



UPAS SERIES

***SLIMLINE ACTIVE
SUBWOOFER***



UPAS821

MANUAL

Introduction

The VPAS821 is the ultimate mobile audio upgrade, offering a compact yet powerful solution to elevate your vehicle's sound system. Designed with innovative features for seamless installation and optimized performance, this under-seat enclosure is perfect for cars, trucks, golf carts, and other vehicle applications.

With two full-range output channels and a dedicated subwoofer channel, the VPAS821 is a true all-in-one audio solution. The integrated outputs allow you to drive additional speakers, providing rich, full-range sound throughout your vehicle. Whether upgrading your factory audio or starting from scratch, the VPAS821 ensures a dynamic and immersive listening experience.

The VPAS821 is engineered for easy OEM integration, featuring 20V line-level inputs, auto turn-on circuits, and an ultra-compact design for hassle-free installation in almost any vehicle. To address challenges with OEM audio signals and enhance overall sound quality, the VPAS821 includes:

- **Dual Bass Controls:** One is for precise level adjustment, and the other is powered by Cerwin Vega's exclusive VEGA BASS, bass enhancement circuit for deeper and richer bass.
- **Advanced Filters:** Standard low-pass and subsonic filters ensure optimal frequency control.
- **Phase Adjustments:** For seamless blending of subwoofer and full-range speakers.

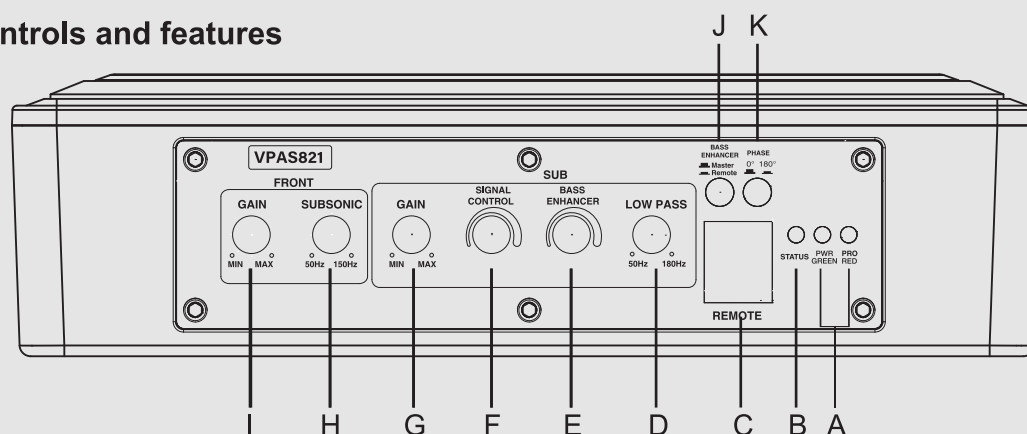
Built around an 8" subwoofer with 450W MAX power the VPAS821 delivers robust bass performance in a space-saving enclosure. Its ability to power additional speakers through the full-range outputs makes it the ideal choice for creating a cohesive, high-quality audio system without the need for multiple components.

Transform your vehicle's sound system with the VPAS821-your all-in-one solution for deep bass, clear highs, and full-range audio excellence.

Features

- 2.1 System: Subwoofer and 2 Channel Outputs
- Super Slim Design
- Adjustable Input Sensitivity
- Inputs: Low-level and 20V High-level
- Sub Sonic Filter: 20Hz (fixed)
- VEGA BASS - Bass Enhancer:
- Trigger signal control, 0-16dB adjustment range
- Low Pass Filter (LPF): Adjustable from 50Hz to 180Hz
- Auto Turn On: On/Off
- LED Indicators: Power, Protect, and Status
- Dual Remote Control Included:
 - for Subwoofer Level and Bass Enhancement
- Protection Circuits:
 - Thermal, Short, and Overload Protection
- Power Output:
 - 870W MAX - 450x1 +210x2
 - 290W RMS - 150x1 + 70x2
- Woofer Size: 8 inches
- Dimensions: (LxWxH)
 - 12.40 x 9.06 x 2.52(315 x 230 x 64 mm)

Panel controls and features



A. POWER STATUS LED

This bi-color LED glows green when power is on and no problems are present. If one of the protection circuits comes on, it will change to red.

