

USA·SPEC

PA15-INFI

iPod to INFINITI / NISSAN car stereo interface
with Text Display

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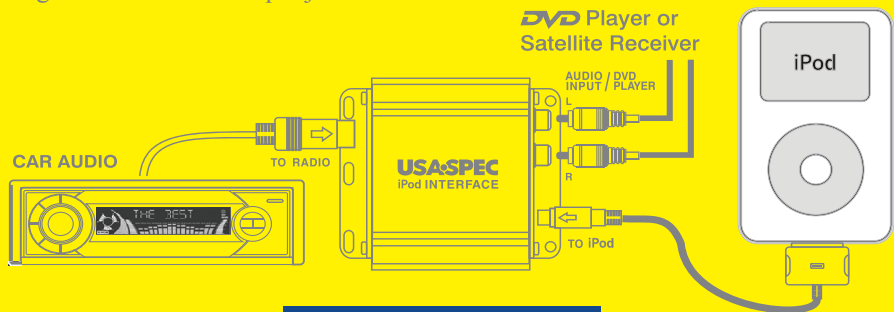
PLAY, CONTROL & CHARGE

Your iPod through INFINITI / NISSAN Car Stereo System!

KEY FEATURES

This adaptor connects an iPod, iPhone, or iTouch to your INFINITI / NISSAN audio system with the following benefits:

- Connects iPod's audio output directly to INFINITI/NISSAN Audio system for optimal sound quality playback.
- Displays text information on SAT ready radios.
- Retains Satellite radio receivers, CD Changers, and DVD systems.
- Offers two ways to access the music on iPod, namely, DIRECT MODE and Folder MODE.
- Charges iPod (both Firewire and USB charging types are supported) while playing. Charging stops at 30 minutes after car key is turned off to prevent car battery drain.
- Connects Satellite radio, DVD player, or other audio source to the car audio system through the AUX Audio Input jack.



APPLICATION

** The chart below is for general reference only. For detailed application and compatibility please consult www.usaspec.com or call 626-336-3836.

Model	Year: Radio Type	Year: Radio Type	Model	Year: Radio Type
Altima	05-06: BOSE	07-09: NAV	G35 Sedan	03 ½ - 06: All Radios
Armada	05-07: BOSE	08-09: NON-NAV	G35/37 Sedan	07-09: NON-NAV
Frontier	05-09: BOSE		G35 Coupe	03-07: All Radios
Maxima	04-08: BOSE	2009: NON-NAV	G37 Coupe	08-09: NON-NAV
Murano	04-07: All Radios	2009: NON-NAV	EX35	05-09: NON-NAV
Pathfinder	05-07: BOSE	08-09: NON-NAV	FX35/45	03-08: All Radios
Quest	08-09: NON-NAV BOSE		FX35/50	2009: NON-NAV
Rogue	08-09: All Radios		M35	03-07: All Radios
Sentra	07-09: BOSE		M45	06-07: All Radios
Titan	05-07: BOSE	08-09: NON-NAV	M35/45	08-09: NON-NAV
Versa	07-09: BOSE		QX56	04-07: All Radios
Xterra	05-09: BOSE		QX56	08-09: NON-NAV
350Z	04-08 All radio	2009: NON-NAV		



OWNER'S MANUAL

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QUICK NOTES

- PA15-INFI is applicable to cars that have SAT receivers. Otherwise, PA15-NIS model should be used instead.
- **Troubleshooting Hint**
Some of the NISSAN and INFINITI radios “floated” the ground pin on the radio connector where PA15-INFI connects to. Therefore, it is required to connect a GROUND wire to the SAT receiver’s metal chassis to complete the CONSTANT POWER circuitry. Please reference the diagram in Section 4: Cable Connection.
In the cases where the radio has a “floated” ground wire, without the GROUND wire connection, iPod will not charge and it will not display the “NISSAN and OK to Disconnect” messages.
- Radio must go through the **Preset Set Up Procedure** in Section 3-1-2 order for the Folder Mode to work properly.
- PA15-INFI charges the battery of all iPod and iPhone in the market today (Oct, 2009). The charging for some of the iPod or iPhone stops for about 8 seconds after it is connected to PA15-INFI. This is normal procedure while iPod or iPhone is synchronizing with the interface adaptor and the radio.
- ***Model PA15-NIS’s functionality is 100% equivalent to PA15-INFI. However PA15-NIS makes connection at the radio thus you will need to remove the radio from the dash.***

For technical or warranty services, please email techsupport@usaspec.com or call 626-336-3836 (Pacific time 9am to 5pm).
info@usaspec.com does not respond to technical support and warranty service requests.

