

E90 AVIN Non-iDrive Head Unit Install with Logic 7 Integration

Option 1: If you prefer to go an easier route you can order our BMW MOST interface. It would make the install a lot easier and will not require many of the steps in the guide below.

The BMW MOST interface is available in the link below

<https://avinusa.com/bmw-most-fiber-optic-amp-interface-for-e90-e91-e92-e93-e60-e61-e81-e82-e83-e84-e70-e87-e88.html>

Option 2:

PURPOSE: This document provides the basic steps required to: (a) relocate the factory head unit to under the seat, (b) install the AVIN E90 Non-iDrive Head Unit, & (c) integrate the two head units such that audio, and other stock functions can operate seamlessly on the MOST-based Logic 7 system.

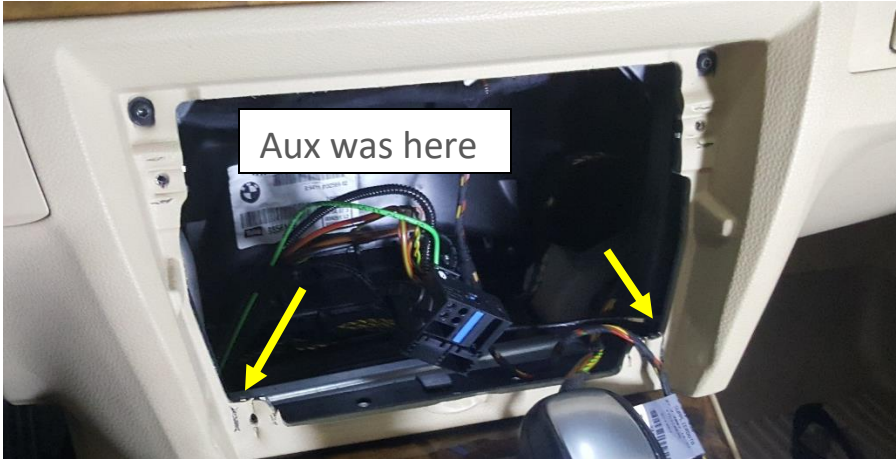
1. Remove factory head unit, HVAC controls, trim & factory mounting bracket.
There are plenty of DIY's on this. It's relatively straight forward.
2. Remove the center console trim, & ash tray





Shown removed

- 3. Trim the corners of the center dash opening. This will give a better fit when installing the AVIN unit.

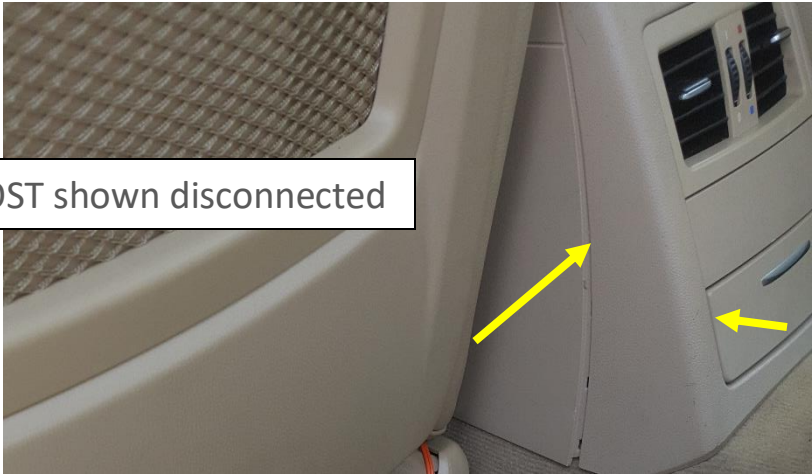


- 4. Remove the rubber tray located in the center storage area.



