HD) Radio®

Owner's Manual
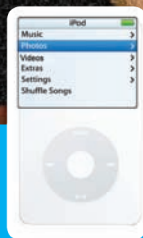
Installation and Operation

HDRT

Peripheral®
HD Radio™ Tuner   HD) Radio®
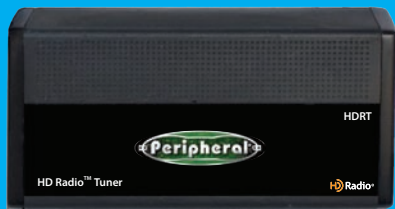
HD Radio™ Tuner

add iPod®
(if equipped)

Peripheral®
TECHNOLOGY

Table of Contents

Media Gateway & Optional Add-ons

Factory Radio
Not Included

LCD Retention Harness
Part #: PGHFD1A*

iPod
Not Included

Media Gateway Harness
Part #: PGHFD1

Media Gateway
Part #: PXAMG

11Ft. iPod Cable

3Ft. HD Radio Cable

HD) Radio®

HD Radio™ Tuner
Part #: HDRT

Antena Adapter

* Required for 2008 Escape, Mariner and Focus.

1. Introduction

Thank you for purchasing the Peripheral Electronics® Media Gateway. The Media Gateway is designed to provide endless hours of listening pleasure from your factory radio. To ensure that your HD Radio tuner or iPod performs correctly with your radio, we recommend that you read this entire manual before attempting installation of the Media Gateway.

The Media Gateway allows connectivity for HD Radio and iPod, enabling full control of these devices from the factory installed radio. It also retains original system features such as satellite radio and rear seat entertainment (if equipped).

Application Guide
* *www.peripheralelectronics.com* (Click on "Application Guide" link.)

2. Precautions

UPDATING iPod FIRMWARE
For proper operation of the Media Gateway, your iPod must be updated with the most recent version of firmware from Apple. This is done on your computer. To update the software on the iPod go to:
http://www.apple.com/ipod/download/.
Follow the directions on the website to complete the download. There is no charge for this update.

PREVENTING DAMAGE TO YOUR VEHICLE OR IPOD.
Some installations require you to make wiring connections. To eliminate the risk of an electrical short, we recommend disconnecting the vehicle's battery prior to installation. If you do not feel comfortable making these connections, we suggest you seek professional installation. We recommend that the iPod be disconnected from the interface when the vehicle is not in use.

PROPER MOUNTING LOCATION
Securely install the interface in a location free from; heat, humidity, moving parts, sharp metal edges or direct sunlight. We recommend securing the interface to a suitable location using; double sided tape, Velcro™ or zip-ties.

3. Compatibility Notes

This section will inform you of the specific requirements for your factory radio to be compatible with the Media Gateway. These notes will inform you of any issues or circumstances that can affect the compatibility of our product with your radio, audio system, or accessories. Not all Factory radios are compatible with the Media Gateway. The Media Gateway will only work on models equipped with the specifications listed below. Please read and understand these notes before proceeding:

Radio Requirements

Radios must be "can-bus", satellite ready, and may have "MP3" printed on the face plate of the radio. This indicates that the required connection is present on the rear of the head unit and that the radio has the necessary functionality to operate the Media Gateway.

Refer to **www.peripheralelectronics.com/apps**
for most updated application guide.

4. Programming the Media Gateway (PXAMG)

The Media Gateway may need to be programmed before installation. To program the interface you will need to set the dip switches located on the side of the interface (see Fig. 1 below) to the proper configuration listed below. Prior to installation the switches are in their default setting of "off" in the up position and are turned "on" when switched down. Refer to the chart below.

