



BAVARIAN SOUNDWERKS

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## DICE iPod Integration Installation Instructions for BMW 3 Series, M3 Coupe '00-'06 (E46)

**Important! Please Read the Following Regarding  
the Integration of the Dice Module into your BMW.**

**IF THE BELOW STEPS AND SUBSEQUENT  
PROGRAMMING ARE NOT PERFORMED  
EXACTLY AS OUTLINED, YOUR DICE KIT  
WILL NOT FUNCTION PROPERLY.**

- ***If you experience the Dice Module not operating correctly upon the initial installation, head to the trunk and unplug the 3 pin connector for approximately 1 minute. This will resolve 99% of all issues that may have arisen. Plug the connector back in and reattempt the initialization process.***

**Before you begin the installation process, it is IMPERATIVE that you read and understand the following information.**

- The Dice module is a very complex piece of hardware that is responsible for very complicated communications between your iPod and your BMW. It will not just “work” once you plug it in. Much like a computer, it has to be precisely programmed in order to communicate with existing components in your BMW.
- Your iPod **MUST** be updated with the very latest firmware from Apple. This software is available through the iTunes website. Before you attempt to install your Dice Module, make **SURE** that your iPod has the latest firmware installed.

- Also, it is **IMPERATIVE** that your iPod has a complete charge before you attempt to use it for the first time with your Dice module.
- Again, much like your computer, the Dice module requires a thorough initial programming sequence, as well as a great amount of **PATIENCE** during this initialization. Please perform these initial programming steps carefully and methodically.
- **We recommend a dry run, meaning before you route the cable from the front to the rear of the car, test the Dice kit in the trunk. Follow all instructions regarding the wiring, and give it a go before you get too involved. Once operation is confirmed, proceed as outlined below.**
- ***If you experience the Dice Module not operating correctly upon the initial installation, head to the trunk and unplug the 3 pin connector for approximately 1 minute. This will resolve 99% of all issues that may have arisen. Plug the connector back in and reattempt the initialization process.***

#### Tools Required:

- Panel Removal Tool
- Philips Head Screwdriver
- Brain

#### The Process: **Disconnect your negative battery terminal first.**

We'll begin by disassembling the trunk first. From there, we'll run the Dice cable to the front of the car, at which point we will plug the cable into the Dice module. From the Dice module, we will route the cable that connects the Dice module to your iPod. Lastly, we will initialize the Dice module.

1. Begin by removing all items from the trunk of the vehicle. Make sure that all tail lights are in working order. If not, now is a good time to replace them. Also remove the carpet that covers the floor of the trunk, as it will reveal several fasteners that will need removing.
2. Start by removing the taillight covers. Push inward on the clip, and the light will release itself (Figure 1). Now depress the wiring clip attached to the light bulb housing to release the housing, and move the housing safely away from your working space (Figure 1-A)



Figure 1

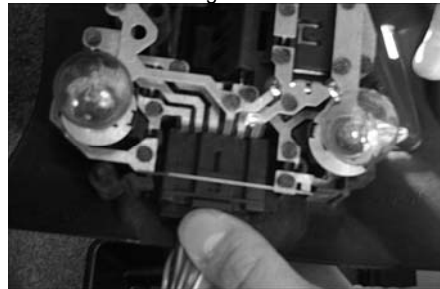


Figure 1-A

3. Now, look to the floor of the trunk. You will see that the two plastic casings on either side of the trunk are secured by plastic screws on the passenger side and fasteners on the drivers' side (Figures 2 & 3) remove the fasteners using you panel removal tool as shown. The plastic screws on the passenger side can be removed using a flat head screwdriver. The battery is located underneath this panel.