5. Remove the rear climate control cover to get access to the factory aux port.

Factory MOST shown disconnected

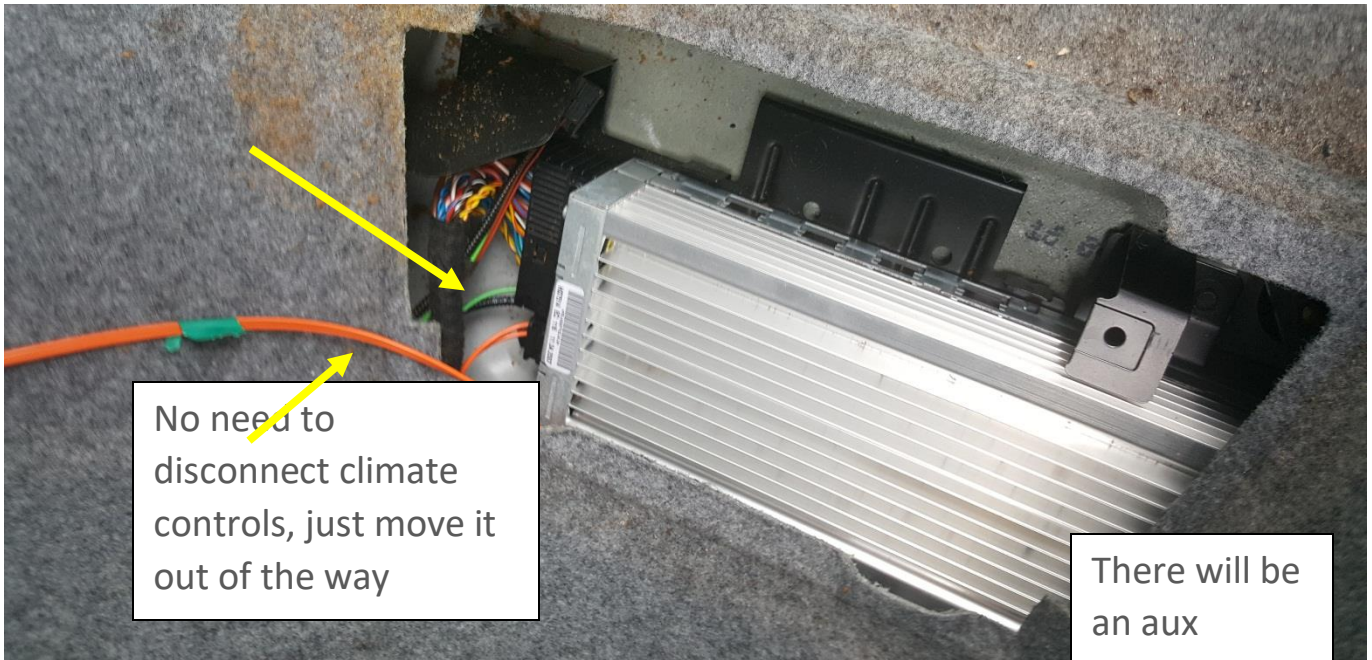


6. Remove the plastic trim on the bottom of the dash. The small speaker, MOST loop connector, foot well light, & some antenna thingy need to be disconnected.

This will be installed later

7. Lower the rear drivers -side seat to gain access to the trunk from the cabin.

8. Disconnect the stock MOST unit at the factory amp connection, located in the trunk.



No need to disconnect climate controls, just move it out of the way

There will be an aux connector behind here

9. Fabricate FOUR (4) – 3 ft wires with 18-22 gauge female connectors. I highly recommend soldering this to the connector pins and protecting the exposed ends with heat shrink tubing (helps prevent an accidental short)