B. STATUS LED

This light indicate when the VPAS821 is powered up normally.

C. REMOTE LEVEL CONTROL PORT

If you are going to use the REMOTE BASS control, attach the included remote level control BEFORE setting gain and "pre-set" it to about the 12 o'clock position.

D. LOW PASS FILTER

This control permits you define the frequency range you want the subwoofer amplifier to receive. The subwoofer will reproduce all sound BELOW the frequency you set.

Note: The low pass filter frequency can be higher or lower than the marked Frequency. There is a +/-20% tolerance.

E. BASS ENHANCER

The BASS ENHANCER feature will increase the sound level in the bass frequencies.

F. SIGNAL CONTROL

The Signal Control knob adjusts the input signal level from your car's stereo to the amplifier, preventing distortion and matching the amplifier's sensitivity for clean sound.

G. SUB GAIN CONTROL

After you have installed your system, turn this GAIN control to minimum (counter-clockwise).

Turn the head unit on and adjust the head unit volume to a comfortable listening level.

Slowly turn up the subwoofer input gain control until you hear a small amount of distortion. Then reduce the level until the distortion is completely gone. Level the control at this setting.

H. SUBSONIC FILTER

The Subsonic knob can remove frequencies below the set range (50-150Hz) for a tighter, cleaner bass sound.

I. FRONT GAIN KNOB

The Front GAIN knob adjusts the input signal for the front speakers, preventing distortion and matching their volume with the rest of the system.

J. BASS ENHANCER

The Bass Enhancer switch controls whether the bass boost is from the main signal or the remote control.

K. PHASE SWITCH

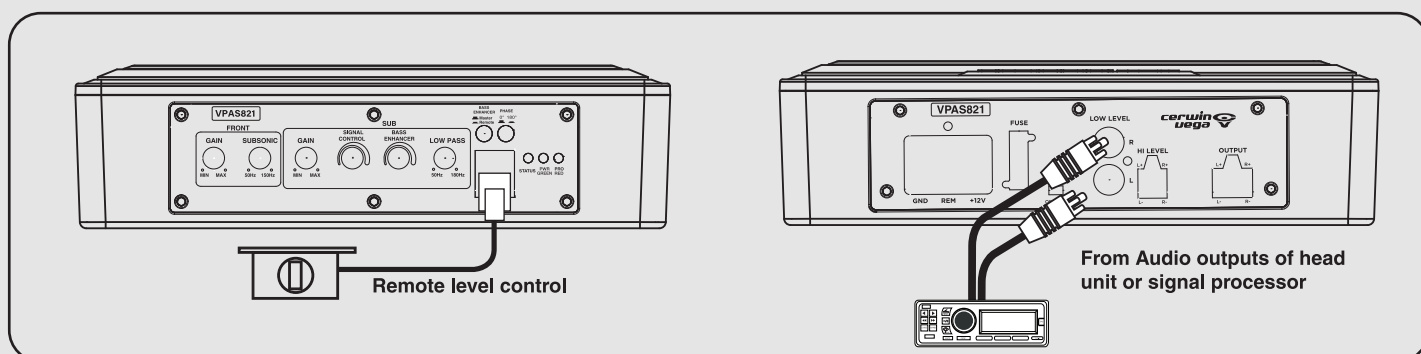
Use this switch to help compensate for time alignment problems in the system. Such problems usually result from having the subwoofer at a different distance from the listener than the other speakers in the system.

