

BMW RDS Radio and OEM Amplifier stuff



Tired of searching for the best way to bypass the BMW OEM amp while continuing to use the BMW wire harness?

Here is the definitive pinout guide for the BMW e32 735i with a Blaupunkt OEM amplifier. Use this to completely bypass the amplifier.

The Blaupunkt amplifier is especially made for BMW. The amp has two 12 Pin male connectors. To bypass the amp unplug the cables and construct a jumper according to the table below. The "W" and "B" codes refer to the White and Black connectors. The number after the codes refer to the pin locations. For example, W11 -> B1 means connect the wire from pin 11 of the White connector to pin 1 of the Black connector.

Front Speakers

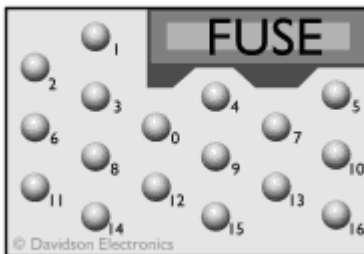
Left (+)		Right (+)
W11 -> B1	1" Tweeter	W6 -> B8
W11 -> W7	2 1/2" Midrange	W6 -> B6
W11 -> W1	5 1/4" Woofer	W6 -> B12
(-)		(-)
W10 -> W2	(Common)	W4 -> B5

Rear Speakers

Left (+)		Right (+)
W12 -> B7	1" Tweeter	W5 -> B9
W12 -> W8	5 1/4" Woofer	W5 -> B11
(-)		(-)
W10 -> W3	(Common)	W4 -> B10

More information:

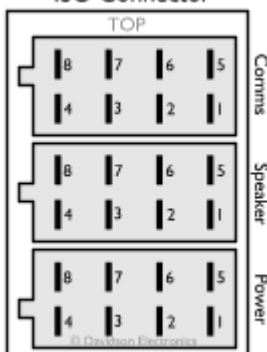
BMW 22DC785 Connector



- 1=Front Left +
- 2=Front Right +
- 3=Rear Left +
- 4=NC
- 5=12V IGN
- 6=Rear Right +
- 7=NC
- 8=Front Left -
- 9=12V MEM

- 10=NC
- 11=Front Right -
- 12=Rear Left -
- 13=Illumination
- 14=Rear Right -
- 15=Earth
- 16=Elec Aerial
- 0=NC

ISO Connector



POWER

- 1=Earth
- 2=Illumination
- 3=Battery
- 4=N/C
- 5=Ignition
- 6=Auto Aerial (another live input on VW Betas)
- 7=N/C
- 8=Phone mute

SPEAKERS

- 1=Left Rear(1)
- 2=Left Front(1)
- 3=Right Front(1)
- 4=Right Rear(1)
- 5=Left Rear(2)
- 6=Left Front(2)
- 7=Right Front(2)
- 8= Right Rear(2)

Amplifier Pinouts

The pinouts for the 15 pin connector, the one with the large pins in the connector closest to the rear of the car.

1. Subwoofer Rear Deck, Left +
2. Subwoofer Rear Deck, Left Center +
3. Left Rear Door Woofer -
4. Radio on/antenna trigger signal (12v)
5. Right Rear Door Woofer +
6. Subwoofer Rear Deck, Right -
7. Subwoofer Rear Deck, Right Center -
8. 12 V Power Source
9. Subwoofer Rear Deck, Left -
10. Subwoofer Rear Deck, Left Center -
11. Left Rear Door Woofer +
12. Right Rear Door Woofer -
13. Subwoofer Rear Deck, Right +
14. Subwoofer Rear Deck, Right Center +
15. Ground

Here are the pinouts for the 18-pin connector:











1. Not used
2. Low freq. negative (-) signal - Transceiver/charging electronics
3. Not used
4. Not used
5. I-bus Signal Line - Splice X18344
6. Not used
7. Not used
8. Right Preamp Output -
9. Left Preamp Output -
10. Not used
11. Low freq. voltage (+) signal - Transceiver/charging electronics (DSP)
12. Not used
13. Telephone mute signal - Transceiver/charging electronics
14. Not used
15. Telephone ON signal - Transceiver/charging electronics
16. Not used
17. Right Preamp Out +
18. Left Preamp Out +

Here are the pinouts for the 26 pin connector:

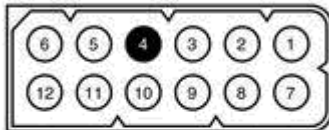
1. Left Front Woofer +
2. Left Front Woofer -
3. Not used
4. Right Front Mid-range -
5. Left Front Mid-range +
6. Not used
7. Not used
8. Not used
9. Right Front Mid-range +
10. Left Front Mid-range -
11. Right Rear Mid-range +
12. Right Front Tweeter +
13. Right Front Woofer +
14. Left Front Tweeter +
15. Left Front Tweeter -
16. Left Rear Mid-range -
17. Not used
18. Not used
19. Left rear mid-range speaker/tweeter +
20. Not used
21. Not used
22. Not used
23. Not used
24. Right rear mid-range speaker/tweeter -
25. Right Front Tweeter -
26. Right Front Woofer -

www.photopoint.com
26-pin Connector Diagram

1	2	3	4	5	6	7	8	9	10	11	12	13
14	15	16	17	18	19	20	21	22	23	24	25	26

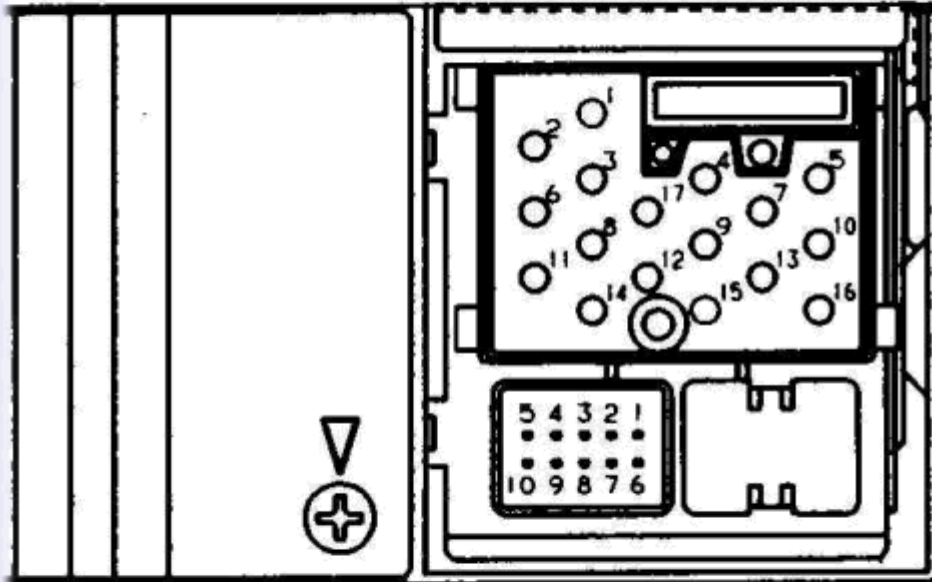
1	Brown/Orange	Right Rear Output	(-)	
2	Blue/Black	Right Rear Output	(+)	
3	Yellow/Black	Left Rear Output	(+)	
4	Brown/Orange	Left Rear Output	(-)	
5	empty			
6	empty			
7	empty			
8	Blue/White	Right Front Mid	(+)	
9	Blue/Orange	Right Front Mid	(-)	
10	Yellow/Black	Left Rear Tweeter	(+)	
11	Yellow/Grey	Left Rear Tweeter	(-)	
12	Blue/Black	Right Rear Tweeter	(+)	
13	Blue/Grey	Right Rear Tweeter	(-)	
14	Brown/Orange	Left Front Output	(-)	
15	Blue/Red	Left Front Output	(+)	
16	Yellow/Red	Right Front Output	(+)	
17	Brown/Orange	Right Front Output	(-)	
18	empty			
19	empty			
20	empty			
21	Yellow/Green	Left Front Tweeter	(+)	
22	Yellow/Brown	Left Front Tweeter	(-)	
23	Blue/Green	Right Front Tweeter	(+)	
24	Blue/Brown	Right Front Tweeter	(-)	
25	Yellow/White	Left Front Mid	(+)	
26	Yellow/Brown	Left Front Mid	(-)	

12-pin Connector Diagram



1	Red	Power	Do not use
2	White	Remote Turn-On	
3	Brown	Ground	Do not use
4	Empty		
5	Blue/Purple	Right Rear Woofer	(+) 
6	Blue/Grey	Right Rear Woofer	(-) 
7	Yellow/Red	Left Front Woofer	(-) 
8	Yellow/Brown	Left Front Woofer	(+) 
9	Blue/Red	Right Front Woofer	(-) 
10	Blue/Brown	Right Front Woofer	(+) 
11	Yellow/Purple	Left Rear Woofer	(+) 
12	Yellow/Grey	Left Rear Woofer	(-) 

PIN#		PIN#	
1	SP FRONT L (+)	10	(GAL)
2	SP FRONT R (+)	11	SP FRONT R (-)
3	SP REAR L (+)	12	SP REAR L (-)
4	TEL MUTE	13	ILL IN
5	ACC	14	SP REAR R (-)
6	SP REAR R (+)	15	GND
7	(DAC)	16	AUTO ANT
8	SP FRONT L (-)	17	(LAC)
9	BACK UP		



