

# R2-W10D2/D4

10" R-Series "R2" Subwoofer



## 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.

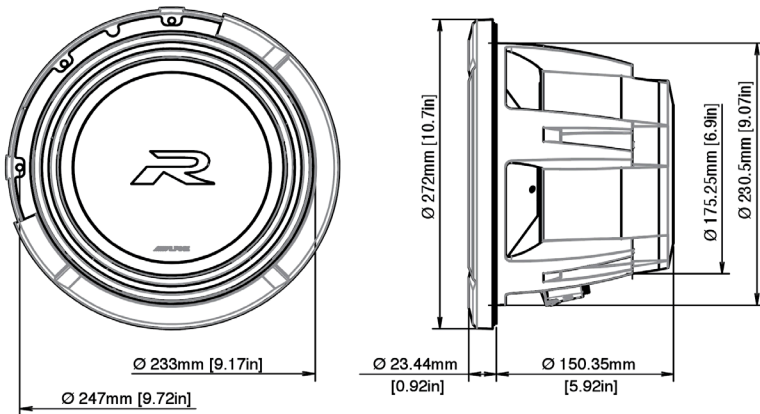


## POWER RANGE: 300-750W



# R2-W10D2/D4

10" R-Series "R2" Subwoofer



## 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<sup>2</sup>
- Linear Excursion ( $X_{max}$ ): 20 mm
- Mechanical Travel ( $X_{mech}$ ): 70 mm

## BOX SPECS

### SEALED BOX RANGE:

Net Internal Volume: 0.4 - 0.85 ft<sup>3</sup>

### RECOMMENDED SEALED BOX:

External Dimensions: 12" x 12" x 10.5"

Gross Internal Volume: 0.58 ft<sup>3</sup>

Net Internal Volume: 0.50 ft<sup>3</sup>

D2 - F3, Qtc: 44 Hz, 0.70

D4 - F3, Qtc: 42 Hz, 0.78

### VENTED BOX RANGE:

Net Internal Volume: 0.75 - 1.3 ft<sup>3</sup>

Fb, Tuning: 35-39 Hz

### RECOMMENDED VENTED BOX:

External Dimensions: 13" x 11.5" x 25.25"

Gross Internal Volume: 1.58 ft<sup>3</sup>

Vent Area (W x H): 15 in<sup>2</sup> (10" x 1.5")

Vent Length: 19.5"

Vent Displacement: 0.25 ft<sup>3</sup>

Net Internal Volume (Vb): 1.25 ft<sup>3</sup>

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<sup>2</sup>
- Linear Excursion ( $X_{max}$ ): 20 mm
- Mechanical Travel ( $X_{mech}$ ): 70 mm