Dip Switch Configuration Chart

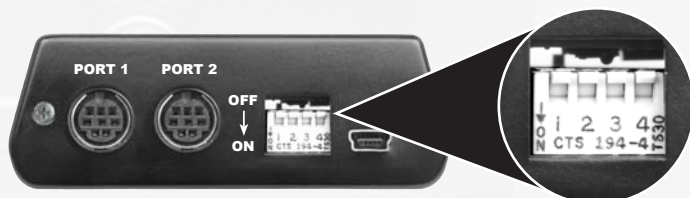| Features	1	2	3	4
IPOD, HD RADIO, SAT	off	off	off	off

Fig. 1 Side view of interface with dip switches in correct position

5. Installation

1. **When making electrical connections it is always recommended that the vehicle's battery be disconnected from the electrical system before performing the installation.**

2. Carefully remove the trim panels covering the 7mm bolts that secure the radio into the dash cavity. Remove these bolts, and carefully pull the radio from the dash of the vehicle. This will provide access to the factory radio connectors where you will connect the Media Gateway harness.

3. **Disconnect the factory 24-Pin harness and 16-Pin harness (if present) from the back of the radio.** Disconnect the antenna adaptor from the radio.

4. Plug in the male connectors on the PGHFD1 harness into the 24-pin port and 16-pin port on the back of the radio. Next, connect the factory 24-pin and 16-pin harness (if present) into the female connectors on the PGHFD1 harness. Be sure to make a firm connection but do not force it. Plug the black micro-fit 24-pin connector on the PGFD1 harness into the PXAMG Media Gateway box.

5. **IMPORTANT NOTES** for installation in 2008 Mercury **Mariner**, Ford **Focus**, or Ford **Escape**

   **** 2008 Mercury Mariner, 2008 Ford Focus, and 2008 Ford Escape will require the PGHFD1A harness. This harness will connect to the 4-Pin plug on the PGHFD1 harness. This harness will replace the current 12-pin harness connected to the LCD mounted above the radio. Disconnect the factory 12-Pin harness and do not reconnect. Plug the 12-Pin connector of the PGHFD1A harness into the LCD display. Again make a firm connection, but do not force.

6. Plug the 3 foot HD Radio Cable (8-Pin mini-din to 8-Pin mini-din) cable into the first port (furthest to the dipswitches) on the Media Gateway. Connect the other end of this cable into the HD Radio tuner. Connect the factory antenna cable into the antenna connection on the HD Radio tuner (HDRT) Using the supplied antenna adaptor if needed to make this connection.

7. If connecting an iPod, connect the 8-Pin mini-din iPod cable into the second port on the Media Gateway (closest to the dipswitches). Carefully run the 11 foot iPod cable behind the dash to the location where the iPod will be mounted or stored (for example the glove box or center console). This location will vary based on the vehicle, and the customer's prefrence. When running this cable through the dash be sure to secure it away from moving parts or sharp metal edges that may damage the cable.

8. To complete the installation secure the Media Gateway (PXAMG) and HD Radio tuner (HDRT) into the cavity in the dash behind the radio. Be sure that the cables and interface modules are not near moving parts or sharp metal edges as they may damage the cables. To prevent rattling noises inside the dash, use zip ties, or electrical tape, or other fasteners to mount the interfaces to the factory wiring or installed audio components (for example under the factory Satellite tuner (if present).

9. With all connections made, reconnect the vehicle's battery, insert the key into the ignition, and turn the vehicle on. Check for proper operation of the Media Gateway and HD Radio tuner before reinstalling the factory dash panels.

Sample Mounting Locations: You can Secure your Media Gateway and HD Radio tuner in the shaded areas shown below.

Mounting location for Media Gateway or HD Radio tuner

Mounting location for Media Gateway or HD Radio tuner

6. HD Radio Operation
6.1 Selecting HD Radio

Simply press and release the AUX or SAT button until "HD Radio" is displayed on the screen.

**When you press the AUX or SAT button, you will see the corresponding SAT mode (for example SAT 1), a slight delay, and then the current Media Gateway mode will be displayed (HD Radio/iPod/Sat1 - Sat 2 - Sat 3/Line In).

Tune Up / Seek Up
Press the **SEEK►** button to advance one station or to seek to next broadcasting station.

Tune Down / Seek Down
Press the **◄SEEK** button to move back one station or to seek back to previous broadcasting station.

Changing from auto seek to manual tuning:
Press and hold **SEEK►** button for longer than two seconds to toggle between manual tune and auto tune modes. Either "MANUAL" or "AUTO" will be displayed on the screen to verify which mode is selected.