PIN#	
1	DATA
2	RXEN
3	D.GND
4	S.R GND
5	S.L GND
6	CLK
7	RST
8	GND SHIELD
9	SIG R
10	SIG L

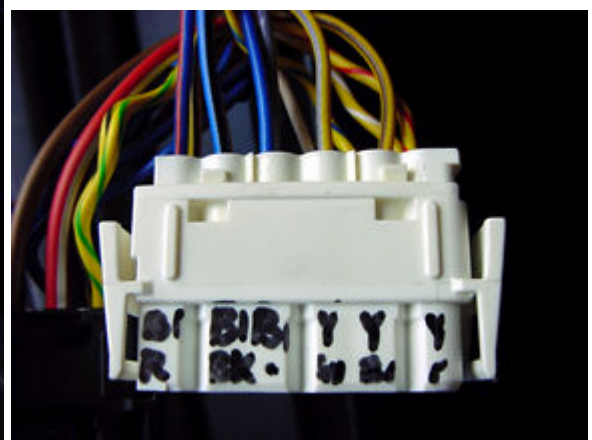
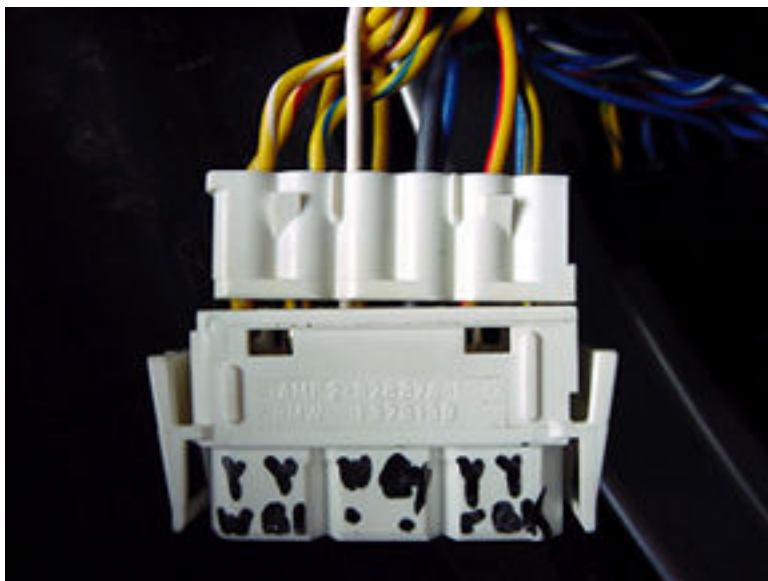
Radio wires	Color	Connector	Pin#	Color	Connector	Pin#
Front Left (+)	Yellow / Red	26p	16	Yellow / Red	12p	.
Front Left (-)	Yellow / Brown	26p	17	Grey	12p	.
Front Right (+)	Blue / Red	26p	15	Blue / Red	12p	.
Front Right (-)	Blue / Brown	26p	14	Blue	12p	.
Rear Left (+)	Yellow / Blue	26p	3	Yellow / Black	12p	.
Rear Left (-)	Yellow / Grey	26p	4	Grey	12p	.
Rear Right (+)	Blue / Violet	26p	2	Blue / Black	12p	.
Rear Right (-)	Blue / Grey	26p	1	Blue	12p	.
Remote power	White	12p	2	White	12p	.
Body computer system	.	.	.	.	.	.

Interior lights system	.	.	.	.	.
Instrument cluster system	.	.	.	.	.
Body Computer system	.	.	.	.	.
Cellular phone	.	.	.	.	.