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Thank you for purchasing **USA·SPEC** product. This manual describes the functions and operation of PA15-INFI iPod interface to Nissan and Infiniti car radios. Please read this manual before installing the interface adaptor in your vehicle.

!!!! IMPORTANT!!!!

- ❖ It is strongly recommended that the adaptor is installed in an easily accessible location, so that it can later be easily reset or upgraded.
- ❖ Eject ALL CDs from the built-in CD player or CD changer before removing the radio from dash board.
- ❖ **USA·SPEC** distributes products through authorized dealers so customers will receive proper services and advice from the dealers. **USA·SPEC** reserves the right to offer technical or warranty services only on products purchased through authorized **USA·SPEC** dealers.
- ❖ SAFETY NOTE: You should always give full attention to driving. DO NOT operate the feature or function of PA15-INFI in such a way that might distract you while you are driving.

Section 1. ABOUT PA15-INFI INTERFACE

1-1 Introduction

- a) This interface connects an iPod (includes iPhone and iTouch) directly to your INFINITI or NISSAN audio system for optimal playback sound quality.
- b) This interface enables iPod to coexist with INFINITI or NISSAN navigation system, CD changer, and SAT radio receiver, and controls iPod via both car radio and steering wheel control.
- c) PA15-INFI's on board software translates commands from radio's SAT Band control into commands that the iPod understands.
- d) This interface charges iPod while it is playing and charging stops automatically half an hour after iPod is paused.

1-2 Text Display of Song information

Artist name and song title can be displayed on radio by configuring PA15-INFI to work with SAT or RADIO button on the radio.

1-3 Package Content

PA15-INFI package contains one PA15-INFI interface adaptor and one each of the following cables: CDL-NISx, and CB-PA105.

1-4 Compatibility

Future iPod and iTunes software updates may affect the features and functions described in this owner's manual and **USA·SPEC** website.

1-5 Applications

Make	Model	Year	Type of Radio	Text Display	Radio Button to Access iPod	FOLDER Mode Function Control Key Type	Notes
NISSAN	Altima	05-06	Bose	Yes	SAT	A	
		07-09	Nav	Yes	CD6/MP3	MP3	(1)
			Non-Nav	Yes	RADIO	A	
	Armada	05-07	Bose	Yes	SAT	A	
		08-09	Non-Nav only	Yes	SAT	A or C	(3)
	Frontier	05-09	Bose	Yes	SAT	A	
	Maxima	04-06	Bose	Yes	SAT	A	
		07-08	Nav	Yes	SAT	B	
			Non-Nav	Yes	SAT	B	
	Murano	2009	Non-Nav only	Yes	SAT	A or C	(3)
		04-07	All radios	Yes	SAT	A	
	Pathfinder	2009	Non-Nav only	Yes	SAT	A or C	(3)
		05-07	Bose	Yes	SAT	A	
	Quest	08-09	No-Nav Bose	Yes	SAT	A	
		08-09	All Radios	Yes	RADIO	A	
	Sentra	07-09	Bose	Yes	SAT	A	
	Titan	05-07	Bose	Yes	SAT	A	
		08-09	Non-Nav only	Yes	SAT	A or C	(3)
Versa	07-09	Bose	Yes	SAT	A		
Xterra	05-09	Bose	Yes	SAT	n/a		
350 Z	04-08	Nav or SAT Radios	Yes	SAT	A		
370 Z	2009	Non-Nav only	Yes	SAT	A		

Make	Model	Year	Type of Radio	Text Display	Radio Button to Access iPod	FOLDER Mode Function Control Keys Type	Notes
INFINITI	G35 Sedan	03 ½-04	SAT Radios	Yes	SAT	A	
		05-06	SAT Radios	Yes	SAT	A	
	G35/37 Sedan	07-09	Nav	n/a	n/a		(2)
			Non-Nav	Yes	SAT	A	
	G35 Coupe	03-04	SAT Radios	Yes	SAT	A	
		05-07	SAT Radios	Yes	SAT	A	
	G35/37 Coupe	08-09	Nav	n/a	n/a		(2)
			Non-Nav	Yes	SAT	C	
	EX35	08-09	Nav	n/a	n/a		(2)
			Non-Nav	Yes	SAT	C	
	M35	03-04	SAT Radios	Yes	SAT	A	
	M35/45	06-07	Nav	Yes	SAT	C	
			Non-Nav	Yes	SAT	C	
		08-09	Nav	n/a	n/a		(2)
	FX35/50	03-09	Non-Nav	Yes	SAT	C	
			SAT Radios	Yes	SAT	B	
	FX35/50	2009	Nav	Yes	SAT	B	
			Non-Nav	Yes	SAT	B	
QX56	04-07	Nav	Yes	SAT	A		
		Non-Nav Bose	Yes	SAT	A		
QX56	08-09	Nav	n/a	n/a		(2)	
		Non-Nav	Yes	SAT	B		

Note (1) Altima '07 - '09 navigation radio : connection is made at external changer. CD changer can be retained.

