

High Amplitude Multi-Roll (HAMR) Surround
(US Pat #8,208,677)

Reinforced Parabolic Cone Structure with Pulp/Kevlar Cone & PP/Mica/Talc Dust cap

Concealed Mount Gasket
(Integrated Grille System Ready, US Pat #7,760,900)

Airflow Management & Heat Transfer System
(US Pat #7,684,585; #6,678,387)

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

Cast Aluminum Frame with Integral Shorting Sleeve
(US Pat #7,272,238)

Airflow Optimized Dual Flare Pole Vent

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

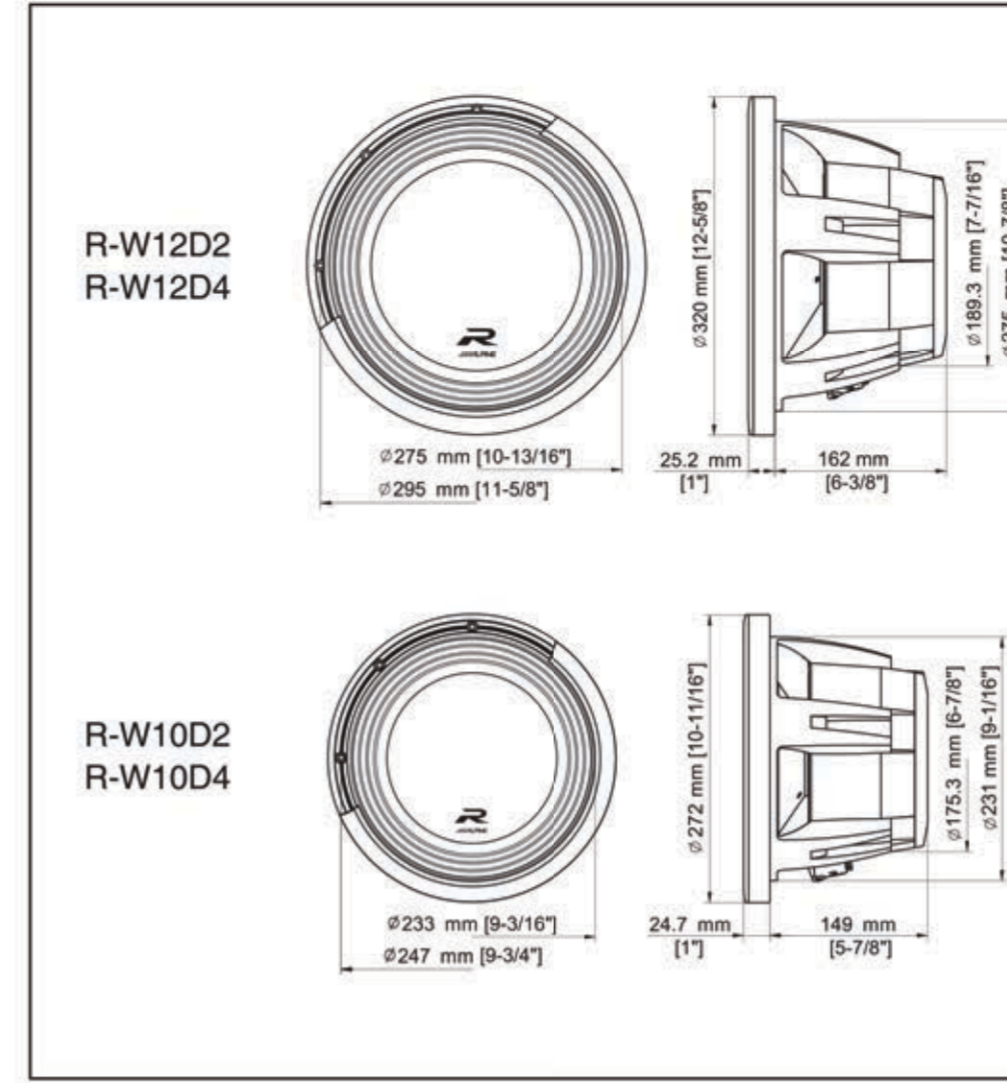
Reinforced Cone Neck & Spider Joint

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

Integrated 8AWG Push Terminals with VC Configuration Jumpers

High-Excursion Overhung Voice Coil Configuration

High-Grade Strontium Ferrite Segmented Magnet Assembly



ALPINE

ALPINE ELECTRONICS, INC.
Tokyo office
1-1-8 Nishi-Gotanda, Shinagawa-ku,
Tokyo 141-8501, Japan
Phone: 81(3) 3494-1101

