



**Expand Your Factory Radio**

add

**iPod®**



**GM4  
Owner's  
Manual  
Neo Gateway**



**Enjoy the Music**

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# Neo Gateway & Optional Add-ons



# 1. Introduction

Thank you for purchasing the ® Neo Gateway. The Neo 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 Neo Gateway.

The Neo 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 satellite radio (if equipped).

## 2. Precautions

### **UPDATING iPod FIRMWARE**

For proper operation of the Neo 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

### 4. Dipswitch Settings

All 4 dipswitches **MUST** be set in the **OFF** (up) position for proper operation.



**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 10mm 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 Neo Gateway harness.
3. Disconnect the factory 16-Pin harnesses from the back of the radio. Disconnect the antenna from the radio.
4. Connect the 8-Pin iPod docking cable into the first port on the Neo Gateway (farthest 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 the 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), make the following connections **before connecting the to the vehicle**. Plug the 3 foot HD Radio Cable (8-Pin mini-din to 8-Pin mini-din) into the second port (closest to the dipswitches) on the Neo 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 a Peripheral BAA20 antenna adaptor if needed to make this connection.
6. Locate the two 14-pin female connectors on the GM4 harness. Plug the vehicle's 14-pin and 16-pin male connectors into the GM4 connectors. Plug the male connectors of the GM4 harness into the back of the radio. Plug the Black micro-fit 24-pin connector on the GM4 harness into the Neo Gateway box.
7. To complete the installation secure the Neo Gateway ( ) 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, tape, or other fasteners to mount the interfaces securely.
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 Neo Gateway and HD Radio tuner before reinstalling the factory dash panels.
9. Note: The first time 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. Then access SAT mode again to begin normal gateway operation.

## 6. iPod Operation

### **Entering Mode Select Menu**

Leave and re-enter the SAT mode to enter the mode select menu. This can be accomplished by pressing the “**FM**” or “**AM**” icon, then pressing the “**XM**” icon. Once in the mode select menu, turn the rotary knob to scroll through available sources. Once “**IPOD**” is displayed, press the “**»»»»**” icon to select the displayed mode.

### **Next Track**

Turn the rotary tune knob to the right one notch to advance to the next track.

### **Previous Track**

Turn the rotary tune knob to the left one notch to move back to the previous track.

### **Fast Forward**

Press “**SEEK Λ**” to fast forward the song that is playing. Press “**SEEK Λ**” again to resume play.

### **Rewind**

Press “**SEEK V**” to rewind the song that is playing. Press “**SEEK V**” again to resume play.

### **Entering Browse Menu / Select**

Press the “**»»»»**” button to enter the “**BROWSE**” menu or to make a selection while in the “**BROWSE**” menu.

### **Menu UP**

Press the “**Category**” icon until the “**««««**” icon is displayed. Press the “**««««**” icon to move back in the Browse menu.



## **Browse by Artist**

**Press “>>>>>” to enter the browse menu.**

“PL:LIST” will appear on your display.

**Turn the rotary tune knob until “AR:ARTIST” is displayed.**

**Press “>>>>>” 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.

**Turn the rotary tune knob to cycle through the artists.**

When the desired artist is displayed on the radio,

**Press the “>>>>>” button 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.

**Turn the rotary tune knob to cycle through the albums.**

Once the desired album is displayed,

**Press the “>>>>>” button 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.

**Turn the rotary tune knob 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 the “>>>>>” button to select and play the desired song.**

The display will automatically change to display and scroll the title of the chosen song.

## Browse by Album

Press “>>>>>” to enter the browse menu.

“PL:LIST” will appear on your display. Turn the rotary tune knob until **ALBUM** is displayed. Press “>>>>>” to select browse by Album.

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.

Turn the rotary tune knob to cycle through the albums.

Once the desired album is displayed,

Press “>>>>>” 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.

Turn the rotary tune knob 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 “>>>>>” to select and play the desired song.

The display will automatically change to display and scroll the song title.



## Browse by Genre

Press “>>>>>” to enter the browse menu.

“PL:LIST” will appear on your display. Turn the rotary tune knob until **GENRE** is displayed.

Press “>>>>>” to select browse by Genre.

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.

Turn the rotary tune knob to cycle through the Genres.

