



BMW (with M.O.S.T. 25 amplifier) 2006-2013

INTERFACE FEATURES

- Provides accessory power (12 volt 10 amp)
- Retains R.A.P. (retained accessory power)
- Designed for amplified models
- Retains audio controls on the steering wheel
- Retains phone buttons (radio dependent)
- Retains factory features: date, time, temperature display
- Micro-B USB updatable

INTERFACE COMPONENTS

- AX-BM90122 interface
- AX-BM90122 harness
- AX-BM90122 amplifier interface
- AXSWC harness
- AXSWC interface
- Female 3.5mm connector with stripped leads

APPLICATIONS

BMW

1-Series	2008-2013	3-Series	2006-2013
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TABLE OF CONTENTS

Connections.....	2
Installing the Interface.....	3
Installing the Fiber Optic Cable.....	3
Programming.....	4-5

TOOLS REQUIRED

- Wire cutter
 - Crimp tool and Connectors
(example: butt-connectors, bell caps, etc.)
- or
- Solder gun, solder, heat shrink
 - Tape
 - Zip-ties

Product Info



ATTENTION: With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections are secure before cycling the ignition to test this product.
NOTE: Refer to the instructions included with the aftermarket radio.

CONNECTIONS

From the AX-BM90122 harness to the aftermarket radio, connect as indicated:

- **Black** wire to the ground wire.
- **Yellow** wire to the battery wire.
- **Red** wire to the accessory wire.
- **Blue** wire to the power antenna turn-on wire.
- **Brown** wire to the mute wire.
- **Orange** wire to the illumination wire (if applicable).
- **Yellow** wire (6' long w/fuse-holder) directly to the vehicle's battery.

The following (3) wires are only for multimedia/navigation radios that require these wires.

- **Blue/Pink** wire to the VSS/speed sense wire.
- **Green/Purple** wire to the reverse wire.
- **Light Green** wire to the parking brake wire.
- *Tape off and disregard the following (8) wires, they will not be used in this application:*
Gray, Gray/Black, Green, Green/Black, Purple, Purple/Black, White, White/Black
- **Red** and **White** RCA jacks labeled "FRONT LEFT" and "FRONT RIGHT" to the full range front amplifier output jacks.

AXSWC harness:

This harness is only to be used if the vehicle is equipped with steering wheel controls.

- Connect the **Black** wire to the chassis ground.
- Connect the **Red** wire to accessory power.

For 3.5mm jack - Steering Wheel Control retention:

The 3.5mm jack is to be used to retain audio controls on the steering wheel control.

For the radios listed below: Connect the female **3.5mm connector** with stripped leads to the male 3.5mm **SWC** jack from the **AXSWC harness**. Tape off and disregard remaining wires.

- **Eclipse:** Connect the SWC wire, **Brown** to the **Brown/White** wire of the connector. Then connect the remaining SWC wire, **Brown/White** to the **Brown** wire of the connector.
- **Metra OE:** Connect the SWC (*Key 1*) wire **Gray** to the **Brown** wire.
- **Kenwood or select JVC with a SWC** wire: Connect the **Blue/Yellow** wire to the **Brown wire**. **Note:** If the **Kenwood** radio auto detects as a **JVC**, manually set the radio type to **Kenwood**. See the instructions under Changing Radio Type.
- **XITE:** Connect the SWC (*SWC-2*) wire from the radio to the **Brown** wire.
- **Parrot Asteroid Smart or Tablet:** Connect the 3.5mm jack into the AX-SWC-PARROT (sold separately), and then connect the 4-pin connector from the AX-SWC-PARROT into the radio. **Note:** The radio must be updated to rev. 2.1.4 or higher software.
- **Universal "2 or 3 wire" radio:** Connect the SWC wire, (*Key-A or SWC-1*) to the **Brown** wire of the connector. Then connect the remaining SWC wire, (*Key-B or SWC-2*) to the **Brown/White** wire of the connector. If the radio comes with a third wire for ground, disregard this wire. **Note:** After the interface has been programmed to the vehicle, refer to the manual provided with the radio for assigning the **Steering Wheel Control** buttons. Contact the radio manufacturer for more information.
- **For all other radios:** Connect the 3.5mm jack into the port on the radio designated for an external SWC interface. Refer to the manual provided with the radio, if in doubt as to where the 3.5mm jack connects.

INSTALLING THE AX-BM90122 INTERFACE

With the key in the off position:

- Connect the AX-BM90122 harness to the AX-BM90122 interface.
- Connect the AX-BM90122 harness to the AX-BM90122 amplifier interface.
- Connect the AX-BM90122 harness to the wiring harness in the vehicle.

