

iPod Integration Kit

Rev. B.01

Introduction.

Factory radio compatible iPod integration from DICE!
Connect the iPod to your vehicle's factory entertainment system and hear what an iPod should sound like. CD quality sound* and controls from your radio, steering wheel or the iPod. DICE keeps your iPod charged and ready to go. Radios supporting CD-text will also display text from your iPod, allowing you to view song title and artist name right on your radio's display.** Please note that FM-RDS text display does not guarantee CD-text support!

* Sound quality depends on the quality of the music on the iPod.
** CD Text may not be available on all text capable radios. Check compatibility guide for complete details.

Warning!

Do not allow the Apple iPod to distract you from driving! Only operate the unit when stationary or ask passengers to operate it for you. Neither DICE Electronics, LLC., Apple Computer, Inc., its regional offices, distributors or resellers accept any responsibility for any damage or injury as a result of using the DICE iPod Integration Kit. The use of this product constitutes your acceptance of our terms and conditions.

Exercise good judgment and keep your eyes on the road at all times!

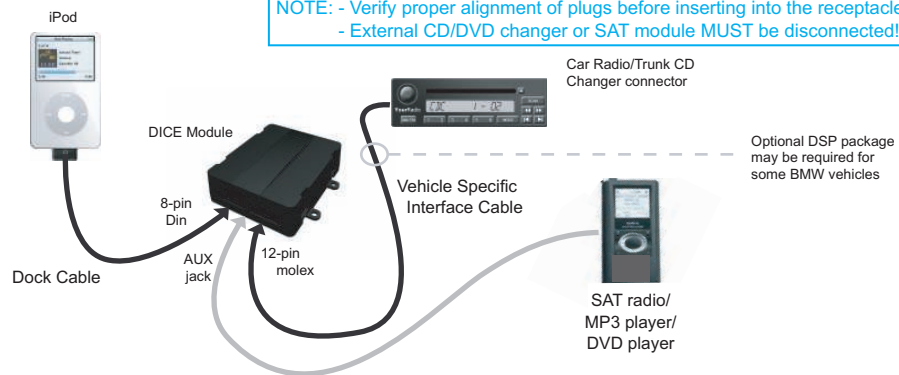
Getting Started.

Is Your iPod Up To Date?

Before you start, please check your iPod firmware version. For a complete list of supported iPod firmware versions, please visit <http://support.diceelectronics.com>.

Connection Diagram.

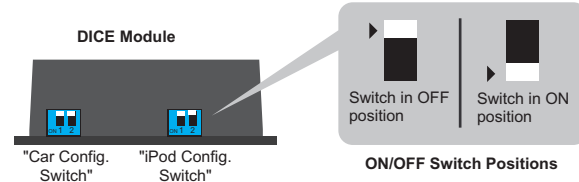
For detailed installation instructions, please visit <http://support.diceelectronics.com>. Here, you will find the latest information and instructions regarding the installation of your DICE Electronics iPod Integration Kit.



CAUTION: There may be more than one 3-pin plug if the vehicle is cellular phone ready; see supplement!

Dip Switch Configuration.

The dip switches located on the DICE module are used to configure how the iPod will interface and function with the radio.



Supported iPods.

iPod	Limitations
3G	Must have FW version 2.3 Does not support Albums and Chapters. FF/RW does not work from radio.
4G	Must have FW version 3.1.1
Photo	Must have FW version 1.2.1
Video	Must have FW version 1.1.1
nano	Must have FW version 1.1.1
mini	Must have FW version 1.4.1

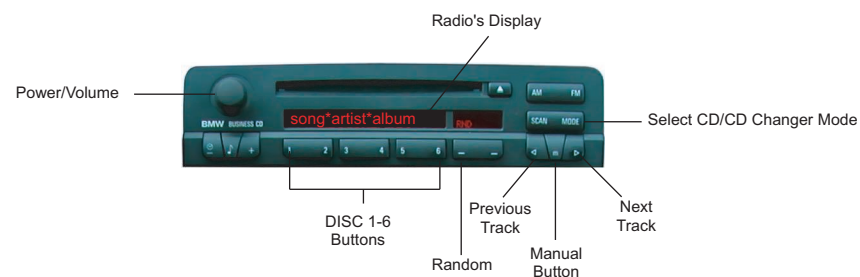
Load Your Music.

To take full advantage of our quick music browsing system, you must have your music organized in playlists on your iPod before using your DICE iPod Integration Kit.

For details on using your iPod and iTunes software, please refer to the documentation provided with your iPod.

General Operation.

BMW Business CD Radio.



Car Configuration Switch.

The features of this switch are currently inactive.

