BAVSOUND

Stage One Speaker Upgrade Installation Instructions for BMW X3 '04-'10 (E83)

Want an easier install? Watch our videos first!

This is a supplement for the installation videos that you will find on our website (<u>www.bavsound.com</u>). Head to "Help > Installation Info."

There are details we go over in the installation videos that cannot possibly be covered as effectively through the written word. This guide is meant to help you in the garage. We still suggest taking your computer/tablet/phone to the car with you and streaming the videos to make sure everything goes off without a hitch. Now, let's get started!

What you'll need to complete the installation:

- BAVSOUND Tool Kit (or some variety thereof the video highlights the tools needed for this particular installation) <u>http://www.bavsound.com/product/414/361/</u> BAVSOUND-Interior-Disassembly-Tool-Kit/
- Optional: **Heat gun or hair dryer** (to dry your hair only kidding to heat up sound deadening for better pliability).
- Tunes in the garage (your choice)

Before you Begin

- Please review and familiarize yourself completely with these instructions before starting work on your vehicle!
- Install all your speakers before you audition the Stage One. Installing one speaker and then listening to the system to "see if it sounds better" is like putting one high performance shock on your car and taking it for a test drive. Feel free to test to make sure the connections were properly made after installing each speaker, but beyond that, keep the process moving along and audition it once all speakers have been installed.
- Ensure that your bass and treble settings are set to their default middle positions before installing your new speaker upgrade. Once you've installed your Stage One, you can reset the bass and treble settings to taste. Keep in mind that we generally recommend keeping them both very close to center as large adjustments introduce distortion into the audio signal and will lower performance of your system.
- **Perform the installation one door at a time.** Since there are many small parts that you'll remove when completing the project, limiting the work you're doing to one door will prevent you from confusing which parts go with what door.
- Installation is essentially the reverse of the removal process outlined below.
- Variations occasionally occur, so if anything seems out of line with what is contained in the pages that follow, don't hesitate to contact us.

Ready? Let's get started!

Part 1: Front Doors

1. Believe it or not, the front doors are very simple to remove. We like to start by removing the bolts behind both the airbag plug and the round plug just beneath the armrest closest to the rear of the door. Using your plastic panel removal tool, pop these out and remove the Torx T25 bolts.



2. Next, we'll remove the woodgrain (or aluminum, depending on your interior trim) panel that covers the door handle. There are two more Torx T25 bolts behind this panel, both of which will need to be removed.

Using the plastic panel removal tool, carefully pry out on the bottom edge of the panel along the edge of the seam. Once free, use your hand to continue prying the cover off along the edges of the seam until the panel is removed.



3. With the cover and bolts removed, we can now remove the panel itself. Using your plastic panel removal tool, carefully pry the door panel starting along the edge at the upper left of the panel, shown here.

Once the top edge pops loose, use your hands to work around the outer perimeter of the panel, freeing each clip as you pull outward.



6. The picture on the right shows you the blue "clips" that you'll be removing. Once that top left corner is removed, begin working your way around the panel until it is completely free. Take a firm grip while pulling in towards the car. The top edge is going to require a small amount of finesse, which you'll see as you get there. Don't force anything. It will come off, we promise.



7. With the panel now free, the first thing we'll do is unplug the speakers, window controls and lighting. Simply pull outward away from the speaker/switch, and the connectors will free themselves. Now, we need to pop out the door latch mechanism. It's easy, don't worry! Just place your fingers behind the switch as shown, and pull away from the panel:



8. With the panel free, take it to your workspace and prepare for the midrange installation. The midrange is attached using three 8mm nuts. Remove these, and unplug the tweeter connector from the midrange.



9. As you can see, we'll need to carefully pry the factory tweeter out of it's housing. Using your right-angle pick tool, carefully pry the tweeter out by prying the three attachment points outward and lifting upward with your pick tool.

IMPORTANT! Before installing your new BAVSOUND tweeter, you **MUST** plug the included capacitor harness inline with the front tweeter or your tweeter **will NOT** function correctly.

- 9. With the midranges installed, now we can install the front tweeters. You'll be amazed at just how simple this process is to handle. Just snap your new Bavsound tweeters directly into the factory location, making sure to install the included capacitor harness inline between the midrange and the tweeter.
- 10. With the tweeter snapped in and plugged into the midrange with the capacitor harness inline, you're now ready to reinstall the door panel.

Don't forget to plug ALL of your connections back into place, as well as your door handle.

We recommend starting the attachment process on the top edge of the door panel, and slowly working your around by ensuring the clips are aligned with the holes in the door before firmly pressing inward, securing the panel for good.

Part 2: Rear Doors

The removal process for the rear doors is the same as the front doors. Therefore, please refer back for a refresher course, although we bet you can do it from memory now. The tweeters and midranges are installed in an identical manner to the front doors.