Once the desired Genre is displayed,

Press “>>>>>” to select the desired Genre.

The list of Artists on your iPod from the selected 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.

**Turn the rotary tune knob to cycle through the artists.**

When the desired artist is displayed on the radio,

**Press “>>>>” 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.

**Turn the rotary tune knob to cycle through the albums.**

Once the desired album is displayed,

**Press “>>>>” 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.

**Turn the rotary tune knob 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 “>>>>” to select and play the desired song.**

The display will automatically change to display and scroll the song title.



## **Browse by Playlist**

**Press the “>>>>” button to enter the browse menu.**

“PL:LIST” will appear on your display.

**Press “>>>>” to select browse by Playlist.**

The Playlists on your iPod will be displayed one at a time in alphabetical order.

“PL” in front of playlist indicates that this is the folder of Playlists.

**Turn the rotary tune knob to cycle through the Playlists.**

When the desired playlist is displayed on the radio,

**Press “>>>>” 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.

**Turn the rotary tune knob to cycle through the songs in the selected Playlist.**

When the desired song is displayed on the radio,

**Press “>>>>” to select and play the desired song.**

The display will automatically change to display and scroll the song title.

# 7. HD Radio Operation

## Entering Mode Select Menu

Leave and re-enter the SAT mode to enter the mode select menu. This can be accomplished by pressing the “**FM**” or “**AM**” icon, then pressing the “**XM**” icon. Once in the mode select menu, turn the rotary knob to scroll through available sources. Once “**HD RADIO**” is displayed, press the “**>>>>**” icon to select the displayed mode.

## Tune Up

Turn the rotary tune knob to the right to manually tune up.

## Seek Up

Press the “**SEEK ^**” button to seek up to next available station.

## Tune Down

Turn the rotary tune knob to the left to manually tune down.

## Seek Down

Press the “**SEEK v**” button to seek down to next available station.

## Changing Bands

To switch between AM and FM bands, press the “**Category**” button until AM or FM is displayed on the screen. Press the softkey to select the desired band.

## Store Presets

To Store a station into the Preset memory, tune to the station, to enter the preset menu, press the “**>>>>**” button. Turn the tune knob in the upper right corner to select the preset location (1-18) where you wish to store the preset. when the preset position is displayed (for example PRE1) press “**v**” to store the preset into memory.

The screen will display “**PR SAVED**” and your preset has been stored into memory.

## Recall Presets

To recall a preset saved in memory, press the “**>>>>**” button to enter the preset menu. use the tune knob in the upper right corner to scroll through the stored preset stations. when the desired preset is displayed, press the “**^**” button to select it.

## Exit menus

Press the “**<<<<**” button to exit the preset menu and continue playing the current station.

“**EXIT**” will be displayed when button is pressed. You can also wait the allotted 10 seconds and the menu will exit automatically.

## 8. Selecting AUX Input

### Entering Mode Select Menu

Leave and re-enter the SAT mode to enter the mode select menu. This can be accomplished by pressing the “**FM**” or “**AM**” icon, then pressing the “**XM**” icon. Once in the mode select menu, turn the rotary knob to scroll through available sources. Once “**AUX**” is displayed, press the “>>>>” icon to select the displayed mode.

### Selecting between AUX1 / AUX2

If you are currently in AUX1 or AUX2 mode turn the rotary knob to enter the mode select menu. Once AUX1 or AUX 2 is displayed on the screen press the “>>>>” button to select.

## 9. Selecting Factory Installed Sat (if equipped)

### Entering Mode Select Menu

Leave and re-enter the SAT mode to enter the mode select menu. This can be accomplished by pressing the “**FM**” or “**AM**” icon, then pressing the “**XM**” icon. Once in the mode select menu, turn the rotary knob to scroll through available sources. Once “**AUX**” is displayed, press the “>>>>” icon to select the displayed mode.

