



R2-Series SUBWOOFER

HAUT-PARLEUR D'EXTRÊMES GRAVES R2-Series

APPLICATION GUIDE

GUIDE D' APPLICATION

R2-W12D4

12 Inch Dual Voice Coil Subwoofer (4Ω)+(4Ω)
Haut-parleur d'extrêmes graves à double bobine 12 po (4Ω)+(4Ω)

R2-W12D2

12 Inch Dual Voice Coil Subwoofer (2Ω)+(2Ω)
Haut-parleur d'extrêmes graves à double bobine 12 po (2Ω)+(2Ω)

R2-W10D4

10 Inch Dual Voice Coil Subwoofer (4Ω)+(4Ω)
Haut-parleur d'extrêmes graves à double bobine 10 po (4Ω)+(4Ω)

R2-W10D2

10 Inch Dual Voice Coil Subwoofer (2Ω)+(2Ω)
Haut-parleur d'extrêmes graves à double bobine 10 po (2Ω)+(2Ω)

R2-W8D4

8 Inch Dual Voice Coil Subwoofer (4Ω)+(4Ω)
Haut-parleur d'extrêmes graves à double bobine 8 po (4Ω)+(4Ω)

R2-W8D2

8 Inch Dual Voice Coil Subwoofer (2Ω)+(2Ω)
Haut-parleur d'extrêmes graves à double bobine 8 po (2Ω)+(2Ω)



**Reinforced Parabolic Cone Structure with
Pulp/Kevlar Cone & PP/Ceramic Dust Cap**

**High Amplitude Multi-Roll
Santoprene® Surround**
(US Pat #8,208,677)

**Twist-Lock
EZ-Change
Grille System**

**Custom-Designed
Cast Aluminum
Frame**

**Perimeter Venting with
Airflow Management
System** (US Pat #7,684,585)

**High-Excursion Overhung
Voice Coil Configuration**

**Compound Radius Curve
Extended Pole Geometry**
(US Pat #6,639,993)

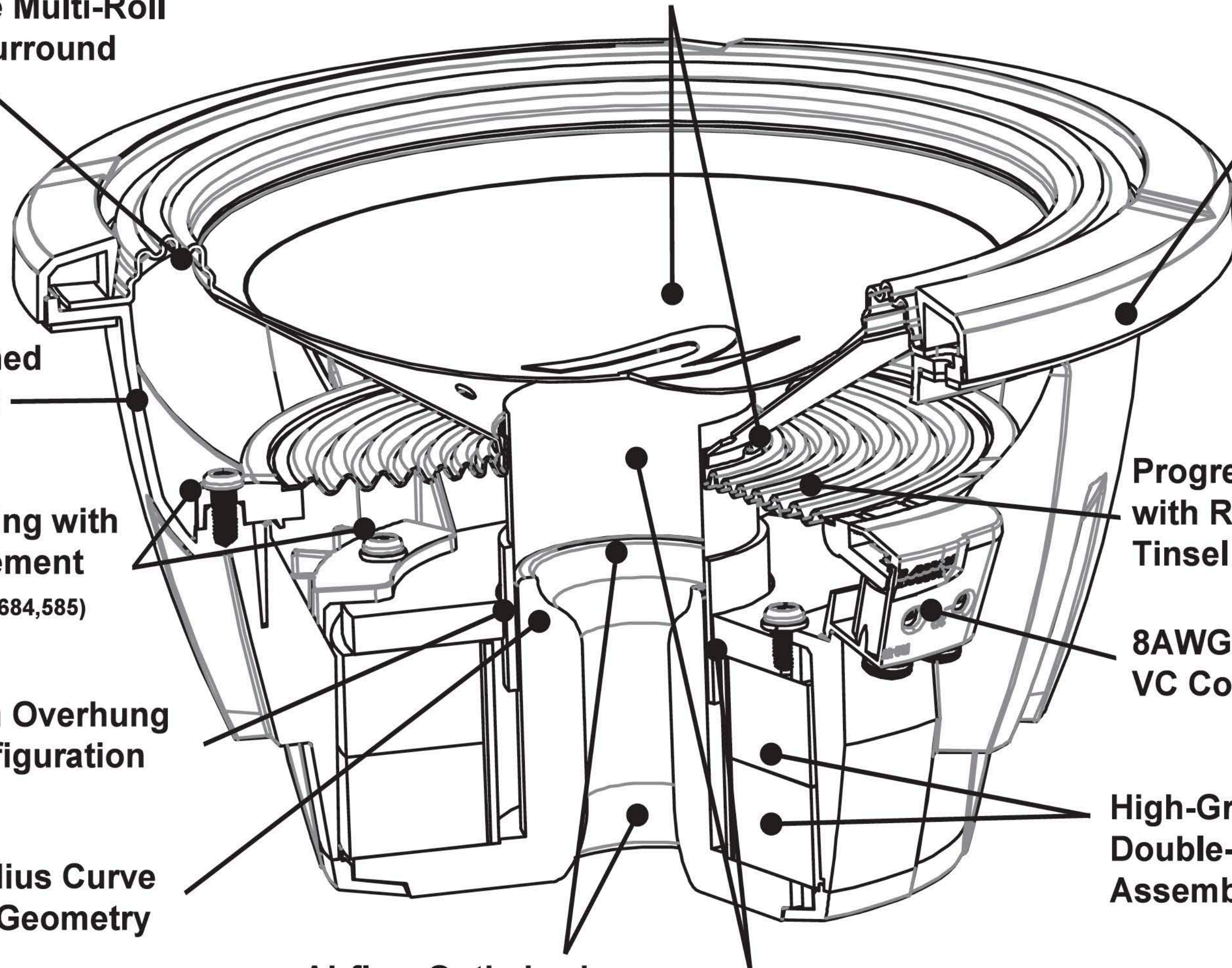
**Progressive Spider
with Reinforced Layer
Tinsel Leads** (US Pat #6,810,988)

