



OWNER'S MANUAL **SUBWOOFER**



DX-10 / XO-1044 / DX-12 / XO-1244 / DX-15 / XO-1544 V2

1. Introduction
2. Safety instructions
3. Specifications
4. Dimensions
5. How to use
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1. INTRODUCTION

Thank you for purchasing your American Bass product. We take pride in delivering powerful high-performance sound systems engineered for exceptional volume and clarity without compromising quality.

To get the most out of your product, please read this manual carefully before installation and use. It's especially important to review all safety precautions and setup guidelines. Be sure to keep this manual in a safe and accessible place for future reference.

2. SAFETY INSTRUCTIONS

Secure Installation

Mount the subwoofer securely. A loose subwoofer can become a serious hazard if it shifts or disconnects while driving.

Handle with Care

If possible, keep the subwoofer in its original packaging until installation to prevent accidental damage.

Avoid Dropping

Be cautious when handling the subwoofer. Dropping it can damage internal components.

Tool Safety

Always follow proper safety procedures and wear protective gear when using tools.

Power Off Devices

Turn off the head unit and all connected audio equipment before installation to prevent damage.

Check Placement

Make sure the subwoofer does not obstruct or interfere with any mechanical or electrical components in the vehicle.

Avoid Harsh Environments

Do not install the subwoofer in areas exposed to moisture, extreme temperatures, or dust.

- Operating temperature range: +5°C (41°F) to +40°C (104°F)

- If condensation occurs, allow the unit to dry completely before use.

Be Aware of Vehicle Systems

When drilling or cutting, avoid areas with wiring, fuel lines, brake lines, or structural components. Always wear protective eyewear and gloves.

Secure Wiring Properly

Ensure speaker cables are not in contact with moving parts or sharp edges. Secure them along their full length.

Use Correct Cable Size

Select speaker cables appropriate for the length of the run and the amount of power being transmitted.

Avoid Tension on Cables

Do not stretch cables across moving vehicle parts. This may damage insulation and lead to shorts or fire.

Protect Cables at Entry Points

Use rubber grommets or similar materials when running cables through metal plates or near heated components to prevent damage.

CAUTION:

High sound pressure levels can damage your hearing.

Always use common sense when adjusting volume.

3. SPECIFICATIONS

Thank you for choosing an American Bass subwoofer. Engineered for superior performance, this subwoofer is designed specifically for automotive use and has undergone rigorous testing to deliver long-lasting, reliable sound quality.

1. INTRODUCTION

Thank you for purchasing your American Bass product. We take pride in delivering powerful high-performance sound systems engineered for exceptional volume and clarity without compromising quality.

If you have any questions about product or operation that are not addressed in this manual, please contact your authorized AMERICAN BASS dealer for support.

FEATURES

DX-10 / XO-1044 V2

10" Subwoofer

RMS Power: 300 W

Max Power: 600 W

Stitched Foam Surround

Fiberglass Reinforced Cap

DX line Single VC, XO DVC

2" Copper Voice Coil

45 Oz x2 Magnet Structure

PVC Gasket Ring

DX-12 / XO-1244 V2

12" Subwoofer

RMS Power: 300 W

Max Power: 600 W

Stitched Foam Surround

Fiberglass Reinforced Cap

DX line Single VC, XO DVC

2" Copper Voice Coil

45 Oz x2 Magnet Structure

PVC Gasket Ring

DX-15 / XO-1544 V2

15" Subwoofer

RMS Power: 500 W

Max Power: 1000 W

Stitched Foam Surround

Fiberglass Reinforced Cap

DX line Single VC, XO DVC

2.5" Copper Voice Coil

65 Oz x2 Magnet Structure

PVC Gasket Ring

PRECAUTIONS

- Before making holes, check the mounting space with supplied template.
- To prevent noise pick-up, keep the wiring away from motors, high-voltage leads and other potential noise sources.
- To prevent a short-circuit, keep all wiring away from moving parts and sharp edges.
- Make sure you carefully read and understand the installation instructions before installing this subwoofer in your vehicle.

