

# **DICE interface for iPod**

for selected Audi/Volkswagen vehicles

#### Installation Guide/User Manual

for model number Audi/VW-CDC and Audi/VW-SAT integration kits







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#### Table of contents iPod audio source Controls in SAT emulation Copyrights and trademarks Browsing function in SAT emulation Icon legends Scrolling feature Warranty and safety **Auxiliary audio source** Product registration Troubleshooting Supported iPod models Disclaimer iPod hierarchy Charging Icon legends Audi/VW-CDC integration kit 8-19 Integration kit contents Turn jog dial DIP switches 10 DIP switch settings 11 Turn jog dial repeatedly Installation 12 iPod audio source 18 Controls in CDC emulation 18 Press button Browsing function in CDC emulation 19 Press button repeatedly Audi/VW-SAT integration kit 20-29 Integration kit contents 21 DIP switches 22 Scroll DIP switch settings 23 Installation 24

28

28

29

30

31

33

35



### Warning and safety!

Please read these instructions carefully before proceeding. Failure to follow instructions may result in improper operation or injury. Neither DICE Electronics, LLC. nor Apple Inc., its regional offices, distributors or resellers take any responsibility for any damage or injury as a result of using the integration kit.

- Do not open, disassemble or alter the interface in any way.
- Do not insert anything into the casing.
- Do not cut or try to alter cables in any way and always use the correct connections.
- -Only operate unit when stationary or ask passengers to operate it for you.
- Do not allow the Apple iPod to distract you from driving.
- Exercise good judgement and keep your eyes on the road at all times.
- -Do not expose unit to extreme temperatures, humidity or shock.
- Keep the unit and iPod away from fluids.
- -Keep away from children! Interface 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 chocking
  hazard when handled by children.









### Congratulations on your purchase

Thank you for purchasing the DICE integration kit for iPod. Please review our user manual and installation guide before operating the unit. This interface was designed and manufactured to seamlessly integrate with your vehicle's factory entertainment system.

#### **Product registration**

In order to validate your warranty period and to receive telephone or online support, you MUST register your DICE product.

#### To register your DICE product, please complete the following steps:

- 1. Visit http://www.diceelectronics.com/register
- 2. Complete the product registration form.
- 3. Submit the form.
- 4. Save the registration/support/warranty sheet in a safe place for future reference.

If you are unable to complete the registration via internet, please call DICE Electronics at 1-888-342-3999.



#### Supported iPod models and firmware version requirements

FW:3.1.1



iPod 4th generation 20GB 40GB

FW:1.2.1



iPod

4th generation color display 20GB 30GB 40GB 60GB

FW:1.0.3



iPod classic 80GB 160GB

FW:1.2.1



iPod 5th generation (video) 30GB 60GB 80GB

FW:1.4.1



iPod mini 4GB 6GB

FW:1.0.3



iPod nano 3th generation (video)

4GB 8GB

FW:1.3.1



iPod nano

1st generation 1GB 2GB 4GB

FW:1.1.3



iPod nano

2nd generation (aluminum) 2GB 4GB 8GB

FW:1.1.1



iPod touch

8GB 16GB 32GB

For the latest firmware versions and models not listed, please contact your authorized dealer or DICE Electronics, LLC.



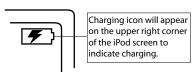
### iPod hierarchy

By default, the interface creates a Playlist having a name that is the same as the name of the iPod. This Playlist is the very first on the list of Playlists shown while browsing in Playlist mode. This Playlist contains all the songs on the iPod. Once a Playlist is active an Artist may be selected within that Playlist using the Artist Mode. Albums by the selected Artist and within the selected Playlist may be selected in Album Mode. "ALL ARTIST" and "ALL ALBUM" designate all available content in those categories.



### Charging

The interface automatically charges the battery of the iPod when connected and the key is in the ACC/ON position.





## Audi/VW-CDC integration kit



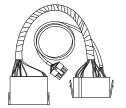
## **Integration kit contents**

1 Vehicle specific interface unit 1 iPod docking cable Vehicle specific harnesses (R,R1,R2)\* 1 User manual

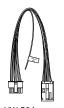












Audi-R harness

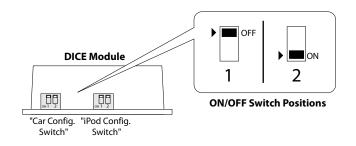
VW-R2 harness

<sup>\*</sup> Note that your kit may contain one or more harnesses.