Low Level Input Wiring

Low-level (RCA) input wiring is preferred for best audio performance. Most trunk or hatchback installations will require a 15-20 foot RCA cable, while pickup trucks and under-seat installations will require a 6-12 foot RCA cable. Always use a high quality cable.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.1 SPECIAL NOTE: Always route power and signal separately

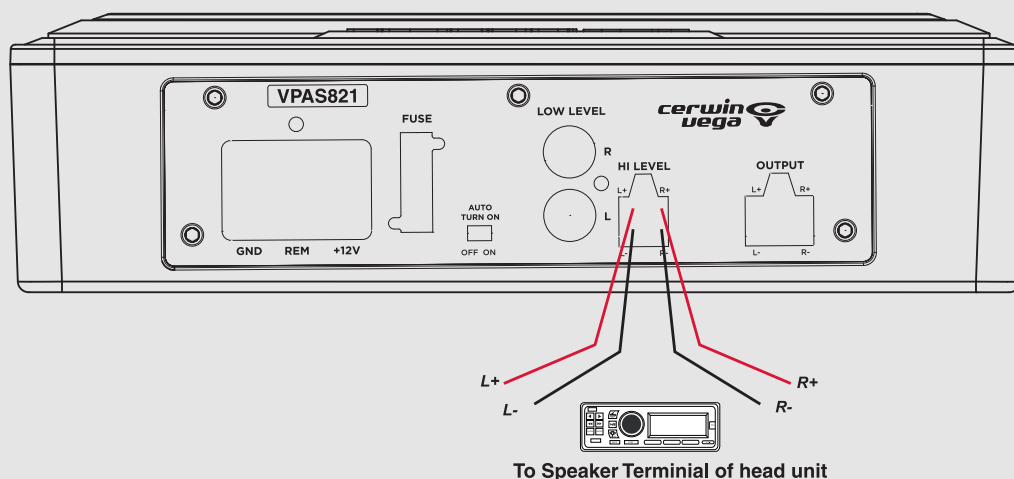


High Level Input Wiring

The high level input(s) should only be used when your headunit lacks RCA outputs. If the RCA outputs are not present, connect the speaker outputs from the head unit to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase problems.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.2



Power Connections

Connect the ground terminal to the closest point on the chassis of the vehicle. Keep this ground wire to less than 18" (45 cm) in length. Use 8 gauge wire (NO CCA WIRE!!!!)

Connect the remote terminal to the remote output of head unit using 16 gauge wire.

Connect an empty fuse holder within 18" (45 cm) of the car battery, and run 8 gauge cable from this fuse holder to the amplifier location. Then connect the fuse holder to the "BATTERY+" (+12V) connection on the subwoofer rear panel. Insert FUSE now.

Fig.3

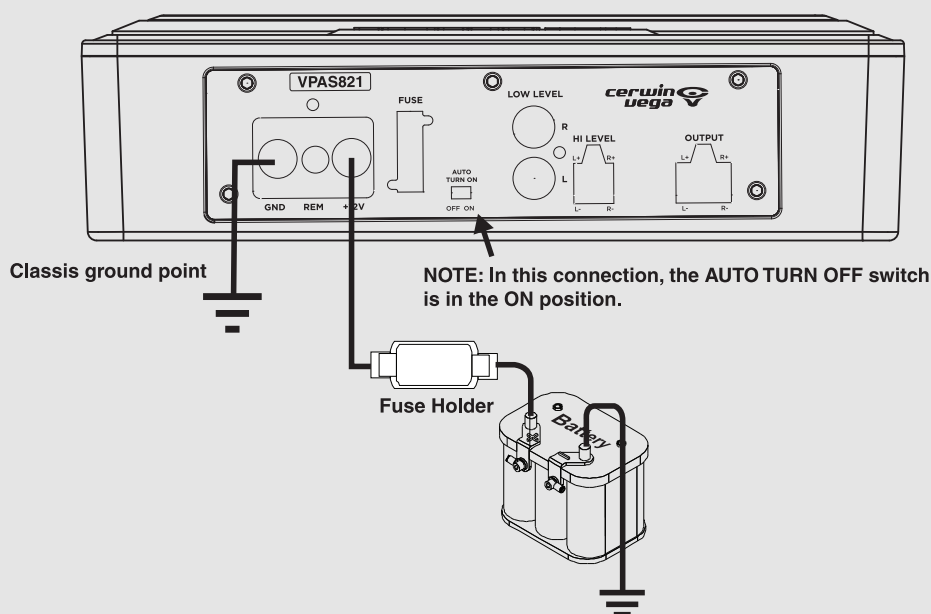
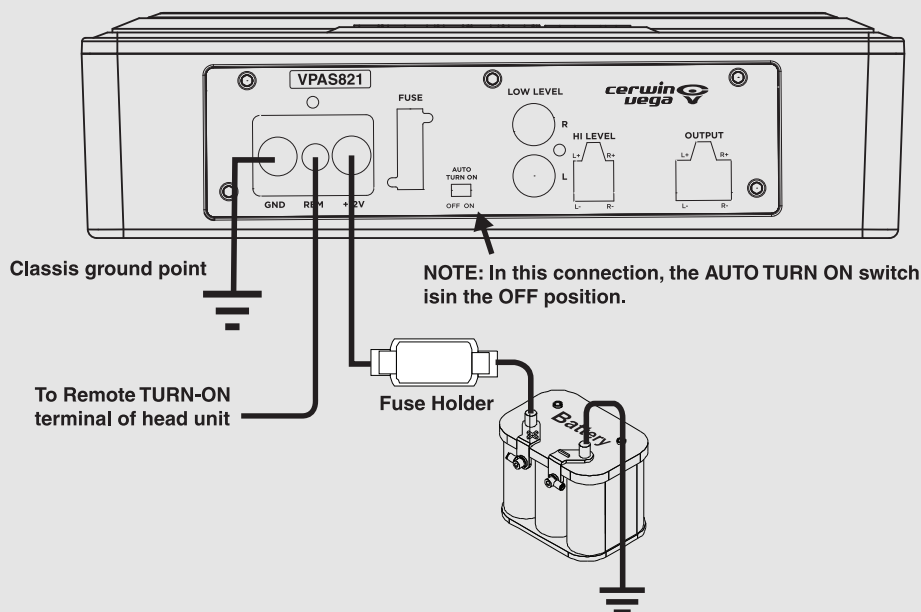


