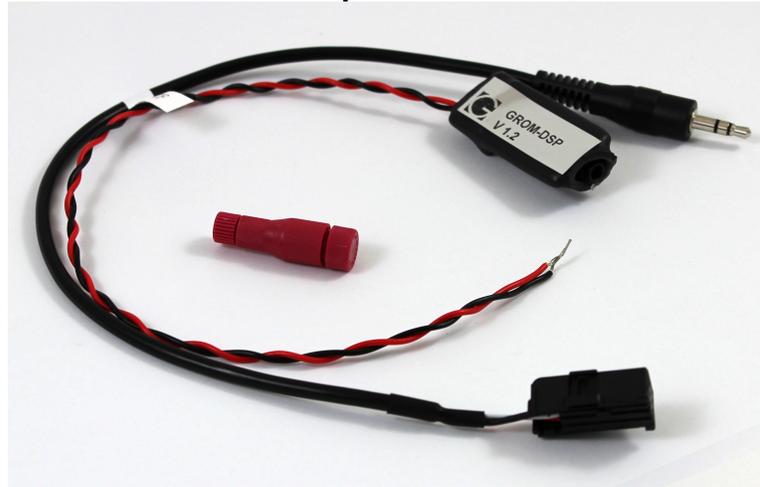


GROM DSP adapter for BMW vehicles



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:

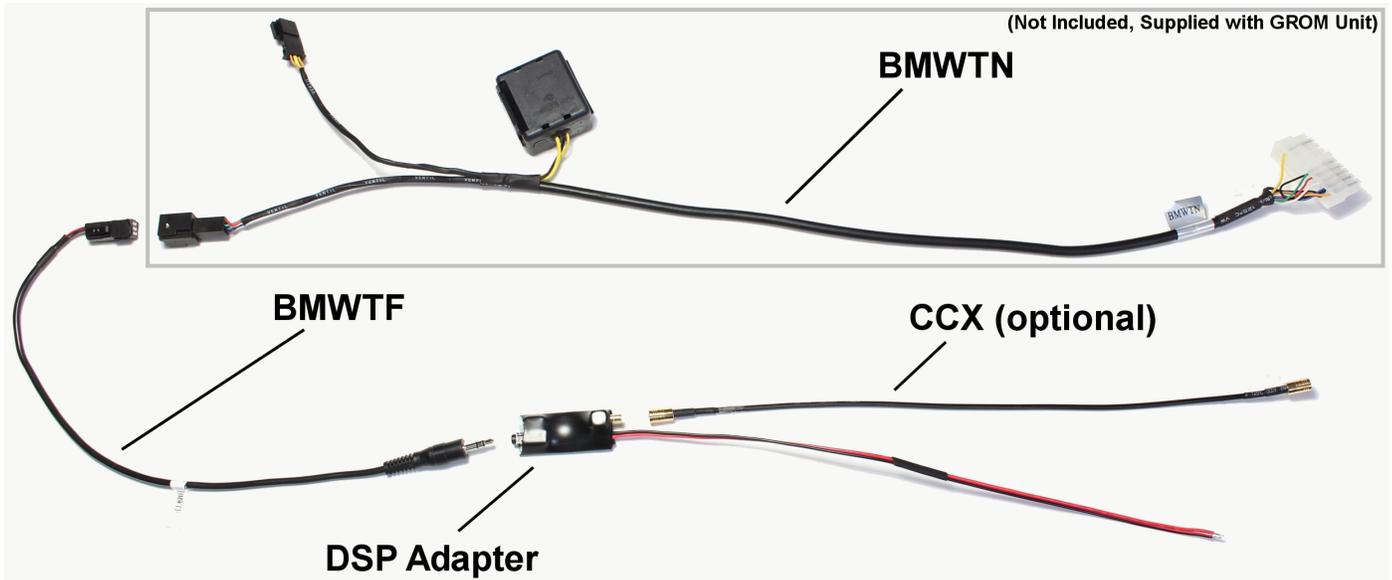
09/1998-2001 7series
2000-2003 M5
2000-2003 Z8

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

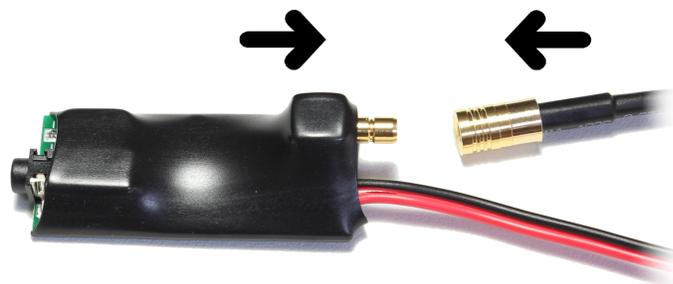
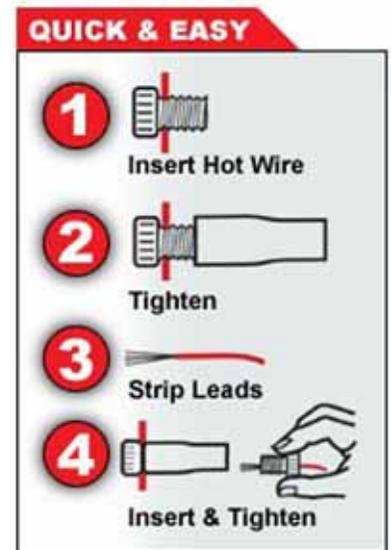
Please follow the following installation steps. Please use a digital multi-meter to test vehicle wires to confirm before connecting.