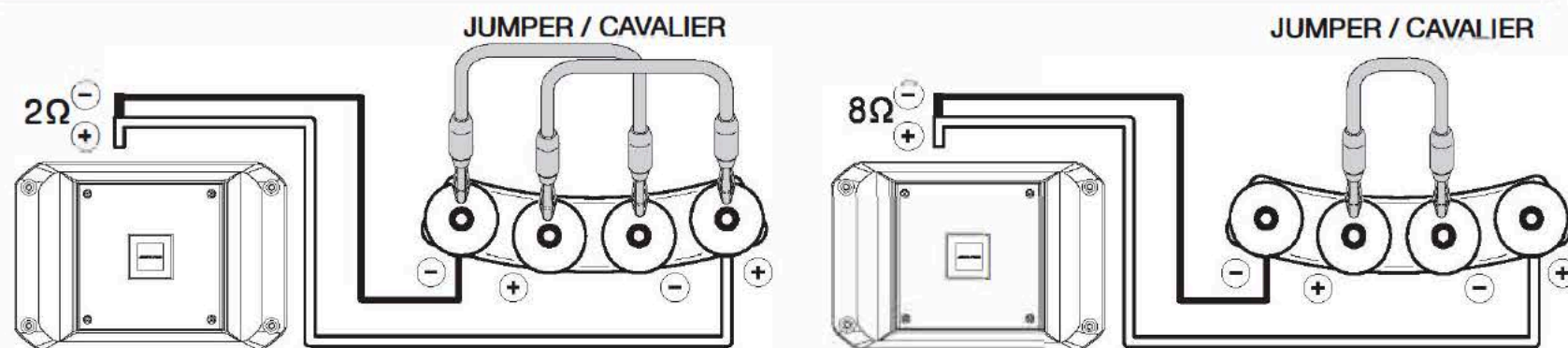
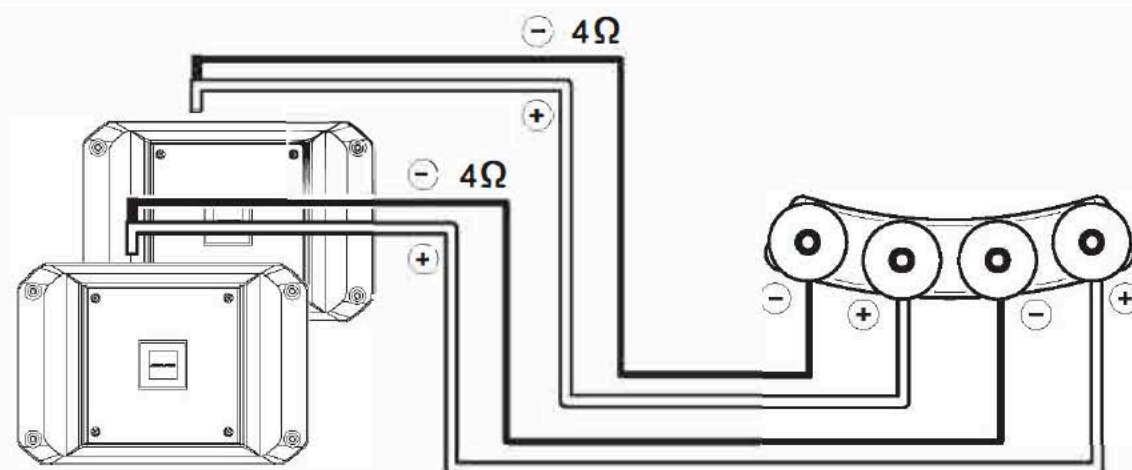
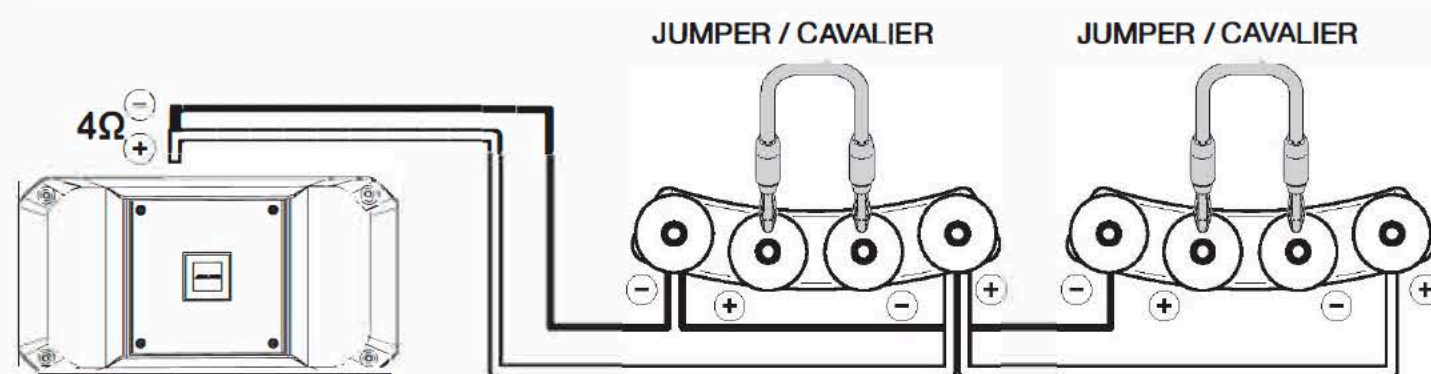
