



S2-SERIES SUBWOOFER HAUT-PARLEUR D'EXTRÊMES GRAVES S-SERIES APPLICATION GUIDE GUIDE D' APPLICATION

S2-W12D4

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

S2-W12D2

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

S2-W10D4

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

S2-W10D2

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

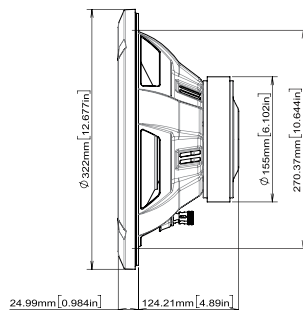
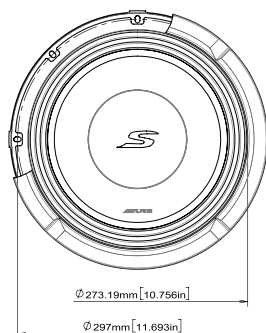
S2-W8D4

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

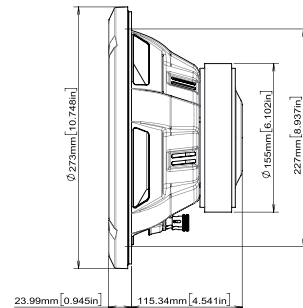
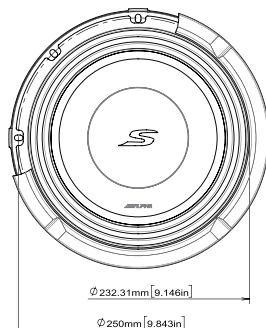
S2-W8D2

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

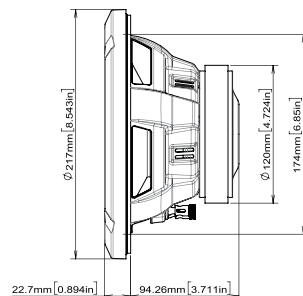
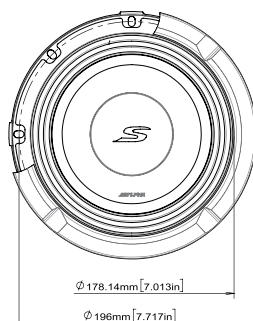
S2-W12D2
S2-W12D4



S2-W10D2
S2-W10D4



S2-W8D2
S2-W8D4



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

Note: Specifications subject to change without notice

S2-Series					
S2-W8D2	S2-W8D4	S2-W10D2	S2-W10D4	S2-W12D2	S2-W12D4
2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω
8"		10"		12"	
23Hz-215Hz		25Hz-215Hz		23Hz-215Hz	
150W-300W RMS		250W-600W RMS			
300W RMS (efficace) / 900W PEAK (de crête)		600W RMS (efficace) / 1800W PEAK (de crête)			
34 oz		64 oz			
35.55 mm (1.4")		65.5 mm (2.6")			
82.6 dB	82.7 dB	84.5 dB	84.9 dB	85.7 dB	86.2 dB
1.8Ω+1.8Ω	3.6Ω+3.6Ω	1.8Ω+1.8Ω	3.6Ω+3.6Ω	1.8Ω+1.8Ω	3.6Ω+3.6Ω
2.62 mH	1.11 mH	3.85 mH	1.59 mH	3.79 mH	1.55 mH
46.5 Hz	47.9 Hz	31.1 Hz	32.0 Hz	26.6 Hz	28.8 Hz
7.2 L	7.5 L	24.5 L	24.9 L	55.1 L	51.5 L
5.6	5.9	6.4	5.6	6.5	5.9
0.65	0.74	0.43	0.44	0.46	0.47
0.59	0.64	0.41	0.41	0.43	0.44
194 cm²		330 cm²		472 cm²	
13 mm		15 mm			
40 mm		64 mm			

