

RS



amplified installation manual

CONGRATULATIONS

Dear Friend,

Thank you for selecting Bazooka® subwoofer speaker systems for your car stereo system. The Bazooka Reference series represents SAS's continued commitment to efficiency and design. An innovative manufacturing process developed by SAS for the Bazooka provides consumers with state-of-the-art speaker system design. At SAS, we take pride in manufacturing the most revolutionary bass speaker systems ever created, featuring our patented Bass Tubes® enclosure design, and we hope you will take pride in owning them.

Several years ago, we realized that efficiency was the wave of the future in autosound, so we made a commitment to design, manufacture, and deliver the most efficient speaker systems possible.

Today we market our patented speaker systems worldwide and the high quality of the Bazooka brand is well respected by consumers and dealers of all nationalities.

When properly installed, Bazooka subwoofer speaker systems will give you years of clean uninterrupted sound reproduction. Therefore, I urge you to take a few minutes of your time to review this instruction booklet. It was designed to give you a better understanding of our products and to explain how to apply them properly.

Thank you again for choosing Bazooka. Our early commitment to quality has made them the product of choice, and I am sure you will agree that you have made the right one! Enjoy!

Sincerely,



JON C. JORDAN
President
SAS/BAZOOKA



CONTENTS

System Features	pg 3
Specifications	pg 3
Installation	pg 4,5
Mounting The Bazooka	pg 6,7,8
Wiring Diagram	pg 9
Power Wire	pg 10
Ground Wire	pg 10,11
Remote Turn On Options	pg 11,12
Input Signal Connections	pg 12
Phase Alert	pg 13
Amplifier Status LED	pg 13
Adjusting the Crossover	pg 14
Adjusting Level Gain	pg 14

WARRANTY

All SAS® Reference Series products are covered under warranty for two full years from the date of purchase. Terms and conditions of the warranty are as stated on the warranty card included in the box with the product. SAS recommends that you use only authorized BAZOOKA® dealers to install this product. Improper or incorrectly performed installation voids this warranty.

PRACTICE SAFE LISTENING

Continuous exposure to high volumes of sound may cause permanent hearing loss. High powered auto sound systems are capable of producing sounds well over 130 dB. Even short periods of play at high volume levels can impair your ability to hear necessary traffic sounds and may constitute a hazard. Please use common sense and practice SAFE LISTENING !

If you have any questions contact the SAS Technical Support Department at:
Phone - (225) 272 7135 • Fax - (225) 272-9844 In Canada: • (604) 988 2966
Email - tech@bazooka.com • Website - www.bazooka.com
15049 Florida Blvd., Baton Rouge, LA. 70819

SYSTEM FEATURES

- 6 1/2", 8", or 10" SUBWOOFER
- BASS-REFLEX ENCLOSURE *
- HIGH EFFICIENCY OUTPUT
- OPTIMIZED FOR SPACE EFFICIENCY
- DESIGNED FOR CORNER LOADING
- MOISTURE RESISTANT ENCLOSURE
- CONTINUOUSLY VARIABLE 18dB ELECTRONIC CROSSOVER
- NOISE REJECTING BALANCED HIGH LEVEL INPUT
 - INPUTS ARE SUMMED MONO INTERNALLY
 - 150 WATTS MONO INTO 2 OHMS
- SELECTABLE AUTOMATIC TURN ON FEATURE
 - 2 YEAR WARRANTY
- LARGE MAGNET FOR INCREASED POWER HANDLING

*BAZOOKA ® subwoofer speaker systems exclusively incorporate the revolutionary Bass Tubes ® patented subwoofer enclosure design available only from SAS .