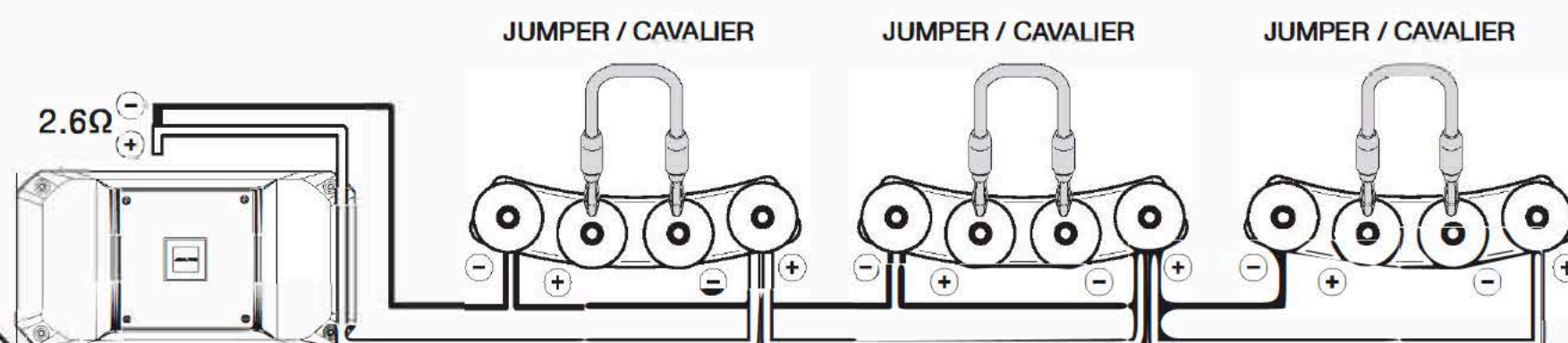
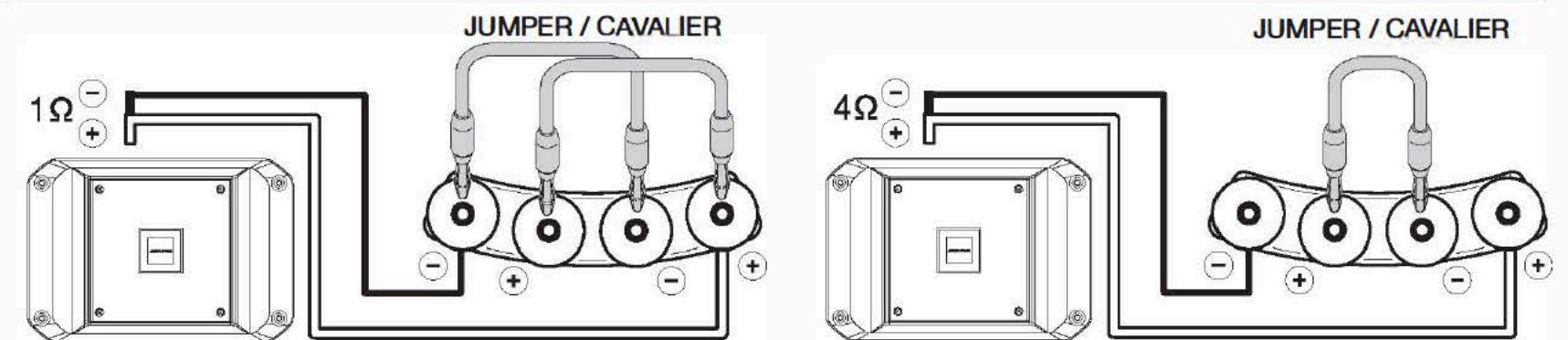
**8AWG Push Terminals with
VC Configuration Jumpers**