ALPINE ELECTRONICS MARKETING, INC.
1-7, Yukiya-Denmacho, Chizu
Tokyo 145-0057, Japan
Tel: 03-5499-4531

ALPINE ELECTRONICS OF AMERICA, INC.
19145 Gramercy Place
Torrance, California 90501 U.S.A.
Tel: 1(310)328-8000

ALPINE ELECTRONICS GmbH
Wilhelm-Wagenfeld-Strasse 1-3,
89007 Munich,
Germany
Phone: 49(0)89-324264-0

ALPINE ELECTRONICS FRANCE S.A.R.L.
184 allée des Erables
CS 30216 - Villepinte
95 945 Fossey CDG cedex
FRANCE
Phone: +33 1 48 63 89 89

ALPINE ITALIA S.p.A.
Viale C. Colombo 8,
20090 Trazzano Sul
Naviglio (MI), Italy
Tel: 02-484781

ALPINE ELECTRONICS OF U.K., LTD.
Alpine House, Eastplace Business Park,
Fleethamstead Highway,
Coventry CV4 9TW, U.K.
Phone: 44-2476-715500

ALPINE ELECTRONICS OF AUSTRALIA PTY. LTD.
181-185 Phirose Highway, Hattam
Victoria 3803, Australia
Tel: 03-8787-1200

ALPINE ELECTRONICS DE ESPAÑA, S.A.
Pinar de Gamares 36, Pabellón, 22
01013 Vitoria (Alava),
49001 Ibañeta, Spain
Tel: 345-283588

ALPINE ELECTRONICS (CHINA) CO., LTD.
R2-4F, China Merchants Tower
No. 115 Jianguo Street, Chaoyang District,
Beijing 100022, China
Phone: 86(10)6566-0308