### Factory Sat Operation

Refer to the owners’ manual that came with your 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 Neo 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 <a href="http://www.apple.com/ipod/download">http://www.apple.com/ipod/download</a>
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. <b>YOU WILL NOT LOSE MUSIC</b> 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 Neo Gateway does not recognize the HD Radio tuner (HDRT)	The HD tuner was not properly connected when the was first connected and initialized.	HDRT must be connected <b>before the Gateway is powered on</b> . Disconnect the 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 Gateway 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 dealer. This warranty covers any supplied or manufactured parts of this product that, upon inspection by 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, 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 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, will repair or replace the product at their discretion, if it is defective in material or workmanship providing it is returned to an Authorized Neo Car Audio dealer, with PROOF OF PURCHASE from an authorized 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.



The logo for NEO CAR AUDIO features the word "NEO" in a stylized, outlined font with a blue-to-purple gradient. Below it, the words "CAR AUDIO" are written in a simpler, blue, sans-serif font. The entire logo is reflected on a light blue surface below it.

NEO  
CAR AUDIO

# **BluStream Operation in: General Motors (PGHGM4 & ISGM574)**

## **Selecting Bluetooth Mode**

### **Navigation Radios**

Press the XM icon on the screen. Immediately turn the TUNE KNOB until BT is displayed. Press the >>>> icon on the screen to select the displayed mode.

### **Non-Navigation Radios**

Press the BAND button until XM is displayed. Immediately turn the TUNE KNOB until BT is displayed. Press PRESET 2 to select the displayed mode.

## **Phone Controls**

**IMPORTANT NOTE: The radio MUST be in Satellite mode in order for the ISBT21 to function. If you switch out of Satellite Radio mode the ISBT21 will automatically disconnect from your phone and you must use the handset.**

### **Navigation Radios**

**1. Answer/End Call** - Press SEEK ▲ to answer/end a call.

**2 Volume** - Turn the TUNE KNOB while in a call to adjust the volume.

**3. Call Waiting** - Press SEEK ▲ while in a call to answer a 3rd party call. You can also use SEEK ▲ to switch between the calls. To end a 3rd party call you must press and HOLD SEEK ▲ for 2 seconds.

**4. Privacy Mode** - Press SEEK ▼ while in a call to transfer the audio from the vehicle speakers to the handset.

**5. Reject Call** - Press SEEK ▼ to reject an incoming call.

**6. Voicemail** - While in Bluetooth mode, press the CATEGORY icon on the screen & then press the VOICECALL button to activate voicemail.

**7. Call History** - Turn the TUNE KNOB while in Bluetooth mode to scroll through a list of your previous incoming calls.

**8. Call Last #** - Press SEEK ▲ while in Bluetooth mode to call the last incoming number to your phone.

**9. Menu** - While in Bluetooth mode press the CATEGORY icon on the screen & then press the >>>> button to enter the menu. Once in the menu you can use the TUNE KNOB to scroll through the options. Press the >>>> button while in the menu to select the displayed option.

### **Non-Navigation Radios**

**1. Answer/End Call** - Press PRESET 3 to answer/end a call.

**2 Volume** - Turn the TUNE KNOB while in a call to adjust the volume.

**3. Call Waiting** - Press PRESET 3 while in a call to answer a 3rd party call. You can also use PRESET 3 to switch between the calls. To end a 3rd party call you must press and HOLD PRESET 3 for 2 seconds.

**4. Privacy Mode** - Press PRESET 4 while in a call to transfer the audio from the vehicle speakers to the handset.

**5. Reject Call** - Press PRESET 4 to reject an incoming call.

**6. Voicemail** - While in Bluetooth mode, press PRESET 6 to activate voicemail.

**7. Call History** - Turn the TUNE KNOB while in Bluetooth mode to scroll through a list of your previous incoming calls.

**8. Call Last #** - Press PRESET 3 while in Bluetooth mode to call the last incoming number to your phone.

**9. Menu** - While in Bluetooth mode press PRESET 2 to enter the menu. Once in the menu you can use the TUNE KNOB to scroll through the options. Press PRESET 2 while in the menu to select the displayed option.

## **A2DP Controls**

### **Navigation Radios**

**1. Play/Pause** - Press SEEK ▼ to Play/Pause the song that is selected.

**2 Changing Tracks** - Turn the TUNE KNOB to change tracks

### **Non-Navigation Radios**

**1. Play/Pause** - Press PRESET 4 to Play/Pause the song that is selected.

**2 Changing Tracks** - Turn the TUNE KNOB to change tracks