

# R2-W8D2/D4

8" 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

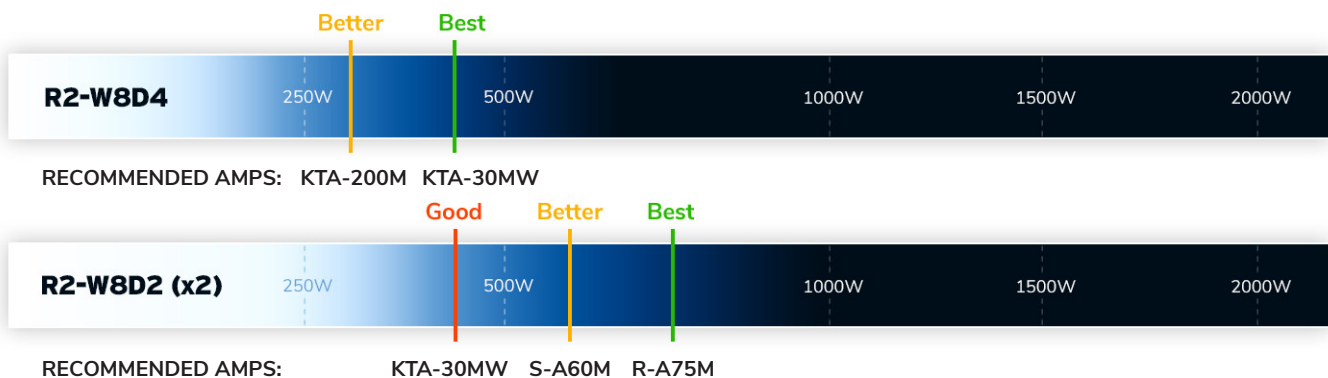
**New Motor Structure** – The new R-Series subwoofers now feature larger, double-stacked magnets that contribute more motor force for deeper bass and tighter bass control compared to the previous generation.

**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.

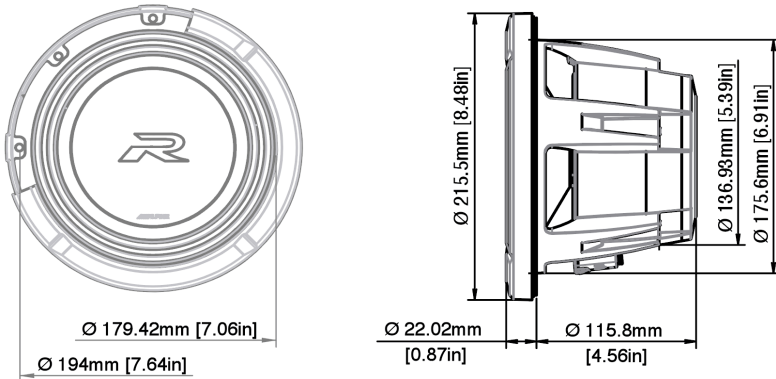


## POWER RANGE: 150-350W



# R2-W8D2/D4

8" R-Series "R2" Subwoofer



## GENERAL SPECS

- Size: 8"
- Dimensions: 7.64" x 7.64" x 4.56"
- Frequency Response: 30Hz - 200Hz
- Power Range: 150W - 350W RMS
- Power Handling: 350W RMS / 1000W Peak
- Magnet Weight: 56 oz
- Voice Coil Diameter: 40 mm (2.6")

## R2-W12D2 - THIELE-SMALL PARAMETERS

- Sensitivity (1W/1m): 83.6 dB
- DC Resistance ( $R_e$ ):  $1.8\Omega + 1.8\Omega$
- Free Air Resonance ( $F_s$ ): 42 Hz
- Equivalent Stiffness: 10.1 L
- Mechanical Q ( $Q_{ms}$ ): 7.69
- Electrical Q ( $Q_{es}$ ): 0.52
- Total Q ( $Q_{ts}$ ): 0.48
- Cone Area ( $S_d$ ): 201 cm<sup>2</sup>
- Linear Excursion ( $X_{max}$ ): 12 mm
- Mechanical Travel ( $X_{mech}$ ): 52 mm

## BOX SPECS

### SEALED BOX RANGE:

Net Internal Volume: 0.15 - 0.45 ft<sup>3</sup>

### RECOMMENDED SEALED BOX:

External Dimensions: 13" x 13" x 5.5"

Gross Internal Volume: 0.30 ft<sup>3</sup>

Net Internal Volume: 0.25 ft<sup>3</sup>

D2 - F3, Qtc: 59Hz, 0.73

D4 - F3, Qtc: 59Hz, 0.72

### VENTED BOX RANGE:

Net Internal Volume: 0.25 - 0.7 ft<sup>3</sup>

Fb, Tuning: 36-40Hz

### RECOMMENDED VENTED BOX:

External Dimensions: 11" x 9.5" x 21"

Gross Internal Volume: 0.86 ft<sup>3</sup>

Vent Area (W x H): 8 in<sup>2</sup> (8" x 1")

Vent Length: 17.5"

Vent Displacement: 0.13 ft<sup>3</sup>

Net Internal Volume (Vb): 0.68 ft<sup>3</sup>

D2 - F3, Ripple, Fb: 33Hz, 2.5 dB, 39Hz

D4 - F3, Ripple, Fb: 32Hz, 3.2 dB, 39Hz

## R2-W12D4 - THIELE-SMALL PARAMETERS

- Sensitivity (1W/1m): 83.7 dB
- DC Resistance ( $R_e$ ):  $3.6\Omega + 3.6\Omega$
- Free Air Resonance ( $F_s$ ): 43 Hz
- Equivalent Stiffness: 10.5 L
- Mechanical Q ( $Q_{ms}$ ): 7.08
- Electrical Q ( $Q_{es}$ ): 0.58
- Total Q ( $Q_{ts}$ ): 0.53
- Cone Area ( $S_d$ ): 201 cm<sup>2</sup>
- Linear Excursion ( $X_{max}$ ): 12 mm
- Mechanical Travel ( $X_{mech}$ ): 52 mm