**High-Grade Strontium Ferrite
Double-Stacked Magnet
Assembly**

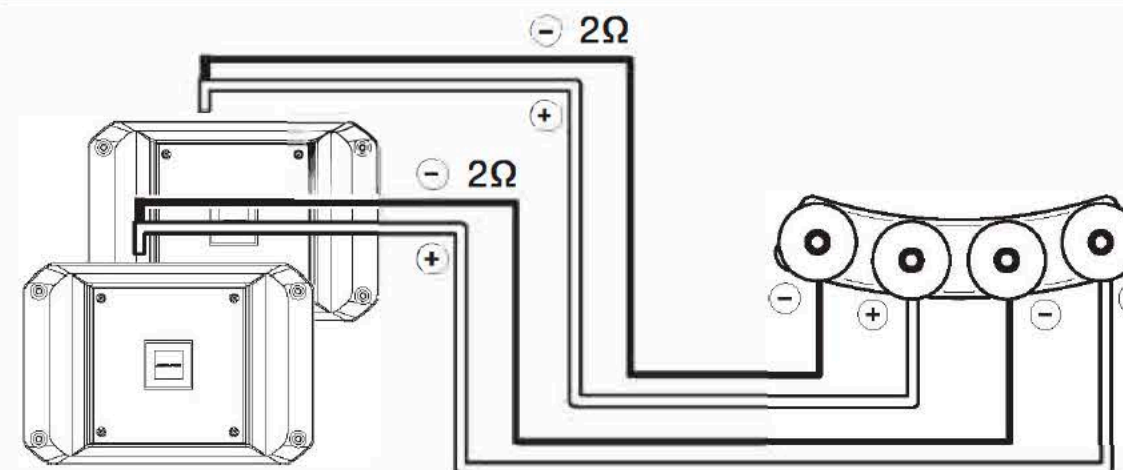
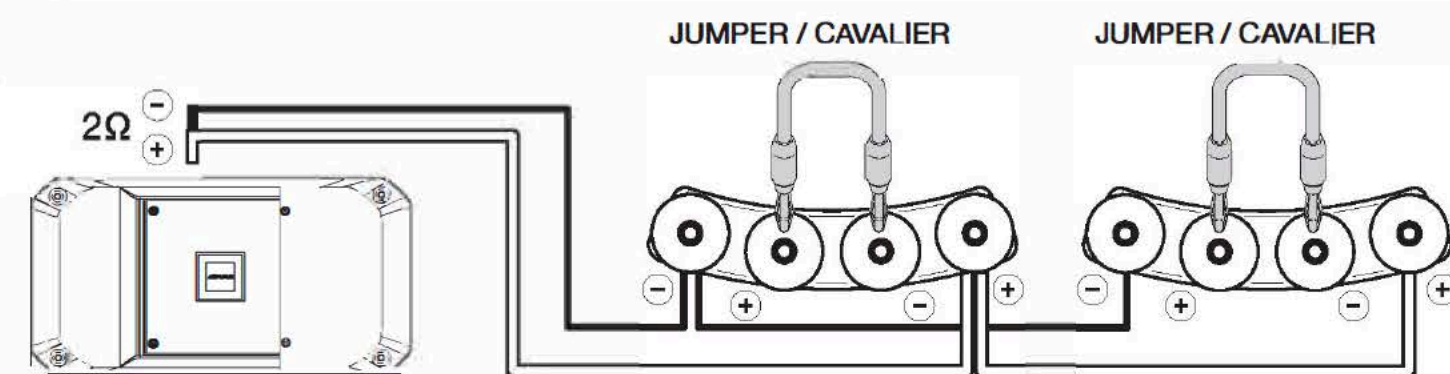
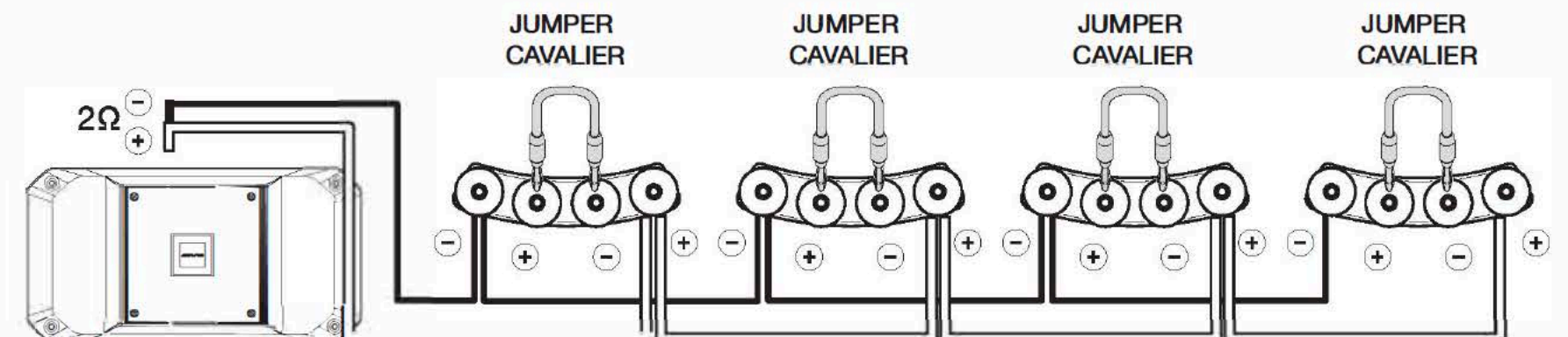
**Airflow Optimized
Dual Flare Pole Vent**

**65mm Voice Coil with High-Temp
4-Layer DVC Winding on AL Former**



ALPINE**4 + 4****Example 1** One Amplifier + One Subwoofer**Example 3** Two Amplifiers + One Subwoofer**Example 5** One Amplifier + Two Subwoofers**Example 7** One Amplifier + Three Subwoofers**2 + 2**R2-W804/R2-W1004/R2-W1204
R2-W802/R2-W1002/R2-W1202**Example 2** One Amplifier + One Subwoofer

Caution ! Consult amplifier owner's manual for 1Ω connection.
Attention : lire le manuel de l'amplificateur pour la connexion à 1Ω .