SPECIFICATIONS

	RS6A-HP	RS8A-HP	RS10A-HP
Woofers Size	6.5"	8"	10"
Voice Coil Size	1" high power/high temp	1.5" high power/high temp	1.5" high power/high temp
Magnet Size	20 oz.	28 oz.	28 oz.
Frequency response	39-250 hz.	39-250 hz.	39-250 hz.
Efficiency	100 dB*	102 dB*	104 dB*
Dimensions	18.325" x 6.75" x 8"	18.325" x 8.5" x 10"	21.1" x 10.3" x 12.2"
Weight	15 lbs.	20 lbs.	25 lbs.
Power	150 RMS	150 RMS	150 RMS
BASS TUBES ® enclosure - patented Bass Reflex/ducted port alignment			

* The efficiency levels of all Bazooka subwoofer speaker systems are measured in the typical environment: In the low bass region with one watt of power.

INSTALLATION

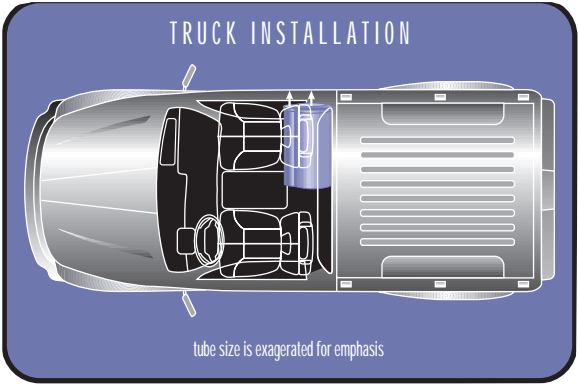


Figure 1

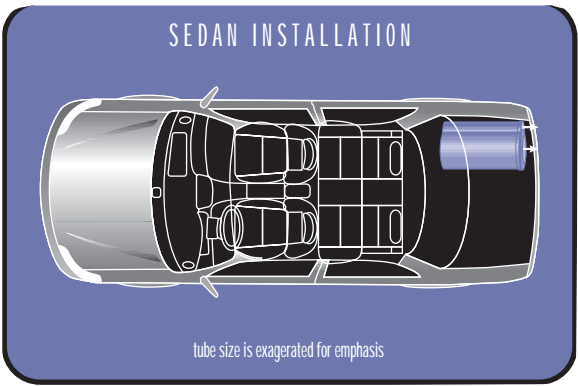


Figure 2

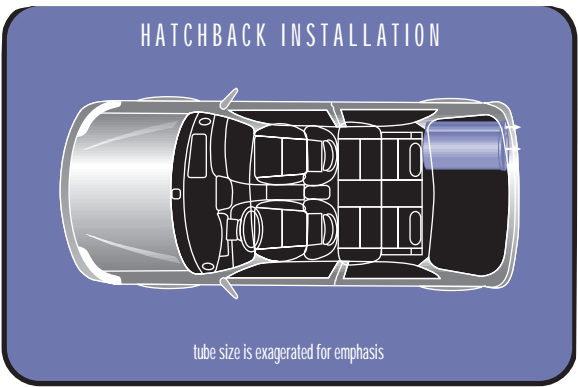


Figure 3

INSTALLATION

Please take time to read through this manual and plan out your installation before you begin!

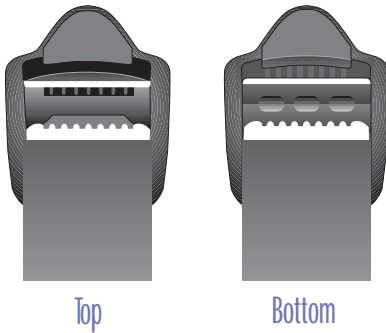
Locate an area in the rear of the vehicle where you would like to place the Bazooka speaker systems. The location you have selected must meet the following requirements in order for the Bazooka to be properly installed in the vehicle:

- 1) The woofer (grill end) should be facing into a corner. (See figures 1, 2 and 3)
- 2) Ideally, there should be 2 to 4 inches between the woofer and the corner it is pointing into.
- 3) The mounting area should be carefully checked to be sure that the mounting screws will not damage the gas tank, electrical wiring, fuel lines, or the spare tire during the mounting of the strap bases.
- 4) The strap mounting bases should be screwed securely to a rigid surface that is part of, or anchored to, the structure of the vehicle.

