### <u>How to Improve the Sound</u> Quality in Your Car

When driving, a car can be a great place to enjoy music, but m any people still put up with marginal sound quality that they' d never tolerate at home. Today, we will give you some suggest ions on how to improve the sound in your vehicle. Follow these tips, you might don't have to live with the bad sound any mor e.

#### Tips 1 : Add an amplifier.

Maybe you'll say "My factory stereo puts out 200 watts, and th at's plenty of power." But there's huge difference between 50 watts peak power per channel produced by your <u>Android car ster</u> <u>eo</u> and 50 watts RMS from an outboard amplifier. A separate amp lifier will provide more clean power than any car stereo, and that'll make a night-andday difference in sound quality. Your system will sound better , whether you listen to Mahler at a conversational level or Me gadeth turned up to 11. An amplifier is essential to getting g reat sound in your car.



#### Tips 2 : Build a better sub box. Or buy one.

If you're building a sealed subwoofer box, make sure it's seal ed properly. Air leaks can really hurt your sub's performance. If you're using a ported box, make sure you've got the right sub in there. You can destroy a sub that's designed for sealed box use by driving it hard in a ported enclosure. Also, it's important to build a box with the correct interior volume for the sub you've picked out. A mismatch can result in poor perfo rmance or a sub fatality. You can also avoid all of these issu es by buying a premade enclosure that'll work with your subwoo fer.

## Tips 3 : Select a lower level of compression for your music fi les.

Though you can store more music files in your music player if you use greater compression, and they'll sound OK when you're listening through earbuds. You'll lose some high-andlow frequency information when you compress your music, along with some of the details that make your music interesting. And , on a good car audio system, you can really tell that somethi ng's missing. Don't settle for the default setting when creating your files. If you want to use your iPod, smartphone, or MP3 player in yo ur car, try using as little compression as possible. The highe r the bit rate, the better your music will sound through your car's system.

Source: <u>Crutchfield.com</u>

## <u>A guide to Android Car Stereo</u> <u>Wiring Harnesses</u>

By Dave Delamere

# Getting a handle on all those wire s

While they can look like some sort of multicolor pasta dish, w iring harnesses help you connect your new <u>Android car stereo</u> t o your vehicle's wiring. In this article, we'll explain the di fferent types of harnesses and adapters and how they're helpfu l when installing your new car stereo.

#### Car stereo wiring harnesses

Each vehicle has a different wiring story. Sometimes you have a choice of harnesses that will work in your car. Other times, you might need more than one harness to complete the installa tion.



#### The basic wiring harness

These represent the most common type of wiring harnesses. They offer connections for the power and speaker wires. They can a lso include connections for the new stereo's ground and illumi nation wires.

Using the wiring code the adapter manufacturer supplies, these harnesses enable you to match up the wires for each connectio n to the new stereo's wiring harness. Once that's done, you pl ug the other end of the harness into your car's wiring connect or (the one that was plugged into the factory radio).

#### Specialized wiring harnesses

Vehicle audio systems, electrical systems, and convenience fea tures have come a long way. So, the harnesses had to evolve to handle the complex wiring and data information that modern ca rs use.

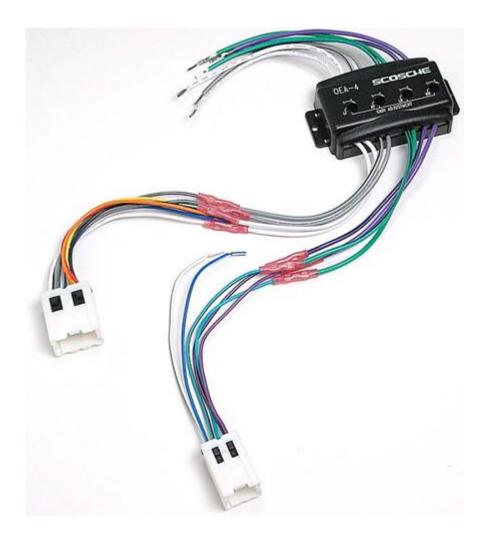
Connections at a distant location

In some vehicles, you need to plug in the harness somewhere ot her than behind the radio. A great example is a common version of the Ford Taurus, where the factory amp and radio tuner are located in the vehicle's trunk. These harnesses often consist of a basic wiring scheme that has wires long enough to reach the necessary destination. In the case of the Taurus, the adap ter includes 20' of speaker wire to reach the trunk.

Hook up your new radio by bypassing the factory amp

A vehicle's stereo system sometimes has a separate amplifier, and when installing a new receiver, you generally need to conn ect the new <u>Bluetooth car stereo</u>'s speaker wires to the factor y amp's output section. These amp bypass harnesses allow you t o use the power from the new car stereo to drive your speakers and not rely on factory power.

These harnesses tend to be more affordable than amplifier inte gration adapters (below), but can involve more work if the amp lifier is in a remote location, like under a seat or in the tr unk.



Keep the factory amp in play

Many wiring harnesses can let you keep your vehicle's factory amplifier when replacing the stock radio. They include connect ions that directly tie the outputs of your new car stereo into the factory amplifier's inputs. So, you'll be using the facto ry power for your speakers, instead of the power from your new radio.