Example 4 Two Amplifiers + One Subwoofer**Example 6** One Amplifier and Two Subwoofers**Example 8** One Amplifier + Four Subwoofers

General Specifications		
Sealed	Taille	
Frequency Response	Response en Fréquence	
Power Range	Plage de Puissance	
Power Handling	Puissance Admissible	
Magnet Weight	Poids de l'aimant	
Voice Coil Diameter	Diamètre de la bobine	
Thiel-Small Parameters		
Sensitivity (1W/1m)	Sensibilité (1W/1m)	SPL
DC Resistance	Résistance CC	Re
Free Air Resonance	Résonance à l'air libre	Fs
Equivalent Stiffness	Raiduer équivalente	Vas
Mechanical Q	Q Mécanique	Qms
Electrical Q	Q Électrique	Qes
Total Q	Q Total	Qts
Cone Area	Surface du diaphragme	Sd
Linear Excursion	Displacement Linéaire	Xmax (1-way)
Mechanical Travel	Déplacement Mécanique	Xmech (P-P)

R2-Series					
R2-W8D2	R2-W8D4	R2-W10D2	R2-W10D4	R2-W12D2	R2-W12D4
2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω
8"		10"		12"	
30Hz-200Hz		26Hz-200Hz		24Hz-200Hz	
150W-350W RMS		300W-750W RMS			
350W RMS (efficace) / 1000W PEAK (de crête)		750W RMS (efficace) / 2250W PEAK (de crête)			
56 oz		123 oz		144 oz	
40 mm (1.6")		65.5 mm (2.6")			
83.6 dB	83.7 dB	82.3 dB	82.8 dB	85.0 dB	84.6 dB
1.8Ω+1.8Ω	3.6Ω+3.6Ω	1.9Ω+1.9Ω	3.5Ω+3.5Ω	1.9Ω+1.9Ω	3.5Ω+3.5Ω
42 Hz	43 Hz	31 Hz	32 Hz	29 Hz	30 Hz
10.1L	10.5 L	18.2 L	18.2 L	36.9 L	32.8 L
7.69	7.08	7.07	6.50	6.32	6.51
0.52	0.58	0.5	0.52	0.44	0.55
0.48	0.53	0.47	0.48	0.41	0.51
201 cm²		333 cm²		479 cm²	
12mm		20mm			
52mm		70mm		72mm	

Note: Specifications subject to change without notice

		R2-W8D2/D4	R2-W10D2/D4	R2-W12D2/D4
Sealed Box Range	Net Internal Volume	0.15-0.45 ft³	0.4-0.85 ft³	0.55-1.0 ft³
Recommended Sealed Box	External Box Dimensions	13" x 13" x 5.5"	12" x 12" x 10.5"	14" x 14" x 11"
	Gross Internal Volume	0.30 ft³	0.58 ft³	0.85 ft³
	Net Internal Volume	0.25 ft³	0.50 ft³	0.75 ft³
	F3, Qtc	D2: 59 Hz, 0.73 D4: 59 Hz, 0.72	D2: 44 Hz, 0.70 D4: 42 Hz, 0.78	D2: 43 Hz, 0.65 D4: 39 Hz, 0.84
Vented Box Range	Net Internal Volume	0.25-0.7 ft³	0.75-1.3 ft³	1.0-1.5 ft³
	Tuning	36-40Hz	35-39Hz	33-37Hz
Recommended Vented Box	External Box Dimensions	11" x 9.5" x 21"	13" x 11.5" x 25.25"	12.5" x 14" x 25.5"
	Gross Internal Volume	0.86 ft³	1.58 ft³	1.91 ft³
	Vent Area (dimensions)	8 in² (8" x 1")	15 in² (10" x 1.5")	18.75 in² (12.5" x 1.5")
	Vent length	17.5"	19.5"	22"
	Vent Displacement	0.13 ft³	0.25 ft³	0.36 ft³
	Net Internal Volume (Vb)	0.68 ft³	1.25 ft³	1.45 ft³
	F3, ripple, Fb	D2: 33 Hz, 2.5 dB, 39 Hz D4: 32 Hz, 3.2 dB, 39 Hz	D2: 29 Hz, 6.0 dB, 37 Hz D4: 29 Hz, 6.3 dB, 37 Hz	D2: 29 Hz, 4.3 dB, 36 Hz D4: 28 Hz, 5.8 dB, 36 Hz

Notes:
 1) Recommended enclosure net internal volume is based upon 3/4" (19mm) MDF enclosure construction.
 2) Consult the table below for alternative enclosure net internal volume calculation.