		S2-W8D2/D4	S2-W10D2/D4	S2-W12D2/D4
Sealed Box Range	Net Internal Volume	0.15-0.50 ft ³	0.4-0.85 ft ³	0.55-1.0 ft ³
Recommended Sealed Box	External Box Dimensions	13"x13"x5.5"	12"x12"x10.5"	14"x14"x11"
	Gross Internal Volume	0.30 ft ³	0.58 ft ³	0.85 ft ³
	Net Internal Volume	0.27 ft ³	0.53 ft ³	0.79 ft ³
	F3, Qtc	D2: 61 Hz, 0.72 D4: 57 Hz, 0.78	D2: 47 Hz, 0.73 D4: 48 Hz, 0.77	D2: 41 Hz, 0.88 D4: 42 Hz, 0.91
Vented Box Range	Net Internal Volume	0.35-0.70 ft ³	0.75-1.3 ft ³	1.0-1.5 ft ³
	Tuning	36-40Hz	35-39Hz	32-37Hz
Recommended Vented Box	External Box Dimensions	11"x8.5"x20"	23"x12"x11.5"	23"x12.5"x14"
	Gross Internal Volume	0.71 ft ³	1.3 ft ³	1.71 ft ³
	Vent Area (dimensions)	5.25in ² (7"x 0.75")	10in ² (10"x 1")	12.5in ² (12.5"x 1")
	Vent length	15.5"	17"	16"
	Vent Displacement	0.10 ft ³	0.17 ft ³	0.20 ft ³
	Net Internal Volume (Vb)	0.58 ft ³	1.08 ft ³	1.45 ft ³
	F3, ripple, Fb	D2: 31Hz, 1.1dB, 37Hz D4: 31Hz, 1.6dB, 37Hz	D2: 29Hz, 2.9dB, 35Hz D4: 29Hz, 2.3dB, 35Hz	D2: 30Hz, 3.3dB, 34Hz D4: 30Hz, 4.1dB, 34Hz

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)	-0.03ft ³	-0.05ft ³	-0.06ft ³
Reverse Mount Added Volume* (magnet out)	+0.03ft ³	+0.05ft ³	+0.07ft ³

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

		S2-W8D2/D4	S2-W10D2/D4	S2-W12D2/D4
Gamme Box Sealed	Net volume interne	0.15-0.50 pi ³	0.4-0.85 pi ³	0.55-1.0 pi ³
Recommended Boîte Scellé	Dimensions extérieures	13 po x13 po x5.5 po	12 po x12 po x10.5 po	14 po x14 po x11 po
	Volume intérieur brut	0.30 pi ³	0.58 pi ³	0.85 pi ³
	Volume intérieur Net ***	0.27 pi ³	0.53 pi ³	0.79 pi ³
	F3,Qtc	D2: 61 Hz, 0.72 D4: 57 Hz, 0.78	D2: 47 Hz, 0.73 D4: 48 Hz, 0.77	D2: 41 Hz, 0.88 D4: 42 Hz, 0.91
Gamme charge bass-reflex	Volume net interne	0.35-0.70 pi ³	0.75-1.3 pi ³	1.0-1.5 pi ³
	mise au point	36-40Hz	35-39Hz	32-37Hz
Recommended charge bass-reflex	Dimensions extérieures	11 po x8.5 po x20po	23 po x12 po x11.5 po	23 po x12.5 po x14 po
	Volume intérieur brut	0.71 pi ³	1.3 pi ³	1.71 pi ³
	Aire de l'évent (dimensions)	5.25in ² (7 po x 0.75 po)	10in ² (10 po x 1 po)	12.5in ² (12.5 po x 1po)
	Longueur de l'évent	15.5 po	17 po	16 po
	déplacement de l'évent	0.10 pi ³	0.17 pi ³	0.20 pi ³
	Volume intérieur Net (Vb)***	0.58 pi ³	1.08 pi ³	1.45 pi ³
	F3, crête, Fb	D2: 31Hz, 1.1dB, 37Hz D4: 31Hz, 1.6dB, 37Hz	D2: 29Hz, 2.9dB, 35Hz D4: 29Hz, 2.3dB, 35Hz	D2: 30Hz, 3.3dB, 34Hz D4: 30Hz, 4.1dB, 34Hz