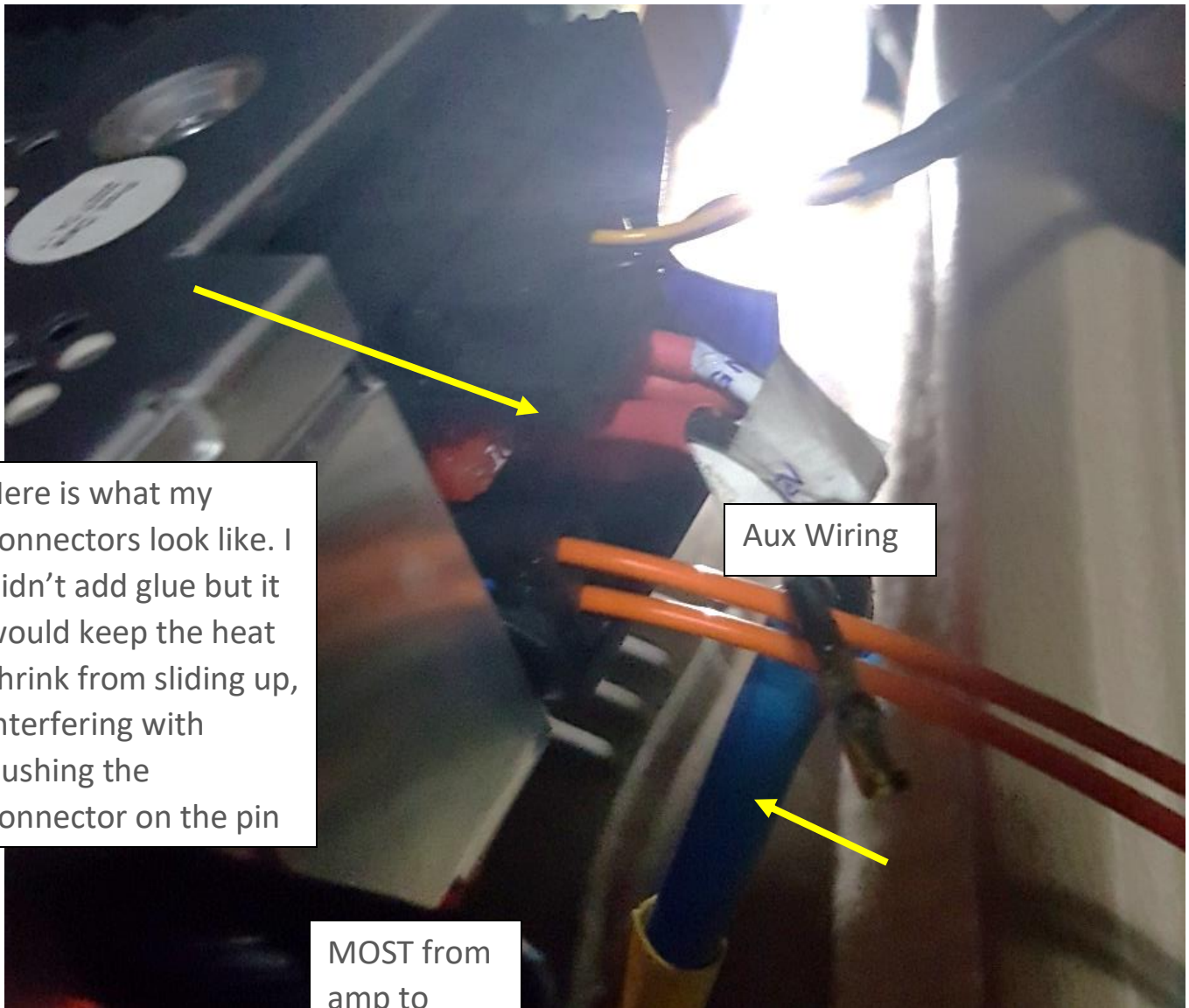
Pry with trim tool here



10. Bundle the four wires together and label them at both ends with the following descriptions:

- GND – Pin 12. This is the ground wire for the head unit
- +12V – Pin 15. This provides the power to run the head unit

<p>One of these goes on one end of each 3 ft wire. The other end is bare (for splicing)</p>	<p>“LOW” signal wire from the Canbus “HIGH” signal wire from the Canbus</p>	<p>Add heat shrink tubing to this end</p>
<p>The Four wires can be protected by heat shrinking as a bundle</p>		



Here is what my connectors look like. I didn't add glue but it would keep the heat shrink from sliding up, interfering with pushing the connector on the pin