Be sure that your application meets all of these requirements before you continue the installation procedure!

MOUNTING THE BAZOOKA

Figure 4



1. With the top side of the buckle facing up (see figure 4), lace the strap through the mounting base as illustrated in figure 5.



Figure 5

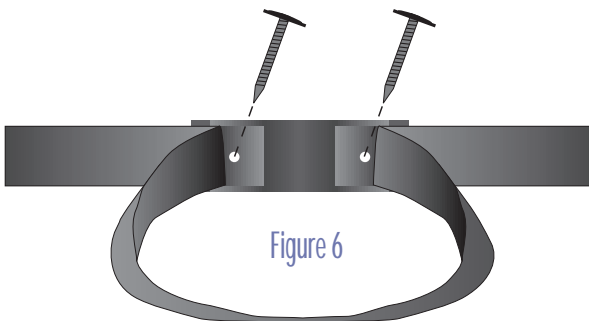


Figure 6

2. After the strap is completely laced through the mounting base, make a loop with the strap, where it runs across the middle of the base as illustrated in figure 6. This loop is necessary to access the two mounting holes in the base.

MOUNTING THE BAZOOKA

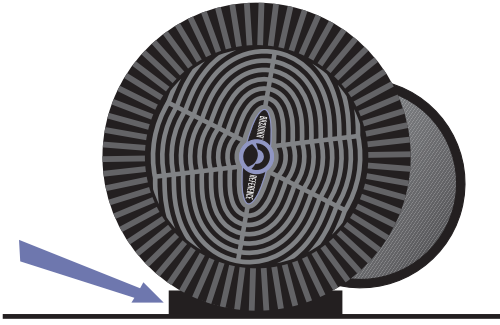


Figure 7

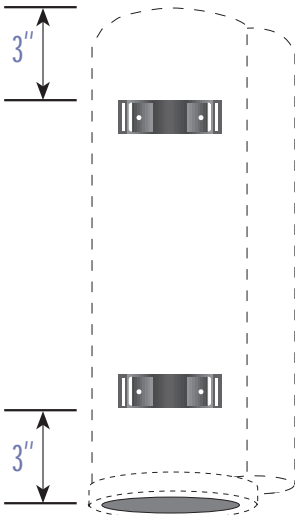


Figure 8

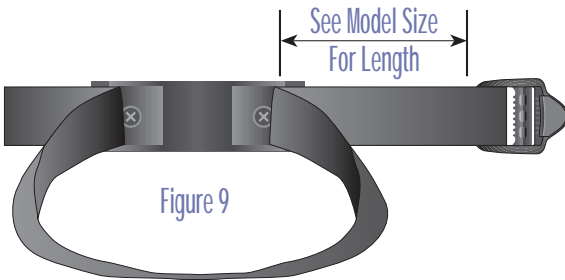
3. Place each mounting base under the Bazooka so that the apex at the bottom of the tube sits inside the mounting base as in figure 7.

4. Move the bases so that they are spaced approximately 3" from each end of the enclosure as illustrated in figure 8.

5. Remove the Bazooka without moving the mounting bases and set it aside.

6. Screw each mounting base securely in place with screws provided as illustrated in figure 6.

MOUNTING THE BAZOOKA



Model	Length
RS6A	17"
RS8A	22"
RS10A	27"



7. Adjust buckle end of strap so that it extends out of the mounting base (see figure 9) the proper length for the model size of Bazooka you are installing (Refer to the chart for proper length)

8. Remove any slack in the strap by feeding it out of the mounting base on the loose end of the strap opposite the buckle.

