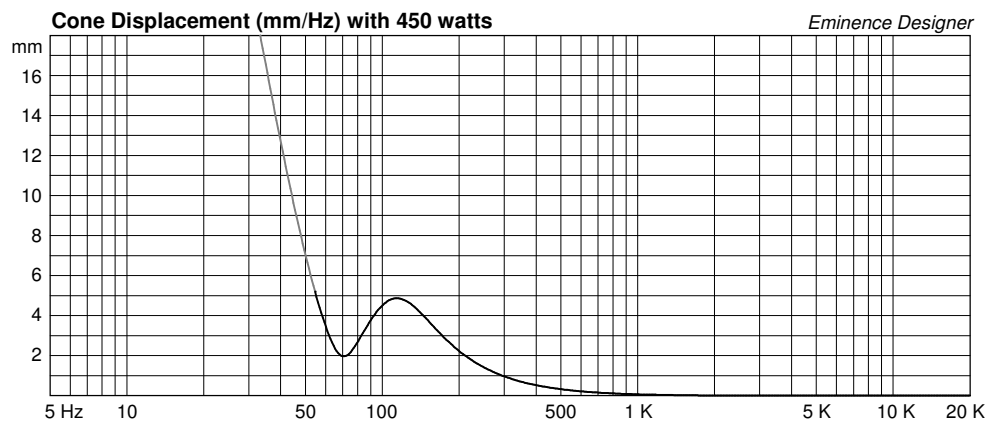
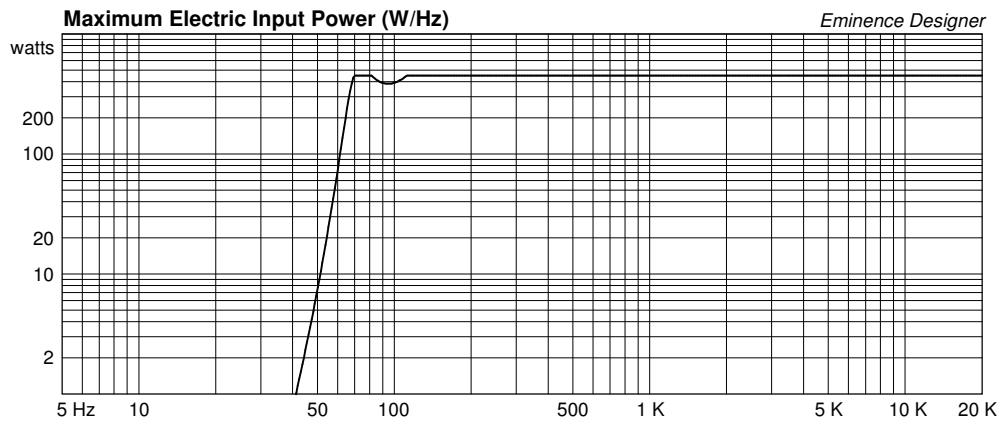
Eminence Designer

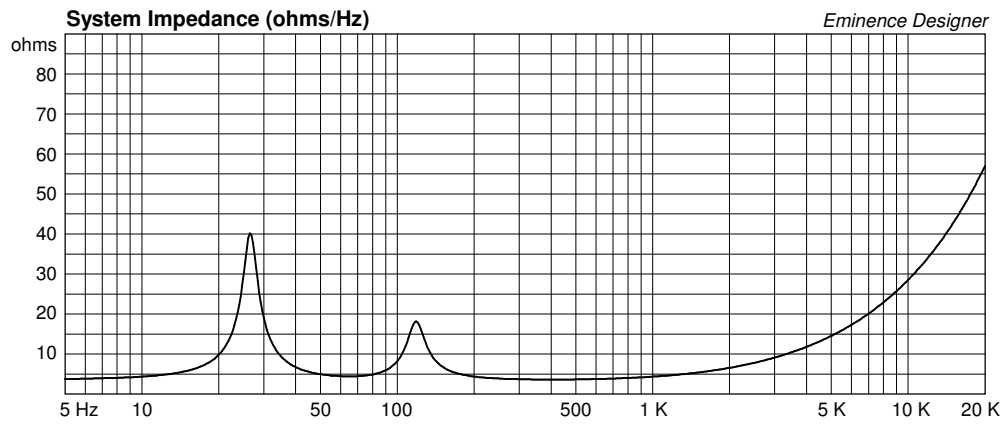


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







DeltaPro-12-450-4 Med Vented Woofer

By Tom James, Eminence Speaker LLC

350 Watts; F3 of 68 Hz. Use a steep high pass filter at 50 Hz or higher.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.95 cu.ft