## Dip switches

The configuration switches located on the DICE module are used to set the operation of the interface by the installer. Incorrect dip switch settings may cause the DICE interface not to work properly or not to operate at all. <u>Disconnect the vehicle harness from module and cycle ignition off for 50 seconds after changing the switches!</u>





## Dip switch settings

Car configuration switches		
Settings		
CD changer (CDC)		
Dip switch 1	Dip switch 2	
OFF	OFF	

Switches should remain in the default OFF position.

ir ou configuration switches			
Settings			
"Locked"		"iP	od"
Dip switch 1	Dip switch 2	Dip switch 1	Dip switch 2
OFF	OFF	ON	ON
It is best selected when advanced controls on the radio are used.  After the initialization the iPod will be locked for an increased interface functionality.		It is best selected v is not supported l user wishes to ret Track numbers and synchronized betw radio. Because their	by the radio and rain iPod control. It times are not veen the iPod and

iPod configuration switches



Default



iPod.

transfer between the iPod and radio. this mode has the fastest response time. Content is selected on the



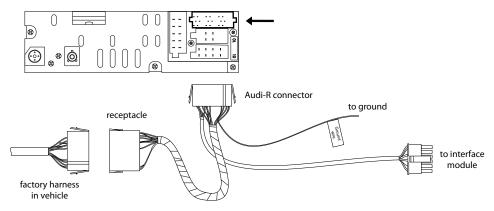
#### Installation

Installation should only be performed by a qualified professional. Beware of sharp edges to avoid injury and exercise caution when removing trims as they may break. The module should be placed at an accessible location to allow AUX cable to be connected, such as in the glove box, the center console or under the front seat.

- 1 Pull vehicle into service bay and access radio/center console.
- 2 Disconnect both battery terminals. These cables must be disconnected during installation to ensure proper initialization of the module when it is connected. **Make sure that radio code is available before starting installation.**
- 3 Before pulling out the radio, remove surrounding trims and screws. Most trims can be removed by carefully pulling on the piece or using trim removal tools. Trim is usually held in place by snap-in clips.
- **4** To remove the radio you need to use the appropriate radio removal tool. Consult your dealership if additional information is needed on removing the radio.

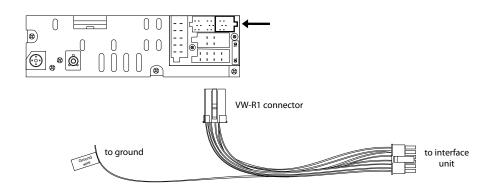


**5a - Audi radios with R connectors -** You can access the CD changer connector located on the back of the radio. Unplug the factory connection if present and plug the Audi-R BUS connector into the receptacle. The connector should securely lock. Ground wire MUST be connected to a stable grounding point.



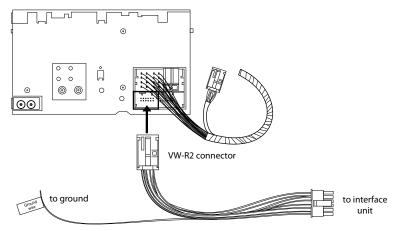


**5b - VW radios with R1 connectors -**You can access the CD changer connector located on the back of the radio. Unplug the factory connection if present and plug the VW-R1 BUS connector into the receptacle. The connector should securely lock. Ground wire MUST be connected to a stable grounding point.



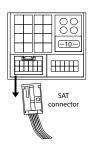


**5c-VW radios with R2 connectors** -You can access the CD changer connector located on the back of the radio. Unplug the factory connection if present and plug the VW-R2 BUS connector into the receptacle. The connector should securely lock. Ground wire MUST be connected to a stable grounding point.





- 5c Cable modification If vehicle is equipped with factory Satellite radio and desired to be retained, a harness modification is required.
  - Disconnect main radio harness and locate SAT connector. Remove it from main harness by pressing on the release tab of the SAT connector



2 Slide out the inner part of the 4 Remove the SAT wires from SAT connector from plastic housing.



3 Disassemble the VW-R2 connector the same way as the factory SAT connector.



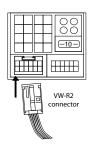
the factory connector by releasing the pins with a small screw driver or ballpoint pen.