Notes:
1) Recommandé enceinte volume net inteme 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)	-0.03ft ³	-0.05ft ³	-0.06ft ³
Inverser Volume mont Ajouté * (des aimants)	+0.03ft ³	+0.05ft ³	+0.07ft ³

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

**Parabolic Cone Structure with
PP/Carbon Fiber Cone & PP/Ceramic Dust Cap**

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

**Twist-Lock Grille
System with no patent**

**High Strength
Steel Frame**

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

**High-Excursion Underhung
Voice Coil Configuration**

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

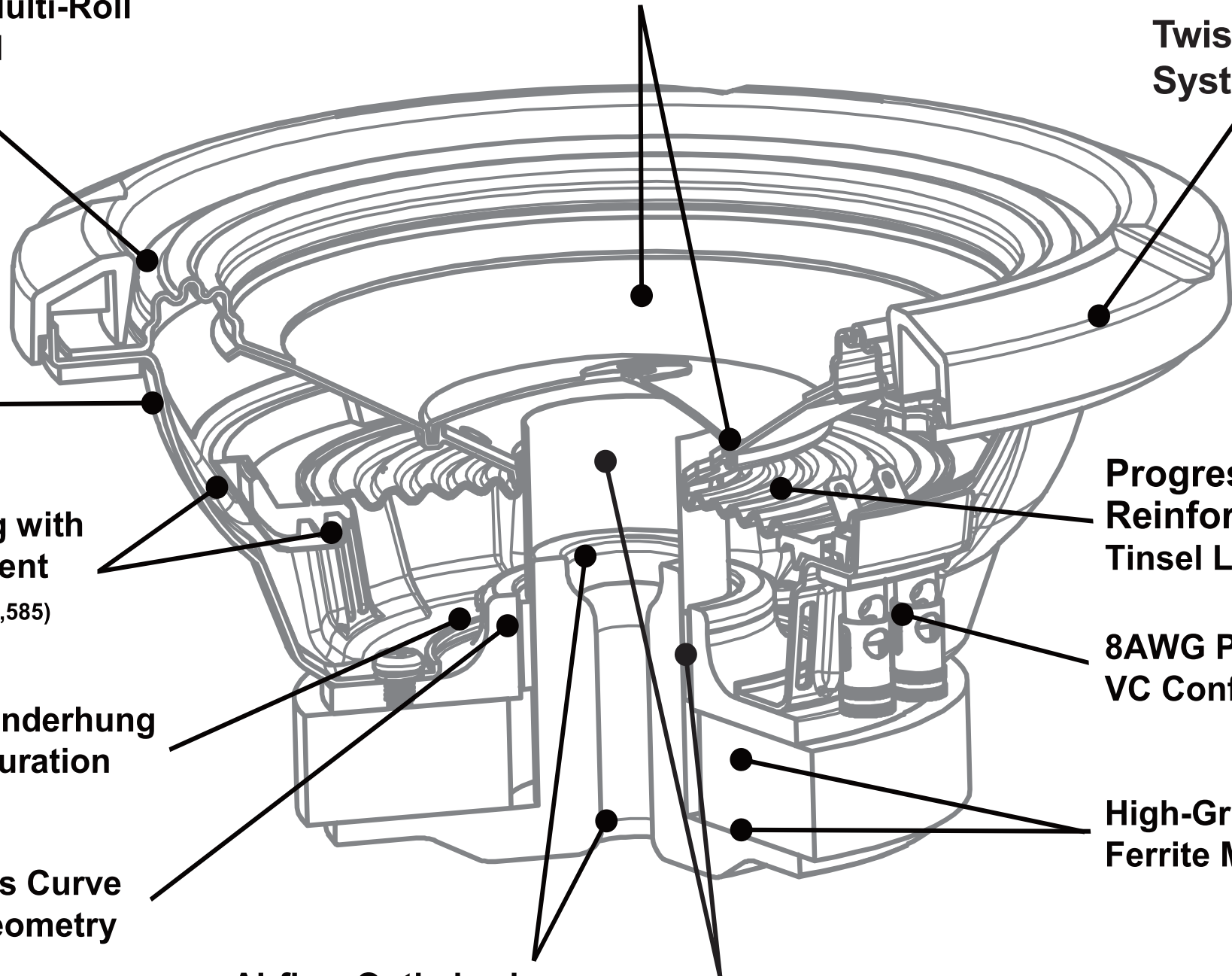
**Progressive Spider with
Reinforced Layer
Tinsel Leads** (US Pat #6,810,988)

