DeltaPro15 Large Vented Box, Med Power, Med F3. Ok Full Range
By McJerry, Eminence Speaker LLC
Displacement limited to 200 watts. Must use a 24 dB per octave high pass filter set to 45 Hz or higher to protect driver from overexcursion.

Box Properties
--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 4.5 cu.ft
V(total) = 4.651 cu.ft
Fb = 53 Hz
QL = 7
F3 = 61.26 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 3.958 in
Lv = 0.75 in

Driver Properties
--Description--
Name: Delta Pro-15
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Ribbed paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Diecast aluminum basket.
Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Mechanical Parameters--
Fs = 42 Hz
Qms = 4.73
Vas = 243.5 liters
Cms = 0.24 mm/N
Mms = 61 g
Rms = 3.41 kg/s
Xmax = 4.3 mm
P-Dia = 328 mm
Sd = 856.3 sq.cm
P-Vd = 0.363 liters
--Electrical Parameters--
Qes = 0.44
Re = 5.71 ohms
Le = 0.83 mH
Z = 8 ohms
BL = 14.5 Tm
Pe = 400 watts
1-W SPL = 98.12 dB
2.83-V SPL = 99.58 dB

File: DeltaPro15LargeVentedBox200Watts.bb6
Maximum Electric Input Power (W/Hz)

Cone Displacement (mm/Hz) with 200 watts

Vent Air Velocity (m/sec/Hz) with 200 watts
DeltaPro15A Med Vented Box, High Power Sat or Monitor Cab.
By McJerry, Eminence Speaker LLC
Displacement limited to 350 watts. Must use a 24 dB per octave high pass filter set to 100 Hz or higher.
Use with a Sub-woofer system. Good for a 15" Two-way to go with a sub.

Box Properties
--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 3 cu.ft
V(total) = 3.158 cu.ft
Fb = 75 Hz
QL = 7
F3 = 71.3 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 5.119 in
Lv = 0.75 in

Driver Properties
--Description--
Name: Delta Pro-15
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Ribbed paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Diecast aluminum basket.
Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Mechanical Parameters--
Fs = 42 Hz
Qms = 4.73
Vas = 243.5 liters
Cms = 0.24 mm/N
Mms = 61 g
Rms = 3.41 kg/s
Xmax = 4.3 mm
P-Dia = 328 mm
Sd = 856.3 sq.cm
P-Vd = 0.363 liters

--Electrical Parameters--
Qes = 0.44
Re = 5.71 ohms
Le = 0.83 mH
Z = 8 ohms
BL = 14.5 Tm
Pe = 400 watts

--Electromech. Parameters--
Qts = 0.4
no = 3.953 %
1-W SPL = 98.12 dB
2.83-V SPL = 99.58 dB
System Impedance (ohms/Hz)

Phase Response (deg/Hz)

Group Delay (msec/Hz)
DeltaPro15A High Power Sealed Box, Great Vocal Monitor
By McJerry, Eminence Speaker LLC
Thermally Limited to 400 Watts; use a steep high pass filter at 125 Hz.

Box Properties
--Description--
Name:
Type: Closed Box
Shape: Prism, square
--Box Parameters--
Vb = 0.959 cu.ft
V(total) = 1.097 cu.ft
Qtc = 0.902
QL = 19.86
F3 = 102.7 Hz
Fill = heavy

Driver Properties
--Description--
Name: Delta Pro-15
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Ribbed paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Diecast aluminum basket.
Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Mechanical Parameters--
Fs = 42 Hz
Qms = 4.73
Vas = 243.5 liters
Cms = 0.24 mm/N
Mms = 61 g
Rms = 3.41 kg/s
Xmax = 4.3 mm
Xmech = 13.7 mm
P-Dia = 328 mm
Sd = 856.3 sq.cm
P-Vd = 0.363 liters
--Electrical Parameters--
Qes = 0.44
Re = 5.71 ohms
Le = 0.83 mH
Z = 8 ohms
BL = 14.5 Tm
Pe = 400 watts
--Electromech. Parameters--
Qts = 0.4
no = 3.953 %
1-W SPL = 98.12 dB
2.83-V SPL = 99.58 dB
DeltaPro15 Small Mid/High Box, Hi Power. Use with a Sub Woofer
By McJerry, Eminence Speaker LLC
Displacement and thermally limited to 400 watts. Must use a 24 dB per octave high pass filter set to 100 Hz or higher. Will need some EQ to flatten out. Great Hi-Power Mid/High box; must use with a sub-woofer system.

Box Properties
--Description--
Name: Delta Pro-15
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
\[ V_b = 1.91 \text{ cu.ft} \]
\[ V_{(total)} = 2.063 \text{ cu.ft} \]
\[ F_b = 85 \text{ Hz} \]
\[ Q_L = 7 \]
\[ F_3 = 84.02 \text{ Hz} \]
\[ \text{Fill} = \text{minimal} \]
--Vents--
\[ \text{No. of Vents} = 2 \]
\[ \text{Vent shape} = \text{round} \]
\[ \text{Vent ends} = \text{one flush} \]
\[ D_v = 4.278 \text{ in} \]
\[ L_v = 0.75 \text{ in} \]

Driver Properties
--Description--
Name: Delta Pro-15
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Ribbed paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Diecast aluminum basket.
Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Mechanical Parameters--
\[ F_s = 42 \text{ Hz} \]
\[ Q_{ms} = 4.73 \]
\[ V_{as} = 243.5 \text{ liters} \]
\[ C_{ms} = 0.24 \text{ mm/N} \]
\[ M_{ms} = 61 \text{ g} \]
\[ R_{ms} = 3.41 \text{ kg/s} \]
\[ X_{max} = 4.3 \text{ mm} \]
\[ X_{mech} = 13.7 \text{ mm} \]
\[ P-Dia = 328 \text{ mm} \]
\[ S_d = 856.3 \text{ sq.cm} \]
\[ P-V_d = 0.363 \text{ liters} \]
--Electrical Parameters--
\[ Q_{es} = 0.44 \]
\[ R_e = 5.71 \text{ ohms} \]
\[ L_e = 0.83 \text{ mH} \]
\[ Z = 8 \text{ ohms} \]
\[ B_L = 14.5 \text{ Tm} \]
\[ P_e = 400 \text{ watts} \]
\[ \text{no} = 3.953 \% \]
\[ \text{1-W SPL} = 98.12 \text{ dB} \]
\[ \text{2.83-V SPL} = 99.58 \text{ dB} \]
Normalized Amplitude Response (dB-SPL/Hz)

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 400 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>
<th>5 K</th>
<th>10 K</th>
<th>20 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cone Displacement (mm/Hz) with 400 watts

<table>
<thead>
<tr>
<th>mm</th>
<th>5 Hz</th>
<th>10</th>
<th>50</th>
<th>100</th>
<th>500</th>
<th>1 K</th>
<th>5 K</th>
<th>10 K</th>
<th>20 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vent Air Velocity (m/sec/Hz) with 400 watts

<table>
<thead>
<tr>
<th>m/s</th>
<th>5 Hz</th>
<th>10</th>
<th>50</th>
<th>100</th>
<th>500</th>
<th>1 K</th>
<th>5 K</th>
<th>10 K</th>
<th>20 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>