

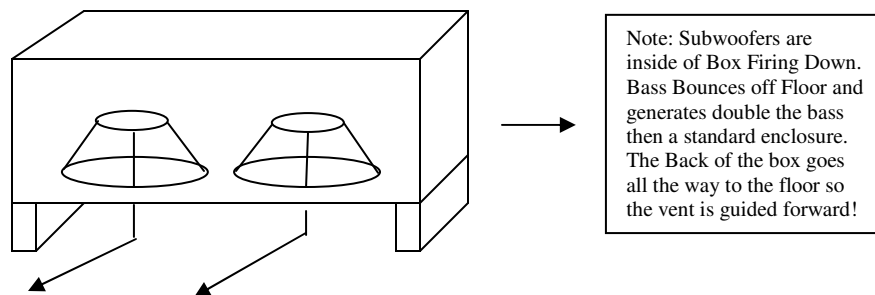
CAR ACOUSTICS

When designing a good sound system in a car, you really have to take in consideration the type of car you are dealing with to get the best sound. The best cars to put car audio systems in are either hatchback type cars, or SUV's. The acoustics in these cars is optimum for getting the best sound. The farther away from the driver you can get the subs, the better they will sound. Also, if you point the subwoofers in the direction of the license plate you will increase your bass by 25% minimum.

The most difficult cars to get sounding good are convertibles. These cars such as Convertible mustangs or Jeeps with a soft top are at a huge disadvantage when it comes to designing a system. You can put the same system in 2 cars, let's say one is a hatchback Honda, and the other is a Convertible Mustang. You can have these cars side by side with the exact same system and the Honda will sound 3 times better then the Mustang. This is how crucial the acoustics of a vehicle affect a system.

The reason this is true, is that the bass has nothing to reflect off of with a convertible. The convertible top allows the bass to escape from the car without even being heard. There are several different ways to help this, but it is never as good as a solid hatchback or SUV.

The first trick to solving this problem is building what is called a horn-loaded enclosure. This is real simple. Just build the enclosure so that the subs are firing down. The box is suspended with a 3" opening across the front. The bass will reflect off of the floor and gain momentum. When designing systems for convertibles, or say an extra cab truck, this type of sealed enclosure design can be made to hit hard if made properly. Look at the drawing below. Also note that the enclosure needs to be built to the specifications that the speaker company has provided for optimum size. This type of box works incredible in Jeep Wranglers, King Cab Trucks, under seats, etc.



Another difficult vehicle to get to sound good is any standard cab truck. Limited space and having the subwoofers right behind you causes the bass to not sound as good as it could if it were

in say a Ford Expedition. Please do some research on your specific vehicle to create the optimum system without wasting a lot of money!! If you do it wrong the first time, it can cost double to fix it!!

UPDATE (Difficult Cars).....Okay, I have to go a little further on this, because we are seeing a lot more people coming into our store not understanding that they are starting out with a very difficult car. And when I mean difficult...I mean hard to get sounding good. I can always get a car to sound good, but at what price are you willing to pay??

Let's start with BMW, Mercedes, Audi, and Jaguar. These cars right here are a nightmare to get good sound in without spending some big money. It is funny to me, because these cars are expensive, but when many customers come into my store and say they want some good bass for \$300 in one of these cars I just laugh. There is no way around spending money to get these cars to sound good. Let me explain....

First off, most of these cars have completely sealed trunks. The trunk is like a tuna can. You put any type of sub in the trunk; you will never hear it, unless you cut some metal out to vent it into the front of the car. Many of these cars have the gas tank right behind the rear seat, which also poses another problem. It makes it 5 times harder to run wires through these cars. This is just the beginning. These cars are not meant to come apart easily. It takes 3 times longer for any installation on these cars.

Also, we are seeing a lot of the "Old School" cars coming in. Buicks, Cutlass, Oldsmobile, Cadillac, etc....All from the 1980's and 90's. Well, these cars are also a nightmare compared to a Honda to get to sound good. The main problem is that you need to understand that the trunks on these cars are huge, and the trunks and back seats are solid, so if you have one of these cars expect to use at least 2 good 12" subs and a Monster Amp just to get the bass through the seats. Also, these cars take 2 to 3 times longer than average cars due to the age, and size.

SUB UPDATE.....Many of the subwoofer companies have come out with super "Slim" subs. This is a dream come true, because the subs are ½ the mounting depth. This opens up a bunch of different options if you are limited in space. We carry them all at Outrageous Audio!