Fig.4



We included mounting brackets to ensure the subwoofer remains securely mounted. Two types of installation are possible.

In the trunk

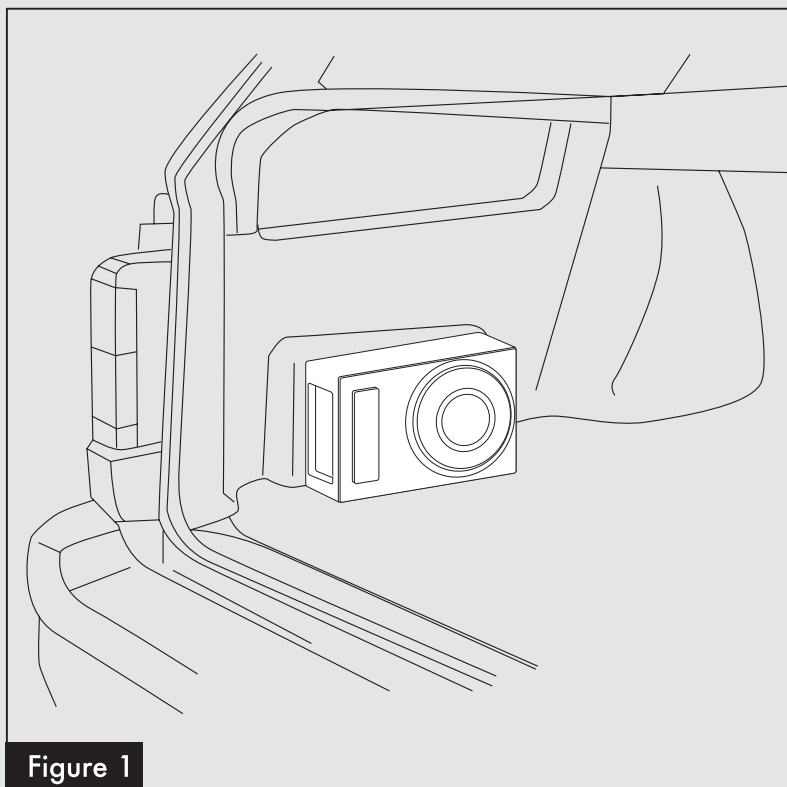


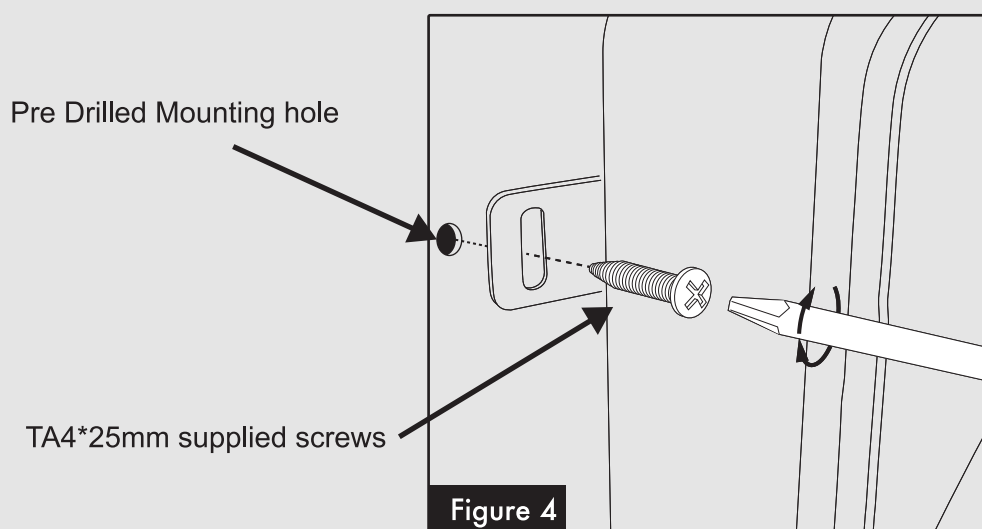
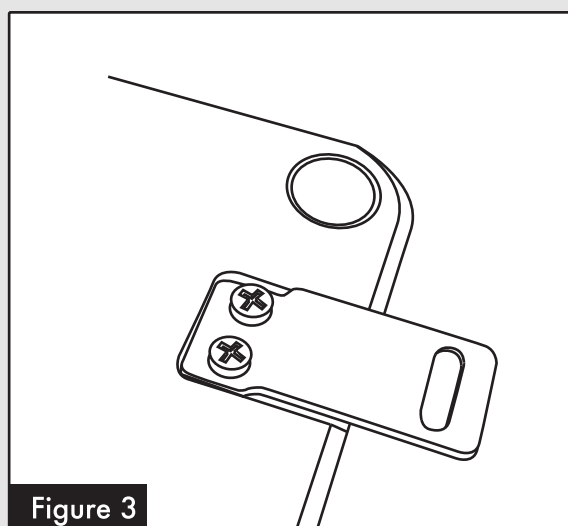
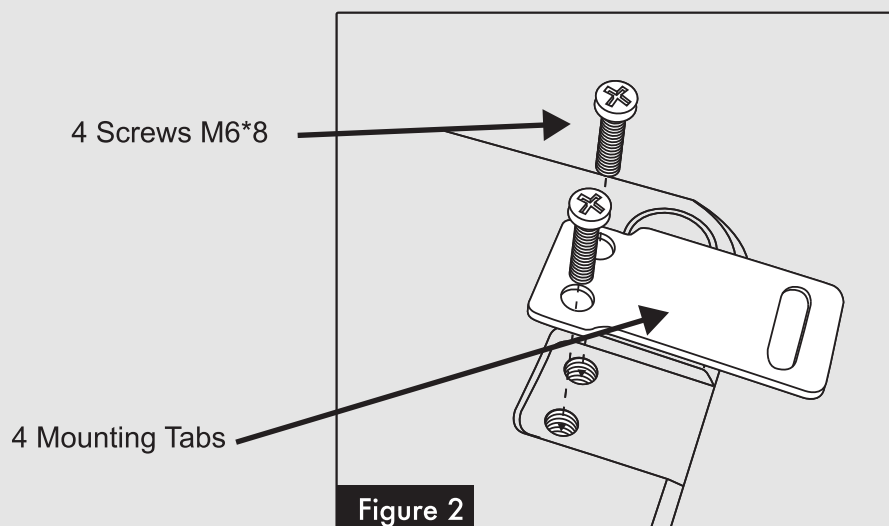
Figure 1

- 1 - Rear seats must be positioned in their normal fixed position.
- 2 - Decide the best location possible that suits your automobile and space available. The best and most secure location for optimum sound quality is behind the rear seats, or the trunk floor (see Figure 1).
- 3 - Ensure the area for subwoofer location is clean and tidy. Any loose objects must be removed, as they could knock and damage the subwoofer.
- 4 - Once the location has been decided, mark the screw hole positions for the fixing brackets. Be cautious of plastic panels!!
- 5 - Drill holes of 2 mm for the 4 fixing brackets, at your defined locations.
- 6 - Fix the clamps to the subwoofer basket with the four machine screws M6*8 (the mounting brackets have a mounting direction system). (Figure 2 & 3)
- 7 - Position the subwoofer so that the holes correspond to the M4*25 supplied screws and fix it. (Figure 4)
- 8 - Please make sure the subwoofer enclosure is tightly fixed.



CAUTION!! Make sure to not drill or screw into the vehicles gas tank!!!





Under a seat

- 1 - The seat must be positioned in its normal fixed position.
- 2 - Decide the best location possible that suits your automobile and space available, checking that the enclosure doesn't hamper the seat mobility. (See Figure 1)
- 3 - Ensure the area for subwoofer location is clean and tidy. Any loose objects must be removed.
- 4 - Once the location has been decided, mark the screw hole positions for the fixing brackets.
- 5 - Drill holes of 2 mm for the 4 fixing brackets, at your defined locations.
- 6 - Fix the clamps to the subwoofer basket with the 4 -machine screws M6*8 (the fixing clamps have a mounting direction system) (Figure 2 & 3)
- 7 - Position the subwoofer so that the holes correspond to the M4*25 supplied screws and fix it. (Figure 4)
- 8 - Please make sure the subwoofer enclosure is tightly fixed



CAUTION!! Make sure to not drill or screw into the vehicles gas tank!!!



