

E30 Base radio system install.

This is based off a 90 325i without premium system, no amp, no fader. The stock head unit finally gave up the ghost and the speakers were shot. So it was time for a replacement. As much as I liked the base HU I decided to upgrade so I could have a Bluetooth phone system and streaming. I decided on the Blaupunkt Toronto 420BT. The basics: front and rear USB, SD Card, aux in, external mic port, IPod/phone direct control, Pre-amplifier 4-channel (2 V), and Sub-out. The last two I didn't really care about but were nice if I decide to further upgrade later. I also bought two sets of Rockford-Fosgate R152-2 component set ups. Total price for everything was around around \$280.

I will skip the obvious stuff as it has been covered several times on the forum, so we will start with the wiring. A base late production e30 wiring is as follows:

#### Radio Wires:

Radio Power (+)	Violet/Grey	Connector 216	(Hot in Acc., Run, Start)
Radio Ground (-)	Brown	Connector 216	
Radio Memory (+)	Red/Green	Connector 215	(Yellow wire out of radio)
Illumination	Grey/Red	Connector 215	(White wire out of radio)
Power Antenna	White	Mine had both a 1/8" and 1/4" connector available.	

#### Radio Speaker Connectors:

Left Front (-)	Yellow/Grey	.174" Male Spade	Large	Connector 212
Left Front (+)	Yellow/Red	.056" Male	Small	Connector 212
Right Front (-)	Blue/Grey	.174" Male Spade	Large	Connector 218
Right Front (+)	Blue/Red	.056" Male	Small	Connector 218
Left Rear (-)	Yellow/Brown	.174" Male Spade	Large	Connector 245
Left Rear (+)	Yellow/Black	.056" Male	Small	Connector 245
Right Rear (-)	Blue/Brown	.174" Male Spade	Large	Connector 244
Right Rear (+)	Blue/Black	.056" Male	Small	Connector 244

#### Speaker Connections:

Left Front (-)	Yellow/Grey	.110" Female Spade	Small
Left Front (+)	Yellow/Red	.189" Female Spade	Large
Right Front (-)	Blue/Grey	.110" Female Spade	Small
Right Front (+)	Blue/Red	.189" Female Spade	Large
Left Rear (-)	Yellow/Brown	.110" Female Spade	Small
Left Rear (+)	Yellow/Black	.189" Female Spade	Large
Right Rear (-)	Blue/Brown	.110" Female Spade	Small
Right Rear (+)	Blue/Black	.189" Female Spade	Large

#### Front Tweeter Wiring:

Left (-)	Grey/Green	.189" Female Spade	Large	Connects to Yellow/Grey, Kick Panel White Connector
Left (+)	Grey/Yellow	.110" Female Spade	Small	Connects to Yellow/Red, Kick Panel Blue Connector
Right (-)	Grey/Green	.189" Female Spade	Large	Connects to Blue/Grey, Kick Panel White Connector
Right (+)	Grey/Yellow	.110" Female Spade	Small	Connects to Blue/Red, Kick Panel Blue Connector

#### Rear Tweeter Wiring: None

My plan was not to destroy the factory wiring harness. So I had to locate connectors to attach the Blaupunkt harness to the factory harness since there are no aftermarket plug n play types.

Here is my connection to the main power using standard 1/4" male spades and shrink tubing:



Power antenna: I just used the 1/4" connector vs the 1/8" since the connector was readily available.



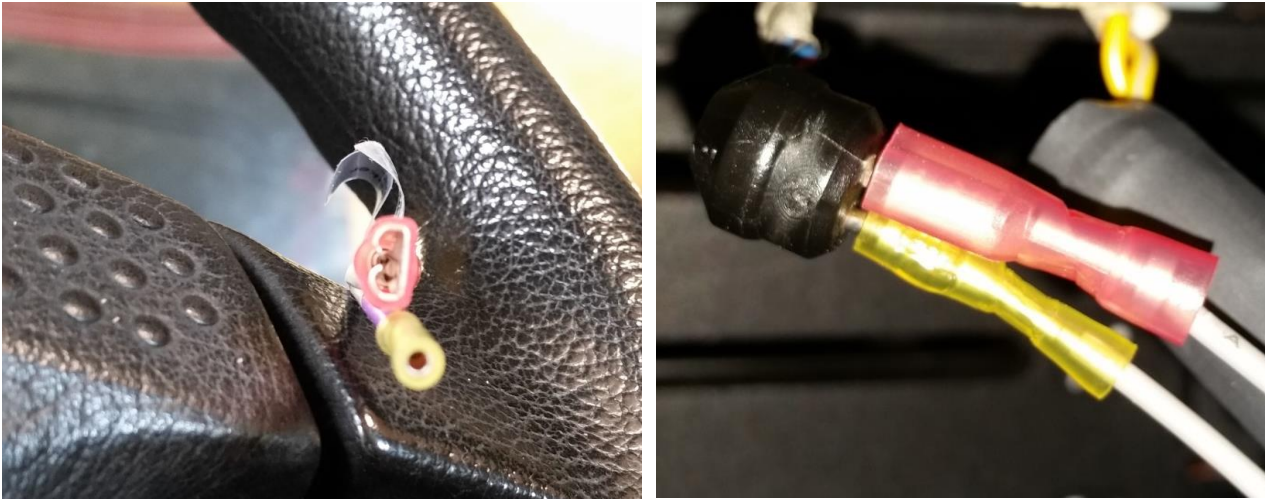
Radio Power (+) Violet/Grey, Connector 216, (Hot in Acc., Run, and Start)  
Radio Ground (-) Brown, Connector 216