3. SPECIFICATIONS

MODEL	DX-10 V2	DX-12 V2	DX-15 V2
RMS Power (W)	300	300	500
Max Power (W)	600	600	1000
Voice Coil Size(Inch)	2	2	2.5
Voice Coil Wire	Copper	Copper	Copper
Subwoofer Size (Inch)	10	12	15
Surround Material	Foam	Foam	Foam
Cone Material	Paper	Paper	Paper
Frame Material	Heavy Duty Metal	Heavy Duty Metal	Heavy Duty Metal
Magnet Type	Ferrite	Ferrite	Ferrite

THIELE-SMALL PARAMETERS

MODEL	DX-10 V2	DX-12 V2	DX-15 V2
Impedance (Ohm)	4	4	4
Re (Ohm)	3.2	3.2	3.2
SPL(dB)	83.7	86	87
Xmax	0.47"/12mm	0.47"/12mm	0.57"/14mm
Fs(Hz)	33.6	31.5	29.4
Vas (L)	21.6	49.6	77.3
Qts	0.49	0.54	0.59
BL	14.1	14.2	17.4
Qes	0.53	0.59	0.66
Qms	5.89	6.43	5.62
Mms	158.3	188.1	343.4
SD	330	510	804
Le	1.76	1.78	2.23

Note: The specified sensitivity rating is not directly correlated to the actual sound pressure level (SPL) within a vehicle. It should not be used as the sole reference when comparing this subwoofer to other models.

