



GROM-DSP



Thank you for your purchase of the GROM-DSP adapter. Certain BMWs were equipped with what is known as Digital Sound Processing (DSP). DSP is a RG174 coaxial input instead of wires from the BMW CD Changer into the factory amplifier. BMW sometimes refers to this as "premium sound".

Vehicles with DSP as an option:

1997-2003 5-series
2004-2009 X3
2000-2006 X5
2003-2009 Z4

Vehicles with DSP as standard equipment:

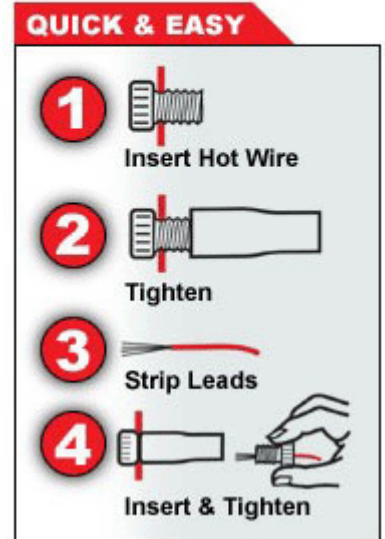
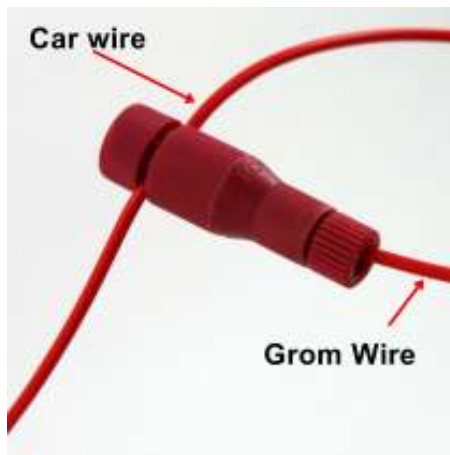
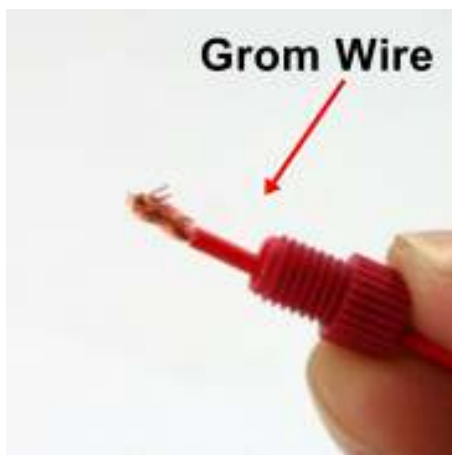
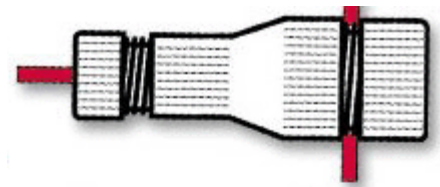
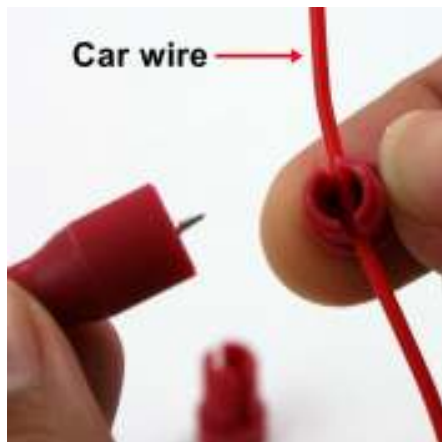
09/1998-2001 7-series
2000-2003 M5
2000-2003 Z8

Vehicles manufactured after MY2002 will have to inspect their connections to determine what type of DSP is present. If the vehicle was originally equipped with a CD Changer, this is simple as you will be able to check what connections are connected to your changer.

If the vehicle was not equipped with a changer or the vehicle was purchased used (possibly the changer was removed upon selling of vehicle) you will need to locate the factory amplifier and inspect to see if a coaxial wire is present.

If you should need additional assistance, please take pictures of the amplifier connections and of the original CD-Changer connections to visually confirm whether or not you have DSP and send them to us at info@gromaudio.com

Please follow the following installation steps. Please use a digital multi meter to test vehicle wires.



1. Connect **RED** wire to a 12-14 + Volt switched power wire. Should turn on and off with the key (ignition or accessory). Red POSI-TAP connector has been included for your convenience to make a connection to power wire. For further info on how to use posi-tap: <http://gromaudio.com/docs/posi-tap.pdf>