Note (2) iPod interface solution is not available from **USA-SPEC**

Note (3) Use "A Type" if radio has DOT MATRIX style display, and use "B Type" if radio has LCD Screen style display.

USA·SPEC verified the published radio and vehicle application to the best of our ability. Due to uncontrollable factors, **USA·SPEC** can not 100% guarantee every published applications. These factors include variables such as, anomalies within a factory radio, factory radio heretofore unknown to **USA·SPEC** and partial model year changes.

Section 2. Direct Mode, Folder Mode, and AUX Option

PA15-INFI provides two ways to control your iPod, namely, Direct Mode or Folder Mode.

2-1 Direct Mode

Search and select music on iPod just as you would in portable use. Also use the track up/down button on the radio or the steering wheel to control.

- When PA15-INFI is configured to SAT control, SAT Preset #5 is dedicated to Direct Mode.
- In Direct Mode, screen and click wheel keypad on iPod are unlocked and fully functional. No text display on radio while in Direct Mode.

Application Tip

Direct Mode allows for the playing of wi-fi music stream such as Pandora.com® and SIRIUS/XM Online from iPhone or iTouch through the car stereo.

2-2 Folder Mode

Access 3 **Folders**, namely Playlist, Artist, and Album on iPod from radio and allows text based song search by the title of Artist, Album, and Playlist. See section 3-1 for more information. The Folders are associated to SAT presets as followed:

- SAT Preset #1 accesses *Playlist* Folder. Display on radio is: PL- *Playlist name*.
- SAT Preset #2 accesses *Artist* Folder. Display on radio is: AR- *Artist name*.
- SAT Preset #3 accesses *Album* Folder. Display on radio is: AL- *Album name*
- SAT Preset #4 access *All Songs* Folder. Display on radio is: ALL- *Song title*.
- SAT Preset #5 access *Genres* Folder. Display on radio is: Ge- *Genres name*.

CAUTION: DO NOT operate the text based song search feature if it will distract and prevent you from giving your full attention to driving or to the road. Safe driving is your responsibility.

2-3 AUX Input Option

In addition to iPod, PA15-INFI can connect a second audio source to car radio. Connect the second audio source to the RCA jack labeled AUX INPUT. **AUX input is enabled by setting the DIP switch #1 on the side of the interface adaptor to ON position.**

Section 3. Mode Setting and Function Control

Note: DIP switch #1 is only related to RCA AUX option setting and it is independent from these DIP switch settings.

3-1 Folder Mode + Direct Mode Configuration

Note: Folder Mode is only applicable to radios that have a SAT or a RADIO button.

3-1-1 Dip Switch Setting

A. To use **(SAT)** or **(RADIO)** button on the radio, set DIP switches as follow:

Radio Preset Button Type	DIP #2	DIP #3	DIP #4
"Preset A-B-C"	OFF	ON	OFF
"SAT1" and "SAT2"	OFF	OFF	ON

B. To use **(CD/MP3)** button on the radio, set DIP switches as follow:

DIP #2	DIP #3	DIP #4
ON	ON	OFF

3-1-2 Folder Mode Set Up on the Radio

IMPORTANT!!

This is a one-time SET UP procedure and it must be performed at the time of installation to enable FOLDER Mode operation. This set up procedure is not required if using CD/MP3 button.

The SET UP procedure is as follow:

- Step 1. Complete the cable connections. See Section 4 for details.
- Step 2. Set the DIP switches on PA15-INF1 adaptor according to the charts in Section 3-1-1.
- Step 3. Play the 1st track of any Artist folder on your iPod or iPhone.
- Step 4. Pause the iPod or iPhone after the 1st track is played for few seconds.
- Step 5. Connect iPod or iPhone to interface adaptor.
- Step 6. Turn car key to ACC power ON and turn the radio ON.
- Step 7. Switch radio to XM (or Sirius) band by pushing the RADIO or SAT button.
- Step 8. iPod music will play through the radio.

button.

If radio has SAT1 and SAT2 buttons then push the SAT1 button.