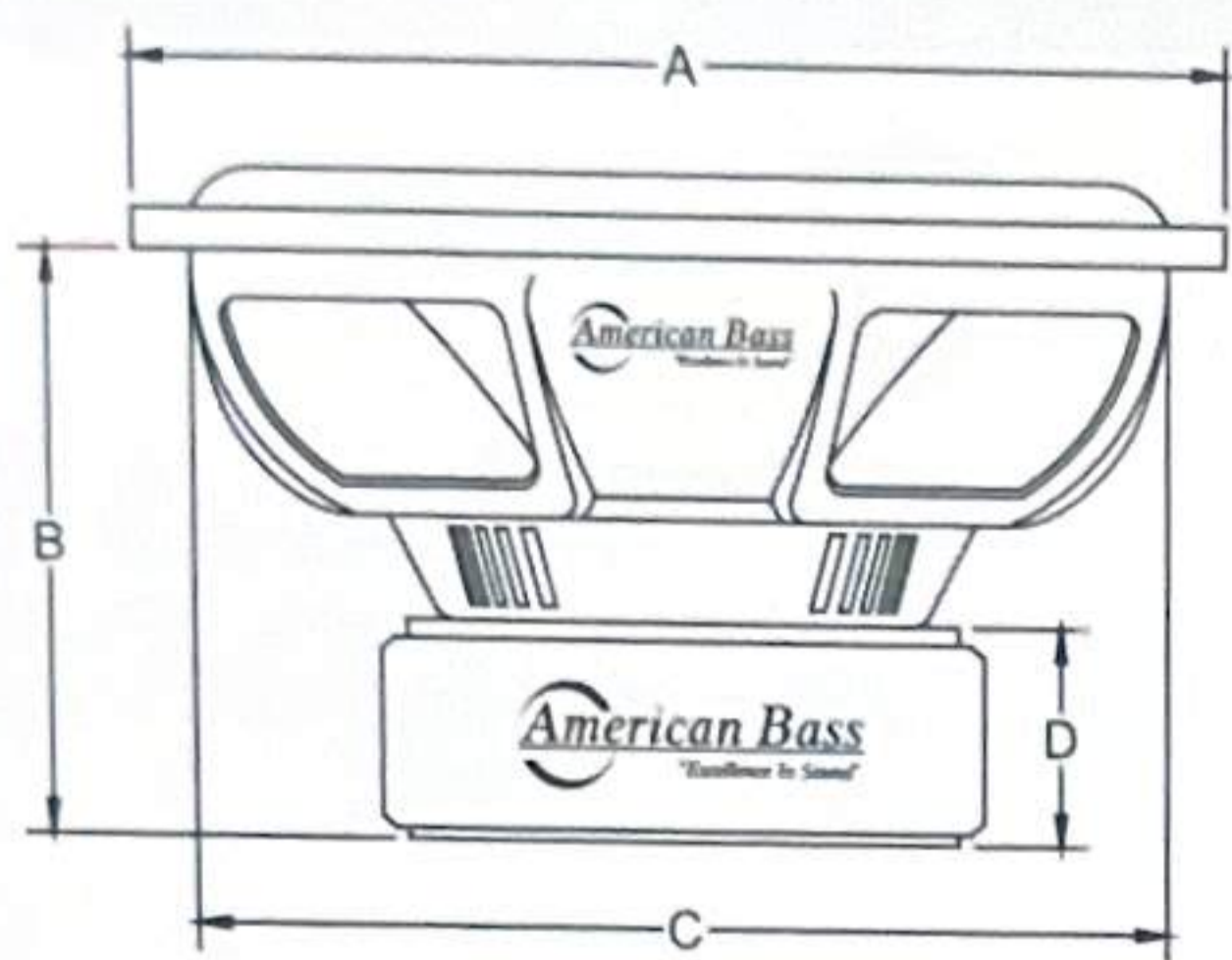
3. SPECIFICATIONS

MODEL	XO-1044 V2	XO-1244 V2	XO-1544 V2
RMS Power (W)	300	300	500
Max Power(W)	600	600	1000
Voice Coil Size (Inch)	2.0	2	2.5
Voice Coil Wire	Copper	Copper	Copper
Subwoofer size (Inch)	10	12	15
Cone material	Foam	Foam	Foam
Frame material	paper	Non-pressed Paper	Non-pressed Paper
Magnet type	Heavy Duty Metal	Heavy Duty Metal	Heavy Duty Metal
	Ferite	Ferite	Ferite

THIELE-SMALL PARAMETERS

MODEL	XO-1044 V2	O-1244 V2	XO-1544 V2
Impedance (Ohm)	4+4	4+4	4+4
Re (Ohm)	3.4+3.4	3.4+3.4	3.4+3.4
SPL(dB)	83.8	86.1	87.2
Xmax	0.47"/12mm	0.47"/12mm	0.59"/15mm
Fs(Hz)	36.8	31.1	29.9
Vas (L)	19.8	54.2	71.5
Qts	0.57	0.57	0.61
BL	18.4	18.7	22
Qes	0.63	0.63	0.69
Qms	5.69	5.51	5.21
Mms	144	176.6	323.5
SD	330	510	804
Le	2.73	1.28	4.1

Note: The specified sensitivity rating is not directly correlated to the actual sound pressure level (SPL) within a vehicle. It should not be used as the sole reference when comparing this subwoofer to other models.



Model	A	B	C	D
DX-10/ XO-1044V2	10.52in/266mm	5.52in/138 mm	9.24in/231 mm	2.24in/56 mm
DX-12/ XO-1244 V2	12.64in/316 mm	6.08in/152 mm	11.52in/288 mm	2.24in/56 mm
DX-15/ XO-1544 V2	15.76in/394 mm	7.4in/185 mm	14.32in/358 mm	2.8in/70 mm

SPECIFICATIONS	DX-10 V2	DX-12 V2	DX-15 V2	XO-1044 V2	XO-1244 V2	XO-1544 V2
RMS Power (W)	300	300	500	300	300	500
Max Power (W)	600	600	1000	600	600	1000
FS (Hz)	33.6	31.5	29.4	36.8	31.1	29.9
Nominal Impedance(Ohm)	4	4	4	4+4	4+4	4+4
Sensitivity @ 1w/1m(dB)	83.7	86	87	83.8	86.1	87.2
Frequency Range(Hz)	30-500	30-500	30-500	30-500	30-500	30-500
Magnet (Oz)	90	90	130	90	90	130
Voice Coil (Inch)	2	2	2.5	2	2	2.5
Cone	Paper	Paper	Paper	Paper	Paper	Paper
Mounting Depth	5.52"/138mm	6.08"/152mm	7.4"/185mm	5.52"/138mm	6.08"/152mm	7.4"/185mm
Mounting Diameter	9.24" / 231 mm	11.52"/ 288mm	14.32"/358mm	9.24"/231mm	11.52"/288m	14.32"/358m
Sealed Box Volume	0.71 cu ft / 20 L	0.883 cu ft / 25 L	2.12 cu ft / 60 L	0.71 cu ft / 20 L	0.883 cu ft / 25 L	2.12 cu ft / 60 L
Ported Box Volume	1.24 cu ft / 35 L	1.41 cu ft / 40 L	2.83 cu ft / 80 L	1.24 cu ft / 35 L	1.41 cu ft / 40 L	2.83 cu ft / 80 L

6. HOW TO USE

To ensure the longevity and performance of your subwoofer, it's important to choose the right amplifier and use proper settings. Always pair the subwoofer with an amplifier whose nominal power is slightly below the subwoofer's rated RMS power. This helps prevent signal distortion, overheating, and voice coil damage.