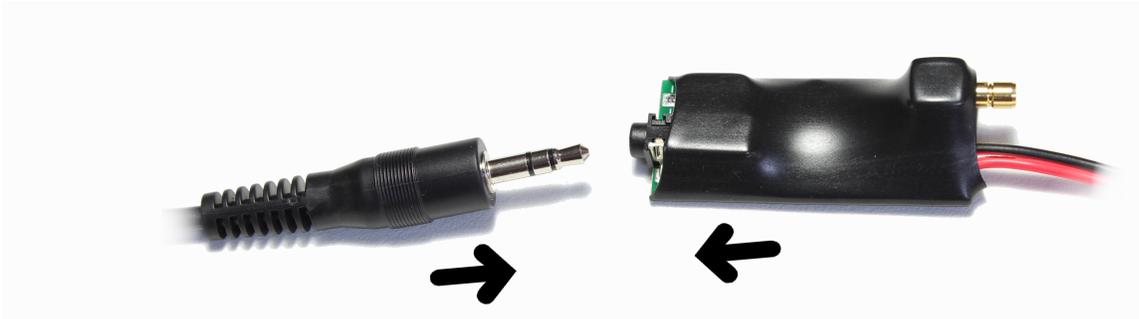
1. Connect **RED** wire to a 12-14 + Volt switched power wire. Should turn on and off with the key (ignition or accessory). Red POSI-TAP connector has been included for your convenience to make a connection to power wire. For further info on how to use posi-tap: <http://gromaudio.com/docs/posi-tap.pdf>

2. Connect **BLACK** to Ground (Earth) Chassis of vehicle. You may also locate Ground Wire instead, which is usually a larger BROWN wire located on main amplifier harness.

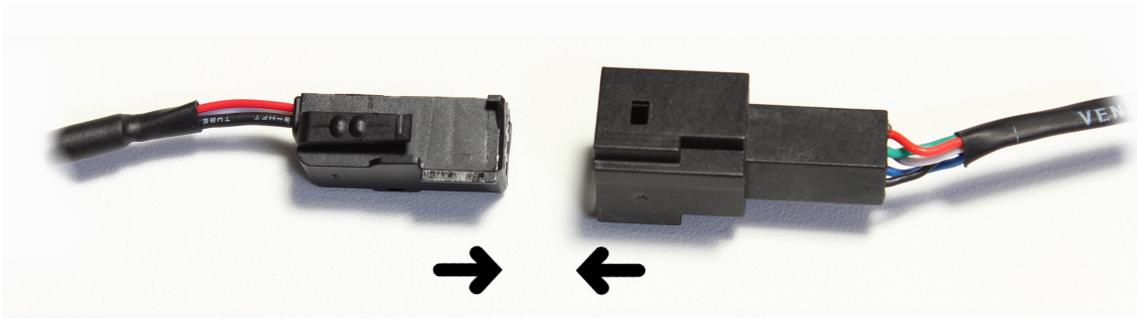
3. Remove factory coaxial DSP cable connected to the CD Changer. Connect the coaxial cable to the GROM-DSP connector Input. Make sure the other end of coaxial cable is connected from the GROM-DSP to the BMW amplifier. Please be sure the coaxial cable is fully inserted. If vehicle does not have this coaxial DSP cable present in vehicle, additional Cable **CCX** may be required to be purchased.



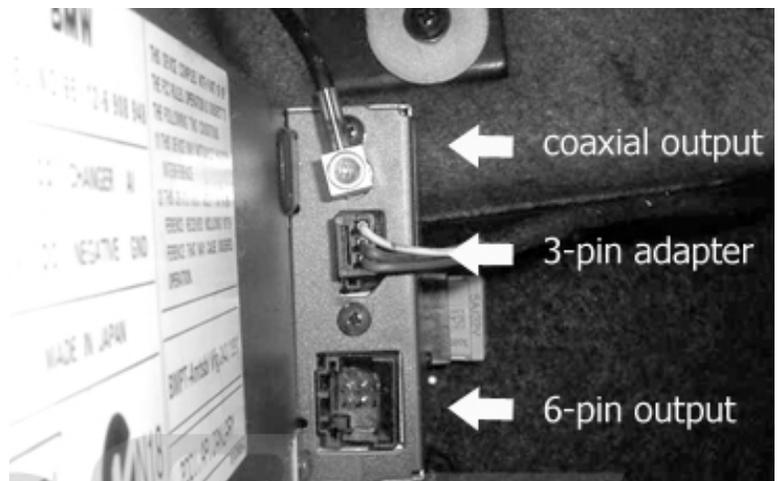
4. Connect the male 3.5mm audio connector of the provided cable **BMWTF** (3.5 mm male – 6 Pin connector) to the female 3.5 mm audio input jack of the GROM-DSP.



