Be sure to read “Important Information for the user” first!
“Important Information for the user” includes the important information that you must understand before using this navigation system.
This software requires that the navigation system is properly connected to your vehicle’s parking brake and depending on your vehicle, additional installation may be required. For more information, please contact your Authorized Pioneer Electronics retailer or call us at (800) 421-1404.
Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, keep this manual in a safe place for future reference.

### Important

The screens shown in the examples may differ from actual screens. Actual screens may be changed without notice for performance and function improvements.

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Manual overview

Before using this product, be sure to read “Important Information for the user” (a separate manual) which contains warnings, cautions, and other important information that you should note.

How to use this manual

Finding the operation procedure for what you want to do
When you have decided what you want to do, you can find the page you need from the “Contents”.

Finding the operation procedure from a menu name
If you want to check the meaning of an item displayed on the screen, you will find the necessary page from the “Display information” at the end of the manual.

Glossary
Use the glossary to find the meanings of terms.

Terminology
Before moving on, take a few minutes to read the following information about the conventions used in this manual. Familiarity with these conventions will help you greatly as you learn how to use your new equipment.

- Buttons on your navigation system are described in ALL CAPITAL, BOLD lettering: e.g.) MENU button, MAP button.
- Items in different menus, screen titles, and functional components are described in bold with double quotation marks “ ”: e.g.) “Navigation Menu” screen or “Audio Source” screen
- Touch panel keys that are available on the screen are described in bold in brackets []:

Definitions of terminology

“USB storage device”
The term for USB memory only is “USB storage device”.

“SD memory card”
The SD memory card and SDHC memory card are collectively referred to as the “SD memory card”.

Notice regarding MP3 file usage
Supply of this navigation system conveys only a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue generating), real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay audio or audio on demand applications. An independent license for such use is required. For details, please visit http://www.mp3licensing.com.
iPod compatibility

This product supports only the following iPod models and iPod software versions. Others may not work correctly.
- iPod nano first generation; Ver. 1.3.1
- iPod nano second generation; Ver. 1.1.3
- iPod nano third generation; Ver. 1.1.3
- iPod nano fourth generation; Ver. 1.0.3
- iPod fifth generation; Ver. 1.3
- iPod classic; Ver. 2.0
- iPod touch first generation; Ver. 1.1.5
- iPod touch second generation; Ver. 2.2
- iPhone; Ver. 2.2
- iPhone 3G; Ver. 2.2

In this manual, iPod and iPhone will be referred to as iPod.

When you use this navigation system with a Pioneer USB interface cable for iPod (CD IU50) (sold separately), you can control an iPod compatible with this navigation system.

To obtain maximum performance, we recommend that you use the latest software for the iPod.

Operation methods may vary depending on the iPod models and the software version of iPod.

For more details about iPod compatibility with this navigation system, refer to the information on our website.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

iPhone is a trademark of Apple Inc.

Protecting the LCD panel and screen

- Do not allow direct sunlight to fall on the LCD screen when this product is not being used. Extended exposure to direct sunlight can result in LCD screen malfunction due to the resulting high temperatures.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of spots, colored stripes, etc.
- To protect the LCD screen from damage, be sure to touch the touch panel keys with your finger. (The stylus is supplied for special calibrations. Do not use the stylus for normal operations.)

Resetting the microprocessor

**CAUTION**

Pressing the **RESET** button clears the settings for the audio source without clearing all the navigation function items. Please refer to the related section before clearing.

- For more detailed information about the items which would be erased, refer to Setting items to be deleted on page 111.

The microprocessor must be reset under the following conditions:
- Prior to using this product for the first time after installation.
- If the product fails to operate properly.
- If there appear to be problems with the operation of the system.
- When changing the combination of equipment.
- When adding/removing additional products that connect to the navigation system.
- If your vehicle position is shown on the map with a significant positioning error.

Map coverage

For more details about the map coverage of this navigation system, refer to the information on our website.
Press the RESET button with a pen tip or other pointed implement.

If you have connected other equipment to this navigation system with IP BUS, be sure to reset that equipment too.
Checking part names and functions

This chapter gives information about the names of the parts and the main features using the buttons.

1 Disc loading slot
   Insert a disc to play.
   ➢ For details concerning operations, refer to inserting and ejecting a disc on the next page.

2 EJECT button
   Press to eject the disc from the disc loading slot.

3 Head unit

4 MODE button
   • Press to switch between the map screen and the audio operation screen.
   • Press to display the map screen while the screen of navigation function is displayed.

5 MULTI-CONTROL
   MULTI-CONTROL is used only for the audio function.
   ➢ For more details, refer to the descriptions from Chapter 13 to Chapter 27.
   • Rotating:
     Adjusts the audio source volume.
   • Moving MULTI-CONTROL to the left or right:
     Allows you to change the frequency one step at a time; operates track search controls.
   • Keep moving MULTI-CONTROL to the left or right:
     Allows you to perform manual seek tuning, fast forward or reverse.

6 LIST button
   This button is used only for the audio function.
   ➢ For more details, refer to the descriptions from Chapter 13 to Chapter 27.
Before you start

7 SRC/OFF button
This button is used only for the audio function.
☞ For more details, refer to the descriptions from Chapter 13 to Chapter 27.

8 BAND/ESC button
This button is used only for the audio function.
☞ For more details, refer to the descriptions from Chapter 13 to Chapter 27.

9 Detachable device

10 LCD screen

11 RESET button
☞ For details, refer to Resetting the micro processor on page 8.

12 Bluetooth connection status indicator
Lights up when your phone is paired to the navigation system by Bluetooth wireless technology.

13 DETACH button
Press to remove the detachable device from the head unit.

Inserting and ejecting a disc

Inserting a disc

- Insert a disc into the disc loading slot.

Do not insert anything other than a disc into the disc loading slot.

Ejecting a disc
- Press the EJECT button.
The disc is ejected.

Inserting and ejecting an SD memory card

⚠️ CAUTION
- Keep the dummy SD card out of the reach of small children to prevent them from accidentally swallowing it.
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

Inserting an SD memory card

1 Remove the detachable device from the head unit.
☞ For details, refer to Removing and attaching the detachable device on page 15.

2 Insert an SD memory card into the SD card slot.
Insert it with the contact the top of the detachable device and press the card until it clicks and completely locks.
Before you start

- This system is not compatible with Multi Media Card (MMC).
- Compatibility with all SD memory cards is not guaranteed.
- This unit may not achieve optimum performance with some SD memory cards.
- Do not insert anything other than SD memory cards or dummy SD cards into the SD card slot.
- When you insert the SD memory card which contains your customized POI data, the navigation system restarts.

Ejecting an SD memory card

1 Display the “Navigation Menu” screen.

2 Touch [Eject SD].
A message confirming whether to restart the navigation system appears.

3 Touch [OK].
The navigation system restarts, and then following message appears.

4 Press the SD memory card until it clicks.
The SD memory card is ejected.

5 Pull out the SD memory card.
- Insert the dummy SD card to keep the SD card slot free of dust when the SD memory card is not inserted.

6 Touch [Restart].
The navigation system restarts.

Plugging and unplugging a USB storage device

⚠️ CAUTION
- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.
Plugging in a USB storage device

- Plug a USB storage device into the USB connector.

- Compatibility with all USB storage devices is not guaranteed. This navigation system may not achieve optimum performance with some USB storage devices.
- Connection via USB hub is not possible.

Unplugging a USB storage device

- Pull out the USB storage device after checking that no data is being accessed.

Connecting and disconnecting an iPod

⚠️ CAUTION

- To prevent data loss and damage to the storage device, never remove it from this navigation system while data is being transferred.
- If data loss or corruption occurs on the storage device for any reason, it is usually not possible to recover the data. Pioneer accepts no liability for damages, costs or expenses arising from data loss or corruption.

Connecting your iPod

Using the USB interface cable for iPod enables you to connect your iPod to the navigation system.

- A USB interface cable for iPod (CD IU50) (sold separately) is required for connection.

1 Pull out the USB storage device after checking that no data is being accessed.

2 Connect your iPod.

Disconnecting your iPod

- Pull out the USB interface cable for iPod after checking that no data is being accessed.

Protecting your product from theft

The detachable device can be removed from the head unit to discourage theft.

⚠️ For details, refer to Removing and attaching the detachable device on page 15.

⚠️ CAUTION

- Never grip the display and the buttons tightly or use force when removing or attaching.
- Avoid subjecting the detachable device to excessive shocks.
Before you start

- Keep the detachable device out of direct sunlight and high temperatures.
- After removing the detachable device, keep it in a safe place so it is not scratched or damaged.

Flow from startup to termination

1. Start the engine to boot up the system.
   - To protect the LCD screen from damage, be sure to use your fingers to touch the touch panel keys. (The stylus is supplied for special calibrations. Do not use the stylus for normal operations.)

2. Turn off the vehicle engine to terminate the system.
   The navigation system is also turned off.

On first-time startup

When you use the navigation system for the first time, select the language that you want to use.

1. Start the engine to boot up the system.
   After a short pause, the navigation splash screen comes on.
   And then the "Select UI Language" screen appears.

   2. Touch the language that you want to use on the screen.
      The "Voice Language Selection" screen appears.

   3. Touch the language that you want to use for the voice guidance.
      The navigation system will now restart.

   4. Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions.

The map screen appears.

Regular startup

- Start the engine to boot up the system.
  - The screen shown will differ depending on the previous conditions.
  - When there is no route, the disclaimer appears after the navigation system reboots.
  Read the disclaimer carefully, checking its details, and then touch [OK] if you agree to the conditions.
Removing the detachable device from the head unit enables you to set routes and search locations even when you are out of your vehicle. Also, you can connect the detachable device to your PC using the supplied USB cable. This chapter describes how to use the detachable device as it is removed from the head unit.

Checking part names and functions

**Bottom of the detachable device**

1. **USB connector**
   - Use to connect with your PC.

2. **Power switch**
   - Use to turn the detachable device on and off.

3. **SD card slot**
   - For more detailed information, refer to *Inserting and ejecting an SD memory card* on page 11.

**Top of the detachable device**

1. **USB connector**
2. **Power switch**
3. **SD card slot**

How to use the detachable device

Removing and attaching the detachable device

**Removing the detachable device**

- The head unit cannot be operated while the detachable device is removed from the head unit.
- Removing the detachable device automatically turns the audio source off.
- Removing the detachable device while displaying an audio screen automatically turns the audio source off and switches to display the map screen.

1. Press DETACH button to release the detachable device.
2. Gently grip the right side of the front panel and slowly pull it outward. Take care not to drop the detachable device and protect it from contact with water or other fluids to prevent permanent damage.

**Attaching the detachable device**

- If the detachable device is turned on before it is attached to the head unit, it will not turn off when the ignition switch is turned off (ACC OFF).

1. Turn off the power of detachable device.
2. Slide the detachable device to the left until it clicks. The detachable device and the head unit are jointed on the left side. Make sure that the detachable device has been jointed to the head unit.
3 Press the center on the right side of the detachable device until it is firmly seated. If you can’t attach the detachable device to the head unit successfully, try again. The detachable device may be damaged if you attach the detachable device forcibly.

Installing the battery

CAUTION

- Do not under any circumstances attempt to change the battery yourself.
- The battery should only be changed by Pioneer service personnel.

Disposing of the battery

WARNING

- Keep the battery pack out of the reach of small children to prevent them from accidentally swallowing it.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

CAUTION

When disposing of used batteries, please comply with governmental regulations or environmental public institutions’ rules that apply in your country/area.

1 Remove the screw in the back of the detachable device.

2 Slide the cover off.

3 Remove the battery.
4  Detach the cable to disconnect the battery.

Turning on the detachable device
If you turn on the detachable device while it is removed from the head unit, the navigation system switches to “Detach mode”.

- The following functions are not available in “Detach mode”.
  - Voice guidance
  - Auto reroute function
  - Map matching
  - Hands free phoning
  - Audio functions

- When the battery of the detachable device is completely run down, the splash screen is displayed the next time the system is booted up.

Charging the battery of detachable device
- The operating temperature range of the battery is from 4 °F to +140 °F.
- The charging temperature range of the battery is from 32 °F to +131 °F.
  Charging cannot be done when the temperature is outside of the charging temperature range.
  
  The battery of the detachable device is charged in the following situations.
  - When the detachable device is attached to the head unit while the ignition switch is turned on (ACC ON).
  - When the detachable device is connected to your PC.
  
  - Before charging the detachable device by connecting it to your PC, turn off the power of detachable device. If the power is on, the battery may not be charged.
  - When connecting to your PC, the battery may not be charged depending on the setting of the screen brightness.
  
  - For details, refer to Adjusting the screen brightness on page 64.

Monitoring the battery status
You can check the battery status of the detachable device.

1  Display the “Navigation Menu” screen.

2  Touch [Settings].

The “Settings Menu” screen appears.

The battery status indicator is displayed on the upper right of the “Settings Menu” screen.

Battery status indicator

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🟢</td>
<td>Fully charged</td>
</tr>
<tr>
<td>🟢</td>
<td>Sufficient power</td>
</tr>
<tr>
<td>🟢</td>
<td>Charging</td>
</tr>
</tbody>
</table>

Turning off the navigation system automatically
When the battery of detachable device nearly runs out, the navigation system automatically turns off.

When the detachable device is turned on again after charging the battery, it returns to the last status of system.
How to use the detachable device

1 A message appears when the remaining battery life is getting low.

2 When the battery nearly runs out, the navigation system automatically turns off after a message appears.

Connecting with your PC

It is available to connect the detachable device and your PC using the USB cable (supplied with the navigation system).

1 Connect the supplied USB cable to USB connector.

2 Connect the supplied USB cable to your PC.
How to use the detachable device
### Screen switching overview

1. **Map screen**
   - Press the MODE button to display the navigation map screen.

2. **“Navigation Menu” screen**
   - You can search for your destination on this menu. You can also check or cancel your set route from this menu.

3. **“Settings Menu” screen**
   - You can access the screen to customize settings.

4. **“Phone Menu” screen**
   - You can access the screen that is related to hands free phoning to see call histories and change the settings on the Bluetooth wireless technology connection.

5. **Audio operation screen**
   - When you play the audio source, this screen appears regularly.

- To return to the previous screen, touch the button.
Operating menu screens (e.g. “Navigation Menu” screen)

1. **Screen title**
2. Shows the next or previous page.
3. Returns the previous screen.

Operating list screens (e.g. city list)

1. **Screen title**
2. Touching \( \uparrow \) or \( \downarrow \) on the scroll bar scrolls through the list and allows you to view the remaining items.
3. Returns the previous screen.
4. **Listed items**
   Touching an item on the list allows you to narrow down the options and proceed to the next operation.
5. If all of characters cannot be displayed within the displayed area, touching the key to the right of the item allows you to see remaining characters.

Operating the on-screen keyboard

1. **Text box**
   Displays the characters that are entered. If there is no text in the box, an informative guide with text appears.
2. **Keyboard**
   Touch the keys to enter the characters.
3. Returns the previous screen.
4. \([0-9], \text{Sym}., \text{Others}]:\)
   You can enter other characters of alphabet. You can also enter text with marks such as \(\&\) or \(+\) or numbers.
   Touch to toggle the selection.
   When you use any of “A”, “Ä”, “Å”, “Æ”, the displayed result is the same.
5. **[OK]**:
   Confirms the entry and allows you to proceed to the next step.
6. Deletes the input text one letter at a time, beginning at the end of the text. Continuing to touch the button deletes all of the text.
Most of the information provided by your navigation system can be seen on the map. You need to become familiar with how the information appears on the map.

**How to read the map screen**

This example shows an example of a 2D map screen.

- Information with the mark (*) appears only when the route is set.
- Depending on the conditions and settings, some items may not be displayed.

1. **Name of the street to be used (or next guidance point)**
   Touching this item enables you to hear the next guidance again.

2. **Next direction of travel**
   When you approach a guidance point, this appears in green. Touching this item enables you to hear the next guidance again.

3. **Distance to the guidance point**
   Shows the distance to the next guidance point.

4. **Zoom in/Zoom out**
   Touching displays touch panel keys for changing the map scale and the map orientation.

5. **Current position**
   Indicates the current location of your vehicle. The apex of the triangular mark indicates your orientation and the display moves automatically as you drive.

- The apex of the triangular mark is the proper current position.

6. **Street name (or city name) that your vehicle is traveling along**
   For details, refer to *Setting the current street name display* on page 28.

7. **Menu key**

8. **Map orientation indicator**
   - When “North up” is selected, is displayed.
   - When “Heading up” is selected, is displayed.
     The red arrow indicates north.

   For details, refer to *Switching the map orientation* on page 24.
The direction towards your destination (next waypoint, or cursor) is indicated with a straight line.

10 Current route*
The route currently set is highlighted in bright color on the map. If a waypoint is set on the route, the route after the next waypoint is highlighted in another color.

11 Multi-Info window
Each touch of [Multi-Info window] changes the display information.

- **Distance to the destination (or distance to waypoint)**
- **Estimated time of arrival at your destination or waypoint**
The estimated time of arrival is an ideal value calculated based on the value set for [Speed] and the actual driving speed. The estimated time of arrival is only a reference value, and does not guarantee arrival at that time.
- **Travel time to your destination or waypoint**

12 Current time

**Meaning of guidance flags**

- **Destination**
The checkered flag indicates your destination.
- **Waypoint**
The blue flags indicate your waypoints.
- **Guidance point**
The next guidance point (next turning point, etc.) is shown by a yellow flag.

### Displaying the audio information bar
You can check the current status on the selected audio source.

### Enlarged map of the intersection
When “Close Up View” in the “Map” screen is “On”, an enlarged map of the intersection appears.

⇒ For details, refer to Setting “Close Up View” on page 28.

### Display during freeway driving
In certain locations of the freeway, lane information is available, indicating the recommended lane to be in to easily maneuver the next guidance.
While driving on the freeway, freeway exit numbers and freeway signs may be displayed when in the vicinity of interchanges and exits.

1 Lane information
2 Freeway exit information
   Displays the freeway exit.
3 Freeway signs
   These show the road number and give directional information.
   □ If the data for these items is not contained in the built-in memory, the information is not available even if there are the signs on the actual road.

Operating the map screen
Changing the scale of the map
You can change the map scale between 25 yard and 1,000 miles (25 meters and 2,000 kilometers).

1 Display the map screen.
2 Touch \( \text{on the map screen.} \)
   and \( \text{with the map scale appear.} \)

3 Touch \( \text{or} \) to change the map scale.
   □ If you do not operate the function for a few seconds, the display is automatically returned.

Switching the map orientation
You can switch the vehicle’s direction on the map between “Heading up” and “North up”.

- Heading up:
  The map display always shows the vehicle’s direction as proceeding toward the top of the screen.
- North up:
  The map display always has north at the top of the screen.
   □ The map orientation is fixed at “North up” in the following situation.
     When the map scale is 25 miles (50 kilometers) or more.
   □ The map orientation is fixed at “Heading up” in the following situation.
     When the 3D map screen is displayed.

1 Display the map screen.
2 Touch \( \text{on the map screen.} \)
   or \( \text{appears.} \)
   □ When “North up” is selected, \( \text{is displayed.} \)
   □ When “Heading up” is selected, \( \text{is displayed.} \)

3 Touch \( \text{or} \) to switch the vehicle’s direction.
Each time you touch the key changes that setting.
If you do not operate the function for a few seconds, the display is automatically returned.

**Scrolling the map to the position you want to see**

1. Display the map screen.
2. Touch and drag the map in the desired direction to scroll.

   ① Distance from the current position
   ② Cursor

Positioning the cursor to the desired location results in a brief informational overview about the location being displayed at the bottom of screen, with street name and other information for this location being shown. (The information shown varies depending on the position.)

- The scrolling increment depends on your dragging length.

- Touch .

The map returns to the current position.

- Pressing MODE button returns the map to the current position.

**Viewing information about a specified location**

An icon appears at registered places (home location, specific places, Favorites entries) and places where there is a POI icon or traffic information icon. Place the scroll cursor over the icon to view detailed information.

1. Scroll the map and move the scroll cursor to the icon you want to view.

2. Touch .

Information for a specified location appears.

The information shown varies according to the location. (There may be no information for that location.)

- For details, refer to Setting the “Favorites” icon display on page 28.
- For details, refer to Displaying POI on the map on the next page.
- For details, refer to Dialing from the map on page 53.

**Customizing the map screen settings**

The general settings related with a map screen can be customized.

To customize the map screen, display the “Map” screen.


The “Navigation Menu” screen appears.
2 Touch [Settings].
The “Settings Menu” screen appears.

3 Touch [Map].
The “Map” screen appears.

### Displaying POI on the map
Displays icons for the surrounding facilities (POI) on the map.

- POI icons are not displayed when the map scale is 1 mile (2 kilometers) or more.
- You can select up to 10 items from the detailed category.
- Creating a customized POI is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC. (“AVIC FEEDS” will be available on our website.) Store the customized POI into the SD memory card properly, and then insert it to the SD card slot. By selecting the POI icon, the system displays it on the map screen.

1 Display the “Map” screen.
2 Touch [Overlay POI].
The “Overlay POI” screen appears.

3 Touch [Display] to turn it [On].
   - If you do not want to display the POI icon on the map, touch [Display] to turn it [Off].
   (Even if [Display] is turned [Off], the POI selection setting is retained.)

4 Touch [POI].
The “Overlay POI (Main Category)” screen appears.

5 Touch the category you want to display.
A list of subcategories under the selected main category appears.

- Touch [OK].
  Returns previous screen.
6 Touch the subcategory.
A red check mark appears next to the selected category. To cancel the selection, touch the entry again.
- If you want to search with more detailed categories, touch .
Touch the item and touch [OK]. When only a few types of the detailed categories are selected, blue check marks will appear.

When subcategory is selected, is not available.

7 Touch [OK].
Returns previous screen.

8 To finish the selection, touch [OK].

Switching the map between 2D and 3D
Various types of screen displays can be selected for navigation guidance.

2D map screen

1 Display the “Map” screen.

2 Touch [View Mode].
Each time you touch the key changes that setting.
- [2D] (default):
  Displays the 2D map screen.
- [3D]:
  Displays the 3D map screen.

Displaying maneuvers
Selects whether to display or hide the next turn ahead of the vehicle on the map.