We recommend warming up the subwoofer before full operation. Like all speakers, it contains moving components that benefit from a break-in period. Play musical content at moderate volume for at least 40 hours to allow the suspension system to settle. During this time, avoid excessive volume. If you notice a burning smell at high volume immediately lower the volume and let the subwoofer cool.

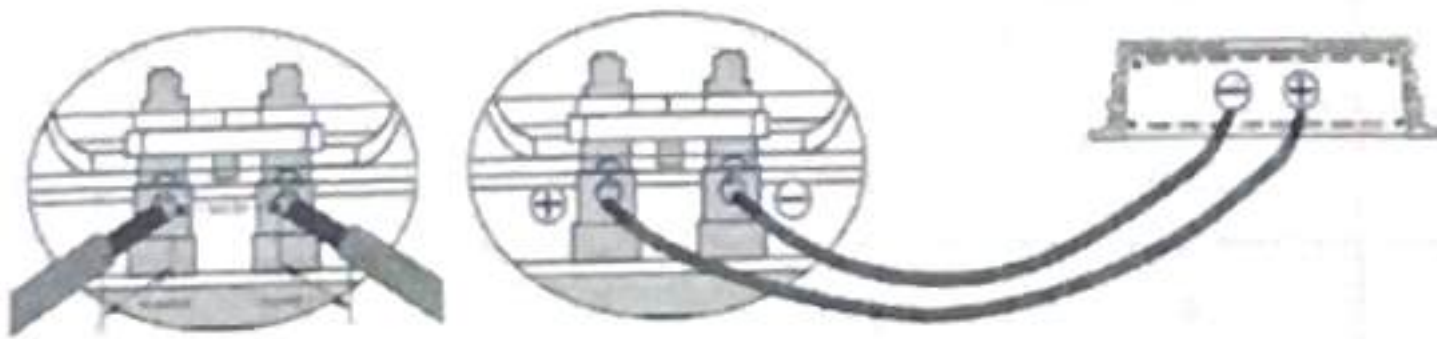
Recommended Amplifier & Head Unit Settings

- Head Unit Volume: Do not exceed 80% of the maximum volume
- Amplifier Gain (Sensitivity): Set to 50%
- Subsonic Filter: Set 5 Hz below the port tuning frequency
- Example: If your port is tuned to 30 Hz, set the subsonic filter to 25 Hz
- Low Pass Filter (LPF): Set between 63-80 Hz to limit high frequencies
- Bass Boost: Set to 0 for optimal performance and to avoid distortion.

7. WIRING DIAGRAMS

Attention! You need to connect both voice coils of the subwoofer. Do not expose your amplifier to loads below the value predetermined by the manufacturer. Various examples of connection types are given at the pages below. Use these examples to determine the required load impedance of your connection.

Connection of terminals



Series connection

Total impedance = $\Omega_{SUB 1} + \Omega_{Sub 2} + \Omega_{Sub 3} \dots$

Selection of the diameter of speaker cables

Use the table below to select the desired diameter based on the length and the power consumption.

Power consumption(W)	Cable length (m)								Size	
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	AWG	mm ²
25 000									5	16.8
20 000									8	8.37
15 000									10	5.26
10 000									14	2.08
8 000										
6 000										
4 000										
2 000										
1 000										
500										
250										
100										

Parallel connection

$$\text{Total impedance} = \frac{1}{\frac{1}{\Omega_{\text{Sub 1}}} + \frac{1}{\Omega_{\text{Sub 2}}} + \frac{1}{\Omega_{\text{Sub 3}}} + \dots}$$