These harnesses can sometimes shorten the installation time, s ince wires often do not have to be run to the factory amplifie r location, but they tend to be more expensive than the bypass harnesses above. You may also see a module connected in these harnesses — they include adjustments that enable you to prope rly integrate your stereo's speaker outputs and the factory am p's inputs to keep your music clear.

Retain those important audible safety alerts

In many vehicles, the audible safety alerts are integrated int o the factory radio. When you replace that radio, these warnin g sounds are lost, and that's dangerous. Thus, these vehicles require a special harness to keep these audible tones working when you install a new stereo. Fortunately, these harnesses al so take care of all of the basic stereo connections.

Hang on to factory conveniences you love

Today's cars include an evergrowing number of features built into the factory radios, whic h complicate wiring connections immensely. They can include th ings like Ford SYNC®, GM OnStar®, Chrysler Uconnect®, and stee ring wheel audio controls for the stereo and your phone.

When you replace the factory radio in these vehicles, a morerobust type of integration adapters is needed in order to have these features work with your new stereo.

Some integration adapters, like the iDatalink Maestro, even en able you to download programming for specific receivers and ve hicles so you can keep as much of the factory functionality as

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#### Packages that connect and secure your radio

There are also vehicles that not only have a complicated wirin g scheme, but they also have a unique dash layout. Integration adapters for these vehicles include both the wiring connectio ns and a custom dash kit to get your new receiver installed.

These generally include just about everything you need to get the receiver connected, mounted in the dash, and retain many o f beneficial factory features, such as electronic climate cont rols.

## Additional adapters for car stereo in stallations

Sometimes, a wiring harness won't take care of everything and you need additional adapters to install a new stereo. They can help with a specific connection or allow you to keep a factor y feature.

Antenna adapters

Many factory AM/FM antenna connectors simply plug into the ant enna port on the rear of a new receiver. However, some vehicle s have an antenna connector with a different shape or are part of an amplified antenna system. In these cases, an antenna ad apter becomes necessary for your radio installation so you can keep your AM/FM stations playing.

Steering wheel audio control adapters

Modern vehicles often include steering wheel controls to let y ou safely operate your factory audio system without taking you r hands off the wheel. These functions include volume controls , track forward/back, and handsfree calling controls. In most cases, those controls won't wor k after replacing the factory radio. Thankfully, steering whee l control adapters help integrate these controls with many new stereos, so you can keep using these handy controls with your new stereo. Besides, there are many aftermarket products like <u>Pumpkin car stereo</u> support steering wheel control function.



#### Speaker wiring harnesses

While they don't directly help with car stereo installations, the speaker wiring harnesses we offer let you use the factory speaker wires for your new speakers, just like car stereo harn esses. Their plugs match the factory speaker wiring plugs in t he vehicle, and the other ends slide over the new speakers' te rminals. That way, you don't have to run new wire from the rad io to all the speaker locations in your vehicle or cut factory wires.

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## <u>How Bluetooth Car Stereos</u> <u>Work</u>



by Jessika Toothman

Bluetooth car stereos are commonly integrated with Bluetoothenabled cell phones, and when the two devices are within range of each other, they can communicate in a number of interestin g ways. Depending on the particular models in use, it may be p ossible to make and receive calls without even pulling out you r phone or pushing a single button. You can even hear the call s through the vehicle's speakers. Other models may require a f ew

pushes, but usually with more ease than plodding through cell phone menus. You may also be able to view other information su ch as the phonebook, incoming calls and call status on the ste reo panel. When the phone rings, the speakers will automatical ly turn down the volume on any music or movies that are playin g while you chat on the phone and resume when the call is over Some <u>Bluetooth car stereos</u> can store your phone's entire addre ss book and other contact information; others have builtin phones which copy all the information off your phone's SIM card and take over the functions for calling. Your cell phone is disconnected from the piconet, not only saving its battery power but also providing a stronger connection.

These innovations come almost as much out of necessity as conv enience — at least for people who can't stand being in the car without making a quick phone call. Many places now enforce la ws limiting the use of cell phones while driving, and Bluetoot h car stereos are one way to bridge the middle ground.

Besides augmenting your ability to connect with the outside wo rld through phone calls, Bluetooth car stereos can also enhanc e the environment inside a vehicle. Transmitters can be used t o stream music from iPods, MP3 players and satellite radio str aight into the stereo without creating a mess of tangled cords Some can display video car stereos on fullcolor LCD displays, although this usually isn't an option when the car is moving. If you have some passengers in the back wh o could use a movie to settle down, lots of Bluetoothenabled Android car stereos also come with the hookups needed to turn your vehicle into a mobile entertainment center. Conne ctions for other devices like GPS navigators and USB flash dri ves are among other common fixtures.

And with each passing year, the technology grows and evolves. Comparing Bluetooth-enabled car stereos to cassetteenabled car stereos already seems like a throwback to the Midd le Ages, so who knows what the future has in store.

source:<u>http://electronics.howstuffworks.com/gadgets/automotive</u>
/bluetooth-car-stereo.htm