

USA·SPEC

Model **PA11-GM**
iPod to GM car stereo Interface



OWNER'S MANUAL

TECH. SUPPORT
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9 AM ~ 4 PM PST

Thank you for purchasing a **USA&SPEC** product. This manual describes the functions and operation of PA11-GM iPod interface for GM cars. Please read this manual before installing the product to your vehicle.

Section 1. ABOUT YOUR INTERFACE PA11-GM

1-1 This interface connects an iPod directly to your GM audio system. Its on-board software translates commands from either your GM CD changer controls or XM band controls into commands that the iPod understands. This interface enables the iPod to **co-exist** with the GM Navigation system, CD changer, XM radio receiver, DVD system, and ON-Star, and provides the following benefits:

- Directs the iPod's audio output to GM vehicle audio system for optimal sound quality playback.
- Controls the iPod via vehicle's radio and steering wheel controls.
- Charges the iPod's internal battery, and charging stops automatically at one hour after the iPod is paused.

1-2 This interface adapter is designed to use either the **CD changer control** or the **XM band control** of your GM factory radio for controlling iPod and AUX. Selecting and using these controls for your auxiliary inputs as follows:

1-2-1. Using the CD Changer control:

- Set DIP switches # 3 and #4, located at the side panel of the adaptor, to the "ON" position. Your radio will recognize the adaptor and will turn on the CD changer icon on display panel.
- Access and control your iPod and AUX with the "DISC" and the CD changer control keys on GM radio.
- If you prefer to use the XM control instead of the CD changer control for iPod and AUX interface, please see the following "Using XM control" instructions. An example case of such a preference is that a factory CD changer already exists in your vehicle.

1-2-2. Using the XM band control without satellite receiver:

If your GM factory radio does not have a CD changer control function, but it is a **XM satellite ready** radio, you can use the XM band to do iPod and AUX interface. Setting the DIP switch #3 to "OFF" and the DIP switch #4 to "ON" position, both XM1 and XM2 bands will allow you to control iPod and AUX input port. Access and control your iPod and AUX with the "BAND" and the CD player control keys on GM radio. Press "BAND" button until "XM1" is displayed. Press "5" key for Playlist (or, disc number) change.

1-2-3. Using the XM band control with satellite receiver:

If your vehicle has a factory installed XM receiver, set both DIP switch #3 and DIP switch #4 to the "OFF" position. The XM1 will become iPod and AUX control and XM2 band remains for XM radio reception. The DATA line on factory XM receiver (tuner) shall be cut and connected to PA11-GM adapter for this mode of operation. Please refer to the INSTALLATION section for connection details. Access and control your iPod and AUX with the "BAND" and the CD player control keys on GM radio. Press "BAND" button until "XM1" is displayed on radio. Press "5" key for Playlist (or, disc number) change.

1-3 Compatibility

This PA11-GM interface is compatible with iPod (G3, G4 and Photo) and iPod mini models featuring a dock connector. The functionality and features of the iPod interface described in this owner's manual are confirmed with firmware version 1.3 for iPod mini, firmware version 2.3 and 3.0.2 for iPod, and firmware version 1.1 for iPod photo.

Future firmware updates for your iPod or iPod mini or iPod photo may affect the features and functions described in this owner's manual.

Display of artist and song title information, track search by artist, song title, album or genre are NOT supported. Only the Playlist number and track number are displayed on radio.

1-4 Package Contents

PA11-GM contains one each of PA11-GM interface adapter, XM DATA wire(Blue), CAS-G7i, CAS-F12 and CB-PA14 cables.