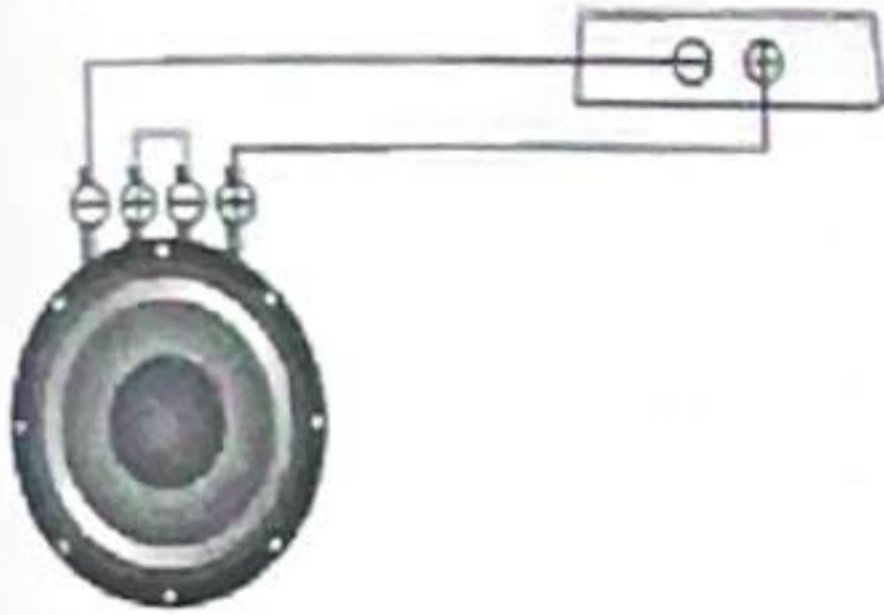
Schemes of enabling the load of the subwoofer

Voice coils 1+1, 2+2 Ohm

The subwoofer has voice coil D1 or D2.