5 Relocate wires to VW-R2 connector keeping the same order and location.



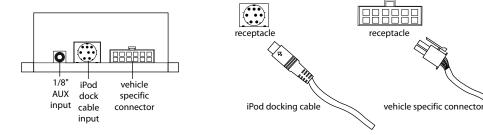
6 Put plastic connector covers back on Insert VW-R2 connector to factory VW main harness.



7 Connect around wire to chassis of radio



**6** Connect the vehicle specific connector and the iPod docking cable to the DICE module. Apply cable ties to secure the cables.



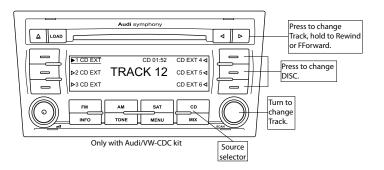
- 7 Verify that all connections have been properly made.
- 8 Reconnect the car's battery. Test the unit before seating the cables and reinstalling the panels/trim.



#### iPod audio source

#### **Controls in CDC emulation**

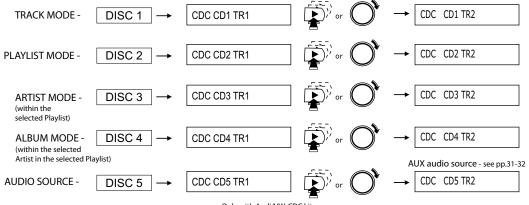
Press the CD button to access the interface and its features. Pressing this button repeatedly will cycle through sources present (internal CD if present, followed by external) in your vehicle. When the iPod audio source is active (DISC 5, Track1), press the Track button or turn the Tune dial to select next/previous Song.





## **Browsing function - in CDC emulation**

After connecting the iPod and selecting the CD changer source, use the desired mode by selecting DISC 1-4. To change Track press the Track button or turn the Tune dial. Text display is not supported, however recent iPod firmware upgrades show the Title/Artist information of the currently played song. Alternately, you may select iPod mode (p.11).



Only with Audi/VW-CDC kit



## Audi/VW-SAT integration kit

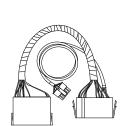


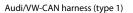
Pod

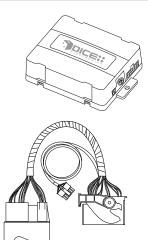
### Integration kit contents

1 Vehicle specific interface unit 1 iPod docking cable Vehicle specific harnesses (Audi/VW-CAN)\* 1 User manual

\*PDICE::







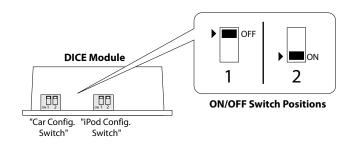
Audi/VW-CAN harness (type 2)

<sup>\*</sup> Note that your kit may contain one or more harnesses, in some cases they may look different from the ones illustrated above.



## Dip switches

The configuration switches located on the DICE module are used to set the operation of the interface by the installer. Incorrect dip switch settings may cause the DICE interface not to work properly or not to operate at all. <u>Disconnect the vehicle harness from module and cycle ignition off for 50 seconds after changing the switches!</u>





## Dip switch settings

Car configuration switches			
Settings			
Multi-line display		Single-line display	
Dip switch 1	Dip switch 2	Dip switch 1	Dip switch 2
OFF	OFF	ON	OFF
This is the recommended setting for radios that have multiple text fields displayed in Satellite emulation mode.		This setting is recommended for radios where there is only 1 text field displayed in Satellite emulation mode.	

Recommended for Satellite (XM/Sirius) capable radios. This type of emulation provides <u>full text display</u> on the radio. If Satellite (XM/Sirius) is equipped it must be disconnected to operate integration in this emulation mode. XM/Sirius receiver is usually located in the trunk or under the passenger seat.