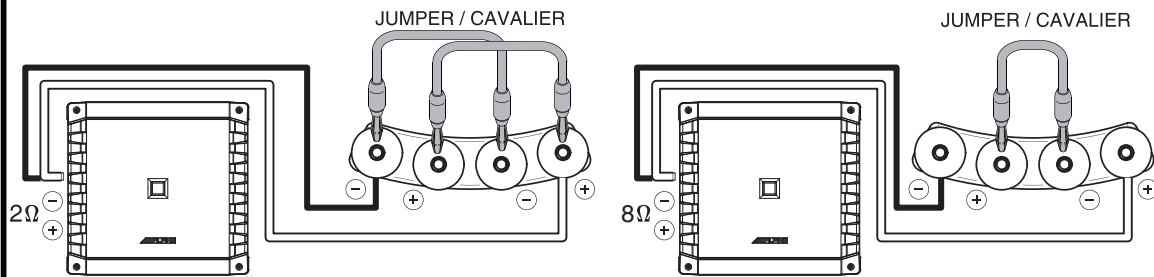
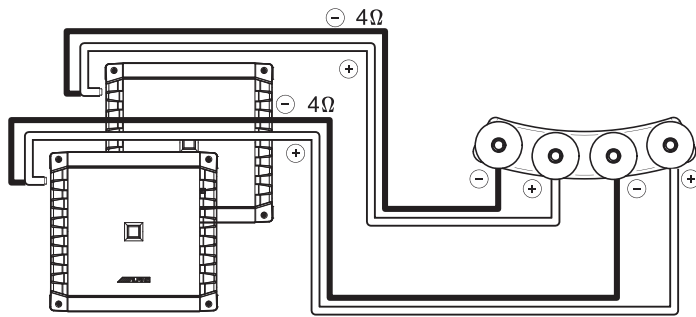
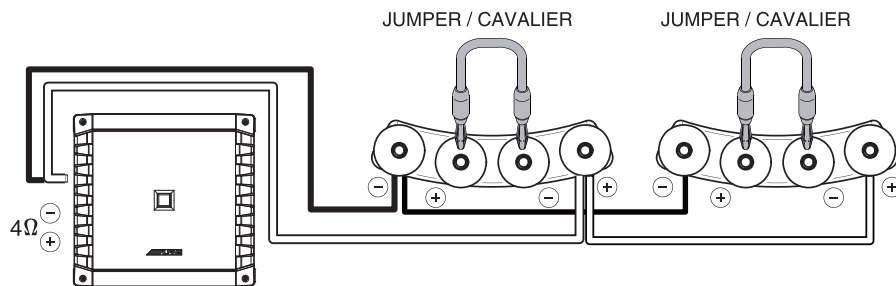
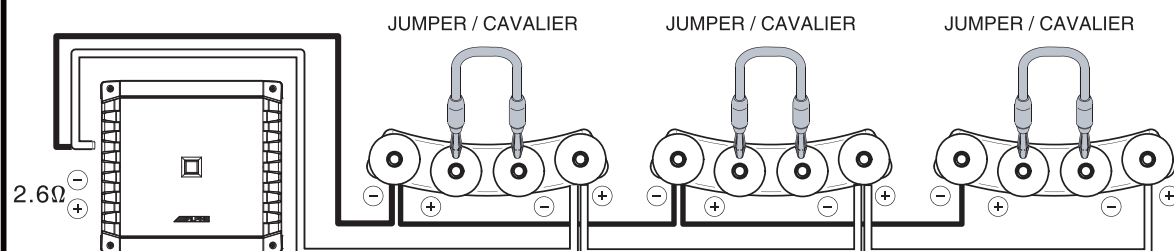
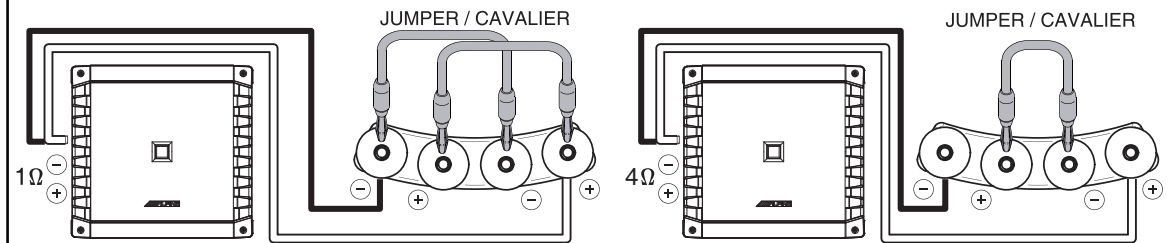
**8AWG Push Terminals with
VC Configuration Jumpers**