1-5 Applications

PA11-GM is applicable to the following GM vehicles:

MAKE	MODEL	YEAR	iPod control use*
CADILLAC	ESCALADE	2003-2005	CDC or XM
	EXT	2003-2005	CDC or XM
CHEVY	IMPALA	2000-2004	CDC or XM
	MONTE CARLO	2000-2004	CDC or XM
CHEVY TRUCKS	AVALANCHE	2003-2005	CDC or XM
	COLORADO	2005	CDC or XM
	SILVERADO	2003-2005	CDC or XM
	SUBURBAN	2003-2005	CDC or XM
	TAHOE	2003-2005	CDC or XM
	TRAIL BLAZER	2004-2005	XM
	VENTURE	2004	XM
GMC	CANYON	2005	CDC or XM
	DENALI	2003-2005	CDC or XM
	ENVOY	2004-2005	XM
	SIERRA	2003-2005	CDC or XM
	YUKON	2003-2005	CDC or XM
HUMMER	H1	2004-2005	CDC or XM
	H2/ SUT	2003-2005	CDC or XM
PONTIAC	GRAND PRIX	2005	CDC or XM

*CDC is the abbreviation of CD Changer Control.

Section 2. PLAYLIST MODE, DIRECT MODE AND AUX OPTION

PA11-GM provides two ways to control your iPod through car radio, namely **Playlist Mode** and **Direct Mode**.

2-1 Direct Mode: Search and select music on iPod directly just as you would in portable use. The music will play back through your car stereo. Use the track up/ down, fast forward, and reverse buttons on your radio to control music playback.

All control functions on iPod are available to use as well. Please see section 4 in this manual for additional information

2-2 Playlist Mode: Operate and control the iPod like it is a CD changer. This mode allows you to access up to five Playlists on the iPod. This is also referenced as External Control Mode of the iPod. The detail of Playlist creation and playback controls are in section 5 of this manual.

DIP switch #2 is for mode selection use. "ON" position is for **Playlist Mode** and "OFF" position is for **Direct Mode**. It is preset to **Playlist Mode** at factory.

Note: Disconnect iPod from PA11-GM before switching DIP switch #2 for mode alteration.

2-3 Additional AUX INPUT Option Selection

PA11-GM interface adaptor is capable of connecting two audio sources to your GM radio, including the iPod. The additional audio source connects to the RCA input jack labeled as AUX INPUT. If you choose to use AUX INPUT, the DIP switch #1 at the side of adaptor box must be set to "OFF" position (factory presets it at "ON" position).

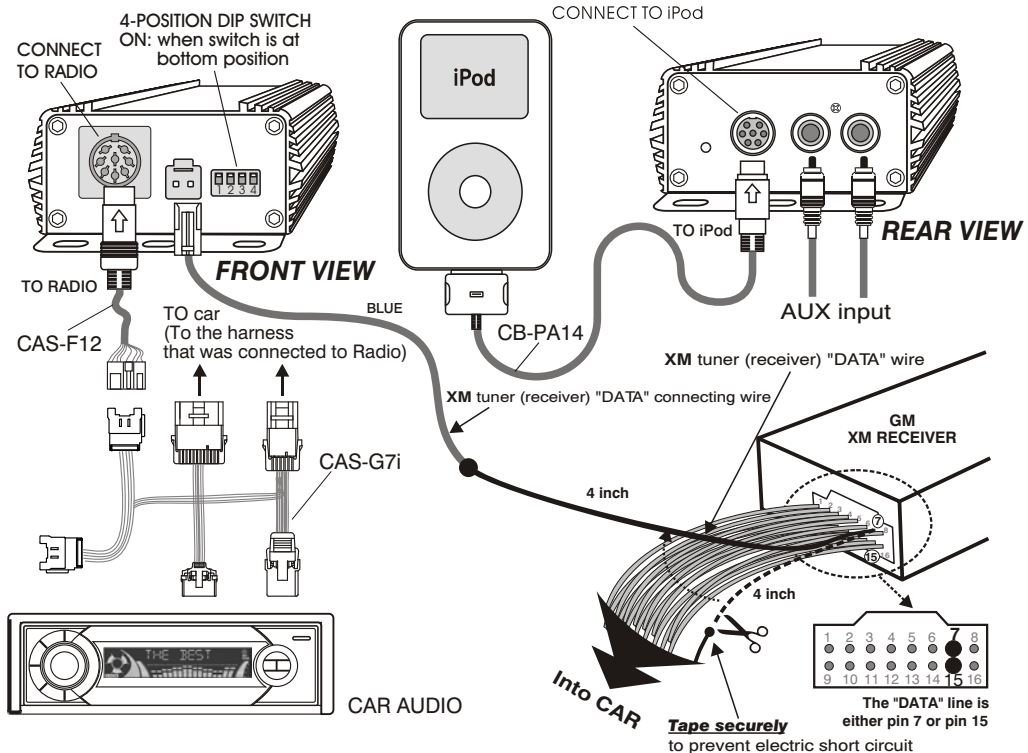
The audio source at AUX INPUT can be accessed at CD 6 Track 1. CD1 to CD 4 are for accessing Playlists, and CD 5 is for accessing all songs on iPod.

