

7th November 2007, 20:57

#1

## [robertdn](#)

Member, Sport: On DSC: On  
(>100 posts)



Join Date: Nov 2003  
Location: Ytre Enebakk,  
Norway  
Age: 35

Garage: [BMW M5 Carbon Black \(E39\)](#)

Sales Feedback: (0)

Thanks: 0  
Thanked 1 Time in 1 Post

8th November 2007, 01:55

#2

## [robertdn](#)

Member, Sport: On DSC: On  
(>100 posts)



Join Date: Nov 2003  
Location: Ytre Enebakk,  
Norway  
Age: 35

Garage: [BMW M5 Carbon Black \(E39\)](#)

Sales Feedback: (0)

Thanks: 0  
Thanked 1 Time in 1 Post

9th November 2007, 04:33

#3

## [neuspeeder](#)

Member, Sport: On DSC:

### non-dsp to dsp conversion "urgent" :)

Looking for advice,

I've just complete a full nav retrofit, and have just received a DSP amp, since my non-dsp was broken. Then I found out that the harness for the non-dsp do not match the DSP amp.

Anyone have any experience with this and know what to do ?

Setup is now retrofit harness, BM54 radio, changer, 16:9 unit and MKIV nav unit.....and the odd-ball DSP amp (newest model) that doesn't fit in.

So, what to do, gut the harness and hardwire them to the amp ?

In advance thanks for your help! 😊

---

Regards,

Robert DN

'99 Carbon Black M5.

-19" BBS LM -Kelleners Exhaust -Custom chip. -2001 facelift. -2005 engine -H&R Coilover -Sachs Race Engineering clutch -Modified flywheel -Vorsteiner CF hood -16:9 display/MKIV Nav, BM54 radio, changer with mp3/wma support.

97 E39 540IA Wagon (transport)

94 E36 325I (wife's car)

91 E31 750I (possible convertible project)

73 2002 (Track project)

Update:

Looked at my 540 with DSP how it was wired, removed the non-dsp connector and attached the wires directly to the amp.

There is some sound on the tweeters now but very low and DSP does not show on the screen. Getting confused.....

Anyone that have done this conversion before and have some tips ? Maybe the car will have to be recoded with the dsp ?

---

Regards,

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what is DSP?

I think my car does have it, as I have the M-audio upgrade, and have seen DSP on the

On (>100 posts)



Join Date: May 2007  
Location: Kirkland, WA

Garage: [m5/lemans blue](#)

Sales Feedback: (0)

Thanks: 0  
Thanked 2 Times in 1 Post

19th November 2007, 05:27

## [TorqueDog](#)

Fellow Member (>400)



Join Date: Oct 2007  
Location: Calgary, AB  
Age: 24

Garage: [2002 BMW M5 in Le Mans Blue](#)

Sales Feedback: (1)

Thanks: 14  
Thanked 25 Times in 16 Posts

19th November 2007, 16:45

## [DouglasABaker](#)

M5 Expert (>4000)



Join Date: Jan 2007  
Location: Franklin, MA  
Age: 36

Garage: [2002 Chiaretto Red M5](#)


Sales Feedback: (0)

menu screen when playing around w/ the computer.

Mind you, I've only had the car since summer, so I'm still figuring the "toys" out on the car.

#4

Quote:

Originally Posted by [neuspeeder](#)   
*what is DSP?*

Digital Signal Processing, used to enhance sound quality.

-James

- '02 **BMW ///M5 - Le Mans Blue**

- Factory options: Chromeline trim, Comfort seats, BMW Active Seat, M-Audio w/DSP, Electric rear sunshade, Fold-down seats w/ integrated ski bag

- Aftermarket: Angel iBright V3.0, VSM w/ PS2 and Keyhole Reverse Camera, DICE iPod kit, Carbon Fiber Interior Trim (with Nussbaum shifter and e-brake for some contrast), Shadowline exterior door trim, Satin Black Kidney Grilles

#6

Robert,

I'm not particularly familiar with the non-DSP amp, but I am w/ DSP.