Here is how I connected the Memory (Always hot +) and the illumination:



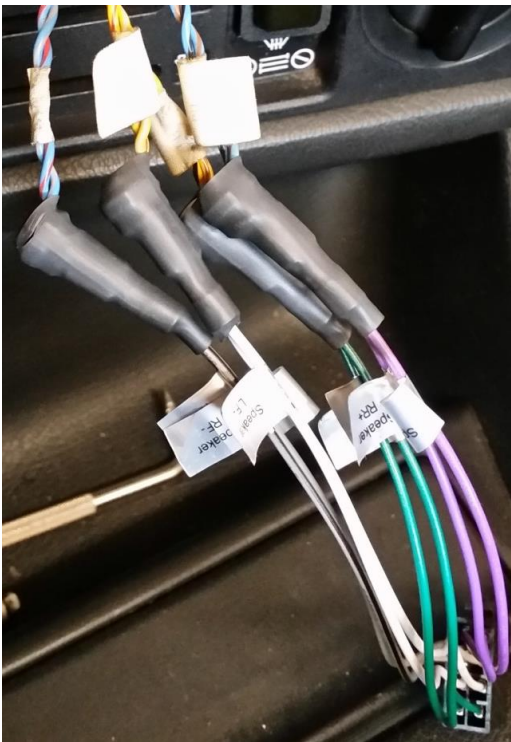
Since the factory radio was shot and needing a complete rebuild anyway, I cut the white (connector 215). Memory (Yellow wire out of radio connector), Illumination (white wire out of radio connector) this will then plug into the corresponding female part of connector 215 with the Radio Memory (+) Red/Green and Illumination Grey/Red.

Here is how I attacked the speaker connections at the radio.



Each factory speaker connector has a large (-) .175" spade and a small round (+).056" pin. I used a 1/4" female spade for the (-). For the (+) I used a yellow phone pin connector that I drilled out to make a nice tight fit to the positive pin. I crimped the pin connector just a little to the speaker connector. I then shrink wrapped them to ensure they stayed connected.

Here is the finished look:



The speakers were fairly easy also since the tweeter wiring is already there. The hard part was finding the tweeter connection under the carpet on the driver's side.

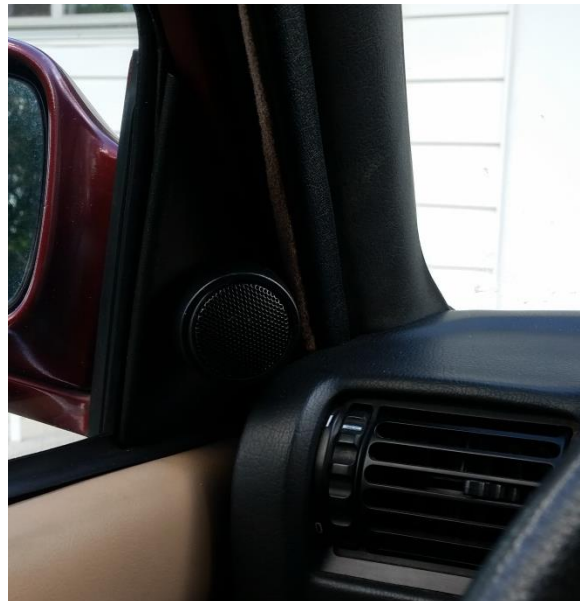


Left (-)	Grey/Green	Connects to Yellow/Grey, Kick Panel White Connector
Left (+)	Grey/Yellow	Connects to Yellow/Red, Kick Panel Blue Connector
Right (-)	Grey/Green	Connects to Blue/Grey, Kick Panel White Connector
Right (+)	Grey/Yellow	Connects to Blue/Red, Kick Panel Blue Connector

The tweeter connections in the doors are straight forward and wiring is the same:

Left (-) Grey/Green (Large), Left (+)  
Grey/Yellow

Right (-) Grey/Green (Large), Right (+)  
Grey/Yellow



I mounted the RF tweeter pods straight to the door covers and drilled a hole for the wiring:

Here are the speakers in the kick panel installed:



They fit nicely under the kick panels and look stock. The only problem is the R152-2 speaker mount holes don't line up perfectly with the factory nut plates and required slight modification to the speaker mount holes.

It is the same for the rear speakers. I used the factory rear cover because the RF covers would not fit with the rear shelf contour. I just mounted the RF tweeter pods on the cover for the rears, until I get a set of premium cases.



The Blaupunkt Toronto 420BT Installed:

Why no AMP or Sub you ask? I am not a big audiophile and my ears are pretty much shot from 27 years in the USAF, most of that time flying turboprops. So sound quality is not exactly a big priority, and anything was probably better than what I had. I have more pictures of the wiring if you may want to see others.