Aux Wiring

MOST from amp to Stock Head unit

Heat shrink bundle

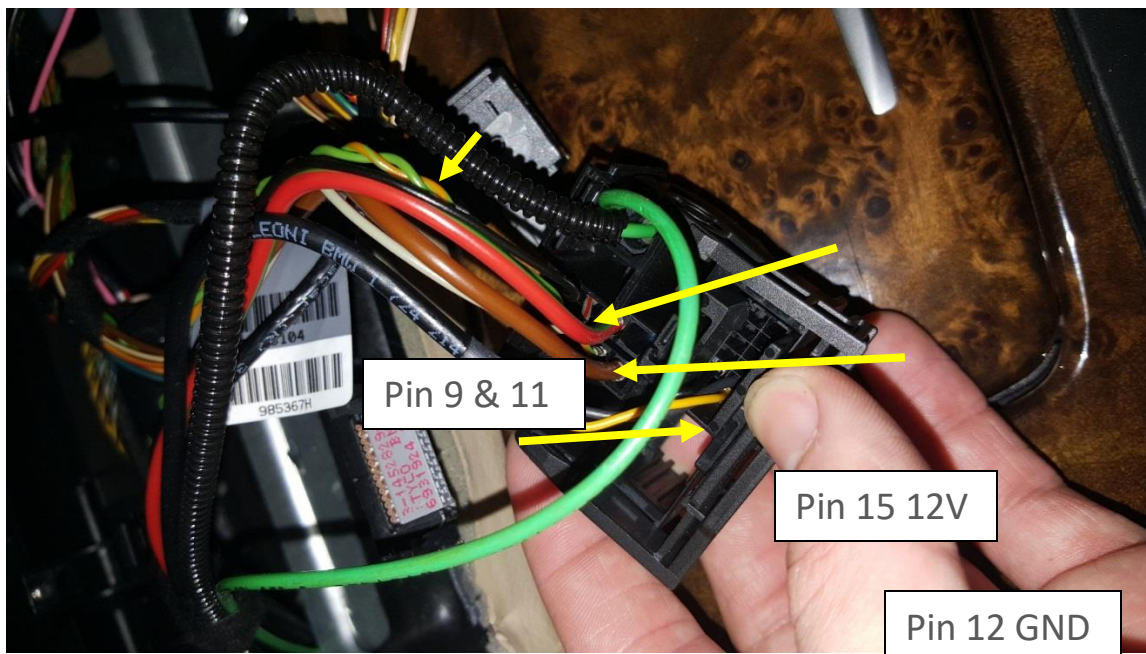
MAKE SURE THE BATTERY HAS BEEN DISCONNECTED BEFORE COMPLETEING THE NEXT STEPS!!!!

11. Run the four wires (made in step 10) from the factory head unit connector to the drivers seat. The female connectors should be located at the drivers seat, while the bare wires in the center dash area with plenty of slack in the center dash area.