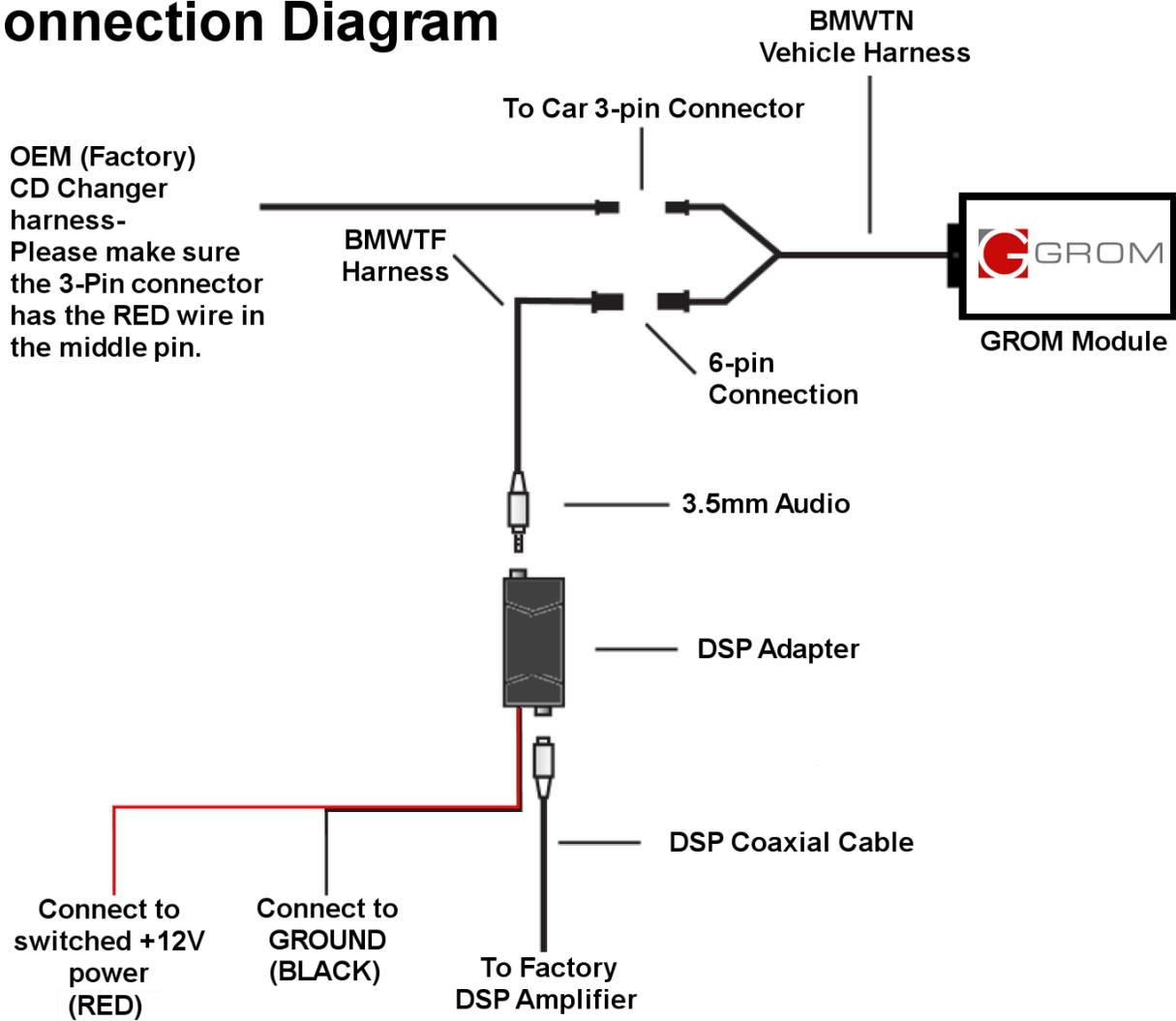
5. Connect the 6-pin connector of **BMWTF** to the **BMWTN** harness 6-pin connector.



6. Connect the **BMWTN** Harnesses 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.**



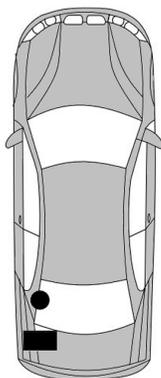
Connection Diagram



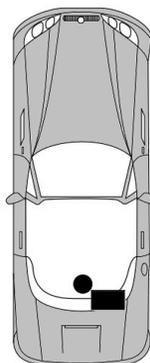
Connector Location

3-pin connector ●

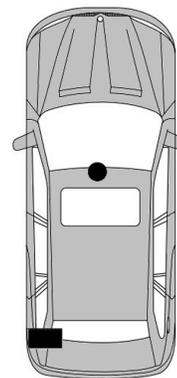
DSP amplifier ■



BMW 5 series and X5



BMW Z4



BMW X3