Printed in CHINA



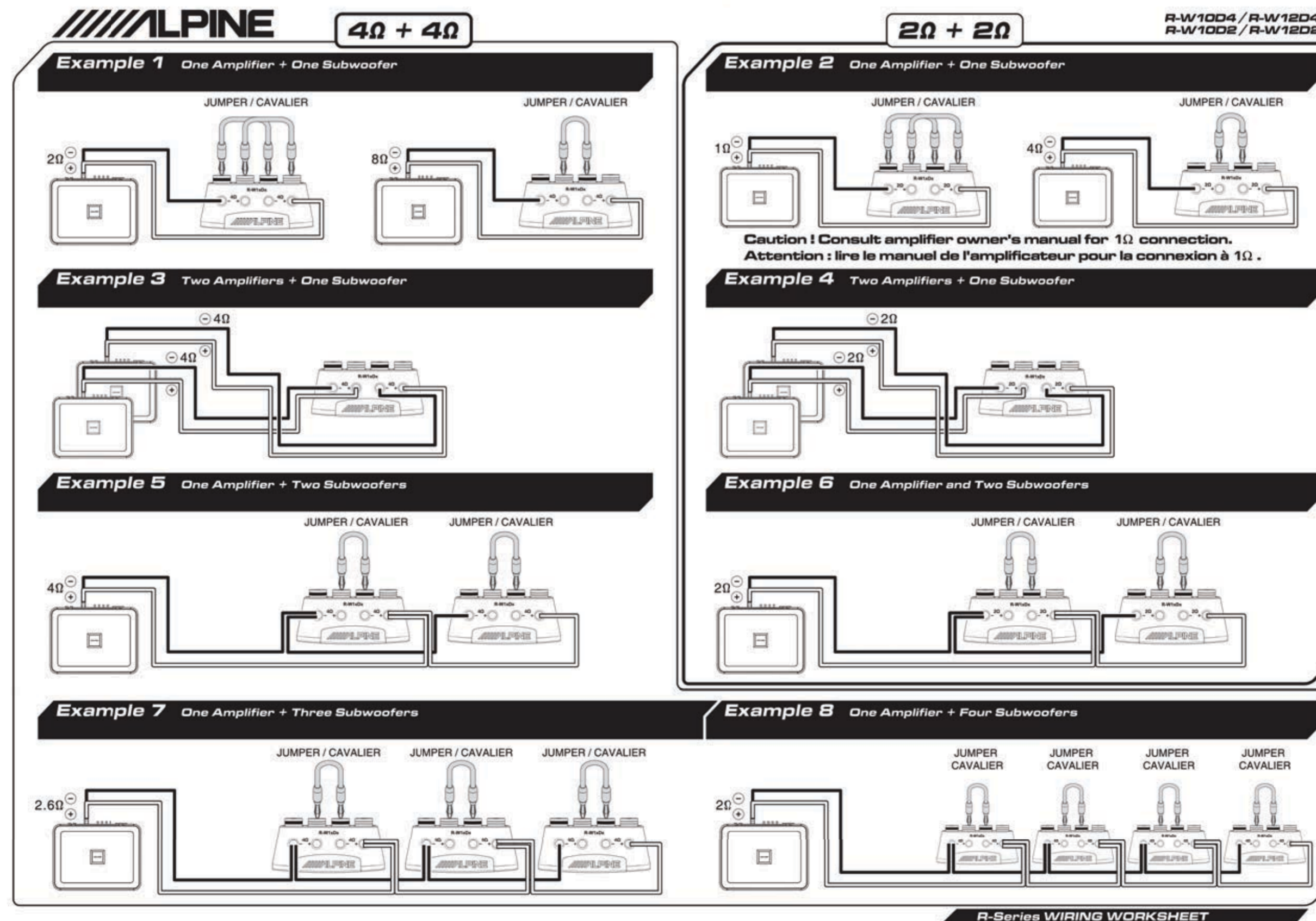
R-Series SUBWOOFER
HAUT-PARLEUR D'EXTRÊMES GRAVES R-Series
APPLICATION GUIDE
GUIDE D'APPLICATION

- R-W12D4**
12 Inch Dual Voice Coil Subwoofer (40)+(40)
Haut-parleur d'extrêmes graves à double bobine 12 po (40)+(40)
- R-W12D2**
12 Inch Dual Voice Coil Subwoofer (20)+(20)
Haut-parleur d'extrêmes graves à double bobine 12 po (20)+(20)
- R-W10D4**
10 Inch Dual Voice Coil Subwoofer (40)+(40)
Haut-parleur d'extrêmes graves à double bobine 10 po (40)+(40)
- R-W10D2**
10 Inch Dual Voice Coil Subwoofer (20)+(20)
Haut-parleur d'extrêmes graves à double bobine 10 po (20)+(20)

General Specifications			R-Series			
			R-W10D2	R-W10D4	R-W12D2	R-W12D4
Size	Taille		10"	10"	12"	12"
Frequency Response	Response en Fréquence		26Hz-200Hz	26Hz-200Hz	24Hz-200Hz	24Hz-200Hz
Power Range	Plage de Puissance		300W-750W RMS (efficace)			
Power Handling	Puissance Admissible		750W RMS (efficace) / 2250W PEAK (de crête)			
Magnet Weight	Poids de l'aimant		111 oz	111 oz	127 oz	127 oz
Voice Coil Diameter	Diamètre de la bobine		65.5 mm (2.6")			
Thiele-Small Parameters						
Sensitivity (1W/1m)	Sensibilité (1W/1m)	SPL	82.4 dB	82.4 dB	84.3 dB	84.7 dB
DC Resistance	Résistance DC	Re	1.90+1.90	3.60+3.60	1.90+1.90	3.60+3.60
Inductance	Inductance	Le	2.72 mH	4.46 mH	3.00 mH	4.46 mH
Free Air Resonance	Résonance à l'air libre	Fs	30 Hz	31 Hz	27 Hz	28 Hz
Equivalent Stiffness	Raideur équivalente	Vas	21 L	20 L	51 L	48 L
Mechanical Q	Q Mécanique	Qms	8.03	7.71	7.56	7.15
Electrical Q	Q Électrique	Qes	0.50	0.59	0.53	0.61
Total Q	Q Total	Qts	0.47	0.55	0.49	0.56
Cone Area	Surface du diaphragme	Sd	333cm ²		479 cm ²	
Linear Excursion	Déplacement Linéaire	Xmax (1-way)	20 mm			
Mechanical Travel	Déplacement Mécanique	Xmech (P-P)	70 mm		72 mm	