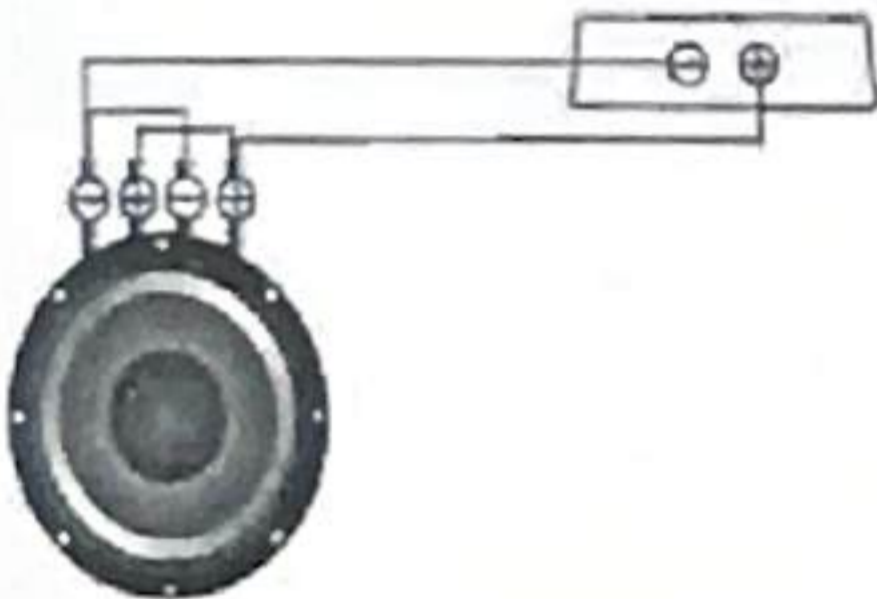


One subwoofer, coils in series



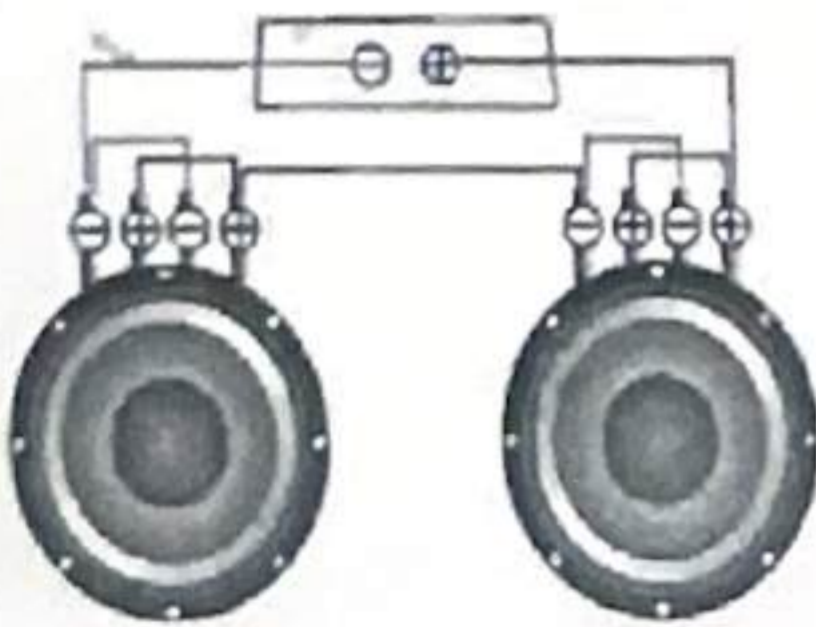
Voice coils	Total impedance
4+4 Ohm	8 Ohm
2+2 Ohm	4 Ohm

One subwoofer, coils in parallel



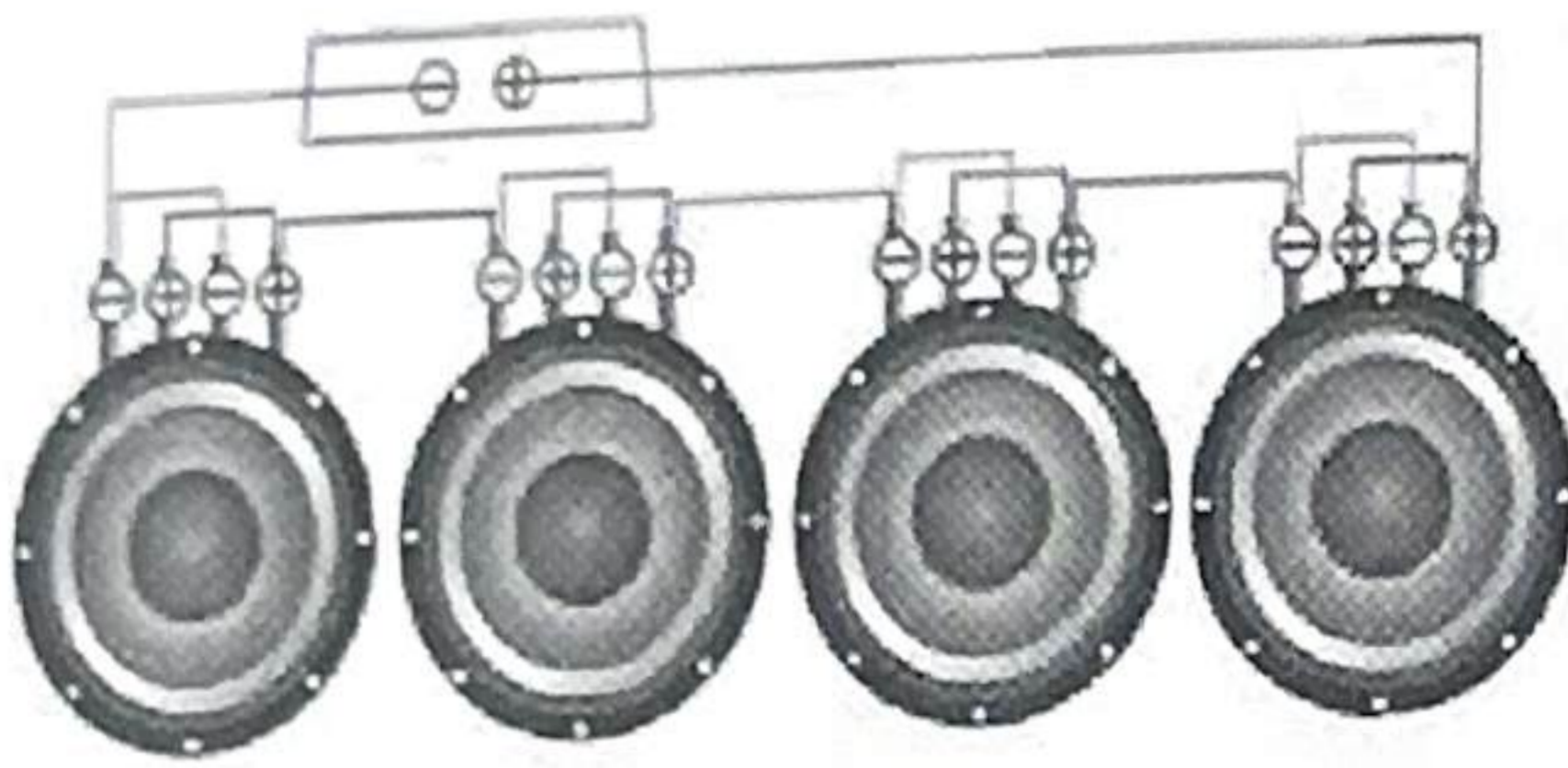
Voice coils	Total impedance
4+4 Ohm	2 Ohm
2+2 Ohm	1 Ohm