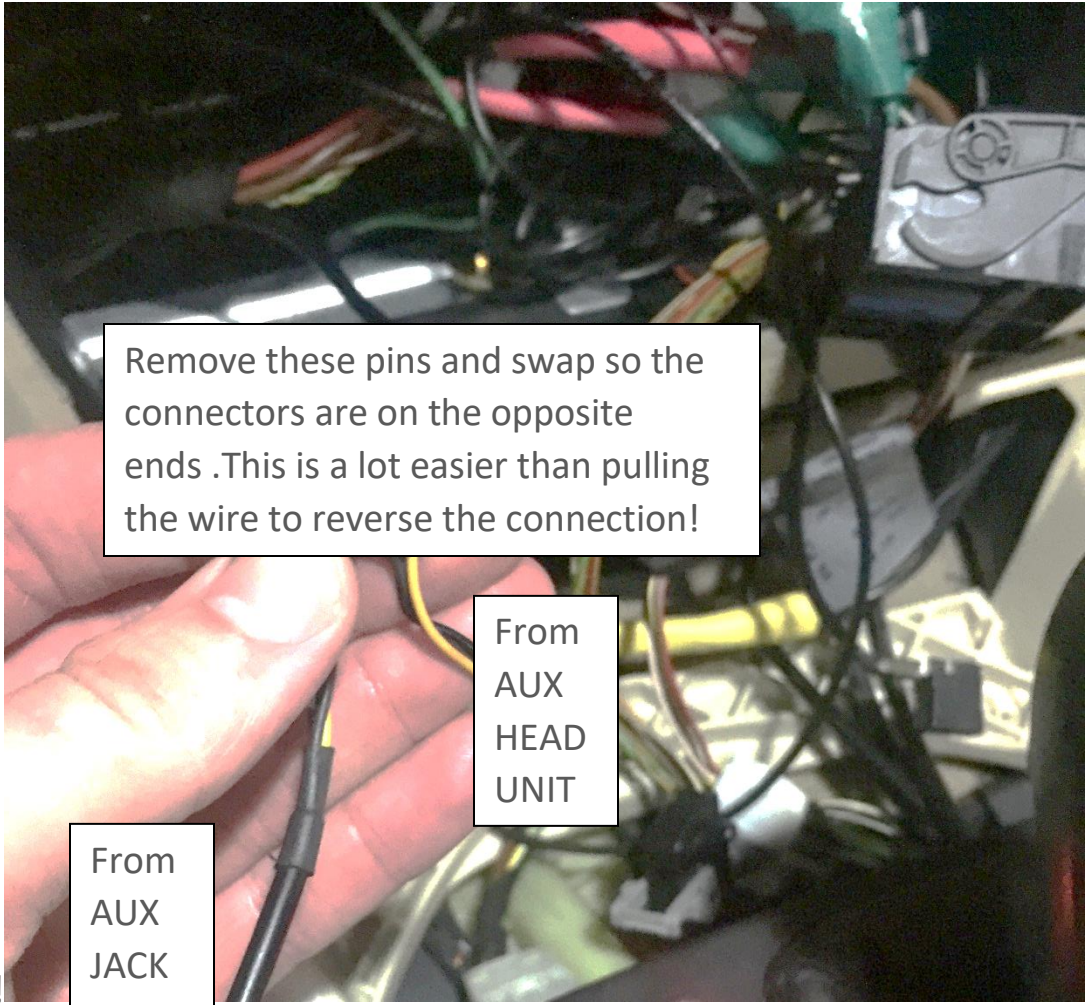


There is a small opening in between the driver's foot well (trim removed) & the head unit area. Feed the cable bundle through here and tuck it under the side console trim.

12. Splice into the factory harness at wires leading to pins 12, 15, 9, & 11. Make sure there is a firm connection. Do not use the cheap wire splices! Either Solder the wires and heat shrink (and/or use electrical tape) or use the posi-splice connectors.



13. Remove the aux cable connector from the factory radio connector.
14. Remove the aux connector from the center console and armrest area. You'll need to run it so it can reach under the driver's seat.
15. Reverse the two ends of the aux connector. This will allow the Avin unit to send an aux signal from the dash to the factory head unit under the driver's seat.



Remove these pins and swap so the connectors are on the opposite ends .This is a lot easier than pulling the wire to reverse the connection!

From
AUX
HEAD
UNIT

From
AUX
JACK
@
rear
HVAC
cover

16. Run from rear market MOST connector from the trunk to under the drivers seat.



17. Reinstall the drivers footwell cover/trim on the lower dash with MOST loop connector, speaker, light, etc.
18. Connect the aftermarket MOST bus, aux connector, and the four new wires to the correct pins on the head unit.
19. At this point you can hook the battery up and test to make sure the factory unit has power and audio relocated under the seat.
20. Run the AVIN GPS antenna, USB input/outputs, video in/outs, and other necessary cables under the lower right corner, through the center console, and up to the center storage/armrest area.
21. Complete the aux install by connecting the AVIN supplied front L/R RCA connectors to an RCA-to-AUX adapter. This can be purchased at most auto parts stores. This will allow the AVIN unit to send the audio out signal to the head unit.
22. Install the HVAC controls into the avin unit.
23. Install the factory head unit harness, radio antenna, gps, and other connectors to the back of the AVIN unit.
24. Install the AVIN unit into the center console and secure with the supplied screws.

25. Reinstall the center trim and rear HVAC trim.

26. Turn the unit on and enjoy.



Backup camera requires additional steps and parts