V(total) = 2.134 cu.ft

Fb = 66 Hz

QL = 7

F3 = 67.54 Hz

Fill = normal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 3.23 in

Driver Properties

--Description--

Name: DeltaPro-450-4

Type: Standard one-way driver

Company: Eminence Speaker USA

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 45.2 Hz

Qms = 7.97

Vas = 137.7 liters

Cms = 0.35 mm/N

Mms = 35.8 g

Rms = 1.28 kg/s

Xmax = 5.2 mm

Xmech = 7.8 mm

P-Dia = 258.9 mm

Sd = 532.4 sq.cm

P-Vd = 0.272 liters

--Electrical Parameters--

Qes = 0.41

Re = 3.6 ohms

Le = 0.45 mH

Z = 4 ohms

BL = 9.51 Tm

Pe = 450 watts

--Electromech. Parameters--

Qts = 0.39

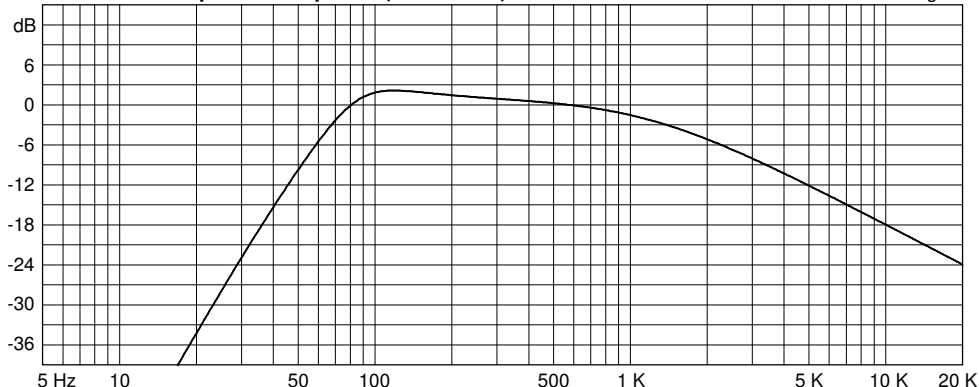
no = 2.991 %

1-W SPL = 97.4 dB

2.83-V SPL = 100.4 dB

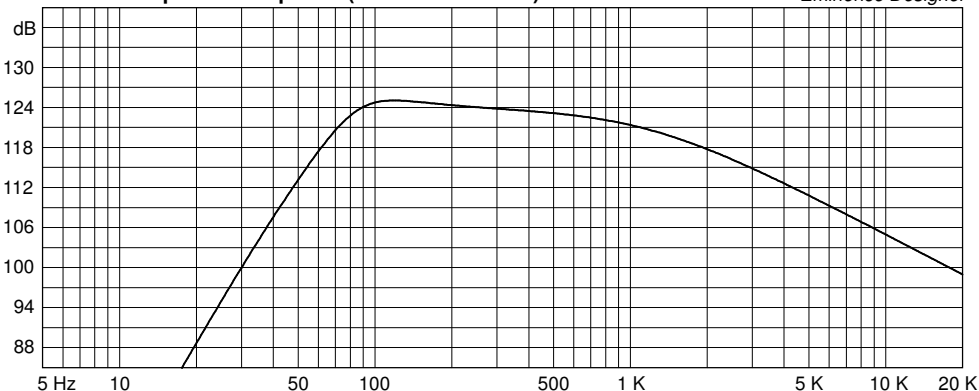
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



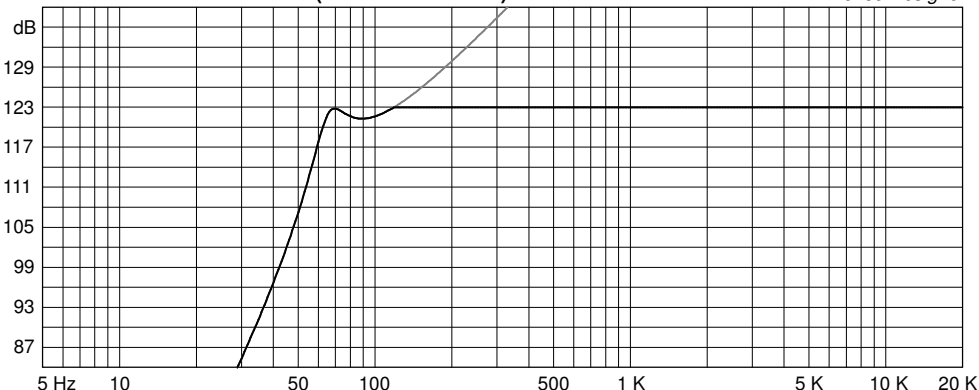
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 350 watts

