Delta Pro-18A Large Subwoofer Cabinet

By Jerry McNutt, Eminence Speaker LLC
Limit to 250 Watts; F3 of 36 Hz. Use a steep high pass at 30 Hz.

Box Properties
--Description--
Name: Vented Box
Type: Prism, square
--Box Parameters--
Vb = 10 cu.ft
V(total) = 10.45 cu.ft
Fb = 35 Hz
QL = 7
F3 = 36.01 Hz
Fill = minimal
--Vents--
No. of Vents = 4
Vent shape = round
Vent ends = one flush
Dv = 4 in
Lv = 5.845 in

Driver Properties
--Description--
Name: Delta Pro-18A
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: 18" Sub Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 28.03 Hz
Qms = 10.38
Vas = 17.62 cu.ft
Xmax = 0.264 in
Sd = 184.1 sq.in
Qes = 0.33
Re = 5.3 ohms
Le = 3.43 mH
Z = 8 ohms
Pe = 500 watts

Normalized Amplitude Response (dB-SPL/Hz)

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 250 watts

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

Phase Response (deg/Hz)

Group Delay (msec/Hz)
Delta Pro-18A Small Vented Woofer Box
By Jerry McNutt, Eminence Speaker LLC
Limit to 500 Watts; F3 of 63 Hz. Use steep high pass at 40 Hz.

Box Properties
--Description--
Name: Delta Pro-18A Small Vented Woofer Box
Type: Vented Box
Shape: Prism, square
--Box Parameters--
\[ V_b = 2.7 \text{ cu.ft} \]
\[ V_{(total)} = 3.036 \text{ cu.ft} \]
\[ F_b = 55 \text{ Hz} \]
\[ QL = 7 \]
\[ F_3 = 62.92 \text{ Hz} \]
Fill = minimal
--Vent--
\[ \text{No. of Vents} = 2 \]
\[ \text{Vent shape} = \text{round} \]
\[ \text{Vent ends} = \text{one flush} \]
\[ D_v = 4 \text{ in} \]
\[ L_v = 3.869 \text{ in} \]

Driver Properties
--Description--
Name: Delta Pro-18A
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: 18" Sub Woofer
--Configuration--
\[ \text{No. of Drivers} = 1 \]
--Driver Parameters--
\[ F_s = 28.03 \text{ Hz} \]
\[ Q_{ms} = 10.38 \]
\[ V_{as} = 17.62 \text{ cu.ft} \]
\[ X_{max} = 0.264 \text{ in} \]
\[ S_d = 184.1 \text{ sq.in} \]
\[ Q_{es} = 0.33 \]
\[ R_e = 5.3 \text{ ohms} \]
\[ L_e = 3.43 \text{ mH} \]
\[ Z = 8 \text{ ohms} \]
\[ P_e = 500 \text{ watts} \]

Normalized Amplitude Response (dB-SPL/Hz)

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

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

<table>
<thead>
<tr>
<th>Watts</th>
<th>5 Hz</th>
<th>10</th>
<th>50</th>
<th>100</th>
<th>500</th>
<th>1 K</th>
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Cone Displacement (mm/Hz) with 500 watts

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<th>Diameter (mm)</th>
<th>5 Hz</th>
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<th>50</th>
<th>100</th>
<th>500</th>
<th>1 K</th>
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Vent Air Velocity (m/sec/Hz) with 500 watts

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<thead>
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<th>Velocity (m/s)</th>
<th>5 Hz</th>
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<th>50</th>
<th>100</th>
<th>500</th>
<th>1 K</th>
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Delta Pro-18A Med Vented Sub Cabinet

By Jerry McNutt, Eminence Speaker LLC

Limit to 500 Watts; F3 of 48 Hz. Use a steep high pass at 35 Hz.

Box Properties

--Description--
Name: Vented Box
Shape: Prism, square

--Box Parameters--
Vb = 5 cu.ft
V(total) = 5.339 cu.ft
Fb = 45 Hz
QL = 7
F3 = 48.28 Hz
Fill = minimal

--Vents--
No. of Vents = 4
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 3.585 in

Driver Properties

--Description--
Name: Delta Pro-18A
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: 18" Sub Woofer

--Configuration--
No. of Drivers = 1

--Driver Parameters--
Fs = 28.03 Hz
Qms = 10.38
Vas = 17.62 cu.ft
Xmax = 0.264 in
Sd = 184.1 sq.in
Qes = 0.33
Re = 5.3 ohms
Le = 3.43 mH
Z = 8 ohms
Pe = 500 watts

Normalized Amplitude Response (dB-SPL/Hz)

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

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

<table>
<thead>
<tr>
<th>Watts</th>
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<td>200</td>
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Hz

5 10 100 500 1 K 5 K 10 K 20 K

Cone Displacement (mm/Hz) with 500 watts

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<th>mm</th>
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</table>

Hz

5 10 100 500 1 K 5 K 10 K 20 K

Vent Air Velocity (m/sec/Hz) with 500 watts

<table>
<thead>
<tr>
<th>m/s</th>
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<td>48</td>
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Hz

5 10 100 500 1 K 5 K 10 K 20 K
Delta Pro-18A Med to Large Sub Cabinet
By Jerry McNutt, Eminence Speaker LLC
Limit to 500 Watts; F3 of 45 Hz. Use steep high pass at 35 Hz.

Box Properties
--Description--
Name: Vented Box
Type: Prism, square
--Box Parameters--
Vb = 6 cu.ft
V(total) = 6.309 cu.ft
Fb = 46 Hz
QL = 7
F3 = 45.31 Hz
Fill = minimal
--Vents--
No. of Vents = 4
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 2 in

Driver Properties
--Description--
Name: Delta Pro-18A
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: 18" Sub Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 28.03 Hz
Qms = 10.38
Vas = 17.62 cu.ft
Xmax = 0.264 in
Sd = 184.1 sq.in
Qes = 0.33
Re = 5.3 ohms
Le = 3.43 mH
Z = 8 ohms
Pe = 500 watts

Normalized Amplitude Response (dB-SPL/Hz)

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

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

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<th>Hz</th>
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Phase Response (deg/Hz)

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Group Delay (msec/Hz)

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<th>100</th>
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<th>1 K</th>
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Delta Pro-18A Two By 18 Subwoofer
By Jerry McNutt, Eminence Speaker LLC
Limit to 1000 Watts; F3 of 49 Hz. Use a steep high pass at 35 Hz. Slot Ports.

Box Properties
--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 9.8 cu.ft
V(total) = 10.7 cu.ft
Fb = 45 Hz
QL = 7
F3 = 48.75 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = rectangle
Vent ends = one flush
Hv = 20.5 in
Wv = 2 in
Lv = 6.773 in

Driver Properties
--Description--
Name: Delta Pro-18A
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: 18" Sub Woofer
--Configuration--
No. of Drivers = 2
Mounting = Standard
Wiring = Parallel
Drivers sum coherently = Yes
--Driver Parameters--
Fs = 28.03 Hz
Qms = 10.38
Vas = 17.62 cu.ft [35.24]
Xmax = 0.264 in
Sd = 184.1 sq.in [368.3]
Qes = 0.33
Re = 5.3 ohms [2.65]
Le = 3.43 mH [1.715]
Z = 8 ohms [4]
Pe = 500 watts [1000]