OFF OF	F
Default	



iPod configuration switches			
Settings			
"Locked"		"iPod"	
Dip switch 1	Dip switch 2	Dip switch 1	Dip switch 2
OFF	OFF	ON	ON
It is best selected when text display is supported by the radio. After connecting the iPod you will see a logo or a checkmark indicating that the iPod is locked. After the initialization the iPod will be locked for an increased interface functionality.		It is best selected vis NOT supported Track numbers and synchronized betwradio. Because the transfer between this mode has the time. Content is so iPod.	by the radio. If times are not veen the iPod and re is less data he iPod and radio, fastest response







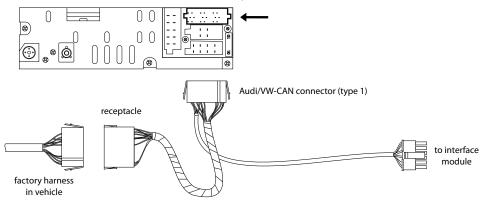
#### Installation

Installation should only be performed by a qualified professional. Beware of sharp edges to avoid injury and exercise caution when removing trims as they may break. The module should be placed at an accessible location to allow AUX cable to be connected, such as in the glove box, the center console or under the front seat.

- 1 Pull vehicle into service bay and access radio/center console.
- 2 Disconnect both battery terminals. These cables must be disconnected during installation to ensure proper initialization of the module when it is connected. Make sure that radio code is available before starting installation.
- **3** Before pulling out the radio remove surrounding trims and screws. Most trims can be removed by carefully pulling on the piece or using trim removal tools. Trim is usually held in place by snap-in clips.
- **4** To remove the radio you need to use the appropriate radio removal tool. Consult your dealership if additional information is needed on removing the radio.

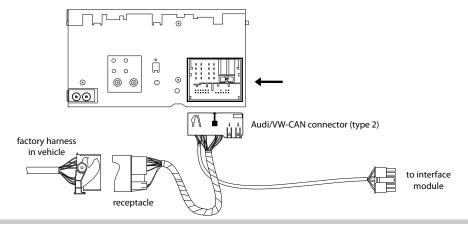


5a - Audi/VW radios with "Y-harness" type CAN1 connection -You can access the SAT connector located on the back of the radio. Unplug the factory connection if present and plug the Audi/VW CAN connector in. Connect the factory plug to the cable receptacle if it was removed from the radio. The connector should securely lock. The factory SAT tuner must be disconnected at the tuner which is usually located in the trunk or under the passenger seat. For detailed information refer to the service manual of your vehicle.



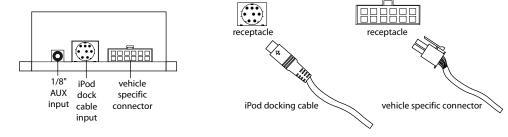


**5b - Audi/VW radios with "Y-harness" type CAN2 connection -**You can access the SAT connector located on the back of the radio. Unplug the factory connection if present and plug the Audi/VW CAN connector in. Connect the factory plug to the cable receptacle if it was removed from the radio. The connector should securely lock. **The factory SAT tuner must be disconnected at the tuner which is usually located in the trunk or under the passenger seat.** 





**6** Connect the vehicle specific connector and the iPod docking cable to the DICE module. Apply cable ties to secure the cables.



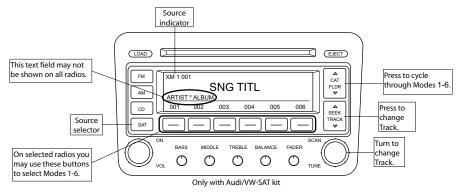
- 7 Verify that all connections have been properly made.
- 8 Reconnect the car's battery. Test the unit before seating the cables and reinstalling the panels/trim.



#### iPod audio source

#### **Controls in SAT emulation**

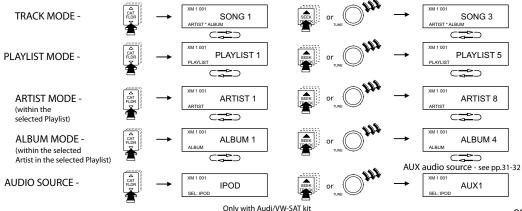
Press the SAT button to access the interface and its features. When the iPod audio source is active (Mode 5, Channel 1), use the Track button or the Tune dial to select next/previous Song.





### Silverline browsing function - in SAT emulation

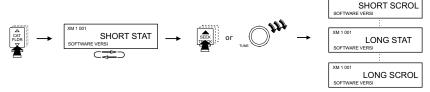
The Silverline integration kit features content browsing. After connecting the iPod, select the desired browsing mode by pressing the appropriate CAT/FLDR button. Press the Seek/Track button or turn the Tune dial repeatedly to browse contents; 1 second after releasing the button, your selection is executed.





