

## BMW Mini (R53) (with Harmon Kardon amplifier) 2001-2006

### INTERFACE FEATURES

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- Provides accessory power
- Retains audio controls on the steering wheel
- Retains phone buttons (radio dependent)
- Retains factory features: date, time, temperature display
- Selectable audio options
- Micro “B” USB updatable

### INTERFACE COMPONENTS

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- AX-BM9112 interface
- ASWC-1 interface
- AX-BM9112 harness
- ASWC-1 harness
- Female 3.5mm connector with stripped leads

### TABLE OF CONTENTS

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Connections to be made .....	2
Installing the AX-BM9112 .....	3
Programming the ASWC-1 interface .....	3
Audio level adjustment.....	4

### TOOLS REQUIRED

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- Wire cutter • Crimp tool • Solder gun • Tape
- Connectors (example: butt-connectors, bell caps, etc.)

**CAUTION!** All accessories, switches, climate controls panels, and especially air bag indicator lights must be connected before cycling the ignition. Also, do not remove the factory radio with the key in the on position, or while the vehicle is running.

## CONNECTIONS TO BE MADE

### From the aftermarket radio to the AX-BM9112 harness:

- Connect the **Black** wire to the ground wire.

**Note:** *There will also be a Black ground wire on the 12-pin pre-wired ASWC-1 harness to connect as well.*

- Connect the **Yellow** wire to the battery wire.

- Connect the **Red** wire to the accessory wire.

**Note:** *There will also be a Red accessory wire on the 12-pin pre-wired ASWC-1 harness to connect as well.*

- If the aftermarket radio has an illumination wire, connect the **Orange** wire to it.
- Connect the **Blue** wire to the antenna turn on wire.
- Connect the **Gray** wire to the right front positive speaker output.
- Connect the **Gray/Black** wire to the right front negative speaker output.
- Connect the **White** wire to the left front positive speaker output.
- Connect the **White/Black** wire to the left front negative speaker output.
- Connect the **Green** wire to the left rear positive speaker output.
- Connect the **Green/Black** wire to the left rear negative speaker output.
- Connect the **Purple** wire to the right rear positive speaker output.
- Connect the **Purple/Black** wire to the right rear negative speaker output.
- The momentary switch will only be used in models that are not equipped with steering wheel controls.

### From the aftermarket radio to the 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 ground wire.
- Connect the **Red** wire to the accessory wire.
- For the radios listed below, connect the *female 3.5mm connector with stripped leads*, 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.

## INSTALLING THE AX-BM9112

### With the key in the off position:

- Connect the AX-BM9112 harness to the AX-BM9112 interface, and then to the wiring harness in the vehicle.
- Connect the ASWC-1 harness to the ASWC-1 interface, and then to the AX-BM9112 interface.

## PROGRAMMING THE ASWC-1 INTERFACE

- 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 [axessinterfaces.com](http://axessinterfaces.com) for customizing the buttons, if so desired.

## PROGRAMMING THE ASWC-1 INTERFACE (CONT.)

### Steering wheel control extra settings

#### 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

1 flash - Eclipse (Type 1) †	10 flashes - Clarion (Type 2) †
2 flashes - Kenwood ‡	11 flashes - Metra OE
3 flashes - Clarion (Type 1) †	12 flashes - Eclipse (Type 2) †
4 flashes - Sony / Dual	13 flashes - LG
5 flashes - JVC	14 flashes - Parrot **
6 flashes - Pioneer / Jensen	15 flashes - XITE
7 flashes - Alpine *	16 flashes - Philips
8 flashes - Visteon	17 flashes - TBD
9 flashes - Valor	18 flashes - JBL

\* **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 to 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](http://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.*

## AUDIO LEVEL ADJUSTMENT

### For vehicles equipped with steering wheel controls (vehicle must have a Source button on the steering wheel):

- To enter amplifier adjustment mode, press and hold the Source button for more than 3 seconds. While in amplifier adjustment mode, the steering wheel controls will no longer control the radio.
- **Front/Rear Balance Adjustment:**
  - Press and hold Volume Up button to cycle from front to rear, and back to the front. Release the Volume Up button when the desired settings is achieved.
- **Driver Mode:**
  - To enable/disable Driver Mode, press the Track + button.
- **Preset EQ:**
  - Press the Track Down button to cycle through the preset EQ settings: Normal, Spatial, Electronics, Instrumental, Festival
  - To return the steering wheel controls to normal operation, press the Volume Down button.
- The interface will save all changes to its internal memory when the ignition is switched off. The settings will not be saved if power is disconnected from the interface.

### For vehicles not equipped with steering wheel controls:

- **Front/Rear Balance Adjustment:**
  - Press and hold the momentary button for more than 3 seconds to cycle from front to rear, and back to the front. Release the momentary button when the desired setting is achieved.
- **Driver Mode:**
  - To enable/disable Driver Mode, press and hold the momentary button for 2 seconds.  
**Note:** Do not hold the momentary button longer than 3 seconds to avoid changing the F/R Balance.
- **Preset EQ:**
  - A short press of the momentary button will change the various Preset EQ settings: Normal, Spatial, Electronic, Instrumental, Festival
- The interface will save all changes to its internal memory when the ignition is switched off. The settings will not be saved if power is disconnected from the interface.









# AX-BM9112

INSTALLATION INSTRUCTIONS



### IMPORTANT

*If you are having difficulties with the installation of this product, please call our Tech Support line at 1-800-253-TECH. Before doing so, look over the instructions a second time, and make sure the installation was performed exactly as the instructions are stated. Please have the vehicle apart and ready to perform troubleshooting steps before calling.*



### 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](http://www.installerinstitute.com) or call 800-354-6782 for more information and take steps toward a better tomorrow.



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