Operation of AUX

If the "AUX INPUT" option is selected, radio will display "CD 6 Track 1" gives access to the audio source connected to AUX INPUT port. Adjust VOLUME, BASS, TREBLE and etc. as you would normally do for the other program sources on the radio.

Section 3. INSTALLATION

- Step 1-a- Decide to use CD changer control or XM control first, and then set the DIP switch #3 and #4 position at side panel of PA11-GM accordingly. (See Section 1-2 instructions above. The adapter is preset to CD changer control mode at factory.)
- Step 1-b- Set the DIP switch #2 to "OFF" position only if the **Direct Mode** is preferred.
- Step 2- Remove radio from the dash.
- Step 3- Unplug the 24 pin and 12 pin connectors from the radio and connect them to **USA-SPEC CAS-G7i** cable.
- Step 4- Plug **USA-SPEC CAS-G7i** cable's 24 pin and 12 pin connectors to the radio.
- Step 5- Connect CAS-F12 cable to G7i cable. Plug the round DIN connector on CAS-F12 to adapter where it is labeled "RADIO". Go to Step 8 if there is no factory XM receiver in your vehicle.
- Step 6-1- Locate the "DATA" wire of XM receiver. It is connected to either the pin 7 or pin 15 of the connector hardness on the receiver box.
- Step 6-2a- Cut this "DATA" wire approximately 4 inches away from the receiver box.
- Step 6-2b- Immediately and securely tape the open end of the wire that goes into the car to prevent electric short circuits with car body, or with other wires.
- Step 6-3- Splice the other open end of "DATA" wire (receiver side) with the blue wire that comes with the PA11-GM adapter.
- Step 7- Plug the Data wire (Blue) into PA11-GM adaptor where it is labeled "XM Receiver".
- Step 8- Connect the audio output of your auxiliary sources to AUX input jack on PA11-GM adapter box if the additional AUX option is selected by setting the DIP switch #1 to "OFF" position.
- Step 9- Reinstall radio to the dash.



WARNING!!

Use only the iPod connection cable which comes with PA11-GM interface adaptor. iPod connection cables from other sources may look similar, but they may damage your iPod .

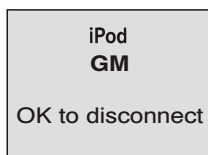
Section 4. CONNECTING & PLAYING of iPod in DIRECT MODE

When the iPod is connected to the adapter, the iPod 's screen will go blank for few seconds before the normal screen returns. The audio of iPod music will be played back at DISC 5 and Track 1. Adjust VOLUME, BASS, TREBLE and etc. as you would normally do for the other program sources on the radio.

Section 5. CONNECTING & PLAYING of iPod in PLAYLIST MODE

5-1 Connecting iPod to the interface

Turn your GM radio ON before connecting your iPod . After connection, the iPod will take a few moments to change to external control mode. The screen of iPod will then show



and you are now able to select iPod mode.

5-2 Select iPod mode on GM radio

Press "DISC" or "BAND" button, depending on the setting of the DIP switches made at Step 1of installation, until "CD6 TRK-x" appears on the radio display (x is the track number of "Now Playing" song on iPod). This display confirms that iPod mode has been completely synchronized and activated. Synchronization timing varies according to the number of Playlists on your iPod.