Note: Specifications subject to change without notice

APPLICATION DIAGRAMS



		R-W10D2/D4	R-W12D2/D4
Sealed Box Range	Net Internal Volume	0.4-0.85 ft ³	0.55-1.0 ft ³
	External Box Dimensions	12"x12"x10.5"	14"x14"x11"
Recommended Sealed Box	Gross Internal Volume	0.58 ft ³	0.85 ft ³
	Net Internal Volume	0.50 ft ³	0.75 ft ³
	F3, Qtc	D2: 44 Hz, 0.71 D4: 38 Hz, 0.89	D2: 40 Hz, 0.82 D4: 37 Hz, 1.00
Vented Box Range	Net Internal Volume	0.75-1.3 ft ³	1.0-1.5 ft ³
	Fb, Tuning	35-39 Hz	32-37 Hz
Recommended Vented Box	External Box Dimensions	23" x 12" x 11.5"	23" x 12.5" x 14"
	Gross Internal Volume	1.3 ft ³	1.71 ft ³
	Vent Area (W x H)	10 in ² (10"x1")	12.5 in ² (12.5"x1")
	Vent Length	17"	16"
	Vent Displacement	0.2 ft ³	0.23 ft ³
	Net Internal Volume (Vb)	1.0 ft ³	1.38 ft ³
F3, ripple, Fb	D2: 29Hz, 4.8dB, 36Hz D4: 28Hz, 6.1dB, 36Hz	D2: 30Hz, 4.6dB, 35Hz D4: 29Hz, 5.8dB, 35Hz	

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)	-0.08 ft ³	-0.10 ft ³
Reverse Mount Added Volume* (magnet out)	+0.05 ft ³	+0.09 ft ³

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

		R-W10D2/D4	R-W12D2/D4
Gamme Box Sealed	Volume intérieur net	0.4-0.85 pi ³	0.55-1.0 pi ³
	Dimensions de la boîte extérieures	12 po x 12 po x 10.5 po	14 po x 14 po x 11 po
recommended Boîte Scellée	Volume intérieur brut	0.58 pi ³	0.85 pi ³
	Volume intérieur Net ***	0.50 pi ³	0.75 pi ³
	F3, Qtc	D2: 44 Hz, 0.71 D4: 38 Hz, 0.89	D2: 40 Hz, 0.82 D4: 37 Hz, 1.00
Gamme charge bass-reflex	Volume intérieur net	0.75-1.3 pi ³	1.0-1.5 pi ³
	Fb, mise au point	35-39Hz	32-37Hz
recommended charge bass-reflex	Dimensions de la boîte extérieures	23 po x 12 po x 11.5 po	23 po x 12.5 po x 14 po
	Volume intérieur brut	1.3 pi ³	1.71 pi ³
	Aire de l'évent (W x H)	10 in ² (10 po x 1 po)	12.5 in ² (12.5 po x 1 po)
	Longueur de l'évent	17 po	16 po
	Déplacement de l'évent	0.2 pi ³	0.23 pi ³
	Volume intérieur Net (Vb)***	1.0 pi ³	1.38 pi ³
F3, crête, Fb	D2: 29Hz, 4.8dB, 36Hz D4: 28Hz, 6.1dB, 36Hz	D2: 30Hz, 4.6dB, 35Hz D4: 29Hz, 5.8dB, 35Hz	

Notes:
1) Recommandé enclose 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)	-0.08 ft ³	-0.10 ft ³
Inverser Volume mont Ajouté * (des aimants)	+0.05 ft ³	+0.09 ft ³

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