HUZZAH!

You've now completed your BAVSOUND Stage One Speaker Upgrade! Head up front, put on your favorite album, and go for a drive.

And most importantly, enjoy your new BAVSOUND system!

Love your new Stage One? Let us know!

Tweet us <u>@bavsound</u> with hashtag #StageOne or #bavsound and tell us what you think!

Troubleshooting

If you're experiencing an issue with your new speakers, please carefully read through this guide, as it covers almost any issue that you are likely to encounter. (If the guide doesn't resolve these issues for you, please feel free to contact us - <u>www.bavsound.com</u>).

ISSUE #1: No Sound from Speaker

One of three things is most likely happening, and they are listed in order of most common occurrence along with how to correct them:

Possible Cause 1: The wiring on the plug-n-play connector is misaligned.

Step 1. Check for alignment of wires from their factory plug through the BAVSOUND connector. Do they line up (see below)?

Step 2a. If the connections line up, go ahead and plug the factory speaker back in to confirm operation. If the factory speaker works, and the wires in the plug are aligned, the speaker is defective. We need to get you a new speaker!

Step 2b. If the connections don't line up, you'll need to move them so polarity is correct and the positions are correct. On our wires, the Red Stripe is positive, while the solid black is negative, while on the BMW side of the plug that following holds true:

- Black Stripes, Red Stripes, White Stripes, Purple Stripes are Positive.
- Solid wires are negative, as are wires with Brown Stripes or Grey Stripes.

Possible Cause 2: The speaker connections are being shorted out.

Check to make sure that no speaker terminal is touching metal. This can cause the speaker to not function, as it is effectively grounded (shorted) out (most common in midrange speakers).

If you find that this was the case, place electrical tape over the terminals to prevent future mishaps. If the entire system has no sound after the installation of

new speakers, we almost know for sure that there is a speaker whose terminals are grounded out. Let's check by disconnecting each speaker until the music comes back on and we've isolated the problem speaker.

Possible Cause 3: The amplifier may be broken.

If there was a speaker or location in your system which didn't play before installing the Stage One, this is probably the issue.

If this was the case, and you were trying to fix the problem by purchasing new speakers, we may need to look at the factory amplifier, as it is most likely the culprit.

Is the entire side (left front, right rear, right front, left rear) not working, or is it a particular speaker that was not working? Most likely it was a single speaker.

If an entire side is not working, make sure, especially on the tweeters that you just installed, that neither the positive or negative terminals are touching metal. This can contribute to an entire side (channel) not working properly.

ISSUE #2: Distorted Sound coming from new Speaker

- 1. Where are the bass/treble settings on the radio/EQ? Flatten out the settings to ensure no pre-amp distortion is the cause of the problem. If you're using the radio to test the speakers, go ahead and use a CD or directly connected iPod instead.
- 2. Are speaker terminals touching ground (metal)? Where is the distortion coming from? A single speaker, an entire side (channel), or the entire system? Its best at this point to go back and disconnect each speaker until the distortion goes away. The most likely culprits are the front tweeters.
- 3. Was the factory speaker distorted as well? If a single speaker was distorting, the most likely culprit is the amplifier. We may need to explore replacing/ repairing your factory amplifier.

ISSUE #3: Lack of Bass Response

A common occurrence when a mid bass speaker is wired "out of phase". This means that the positive (+) and negative (-) are backwards on the plug and play connections.

Here we'll want to check alignment of the connectors as they come together between the speaker and the factory plugs. The lack of bass response generally is due to one speaker being out of phase and the other speaker(s) being in phase.

The easy fix is checking these connections to make sure that positives go to positive and negatives go to negatives. Basically, double check your wiring on each speaker. If one speaker is out of phase, the bass response of the entire vehicle can be compromised.

ISSUE #4: Too Much Treble, Harshness, or Brightness

Where are the bass/treble settings on the radio/EQ? Go ahead and flatten out the settings to ensure no pre-amp distortion is the cause of the problem. If you're using the radio to test the speakers, try using a CD or directly connected iPhone or iPod instead.

ISSUE #5: Missing Product(s)

If you feel that a product or accessory is missing, let's check a few things before we send out replacements. It'll save everyone a lot of time!

- 1. Please check to make sure that nothing has gone unnoticed in the packaging. If you're calling from your office and don't have access to the package, please bring the package to the office the next day so that we can go over with you exactly what was supposed to be in the packages that we shipped out to you. Sometimes our shipping department uses filler boxes in packages to ensure that your products aren't damaged in shipping, and often times those boxes are mistaken for missing products.
- 2. **If indeed a product is missing, firstly please accept our apologies.** We try our best to ensure that all orders are filled as they should be, but we're only human. Please contact us (<u>www.bavsound.com</u>) and we'll get it resolved for you shortly!