If iPod was playing previously before radio or ACC power was OFF, and the iPod was not disconnected, playback resumes from where it was stopped.

5-3 Disconnecting iPod from the interface

If the CD changer control is selected, the radio will automatically switch to AM/FM mode when iPod is disconnected from adapter.

If the XM control is selected, the radio will stay at XM band and displays "iPod" when iPod is disconnected from adapter.

After disconnecting, iPod screen changes from the external control mode screen back to the normal menu. Pressing and holding the Play/Pause button on iPod may get the normal iPod menu back faster.

5-4 Playback of songs on iPod

All audio tracks on your iPod will be played (All play) at DISC 6. Track order is determined by the default order on your iPod. Selecting DISC1 to DISC 5 on radio will allow playback of 5 Playlists on iPod .

Every time when iPod is connected to the interface adaptor, the playback starts from "Now Playing" song at DISC 6 by default.

If iPod was playing any of its Playlist right before the connection, the same Playlist will continue to play and repeated at disc 6 but iPod will switch to "All" as soon as fast forward button is pressed.

5-5 Selecting a Playlist

Press "5" button to select a Playlist. The selected Playlist will begin playing and the Playlist number and track number will be displayed. In rare cases, this may take up to few seconds for the completion of synchronization.

After playing the last song in the current Playlist, playback will start again from the first track of this Playlist.

Playlist naming

- When iPod is connected to your radio via PA11-GM interface adaptor, the adaptor scans all available Playlists on iPod and looks for designated "GM" Playlists which are created for direct access with DISC buttons on GM radio. The designated "GM" Playlists are related to DISC number in the following manner:

DISC 1: "GM1..."
DISC 2: "GM2..."
DISC 3: "GM3..."
DISC 4: "GM4..."
DISC 5: "GM5..."
DISC 6: ALL SONGS on iPod

The naming of designated "GM" Playlists in iTunes for PA11-GM interface must be exactly as shown. "GM" must be in capital letters and there can be no spaces between "GM" text and number.

However, you may add any text after the correct naming of a Playlist. (i.e. "GM1-Jazz", "GM3_Favorite3" are acceptable Playlist names for PA11-GM iPod interface.)

- If no designated "GM" Playlists are created, PA11-GM adaptor automatically relates the first five available Playlists on iPod to DISC number 1 to 5 regardless Playlist's naming.
- If less than five designated "GM" Playlists are created, PA11-GM adaptor automatically fills up the rest of DISC numbers beginning with the first available Playlist on iPod.
Example: if only three designated "GM1", "GM3" and "GM5" Playlists are created, the disc number on radio will be:

DISC 1: "GM1..."
DISC 2: (1st available Playlist on iPod)
DISC 3: "GM3..."
DISC 4: (2nd available Playlist on iPod)
DISC 5: "GM5..."

The iPod interface does not recognize Playlists that contain no audio tracks regardless of Playlist naming. The iPod interface also does not recognize the "On-The-Go" Playlist on your iPod.

5-6 Playback function controls

You can control playback with several functions. These functions are generally cancelled when you press select radio buttons; disconnect the iPod, or POWER OFF the radio or ACC.

SCAN

Press the scan button, and each track in the current Playlist will play for 10 seconds. If SCAN is pressed at DISC 6, it will play all songs in iPod for 10 seconds each.

Random (Shuffle)

Press the random button (RND), songs within a Playlist will play back in random order. The display of track number will change to start from 1 as it does on the iPod.

Repeat

Repeat of a song being played is not supported.

Track Up/Down

Press the track up button to advance to the next track in the Playlist. Press the track down button to go to the beginning of the track that's being played. Press the track down button twice to go to the previous track.

If the track up or track down button is pressed quickly in repetition, the track numbers displayed may change unevenly. You may also hear short bits of audio during repeated presses of track up and track down buttons.