- Step 10. When radio displays CH 1, push-n-hold preset button #1 for about 3 seconds or until a beep is heard.
- Step 11. Push the Track Up button to CH2. (Note: find out which button on your radio is for Track Up from [Section 1-5 Application table](#) and [Section 3-1-3 table](#)).
- Step 12. When radio displays CH2, push-n-hold the preset button #2 for about 3 seconds or until a beep is heard.
- Step 13. Repeat Step 9 and Step 10 to finish the set up of CH3 to CH6 and Preset #3 to preset #6.

3-1-3 Functions and Radio Buttons

Note A: The **SET UP** procedure in **Section 3-1-2** must be done before operating iPod with PA15-INFI.

Note B: The functions of buttons on **INFINITI** and **NISSAN** radios vary among vehicles. Please use [Section 1-5 Application](#) to figure out your radio's **function control key type** and then operate the functions of your radio according to the chart below.

Preset #1 - #6	FOLDER Selection	(a)
SEEK	sub-FOLDER Up /Dn	(b)
TUNE Button	Track Up / Dn	(c)
Push & Hold TUNE	Fast Forward and Rewind	(d)
DISP (or, AUDIO)	Display Text Information	(e)
1st Push & Hold Preset #4	Random play ON	
2nd Push & Hold Preset #4	Random play OFF	
SCAN	10 Track Advance	
Preset #1 - #6	FOLDER Selection	

Continued on next page...

C	Preset #1 - #6	FOLDER Selection	(a)
	SEEK	sub-FOLDER Up / Dn	(b)
	TUNE Knob	Track Up / Dn	(c)
	TUNE Knob Fast 90° Turn	Fast Forward and Rewind	(d)
	DISP (or, AUDIO)	Display Text Information	(e)
	1st Push & Hold Preset #4	Random play ON	
	2nd Push & Hold Preset #4	Random play OFF	
	Push-n-Hold SEEK	10 Track Advance	
MP3	DISC #1 - # 6	FOLDER Selection	(a)
	SEEK	Track Up / Dn	(c)
	TUNE Knob	sub-FOLDER Up / DN	(b)
	FOLDER	Browse sub-FOLDER List	
	TRACK	Browse Track List	

Explanations:

- (a) (1) Push **SAT1** or "**Preset A-B-C**" to select the preset A group.
 (2) Push radio Preset buttons to access iPod Folders, Direct Mode, and RCA AUX as follow:

<i>Push...</i>	<i>Radio Plays</i>	<i>Remark</i>
Preset # 1	Playlist Folders	
Preset # 2	Artist Folders	
Preset # 3	Album Folders	
Preset # 4	All Songs Folder	
Preset # 5	iPod Direct	
Preset # 6	RCA AUX	IF DIP #1= ON

- (b) (1) Push to select sub-folder (example: change to next or previous Playlist while in the Playlist folder; change to next or previous Artist while in the Artist folder).
 (2) When in Songs Folder, push the button to change track by alphabetical order. (this feature applies to iTouch and iPhone only. For iPods, it is a regular track up/down function only.)
- (c) Due to the radio's display limitation, when track number is greater than 999, the first 2 digits and the last 2 digits of the track number are displayed alternately.
- (d) Push the button to fast rewind or fast forward the playing track for approximately 40 seconds respectively.
- (e) Push DISP button on radio to view music's text information. Text display on radio is as follow: (Note: available on SAT ready radios only.)

DISP Button	Prefix Text form Radio	Text from iPod	Note
1st Push →	SAT CHannel NUMBER	<i>track number</i>	(a)
2nd Push →	SAT CATEGORY	<i>folder type & name</i>	
3rd Push →	NAME	<i>artist name</i>	
4th Push →	TITLE	<i>album name</i>	
4th Push →	SAT CHannel NAME	<i>song title</i>	

3-1-4 Connecting and Playing iPod

- When iPod is connected to the interface adaptor and the Preset A button or SAT1 button on the radio is pushed, iPod will begin playing Songs at preset #4.
- preset #4 will continue to play the track in **the** Folder which was played prior to iPod is connected to PA15-INFI. When the last track of **the playing** Folder is completed, iPod will go to the first track of Songs folder.
- When returning to Songs Folder (preset #4) from Direct Mode (preset #5) Preset #4 will continue the same iPod folder being played at Direct Mode. When the last track of this folder is played, iPod will then go to the first track of Songs folder.

3-1-5 Switching Between SAT receiver and iPod

When there is a factory installed SAT receiver, switching between iPod and SAT can be accomplished as follow:

A. From iPod to SAT

Change radio to AM or FM band first and SAT receiver will be connected when the SAT button is pressed again.