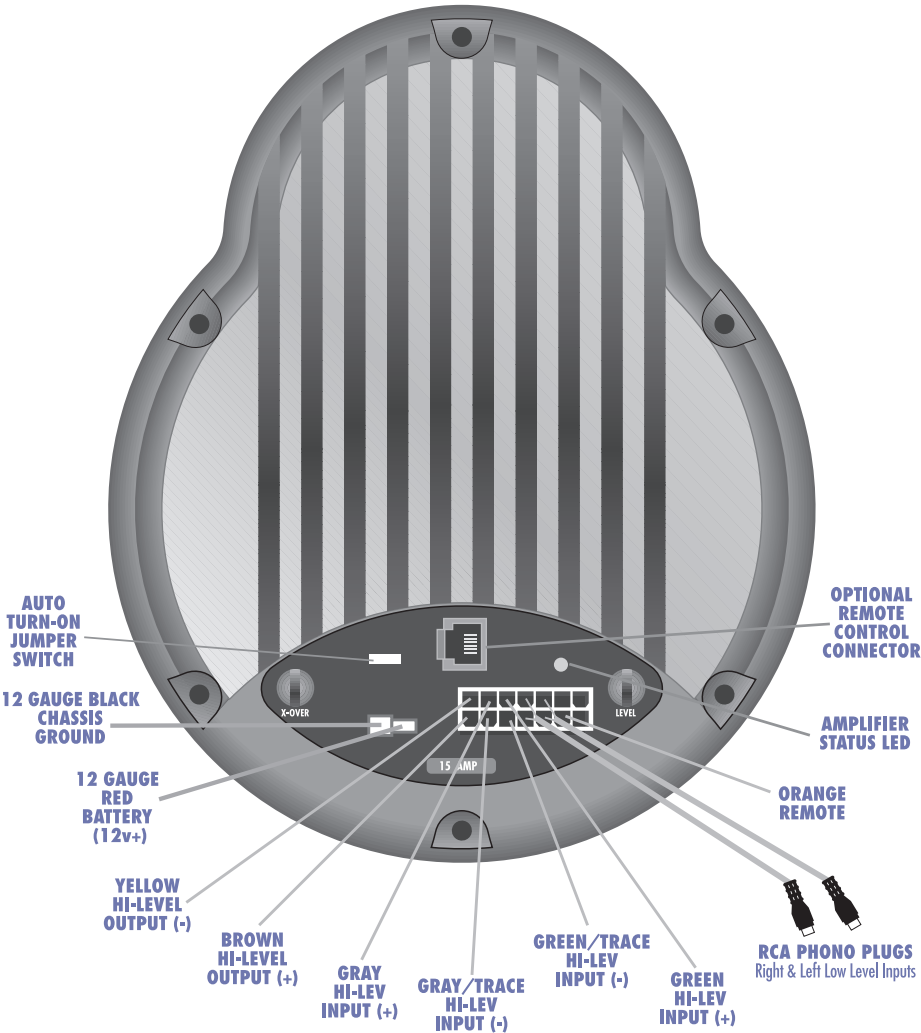
9. Place Bazooka on the mounting bases and fasten the buckles as illustrated in figure 10. The strap should loop through the buckle and be tightened securely by holding the strap in place with one hand and pulling the loose end away from the buckle, but against the cabinet.

Technical Note

Due to the jarring and shifting that can occur in a vehicle, the mounting straps may stretch or loosen. We recommend that you check the straps regularly to assure that your Bazooka is mounted securely in place.

WIRING DIAGRAM

When using high level inputs, take the time after you make all wiring connections to run through the AM I IN PHASE? procedure of this manual to confirm that your inputs are in correct electrical phase and the proper bass response is being produced.



POWER WIRE

The 12 gauge red wire on the 2-pin power plug is the 12 Volt positive power wire. It must be fused and connected directly to the positive terminal of the battery to provide a power source with a low voltage drop and low noise. Do not make the power connection at the fuse block or any point other than the battery. Improper power sources can reduce output and cause distortion.

The fuse holder should be connected to the battery's positive terminal. The fuse is designed to prevent fire or damage to your car, should the battery wire short to ground. Wait to insert the fuse into its holder until all wire connections have been made.

If it is necessary to lengthen the battery wire, add the required length between the amplifier and the fuse holder, not the fuse holder and the battery. Use 12 gauge or larger to extend the battery wire. It is best to use as short a wire as possible.