Under a seat

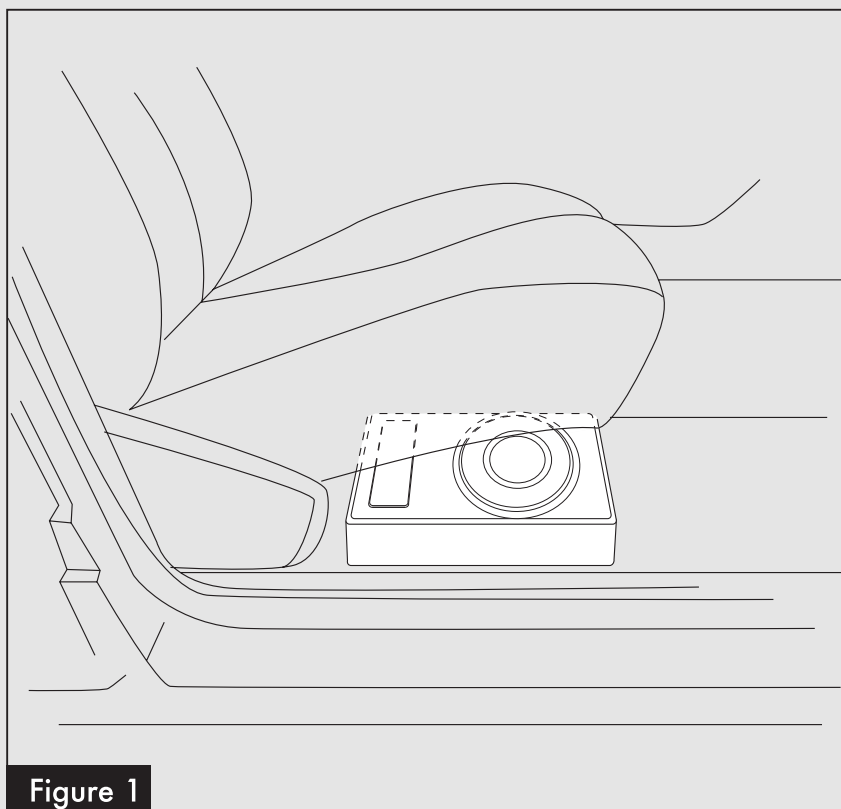
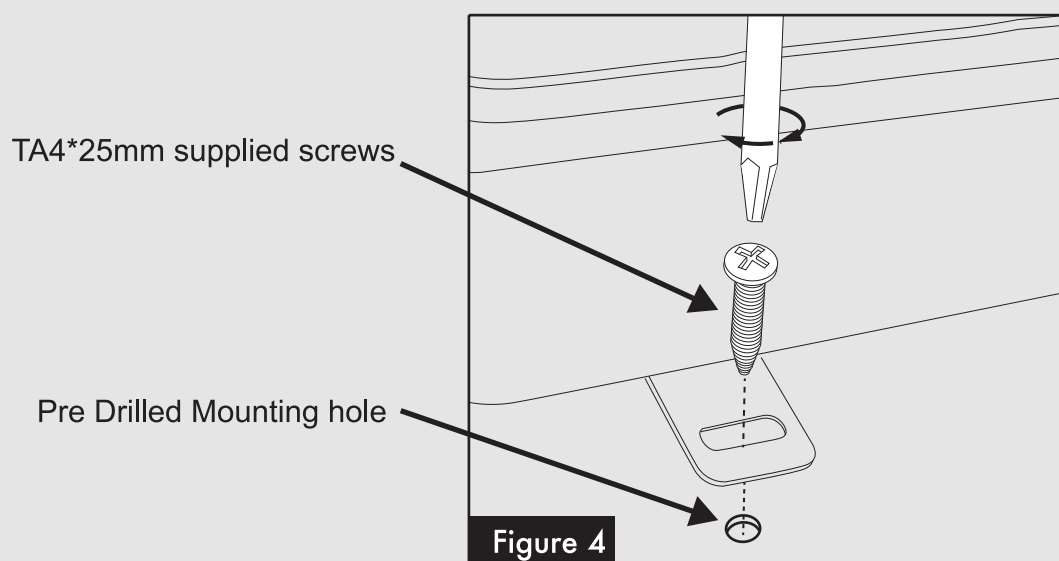