B. From SAT to iPod

Change the radio to AM or FM band first and iPod will be connected when the SAT button is pressed again.

Section 4. CABLE CONNECTION

Step 1- Set DIP switches according to Section 3-1-1 of this manual.

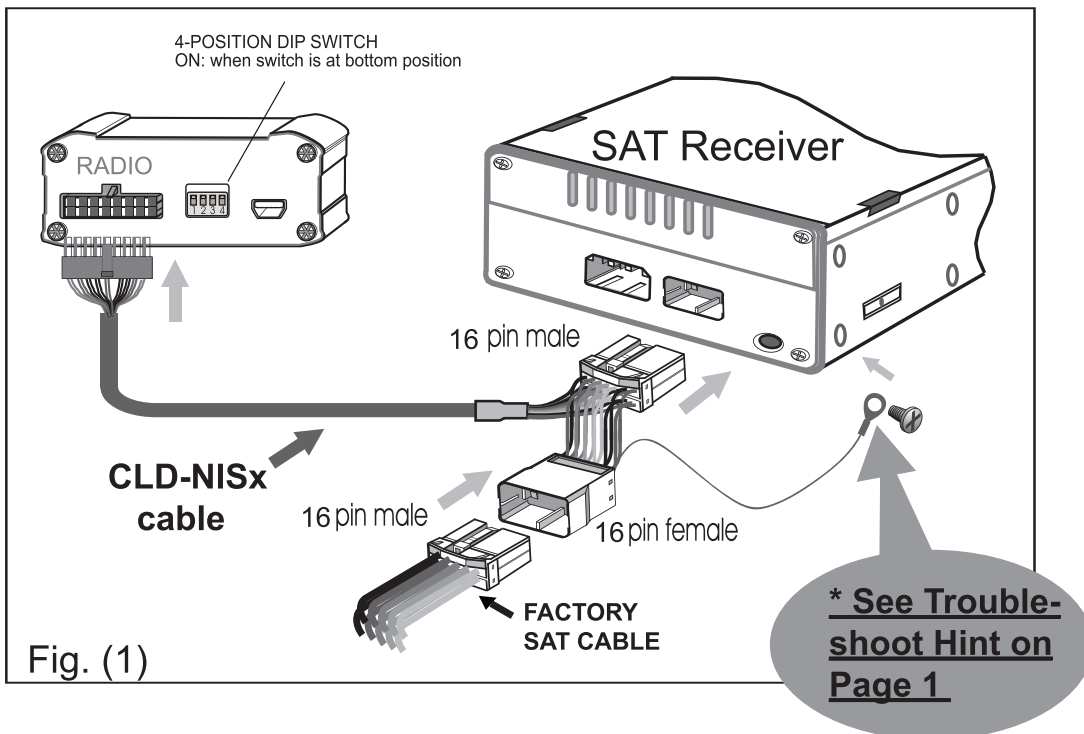
Step 2- Must remove or eject all CDs from radio.

Step 3- Locate the SAT receiver in the car. Reference Table (1) on Page 9 the approximate location of the SAT receiver.

Step 4- Reference Fig.(1) to complete the cable connection with SAT receiver.

Step 5- Plug the 18-pin connector on **USA:SPEC** CAS-NISx cable to the interface adaptor where it is labeled RADIO.

- Step 6- Connect your audio source to the RCA jacks on the adaptor if AUX option is selected by setting DIP switch #1 = ON.
- Step 7- Plug CB-PA105 cable to the adaptor where it is labeled iPod.
- Step 8- Perform a test run.



Model	SAT Receiver Location in Car
Altima	Under Rear Deck
Armada	Above Gas Paddle
Frontier	Driver Side Kick panel
Maxima	Under Rear Deck
Murano	Left-Front of Spare Tire
Pathfinder	Driver Side Kick panel
Quest	Behind Glove Box
Rogue	Behind Left Rear Quarter Panel
Sentra	Left Trunk
Titan	Above Gas Paddle
Versa	Left Trunk
Xterra	Driver Side Kick panel
350 Z	Left-Front of Spare Tire
370 Z	Left-Front of Spare Tire
G35 / G37 Sedan	Under Rear Deck
G35 / G37 Coupe	Under Left Rear Floor
EX35	Under Right Rear Floor
M35 / M45	Under Rear Deck
FX 35/45/50	Under Right Rear Floor
QX56	Above Gas Paddle

Table (1): SAT Receiver Location