# **Expand Your Factory Radio**

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**iPod**<sup>®</sup>

# HYUNDAI

H) Radio

(Peripheral)

Automotive Media Gateway

Owner's Manual Media Gateway PXAMG **PGHHY1** 

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## **Media Gateway & Optional Add-ons**



# **1. Introduction**

Thank you for purchasing the Peripheral Electronics<sup>®</sup> Media Gateway. The Media Gateway is designed to provide endless hours of listening pleasure from your factory radio. To ensure that your 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 iPod and the HD Radio tuner (HDRT sold separately), enabling full control of these devices from the factory installed radio. It also retains original system features such as satellite radio (if equipped).

# 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.

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<sup>™</sup> or zip-ties.

# **3. Compatibility Notes**

#### **Radio Requirements**

Radio must have a button labeled "XM" to support the Media Gateway.

#### Please visit www.peripheralelectronics.com

to verify your vehicle's compatibility.

# 4. Dipswitch Settings

For standard operation of the Media Gateway, all four dip-switches need to be OFF (up) prior to installation.



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 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 harness from the back of the radio. Disconnect the antenna adaptor from the radio.

4. Connect the 8-Pin iPod docking cable into the first port on the Media Gateway furthest away from 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 customer's preference. 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.

5. If connecting the HD Radio tuner (HDRT sold separately) Plug the 3 foot HD Radio Cable (8-Pin to 8-Pin) into the second port (closest 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).

6. Plug the male connectors on the PGHHY1 harness into the ports on the back of the radio. Next, connect the factory harnesses into the female connectors on the PGHHY1 harness. Be sure to make a firm connection but do not force it. Plug the black micro-fit 24-pin connector on the PGHHY1 harness into the PXAMG Media Gateway box.

7. 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).

8. 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.

9. NOTE: The first time that you access the Gateway, your radio may display "DEV INIT" while the device is initializing. If this is displayed, please wait one minute then cycle the ignition off and on. Access "SAT" mode again to begin normal gateway operation.

## 6. iPod Operation

Press the XM button to cycle through the Media Gateway sources until "iPod" is displayed. Each time you press the XM button you will switch to the next Media Gateway source. (Sat 1\*, Sat 2\*, Sat 3\*, HD-FM1\*, HD-FM2\*, HD-FM3\*, HD-AM\*, iPod, Aux audio input) \* if equipped

#### Controls:

#### Next Track

Press the "SEEK  $\Lambda$ " button or turn the tune knob clockwise to advance one song in an Album or Playlist.

#### **Previous Track**

Press the "V SEEK" button or turn the tune knob counter-clockwise to move back one song in an Album or Playlist.

#### **Fast Forward**

Press Preset #6 to Fast Forward the song that is playing. Press again to resume play.

#### Rewind

Press Preset #5 to Rewind the song that is playing. Press again to resume play.

#### **Display Options**

Press Preset #4 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.

#### Enter Browse menu / make a selection

To enter the Browse menu, press preset #2. While in the Browse menu press preset #2 to select the option displayed on the radio.

#### Menu UP

Press Preset # 1 to move up one folder in the menu.

#### Exit Browse Menu

Press Preset #3 to exit the Browse menu and continue playing the current song.

#### Example of how to Browse by Artist

Press Preset #2 to enter the Browse menu.

"PL:LIST" will appear on the radio.

Press the "SEEK /\" or "V SEEK" button until "AR:ARTIST" is displayed. 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 A" button to cycle through the artists.

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 A" 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 A" 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.

## 7. HD Radio Operation

Press the XM button to cycle through the Media Gateway sources until "HD FM" or "HD AM" is displayed. Each time you press the XM button you will switch to the next Media Gateway source. (Sat 1\*, Sat 2\*, Sat 3\*, HD-FM1\*, HD-FM2\*, HD-FM3\*, HD-AM\*, iPod, Aux audio input) \* if equipped

#### Tune Up / Seek Up

Press the "SEEK  $\Lambda$ " button to advance one station or to seek up to next broadcasting station.

#### Tune Down / Seek Down

Press the "V SEEK" button to move back one station or to seek down to the next broadcasting station.

#### Storing Radio Stations into Preset Memory

Once you have tuned to a station you wish to store as a preset, 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 the Preset button(1-6) that represents the station stored in memory that you wish to recall.

#### **Displaying Text**

1. Press the info button on 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 is available in High Definition 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 Tuner 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 reception.

## 8. Selecting AUX Input

Press the XM button to cycle through the Media Gateway sources until "AUX" is displayed. Each time you press the XM button you will switch to the next Media Gateway source. (Sat 1\*, Sat 2\*, Sat 3\*, HD-FM1\*, HD-FM2\*, HD-FM3\*, HD-AM\*, iPod, Aux audio input) \* if equipped.

## 9. Selecting Factory Installed XM Radio

Press the XM button to cycle through the Media Gateway sources until "SAT" is displayed. Each time you press the XM button you will switch to the next Media Gateway source. (Sat 1\*, Sat 2\*, Sat 3\*, HD-FM1\*, HD-FM2\*, HD-FM3\*, HD-AM\*, iPod, Aux audio input) \* if equipped.

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

# **10. Troubleshooting**

Symptom	Cause	Remedy
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 LOSE 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 HD tuner was not properly connected when the PXAMG was first connected and initialized.	HDRT must be connected <b>before the</b> <b>PXAMG is powered on</b> . Disconnect the PXAMG from the vehicles harness for 5 minutes. Verify the 8 pin DIN HDRT cable is securely connected at both ends before reconnecting the vehicle harness.
Radio shows "DEV INIT"	Gateway device is initializing	This only occurs the first time the PXAMG is powered on. Wait a few minutes, cycle ignition off and on then enter SAT Mode.
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.
HD Radio station quality fluctuates or is lost randomly	The HD Tuner is temporarily losing reception of the Digital HD Radio broadcast signal	This is expected performance. The Digital HD Radio playback will resume in areas of higher broadcast signal strength.

# **11. 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 Electronics 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 Electronics 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 reception, 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. Re-orientate or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that of which the receiver 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.



For Best Performance Have It Professionally Installed.



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