If you check my blog, you'll find the wiring colors for the speaker outputs. If you follow [this link](#), you'll find complete pin diagrams for all 3 DSP wiring harnesses.

If you [follow this link](#), it will take you to a page where you can check out the harnesses for the DSP and non-DSP amps as well.

If you'd like to post pictures of your harnesses (preferably in focus and up close!) I'd be happy to try to help you identify the various wires. BMW is pretty good about wire color consistency, and I'm pretty familiar w/ the scheme.

d-

Blog Entries: [6](#)  
Thanks: 47  
Thanked 1,112 Times in 540 Posts

19th November 2007, 20:49

## [robertdn](#)

Member, Sport: On DSC: On  
(>100 posts)



Join Date: Nov 2003  
Location: Ytre Enebakk, Norway  
Age: 35


Garage: [BMW M5 Carbon Black \(E39\)](#)

Sales Feedback: [\(0\)](#)

Thanks: 0  
Thanked 1 Time in 1 Post

#7

Quote:

Originally Posted by [DouglasABaker](#)   
*Robert,*

*I'm not particularly familiar with the non-DSP amp, but I am w/ DSP.*

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*If you'd like to post pictures of your harnesses (preferably in focus and up close!) I'd be happy to try to help you identify the various wires. BMW is pretty good about wire color consistency, and I'm pretty familiar w/ the scheme.*

*d-*

Thank you very much Douglas! The schematics gave some explanations.

Since the car is only equipped with hifi, it does not have connector X18772 that carries I-bus and radio inputs. So I'll have to pickup that signal from the other connectors.

A scary thing thou, is that the 26pin connector is a perfect match on both amplifiers, but when I look at the pin-outs I now see that they are not compatible at all, in worst case i have now sent amp out signal to the radio out, with reverse polarity. Really hope my radio internals are not blown to pieces. Thought BMW didn't make connectors that could be used several places.

If I read the schematics correct, I would have to create 2 new connectors and get the wiring right.....this is a much bigger project than i imagined.

So, the big decision is, buy a used non-dsp amp or cut the existing wires and try to connect them to the new amp. Even don't know if this setup will work with all the units and the dsp amp. Not sure if the radio has survived either.

Have to give this some thought, and even consider going for a aftermarket amp.

Any recommendations on which route to take ? I'm willing to add additional \$\$ into this to get it all working, can't stop now after i've used in the neighbourhood of \$4000 on this project.

Thank you so much again for the links, a lot of info to read up on!

Update: Radio is fine, connected it to my garage amp and full sound on all 4 channels. Also it seems that all the wires are there, just need to re-order and solder them to one connector, and find some clever way to connect 9 wires to the socket that I don't have a connector for.

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Regards,  
Robert DN  
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*Last edited by robertdn; 19th November 2007 at 23:35.*

2nd December 2007, 18:33

#8

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On (>100 posts)



Join Date: Nov 2003  
Location: Ytre Enebakk,  
Norway  
Age: 35

Garage: [BMW M5 Carbon Black \(E39\)](#)

Sales Feedback: [\(0\)](#)

Thanks: 0  
Thanked 1 Time in 1 Post

Finally, I got it working.

Some hints:

- Cut all cables to old AMP, except the 12 pin connector
- Use 26pin connector and solder the speakers inn according to wirecolors for non-dsp and pinouts for DSP.
- Solder (or use the pins you get spare from the 26pin connector) I-Bus, front left and front right to the 18pin connector. I-Bus signal can be taken from the radio.
- Take the "pins" out of the old 12 pin connector, and plug them into the 15pin connector according to pinouts (ground, 12v, antenna signal/AMP ON, rear left and right speakers)

Took quite some time figuring it out and soldering all the wires, there's a LOT of them.

Let me know if anyone are doing the same and have any questions 😊

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Regards,  
Robert DN

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