Changing Bands
Press and release the AUX button to cycle through FM1, FM2, FM3 and AM1.

Storing Radio Stations into Preset Memory
Once you have tuned to a station you wish to store as a preset you will need to press and hold one of the preset buttons (1-6) for longer than two seconds to store it into that location. The screen will display "PR SAVED" and your preset has been stored into memory.

Recall Stored Preset Stations
Press and release the Preset Button(1-6) that represents the station stored in memory that you wish to recall.

Displaying Text

A. Radios equipped with the text/scan button:
    1. Press the TEXT/SCAN button to display artist/song title information, if available.

B. Radios not equipped with the TEXT/SCAN button:
    1. Press the ⊕ button located in the top right hand corner of the radio to display artist/song title information, if available.

**Not all stations broadcast the artist and song title information.

***NOTE: If the selected station supports HD RADIO and the signal is strong enough the radio will auto-lock onto the HD Radio Station. The letters "HD1, HD2 or HD3" will follow the stations frequency when locked onto an HD station.

The HD Radio will pick up both Digital and Analog radio signals. Multicast HD2 and HD3 stations are digital only, and will not be available if the radio signal is too far away, causing a weak signal.

7. iPod Operation (if equipped)

Simply press and release the AUX or SAT button until "IPOD" is displayed on the radio.

**When you press the AUX or SAT button, you will see the corresponding SAT mode (for example SAT 1), a slight delay, and then the current Media Gateway mode will be displayed (HD Radio/iPod/Sat1 - Sat 2 - Sat 3/Line In)

Controls:

Next Track
Press the **SEEK►** button to advance one song in an Album or Playlist.

Previous Track
Press the **◄SEEK** button to move back one song in an Album or Playlist.

Fast Forward
Press and Hold Preset # 6 button to Fast Forward the song that is playing.

Rewind
Press and hold Preset # 5 button to Rewind the song that is playing.

6

Display Options
Press the Preset # 4 remove button to switch between the song title information and the play counter. After using the fast-forward or rewind function, the radio will display the elapsed time of the song that is currently playing.

Menu Down / Select
Press and release the Preset # 2 remove button to make a selection or move down one folder in the menu.

Menu UP
Press the Preset # 1 remove button to move up one folder in the menu.

Exit Browse Menu
Press the Preset # 3 remove button to exit the browse menu and continue playing the current song. "EXIT" will be displayed when button is pressed.

Browse by Artist

Press and release the Preset #2 to enter the browse menu.
The word *"BROWSE"* will appear on the radio. You have entered the Browse menu.

Press the SEEK▶ or ◀SEEK button until ARTIST is displayed.
("F:" in front of the different artists names indicates that this is the folder of artists).

Press Preset #2 to select browse by Artist.
The list of Artists on your iPod will be displayed one at a time in Alphabetical order. "AR:" will be displayed in front of the artist's name to indicate that you are searching for an artist.

Press the SEEK▶ or ◀SEEK button to cycle through the artists.
If the artist you are looking for is toward the end of the alphabet you may use the ◀SEEK to search backwards. When the desired artist is displayed on the radio,
Press Preset #2 to select the artist and display the albums by that artist.
The Albums from the selected Artist will be displayed one at a time in Alphabetical order. "AL:" will be displayed in front of the name of the album to indicate you are searching for an album.
Press the SEEK▶ or ◀SEEK button to cycle through the albums.

7

Once the desired album is displayed,
Press Preset #2 to select the desired Album.
The first song in the album will be displayed. "TR:" will be displayed in front of the song title to indicate that a "track" or song title is being displayed.
Press the SEEK▶ or ◀SEEK button to cycle through the songs in the selected album.
Songs are listed in the order in which they appear in the album, not Alphabetically. Once the radio displays the name of the desired song,
Press Preset #2 to select and play the desired song.
The display will automatically change to display the title of the chosen song. On some radios the text will scroll to show the full track title/artists name.