1 Display the “Map” screen.

2 Touch [Show Manuever].
Each time you touch the key changes that setting.
- [View] (default):
  Displays the next turn ahead of the vehicle on the map.
- [Hide]:
  Hides the next turn ahead of the vehicle on the map.

Setting the map color change between day and night
To improve the visibility of the map during the evening, you can set the timing for changing the combination of the map color.

1 Display the “Map” screen.

2 Touch [Day/Night Display].
Each time you touch the key changes that setting.
- [Automatic] (default):
You can change the colors of a map between daytime and nighttime according to whether the vehicle lights are On or Off.

- **[Day]**: The map is always displayed with daytime colors.
- **[Automatic]**: To use this function with [Automatic], the Orange/white lead of the navigation system must be connected correctly.

### Changing the road color

You can set the road color to bluish or reddish.

1. **Display the “Map” screen.**
2. **Touch [Road Color].**
Each time you touch the key changes that setting.
   - **[Blue]** (default): Changes to blue based road colors.
   - **[Red]**: Changes to red based road colors.

### Setting “Close Up View”

This setting enables switching to an enlarged map around the point where your vehicle is approaching an intersection, entrance/exit of freeway or a junction.

1. **Display the “Map” screen.**
2. **Touch [Close Up View].**
Each time you touch the key changes that setting.
   - **[On]** (default): Switches to an enlarged map.
     Displays the close up view with the 2D map.
   - **[Off]**: Does not switch to an enlarged map.

### Changing the setting of navigation interruption screen

Set whether to automatically switch to the navigation screen from the audio screen when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

1. **Display the “Map” screen.**
2. **Touch [AV Guide Mode].**
Each time you touch the key changes that setting.
   - **[On]** (default): Switches from the audio operation screen to the navigation screen.
   - **[Off]**: Does not switch the screen.

### Setting the “Favorites” icon display

You can select whether to display the “Favorites” icon on the map.

1. **Display the “Map” screen.**
2. **Touch [Favorites Icon].**
Each time you touch the key changes that setting.
   - **[On]** (default): Displays the “Favorites” icon on the map.
   - **[Off]**: Hides the “Favorites” icon on the map.

### Setting the current street name display

Selects whether to display or hide the street name (or city name) that your vehicle is traveling along.

1. **Display the “Map” screen.**
2. **Touch [Current Street].**
Each time you touch the key changes that setting.
   - **[View]** (default): Displays the street name (or city name) on the map.
   - **[Hide]**: Hides the street name (or city name) on the map.
CAUTION
For safety reasons, these route setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

The basic flow of creating your route

1. Park your vehicle in a safe place, and apply the parking brake.
2. Display the “Navigation Menu” screen.
3. Select the method of searching for your destination.
   - For details, refer to Searching for and selecting a location on page 36.
4. Enter the information about your destination to calculate route.
5. Confirm the location on the map.
   - For details, refer to Checking the location on the map on this page.
6. The navigation system calculates the route to your destination, and then shows the route on the map.
7. Check and decide the route.
   - For details, refer to Checking the calculated route on this page.
8. Your navigation system sets the route to your destination, and the map of your surroundings appears.
9. After releasing the parking brake, drive in accordance with navigation guidance.

Checking the location on the map

After searching for the destination, the “Location confirmation screen” appears.

Touch [OK].
The destination is set, and then route calculation starts.
- If you press MODE button during route calculation, the calculation is canceled and the map display appears.
- Touch [Scroll].
The map display changes to the scroll mode. You can fine tune the location in the scroll mode, and then you can set the location as your destination or do various operations.
   - For details, refer to Registering a location by scroll mode on page 42.
- Touch [Waypoint].
The location is added to the “Waypoints List” screen.
   - If a destination is not set, [Waypoint] is not available.

Checking the calculated route

After the destination is set, route calculation starts.
When the route calculation is completed, “Route confirmation screen” appears.

**Route confirmation screen**

1. Distance to the destination
2. Travel time to your destination
3. Estimate the fuel cost to your destination
   - For details, refer to *Inputting the fuel consumption information for calculating the fuel cost* on page 62.
4. Route calculation condition

- **Touch [OK].**
  Sets the displayed route as your route, and starts the route guidance.
  - Touch [ ].

The message confirming whether to cancel the calculated route appears.
Touch [Yes] to cancel the calculated route, and then the map screen appears.

**Modifying the route calculation conditions**

You can modify the conditions for route calculation and recalculate the current route.

1. **Touch [Options] on the “Route confirmation screen”**.
   The “Route Options” screen appears.

2. **Touch the desired items to change the route calculation conditions and then touch [OK].**
   The route is recalculated, and “Route confirmation screen” appears.

**Items that users can operate**

Settings marked with an asterisk (*) show that these are default or factory settings.

**Route Condition**

This setting controls how the route should be calculated by taking into account the time or the distance or the main road. Determines which condition takes priority for route calculation.

- **[Fast]***:
  Calculates a route with the shortest travel time to your destination as a priority.

- **[Short]***:
  Calculates a route with the shortest distance to your destination as a priority.

- **[Major]***:
  Calculate a route that passes major arterial road as a priority.

**Avoid Toll Road**

This setting controls whether toll roads (including toll areas) should be taken into account.

- **[Off]***:
  Calculate a route that may include toll roads (including toll areas).

- **[On]***:
  Calculate a route that avoids toll roads (including toll areas).

- The system may calculate a route that includes toll road even if [On] is selected.

**Avoid Ferry**

This setting controls whether ferry crossings should be taken into account.

- **[Off]***:
  Calculate a route that may include ferries.

- **[On]***:
  Calculate a route that avoids ferries.

- The system may calculate a route that includes ferry way even if [On] is selected.
Avoid Freeway
This setting controls whether freeways may be included in the route calculation.

- **[Off]**: Calculate a route that may include freeways.
- **[On]**: Calculate a route that avoids freeways.
  - The system may calculate a route that includes freeway even if [On] is selected.

Time restrictions
This setting controls whether streets or bridges have traffic restrictions during a certain time should be taken into account.
  - If you want to set your route to avoid opened bridges, select [On].

- **[On]**: Calculate a route while avoiding streets or bridges with traffic restrictions during a certain time.
- **[Off]**: Calculate a route while ignoring traffic restrictions.
  - The system may calculate a route that includes streets or bridges that are subject to traffic restrictions during a certain time even if [On] is selected.

⚠️ CAUTION
If the time difference is not set correctly, the navigation system cannot consider traffic regulations correctly. Set the time difference correctly (Refer to Setting the time difference on page 60).

Checking the current itinerary
You can check the route details.

- Touch [Profile] on the “Route confirmation screen”.
  The “Route Profile” screen appears.

- When a long distance route is calculated, your navigation system may not be able to list all roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Adding a waypoint
Up to 5 waypoints can be set, and waypoints and final destination can be sorted automatically or manually.
  - When you set waypoints in the route to your destination, the route up to the next waypoint will appear in light green. The rest of the route will appear in light blue.
  - For details concerning operations, refer to Adding a waypoint on page 33.

1. Touch [Waypoints] on the “Route confirmation screen”.
The “Waypoints List” screen appears.

2. Touch [Add].
The “Select Search method” screen appears.
3 Search for a location.
After searching for a point, display it on a map, then touch [OK] to add to the “Waypoints List” screen.

- For details, refer to Searching for and selecting a location on page 36.

4 Touch [OK] on the “Waypoints List” screen.
“Route confirmation screen” appears.
Checking and modifying the current route

You can check the route details. You can also recalculate the route in different conditions.

1. Display the “Navigation Menu” screen.
2. Touch [Route info]. “Route confirmation screen” appears.

☐ [Route info] is active only when the route is set.

Checking the current itinerary

You can check the route details.

1. Display the “Route confirmation screen”.
2. Touch [Profile] on the “Route confirmation screen”.
The “Route Profile” screen appears.

☐ When a long distance route is calculated, your navigation system may not be able to list all roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Editing waypoints

You can edit waypoints (locations you want to visit on the way to your destination) and recalculate the route so that is passes through these locations. To edit the waypoints, display the “Waypoints List” screen.

1. Display the “Route confirmation screen”.
2. Touch [Waypoints] on the “Route confirmation screen”.
The “Waypoints List” screen appears.

Adding a waypoint

Up to 5 waypoints can be set, and waypoints and final destination can be sorted automatically or manually.

1. Display the “Waypoints List” screen.
2. Touch [Add].
The “Select Search method” screen appears.
3. Search for a location.
After searching for a point, display it on a map, then touch [OK] to add to the “Waypoints List” screen.
Checking and modifying the current route

4 Touch [OK] on the “Waypoints List” screen.
“Route confirmation screen” appears.

5 Touch [OK].
The route is recalculated and the map of the current position appears.

Deleting a waypoint
You can delete waypoints from the route and then recalculate the route. (You can delete waypoints successively.)

1 Display the “Waypoints List” screen.
2 Touch [Delete] next to the waypoint that you want to delete.
The touched waypoint will be deleted from the list.
3 Touch [OK] on the “Waypoints List” screen.
“Route confirmation screen” appears.

4 Touch [OK].
The route is recalculated and the map of the current position appears.

Sorting waypoints
You can sort waypoints and recalculate the route.
You cannot sort waypoints that you have already passed.

1 Display the “Waypoints List” screen.
2 Touch [Sort].
The “Sort Waypoints” screen appears.

3 Touch the waypoint or destination.
Put them in the desired order.
- Touch [Automatic].
You can sort the destination and waypoints automatically. The system will show the nearest waypoint (distance in a straight line) from the current location as waypoint 1, and sort the other points (including your destination) in order of distance from the waypoint 1.
- Touch [Clear].
The sorting waypoints is canceled.

4 Touch [OK].
The “Waypoints List” screen appears.

5 Touch [OK] on the “Waypoints List” screen.
“Route confirmation screen” appears.

6 Touch [OK].
The route is recalculated and the map of the current position appears.

Modifying the route calculation conditions
The settings related to route calculation can be customized.

1 Display the “Route confirmation screen”.
2 Touch [Options].
The “Route Options” screen appears.
Checking and modifying the current route

Using the demonstration guidance

This is a demonstration function for retail stores. After a route is set, touching this key starts the simulation of route guidance.

1. Display the “Navigation Menu” screen.
2. Touch [Settings].
   The “Settings Menu” screen appears.
3. Touch [Demo Mode].
   Each time you touch the key changes that setting.
   - [On]: Repeat demo drive.
   - [Off] (default): Demo Mode is set off.

Canceling the route guidance

If you no longer need to travel to your destination, follow the steps below to cancel the route guidance.

1. Display the “Navigation Menu” screen.
2. Touch [Cancel].
   A message confirming the cancellation of the current route appears.
3. Touch [Yes].
   The current route is deleted, and a map of your surroundings reappears.
   - Touch [Skip].
     The next waypoint along the route can be skipped.
   A new route to your destination through all remaining waypoints, except for the skipped waypoint, is calculated.
   When the route calculation is completed, “Route confirmation screen” appears.
   - [Skip] is available only when a waypoint is set.
   - Touch [No].
     Returns to the previous display without deleting the route.
CAUTION
For safety reasons, these route setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

- Some information regarding traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes through the location in question. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

Searching for a location by address
The most frequently used function is [Address], in which the address is specified and the location is searched.
- Depending on the search results, some steps may be skipped.

1 Display the “Navigation Menu” screen.
2 Touch [Address].
The “Address Search” screen appears.

3 Touch [City].
The “Enter City Name” screen appears.

4 Enter the city name and then touch [OK].
The “Select City” screen appears.
- You can search for the city name by keyword.
  - For details, refer to Searching for a name by entering multiple keywords on the next page.

5 Touch the desired city name.
The “Enter Street Name” screen appears.
Searching for and selecting a location

Searching for a name by entering multiple keywords
You can search for a name (such as a city name or a street name) by entering multiple keywords.
- Up to three keywords can be entered.
- Enter a space between keywords as you want to enter several ones.
The result of search depends on the number of the entered keywords.

Entering a keyword
All names containing the word beginning with entered keyword are displayed as a search result.

Entering two keywords
The names including the following two words below are displayed as a result:
- The word that matches with the first keyword you entered.
- The word beginning with the second keyword.

Entering three keywords
The names including the following two words below are displayed as a result:
- The words that match with both first and second keywords you entered.
- The word beginning with the third keyword.
e.g. Searching “West Los Angeles”.

<table>
<thead>
<tr>
<th>Entered keywords</th>
<th>Search results</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEST L</td>
<td>“West Los Angeles” is searchable.</td>
</tr>
<tr>
<td>LOS A</td>
<td>“West Los Angeles” is searchable.</td>
</tr>
<tr>
<td>WEST LOS A</td>
<td>“West Los Angeles” is searchable.</td>
</tr>
<tr>
<td>LOS ANGELES W</td>
<td>“West Los Angeles” is searchable.</td>
</tr>
<tr>
<td>W L A</td>
<td>“West Los Angeles” is not searchable.</td>
</tr>
<tr>
<td>W LOS ANGELES</td>
<td>“West Los Angeles” is not searchable.</td>
</tr>
</tbody>
</table>

6 Enter the street name and then touch [OK].
The “Select Street” screen appears.
- You can search for the street name by key word.
- For details, refer to Searching for a name by entering multiple keywords on this page.

7 Touch the desired street.
The “House#” screen appears.

8 Enter the house number and then touch [OK].
The “Selected House Number” screen appears.

9 Touch the desired house number range.
The searched location appears on the map screen.
Chapter 08 Searching for and selecting a location

Setting up a route to your home

If your home location is stored, the route home can be calculated by touching a single key.

1 Display the “Navigation Menu” screen.
2 Touch [Go Home].
   If the home location has not been stored yet, the confirmation message appears.
   □ Touch [Register].
   The “Set Home” screen appears.
   ☞ For details, refer to Registering and editing your home on page 43.

Searching for Points of Interest (POI)

Information about various facilities (Points Of Interest POI), such as gas stations, parking lots or restaurants, is available. You can search for a POI by selecting the category (or entering the POI Name).

1 Display the “Navigation Menu” screen.
2 Touch [POI].
   The “POI Search” screen appears.

3 Touch [Zone].
   The “State/Province Selection” screen appears.
   ☞ Once the state, province, or territory has been selected, you only have to change states, provinces, or territories when your destination is outside of the state, province, or territory you selected.
4 Touch [Name].
   The “POI Name” screen appears.
5 Enter the POI name and then touch [OK].
   You can search for a POI name by keyword.
   ☞ For details, refer to Searching for a name by entering multiple keywords on the previous page.
6 Touch [Search].
   The “POI List” screen appears.
7 Touch the POI you want.
   The searched location appears on the map screen.
   □ Touch [Sort].
   Each time you touch [Sort] changes the sort order.

Searching for a POI directly from the name of the facilities

1 Display the “POI Search” screen.
2 Touch [Spell Name].
   The “POI Name Input Menu” screen appears.
Searching for and selecting a location

- Current order is displayed on the upper right of the screen.
  - : Sorts the items in the list in order by distance from the vehicle position.
  - : Sorts the items in the list alphabetically.

Searching for a nearby POI

You can search for POIs in your surroundings.

1. Display the “POI Search” screen.
2. Touch [Near Me].
   POI’s are divided into several categories.
3. Touch the category you want.
   - If there are more detailed categories within the selected category, repeat this step as many times as necessary.
4. Touch the POI you want.
   The searched location appears on the map screen.

Searching for POIs around the destination

- This function is available when the route is set.

1. Display the “POI Search” screen.
2. Touch [Near Dest.].
   POI’s are divided into several categories.
3. Touch the category you want.
   - If there are more detailed categories within the selected category, repeat this step as many times as necessary.
4. Touch the POI you want.
   The searched location appears on the map screen.

Searching for POIs around the city

You can search for POIs around a specified city.

1. Display the “POI Search” screen.
2. Touch [Around City].
   The “Around City Input Menu” screen appears.
3. Touch [Zone].
   The “State/Province Selection” screen appears.
   If the location that you want to search for is in another state, province, or territory, this changes the area setting.
   - Once the state, province, or territory has been selected, you only have to change states, provinces, or territories when your destination is outside of the state, province, or territory you selected.
4. Touch [Name].
   The “Enter City Name” screen appears.
5. Enter the city name and then touch [OK].
   The “Around City Input Menu” screen appears.
   - You can search for the city name by keyword.
   - For details, refer to Searching for a name by entering multiple keywords on page 37.
6 Touch [Search].
The “Select City” screen appears.

7 Touch the desired city name.
POI’s are divided into several categories.
  ▶ Touch [ ].
The representative location of the city appears on the map screen.

8 Touch the category you want.
  □ If there are more detailed categories within the selected category, repeat this step as many times as necessary.

9 Touch the POI you want.
The searched location appears on the map screen.

Searching for POIs by using the data on the SD memory card
Creating a customized POI is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC. (“AVIC FEEDS” will be available on our website.) Storing the customized POI properly and inserting the SD memory card enables the system to use the data for searches.

1 Insert an SD memory card into the SD card slot.
  ➤ For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.

2 Display the “Navigation Menu” screen.

3 Touch [AVIC FEEDS].
The “Select List” screen appears.

4 Touch the folder you want on the list.
The “Select POI” screen appears.

5 Touch the POI you want.
The searched location appears on the map screen.

Selecting destination from “Favorites”
Storing locations you visit frequently saves time and effort.
Selecting an item from the list provides an easy way to specify the position.
  □ This function is not available when there is no registered location in “Favorites”.
  ➤ For details, refer to Registering a location into “Favorites” on page 42.

1 Display the “Navigation Menu” screen.

2 Touch [Favorites].
The “Select Favorite” screen appears.

3 Touch the entry you want.
The searched location appears on the map screen.

Selecting a location you searched for recently
The places that you have searched for in the past are automatically stored in “History”.
  □ If no location is stored in Destination History, you cannot select [History]. (If you perform a route calculation, you can select [History].)
  □ “History” can store up to 100 locations. If the entries reach the maximum, the new entry overrides the oldest one.

1 Display the “Navigation Menu” screen.

2 Touch [History].
The “Destination History” screen appears.
Searching for and selecting a location

3 Touch the entry you want. The searched location appears on the map screen.

Searching for a location by coordinates

Entering a latitude and longitude pinpoints the location.

1 Display the “Navigation Menu” screen.

2 Touch [Coordinate]. The “Coordinate Input Menu” screen appears.

3 Touch [Longitude]. The “Enter Longitude” screen appears.

Enter the longitude, and then touch [OK]. The screen returns to the previous screen.

To enter W 50°1’2.5” for example, touch [W], [0], [5], [0], [1], [0], [2], and [5].

4 Touch [Latitude]. The “Enter Latitude” screen appears.

Enter the latitude, and then touch [OK]. The screen returns to the previous screen.

To enter N 5°1’2.5” for example, touch [N], [0], [5], [0], [1], [0], [2], and [5].

5 Touch [OK]. The searched location appears on the map screen.

Searching for a location by scrolling the map

Specifying a location after scrolling the map enables you to set the position as destination, waypoint, or register the location to “Favorites”.

1 Display the map screen.

2 Touch and drag the screen to scroll the map to the position you want. The searched location appears on the map screen.

When searching for a destination or waypoints, touch .
Registering a location into “Favorites”

Registering a location by “Favorites”

Favorites can store up to 400 registered locations. These can include your home location, favorite places, and destinations you have already registered.

1 Display the “Navigation Menu” screen.
2 Touch [Favorites].
   The “Select Favorite” screen appears.
3 Touch [Add].
   The “Select Search method” screen appears.
4 Search for a location.
   ➤ For details, refer to Searching for and selecting a location on page 36.
5 When the map of the location you want to register is displayed, touch [OK].
   The location is registered, and then the “Edit Favorite” screen appears.
   ➤ For details, refer to Editing the entry in “Favorites” on this page.
6 Touch [OK].
   The registration is completed.

Registering a location by scroll mode

1 Scroll to the location you want to register.
2 Touch ．
   The location is registered, and then the “Edit Favorite” screen appears.
   ➤ For details, refer to Editing the entry in “Favorites” on this page.
3 Touch [OK].
   The registration is completed.

Editing registered locations

Editing the entry in “Favorites”

1 Display the “Navigation Menu” screen.
2 Touch [Favorites].
   The “Select Favorite” screen appears.
3 Touch  next to the location that you want to edit.
   The “Edit Favorite” screen appears.
4 Touch [Name].
   You can enter the desired name.
   ➤ Up to 17 characters can be input for the name.
   ▪ Touch [Phone #].
     You can edit the registered phone number. To dial the number, touch ．
     ➤ For details, refer to Dialing the entry in the “Favorites” on page 52.
   ▪ Touch [Icon].
     The symbol displayed on the map and “Favorites”.
   ▪ Touch [Modify Location].
     You can change the registered location by scrolling the map.
Sorting the entry in “Favorites”

1. Display the “Navigation Menu” screen.
2. Touch [Favorites].
The “Select Favorite” screen appears.
3. Touch [Sort].
   Each time you touch [Sort] changes the sort order.
   - Current order is displayed on the upper right of the screen.
   - Sorts the items in the list in order by distance from the vehicle position.
   - Sorts the items in the list alphabetically.
   - Sorts the items in the list in order of the recently used items.

Deleting the entry in “Favorites”

1. Display the “Navigation Menu” screen.
2. Touch [Favorites].
The “Select Favorite” screen appears.
3. Touch [Delete].
The “Delete from Favorites” screen appears.
4. Select the location you want to delete.
   A check mark appears by the selected location.

   - Touch [All].
     Selects all entries.
   - Touch [None].
     Displayed when all locations are selected. Cancels all selected locations.

5. Touch [Delete].
   A message will appear asking you to confirm the deletion.
6. Touch [Yes].
   The data you selected is deleted.
   - Touch [No].
     Cancels the deletion.

Registering and editing your home

Registering your home position saves time and effort. Also, routes to home positions can be calculated easily with a single touch of the key from the “Navigation Menu”. The registered home position can also be modified later.

Registering your home

1. Display the “Navigation Menu” screen.
## Registering and editing locations

2 Touch [Settings].
The “Settings Menu” screen appears.

3 Touch [Set Home].
The “Set Home” screen appears.

4 Touch [Home].
The “Select Search method” screen appears.

5 Search for a location.
After searching for a point, display it on a map, then touch [OK].
The location is registered, and then the “Set Home” screen appears.
For details, refer to Searching for and selecting a location on page 36.

6 Touch [Phone #].
You can register your home phone number.

7 Touch [OK].
The registration is completed.

### Editing your home

1 Display the “Navigation Menu” screen.

2 Touch [Favorites].
The “Select Favorite” screen appears.
Home location is displayed on the top of the list.

3 Touch next to the home location.
The “Edit Favorite” screen appears.

  - Touch [Phone #].
  You can edit the registered phone number. To dial the number, touch [ ].
  For details, refer to Making a call home easily on page 50.
  - Touch [Modify Location].
  You can change the registered location by scrolling the map.

4 Touch [OK].
The registration is completed.

---

### Deleting an entry in “History”

Items in History can be deleted. All entries in History can be deleted at once.

1 Display the “Navigation Menu” screen.

2 Touch [History].
The “Destination History” screen appears.

3 Touch [Delete].
The “Delete from History” screen appears.

4 Select the location you want to delete.
A check mark appears by the selected location.
Registering and editing locations

- Touch [All].
  Selects all entries.
- Touch [None].
  Displayed when all locations are selected. Cancels all selected locations.

5  Touch [Delete].
A message will appear asking you to confirm the deletion.

6  Touch [Yes].
The data you selected is deleted.
- Touch [No].
  Cancels the deletion.
**CAUTION**
For your safety, avoid talking on the phone as much as possible while driving.

If your cellular phone features Bluetooth® technology, this navigation system can be connected to your cellular phone wirelessly. Using this hands free function, you can operate the navigation system to make or receive phone calls. You can also transfer the phone book data stored in your cellular phone to the navigation system. This section describes how to set up a Bluetooth connection and how to operate a cellular phone featuring Bluetooth technology on the navigation system.

For more information about the connectivity with the cellular phone featuring Bluetooth wireless technology, refer to the information on our website.

**Preparing communication devices**
This navigation system has a built-in function to use cellular phones featuring Bluetooth wireless technology.

While your cellular phone featuring Bluetooth wireless technology is connected, the Bluetooth connection status indicator lights.

- For details, refer to *Notes for hands free phoning* on page 57.
- When the navigation system is turned off, the Bluetooth connection is also disconnected. When the system restarts, the system automatically attempts to reconnect the previously connected cellular phone. Even when the connection is severed for some reason, the system automatically reconnects the specified cellular phone (except when the connection is severed due to cellular phone operation).

**Displaying the Phone Menu**
Use the “Phone Menu” if you connect the cellular phone to the navigation system for utilization.

1. Display the “Navigation Menu” screen.
2. Touch [Phone].

The “Phone Menu” screen appears.

![Phone Menu Screen]

1. Network name of the cellular phone company
2. Reception status of the cellular phone
3. Battery status of the cellular phone
4. Name of connected cellular phone

**Registering your cellular phone**
You need to register your cellular phone featuring Bluetooth wireless technology when you connect it for the first time. A total of three phones can be registered. Three registration methods are available:
- Searching for nearby phones
- Searching for a specified phone
- Pairing from your cellular phone

- You can register up to 3 cellular phones to this navigation system.
- The default device name displayed on the cellular phone is “PIONEER NAVI”. The PIN code is “1111”.

![Phone Menu Screen]
Searching for nearby phones
The system searches for available cellular phones near the navigation system, displays them in a list, and registers them for connection.

1 Activate the Bluetooth wireless technology on your cellular phone.
For some cellular phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your cellular phone.

2 Touch [Settings] on the “Phone Menu” screen.
The “Bluetooth Settings” screen appears.

3 Touch [Connections].
The “Connection List” screen appears.

4 Touch [Add], and then [Search devices].
The system searches for cellular phones featuring Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.

5 Wait until your cellular phone appears in the list.

6 Touch the cellular phone name you want to register.
A message prompting you to enter a PIN code appears.

7 Enter the PIN code “1111” using the cellular phone.
When a connection is successfully established, a connection complete message appears, the screen returns to the “Bluetooth Settings” screen by touching [OK].

Searching for a specified phone
If you cannot connect your phone using [Search devices] and [Pair from the mobile phone], try this method if your phone is found in the list.
1 Activate the Bluetooth wireless technology on your cellular phone. 
For some cellular phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your cellular phone.

2 Touch [Settings] on the “Phone Menu” screen. 
The “Bluetooth Settings” screen appears.

3 Touch [Connections].
The “Connection List” screen appears.

4 Touch [Add], and then [Select specific devices].
The “Select specific devices” screen appears.

5 Touch the model name of the cellular phone to be connected.
The system searches for cellular phones featuring Bluetooth technology that are waiting for the connection and displays them in the list if the device has found.
☐ If you cannot find the desired model name on the list, touch [Other phones] to search the cellular phones available nearby.

6 Select the cellular phone you want to register from the list.
A message prompting you to enter a PIN code appears.

7 Enter the PIN code “1111” using the cellular phone.
When a connection is successfully established, a connection complete message appears, the screen returns to the “Bluetooth Settings” screen by touching [OK].

Pairing from your cellular phone 
You can register the cellular phone by setting the navigation system to standby mode and requesting connection from the cellular phone.

1 Activate the Bluetooth wireless technology on your cellular phone. 
For some cellular phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your cellular phone.

2 Touch [Settings] on the “Phone Menu” screen. 
The “Bluetooth Settings” screen appears.

3 Touch [Connections].
The “Connection List” screen appears.

4 Touch [Add], and then [Pair from the mobile phone].
The navigation system waits for a Bluetooth wireless technology connection.

5 Register the navigation system on your cellular phone.
If your cellular phone asks you to enter a pass word, enter the PIN code (password) of the navigation system.
After the registration is completed, the following screen appears.
Connecting and disconnecting a registered cellular phone

Connecting a registered cellular phone

The navigation system automatically connects the cellular phone selected as the target of connection. However, connect the cellular phone manually in the following cases:

- Two or more cellular phones are registered, and you want to manually select the cellular phone to be used.
- You want to reconnect a disconnected cellular phone.
- Connection cannot be established automatically for some reason.

If you start connection manually, carry out the following procedure. You can also connect the phone by having the navigation system detect it automatically.

» For details, refer to Setting automatic connection on page 56.

1 Activate the Bluetooth wireless technology on your cellular phone.
For some cellular phones, no specific action is necessary to activate Bluetooth wireless technology. For details, refer to the instruction manual of your cellular phone.

2 Display the “Phone Menu” screen.

3 Touch [Settings].
The “Bluetooth Settings” screen appears.

4 Touch [Connections].
The “Connection List” screen appears.

5 Touch the name of the cellular phone that you want to connect.
Connection starts.
When a connection is successfully established, a connection complete message appears, the screen returns to the “Bluetooth Settings” screen by touching [OK].
- To cancel the connection to your cellular phone, touch [Cancel].
- If connection fails, check to see whether your cellular phone is waiting for a connection and then retry.

Disconnecting a cellular phone

1 Display the “Phone Menu” screen.

2 Touch [Settings].
The “Bluetooth Settings” screen appears.

3 Touch [Connections].
The “Connection List” screen appears.

4 Touch [Drop] next to the cellular phone name.

Deleting a registered phone

If you no longer need to use a registered phone with the navigation system, you can delete it from the registration assignment to free this spot up for another phone.
- If a registered phone is deleted, all the phone book entries and call history lists that correspond to the phone will be also cleared.

1 Display the “Phone Menu” screen.
2 Touch [Settings].
The “Bluetooth Settings” screen appears.

3 Touch [Connections].
The “Connection List” screen appears.

4 Touch [Delete] next to the cellular phone name.
The registration is canceled.

Making a phone call
You can make a phone call in many different ways.

Direct dialing
1 Display the “Phone Menu” screen.
2 Touch [Dial Pad].
The direct dial screen appears.

3 Touch the number keys to enter the phone number.
The phone number that was input is displayed.
And is activated.

- Touch .
The input number is deleted a digit at a time from the end of the number. Continuing to press this deletes all of the digits.
- Touch .
Return to the previous screen.

4 Touch to make a call.
- To cancel the call after the system starts dialing, touch .

5 Touch to end the call.

Making a call home easily
You can call home without taking the time to enter the phone number if the phone number has been registered.

1 Display the “Phone Menu” screen.
2 Touch [Call Home].
Dialing home starts.

- If you have not registered your home number, a message appears. Touch [Yes] to start registration.
- For more details about “Set Home”, refer to Registering your home on page 43.

Calling a number in the “Contacts”
After finding the entry you want to call in the “Contacts” screen, you can select the number and make the call.

- Before using this function, you need to set the phone number from the phone book to “Contacts”.
- For details, refer to Transferring the phone book on page 54.

1 Display the “Phone Menu” screen.
2 Touch [Contacts].
The “Contacts” screen appears.

3 Switch the page of the list to display the desired entry.
If you touch an alphabet tab, you can jump to the first page of the contacts whose names start with that letter.
Using hands-free phoning

Alphabet tabs
Makes the screen jump to the beginning of the page including the entry whose names start with any of selected alphabets. Touching [ #ABCDE ] also displays the page including the entry whose names start with primary symbols or numbers. Touching [ Others ] displays the page including entries that are not assigned to any of the other tabs.

or : Shows the next or previous alphabet tab.

4 Touch the desired entry on the list to make a call.

5 Touch to end the call.

Dialing GOOG-411

CAUTION
Local and/or long distance charges for making a phone call may apply.

You can dial GOOG 411 to dial the free business listing service of Google™ with one touch.

1 Display the “Phone Menu” screen.

2 Touch [GOOG-411].
Dialing GOOG 411 starts.

3 You can now use the GOOG-411 phone service.
For details about GOOG 411 service and availability, contact Google™.

Making a phone call using the received call history
The received call history saves 30 calls per registered cellular phone. If the number of calls exceeds 30, the oldest entry will be deleted.

1 Display the “Phone Menu” screen.

2 Touch [Received].
The “Received Calls List” screen appears.

3 Touch an entry on the list.
Dialing starts.
   - To cancel the call after the system starts dialing, touch .
   - Touch [Detail].
The “Detail Information” screen appears.

You can check the details of the party before making a phone call.

4 Touch to end the call.
Making a phone call using the dialed number history

The dialed number history saves 30 calls per registered cellular phone. If the entries exceed 30, the oldest one will be deleted.

1 Display the “Phone Menu” screen.
2 Touch [Dialed].
The “Dialed Calls List” screen appears.

3 Touch an entry on the list.
Dialing starts.
   □ To cancel the call after the system starts dialing, touch .
   □ Touch [Detail].
The “Detail Information” screen appears.

You can check the details of the party before making a phone call.
4 Touch  to end the call.

Making a phone call using missed call history

The missed call history saves 30 calls per registered cellular phone. If the number of calls exceeds 30, the oldest entry will be deleted.

1 Display the “Phone Menu” screen.
2 Touch [Missed].
The “Missed Calls List” screen appears.

3 Touch an entry on the list.
Dialing starts.
   □ To cancel the call after the system starts dialing, touch .
   □ Touch [Detail].
The “Detail Information” screen appears.

You can check the details of the party before making a phone call.
4 Touch  to end the call.

Dialing the entry in the “Favorites”

You can make a call to the entry registered in the “Favorites”.

1 Display the “Navigation Menu” screen.
2 Touch [Favorites].
The “Select Favorite” screen appears.

3 Touch next to the location that you want to make a call.
The “Edit Favorite” screen appears.

4 Touch  to make a call.
To cancel the call after the system starts dialing, touch .

5 Touch  to end the call.
Dialing a facility’s phone number
You can make a call to facilities with phone number data.
□ You cannot make a call to locations or POIs that have no phone number data.

1 Display the “Navigation Menu” screen.
2 Touch [POI].
The “POI Search” screen appears.
3 Search for the POI.
The “POI List” screen appears.
  ➜ For details concerning operations, refer to Searching for Points of Interest (POI) on page 38.
4 Touch □ next to the POI that you want to make a call.
The “Detailed POI Information” screen appears.
5 Touch □ to make a call.
To cancel the call after the system starts dialing, touch □.
6 Touch □ to end the call.

Receiving a phone call
You can perform hands free answering by using the navigation system.

Answering an incoming call
The system informs you that it is receiving a call by displaying a message and producing a ring sound once.
If [Auto Answer Preference] is set to [Off], answer the call manually. Answering is available if any screen is displayed, such as the map screen or the setting screen.
□ You can set this navigation system to automatically answer incoming calls.
  ➜ For details, refer to Answering a call automatically on page 56.

1 When a call comes in, the answering operation menu appears on the screen.

Dialing from the map
You can make a call by selecting the icon of a registered location or a POI icon from the map screen.
□ You cannot make a call to locations or POIs that have no phone number data.

1 Scroll the map, and place the cursor on an icon on the map.
2 Touch □.
Detailed information is displayed.
3 Touch □ to make a call.
To cancel the call after the system starts dialing, touch □.
4 Touch □ to end the call.

When there is an incoming call, you can reject it by touching □.
You can adjust volume when you are talking. To adjust volume, touch [Vol -] and [Vol +] displayed on the screen (like below) when you are talking.

3 Touch  to end the call.
The call ends.
- If the voice on the other end of the call is too quiet to hear, you can adjust the volume of the received voice.
  ➤ For more details about “Phone Volume”, refer to Setting the phone volume on the next page.
- You may hear a noise when you hang up the phone.

Rejecting an incoming call
You can reject an incoming call.
➤ For details, refer to Setting the automatic rejection function on page 56.

- When a call comes in, touch .
The call is rejected.
  ➤ The rejected call is recorded in the missed call history list.
  ➤ For details, refer to Making a phone call using missed call history on page 52.

Transferring the phone book
You can transfer the numbers in a registered user phone’s address book into the Contacts.
- Depending on the cellular phone, “Phone Book” may be called a name such as “Contacts”, “Business card” or something else.
- With some cellular phones, it may not be possible to transfer the entire phone book at once. In this case, transfer addresses one at a time from your phone book using your cellular phone.
- The maximum 400 entries can be transferred per cellular phone. If the entries exceed 400, the extra entries will not be transferred. If more than one number is registered for one person, such as work place and home, each number is counted separately.

Each entry can hold up to 3 phone numbers.
- Depending on the cellular phone that is connected to this navigation system via Bluetooth technology, this navigation system may not be able to display the phone book correctly. (Some characters may be garbled.)
- If the phone book in the cellular phone contains image data, the phone book may not be correctly transferred.

1 Connect the cellular phone that has the phone book to transfer.
  ➤ For details, refer to Connecting a registered cellular phone on page 49.

2 Touch [Transfer] on the “Phone Menu” screen.
The confirmation messages appear.

3 Check that the following screen is displayed, and operate your cellular phone to transfer the phone book entries.

- You can send the phone book entries repeatedly before touching [OK]. If your cellular phone supports one by one transfer only, send all the entries that you want to transfer before touching [OK].
- If your phone has a capability for automatic transfer of phone book, this screen is skipped and transfer will start.
- The transferred data can not be edited on the navigation system.

4 Touch [OK].
Transfer starts. It may take time depending on how many entries will be transferred.
Using hands-free phoning

5 When the completion message appears, check the message and touch [OK].

Transfer ends.

Clearing memory
You can clear the memory of each item that corresponds to the connected cellular phone: phone book, dialed/received/missed call history list and preset dials.

1 Touch [Settings] on the “Phone Menu” screen.
The “Bluetooth Settings” screen appears.

2 Touch [Clear Memory].
The “Clear Memory” screen appears.

On this screen, you can select the following items:

- **Contacts:**
  You can clear the registered phone book.

- **Received Calls List:**
  You can clear the received call history list.

- **Dialed Calls List:**
  You can clear the dialed call history list.

- **Missed Calls List:**
  You can clear the missed call history list.

- Touch [Clear All].
  It clears all the data that correspond to the connected cellular phone.

3 Touch [OK].
Data on the selected item is cleared from this navigation system’s memory.
- If you do not want to clear memory that you have selected, touch [No].

Setting the phone
Setting the phone volume
The volume level for hands free phoning can be adjusted.

1 Touch [Volume] on the “Phone Menu” screen.
The “Phone Volume” screen appears.

2 Touch [+] or [-] to set their volume.

- **[Phone Ringtone]:**
  This setting controls the incoming ring tone volume.

- **[Phone Voice]:**
  This setting controls the incoming voice volume.

Phone volume varies depending on the incoming caller’s phone, volume setting and other conditions.

For details concerning operations, refer to *Answering an incoming call* on page 53.
**Stopping Bluetooth wave transmission**

You can stop transmission of electric waves by turning off the Bluetooth function. If you do not use the Bluetooth wireless technology, we recommend selecting [Off].

1. Touch [Settings] on the “Phone Menu” screen.
   The “Bluetooth Settings” screen appears.

2. Touch [Bluetooth On/Off].
   Touching [Bluetooth On/Off] switching between [On] and [Off].

**Answering a call automatically**

The navigation system automatically answers incoming calls to the cellular phone, so you can answer a call while driving without taking your hands off the steering wheel.

1. Touch [Settings] on the “Phone Menu” screen.
   The “Bluetooth Settings” screen appears.

2. Touch [Auto Answer Preference].
   The “Auto Answer Preference” screen appears.

3. Touch the desired option.
   - [Off]: No automatic response. Respond manually
   - [Immediately]: Answers immediately
   - [After 3 seconds]: Answers after three seconds
   - [After 6 seconds]: Answers after six seconds
   - [After 10 seconds]: Answers after ten seconds

**Setting the automatic rejection function**

If this function is on, the navigation system automatically rejects all incoming calls.

1. Touch [Settings] on the “Phone Menu” screen.
   The “Bluetooth Settings” screen appears.

2. Touch [Refuse All Calls].
   Touching [Refuse All Calls] switches between [On] and [Off].
   - If both “Refuse All Calls” and “Auto Answer Preference” are activated, “Refuse All Calls” is prioritized and all incoming calls are automatically rejected.
   - If “Refuse All Calls” is set to [On], rejected incoming calls will not be stored in the missed call list.

**Echo canceling and noise reduction**

When you are operating hands free phoning in the vehicle, you may hear an undesirable echo. This function reduces the echo and noise while you are using hands free phoning, and maintains a certain sound quality.

1. Touch [Settings] on the “Phone Menu” screen.
   The “Bluetooth Settings” screen appears.

2. Touch [Echo Cancel].
   Touching [Echo Cancel] switches between [On] and [Off].

**Setting automatic connection**

When automatic connection is active, the navigation system will automatically establish a connection with a registered phone when it comes into range. Using this feature avoids all of the processes for establishing a connection.
   - With some cellular phones, it may not be possible to perform automatic connection.
Using hands-free phoning

1 Touch [Settings] on the “Phone Menu” screen.
The “Bluetooth Settings” screen appears.

2 Touch [Auto Connect].
Touching [Auto Connect] switches between [On] and [Off].
- Automatic connection is performed in the registration number order.
- Some cellular phones do not support automatic connection.

Editing the device name
You can change the device name to be displayed on your cellular phone. (Default is [PIONEER NAVI].)

1 Touch [Settings] on the “Phone Menu” screen.
The “Bluetooth Settings” screen appears.

2 Touch [Edit Name].
The keyboard to enter the name appears.

3 Touch ‘’ to delete the current name, and enter the new name by using the keyboard.

4 Touch [OK].
The name is changed.
- Up to 16 characters can be entered for a device name.

Notes for hands-free phoning
General notes
- Connection to all cellular phones featuring Bluetooth wireless technology is not guaranteed.
- The line of sight distance between this navigation system and your cellular phone must be 10 meters or less when sending and receiving voice and data via Bluetooth technology. However, the actual transmission distance may be shorter than the estimated distance, depending on the usage environment.
- With some cellular phones, the speakers of the system may not produce a ring sound.
- If private mode is selected on the cellular phone, hands free phoning may be disabled.

Registration and connection
- Cellular phone operations vary depending on the type of cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.
- With cellular phones, phone book transfer may not work even though your phone is paired with the navigation system. In that case, disconnect your phone, perform pairing again from your phone to the navigation system, and then perform the phone book transfer.

Making and receiving calls
- You may hear a noise in the following situations:
  When you answer the phone by using the button on the phone.
  When the person on the other end of the line hangs up the phone.
- If the person on the other end of the phone call cannot hear the conversation due to an echo, decrease the volume level for hands free phoning. This may reduce the echo.
- With some cellular phones, even if you press the accept button on the cellular phone when a call comes in, hands free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, the name that comes first alphabetically is displayed.
If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

During incoming and outgoing calls or talking on a phone, you can only do the following operations:
- Touching 
  
  Vol +, and Vol -.
- Displaying the map screen.
- Switching the audio sources.

The received call history and the dialed number history
- Calls made or editing performed only on your cellular phone will not be reflected to the dialed number history or phone book in the navigation system.
- You cannot make a call to the entry of an unknown user (no phone number) in the received call history.
- If calls are made by operating your cellular phone, the dialed number history data will be recorded as “Unknown” in the navigation system.

Phone book transfers
- If there are more than 400 phone book entries on your cellular phone, all entries may not be able to be downloaded completely.
- With some cellular phones, it may not be possible to transfer all items in the Contacts at one time. In this case, transfer items one by one from your cellular phone.
- Depending on the cellular phone, this navigation system may not display the phone book correctly. (Some characters may be garbled, or first name and last name may be in reverse order.)
- If the phone book in the cellular phone contains image data, the phone book may not be transferred correctly. (Image data cannot be transferred from the cellular phone.)
- Depending on the cellular phone, phone book transfer may not be available.

Updating the Bluetooth wireless technology software
Update files will be available for download in the future. You will be able to download the latest update from an appropriate website to your PC.

1. Before you download the files and install the update, read through the instructions on the website. Follow the instructions on the website for steps until [Update] becomes active.

2. Insert an SD memory card into the SD card slot.
   - For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.

3. Touch [Settings] on the “Phone Menu” screen.
   The “Bluetooth Settings” screen appears.

4. Touch [Bluetooth Software Update].
   A message confirming whether to start updating the software appears.
   Update starts.

5. To finish the update, touch [OK].
   Update is completed.
Setting the volume for navigation system

The sound volume for the navigation can be set.

- When using a phone, the sound volume of the navigation system is dependent on the phone volume setting.

1. Display the “Navigation Menu” screen.
2. Touch [Settings].
   The “Settings Menu” screen appears.
3. Touch [Sound].
   The “Sound” screen appears.
4. Touch [+] or [–] next to “Guidance”.
   Controls the master volume of both the navigation guidance and beep.
   When set to [–], guidance is output. When set to [+], no guidance is output.
- Touch [Beep].
Each time you touch the key changes that setting.
  - [Off]: Muting the beep sound.

Selecting the language

You can set the languages used on the program and voice guidance. Each language can be set separately.

1. Display the “Region” screen.
2. Touch [UI Language].
   The “Select UI Language” screen appears.
3. Touch the desired language.
   After the language is selected, the screen returns to the previous screen.
4. Touch [Voice Language].
   The “Voice Language Selection” screen appears.
5. Touch the desired language.
   After the language is selected, the screen returns to the previous screen.
   The navigation system restarts.

Installing additional files for voice guidance (TTS files)

TTS file is used to read out the street name in the route guidance by navigation system. If the latest TTS file is available, you can replace the current TTS file with the latest one.

1. Copy the “Voice” folder onto the topmost directory of the SD memory card.
   The “Voice” folder is stored on the supplied CD ROM. Use your PC to copy it.
2 Insert an SD memory card into the SD card slot.
   - For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.

3 Touch [Voice Language] on the “Region” screen.
   The “Voice Language Selection” screen appears.

4 Touch [Setup].
   The language list is displayed.

5 Touch [Current Voice].
   The replaceable languages will appear.

6 Touch the desired language.
   After the language is selected, the screen returns to the “Region” screen.

7 Touch [OK] on the “Region” screen.
   The navigation system restarts.

Setting the time difference
Adjusts the systems clock. Set the time difference (+, –) from the time originally set in your navigation system.

1 Display the “Region” screen.

2 Touch [Time].
   The “Time Settings” screen appears.

3 To set the time difference, touch [+] or [–].
   The time difference between the time originally set in the navigation system (Pacific Standard Time) and the current location of your vehicle is shown. If necessary, adjust the time difference. Touching [+] or [–] changes the time difference display in one hour increments.
   The time difference can be set from -4 to +9 hours.

4 Touch [Summer Time].
   If necessary, set to summer time. Summer time is off by default. Touch [Summer Time] to change the time if you are in the summer time period. This turns the display below summer time [On].

5 Touch [Time format].
   Each time you touch the key changes that setting.
   - [12 hour] (default):
     Switching the display for 12 hours with am/pm.
   - [24 hours]:
     Switching the display for 24 hours.

Changing the unit between km and miles
This setting controls the unit of distance and speed displayed on your navigation system.

1 Display the “Region” screen.

2 Touch [km / mile].
   Each time you touch the key changes that setting.
   - [mile] (default):
     Show distance in miles.
   - [km]:
     Show distance in kilometers.
   - [Mile&Yard]:
     Show distance in miles and yards.
Changing the virtual speed of the vehicle

When calculating the expected time of arrival and the number of hours to the destination, set the average speed for the freeway or ordinary roads using [+] and [–].

1 Display the “Region” screen.
2 Touch [Speed].
The “Average Speed Settings” screen appears.
3 Touch [+] or [–] to set the speed.
   □ The estimated time of arrival is not necessarily estimated based on this speed value.
4 Touch [OK].
The settings are completed.

Setting the keyboard layout

You can select the type of keyboard to be used for inputting characters.

1 Display the “Region” screen.
2 Touch [Keyboard].
Each time you touch the key changes that setting.
   • [QWERTY] (default):
   • [QWERTZ]:
   • [AZERTY]:
   • [ABC]:

Replicating the settings

You can import settings you have made on the utility program “AVIC FEEDS” which is available separately to the navigation system.

1 Insert an SD memory card into the SD card slot.
   □ For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.
2 Display the “Navigation Menu” screen.
3 Touch [Cpy Setting].
A message confirming whether to update the settings appears.
4 Touch [Yes].
Update starts.
After updating the settings is finished, a message confirming whether to restart the navigation system appears.
5 Touch [OK].
The navigation system restarts.
Inputting the fuel consumption information for calculating the fuel cost

You can estimate the fuel cost to your destination by entering the fuel consumption information in the navigation system.

1 Display the “Navigation Menu” screen.
2 Touch [Gas Mileage]. The “Gas Mileage” screen appears.
3 Enter the fuel consumption information.

Enter the following items:
- [Surface Road]: Enter the fuel cost when you drive on the ordinary road.
  - How the fuel cost is entered depends on the [Gas Unit] setting.
    - When [Gas Unit] is set to [Liter], Enter how much fuel you need to travel 60 miles (100 kilometers).
    - When [Gas Unit] is set to [Gallon], Enter how many miles (kilometers) you get to a gallon.
- [HWY Gas Mile]: Enter the fuel cost when you drive on the freeway.
  - How the fuel cost is entered depends on the [Gas Unit] setting.
    - When [Gas Unit] is set to [Liter], Enter how much fuel you need to travel 60 miles (100 kilometers).
    - When [Gas Unit] is set to [Gallon], Enter how many miles (kilometers) you get to a gallon.
- [Gas Price/Unit]: Enter the fuel unit price.
- [Gas Unit]: Set the fuel unit.
- [Currency]: Set the unit of currency.

When all the items are entered, inputting the fuel consumption information is complete.

Setting the power-saving function

You can select the setting of the screen backlight to save the battery power.

1 Display the “Navigation Menu” screen.
2 Touch [Settings]. The “Settings Menu” screen appears.
3 Touch [Backlight Timeout]. Each time you touch the key changes that setting.
   - [Never]: Deactivates the power saving feature of the screen backlight.
   - [30 sec]: Dims the backlight automatically if you do nothing for 30 seconds.

Adjusting the response positions of the touch panel (touch panel calibration)

If you feel that the touch panel keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel screen.

- Make sure to use the supplied stylus for adjustment and gently touch the screen. If you press the touch panel forcefully, the touch panel may be damaged. Do not use a sharp pointed tool such as a ballpoint pen or a mechanical pen, which could damage the screen.

Stylus (supplied with the navigation system)

1 Display the “Navigation Menu” screen.
2 Touch [Settings]. The “Settings Menu” screen appears.
3 Touch [Calibrate].
A message confirming whether to start the calibration appears.

4 Touch and hold the target that point to the center and corners of the LCD screen.
The target indicates the order.

5 Touch anywhere on the screen.
The adjusted position data will be saved.
Do not turn off the engine while saving the adjusted position data.

Correcting the current location
Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

1 Display the “Navigation Menu” screen.
2 Touch [Settings].
The “Settings Menu” screen appears.
3 Touch [Location].
4 Scroll to the position where you want to set, then touch [OK].

Checking the connections of leads
Check that leads are properly connected between the navigation system and the vehicle. Please also check whether they are connected in the correct positions.

1 Display the “Navigation Menu” screen.
2 Touch [Settings].
The “Settings Menu” screen appears.
3 Touch [Connection].
The “Connection” screen appears.

GPS Status
Indicates the connection status of the GPS antenna, the reception sensitivity and from how many satellites the signal is received.

<table>
<thead>
<tr>
<th>Color</th>
<th>Signal communication</th>
<th>Used in positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yellow</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Hand Brake
When the parking brake is applied, [On] is displayed. When the parking brake is released, [Off] is displayed.

Illumination
When the headlights or small lamps of a vehicle are on, [On] is displayed. When the small lamps of a vehicle are off, [Off] is displayed. (If the orange/white lead is not connected, [Off] appears.)

Checking the version information
1 Display the “Navigation Menu” screen.
2 Touch [Settings].
The “Settings Menu” screen appears.
3 Touch [Service Info].
The “Service Information Screen” screen appears.
4 Check the version information.
Adjusting the screen brightness

You can set the screen brightness for each of the following situations.
- When the detachable device is attached to the head unit and the vehicle lights are off.
- When the detachable device is attached to the head unit and the vehicle lights are on.
- When the detachable device is not attached to the head unit.

1 Display the “Navigation Menu” screen.
2 Touch [Settings].
The “Settings Menu” screen appears.
3 Touch [Brightness].
The “Brightness” screen appears.
4 Touch [+] or [–] to adjust the brightness.
Each time you touch [+] or [–] increases or decreases the level. 10 to 0 is displayed as the level is increased or decreased.
5 Touch [OK].
The adjustment is completed.

Turning off the screen

By turning off the backlight of the LCD screen, you can turn off the screen display without turning off the voice guidance.

1 Display the “Navigation Menu” screen.
2 Touch [Settings].
The “Settings Menu” screen appears.
3 Touch [Screen Off].
The screen is turned off.
   □ Touch anywhere on the screen to turn it back on.

Restoring the default setting

 Resets various settings registered to the navigation system and restores them to the default or factory settings.

1 Display the “Navigation Menu” screen.
2 Touch [Settings].
The “Settings Menu” screen appears.
3 Touch [F. Reset].
The message confirming whether to restore the settings appears.
4 Touch [Yes].

Returning the navigation system to the initial state

You can return settings or recorded content to the default or factory settings.

Press the RESET button.
The navigation system restarts, and the splash screen appears.

2 Wait about 10 seconds, and then press and hold the MODE button until the “Date/Setting Clear” screen appears.
The “Date/Setting Clear” screen appears.
3 Touch [Clear user information].
Touching [Clear user information] displays the confirmation message for clearing the memory.
□ Touch [Reset].
Various settings registered to the navigation system is reset to the default or factory settings.
4 Touch [Yes].
The recorded contents are cleared.
Exporting data for “AVIC FEEDS”

You can export data to an SD memory card for browsing on the PC application. The following data can be exported.

- Gas Mileage
- Drive Log

Gas Mileage

Entering the fueling information

- Up to 24 sets of “Gas Mileage” entries can be stored. You can also export the data, as described below.
- If the entries reach the maximum number, a new entry will overwrite the oldest one.

Gas Mileage function only assists you to calculate your average mileage based on the information you input. The function does not receive data directly from the vehicle.

1. Display the “Navigation Menu” screen.
2. Touch [Gas Mileage].
   The “Gas Mileage” screen appears.
3. Touch [Gas Price].
   The “Gas Price Calculation” screen appears.
4. Enter the following settings:
   - [Distance]: Enter the distance traveled since the previous fueling.
     - The distance is entered automatically only when the distance traveled since the previous fueling is recorded.
   - [Gas Pumped]: Enter the amount of fuel pumped.
   - [Gas Price/Unit]: Enter the fuel unit price.
   - When all the items are entered, the fuel consumption is displayed next to “Gas Mileage”.
5. Touch [OK].
   The “Gas Price Calculation” screen appears. Then touch [OK] to display the “Gas Mileage” screen.

Exporting the data of “Gas Mileage”

Exporting the “Gas Mileage” data to an SD memory card is possible.
- The data stored in this navigation system will be cleared as exporting it to the SD memory card.
Other functions

1 Insert an SD memory card into the SD card slot.
   - For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.

2 Display the “Navigation Menu” screen.

3 Touch [Gas Mileage].
   The “Gas Mileage” screen appears.

4 Touch [Export].
   After a message confirming whether to export the data appeared, exporting the data to the SD memory card starts.
   The “Gas Mileage” screen appears when it is done.
   - Touching [Export] next to “Gas Mileage” on the “Export/Import Menu” screen enables you to perform the equivalent operation.
   - For details, refer to Exporting the data of “Gas Mileage” from “Export/Import Menu” screen on the next page.

Recording your travel history
Activating the track logger enables you to record your driving history (called “track log” below). You can review the travel history later.
- If an SD memory card is inserted into the SD card slot, the track logs will be stored in the SD memory card.
- When the detachable device is removed from the head unit, this function is not available.

Exporting and importing the entry in “Favorites”

Exporting the entry in “Favorites”
Exporting the “Favorites” data to an SD memory card for editing is possible by using the utility program “AVIC FEEDS” which is available separately, on your PC.
1 Insert an SD memory card into the SD card slot.
   ➤ For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.

2 Display the “Navigation Menu” screen.

3 Touch [Data In/Out].
   The “Export/Import Menu” screen appears.

4 Touch [Export] next to “Favorites”.
   Exporting the data starts.
   After exporting the data is finished, the following message appears.

5 Touch [OK].
   The “Navigation Menu” screen appears.

---

Importing “Favorites” edited on “AVIC FEEDS”

You can import the locations that you have edited on the utility program “AVIC FEEDS” which is available separately to “Favorites”.
   ➤ When a location that is already registered in “Favorites” is imported, the location is overwritten.

---

Exporting the data of “Gas Mileage” from “Export/Import Menu” screen

1 Insert an SD memory card into the SD card slot.
   ➤ For more details of the operation, refer to Inserting and ejecting an SD memory card on page 11.

2 Display the “Navigation Menu” screen.
3 Touch [Data In/Out].
The “Export/Import Menu” screen appears.

4 Touch [Export] next to “Gas Mileage”.
Exporting the data starts.
After exporting the data is finished, the following message appears.

5 Touch [OK].
The “Navigation Menu” screen appears.

“PC Mode” function
When you connect a detachable device containing an SD memory card to your PC, “PC Mode” enables your PC to identify the detachable device as a removable disc.

Switching to “PC Mode”
1 Connect the detachable device and your PC using the USB cable.
   For details, refer to Connecting with your PC on page 18.
2 Display the “Navigation Menu” screen.
3 Touch [Connect PC].
A message confirming whether to restart the navigation system appears.

4 Touch [OK].
The navigation system restarts.
And then the navigation system changes to “PC Mode”.

Canceling “PC Mode”
1 Disconnect the detachable device from your PC.
2 Touch [End].
“PC Mode” is canceled, and then the system restarts.
Using the audio source

You can play or use the following sources with the navigation system.

- XM (XM tuner)
- SIRIUS (SIRIUS tuner)
- HD Radio (HD Radio tuner)
- TUNER (FM, AM)
- CD
- ROM (MP3, AAC, WAV, WMA)
- USB
- iPod
- EXT1 (external unit1)
- EXT2 (external unit2)
- AUX (auxiliary device)

Switching the audio operation screen

1. Press MODE button when the map of the current location is displayed.

2. Press SRC/OFF button repeatedly to switch between the following sources.
   - XM (XM tuner)
   - SIRIUS (SIRIUS tuner)
   - HD Radio (HD Radio tuner)
   - TUNER (tuner)
   - CD (built in CD player)
   - USB (USB storage device)
   - iPod (iPod connected using USB input)
   - EXT1 (external unit1)
   - EXT2 (external unit2)
   - AUX (auxiliary device)

   When the tuner has been tuned in to an HD Radio broadcasting, “TUNER” can not be selected.
Screen switching overview

- Press
- Press and hold for a few seconds
- Press the center of MULTI-CONTROL

*: Turn and press the center of MULTI-CONTROL
**: Pressing LIST or EJECT button enables you to perform the equivalent operation.
Basic flow of operation

What you can do on each menu

1. **Audio operation screen**
   When you play the audio source, this screen appears.

2. **Function select screen**
   You can access the screen for selecting either “Function Menu” or “Audio Menu”. Depending on the source, “Function Menu” may not exist.

3. **“Function Menu” screen**
   You can access the screen to customize additional function settings.

4. **“Audio Menu” screen**
   You can access the screen where various settings are available with the audio source according to your sound requests.

5. **Source off screen**

6. **“Initial Setting” screen**
   You can access the screen that lets you perform system set up of different settings for this navigation system.
You can listen to the radio by using the navigation system. This section describes operations for radio (FM).

- Press SRC/OFF button to display the “TUNER” screen.
  ➤ For details, refer to Switching the audio operation screen on page 69.

**Operating by hardware buttons**

**Pressing BAND/ESC button**
Band can be selected from among FM1, FM2, FM3, or AM.

**Pressing MULTI-CONTROL up or down**
You can recall radio stations assigned to preset tuning keys 1 to 6.

**Pressing MULTI-CONTROL left or right**
The frequencies move up or down step by step.

**Pressing and holding MULTI-CONTROL left or right**
The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
➤ You can cancel seek tuning by pressing MULTI-CONTROL left or right.

**Pressing the center of MULTI-CONTROL**
The function select screen appears.

### Storing and recalling broadcast frequencies

With a touch of any of the preset tuning keys (P1 to P6), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).

1. **When you find a frequency that you want to store in memory, keep touching a preset tuning key P1 to P6 until the preset number (e.g., P.CH1) stops flashing.**
The selected radio station has been stored in memory.
➤ Up to 18 stations, 6 for each of three FM bands can be stored in memory.

2. **Touch the same preset tuning key P1 to P6.**
The radio station frequencies are recalled from memory.

### Reading the screen

1. **Source icon**
   Shows which source has been selected.

2. **Band**
   Shows which band the radio is tuned to: FM1 to FM3.

3. **Preset number indicated next to “P.CH”**
   Shows what preset item has been selected.

4. **Frequency**

5. **Signal level indicator**

6. **Touch panel keys**
   - P1 to P6:
     Recalls radio stations.
   ➤ For details, refer to Storing and recalling broadcast frequencies on this page.

7. **Local indicator**
   Shows when local seek tuning is on.
   ➤ For details, refer to Tuning in strong signals on the next page.

8. **STEREO indicator**
   Shows when the selected frequency is being broadcast in stereo.
Storing the strongest broadcast frequencies

“BSM” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys to and, once stored there, you can tune in to these frequencies with the touch of a key.

1 Display the “Function Menu” screen.
   ➤ For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “BSM”.

3 Press the center of MULTI-CONTROL to start “BSM”.

BSM begins to flash. While BSM is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys in order of their signal strength. When this is complete, BSM stops flashing.

➤ To cancel the storage process, press the center of MULTI-CONTROL again.

➤ Storing broadcast frequencies with BSM may replace broadcast frequencies you have already saved by using to.

Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

1 Display the “Function Menu” screen.
   ➤ For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Local”.

3 Pressing the center of MULTI-CONTROL switches between on and off.

4 Press MULTI-CONTROL left or right to set the sensitivity.

There are four levels of sensitivity for FM.

<table>
<thead>
<tr>
<th>FM: Level</th>
<th>Level2</th>
<th>Level3</th>
<th>Level4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level1</td>
<td>Level2</td>
<td>Level3</td>
<td>Level4</td>
</tr>
</tbody>
</table>

➤ The level “4” setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.
You can listen to the radio using this navigation system. This section describes operations for radio (AM).

1. Press SRC/OFF button to display the “TUNER” screen.
   ➤ For details, refer to Switching the audio operation screen on page 69.

2. Press BAND/ESC button repeatedly until “AM” in the display.

### Operating by hardware buttons

**Pressing BAND/ESC button**
Band can be selected from among FM1, FM2, FM3, or AM.

**Pressing MULTI-CONTROL up or down**
You can recall radio stations assigned to preset tuning keys P1 to P6.

**Pressing MULTI-CONTROL left or right**
The frequencies move up or down step by step.

**Pressing and holding MULTI-CONTROL left or right**
The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
➤ You can cancel seek tuning by pressing MULTI-CONTROL left or right.

**Pressing the center of MULTI-CONTROL**
The function select screen appears.

### Storing and recalling broadcast frequencies

With a touch of any of the preset tuning keys P1 to P6, you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).

1. **When you find a frequency that you want to store in memory, keep touching a preset tuning key P1 to P6 until the preset number (e.g., P.CH1) stops flashing.**
The selected radio station has been stored in memory.
➤ Up to 6 stations can be stored in memory.

2. **Touch the same preset tuning key P1 to P6.**
The radio station frequencies are recalled from memory.
Storing the strongest broadcast frequencies

“BSM” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys $p_1$ to $p_6$ and, once stored there, you can tune in to these frequencies with the touch of a key.

1 Display the “Function Menu” screen.
   ➤ For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “BSM”.

3 Press the center of MULTI-CONTROL to start “BSM”.
   BSM begins to flash. While BSM is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys $p_1$ to $p_6$ in order of their signal strength. When this is complete, BSM stops flashing.
   — To cancel the storage process, press the center of MULTI-CONTROL again.
   — Storing broadcast frequencies with BSM may replace broadcast frequencies you have already saved by using $p_1$ to $p_6$. ❑

Tuning in strong signals

Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

1 Display the “Function Menu” screen.
   ➤ For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Local”.

3 Pressing the center of MULTI-CONTROL switches between on and off.

4 Press MULTI-CONTROL left or right to set the sensitivity.
   There are two levels of sensitivity for AM.

<table>
<thead>
<tr>
<th>AM: Level1</th>
<th>Level2</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ The level “2” setting allows reception of only the strongest stations, while lower settings let you receive weaker stations. ❑</td>
<td></td>
</tr>
</tbody>
</table>
You can listen to the radio by using the navigation system. This section describes operations for HD Radio™.

For details concerning operation, refer to the HD Radio tuner’s operation manual.

- Press SRC/OFF button to display the “HD Radio” screen.
  - For details, refer to Switching the audio operation screen on page 69.

### Reading the screen

1. **Source icon**
   Shows which source has been selected.
2. **Text display area**
   - **Band**
     Shows which band the radio is tuned to: FM1, FM2, FM3 or AM.
   - **Preset number indicated next to “P.CH”**
     Shows what preset item has been selected.
   - **Frequency**
   - **Multicasting indicator**
     Shows the number of multicast channels in the current frequency.
   - **Channel name**
     Shows the channel name of broadcast channel.
   - **Artist name**
     Shows the artist name for the current song.
   - **Song title**
     Shows the title of the song currently playing.

3. **Program type**
   Shows the type of current program.
4. **Signal level indicator**
5. **Blending mode indicator**
   - For details, refer to Switching the reception mode on page 78.
6. **Touch panel keys**
   - **Disp**
     Changes the display in the text area.
   - **Disp**
     Touching and holding scrolls displayed information.
   - **Disp**
     Only when the tuner has been tuned in to an HD Radio broadcasting, display can be changed.
7. **Local indicator**
   Shows when local seek tuning is on.
   - For details, refer to Tuning in strong signals on the next page.
8. **STEREO indicator**
   Shows when the selected frequency is being broadcast in stereo.

### Operating by hardware buttons

**Pressing BAND/ESC button**
Band can be selected from among FM1, FM2, FM3, or AM.

**Pressing MULTI-CONTROL up or down**
You can recall radio stations assigned to preset tuning keys p1 to p6.

**Pressing MULTI-CONTROL left or right**
The frequencies move up or down step by step.
Pressing and holding MULTI-CONTROL left or right
The tuner will scan the frequencies until a broadcast strong enough for good reception is found.
- You can cancel seek tuning by pressing MULTI-CONTROL left or right.

Pressing the center of MULTI-CONTROL
The function select screen appears.

Storing and recalling broadcast frequencies
With a touch of any of the preset tuning keys (P1 to P6), you can easily store up to six broadcast frequencies for later recall (also with the touch of a key).

1 When you find a frequency that you want to store in memory, keep touching a preset tuning key P1 to P6 until the preset number (e.g., P.CH1) stops flashing. The selected radio station has been stored in memory.

2 Touch the same preset tuning key P1 to P6. The radio station frequencies are recalled from memory.

Storing the strongest broadcast frequencies
“BSM” (best stations memory) lets you automatically store the six strongest broadcast frequencies under the preset tuning keys P1 to P6 and, once stored there, you can tune in to these frequencies with the touch of a key.

1 Display the “Function Menu” screen. For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “BSM”.

3 Press the center of MULTI-CONTROL to start “BSM”.
BSM begins to flash. While BSM is flashing, the six strongest broadcast frequencies will be stored under the preset tuning keys P1 to P6 in order of their signal strength. When this is complete, BSM stops flashing.
- To cancel the storage process, press the center of MULTI-CONTROL again.
- Storing broadcast frequencies with BSM may replace broadcast frequencies you have already saved by using P1 to P6.

Tuning in strong signals
Local seek tuning allows you to tune in only those radio stations with sufficiently strong signals for good reception.

1 Display the “Function Menu” screen. For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Local”.

3 Pressing the center of MULTI-CONTROL switches between on and off.

4 Press MULTI-CONTROL left or right to set the sensitivity. There are four levels of sensitivity for FM and two levels for AM:
   FM: Level1 Level2 Level3 Level4
   AM: Level1 Level2
   - The FM “4” (AM “2”) setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

Switching the seek mode
You can select the method of seek tuning.

1 Display the “Function Menu” screen. For details, refer to Screen switching over view on page 70.
2 Turn MULTI-CONTROL to display “Seek Mode”.

3 Press the center of MULTI-CONTROL to switch between “Seek All” and “Seek HD”.
   • “Seek All”:
     Seeks stations from both analog and digital broadcasting.
   • “Seek HD”:
     Seeks from digital broadcasting only.

If you select “Seek HD” on this setting while “Blending” is set to “Off”, the setting on “Blending” turns to “On” automatically.

Switching the reception mode
If a digital broadcast reception condition gets poor, the tuner automatically switches to the analog broadcast of the same frequency level in default. If you want to prevent a frequent automatic switching, switch this setting to “Off”.

1 Display the “Function Menu” screen.
   ✪ For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Blending”.

3 Press the center of MULTI-CONTROL to switch between “On” and “Off”.
   • “Off”:
     Receives analog broadcasting only.
   • “On”:
     Automatically switches to the analog broadcast of the same frequency level as the digital broadcast.
     ✪ is displayed as the blending mode indicator.

If you select “Off” on this setting while “Seek Mode” is set to “Seek HD”, the setting on “Seek Mode” turns to “Seek All” automatically.
You can play a normal music CD using the built-in drive of the navigation system. This section describes how.

- **Insert the disc you want to play into disc-loading slot.**
  Playback starts from the first track of the CD.
  - If the disc is already set, press SRC/OFF button to display the “CD” screen.
  - For details, refer to Switching the audio operation screen on page 69.

**Reading the screen**

1. **Source icon**
   Shows which source has been selected.

2. **Text display area**
   - **Track number indicated next to “TRK”**
     Shows the number of the track currently playing.
   - **Play time**
     Shows the elapsed playing time within the current track.
   - **Artist name**
     Shows the artist name of the disc currently playing (when available).
   - **Artist name**
     Shows the artist name of the track currently playing (when available).
   - **Disc title**
     Shows the title of the disc currently playing (when available).
   - **Track title**
     Shows the title of the track currently playing (when available).

3. **Repeat/Random/Scan indicator**
   Shows the current playback status.

4. **Touch panel keys**
   - **DISP**
     Changes the display in the text area.
   - **S.Rtrv**
     Sets advanced sound retriever function.
     For details, refer to Using advanced sound retriever on page 81.
   - **Playback and Pause**
   - **Play tracks in random order.**
     For details, refer to Play tracks in random order on the next page.
   - **Repeats playback.**
     For details, refer to Setting a repeat play range on the next page.
   - **Scans tracks of a CD.**
     For details, refer to Scan tracks of a CD on the next page.

5. **Advanced sound retriever indicator**
   For details, refer to Using advanced sound retriever on page 81.

**Operating by hardware buttons**

- **Pressing BAND/ESC button**
  For details, refer to Pressing BAND/ESC button on page 83.

- **Pressing MULTI-CONTROL right**
  Skips to the start of the next track.

- **Pressing and holding MULTI-CONTROL right**
  Performs fast forward.

- **Pressing MULTI-CONTROL left**
  Skips to the start of the current track.
Pressing it twice continuously will skip to the previous track.

**Pressing and holding MULTI-CONTROL left**
Performs fast reverse.
慣れ Fast reverse is canceled when it reaches the beginning of the first track on the disc.

**Pressing the center of MULTI-CONTROL**
The function select screen appears.

**Pressing LIST button**
Shows the list to select a track.
慣れ For details, refer to Selecting a track from the list on this page.

**Selecting a track from the list**
Track title list lets you see the list of track titles on a CD TEXT disc and select one of them to play back.

1 Press LIST button.
The list of track titles appears.
慣れ To return to the previous screen, press BAND/ESC or LIST button.

2 Use MULTI-CONTROL to select the desired track title.

- Pressing MULTI-CONTROL up or down
  Selects the desired track title.

- Turning MULTI-CONTROL enables you to perform the equivalent operation.

- Pressing the center of MULTI-CONTROL
  Plays the selected track.

- Pressing MULTI-CONTROL right enables you to perform the equivalent operation.

### Setting a repeat play range

- Touch repeatedly until the desired repeat range appears in the display.

  - Repeats just the current track.
  - No indicator (disc repeat): Repeats the current disc.

  ※ If you skip a track forward or backward while the repeat play range is set to , the repeat play range changes to disc repeat automatically.

### Play tracks in random order

Tracks in a selected repeat range are played in random order.

- Touch .
  Random play begins.

  - When you turn random play on, appears.
  - To turn random play off, touch again.
  - If you touch while the repeat play range is set to , the repeat play range changes to disc repeat automatically and tracks will be played in random order.

### Scan tracks of a CD

Scan play lets you hear the first 10 seconds of each track on the CD to search for a song.

- Touch .
  Scan play begins.

  - After scanning is finished, normal playback of the tracks will begin again.
  - To turn scan play off, touch again.
  - If you touch while the repeat play range is set to , the repeat play range changes to disc repeat automatically and scanning tracks will begin.
  - If you skip a track forward or backward during scan play, the scan play is automatically canceled.
Playing audio CDs

- If you touch \( \text{ } \) during scan play, the scan play is automatically canceled and playback of the current track will be repeated.
- If you touch \( \text{ } \) during scan play, the scan play is automatically canceled and tracks will be played in random order.

Playback and Pause

- Touch \( \text{ } \). Playback of the current track pauses, and “Pause” is displayed.
  - To turn pause off, touch \( \text{ } \) again.

Using advanced sound retriever

Advanced sound retriever function automatically enhances compressed audio and restores rich sound.

- Touch [S.Rtrv] repeatedly to select the desired setting.
Each touch of [S.Rtrv] changes the settings as follows:
  - \( \text{ } \): Sets to S.Rtrv1.
  - \( \text{ } \): Sets to S.Rtrv2.
  - No indicator: Sets to off.
  - S.Rtrv2 is more effective than S.Rtrv1.
You can play a disc that contains compressed audio files using the built-in drive of the navigation system. This section describes these operations.

- In the following description, the MP3, WMA, AAC, WAV files are collectively referred to as “Compressed audio file”.

- Insert the disc you want to play into disc-loading slot.
  Playback starts from the first file of the ROM.
  - If the disc is already set, press SRC/OFF button to display the “CD” screen.
  - For details, refer to Switching the audio operation screen on page 69.
  - When playing a disc containing a mixture of various media file types, you can switch between media files types to play.
  Press BAND/ESC button to switch between CD (audio data (CD DA)) and ROM (compressed audio file).
  - For details, refer to Pressing BAND/ESC button on the next page.

### Reading the screen

1. **Source icon**
   Shows which source has been selected.

2. **Text display area**
   - **Folder number indicated next to “FLDR”**
     Shows the folder number currently playing.
   - **Track number indicated next to “TRK”**
     Shows the track number currently playing.

3. **Repeat/Random/Scan indicator**
   Shows the current playback status.

4. **File type indicator**
   Shows the type of audio file currently playing.

5. **Touch panel keys**
   - **PLAY/Pause**
     Plays tracks in random order.
   - **S.Rtrv:**
     Sets advanced sound retriever function.
   - **Disp:**
     Changes the display in the text area.
   - **File name**
     Shows the file name currently playing.
   - **Track title**
     Shows the title of the track currently playing.
   - **Artist name**
     Shows the artist name for the current song.
   - **Album title**
     Shows the title of the album for the current song.

For details, refer to Using advanced sound retriever on page 84.

For details, refer to Play tracks in random order on page 84.

For details, refer to Setting a repeat play range on page 84.

For details, refer to Scan folders and tracks on page 84.
Playing music files on ROM

Advanced sound retriever indicator

For details, refer to Using advanced sound retriever on the next page.

Operating by hardware buttons

Pressing BAND/ESC button

Switches between CD (audio data (CD DA)) and ROM (compressed audio file).
- This operation is available only when playing a disc containing both CD DA and compressed audio files.
- If you have switched between CD DA and compressed audio, playback starts at the first track on the disc.

Pressing and holding BAND/ESC button

Playback returns to the root folder.

Pressing MULTI-CONTROL up or down

Selects the previous or next folder and plays the first track on the folder.
- You cannot select a folder that does not have a compressed audio file recorded in it.

Pressing MULTI-CONTROL right

Skips to the start of the next track.

Pressing and holding MULTI-CONTROL right

Performs fast forward.

Pressing MULTI-CONTROL left

Skips to the start of the current track. Pressing it twice continuously will skip to the previous track.

Pressing and holding MULTI-CONTROL left

Performs fast reverse.
- Fast reverse is canceled when it reaches the beginning of the first track on the disc.

Pressing the center of MULTI-CONTROL

The function select screen appears.

Pressing LIST button

Shows the list to select a track.
- For details, refer to Selecting a track from the list on this page.

Selecting a track from the list

The list lets you see the list of file names or folder names on a disc. If you select a folder on the list, you can view its contents. You can play a file on the list by selecting it.

1. Press LIST button.

The list of track titles and folder names appears.
- To return to the previous screen, press BAND/ESC or LIST button.
- If the selected folder does not contain any playable track, the track list is not displayed.

2. Use MULTI-CONTROL to select the desired track title.

- Pressing MULTI-CONTROL up or down Selects the desired track title.
- Turning MULTI-CONTROL enables you to perform the equivalent operation.
- Pressing the center of MULTI-CONTROL When a folder is selected, it displays the content of the lower folder. When a track is selected, it plays the selected track.
- Pressing MULTI-CONTROL right enables you to perform the equivalent operation.
- Pressing and holding the center of MULTI-CONTROL
When a folder is selected, it plays the first track in the selected folder.

- Pressing MULTI-CONTROL left
  When the lower folder is listed, it returns to the upper folder.
  - If the root folder is listed, this operation is not available.
- Pressing and holding MULTI-CONTROL left
  Displays the content of the root folder.
  - If the root folder is listed, this operation is not available.

### Scan folders and tracks
Scan play lets you hear the first 10 seconds of each track. Scan play is performed in the current repeat play range.

- Touch \[ \]
  Scan play begins.
  - After completion of track or folder scanning, normal playback of the tracks will begin again.
  - To turn scan play off, touch \[ \] again.
  - If you touch \[ \] while the repeat play range is set to \[ \], the repeat play range changes to \[ \] automatically and scanning tracks will begin.
  - If you touch \[ \] while the repeat play range is set to disc, scan play is performed for only the first tracks of each folder.
  - If you perform skipping the track forward, backward, or returning to root folder during scan play, the scan play is automatically canceled.
  - If you touch \[ \] during scan play, the scan play is automatically canceled and playback of the current track will be repeated.
  - If you touch \[ \] during scan play, the scan play is automatically canceled and tracks will be played in random order.

### Setting a repeat play range
Touch \[ \] repeatedly until the desired repeat range appears in the display.

- \[ \]: Repeats just the current track.
- \[ \]: Repeats the folder currently playing.
- No indicator (disc repeat): Repeats the current disc.
  - If you perform returning to the root folder while the repeat play range is set to \[ \] or \[ \], the repeat play range changes to disc repeat automatically.
  - If you perform skipping the track forward or backward while the repeat play range is set to \[ \], the repeat play range changes to \[ \] automatically.

### Play tracks in random order
Tracks in a selected repeat range are played in random order.

- Touch \[ \]
  Random play begins.
  - When you turn random play on, \[ \] appears.
  - To turn random play off, touch \[ \] again.
  - If you touch \[ \] while the repeat play range is set to \[ \], the repeat play range changes to \[ \] automatically and tracks will be played in random order.

### Playback and Pause
- Touch \[ \]
  Playback of the current track pauses, and “Pause” is displayed.
  - To turn pause off, touch \[ \] again.

### Using advanced sound retriever
Advanced sound retriever function automatically enhances compressed audio and restores rich sound.
Touch [S.Rtrv] repeatedly to select the desired setting.
Each touch of [S.Rtrv] changes the settings as follows:

- 📀: Sets to S.Rtrv1.
- 📀: Sets to S.Rtrv2
- No indicator: Sets to off.

- S.Rtrv2 is more effective than S.Rtrv1.
Playing music files on USB

Reading the screen

1 Source icon
   Shows which source has been selected.

2 Text display area
   • Folder number indicated next to “FLDR”
     Shows the folder number currently playing.
   • Track number indicated next to “TRK”
     Shows the track number currently playing.
   • Play time
     Shows the elapsed playing time of the current file.
   • Comment
     Shows the comment of the file currently playing (when available).
   • Folder name
     Shows the folder name currently playing.
   • File name
     Shows the file name currently playing.
   • Track title
     Shows the title of the track currently playing.
   • Artist name
     Shows the artist name currently playing (when available).
   • Album title
     Shows the title of the album for the current track (when available).

3 File type indicator
   Shows the type of audio file currently playing.

4 Repeat/Random/Scan indicator
   Shows the current playback status.

5 Touch panel keys
   • DISP:
     Changes the display in the text area.
   • S.Rtrv:
     Sets advanced sound retriever function.
     ➤ For details, refer to Using advanced sound retriever on page 88.
   • Playback and Pause
   • Random:
     Plays files in random order.
     ➤ For details, refer to Playing files in random order on the next page.
   • Repeat:
     Repeats playback.
     ➤ For details, refer to Setting a repeat play range on the next page.
   • Scan:
     Scans folders and files.
     ➤ For details, refer to Scan folders and files on page 88.

6 Advanced sound retriever indicator
   ➤ For details, refer to Using advanced sound retriever on page 88.

Operating by hardware buttons

Pressing and holding BAND/ESC button
Playback returns to the root folder.

Pressing MULTI-CONTROL up or down
Plays the first playable file on the previous or next folder.
   □ The folders where there are no playable files are skipped.

Pressing MULTI-CONTROL right
Skips to the start of the next file.

Pressing and holding MULTI-CONTROL right
Performs fast forward.
Playing music files on USB

Pressing MULTI-CONTROL left
Skips to the start of the current file. Pressing it twice continuously will skip to the previous file.

Pressing and holding MULTI-CONTROL left
Performs fast reverse.
- There is no sound on fast reverse or forward.

Pressing the center of MULTI-CONTROL
The function select screen appears.

Pressing LIST button
Shows the list to select a file.
- For details, refer to Selecting a file from the list on this page.

Selecting a file from the list
The list lets you see the list of file names or folder names on a USB. If you select a folder on the list, you can view its contents. If you select a file on the list, you can play the selected file.

1 Press LIST button.
The list of file and folder names appears.
- To return to the previous screen, press BAND/ESC or LIST button.
- If the selected folder does not contain any file that can be played, the file list is not displayed.

2 Use MULTI-CONTROL to select the desired file name.
- Pressing MULTI-CONTROL up or down selects the desired file name.

- Turning MULTI-CONTROL enables you to perform the equivalent operation.
- Pressing the center of MULTI-CONTROL
  When a folder is selected, it displays the content of the lower folder.
  When a file is selected, it plays the selected file.
  - Pressing MULTI-CONTROL right enables you to perform the equivalent operation.
- Pressing and holding the center of MULTI-CONTROL
  When a folder is selected, it plays the first file in the selected folder.
- Pressing MULTI-CONTROL left
  When the lower folder is listed, it returns to the upper folder.
  - If the root folder is listed, this operation is not available.
- Pressing and holding MULTI-CONTROL left
  When the lower folder is listed, it returns to the root folder.
  - If the root folder is listed, this operation is not available.

Setting a repeat play range
- Touch repeatedly until the desired repeat range appears in the display.
  - Repeats just the current file.
  - Repeats the folder currently playing.
  - No indicator (all repeat):
    Repeats all.
  - If you perform returning to the root folder while the repeat play range is set to or the repeat play range changes to all repeat automatically.

Playing files in random order
Files in a selected repeat range are played in random order.
Switching on random play

When you turn random play on, **Random** appears.

To turn random play off, touch the random play icon again.

If you touch the random play icon while the repeat play range is set to ****, the repeat play range changes to **** automatically and files will be played in random order.

**Scan folders and files**

Scan play lets you hear the first 10 seconds of each file. Scan play is performed in the current repeat play range.

Touch **Scan**.

Scan play begins.

After completion of file or folder scanning, normal playback of the files will begin again.

To turn scan play off, touch the scan play icon again.

If you touch the scan play icon while the repeat play range is set to ****, the repeat play range changes to **** automatically and scanning files will begin.

If you touch the scan play icon while the repeat play range is set to all, scan play is performed for only the first files of each folder.

If you skip a file forward, backward, or return to the root folder during scan play, the scan play is automatically canceled.

If you touch the scan play icon during scan play, the scan play is automatically canceled and playback of the current file will be repeated.

If you touch the scan play icon during scan play, the scan play is automatically canceled and files will be played in random order.

**Playback and Pause**

Touch **Pause**.

Playback of the current file pauses, and “Pause” is displayed.

To turn pause off, touch the pause icon again.

Using advanced sound retriever

Advanced sound retriever function automatically enhances compressed audio and restores rich sound.

Touch [S.Rtrv] repeatedly to select the desired setting.

Each touch of [S.Rtrv] changes the settings as follows:

- **1**: Sets to S.Rtrv1.
- **2**: Sets to S.Rtrv2.
- No indicator: Sets to off.

S.Rtrv2 is more effective than S.Rtrv1.

Playing music files on USB

Chapter 19
Using an iPod

Using the USB interface cable for iPod enables you to connect your iPod to the navigation system.

- A USB interface cable for iPod (CD IU50) (sold separately) is required for connection.
- iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

1 Connect your iPod.
   ➤ For details, refer to Connecting your iPod on page 13.

2 Press SRC/OFF button to display the “iPod” screen.
   ➤ For details, refer to Switching the audio operation screen on page 69.

Reading the screen

1 Source icon
   Shows which source has been selected.

2 Text display area
   - Song number
     Shows the number of the song currently playing and total number of songs in the selected list.
   - Play time
     Shows the elapsed playing time within the current song.
   - Song title (episode)
     Shows the title of the current song. When a podcast is played, the episode is displayed.
   - Artist name

3 Shuffle play indicator
   Appears when shuffle play is activated.

4 Repeat play indicator
   Appears when repeat play is activated.

5 Touch panel keys
   - DISP:
     Changes the display in the text area.
   - S. Rtrv:
     Sets advanced sound retriever function.
     ➤ For details, refer to Using advanced sound retriever on page 91.
   - Ctrl:
     Sets iPod control mode.
     ➤ For details, refer to Operating this navigation system’s iPod function from your iPod on page 91.
   - All:
     Sets shuffle all.
     ➤ For details, refer to Playing all songs in random order (shuffle all) on page 92.
   - Link to Genre:
   - Link to Artist:
   - Link to Album:
     Narrows down a song with the list of songs related to the currently playing song.
     ➤ For details, refer to Playing songs related to the currently playing song on page 92.

6 iPod control mode indicator
   ➤ For details, refer to Operating this navigation system’s iPod function from your iPod on page 91.

7 Advanced sound retriever indicator
   ➤ For details, refer to Using advanced sound retriever on page 91.

Shows the artist name for the current song.

- Album title (podcast title)
  Shows the title of the album for the current song.
  When a podcast is played, the podcast title is displayed.
Operating by hardware buttons

Pressing MULTI-CONTROL right
Skips to the start of the next song.

Pressing and holding MULTI-CONTROL right
Performs fast forward.

Pressing MULTI-CONTROL left
Skips to the start of the current song. Pressing it twice continuously will skip to the previous song.

Pressing and holding MULTI-CONTROL left
Performs fast reverse.

Pressing the center of MULTI-CONTROL
The function select screen appears.

Pressing LIST button
Shows the list to select a song.
✦ For details, refer to Selecting a song from the list on this page.

Selecting a song from the list
Selecting the item on list allows you to search for a song and play it in your iPod.

1 Press LIST button to display the top category menu.
   ✦ To return to the previous screen, press BAND/ESC button.

2 Use MULTI-CONTROL to select a category.
   • Playlists (playlists)

   • Artists (artists)
   • Albums (albums)
   • Songs (songs)
   • Podcasts (podcasts)
   • Genres (genres)
   • Composers (composers)
   • Audiobooks (audiobooks)

   • Pressing MULTI-CONTROL up or down Select the desired item.
     ✦ Turning MULTI-CONTROL enables you to perform the equivalent operation.

   • Pressing the center of MULTI-CONTROL
     When an item is selected, it narrows down the item with the list.
     ✦ Pressing MULTI-CONTROL right enables you to perform the equivalent operation.

   • Pressing and holding the center of MULTI-CONTROL
     When an item is selected, it plays the first song in the selected item.
     ✦ Pressing MULTI-CONTROL right enables you to perform the equivalent operation.

   • Pressing MULTI-CONTROL left
     When the lower tier of items are listed, it returns to the upper tier of items.
     ✦ If the uppermost tier of items are listed, this operation is not available.

   • Pressing and holding MULTI-CONTROL left
     When the lower tier of items are listed, it returns to the uppermost tier of items.
     ✦ If the uppermost tier of items are listed, this operation is not available.

3 Repeat step 2 to find a song you want to listen to.
   ✦ Pressing the center of MULTI-CONTROL
     Plays the selected song (or episode).

Setting a repeat play range

1 Display the “Function Menu” screen.
   ✦ For details, refer to Screen switching over view on page 70.
Using an iPod

2 Turn MULTI-CONTROL to select “Play Mode”.

3 Press the center of MULTI-CONTROL to set.

Each press of MULTI-CONTROL changes the settings as follows:

- “Repeat All”:
  Repeats all songs in the selected list.
- “Repeat One”:
  Repeats just the current song.

Icons below are displayed as the repeat play indicator.
When the setting is “Repeat All”, All appears.
When the setting is “Repeat One”, One appears.

Playback and Pause

1 Display the “Function Menu” screen.
   For details, refer to Screen switching overview on page 70.

2 Turn MULTI-CONTROL to select “Pause”.

3 Press the center of MULTI-CONTROL to set.

4 Press the center of MULTI-CONTROL to switch between “On” and “Off”.

Using advanced sound retriever

Advanced sound retriever function automatically enhances compressed audio and restores rich sound.

- Touch [S. Rtrv] repeatedly to select the desired setting.
  Each touch of [S. Rtrv] changes the settings as follows:
  - [ ]: Sets to S.Rtrv1.
  - [ ]: Sets to S.Rtrv2.
  - No indicator:
    Sets to off.

S.Rtrv2 is more effective than S.Rtrv1.

Operating this navigation system's iPod function from your iPod

This navigation system’s iPod function can be operated from your iPod. Sound can be heard from the car’s speakers, and operation can be conducted from your iPod.

While the control mode is set to iPod ( ), you can operate iPod function from the connected iPod.

This function can be operated with the following iPod models:

- iPod nano second generation
- iPod nano third generation
- iPod nano fourth generation
- iPod classic
- iPod touch first generation
- iPod touch second generation
- iPhone
- iPhone 3G

While this function is in use, even if the ignition key is turned off, the iPod will not be turned off. To turn off power, operate the iPod.

1 Touch Ctrl to switch the control mode.

Each touch of Ctrl changes the settings as follows:

- [ ]:
  This navigation system’s iPod function can be operated from the connected iPod.
- No indicator:
  This navigation system’s iPod function can be operated from this navigation system.
2 When you select 3, operate the connected iPod to select a song and play.
   • Switching the control mode to 4 pauses song playback. Operate the iPod to start playback.
   • Even if the control mode is set to 4, following functions are available from this navigation system.
     - Volume
     - Fast forward/reverse
     - Song up/down
     - Pausing
     - S.Rtrv

Playing songs in random order (shuffle)
This function shuffles songs or albums and plays them in random order.

1 Display the “Function Menu” screen.
   • For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Shuffle Mode”.

3 Press the center of MULTI-CONTROL to set.
Each press of MULTI-CONTROL changes the settings as follows:
   • “Shuffle Off”:
     - Does not shuffle.
   • “Shuffle Songs”:
     - Plays back songs in random order within the selected list.
   • “Shuffle Albums”:
     - Selects an album randomly, and then plays back all songs in that album in order.

Playing all songs in random order (shuffle all)
• Touch All to turn shuffle all on.
All songs on the iPod will play randomly.

To turn shuffle all off, set “Shuffle Mode” in the “Function Menu” screen to off.
• For details, refer to Playing songs in random order (shuffle) on this page.

Playing songs related to the currently playing song
Songs related to the currently playing song are played. You can play songs of the following lists.
• Album list of currently playing genre
• Album list of currently playing artist
• Song list of currently playing album
• Depending on the number of files in the iPod, there may be a delay when displaying a list.

• Touch [Link to Genre], [Link to Artist], or [Link to Album] to select a search mode.
   • Link to Genre:
     - Plays the album of currently playing genre.
   • Link to Artist:
     - Plays the album of currently playing artist.
   • Link to Album:
     - Plays the song of currently playing album.

Searching flashes while searching the list and then the playback of the list starts.
• Operations below turn the link play mode off.
  - Pressing BAND/ESC or LIST button
  - Touching panel keys
  - Pressing MULTI-CONTROL
• If the related albums or songs are not found, Not Found is displayed.

Searching for applicable items alphabetically
Using the search control displays the page which includes the first applicable option.
• This function is available for the alphabetical list only.
1 Press LIST button to display the top category menu.
   ✷ To return to the previous screen, press BAND/ESC button.

2 Turn MULTI-CONTROL to display the desired category.
   • Playlists (playlists)
   • Artists (artists)
   • Albums (albums)
   • Songs (songs)
   • Podcasts (podcasts)
   • Genres (genres)
   • Composers (composers)
   • Audiobooks (audiobooks)

3 Press the center of MULTI-CONTROL to set.
   ✷ Pressing MULTI-CONTROL right enables you to perform the equivalent operation.
   ✷ To return to the previous screen, press MULTI-CONTROL left.

4 Press LIST button to change the search mode to ABC search.

5 Turn MULTI-CONTROL to select the desired character.

6 Press the center of MULTI-CONTROL to display the alphabetical list.
   ✷ An article listed below and space at the beginning of the artist name will be ignored and the next character will be taken into account for searching.
     “A” or “a”
     “AN”, “An”, or “an”
     “THE”, “The”, or “the”

   ✷ If alphabet search is aborted, Not Found is displayed.

7 On the song (or episode) list, turn MULTI-CONTROL to select the song you want to play.

8 Press the center of MULTI-CONTROL to set.

Setting the audiobook play speed

While listening to an audiobook on iPod, playback speed can be changed.

1 Display the “Function Menu” screen.
   ✷ For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Audiobooks”.

3 Press the center of MULTI-CONTROL repeatedly until the desired setting appears in the display.

   Each press of MULTI-CONTROL changes the settings as follows:
   • “Normal”:
     Playback in normal speed.
   • “Slower”:
     Playback slower than normal speed.
   • “Faster”:
     Playback faster than normal speed.
Using the XM tuner

You can use the navigation system to control an XM satellite digital tuner, which is sold separately. For details concerning operation, refer to the XM tuner’s operation manuals. This section provides information on XM operations with the navigation system which differs from that described in the XM tuner’s operation manual.

Reading the screen

Channel mode

1. Source icon
   Shows which source has been selected.

2. Text display area
   - Band
     Shows the XM band that has been selected.
   - Channel number indicated next to “CH”
     Shows the XM channel number the tuner is currently tuned to.
   - Preset number indicated next to “P.CH”
     Shows what preset item has been selected.
   - Detail information
     Shows the detailed information of the broadcast channel currently being received.
   - Artist name
     Shows the artist name for the current song.
   - Song title
     Shows the title of the current song and program.
   - Category name
     Shows the category of broadcast channel.

3. XM channel select mode indicator
   Shows what channel select mode has been selected. You can select a channel from all channels in Channel mode, and select a channel from selected category in Category mode.
   ➤ For details, refer to Switching the XM channel select mode on the next page.

4. Touch panel keys
   - to
     Recalls channels from the preset.
     ➤ For details, refer to Storing and recalling broadcast stations on the next page.
   - DISP
     Changes the display in the text area.
   - SAT
     Switching the XM channel select mode.
     ➤ For details, refer to Switching the XM channel select mode on the next page.

Category mode

1. Source icon
   Shows which source has been selected.

2. Text display area
   - Band
     Shows the XM band that has been selected.
   - Channel number indicated next to “CH”
     Shows the XM channel number the tuner is currently tuned to.
   - Preset number indicated next to “P.CH”
     Shows what preset item has been selected.
   - Detail information
     Shows the detailed information of the broadcast channel currently being received.
   - Artist name
     Shows the artist name for the current song.
   - Song title
     Shows the title of the current song and program.
   - Category name
     Shows the category of broadcast channel.

3. XM channel select mode indicator
   Shows what channel select mode has been selected. You can select a channel from all channels in Channel mode, and select a channel from selected category in Category mode.
   ➤ For details, refer to Switching the XM channel select mode on the next page.

4. Touch panel keys
   - to
     Recalls channels from the preset.
     ➤ For details, refer to Storing and recalling broadcast stations on the next page.
   - DISP
     Changes the display in the text area.
   - SAT
     Switching the XM channel select mode.
     ➤ For details, refer to Switching the XM channel select mode on the next page.
Operating by hardware buttons

Pressing BAND/ESC button
Band can be selected from among XM 1, XM 2, or XM 3. This is useful for switching the preset item.

Pressing MULTI-CONTROL up or down
During Channel mode:
You can recall radio stations assigned to preset tuning keys P1 to P6.
During Category mode:
The categories move up or down one at a time.

Pressing MULTI-CONTROL left or right
During Channel mode:
The channels move up or down one at a time.
During Category mode:
The channels move up or down one at a time within a selected category.

Pressing and holding MULTI-CONTROL left or right
During Channel mode:
You can skip the broadcasting channels.
During Category mode:
You can skip the broadcasting channels within a selected category.

Pressing the center of MULTI-CONTROL
The function select screen appears.

Storing and recalling broadcast stations
With a touch of any of the preset tuning keys (P1 to P6), you can easily store up to six broadcast channels for later recall (also with the touch of a key).

1. Select the channel that you want to store in memory.

2. Keep touching a preset tuning key P1 to P6 until the XM preset number (e.g., P.CH1) stops flashing.
The selected station has been stored in memory.
- Up to 18 stations, 6 for each of three XM bands can be stored in memory.

3. Touch the same preset tuning key P1 to P6.
The stations are recalled from memory.
- You can also press MULTI-CONTROL up or down to recall radio stations assigned to preset tuning keys P1 to P6.

Switching the XM channel select mode
You have two methods for selecting a channel: by number and by category. When selecting by number, channels in any category can be selected. Select by category to narrow your search down to only channels in a particular category.

- Touch repeatedly to set the desired channel select mode.
It changes the settings as follows:

  - Channel mode
You can select a channel from all channels when you operate this function.

  - Category mode
You can select a channel within a selected category that you operate this function.
You can use the navigation system to control a Pioneer Sirius satellite digital tuner, which is sold separately.

For details concerning operation, refer to the SIRIUS tuner’s operation manuals. This section provides information on SIRIUS operations with navigation system which differs from that described in the SIRIUS tuner’s operation manual.

When you use the SiriusConnect universal tuner (sold separately) with this navigation system, Pioneer SIRIUS BUS INTERFACE is required. For details concerning operation, refer to the owner’s manual of Pioneer SIRIUS BUS INTERFACE and SiriusConnect universal tuner.

**Reading the screen**

**Channel mode**

1. **Source icon**
   - Shows which source has been selected.

2. **Text display area**
   - **Band**
     - Shows the SIRIUS band that has been selected.
   - **Channel number indicated next to “CH”**
     - Shows the SIRIUS channel number that the tuner is tuned to.
   - **Preset number indicated next to “P.CH”**
     - Shows what preset item has been selected.
   - **Play time**
     - Shows the elapsed playing time within the stored broadcast.
   - **Channel name**
     - Shows the channel name of broadcast channel.
   - **Category name**
     - Shows the category of broadcast channel.
   - **Artist name**
     - Shows the artist name for the current song.
   - **Song title and program title**
     - Shows the title of the current song and program.
   - **Composer name indicator**
     - Shows the composer name of the song currently playing.

3. **SIRIUS channel select mode indicator**
   - Shows what channel select mode has been selected. You can select a channel from all channels in **Channel mode**, and select a channel from the selected category in **Category mode**.

4. **Instant Replay** mode indicator
   - Shows when the “Instant Replay” mode is on.
   - To cancel the “Instant Replay” mode, press **BAND/ESC** button.

5. **Category mode**

   - **Source icon**
Using the SIRIUS tuner

Summary:
- For details, refer to Using the “Instant Replay” function on the next page.
- Touch panel keys
  - 5 Touch panel keys
  - For details, refer to Storing and recalling broadcast stations on this page.
- Playback and Pause
  - For details, refer to Using the “Instant Replay” function on the next page.
- Changing the display in the text area.
  - For details, refer to Switching the SIRIUS channel select mode on this page.

Operating by hardware buttons

Pressing BAND/ESC button
Band can be selected from among SR1, SR2, or SR3. This is useful for switching the preset item.

Pressing MULTI-CONTROL up or down
During Channel mode:
You can recall radio stations assigned to preset tuning keys P1 to P6.
During Category mode:
The categories move up or down one at a time.

Pressing MULTI-CONTROL left or right
During Channel mode:
The channels move up or down one at a time.
During Category mode:
The channels move up or down one at a time within a selected category.

Pressing and holding MULTI-CONTROL left or right
You can skip the broadcasting channels.

Pressing the center of MULTI-CONTROL
The function select screen appears.

Storing and recalling broadcast stations

With a touch of any of the preset tuning keys (P1 to P6), you can easily store up to six broadcast channels for later recall (also with the touch of a key).

1 Select the channel that you want to store in memory.

2 Keep touching a preset tuning key P1 to P6 until the SIRIUS preset number (e.g., PCH1) stops flashing.
The selected station has been stored in memory.

3 Touch the same preset tuning key P1 to P6.
The station is recalled from memory.
You can also press MULTI-CONTROL up or down to recall radio stations assigned to preset tuning keys P1 to P6.

Switching the SIRIUS channel select mode

You have two methods for selecting a channel: by number and by category. When selecting by number, channels in any category can be selected. Select by category to narrow your search down to only channels in a particular category.

- Touch repeatedly to set the desired channel select mode.
It changes the settings as follows:
Using the SIRIUS tuner

Using the “Instant Replay” function

The “Instant Replay” function allows you to replay the stored broadcast on the SIRIUS tuner (if the tuner capable for this function). As soon as you tune to a channel, the SIRIUS tuner automatically begins storing the broadcast. It can store approximately up to 44 minutes previous (depending on the selected channel and the memory capacity of connected tuner).

1 Touch and hold on the SIRIUS screen to activate the “Instant Replay” mode.
   - It begins replaying the stored broadcast on the SIRIUS tuner.

2 Use MULTI-CONTROL or touch panel keys on the screen for “Instant Replay”.
   - Pressing BAND/ESC button Deactivates the “Instant Replay” mode.
   - Pressing MULTI-CONTROL right Forwards play to the next song or program
   - Pressing and holding MULTI-CONTROL right Performs fast forward.
   - Pressing MULTI-CONTROL left Return to the start of the current song or program. Pressing again will skip back to the previous song or program.
   - Pressing and holding MULTI-CONTROL left Performs fast reverse.
   - Touching Switches between playback and pause.

   - During “Instant Replay” mode, each touch of [ ] changes the display information as follows:
     Time position Channel number Channel name Channel category Artist name/feature Song/program title Composer
   - You cannot replay the broadcast prior to the beginning of stored data.

Using the Game Alert function

Selecting teams for Game Alert

This navigation system can alert you when games involving your favorite sports teams are about to start. To use this function you need to store the teams you want to follow in advance.

1 Display the “Function Menu” screen.
   - For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Team Setting”.

3 Press MULTI-CONTROL left or right to select a desired league.
   League names are switched in the display.

4 Press the center of MULTI-CONTROL to store the selected league in memory.
   The game alert function will start on that league.
   - To turn the Game Alert off of the selected league, press the center of MULTI-CONTROL again.

5 Press MULTI-CONTROL up or down to select a desired team.
   Teams in the selected category are switched in the display.
6 Press the center of MULTI-CONTROL to store the selected team in memory. The game alert function will start on that team.
   - To turn the Game Alert off of the selected team, press the center of MULTI-CONTROL again.

7 Repeat these steps for selecting other teams.

### Switching the Game Alert on or off

Once you made team selections, you need to turn the Game Alert function on.

1 Display the “Function Menu” screen.
   - For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Game Alert”.

3 Press the center of MULTI-CONTROL to switch between “On” and “Off”.

### When a game involving one of your teams is broadcast

When a game of the selected team is about to start (or is currently playing) on a different station or when the power of this navigation system turns on, an alert is displayed. Press and hold the center of MULTI-CONTROL to switch to that station, and you can listen to that game.

- If you do not operate the function within about 10 seconds, the display is automatically returned.
- To cancel the alert, press BAND/ESC button.
- Alerts may not be provided depending on the status of the navigation system.

### Displaying Game Information

If games of your selected teams are currently playing, you can display information of the games and tune to the broadcast channel.

- The game information function is available when teams and leagues are registered while the “Game Alert” setting is “On”.

1 Display the “Function Menu” screen.
   - For details, refer to Screen switching over view on page 70.

2 Turn MULTI-CONTROL to display “Game Info”.

3 Press MULTI-CONTROL up or down to select a game.
   - The game score will be updated automatically.

4 Press the center of MULTI-CONTROL to switch to that station to listen to the game.
   - If you have not made any team selections, a message appears.
   - When no games involving your favorite teams are currently being played, a message appears.
The term “external unit” refers to future Pioneer devices that are not currently planned for, or to devices that allow control of basic functions although they are not fully controlled by the navigation system. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them as external unit 1 or external unit 2. For details of the connection method, refer to “Installation Manual”. For details concerning operation, refer to the external unit’s operation manual. This section provides information on external unit operations with the navigation system that differ from those described in the external unit’s operation manual.

Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

Operating by hardware buttons

Pressing BAND/ESC button
You can send a band command to the external unit.

Pressing MULTI-CONTROL up, down, left or right
You can operate the external unit.

Pressing the center of MULTI-CONTROL
The function select screen appears.

Switching between automatic and manual function

1 Display the “Function Menu” screen.
   For details, refer to Screen switching overview on page 70.

2 Turn MULTI-CONTROL until “Auto/Manual” appears in the display.

3 Pressing the center of MULTI-CONTROL switches between “Auto” and “Manual”.
   Operating commands set for Auto and Manual operations vary depending on the external unit connected.

Reading the screen

1 Source icon
   Shows which source has been selected.

2 External unit indicator
   Displays the information that is sent by connected external units.

3 Auto/Manual mode indicator
   Shows the current mode.

4 Touch panel keys
   The external unit can be operated by transmitting the operating commands set to 1 key 6 key.
operate the external unit by using “function1” — “function4”

the external unit can be operated by transmitting the operating commands set to function1 function4.

1 display the “function menu” screen.
   ✪ for details, refer to screen switching over view on page 70.

2 turn multi-control until the desired setting appears in the display.

3 press the center of multi-control to set.
   □ the operating commands set to function1 function4 vary depending on the external unit.
   □ some functions may not be used until you touch and hold the key. ✪
Using the AUX source

A stereo mini plug cable lets you connect your navigation system to auxiliary equipment. For more details, refer to the stereo mini plug cable owner’s manual.

Reading the screen

1 Source icon
   Shows which source has been selected.

Switching the auxiliary setting

1 Turn MULTI-CONTROL to select “AUX” in the “Initial Setting” screen.
   ➲ For details, refer to Displaying the “Initial Setting” screen on page 104.

2 Press the center of MULTI-CONTROL to turn “AUX” on.
   ➲ To turn AUX off, press MULTI-CONTROL again.

Selecting “AUX” as the source

- Press SRC/OFF button to display the “AUX” screen.
  ➲ For details, refer to Switching the audio operation screen on page 69.
Press SRC/OFF and hold until the audio source turns off.
- For details, refer to Switching the audio operation screen on page 69.
- To return to the display of each source, press SRC/OFF button.
Using the initial settings, you can customize various system settings to achieve optimal performance from this navigation system.

### Displaying the “Initial Setting” screen

To customize the initial settings, display the “Initial Setting” screen.

1. Press SRC/OFF and hold until the audio source turns off.
   - For details, refer to Switching the audio operation screen on page 69.

2. Press the center of MULTI-CONTROL and hold until the initial setting screen appears in the display.

   ![Initial Setting Screen]

   - **Screen title**
   - **Setting item**
   - **Setting value**

### Setting the illumination color

The illumination color can be selected from 10 different colors. Furthermore, the illumination color can switched between these 10 colors in order.

1. Display the “Initial Setting” screen.
   - For details, refer to Displaying the “Initial Setting” screen on this page.

2. Turn MULTI-CONTROL to select “RGB Illumination”.

3. Press MULTI-CONTROL left or right to select the desired color.
   - **White** (white)
   - **Light Green** (light green)
   - **Green** (green)
   - **Light Blue** (light blue)
   - **Blue** (blue)
   - **Yellow** (yellow)
   - **Amber** (amber)
   - **Red** (red)
   - **Scan** (scan)
   - **Custom** (custom)
   - “Scan”: Shifts between the eight default colors in sequence gradually.
   - “Custom”: Sets your created color which is installed from SD as the illumination color.

### Switching the auxiliary setting

It is possible to use auxiliary equipment with the navigation system as the one of sources. Activate the auxiliary setting when using auxiliary equipment connected to the navigation system.

1. Display the “Initial Setting” screen.
   - For details, refer to Displaying the “Initial Setting” screen on this page.

2. Turn MULTI-CONTROL to select “AUX”.

3. Press the center of MULTI-CONTROL to switch between “On” and “Off”.

### Setting the rear output and subwoofer controller

The navigation system’s rear output can be used for a full range speaker or subwoofer connection. If you switch S/W Control to Rear SP:S/W, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp. Initially, the navigation system is set for a rear full range speaker connection (Rear SP:F.Range).
Customizing the initial settings

1 Display the “Initial Setting” screen.
   For details, refer to Displaying the “Initial Setting” screen on the previous page.

2 Turn MULTI-CONTROL to select “S/W Control”.

3 Press the center of MULTI-CONTROL to switch between “Rear SP:F.Range” and “Rear SP:S/W”.
   When no subwoofer is connected to the rear output, select Rear SP:F.Range.
   When a subwoofer is connected to the rear output, select Rear SP:S/W.
   □ Both rear speaker leads output and RCA rear output are switched simultaneously in this setting. (When you use the product without RCA rear output, this setting only applies to the rear speaker leads.)

Setting the rear output

1 Display the “Initial Setting” screen.
   For details, refer to Displaying the “Initial Setting” screen on the previous page.

2 Turn MULTI-CONTROL to select “Pre-out”.

3 Press the center of MULTI-CONTROL to switch between “Subwoofer” and “Rear”.

Switching the sound muting/attenuation

You can select the muting method when the voice guidance is output.
□ When you use a cellular phone connected with Bluetooth technology (dialing, talking, incoming call), the audio source volume is always muted independently of this setting.

1 Display the “Initial Setting” screen.
   For details, refer to Displaying the “Initial Setting” screen on the previous page.

2 Turn MULTI-CONTROL to select “Guidance”.

3 Press the center of MULTI-CONTROL repeatedly until the desired setting appears in the display.
   Each press of MULTI-CONTROL changes the settings as follows:
   • “ATT”: The audio source is attenuated automatically when the voice guidance is output.
   • “Mute”: The audio source is muted automatically when the voice guidance is output.
   • “Normal”: The audio source volume does not change.
   □ Operation returns to normal when the corresponding action is ended.

□ Operation returns to normal when the corresponding action is ended.
Displaying the “Audio Menu” screen

To customize the audio settings, display the “Audio Menu” screen.

1 Press MULTI-CONTROL to display the function select screen.
   ➤ For details, refer to Screen switching overview on page 70.

2 Turn MULTI-CONTROL to select “Audio Menu”.

3 Press the center of MULTI-CONTROL. The “Audio Menu” screen appears.

   ① Source icon
      Shows which source has been selected.
   ② Screen title
   ③ Setting item
   ④ Setting value

Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Display the “Audio Menu” screen.
   ➤ For details, refer to Displaying the “Audio Menu” screen on this page.

2 Turn MULTI-CONTROL to select “Fader”.
   ➤ If the balance setting has been previously adjusted, Balance will be displayed.

3 Press MULTI-CONTROL up or down to adjust front/rear speaker balance.
   Each time MULTI-CONTROL is pressed up or down, the front/rear speaker balance moves towards the front or rear.
   “Front15" to “Rear15” is displayed as the front/rear speaker balance moves from front to rear.
   Setting “Front” and “Rear” to “0” is correct when using a two speaker system.
   When “Rear SP:S/W” is selected in “S/W Control”, front/rear speaker balance cannot be adjusted.
   ➤ Refer to Setting the rear output on the previous page.

4 Press MULTI-CONTROL left or right to adjust left/right speaker balance.
   Each time MULTI-CONTROL is pressed left or right, the left/right speaker balance moves to wards the left or right.
   “Left 15” to “Right 15” is displayed as the left/right speaker balance moves from left to right.

Using the equalizer

The equalizer lets you adjust equalization to match vehicle interior acoustic characteristics as desired.

Recalling equalizer curves

There are six stored equalizer curves that you can easily recall at any time. Here is a list of the equalizer curves:

<table>
<thead>
<tr>
<th>Equalizer curve</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuperBass</td>
<td>A curve in which only low pitched sound is boosted.</td>
</tr>
<tr>
<td>Powerful</td>
<td>A curve in which low pitched and high pitched sounds are boosted.</td>
</tr>
<tr>
<td>Natural</td>
<td>A curve in which low pitched and high pitched sounds are slightly boosted.</td>
</tr>
</tbody>
</table>
Audio adjustments

Vocal
Vocal is a curve in which the midrange, which is the human vocal range, is boosted.

Flat
Flat is a flat curve in which nothing is boosted.

Custom
Custom is an adjusted equalizer curve that you create. A separate custom curve can be created for each source.

1 Display the “Audio Menu” screen.
   ➪ For details, refer to Displaying the “Audio Menu” screen on the previous page.

2 Turn MULTI-CONTROL to select “Preset Equalizer”.

3 Press MULTI-CONTROL left or right to select an equalizer curve.

Adjusting the equalizer curves
You can adjust the currently selected equalizer curve setting as desired. Adjustments can be made with a 3 band parametric equalizer.

• Band:
  You can select the equalizer band.

• Frequency:
  You can select which frequency to set as the center frequency.

• Level:
  You can select the decibel (dB) level of the selected EQ.

• Q:
  You can select the details of the curve characteristics. (The following figure shows the characteristic image.)

1N  2N
1W  2W

4 Press MULTI-CONTROL up or down to adjust the level of the equalizer band.
Each time MULTI-CONTROL is pressed up or down, the level of the equalization band increases or decreases. “+6” to “-6” is displayed as the level is increased or decreased.

5 Turn MULTI-CONTROL to select “P. EQ Setting2”.

6 Press MULTI-CONTROL left or right to select the desired frequency.
Press MULTI-CONTROL left or right until the desired frequency appears in the display.
Low: 40 Hz  80 Hz  100 Hz  160 Hz
Mid: 200 Hz  500 Hz  1 kHz  2 kHz
High: 3 kHz  8 kHz  10 kHz  12 kHz

7 Press MULTI-CONTROL up or down to select the desired Q factor.
Press MULTI-CONTROL up or down until the desired Q factor appears in the display.
2W  1W  1N  2N

Adjusting loudness
Loudness compensates for deficiencies in the low and high sound ranges at low volume.

1 Display the “Audio Menu” screen.
   ➪ For details, refer to Displaying the “Audio Menu” screen on the previous page.
2 Turn MULTI-CONTROL to select “Loudness”.

3 Press the center of MULTI-CONTROL to turn loudness on.
Loudness level (e.g., Mid) appears in the display.
- To turn loudness off, press MULTI-CONTROL again.

4 Press MULTI-CONTROL left or right to select a desired level.
Each time MULTI-CONTROL is pressed left or right, level is selected in the following order:
Low  Mid  High

Using subwoofer output
The navigation system is equipped with a subwoofer output mechanism, which can be turned on or off.

1 Display the “Audio Menu” screen.
- For details, refer to Displaying the “Audio Menu” screen on page 106.

2 Turn MULTI-CONTROL to select “Sub-Woofer1”.

3 Press the center of MULTI-CONTROL to turn subwoofer output on.
- To turn subwoofer output off, press MULTI-CONTROL again.

4 Press MULTI-CONTROL left or right to set the phase of subwoofer output.
It changes the settings as follows:
- “Reverse”: Sets to reverse phase.
- “Normal”: Sets to normal phase.

5 Turn MULTI-CONTROL to select “Sub-Woofer2”.

6 Press MULTI-CONTROL left or right to select cut-off frequency.
Each time MULTI-CONTROL is pressed left or right, frequencies are selected in the following order:
50 Hz  63 Hz  80 Hz  100 Hz  125 Hz

7 Press MULTI-CONTROL up or down to adjust the output level of the subwoofer.
Each time MULTI-CONTROL is pressed up or down, subwoofer level increases or decreases.
“+6” to “-24” is displayed as the level is increased or decreased.

Using the high pass filter
When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, activate HPF (high pass filter). Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Display the “Audio Menu” screen.
- For details, refer to Displaying the “Audio Menu” screen on page 106.

2 Turn MULTI-CONTROL to select “HPF”.

3 Press the center of MULTI-CONTROL to turn high pass filter on.
- To turn high pass filter off, press MULTI-CONTROL again.

4 Press MULTI-CONTROL left or right to select cut-off frequency.
Each time MULTI-CONTROL is pressed left or right, frequencies are selected in the following order:
50 Hz  63 Hz  80 Hz  100 Hz  125 Hz
Adjusting source levels

SLA (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

Settings are based on the FM tuner volume level, which remains unchanged.

1. Compare the FM tuner volume level with the level of the source you wish to adjust.

2. Display the “Audio Menu” screen.
   - For details, refer to Displaying the “Audio Menu” screen on page 106.

3. Turn MULTI-CONTROL to select “SLA”.

4. Press MULTI-CONTROL up or down to adjust the source volume.
   Each time MULTI-CONTROL is pressed up or down, source volume increases or decreases.
   “SLA +4” to “SLA -4” is displayed as the source volume is increased or decreased.

Enhancing bass (Bass)

The “Bass” enhances bass sounds, which can be muted by driving noise.

1. Display the “Audio Menu” screen.
   - For details, refer to Displaying the “Audio Menu” screen on page 106.

2. Turn MULTI-CONTROL to select “Bass”.

3. Press MULTI-CONTROL up or down to select a desired level.
   “0” to “+6” is displayed as the level is increased or decreased.
Returning the Navigation System to the Default or Factory Settings

You can return settings or recorded contents to the default or factory settings. There are four methods to clear user data, and the situations and the cleared contents are different for each method. For the contents that are cleared in each method, see the list presented later.

- Some data remains. Read Setting items to be deleted before you operate this function.

- **Method 1: Press the RESET button**
  Pressing the RESET button clears almost all settings of the audio function.
  ➤ For details, refer to Resetting the micro processor on page 8.

- **Method 2: Touch [F. Reset]**
  ➤ For details, refer to Restoring the default setting on page 64.

- **Method 3: Touch [Reset] on the “Date/Setting Clear” screen**

- **Method 4: Touch [Clear user information] on the “Date/Setting Clear” screen**
  Clears some items in the “Settings Menu” and “Phone” menu.
  ➤ For details, refer to Returning the navigation system to the initial state on page 64.
Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table return to the default or factory settings. Any items not listed below will be retained. However, if you carry out [Clear user information], all the settings related to the navigation function including the items not listed below are deleted.

- : The setting will be retained.
- ✓: The setting will be cleared and returned to the default or factory settings.

<table>
<thead>
<tr>
<th>Navigation functions</th>
<th>Method 1</th>
<th>Method 2</th>
<th>Method 3</th>
<th>Method 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map function</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>View mode and scale setting on the map</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Direction of the map</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Last cursor position on the map screen</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Current route</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance state of the current route</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Vehicle position information</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Route conditions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>[Navigation Menu]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point registered in [Favorites]</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sorting order selected in [Favorites]</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>[History]</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>[Gas Mileage]</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>[Settings] menu</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Sound]</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>[UI Language], [Voice Language]</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>[Time]</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>[Set Home]</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>[Demo Mode]</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>[Brightness]</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other settings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
## Returning the Navigation System to the Default or Factory Settings

### Phone Menu menu

| [Contacts] | ✓ | ✓ | ✓ |
| [Volume] | ✓ | ✓ | ✓ |
| [Settings] | ✓ | ✓ | ✓ |
| Call histories | ✓ | ✓ | ✓ |

### Audio functions

<table>
<thead>
<tr>
<th>Audio functions</th>
<th>Method 1</th>
<th>Method 2</th>
<th>Method 3</th>
<th>Method 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Settings</td>
<td>All settings</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Menu</td>
<td>All settings</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Function Menu of each source</td>
<td>All settings</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. While this list is not comprehensive, it should answer your most common problems. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

## Problems with the navigation screen

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power doesn’t turn on. The navigation system doesn’t operate.</td>
<td>Leads and connectors are incorrectly connected.</td>
<td>Confirm once more that all connections are correct.</td>
</tr>
<tr>
<td></td>
<td>The fuse (in the vehicle power charger) is blown.</td>
<td>Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rating.</td>
</tr>
<tr>
<td></td>
<td>Noise and other factors are causing the built in microprocessor to operate incorrectly.</td>
<td>Press the <strong>RESET</strong> button. (Page 8)</td>
</tr>
<tr>
<td>The detachable device does not turn on.</td>
<td>The battery of the detachable device is run down.</td>
<td>Charge the battery. (Page 17)</td>
</tr>
<tr>
<td>When you use the detachable device removed from the main unit, the battery runs out more rapidly than before.</td>
<td>There’s a possibility a new battery is needed.</td>
<td>Contact the nearest authorized Pioneer Service Station.</td>
</tr>
</tbody>
</table>
| You cannot position your vehicle on the map without a significant positioning error. | Signal quality from the GPS satellites is poor causing reduced positioning accuracy. Such a loss of signal quality may occur for the following reasons:  
• This product is in an unsuitable location.  
• Obstacles are blocking signals from the satellites.  
• The position of satellites relative to your vehicle is inadequate.  
• Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)  
• If a cellular phone is used near the GPS module, GPS reception may be lost temporarily. | Check the GPS signal reception, the position of this product and the topside clearance if necessary, or continue driving until reception improves. |
| You cannot position your vehicle on the map without a significant positioning error. | Something covers this product’s topside. | Do not cover this product with spray paint or vehicle wax, because this may block the reception of GPS signals. |
| | The navigation system may not be mounted securely in your vehicle. | Check that the navigation system is securely mounted and, if necessary, consult the dealer that installed the system. |
The map color does not switch automatically between daytime and nighttime.

[Day/Night Display] is set to [Day]. Check [Day/Night Display] setting and make sure [Automatic] is selected. (Page 27)

The screen is too bright. An improper value has been set on ‘Brightness’. Check the settings.

The display is very dim. An improper value has been set on ‘Brightness’. Check the settings.

No sounds of audio source are produced. The volume level will not rise. The volume level is low. Adjust the volume level.

A speaker lead is disconnected. Check the connection.

The volume of navigation guidance and beeps cannot be adjusted. Try to adjust them with MULTI-CONTROL. Turn the volume up or down using [Sound] on the ‘Settings Menu’ screen. (Page 59)

The person on the other end of the phone call cannot hear the conversation due to an echo. The voice from the person on the other end of the phone call is output from the speakers and then picked up by the microphone again, creating an echo. Use the following methods to reduce the echo:
- Lower the volume on the receiver
- Have both parties pause slightly before speaking

There’s no picture. The backlight of the LCD panel is turned off. Turn on the backlight. (Page 64)

There is no response when the touch panel key are touched, or a different key responds. The touch panel keys deviate from the actual positions that respond to your touch for some reason. Perform touch panel calibration. (Page 62)

**Problems in the audio screen**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD playback is not possible.</td>
<td>The disc is inserted upside down.</td>
<td>Insert the disc with the label upward.</td>
</tr>
<tr>
<td></td>
<td>The disc is dirty.</td>
<td>Clean the disc.</td>
</tr>
<tr>
<td></td>
<td>The disc is cracked or otherwise damaged.</td>
<td>Insert a normal, round disc.</td>
</tr>
<tr>
<td></td>
<td>The files on the disc are an irregular file format.</td>
<td>Check the file format.</td>
</tr>
<tr>
<td></td>
<td>The disc format cannot be played back.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td></td>
<td>The loaded disc is a type this system cannot play.</td>
<td>Check what type of disc it is. (For more cautions about handling each type of media, refer to Page 124.)</td>
</tr>
<tr>
<td>The audio skips.</td>
<td>The navigation system is not firmly secured.</td>
<td>Secure the navigation system firmly.</td>
</tr>
<tr>
<td>No sounds are produced. The volume level will not rise.</td>
<td>Cables are not connected correctly.</td>
<td>Connect the cables correctly.</td>
</tr>
<tr>
<td></td>
<td>The system is paused or performing, fast reverse or forward during the audio playback.</td>
<td>There is no sound on fast reverse or forward.</td>
</tr>
</tbody>
</table>
The iPod is frozen.

- Reconnect the iPod with the USB interface cable for iPod.
- Update the iPod software version.

An error has occurred.

- Reconnect the iPod with the USB interface cable for iPod.
- Park your vehicle in a safe place, and apply the parking brake. Turn the power off and then turn the power on. If this does not solve the problem, press RESET button on the navigation system.
- Update the iPod software version.

### Problems with the phone screen

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialing is not possible because the touch panel keys for dialing are inactive.</td>
<td>Your phone is out of range for service.</td>
<td>Retry after re-entering the range for service.</td>
</tr>
<tr>
<td></td>
<td>The connection between the cellular phone and the navigation system cannot be established now.</td>
<td>Perform the connection process.</td>
</tr>
</tbody>
</table>

**If the screen becomes frozen...**

Park your vehicle in a safe place, and apply the parking brake. Press RESET button on the navigation system.
Messages and how to react to them

The following messages may be displayed by your navigation system. Refer to the table below to identify the problem, then take the suggested corrective action. There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Messages for navigation functions

<table>
<thead>
<tr>
<th>Message</th>
<th>When</th>
<th>What to do (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing to start up system... please wait</td>
<td>When the navigation system starts, the message is displayed if the remaining battery power of the detachable device is low.</td>
<td>• Wait until the message &quot;Ready to start up system.&quot; appears. After the message is displayed, the navigation system restarts. • Consult the nearest authorized Pioneer service station if this message persists.</td>
</tr>
<tr>
<td>Dataloading failed.</td>
<td>You may have transferred the data from your cellular phone in a format cannot be received by the navigation system.</td>
<td>• Select a suitable item and format, then retry. (Page 58) • Connect your cellular phone with another method again and retry. (Page 46)</td>
</tr>
</tbody>
</table>
Messages for audio functions

When problems occur in the audio source, a message may appear on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest Pioneer Service Center.

### Built-in CD drive

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error-11, 12, 17, 30</td>
<td>Dirty</td>
<td>Clean the disc.</td>
</tr>
<tr>
<td></td>
<td>Scratched disc</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>Error10, 11, 12, 15, 17, 30, A0, CHK CDCORE</td>
<td>Electrical or mechanical</td>
<td>Turn the ignition switch OFF and back ON, or switch to a different source, then back to the CD player.</td>
</tr>
<tr>
<td>Error-15</td>
<td>The inserted disc does not contain any data.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>Error-23</td>
<td>The CD format cannot be played back.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>Error-22</td>
<td>The inserted disc does not contain any files that can be played back.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>No Audio</td>
<td>The inserted disc does not contain any files that can be played back.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>TRK Skipped</td>
<td>The inserted disc contains files that are protected by DRM.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>Protect</td>
<td>All the files on the inserted disc are secured by DRM.</td>
<td>Replace the disc.</td>
</tr>
<tr>
<td>Heat</td>
<td>The temperature of the navigation system is outside of the normal operating range.</td>
<td>Wait until the unit’s temperature returns to within normal operating limits.</td>
</tr>
</tbody>
</table>

### USB/iPod

<table>
<thead>
<tr>
<th>Message</th>
<th>Cause</th>
<th>Action (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Audio</td>
<td>The connected USB storage device does not contain any files that can be played back.</td>
<td>Store playable files.</td>
</tr>
<tr>
<td>Protect</td>
<td>All the files on the inserted external storage device are secured by DRM.</td>
<td>Store playable files.</td>
</tr>
<tr>
<td>TRK Skipped</td>
<td>The protected files are skipped.</td>
<td>Store playable files.</td>
</tr>
<tr>
<td>Check USB</td>
<td>The USB connector or USB cable is short circuited.</td>
<td>Confirm that the USB connector or USB cable is not caught in something or damaged.</td>
</tr>
<tr>
<td></td>
<td>The connected USB storage device consumes more than 500 mA (maximum allowable current).</td>
<td>Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB storage device.</td>
</tr>
<tr>
<td>Error-A1</td>
<td>The connected USB storage device consumes more than 500 mA (maximum allowable current).</td>
<td>Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB storage device.</td>
</tr>
<tr>
<td>Condition</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CHK CDCORE</td>
<td>Electrical or mechanical&lt;br&gt;Turn the ignition switch OFF and back ON, or switch to a different source, then back to the USB source.</td>
<td></td>
</tr>
<tr>
<td>Error-19</td>
<td>Communication failure&lt;br&gt;• Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again.&lt;br&gt;• Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB storage device.&lt;br&gt;• If the message appears frequently, consult your dealer.</td>
<td></td>
</tr>
<tr>
<td>Error-16</td>
<td>The iPod is not compatible with this navigation system.&lt;br&gt;Use an iPod of a compatible version.</td>
<td></td>
</tr>
<tr>
<td>N/A USB</td>
<td>The iPod is not compatible with this navigation system.&lt;br&gt;Use an iPod of a compatible version.</td>
<td></td>
</tr>
<tr>
<td>Old version of iPod</td>
<td>Update the iPod version.</td>
<td></td>
</tr>
<tr>
<td>The USB storage device connected to is not supported by this navigation system.</td>
<td>Connect a USB storage device that is USB Mass Storage Class compliant.</td>
<td></td>
</tr>
<tr>
<td>NO SONGS</td>
<td>No songs&lt;br&gt;Transfer the songs to iPod.</td>
<td></td>
</tr>
<tr>
<td>STOP</td>
<td>No songs in the current list&lt;br&gt;Select a list that contains the songs.</td>
<td></td>
</tr>
</tbody>
</table>
Positioning technology

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 21,000 km, continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth’s surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.

Map matching

As mentioned, the positioning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.

Handling large errors

Positioning errors are kept to a minimum by combining GPS and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.
When positioning by GPS is impossible

- GPS positioning is disabled if signals can not be received from more than two GPS satellites.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.

- In tunnels or enclosed parking garages
- Under elevated roads or similar structures
- When driving among high buildings
- When driving through a dense forest or tall trees
- If a car phone or cellular phone is used near this product, GPS reception may be lost temporarily.
- Do not cover this product with spray paint or vehicle wax, because this may block the reception of GPS signals.
- If a GPS signal have not been received for a long time, your vehicle’s actual position and the current position mark on the map diverge considerably or do not be updated. In such case, once GPS reception is restored, accuracy will be recovered.

Conditions likely to cause noticeable positioning errors

For various reasons, such as the state of the road you are traveling on and the reception status of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

- If you make a shallow turn.
- If there is a parallel road.
- If there is another road very nearby, such as in the case of an elevated freeway.
- If you take a recently opened road that is not on the map.
- If you drive in zigzags.
• If the road has a series of hairpin bends.

• If there is a loop or similar road configuration.

• If you take a ferry.

• If you are driving on a long, straight road or a gently curving road.

• If you are on a steep mountain road with many height changes.

• If you enter or exit a multi storey parking lot or similar structure using a spiral ramp.

• If your vehicle is turned on a turntable or similar structure.

• If trees or other obstacles block the GPS signals for a considerable period.

• If you drive very slowly, or in a start and stop manner, as in a traffic congestion.

• If you join the road after driving around a large parking lot.
• When you drive around a traffic circle.

• When starting driving immediately after starting the engine.

Route setting information
Route search specifications
Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

⚠️ CAUTION ⚠️
When a route is calculated, the route and voice guidance for the route are automatically set. Also, for day or time traffic regulations, only information about traffic regulations applicable at the time when the route was calculated is shown. One way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.

• The calculated route is one example of the route to your destination decided by the navigation system while taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to take. If you need to take a certain street, set a waypoint on that street.)

• If the destination is too far, there may be instances where the route cannot be set.

• During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guidance points in rapid succession, some may delay or not be announced.

• It is possible that guidance may direct you off a freeway and then back on again.

• In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.

• In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.

• When there is a traffic congestion ahead, a detour route may not be suggested if driving through the traffic congestion would still be better than taking the detour.

• There may be instances when the starting point, the waypoint and the destination point are not on the highlighted route.

• The number of traffic circle exits displayed on the screen may differ from the actual number of roads.

Route highlighting
• Once set, the route is highlighted in bright color on the map.

• The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Handling and care of discs
Some basic precautions are necessary when handling your discs.
**Built-in drive and care**

- Use only conventional, fully circular discs. Do not use shaped discs.
  
- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the built in drive.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a disc, wipe it with a soft cloth, moving outward from the center.

- Condensation may temporarily impair the built in drive’s performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

**Playable discs**

**CD**

CD discs that display the logos shown below generally can be played on this built in CD drive.

**Ambient conditions for playing a disc**

- At extremely high temperatures, a temperature cutout protects this product by switching it off automatically.
Detailed information for playable media

Compatibility

CD-R/CD-RW discs
- Unfinalized discs cannot be played back.
- It may not be possible to play back CD-R/CD-RW discs recorded on a music CD recorder or a personal computer because of disc characteristics, scratches or dirt on the disc, or dirt, scratches or condensation on the lens of the built in drive.
- Playback of discs recorded on a personal computer may not be possible, depending on the recording device, writing software, their settings, and other environmental factors.
- Please record with the correct format. (For more details, please contact manufacturer of media, recorders, or writing software.)
- Titles and other text information recorded on a CD-R/CD-RW disc may not be displayed by this product (in the case of audio data (CD DA)).
- Read the precautions with CD-R/CD-RW discs before using them.

Common notes about the external storage device (USB, SD)
- Do not leave the external storage device (USB, SD) in any location with high temperatures.
- Operations may vary depending on the kind of an external storage device (USB, SD).

Common notes about the USB storage device
- Depending on the kind of the USB storage device you use, this navigation system may not recognize the storage device or files may not be played back properly.
- There may be a slight delay when starting playback of files on a USB storage device with complex folder hierarchies.
- It may not be possible to play some music files from USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.

Common notes about the SD memory card
- Depending on the kind of the SD memory card you use, this navigation system may not recognize the storage device or files may not be played back properly.

USB storage device compatibility
- For more details about USB storage device compatibility with this navigation system, refer to Specifications on page 135.
- Protocol: bulk
  - You cannot connect a USB storage device to this navigation system via a USB hub.
  - Partitioned USB memory is not compatible with this navigation system.
  - Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or gas pedal.
  - There may be a slight delay when starting playback of audio files encoded with image data.
  - Some USB storage devices connected to this navigation system may generate noise on the radio.
  - Do not connect anything other than the USB memory device.

The sequence of audio files on USB memory
For USB memory, the sequence is different from that of USB memory device.
SD memory card and SDHC memory card

- For more details about SD memory card compatibility with this navigation system, refer to Specifications on page 135.
- This system is not compatible with Multi Media Card (MMC).

Handling guidelines and supplemental information

- Copyright protected files cannot be played back.
### Media compatibility chart

#### General

<table>
<thead>
<tr>
<th>Media</th>
<th>CD-R/-RW</th>
<th>USB storage device</th>
</tr>
</thead>
<tbody>
<tr>
<td>File system</td>
<td>ISO9660 level 1, ISO9660 level 2, Romeo and Joliet</td>
<td>FAT16/FAT32</td>
</tr>
<tr>
<td>Maximum number of folders</td>
<td>255</td>
<td>500</td>
</tr>
<tr>
<td>Maximum number of files</td>
<td>999</td>
<td>15000</td>
</tr>
<tr>
<td>Playable file types</td>
<td>MP3, WMA, AAC, WAV</td>
<td>MP3, WMA, AAC, WAV</td>
</tr>
</tbody>
</table>

#### MP3 compatibility

<table>
<thead>
<tr>
<th>Media</th>
<th>CD-R/-RW, USB storage device</th>
</tr>
</thead>
<tbody>
<tr>
<td>File extension</td>
<td>.mp3</td>
</tr>
<tr>
<td>Bit rate</td>
<td>8 kbps to 320 kbps (CBR), VBR</td>
</tr>
<tr>
<td>Sampling frequency</td>
<td>16 kHz to 48 kHz</td>
</tr>
<tr>
<td>ID3 tag</td>
<td>ID3 Tag Ver. 1.0, 1.1, 2.2, 2.3, 2.4</td>
</tr>
</tbody>
</table>

**Notes:**
- Ver. 2.x of ID3 Tag is given priority when both Ver. 1.x and Ver. 2.x exist.
- The navigation system is not compatible with the following:
  - MP3i (MP3 interactive), mp3 PRO, m3u playlist

#### WMA compatibility

<table>
<thead>
<tr>
<th>Media</th>
<th>CD-R/-RW, USB storage device</th>
</tr>
</thead>
<tbody>
<tr>
<td>File extension</td>
<td>.wma</td>
</tr>
<tr>
<td>Bit rate</td>
<td>48 kbps to 384 kbps (CBR), VBR</td>
</tr>
<tr>
<td>Sampling frequency</td>
<td>32 kHz to 48 kHz</td>
</tr>
</tbody>
</table>

**Note:**
- The navigation system is not compatible with the following:
  - Windows Media Audio 9 Professional, Lossless, Voice
WAV compatibility

<table>
<thead>
<tr>
<th>Media</th>
<th>CD-R/-RW, USB storage device</th>
</tr>
</thead>
<tbody>
<tr>
<td>File extension</td>
<td>.wav</td>
</tr>
<tr>
<td>Format</td>
<td>Linear PCM (LPCM), MS ADPCM</td>
</tr>
<tr>
<td>Sampling frequency</td>
<td>LPCM: 16 kHz to 48 kHz</td>
</tr>
<tr>
<td></td>
<td>MS ADPCM: 22.05 kHz and 44.1 kHz</td>
</tr>
</tbody>
</table>

AAC compatibility

<table>
<thead>
<tr>
<th>Media</th>
<th>CD-R/-RW, USB storage device</th>
</tr>
</thead>
<tbody>
<tr>
<td>File extension</td>
<td>.m4a</td>
</tr>
<tr>
<td>Bit rate</td>
<td>16 kbps to 320 kbps (CBR)</td>
</tr>
<tr>
<td>Sampling frequency</td>
<td>11.025 kHz to 48 kHz</td>
</tr>
</tbody>
</table>

Notes:
- The navigation system plays back AAC files encoded by iTunes.
- The navigation system is not compatible with the following:
  - Apple Lossless, files encoded with VBR

Common notes
- The navigation system may not operate correctly, depending on the application used to encode WMA files.
- Depending on the version of Windows Media Player used to encode WMA files, album names and other text information may not be correctly displayed.
- There may be a slight delay when starting playback of audio files encoded with image data.
- The navigation system is not compatible with packet write data transfer.
- This navigation system can recognize up to 32 characters, beginning with the first character, including extension for the file and folder name. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

Example of a hierarchy

The following figure is an example of the tier structure in the disc. The numbers in the figure indicate the order in which folder numbers are assigned and the order to be played back.

- Folder
- File

![Example of a hierarchy diagram](image)
Notes

- This product assigns folder numbers. The user cannot assign folder numbers.
- If there is a folder that does not contain any playable file, the folder itself will display in the folder list but you cannot check any files in the folder. (A blank list will appear.) Also, these folders will be skipped without displaying the folder number.

Bluetooth

Bluetooth is a short range wireless radio connectivity technology that is developed as a cable replacement for cellular phones, handheld PCs and other devices. Bluetooth operates in 2.4 GHz frequency range and transmits voice and data at speeds up to 1 megabit per second. Bluetooth was launched by a special interest group (SIG) comprising Ericsson Inc., Intel Corp., Nokia Corp., Toshiba and IBM in 1998, and it is currently developed by nearly 2000 companies worldwide.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Pioneer Corporation is under license. Other trademarks and trade names are those of their respective owners.

SD and SDHC logo

SD Logo is a trademark.

SDHC Logo is a trademark.

WMA

The Windows Media™ logo printed on the box indicates that this unit can play back WMA data.
WMA is short for Windows Media Audio and refers to an audio compression technology that is developed by Microsoft Corporation. WMA data can be encoded by using Windows Media Player version 7 or later. Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG 2 and MPEG 4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes version 7.7.
- iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.
Detailed information regarding connectable iPods

**CAUTION**

- Pioneer accepts no responsibility for data lost from an iPod, even if that data is lost while using the navigation system.
- Do not leave the iPod in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPod malfunction due to the resulting high temperature.
- Do not leave the iPod in any location with high temperatures.
- Firmly secure the iPod when driving. Do not let the iPod fall onto the floor, where it may become jammed under the brake or gas pedal.

For details, refer to the iPod’s manuals.

**iPod**

“Made for iPod” means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

**iPhone**

“Works with iPhone” means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards.

iPhone is a trademark of Apple Inc.

**iTunes**

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.
Using the LCD screen correctly

Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this navigation system, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in “Specifications”.
- Do not use the LCD screen at temperatures higher or lower than the operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the Touch Panel functions. The LCD screen can scratch easily. (The stylus is supplied for special calibrations. Do not use the stylus for normal operation.)

Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the navigation unit, resulting in possible damage.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or colored stripes.

Maintaining the LCD screen

- When removing dust from the LCD screen or cleaning it, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the LCD screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight

A light emitting diode is used inside the display to illuminate the LCD screen.

- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- The product lifetime of the LED backlight is more than 10,000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorized PIONEER Service Station.
## Display information

### “Navigation Menu” screen

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<tr>
<td>Go Home</td>
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<tr>
<td>POI</td>
<td>38</td>
</tr>
<tr>
<td>Spell Name</td>
<td>38</td>
</tr>
<tr>
<td>Near Me</td>
<td>39</td>
</tr>
<tr>
<td>Near Dest.</td>
<td>39</td>
</tr>
<tr>
<td>Around City</td>
<td>30</td>
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<td>AVIC FEEDS</td>
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<tr>
<td>Favorites</td>
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<tr>
<td>Coordinate</td>
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<td>Cancel</td>
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<tr>
<td>Gas Mileage</td>
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<td>Connect PC</td>
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<td>Route info</td>
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<td>Cpy Setting</td>
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<td>Eject SD</td>
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<td>Settings</td>
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### “Settings Menu” screen

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<td>Sound</td>
<td>59</td>
</tr>
<tr>
<td>Region</td>
<td>59</td>
</tr>
<tr>
<td>UI Language, Voice Language</td>
<td>59</td>
</tr>
<tr>
<td>Time</td>
<td>60</td>
</tr>
<tr>
<td>km / mile</td>
<td>60</td>
</tr>
<tr>
<td>Speed</td>
<td>61</td>
</tr>
<tr>
<td>Keyboard</td>
<td>61</td>
</tr>
<tr>
<td>Map</td>
<td>25</td>
</tr>
<tr>
<td>Overlay POI</td>
<td>26</td>
</tr>
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<td>View Mode</td>
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<td>Favorites Icon</td>
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<td>Current Street</td>
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<td>Backlight Timeout</td>
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<td>Calibrate</td>
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<tr>
<td>Set Home</td>
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<td>Location</td>
<td>63</td>
</tr>
<tr>
<td>Connection</td>
<td>63</td>
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<td>Service Info</td>
<td>63</td>
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<td>Drive Log</td>
<td>66</td>
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<td>Demo Mode</td>
<td>35</td>
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</tbody>
</table>
Appendix

“Phone Menu” screen

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dial Pad</td>
<td>50</td>
</tr>
<tr>
<td>Call Home</td>
<td>50</td>
</tr>
<tr>
<td>Contacts</td>
<td>50</td>
</tr>
<tr>
<td>Received</td>
<td>51</td>
</tr>
<tr>
<td>GOOG-411</td>
<td>51</td>
</tr>
<tr>
<td>Dialed</td>
<td>52</td>
</tr>
<tr>
<td>Missed</td>
<td>52</td>
</tr>
<tr>
<td>Transfer</td>
<td>54</td>
</tr>
<tr>
<td>Volume</td>
<td></td>
</tr>
<tr>
<td>Phone Ringtone</td>
<td>55</td>
</tr>
<tr>
<td>Phone Voice</td>
<td></td>
</tr>
<tr>
<td>Settings</td>
<td>55</td>
</tr>
<tr>
<td>Connections</td>
<td>49</td>
</tr>
<tr>
<td>Bluetooth On/Off</td>
<td>56</td>
</tr>
<tr>
<td>Auto Answer Preference</td>
<td>56</td>
</tr>
<tr>
<td>Refuse All Calls</td>
<td>56</td>
</tr>
<tr>
<td>Echo Cancel</td>
<td>56</td>
</tr>
<tr>
<td>Auto Connect</td>
<td>56</td>
</tr>
<tr>
<td>Edit Name</td>
<td>57</td>
</tr>
<tr>
<td>Clear Memory</td>
<td>55</td>
</tr>
<tr>
<td>Bluetooth Software Update</td>
<td>58</td>
</tr>
</tbody>
</table>
Glossary

AAC
AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG 2 and MPEG 4.

Bit rate
This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

CD-DA
This stands for a general music CD (commercial release audio CD). In this manual, this word is sometime used for a distinction between data CDs (which include compressed audio files) and general music CDs.

Current location
The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Destination
A location you choose as the end point of your journey.

Favorites
A frequently visited location (such as your workplace or a relative’s home) that you can register to allow easy routing.

GPS
Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Guidance mode
The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

Guidance point
These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the yellow flag icon.

Home location
Your registered home location.

ID3 tag
This is a method of embedding track related information in an MP3 file. This embedded information can include the track title, the artist’s name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted by the number of characters, the information can be viewed when the track is played back.

ISO9660 format
This is the international standard for the format logic of DVD/CD ROM folders and files. For the ISO9660 format, there are regulations for the following two levels:

Level 1:
The file name is in 8.3 format (the name consists of up to 8 characters, half byte English capital letters, half byte numerals and the “ ” sign, with a file extension of three characters).

Level 2:
The file name can have up to 31 characters (including the separation mark “.” and a file extension). Each folder contains less than 8 hierarchies.

Extended formats
Joliet:
File names can have up to 64 characters.
Romeo:
File names can have up to 128 characters.

- Level 1:
The file name is in 8.3 format (the name consists of up to 8 characters, half byte English capital letters, half byte numerals and the “ ” sign, with a file extension of three characters).

- Level 2:
The file name can have up to 31 characters (including the separation mark “.” and a file extension). Each folder contains less than 8 hierarchies.
• **Level 2:**
The file name can have up to 31 characters (including the separation mark "." and a file extension). Each folder contains less than 8 hierarchies.

• **Extended formats**
  - Joliet:
    File names can have up to 64 characters.
  - Romeo:
    File names can have up to 128 characters.

**MP3**
MP3 is short for MPEG Audio Layer 3. It is an audio compression standard established by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the size of a conventional disc.

**MPEG**
This stands for Moving Pictures Experts Group, and is an international video image compression standard.

**Multi-session**
Multi session is a recording method that allows additional data to be recorded later. When recording data on a CD ROM, CD R or CD RW, etc., all data from beginning to end is treated as a single unit or session. Multi session is a method of recording more than 2 sessions in one disc.

**Packet write**
This is a general term for a method of writing individual files to a CD R, etc. whenever required, just as is done with files on floppy or hard disks.

**Phone book**
An address book on user’s phone is collectively referred to as “Phone book”. Depending on the cellular phone, the “Phone book” may be called a name such as “Contacts”, “Business card” or something else.

**Point of Interest (POI)**
Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

**Route setting**
The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

**Set route**
The route marked out by the system to your destination. It is highlighted in bright color on the map.

**Track log**
Your navigation system logs routes that you already passed through if the track logger is activated. This recorded route is called a “track log”. It is handy when you want to check a route traveled or if returning along a complex route.

**VBR**
VBR is short for variable bit rate. Generally speaking, CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression priority sound quality.

**Voice guidance**
The giving of directions by navigation voice while in guidance.

**Waypoint**
A location that you choose to visit before your destination; a journey can be built up from multiple waypoints and the destination.

**WMA**
WMA is short for Windows Media™ Audio and refers to an audio compression technology that is developed by Microsoft Corporation.
Specifications

General
Rated power source .......... 14.4 V DC
(allowable voltage range: 10.8 V to 15.1 V DC)
Grounding system .............. Negative type
Maximum current consumption ........................................... 10.0 A
Dimensions (W × H × D):
D
Chassis ..................... 178 mm × 100 mm × 157 mm
(7 in. × 3 7/8 in. × 6 1/8 in.)
Nose ........................... 171 mm × 97 mm × 8 mm
(6 3/4 in. × 3 7/8 in. × 3/8 in.)
Detachable device ...... 130 mm × 73 mm × 19 mm
(5 1/8 in. × 2 7/8 in. × 3/4 in.)
Weight .............................. 1.7 kg (3.7 lbs)
NAND flash memory .......... 2 GB

Navigation
GPS Receiver:
System ............................. L1, C/Acode GPS
SPS (Standard Positioning Service)
Reception system .......... 20 channel multi channel reception system
Reception frequency ... 1575.42 MHz
Sensitivity .......................... 140 dBm (typ)
Position update frequency ........................................... Approx. once per second
GPS antenna:
Antenna ......................... Micro strip flat antenna/
right handed helical polariza
tion
Antenna cable ............... 5.0 m (16 ft. 5 in.)
Dimensions (W × H × D) 
........................................... 33 mm × 14.7 mm × 36 mm
(1 1/4 in. × 1/2 in. × 1 3/8 in.)
Weight .............................. 96 g (0.2 lbs)

Display
Screen size/aspect ratio ....... 4.3 inch wide/16:9
(effective display area: 95 mm × 53 mm)
Pixels ..................................... 130 560 (480 × 272)
Display method .................... TFT Active matrix driving
Backlight ............................. LED
Tolerable temperature range:
Power on .......................... 14°F to +140°F
Power off ......................... 4°F to +176°F

Audio
Maximum power output ...... 50 W × 4
Continuous power output ... 22 W × 4 (60 Hz to 15 kHz,
5 %THD, 4Ω LOAD, Both Channels Driven)
Load impedance .......................... 4Ω (4Ω to 8Ω [2Ω for 1 ch] allowable)
Preout output level (max) ... 2.2 V
Preout impedance ............... 1 kohm
Equalizer (3 Band Parametric Equalizer):
Low
Frequency .......................... 40 Hz/80 Hz/100 Hz/160 Hz
Q Factor .............................. 0.35/0.59/0.95/1.15 (+6 dB 
when boosted)
Gain ............................... ±12 dB
Mid
Frequency .......................... 200 Hz/500 Hz/1 kHz/2 kHz
Q Factor .............................. 0.35/0.59/0.95/1.15 (+6 dB 
when boosted)
Gain ............................... ±12 dB
High
Frequency .......................... 3.15 kHz/8 kHz/10 kHz/
12.5 kHz
Q Factor .............................. 0.35/0.59/0.95/1.15 (+6 dB 
when boosted)
Gain ............................... ±12 dB

Loudness contour:
Low ................................. +3.5 dB (100 Hz), +3 dB
(10 kHz)
Mid ................................. +10 dB (100 Hz), +6.5 dB
(10 kHz)
High ............................... +11 dB (100 Hz), +11 dB
(10 kHz) (volume: 30 dB)

HPF:
Frequency .......................... 50 Hz/63 Hz/80 Hz/100 Hz/
125 Hz
Slope ............................... 12 dB/oct

Subwoofer:
Frequency .......................... 50 Hz/63 Hz/80 Hz/100 Hz/
125 Hz
Slope ............................... 18 dB/oct
Gain ............................... 24/+6 dB
Phase ................................. Normal/Reverse
Bass boost:
Gain ............................... 0 dB to +12 dB

CD drive
System .............................. CD, MP3, WMA, AAC, WAV
system
Usable discs .......................... CD, MP3, WMA, AAC, WAV
Signal to noise ratio .......... 94 dB (1 kHz) (IHF A network)

MP3 decoding format ........... MPEG 1 & 2 Audio Layer 3
WMA decoding format......... Ver.7,7.1,8,9,10 (2 ch audio) (Windows Media Player)
AAC decoding format............ MPEG 4 AAC (iTunes encoded only)
WAVE SIGNAL FORMAT ...... Linear PCM, MS ADPCM (Non Compressed)

USB
Head unit
USB standard spec. .... USB 2.0 Full Speed
Max current supply ....... 500 mA
Minimum memory capacity
........................................... 256 MB
File system ................. FAT16, FAT32
USB class ...................... Mass storage class
Decoding format ......... MP3/WMA/AAC/WAVE

Detachable device
USB standard spec. .... USB 2.0 High Speed
Max current supply ....... 500 mA
File system ................. FAT16, FAT32
USB class ...................... Mass storage class

SD
Compatible physical format
........................................ Version 2.00
Max memory capacity ........ 16 GB
File system ................. FAT16, FAT32

Bluetooth
Version .................. Bluetooth 1.2 certified
Output power ............ +4 dBm Max.
(Power class 2)

FM tuner
Frequency range .......... 87.9 MHz to 107.9 MHz
Usable sensitivity .......... 8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
Signal to noise ratio ....... 75 dB (IHF A network)
Distortion ................... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ........ 30 Hz to 15 000 Hz (+3 dB)
Stereo separation ......... 45 dB (at 65 dBf, 1 kHz)

AM tuner
Frequency range .......... 530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity .......... 18 µV (S/N: 20 dB)
Signal to noise ratio ....... 65 dB (IHF A network)

CEA2006 Specifications
Power output .................. 14 W RMS × 4 Channels
(4 Ω and ≤ 1 % THD+N)
S/N ratio ...................... 91 dBA (reference: 1 W into 4 Ω)

Note
Specifications and design are subject to possible modifications without notice due to improvements.