Subwoofer in series, coils in parallel



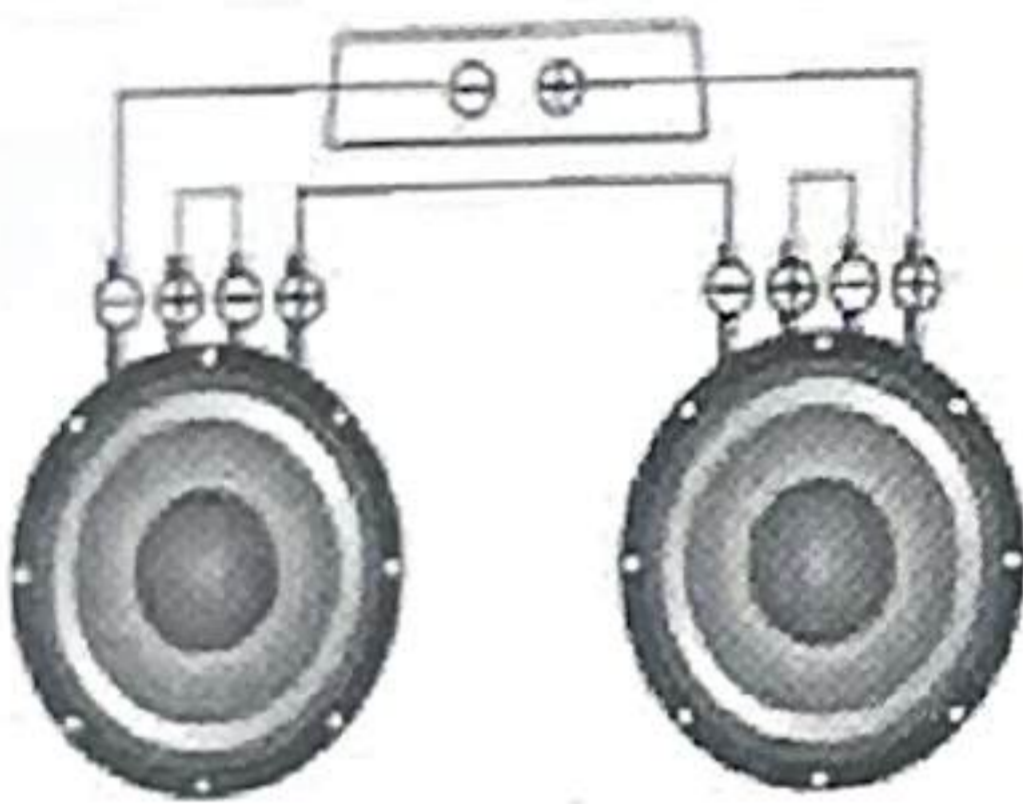
Voice coils	Total impedance
4+4 Ohm	4 Ohm
2+2 Ohm	2 Ohm

