



RS-SB12

12-inch R-Shallow Subwoofer Cabinet

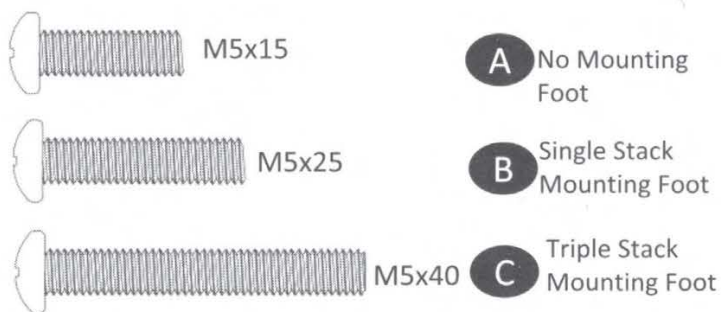
RS-SB10

10-inch R-Shallow Subwoofer Cabinet

1) Contents

Parts Included

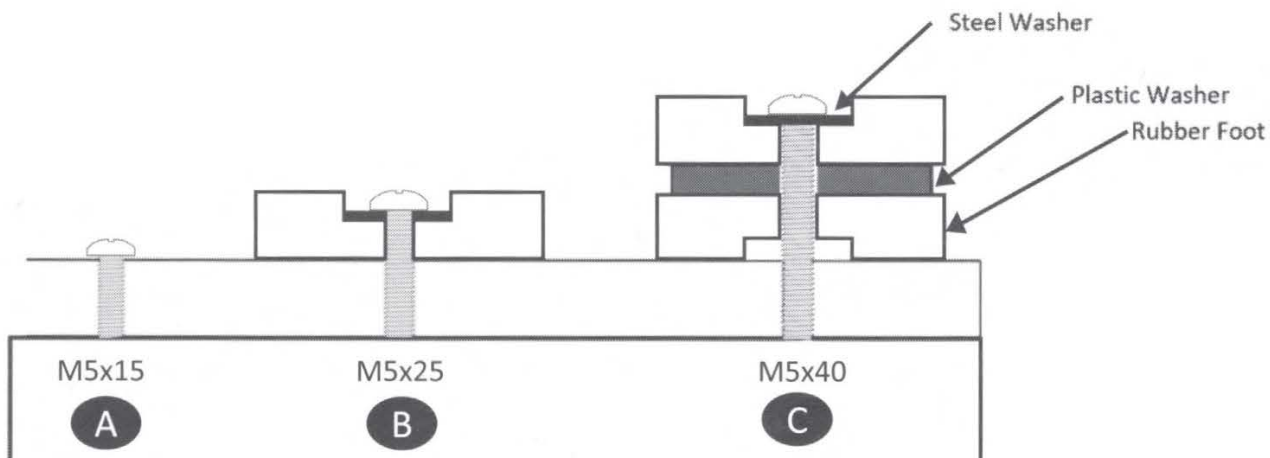
- (8) M5x15 Screw (Pre-installed to cabinet)
- (4) M5x25 Machine Screw
- (4) M5x40 Machine Screw
- (4) Steel Washer
- (8) Stackable Rubber Foot
- (4) Plastic Foot Spacer



2) Mounting foot Installation Guide

Read before Installing:

- Always keep a correct M5 screw installed, do not leave any open holes.
- Depending on application this cabinet is compatible for upfire and downfire configuration.





R-Series Shallow Subwoofer
Caisson de graves peu profond Série RS
APPLICATION GUIDE
GUIDE D' APPLICATION

RS-W12D4

12 Inch Dual Voice Coil Shallow Subwoofer (4Ω)+(4Ω)
Caisson de graves peu profond avec bobine à 2 voies de 12 po (4Ω)+(4Ω)