Be sure you DO NOT run the power wire next to the input cables of the amplifier, this will induce noise.

Avoid running the power wire near the radio's antenna or power leads, or near sensitive equipment or harnesses. The power wire carries substantial currents and could induce noise.

CAUTION

DO NOT substitute the 15 amp fuse included with the Amplified Bazooka with anything other than the same fast blow current rated fuse. Substitution or deletion will void the product's warranty and may cause damage to your car or the amplifier.

GROUND WIRE

The 12 gauge black wire on the 2-pin Molex Mini-fit Jr. connector is the negative ground wire. It must be connected directly to the vehicle chassis near the amplifier. We do not recommend extending the ground wire in any installation, as this can cause unwanted ground loops.

GROUND WIRE CONT.

The ground point in the car should be a piece of chassis metal that is part of or welded to the main body of the vehicle. Painted surfaces should be scraped or sanded clean to expose the bare metal before the ground lug is bolted down. (Cover the bare metal area with paint or grease after you finish mounting the ground wire to prevent rust.)

REMOTE TURN ON OPTIONS

The ORANGE wire on the Amplified Bazookas' 14-pin Molex Mini-fit Jr. connector is the Remote Turn On Wire. You have several options in connecting the Remote Turn On Wire. These options are listed in the order or preference recommended by SAS. Select the option best suited for your application.

Option One:

For the most versatility the Orange Remote Turn On Wire should be connected to the source unit's "Accessory", "Auto-Antenna" or "Remote" lead - any of which will supply 12 Volts positive when the source is turned on. When using this option the Auto/off Jumper Clip must be in the off position (the two right most pins) and the Orange wire will supply turn on voltage to the Amplified Bazooka.

Option Two:

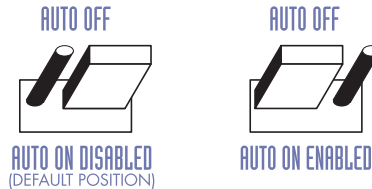
If the source does not have an Auto-Antenna lead (or if the Auto-Antenna goes down during tape operation), you can connect the Amplified Bazookas' Remote Turn On Wire to an accessory or ignition point at the vehicle fuse block. In this configuration, the Amplified Bazooka will be on whenever the ignition is on. This method may allow noise or turn-on-and-off transients to become amplified when the source unit is not in use, and therefore is less desirable than option one. When using this option the Auto/off Jumper Clip must be in the off position (the two right most pins) and the Orange wire will supply turn on voltage to the Amplified Bazooka.

Option Three:

The Amplified Bazooka has a built-in Auto Turn-On Feature. If you choose to use this feature, the Amplified Bazooka will turn on automatically whenever there is music present at the inputs (high level or low level input). Locate the Auto/Off Jumper Clip located on the back of the unit, SAS ships the Amplified Bazooka with this Jumper in the Off Position. To use the Auto Turn-On Option the Jumper must be placed in the Auto Position. The Jumper Clip must be lifted off of the middle and right hand pins and reinserted across the left hand

TURN ON OPTIONS CONT.

and middle pins to enable the Auto Turn-On feature. This can be done easily with a pair of needle nose pliers. With the jumper in the Auto position, the Amplified Bazooka will turn on automatically when it senses any music. The ORANGE wire should not be connected to anything if this feature is being used. Be sure to insulate the end of the ORANGE wire so that it will not short to ground, as this may damage the Amplified Bazooka.



Amplifier Status LED

The white color LED on the Amplified Bazooka will light up GREEN when power, ground and remote are all connected properly. If it lights up RED, the Amplified Bazooka is in protection mode which can indicate a short in the wiring or a problem with the amplifier.

INPUT SIGNAL CONNECTIONS

Should I Use High or Low Level Inputs?

