

R2-W10D2/D4

10" R-Series "R2" Subwoofer

ALPINE



PRODUCT OVERVIEW

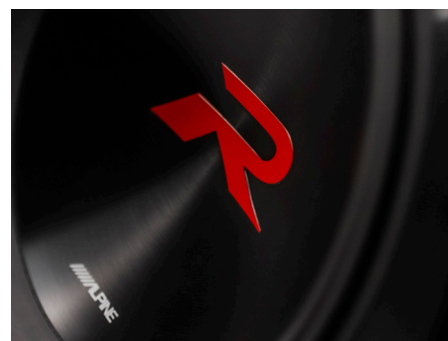
The next generation of sound performance is here with the new R-Series subwoofers featuring a larger motor structure for more accurate and authoritative bass.

PRODUCT FEATURES

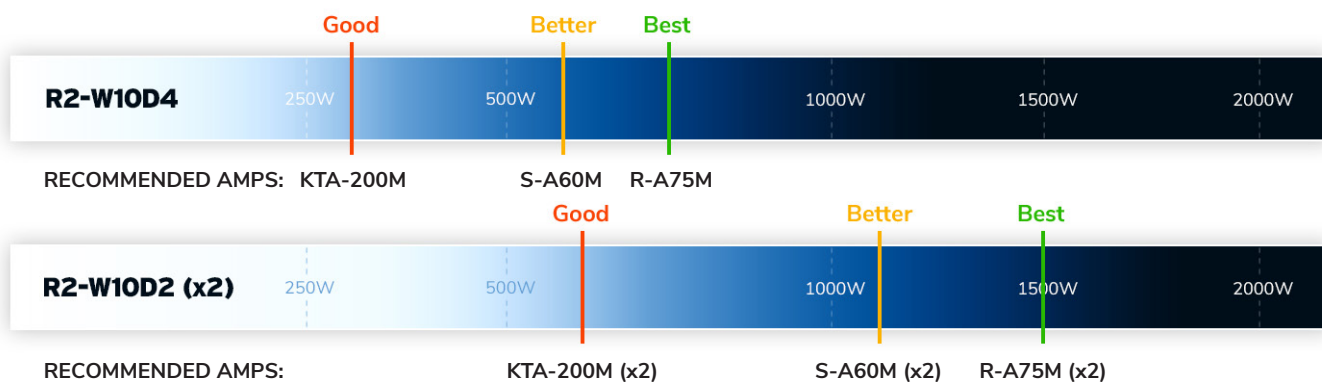
New Motor Structure – The new R-Series subwoofers now feature larger, double-stacked magnets that contribute more motor force for deeper bass and tighter bass control compared to the previous generation.

Oversized Dust Cap – The new hybrid poly ceramic composite dust cap ensures rigidity while also providing incredible internal damping (vibration absorption) to smooth out the bass response and reproduce tight bass.

Increased Accuracy – Alpine's High Amplitude Multi-Roll (HAMR) Surround Technology allows the cone to efficiently move air while staying cool resulting in incredible accuracy from the subwoofer.



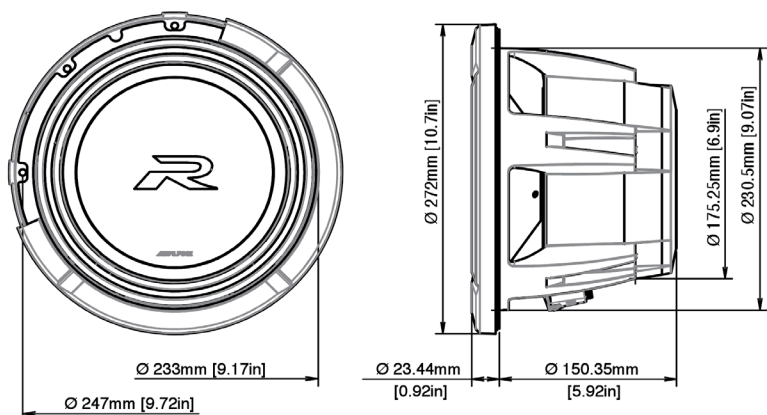
POWER RANGE: 300-750W



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GENERAL SPECS

- Size: 10"
- Dimensions: 9.72" x 9.72" x 5.92"
- Frequency Response: 26Hz - 200Hz
- Power Range: 300W - 750W RMS
- Power Handling: 750W RMS / 2250W Peak
- Magnet Weight: 123 oz
- Voice Coil Diameter: 65.5 mm (2.6")

R2-W10D2 - THIELE-SMALL PARAMETERS

- | | |
|-------------------------------------|-------------------------|
| • Sensitivity (1W/1m): | 82.3 dB |
| • DC Resistance (R_e): | $1.9\Omega + 1.9\Omega$ |
| • Free Air Resonance (F_s): | 31 Hz |
| • Equivalent Stiffness: | 18.2 L |
| • Mechanical Q (Q_{ms}): | 7.07 |
| • Electrical Q (Q_{es}): | 0.5 |
| • Total Q (Q_{ts}): | 0.47 |
| • Cone Area (S_d): | 333 cm ² |
| • Linear Excursion (X_{max}): | 20 mm |
| • Mechanical Travel (X_{mech}): | 70 mm |

BOX SPECS

SEALED BOX RANGE:

Net Internal Volume: 0.4 - 0.85 ft³

RECOMMENDED SEALED BOX:

External Dimensions: 12" x 12" x 10.5"

Gross Internal Volume: 0.58 ft³

Net Internal Volume: 0.50 ft³

D2 - F3, Qtc: 44 Hz, 0.70

D4 - F3, Qtc: 42 Hz, 0.78

VENTED BOX RANGE:

Net Internal Volume: 0.75 - 1.3 ft³

Fb, Tuning: 35-39 Hz

RECOMMENDED VENTED BOX:

External Dimensions: 13" x 11.5" x 25.25"

Gross Internal Volume: 1.58 ft³

Vent Area (W x H): 15 in² (10" x 1.5")

Vent Length: 19.5"

Vent Displacement: 0.25 ft³

Net Internal Volume (Vb): 1.25 ft³

D2 - F3, Ripple, Fb: 29 Hz, 6.0 dB, 37 Hz

D4 - F3, Ripple, Fb: 29 Hz, 6.3 dB, 37 Hz

R2-W10D4 - THIELE-SMALL PARAMETERS

- | | |
|-------------------------------------|-------------------------|
| • Sensitivity (1W/1m): | 82.8 dB |
| • DC Resistance (R_e): | $3.5\Omega + 3.5\Omega$ |
| • Free Air Resonance (F_s): | 32 Hz |
| • Equivalent Stiffness: | 18.2 L |
| • Mechanical Q (Q_{ms}): | 6.50 |
| • Electrical Q (Q_{es}): | 0.52 |
| • Total Q (Q_{ts}): | 0.48 |
| • Cone Area (S_d): | 333 cm ² |
| • Linear Excursion (X_{max}): | 20 mm |
| • Mechanical Travel (X_{mech}): | 70 mm |