RS-W12D2

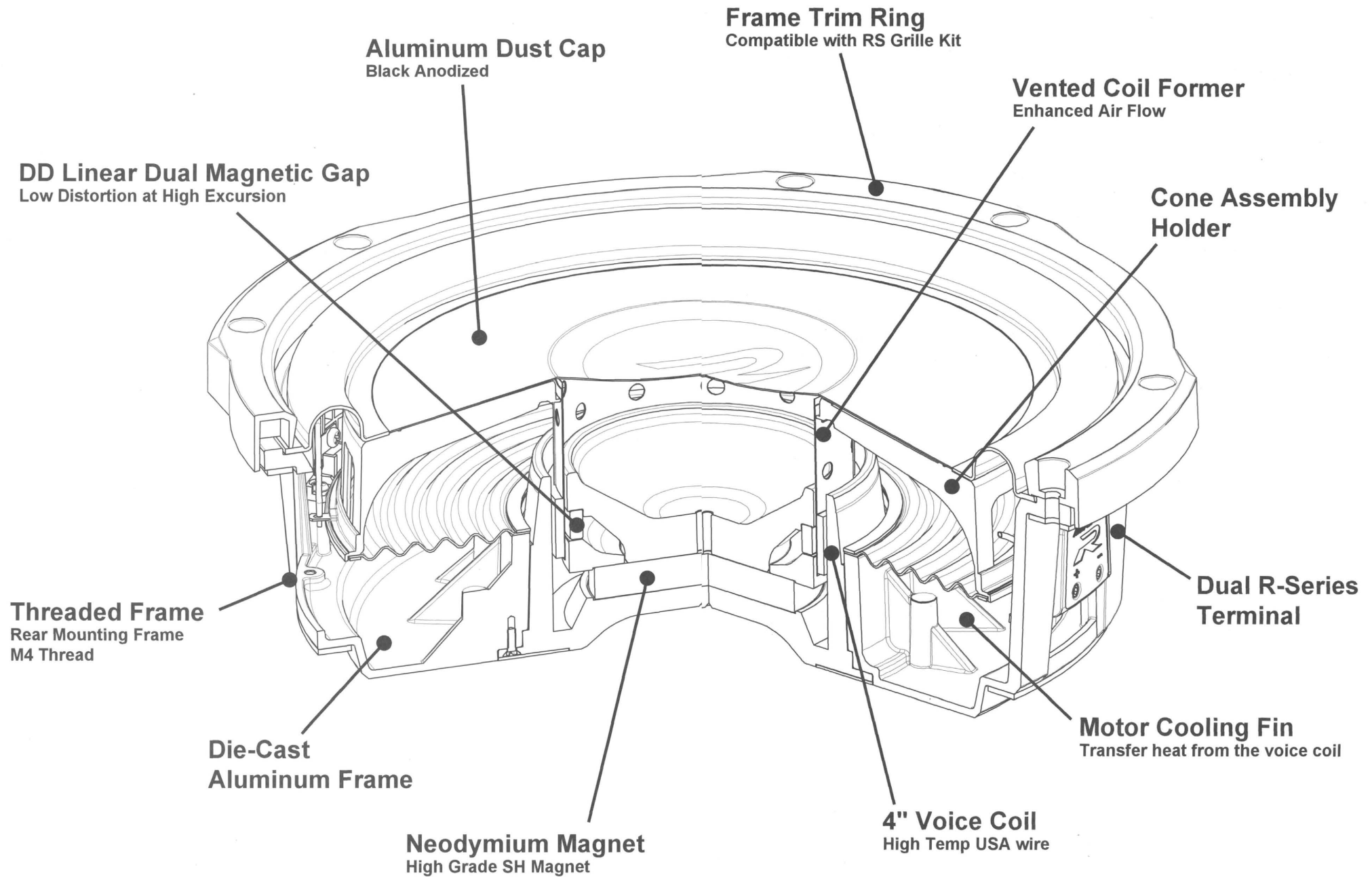
12 Inch Dual Voice Coil Shallow Subwoofer (2Ω)+(2Ω)
Caisson de graves peu profond avec bobine à 2 voies de 12 po (2Ω)+(2Ω)

RS-W10D4

10 Inch Dual Voice Coil Shallow Subwoofer (4Ω)+(4Ω)
Caisson de graves peu profond avec bobine à 2 voies de 10 po (4Ω)+(4Ω)

RS-W10D2

10 Inch Dual Voice Coil Shallow Subwoofer (2Ω)+(2Ω)
Caisson de graves peu profond avec bobine à 2 voies de 10 po (2Ω)+(2Ω)



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)

Note: Specifications subject to change without notice

R-Series			
RS-W10D2	RS-W10D4	RS-W12D2	RS-W12D4
2Ω+2Ω	4Ω+4Ω	2Ω+2Ω	4Ω+4Ω
10"		12"	
25Hz-100Hz			
500W-600W RMS			
600W RMS/ 1800W Peak			
10.4 oz			
100 mm (4")			
Thiel-Small Parameters			
79 dB	78 dB	82 dB	81 dB
1.8Ω + 1.8Ω	3.6Ω + 3.6Ω	1.8Ω + 1.8Ω	3.6Ω + 3.6Ω
30 Hz	31 Hz	28 Hz	29 Hz
20.64 L	23.35 L	42.04 L	43.84 L
6.67	5.72	6.53	7.04
1.11	1.66	1.15	1.17
0.95	1.19	0.98	1.49
380 cm²		572 cm²	
20 mm			
54 mm			