Subwoofers in parallel, coils in parallel

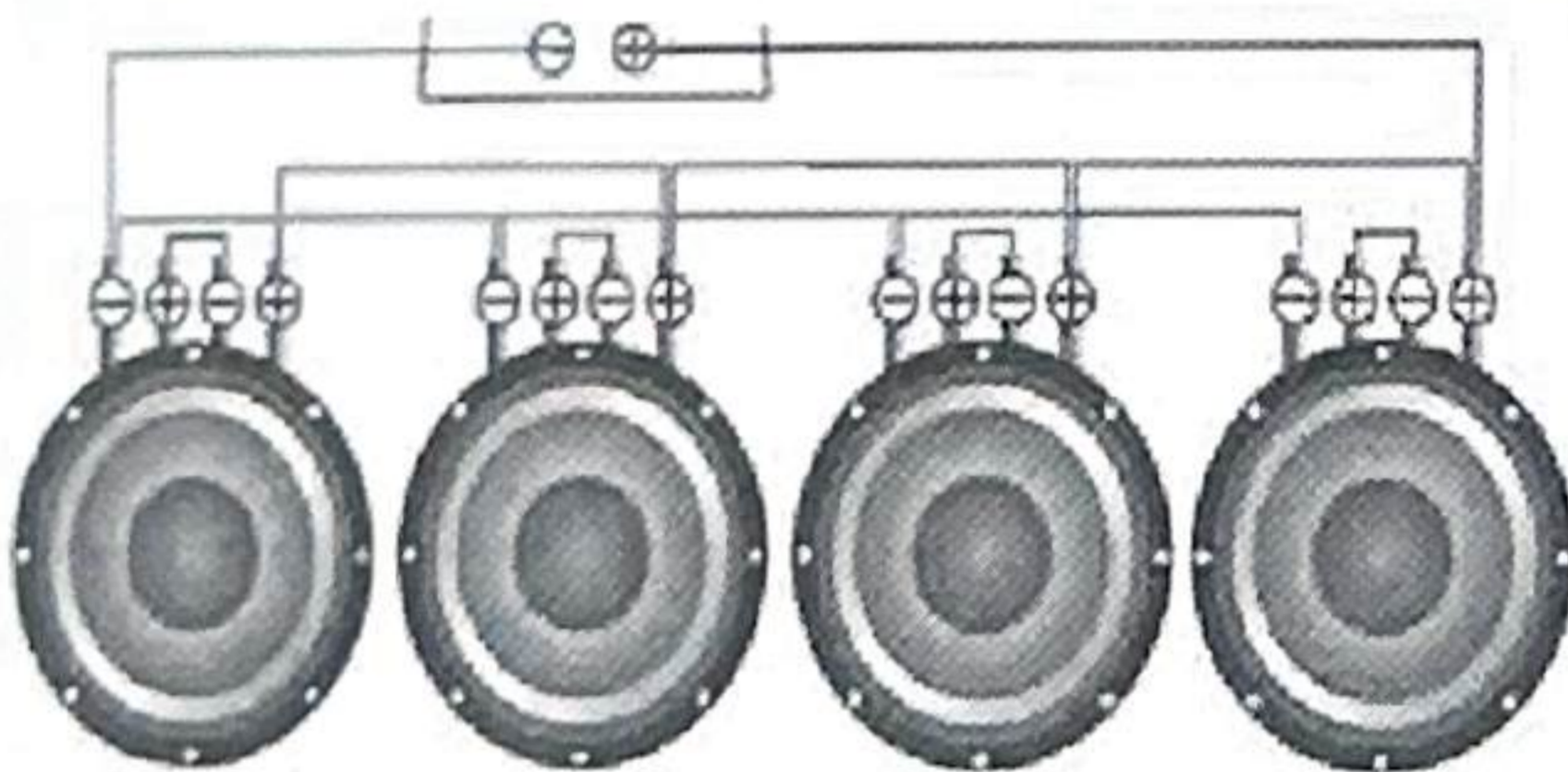


Voice coils	Total impedance
4+4 Ohm	8 Ohm
2+2 Ohm	4 Ohm

Subwoofer in parallel, coils in series



Voice coils	Total impedance
4+4 Ohm	4 Ohm
2+2 Ohm	2 Ohm



Voice coils	Total impedance
4+4 Ohm	2 Ohm
2+2 Ohm	1 Ohm



CAUTION!!!

High sound pressure can damage your health!

Please use common sense when controlling volume.

American Bass is not responsible for shattered windshields, hearing loss, or other consequences of extreme bass. Our subs hit hard — use responsibly.

Made in China



www.AmericanBassAudio.com