#### Scrolling feature - in SAT emulation, Mode 6 (Only with Audi/VW-SAT kit)

To set and change scrolling feature press CAT/FLDR button repeatedly until Mode 6 is selected. Change options by pressing Seek/Track or turning the Tune dial. <u>After setting the desired feature turn off the ignition for at least 50 seconds to engage the new selection.</u>



Certain amount of blinking is normal on some radios when the scrolling feature is on.

#### Firmware version information - in SAT emulation, Mode 6

Firmware versions are displayed while in Mode 6. This may be needed by a support technician if troubleshooting is necessary. Having this information ready before requesting technical support may expedite the troubleshooting process.

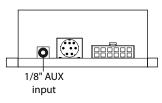


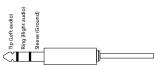


## **Auxiliary audio source**

#### **Connections**

The interface is equipped with a 1/8″ AUX jack connection to connect an auxiliary device, such as an MP3 player, DVD player or other audio source. To access the AUX audio source, select DISC 5, Track 2 or Mode 5, Channel 2.





1/8" mini stereo jack, not included

## Making the adjustments

While listening to the auxiliary device, adjust the volume (gain), bass, mid and treble by turning the Tune dial or pressing the Seek button. DISC/Mode 1-4 modes select what adjustment the Tune/Seek buttons perform. See illustration on page 32.

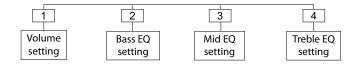


### AUX audio source setting

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

**Volume** (Gain) should be adjusted if the audio level from the auxiliary device is too low or to high. If you hear distorted audio while playing the auxiliary device, you need to reduce (-) the gain. If you notice that the audio is too quiet then the gain setting should be increased (+). Default settings are "50" ("68" for gain) and values may be adjusted in increments between 01-99. **Bass, Mid** and **Treble** should be adjusted to compensate for the acoustic presets of the radio.

**Note:** If you are using an AUX device that is using the vehicle's power source and not its own battery, you may have to use a GROUND-LOOP isolator to avoid grounding and engine noise.





## **Troubleshooting**

Problem	Solution
Cannot select the interface.	Check DIP switch settings (refer to pp.11, 23). With the ignition OFF disconnect vehicle harness from module for a few seconds and reconnect. Verify that the correct button is used to access the interface (CDC or SAT).
No audio from iPod source.	Reset the iPod. Verify proper connection to interface.
Radio/steering wheel controls do not operate iPod.	Reset iPod and make sure most recent iPod firmware is installed. Check vehicle user manual on how steering wheel controls work.
Radio/ steering wheel controls do not operate iPod, but audio is still present.	Select DISC/Mode 5 and Track/Channel 1. Switch back to DISC/Mode 1 and try changing Tracks.



## **Troubleshooting**

Problem	Solution
Interface has erratic recognition or not at all.	Make sure that the ground wire harness is attached to back of radio.
Text is not displaying.	Set iPod switches to OFF for "Locked" mode. Text display is only supported on SAT-capable radios.
iPod does not charge.	Check all connections. Reset iPod and make sure iPod charges while connected to computer or wall charger.
Music is distorted or sound level is too low.	Check and make sure all EQ and BASS boost options are turned off on your iPod. (Refer to AUX settings on p.32)



#### **Disclaimer and warranty**

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Products carry a 90 day limited warranty that protects you from defects in material and workmanship of products sold by DICE Electronics, or its authorized agents, distributors and dealers. The warranty period begins the day a product is purchased by the end user. Products found to be defective during the warranty period will either be repaired or replaced by DICE Electronics at no charge unless warranty is void. Unauthorized attempt of repair or alteration of the product in any way immediately voids this warranty. Warranty does not extend to cosmetics or finish. A DICE product specialist must determine that defect is present in the product and issue an RMA. Be sure that all wiring is connected as described in the user manual and all related equipment is functioning properly. DICE Electronics disclaims any liability for other incurred damages resulting from product defects. Any expenses in the removal and reinstallation of products are not covered by this warranty.

If experience any problems or need help, please contact your local dealer or call 888-342-3999, or visit our support site at http://www.diceelectronics.com/support.



Audi/VW-iPod 2008-03