Figure2 (Driver Side)

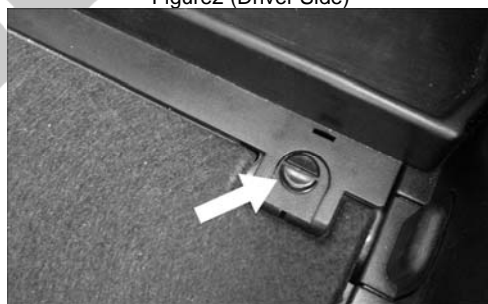


Figure 3 (Passenger Side)

4. Remove these panels and place them aside. Keep all of the fasteners here so as not to lose them.
5. Now, look to the carpeted drivers' side of the trunk, and you will see two fasteners securing the side panel (Figure 4). Remove these using your panel removal tool. You can now fold back the carpeted panel, which will allow us access to the wiring harness that we'll need for our installation purposes.

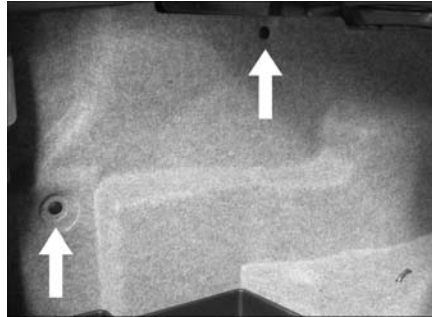


Figure 4

6. This will reveal the factory amplifier along with the factory CD Changer wiring harness. If you have an OEM changer, the wires we'll be using are already plugged into the changer. (Figure 5) The wires will be bundled together, often times in a soft, black padded wrapper. There is one 6 pin plug and one 3 pin plug. **They are most often found tucked behind the factory amplifier.**

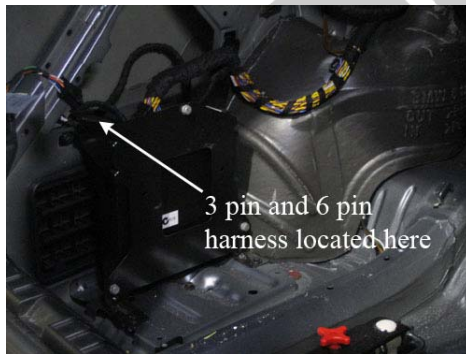


Figure 5

7. At this point, we'll go ahead and plug in the 6 pin connector **ONLY**. **DO NOT PLUG the 3 pin connector at this time! That will be the very LAST thing that you'll do upon completing every other step of the installation.**

**The 3 pin plug on the *BMW side* of the connection will have a brown wire on one of the outside pins. If the brown wire is located in the center pin, you have the wrong 3 pin connector.**

8. Let's now go ahead and pop out the bottom portion of the backseat. To do this, simply lift the front portion of seat upward, and the entire seat will free itself. Remove it from the car.

9. Route the cable up into the cabin by folding down the rear seats in vehicles with fold down seats and snaking the cable underneath the seat and into the bottom of the backseat area (where you sit). **Be careful** to not let the leather rest on the metal tabs that secured the bottom of the backseat into place. We recommend placing a towel or some other soft barrier between the leather and the metal tabs.
10. You'll now proceed to routing the cable alongside the door sill down the passenger side of the vehicle. You can simply tuck the cable underneath the plastic sill all the way underside of the glove box.



Tuck the Dice cable underneath the door sill where it meets the carpet.

11. Bring the Dice cable up underneath the kick panel sill and into the passenger footwell.



12. As the cable comes up towards the glove box, you'll want to begin thinking about where you'll mount the Dice module. We like to mount it behind the glove box. It's easy to remove. Open the glove box and you'll see the 5 screws that need to be removed.



13. There is still one more screw on the underside of the glove box that we'll need to remove.



14. Now, with the glove box open, carefully lift it outward by pulling slightly upward and then toward you. It's easy, stop worrying! Here's what you'll see, and we'll house the Dice module in any one of the little slots back there.



15. Go ahead and plug the cable from the trunk into the Dice Module, and then you can plug the cable going out to the iPod or spec.dock into the Dice Module. If you're going to keep the iPod in the glove box, just snake the wire back into the glove box as you're reinstalling the glove box.