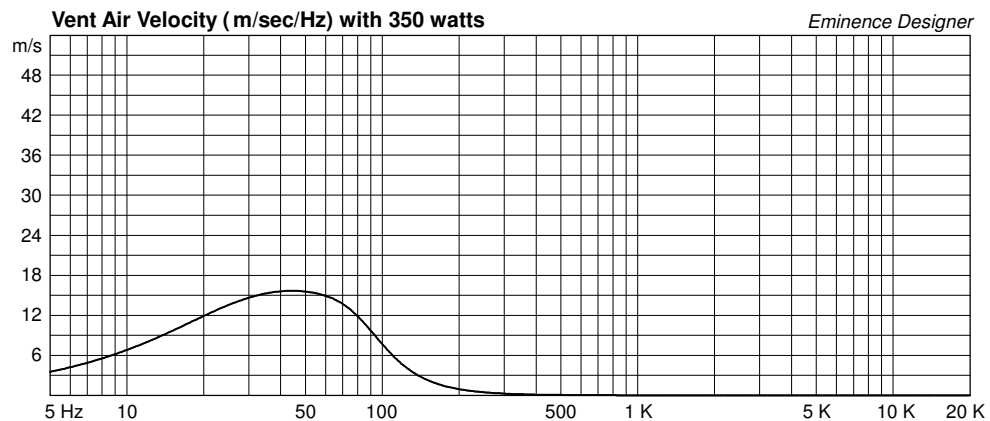
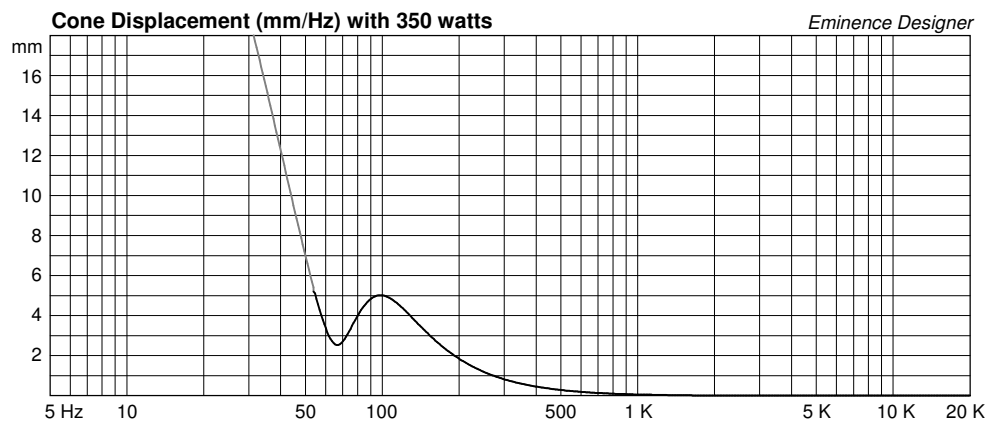
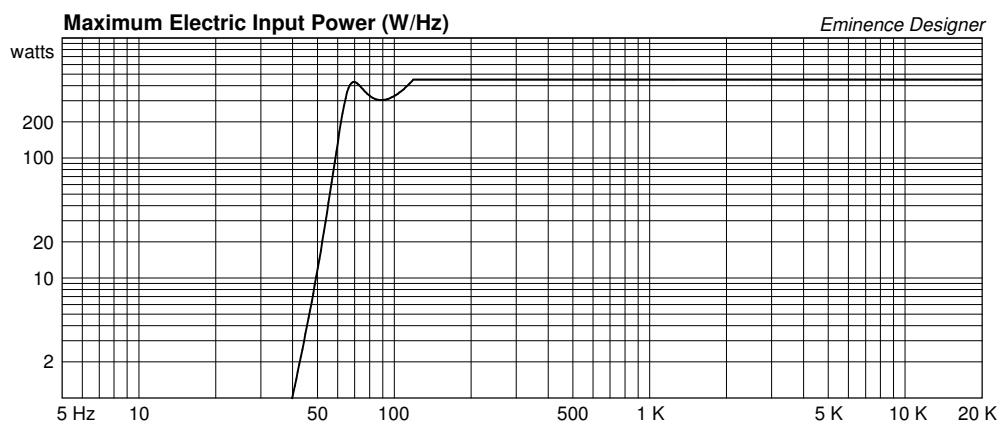
Eminence Designer

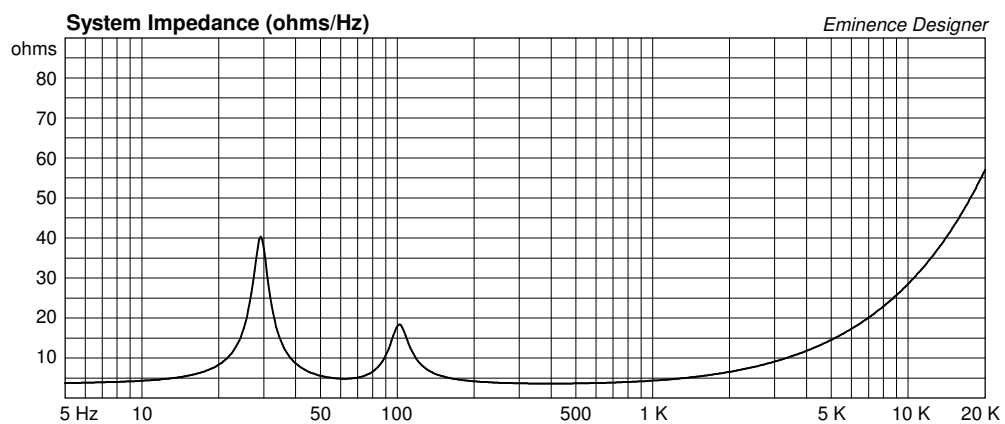


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







DeltaPro-12-450-4 Large Vented Woofer Box

By Tom James, Eminence Speaker LLC

225 Watts; F3 of 54 Hz. Use a steep high pass filter at 45 Hz or higher.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 3.5 cu.ft

V(total) = 3.658 cu.ft

Fb = 55 Hz

QL = 7

F3 = 54.06 Hz

Fill = normal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 1.651 in

Driver Properties

--Description--

Name: DeltaPro-450-4

Type: Standard one-way driver

Company: Eminence Speaker USA

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 45.2 Hz

Qms = 7.97

Vas = 137.7 liters

Cms = 0.35 mm/N

Mms = 35.8 g

Rms = 1.28 kg/s

Xmax = 5.2 mm

Xmech = 7.8 mm

P-Dia = 258.9 mm

Sd = 532.4 sq.cm

P-Vd = 0.272 liters

--Electrical Parameters--

Qes = 0.41

Re = 3.6 ohms

Le = 0.45 mH

Z = 4 ohms

BL = 9.51 Tm

Pe = 450 watts

--Electromech. Parameters--

Qts = 0.39

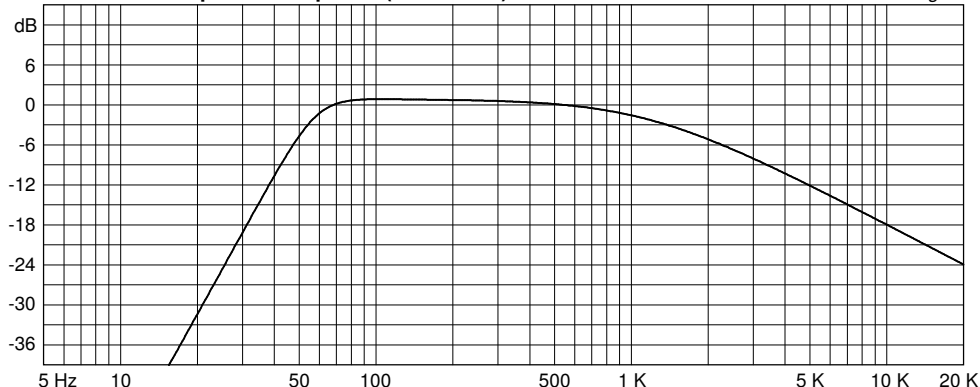
no = 2.991 %

1-W SPL = 97.4 dB

2.83-V SPL = 100.4 dB

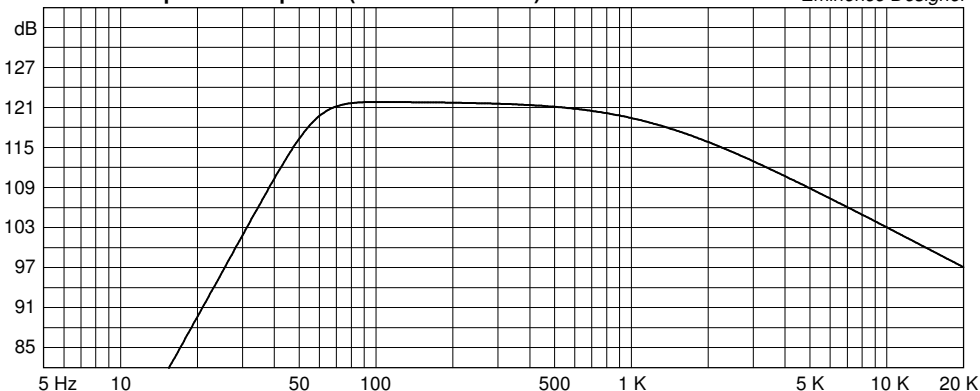
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 225 watts

Eminence Designer



Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer