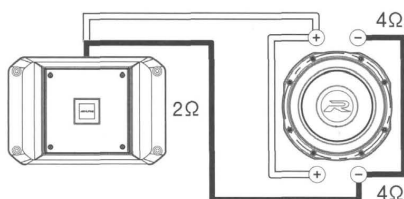
APPLICATION DIAGRAMS

ALPINE

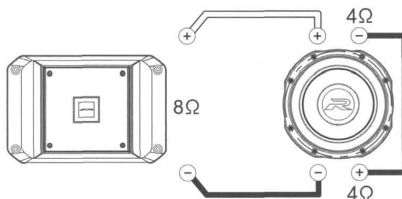
4 + 4

Example 1 One Amplifier + One Subwoofer

One 4Ω DVC Speaker = 2Ω load

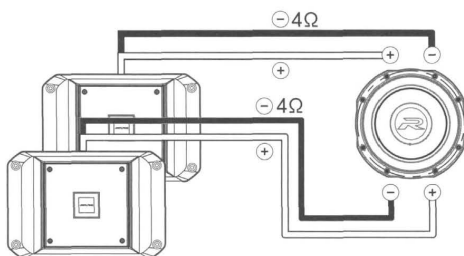


One 4Ω DVC Speaker = 8Ω load



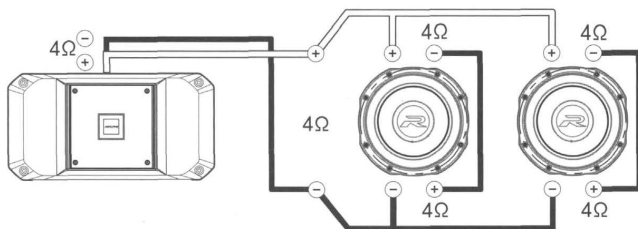
Example 3 Two Amplifiers + One Subwoofer

One 4Ω DVC Speaker = (2) 4Ω load



Example 5 One Amplifier + Two Subwoofers

Two 4Ω DVC Speakers = 4Ω load

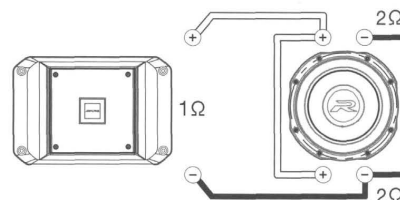


2 + 2

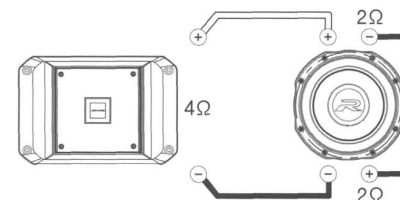
RS-W12D4 / RS-W10D4
RS-W12D2 / RS-W10D2

Example 2 One Amplifier + One Subwoofer

One 2Ω DVC Speaker = 1Ω load



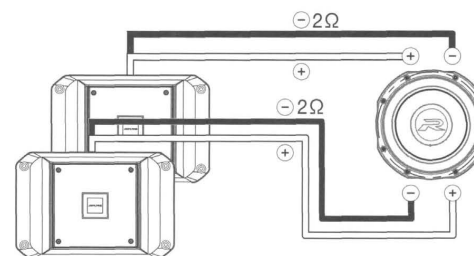
One 2Ω DVC Speaker = 4Ω load



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

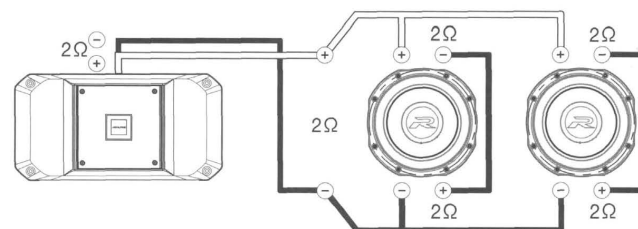
Example 4 Two Amplifiers + One Subwoofer

One 2Ω DVC Speaker = (2) 2Ω load



Example 6 One Amplifier and Two Subwoofers

Two 2Ω DVC Speakers = 2Ω load



		RS-W10D2/D4	RS-W12D2/D4
Sealed Box Range	Net Internal Volume	0.45 - 1.0 ft ³	0.6 - 1.5 ft ³
Recommended Sealed Box (Small Volume Size)	External Dimension (W x H x D)	16" x 15" x 6.25"	18" x 15" x 6.5"
	Gross Internal Volume	0.54 ft ³	0.65 ft ³
	Net Internal Volume	0.50 ft ³	0.60 ft ³
	F3, Fb	32 Hz, 44 Hz	35 Hz, 49 Hz
Recommended Sealed Box (Medium Volume Size)	External Dimension (W x H x D)	18" x 15" x 7"	22" x 16" x 7"
	Gross Internal Volume	0.79 ft ³	0.95 ft ³
	Net Internal Volume	0.75 ft ³	0.90 ft ³
	F3, Fb	30 Hz, 40 Hz	30.5 Hz, 43 Hz
Recommended Sealed Box (Large Volume Size)	External Dimension (W x H x D)	20" x 15" x 8.75"	21" x 16" x 9"
	Gross Internal Volume	1.04 ft ³	1.25 ft ³
	Net Internal Volume	1.00 ft ³	1.20 ft ³
	F3, Fb	28 Hz, 38 Hz	29 Hz, 40 Hz

Displacement Volume	0.04 ft ³	0.05 ft ³
Hole Cutout Size	9-5/8" (243 mm)	11-5/8" (295 mm)

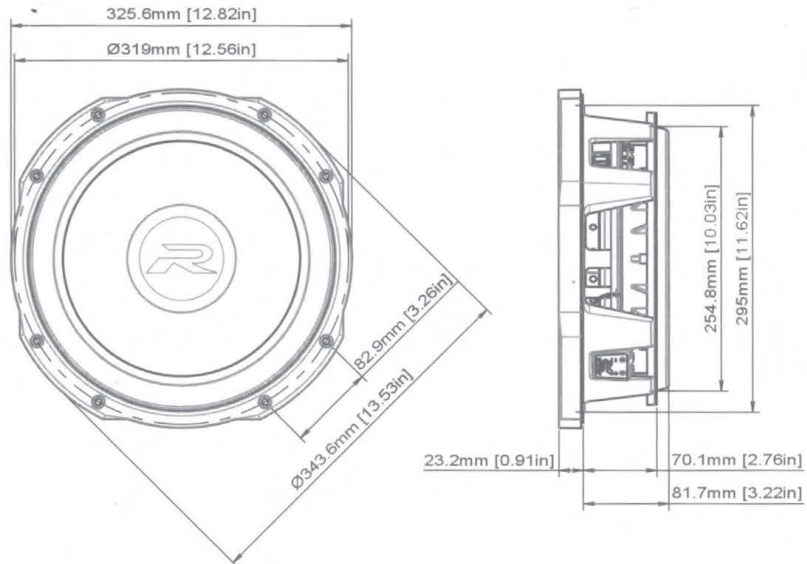
Notes: Recommended enclosure net internal volume based on 3/4" (19 mm) MDF enclosure construction.

		RS-W10D2/D4	RS-W12D2/D4
Gamme Box Sealed	Net volume interne	0.45 - 1.0 pi ³	0.6 - 1.5 pi ³
Recommended Boîte Scellé (Taille petit volume)	Dimension externe (W x H x D)	16 po x 15 po x 6.25 po	18 po x 15 po x 6.5 po
	Volume intérieur brut	0.54 pi ³	0.65 pi ³
	Net volume interne	0.50 pi ³	0.60 pi ³
	F3, Fb	32 Hz, 44 Hz	35 Hz, 49 Hz
Recommended Boîte Scellé (Taille volume moyen)	Dimension externe (W x H x D)	18 po x 15 po x 7 po	22 po x 16 po x 7 po
	Volume intérieur brut	0.79 pi ³	0.95 pi ³
	Net volume interne	0.75 pi ³	0.90 pi ³
	F3, Fb	30 Hz, 40 Hz	30.5 Hz, 43 Hz
Recommended Boîte Scellé (Taille grand volume)	Dimension externe (W x H x D)	20 po x 15 po x 8.75 po	21 po x 16 po x 9 po
	Volume intérieur brut	1.04 pi ³	1.25 pi ³
	Net volume interne	1.00 pi ³	1.20 pi ³
	F3, Fb	28 Hz, 38 Hz	29 Hz, 40 Hz