Browse by Album

Press Preset #2 to enter the browse menu.
The word **"BROWSE"** will appear on the radio. You have entered the Browse menu.
Press the SEEK▶ or ◀SEEK button until ALBUM displayed.
("F:" in front of the different albums indicates that this is the folder of albums).
Press Preset #2 to select this browsing method.
The Albums on your iPod will be displayed one at a time in Alphabetical order. "AL:" will be displayed in front of the name of the album to indicate you are searching in the album folder.

Press the SEEK▶ or ◀SEEK button to cycle through the albums.
If the album you are looking for is toward the end of the alphabet you may use the ◀SEEK to search backwards. Once the desired album is displayed,
Press Preset #2 to select the desired Album.
The first song in the album will be displayed. "TR:" will be displayed in front of the song title to indicate that a "track" or song title is being displayed.
Press the SEEK▶ or ◀SEEK button to cycle through the songs in the selected album.
Songs are listed in the order in which they appear in the album, not alphabetically. When the radio displays the name of the desired song,
Press Preset #2 to select and play the desired song.
The display will automatically change to display the title of the chosen song. On some radios the text will scroll to show the full track title/artists name.

Browse by Genre

Press Preset #2 to enter the browse menu.
The word **"BROWSE"** will appear on your display. You have entered the Browse menu.

Press the SEEK► **or** ◄SEEK **button until Genre is displayed.**
"F" in front of the different Genres indicates that this is the folder of Genres.

Press Preset #2 to select this browsing.
The Genres on your iPod will be displayed one at a time in Alphabetical order. "GE:" will be displayed to indicate that you are searching for a Genre.

Press the SEEK► **or** ◄SEEK **button to cycle through the Genres.**
If the Genre you are looking for is toward the end of the alphabet you may use the ◄SEEK to search backwards. Once the desired Genre is displayed,

Press Preset #2 to select the desired Genre.
The list of Artists on your iPod from the desired Genre will be displayed one at a time in Alphabetical order. "AR:" will be displayed in front of the artist's name to indicate that you are searching in the artist folder.

Press the SEEK► **or** ◄SEEK **button to cycle through the artists.**
If the artist you are looking for is toward the end of the alphabet you may use the ◄SEEK to search backwards. When the desired artist is displayed on the radio,

Press Preset #2 to select that artist and display the albums by that artist.
The Albums from the selected Artist will be displayed one at a time in Alphabetical order. "AL:" will be displayed in front of the name of the album to indicate you are searching for an album.

Press the SEEK► **or** ◄SEEK **button to cycle through the albums.**
Once the desired album is displayed, **Press Preset #2 to select the desired Album.**
The first song in the album will be displayed. "TR:" will be displayed in front of the song title to indicate that a "track" or song title is being displayed.

Press the SEEK► **or** ◄SEEK **button to cycle through the songs in the selected album**.
Songs are listed in the order in which they appear in the album, not alphabetically. When the radio displays the name of the desired song,

Press Preset #2 to select and play the desired song.
The display will automatically change to display the title of the chosen song. On some radios the text will scroll to show the full track title/artists name.

Browse by Playlist

Press Preset #2 to enter the browse menu.
The word **"BROWSE"** will appear on your display. You have entered
the Browse menu.
Press the SEEK▶ or ◀SEEK button until Playlist is displayed.
"F:" in front of the different playlists
indicates that this is the folder of the
Playlists.
**Press Preset #2 to enter the browse
menu.**
The Playlists on your iPod will be
displayed one at a time in Alphabetical
order.
**Press the SEEK▶ or ◀SEEK button
to cycle through the Playlists.**
When the desired playlist is displayed on the radio,
Press Preset #2 to select the desired Playlist.
The list of songs in that playlist will be displayed one at a time. "TR:" will
be displayed in front of the track title to indicate that you are searching
for a "track" or song. The songs will be listed in order that they were
added to the playlist.
**Press the SEEK▶ or ◀SEEK button to cycle through the songs
in the selected Playlist**.
When the desired song is displayed on the radio,
Press preset #2 to select and play the desired song.
The display will automatically change to display the title of the
chosen song. On some radios the text will scroll to show the full track
title/artists name.

8. Selecting Factory Satellite Radio
(if equipped)

Press the AUX or SAT button on the
radio until the display shows "SIRIUS".