**High-Grade Strontium
Ferrite Magnets**

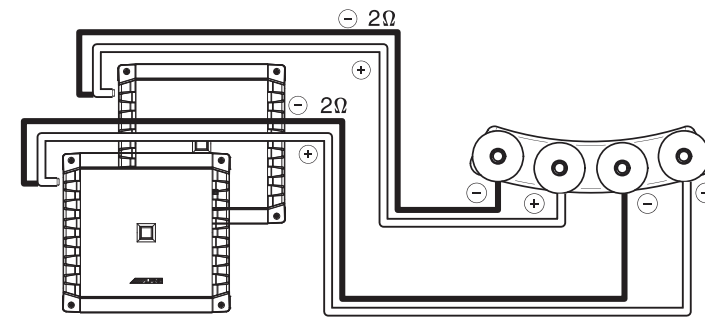
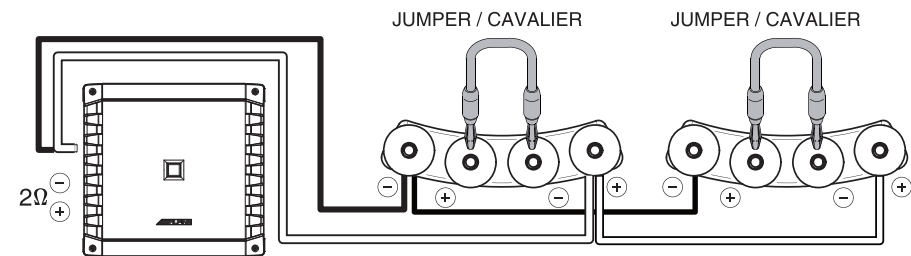
**Airflow Optimized
Dual Flare Pole Vent**

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



ALPINE **$4\Omega + 4\Omega$** **Example 1** One Amplifier + One Subwoofer**Example 3** Two Amplifiers + One Subwoofer**Example 5** One Amplifier + Two Subwoofers**Example 7** One Amplifier + Three Subwoofers **$2\Omega + 2\Omega$** S2-W8D4 / S2-W10D4 / S2-W12D4
S2-W8D2 / S2-W10D2 / S2-W12D2**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