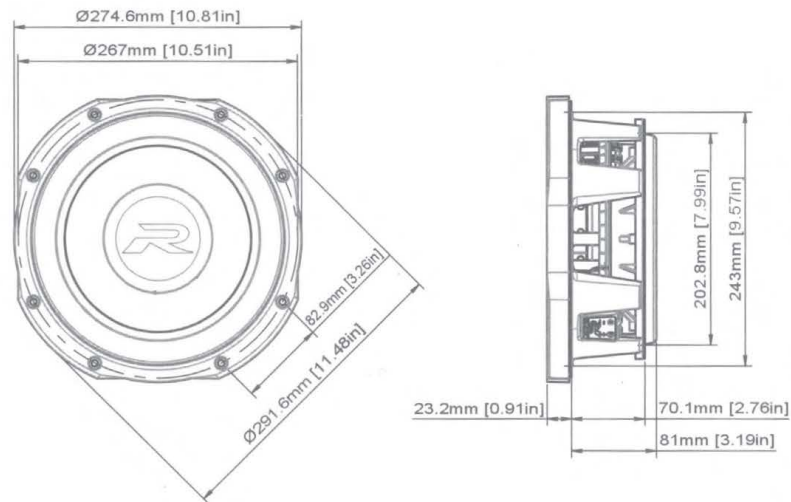
Volume de déplacement	0.04 pi ³	0.05 pi ³
Taille de la découpe de l'orifice	9-5/8 po (243 mm)	11-5/8 po (295 mm)

Remarque: Le volume interne net recommandé pour l'enceinte est basé sur une construction d'enceinte en MDF de 19 mm (3/4 po).

RS-W12D2
RS-W12D4



RS-W10D2
RS-W10D4



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

REGISTER YOUR PRODUCT

Register your Alpine product(s) to help us track your warranty and get access to exclusive content, giveaways and special offers.



REGISTER ONLINE

Visit alpineusa.link/register



TEXT TO REGISTER

Text **"ALPINE"** to **71739** (US Only)

One message per opt-in. Text **"HELP"** for help. Text **"STOP"** to cancel. Message and data rates may apply.
See full privacy policy and SMS terms at www.alpine-usa.com/terms-of-use



SCAN TO REGISTER

Scan the QR Code below using your phone or device





LIMITED WARRANTY

●PRODUCTS COVERED:

This Limited Warranty ("Limited Warranty") covers Alpine Car Audio Products and Related Accessories (the "Product"). Products purchased in Canada are covered only in Canada. Products purchased in the U.S.A. are covered only in the U.S.A.

●LENGTH OF WARRANTY:

This Warranty is in effect for one year (1) from the date of the original retail purchase on the Product.

●WHO IS COVERED:

This Warranty only covers the original purchaser of the Product, who must reside in the United States, Puerto Rico or Canada.

●WHAT IS COVERED:

This Warranty covers defects in materials or workmanship (parts and labor), under normal use, in the Product.

●WHAT IS NOT COVERED:

This Limited Warranty does not cover the following:

- ① Damage occurring during shipment of the Product to Alpine for repair (claims must be presented to the carrier).
- ② Damage caused by normal wear and tear, accidents or abuse, including burned voice coils caused by over-driving the speaker (amplifier level is turned up and driven into distortion or clipping). Speaker mechanical failure (e.g. punctures, tears or rips). Cracked or damaged LCD panels. Dropped or damaged hard drives.
- ③ Damage caused by negligence, misuse, improper operation or failure to follow instructions contained in the Owner's manual.
- ④ Damage caused by an act of God, including without limitation, earthquake, fire, flood, storms or other acts of nature. Any cost or expense related to the removal or reinstallation of the Product.
- ⑤ Service performed by an unauthorized person, company or association.
- ⑥ Any Product which has the serial number defaced, altered or removed.
- ⑦ Any Product which has been adjusted, disassembled, altered or modified without Alpine's consent.
- ⑧ Any Product not distributed by Alpine within the United States, Puerto Rico or Canada.
- ⑨ **Any Product not purchased from an Authorized Alpine Dealer.**

●HOW TO OBTAIN WARRANTY SERVICE:

- ① You are responsible for delivery of the Product to an Authorized Alpine Service Center or Alpine for repair and for payment of any initial shipping charges. Alpine will, at its option, repair or replace the Product with a new or reconditioned product without charge. If the repairs are covered by this Limited Warranty, and if the Product was shipped to an Authorized Alpine Service Center or Alpine, Alpine will pay the return shipping charges. The repaired or replaced Product will continue to be covered under the original Limited Warranty period.
- ② You should provide a detailed description of the problem(s) for which service is required.
- ③ You must supply proof of your purchase of the Product.
- ④ You must package the Product securely to avoid damage during shipment. To prevent lost packages, it is recommended to use a carrier that provides a tracking service.