16. **At this time**, you can head back into the trunk and plug in the 3 pin connector at the junction of the BMW changer cables and the Dice cable.

## Programming the Dice Module

Now we can begin the programming, which is super easy if you follow these steps:

- In some 1999 - 2002 E46 3 Series models, especially models with Cassette Players, we have seen that once you go into Dice mode, the head-unit's controls become locked up due to the Dice's scrolling text.

**Resolution:** Flip the Car Configuration Switch #1 (far left switch) into the down, or "on", position. This slows text output and should unlock head-unit controls. If this doesn't resolve the issue, then try going into simple mode and disabling all text (Disc 6, Track 99).

- We have also seen in some instances where the Satellite Radio (Sirius or XM) is no longer detected after the Dice module is connected. This situation is also caused by Dice's text scrolling locking up the head-unit.

**Resolution:** There are two possible resolutions to this issue: 1. On the Dice module itself, switch the car configuration dipswitch #1 into the down, or "on" position. 2. Insert a CD into the Business CD player. In doing this, your radio is given enough time to catch up to the commands without the text data interfering.

1. Turn the ignition on and **wait approximately 45 seconds before** beginning to use the Dice module. This is **VERY** important. **Do not** attempt to use the iPod during this time.
2. On your head unit, press the CD button twice until you see the Dice module appear on the screen. It will usually say "CD 01-01" at first, or "INIT" for initializing.
3. If your 3 Series is a late '00 model or newer, your radio is capable of supporting the text information from your iPod. To enable text, simply press button #6 on your radio and **wait approximately 45 seconds**.
4. The radio will automatically advance to track #1, which is where we want it to be. Once text appears, press button #1 on your radio. However, **If** your 3 Series has navigation, advance the radio to track 6, and once text appears, press button #1. This will allow the

Dice to sync with the BMW system.

5. **If your Dice module seems to be acting up at this point, as in the text functions aren't working properly or you are unable to activate the text, head back to the trunk and UNPLUG the 3 pin connector for approximately 1 minute. This will reset the iPod. Plug it back in and start over at step 1.**
6. Again, **before** you attempt to control the iPod, **give it a few seconds** to sync up with the communication system in your BMW.

## Using your DICE module in your BMW:

When changing tracks on your iPod using your steering wheel controls or radio controls, **do NOT press the button in rapid succession in an attempt to change songs faster.**

This will cause communication issues with the DICE module. Rather, press **the buttons one at a time**, to allow the radio and the iPod to change songs at the same time.

If you want to rapidly change tracks, do so directly through the iPod controls.

## Troubleshooting Guide:

If your Dice module begins acting up in **any** way, there are a few simple procedures that will most likely solve any issues that you may be having.

***If you experience the Dice Module not operating correctly upon the initial installation, head to the trunk and unplug the 3 pin connector for approximately 1 minute.***

**This will resolve 99% of all issues that may have arisen. Plug the connector back in and reattempt the initialization process.**

1. First and foremost, it is **imperative** that your iPod is up to date with the most current firmware. This firmware is available at the iTunes website. This solves most problems with the Dice modules.
2. Check to make sure that your iPod battery has enough of an initial charge to function properly. This is a very common reason we see the Dice modules not working as they should. If not, the iPod periodically needs to be charged via the AC adapter that came with it. USB charging will not work on an iPod that has completely lost its charge.
3. Reset both the iPod and the Dice module.

To reset the iPod, you will simultaneously hold down the center button and the menu button for approximately 10 seconds until you see an apple appear on the screen of the iPod.

To reset the Dice module, you will want to completely disconnect the module itself, meaning both the cable coming from the trunk and the cable going to the iPod. At this point, it is imperative to leave the module disconnected **for at least half an hour.**

Now, plug the Ipod cable back into the Dice module, then plug the cable coming from the trunk back into the Dice module. Refer to the section above for the proper initialization programming sequence.

