BMW (with M.O.S.T. 25 amplifier) 2004-2013

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 amplifier interface
• ASWC-1 interface
• AX-BM90122 harness
• ASWC-1 harness
• 3.5mm adapter

APPLICATIONS

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TOOLS & INSTALLATION ACCESSORIES REQUIRED

• Crimping tool and connectors, or solder gun, solder, and heat shrink
• Tape
• Wire cutter
• Zip ties

Product Info
From the aftermarket radio to the AX-BM90122 harness, connect the:

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

**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:

  - **Red** and **White** RCA jacks to the full range amplifier output jacks.

**ASWC-1 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 the radios listed below:** Connect the **3.5mm adapter** to the male 3.5mm SWC jack from the ASWC-1 harness. Any remaining wires tape off and disregard:

  - **Eclipse:** Connect the steering wheel control wire, normally **Brown**, to the **Brown/White** wire of the connector. Then connect the remaining steering wheel control wire, normally **Brown/White**, to the **Brown** wire of the connector.
  - **Metra OE:** Connect the steering wheel control Key 1 wire (**Gray**) to the **Brown** wire.
  - **Kenwood or select JVC with a steering wheel control wire:** Connect the **Blue/Yellow** wire to the **Brown** wire.
  - **XITE:** Connect the steering wheel control 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 steering wheel control wire, referred to as Key-A or SWC-1, to the **Brown** wire of the connector. Then connect the remaining steering wheel control wire, referred to as 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 SWC buttons. Contact the radio manufacturer for more information.

**For all other radios:** Connect the 3.5mm jack from the ASWC-1 harness, into the jack on the aftermarket radio designated for an external steering wheel control interface. Please refer to the aftermarket radios manual if in doubt as to where the 3.5mm jack goes to.
INSTALLATION

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**.
- Remove the dust cover from fiber optic port in the **AX-BM90122 amplifier interface**.
- Connect the factory fiber optic cable into the **AX-BM90122 amplifier interface**.
- Connect the **AX-BM90122 harness** to the wiring harness in the vehicle.
- Connect the **ASWC-1 harness** to the **ASWC-1 interface**, and then to the **AX-BM90122 interface**.

PROGRAMMING

- Press and hold the Volume-Up button on the steering wheel.
- Turn the ignition on, the L.E.D. in the ASWC-1 interface will start flashing rapidly, which means the ASWC-1 is looking for the vehicle and the radio.
  
  **Note:** If the L.E.D. did not start flashing rapidly, press the reset button for 3 seconds, while still holding the Volume-Up button.

- After a few seconds the L.E.D. should stop flashing rapidly, and then go out for approximately 2 seconds.

- After approximately 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 to the ASWC-1. The 3rd, 4th, 5th, and 6th flashes should be longer.

  **Tip:** Knowing this will help to troubleshoot, if need be.

- The L.E.D. will pause for another 2 seconds, and then flash **Red** up to 18 times depending on which radio is connected to the ASWC-1. Refer to the L.E.D. feedback section for information.

- This is the end of the auto detection stage. Release from holding the Volume-Up button.
  
  If the ASWC-1 detected the vehicle and the radio successfully, the L.E.D. will light up solid.

- Test the steering wheel controls for proper operation. Refer to the ASWC-1 instructions online at axxessinterfaces.com for customizing the buttons, if so desired.

PROGRAMMING (CONT.)

L.E.D. feedback

The **(18) Red** L.E.D. flashes represent which brand radio the ASWC-1 is connected to. Each flash represents a different radio manufacturer. For example, if you are installing a JVC radio, the ASWC-1 will flash **Red** (5) times, and then stop. Following is a legend that dictates which radio manufacturer corresponds to which flash.

L.E.D. feedback legend

<table>
<thead>
<tr>
<th>Number of flashes</th>
<th>Radio Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eclipse (Type 1) †</td>
</tr>
<tr>
<td>2</td>
<td>Kenwood ‡</td>
</tr>
<tr>
<td>3</td>
<td>Clarion (Type 1) †</td>
</tr>
<tr>
<td>4</td>
<td>Sony / Dual</td>
</tr>
<tr>
<td>5</td>
<td>JVC</td>
</tr>
<tr>
<td>6</td>
<td>Pioneer / Jensen</td>
</tr>
<tr>
<td>7</td>
<td>Alpine *</td>
</tr>
<tr>
<td>8</td>
<td>Visteon</td>
</tr>
<tr>
<td>9</td>
<td>Valor</td>
</tr>
<tr>
<td>10</td>
<td>Clarion (Type 2) †</td>
</tr>
<tr>
<td>11</td>
<td>Metra OE</td>
</tr>
<tr>
<td>12</td>
<td>Eclipse (Type 2) †</td>
</tr>
<tr>
<td>13</td>
<td>LG</td>
</tr>
<tr>
<td>14</td>
<td>Parrot **</td>
</tr>
<tr>
<td>15</td>
<td>XITE</td>
</tr>
<tr>
<td>16</td>
<td>Philips</td>
</tr>
<tr>
<td>17</td>
<td>Philips</td>
</tr>
<tr>
<td>18</td>
<td>JBL</td>
</tr>
</tbody>
</table>

**Note:** If the ASWC-1 flashes **Red** (7) times, and you do not have an Alpine radio connected to it, that means the ASWC-1 does not detect a radio connected it. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.

**Note:** The AX-SWC-PARROT is required (sold separately). Also, the Parrot radio must be updated to rev. 2.1.4 or higher through www.parrot.com.

† Note: If you have a Clarion radio and the steering wheel controls do not work, change the radio type to the other Clarion radio type; same for Eclipse. Refer to the “Programming Information” document online.

‡ Note: If you have a Kenwood radio and the L.E.D. feedback comes back as showing as a JVC radio, change the radio type to a Kenwood. Refer to the “Programming Information” document online.
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.com or call 800-354-6782 for more information and take steps toward a better tomorrow.

Metra recommends MECP certified technicians

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