Your GM radio currently displays a maximum of two digits for track number. Thus, track number 100 will be displayed as 01, Track 101 displayed as 02, track 102 as 03

Fast Track Search (x10)

Pressing the fast forward or fast reverse buttons will advance or retreat through the tracks in the Playlist in increment of 10 (i.e. 04, 14, 24). When the end of the Playlist is reached, the search will stop at track 1, and then continue by increments of 10 (i.e. 19, 29, 1, 11...).

Press and hold the fast forward or fast reverse buttons for more than 4 seconds, and the search will jump to the last track or the first track of the Playlist.

If you are in scan mode, it will be cancelled.

Fast Forward/Fast Reverse Play

This function applies **only** in random mode. Since engaging or disengaging the random mode does not stop playback of the current song, you can change into or out of random mode to do the fast track search (x10) function, or the fast forward/fast backward play function.

Pressing and holding the forward or backward button will cause only the current track to skip through at a rapid speed.

During fast forward, when the end of the current track is reached, the iPod will start playing the next random track at normal speed. During fast backward, when the start of the current track is reached, the track will start playing again at normal speed. To continue fast forward or fast reverse play, release the button and press it again.

Changing source to AM/FM, CD, Cassette

When a source other than the iPod is selected on the radio, the iPod will pause.

Section 6. CAUTION

- In general, iPod has not been designed to withstand temperature extremes in automobiles. Please consult your iPod Owner's Manual regarding acceptable operation and storage temperatures.
- Do not disassemble or alter the cable and interface box.
- Make the connections correctly.
- Do not cut away the wire sheath or use the power for other equipments.
- Do not install in locations which might hinder vehicle operation or create hazards for vehicle occupants.
- Having the wiring and installation done by professionals.
- Arrange wiring so it is not crimped or pinched.
- Do not use this product for purposes other than stated for the vehicle

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GM is a registered trade mark of General Motors Corporation.

Design and specifications are subject to change without notice.



Model **PA11-GM**
iPod to GM car stereo Interface

PLAY, CONTROL & CHARGE

Your iPod through GM Car Stereo System!

KEY FEATURES

This interface connects an iPod or iPod mini directly to your GM audio system with following benefits:

- Connect directly iPod's audio output to GM vehicle audio system for optimal sound quality playback.
- **Playlist Mode:** Play songs and Playlists on iPod with CD changer control or XM band control buttons.
- **Direct Mode:** Search and select songs directly on iPod.
- Maintain current Playlist when switching from portable to in-car use.
- Charge the iPod battery while playing, charging automatically ends at one hour after iPod is paused to prevent car battery drain.
- Plus- Satellite radio, DVD player or other audio sources can be used through AUX Audio Input jack.

This adapter allows either the **CD changer control** or the **XM band control** of GM radio to access songs on iPod. It is designed to **co-exist and compatible with factory CD changer, Navigation, XM receiver, DVD system, and On-Star.**

Display of artist and song title, track search by artist, album, song title are NOT supported. Only the Playlist and track number are displayed on radio.

COMPATIBILITY

This PA11-GM interface is compatible with

- iPod mini firmware version 1.3
- iPod firmware version 2.3 and 3.0.2
- iPod photo firmware version 1.1



Display of artist and song title information, track search by artist, song title, album or genre are NOT supported. Only the Playlist and track numbers are displayed.

APPLICATIONS

PA11-GM is applicable to the following GM vehicles:
Note: Radio must have AUX or SOURCE button.

MAKE	MODEL	YEAR	MAKE	MODEL	YEAR
CADILLAC	ESCALADE	2003-2005	GMC	CANYON	2005
	EXT	2003-2005		DENALI	2003-2005
CHEVY	IMPALA	2000-2004		ENVOY	2004-2005
	MONTE CARLO	2000-2004		SIERRA	2003-2005
CHEVY TRUCKS	AVALANCHE	2003-2005		HUMMER	H1
	COLORADO	2005	H2/ SUT		2003-2005
	SILVERADO	2003-2005	PONTIAC	GRAND PRIX	2005
	SUBURBAN	2003-2005			
	TAHOE	2003-2005			
	TRAIL BLAZER	2004-2005			
	VENTURE	2004			

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