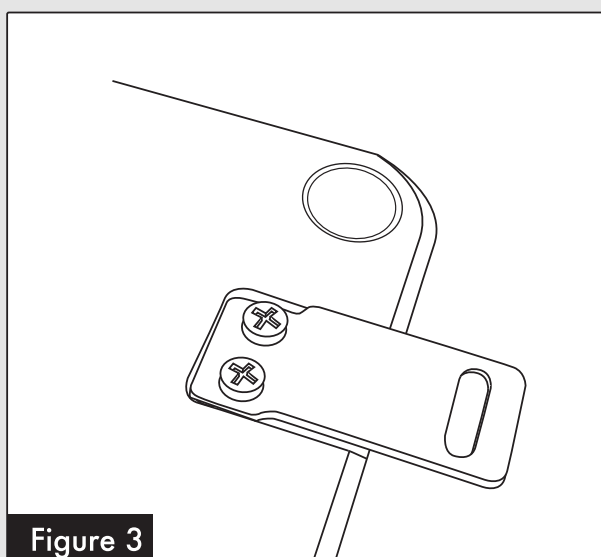
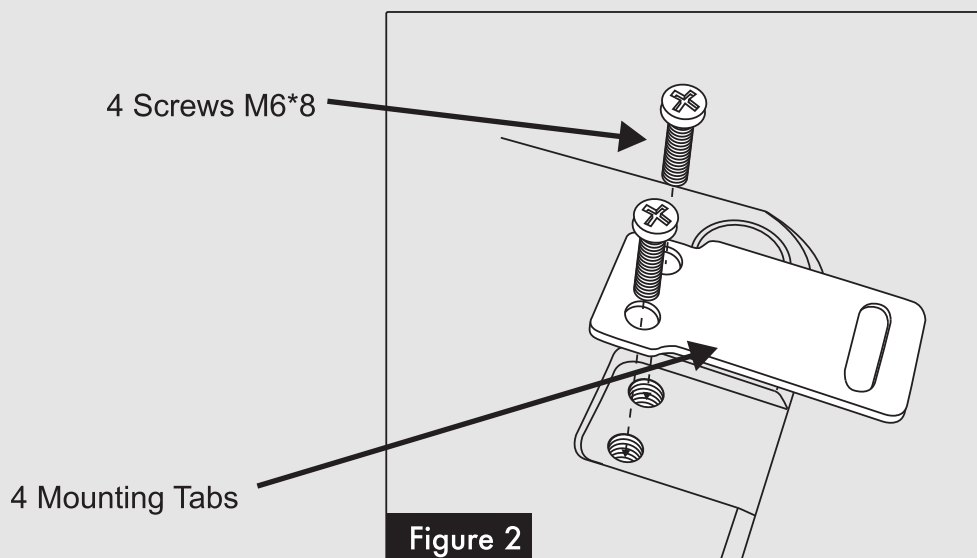


