



BMW (with NBT 6.5" / 8.4" / 10.25" control display*) HDMI and Camera Interface 2010-2017

* For LVDS HSD+2-pin connector only

INTERFACE FEATURES

- Provides front and rear camera inputs to the factory display screen
- Provides an HDMI input to the factory display screen *
- Micro "B" USB updatable

* The factory radio must have an AUX input

INTERFACE COMPONENTS

- AX-AM-BM91 interface
- AX-AM-BM91 harness
- 6-pin to 4-pin LVDS (video) cable
- 10-pin harness with RCA jacks
- 3.5mm extension cable

APPLICATIONS

BMW

1 Series (F20)	2012-2017	3 Series (F30)	2012-2017	5 Series (F10)	2010-2017
1 Series (F21)	2012-2017	4 Series (F32)	2013-2017	X3 (F25)	2010-2017

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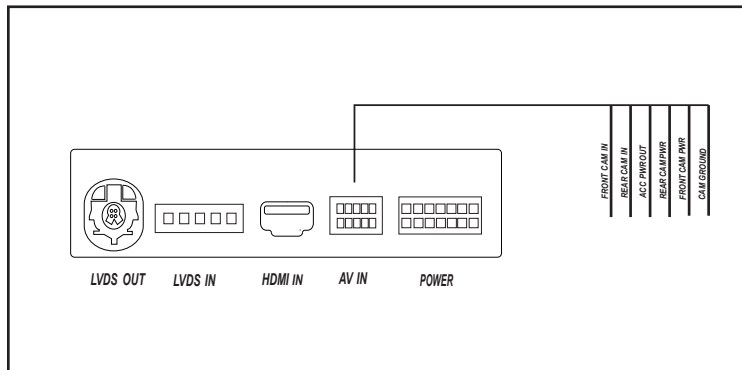
TOOLS REQUIRED

- 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

- If installing a front/rear camera, connect the **Black** wire labeled “GND”, to the camera(s) ground wire.
- If installing a backup camera, connect the **Red** wire labeled “Reverse Camera 12v”, to the backup camera power wire.
- If installing a front camera, connect the **Red** wire labeled “Front Camera 12v”, to the front camera power wire.
- The **Red** wire labeled “Acc Power Output” is optional if a power source is required while a camera is active.
- If installing a backup camera, connect the RCA jack labeled “Reverse Camera Video Input” to the camera.
- If installing a front camera, connect the RCA jack labeled “Front Camera Video Input” to the camera.
- If adding an HDMI input to the factory display screen, connect an HDMI cable (Axxess part number AX-HDCABLE, sold separately), to the port on the AX-AM-BM91 labeled “HDMI IN”.

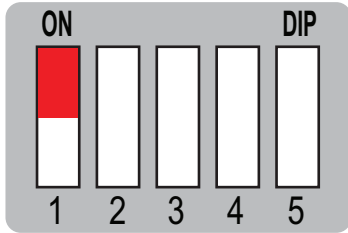


(Connections Diagram)

CONFIGURING THE AX-AM-BM91

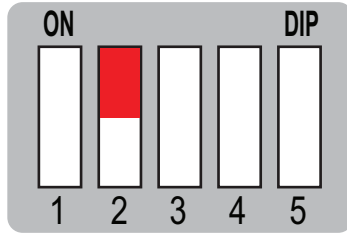
Dip switch settings

Remove the access door located on the top of the AX-AM-BM91 interface to access the dip switches.



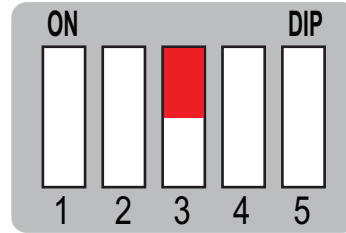
Dip 1

If the vehicle is equipped with a factory backup camera: **On:** Yes **Off:** No



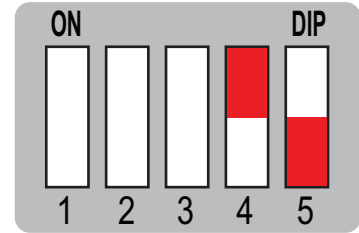
Dip 2

If the vehicle has an aftermarket front camera: **On:** Yes **Off:** No



Dip 3

If the vehicle has an aftermarket backup camera: **On:** Yes **Off:** No

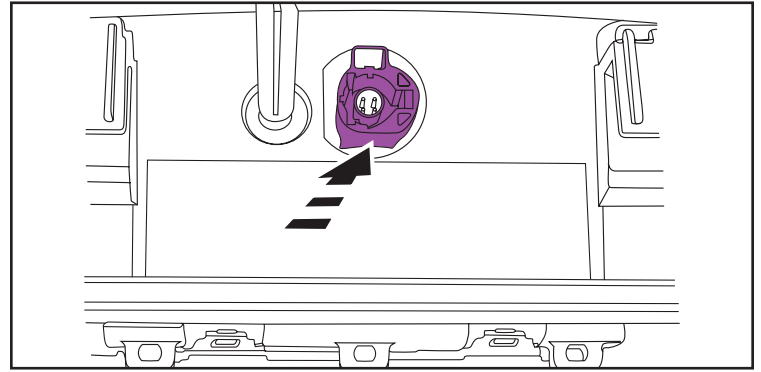


Dips 4 & 5

- 6.5-inch screen:
Dip 4 On - Dip 5 Off
- 8.8-inch or 10.2-inch screen:
Dip 4 Off - Dip 5 Off

INSTALLING THE AX-AM-BM91

- Remove the main connector from the radio, then connect the *male* plug from the AX-AM-BM91 harness into the radio.
- Connect the factory *male* factory connector into the *female* plug from the AX-AM-BM91 harness.
- Connect the AX-AM-BM91 harness into the AX-AM-BM91 interface.
- If adding an HDMI input to the factory display screen, connect the 3.5mm extension cable to the AX-AM-BM91 harness, and then to the vehicles 3.5mm AUX-IN jack.
- Remove the **Violet** LVDS (video) cable from the display screen, then connect it to the AX-AM-BM91 interface (LVDS OUT). (Figure A)
- Connect the 6-pin to 4-pin LVDS (video) cable into the display screen, and then into the AX-AM-BM91 interface (LVDS IN).
- Connect the 10-pin harness with RCA jacks into the AX-AM-BM91 interface.



(Figure A)

Button Configuration

- The buttons in the center console will be used to operate the AX-AM-BM91.

HDMI access

- Select AUX-IN as a source from the factory radio.
- Press and hold the “MENU” button for 2 seconds to switch between the factory screen and the AX-AM-BM91 screen.
- Press the “MENU” button once to exit HDMI mode.
- Double press the “BACK” button to disable the video-in-motion warning message.

Rear camera access

- The backup camera will automatically activate while the vehicle is in reverse gear.
- Deselecting the reverse gear will activate the front camera, if installed and dip switch 2 is selected to “ON”.

Note: This camera takes priority over HDMI mode, and front camera mode. But will not deactivate the front camera. Double press the “BACK” button, or drive over 10 mph, to cancel front camera mode.



Front camera access

- Ensure dip switch 2 is selected to “ON”.
- Press and hold the “BACK” button to activate the front camera.
- Press the “MENU” button once to exit front camera mode.

View Version Number

- Press and hold the “MENU” button for 8 seconds to enter the firmware information screen.



AX-AM-BM91

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 or call 800-354-6782 for more information and take steps toward a better tomorrow.



Metra recommends MECP certified technicians