INSTALLING THE FIBER OPTIC CABLE

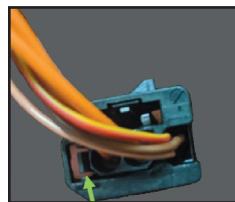
Installing the Fiber Optic Cable:

Removal of the original fiber optic connection is required to adapt to the Media Oriented System Transport (MOST) interface.

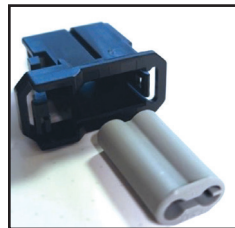
- Seat the **AX-BM90122** amplifier interface in the black connector housing provided with this kit and snap the housing in place. (Figure A)
- From the original **Fiber Optic Connector**: Using a pick tool, carefully pull this tab towards the outside edge for the connector housing. Gently remove the fiber optic insert from the connector. (Figure B)
- From the **MOST Interface**: Push the tab toward the dust cover and, using a needle nose plier, remove the dust cover. Replace the connector with the factory fiber optic cables into the MOST interface's black connector housing. (Figure C)



(Figure A)



(Figure B)



(Figure C)

Programming the AXSWC interface

1. Connect the **AXSWC** harness to the **AX-BM90122** interface.
2. Press and hold the **Volume Up** button on the steering wheel.
3. Turn the ignition on. The L.E.D. in the **AXSWC interface** will start flashing rapidly, as the AXSWC interface searches for the auto manufacturer.
4. After a few seconds the L.E.D. should stop flashing rapidly, then go out for approximately (2) seconds.
5. After that (2) seconds there will be a series of (7) **Green** flashes, some short, and some long. The long flashes represent the wires that are connected from the vehicle to the AXSWC interface. The 3rd, 4th, 5th, and 6th flashes should be longer.
6. The L.E.D. will pause for another (2) seconds, then begin flashing **Red** (up to 23 times) as the SWC interface locates the aftermarket radio installed. Refer to the **L.E.D Feedback Legend** for the number of times the light should flash for the radio installed.
7. This is the end of the auto detection stage. If the **AXSWC interface** detected the vehicle and radio successfully, the L.E.D. will light up solid **Red**. If not, refer to the troubleshooting documents available at axxessinterfaces.com.
8. Release the Volume Up button. Test all functions of the installation for proper operation before reassembling the dash. Refer to the Steering Wheel Control documents available at axxessinterfaces.com for customizing the buttons, if so desired.

L.E.D. Feedback: The (23) **Red L.E.D.** flashes represent a different radio manufacturer for the **AXSWC interface** to detect. For example, if you are installing a **JVC** radio, the **AXSWC interface** will flash **Red** (5) times, then stop. Following is the **L.E.D Feedback Legend**, which indicates the flash count of the radio manufacturer

L.E.D. Feedback Legend

Flash Count	Radio
1	Eclipse (type 1) †
2	Kenwood ‡
3	Clarion (type 1) †
4	Sony / Dual
5	JVC
6	Pioneer / Jensen
7	Alpine *
8	Visteon
9	Valor
10	Clarion (type 2) †
11	Metra OE
12	Eclipse (type 2) †

Flash Count	Radio
13	LG
14	Parrot **
15	XITE
16	Philips
17	TBA
18	JBL
19	Insane
20	Magnadyne
21	Boss
22	Axxera
23	Axxerra (type 2)

KEYNOTES

- * If the **AXSWC interface** flashes **Red** (7) times, and an **Alpine** radio is not installed, that means there is an open connection not accounted for. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.
- ** The **AXSWCH-PAR** is required (sold separately). Also, the software in the radio must be rev. 2.1.4 or higher.
- † If a **Clarion** or **Eclipse** radio is installed and the steering wheel controls do not function, change the radio to **Clarion (type 2)** or **Eclipse (type 2)** respectively. If the steering wheel controls still do not function, refer to the **Changing Radio Type** document available at axxessinterfaces.com.
- ‡ If a **Kenwood** radio is installed and the L.E.D. feedback flashes (5) times instead of (2), manually change the radio type to **Kenwood**. To do this, refer to the **Changing Radio Type** document available at axxessinterfaces.com.



AX-BM90122

INSTALLATION INSTRUCTIONS

Having difficulties? We're here to help.



Contact our Tech Support line at:

386-257-1187



Or via email at:

techsupport@metra-autosound.com

Tech Support Hours (Eastern Standard Time)

Monday - Friday: 9:00 AM - 7:00 PM

Saturday: 10:00 AM - 7:00 PM

Sunday: 10:00 AM - 4:00 PM



KNOWLEDGE IS POWER

Enhance your installation and fabrication skills by enrolling in the most recognized and respected mobile electronics school in our industry. Log onto www.installerinstitute.edu or call 386-672-5771 for more information and take steps toward a better tomorrow.



**Metra recommends MECP
certified technicians**