●HOW WE LIMIT IMPLIED WARRANTIES:

ANY IMPLIED WARRANTIES INCLUDING FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY ARE LIMITED IN DURATION TO THE PERIOD OF THE EXPRESS WARRANTY SET FORTH ABOVE AND NO PERSON OR THIRD PARTY IS AUTHORIZED TO ADD TO, MODIFY, OR EXTEND THE TERMS OF THIS LIMITED WARRANTY AND/OR ASSUME FOR ALPINE ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT.

●HOW WE EXCLUDE CERTAIN DAMAGES:

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, ALPINE AND ITS PARENT COMPANY, AFFILIATES, AND SUBSIDIARIES EXPRESSLY DISCLAIM LIABILITY TO YOU UNDER ANY THEORY OF LIABILITY FOR ALL INCIDENTAL, INDIRECT DAMAGES, SPECIAL, PUNITIVE, AND CONSEQUENTIAL DAMAGES WHICH MAY BE INCURRED BY YOU IN RELATION TO THE PRODUCT. THE TERM INCIDENTAL DAMAGES INCLUDES, BUT IS NOT LIMITED TO, COSTS AND EXPENSES OF TRANSPORTING THE PRODUCT TO THE ALPINE SERVICE CENTER, LOSS OF THE ORIGINAL PURCHASER'S TIME, LOSS OF THE USE OF THE PRODUCT, BUS FARES, CAR RENTALS OR OTHER COSTS RELATING TO THE CARE AND CUSTODY OF THE PRODUCT. THE TERM CONSEQUENTIAL DAMAGES INCLUDES, BUT IS NOT LIMITED TO, THE COST OF REPAIRING OR REPLACING OTHER PROPERTY WHICH IS DAMAGED WHEN THIS PRODUCT DOES NOT WORK PROPERLY. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THIS LIMITED WARRANTY AND THE REMEDIES PROVIDED HEREUNDER ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE TOTAL LIABILITY OF ALPINE, ITS PARENT COMPANY, AFFILIATES, AND SUBSIDIARIES IN CONNECTION WITH THIS LIMITED WARRANTY AND/OR THE PRODUCT SHALL NOT EXCEED THE AMOUNT YOU ACTUALLY PAID FOR THE PRODUCT.

●HOW STATE/PROVINCIAL LAW RELATES TO THE LIMITED WARRANTY:

This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state and province to province. In addition, some states/provinces do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages. Accordingly, limitations as to these matters contained herein may not apply to you.

If any of the terms of this Limited Warranty are held to be null, void, illegal or unenforceable for any reason, the remaining terms of this Limited Warranty will remain in full force and effect.

For warranty service in the Canadian market, contact:
Phone: (905) 513-7733 Fax: (905) 513-7740
Email: info@gentec-intl.com
Or visit our website at <http://www.alpine-canada.com>

●HOW TO CONTACT CUSTOMER SERVICE:

Should the Product require service, please call the following number for your nearest Authorized Alpine Service Center.

CUSTOMER SERVICE	1-800-421-2284, ext. 860304
TECH SUPPORT	1-800-TECH-101 (1-800-832-4101)

Or visit our website at <http://www.alpine-usa.com>

This Limited Warranty is provided by ALPINE ELECTRONICS OF AMERICA, INC., whose principal office is at 1500 Atlantic Blvd, Auburn Hills, MI 48326, U.S.A.

Do not send Products to this address.

Call the toll-free telephone number or visit the website to locate a service center.



IMPORTANT NOTICE!
PLEASE READ FIRST BEFORE INSTALLING SPEAKERS

Congratulations on your purchase of high quality speakers from Alpine. Your listening satisfaction is important to us. In order to maximize and maintain peak speaker performance the following guidelines are being provided. Please read this notice carefully before operating the speakers.

- 1. Do not over-drive the amplifier. Over-driving the amplifier will result in distortion or clipping and can damage any speaker.**
- 2. Make sure gain controls are properly set. (Follow instructions in amplifier owner's manual.)**
- 3. Make sure that the speaker is properly rated for the amplifier.**
- 4. Make sure that volume, bass, treble, equalization or crossover settings do not cause the amplifier to over-drive.**

Failure to follow these guidelines may result in burned or damaged speaker voice coils which will void your warranty.

If further assistance is necessary, please contact your Alpine authorized dealer.