

• Supplement: Make a DB25-to-54-pin Adaptor

Model & year: **Pre-'03 BMWs**

Expertise level: **Beginner > Intermediate > Advanced**

Date: **January, 2019**

Estimated time to complete: **varies**

Tools Required

- Wire snips
- Other basic hand tools

Facilities Needed

- Work Bench

Parts Required

- (1) DB25 Connector
- (1) BMW 54-pin Connector
- Misc Wiring and Connectors

Getting Started



Installing a factory Bluetooth TCU in your BMW may require adapting the stock DB25 telephone module connection to fit the more modern 54-pin receptacle found on their TCU modules. Around 2003, BMW dispensed with DB25-type connections and began using 54-pin connectors in their cars. So all earlier models will need an adaptor.

Unfortunately, BMW discontinued their stock adaptor (p/n 84 12 0 308 375, image above) sometime in 2018. While an occasional factory adaptor may appear on eBay from time to time (used), in all likelihood you will have to build your own adaptor if you want to install a factory Bluetooth TCU or ULF in your older BMW. Although this task is not difficult, it does require patience and effort to acquire and wire-up the needed parts.

DB25

Several online electronics stores sell this common type of electrical connector. (Old computer printers used this connector type.) Perform an Internet search to locate one. Another option is to snip a DB25 from a BMW salvage yard. However, you will need to identify the wiring schematic in order to correctly match those wires to the pinouts of the 54-pin.

54-Pin

BMW offers this part new, unassembled, with the following part numbers (list prices shown):

- Connector Housing.....61136920074 (\$10.72)
- 01-36 Pin Strip.....61136920062 (\$1.22)
- 37-54 Pin Strip.....61163909070 (\$1.08)
- Socket Terminals (12).....61138369696 (\$0.28 ea)

As with the DB25, it may be easier to snip a connector from a BMW salvage yard (with about 1 foot of attached wiring). This way, you have both the wires and terminals needed. Afterward, all that is required is to splice those wires into the DB25.

Wiring

If needed, wiring supplies are commonly available both online and at many retail stores.

Procedure

Wiring

After collecting all the parts needed, wire using the following schematic:

DB25	54 Pin	Description
3	36	Ground (KL31)
4	17	Power (KL30)
5	35	Power w/key position 1/2 (KLR)
10	51	Radio Mute
11	32	Pairing Button (for ULF, optional for TCU)
14	19	Mic (-)
15	1	Mic (+)
19	37	Speaker (+)
20	21	Mic (-) Shielded Ground
21	33	Telephone ON
22	15	I-BUS
25	38	Speaker (-)

In making wire connections, I strip 1/4" off the ends of each wire and twist them together. I then apply a bit of solder to secure the connection. Finally I slip heat-shrink tubing over the connection and shrink it using a plain-old match (of course a heat gun or cigarette lighter will work too). I prefer heat-shrink tubing to electrical tape since tape will degrade over time. If using heat shrink tubing, don't forget to slide a piece of it over the wires *before* soldering them together!

Wrap the resulting wire bundle in friction tape or similar wire collector material. Your adaptor should look similar to the one in image above.

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