If the source unit has only speaker outputs, use the high-level inputs of the Amplified Bazooka. If the source unit has both high and low level outputs, we recommend using the high level inputs over the low level inputs, due to the configuration of the Amplified Bazooka's balanced input circuit. PLEASE NOTE THAT THE WIRING IN A FACTORY STEREO MAY NOT BE ELECTRICALLY IN PHASE EVEN WHEN YOU HAVE MADE THE PROPER CONNECTIONS. Take the time after you make your wire connections to run through the quick phase check procedure in the AM I IN PHASE? Section of this manual. NEVER USE BOTH high and low-level inputs at the same time!

High-Level Inputs:

If the source unit has both front and rear speaker outputs, use only one set of speaker outputs for the high-level input of the Amplified Bazooka. Connect the GREEN wire from the 14-pin Molex plug of the Amplified Bazooka to the source units left (+) positive speaker output. Connect the GREEN WBLACK stripe wire of the plug to the source units left (-) negative speaker output. Connect the GRAY wire of the plug to the source units right (+) positive speaker output. Connect the GRAY WBLACK stripe wire of the plug to the source units right (-) negative speaker output.

Phase Alert

When one of the Amplified Bazooka's High-level Input channels is out of phase electrically with the other High-level Input channel your Bazooka will sound as if it has little or no output, and any output that is produced may sound distorted. If you suspect that your Bazooka is out of phase, use the AM I IN PHASE procedure to diagnose and correct the Bazookas' output, and proper bass response will be produced.

AM I IN PHASE?

If your inputs are out of phase and you turn the balance control of your radio all the way to one side, right or left, the bass output from the Bazooka will increase. When you bring the balance control back to the center position the bass level will drop. This confirms that one of your input channels is wired out of phase with the other. To correct this situation, simply reverse the connections on one of the two input channels. When the wiring is in correct electrical phase, the level of bass output will be greatest when the balance control of the radio is set to the center position.

LOW-LEVEL INPUT:

If your source unit only has low-level RCA phono jack output, use only the low-level inputs of the Amplified Bazooka.

Connect the low-level RCA phono jack inputs of the Amplified Bazooka to the source with a shielded RCA patch cord. To avoid possible noise problems, be sure to run the patch cord away from all power wires and factory wire harnesses.

When using the low-level inputs DO NOT make any connections to the Green and Gray high-level input wires of the Amplified Bazooka and make sure these wires are insulated to avoid the possibility of a short circuit.

AMPLIFIER STATUS LED

WHITE = OFF

GREEN = NORMAL OPERATION

RED = PROTECTION MODE

ADJUSTING THE CROSSOVER

The built-in crossover on the Amplified Bazooka is a 18 dB per octave electronic low pass filter, it has a 60 Hz to 250 Hz variable crossover point. Select the crossover point that you feel best fits your system design. Set the potentiometer labeled XOVER to the point you selected, 60 Hz being all the way to the left (counterclockwise) and 250 Hz being all the way to the right (clockwise). When you have set the crossover, proceed to the next step.

ADJUSTING LEVEL GAIN CONTROL

Locate the potentiometer labeled LEVEL. This is the level control. Start with the level control turned all the way to the left (counterclockwise). The bass should be off or very low at this point. Turn up your head unit until the sound from the existing speakers starts to clip or distort. This is the point in your system where you will get maximum volume with the least amount of distortion. With the head unit at this point, turn the level gain control up slowly until the bass volume blends well with the existing high frequency speakers. This should be the proper setting for the level gain control. Now that the level is set, you may want to go back to the x-over control and adjust the x-over point by ear to meet the desired sonic quality of your system design.

LISTEN
TO YOUR
EARSTM

If you have any questions contact
the SAS Technical Support Department at:

Phone - (225) 272 7135 • Fax - (225) 272-9844

Email - tech@bazooka.com • Website - www.bazooka.com

In Canada: (604) 988 2966

15049 Florida Blvd., Baton Rouge, LA. 70819



SAS, BAZOOKA, BASS TUBES, and LISTEN TO YOUR EARS are registered trademarks of Southern Audio Services, Inc.
PAT. NO. 4,567,959 • PAT NO. 5,097,513