Figure 1



Troubleshooting

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous pages. If problems persist, read the following troubleshooting tips which may help eliminate the problems.

SYMPTOM

POSSIBLE REMEDY

Amplifier will not power up.	Check to make sure you have a good ground connection. Check that the Remote Input (Turn-On) has at least 5VDC. Check that there is battery power on the (+) terminal. Check that there is at least 12v. Check all fuse, replace if necessary. Make sure that the Protection LED is not illuminated. If it is lit, shut off the amplifier briefly, and then repower it.
Protection LED comes on when amplifier is powered up	Check for short circuits on speaker leads. Turn down the volume control on the head unit to prevent overdriving. Remote speaker leads, and reset the amplifier. If the Protection LED still comes on, then the amplifier is faulty and needs servicing.
No output.	Check that all fuses are OK. Check that unit is properly grounded. Check that the Remote Input (Turn-On) has at least 5VDC. Check that the RCA audio cables are plugged into the proper inputs. Check all speaker wiring.
Low output.	Reset the Level Control. Check the Crossover Control settings.
High hiss in the sound.	Disconnect all RCA inputs to the power sub's control panel. If the hiss disappears, then plug in the component driving the amplifier and unplug its inputs. If the hiss disappears at this point, go on until the faulty/noisy component is found. It is best to set the amplifier's input level control as low as possible. The best subjective signal-to-noise ratio is achieved in this manner. Try to set the head unit as high as possible (without distortion) and the amp input level as low as possible.
Squealing noise is present.	Check for improperly grounded RCA interconnects.
Distorted sound.	Check that the Input Level Control is set to match the signal level of the head unit. Always try to set the Input Level as low possible. Check that all crossover frequencies are properly set. Check for short circuits on the speaker leads.
Amplifier gets very hot.	Check that the minimum speaker impedance for the amp model is correct. Check that there is good air circulation around the amp. In some applications, it may be necessary to add an external cooling fan.
Engine noise (static type)	This is usually caused by poor quality RCA cables, which can pick up radiated noise. Use only the best quality cables, and route them away from power cables.
Engine noise (alternator whine)	Check that the RCA grounds are not shorted to the vehicle chassis Check that the head unit is properly grounded.

CERWIN VEGA (a division of CV & DA Holdings, Inc.) warrants this product to be free from defects in material and workmanship for a period of one (1) year from the original date of purchase provided, it was purchased from an authorized Cerwin Vega, retailer within the United States.

THIS WARRANTY IS NOT TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL PURCHASE OF THIS PRODUCT IN ITS ORIGINAL INSTALLATION. The original purchaser must reside in the United States and be able to provide proof of purchase and installation with the sales from the authorized Cerwin Vega retailer and completion of online registration that sold and installed the product.

Should a manufacturing defect occur during above said warranty period, Cerwin Vega will replace or repair the defective product with a product of the same or equivalent value and performance.

Damage or failure caused by any of the following is not covered under this warranty policy: burnt voice coils, negligence, improper use, abuse, product modification, unauthorized repair attempts, accident, acts of God, misrepresentations by Cerwin Vega retailers, and improper/inadequate packaging during return shipping.



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