



COBALT

How to Determine Which Style Enclosure is for You.

The performance of a woofer will vary depending on the type of enclosure the woofer is placed in. The Cobalt woofers will work in a variety of enclosures. Listed below is several enclosure designs, each designed to meet specific needs and wants of the end user.

1. Sealed enclosure. Offering great accuracy, good tonal quality and low bass from a small enclosure.
2. Ported enclosure. Designed to play lower bass louder than the sealed enclosure, power handling is great, and is more efficient than the sealed design.
3. Bandpass enclosure. Offering good frequency response and great overall output, however, power handling is the lowest of the three and it is also the largest enclosure of the group.

Specs on the Cobalt Woofers								
Woofer	Cobalt 8		Cobalt 10		Cobalt 12		Cobalt 15	
Type	8s	8d	10s	10d	12s	12d	15s	15d
Nominal Impedance	4ohm	2/8ohm	4ohm	2/8ohm	4ohm	2/8ohm	4ohm	2/8ohm
RE (ohm)	3.7	1.8/7.1	3.4	1.9/7.6	3.4	1.9/7.7	3.3	1.9/7.7
Levc (mH)	0.51	0.77/3.06	0.81	1.05/4.21	0.85	1.14/4.57	0.75	1.19/4.76
Sensitivity (dB)	92	95/89	91	95/89	93	95/89	95	99/93
Fs (hz)	52	47	32	30	26	24	27	26
Qms	4.60	5.92	3.10	4.11	3.22	0.54	3.57	4.38
Qes	0.51	0.40	0.54	0.39	0.54	0.48	0.60	0.42
Qts	0.46	0.37	0.46	0.36	0.47	0.43	0.51	0.38
BL (TM)	8.0	6.6/13.1	8.1	7.4/14.9	8.4	7.0/14.0	9.8	9.3/18.5
Sd (sq.in.)	31	31	50	50	78	78	128	128
Vas (cu.ft.)	0.71	0.71	2.47	2.47	6.71	6.71	11.31	11.31
Xmax (mm)	5.0	5.0	5.0	6.0	8.5	6.0	7.75	5.25
Pmax (watts)	300	300	400	400	400	400	400	400
Outside Diameter	8.5in.	8.5in.	10.5in.	10.5in.	12.5in.	12.5in.	15.5in.	15.5in.
Mounting Diameter	7.25in.	7.25in.	9.187in.	9.187in.	11.125in.	11.125in.	13.875in.	13.875in.
Mounting Depth	3.875in.	3.875in.	4.75in.	4.75in.	5.5in.	5.5in.	6.75in.	6.75in.
Basket Displacement	57cu.in.	57cu.in.	115cu.in.	115cu.in.	209cu.in.	209cu.in.	420cu.in.	420cu.in.

1. Sealed Enclosures for Cobalt Woofers				
Woofer	Cobalt 8s/d	Cobalt 10s/d	Cobalt 12s/d	Cobalt 15s/d
Gross Volume	0.3 cu.ft.	0.6 cu.ft.	1.6 cu.ft.	2.75 cu.ft.
Net Volume	0.27 cu.ft.	0.53 cu.ft.	1.38 cu.ft.	2.26 cu.ft.
F3	65Hz	57Hz	46Hz	43Hz
F10	42Hz	38Hz	32Hz	31Hz
Intelli-Q Setting	45Hz @ 6dB	40Hz @ 6dB	34Hz @ 6dB	33Hz @ 6dB

2. Ported Enclosures for Cobalt Woofers				
Woofer	Cobalt 8s/d	Cobalt 10s/d	Cobalt 12s/d	Cobalt 15s/d
Gross Volume	0.55 cu.ft.	1.1 cu.ft.	2.75 cu.ft.	4.25 cu.ft.
Net Volume	0.67 cu.ft.	0.99 cu.ft.	2.55 cu.ft.	3.93 cu.ft.
Port Diameter	3"	3"	4"	4"
Port Length	10"	9.75"	8"	4"
Intelli-Q Setting	45Hz @ 6dB	40Hz @ 5dB	35Hz @ 6dB	35Hz @ 7dB
Tuning Frequency	45Hz	40Hz	35Hz	35Hz

3. Bandpass Enclosures for Cobalt Woofers				
Woofer	Cobalt 8s/d	Cobalt 10s/d	Cobalt 12s/d	Cobalt 15s/d
Gross Sealed Volume	0.4 cu.ft.	0.6 cu.ft.	1.00 cu.ft.	2.0 cu.ft.
Net Sealed Volume	0.37 cu.ft.	0.52 cu.ft.	0.92 cu.ft.	1.76 cu.ft.
Gross Vented Volume	0.45 cu.ft.	0.7 cu.ft.	1.40 cu.ft.	2.0 cu.ft.
Net Vented Volume	0.43 cu.ft.	0.66 cu.ft.	1.32 cu.ft.	1.89 cu.ft.
Port Diameter	3"	4"	(2) 4"	(3) 4"
Port Length	4"	5"	5"	5"
F3	60Hz	40Hz	31Hz	33Hz