Front Mount Displacement* (magnet in)	-0.050 ft³	-0.08 ft³	-0.10 ft³
Reverse Mount Added Volume* (magnet out)	+0.035 ft³	+0.05 ft³	+0.09 ft³

*Based upon 3/4" (19mm) baffle thickness, with opening cut approximately to gasket inner diameter

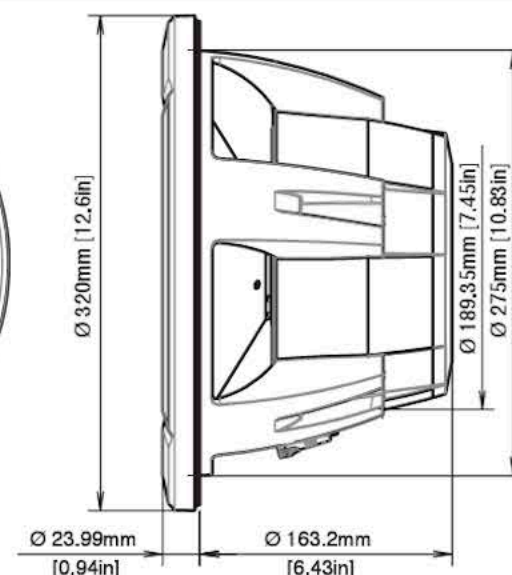
		R2-W8D2/D4	R2-W10D2/D4	R2-W12D2/D4
Gamme Box Sealed	Net volume interne	0.15-0.45 pi³	0.4-0.85 pi³	0.55-1.0 pi³
Recommended Boîte Scellé	Dimensions extérieures	13 po x 13 po x 5.5 po	12 po x 12 po x 10.5 po	14 po x 14 po x 11 po
	Volume intérieur brut	0.30 pi³	0.58 pi³	0.85 pi³
	Volume intérieur Net ***	0.25 pi³	0.50 pi³	0.75 pi³
	F3, Qtc	D2: 59 Hz, 0.73 D4: 59 Hz, 0.72	D2: 44 Hz, 0.70 D4: 42 Hz, 0.78	D2: 43 Hz, 0.65 D4: 39 Hz, 0.84
Gamme charge bass-reflex	Volume net interne	0.25-0.7 pi³	0.75-1.3 pi³	1.0-1.5 pi³
	mise au point	36-40Hz	35-39Hz	33-37Hz
Recommended charge bass-reflex	Dimensions extérieures	11 po x 9.5" po x 21 po	13 po x 11.5 po x 25.25 po	12.5 po x 14 po x 25.5 po
	Volume intérieur brut	0.86 pi³	1.58 pi³	1.91 pi³
	Aire de l'évent (dimensions)	8 po² (8 po x 1 po)	15 po² (10 po x 1.5 po)	18.75 po² (12.5 po x 1.5 po)
	Longueur de l'évent	17.5 po	19.5 po	22 po
	déplacement de l'évent	0.13 pi³	0.25 pi³	0.36 pi³
	Volume intérieur Net (Vb)***	0.68 pi³	1.25 pi³	1.45 pi³
	F3, crête, Fb	D2: 33 Hz, 2.5 dB, 39 Hz D4: 32 Hz, 3.2 dB, 39 Hz	D2: 29 Hz, 6.0 dB, 37 Hz D4: 29 Hz, 6.3 dB, 37 Hz	D2: 29 Hz, 4.3 dB, 36 Hz D4: 28 Hz, 5.8 dB, 36 Hz

Notes:
 1) Recommandé enceinte volume net interne est basée sur 3/4 "(19mm) de construction boîtier en MDF.
 2) Consulter le tableau ci-dessous pour le calcul de filet d'enclos alternative volume interne.