Speaker Wires	Color	Connector	Pin#	Color	Connector	Pin#
Front Left Tweeter (+)	Yellow / Green	26p	.	Yellow / Green	12p with 11 wires	.
Front Left Tweeter (-)	Yellow / Brown	26p	.	Yellow / Brown	12p	.
Front Right Tweeter (+)	Blue / Green	26p	.	Blue / Green	12p with 11 wires	.
Front Right Tweeter (-)	Blue / Brown	26p	.	Blue / Brown	12p with 11 wires	.
Front Left Midrange (+)	Yellow / White	26p	.	Yellow / White	12p	.
Front Left Midrange (-)	Yellow / Brown	26p	.	Yellow / Brown	12p	.
Front Right Midrange (+)	Blue / White	26p	.	Blue / White	12p with 11 wires	.
Front Right Midrange (-)	Blue / Brown	26p	.	Blue / Brown	12p with 11 wires	.
Front Left Woofer (+)	Yellow / Red	12p	.	Yellow / Red	12p	.
Front Left Woofer (-)	Yellow / Brown	12p	.	Yellow / Brown	12p	.
Front Right Woofer (+)	Blue / Red	12p	.	Blue / Red	12p with 11 wires	.
Front Right Woofer (-)	Blue / Brown	12p	.	Blue / Brown	12p with 11 wires	.
Rear Left Tweeter (+)	Yellow / Black	26p	.	Yellow / Black	12p with 11 wires	.
Rear Left Tweeter (-)	Yellow / Grey	26p	.	Yellow / Grey	12p	.
Rear Right Tweeter (+)	Blue / Black	26p	.	Blue / Black	12p with 11 wires	.
Rear Right Tweeter (-)	Blue Grey	26p	.	Blue Grey	12p with 11 wires	.
Rear Left Woofer (+)	Yellow / Violet	12p	.	Yellow / Violet	12p	.
Rear Left Woofer (-)	Yellow / Violet	12p	.	Yellow / Grey	12p	.
Rear Right Woofer (+)	Blue / Violet	12p	.	Blue / Violet	12p with 11 wires	.
Rear Right Woofer (-)	Blue / Grey	12p	.	Blue / Grey	12p with 11 wires	.
+ 12V constant power	Red / White	12p	.	Red / White	12p with 11 wires	.
Ground	Brown	12p	.	Brown	12p with 11 wires	.

From the e34 net web site

http://www.bmwe34.net/e34main/upgrade/stereo_subwoofer.htm



Left Pic: Detail of connector with strain relief detached.
 Right Pic: Detail of other side of connector.

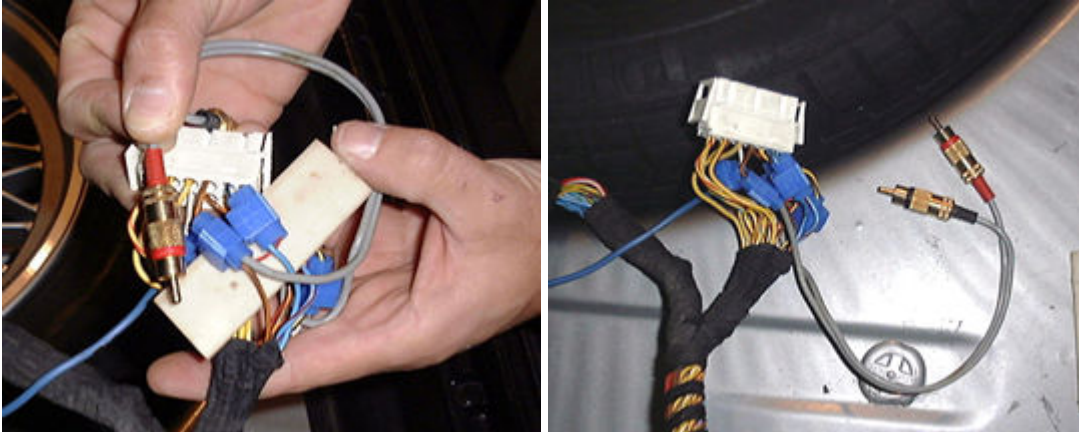
4. You have to tap on the signals from the radio at the amp: (Wire colors depends on Bmw year)

Rear Left (+): Yell/Blue (Yellow Black)

Rear Left (-): Yellow/Grey (Grey or Brn/Orange)

Remote power for new amp: White Rear Right (+): Blue/Violet (Blue/Black)

Rear Right (-): Blue/Grey (Blue or Brn/Orange) 5. You might need to strip some of the factory harness tape to allow enough play in the factory wiring to attach the big wire taps (or the splice).



6. You can use a short piece (around 8") of Left/Right RCA wire (RCA cable with individually insulated +/- wires as opposed to an RCA with the ground shield woven around the outside of the + wire) for the pre-outs of the new amp. (Thanks Derek for the pictures)

7. Find a location for the amp, either at the back of the rear seat (in the trunk) or like Anthony, relocate the stock amp and the new one at the same location.

8. 12V to power the new amplifier (big gauge wires) should be taken directly from the battery with a inline fuse as close to the battery as you can. For the ground, don't try the rear tail light bolts... This is a lousy ground and will give you a lot of alternator noise (how do I know? Don't ask). One of the rear seatbelt bolts will be perfect.

9. Now you just have to connect your subwoofer(s) to the amp. If you use one sub only, make sure you have a bridgeable amp.



You can place the subwoofer where the ski bag used to be, and if you don't have a ski bag, you can pop out the metal plate that covers the opening and put some rubber tubing around the edge (to keep from getting things caught, cut, or ripped). Then push the box right up to the opening. The armrest really needs to be down in order to get the bass response.

Here are my pictures:

