# 2009 Cadillac CTS/CTS-V Navigation System

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview</strong></td>
<td>1-1</td>
</tr>
<tr>
<td>Overview</td>
<td>1-2</td>
</tr>
<tr>
<td><strong>Features and Controls</strong></td>
<td>2-1</td>
</tr>
<tr>
<td>Features and Controls</td>
<td>2-2</td>
</tr>
<tr>
<td><strong>Navigation Audio System</strong></td>
<td>3-1</td>
</tr>
<tr>
<td>Navigation Audio System</td>
<td>3-2</td>
</tr>
<tr>
<td><strong>Speech Recognition</strong></td>
<td>4-1</td>
</tr>
<tr>
<td>Speech Recognition</td>
<td>4-2</td>
</tr>
<tr>
<td><strong>Index</strong></td>
<td>1</td>
</tr>
</tbody>
</table>
This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

The information in this manual supplements the owner manual. This manual includes the latest information available at the time it was printed. We reserve the right to make changes in the product after that time without notice. For vehicles first sold in Canada, substitute the name General Motors of Canada Limited for Cadillac Motor Car Division whenever it appears in this manual.

Keep this manual with the owner manual in the vehicle, so it will be there if it is needed. If the vehicle is sold, leave this manual in the vehicle.

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**Canadian Owners**

A French language copy of this manual can be obtained from your dealer/retailer or from:

Helm, Incorporated  
P.O. Box 07130  
Detroit, MI 48207  
1-800-551-4123  
helminc.com

**Propriétaires Canadiens**

On peut obtenir un exemplaire de ce guide en français auprès de concessionnaire ou à l’adresse suivante:

Helm Incorporated  
P.O. Box 07130  
Detroit, MI 48207  
1-800-551-4123  
helminc.com
Overview

Navigation System Overview

B. TUNE/TONE Knob. See “Hard Keys” under Using the Navigation System on page 2-2 for more information.


E. FAV (Favorite) key. See “Storing Radio Station Presets” under Navigation Audio System on page 3-2 for more information.

F. SEEK Key. See Navigation Audio System on page 3-2 CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

G. (CD/DVD Eject) Key. See CD Player on page 3-10 and DVD Player on page 3-16 for more information.

H. AUDIO key. See Navigation Audio System on page 3-2 for more information.


J. MENU SELECT Knob. See “Hard Keys” under Using the Navigation System on page 2-2 for more information.

K. REC (Record) Key. See Hard Drive Device on page 3-22 for more information.

L. CONFIG (Configure) Key. See Configure Menu on page 2-26 for more information.

M. (Play/Pause) Key. See “Timeshift, USB, and iPod” under Navigation Audio System on page 3-2, Hard Drive Device on page 3-22, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

N. FWD (Forward) Key. See “Timeshift, USB, and iPod” under Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, Hard Drive Device on page 3-22 for more information.

O. REV (Reverse) Key. See “Timeshift, USB, and iPod” under Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.
P. RPT (Repeat) Key. See “Hard Keys” under Using the Navigation System on page 2-2 for more information.

Q. DEST (Destination) Key. See Destination on page 2-12 for more information.

R. CD/DVD Slot. See CD Player on page 3-10 and DVD Player on page 3-16 for more information.

S. DEL (Delete) Key. See “XM™ Satellite Radio Service” under Navigation Audio System on page 3-2 and Hard Drive Device on page 3-22 for more information.

T. INFO (Information) Key. See Speech Recognition on page 4-2 and Weather on page 4-4.

Getting Started

Read this manual thoroughly to become familiar with how the navigation system operates.

Keeping your eyes on the road and your mind on the drive is important for safe driving. The navigation system has built-in features intended to help do this. Some features may be disabled while driving. Note that these functions are grayed-out. A grayed-out function indicates it is not available when the vehicle is moving.

All functions are available when the vehicle is parked. Do the following before driving:

- Become familiar with the navigation system operation, hard keys on the faceplate, and touch-sensitive screen buttons of the navigation system.
- Set up the audio by presetting favorite stations, setting the tone, and adjusting the speakers.
- Set up the navigation features before beginning driving, such as entering an address or a preset destination.
- Set up your phone numbers in advance so they can be called easily with the press of a single button or a single voice command (for navigation systems equipped with phone capability).

⚠️ CAUTION:

Taking your eyes off the road too long or too often while using the navigation system could cause a crash resulting in injury or death to you or others. Focus your attention on driving.
CAUTION:

Avoid looking too long or too often at the moving map on the navigation screen. This could cause a crash and you or others can be injured or killed. Use the turn-by-turn voice guidance directions whenever possible.

Use the navigation system to:

- Plan a route.
- Select a destination using various methods and choices.
- Follow turn-by-turn route and map guidance with voice prompts, only if permitted by traffic laws, controls, and conditions.
- Receive RDS broadcast announcements.

Always be alert and obey traffic and roadway laws and instructions, regardless of the guidance from the navigation system. Because the navigation system uses street map information that does not include all traffic restrictions or the latest road changes, it may suggest using a road that is now closed for construction or a turn that is prohibited by signs at the intersection. Because the system uses limited information, always evaluate whether following the system’s directions is safe and legal for the current conditions.

When the navigation system is turned on, a screen may appear with the information below, and you must read and acknowledge the information it contains.

CAUTION:

Taking your eyes off the road for extended periods could cause a crash resulting in injury or death to you or others.

To help avoid a crash in which you or others could be killed:

- Always concentrate on your driving first by keeping your eyes and mind on the road, and your hands on the wheel.
- Follow system directions only if permitted by traffic laws, controls, and conditions.
- Before using this system, read the owner manual and learn how it operates.
- Some system controls cannot be used the when vehicle is moving.
After acknowledging the start up information you will be able to access the NAV (navigation) and DEST (destination) functions. Once accessed, enter or delete information in the navigation system or access other functions. See instructions later in this section.

CAUTION

To help avoid a crash in which you or others could be injured or killed:

- Always concentrate on your driving first by keeping your eyes and mind on the road, and your hands on the wheel.
- Follow system directions only if permitted by traffic laws, controls, and conditions.
- Before using this system, read the owner manual and learn how it operates.

Some system controls cannot be used when vehicle is moving.

OK

When getting started the navigation system can be set to preferences or information that has been entered can be deleted using various options.

**Language — English/Metric**

To change the language of the navigation screens, see “DIC Vehicle Customization” in the Index of the vehicle’s owner manual.

To change the navigation screens from English or metric, see “DIC Operation and Displays” in the Index of the vehicle’s owner manual.

**Deleting Personal Information**

This navigation system can record and store destinations and personal information such as names and addresses. When disposing of the vehicle, you may want to delete this information. See “Previous Destinations — Deleting” and “Address Book — Editing and Deleting Entries” under Destination on page 2-12 for deleting this information.

Each time the vehicle is started and the navigation system is turned on, the Caution screen appears. If the Caution screen appears, touch OK to accept the Caution. If OK is not selected, all hard keys except for NAV (navigation) and DEST (destination) can be accessed. Once the NAV or DEST hard keys are pressed, this Caution screen appears and OK must be pressed to access the navigation map.
Storing Radio Station Presets

Up to 36 preset stations can be stored. AM, FM, and XM (if equipped) can be mixed. To store presets:

1. Press the \( \text{billboard} \) (power) knob to turn the system on.
2. If viewing a map screen, touch the source screen button, press the AUDIO key, or press the FAV (favorite) key.
3. Select the band.
4. Seek or tune to the desired station, to select the station.
5. Press and hold one of the preset screen buttons for more than one and a half seconds.
6. Repeat the steps for each preset.

To change the number of preset pages, see “Number of Preset Pages” under “Radio Menu” under Navigation Audio System on page 3-2 for more information.

Entering an Address and Point of Interest, and Storing Preset Destinations

The vehicle must be in P (Park) to perform these operations.

Entering an Address

If having trouble finding a city or a street name:

- Enter the street name first instead of the city name, or vice versa.
- Enter more characters or reduce the amount of characters to reduce or expand the available options.

To set a destination by entering a street name:

1. Press the \( \text{billboard} \) to turn the system on.
2. A caution may appear. Touch the OK screen button to proceed.
3. Press the DEST hard key.
4. Select the Street screen button.
5. The Street name category is automatically selected for entry. Start entering the street name. It is recommended that directional information or street type is not entered, and use the Space screen button between street or city names. For example, the street name N. Royal Oak Rd. should be entered as royal(Space screen button)oak. Use the backspace ( \( \text{backspace} \)) screen button if an incorrect character has been entered.
If four or less names are available for the entered characters, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available streets. Select the List button to view the list and select a street.

While the Street name category is empty, there is a Last 5 Streets screen button that displays the last five selected streets. Press this button to select a street from the list.

6. Enter the house number. The system displays the house number range that is available for the street.

7. If there is more than one city, the list of cities that have that street name and house number displays. Select a city from the list.

8. A confirmation screen displays with the address. If the address is correct, select the Go screen button. The system calculates the route.

9. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.

10. Select the Start Guidance screen button. The route is now ready to be started.

See “Address Entry” under Destination on page 2-12 for more information.

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**Entering a Point of Interest (POI)**

To set a destination by entering a Point of Interest (POI):

1. Press the \( \bigcirc \) to turn the system on.

2. A caution may appear. Touch the OK screen button to proceed.

3. Press the DEST hard key.

4. Press the Point of Interest screen button.

5. Enter the specific title of the POI in the POI name space (i.e. Washington Monument). If four or less names are available, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available POI names. Select the List button to view the list. Select the POI.

6. Select the Go screen button. The system calculates the route.

7. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.

8. Select the Start Guidance screen button. The route is now ready to be started.

See “Point of Interest (POI)” under Destination on page 2-12 for more information.
Storing Preset Destinations

1. Press the \( \bigcirc \) to turn the system on.
2. A caution may appear. Touch the OK screen button to proceed.
3. Press the NAV or DEST hard key.
4. Enter a destination. See *Destination on page 2-12* for information on how to enter a destination.
5. Press the Add screen button from the map screen to add the current final destination to the address book.
   The address book screen appears.
6. Select the Name screen button. An alpha-keyboard displays. Enter the name.
7. Press and hold one of the screen buttons at the bottom of the screen until the text in the button changes.
   The address book entry name appears in that preset destination screen button and is now available to select from the Select Destination screen. See “Using Your Stored Preset Destinations” next in this section to select it as a destination.
   See “Adding or Changing Preset Destinations” under *Destination on page 2-12* for more information on how to add preset destinations.

Using Your Stored Preset Destinations

These destinations are available for selection while driving.

1. Press the \( \bigcirc \) to turn the system on.
2. A caution may appear. Touch the OK screen button to proceed.
3. Press the DEST hard key.
4. Select one of the available preset destination screen buttons. The system calculates the route.
5. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.
6. Select the Start Guidance screen button. The route is now ready to be started.

See “Preset Destination” under *Destination on page 2-12* for more information.
Canceling Guidance

Guidance is canceled once you arrive at your final destination. To cancel guidance prior to arrival at the final destination:

1. Press the DEST hard key.
2. Press the Cancel Guidance screen button.
3. Press the Yes screen button to confirm cancellation.

Voice Guidance

To adjust the volume of voice guidance prompts:

1. Press the CONFIG hard key to enter the menu options, then press the CONFIG key repeatedly until Nav is selected or touch the Nav screen button.
2. Press the Voice Volume screen button.
3. Press the + (plus) or – (minus) screen buttons to increase or to decrease the volume of the voice prompts.

See “Voice Volume ” under Configure Menu on page 2-26 for more information.

Cleaning the Display

If the panel or the display is stained, wipe it with a dry, soft cloth, such as a silicon cloth.

Notice: If you use abrasive cleaners when cleaning glass surfaces, you could scratch the glass. When cleaning the glass, use only a soft cloth and do not spray cleaner directly on the system.

Do not apply spray cleaner directly to the system, the cleaner could affect the mechanical parts.

Do not wipe the panel with a hard cloth or use a volatile liquid such as thinner or alcohol, it could scratch the surface or erase the characters.
Section 2  Features and Controls

Features and Controls ........................................... 2-2
Using the Navigation System ................................. 2-2
Maps ................................................................. 2-5
Symbols .............................................................. 2-7
Destination .......................................................... 2-12
Configure Menu ................................................... 2-26

Global Positioning System (GPS) ......................... 2-37
Vehicle Positioning ................................................ 2-37
Problems with Route Guidance .............................. 2-38
If the System Needs Service ................................. 2-39
Ordering Map DVDs ............................................ 2-39
Database Coverage Explanations ......................... 2-39
Features and Controls

Using the Navigation System

This section presents basic information needed to operate the navigation system.

Use the hard keys located on the navigation system along with the available touch screen buttons on the navigation screen to operate the system. See Navigation System Overview on page 1-2 for more information.

Once the vehicle is moving, various functions are disabled to reduce driver distractions.

Hard Keys

The following hard keys are located on the navigation system:

**VOL/ (Volume/Power):** Press to turn the system on and off. Turn this knob to increase or decrease the volume. The volume works for the features that are currently being used; audio, OnStar®, changes the volume for the phone, voice guidance, and speech recognition changes the volume of voice prompts.

**TUNE/TONE:** Turn to go to the next or previous radio station/channel, track, or chapter. Press this knob to access the Sound screen to adjust bass, midrange, treble, and Digital Signal Processing (DSP). See Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

**NAV ↓ ↑ (Navigation Screen Up/Down):** Press to make the screen go up and down. In the up position, all touch screen buttons can be viewed or used. In the down position, a portion of the screen will be shown that displays the current audio source and temperature.

**FAV (Favorite):** Press to access the preset stations. See “Storing Radio Station Presets” under Navigation Audio System on page 3-2 for more information.

**SEEK / SEEK:** Press the seek arrows to seek and scan radio stations, to seek tracks on a CD or MP3, to seek chapters on a DVD, and to seek songs on the HDD, USB, and iPod®. See Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

** (CD/DVD Eject):** Press to eject a CD or a DVD.
**AUDIO:** Press to access the full Audio screen to change AM, FM, XM™ Satellite Radio Service (if equipped), CD, MP3, DVD, HDD, USB, and iPod, and auxiliary input. See “Audio” under Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

**NAV (Navigation):** Press to view your vehicle’s current position on the map screen. Each press of this key cycles through Full Map and the tab that displays the current audio source (AM, FM, CD, etc.). Full Map displays the screen in full map view. Selecting the audio tab splits the screen between the map screen and the current audio source screen menu. See “Audio” under Navigation Audio System on page 3-2 for more information.

**MENU ▶ SELECT:** Turn the MENU knob to highlight a feature. Press this knob to select the highlighted feature.

**REC (Record):** Press to record a CD, MP3, and USB to the hard drive. See Navigation Audio System on page 3-2, CD Player on page 3-10, and Hard Drive Device on page 3-22 for more information.

**CONFIG (Configure):** Press to adjust features for sound, radio, navigation, the display, and clock. See Configure Menu on page 2-26 for more information.

**RPT (Navigation Repeat):** Press to repeat the last voice guidance prompt.

**DEST (Destination):** Press to access the Route screen to plan a destination. If route guidance is active, press this key to access the Route screen. See Destination on page 2-12 for more information.

**DEL (Delete):** Press to delete XM categories and information from the hard drive. See Navigation Audio System on page 3-2 and Hard Drive Device on page 3-22 for more information.

**INFO (Information):** Press for Speech Help and Weather. See Speech Recognition on page 4-2 and Weather on page 4-4 for more information.

**/>/ll (Play/Pause):** Press to play and to pause Timeshift, CD, MP3, DVD, HDD, USB, iPod. See Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.
FWD (Forward): Press and hold to fast forward through devices such as CD, MP3, DVD, HDD, USB, and iPod. See Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

REV (Reverse): Press and hold to quickly rewind through devices such as CD, MP3, DVD, HDD, USB, iPod. See Navigation Audio System on page 3-2, CD Player on page 3-10, DVD Player on page 3-16, and Hard Drive Device on page 3-22 for more information.

Touch Screen Buttons

Touch screen buttons are located on the screen. Screen buttons are highlighted when a feature is available. There are also some toggle screen buttons that highlight when active and grey-out when inactive.

Alpha-Numeric Keyboard

Letters of the alphabet, symbols, punctuation, and numbers, when available, display on the navigation screen as an alpha or numeric keyboard. The alpha keyboard displays when the system requires entry of a name.

All characters are touch screen buttons. Touch a character to select it.

À-Ý (Accent Alphabet): Select this screen button to select letters with accent symbols.

A-Z (Alphabet): Select this screen button to select letters from the alphabet.

0-9 (Numbers): Select this screen button to select numbers.

Sym (Symbols): Select this screen button to select symbols.

Space: Select the space screen button to enter a space between characters or the words of a name.

(Backspace): Select the backspace screen button if an incorrect character has been selected.

To make name selections easier, the system only highlights the characters that can follow the last one entered. For example, if a Z is entered, a T may not be available for selection.

If a name does not display after entry, it may need to be entered differently since the map database may not contain that information.
Maps
This section includes basic information needed to know about the map database.

Map Coverage
The maps are stored on the HDD (Hard Drive). It includes the 48 contiguous United States, Alaska, Hawaii, portions of Canada, Puerto Rico, and the U.S. Virgin Islands.

See “City List” later in this section to view a detailed explanation of map coverage and detailed city lists in each region.

Installing the DVD Map Disc
Your dealer/retailer installed the map database information on the HDD.
After receiving an updated map disc, it needs to be copied to the HDD. Read the following steps completely before operating this feature.
1. Turn the ignition on.
2. Press \( \text{\textcircled{1}} \) to turn the system on.
3. Insert the update disc partway into the slot, label side up. The player pulls it in.
4. Update Confirmation screen displays with version information, then press Update screen button.
5. Enter the Authentication Code, then press Enter screen button.
6. If correct code is entered, the system reboots and starts updating, the status bar displays.
7. The disc is automatically ejected after the map database update is completed. The system reboots.

If the application update file is included in the disc, the application update is also done.

The disc is not automatically ejected, press \( \text{\textcircled{2}} \) after the application update is completed.

Ejecting the DVD Map Disc
When the map disc has finished copying to the HDD, press the \( \text{\textcircled{2}} \) button.
Handling the DVD Map Disc

When handling the DVD map disc, be careful of the following:

- Handle the disc very carefully to avoid contamination or flaws. Signals may not read out properly if the disc gets contaminated or flawed.
- If the disc gets soiled, use a soft cloth to gently wipe it out from the center of the disc to the outside. Do not use photographic record cleaner, solvents, or other cleaners.
- Do not use the disc to rest on while writing or drawing using any writing utensil or attach a seal to any of the sides or the disc.
- Do not keep the disc in direct sunlight, high temperatures, or humidity.
- After using the disc, place it back into the original case.

Map Adjustments

The scale of view on the map can be adjusted. Also, the map scrolls automatically based on the direction the vehicle is being travelled.

Map Scales

🌐 / 🌐 (Zoom In/Zoom Out): Touch the zoom in or out screen buttons or the scale on the bar to change the level of map detail. The scale appears on the screen once the zoom in or zoom out screen buttons are selected. The system adjusts the map accordingly. The scale of a map can range from 1/32 of a mile (50 m) to 350 mi. (550 km). To change from English or metric, see “DIC Operation and Displays” in the Index of your vehicle’s owner manual.
Scrolling the Map

Touch anywhere on the map screen and the scroll symbol appears. Use this feature to scroll across the map.

Move your finger in any direction on the map screen and the map continues to scroll in that direction until you remove your finger. The rate of scrolling depends on where the screen is being touched. The rate increases when touching closer to the edge of the screen.

If using the scroll feature, scroll the map and the vehicle icon becomes lost, press the NAV (Navigation) key to return to the current vehicle location on the map.

When scrolling on the map, the system displays the address of the scroll symbol location.

You can use the scroll feature on the map to set a destination. See “From Map” under Destination on page 2-12 for more information.

When scrolling on the map without a planned route, press the GO screen button to calculate the route from your current position to the destination mark.

Symbols

The following symbols are the most common symbols that appear on a map screen.

Your vehicle is shown as this symbol. It indicates the current position and heading direction of the vehicle on the map.

The destination symbol appears on the map, after a route has been planned, marking the final destination.
The waypoint number displays on the map after a waypoint has been added to your route.

A waypoint is a series of two or more marked stopovers on the way to the final destination. The waypoint symbol is numbered from 1 through 3 depending on how many intermediate waypoints have been set.

The distance to crosshairs indicates the distance to the crosshair area displayed on the map screen during map scrolling.

This symbol only appears when time is not available.

The distance and time to destination symbol indicates the distance and the estimated time remaining to the final destination or arrival time, depending on the option selected.

Press this screen button to change between viewing the time of day and the arrival time. If waypoints have been added to the current route, each waypoint destination appears giving the same information.
Select this screen symbol to switch between North Up, Heading Up, and 3-D modes.

This north up symbol indicates the map with North Up, known as North Up mode. While in North Up mode, the vehicle icon follows the north direction on the map regardless of which direction the vehicle is traveling.

Select this screen symbol to switch Heading Up, North Up, and 3-D modes.

This heading up symbol indicates the map with the vehicle travel direction up, known as Heading Up mode. While in Heading Up mode, the direction the vehicle is traveling will always be at the top of the map screen. The shaded triangle indicates the North direction. The vehicle icon will always be headed in the direction the vehicle is traveling.

Press this screen symbol to change to 3-D mode.

The symbol for the 3-D function is the same as the Heading Up symbol, but shows the map in a 3-D view.

The No GPS symbol appears when the vehicle is acquiring or not receiving a Global Positioning System (GPS) satellite signal.

See Global Positioning System (GPS) on page 2-37 for more information.

Select the Add screen button to store the location on the screen in your address book.

The system automatically stores the point in the address book. See “Address Book” under Destination on page 2-12 for more information.
Displaying Points of Interest (POI) on the Map Screen

Select the POI screen button to display or remove POI icons from the map.

Displaying POI icons on the map indicates where POIs (i.e. restaurants, gas stations, etc.) are located. This screen appears after selecting the POI screen button.

Select one of the POI categories to display or to remove POI icons from the map screen. When a category is selected those POI icons display on the map.

**Edit:** Select this screen button to change one of the current POI categories. Press the Edit screen button, select the POI category to be changed, then select the new category.
Nearby POIs: Select to display the list of available POIs for the selected POI categories. The list provides the POI icon, the name, the direction, and the distance to the POI from the vehicle's current position. Use the scroll arrows to move up and down the list. Use the Sort by Dist (distance), Icon, Name, and, on Route as desired.

**Go:** Press this screen button, next to the desired POI, to make this POI a destination or a waypoint.

Select a POI name to receive information about the POI. From this screen you can select: Add, to add this POI to the address book, Go, or Map.

**Add:** Press to add this POI to the address book. See “Address Book” under Destination on page 2-12 for information on address book entries.

**Go:** Press to make this POI a destination or a waypoint.

**Map:** Press to display the map showing the location of the POI.
Driving on a Route

When a destination has been routed and while driving on route, the map screen automatically displays the next maneuver.

This next maneuver pop-up displays the next maneuver direction and how many miles or kilometers the vehicle is from it.

When approximately 1/4 mi. (0.4 km) from the next maneuver, the screen displays the name and a detailed view of the next maneuver.

Auto Reroute

When the destination is set and the vehicle is not travelling the planned route, the system automatically plans a new route and begins to reroute. The new route is highlighted on the screen.

Destination

Press the DEST key to access the Select Destination screen. From this screen, select from several options to plan a route by entering destinations.
Address Entry

Street: The address entry destination method allows entry of an address by providing the system with a street name, a city name, or the name of a state or province.

If having trouble finding a city or a street name:

- Enter the street name first instead of the city name, or vice versa.
- Enter more characters or reduce the amount of characters to reduce or expand the available options.

Entering the Street Name First

1. Press the DEST hard key.
2. Select the Street screen button.
3. The Street category is automatically selected for entry. Start entering the street name.

It is recommended that directional information or street type is not entered. Use the Space screen button between street or city names. For example, the street name N. Royal Oak Rd. should be entered as royal(Space screen button)oak. Use the backspace ( ) screen button if an incorrect character has been entered.

If four or less names are available for the entered characters, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available streets. Select the List button to view the list and select a street.

While the Street name category is empty, there is a Last 5 Streets screen button that displays the last five selected streets. Press this button to select a street from the list.

4. Select the street name.
5. Enter the house number. The system displays the house number range that is available for the street.
6. If there is more than one city, the list of cities that have that street address displays. Select a city from the list.

7. A confirmation screen displays with the address. If the address is correct, select the Go screen button. The system calculates the route.

8. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.

9. Select the Start Guidance screen button. The route is now ready to be started.

See “Getting Started on Your Route” later in this section.

**Entering the City Name First**

1. Press the DEST hard key.

2. Select the Street screen button.

3. Select the City screen button and start entering the city name.

   If four or less names are available for the entered characters, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available cities. Select the List button to view the list and select a city.

4. Start entering the street name.

   It is recommended that directional information or street type is not entered. Use the Space screen button between street or city names. For example, the street name N. Royal Oak Rd. should be entered as royal(Space screen button)oak. Use the backspace ( ▶️ ) screen button if an incorrect character has been entered.

   If four or less names are available for the entered characters, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available streets. Select the List button to view the list and select a street.

   While the Street name category is empty, there is a Last 5 Streets screen button that displays the last five selected streets. Press this button to select a street from the list.

5. Select the street name.

6. Once a street has been selected, the numeric keyboard displays, allowing entry of the house number. The system displays the house number range that is available for the street.
7. A confirmation screen displays with the address. If the address is correct, select the Go screen button. The system calculates the route.

8. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.

9. Select the Start Guidance screen button. The route is now ready to be started.

See “Getting Started on Your Route” later in this section.

**Entering the State or Province First**

1. Press the DEST hard key.
2. Select the Street screen button.
3. Select the State screen button and select the state or province from the list.
4. Select the City screen button and start entering the city name.
5. Start entering the street name.
   Do not enter directional information or street type, and use the Space screen button between street or city names. For example, the street name N. Royal Oak Rd. should be entered as royal(Space screen button)oak. Use the backspace screen button if an incorrect character has been entered.

If four or less names are available for the entered characters, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available cities. Select the List button to view the list and select a city.

While the Street name category is empty, there is a Last 5 Streets screen button that displays the last five selected streets. Press this button to select a street from the list.

6. Select the street name.

7. Once a street has been selected, the numeric keyboard displays, allowing entry of the house number. The system displays the house number range that is available for the street.

8. A confirmation screen displays with the address. If the address is correct, select the Go screen button. The system calculates the route.

9. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.

10. Select the Start Guidance screen button. The route is now ready to be started.

See “Getting Started on Your Route” later in this section.
Point of Interest (POI)

Point of Interest: The Point of Interest (POI) destination entry method allows selection of a destination by providing the system with a POI name, a city name, or selecting the POI from the POI list.

Entering the POI Name/Phone Number

1. Press the DEST hard key.
2. Select the Point of Interest screen button.
3. The Name / ☎ category is automatically selected for entry. Start entering the name or select the 0-9 screen button to enter the phone number.

   If four or less names are available, a list displays.
   If more than four are available, there is a match counter with a number in it, it represents the number of available POI names. Select the List button to view the list.

4. Select the POI name from the list.
5. A confirmation screen displays with the POI information. If the POI information is correct, select the Go screen button. The system calculates the route.
6. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.
7. Select the Start Guidance screen button. The route is now ready to be started.

See “Getting Started on Your Route” later in this section.
**Entering the City Name First**

1. Press the DEST hard key.
2. Select the Point of Interest screen button.
3. Select the City screen button and start entering the city name.
   
   If four or less names are available, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available cities. Select the List button to view the list and select a city.

4. Select the Name / phone screen button and start entering the name or select the 0-9 screen button to enter the phone number.
   
   If four or less names are available, a list displays. If more than four are available, there is a match counter with a number in it, it represents the number of available POI names. Select the List button to view the list.

5. Select the POI name from the list.
6. A confirmation screen displays with the POI information. If the POI information is correct, select the Go screen button. The system calculates the route.
7. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.
8. Select the Start Guidance screen button. The route is now ready to be started.

See “Getting Started on Your Route” later in this section.

**Selecting a POI Category**

1. Press the DEST hard key.
2. Select the Point of Interest screen button.
3. Select the Browse POI Categories screen button.
4. Select a category, and then a sub-category.
   
   The system will display available POI names in the selected sub-category.

5. Select the POI name from the list.
6. A confirmation screen displays with the POI information. If the POI information is correct, select the Go screen button. The system calculates the route.
7. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.
8. Select the Start Guidance screen button. The route is now ready to be started.

See “Getting Started on Your Route” later in this section.
Address Book:
The address book entry method allows you to select a destination by selecting an address that has been stored in your address book.

1. Press the DEST hard key.
2. Select the Address Book screen button.
   A list of your address book addresses display. Use the scroll arrows to the left to scroll through the list.
3. Select the Go screen button next to the destination. The system calculates the route.
4. Select the route preference (Fastest, Shortest, or Easy). The system highlights the route.
5. Select the Start Guidance screen button. The route is now ready to be started.
   See “Getting Started on Your Route” later in this section for more information.
   See “Adding Destinations to the Address Book” later in this section.

OnStar® Destination Download

OnStar® Destination Download (if equipped) is a service available for OnStar* subscribers that makes operating your navigation system much simpler. It allows subscribers to request and receive navigation assistance on-the-go.
Using OnStar® Destination Download

Press the blue OnStar button and an Advisor can locate a point-of-interest or an address and download the necessary information or coordinates to your navigation system. Once the destination is downloaded, the navigation system will search for the address in the mapping disc’s database. When the address is found, it will be shown on your navigation system’s screen along with the buttons described below.

- Select Go, the navigation system calculates route(s). Select a route (i.e. Shortest Route), and Start Guidance.
- Select Map, the navigation system displays the Destination Map Screen.
- Select Call, the navigation system initiates a call to your destination with your Bluetooth phone (if available) or OnStar Hands-Free Calling (if minutes are available).
- Select Add to Address Book, the navigation system copies the downloaded destination to the address book and displays the new address book entry.
- Select Back, the navigation system cancels your OnStar Destination Download and returns to the previous screen. The downloaded address will not be added to the previous destinations.

Route Guidance Not Active

If an OnStar destination is downloaded while route guidance is not active, the navigation system displays an OnStar Destination Download Screen and operations will continue as outlined in the Using OnStar Destination Download section:

Route Guidance Active

If OnStar downloads a destination while route guidance is already active, the navigation system adds the downloaded destination as the next waypoint in the existing route. All features such as Call and Add to Address Book will be available for the waypoint. Refer to the section on Waypoints for more information.
Previous Destinations

Previous OnStar Destination Downloads are saved under Previous Destinations in the navigation system where they can be accessed or saved to the address book.

Important Notes regarding OnStar Destination Download:

• If the navigation system is turned off when the destination download is attempted, the navigation system will automatically turn on and display the OnStar Destination Download Screen. The radio will remain on after the download occurs.

• If OnStar downloads a destination and the address is not found in the mapping disc’s database and routing by coordinates is not available, the Go and Map buttons gray out and routing will not be available. Press the blue OnStar button for further assistance.

• The Call button grays out when there is no phone number available for your destination and while connected to OnStar.

Map Destination Screen Functions

If the map screen is used to show destination, it will have map screen capabilities such as Go, Mark, Zoom, Scroll, etc. The address is shown at the top of the screen.
Getting Started on Your Route

Once a destination has been entered there are several functions that can be performed. Press the DEST hard key to access the Route screen.

Turn List

Select this screen button, from the Route screen, to view the list of maneuvers for the entire route.

Turn List: Select this screen button, from the Route screen, to view the list of maneuvers for the entire route.
Route Preview

Route Preview: Select this screen button, from the Route screen, to preview the entire route in either direction.

⏯ (Pause): Select to pause the route preview, while in reverse, fast reverse, forward, or fast forward scroll.

▶ (Forward Scroll): Select to forward scroll to the final destination.

⏩ (Fast Forward Scroll): Select to fast forward scroll to the final destination. This button displays once the forward scroll button has been selected.

⏩ (Fast Forward Skip): Select to go to the final destination.

Detour

Detour: Select this screen button from the Route screen, then select to detour 1, 3, 5, 15, or 25 miles (2, 5, 10, 20, or 40 km) around the current route. Select Entire Route to detour the entire route. This option is only available while driving on a route.

Voice Volume

Voice Volume: Select this screen button from the Route screen to change the volume of voice prompts. Select the Voice Guidance, Traffic Event Voice Prompt, Speech Recognition Prompt, and Speech Confirmation Prompt screen buttons to turn voice prompts on or off for each voice category. See “Nav” under Configure Menu on page 2-26 for more information.
Add Waypoint

Add: Select this screen button from the Route screen. This feature allows up to three waypoints to be added to the current route, between one start point and final destination. Once a waypoint has been added, the points can be edited or deleted.

To add a waypoint:
1. Press the DEST hard key.
2. Select the Add screen button. This button only appears if a route has been calculated.

3. Using the desired method of entering a destination, enter the waypoint. See “Destination” previously for more information. The system calculates and highlights the route. The route is now ready to be started.

4. To add more waypoints, press the DEST hard key, then select the Add screen button, where the next waypoint should fall on the route. The system calculates and highlights the route. The route is now ready to be started.

To delete a waypoint:
1. Press the DEST hard key.
2. Select the Delete screen button next to the waypoint to be deleted.
3. The system displays a pop-up confirmation message. Select Yes to delete the waypoint; select No to cancel this operation. The system calculates and highlights the route. The route is now ready to be started.

Suspend Guidance
Press this screen button, from the Route screen, to put the current route on hold.

Resume Guidance
Press this screen button, from the Route screen, to resume guidance on the current route.
Cancel Guidance

Press this screen button, from the Route screen, to cancel the current route. A confirmation window displays. Select Yes to cancel; No to cancel this operation.

Preset Destinations — Adding or Changing

This feature allows addition or changes to one of six preset destinations. When a destination has been added as a preset destination, it is available to select from the Select Destination screen. See “Preset Destination” previously for information on how to select a preset destination as a final destination.

Storing the Current Destination

To store the current final destination as a preset destination:

1. Select the Add screen button from the map screen. The Address Book screen appears.
2. Select the Name screen button. An alpha-keyboard displays. Enter the name.
3. Press and hold one of the six screen buttons at the bottom of the screen until the text within the button changes.

The name appears in that preset destination screen button and is now available to select from the Select Destination screen.

Adding or Changing Destinations

1. Press the DEST hard key.
2. Select the Address Book screen button.
3. Select the address book entry to add or change.
4. Press and hold one of the six screen buttons at the bottom of the screen until the text within the button changes.

The name appears in that preset destination screen button and is now available to select from the Select Destination screen.

Address Book — Storing Destinations

To store the current final destination to the address book, press the Add screen button from the map screen while scrolled to the final destination. The system automatically saves the final destination information in the address book.
Address Book — Editing and Deleting Entries

To edit the name of an address book:
1. Press the DEST hard key.
2. Select the Address Book screen button. A list of address book entries will display. Use the scroll arrows to the left to scroll through the list.
3. Select the address book entry to change.
4. Touch the Name screen button and use the alpha keyboard to edit or add the name.
5. Touch the OK screen button to save the changes.

To add or change the phone number of an address book entry:
1. Press the DEST hard key.
2. Select the Address Book screen button. A list of address book entries display. Use the scroll arrows to the left to scroll through the list.
3. Select the address book entry to change.
4. Touch the Phone # screen button and use the numeric keyboard to enter or change the phone number.
5. Touch the OK screen button to save your changes.

To change the map icon of an address book entry:
1. Press the DEST hard key.
2. Select the Address Book screen button. A list of address book entries display. Use the scroll arrows to the left to scroll through the list.
3. Select the address book entry to change.
4. Touch the Icon screen button.
5. Select an icon from the list.
To add a voice tag to an address book entry:
1. Press the DEST hard key.
2. Select the Address Book screen button. A list of address book entries display. Use the scroll arrows to the left to scroll through the list.
3. Select the address book entry to change.
4. Touch the Add Voice Tag screen button.
5. The system asks that you state the name. You will have two seconds to state the name. The system responds back with the name.

To delete an address book entry:
1. Press the DEST hard key.
2. Select the Address Book screen button. A list of address book entries display. Use the scroll arrows to the left to scroll through the list.
3. Select the address book entry to delete.
4. Touch the Delete screen button to delete the address book entry. A confirmation displays.

Previous Destinations — Deleting
To delete all previous destinations.
1. Press the DEST hard key.
2. Select the Previous Destination screen button.
3. Touch the Delete All screen button. A confirmation window displays. Select Yes to cancel; No to cancel this operation.

Configure Menu

Press the CONFIG hard key to adjust several of the system’s features and preferences. The last selected menu screen is the screen that displays; Sound, Radio, Nav (navigation), Display, or clock.
Sound
Press the CONFIG key to enter the Menu options, then press the CONFIG key repeatedly until Sound is selected or touch the Sound screen button to make speaker and DSP (Digital Signal Processing) adjustments. See Navigation Audio System on page 3-2 for more information.

Radio
Press the CONFIG key to enter the menu options, then press the CONFIG key repeatedly until Radio is selected or touch the Radio screen button to make changes for radio information displayed, preset pages, Automatic Volume Control, and XM™ categories restore. See Navigation Audio System on page 3-2 for more information.

Nav (Navigation)
Press the CONFIG key to enter the Menu options, then press the CONFIG key repeatedly until Nav is selected or touch the Nav screen button.
Voice Volume
Touch the Voice Volume screen button to change the volume of the voice prompts or to turn the voice prompts on and off.

Master Volume Level: Touch the + (plus) or – (minus) screen buttons to increase or to decrease the volume of all voice categories.

Voice Guidance: Touch to turn voice instructions on and off while traveling on a planned route. Voice guidance is on when the button is highlighted.

Traffic Event Voice Prompt: Touch to turn traffic voice instructions on and off. Traffic voice is on when the button is highlighted.

Speech Recognition Prompt: Touch to turn speech recognition prompts on and off. Speech prompts are on when the button is highlighted.

Speech Confirmation Feedback: Touch to turn speech confirmation feedback on and off. Speech feedback is on when the button is highlighted.

Route Preference
Touch the Route Preference screen button to change route options when the system calculates a route.

Avoid Freeway: The system avoids major roads when calculating a planned route.

Avoid Toll Road: The system avoids toll roads when calculating a planned route.

Avoid Ferry: The system avoids ferries when calculating a planned route.

Avoid time and seasonal restricted road: The system avoids time restricted and seasonal roads when calculating a planned route.

Back Track
Touch the Back Track screen button to turn recording and displaying on and off or to delete the path being traveled when not on a marked road.

Record Back Track: When this feature is active the system starts recording the path being traveled when not on a marked road. This button highlights when it is active.

Display Back Track: When this feature is active the system displays the path that is being traveled. This path is a simulation since the map database coverage will not have these roads on the system. This button highlights when it is active.

Delete Recorded Back Track: Touch this screen button to delete the recorded path.

Map Database Information
Touch the Map Database Information screen button to view system information.
XM NavTraffic™ (USA and Canada)

The vehicle’s navigation system may have an XM NavTraffic™ receiver. XM NavTraffic™ is a subscription service provided via XM™ Satellite Radio. XM NavTraffic™ provides real-time traffic information fully integrated to the navigation system to display current traffic conditions for a driver’s chosen route. XM NavTraffic™ allows drivers to make the most informed, timesaving routing decisions.

XM NavTraffic™ is powered by NAVTEQ Traffic™ data which provides aggregate, quality tested information from the leading commercial and public traffic data providers including government departments of transportation, police, and emergency services, road sensors, cameras, and airborne reports. Three types of traffic information for major roadways are displayed on the navigation system:

- Unscheduled traffic incident data, such as accidents and disabled vehicles
- Scheduled traffic incident data, such as road construction and road closures
- Traffic flow information (rate of speed data)

Traffic information is delivered to the vehicle by the XM™ Radio satellites. XM NavTraffic™ makes it possible for the navigation system to provide continuously updated traffic information personalized for a driver’s needs.


A service fee is required in order to receive the XM NavTraffic™ service.

*Flow data not currently reported in these markets.
Turning XM NavTraffic™ On and Off

To turn traffic on or off:

1. Press the CONFIG hard key, then press the CONFIG key repeatedly until Nav is selected or press the Nav screen button.
2. Touch the Traffic Information button.
3. Touch the Display Traffic Information button. This button highlights when it is active.

Selecting Use Traffic Information for Guidance enables the system to show a pop-up screen notifying you of a possibly quick route. If currently driving using a planned route, the pop-up screen appears on the display when this has been selected.

When these features are highlighted while traveling on a route, accidents can be viewed and avoided that are on the route.

When traffic is enabled, a vehicle traffic symbol appears in the Traffic screen button. The vehicle traffic symbol is color coded, as follows:

- No symbol displays if traffic conditions reported to the navigation system do not affect the vehicle, or no information is received while driving on a route that is not active.
- Green indicates that the traffic condition is far away.
- Yellow indicates that a minor traffic condition in the general area.
- Red indicates that, while under route guidance, a quicker route is available.

Traffic flow conditions appear on the map screen:

- Green indicates free traffic flow.
- Yellow indicates a congestion.
- Red indicates heavy or stopped traffic.

Locations and Information of Traffic Conditions

The system may take some time to sort the information. The list of traffic conditions display in the order of distance from the vehicle, for up to approximately 150 mi (240 km). If currently traveling on a planned route, you can filter the list to see traffic conditions along the planned route. Not all traffic conditions may be reported in the list.
To view the traffic condition location and information on the map:

1. Press the NAV key, then press the NAV key repeatedly until Traffic is selected, or touch the Traffic screen button. A list of traffic conditions may display with the direction and how far away the traffic conditions are from the vehicle’s current position.

2. Select a traffic condition to view it on the map. The map screen displays with the area of the traffic condition shown. Press the Next or Previous screen buttons to view the accident locations that are on the list.
Avoid Traffic Condition

Avoid: The vehicle must be on Route Guidance and the traffic condition must be on the route for the Avoid feature to work.

Touch the Avoid screen button next to the traffic condition to be avoided. The current route updates to remove the area with the traffic condition from the route. Select each traffic condition to avoid.

Avoided List: Once one or more traffic conditions have been avoided, touch this screen button to view the list of traffic conditions that have been selected to avoid. Select one or more of the avoided traffic conditions to place the condition(s) back on route.

Scrolling Map

While scrolling the map, traffic condition icons may appear. To receive information about the traffic condition, place the cross hairs over the traffic condition icon. After selecting the i (information) screen button, the type of traffic condition, the street name, and a description of the traffic condition appears on the display. See “Scrolling the Map” under Maps on page 2-5 for more information.
Use Traffic Information for Guidance

Selecting Use Traffic Information for Guidance enables the system to show a pop-up screen notifying of a possible quicker route, when driving using a planned route.

To turn this feature on:

1. Press the CONFIG hard key, then press the CONFIG key repeatedly until Nav is selected or press the Nav screen button.
2. Touch the Traffic Information button.
3. Touch the Use Traffic Information for Guidance button. This button highlights when it is active.

Alternate Route

When the pop-up display “Detour Available” appears on the screen to notify that a possibly quicker route is available, an alternate route can be selected, to detour around the traffic condition. Press the Yes screen button and the system automatically calculates a new route. This option only becomes available when the traffic icon is red.

XM NavTraffic™ information may not be provided for the alternate route, depending on what type of road the vehicle is traveling on.

Traffic Condition Symbols

The following are traffic condition symbols that can appear on the display:

- Stopped traffic.
- Traffic jam.
Accident.

Road closed.

Lane Narrows.

Road work. Construction.

Alert.

Road condition.
Display

Press the CONFIG key to enter the menu options, then press the CONFIG key repeatedly until Display is selected or touch the Display screen button.

Display Off
Touch this screen button to turn the display off. Press any hard key such as NAV, AUDIO, FAV, CONFIG, DEST, SCREEN, or TONE to view the display.
Brightness/Contrast/Mode

Touch this screen button to change the brightness, contrast, and mode of the display.

☀️ (Brightness): Touch the + (plus) or – (minus) screen buttons to increase or decrease the brightness of the screen.

☀️ (Contrast): Touch the + (plus) or – (minus) screen buttons to increase or decrease the contrast of the screen.

Auto (Automatic): Touch to automatically adjust the screen background depending on exterior lighting conditions.

Day: Touch to make the map background brighter.

Night: Touch to make the map background darker.

The dimming change button on the navigation faceplate is used to toggle between these dimming modes.

Setting the Clock

The navigation system time and the analog clock are separate features. Changing the time through the navigation system will not change the time on the analog clock and vice versa. See “Analog Clock” in the Index of your vehicle's owner manual to change the analog clock time.

To set the time:

1. Press the CONFIG key to enter the menu options, then press the CONFIG key repeatedly until the time is selected or touch the clock screen button located in the upper right corner of the screen.
2. Press the Hours and Minutes – (minus) and + (plus) signs to decrease and to increase the time.

12/24 HR Format: Select the 12 HR screen button for standard time; select the 24 HR screen button for military time.

DD/MM or MM/DD Format: Press the + (plus) or – (minus) display buttons to increase or decrease the MM, DD, and YYYY date display.

Auto GPS Update: Press either the On or Off display buttons. If On, the GPS update feature automatically updates the date and time.

Daylight Savings: Press either the On or Off display buttons. Press On to jump ahead for daylight savings time. Press Off to fall back out of daylight savings time.

Time Zone: Auto GPS Update must be off before the time zone can be changed. Select the change display button to select the desired time zone.
Global Positioning System (GPS)

The navigation system determines the position of the vehicle by using satellite signals, various vehicle signals, and map data.

At times, other interferences such as the satellite condition, road configuration, the condition of the vehicle and/or other circumstances can interfere with the navigation system’s ability to determine the accurate position of the vehicle.

The GPS shows the current position of the vehicle using signals sent by the GPS Satellites of the United States Department of Defense. When the vehicle is not receiving signals from the satellites, a symbol appears on the map screen. Refer to Symbols on page 2-7.

This system may not be available or interferences may occur if any of the following is true:

- Signals are obstructed by tall buildings, trees, large trucks, or a tunnel.
- Objects are located on the rear shelf of the vehicle.
- Satellites are being repaired or improved.
- After-market glass tinting has been applied to the vehicle’s rear windshield.

Notice: Do not apply after-market glass tinting to the vehicle’s windows. Glass tinting interferes with the system’s ability to receive GPS signals and causes the system to malfunction. The window might have to be replaced to correct the problem. This would not be covered by the warranty.

For more information if the GPS is not functioning properly, see If the System Needs Service on page 2-39 and Problems with Route Guidance on page 2-38.

Vehicle Positioning

At times, the position of the vehicle on the map may be inaccurate due to one or more of the following reasons:

- The road system has changed.
- The vehicle is driving on slippery road surfaces such as in sand, gravel and/or snow.
- The vehicle is traveling on winding roads.
- The vehicle is on a long straight road.
- The vehicle is approaching a tall building or a large vehicle.
- The surface streets run parallel to a freeway.
- The vehicle has just been transferred by a vehicle carrier or a ferry.
• The current position calibration is set incorrectly.
• The vehicle is traveling at high speed.
• The vehicle changes directions more than once, or when the vehicle is turning on a turn table in a parking lot.
• The vehicle is entering and/or exiting a parking lot, garage or a lot with a roof.
• The GPS signal is not received.
• A roof carrier is installed on the vehicle.
• The vehicle has tire chains installed.
• The tires are replaced.
• The tire pressure for the tires is incorrect.
• The tires are worn.
• The first navigation use after the map data is updated.
• The battery is disconnected for several days.
• The vehicle is driving in heavy traffic where driving is at low speeds, and the vehicle is stopped and started repeatedly.

If experiencing problems with the system, it may need to be calibrated. See “DIC Compass” in the Index of the vehicle’s owner manual.

Problems with Route Guidance

Inappropriate route guidance may occur under one or more of the following conditions:
• You have not turned onto the road indicated.
• Route guidance may not be available when using automatic rerouting for the next right or left turn.
• The route may not be changed when using automatic rerouting.
• There is no route guidance when turning at an intersection.
• Plural names of places may be announced occasionally.
• It may take a long time to operate automatic rerouting during high-speed driving.
• Automatic rerouting may display a route returning to the set waypoint if heading for a destination without passing through a set waypoint.
• The route prohibits the entry of a vehicle due to a regulation by time or season or any other regulation which may be given.
• Some routes may not be searched.
• The route to the destination may not be shown if there are new roads, if roads have recently changed or if certain roads are not listed in the map data. See Ordering Map DVDs on page 2-39.
To recalibrate the vehicle’s position on the map, see “DIC Compass” in the Index of the vehicle’s owner manual.

**If the System Needs Service**

If the navigation system needs service and the steps listed here have been followed but there are still problems, see your dealer/retailer for assistance.

**Ordering Map DVDs**

The map data in the vehicle is the most up-to-date information available when the vehicle was produced. The map data is updated periodically, provided that the map information has changed.

If you have any questions about the operation of the navigation system or the update process, contact the GM Nav Disc Center toll-free phone number, 1-877-NAV-DISC (1-877-628-3472) or go to the center’s website, gmnavdisc.com. If you need any updates, call the GM Nav Disc Center or order a new disc online.

To order a disc, have your Vehicle Identification Number (VIN) available. This helps the center make sure you receive the correct and most up-to-date DVD map disc for your vehicle. See “Vehicle Identification Number (VIN)” in the Index of your vehicle’s owner manual for more information.

After receiving the updated disc, see “Installing the DVD Map Disc” and “Ejecting the DVD Map Disc” under Maps on page 2-5.

**Database Coverage Explanations**

Coverage areas vary with respect to the level of map detail available for any given area. Some areas feature greater levels of detail than others. If this happens, it does not mean there is a problem with the system. As the map data is updated, more detail may become available for areas which previously had limited detail. See Ordering Map DVDs on page 2-39.
Section 3  Navigation Audio System

<table>
<thead>
<tr>
<th>Navigation Audio System</th>
<th>CD Player</th>
<th>DVD Player</th>
<th>Care of Your CDs and DVDs</th>
<th>Hard Drive Device</th>
<th>Auxiliary Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3-2</td>
<td>3-10</td>
<td>3-21</td>
<td>3-22</td>
<td>3-28</td>
</tr>
</tbody>
</table>


Navigation Audio System

*Notice:* Before adding any sound equipment to the vehicle, such as an audio system, CD player, CB radio, mobile telephone, or two-way radio, make sure that it can be added by checking with your dealer/retailer. Also, check federal rules covering mobile radio and telephone units. If sound equipment can be added, it is very important to do it properly. Added sound equipment can interfere with the operation of the vehicle’s engine, radio, or other systems, and even damage them. The vehicle’s systems can interfere with the operation of sound equipment that has been added.

*Notice:* The chime signals related to safety belts, parking brake, and other functions of the vehicle operate through the navigation system. If that equipment is replaced or additional equipment is added to the vehicle, the chimes may not work. Make sure that replacement or additional equipment is compatible with the vehicle before installing it. See “Accessories and Modifications” in the Index of the vehicle’s owner manual.

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Playing the Radio

*Power/Volume*: Press to turn the audio system on and off. Turn the knob to increase or to decrease the volume.

*TUNE/TONE Knob*: Turn to go to the next or previous frequency.

Press this knob to display the Sound menu. See “Sound Menu” later in this section.

*AUDIO*: Press to display the full audio screen. Press the key to switch between AM, FM, or XM™, if equipped, CD, DVD, HDD, and AUX (auxiliary input), or touch the screen button. See CD Player on page 3-10, DVD Player on page 3-16, Hard Drive Device on page 3-22, and Auxiliary Devices on page 3-28 for more information.
Finding a Station

If viewing a map screen, touch the source screen (AM, FM, XM, CD, etc.) button. The display splits between the audio screen and the map screen. All station-changing functions can be performed from this screen.

**FM source shown, other sources similar**

If viewing a map screen, touch the source screen (AM, FM, XM, CD, etc.) button. The display splits between the audio screen and the map screen. All station-changing functions can be performed from this screen.

In order to view a split screen while on a map screen, press the AUDIO hard key.

**AM/FM/XM:** Touch the source (AM, FM, or XM, if equipped) screen button or press the AUDIO key repeatedly until the desired source highlights.
All: Touch the screen button, located in the middle of the screen, to receive a list of all of the selected band stations in the area. Use the up and down arrow screen buttons to scroll the frequencies. Select the frequency.

XM lists also contain a category to select and the stations or channels that pertain to the category. For XM, touch the left and right arrow screen buttons to change categories. The station information displays.

FM lists may also contain a category to select if stations in the area support Radio Data Systems (RDS).

DEL (Delete): Press to remove the currently displayed category.

Restore CAT: Touch to restore a category that was just removed

Restore All: Touch to restore all categories that were removed.

Refresh: Touch to refresh the list of stations.

When viewing a map screen, the name of the station or channel displays.

▶SEEK / ◀SEEK: To seek stations, press the left or right arrow keys to go to the next or previous station and stay there.
Storing Radio Station Presets

This feature allows storage up to 36 preset stations. AM, FM, and XM (if equipped) can be mixed. To store presets:

1. Press \( \text{on} \) to turn the system on.
2. If viewing a map screen, touch the source screen button, press the AUDIO key, or press the FAV (favorite) key.
3. Select the band.
4. Seek or tune to the desired station, to select the station.
5. Press and hold one of the preset screen buttons for more than one and a half seconds.
6. Repeat the steps for each preset.

To change the number of preset pages, see “Number of Preset Pages” under “Radio Menu” later in this section.

Sound Menu

TONE or CONFIG (Configure): Press this knob or press the CONFIG key to access the Sound menu to adjust the treble, midrange, bass, fade, balance, and Digital Signal Processing (DSP).

TREBLE: Touch the plus (+) or minus (−) sign to increase or decrease the treble. If a station is weak or has static, decrease the treble.

MID (Midrange): Touch the plus (+) or minus (−) sign to increase or decrease the midrange.

BASS: Touch the plus (+) or minus (−) sign to increase or decrease the bass.
Adjusting the Speakers

L/R (Left/Right) (Balance): To adjust the balance between the left and the right speakers, touch and hold the L or R screen buttons.

Front/Rear (Fade): To adjust the fade between the front and the rear speakers, touch and hold the Front or Rear screen buttons.

Digital Signal Processing (DSP)

If the system has Digital Signal Processing (DSP), DSP is used to provide a choice of five different listening experiences. DSP can be used while listening to the audio system. The type of DSP selected is displayed on the status screen.

Select from the following DSP settings:

Normal: Select to adjust the audio to be in normal mode. This provides the best sound quality or all seating positions.

Driver: Select to adjust the audio to give the driver the best possible sound quality.

Rear: Select to adjust the audio to give the rear seat occupants the best possible sound quality.

Centerpoint®: Select to turn on Bose Centerpoint. Centerpoint produces a full vehicle surround sound listening experience from a CD, MP3/WMA, DVD, AUX (auxiliary) input, or XM stereo digital audio source and delivers five independent audio channels from the conventional two channel stereo recordings. This is not available for AM or FM.

5.1 Surround: 5.1 Surround sound processing is available for DVD-A/DVD-V sources that were recorded in 5.1 surround.

- 5.1 Surround + Normal: Best for all seating positions.
- 5.1 Surround + Rear: Best for the rear seating position.
Radio Menu

Additional Information Displayed
Touch the Additional Information Displayed screen button to turn station, channel, CD, and MP3 information on or off.

Touch the On screen button to receive information, when it is available, for the following; FM: radio text, XM: Song Title and Artist Name, CD: CD text, MP3: tag information.

Touch the Off screen button to receive no information.

Number of Preset Pages
Touch the Number of Preset Pages screen button to change the number of preset pages, 1 through 6. Each preset page can contain six preset stations. Touch the desired numbered screen button.

Noise Compensation Technology: Your Bose® equipped vehicle includes Bose AudioPilot® noise compensation technology.

When turned on, AudioPilot® continuously adjusts the audio system equalization, to compensate for background noise, so that the music always sounds the same at the set volume level.

Press the CONFIG key to enter the menu screen, then press the CONFIG key repeatedly until Radio is selected or touch the Radio screen button to make radio system changes.
This feature is most effective at lower volume settings where background noise can affect how well the music is heard being played through the vehicle's audio system. At higher volume settings, where the music is much louder than the background noise, there may be little or no adjustments by AudioPilot. For additional information on AudioPilot, please visit bose.com/audiopilot.

To use AudioPilot:
1. Press the CONFIG key to enter the menu screen, then press the CONFIG key repeatedly until Radio is selected or touch the Radio screen button.
2. Press the Automatic Volume Control screen button to access the AudioPilot menu.
3. Press the ON screen button.

To turn off, touch the OFF screen button.

**XM Category Restore**

Touch the “Yes” button of Restore All Categories screen to add all categories that have been removed. Touch the “No” button of Restore All Categories screen to cancel.

**Timeshift**

Timeshift records all information from AM, FM, or XM, if equipped, for up to an hour. Timeshift allows you to listen to information that was missed. Once starting to listen to one of the bands, timeshift automatically starts. Once timeshift has recorded for an hour, it will keep recording and start removing the information from the beginning.

Press >/| (pause) to stop hearing the information through the speakers. During this pause time, timeshift keeps recording. Press >/| (play) to continue listening where you left off. During pause, a progress bar displays, to show how much time the system has been buffering.

Press >/| before turning the vehicle off so that Timeshift keeps recording for up to one hour. If the vehicle is still off after an hour of recording, the vehicle stops recording and all information is lost.

If stations are switched, during this hour period, timeshift erases all information that was recorded and starts recording from the current band. If you switch to listening to any other source, timeshift will not record.
Radio Data System (RDS)

The audio system has a Radio Data System (RDS). RDS features are available for use only on FM stations that broadcast RDS information. With RDS, the radio can:

- Seek to stations broadcasting the selected type of programming
- Receive announcements concerning local and national emergencies
- Display messages from radio stations

This system relies on receiving specific information from these stations and only works when the information is available. In rare cases, a radio station may broadcast incorrect information that causes the radio features to work improperly. If this happens, contact the radio station.

The RDS system is always on. When information is broadcast from the current FM station, the station name or call letters display on the audio screen. RDS may provide a program type (PTY) for current programming and the name of the program being broadcasted.

XM™ Satellite Radio Service

XM™ is a satellite radio service that is based in the 48 contiguous United States and 10 Canadian provinces. XM Satellite Radio has a wide variety of programming and commercial-free music, coast-to-coast, and in digital-quality sound. During your trial or when you subscribe, you will get unlimited access to XM Radio Online for when you are not in your vehicle. A service fee is required to receive the XM service. For more information, contact XM at xmradio.com or call 1-800-929-2100 in the U.S. and xmradio.ca or call 1-877-438-9677 in Canada.

When XM™ is active, the channel name and number, category name, song title, and artist will display on the screen.

XM™ Radio Messages

See “XM™ Radio Messages” in the vehicle’s owner manual” for a list of possible XM messages.
CD Player

The player can be used for CD, MP3, and DVD. See DVD Player on page 3-16 for more information about DVD audio and video.

When a CD is used, album name, artist name, name of a song, genre name, etc. can be displayed. This is a searched content from the Gracenote database of the HDD.

With the ignition on, insert a CD partway into the slot, label side up. The player pulls it in and the CD should begin playing. While playing a CD, the navigation system is available. If you insert a CD with the system off and the ignition on, it starts to play.

When you insert a CD, Gracenote logo display starts with the Gracenote database access and the CD tab activates.

If the ignition or radio is turned off while a CD is in the player, it stays in the player. When the ignition or radio is turned on, the CD starts playing where it stopped, if it was the last selected audio source.

As each new track starts to play, the track number displays.

The CD player can only play the full-size (12 cm) CDs.

If an error appears on the display, see “CD Messages” later in this section.

If viewing a map screen, touch the CD screen button. The display splits between the audio screen and the map screen. If no split screen is wanted or if not on a map screen, press the AUDIO key then press the AUDIO key again until CD is selected or touch the CD screen button.

Playing an Audio CD

If viewing a map screen, touch the CD screen button. The display splits between the audio screen and the map screen. If no split screen is wanted or if not on a map screen, press the AUDIO key then press the AUDIO key again until CD is selected or touch the CD screen button.

If viewing a map screen, touch the CD screen button. The display splits between the audio screen and the map screen. If no split screen is wanted or if not on a map screen, press the AUDIO key then press the AUDIO key again until CD is selected or touch the CD screen button.

RANDOM: Touch this button to hear the tracks in random, rather than sequential, order. Touch RANDOM again to turn off random play.

| RANDOM | (Pause/Play): Touch to pause the CD, the pause symbol displays. This button will then change to the play button. Touch the play button to play the CD. |
(Rewind): Touch and hold to rewind quickly through a track selection. A sound is heard at a reduced volume. Release this button to stop rewinding. The display shows the elapsed time of the track.

(Forward): Touch and hold to fast forward quickly through a track selection. A sound is heard at a reduced volume. Release this button to stop fast forwarding. The display shows the elapsed time of the track.

SEEK / SEEK: Press the right arrow to go to the next track. Press the left arrow to go to the start of the current track, if more than five seconds have played or to the previous track, if five seconds or less have played. If either arrow is pressed more than once, the player continues moving backward or forward through the CD. The sound mutes while seeking.

TUNE/TONE knob: Turn to go to the next or previous track.

Track List Screen: Press the center button on the main screen to go to the Track List Screen. Press the screen button to select a different song to play from the disc.

Using an MP3 CD and DVD
MP3 Format

There are guidelines that must be met, when creating an MP3 disc. If the guidelines are not met when recording a CD-R(W), the CD may not play. The guidelines are:

- Sampling rate: 8 kHz, 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, and 48 kHz.
- Bit rates supported: 8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160, 192, 224, 256, and 320 kbps.
- ID3 tag information is displayed by the radio if it is available. The radio will display a filename, song name, artist name, album name, and directory name.
- Maximum number of folders is 255 with a maximum hierarchy of eight folders.
- Create a folder structure that makes it easy to find songs while driving. Each folder or album should contain 18 songs or less.
- It is recommended that there is a maximum of 1024 files on a disc.
- The files can be recorded on a CD-R or CD-RW with a maximum capacity of 700 MB.
**Root Directory**

The root directory is treated as a folder. If the root directory has compressed audio files, the directory displays as DISC. All files contained directly under the root directory are accessed prior to any root directory folders. However, playlists can always be accessed before root folders or files.

**Empty Directory or Folder**

If a root directory or a folder exists somewhere in the file structure that contains only folders/subfolders and no compressed files directly beneath them, the player advances to the next folder in the file structure that contains compressed audio files and the empty folder will not be displayed or numbered.

**No Folder**

When the CD contains only compressed files, the files are located under the root folder. The next and previous folder functions have no function on a CD that was recorded without folders or playlists. When displaying the name of the folder the radio displays DISC.

When the CD contains only playlists and compressed audio files, but no folders, all files are located under the root folder. The left and right arrow buttons search playlists (Px) first and then goes to the root folder. When the radio displays the name of the folder the radio displays DISC.

**Order of Play**

Tracks are played in the following order:

- Play begins from the first track in the first playlist and continues sequentially through all tracks in each playlist. When the last track of the last playlist has been played, play continues from the first track of the first playlist.

- If the CD does not contain any playlists, then play begins from the first track under the root directory. When all tracks from the root directory have been played, play continues from files according to their numerical listing. After playing the last track from the last folder, play begins again at the first track of the first folder or root directory.

When play enters a new folder, the display automatically shows the new folder name. The new track name displays.

**File System and Naming**

The song name that displays is the song name contained in the file. If the song name is not present in the file, then the radio displays the file name with the extension (such as .mp3) as the track name.
Preprogrammed Playlists

Preprogrammed playlists which were created by WinAmp™, MusicMatch™, or Real Jukebox™ software can be accessed, however, there is not editing capability. These playlists are treated as special folders containing compressed audio song files.

Playing an MP3

With the ignition on, insert a MP3 CD partway into the slot, label side up. The player pulls it in and the MP3 should begin playing. While playing a MP3, the navigation system is available. If a MP3 is inserted with the system off and the ignition on, it starts to play.

When a MP3 CD is inserted, the MP3 tab activates.

If the ignition or radio is turned off with a MP3 CD in the player, it stays in the player. When the ignition or radio is turned on, the MP3 CD starts playing where it stopped, if it was the last selected audio source.

As each new track starts to play, the track number displays.

If an error displays, see “CD Messages” later in this section.

If viewing a map screen, touch the MP3 screen button. The display splits between the audio screen and the map screen. If no split screen is wanted or if not on a map screen, press the AUDIO key, then press the AUDIO key until MP3 is selected or touch the MP3 screen button.

II / ▶ (Pause/Play): Touch to pause the CD, the pause symbol displays. This button then changes to the play button. Touch the play button to play the CD.

Random: Touch to hear the disc played in random (tracks and folders) order. Touch the Random screen button to turn off random play.
(Rewind): Touch and hold to rewind quickly through a track selection. A sound is heard at a reduced volume. Release this button to stop rewinding. The display shows the elapsed time of the track.

(Forward): Touch and hold to fast forward quickly through a track selection. A sound is heard at a reduced volume. Release this button to stop fast forwarding. The display shows the elapsed time of the track.

TUNE/TONE Knob: Turn to go to the next or previous track.

(Category): Select the left or right arrow to go to the previous or next folder/Artist/Album/Genre on the disc.

SEEK / SEEK: Press the right arrow to go to the next track. Press the left arrow to go to the start of the current track, if more than five seconds have played or to the previous track, if five seconds or less have played. If either arrow is pressed more than once, the player will continue moving backward or forward through the CD. The sound mutes while seeking.

Music Navigator: Press the center button on the main screen to display Music Navigator.

Selecting any of the following screen buttons, when in MP3, displays the Music Navigator screen for each of the following categories:

- **All Songs**: Press this button to view all songs stored on the DISC. Select a song name from that list. It may take a few minutes for the system to show the list. Once a song has been selected from this category, the song name will appear in the center button on the main screen.

- **Folder**: Press this button to view the folders that have been stored on the DISC. Select a folder name to view all songs in this folder, select a song. It may take a few minutes for the system to show a list. Once a song has been selected from this category, the folder name appears in the center button on the main screen to show that music is being played from a specific folder.

- **Artist**: Press this button to view the artists that have been stored on the DISC. Select an artist name to view all songs on that list, select a song. It may take a few minutes for the system to show the list. Once a song has been selected from this category, the artist name appears in the center button on the main screen to show that music is being played from a specific artist.
• **Album:** Press this button to view the albums that have been stored on the DISC. Select an album name to view all songs on that list, select a song. It may take a few minutes for the system to show the list. Once a song has been selected from this category, the album name appears in the center button on the main screen to show that music is being played from a specific album.

• **Genre:** Press this button to view the genres that have been stored on the DISC. Select a genre name to view all songs on that list, select a song. Once a song has been selected from this category, the genre name appears in the center button on the main screen to show that music is being played from a specific genre.

• **Audiobook:** Press this button to view the audiobooks that have been stored on the DISC. It may take a few minutes for the system to show the list. The audiobooks that have been stored cannot be played from DISC. They will need to be copied from the DISC to HDD before being listened to.

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**CD Messages**

If Disc Read Error appears on the display and/or the CD comes out, it could be for one of the following reasons:

- If a disc was inserted with an invalid or unknown format.
- It is very hot. When the temperature returns to normal, the CD should play.
- You are driving on a very rough road. When the road becomes smoother, the CD should play.
- The CD is dirty, scratched, wet, or upside down.
- The air is very humid. If so, wait about an hour and try again.
- There may have been a problem while burning the CD.
- The label may be caught in the CD player.

If the CD is not playing correctly, for any other reason, try a known good CD.

If any error occurs repeatedly or if an error cannot be corrected, contact your dealer/retailer.
DVD Player

The player can be used for DVD audio and DVD video.

With the ignition on, insert a DVD partway into the top visible slot, label side up. The player pulls it in and the DVD should begin playing. While playing a DVD, the navigation system is available. If you insert a DVD with the system off and the ignition on, it starts to play.

The vehicle must be in P (Park).

The DVD player is only compatible with DVDs of the appropriate region code that is printed on the jacket of most DVDs.

The DVD slot is compatible with most audio CDs, CD-R, CD-RW, DVD-Video, DVD-Audio, DVD-R/RW, DVD+R/RW media along with MP3 and WMA “un-protected” formats.

If an error displays, see “DVD Messages” later in this section.

Playing a DVD

There are three ways to play a DVD:

- Once a DVD is inserted, the system automatically starts play of the DVD.
- If you are on a map screen, touch the DVD screen button.
- Press the AUDIO hard key, then touch the DVD screen button.

VOL/ ⌚ (Volume/Power): Press to turn the system on and off. Turn the knob to increase or decrease the volume of the audio system.
DVD Menu Options

Once a DVD starts to play, the menu options automatically appear. To display the menu choices while a DVD is playing in full screen, touch anywhere on the screen.

There are two pages of menu options. Press the page number screen button, located in the bottom right corner of the screen, to use all of the menu screen buttons. Menu options are available when they are highlighted. Some menu options are only available when the DVD is not playing.

**Full Screen:** Press this screen button to remove all menu options from the display. Press anywhere on the screen to display the menu options.

**Cursor:** Touch this button to access the cursor menu. The arrows and other cursor options allow navigation of the DVD menu options. The cursor menu options are only available if a DVD has a menu.

**Q, R** (Arrow Buttons): Use these arrow buttons to move around the DVD menu.

**Enter:** Touch to select the highlighted option.
**Return:** Touch to go back to the previous DVD menu.

**Back:** Touch to go back to the main DVD display screen.

**Move:** Touch to move the cursor buttons back and forth from the bottom-right corner to the top-left corner of the screen.

**Random:** Touch to hear the tracks in random, rather than sequential, order. Touch Random again to turn off random play. This button is not available for DVD video.

■ (Stop): Touch to stop play of the DVD. Press the ■/II (play/pause) hard key to continue playing the DVD from where the DVD was stopped. Press this button twice to return to the beginning of the DVD.

■/II (Play/Pause): Touch to pause the DVD. Touch this hard key again to play the DVD from where the DVD was stopped.

**Angle:** Touch to adjust the viewing angle of the DVD. Repeatedly press this button to toggle through the angles. This button is not available when the DVD is stopped. This may not be available on all DVDs.

**Audio Stream:** Press to display the audio stream number and to change the language heard. Repeatedly press this button to toggle through the available languages. This may not be available on all DVDs. This button is not available when the DVD is stopped.

**Subtitle Stream:** Touch to playback the video with subtitles. Repeatedly press this button to toggle through the available languages. To turn the subtitles off, press this button until Off is selected. This button is not available when the DVD is stopped. This may not be available on all DVDs.

**Top Menu:** Touch to display the first menu of the DVD. This button is not available on all DVDs.

**Menu:** Touch to display the DVD menu of the current area of the DVD that is playing. This button is not available for DVD audio.

**Keypad:** Touch to display the title/chapter, the group/track, or the menu number screen; type in the appropriate number on the keypad.
Setup: Touch to display the DVD Setup screen. The DVD Setup screen allows you to change the initial settings; language and aspect, to change the brightness, contrast, and mode, and to change autoplay. The initial settings and auto play are only available when the DVD is not playing.

Initial Settings: From the DVD Setup screen, touch this button to change audio, subtitle, and menu languages, and to view the aspect of the DVD. The movie must be stopped to use this menu. These settings are not available on all DVDs.

Audio Language: Touch English, French, or Spanish to change the language that you are listening to.

Subtitle Language: Touch English, French, or Spanish to change the language of the subtitles.

Menu Language: Touch English, French, or Spanish to change the language of the menus.

Aspect: Touch to change the aspect ratio of the DVD. This may not be available on all DVDs.
Brightness/Contrast/Mode: From the DVD Setup screen, touch this button to change the brightness, contrast, and mode of the screen while playing a DVD.

☀ (Brightness): Touch the up or down screen arrows to increase or decrease the brightness of the DVD screen.

 (%) (Contrast): Touch the up or down screen arrows to increase or decrease the contrast of the DVD screen.

Auto (Automatic): Touch to automatically adjust the navigation screen background depending on exterior lighting conditions.

Night: Touch to make the navigation screen background darken.

Day: Touch to make the navigation screen background brighten.

Autoplay: From the DVD Setup screen, touch this button to turn autoplay on or off. When on, if the DVD has stayed in the menu, it begins playing the movie after the menu displays for five seconds. This may not be available on all DVDs.

▶ SEEK (Next Track/Chapter): Press to go to the next track or chapter. This button may not work when the DVD is playing the copyright information or the previews.

◄ SEEK (Previous Track/Chapter): Press to return to the start of the current track or chapter. Press this button again to go to the previous track or chapter. This button may not work when the DVD is playing the copyright information or the previews.

TUNE/TONE Knob: Turn to go to the next or previous track/chapter.
DVD Messages

If Disc Read Error displays and/or the DVD comes out, it could be for one of the following reasons:

- If a disc was inserted with an invalid or unknown format.
- If the disc is not from a correct region.
- It is very hot. When the temperature returns to normal, the DVD should play.
- You are driving on a very rough road. When the road becomes smoother, the DVD should play.
- The DVD is dirty, scratched, wet, or upside down.
- The air is very humid. If so, wait about an hour and try again.
- There may have been a problem while burning the DVD.
- The label may be caught in the DVD player.

If the DVD is not playing correctly, for any other reason, try a known good DVD.

If any error occurs repeatedly or if an error cannot be corrected, contact your dealer/retailer.

Care of Your CDs and DVDs

If playing recorded media such as a CD or DVD, the sound quality may be reduced due to CD or DVD quality, the method of recording, the quality of the music that has been recorded, recording speed, max media recording speed, and the way the CD or DVD has been handled. There may be an increase in skipping, difficulty in finding tracks, and/or difficulty in loading and ejecting. If these problems occur, check the bottom surface of the CD or DVD. If the surface is damaged, such as cracked, broken, or scratched, it will not play properly. If the surface is soiled, see “Care of Your CDs and DVDs” in the Index of the vehicle’s owner manual.

If there is no apparent damage, try a known good CD or DVD.

Notice: If a label is added to a CD or DVD, or more than one CD or DVD is inserted into the slot at a time, or an attempt is made to play scratched or damaged CDs or DVDs, the player could be damaged. While using the CD or DVD player, use only CDs or DVDs in good condition without any label, load one CD or DVD at a time, and keep the player and the loading slot free of foreign materials, liquids, and debris.
Do not add any label to a CD or DVD, it could get caught in the player. If a CD or DVD is recorded on a personal computer and a description label is needed, try labeling the top of the recorded CD or DVD with a soft marker.

**Hard Drive Device**

With a hard drive device you are able to record songs from your CD player or a mass media storage device connected by a USB connector. The hard drive has at the most 9 GB memory capacity for storage of media files.

The types of formats supported by the HDD are:

- MP3
- MP3-PRO (with Spectral Band Replication)
- WMA
- AAC
- OGG Vorbis
- Audible.com

**Recording from a CD**

To record all tracks:

1. Load a CD.
   - To record an audiobook from a CD or a USB, you must register with audible.com to receive an ID number. The ID number must be entered into the system. See audiobook later in this section for information on audible.com. See “Radio” under Configure Menu on page 2-26 for information on entering your ID number.

2. Press the REC hard key.

3. A confirmation window will display. Select Yes to record all tracks; select No to cancel the operation.
   - A progress bar displays if Yes was selected.

To record selected tracks:

1. Load a CD.

2. Touch the Track List screen button in the middle of the screen.
3. Select the songs from the Music Navigator screen. To record an audiobook from a CD or a USB, you must register with audible.com to receive an ID number. The ID number must be entered into the system. See audiobook later in this section for information on audible.com. See “Radio” under Configure Menu on page 2-26 for information on entering your ID number.

4. Press the RECORD hard key.

5. A confirmation window displays. Select Yes to record this track; select No to cancel the operation. A progress bar displays if Yes was selected.

While recording a CD to the HDD, if the system is turned off, the recording process stops. When the system is turned back on, the recording process will not continue.

Recording from a USB Device

To record all tracks:

1. Connect a USB device.

To record an audiobook from a CD or a USB, you must register with audible.com to receive an ID number. The ID number must be entered into the system. See audiobook later in this section for information on audible.com. See “Radio” under Configure Menu on page 2-26 for information on entering your ID number.

2. Press the REC hard key.

3. A confirmation window displays. Select Yes to record all tracks; select No to cancel the operation. A progress bar displays if Yes was selected.
To record selected tracks:

1. Connect a USB device.

2. Touch the USB screen button in the middle of the screen.

3. Select the media from the Music Navigator screen.
   To record an audiobook from a CD or a USB, you must register with audible.com to receive an ID number. The ID number must be entered into the system. See audiobook later in this section for information on audible.com. See “Radio” under Configure Menu on page 2-26 for information on entering your ID number.

4. Press the REC hard key.

5. A confirmation window displays. Select Yes to record this track; select No to cancel the operation.
   A progress bar displays if Yes was selected.

While recording a USB device to the HDD, if the system is turned off, the recording process stops. When the system is turned back on, the recording process will not continue.

**Edit:** For tracks recorded from CD audio discs to the HDD, it displays “Multi Hit” on the screen when the music information of two or more that is the same as the current album is retrieved from the Gracenote database stored in the radio. Then if the Edit button is pressed, you can specify it for one for one from the multi hit list that is generated based on the Gracenote database.

**Random:** Press to play the songs stored on the HDD in random, then sequential order. Press this button again to stop random play.
DEL (Delete): Select a song from one of the Music Navigator screens or you must be listening to a song to delete it. Once the song is selected, press the DEL hard key.

To Delete an entire category, select a category from the Music Navigator screen and press the DEL hard key.

▶/‖ (Play/Pause): Press this hard key for playback of any media source that had been currently playing at the point of where it was stopped. Press this button to pause the currently playing media source.

TUNE/TONE: Turn to go to the next or previous track.

▶SEEK / ‖SEEK: Press the right arrow to go to the next track. Press the left arrow to go to the start of the current track, if more than five seconds have played or to the previous track, if five seconds or less have played. If either arrow is pressed more than once, the player continues moving backward or forward through the HDD. The sound mutes while seeking.

 CATEGORY: Select the left or right arrow to go to the previous or next Album/Playlist/Artist/Genre/Audiobook on the HDD.

Press the center button on the main screen to display Music Navigator.

Music Navigator Screen

Selecting any of the following screen buttons, when in HDD, displays the Music Navigator screen for each of the following categories.

Playlist: Press to view the playlists that have been stored on the HDD. Select a playlist name to view all songs that have been stored in this list, select a song. Once a song has been selected from this category, the “Playlist” appears in the center button on the main screen to show that music is being played in this mode.

More Like This: Press this button, the playlist of songs similar to the current song is generated by music recognition technology and related data that are provided by Gracenote.

After the list is created, select a song to listen to. Press the Refresh screen button to generate the new list.

Once a song has been selected from this category, the “AutoPlay” appears in the center button on the main screen to show music is being played in this mode.

Artist: Press to view the artists that have been stored on the HDD. Select an artist name to view all songs in this list, select a song to listen to.

Once a song has been selected from this category, the “Artist” appears in the center button on the main screen to show that music is being played in this mode.
**Album:** Press to view the albums that have been stored on the HDD. Select an album name to view all songs in this list, select a song to listen to.

Once a song has been selected from this category, the “Album” appears in the center button on the main screen to show that music is being played in this mode.

**Genre:** Press to view the genres that have been stored on the HDD. Select a genre name to view all songs in this list, select a song to listen to.

Once a song has been selected from this category, the “Genre” appears in the center button on the main screen to show that you are playing music in this mode.

**Audiobook:** Press this button to view the Audiobook that have been stored on the HDD. Select an audiobook name (book title) to view all sections in it. Select a section to listen to. If the “Last position” screen button is pressed, the audiobook starts playback from the position it was stopped the last time played.

Once a audiobook has been selected from this category, the “Audiobook” appears in the center button on the main screen to show that you are playing in this mode.

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**Compressed Audio**

The HDD will play an MP3/WMA disc that contains compressed CD audio from all formats that are supported. By default the radio shows the CD label on the left side of the screen but plays all supported file formats in the order in which they were recorded to the CD.

**Background Recording**

A CD can be copied and then listened to or a CD can be recording while listening to another source such as AM, FM, HDD, or AUX. The quality of the listening experience should be the same whether recording in the background or not, and the speed of the recording process does not take any longer than normal.

Timeshift cannot be activated during the background recording function.

**Duplicate Content**

When record is executed the system checks to see if the CD has already been recorded to the hard drive. If the entire contents of the CD still exists on the hard drive the system will not record the content. If the system determines that none or only some of a CD exists, the entire CD records to the hard drive. This could result in duplicate songs.
**CD Eject**

If the CD is ejected before the recording process has completed, tracks that have been completely recorded are stored to the hard drive, incomplete tracks are discarded. If the same CD is inserted again, the radio system continues recording and only records tracks that were not previously copied.

**Power Mode**

If the system is turned off during a CD or USB recording process, it will stop. When the radio is turned back on, the recording process needs to be started again.

**Saving HDD Favorites**

During HDD playback, select one of the lower buttons to save songs in its category. Each category has six presets.

To add a song from a category, you must be listening to the song. Press and hold the lower button until “Favorite saved...” displays on the screen.

**Audio Book**

The system is able to play back audio-book content downloaded from audible.com®. This content can be transferred into the system by either burning it to a CD or recording it to a USB storage device.

The audible.com playback requires activation of the vehicle as a player for downloaded content. The radio system activates the audible.com system when information is found on either a CD inserted into the CD player or if a USB storage device is connected. Make sure the activation file is copied onto a CD or a USB storage device so that the downloaded media is supported.

In the process of activation, the Vehicle Identification Number (VIN) number is required in order to activate your vehicle.
Auxiliary Devices

The navigation system has an auxiliary input jack located in the center console. This is not an audio output; do not plug the headphone set into the front auxiliary input jack. You can however, connect an external audio device such as an iPod, laptop computer, MP3 player, CD changer, or cassette tape player, etc. to the auxiliary input jack for use as another source for audio listening.

Drivers are encouraged to set up any auxiliary device while the vehicle is in P (Park). See “Defensive Driving” in the Index of the vehicle’s owner manual for more information on driver distraction.

To use a portable audio player, connect a 3.5 mm (1/8 inch) cable to the auxiliary input jack. When a device is connected, the system detects and automatically begins playing audio from the device over the vehicle’s speakers.

If a device is connected and you are listening to another source (FM, CD, MP3, etc.), press the AUDIO key then press the AUDIO key repeatedly until AUX is selected or touch the AUX screen button. An auxiliary device must be connected for the AUX screen button to appear as an option to select or the vehicle must have rear auxiliary jacks.

The screen buttons are dependent of the type of auxiliary device that you are using.

USB Host Support

The USB connector uses the USB 2.0.

USB Supported Devices

- USB Flash Sticks (Pen Drives)
- Portable USB Hard Drives
- CompactFlash (or other portable media) adapters

Depending on the USB mass storage device, some devices may not be recognized. The HUB device is not supported.

USB Playback

Music can be played directly from the USB device and controlled through the radio’s MP3 control functions and the Music Navigator.

USB Media Recording

A USB Mass Storage device such as a “pen drive” or a portable USB hard drive can be connected to the USB port to record media contents, such as compressed audio files from the USB storage device onto the HDD. The USB port is located in the center console bin, between the Accessory Power Outlet (APO) socket and the auxiliary input jack.

In addition to recording the content from the USB storage device, content can be played back directly from the USB device.
USB Background Recording

If the content of a USB device is chosen to be copied, these media files are copied to the hard drive. The recording process occurs in the background and does not affect playback from any source, including the USB device itself. The quality of the listening experience should be the same whether recording in the background or not, and the speed of the recording process does not take any longer than normal.

Timeshift cannot be activated during the background recording function.

Using the Radio Controls to Connect and Control Your iPod®

An iPod can be controlled using the radio buttons and knobs and display your iPod song information on the radio’s display. To connect and control an iPod using the radio controls, the vehicle must have a USB port. If it does, it is located in the center console bin. A special iPod connection cable is needed that can be purchased with the vehicle or may be available after, from your dealer/retailer. See your dealer/retailer for more information.

This feature supports the following iPod models:
- Fifth generation or later iPod
- First or Second generation or later iPod Nano*

* For proper operation, make sure the iPod has the latest firmware from Apple®. The iPod firmware can be updated using the latest iTunes application. See apple.com/itunes.

To connect and control the iPod, connect one end of the specially purchased iPod connection cable to the iPod’s dock connector. Connect the other end to both the USB port and the auxiliary input jack. The USB port and the auxiliary input jack are located in the center console bin. If the vehicle is on and the USB connection works, a GM logo appears on the iPod. The iPod music displays on the radio’s display and begins playing through the vehicle’s radio system.

A standard iPod USB cable, like the one that came with the iPod, cannot be used to connect an iPod to the vehicle. The iPod connection cable that was purchased with the vehicle or that was made available from your dealer/retailer must be used in order for this feature to work.
Use the radio Menu/Select knob to bring up the iPod Menu and select Songs, Artists, Albums, Playlists and Audio books to play from the iPod.

The iPod charges while it is connected to the vehicle and if the vehicle is turned to ACC/ACCESSORY or ON/RUN. It can also be left connected to the vehicle while the vehicle is turned off or removed. With the vehicle turned off, the iPod automatically powers off and will not charge or draw power from the vehicle’s battery.

If an older iPod model is used that is not supported or does not have the special iPod connection cable, the iPod can still be used in the vehicle by connecting it to the Auxiliary Input Jack using a standard 3.5 mm (1/8 inch) stereo cable. See “Using the Auxiliary Input Jack” earlier for more information.

Gracenote Database

When a CDDA is recorded from a CD to the HDD, the music information (Album name, Artist name, Song name and Genre) is retrieved from the Gracenote database, stored in the radio. The database information uses the information of Gracenote Music Recognition Service. See “Radio(s)” in the owner manual for more information on the Gracenote Database.

Gracenote Music Recognition Service, Music recognition technology, and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information, visit gracenote.com.

Updating the Gracenote Database

1. Turn the ignition on.
2. Press $ to turn the system on.
3. Insert the update disc partway into the slot, label side up. The player pulls it in.
4. Update Confirmation screen displays along with the version information. Press the Update screen button.
5. The system reboots and starts updating the database. A progress bar displays.
6. The disc automatically ejects after the update is completed. The system reboots.
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Section 4   Speech Recognition

Speech Recognition ........................................ 4-2
Weather .......................................................... 4-4
Speech Recognition

The navigation system’s speech recognition allows for hands-free operation of navigation and audio system features.

Speech recognition can be used when the ignition is on or when Retained Accessory Power (RAP) is active. See “Retained Accessory Power (RAP)” in the Index of the vehicle’s owner manual for more information.

Speech Recognition — Using

1. Push and hold the talk symbol steering wheel control until a beep is heard. The audio system mutes.

While in the navigation screens, the system displays a symbol (.addMouseListener(×)()) while the speech recognition is active.

2. Clearly state one of the commands listed under Speech Help.

Speech Recognition — Canceling

Press the Mute/Voice button while using speech recognition. Press this button again to turn speech recognition back on.

Speech Recognition — Overview

1. Press the INFO hard key to enter the menu options, press the INFO key repeatedly until Speech Help is selected or touch the Speech Help screen button.

2. Touch the Overview screen button. Available features in the system gives explanation of how to use the feature. A list of questions/categories display.

3. Touch the question/category to learn how to use speech recognition.

A command may be invalid if it does not recognize the command or if it cannot perform the command due to not being in an appropriate area for that command, the system states “Invalid Command.”
Speech Recognition — Commands

Press the INFO hard key to enter the menu options, press the INFO key repeatedly until Speech Help is selected or touch the Speech Help screen button. Touch one of the following command categories to view the list of speech commands for that category.

**Common Commands:** These commands are available anytime.

**Top Level Commands:** All commands can be stated at each main menu.

**Map Commands:** Available when the map screen is displayed. When a split screen, Audio/Map, is displayed, the map commands are not available.

**Guidance Commands:** Available when driving on a route.

**Radio Commands:** Available when listening to AM or FM stations or XM™ (if equipped) channels.

**Disc Commands:** Available when a CD, MP3, or DVD is loaded.

**HDD (Hard Drive) Commands:** Available when listening to music or audio books that are on the hard drive.

**AUX (Auxiliary Device) Commands:** Available when an auxiliary device is being used.
Weather

Press the INFO key, then press the INFO key repeatedly until the Weather screen button is selected or touch the Weather screen button.

Current Condition: Touch to view the current weather condition for the city of the vehicle’s current position.

Extended Forecast: Touch to view the current condition with a two day forecast for the city of the vehicle’s current position.

Along Route: Touch to view the weather condition’s of the current route. The vehicle must be driving on a route for this feature to operate.

Weather Warnings: Touch to view any weather warnings of the current vehicle position and the areas within the vehicle’s proximity.

A subscription of the XM™ Satellite Radio Service is necessary for getting the up-to-date weather warnings. A service fee is required in order to receive the XM™ service. For more information, contact XM™; in the U.S. at xmradio.com or call 1-800-852-XM XM (9696) or in Canada at xmradio.ca or call 1-877-GET-XMSR (438-9677).
F
Finding a Station .............................................. 3-3

G
Getting Started, Navigation .............................. 1-4
Getting Started on Your Route ......................... 2-21
Global Positioning System (GPS) ......................... 2-37

H
Handling the DVD Map Disc ............................... 2-6
Hard Disk Drive (HDD) ......................................... 3-22
Hard Keys ....................................................... 2-2

I
Installing the DVD Map Disc ............................... 2-5

L
Language — English/Metric ............................... 1-6

M
Map Adjustments ................................................. 2-6
Map Coverage ................................................... 2-5
Map Scales ...................................................... 2-5
Maps .............................................................. 2-5
Menu
  Configure ................................................... 2-26

N
Nav (Navigation) ................................................. 2-27
Navigation
  Getting Started ............................................ 1-4
  System Overview ............................................ 1-2
  Using the System ........................................... 2-2
OnStar® Destination Download .......................... 2-18
Ordering
  Map DVDs ................................................. 2-39
Overview, Navigation System ............................. 1-2
Owners, Canadian .............................................. iii

Playing a DVD ............................................... 3-16
Playing the Radio ............................................. 3-2
Preset Destinations — Adding or Changing ......... 2-24
Previous Destinations — Deleting ...................... 2-26
Problems with Route Guidance ......................... 2-38
Propriétaires Canadiens ..................................... iii

Radio  .................................................................. 2-27
Radio Data System (RDS) ................................. 3-9
Radio Menu ..................................................... 3-7

Scrolling the Map ............................................. 2-7
Setting the Clock ............................................. 2-36
Sound ........................................................... 2-27
Sound Menu .................................................... 3-5
Storing Radio Station Presets ........................... 1-7, 3-5
Symbols .......................................................... 2-7
System Needs Service, If ................................. 2-39
<table>
<thead>
<tr>
<th>T</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeshift ......................................................... 3-8</td>
<td>Vehicle Positioning ................................................ 2-37</td>
</tr>
<tr>
<td>Touch Screen Buttons ........................................... 2-4</td>
<td>Voice Guidance ....................................................... 1-10</td>
</tr>
<tr>
<td>U</td>
<td>X</td>
</tr>
<tr>
<td>Using an MP3 CD and DVD ....................................... 3-11</td>
<td>XM Category Restore .............................................. 3-8</td>
</tr>
<tr>
<td>Using OnStar® Destination Download .......................... 2-19</td>
<td>XM NavTraffic™ (USA and Canada) .............................. 2-29</td>
</tr>
<tr>
<td>Using Your Stored Preset Destinations ...................... 1-9</td>
<td>XM™ Satellite Radio Service .................................... 3-9</td>
</tr>
</tbody>
</table>