*** NOTE When you press the AUX or
SAT button, you will see the corre-
sponding SAT mode (for example
SAT 1), a slight delay, and then
the current Gateway mode will be
displayed (HD Radio/iPod /Sat1 -
Sat 2 - Sat 3/Line In)

For instructions on the operation of the factory installed Satellite
Radio tuner, please reference the owners's manual supplied with
the vehicle.

10. Trouble Shooting

Symptom	Cause	Remedy
When I listen to the factory AM or FM radio there is only static, no audio.	Factory antenna cable is connected to the HD Radio tuner.	Use Gateway to access HD Radio source. This will provide all AM and FM reception for your vehicle.
No AM or FM reception using the HD Radio source	Factory antenna cable is not connected to the HD Radio tuner (HDRT)	remove from factory radio, connect into HDRT module. Note* some vehicles need to use the supplied antenna adaptor to make this connection.
Radio shows iPod not connected	iPod cable is not connected to iPod or Gateway.	Verify the docking cable is connected to the Media Gateway, and the iPod
I can not correctly control the iPod through the radio.	the iPod firmware may be out of date.	Update iPod firmware for free at http://www.apple.com/ipod/download
I have updated my iPod's firmware and still have control issues	sometimes the iPods needs to be reset	Press and hold the click wheel (center button) and the menu button for 10 seconds. This will reboot the iPod. YOU WILL NOT LOOSE MUSIC on the iPod by doing this reset
I don't see iPod artist or song information on the screen	the radio is displaying a different text field	Press the Text / Scan button to see text
I can't use my iPod's click wheel to select music	the iPod is in external control mode. This allows text to be displayed on the radio screen	Press the Aux / Sat button and select AUX 2 source to control the iPod manually using the click wheel
the Media Gateway does not recognize the HD Radio tuner (HDRT)	the Gateway needs to be reset when connecting a new component such as the HDRT	disconnect the Gateway interface from the vehicle. Let it sit without power for 5 minutes. Use the 8-pin to 8-pin HDRT cable to connect the Tuner to the Media Gateway, then connect to the vehicle

For consumer technical support call:
866-788-4237 in the US or 727-572-9255 ext.265 for international calls
Hours: 9:30 AM - 7:00 PM, EST, MON - THURS / 9:30 AM - 6:00 PM, EST, FRI

Warranty

One Year Limited Warranty

The quality controls used in the manufacture of this product will ensure your satisfaction. This warranty applies only to the original purchaser of this product from an authorized Peripheral Elecronics dealer. This warranty covers any supplied or manufactured parts of this product that, upon inspection by Peripheral Electronics authorized personnel, is found to have failed in normal use due to defects in material or workmanship. This warranty does not apply to installation expenses. Attempting to service or modify this unit, operating this unit under conditions other than the recommended voltage will render this WARRANTY VOID.

Unless otherwise prescribed by law, Peripheral Electronics shall not be liable for any personal injury, property damage and or any incidental or consequential damages of any kind (including water damage) resulting from malfunctions, defects, misuse, improper installation or alteration of this product. All parts of this Peripheral Electronics product are guaranteed for a period of 1 year as follows:

Within the first 12 months from date of purchase, subject to the conditions above, Peripheral Electronics will repair or replace the product at their discretion, if it is defective in material or workmanship providing it is returned to an Authorized Peripheral Electronic's Dealer, with PROOF OF PURCHASE from an authorized Peripheral Elecronics dealer.

Warning:

This equipment may be reset by unintentional electrostatic discharge during operation. Exposure to direct sunlight or extreme heat may cause damage or malfunction.

FCC Class B Radio Frequency

Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television recption, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorientate or relocate the receiving antenna.
2. Increase the separation between the equipment and reciever.
3. Connect the equipment into an outlet on a circuit differant from that of which the reciever is connected.
4. Consult the dealer or an experienced radio / television technical for help.

Notice : The changes or modifications not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

⏻ simple™

Expand Your Factory Radio

For Best Performance Have It Professionally Installed.

MECP
Powered by
CEA

www.peripheralelectronics.com

Peripheral
TECHNOLOGY