Selected Mode	Dip Switch # Position	
	1	2
Default	OFF	OFF

iPod Configuration Switch.

DICE Mode.

DICE Mode is best selected when controls from both the iPod and the radio are both desired. On your iPod you will see a DICE logo or checkmark followed by a series of iPod initialization screens for a few seconds before the familiar iPod user interface returns.

Simple iPod Mode.

iPod Mode is best selected when text display is not supported by the radio. Track numbers and times are not synchronized between the iPod and radio. Because there is less data transfer between the iPod and the radio, this mode has the fastest

Selected Mode	Dip Switch # Position		Text Display	Track Time Info	Radio Controls	iPod Controls	Initialization
	1	2					
DICE Mode	OFF	OFF	YES	YES	YES	YES	YES
iPod Mode	ON	ON	NO	NO	YES	YES	NO

Charging.

The DICE iPod integration kit automatically charges your iPods battery.

General Operation-continued.

1 **a** Connect the iPod to your DICE iPod Interface with the provided docking cable or an optional DICE Video cradle. **b** Turn on your radio and **c** select the CD Changer source. For a few seconds the iPod may cycle through a set of screens while it initializes in the DICE Mode. During this time your radio will display "INIT"!



2 If playback does not automatically begin or "PAUSE" is displayed on the radio's display, then select a playlist or song or press the next track button on your radio. You can browse music by **d** using your iPod or by using the buttons on your radio or steering wheel. Both the iPod and radio's controls are always active in both DICE and simple iPod mode and do not require you to select different modes. The following buttons on your radio have features (see pg.6) assigned to them: next/previous **e**, fast forward/rewind **e** (after pressing the manual button **f**) and disc 1-6 **g**.



See next page (pg.6) for song browsing instructions.

Song Browsing.

The DICE iPod integration kit gives you the following features while browsing from your radio: The DISC 1-4 modes select how your next/previous and fast forward/rewind buttons will function. If text display is enabled, the radio will display the currently selected mode. See the matrix below:

Radio Buttons and Features				
Selected Mode	Next	Previous	Fast Forward	Rewind
DISC 1	next track	prev. track	FF song	RW song
DISC 2	next playlist	prev. playlist	--	--
DISC 3	next album	prev. album	--	--
DISC 4	next chapter	prev. chapter	--	--
DISC 5	next source	prev. source	--	--
DISC 6	Enable text display. -See instructions below.			

ie. When you select DISC 1 the next button will select the next song. If you select DISC 2 then then the next button will select the next playlist.

Text Display.

To enable text display on BMW radios, press DISC 6. Then, select a track number to send text to the designated display:

Track #	Text Displayed On	For Vehicles	Characters
01	Radio	3-Series/Z3/Z4/X3	12
02	Navigation	All with nav.	15
03	Cluster/OBD	5-Series/7-Series/X5 w/o nav.	20
04	MID	alternate for 5-Series/7-Series/X5	11
99	No Text	All	----

On some older BMW radios, buttons must be pressed 2x to execute the command if text display is enabled.



Troubleshooting.

You cannot switch your radio to CD changer/ SAT mode:

1. Check cables to make sure everything is tight. VW and Audi vehicles have a separate ground cable that MUST be grounded to the chassis.
2. Remove the fuse of the radio, wait 30 seconds, then reinsert the fuse. This will reset your radio and the interface. You may have to enter the radio security code so please keep it at hand.
3. Consult with your installer or contact your support center

The "OK to disconnect (checkmark)" screen will not go away.

1. Disconnect and reset iPod. Please refer to the documentation included with your iPod or visit <http://www.apple.com/support/ipod>.
2. Turn radio off and then on again.

You cannot hear music playing:

1. Make sure that the correct mode (CDC/SAT/AUX) is selected on your radio. Check your radio's owner's manual to find how this is done.
2. Make sure that the iPod can play music on its own and that it has playlists with music.
3. Nano iPods may need to be reset (select + menu buttons) to enable external audio out. Some nano iPods do not have audio output through the dock connector.

You cannot control the iPod from the radio:

1. Make sure the firmware on your iPod is supported. See pg.4 of this guide.
2. Disconnect and reset the iPod. Please refer to the documentation included with your iPod or visit <http://www.apple.com/support/ipod>

iPod does not turn on:

1. Verify that the iPod's battery is not depleted by attempting to turn it on without connecting it to the car.
2. Turn off both your car stereo and the iPod before connecting to the interface. Power on your radio and select the appropriate source.

iPod does not charge:

1. Check all connections.
2. See if the iPod will charge when connected to a computer or wall charger.

Music is distorted or the sound level is too low:

1. Check and make sure all EQ and BASS boost options are turned off on your iPod.



Auxiliary Input.

