

Dayton Audio RSS390HO-4 15" Subwoofer Single Sealed

By Jon Shimamoto
Modified Zaph Design



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 1.692 cu.ft

V(total) = 2.407 cu.ft

Qtc = 0.57

QL = 19.62

F3 = 52.77 Hz

Fill = heavy

Driver Properties

--Description--

Name: Dayton Audio RSS390HO-4 15"

Type: Standard one-way driver

Company: Dayton Audio

Piston: Aluminum

Suspension: Rubber

Dust Cap: Plastic

Frame: Cast

Voice Coil: 2.5" 4-layer

Terminals: Spring loaded

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 24.2 Hz

Qms = 4.48

Vas = 109.7 liters

Cms = 0.11 mm/N

Mms = 380.6 g

Rms = 13.34 kg/s

Xmax = 12 mm

Xmech = 18.01 mm

P-Dia = 12.86 in

Sd = 829.6 sq.cm

P-Vd = 0.0355 cu.ft

--Electrical Parameters--

Qes = 0.42

Re = 3.3 ohms

Le = 1.83 mH

Z = 3.96 ohms

BL = 21.52 Tm

Pe = 500 watts

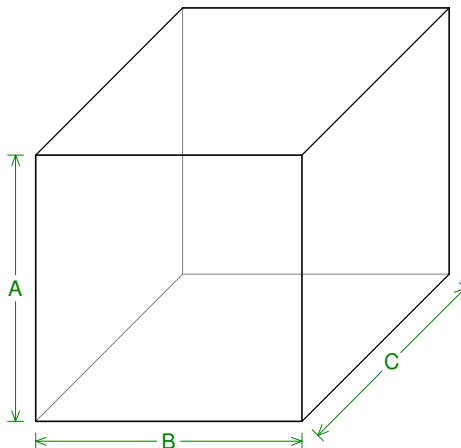
--Electromech. Parameters--

Qts = 0.39

no = 0.357 %

1-W SPL = 87 dB

2.83-V SPL = 91.52 dB



--External Dimensions--

A = 18 in

B = 18 in

C = 18.75 in

--Internal Dimensions--

A = 16 in

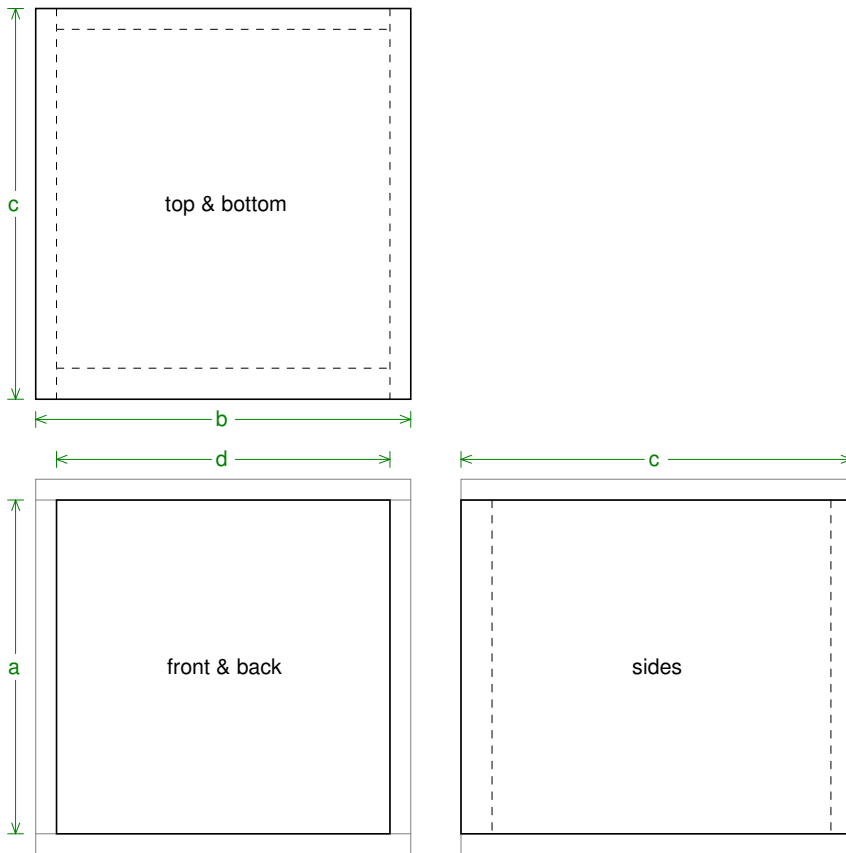
B = 16 in

C = 16.25 in

--Wall Thickness--

Front = 1.5 in

Side = 1 in



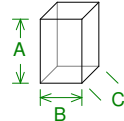
Box Parts

- Box Shape: Square Prism
- 1 Top, 1 Bottom: depth (c) = 18.75 in
width (b) = 18, thickness = 1 in
- 1 Front: height (a) = 16 in
width (d) = 16, thickness = 1.5 in
- 1 Back: height (a) = 16 in
width (d) = 16, thickness = 1 in
- 2 Sides: height (a) = 16 in
depth (c) = 18.75, thickness = 1 in

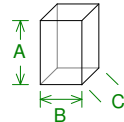
--Driver Mounting--
Mounting: Flush

--Misc Objects Inside or Part of Box--

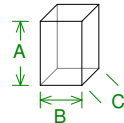
Object: amplifier
No. of Objects: 1
Volume: 0.319 cu.ft (reduces box)
Shape: Square Prism
A = 10.5 in
B = 10.5 in
C = 5 in



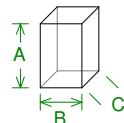
Object: Brace
No. of Objects: 8
Each Object: 0.013 cu.ft
Total Volume: 0.104 cu.ft (reduces box)
Shape: Square Prism
A = 10 in
B = 1.5 in
C = 1.5 in



Object: Brace (amp)
No. of Objects: 2
Each Object: 0.0347 cu.ft
Total Volume: 0.0694 cu.ft (reduces box)
Shape: Square Prism
A = 16 in
B = 0.75 in
C = 5 in



Object: Brace (amp)
No. of Objects: 1
Volume: 0.0228 cu.ft (reduces box)
Shape: Square Prism
A = 10.5 in
B = 0.75 in
C = 5 in



Object: Amp back cover
No. of Objects: 1
Volume: 0.0625 cu.ft (reduces box)
Shape: Square Prism
A = 12 in
B = 12 in
C = 0.75 in

