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PRODUCT OVERVIEW

The powerful X-Series subwoofers combine groundbreaking Alpine technologies along with modern, exaggerated design and components to give you a high-performance subwoofer that requires very little enclosure space. With 48mm of total excursion, the X-W12D4 is able to produce impressive amounts of bass while maintaining control and accuracy.
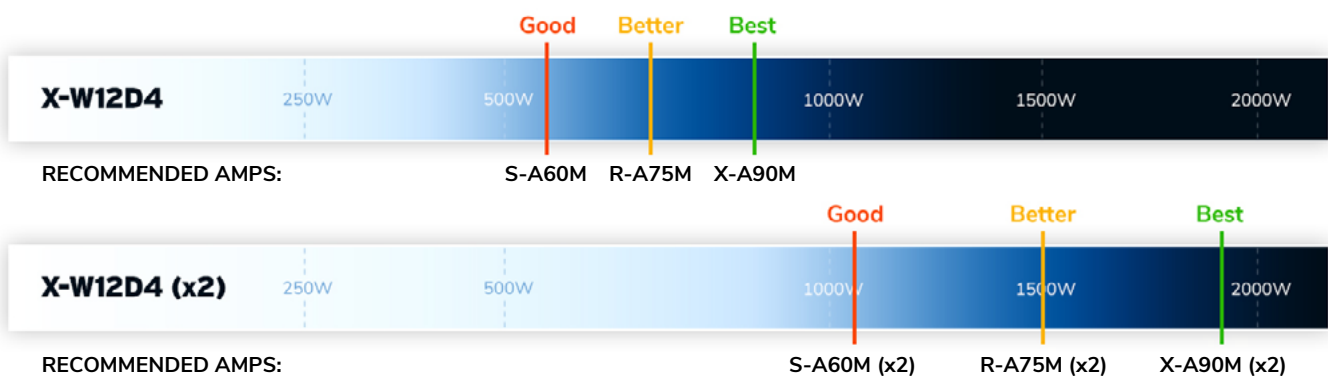
PRODUCT FEATURES

Impressive Output – A powerful, motor comprised of a premium, elongated voicecoil[1] and triple stacked ferrite magnets[3] reproduce the bass you crave

Unprecedented Accuracy – The unmatched 48mm of total excursion is controlled by a dual spider[2], and the iconic HAMR Surround[4]

Install Friendly Design – The overbuilt motor allows a small box requirement while the locking trim ring[5] ensure a beautiful fit and finish
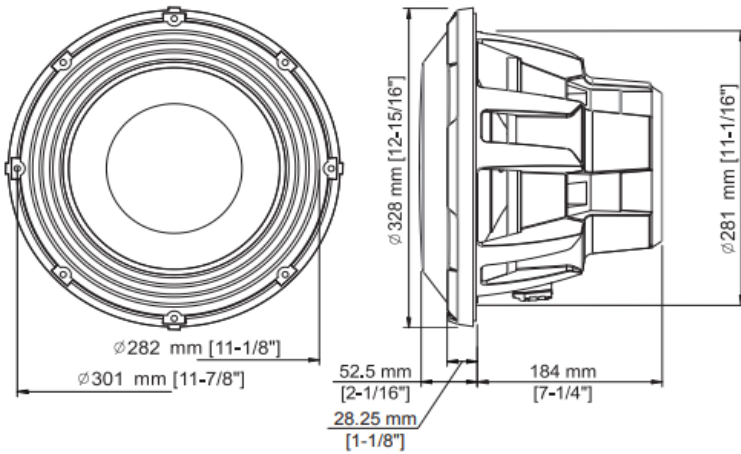
POWER RANGE: 450-900W

X-W12D4	Good	Better	Best			
	250W	500W		1000W	1500W	2000W
RECOMMENDED AMPS:	S-A60M	R-A75M	X-A90M			

X-W12D4 (x2)			Good	Better	Best	
	250W	500W	1000W	1500W	2000W	
RECOMMENDED AMPS:			S-A60M (x2)	R-A75M (x2)	X-A90M (x2)	

∅282 mm [11-1/8"]
∅301 mm [11-7/8"]

∅328 mm [12-15/16"]
∅281 mm [11-1/16"]

52.5 mm [2-1/16"]
28.25 mm [1-1/8"]
184 mm [7-1/4"]

BOX SPECS

SEALED BOX RANGE:
Net Internal Volume: 0.4 - 1.25 ft³

RECOMMENDED SEALED BOX:
External Dimensions: 14" x 14" x 12.25"
Gross Internal Volume: 0.97 ft³
Net Internal Volume: 0.85 ft³
F3, Qtc: 36 Hz, 0.99

VENTED BOX RANGE:
Net Internal Volume: 1.0 - 2.0 ft³
Fb, Tuning: 30-36 Hz

RECOMMENDED VENTED BOX:
External Dimensions: 14" x 23.5" x 14"
Gross Internal Volume: 1.98 ft³
Vent Area (W x H): 15.0 in² (3.75" x 4")
Vent Length: 18"
Vent Displacement: 0.21 ft³
Net Internal Volume (Vb): 1.65 ft³
F3, Ripple, Fb: 28 Hz, 5.7 dB, 33 Hz

GENERAL SPECS

- **Size:** 12"
- **Dimensions:** 11.875" x 11.875" x 7.25"
- **Frequency Response:** 24Hz - 200Hz
- **Power Range:** 450W - 900W RMS
- **Power Handling:** 900W RMS / 2700W Peak
- **Magnet Weight:** 174 oz (x3)
- **Voice Coil Diameter:** 65.5 mm (2.6")

THIELE-SMALL PARAMETERS

- **Sensitivity (1W/1m):** 84.3 dB
- **DC Resistance (R_e):** 3.6Ω + 3.6Ω
- **Inductance (L_e):** 4.42 mH
- **Free Air Resonance (F_s):** 27 Hz
- **Equivalent Stiffness:** 56 L
- **Mechanical Q (Q_{ms}):** 5.63
- **Electrical Q (Q_{es}):** 0.62
- **Total Q (Q_{ts}):** 0.56
- **Cone Area (S_d):** 472 cm²
- **Linear Excursion (X_{max}):** 24 mm
- **Mechanical Travel (X_{mech}):** 82 mm
- **Displacement Volume (V_d):** .12 ft³

RECOMMENDED ENCLOSURE RESPONSE CURVES:

Ported
Sealed