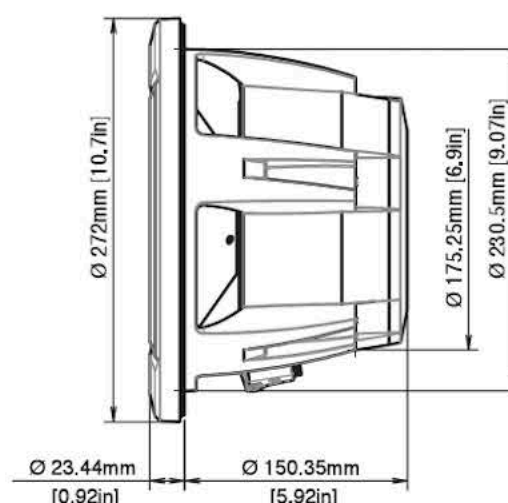
Avant le déplacement du Mont * (aimant)	-0.050 ft³	-0.08 ft³	-0.10 ft³
Inverser Volume mont Ajouté * (des aimants)	+0.035 ft³	+0.05 ft³	+0.09 ft³

* Sur la base de l'épaisseur du déflecteur 3/4" (19mm), avec une ouverture coupée à peu près à joint diamètre Intérieur

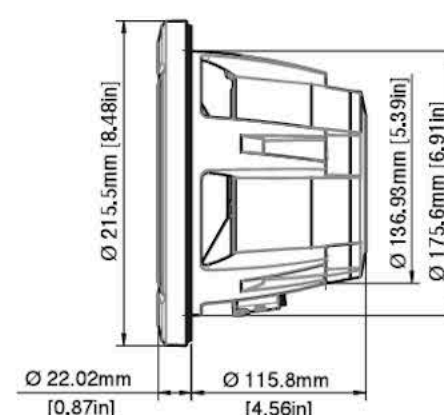
R2-W12D2
R2-W12D4



R2-W10D2
R2-W10D4



R2-W8D2
R2-W8D4



ALPINE®

ALPS ALPINE (Head Office)
1-7, Yukigaya-otsukamachi, Ota-ku
Tokyo, 145-8501
TEL. +81(3)3726-1211

ALPS ALPINE (Iwaki Office)
20-1 Yoshima-Industrial Park, Iwaki
Fukushima Prefecture 970-1192
TEL. +81(246)36-4111

**ALPS ALPINE NORTH AMERICA
(Detroit Office)**
1500 Atlantic Blvd
Auburn Hills, Michigan 48326
TEL. (248) 391-9950

ALPS ALPINE EUROPE GmbH (Head Office)
Ohmstrasse 4, D-85716
Unterschleissheim, Germany
TEL. +49(89)321421-0

ALPS ALPINE EUROPE GmbH (Sweden Office)
Gruvgatan 37, 421 30
Vastra Frolunda, Sweden
TEL. +46(31)758-3300

ALPS ALPINE (China)
East 28F, Hanwei Plaza, No.7 Guanghua
Street, Chaoyang District
Beijing, 100004, P.R. of China
TEL. +86(10)6539-3690 (Alps) /
+86(10)6566-0308 (Alpine Electronics)

**ALPS ALPINE EUROPE GmbH
(France Office)**
Parc d'Activités Paris Nord II 184,
allée des érables BP 68125 Villepinte 95975
Roissy Charles de Gaulle Cedex, France
TEL. +33(148)631-290

ALPS ALPINE EUROPE GmbH (Italy Office)
Viale C. Colombo 8, 20090
Trezzano sul Naviglio (MI), Italy
TEL. +39(02)90394-559

ALPS ALPINE EUROPE GmbH (UK Office)
Aurora House, Deltic Avenue, Rooksley,
Milton Keynes, MK13 8LW, U.K.
TEL. +44(1908)354-210

ALPS ALPINE ASIA
The 9th Towers, Tower B, 24th Floor,
Unit TNB01-03, 33/4 Rama 9 road
Huay Kwang, Bangkok, 10310, Thailand
TEL. +66(2)090-9596

ALPINE ELECTRONICS OF AUSTRALIA
161-165 Princes Highway
Hallam Victoria, Australia 3803
TEL. +61(3)8787-1200

Printed in CHINA