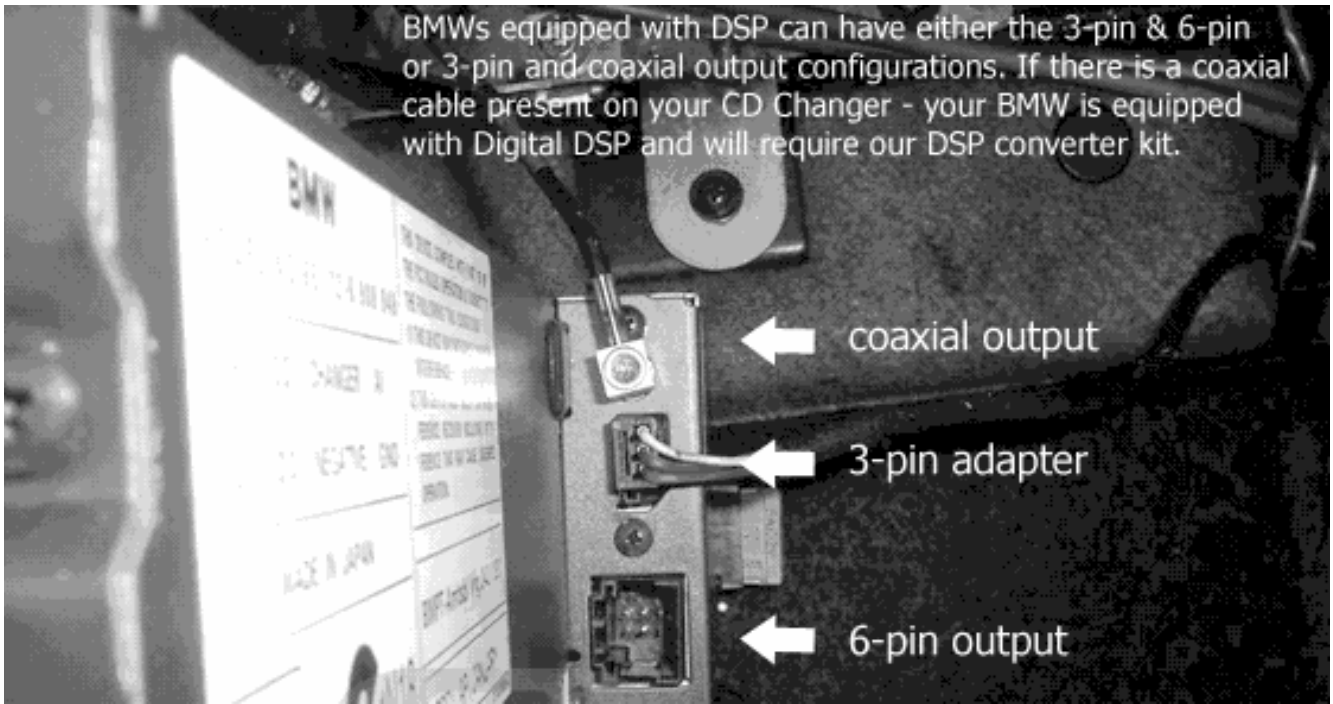
2. Connect **BLACK** to Ground (Earth) wire. Usually a larger **BROWN** wire located on main amplifier harness or to vehicle chassis.

3. Remove factory coaxial DSP cable connected to the cd changer. Connect the coaxial cable to the GROM-DSP connector. You just need to make sure the coaxial cable is connected from the GROM-DSP to the BMW amplifier. Please be sure the coaxial cable is fully inserted.

4. Connect the male 3.5mm audio connector of the provided cable (3.5 mm male – 6 Pin connector) to the female 3.5 mm audio jack of the GROM-DSP. Connect the 6 pin connector to the BMW harness' 6 pin connector.

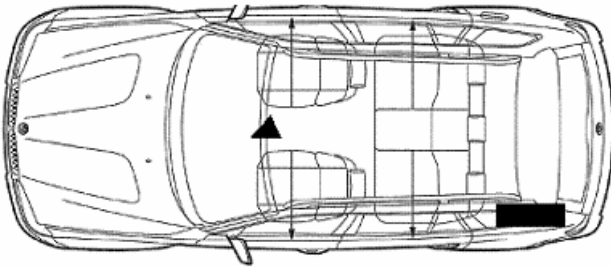
5. Connect the BMW 3 Pin connector to the vehicle 3 pin CD-changer cable. Note for BMW trunk installations: Some BMW vehicles are factory wired for the cellular phone system. Except for wire location, the factory cellular phone connector looks identical to the factory 3-pin connector used for the CD changer. The **CORRECT** 3-pin connector for the CD-Changer has a **BROWN** wire (ground) in the #1 pin position. Please make certain you use this connector. The **INCORRECT** factory cellular phone connector has a **BROWN** wire in the center position – **DO NOT USE THIS CONNECTOR.**

BMW's equipped with DSP can have either the 3-pin & 6-pin or 3-pin and coaxial output configurations. If there is a coaxial cable present on your CD Changer - your BMW is equipped with Digital DSP and will require our DSP converter kit.

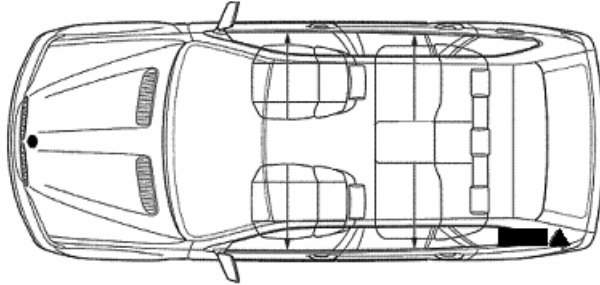


DSP Locations

BMW X3

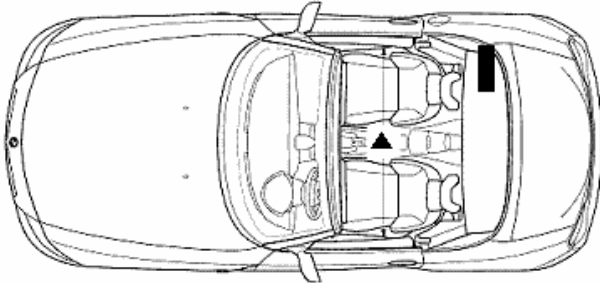


BMW 5 Series and X5



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BMW Z4



▲ 3 Pin Connector

■ DSP Amplifier

**CONNECTION
DIAGRAM**

OEM (Factory)
CD-Changer
Harness -
Please be sure
the 3 Pin
connector has
the RED wire in
the middle pin.