Selecting the AUX Source.

Selecting DISC 5 and then pressing the next track or previous track buttons will toggle between the iPod and an auxiliary audio device. Auxiliary device support does not include controls from the radio or charging. While DISC 5 is selected track 1 indicates that the iPod is selected and track 2 indicates that the AUX source is selected.

AUX Source Settings.

The auxiliary input has settings for gain, bass and treble in order to optimize sound.

Gain. Should be adjusted if the input level from the auxiliary device is too low or too high. If you hear distorted audio while playing the auxiliary device, you need to reduce (-) the gain setting. If you notice the audio is too quiet while listening to an auxiliary device, the gain setting should be increased (+). Default settings are "50" ("68" is default for gain) and values may be adjusted between 01-99.

Bass, Mid and Treble. Should be adjusted to personal preference.

Making the Adjustments.

While listening to the auxiliary device, the next/previous buttons will adjust gain, bass, mid and treble. The DISC 1-4 modes select what functionality your next/previous buttons will have. See the matrix for the complete list of what each mode does.

Radio Buttons and Features		
Selected Mode	Next	Previous
DISC 1	gain +	gain -
DISC 2	bass +	bass -
DISC 3	mid +	mid -
DISC 4	treble +	treble -

ie. When you select DISC 1, pressing the next/previous button will adjust +/- gain settings. If you select DISC 2, the next/previous button will adjust +/- bass settings.



Optional Hardware.



Sleek Design.



Unique Mount.



Video Out.



DICE Video Cradle.

An iPod docking cradle with a sleek design that compliments the car's interior! The DICE Video Cradle can be mounted almost anywhere, thanks to its unique ball and cup mount solution, allowing it to be angled, tilted and rotated. Featuring a universal iPod dock connector and 1/8" video out jack for use with video compatible iPods.

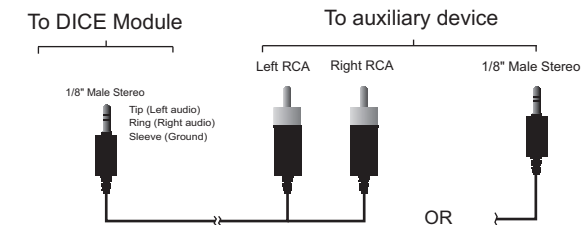
The DICE Video Cradle can be added to any dock cable compatible iPod solution, regardless of the manufacturer!

For more accessories, visit <http://www.diceelectronics.com>

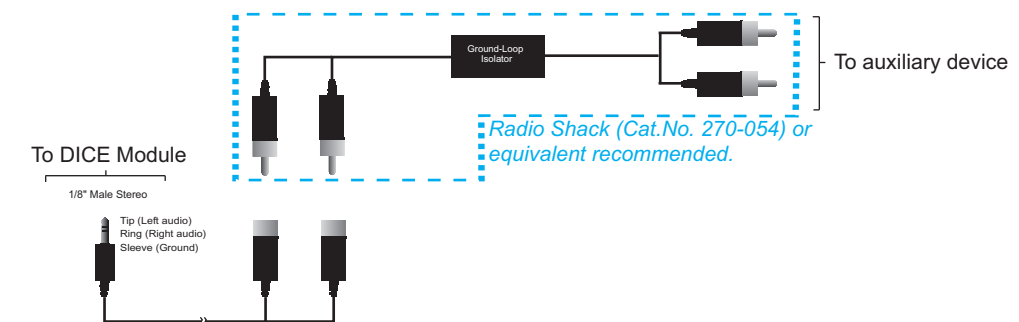


AUX Source Connections.

These are examples of component cables that can be used to connect an AUX device to the DICE module. These cables can be found at any stereo shop and are not included in this kit.



A Ground-Loop Isolator (not included) may be required when the auxiliary device is charged/powerd from the vehicle's 12V battery source. This additional part can be found at Radio Shack® (Cat.No. 270-054) and will eliminate unwanted noise caused by ground loops.



Disclaimer.

Important Disclaimer, please read!

Driving is dangerous and requires concentration. Do not allow the DICE iPod Integration Kit to distract you from prevailing traffic conditions. If in doubt, only operate the unit when stationary or ask a passenger to operate it for you.

Do not submerge or expose to water or other fluids. DICE components are NOT water resistant and will be damaged by water. You must properly insulate its casing if your installation environment may subject the unit to water, such as a convertible vehicle.

Keep away from children !

DICE components may contain small parts, can be broken or disassembled and components may become loose from vibration and heat. Small components and packaging materials may be a choking hazard when handled by children.

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Proof of purchase is required.

Warranty does not cover normal tear and wear, damages due to negligence, improper installation or operation.

